CITY OF MERCER ISLAND

KING COUNTY, WASHINGTON

MERCER ISLAND PUBLIC WORKS DEPARTMENT

Island Crest Way Crosswalk Improvements

Project Number:
SP0135

Contract Specifications

March 2024

BRYCE CORRIGAN
STATE OF WASHINGTON
20100320
REGISTERED
PROFESSIONAL ENGINEER

3/21/2024

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Notices

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Advertisement for Bids City of Mercer Island

Project Title: Island Crest Way Crosswalk Improvements
Bid Number: 24-14
Engineers Estimated Cost: $1,150,000

Bidders shall submit their bids in PDF format to the Public Works email address at: bids@mercerisland.gov. Sealed bids will be received, not sent, electronically by the City until **2 pm on April 11, 2024**.
There will be no public bid opening for this project. Bid results will be posted on the City's web page at: https://www.mercerisland.gov/rfps.

Bidder questions are to be directed to Rebecca O'Sullivan, Transportation Engineer, by email only at rebecca.osullivan@mercerisland.gov. The City will receive questions until **1 pm on April 04, 2024**. Questions received after this date will not be answered. All questions and responses will be posted in an addendum by **April 09, 2024** to the Builders Exchange site.

Work to be performed under this contract includes but is not limited to: temporary traffic control, pedestrian traffic control, vegetation and tree removal, pavement removals and minor grading, new concrete curb & gutter, new concrete sidewalk, new ADA ramps, conduit and wiring installation of new crosswalk pedestrian signals, conduit and wiring installation of new rectangular rapid flashing beacons, illumination modifications, pavement markings, and landscape restoration.

The City reserves the right to reject any and all bids and to waive minor irregularities.

Plans, specifications, addenda, and bidders list are available on-line through Builders Exchange of Washington, Inc. at http://www.bxwa.com. Click on "Posted Projects", "Public Works", "City of Mercer Island", "Projects Bidding". Builders Exchange manages the official bidders list. Bidders are encouraged to register in order to receive automatic email notification of future addenda and to be placed on the official bidders list.

Plans and specifications are also available at the City of Mercer Island website https://www.mercerisland.gov/rfps. Addenda may not be available or updated on this website.

A bid deposit in the amount of five percent (5%) of the bid total price must accompany each bid.

The City of Mercer Island, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 23 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

Andrea Larson, City Clerk

Published: Seattle Daily Journal of Commerce – 3/26/24 and 4/2/24

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City of Mercer Island Instructions to Bidders

1. ELIGIBILITY TO BID:

It is the intent of the City to award a contract to the low responsible bidder. Before award, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder. To be eligible to bid, each Bidder must, at the time of the bid submittal:

A. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW; and

B. Have a current Washington Unified Business Identifier (UBI) number; and

C. If applicable:
   i. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW; and
   ii. Have a Washington Employment Security Department number, as required in Title 50 RCW; and
   iii. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW; and
   iv. Have an electrical contractor license, if required by Chapter 19.28 RCW; and
   v. Have an elevator contractor license, if required by Chapter 70.87 RCW; and

D. Not be disqualified from bidding on any public works contract under RCW 39.06.010, 39.12.050, RCW 39.12.055, or 39.12.065 (3); and

E. Not be disqualified or debarred or ineligible to be awarded contracts for which Federal funds have been requested or received.

F. Completed the L&I online training or meet the prior experience requirements in RCW 39.04.350(1)(f); and

G. Within the three-year period immediately preceding the date of the bid solicitation, not have been determined by a final and binding citation and notice of assessment issued by the department of labor and industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48 or 49.52 RCW.

A contract shall only be awarded to a Bidder that demonstrates to the City's satisfaction that the Bidder is qualified to perform the Work and is, therefore, a responsible bidder.

2. SUBCONTRACTOR RESPONSIBILITY CRITERIA:

The Bidder must verify responsibility criteria for each first-tier subcontractor, and each subcontractor of any tier that hires other subcontractors must verify responsibility criteria for each of its subcontractors. Upon request of the City the Bidder shall promptly provide documentation to the City demonstrating that the subcontractor(s) meets the subcontractor responsibility criteria below. The requirements of this section apply to all subcontractors regardless of tier.

At the time of subcontract execution, the Bidder shall verify that each of its first-tier subcontractors meets the following bidder responsibility criteria:

A. Have a current certificate of registration in compliance with chapter 18.27 RCW; and

B. Have a current Washington Unified Business Identifier (UBI) number; and

C. If applicable:

   i. Have Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW; and

   ii. Have a Washington Employment Security Department number, as required in Title 50 RCW; and

   iii. Have a Washington Department of Revenue state excise tax registration number as required in Title 82 RCW; and

   iv. Have an electrical contractor license, if required by Chapter 19.28 RCW; and

   v. Have an elevator contractor license, if required by Chapter 70.87 RCW; and

D. Not be disqualified from bidding on any public works contract under RCW 39.06.010, RCW 39.12.050, RCW 39.12.055, or RCW 39.12.065 (3); and

E. Not be disqualified or debarred or ineligible to be awarded contracts for which Federal funds have been requested or received.

F. Completed the L&I online training or meet the prior experience requirements in RCW 39.04.350(1)(f); and

G. Within the three-year period immediately preceding the date of the bid solicitation, not have been determined by a final and binding citation and notice of assessment issued by the department of labor and industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48 or 49.52 RCW.

H. Key personnel must hold an appropriate license in the applicable discipline.

3. EXAMINATION OF PLANS, SPECIFICATIONS AND SITE:

Each bidder is instructed to examine the Plans, Specifications, Addenda, the site of the proposed improvements, and conduct any other examination and investigation which the bidder may desire to make as to the accuracy of the nature of the work and the difficulties to be encountered. The Bidder shall be responsible for all costs associated with these additional examinations including all restoration work and damages which may be a result of such investigation. Bidders shall consider Federal, State, and local laws and regulations that may affect cost, progress, or performance of the work.

4. ADDITIONAL INFORMATION:

All questions about the meaning or intent of the Contract Documents are to be directed to Rebecca O'Sullivan, Transportation Engineer, in writing or by email to rebecca.osullivan@mercerisland.gov. No telephone questions will be accepted or considered. Bidders should include a reference to the specification section and paragraph number and/or drawing number in the Contract Documents.

The City will receive questions until **1pm** on **April 4, 2024**. Questions received after this date will not be answered. All questions and responses will be posted by **April 9, 2024** to the Builders Exchange site. The City will delete bidder names from the text of question(s) and answers being sent.

Interpretations or clarifications considered necessary by the City in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by the Engineer or City as having received the Contract Documents. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

5. WAGES:

This Contract is subject to Chapters 39.12 and 49.28 RCW, amendments thereto and regulations issued thereunder, relating to prevailing wages, benefits and other requirements. Bidders shall examine and be familiar with such requirements. No claim for additional compensation will be allowed which is based upon a lack of knowledge or a misunderstanding of any such requirements by the Bidder or a failure to include in Bidder's price adequate increases in such wages during the performance of this Contract. A copy of the most recent prevailing wage schedule is in the Appendix of the specifications. Current prevailing wage rates for King County can be obtained from the Washington State Department of Labor and Industries at https://lni.wa.gov/licensing-permits/public-works-projects/prevailing-wage-rates/.

If this Contract is for a project that receives Federal funds, the labor and wage and benefits standards in 29 CFR part 5 may also apply, so Bidders shall examine and be familiar with such requirements.

6. PROGRESS AND COMPLETION:

Time is of the essence for this Project. Progress and completion of the Work shall comply with all requirements herein, and intermediate and final completion dates as may be set forth in the specifications. The submission of a bid constitutes the Bidder's acknowledgement that such progress and completion requirements have been taken into account in formulating a price for this Work.

7. PREVENTION OF ENVIRONMENTAL POLLUTION AND PRESERVATION OF PUBLIC NATURAL RESOURCES:

If awarded the Contract, the Bidder shall fully comply with all such environmental protection laws, ordinances and regulations dealing with prevention and environmental pollution and the preservation of public natural resources that may be applicable to this Project. The cost of such compliance shall be included in the bid prices.

8. BID FORM:

The Bid Form is included in the Contract Documents. The Bid Form must be completed in ink. Bids that contain omissions, erasures or irregularities of any kind may be rejected. Any qualification, addition, limitation or provision attached to or contained in a bid may render the bid non-responsive and not eligible for award. No oral, facsimile, telegraphic or telephonic bids or modifications will be considered.

All bids shall be signed by the Bidder, or the Bidder's authorized representative. If the bid is made:

A. By an individual, the Bidder's name, signature, and address must be shown;
B. By a partnership or joint venture, it shall contain the names of each partner, the mailing address of the partnership or joint venture and shall be signed in the firm name, followed by the signature of the person signing, indicating that person's position in the partnership or joint venture;
C. By a corporation or limited liability company ("LLC"), the name of the state under the laws of which the corporation or LLC is chartered, the name and post office address of the corporation or LLC and the title of the person who signs on behalf of the corporation or LLC must be shown.

Upon the City's request, the Bidder shall provide copies of the articles of incorporation, bylaws, resolutions of board of directors, partnership papers, joint venture agreements, and any other documents evidencing the legal status of the Bidder and the authority of the Bidder's officer or representative who signed the bid on behalf of the Bidder.

The City is not responsible for any cost incurred in responding to this Call for Bids.

9. ACKNOWLEDGEMENT OF ADDENDA:

Each Bidder shall include on the Bid Form specific acknowledgment of receipt of each Addendum issued by the City during the bidding period. If the Bidder does not specifically acknowledge each addendum, the City may reject the bid as non- responsive unless the City

determines from delivery records or from inclusion of information in the bid of information contained in the addenda that the Bidder received constructive notice of the addenda.

10. BID SECURITY:

The Bid shall be accompanied by a bid deposit in the amount equal to at least 5% of the Total Bid Price. The bid deposit shall be in one of the following formats and made payable to the City:

A. A bid guaranty bond, in accordance with and using a form acceptable to the City which contains provisions substantially similar to those in the bid bond form included with the Contract Documents, duly completed by a guaranty company authorized to carry on business in the state of Washington; or

B. A postal money order, a certified check, or cashier's check drawn upon a banking institution with a branch office in the state of Washington.

The surety signing the bid guaranty bond shall be registered with the Washington State Insurance Commissioner, and the surety's name shall appear in the current Authorized Insurance Company List in the State of Washington published by the Office of the Insurance Commissioner. A Power of Attorney must accompany the bid guaranty bond and must appoint the surety's true and lawful attorney-in-fact to make, execute, seal and deliver the bid guarantee bond. Failure to submit the required bid security with the Bid shall render the bid non-responsive and the Bid shall be rejected.

11. NON-COLLUSION:

Each bid shall be accompanied by a signed Non-Collusion Declaration in accordance with, and using the form provided by the City. Failure to submit a signed Declaration with the Bid shall render the bid non-responsive and the Bid shall be rejected.

More than one Bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. If the City believes that any Bidder is interested in more than one Bid for the work contemplated, all Bids in which such Bidder is interested will be rejected. If the City believes that collusion exists among the Bidders, all Bids will be rejected.

12. DELIVERY OF BID:

Each Bid shall be submitted in PDF format via electronic transmission to the Public Works email address at: bids@mercerisland.gov. The City will not consider bids received after the time fixed for opening bids in the Advertisement for Bids. A Bid is deemed submitted as evidenced by the receipt date and time shown in the source code of the email received by the City's computer system. Contractors accept all risk of late delivery, regardless of fault. Any submittal received after the due date and time shall be deemed non-responsive and will eliminate their Bid from any further consideration. All respondents will receive an email confirmation within the next business day indicating their submittal has been successfully received.

The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of these instructions, that without exception the Bid is premised upon performing the work required by the Contract Documents and such means, methods, techniques, sequences, or procedures of construction as may be indicated in or

required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.

13. MODIFICATION OF BID:

A modification of a Bid will be considered only if the modification is received prior to the time announced for the opening of Bids. All modifications shall be made in writing executed and submitted in the same form and manner as the original Bid.

14. RETURN OF BID SECURITY:

After the bid prices have been compared, the City may return the bid security if, in the City's judgment, the Bidder would not be considered for award. All other Proposal Guarantees will be held until the Contract and the Performance Bond of the successful bidder have been executed.

15. EVALUATION OF BIDS AND BID ERRORS:

After opening the Bids, the City will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any bid item, the price per unit will control. The total of extensions, corrected where necessary, will be used by the City for award purposes.

Irregular Bids:

A. A Bid will be considered irregular and will be rejected if:
   i. The authorized Bid Form furnished by the City is not used or is materially altered;
   ii. The completed Bid Form contains any unauthorized additions, deletions, alternate bids, or conditions;
   iii. The bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
   iv. A price per unit cannot be determined from the Bid Form;
   v. The Bid Form is not properly executed;
   vi. An executed non-collusion certificate is not provided; or
   vii. Proper bid security does not accompany the Bid.

B. A Bid may be considered irregular and may be rejected if:
   i. The Bid Form does not include a unit price for every Bid item;
   ii. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the City;
   iii. Receipt of Addenda is not acknowledged;
   iv. A member of a joint venture or partnership and the joint venture or partnership submit Bid Forms for the same project (in such an instance, both Bids may be rejected); or
   v. If Bid Form entries are not made in ink.

Bids will be evaluated by the City to determine which bid is the apparent lowest, responsive bid.

Bid results will be posted on the City's website at https://www.mercerisland.gov/rfps.

The City, in its sole discretion, reserves the right to waive minor bid errors, informalities, and immaterial irregularities when it is in the City's best interest to do so.

16. EVALUATION OF BIDDER RESPONSIBILITY:

A Contract shall only be awarded to a Bidder that demonstrates to the City's satisfaction that the Bidder is qualified to perform the Work and is, therefore, a responsible bidder.

A. Bidder Responsibility Criteria. To be determined responsible, the Bidder must, in addition to satisfying the bidder responsibility criteria listed in Section 1. ELIGIBILITY TO BID above:

i. Have adequate financial resources to perform the contract, or the ability to obtain them;
ii. Have a satisfactory performance record;
iii. Have a satisfactory record of integrity and business ethics;
iv. Have the necessary production, construction, and technical equipment and facilities or the ability to obtain them;
v. Be otherwise qualified and eligible to receive an award under applicable laws and regulations;
vi. Be in compliance with training requirements in RCW 39.04.350(1)(f); and
vii. Provide a statement in accordance with RCW 9A.72.085 verifying compliance with responsible bidder criteria requirement of RCW 39.04.350(1)(g).

B. Reference Checking. To assist the City in the review of the Bidder's qualifications, the Bidder shall, within five (5) days of being requested to do so by the City, provide the following information:

i. Past Experience in Similar Projects. Provide a list of all construction contracts (whether completed or in progress) entered into or performed by the Bidder within the past five (5) years for projects similar in scope, time and complexity to the work called for under this Contract. Provide the names of the contracts, the total contract price, the name of the foreman, the foreman's previous project experience as a foreman on 3 similar construction contracts, and the names and phone numbers of the owners.

ii. References. Provide a list of five (5) references. References will be asked to rate performance on the following items: overall impression of the company; firm experience and technical knowledge; foreman experience and quality of work, effective coordination of subcontractors; ability to coordinate and work with utility companies and governmental entities; responsiveness to owner requests; attention to safety; quality and timeliness of submittals, change order proposals, project schedule, schedule updates and other applicable paperwork.

If the Bidder is a joint venture, the Bidder shall submit information for the joint venture if the members have worked together in the past and also information about each member of the joint venture. The Joint Venture Agreement shall be included in the submission.

If the Bidder fails to supply information requested concerning responsibility within the time and the manner specified, the City may base its determination of responsibility upon any available information related to the responsibility criteria or may find the Bidder is not responsible.

The City reserves the right to inspect records, reports and other information which may be maintained by or for the Bidder to the extent necessary, as determined by the City to verify, clarify or otherwise consider the information provided by the Bidder.

17. DETERMINATION OF NON-RESPONSIBILITY:

If the City determines a Bidder to be not responsible, the City will provide, in writing, the reasons for the determination. The Bidder may appeal the determination within ten (10) days of its receipt of the City's determination of non-responsibility by presenting additional information to the City. The City shall consider the additional information before issuing its final determination. If the City's final determination affirms that the Bidder is not responsible, the City shall not execute a contract with any other bidder until two (2) business days after the Bidder determined to be not responsible has received the final determination.

18. CONTRACT AWARD:

If a Contract is awarded, the City will award the contract to the responsible bidder that submits the lowest total responsive bid for the schedule(s) selected by City after bid opening and prior to award.

If the Contract is to be awarded, City will give the successful Bidder a Notice of Award within sixty (60) days after the day of the Bid opening. No other act of the City or others will constitute acceptance of a Bid.

The City reserves the right to request bidders to extend the effective period of their bids.

19. REJECTION OF ALL BIDS:

The City reserves the right to reject any or all Bids at any time up to actual execution of the Public Works Contract, even if there has been an award of the Contract.

Any or all Bids will be rejected if the City has reason to believe that collusion exists among the Bidders.

20. EXECUTION OF PUBLIC WORKS CONTRACT:

The Bidder to whom award is made shall execute a written Public Works Contract with the City on the form provided, including any Addenda and any other Exhibits attached thereto, shall secure all insurance, and shall furnish all certificates, endorsements and bonds required by the Contract Documents within ten (10) calendar days after receipt of the forms from the City. Failure or refusal to execute the Public Works Contract, including any Addenda and any other Exhibits attached thereto, as herein provided or to conform to any of the stipulated

requirements in connection therewith shall be just cause for annulment of the award and forfeiture of the Bid security. If the lowest responsive, responsible Bidder refuses or fails to execute the Public Works Contract, including any Addenda and any other Exhibits attached thereto, the City may award the Contract to the second lowest responsive, responsible Bidder. If the second lowest responsive, responsible Bidder refuses or fails to execute the Public Works Contract, including any Addenda and any other Exhibits attached thereto, the City may award the contract to the third lowest responsive, responsible Bidder. On the failure or refusal of such second or third lowest Bidder to execute the Agreement, including any Addenda and any other Exhibits attached thereto, each such Bidder's Bid securities shall be likewise forfeited to the City.

21. BID PROTEST PROCEDURES:

A. Form of Protest. In order to be considered, a Protest shall be in writing, addressed and delivered to the attention of the project manager at the City of Mercer Island, 9601 SE 36th Street, Mercer Island, Washington 98040. The Protest shall include the following:

i. The name, address, and phone number of the Bidder protesting, or the authorized representative of the Bidder;

ii. A complete, detailed statement of all grounds for protest, supporting authority, and any supporting documentation. Supplemental information will not be considered unless the supplementation contains information not available at the time of protest;

iii. The specific ruling or relief requested; and

iv. Evidence that all persons with a financial interest in the procurement have been given notice of the Protest or if such persons are unknown, a statement to that effect.

B. Who May Protest:

i. Protests based on specifications: Any prospective Bidder.

ii. Protests following Bid opening: Any Bidder with a substantial financial interest in the award of a Contract.

C. Time to Protest:

i. Protests based on specifications or other terms in the Contract Documents must be received by the City no later than ten (10) calendar days prior to the date established for submittal of Bids.

ii. The City must receive protests based on other circumstances within five (5) calendar days after the bids are opened and publicly read.

iii. In no event shall a Protest be considered if all bids are rejected or after execution of the Contract.

D. Determination of Protest. Upon receipt of a timely written Protest, the City shall investigate the Protest and shall respond in writing to the Protest prior to the award of Contract. If protest is submitted in accordance with the procedures set forth above, the City will not execute a contract any sooner than two (2) business days after the City's decision on the Protest.

E. Failure to Comply. Failure to comply with the procedures set forth herein may render a Protest untimely or inadequate and may result in rejection thereof by the City.

F. Exhaustion of Administrative Remedies. By submitting a bid, the Bidder agrees the Bidder's compliance with the protest procedures set forth herein are a mandatory condition precedent to the Bidder initiating a lawsuit against the City.

G. Venue. By submitting a bid, the Bidder acknowledges and agrees that a lawsuit or action related to or arising out of this procurement shall be brought in the Superior Court of King County, Washington.

Bidder's Checklist

ALL BIDDERS must properly complete, execute and submit the following with their bids:

1. NON-COLLUSION DECLARATION: Failure to submit the certificate shall make the bid non-responsive and not eligible for award.

2. BID FORM: Bidders must bid on all items contained in the Bid Form and the Form must be signed. The omission or deletion of any bid item may render the bid non-responsive and result in the rejection of the bid. Bidders are reminded to comply with RCW 39.30.060.

3. CONTRACTOR DECLARATION PURSUANT TO RCW 39.04.350(2): Failure to submit the declaration shall make the bid non-responsive and not eligible for award.

4. BID GUARANTY BOND: Failure to furnish a bid deposit of a minimum of five percent (5%) shall make the bid non-responsive and not eligible for award.

5. BIDDERS QUALIFICATION CERTIFICATE: To be completed and signed. The City reserves the right to check all statements and to judge the adequacy of the bidder's qualifications.

To assist the City in the review of the responsible Bidder's qualifications, the Bidder(s) shall, within five (5) days of being requested to do so by the City, provide the information required in Evaluation of Bidder Responsibility of the Instructions to Bidders, including a statement in accordance with RCW 9A.72.085 verifying compliance with responsible bidder criteria requirement of RCW 39.04.350(1)(g).

The **SUCCESSFUL BIDDER** shall properly complete, execute (as required) and submit the following after receiving notice of the award of the Project.

1. Public Works Contract,

2. Performance Bond,

3. Payment Bond,

4. Certificate of Insurance,

5. Retainage Agreement,

6. Statement of Intent to Pay Prevailing Wages,

7. Other documents requested by City.

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BIDDING REQUIREMENTS

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Non-Collusion Declaration

Project Name: Island Crest Way Crosswalk Improvements SP0135

Bidder/Contractor: _____

I, _____, declare under penalty of perjury under the laws of the State of Washington that the following statements are true and correct:

1. I am the representative for the above-named bidder/contractor, and as its _____, I am authorized to make the declaration herein on its behalf.

2. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.

_____ _____

Date and Place Signature

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BID FORM

(NOTE TO BIDDER: This BID FORM shall be completed in ink or typewritten)

TO: City of Mercer Island

ADDRESS: 9601 SE 36th Street
Mercer Island, Washington 98040

PROJECT TITLE: Island Crest Way Crosswalk Improvements, SP0135

Bidder Declaration and Understanding

The undersigned Bidder hereby declares that they have carefully examined the Contract Documents for the construction of the project, that they have personally inspected the site, that they have satisfied themselves as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the quantities with the detailed requirements of the Contract Documents, and that this Proposal is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Proposal. The Bidder further declares that they have exercised their own judgment regarding the interpretation of subsurface information and has utilized all data, which they believe pertinent from the Engineer, Owner, and other sources and have made such independent investigations as the Bidder deems necessary in arriving at their conclusions.

The Bidder is hereby notified that no goal for disadvantaged business enterprise utilization has been established for this project. As part of the City's affirmative action effort, however, the City encourages participation of certified disadvantaged businesses and women business enterprises to act as prime contractors as well as subcontractors on this project.

The undersigned Bidder hereby declares that they have carefully examined the Contract Documents including the following addenda, receipt of all is hereby acknowledged:

Addendum Number	_____	Date	_____
	_____		_____
	_____		_____
	_____		_____

Start of Construction and Contract Completion Time

The Bidder agrees that they will begin work within 10 calendar days of the Notice to Proceed, and Final Completion of the entire project will be achieved by the Final Completion Date (except for extensions of time granted in accordance with the General Terms and Conditions). The Bidder further agrees he/she will, if necessary, accelerate their work, provide additional workers and equipment, and expedite materials delivery to meet these dates, all at no additional expense to the OWNER.

By submitting this bid, the bidder agrees that, if awarded this contract, they will achieve Final Completion within 70 working days from the Notice to Proceed.

By submitting a proposal the Contractor acknowledges and accepts the following anticipated schedule timeline and work limitations described below:

1. A contract is scheduled for City Council award on May 07 2024.
2. Notice to Proceed with construction is anticipated by the week of May 27, 2024.
3. Physical work at the Island Crest Elementary School Driveway shall not commence until June 24, 2024.
4. SeaFair Festival is scheduled for August 2-4.
5. Substantial Completion of the entire project shall be achieved in accordance with SP 1-08.5, no later than August 23rd, 2024, including all pavement, sidewalk, curbs, signal pole foundations, junction boxes, and conduit.
6. Following August 23rd, 2024, no work shall occur at any of the crosswalk locations before 9:30am or after 2:30pm.

Lump Sum or Unit Price Work

The Bidder proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following lump sum or unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. The Contractor shall be compensated for the actual unit quantities performed in accordance with the General Terms and Conditions set forth in these Contract Documents. The Bidder agrees that the lump sum prices and the unit prices represent a true measure of the labor, services, and materials required to perform the work, including all allowances for Contractor-paid taxes, overhead, and profit for each type and unit of work, as well as any auxiliary costs associated with completing a unit of work called for in these Contract Documents. The City does not guarantee the quantities estimated for unit price items, nor does the City limit itself to the estimated number.

If any material, item, or service required by the Contract Documents has not been mentioned specifically, the same shall be furnished and placed with the understanding that the full cost to the Owner has been merged with the prices named in the Proposal.

To the extent possible, standard bid items have been utilized for the work listed in the Proposal. The Bidder is directed to review the Standard Specifications and the City of Mercer Island's Amendments (Special Provisions herein) for descriptions of bid item work, measurement, and payment.

BID SCHEDULE

ISLAND CREST WAY CROSSWALK IMPROVEMENTS						
ITEM NO.	SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
1	1-04	Minor Change	1	EST	$35,000	$35,000
2	1-05	Roadway Surveying	1	LS		
3	1-05	ADA Features Surveying	1	LS		
4	1-05	Record Drawings (Minimum Bid $ 3,000.00)	1	LS		
5	1-09	Mobilization	1	LS		
6	1-10	Traffic Control Supervisor	1	LS		
7	1-10	Pedestrian Traffic Control	1	LS		
8	1-10	Flaggers	1300	HR		
9	1-10	Portable Changeable Message Sign	2600	HR		
10	1-10	Sequential Arrow Sign	1500	HR		
11	1-10	Other Project Temporary Traffic Control	1	LS		
12	2-01	Clearing and Grubbing	1	LS		
13	2-02	Removal of Structures and Obstructions	1	LS		
14	2-02	Remove Tree > 12" Dia. Incl Haul	7	EA		
15	2-02	Asphalt Removal Incl Haul	920	SY		
16	2-02	Cement Concrete Sidewalk Removal Incl Haul	30	SY		
17	2-02	Cement Concrete Curb and Gutter Removal Incl Haul	190	LF		
18	2-03	Roadway Excavation Incl. Haul	220	CY		

19	4-04	Crushed Surfacing Top Course	250	TN		
20	5-04	HMA Cl. 1/2 In. PG 58H-22	260	TN		
21	5-04	Temporary HMA	35	TN		
22	7-05	Adjust Catch Basin or Manhole	7	EA		
23	7-05	Adjust & Install New Rectangular Solid Lid	2	EA		
24	7-12	Adjust Water Valve Box	2	EA		
25	7-15	Adjust Water Meter Box	1	EA		
26	8-01	Erosion Control / Water Pollution Prevention	1	LS		
27	8-02	Property Restoration	1	FA	$15,000	$15,000
28	8-04	Cement Concrete Traffic Curb and Gutter, Type A-1	670	LF		
29	8-04	Cement Concrete Pedestrian Curb	80	LF		
30	8-04	Cement Concrete Extruded Curb Type 6	140	LF		
31	8-09	Raised Pavement Marker Type 1	610	EA		
32	8-09	Raised Pavement Marker Type 2	180	EA		
33	8-12	Wood Fence, 8' Height	70	LF		
34	8-14	Decorative Stamped Cement Concrete Median	40	SY		
35	8-14	Cement Concrete Sidewalk	220	SY		
36	8-14	Detectable Warning Surface	70	SF		
37	8-14	Cement Concrete Curb Ramp Type Perpendicular	7	EA		
38	8-14	Cement Concrete Curb Ramp Type Parallel	2	EA		
39	8-14	Cement Concrete Curb Ramp Type Single Direction	1	EA		
40	8-19	Adjust Gas Valve	4	EA		
41	8-20	Pedestrian Signal System, Island Crest Way and Island Park Elementary School South Entrance, Complete	1	LS		

42	8-20	RRFB system, Island Crest Way and SE 62nd St, Complete	1	LS		
43	8-20	RRFB system, Island Crest Way and SE 63rd St, Complete	1	LS		
44	8-20	Modifications of Existing Illumination System	1	LS		
45	8-20	Maintenance of Existing RRFB System	1	LS		
46	8-21	Permanent Signing	1	LS		
47	8-22	Remove Pavement Markings	1	LS		
48	8-22	Paint Line, 4 Inch	1230	LF		
49	8-22	Paint Line, 6 Inch	100	LF		
50	8-22	Plastic Crosswalk Line	670	SF		
51	8-22	Plastic Stop Line	100	LF		
52	8-22	Plastic Traffic Arrow	4	EA		
53	8-23	Temporary Pavement Markings	1	LS		
54	8-26	Potholing	15	EA		

TOTAL BID……$_____

BID SUMMARY

Unit prices for all items, all extensions, and the total amount of bid must be shown on all Schedules. Where conflict occurs between the unit price and the total amount named for any item, the unit price shall prevail, and the totals shall be corrected to conform thereto.

The bidder shall bid on all items included in the Bid Form.

Per 1-07.2(2) all retail sales tax and other applicable taxes shall be included in the unit prices provided in the bid schedule per Rule 171.

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Subcontractor Listing – RCW 39.30.060

Pursuant to RCW 39.30.060, the Bidder shall list as part of its Bid either itself of the names of the subcontractors with whom the Bidder, if awarded the contract, will subcontract for performance of the work of heating, ventilation and air conditioning ("HVAC"), plumbing as described in chapter 18.106 RCW, and electrical as described in chapter 19.28 RCW, or to name itself for the work. The Bidder shall not list more than one subcontractor for each category of work.

Failure of the Bidder to submit as part of the Bid the names of such subcontractors or to name itself to perform such work or the naming of two or more subcontractors to perform the same category of work shall render the Bidder's Bid nonresponsive and therefore, void.

The requirement of this section to name the Bidder's proposed HVAC, plumbing, and electrical subcontractors applies only to proposed HVAC, plumbing, electrical subcontractors, structural steel installation, and rebar installation who will contract directly with the general contractor submitting the Bid to the City.

Electrical work must be performed by a licensed electrical contractor. Bidders are cautioned that installation of electrical equipment (PVC or metal conduit, junction boxes or similar work) may be considered electrical work even if for future use and no electrical current is involved.

Within 48 hours after the published bid submittal time, the Bidder shall submit the names of the subcontractors with whom the bidder, if awarded the contract, will subcontract for performance of the work of structural steel installation and rebar installation, or shall name itself for work.

If the subcontract work categories as described above are not applicable to the work being bid, the bidder must indicate that the subcontract category is "NOT APPLICABLE."

HVAC

Subcontractor Name: _____

UBI Number: _____

Plumbing

Subcontractor Name: _____

UBI Number: _____

Electrical

Subcontractor Name: _____

UBI Number: _____

Structural Steel

Subcontractor Name: _____

UBI Number: _____

Rebar

Subcontractor Name: _____

UBI Number: _____

PROPOSAL SIGNATURE SHEET

If Sole Proprietor, Partnership or Joint Venture

IN WITNESS hereto the undersigned have set their hands this

_____ day of _____ , 20 _____ .

Name of Bidder (name each partner or joint venture partner) _____

Washington Contractor's Registration No. _____

Address _____

_____

Authorized Signature _____

Position/Title _____

If Corporation or Limited Liability Company (LLC)

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this

_____ day of _____ , 20 _____ .

Name of Corporation or Limited Liability Company (LLC) _____

Washington Contractor's Registration No. _____

Address _____

_____

State of Incorporation or Organization _____

Authorized Signature _____

Position/Title _____

BID GUARANTY BOND

KNOW ALL BY THESE PRESENTS: That we, _____,
as Principal, and _____, as Surety, are jointly and severally held and firmly bound unto the City of Mercer Island, hereinafter called the Obligee, each in the penal sum of five percent *(5%)* of the Principal's Total Bid Price for the work, this sum not to exceed _____ DOLLARS ($_____) (hereinafter referred to as "penal sum") of lawful money of the United States, for the payment whereof unto the Obligee.

WHEREAS, the Principal is herewith submitting its bid proposal for the

Island Crest Way Crosswalk Improvements

NOW, THEREFORE, the condition of this obligation is such that if the Principal is awarded the Contract, and if the Principal, within the time specified, fulfills all of the requirements of the Contract Documents which are conditions precedent to the execution of the Agreement, enters into, executes and delivers to the Obligee an agreement on the form provided herein complete with evidences of insurance, and if the Principal, within the time specified, gives to the Obligee the performance and payment bond on the forms provided herein, then this obligation shall be void; otherwise, the Principal and Surety shall pay unto the Obligee the penal sum; provided however, in no event shall the Surety's liability exceed the penal sum. Provided further, if the difference in money between the Principal's Total Bid Price and the amount for which the Obligee legally contracts with another party to fulfill the Contract is greater than the penal sum, the Principal shall pay unto the Obligee the difference between the penal sum and the amount the Obligee pays another to fulfill the Contract.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable under this obligation as Principal, and that nothing of any kind or nature whatsoever that will not discharge the Principal shall operate as a discharge or a release of liability of the Surety.

IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation shall be binding upon and inure to the benefit of the Principal, the Surety and the Obligee and their respective heirs, executors, administrators, successors and assigns.

SIGNED this _____ day of _____, 20 _____.

Principal: _____	Surety: _____
By: _____	By: _____
Title: _____	Title: _____
Address: _____	Address: _____
Telephone: ( ) _____	Telephone: ( ) _____

Note: A power of attorney must be provided which appoints the Surety's true and lawful attorney-in-fact to make, execute, seal and deliver this bid guaranty bond.

Bidder's Qualification Certificate

The undersigned hereby certifies and submits the following:

Company Name _____

Address _____

_____

Owner Name _____

Contact Person _____

Contact Person's Title _____

Phone _____

E-mail _____

Washington State Contractor Registration # _____

Washington State Unified Business Identifier (UBI) # _____

Federal Tax ID # _____

City of Mercer Island Business License #
(required prior to award of contract) _____

	Yes or No	Account / Registration Number (as applicable)
Does the contractor have industrial insurance coverage for its employees working in Washington as required by Title 51 RCW?		
Does the contractor have a Washington State excise tax registration number as required by Title 82 RCW?		
Does the contractor have a Washington State Employment Security Department number as required by Title 50 RCW?		
Has the contractor been disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3)?		
Within the three-year period immediately preceding the date of the bid solicitation, has the contractor been determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of Chapters 49.46, 49.48, or 49.52 RCW?		

By:

_____ _____

Signature **Print Name**

_____ _____

Title **Date**

Contractor Declaration Pursuant to RCW 39.04.350(2)

Project Name: Island Crest Way Crosswalk Improvements

Bidder/Contractor: _____

I, _____, declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct:

1. I am the representative for the above-named bidder/contractor, and as its _____ I am authorized to make the declaration herein on its behalf.

2. Within the three-year period immediately preceding the date of the bid solicitation for the above-named project, the above-named bidder/contractor has not been determined by a final and binding citation and notice of assessment issued by the department of labor and industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48, or 49.52 RCW.

_____ _____

Date and Place Signature

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AGREEMENT FORMS

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CITY OF MERCER ISLAND, WASHINGTON
PUBLIC WORKS CONTRACT
FOR
Island Crest Way Crosswalk Improvements

THIS PUBLIC WORKS CONTRACT ("Contract") dated [insert date agreement drafted], is effective on the date the Contract is fully executed by the Parties. The Parties to this Contract are the CITY OF MERCER ISLAND, a Washington municipal corporation ("City" or "Owner"), and [INSERT FULL LEGAL NAME OF CONTRACTOR], a [insert state where formed] [choose type of person or entity] ("Contractor").

A. The City desires to retain an independent contractor to furnish all labor and materials necessary to perform work at [insert address], Mercer Island, Washington ("Property"); and

B. The Contractor has the requisite skill and experience to perform such work and has submitted a proposal dated [insert date proposal received] to complete such work ("Proposal").

NOW, THEREFORE, the parties ("Parties") agree to the following terms and conditions:

1. SERVICES BY CONTRACTOR

1.1 Description of Work. Contractor shall perform all work and furnish all tools, materials, supplies, equipment, labor and other items incidental thereto necessary for the construction and completion of the work, more particularly described in the Contract Documents for the Island Crest Way Crosswalk Improvements Project, including this Public Works Contract, the Contractor's completed Bid Form, the City's General Terms and Conditions (May 2020 ed.), any Supplemental and/or Special Conditions, Technical Specifications, Drawings and Addenda, which documents are incorporated by this reference, ("Work"), which Work shall be completed to the City's satisfaction, within the time period prescribed by the City and pursuant to the direction of the City Manager or his or her designee.

1.2 Completion Date. The Work shall be commenced within ten (10) days of receipt by the Contractor of the City's Notice to Proceed and shall be Substantially Completed by August 23, 2024, (the "Contract Time") as may be extended in accordance with the Contract Documents. In the event the Work is not completed within the time specified, Contractor agrees to pay to the City liquidated damages in the amount set forth in Section 1.3 of this Contract.

1.3 Liquidated Damages. TIME IS OF THE ESSENCE OF THIS CONTRACT. Delays inconvenience the residents of Mercer Island and cost taxpayers undue sums of money, adding time needed for administration, engineering, inspection and supervision. It is impractical for the City to calculate the actual cost of delays. Accordingly, the Contractor agrees to pay liquidated damages as follows: Liquidated damages for failure to achieve timely Substantial Completion shall be in the amount of $150 per day.

1.4 Performance Standard. Contractor shall perform the Work in a manner consistent with accepted practices for highly skilled and competent contractors performing this type of work in this area.

1.5 Compliance with Laws. Contractor shall perform the Work in accordance with all applicable federal, state and City laws, including but not limited to all City ordinances, resolutions, standards, or policies, as now existing, or hereafter adopted or amended, and obtain all necessary permits and pay all permit, inspection, or other fees, at its sole cost and expense.

1.6 Utility Location. Contractor is responsible for locating any underground utilities affected by the Work and is deemed to be an excavator for purposes of Chapter 19.122 RCW, as amended. Contractor shall be responsible for compliance with Chapter 19.122 RCW, including utilization of the "one call" locator system before commencing any excavation activities.

1.7 Air Environment. Contractor shall fully cover any and all loads of loose construction materials including without limitation, sand, dirt, gravel, asphalt, excavated materials, construction debris, etc., to protect said materials from air exposure and to minimize emission of airborne particles to the ambient air environment within the City of Mercer Island.

2. TERM

This Contract shall commence on the effective date of this Contract and continue until the Work is complete, and formally accepted by City, and all warranties have expired.

3. REQUISITE SKILL

The Contractor warrants that it has the requisite skill to complete the Work and is appropriately accredited and licensed by all applicable agencies and governmental entities, including but not limited to being registered to do business in the City of Mercer Island by obtaining a City of Mercer Island business registration. Contractor represents that it has visited the site and is familiar with all of the plans and specifications in connection with the completion of the Work.

4. COMPENSATION

4.1 Total Compensation. In consideration of the Contractor performing the Services, the City agrees to pay the Contractor an amount not to exceed [insert maximum value of contract in words] Dollars ($[insert $ amount in figures]), based on the Proposal submitted by Contractor dated [insert date proposal received] and as may be adjusted under the Contract Documents.

4.2 Contractor Responsible for Taxes. Except as otherwise stated in the Contract Documents, the Contractor shall be solely responsible for the payment of any taxes imposed by any lawful jurisdiction as a result of the performance and payment of this Contract.

4.3 Method of Payment. Payment by the City for the Work will only be made after the Work has been completed, a voucher or invoice is submitted in a form satisfactory to the City, and such invoice is approved by the appropriate City representative. Payment shall be made within thirty (30) days of receipt of such invoice or voucher unless otherwise set forth in the Bid Form. The Contractor's acceptance of such payment for the Work shall constitute full compensation for the performance of the Work. Invoices shall be submitted to:

City of Mercer Island
ATTN: Rebecca O'Sullivan, Transportation Engineer

9611 SE 36th Street
Mercer Island, WA 98040

4.4 Retainage. Pursuant to Chapter 60.28 RCW, five percent (5%) of the Total Compensation shall be retained by the City to assure payment of Contractor's state taxes as well as payment of subcontractors, suppliers, and laborers. Upon execution of this Contract, Contractor shall complete, execute, and deliver to the City the Contractor's Retainage Agreement set forth in the Contract Documents. No payments shall be made by the City from the retained percentage fund ("Fund") nor shall the City release any retained percentage escrow account to any person, until the City has received from the Department of Revenue a certificate that all taxes, increases, and penalties due from the Contractor and all taxes due and to become due with respect to the Contract have been paid in full or that they are, in the Department's opinion, readily collectible without recourse to the State's lien on the retained percentage. Upon non-payment by the general contractor, any supplier or subcontractor may file a lien against the retainage funds, pursuant to Chapter 60.28 RCW. Subcontractors or suppliers are required to give notice of any lien within thirty (30) days of the completion of the Work and in the manner provided in RCW 39.08.030. Within sixty (60) days after completion of all Work on this Contract, the City shall release and pay in full the money held in the Fund, unless the City becomes aware of outstanding claims made against this Fund.

5. EQUAL OPPORTUNITY EMPLOYER

In all Contractor services, programs or activities, and all Contractor hiring and employment made possible by or resulting from this Contract, there shall be no discrimination by Contractor or by Contractor's employees, agents, subcontractors or representatives against any person because of sex, sexual orientation, age (except minimum age and retirement provisions), race, color, creed, national origin, marital status or the presence of any disability, including sensory, mental or physical handicaps, unless based upon a bona fide occupational qualification in relationship to hiring and employment. This requirement shall apply, but not be limited to the following: employment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. Contractor shall not violate any of the terms of Chapter 49.60 RCW, Title VII of the Civil Rights Act of 1964, the Americans With Disabilities Act, Section 504 of the Rehabilitation Act of 1973 or any other applicable federal, state, or local law or regulation regarding non-discrimination. Any material violation of this provision shall be grounds for termination of this Contract by the City and, in the case of the Contractor's breach, may result in ineligibility for further City agreements.

6. INDEPENDENT CONTRACTOR/CONFLICT OF INTEREST

It is the intention and understanding of the Parties that the Contractor shall be an independent contractor and that the City shall be neither liable nor obligated to pay Contractor sick leave, vacation pay or any other benefit of employment, nor to pay any social security or other tax which may arise as an incident of employment. The Contractor shall pay all income and other taxes as due. Industrial or any other insurance which is purchased for the benefit of the City, regardless of whether such may provide a secondary or incidental benefit to the Contractor, shall not be deemed to convert this Contract to an employment contract. It is recognized that Contractor may perform work during the Term of this Contract for other third parties; provided, however, that such performance of other work shall not conflict with or interfere with the Contractor's ability to perform the Work. Contractor agrees to resolve any such conflicts of interest in favor of the City.

7. INDEMNIFICATION

7.1 Indemnification and Hold Harmless.

A. The Contractor shall protect, defend, indemnify, and hold harmless City, its elected officials, officers, agents, volunteers, and employees, from any and all claims, demands, suits, penalties, losses, damages, judgments, or costs of any kind whatsoever, including attorneys' fees (hereinafter "claims"), 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. However, 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.

B. The Contractor's obligations under this section shall include, but not be limited to,

i. The duty to promptly accept tender of defense and provide defense to City at the Contractor's own expense.

ii. The duty to indemnify and defend City, its elected officials, officers, agents, and employees, from any claim, demand, and/or cause of action brought by or on behalf of any of its employees, or agents. The foregoing duty is specifically and expressly intended to constitute a waiver of the Contractor's immunity under Washington's Industrial Insurance Act, RCW Title 51, as respects City with a full and complete indemnity and defense of claims made by the Contractor's employees. The parties acknowledge that these provisions were mutually negotiated upon by them.

iii. To the maximum extent permitted by law, the Contractor shall indemnify and defend City, its elected officials, officers, agents and employees, from and be liable for all damages and injury which shall be caused to owners of property on or in the vicinity of the work or which shall occur to any person or persons or property whatsoever arising out of the performance of this Contract, whether or not such injury or damage is caused by negligence of the Contractor or caused by the inherent nature of the work specified.

C. City may, in its sole discretion, (1) withhold amounts sufficient to pay the amount of any claim for injury, and/or (2) pay any claim for injury of which City may have knowledge, regardless of the formalities of notice of such claim, arising out of the performance of this Contract.

D. Any amount withheld will be held until the Contractor secures a written release from the claimant, obtains a court decision that such claim is without merit, or satisfies any judgment on

such claim. In addition, the Contractor shall reimburse and otherwise be liable for claims costs incurred by City, including, without limitation, costs for claims adjusting services, attorneys, engineering, and administration.

E. In the event City incurs any judgment, award, and/or costs arising therefrom, including attorneys' fees, to enforce the provisions of this article, all such fees, expenses, and costs shall be recoverable from the Contractor.

F. This provision has been mutually negotiated by the City and the Contractor.

7.2 Survival. The provisions of this Section 7 shall survive the expiration or termination of this Contract with respect to any event occurring prior to such expiration or termination.

8. INSURANCE

8.1 The Contractor agrees to carry without interruption from commencement of the Contractors work through the term of the contract and for thirty (30) days after Physical Completion, unless otherwise indicated herein, the following insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the Work by Contractor, its agents, representatives, employees or subcontractors with a carriers having a current A.M. Best rating of not less than A:VII. The City, at its discretion, may require additional types and greater limits of insurance coverage commensurate with the risk associated with the performance of the Work.

A. Workers' Compensation and Employer's Liability Insurance in amounts sufficient pursuant to the laws of the State of Washington.

B. Commercial general liability insurance shall be written on a form at least as broad as Insurance Services Office (ISO) occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors, products-completed operations for three years following substantial completion of the Work, stop gap liability, 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 05 09. There shall be no exclusion for liability arising from explosion, collapse, or underground property damage. The City shall be named as an additional insured under the 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 coverage at least as broad, with limits of no less than $2,000,000 each occurrence, $2,000,000 general aggregate, and a $2,000,000 products-completed operations aggregate limit.

C. Automobile liability insurance covering all owned, non-owned, hired, and leased vehicles. Coverage shall be written on 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 with combined single limits for bodily injury and property damage of not less than $1,000,000 per accident.

D. Asbestos Abatement or Hazardous Materials. If asbestos abatement or hazardous materials work is performed, Contractor shall review coverage with the City Attorney's office and provide scope and limits of coverage that are appropriate for the scope of Work and are satisfactory to the City. Contractor shall not commence any Work until its coverage has been approved by the City Attorney's office.

E. Builders Risk insurance covering interests of the City, the Contractor, Subcontractors, and Sub-subcontractors in the work. Builders Risk insurance shall be on a special perils policy form and shall insure against the perils of fire and extended coverage and physical loss or damage including flood, earthquake, theft, vandalism, malicious mischief, and collapse. The Builders Risk insurance shall include coverage for temporary buildings, debris removal, and damage to materials in transit or stored off-site. This Builders Risk insurance covering the work will have a deductible of $5,000 for each occurrence, which will be the responsibility of the Contractor. Higher deductibles for flood and earthquake perils may be accepted by the City upon written request by the Contractor and written acceptance by the City. Any increased deductibles accepted by the City will remain the responsibility of the Contractor. The Builders Risk insurance shall be maintained until the City has granted substantial completion of the project. An installation floater may be acceptable in lieu of Builders Risk for renovation projects only if approved in writing by the City. Builders Risk insurance shall be written in the amount of the completed value of the project with no coinsurance provisions.

8.2 The City shall be named as additional insured on all such insurance policies, with the exception of workers' compensation coverages. The Contractor's insurance coverage 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 and shall not contribute with it. If the Contractor maintains higher insurance limits than the minimums shown above, the City shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Contractor, irrespectively of whether such limits maintained by the Contractor are greater than those required by this Contract or whether any certificate of insurance furnished to the City evidences limits of liability lower than those maintained by the Contractor. Contractor shall provide certificates of insurance and amendatory endorsements, concurrent with the execution of this Contract, evidencing such coverage and, at City's request, furnish the City with copies of all insurance policies and with evidence of payment of premiums or fees of such policies. 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.

8.3 The Contractor shall cause each and every Subcontractor to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except that the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by Subcontractors. The Contractor shall ensure that the City is an additional insured on each and every Subcontractor's Commercial General Liability insurance policy using an endorsement at least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

8.4. 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.

8.5 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 Builders Risk insurance or other property insurance obtained pursuant to the Insurance Requirements Section of this Contract or other property insurance applicable to the work. The policies shall provide such waivers by endorsement or otherwise.

8.6 The 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.

8.7 The provisions of this Section shall survive the expiration or termination of this Contract with respect to any event occurring prior to such expiration or termination.

9. PERFORMANCE/PAYMENT BOND OR ADDITIONAL RETAINAGE

Pursuant to RCW 39.08.010, Contractor shall provide Performance Bond and Payment Bond each in an amount equal to 100% of the amount of this Contract to cover the performance of all provisions of this Contract and the payment of all laborers and suppliers. The Contract bonds shall be in a form set forth in the Contract Documents. The Contract bond shall assure that the Contractor will faithfully perform all of the provisions of the Contract as well as pay all laborers, mechanic subcontractors, materialmen, and suppliers. Contractor's obligations under this Contract shall not be limited to the bond amount.

Alternatively, pursuant to RCW 39.08.010, on contracts of Fifty-Five Thousand Dollars ($55,000) or less, at the option of the Contractor, the City may, in lieu of a bond, retain ten percent (10%) of the Contract amount for a period of thirty (30) days after the date of final acceptance, or until receipt of all necessary releases from the Department of Revenue and the Department of Labor and Industries and settlement of any liens filed under Chapter 60.28 RCW, whichever is later.

10. SAFETY

Contractor shall take all necessary precautions for the safety of its employees on the work site and shall comply with all applicable provisions of federal, state, and municipal safety and health laws and codes, including without limitation, all OSHA/WISHA requirements, Safety and Health Standards for Construction Work (Chapter 296-155 WAC), General Safety and Health Standards (Chapter 296-24 WAC), and General Occupational Health Standards (Chapter 296-62 WAC). Contractor shall erect and properly maintain, at all times, all necessary guards, barricades, signals, and other safeguards at all unsafe places at or near the Work for the protection of its employees and the public, safe passageways at all road crossings, crosswalks, street intersections, post danger signs warning against known or unusual hazards and do all other things necessary to prevent accident or loss of any kind. Contractor shall protect from damage all water, sewer, gas, steam or other pipes or conduits, and all hydrants and

all other property that is likely to become displaced or damaged by the execution of the Work. The Contractor shall, at its own expense, secure and maintain a safe storage place for its materials and equipment and is solely responsible for the same.

11. PREVAILING WAGES

11.1 Wages of Employees. This Contract is subject to the minimum wage requirements of Chapter 39.12 of the Revised Code of Washington, as now existing or hereafter amended or supplemented. In the payment of hourly wages and fringe benefits to be paid to any of Contractor's laborers, workpersons and/or mechanics, Contractor shall not pay less than the "prevailing rate of wage" for an hour's work in the same trade or occupation in the locality within the State of Washington where such labor is performed, as determined by the Industrial Statistician of the Department of Labor and Industries of the State of Washington. Prevailing wages paid pursuant to this Agreement shall be the prevailing wage rates which are in effect on the date when the bids, proposals, or quotes were required to be submitted to the City.

The State of Washington prevailing wage rates applicable for this public works project, which is located in King County, may be found at the following website address of the Department of Labor and Industries: https://lni.wa.gov/licensing-permits/public-works-projects/prevailing-wage-rates/. A copy of the applicable prevailing wage rates is also available for viewing at the office of the City located at 9611 SE 36th St, Mercer Island, WA 98040. Upon request, the City will mail a hard copy of the applicable prevailing wages for this project.

11.2 Reporting Requirements. Contractor shall comply with all reporting requirements of the Department of Labor and Industries of the State of Washington. Upon the execution of this Contract, Contractor shall complete and file a Statement of Intent to Pay Prevailing Wages with the Department of Labor and Industries. If requested by the City, the Contractor shall provide certified payroll records for its employees and the employees of its subcontractors. Upon completion of the Work, Contractor shall complete and file an Affidavit of Wages Paid with the Department of Labor and Industries. Contractor shall deliver copies of both the Statement of Intent to Pay Prevailing Wages and the Affidavit of Wages Paid, certified by the Department of Labor and Industries, to the City.

12. SUBCONTRACTOR RESPONSIBILITY

Contractor shall verify responsibility criteria for each first-tier subcontractor, and a subcontractor of any tier that hires other subcontractors must verify responsibility criteria for each of its subcontractors. Verification shall include that each subcontractor, at the time of subcontract execution, meets the responsibility criteria listed in the Instructions to Bidders and possesses an electrical contractor license, if required by chapter 19.28 RCW, or an elevator contractor license, if required by chapter 70.87 RCW. This verification requirement must be included in every public works subcontract or every tier.

13. OWNERSHIP OF DOCUMENTS

All originals and copies of work product, including plans, sketches, layouts, designs, design specifications, records, files computer disks, magnetic media, all finished or unfinished documents or material which may be produced or modified by Contractor while performing the Work shall become the property of the City and shall be delivered to the City at its request.

14. CONFIDENTIALITY

If it is necessary to provide proprietary information, the Contractor shall clearly mark the information on each page of the document(s) as "Proprietary and Confidential". The City is subject to laws regarding the disclosure of public records and document. Proposals and other materials, submitted by the Contractor become public record and may be subject to public disclosure, in whole or in part, and may be released by the City in the event of a request for disclosure. In the event the City receives a public record request for information and the Contractor has marked the requested document as "Proprietary and Confidential", the City shall notify the Contractor of such request and withhold disclosure of such information for not less than five (5) business days, to permit the Contractor to seek judicial protection of such information; provided that the Contractor shall be solely responsible for all attorney fees and costs in such action and shall save and hold harmless the City from any costs, attorneys fees or penalty assessments under Chapter 42.56 RCW for withholding or delaying public disclosure of such information.

15. BOOKS AND RECORDS

The Contractor agrees to maintain books, records, and documents which sufficiently and properly reflect all direct and indirect costs related to the performance of this Contract and such accounting procedures and practices as may be deemed necessary by the City to assure proper accounting of all funds paid pursuant to this Contract. These records shall be subject at all reasonable times to inspection, review or audit by the City, its authorized representative, the State Auditor, or other governmental officials authorized by law to monitor this Contract.

16. CLEAN UP

At any time ordered by the City and immediately after completion of the Work, the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. In the event the Contractor fails to perform the necessary clean up, the City may, but in no event is it obligated to, perform the necessary clean up and the costs thereof shall be immediately paid by the Contractor to the City and/or the City may deduct its costs from any remaining payments due to the Contractor.

17. GENERAL PROVISIONS

This Contract, the Contract Documents and any supporting contract documents contain all of the agreements of the Parties with respect to any matter covered or mentioned in this Contract and no prior agreements or understandings shall be effective for any purpose. No provision of this Contract may be amended except by written agreement of the Parties. Any provision of this Contract which is declared invalid, void or illegal shall in no way affect, impair, or invalidate any other provision hereof and such other provisions shall remain in full force and effect. The Contractor shall not transfer or assign, in whole or in part, any or all of its obligations and rights hereunder without the prior written consent of the City. In the event the City consents to any such assignment or transfer, such consent shall in no way release the Contractor from any of its obligations or liabilities under this Contract. Subject to the preceding sentence, this Contract shall be binding upon and inure to the benefit of the Parties' successors in interest, heirs, and assigns. In the event the City or the Contractor defaults on the performance of any terms in this Contract, and the Contractor or City places the enforcement of the Contract or any part

thereof, or the collection of any monies due, in the hands of an attorney, or files suit, each Party shall pay all its own attorneys' fees and expenses. The venue for any dispute related to this Contract shall be King County, Washington. Failure of the City to declare any breach or default immediately upon occurrence thereof, or delay in taking any action in connection with, shall not waive such breach or default. This Contract shall be governed by and interpreted in accordance with the laws of the State of Washington. Each individual executing this Contract on behalf of the City and Contractor represents and warrants that such individuals are duly authorized to execute this Contract. Time is of the essence of this Contract and each and all of its provisions in which performance is a factor. Adherence to completion dates is essential to the Contractor's performance of this Contract.

IN WITNESS WHEREOF, the Parties have executed this Contract the day of , 20 .

CONTRACTOR:

[INSERT FULL LEGAL NAME OF CONTRACTOR]

By: _____
[insert full legal name and title of signator]

Address:

Phone:
Email:

CITY:

CITY OF MERCER ISLAND

By: _____
Jessi Bon, City Manager

Attest:

By: _____
Andrea Larson, City Clerk

Approved as to form:

By: _____
Bio Park, City Attorney

PERFORMANCE BOND

To City of Mercer Island, WA

Bond No._____

The City of Mercer Island, Washington has awarded to _____(Principal), a contract for the construction of the project designated as Island Crest Way Crosswalk Improvements, Project No. SP0135, in Mercer Island, Washington (Contract), and said Principal is required to furnish a bond for performance of all obligations under the Contract.

The Principal, and _____ (Surety), a corporation, organized under the laws of the State of _____and licensed to do business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Dept., are jointly and severally held and firmly bound to the City, in the sum of _____US Dollars ($_____) Total Contract Amount, subject to the provisions herein.

This statutory performance bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal's obligations under the Contract and fulfill all terms and conditions of all duly authorized modifications, additions, and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and if such performance obligations have not been fulfilled, this bond shall remain in force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

This bond may be executed in two (2) original counterparts, and shall be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the office executing on behalf of the surety.

PRINCIPAL		SURETY	
Principal Signature	Date	Surety Signature	Date
Printed Name	Date	Printed Name	Date
Title		Title	

Name, address, and telephone of local office/agent of Surety Company is:

PAYMENT BOND

to City of Mercer Island, WA

Bond No_____

The City of Mercer Island, Washington has awarded to _____(Principal), a contract for the construction of the project designated as Island Crest Way Crosswalk Improvements, Project No. SP0135, in Mercer Island, Washington (Contract), and said Principal is required under the terms of that Contract to furnish a payment bond in accord with Title 39.08 Revised Code of Washington (RCW) and (where applicable) 60.28 RCW.

The Principal, and_____ (Surety), a corporation organized under the laws of the State of_____ and licensed to do business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Dept., are jointly and severally held and firmly bound to the City, in the sum of_____ US Dollars ($_____) Total Contract Amount, subject to the provisions herein.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 60.28 including all workers, laborers, mechanics, subcontractors, and materialmen, and all person who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Titles 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any changes, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

This bond may be executed in two (2) original counterparts, and shall be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the office executing on behalf of the surety.

PRINCIPAL		SURETY	
Principal Signature	Date	Surety Signature	Date
Printed Name	Date	Printed Name	Date
Title		Title	

Name, address, and telephone of local office/agent of Surety Company is:

RETAINAGE AGREEMENT

Contract Title: Island Crest Way Crosswalk Improvements
Project No. SP0135

Contract Date _____

Contractor Name _____

Contractor Address _____

_____

Contractor Phone _____

Contractor Federal ID # _____

State Law on How Contract Retainage Monies can be Reserved:

RCW 60.28.010 Retained percentage, labor and material Contracts for public improvements or work other than for professional services, provides that there shall be reserved by the city from the monies earned by the contractor on estimates during the progress of the improvement or work, a sum of five percent of such estimates, said sum to be retained by the city as a trust fund for the protection and payment of any persons performing work or supplying provisions or supplies during the work. The monies reserved for contract retainage may be reserved by the contractor choosing one of the following four options:

All investments selected below are subject to City approval.

Contractor Options (Contractor shall place an "x" in one of the boxes below.)

[ ] (a) Retained in a non-interest bearing fund by the public body until released in accordance with applicable state statutes;

[ ] (b) Deposited by the public body in an interest bearing account in a bank, mutual savings bank, or savings and loan association, not subject to withdrawal until released in accordance with applicable state statutes, provided that interest on such account shall be paid to the contractor;

[ ] (c) Placed in escrow with a bank or trust company by the public body until released in accordance with applicable state statutes. The cost of the investment program and the risk thereof is to be borne entirely by the contractor.

[ ] (d) Contractor may submit a Retainage Bond equal to 5% of the total awarded bid amount for all schedules to be held by the public body until released in accordance with applicable state statutes.

Contractor's Bank

If Contractor selects options (b) or (c) above, Contractor shall designate below the bank in which the retainage is to be deposited:

ACCOUNT NO. _____

BANK NAME _____

BANK ADDRESS _____

_____

BANK PHONE # _____

Agreement

Contractor and City agree that all or part of the monies in the account can only be approved for disbursement by Bank to Contractor upon written authorization of the City Finance Director, or his/her authorized designee.

By _____ By _____

City of Mercer Island Contractor

Date _____ Date _____

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SPECIAL PROVISIONS

TABLE OF CONTENTS – SPECIAL PROVISIONS

INTRODUCTION TO THE SPECIAL PROVISIONS
(January 4, 2024 APWA GSP, Option A)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2024 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions are made up of both General Special Provisions (GSPs) from various sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or is a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

(March 8, 2013 APWA GSP)
(April 1, 2013 WSDOTGSP)

Project specific special provisions are labeled without a date as such:
(*****)

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- *Standard Plans for Road, Bridge and Municipal Construction*, WSDOT Manual M21-01, current edition
- City of Mercer Island Standard Details

Contractor shall obtain copies of these publications, at Contractor's own expense.

DIVISION 1: GENERAL REQUIREMENTS

DESCRIPTION OF WORK

(*****)

Work to be performed under this contract includes but is not limited to: temporary traffic control; pedestrian traffic control, vegetation and tree removal, pavement removals and minor grading; new concrete curb & gutter; new concrete sidewalk, new ADA ramps, conduit and wiring installation of new crosswalk pedestrian signals, conduit and wiring installation of new rectangular rapid flashing beacons, illumination modifications, pavement markings, and landscape restoration.

1-01 DEFINITIONS AND TERMS

1-01.3 Definitions

(January 19, 2022 APWA GSP)

Delete the heading Completion Dates and the three paragraphs that follow it, and replace them with the following:

Dates

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

Award Date
The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

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

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

Substantial Completion Date
The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

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

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

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

Supplement this Section with the following:

All references in the Standard Specifications or WSDOT General Special Provisions, to the terms "Department of Transportation", "Washington State Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".

All references to the terms "State" or "state" shall be revised to read "Contracting Agency" unless the reference is to an administrative agency of the State of Washington, a State statute or regulation, or the context reasonably indicates otherwise.

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

All references to "final contract voucher certification" shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

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

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

Business Day
A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.

Contract Bond
The definition in the Standard Specifications for "Contract Bond" applies to whatever bond form(s) are required by the Contract Documents, which may be a combination of a Payment Bond and a Performance Bond.

Contract Documents
See definition for "Contract".

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

Notice of Award
The written notice from the Contracting Agency to the successful Bidder signifying the Contracting Agency's acceptance of the Bid Proposal.

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

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

1-02 BID PROCEDURES AND CONDITIONS

1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder
(January 24, 2011 APWA GSP)

Bidders must meet the minimum qualifications of RCW 39.04.350(1), as amended:

"Before award of a public works contract, a bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public works project.

Add the following:

1-02.2 Plans and Specifications
(June 27, 2011 APWA GSP)

Delete this section and replace it with the following:

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

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

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17") and Contract Provisions	2	Furnished automatically upon award.
Contract Provisions	2	Furnished automatically upon award
Large plans (22" x 34") and Contract Provisions	1	Furnished only upon request.

Additional plans and Contract Provisions may be purchased by the Contractor from the source stated in the Call for Bids, at the Contractor's own expense.

1-02.4(1) General
(December 30, 2022 APWA GSP Option B)

The first sentence of the ninth paragraph, beginning with "Prospective Bidder desiring…", is revised to read:

Prospective Bidders desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing by close of business three (3) business days preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

1-02.5 Proposal Forms
(July 31, 2017 APWA GSP)

Delete this section and replace it with the following:

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

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

1-02.7 Bid Deposit
(March 8, 2013 APWA GSP)

Supplement this section with the following:

Bid bonds shall contain the following:

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

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

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

1-02.10 Withdrawing, Revising, or Supplementing Proposal
(July 23, 2015 APWA GSP)

Delete this section, and replace it with the following:

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

1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, and
2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and
3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

If the Bidder's request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does not submit a revised or supplemented package, then its bid shall be considered withdrawn.

Late revised or supplemented Bid Proposals or late withdrawal requests will be date recorded by the Contracting Agency and returned unopened. Mailed, emailed, or faxed requests to withdraw, revise, or supplement a Bid Proposal are not acceptable.

1-02.13 Irregular Proposals
(January 4, 2024 APWA GSP)

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
   c. A price per unit cannot be determined from the Bid Proposal;
   d. The Proposal form is not properly executed;
   e. The Bidder fails to submit or properly complete a subcontractor list (WSDOT Form 271-015), if applicable, as required in Section 1-02.6;
   f. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification (WSDOT Form 272-056), if applicable, as required in Section 1-02.6;
   g. The Bidder fails to submit Written Confirmations (WSDOT Form 422-031) from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidder's DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
   h. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award in accordance with Section 1-07.11;

i. The Bidder fails to submit a DBE Bid Item Breakdown (WSDOT Form 272-054), if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
j. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.

2. A Proposal may be considered irregular and may be rejected if:
   a. The Proposal does not include a unit price for every Bid item;
   b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
   c. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;
   d. The completed Proposal form contains unauthorized additions, deletions, alternate Bids, or conditions;
   e. Receipt of Addenda is not acknowledged;
   f. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
   g. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders
(May 17, 2018 APWA GSP, Option B)

Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or does not meet Supplemental Criteria 1-7 listed in this Section.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1), and Supplemental Criteria 1-2. Evidence that the Bidder meets Supplemental Criteria 3-7 shall be provided by the Bidder as stated later in this Section.

1. **Delinquent State Taxes**

   A Criterion: The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.

   B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder does not owe delinquent taxes to the Washington State Department of Revenue, or if delinquent taxes are owed to the Washington State Department of Revenue, the Bidder must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency by the deadline listed below.

2. **Federal Debarment**

A Criterion: The Bidder shall not currently be debarred or suspended by the Federal government.

B. Documentation: The Bidder shall not be listed as having an "active exclusion" on the U.S. government's "System for Award Management" database (www.sam.gov).

3. **Subcontractor Responsibility**

A Criterion: The Bidder's standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder's subcontract form shall also include a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also "responsible" subcontractors as defined by RCW 39.06.020.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a copy of its standard subcontract form for review by the Contracting Agency, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.

4. **Claims Against Retainage and Bonds**

A Criterion: The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the three years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of the public works projects completed in the three years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:

- Name of project
- The owner and contact information for the owner;
- A list of claims filed against the retainage and/or payment bond for any of the projects listed;
- A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

5. **Public Bidding Crime**

A. Criterion: The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.

B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder and/or its owners have not been convicted of a crime involving bidding on a public works contract.

6. **Termination for Cause / Termination for Default**

A Criterion: The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date; or if Bidder was terminated, describe the circumstances.

7. **Lawsuits**

A Criterion: The Bidder shall not have lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency

B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, or shall submit a list of all lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date, along with a written explanation of the circumstances surrounding each such lawsuit. The Contracting Agency shall evaluate these explanations to determine whether the lawsuits demonstrate a pattern of failing to meet of terms of construction related contracts.

As evidence that the Bidder meets the Supplemental Criteria stated above, the apparent low Bidder must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets the supplemental criteria together with supporting documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with the Supplemental Criteria. The Contracting Agency reserves the right to request further documentation as needed from the low Bidder and documentation from other Bidders as well to assess Bidder responsibility and compliance with all bidder responsibility criteria. The Contracting Agency also reserves the right to obtain information from third-parties and independent sources of information concerning a Bidder's compliance with the mandatory and supplemental criteria, and to use that information in their evaluation. The Contracting Agency may consider mitigating factors

in determining whether the Bidder complies with the requirements of the supplemental criteria.

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

If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

Request to Change Supplemental Bidder Responsibility Criteria Prior To Bid: Bidders with concerns about the relevancy or restrictiveness of the Supplemental Bidder Responsibility Criteria may make or submit requests to the Contracting Agency to modify the criteria. Such requests shall be in writing, describe the nature of the concerns, and propose specific modifications to the criteria. Bidders shall submit such requests to the Contracting Agency no later than five (5) business days prior to the bid submittal deadline and address the request to the Project Engineer or such other person designated by the Contracting Agency in the Bid Documents.

1-02.15 Pre Award Information
(December 30, 2022 APWA GSP)

Revise this section to read:

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.
7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of Bids

(December 30, 2022 APWA GSP)

Revise the first paragraph to read:

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

1-03.2 Award of Contract

(******)

Supplement this section with the following:

The Award of contract, if made, will be made to the lowest responsive and responsible bidder. No Award will be made until necessary investigations are made by Contracting Agency as to the responsibility of the apparent low bidder. Contracting Agency shall be the sole judge as to the responsibility of the bidder to satisfactorily perform the work as specified and within the time limit set.

1-03.3 Execution of Contract

(January 4, 2024 APWA GSP Option B)

Revise this section to read:

Within 3 calendar days of Award date (not including Saturdays, Sundays and Holidays), the successful Bidder shall provide the information necessary to execute the Contract to the Contracting Agency. The Bidder shall send the contact information, including the full name, email address, and phone number, for the authorized signer and bonding agent to the Contracting Agency.

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within 10 calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer of Coverage form for the Construction Stormwater General Permit with sections I, III, and VIII completed when provided. Before execution of the contract by the Contracting

Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within the calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of 10 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. The bond may be a combined payment and performance bond; or be separate payment and performance bonds. In the case of separate payment and performance bonds, each shall be for the full contract amount. The bond(s) shall:

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
   a. Is registered with the Washington State Insurance Commissioner, and
   b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
   a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
   b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

1-04 SCOPE OF THE WORK

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

(December 30, 2022 APWA GSP)

Revise the second paragraph to read:

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

1. Addenda,
2. Proposal Form,
3. Special Provisions,
4. Contract Plans,
5. Standard Specifications,
6. Contracting Agency's Standard Plans or Details (if any), and
7. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.4 Changes

(January 19, 2022 APWA GSP)

The first two sentences of the last paragraph of Section 1-04.4 are deleted.

1-04.4(1) Minor Changes

(May 30, 2019 APWA GSP)

Delete the first paragraph and replace it with the following:

Payments or credits for changes amounting to $25,000 or less may be made under the Bid item "Minor Change". At the discretion of the Contracting Agency, this procedure for Minor Changes may be used in lieu of the more formal procedure as outlined in Section 1-04.4, Changes. All "Minor Change" work will be within the scope of the Contract Work and will not change Contract Time.

1-04.6 Variation in Estimated Quantities

(December 30, 2022 APWA GSP, Option A)

Revise the first paragraph to read:

Payment to the Contractor will be made only for the actual quantities of Work performed and accepted in conformance with the Contract. When the accepted quantity of Work performed under a unit item varies from the original Proposal quantity, payment will be at the unit Contract price for all Work unless the total accepted quantity of the Contract item, adjusted to exclude added or deleted amounts included in change orders accepted by both parties, increases or decreases by more than 25 percent from the original Proposal quantity, and if the total extended bid price for that item at time of award is equal to or greater than $5,000. In that case, payment for contract work may be adjusted as described herein.

1-04.9 Use of Buildings or Structures

1-04.9(1) Construction Staging and/or Personnel Parking

(*****)

Add the following new section:

The Contractor shall be responsible for providing a Construction Staging and/or Personnel Area in a safe condition and orderly manner throughout the duration of the project. Prior to any construction activity, the Contractor shall provide written notification; informing the Engineer and all employees, contractors, and subcontractors who intend to arrive at this project with vehicles, equipment or supplies; of the location, purpose, and restrictions that apply to the Construction Staging and Personnel Parking Area.

No Construction Staging and/or Personnel Parking Area will be provided by the Contracting Agency. It is the Contractor's responsibility to locate and arrange for the use of this area. The Contractor must restrict all parking and storage activities to approved Construction Staging and Personnel Parking Area(s) for this project. Signal pole equipment storage may be provided by the City as needed for short term signal pole and signal equipment storage. Should this be needed by the contractor, the contractor shall notify, in writing, the City one week in advance of delivery. It shall be the responsibility of the contractor to notify and coordinate delivery and storage and subsequent pickup/delivery to jobsite with City staff. No additional compensation shall be made should the contractor elect to utilize the City provided storage area.

The purpose of the Construction Staging and/or Personnel Parking Area for this project is to provide all contractors, subcontractors, and personnel associated with this project a safe and orderly location to store equipment, tools, and supplies, and for parking construction or personal vehicles. There is a limited amount of available parking in and around the project area. The use of on-street parking areas in the vicinity of the project is prohibited without the expressed written approval of the Engineer and Public Works Director. Do not use private parking space in or around this project to park construction or personal vehicles without the expressed written approval of the owner of the property. Such approval is to be provided to the Engineer.

All costs associated with providing, maintaining, permitting, operating, and closing the Construction Staging and/or Personal Parking Area(s) for this project shall be considered incidental to and included in the unit contract prices of other Bid Items in this Contract.

1-05 CONTROL OF WORK

1-05.4 Conformity With and Deviations from Plans and Stakes

Section 1-05.4 is supplemented with the following:

(January 13, 2021 WSDOT GSP OPT 2)

Contractor Surveying - Roadway

The Contracting Agency has provided primary survey control in the Plans.

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of the roadbed, drainage, surfacing, paving, channelization and pavement marking, illumination and signals, guardrails and barriers, and signing. Except for the survey control data to be

furnished by the Contracting Agency, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans “DO NOT DISTURB” shall be protected throughout the length of the project or be replaced at the Contractors expense.

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. The description shall include coordinates and elevations of all secondary control points.

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 PIs) and at points on the alignments spaced no further than 50 feet.

3. Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the Plans.

4. Establish grading limits, placing slope stakes at centerline increments not more than 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning Satellite (GPS) Machine Controls are used to provide grade control, then slope stakes may be omitted at the discretion of the Contractor

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. 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 less than 300 feet, and at 10-foot intervals in intersection radii with a radius less than 10 feet. Transversely, stakes shall be placed at all locations where the roadway slope changes and at additional points such that the transverse spacing of stakes is not more than

12 feet. If GPS Machine Controls are used to provide grade control, then roadbed and surfacing stakes may be omitted at the discretion of the Contractor.

7. Establish intermediate elevation benchmarks as needed to check work throughout the project.

8. 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.

9. For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, illumination and signals, guardrails and barriers, and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.

10. Contractor shall determine if changes are needed to the profiles or roadway sections shown in the Contract Plans in order to achieve proper smoothness and drainage where matching into existing features, such as a smooth transition from new pavement to existing pavement. The Contractor shall submit these changes to the Engineer for review and approval 10 days prior to the beginning of work.

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

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

	Vertical	Horizontal
Slope stakes	±0.10 feet	±0.10 feet
Subgrade grade stakes set 0.04 feet below grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway paving pins for surfacing or paving	±0.01 feet	±0.2 feet (parallel to alignment) ±0.1 feet (normal to alignment)

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 will verify these coordinates prior to issuing approval to the Contractor for commencing with the work. The Contracting Agency will require up to seven calendar days from the date the data is received.

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 Standard Plan A10.10. When stakes are needed that are not described in the Plans, then those stakes shall be marked, at no additional cost to the Contracting Agency as ordered by the Engineer.

Payment
Payment will be made for the following bid item when included in the proposal:

"Roadway Surveying", lump sum.

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

(******)

Section 1-05.4 is supplemented with the following:

All costs associated with roadway surveying, licensed surveying, structure surveying, utility surveying, and cross sectioning as required by the Standard Specifications and these Special Provisions shall be measured and paid under the bid item “Roadway Surveying” and no additional payment will be made.

Primary horizontal and vertical control data shall not be furnished by the Contracting Agency and the Contractor shall establish horizontal vertical control as part of the “Roadway Surveying” bid item provided in the Proposal. Available horizontal and vertical control data provided in the Plans is for the Contractor’s convenience and shall be verified as part of the “Roadway Surveying” Work.

Section 1-05.4 is supplemented with the following:

(March 9, 2023)
Contractor Surveying – ADA Features
ADA Feature Staking Requirements
The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, and grades necessary for the construction of the ADA features. Calculations, surveying, and measuring required for setting and maintaining the

necessary lines and grades shall be the Contractor's responsibility. The Contractor shall build the ADA features within the specifications in the Standard Plans and contract documents.

ADA Feature Contract Compliance

The Contractor shall be responsible for completing measurements to verify all ADA features comply with the Contract in the presence of the Engineer.

ADA Feature As-Built Measurements

The Contractor shall be responsible for providing the latitude and longitude of each ADA feature as indicated on the ADA Inspection Form(s) (WSDOT Form 224-020).

The completed ADA Inspection Form(s) (WSDOT Form 224-020) shall be submitted as a Type 3 Working Drawing and transmitted to the Engineer within 30 calendar days of completing the ADA feature. After acceptance, the Contracting Agency will submit the final form(s) to the WSDOT ADA Steward.

Payment

Payment will be made for the following bid item that is included in the Proposal:

ADA Features Surveying	**Per Lump Sum**

The lump sum Contract price for "ADA Features Surveying" shall be full pay for all the Work as specified.

In the instance where an ADA feature does not meet accessibility requirements, all work to replace non-compliant work and then to measure, record the as-built measurements, and transmit the electronic forms to the Engineer shall be completed at no additional cost to the Contracting Agency.

1-05.7 Removal of Defective and Unauthorized Work

(October 1, 2005 APWA GSP)

Supplement this section with the following:

If the Contractor fails to remedy defective or unauthorized work within the time specified in a written notice from the Engineer, or fails to perform any part of the work required by the Contract Documents, the Engineer may correct and remedy such work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized work corrected immediately, have the rejected work removed and replaced, or have work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying defective or unauthorized work, or work the Contractor failed or refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of work of others destroyed or damaged by correction, removal, or replacement of the Contractor's unauthorized work.

No adjustment in contract time or compensation will be allowed because of the delay in the performance of the work attributable to the exercise of the Contracting Agency's rights provided by this Section.

The rights exercised under the provisions of this section shall not diminish the Contracting Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the work as required.

1-05.11 Final Inspection

Delete this section and replace it with the following:

1-05.11 Final Inspections and Operational Testing

(October 1, 2005 APWA GSP)

1-05.11(1) Substantial Completion Date

When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor's request shall list the specific items of work that remain to be completed in order to reach physical completion. The Engineer will schedule an inspection of the work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If, after this inspection, the Engineer concurs with the Contractor that the work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection the Engineer does not consider the work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons therefor.

Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption, the work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the work.

The above process shall be repeated until the Engineer establishes the Substantial Completion Date and the Contractor considers the work physically complete and ready for final inspection.

1-05.11(2) Final Inspection and Physical Completion Date

When the Contractor considers the work physically complete and ready for final inspection, the Contractor by written notice, shall request the Engineer to schedule a final

inspection. The Engineer will set a date for final inspection. The Engineer and the Contractor will then make a final inspection and the Engineer will notify the Contractor in writing of all particulars in which the final inspection reveals the work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective work shall be pursued vigorously, diligently, and without interruption until physical completion of the listed deficiencies. This process will continue until the Engineer is satisfied the listed deficiencies have been corrected.

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.

The Contractor will not be allowed an extension of contract time because of a delay in the performance of the work attributable to the exercise of the Engineer's right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the work was considered physically complete. That date shall constitute the Physical Completion Date of the contract, but shall not imply acceptance of the work or that all the obligations of the Contractor under the contract have been fulfilled.

1-05.11(3) Operational Testing

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore when the work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar work it may be desirable for the Engineer to have the Contractor operate and test the work for a period of time after final inspection but prior to the physical completion date. Whenever items of work are listed in the Contract Provisions for operational testing they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

The costs for power, gas, labor, material, supplies, and everything else needed to successfully complete operational testing, shall be included in the unit contract prices related to the system being tested, unless specifically set forth otherwise in the proposal.

Operational and test periods, when required by the Engineer, shall not affect a manufacturer's guaranties or warranties furnished under the terms of the contract.

1-05.12 Final Acceptance

Add the following new section:

1-05.12(1) One-Year Guarantee Period

(March 8, 2013 APWA GSP)

The Contractor shall return to the project and repair or replace all defects in workmanship and material discovered within one year after Final Acceptance of the Work. The Contractor shall start work to remedy any such defects within 7 calendar days of receiving Contracting Agency's written notice of a defect, and shall complete such work within the time stated in the Contracting Agency's notice. In case of an emergency, where damage may result from delay or where loss of services may result, such corrections may be made by the Contracting Agency's own forces or another contractor, in which case the cost of corrections shall be paid by the Contractor. In the event the Contractor does not accomplish corrections within the time specified, the work will be otherwise accomplished and the cost of same shall be paid by the Contractor.

When corrections of defects are made, the Contractor shall then be responsible for correcting all defects in workmanship and materials in the corrected work for one year after acceptance of the corrections by Contracting Agency.

This guarantee is supplemental to and does not limit or affect the requirements that the Contractor's work comply with the requirements of the Contract or any other legal rights or remedies of the Contracting Agency.

1-05.13 Superintendents, Labor and Equipment of Contractor

(August 14, 2013 APWA GSP)

Delete the sixth and seventh paragraphs of this section.

1-05.14 Cooperation with Other Contractors

(******)

Section 1-05.14 is supplemented with the following:

The Contractor shall afford Contracting Agency and other contractors working in the area reasonable opportunity for the introduction and storage of their materials and the execution of their respective work, and Contractor shall properly connect and coordinate its work with theirs.

1-05.14(1) Notifications Relative to Contractor's Activities

(******)

Add the following new section:

The Contractor shall give written notification to the Engineer and to the listed agencies and individuals, in time for them to receive such notice at least 3 calendar days prior to commencement of Work on the Project site. This notification must include:

- the time of the commencement and completion of work
- names of streets or locations of alleys to be closed
- routes of detours where possible
- schedule of operations

- name(s) and phone number(s) of the construction superintendent in responsible charge
- names of individuals having full authority to execute the orders or directions of the Engineer, in the event of an emergency. Include phone numbers with 24/7 availability.

The Contractor shall copy the Engineer on all communications with others related to this project, whether written, or logs of phone conversations:

- All fire, ambulance and police agencies servicing the project area(s).

1-05.15 Method of Serving Notices

(January 4, 2024 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be served and directed to the Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be written in paper format, hand delivered or sent via certified mail delivery service with return receipt requested to the Engineer's office. Electronic copies such as e-mails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

Add the following new sections:

1-05.16 Water and Power

(October 1, 2005 APWA GSP)

The Contractor shall make necessary arrangements, and shall bear the costs for power and water necessary for the performance of the work, unless the contract includes power and water as a pay item.

1-05.17 Oral Agreements

(*****)

Section 1-05.17 is supplemented with the following:

No oral agreement or conversation with any officer, agent, or employee of the Contracting Agency, either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the contract. Such oral agreement or conversation shall be considered as unofficial information and in no way binding upon the Contracting Agency, unless subsequently put in writing and signed by the Contracting Agency.

Add the following new section:

1-05.18 Record Drawings

(Special Provision) *Supplement*

The Contractor shall maintain one set of full size plans for Record Drawings, updated with clear and accurate red-lined field revisions on a daily basis, and within 2 business days after receipt of information that a change in Work has occurred. The Contractor shall not conceal any work until the required information is recorded.

This Record Drawing set shall be used for this purpose alone, shall be kept separate from other Plan sheets, and shall be clearly marked as Record Drawings. These Record Drawings shall be kept on site at the Contractor's field office, and shall be available for review by the Contracting Agency at all times. **One set shall be submitted to the Engineer monthly, along with the Contractor's request for progress payments.**

Record Drawings shall be submitted to the City and approved prior to granting Substantial Completion.

The preparation and upkeep of the Record Drawings is to be the assigned responsibility of a single, experienced, and qualified individual. The quality of the Record Drawings, in terms of accuracy, clarity, and completeness, is to be adequate to allow the Contracting Agency to modify the computer-aided drafting (CAD) Contract Drawings to produce a complete set of Record Drawings for the Contracting Agency without further investigative effort by the Contracting Agency.

The Record Drawing markups shall document all changes in the Work, both concealed and visible. Items that must be shown on the markups include but are not limited to:

- Actual dimensions, arrangement, and materials used when different than shown in the Plans.
- Changes made by Change Order or Field Order.
- Changes made by the Contractor.
- Accurate locations of storm sewer, sanitary sewer, water mains and other water appurtenances, structures, conduits, light standards, vaults, width of roadways, sidewalks, landscaping areas, building footprints, channelization and pavement markings, etc. Include pipe invert elevations, top of castings (manholes, inlets, etc.).

If the location of the feature constructed or installed **varies** from the Plan locations or elevations, Record Drawings shall contain the following information:

1) All existing or abandoned utilities encountered during construction and not shown on the Contract Drawings

2) Sanitary Sewer and Storm Sewers

   a) Type and size of structure, horizontal location, rim and invert elevation, material and diameter of all pipes entering or leaving the structure.

   b) Type and diameter of sewer or storm drain pipe, length of pipe between structures, slope of pipe based on actual invert elevations, horizontal location of pipe relative to the construction centerline

c) Type and diameter of side sewers, distance to nearest manhole, length of pipe from sewer main to right-of-way line, slope of pipe based on actual inverts, invert elevation at right-of-way

3) Water Distribution System

a) Type and size of pipe, including types of joints, deflection of pipe to the nearest degree, horizontal location of pipe relative to the construction centerline, vertical location to the nearest 0.5' for all valves, fittings and crossings of other underground utilities, length of pipe between fittings

b) Station and offset to all valves, hydrants, blow-offs, air vacs and PRVs, types and sizes of pipe attached to the facility

c) Material and size of service lines, horizontal location of the service line and meter box to the nearest station, meter size, length of service line from main to meter

4) Public Roadway Improvements

a) Centerline elevations to the nearest 0.1' at 50 stations and intersections curb elevations

b) Horizontal Location of driveway centerlines to the nearest station, length and width of driveway

5) Illumination and Signalization

a) Station, offset and elevation, when applicable, for permanent vehicle detection loops, junction boxes, above ground cabinets, luminaire & signal poles, conduits and wiring.

If the Contract calls for the Contracting Agency to do all surveying and staking, the Contracting Agency will provide the elevations at the tolerances the Contracting Agency requires for the Record Drawings.

When the Contract calls for the Contractor to do the surveying/staking, the applicable tolerance limits include, but are not limited to the following:

	Vertical	Horizontal
As-built sanitary & storm invert and grate elevations	± 0.01 foot	± 0.01 foot
As-built monumentation	± 0.001 foot	± 0.001 foot
As-built waterlines, inverts, valves, hydrants	± 0.10 foot	± 0.10 foot
As-built ponds/swales/water features	± 0.10 foot	± 0.10 foot
As-built buildings (fin. Floor elev.)	± 0.01 foot	± 0.10 foot
As-built gas lines, power, TV, Tel, Com	± 0.10 foot	± 0.10 foot
As-built signs, signals, etc.	N/A	± 0.10 foot

Making Entries on the Record Drawings:

- Use erasable colored pencil (not ink) for all markings on the Record Drawings, conforming to the following color code:
- Additions - Red
- Deletions - Green
- Comments - Blue
- Dimensions - Graphite
- Provide the applicable reference for all entries, such as the change order number, the request for information (RFI) number, or the approved shop drawing number.
- Date all entries.
- Clearly identify all items in the entry with notes similar to those in the Contract Drawings (such as pipe symbols, centerline elevations, materials, pipe joint abbreviations, etc.).

The Contractor shall certify on the Record Drawings that said drawings are an accurate depiction of built conditions, and in conformance with the requirements detailed above. The Contractor shall submit final Record Drawings to the Contracting Agency. Contracting Agency acceptance of the Record Drawings is one of the requirements for achieving Physical Completion.

Payment will be made for the following bid item:

Record Drawings (Minimum Bid $ 3,000.00)	**Per Lump Sum**

Payment for this item will be made on a prorated monthly basis for work completed in accordance with this section up to 75% of the lump sum bid. The final 25% of the lump sum item will be paid upon submittal and approval of the completed Record Drawings set prepared in conformance with these Special Provisions.

A minimum bid amount has been entered in the Bid Proposal for this item. The Contractor must bid at least that amount.

1-05.19 Daily Construction Report

(******)
Add the following new section:

The Contractor and subcontractors shall maintain daily, a Daily Construction Report of the Work. The Diary must be kept and maintained by Contractor's designated project superintendent(s). Entries must be made on a daily basis and must accurately represent all of the project activities on each day. The Contractor shall provide signed copies of diary sheets for the previous week to Engineer at each Weekly Coordination Meeting.

Every single diary sheet/page must have:

- Project name & number;
- Consecutive numbering of pages, and
- Typed or printed name, signature, and date of the person making the entry.

At a minimum, the diary shall, for each day, have a separate entry detailing each of the following:

1. Day and date.
2. Weather conditions, including changes throughout the day.
3. Complete description of work accomplished during the day, with adequate references to the Plans and Contract Provisions so the reader can easily and accurately identify said work on the Plans. Identify location/description of photographs or videos taken that day.
4. Each and every changed condition, dispute or potential dispute, incident, accident, or occurrence of any nature whatsoever which might affect Contractor, Contracting Agency, or any third party in any manner.
5. List all materials received and stored on- or off-site by Contractor that day for future installation, including the manner of storage and protection of the same.
6. List materials installed that day.
7. List all subcontractors working on-site that day.
8. List the number of Contractor's employees working during each day, by category of employment.
9. List Contractor's equipment on the site that day; showing which were in use, and which idle.
10. Notations to explain inspections, testing, stake-out, and all other services furnished by Contracting Agency or other party during the day.
11. Verify the daily (including non-work days) inspection and maintenance of traffic control devices and condition of the traveled roadway surfaces.
12. Any other information that serves to give an accurate and complete record of the nature, quantity, and quality of Contractor's progress on each day.
13. Hours worked.

It is expressly agreed between Contractor and Contracting Agency that the Daily Diary maintained by Contractor shall be the "Contractor's Book of Original Entry" for the documentation of any potential claims or disputes that might arise during this Contract. Failure of Contractor to maintain this Diary in the manner described above will constitute a waiver of any such claims or disputes by Contractor.

Engineer or his representative on the job site will also complete a Daily Construction Report.

All costs associated with the Contractor’s Daily Construction Report are considered incidental to and included in the various bid items.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws to be Observed

(October 1, 2005 APWA GSP)

Supplement this section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who

may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

1-07.2 State Sales Tax

Delete this section, including its sub-sections, in its entirety and replace it with the following:

1-07.2 State Sales Tax

(June 27, 2011 APWA GSP)

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(4) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2) describes this exception.

The Contracting Agency will pay the retained percentage (or release the Contract Bond is a FHWA-Funded Project) only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.050). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(2) State Sales Tax — Rule 171

WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

1-07.2(3) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

1-07.2(4) Services

The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

1-07.7 Load Limits

(WSDOT GSP March 13, 1995)

Section 1-07.7 is supplemented with the following:

If the sources of materials provided by the Contractor necessitates hauling over roads other than State Highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

1-07.9(5)A Required Documents

(December 30, 2022 APWA GSP)

This section is revised to read as follows:

All Statements of Intent to Pay Prevailing Wages, Affidavits of Wages Paid and Certified Payrolls, including a signed Statement of Compliance for Federal-aid projects, shall be submitted to the Engineer and to the State L&I online Prevailing Wage Intent & Affidavit (PWIA) system.

1-07.16(1) Private/Public Property

(******)
Supplement this section with the following:

Contractor shall maintain jobsite, all streets used by it, and utilities in a neat, orderly, workmanlike, and usable condition. Contractor shall clean up on a daily basis all refuse, rubbish, scrap material, and debris caused by his operations, including sweeping of streets.

On the event the Contractor fails to conform to these requirements, the Contracting Agency shall have the right to have the work done by others and the cost shall be deducted from moneys due to the Contractor.

The Contractor shall maintain access to driveways adjacent to the project limits at all times. Cement concrete driveway approaches shall be poured in two halves (minimum) to facilitate ingress/egress. At the direction of the Engineer, the Contractor may be directed to place HMA for use in temporary driveway access based on site conditions or to maintain a clean site.

The Contractor shall coordinate with all emergency services within the project site to allow access at all times. This may require additional coordination and temporary facilities to be utilized during the prosecution of the Work such as providing temporary steel sheeting or HMA patching. The costs for coordination and temporary facilities shall be considered part of the project and included in all Bid Items and no additional compensation will be made.

1-07.17 Utilities and Similar Facilities

(******)

Section 1-07.17 is supplemented with the following:

Locations and dimensions shown in the Plans for existing buried facilities are in accordance with available information obtained without uncovering. The actual locations may not correspond to the locations shown in the Plans. The Contractor shall be responsible for determining the exact location of all utilities prior to beginning construction. See RCW 19.122 for the latest rules on contacting the one-number locator service, etc.

The Contractor is also warned that there may be utilities on the project that are not part of the One-Call System. If One-Call is not obtainable, notice shall be provided to the individual utility owners of the Contractor’s intent to excavate, within the same time frame cited in RCW 19.122.030.

All existing utilities and services shown on the plans shall be maintained in continuous service during the Contractor's operations. During contractor operations if a utility is found in conflict with the contract work, the contractor shall notify the Engineer immediately. If any utility requires relocation or temporary shutoff, the Contractor shall coordinate all interruptions of service with the utility owner. Disruptions to the services require a minimum of forty-eight (48) hours notice to the impacted utility for notification to the property owner.

The following addresses and telephone numbers of utility companies known or suspected of having facilities within the project limits are supplied for the Contractor's convenience:

- Puget Sound Energy/Gas
  PSE Electrical Contact:
  Abdulrehman Kamel
  Abdulrehman.kamel@pse.com
  425-748-6382
- Lumen/CenturyLink Telecommunications
  Kent B. Conkle Hernandez
  Network Implementation Engineer
  cell: 425-279-5166
  kent.conkle@lumen.com
- King County Signal
  Ula Tuifua
  <Ula.Tuifua@kingcounty.gov>
  206-477-1490
  Jared Paxton
  <Jared.Paxton@kingcounty.gov>
- At&T
  Greg Roberts
  Construction & Engineering
  JK Communications, Supplier to AT&T
  Cell – 206-496-7973
  gr255y@att.com

The Contractor shall coordinate and afford franchise utilities the opportunity to install new and relocate existing facilities in order to construct the proposed improvements.

1-07.18 Public Liability and Property Damage Insurance

Delete this section in its entirety, and replace it with the following:

1-07.18 Insurance
(January 4, 2024 APWA GSP)

1-07.18(1) General Requirements

A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.

B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.

C. If any insurance policy is written on a claims-made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months

following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.

E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.

F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency

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

H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

I. Under no circumstances shall a wrap up policy be obtained, for either initiating or maintaining coverage, to satisfy insurance requirements for any policy required under this Section. A **"**wrap up policy**"** is defined as an insurance agreement or arrangement under which all the parties working on a specified or designated project are insured under one policy for liability arising out of that specified or designated project**.**

1-07.18(2) Additional Insured

All insurance policies, with the exception of Workers Compensation, and of Professional Liability and Builder's Risk (if required by this Contract) shall name the following listed entities as additional insured(s) using the forms or endorsements required herein:

- the Contracting Agency and its officers, elected officials, employees, agents, and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(4) describes limits lower than those maintained by the Contractor.

For Commercial General Liability insurance coverage, the required additional insured endorsements shall be at least as broad as ISO forms CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

1-07.18(3) Subcontractors

The Contractor shall cause each subcontractor of every tier to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by subcontractors.

The Contractor shall ensure that all subcontractors of every tier add all entities listed in 1-07.18(2) as additional insureds, and provide proof of such on the policies as required by that section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency evidence of insurance and copies of the additional insured endorsements of each subcontractor of every tier as required in 1-07.18(4) Verification of Coverage.

1-07.18(4) Verification of Coverage

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand such verification of coverage with these insurance requirements or failure of Contracting Agency to identify a deficiency from the insurance documentation provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Verification of coverage shall include:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement.
3. Any other amendatory endorsements to show the coverage required herein.
4. A notation of coverage enhancements on the Certificate of Insurance shall <u>not</u> satisfy these requirements – actual endorsements must be submitted.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is required on this Project, a full and certified copy of that policy is required when the Contractor delivers the signed Contract for the work.

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. 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 Contracting Agency's recourse to any remedy available at law or in equity.

All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible or self-insured retention shall be the responsibility of the Contractor. In the event an additional insured incurs a liability subject to any policy's deductibles or self-insured retention, said deductibles or self-insured retention shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

Commercial General Liability insurance shall be written on coverage forms at least as broad as ISO occurrence form CG 00 01, including but not limited to liability arising from premises, operations, stop gap liability, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract. There shall be no exclusion for liability arising from explosion, collapse or underground property damage.

The Commercial General Liability insurance shall be endorsed to provide a per project general aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

Contractor shall maintain Commercial General Liability Insurance arising out of the Contractor's completed operations for at least three years following Substantial Completion of the Work.

Such policy must provide the following minimum limits:

$2,000,000	Each Occurrence
$3,000,000	General Aggregate
$3,000,000	Products & Completed Operations Aggregate
$2,000,000	Personal & Advertising Injury each offence
$2,000,000	Stop Gap / Employers' Liability each accident

1-07.18(5)B Automobile Liability

Automobile Liability shall cover owned, non-owned, hired, and leased vehicles; and shall be written on a coverage form at least as broad as ISO form CA 00 01. If the work involves the transport of pollutants, the automobile liability policy shall include MCS 90 and CA 99 48 endorsements.

Such policy must provide the following minimum limit:

$1,000,000	Combined single limit each accident

1-07.18(5)C Workers' Compensation

The Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

1-07.23 Public Convenience and Safety

1-07.23(1) Construction Under Traffic

(*****)

Section 1-07.23(1) is supplemented with the following:

Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.

Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

Posted Speed	Distance From Traveled Way (Feet)
35 mph or less	**10 ***
40 mph	**15**
45 to 55 mph	**20**
60 mph or greater	**30**

* or 2-feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

1-07.24 Rights of Way

(July 23, 2015 APWA GSP)

Delete this section in its entirety, and replace it with the following:

Street Right of Way lines, limits of easements, and limits of construction permits are indicated in the Plans. The Contractor's construction activities shall be confined within these limits, unless arrangements for use of private property are made.

Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of way and easements, both permanent and temporary, necessary for carrying out the work.

Exceptions to this are noted in the Bid Documents or will be brought to the Contractor's attention by a duly issued Addendum.

Whenever any of the work is accomplished on or through property other than public Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement agreement obtained by the Contracting Agency from the owner of the private property. Copies of the easement agreements may be included in the Contract Provisions or made available to the Contractor as soon as practical after they have been obtained by the Engineer.

Whenever easements or rights of entry have not been acquired prior to advertising, these areas are so noted in the Plans. The Contractor shall not proceed with any portion of the work in areas where right of way, easements or rights of entry have not been acquired until the Engineer certifies to the Contractor that the right of way or easement is available or that the right of entry has been received. If the Contractor is delayed due to acts of omission on the part of the Contracting Agency in obtaining easements, rights of entry or right of way, the Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

Each property owner shall be given 48 hours notice prior to entry by the Contractor. This includes entry onto easements and private property where private improvements must be adjusted.

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address, and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

1-08 PROSECUTION AND PROGRESS

Add the following new section:

1-08.0 PRELIMINARY MATTERS

(May 25, 2006 APWA GSP)

Add the following new section:

1-08.0(1) Preconstruction Conference

(October 10, 2008 APWA GSP)

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To establish normal working hours for the work;
5. To review safety standards and the Contractor's Traffic Control Plan;
6. To discuss such other related items as may be pertinent to the work;

The Contractor shall prepare and submit at the preconstruction meeting the following:

1. A breakdown of all lump sum items;
2. A preliminary schedule of working drawing submittals; and
3. A list of material sources for approval if applicable.

Add the following new section:

1-08.0(2) Hours of Work

(December 8, 2014 APWA GSP)

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 48 hours prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are

not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)

2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.

3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.

4. If a 4-10 work schedule is requested and approved the non working day for the week will be charged as a working day.

5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll.

1-08.3 Progress Schedule

1-08.3(1)A Project Specific Scheduling and Order of Work

(******)

Add the following new Section

The order of work will be at the Contractor's option with the exception noted below and shall be in keeping with good construction practice and the terms of the Contract. However, the Contractor shall schedule his activities and have all work performed within the time constraints noted in the various documents, permits, and the Contract. The Contractor is cautioned to review said documents and permits and schedule the Work activities appropriately as no separate monies will be paid to the Contractor by the Owner due to the time constraints imposed by such documents.

It shall be recognized that the desired sequence of work is as follows:

1. 63rd Intersection

2. 62nd Crossing

3. Island Crest Elementary School Crossing

Trenching

All trenches within the roadway area shall be backfilled and patched with temporary asphalt at the end of each working day, unless prior permission is granted by the Project Engineer. Temporary patching asphalt shall be HMA or cold mix asphalt as approved by the Project Engineer.

Relocation, adjustment, and replacement concurrent with Construction

Minor unexpected relocations, adjustments, and relocations by franchise utilities, and performed by Others shall be performed concurrent with the Contractor's activities. Puget

Sound Energy will begin utility pole relocations prior to notice to proceed, but some work may run concurrent with Contractor's activities.

It shall be anticipated and understood that PSE will be onsite for power service connections and inspections. Their work will be limited to connecting the new wire from the conduit to their secondary service. The contractor shall notify PSE for service connection per the contact provided 1-07.17. Their work is being scheduled for June and July. Copies of their design work will be furnished to the Contract by the City.

Measurement and Payment

All costs associated with project specific scheduling and sequencing shall be incidental to the various bid items of this Contract.

1-08.3(2)B Type B Progress Schedule
(January 4, 2024 APWA GSP)

Revise the first paragraph to read:

The Contractor shall submit a preliminary Type B Progress Schedule at or prior to the preconstruction conference. The preliminary Type B Progress Schedule shall comply with all of these requirements and the requirements of Section 1-08.3(2), except that it may be limited to only those activities occurring within the first 60-working days of the project.

Revise the first sentence of the second paragraph to read:
The Contractor shall submit $$3$$ copies of a Type B Progress Schedule depicting the entire project no later than 21-calendar days after the preconstruction conference.

(******)
Supplement this section with the following:

At the preconstruction meeting the contractor shall provide a schedule depicting the following site-specific considerations:

- Physical work in front of Island Crest Elementary shall not commence until all materials have been ordered for the new pedestrian signal and not before June 24, 2024. The contractor shall submit a pedestrian traffic control plan prior to starting any contract work at school crossing and prior to any equipment being delivered. The contractor must maintain existing RRFB operations until new PHB is ready to be activated.

- It is desirable to sequence and perform work while students are not in attendance.

    - On days when school is in session, no work shall occur at any of the crosswalk locations before 9:30am or after 2:30pm.

    - Contractor is responsible for material procurement and sequencing the work such that all such work at Island Crest Elementary can start and proceed without delay. Any delays or work during school operations due to the Contractor's means and methods of procurement and sequencing the work shall not be the basis of claims for delay or extra compensation.

1-08.4 Prosecution of Work

Delete this section in its entirety, and replace it with the following:

1-08.4 Notice to Proceed and Prosecution of Work

(******)

Revise this section to read:
Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No other work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

A Preliminary Notice to Proceed is anticipated to be issued limited to work and traffic control associated with Potholing. Potholing shall be complete within 15 working days of the Preliminary Notice to Proceed Date. See section 8-26 for potholing. The Final Notice to Proceed will be issued after potholing results are documented and provided to the City and Engineer for review and consideration.

1-08.5 Time for Completion

(******)
Supplement this section with the following:

This project shall be physically completed within ***** 70 ***** working days from the Final Notice to Proceed Date.

(December 30, 2022 APWA GSP, Option A)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the Notice to Proceed Date.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement

will also show the nonworking days and all partial or whole days the Engineer declares as unworkable The statement will be identified as a Written Determination by the Engineer. If the Contractor does not agree with the Written Determination of working days, the Contractor shall pursue the protest procedures in accordance with Section 1-04.5. By failing to follow the procedures of Section 1-04.5, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the completion date of the contract after all the Contractor's obligations under the contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
   a. Certified Payrolls (per Section 1-07.9(5)).
   b. Material Acceptance Certification Documents
   c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
   d. Final Contract Voucher Certification
   e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
   f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
   g. Property owner releases per Section 1-07.24

1-08.9 Liquidated Damages

(March 3, 2021 APWA GSP, Option B)

Revise the second and third paragraphs to read:

Accordingly, the Contractor agrees:

1. To pay (according to the following formula) liquidated damages for each working day beyond the number of working days established for Physical Completion, and

2. To authorize the Engineer to deduct these liquidated damages from any money due or coming due to the Contractor.

Liquidated Damages Formula

LD=0.15C/T

Where:

LD = liquidated damages per working day (rounded to the nearest dollar)
C = original Contract amount
T = original time for Physical Completion

When the Contract Work has progressed to Substantial Completion as defined in the Contract, the Engineer may determine the Contract Work is Substantially Complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, the formula for liquidated damages shown above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as promptly as possible. Upon request by the Project Engineer, the Contractor shall furnish a written schedule for completing the physical Work on the Contract.

1-09 MEASUREMENT AND PAYMENT

1-09.2(1) General Requirements for Weighing Equipment

(******)
This section is replaced with the following:

Delete the last paragraph of this section and replace it with the following:

It is the responsibility of the Contractor to see that tickets are given to the Inspector on the project for each truckload of material delivered. The City will not have a receiver at the point of delivery. Pay quantities will be prepared on the basis of said tally tickets, delivered to the Inspector by the Contractor on or within one (1) business day of the delivery of materials. Tickets not provided to the Inspector will not be honored for payment.

1-09.6 Force Account

(December 30, 2022 APWA GSP)

Supplement this section with the following:

The Contracting Agency has estimated and included in the Proposal, dollar amounts for all items to be paid per force account, only to provide a common proposal for Bidders. All such dollar amounts are to become a part of Contractor's total bid. However, the Contracting Agency does not warrant expressly or by implication, that the actual amount

of work will correspond with those estimates. Payment will be made on the basis of the amount of work actually authorized by the Engineer.

1-09.7 Mobilization

(December 30, 2022 APWA GSP)

Delete this Section and replace it with the following:

Mobilization consists of preconstruction expenses and the costs of preparatory Work and operations performed by the Contractor typically occurring before 10 percent of the total original amount of an individual Bid Schedule is earned from other Contract items on that Bid Schedule. Items which are not to be included in the item of Mobilization include but are not limited to:

1. Portions of the Work covered by the specific Contract item or incidental Work which is to be included in a Contract item or items.
2. Profit, interest on borrowed money, overhead, or management costs.
3. Costs incurred for mobilizing equipment for force account Work.

Based on the lump sum Contract price for "Mobilization", partial payments will be made as follows:

1. When 5 percent of the total original Bid Schedule amount is earned from other Contract items on that original Bid Schedule, excluding amounts paid for materials on hand, 50 percent of the Bid Item for mobilization on that original Bid Schedule, 5 percent of the total of that original Bid Schedule, or 5 percent of the total original Contract amount, whichever is the least, will be paid.
2. When 10 percent of the total original Bid Schedule amount is earned from other Contract items on that original Bid Schedule, excluding amounts paid for materials on hand, 100 percent of the Bid Item for mobilization on that original Bid Schedule, 10 percent of the total of that original Bid Schedule, or 10 percent of the total original Contract amount, whichever is the least, will be paid.
3. When the Substantial Completion Date has been established for the project, payment of any remaining amount Bid for mobilization will be paid.

Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the Contract.

1-09.9 Payments

(December 30, 2022 APWA GSP)

Section 1-09.9 is revised to read:

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

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that

include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make a determination based on information available. The Project Engineer's determination of the cost of work shall be final.

Progress payments for completed work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the work are tentative, and made only for the purpose of determining progress payments. The progress estimates are subject to change at any time prior to the calculation of the final payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump sum breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
4. Change Orders — entitlement for approved extra cost or completed extra work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
2. The amount of progress payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any work has been satisfactorily completed. The determination of payments under the contract will be final in accordance with Section 1-05.1.

Failure to perform obligations under the Contract by the Contractor may be decreed by the Contracting Agency to be adequate reason for withholding any payments until compliance is achieved.

Upon completion of all Work and after final inspection (Section 1-05.11), the amount due the Contractor under the Contract will be paid based upon the final estimate made by the Engineer and presentation of a Final Contract Voucher Certification to be signed by the Contractor. The Contractor's signature on such voucher shall be deemed a release of all claims of the Contractor unless a Certified Claim is filed in accordance with the requirements of Section 1-09.11 and is expressly excepted from the Contractor's

certification on the Final Contract Voucher Certification. The date the Contracting Agency signs the Final Contract Voucher Certification constitutes the final acceptance date (Section 1-05.12).

If the Contractor fails, refuses, or is unable to sign and return the Final Contract Voucher Certification or any other documentation required for completion and final acceptance of the Contract, the Contracting Agency reserves the right to establish a Completion Date (for the purpose of meeting the requirements of RCW 60.28) and unilaterally accept the Contract. Unilateral final acceptance will occur only after the Contractor has been provided the opportunity, by written request from the Engineer, to voluntarily submit such documents. If voluntary compliance is not achieved, formal notification of the impending establishment of a Completion Date and unilateral final acceptance will be provided by email with delivery confirmation from the Contracting Agency to the Contractor, which will provide 30 calendar days for the Contractor to submit the necessary documents. The 30 calendar day period will begin on the date the email with delivery confirmation is received by the Contractor. The date the Contracting Agency unilaterally signs the Final Contract Voucher Certification shall constitute the Completion Date and the final acceptance date (Section 1-05.12). The reservation by the Contracting Agency to unilaterally accept the Contract will apply to Contracts that are Physically Completed in accordance with Section 1-08.5, or for Contracts that are terminated in accordance with Section 1-08.10. Unilateral final acceptance of the Contract by the Contracting Agency does not in any way relieve the Contractor of their responsibility to comply with all Federal, State, tribal, or local laws, ordinances, and regulations that affect the Work under the Contract.

Payment to the Contractor of partial estimates, final estimates, and retained percentages shall be subject to controlling laws.

1-09.13 Claim Resolution

1-09.13(3) Claims $250,000 or Less

(October 1, 2005 APWA GSP)

This section to be deleted and replaced with:

The Contractor and the Contracting Agency mutually agree that those claims that total $250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Arbitration General
(January 19, 2022 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-10 TEMPORARY TRAFFIC CONTROL

1-10.2(1) General

(October 3, 2022)

The Traffic Control Supervisor shall be certified by one of the following:

The Northwest Laborers-Employers Training Trust
27055 Ohio Ave.
Kingston, WA 98346
(360) 297-3035
https://www.nwlett.edu

Evergreen Safety Council
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778
https://www.esc.org

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100
Fredericksburg, Virginia 22406-1022
Training Dept. Toll Free (877) 642-4637
Phone: (540) 368-1701
https://atssa.com/training

Integrity Safety
13912 NE 20th Ave.
Vancouver, WA 98686
(360) 574-6071
https://www.integritysafety.com

US Safety Alliance
(904) 705-5660
https://www.ussafetyalliance.com

K&D Services Inc.
2719 Rockefeller Ave.
Everett, WA 98201
(800) 343-4049
https://www.kndservices.net

1-10.2(2) Traffic Control Plans

(******)

Supplement this section with the following:

Traffic Control Plans and Phasing and Sequencing Plans, including any revisions and updates, are the sole responsibility of the Contractor.

The Traffic Control Plans (TCP) shall be submitted at a scale of 1" = 20' and shall also show hauling routes, which must be approved in advance by the Engineer.

Per 1-08.0(1), the Contractor shall bring a preliminary TCP to the preconstruction meeting which shall include a proposed construction schedule, construction phasing, pedestrian route plan, and associated temporary traffic control implementation.

The TCP shall also include necessary phasing and sequencing diagrams to clarify the proposed order of work and work zones. The following minimum Traffic Control requirements shall be maintained during the construction of the project:

- Driveway closure shall be coordinated with property owners prior to reconstruction.
- Lane closures during working hours are allowable provided one lane of traffic is maintained at all times. Emergency response vehicles shall have immediate access at all times.
- Unless a pay item has specifically been included in the contract, dust, mud control and street cleaning is considered **incidental** to the project.
- The Contractor shall provide for cleaning all surfaced roadways as a result of the execution of this project. Flushing shall not be allowed.

No lane closures will be allowed on a holiday or holiday weekend. Holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend.

The Contractor shall submit a Traffic Control Plan or Plans showing a method of handling traffic. All construction signs, flaggers, spotters and other traffic control devices shall be shown on the Traffic Control Plan(s) except for emergency situations. Generic TCP Plans will not be acceptable. The Contractor's proposed Traffic Control Plans shall show the necessary lane closures, lane shifts, construction signs, flaggers, spotters, and other traffic control devices required to support each phase of the construction. A separate plan shall be prepared for each major construction phase. The Contractor-provided Plans shall be prepared by the Contractor's Traffic Control Supervisor or a licensed engineer in the State of Washington and shall conform to the requirements contained in the latest version of the Manual on Uniform Traffic Control Devices (MUTCD), the latest version of the Work Zone Traffic Control Guidelines published by the Washington State Department of Transportation.

Traffic Control Plans shall specify how accessible pedestrian routes shall be maintained through the project site.

The Contractor shall maintain a pedestrian path for safe crossing at all times for at least one side of the roadway and one side of each intersection. Pedestrian access shall be ADA compliant and shall be maintained at all times. Pedestrian access shall be continuous along the project frontage and provide access to adjacent businesses and buildings and shall be fully accessible after work hours and on weekends.

Payment for developing an approved Traffic Control Plan, including pedestrian access route plan, shall be considered **incidental** to the lump sum price in the Proposal for *"Other Project Temporary Traffic Control"* and no additional compensation will be made.

If operations of the Contractor are shown to significantly impede traffic flow during peak hours, the Engineer may restrict the Contractor's time for operating within the street.

The Contractor shall also be aware of any additional restrictions within the Contract Documents, in particular Special Provisions section 1-07.16(1) and 1-08.0(1).

1-10.3 Traffic Control Labor, Procedures, and Devices

1-10.3(3)A Construction Signs

(******)

Supplement this section with the following:

Project Signs and posts will be provided by the Contractor. Contractor shall coordinate with installation locations and protect signs from damage throughout construction. Costs associated with this work shall be incidental to other items of work.

1-10.3(3)C Portable Changeable Message Sign

(******)
Supplement this section with the following:

Two weeks prior to commencement of work the Contractor shall place a portable changeable message sign at each end of the project as directed by the Engineer. Messages to display will be determined by the Engineer.

1-10.5 Payment

(******)

Supplement this section with the following:

Traffic Control Supervisor	**Per Lump Sum**
Pedestrian Traffic Control	**Per Lump Sum**
Flaggers	**Per Hour**
Portable Changeable Message Sign	**Per Hour**
Sequential Arrow Sign	**Per Hour**
Other Project Temporary Traffic Control	**Per Lump Sum**

No separate payment will be made for the preparation of the Pedestrian Traffic Control Plan. All costs with developing, implementing, and maintaining temporary ADA pedestrian access path via boardwalks, procurement, placement and compaction of crushed surfacing top course for temporary paths, or other labor, tools, and materials to comply with MUTCD Chapter 6D requirements included in the approved Pedestrian Traffic Control Plan and Standard Specifications shall be included in the lump sum bid item ‘’Pedestrian Traffic Control’’.

All costs for minimizing drop-offs and maintaining access to existing streets and driveways and walkways, including, but not limited to, steel sheeting, and channelization devices, additional Traffic Control Labor shall be included by the Contractor in the lump sum Bid price for “Other Project Temporary Traffic Control”. No additional or separate compensation will be allowed.

END OF DIVISION 1

DIVISION 2: ROADWAY EXCAVATION AND EMBANKMENT

2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1 Description

(******)

Supplement this section with the following:

The Contractor shall stake the proposed clearing limits at a minimum of 25' interval. The Contractor notify Engineer upon completion of the staked limits and shall allow 48 hours, after notification, for the Engineer to approve the clearing limits before commencing activities. At the direction of the Engineer, the limits shall be adjusted in the field. When staking the clearing limits, the Contractor shall strive to protect from damage existing landscaping items, such as vegetation, rockeries, irrigation and other items not indicated for removal.

When trees, fencing, landscape vegetation, rockeries, irrigation systems on private property conflicts with the proposed improvements, the Contractor shall allow seven (7) days notice to the property owners before commencing removal of the materials to allow time for private salvage. Items to be salvaged by adjacent homeowners will be determined in the field on an individual basis. If the property owners do not desire to salvage materials, then clearing may commence upon approval of the limits.

This work shall also consist of trimming branches on trees designated to remain after the proposed improvements are completed. Work shall consist of trimming no more than three days contract time (one day per intersection).

2-01.2 Disposal of Usable Materials and Debris

(******)

Supplement this section with the following:

No waste site has been provided for the disposal of excess or excavated materials. The Contractor shall make his or her own arrangements for obtaining waste sites in accordance with Section 2-01.2(2) and 2-03.3(7)C of the Standard Specifications.

The Contractor shall make the opportunity available to the Engineer to allow salvaging of existing landscape rocks, and significant trees once removed to a site designated by the Engineer, prior to the Contractor providing haul and disposal of the materials. This does not imply that the Engineer will accept the materials removed for salvage. If materials are to be salvaged by the Engineer, the Contractor will provide haul to the designated site (within the City of Mercer Island).

2-01.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with section 1-04.1, for the following bid items that are included in the Proposal:

Clearing and Grubbing	**Per Lump Sum**

The unit bid price for the above including all incidental work shall be full compensation for all labor, materials tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specification and these Special Provisions.

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.1 Description

(******)

Supplement this section with the following:

The following is added at the end of this section:

The Contractor shall remove and dispose of all items shown on the site preparation plans and other minor items necessary to complete the work. The contractor shall review the plans, specifications and project site to verify items to be removed within the clearing and grading limits.

Work shall consist of removing all materials noted in this section as well as any other materials noted for removal on the Plan or as necessary for construction of the proposed improvements for which a separate bid item is not provided. The following specific items shall be included under “Removal of Structure and Obstructions”, as well as other minor items noted on the Plans:

- Guard Post / Bollards, 4 EA
- Remove Pavement Markings
- Trees less than 12’’ DBH, 2 EA
- Removal of existing RRFB foundations, poles, wiring, conflicting junction boxes AFTER new signal is operational, see 8-20.

In general, the Contractor shall remove/dispose or abandon existing items which are in conflict with the new improvements, as noted above, and/or shown on the site preparation and demolition Plans. Where not in conflict, or where not specified for relocation, demolition or removal Contractor shall protect all improvements. Miscellaneous small items requiring removal may not have been shown on the Plans.

All items that are to be removed *inside* the roadway prism, which is defined as edge of pavement removal limits (ie: sawcut) to the back of sidewalk or cut/fill line shown on the plans, whichever is furthest from roadway, and not specifically mentioned as a pay item, will be paid as *Roadway Excavation*, Section 2-03 herein. Items *outside* the roadway prism, and not specifically mentioned as a pay item, will be paid as *Removal of Structure and Obstruction*, Section 2-02.5 herein.

Structure excavation, backfill and compaction quantities for the removal of items are not shown in the Plans. This excavation, backfill and compaction work shall be considered incidental to the lump sum “Removal of Structure and Obstruction” or the unit bid price for items included in the Proposal and no further compensation shall be made. All voids shall be backfilled with crushed surfacing.

2-02.3 Construction Requirements

(******)

Supplement this section with the following:

All material removed for the construction of the project shall be hauled off-site to a legal disposal site by the Contractor. The Contractor shall determine the requirements of his selected disposal site related to accepting the material to be deposited on the site. Testing of the material by the disposal site or refusal of the site to accept the material shall not be the basis for additional payment or for an extension of the contract time. The cost of all such requirements shall be included in the various Bid prices in the Proposal.

2-02.3(1) Saw Cutting

(******)

Add the following new section:

All pavement removed, regardless of type, shall be sawcut with a neat, full depth, vertical edge/line except where the plans call for asphalt to be recycled in place in which case the pavement edge shall be created by asphalt milling equipment.

Prior to the placement of Hot Mix Asphalt in locations illustrated in the plans, the Contractor shall sawcut a neat, full depth (up to 12” in depth), vertical edge/line within the existing pavement where the proposed pavement adjoins. The sawcut shall also be set at a continuous offset from the face of curb as illustrated in the plans.

The Contractor shall be responsible for ensuring that special precautions are undertaken so that in accordance with Department of Ecology guidelines no concrete (asphalt or cement) or concrete by-products are discharged into any storm drain or surface water. Cutting operations will increase the pH of water, therefore filtering is not acceptable.

Thoroughly clean saw cuts where necessary by the use of high pressure water (1,400 psi or greater). All wastewater shall be collected using vacuuming and/or pumped into containers for disposal.

Impervious surfaces contaminated from cutting operations shall be cleaned by sweepers to prevent contaminants from entering storm systems.

All costs associated with sawcutting as well as collecting and disposal of wasted water shall be considered incidental to and included unit contract prices for the associated removal bid items which require sawcutting.

2-02.3(2) Asphalt Removal

(******)

Add the following new section:

This work shall consist of asphalt pavement, driveway, and sidewalk/walkway removal to the limits identified on the plans. Regardless of thickness, existing asphalt shall be removed to install the proposed improvements.

All costs associated with asphalt pavement, driveway, and sidewalk/walkway removal and disposal shall be considered included in the bid items except when a specific bid item is included in the contract proposal

2-02.3(3) Cement Concrete Curb and Gutter Removal

(******)

Add the following new section:

This work shall consist of removing cement concrete curb and gutter, cement concrete pedestrian curb, extruded curb, pedestrian curb, including any reinforcement, and other curbing indicated for removal in the Plans or as directed by the engineer. Removal shall be to the limits identified on the plans,

All costs associated with cement concrete curbing removal and disposal shall be considered included in the bid items except when a specific bid item is included in the contract proposal

2-02.3(4) Cement Concrete Sidewalk Removal

(******)

Add the following new section:

This work shall consist of cement concrete sidewalk/walkway removal to the limits identified on the plans. Regardless of depth, existing concrete sidewalk shall be removed to install the proposed improvements. This work shall also consist of the removal of associated pedestrian curb adjacent to the concrete sidewalk.

All costs associated with cement concrete driveway and sidewalk removal and disposal shall be considered included in the bid items except when a specific bid item is included in the contract proposal

2-02.3(3)6 Removal of Drainage Structures

(******)

Add the following new section:

Where shown in the Plans or where designated by the Engineer, the Contractor shall remove existing catch basins, manholes, pipes, and other drainage features in accordance with Section 2-02 of the Standard Specifications. Removal shall be conducted in such a manner as to prevent damage to surrounding facilities including any existing storm sewers, sanitary sewers, electrical conduits or other facilities to remain. All remaining facilities including but not limited to storm sewers, sanitary sewers, monuments, valves, vaults, and electrical conduits damaged due to the Contractor's operations shall be replaced by the Contractor to the satisfaction of the Engineer at no additional cost to the Contracting Agency. Catch basins, manholes, and other drainage structures designated for removal, including all debris, shall be completely removed. All removed catch basins, manholes, and other drainage structures shall become the property of the Contractor and shall be disposed of in accordance with Section 2-02 of the Standard Specifications. All undamaged frames, grates, and solid covers in a re-useable condition shall become the property of the City of Mercer Island and shall be delivered to a location specified by the Engineer.

Sawcutting (full depth) of existing asphalt concrete pavement and cement concrete curb and gutter surrounding the structure required for removal shall be considered incidental to various bid items. Sawcuts shall be in accordance with Section 2-02 of these Special Provisions.

Backfilling of catch basins, manholes, pipes and other drainage structures to be removed and replaced shall not be performed until the new structure is installed and shall be in accordance with Section 7-05. Backfilling of a structure to be replaced shall be performed

using CSTC and paid in accordance with the Bid Schedule. Backfilling of catch basins, manholes, pipes and other drainage structures to be completely removed shall be performed using CSTC and paid in accordance with the Bid Schedule.

Prior to backfilling any voids, the Contractor shall remove pipe as noted in the plans. Pipe shown to be abandoned or ordered by the Engineer to be abandoned shall be plugged with concrete in accordance with Section 2-09.3(1)E of the Standard Specifications.

Material, labor, tools, and equipment necessary to remove and/or fill any abandoned pipe shall be paid in accordance with the Bid Schedule.

The Contractor shall maintain existing drainage, where designated by the Engineer, until the new drainage system is completely installed and functioning.

2-02.4 Measurement

(******)

Supplement this section with the following:

''Tree Removal > 12'' Dia. Incl Haul'' shall be measured per each tree and stump full removed from the project limits to construct proposed improvements.

"Asphalt Removal Incl Haul" shall be measured per square yard on the surface of pavement removed as identified on the plans.

"Cement Concrete Sidewalk Removal Incl Haul" shall be measured per square yard on the surface pavement removed as identified on the plans.

"Cement Concrete Curb and Gutter Removal Incl Haul" shall be measured per linear foot as identified on the plans.

2-02.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Removal of Structure and Obstructions	**Per Lump Sum**
Tree Removal > 12'' Dia Incl Haul	**Per Each**
Asphalt Removal Incl Haul	**Per Square Yard**
Cement Concrete Curb and Gutter Removal Incl Haul	**Per Linear Foot**
Cement Concrete Sidewalk Removal Incl Haul	**Per Square Yard**

The Lump Sum Contract price for *"Removal of Structure and Obstruction"* shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but not limited to, excavation, removal, cutting, and disposal of existing

surface and underground utilities, and the items shown on the Plans and specified herein that do not have a specific unit bid item. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

The Each Contract price for *"Tree Removal > 12" Dia Incl Haul"* shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but not limited to, excavation, removal, breaking, and disposal of existing trees, regardless of diameter, identified in the Plans. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

The Square Yard Contract price for *"Asphalt Removal Incl Haul"* shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but not limited to, excavation, removal, breaking, and disposal of existing asphalt pavements, walkways, and driveways, regardless of thickness. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

The Linear Foot Contract price for *"Cement Concrete Curb and Gutter Removal Incl Haul"* shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but not limited to, excavation, removal, breaking, and disposal of existing cement concrete curb and gutter. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

The Square Yard Contract price for *"Cement Concrete Sidewalk Removal Incl Haul"* shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work defined in the Standard Specifications and the Special Provisions. This work includes, but not limited to, excavation, removal, breaking, and disposal of existing cement concrete sidewalk, walkways, and driveways, regardless of thickness or reinforcement. Haul and disposal/salvage of materials to which this bid item applies shall be considered incidental.

Sawcutting shall be considered incidental and the unit price shall be included in the various bid items

2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.1 Description

(******)

Supplement this section with the following:

The work described in this Section, regardless of the nature or type of the materials encountered, includes excavating subgrade below the existing roadway, existing sidewalk, existing curb and gutter, and existing driveways to establish subgrade required by the proposed improvements and daylighting to existing ground per the details in the Plans.

Should the contractor remove the existing surface treatment and encounter suitable base material that has been inspected and accepted by the Engineer, the contractor shall stop excavation and grade existing ground for proposed improvements.

Any excavation beyond that necessary for construction, unless otherwise ordered by the Engineer in writing, shall not be paid for. Unauthorized over-excavated areas shall be filled with crushed surfacing to be furnished, placed, and compacted at the Contractor's expense.

2-03.4 Measurement

(******)

Supplement this section with the following:

No separate measurement for payment will be made for compaction. All costs associated with compaction shall be included with the other various unit Bid prices in the Proposal.

No separate measurement for payment will be made for disposal of surplus materials. All costs associated with this work shall be included with the other various Bid items in the Proposal.

No shrinkage or swell factors have been included and no deduction for pavement removal is included. Should the Owner direct the Contractor to perform additional excavation beyond that shown on the Contract Plans, the additional roadway excavation will be measured and paid for at a unit cost determined by dividing the lump sum bid amount by the applicable volume specified above.

Should the Contractor disagree with the estimated quantities shown for "Roadway Excavation Incl. Haul" it shall be the Contractor's responsibility to perform a survey of the existing grade and of the bottom of subgrade after excavation and present this information to the Owner. Should it be determined that the quantities are in error, the lump sum Bid amount will be adjusted by a unit price calculated as described above. All costs required to survey the site and develop the terrain models shall be borne by the Contractor.

2-03.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Roadway Excavation Incl. Haul	**Per Cubic Yard**

The Cubic Yard price for "Roadway Excavation Incl. Haul" shall be full compensation for the cost of all labor, tools, equipment, and materials necessary or incidental for excavating, hauling, and disposing of all materials excavated below existing pavement to establish roadway subgrade at an off-site location provided and paid for by the Contractor.

2-04 HAUL

2-04.1 Description

(******)

Supplement this section with the following:

In reference to the term "haul" as used in Section 2-04 and Section 2-09.3(1)D of the Standard Specifications, all costs and expense involved in haul will be considered incidental to the unit contract prices of the bid items and no additional compensation will be made.

2-04.2 Hauling on Routes Other Than State Highways

(******)

Add the following new special provision:

If the sources of materials provided by the Contractor necessitate hauling over roads other than City streets or State highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use and cleaning, if necessary, of the haul routes.

2-04.5 Payment

(******)

Supplement this section with the following:

All costs associated with hauling materials of any description to, from, and within the project site shall be included in the appropriate unit Bid prices in the Proposal and no further compensation will be paid.

END OF DIVISION 2

DIVISION 3: PRODUCTION FROM QUARRY AND PIT SITES AND STOCKPILING

3-01 PRODUCTION FROM QUARRY AND PIT SITES

3-01.4 Contractor Furnished Material Sources

(******)

Supplement this section with the following:

No source has been provided for any materials necessary for the construction of this improvement.

If the source of materials provided by the Contractor necessitates hauling over roads other than City streets, the Contractor shall at his or her own expense make all arrangements for the use of haul routes.

3-01.5 Payment

(******)

Supplement this section with the following:

All costs of any work required under Division 3 shall be included in the unit contract prices for the various items in the Proposal.

END OF DIVISION 3

DIVISION 4: BASES

4-04 BALLAST AND CRUSHED SURFACING

4-04.1 Description

(******)

Supplement this section with the following:

All crushed surfacing material included in this contract is to be used only as indicated on the Plans or as designated by the Engineer and is not for the convenience of the Contractor. The work shall consist of the placement and compaction of crushed surfacing top course beneath pavement, curbs, paths, and sidewalk at locations indicated on the Plans. The Contractor shall place the material on the project as directed.

Also included in this work is the crushed surfacing top course required for the bedding and backfill of the storm drainage improvements.

Also included in this work is the crushed surfacing top course required for placing and constructing temporary pedestrian facilities throughout the project site as directed by the engineer.

4-04-4 Measurement

(******)

Supplement this section with the following:

The basis of measurement for “Crushed Surfacing Top Course” will be by the ton based on certified truck tickets collected by the inspector at the end of each working day. Tickets will be accepted for payment after the end of each working day only when prior arrangements have been made with the inspector.

Should the Contractor not prepare subgrade to the correct line and grades and crushed surfacing materials are placed in excess of the depths required by the Plans, the excess depth will not be measured for payment. The crushed surfacing in these areas will instead be measured by neat line to be converted to tons for deduction in quantities accepted based on the certified truck tickets.

Crushed surfacing top course or base course used for temporary purposes, including but not limited to driving surfaces, will not be measured for payment unless it is incorporated into construction of the final improvements as required by the Plans.

Water used in placing and compacting surfacing materials will not be measured for payment.

4-04-5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Crushed Surfacing Top Course	**Per Ton**

The unit bid price for the above including all incidental work (temporary placement and compaction for sidewalks and driveways, etc.) shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions. The Contract Bid price for "Crushed Surfacing Top Course" shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work as defined in the Plans, Standard Specifications and these Special Provisions. Work elements shall include, but not be limited to, procuring, hauling, placing, grading, and compacting crushed surfacing material. Water used in placing and compacting surfacing materials shall be considered incidental to the material being placed.

It is the Contractor's responsibility to track crushed surfacing materials measured for separate payment and those not measured for payment by providing separate stockpiles or another method acceptable by the Engineer. Should the Contractor not provide separate stockpiles or other method as outlined above, crushed surfacing material paid for per Ton will not be based on certified truck tickets, but instead be measured by neat line to be converted to tons based upon neat line measurements in the field and on the cross sections provided in the Plans.

END OF DIVISION 4

DIVISION 5: SURFACE TREATMENTS AND PAVEMENTS

5-04 HOT MIX ASPHALT
(July 18, 2018 APWA GSP)

Delete Section 5-04 and amendments, Hot Mix Asphalt and replace it with the following:

5-04.1 Description

This Work shall consist of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base in accordance with these Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans. HMA shall be composed of asphalt binder and mineral materials as may be required, mixed in the proportions specified to provide a homogeneous, stable, and workable mixture.

This work shall also include placing and compacting Temporary HMA for Walkways for pavement transitions, temporary walkways, and other temporary facilities as directed by the engineer.

5-04.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4
HMA Additive	9-02.5
Aggregates	9-03.8
Recycled Asphalt Pavement	9-03.8(3)B
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21
Portland Cement	9-01
Sand	9-03.1(2)
(As noted in 5-04.3(5)C for crack sealing)	
Joint Sealant	9-04.2
Foam Backer Rod	9-04.2(3)A

The Contract documents may establish that the various mineral materials required for the manufacture of HMA will be furnished in whole or in part by the Contracting Agency. If the documents do not establish the furnishing of any of these mineral materials by the Contracting Agency, the Contractor shall be required to furnish such materials in the amounts required for the designated mix. Mineral materials include coarse and fine aggregates, and mineral filler.

The Contractor may choose to utilize recycled asphalt pavement (RAP) in the production of HMA. The RAP may be from pavements removed under the Contract, if any, or pavement material from an existing stockpile.

The Contractor may use up to 20 percent RAP by total weight of HMA with no additional sampling or testing of the RAP. The RAP shall be sampled and tested at a frequency of one sample for every 1,000 tons produced and not less than ten samples per project. The asphalt content and gradation test data shall be reported to the Contracting Agency when submitting the mix design for approval on the QPL. The Contractor shall include the RAP as part of the mix design as defined in these Specifications.

The grade of asphalt binder shall be as required by the Contract. Blending of asphalt binder from different sources is not permitted.

The Contractor may only use warm mix asphalt (WMA) processes in the production of HMA with 20 percent or less RAP by total weight of HMA. The Contractor shall submit to the Engineer for approval the process that is proposed and how it will be used in the manufacture of HMA.

Production of aggregates shall comply with the requirements of Section 3-01.
Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

5-04.2(1) How to Get an HMA Mix Design on the QPL
If the contractor wishes to submit a mix design for inclusion in the Qualified Products List (QPL), please follow the WSDOT process outlined in Standard Specification 5-04.2(1).

5-04.2(1)A Vacant

5-04.2(2) Mix Design – Obtaining Project Approval
No paving shall begin prior to the approval of the mix design by the Engineer.

Nonstatistical evaluation will be used for all HMA not designated as Commercial HMA in the contract documents.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Project Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Project Engineer. The Proposal quantity of HMA that is accepted by commercial evaluation will be excluded from the quantities used in the determination of nonstatistical evaluation.

Nonstatistical Mix Design. Fifteen days prior to the first day of paving the contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.

- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & sig-nature) of a valid licensed Washington State Professional Engineer.
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.**

The mix design shall be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO: resource proficiency sample program.

Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324, or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

Commercial Evaluation Approval of a mix design for "Commercial Evaluation" will be based on a review of the Contractor's submittal of WSDOT Form 350-042 (For commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL's) appropriate for the required use.

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

The Contractor may elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:

- Do not use additives that reduce the mixing temperature more than allowed in Section 5-04.3(6) in the production of mixtures.
- Before using additives, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

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

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

Minimum Surface Temperature for Paving

Compacted Thickness (Feet)	Wearing Course	Other Courses
Less than 0.10	55◦F	45◦F
0.10 to .20	45◦F	35◦F
More than 0.20	35◦F	35◦F

5-04.3(2) Paving Under Traffic

When the Roadway being paved is open to traffic, the requirements of this Section shall apply.

The Contractor shall keep intersections open to traffic at all times except when paving the intersection or paving across the intersection. During such time, and provided that there has been an advance warning to the public, the intersection may be closed for the minimum time required to place and compact the mixture. In hot weather, the Engineer may require the application of water to the pavement to accelerate the finish rolling of the pavement and to shorten the time required before reopening to traffic.

Before closing an intersection, advance warning signs shall be placed and signs shall also be placed marking the detour or alternate route.

During paving operations, temporary pavement markings shall be maintained throughout the project. Temporary pavement markings shall be installed on the Roadway prior to opening to traffic. Temporary pavement markings shall be in accordance with Section 8-23.

All costs in connection with performing the Work in accordance with these requirements, except the cost of temporary pavement markings, shall be included in the unit Contract prices for the various Bid items involved in the Contract.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

Plants used for the preparation of HMA shall conform to the following requirements:

1. **Equipment for Preparation of Asphalt Binder** – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
2. **Thermometric Equipment** – An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
3. **Heating of Asphalt Binder** – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.
4. **Sampling and Testing of Mineral Materials** – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).
5. **Sampling HMA** – The HMA plant shall provide for sampling HMA by one of the following methods:
    a. A mechanical sampling device attached to the HMA plant.
    b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment

Trucks used for hauling HMA shall have tight, clean, smooth metal beds and shall have a cover of canvas or other suitable material of sufficient size to protect the mixture from adverse weather. Whenever the weather conditions during the work shift include, or are forecast to include, precipitation or an air temperature less than 45°F or when time from loading to unloading exceeds 30 minutes, the cover shall be securely attached to protect the HMA.

The contractor shall provide an environmentally benign means to prevent the HMA mixture from adhering to the hauling equipment. Excess release agent shall be drained prior to filling hauling equipment with HMA. Petroleum derivatives or other coating material that

contaminate or alter the characteristics of the HMA shall not be used. For live bed trucks, the conveyer shall be in operation during the process of applying the release agent.

5-04.3(3)C Pavers

HMA pavers shall be self-contained, power-propelled units, provided with an internally heated vibratory screed and shall be capable of spreading and finishing courses of HMA plant mix material in lane widths required by the paving section shown in the Plans.

The HMA paver shall be in good condition and shall have the most current equipment available from the manufacturer for the prevention of segregation of the HMA mixture installed, in good condition, and in working order. The equipment certification shall list the make, model, and year of the paver and any equipment that has been retrofitted.

The screed shall be operated in accordance with the manufacturer's recommendations and shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. A copy of the manufacturer's recommendations shall be provided upon request by the Contracting Agency. Extensions will be allowed provided they produce the same results, including ride, density, and surface texture as obtained by the primary screed. Extensions without augers and an internally heated vibratory screed shall not be used in the Traveled Way.

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

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

If the paving machine in use is not providing the required finish, the Engineer may suspend Work as allowed by Section 1-08.6. Any cleaning or solvent type liquids spilled on the pavement shall be thoroughly removed before paving proceeds.

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

A Material Transfer Device/Vehicle (MTD/V) shall only be used with the Engineer's approval, unless other-wise required by the contract.

Where an MTD/V is required by the contract, the Engineer may approve paving without an MTD/V, at the request of the Contractor. The Engineer will determine if an equitable adjustment in cost or time is due.

When used, the MTD/V shall mix the HMA after delivery by the hauling equipment and prior to laydown by the paving machine. Mixing of the HMA shall be sufficient to obtain a uniform temperature throughout the mixture. If a windrow elevator is used, the length of the windrow may be limited in urban areas or through intersections, at the discretion of the Engineer.

To be approved for use, an MTV:

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

To be approved for use, an MTD:

1. Shall be positively connected to the paver.
2. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
3. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
4. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

5-04.3(3)E Rollers

Rollers shall be of the steel wheel, vibratory, oscillatory, or pneumatic tire type, in good condition and capable of reversing without backlash. Operation of the roller shall be in accordance with the manufacturer's recommendations. When ordered by the Engineer for any roller planned for use on the project, the Contractor shall provide a copy of the manufacturer's recommendation for the use of that roller for compaction of HMA. The number and weight of rollers shall be sufficient to compact the mixture in compliance with the requirements of Section 5-04.3(10). The use of equipment that results in crushing of the aggregate will not be permitted. Rollers producing pickup, washboard, uneven compaction of the surface, displacement of the mixture or other undesirable results shall not be used.

5-04.3(4) Preparation of Existing Paved Surfaces

When the surface of the existing pavement or old base is irregular, the Contractor shall bring it to a uniform grade and cross-section as shown on the Plans or approved by the Engineer.

Preleveling of uneven or broken surfaces over which HMA is to be placed may be accomplished by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

Compaction of preleveling HMA shall be to the satisfaction of the Engineer and may require the use of small steel wheel rollers, plate compactors, or pneumatic rollers to avoid bridging across preleveled areas by the compaction equipment. Equipment used for the compaction of preleveling HMA shall be approved by the Engineer.

Before construction of HMA on an existing paved surface, the entire surface of the pavement shall be clean. All fatty asphalt patches, grease drippings, and other objectionable matter shall be entirely removed from the existing pavement. All pavements or bituminous surfaces shall be thoroughly cleaned of dust, soil, pavement grindings, and other foreign matter. All holes and small depressions shall be filled with an appropriate class of HMA. The surface of the patched area shall be leveled and compacted thoroughly. Prior to the application of tack coat, or paving, the condition of the surface shall be approved by the Engineer.

A tack coat of asphalt shall be applied to all paved surfaces on which any course of HMA is to be placed or abutted; except that tack coat may be omitted from clean, newly paved surfaces at the discretion of the Engineer. Tack coat shall be uniformly applied to cover the existing pavement with a thin film of residual asphalt free of streaks and bare spots at a rate between 0.02 and 0.10 gallons per square yard of retained asphalt. The rate of application shall be approved by the Engineer. A heavy application of tack coat shall be applied to all joints. For Roadways open to traffic, the application of tack coat shall be limited to surfaces that will be paved during the same working shift. The spreading equipment shall be equipped with a thermometer to indicate the temperature of the tack coat material.

Equipment shall not operate on tacked surfaces until the tack has broken and cured. If the Contractor's operation damages the tack coat it shall be repaired prior to placement of the HMA.

The tack coat shall be CSS-1, or CSS-1h emulsified asphalt. The CSS-1 and CSS-1h emulsified asphalt may be diluted once with water at a rate not to exceed one part water to one part emulsified asphalt. The tack coat shall have sufficient temperature such that it may be applied uniformly at the specified rate of application and shall not exceed the maximum temperature recommended by the emulsified asphalt manufacturer.

5-04.3(4)A Crack Sealing

5-04.3(4)A1 General

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

Cleaning: Ensure that cracks are thoroughly clean, dry and free of all loose and foreign material when filling with crack sealant material. Use a hot compressed air lance to dry and warm the pavement surfaces within the crack immediately prior to filling a crack with the

sealant material. Do not overheat pavement. Do not use direct flame dryers. Routing cracks is not required.

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

The sand slurry shall consist of approximately 20 percent CSS-1 emulsified asphalt, approximately 2 percent portland cement, water (if required), and the remainder clean Class 1 or 2 fine aggregate per section 9-03.1(2). The components shall be thoroughly mixed and then poured into the cracks and joints until full. The following day, any cracks or joints that are not completely filled shall be topped off with additional sand slurry. After the sand slurry is placed, the filler shall be struck off flush with the existing pavement surface and allowed to cure. The HMA overlay shall not be placed until the slurry has fully cured. The requirements of Section 1-06 will not apply to the portland cement and sand used in the sand slurry.

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

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

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

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

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

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

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

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

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

5-04.3(4)B Vacant

5-04.3(4)C Pavement Repair

The Contractor shall excavate pavement repair areas and shall backfill these with HMA and crushed surfaing base course in accordance with the details shown in the Plans and as marked in the field. The Contractor shall conduct the excavation operations in a manner that will protect the pavement that is to remain. Pavement not designated to be removed that is damaged as a result of the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer at no cost to the Contracting Agency. The Contractor shall excavate only within one lane at a time unless approved otherwise by the Engineer. The Contractor shall not excavate more area than can be completely finished during the same shift, unless approved by the Engineer.

Unless otherwise shown in the Plans or determined by the Engineer, excavate to a depth of 1.0 feet. The Engineer will make the final determination of the excavation depth required. The minimum width of any pavement repair area shall be 40 inches unless shown otherwise in the Plans. Before any excavation, the existing pavement shall be sawcut or shall be removed by a pavement grinder. Excavated materials will become the property of the Contractor and shall be disposed of in a Contractor-provided site off the Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.

Asphalt for tack coat shall be required as specified in Section 5-04.3(4). A heavy application of tack coat shall be applied to all surfaces of existing pavement in the pavement repair area.

Placement of the HMA backfill shall be accomplished in lifts not to exceed 0.35-foot compacted depth. Lifts that exceed 0.35-foot of compacted depth may be accomplished with the approval of the Engineer. Each lift shall be thoroughly compacted by a mechanical tamper or a roller.

5-04.3(5) Producing/Stockpiling Aggregates and RAP

Aggregates and RAP shall be stockpiled according to the requirements of Section 3-02. Sufficient storage space shall be provided for each size of aggregate and RAP. Materials shall be removed from stockpile(s) in a manner to ensure minimal segregation when being moved to the HMA plant for processing into the final mixture. Different aggregate sizes shall be kept separated until they have been delivered to the HMA plant.

5-04.3(5)A Vacant

5-04.3(6) Mixing

After the required amount of mineral materials, asphalt binder, recycling agent and anti-stripping additives have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials is ensured.

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved

by the Engineer. Also, when a WMA additive is included in the manufacture of HMA, the discharge temperature of the HMA shall not exceed the maximum recommended by the manufacturer of the WMA additive. A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, the moisture content shall be reduced as directed by the Engineer.

Storing or holding of the HMA in approved storage facilities will be permitted with approval of the Engineer, but in no event shall the HMA be held for more than 24 hours. HMA held for more than 24 hours after mixing shall be rejected. Rejected HMA shall be disposed of by the Contractor at no expense to the Contracting Agency. The storage facility shall have an accessible device located at the top of the cone or about the third point. The device shall indicate the amount of material in storage. No HMA shall be accepted from the storage facility when the HMA in storage is below the top of the cone of the storage facility, except as the storage facility is being emptied at the end of the working shift.

Recycled asphalt pavement (RAP) utilized in the production of HMA shall be sized prior to entering the mixer so that a uniform and thoroughly mixed HMA is produced. If there is evidence of the recycled asphalt pavement not breaking down during the heating and mixing of the HMA, the Contractor shall immediately suspend the use of the RAP until changes have been approved by the Engineer. After the required amount of mineral materials, RAP, new asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, and RAP is ensured.

5-04.3(7) Spreading and Finishing

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture. Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1”	0.35 feet
HMA Class ¾” and HMA Class ½”	
wearing course	0.30 feet
other courses	0.35 feet
HMA Class ⅜”	0.15 feet

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

When more than one JMF is being utilized to produce HMA, the material produced for each JMF shall be placed by separate spreading and compacting equipment. The intermingling of HMA produced from more than one JMF is prohibited. Each strip of HMA placed during a work shift shall conform to a single JMF established for the class of HMA specified unless there is a need to make an adjustment in the JMF.

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

For HMA accepted by nonstatistical evaluation the aggregate properties of sand equivalent, uncompacted void content and fracture will be evaluated in accordance with Section 3-04. Sampling and testing of aggregates for HMA accepted by commercial evaluation will be at the option of the Engineer.

5-04.3(9) HMA Mixture Acceptance

Acceptance of HMA shall be as provided under nonstatistical, or commercial evaluation.

Nonstatistical evaluation will be used for the acceptance of HMA unless Commercial Evaluation is specified.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Engineer.

The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Engineer and may be made in accordance with this section.

HMA Tolerances and Adjustments

1. **Job Mix Formula Tolerances** – The constituents of the mixture at the time of acceptance shall be within tolerance. The tolerance limits will be established as follows:

   For Asphalt Binder and Air Voids (Va), the acceptance limits are determined by adding the tolerances below to the approved JMF values. These values will also be the Upper Specification Limit (USL) and Lower Specification Limit (LSL) required in Section 1-06.2(2)D2

Property	Non-Statistical Evaluation	Commercial Evaluation
Asphalt Binder	+/- 0.5%	+/- 0.7%
Air Voids, Va	2.5% min. and 5.5% max	N/A

   For Aggregates in the mixture:

   a. First, determine preliminary upper and lower acceptance limits by applying the following tolerances to the approved JMF.

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1”, ¾”, ½”, and 3/8” sieves	+/- 6%	+/- 8%
No. 4 sieve	+/-6%	+/- 8%
No. 8 Sieve	+/- 6%	+/-8%
No. 200 sieve	+/- 2.0%	+/- 3.0%

b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.

2. Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.
   a. **Aggregates** –2 percent for the aggregate passing the 1½″, 1″, ¾″, ½″, ⅜″, and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).
   b. **Asphalt Binder Con**tent – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent

5-04.3(9)A Vacant

5-04.3(9)B Vacant

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation

HMA mixture which is accepted by Nonstatistical Evaluation will be evaluated by the Contracting Agency by dividing the HMA tonnage into lots.

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to one day's production or 800 tons, whichever is less except that the final sublot will be a minimum of 400 tons and may be increased to 1200 tons.

All of the test results obtained from the acceptance samples from a given lot shall be evaluated collectively. If the Contractor requests a change to the JMF that is approved, the material produced after the change will be evaluated on the basis of the new JMF for the remaining sublots in the current lot and for acceptance of subsequent lots. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

Sampling and testing for evaluation shall be performed on the frequency of one sample per sublot.

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling

Samples for acceptance testing shall be obtained by the Contractor when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with AASH-TO T 168. A minimum of three samples should be taken for each

class of HMA placed on a project. If used in a structural application, at least one of the three samples shall to be tested.

Sampling and testing HMA in a Structural application where quantities are less than 400 tons is at the discretion of the Engineer.

For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed. In all cases, a minimum of 3 samples will be obtained at the point of acceptance, a minimum of one of the three samples will be tested for conformance to the JMF:

- If the test results are found to be within specification requirements, additional testing will be at the Engineer's discretion.
- If test results are found not to be within specification requirements, additional testing of the remaining samples to determine a Composite Pay Factor (CPF) shall be performed.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing

Testing of HMA for compliance of V_a will at the option of the Contracting Agency. If tested, compliance of V_a will use WSDOT SOP 731.

Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308.

Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.

5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors

For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting Agency will determine a Composite Pay Factor (CPF) using the following price adjustment factors:

Table of Price Adjustment Factors	
Constituent	**Factor "f"**
All aggregate passing: 1½″, 1″, ¾″, ½″, ⅜″ and No.4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (Va) (where applicable)	20

Each lot of HMA produced under Nonstatistical Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the nonstatistical

tolerance limits in the Job Mix Formula shown in Table of Price Adjustment Factors, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The nonstatistical tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the Roadway shall be tested to provide a minimum of three sets of results for evaluation.

5-04.3(9)C5 Vacant

5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments

For each lot of HMA mix produced under Nonstatistical Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The total job mix compliance price adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

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

5-04.3(9)C7 Mixture Nonstatistical Evaluation - Retests

The Contractor may request a sublot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, V_a. The results of the retest will be used for the acceptance of the HMA in place of the original sublot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of $500 per sample.

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

If sampled and tested, HMA produced under Commercial Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The commercial tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the street shall be tested to provide a minimum of three sets of results for evaluation.

For each lot of HMA mix produced and tested under Commercial Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The Job Mix Compliance Price Adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

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

5-04.3(10) HMA Compaction Acceptance

HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density). The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

Tests for the determination of the pavement density will be taken in accordance with the required procedures for measurement by a nuclear density gauge or roadway cores after completion of the finish rolling.

If the Contracting Agency uses a nuclear density gauge to determine density the test procedures FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on the day the mix is placed and prior to opening to traffic.

Roadway cores for density may be obtained by either the Contracting Agency or the Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches minimum, unless otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.

If the Contract includes the Bid item “Roadway Core” the cores shall be obtained by the Contractor in the presence of the Engineer on the same day the mix is placed and at locations designated by the Engineer. If the Contract does not include the Bid item “Roadway Core” the Contracting Agency will obtain the cores.

For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor’s request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

Test Results

For a sublot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core be used for determination of the relative density of the sublot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the sublot and will be used for calculation of the CPF and acceptance of HMA compaction lot.

When cores are taken by the Contracting Agency at the request of the Contractor, they shall be requested by noon of the next workday after the test results for the sublot have been provided or made available to the Contractor. Core locations shall be outside of wheel paths and as determined by the Engineer. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted from any monies due or that may become due the Contractor under the Contract at the rate of $200 per core and the Contractor shall pay for the cost of the traffic control.

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

Compaction shall take place when the mixture is in the proper condition so that no undue displacement, cracking, or shoving occurs. Areas inaccessible to large compaction equipment shall be compacted by other mechanical means. Any HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective, shall be removed and replaced with new hot mix that shall be immediately compacted to conform to the surrounding area.

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. Unless the Engineer has approved otherwise, rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat. Rollers shall only be operated in static mode on bridge decks.

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

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

5-04.3(10)C Vacant

5-04.3(10)D HMA Nonstatistical Compaction

5-04.3(10)D1 HMA Nonstatistical Compaction – Lots and Sublots

HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to one day's production or 400 tons, whichever is less except that the final sublot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per sublot per WSDOT T 738.

The sublot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing

The location of the HMA compaction acceptance tests will be randomly selected by the Engineer from within each sublot, with one test per sublot.

5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a sublot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For compaction below the required 92% a Non-Conforming Compaction Factor (NCCF) will be determined. The NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of CPF, the quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of mix.

5-04.3(11) Reject Work

5-04.3(11)A Reject Work General

Work that is defective or does not conform to Contract requirements shall be rejected. The Contractor may propose, in writing, alternatives to removal and replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in Section 1-06.2(2) and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

5-04.3(11)B Rejection by Contractor

The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

5-04.3(11)C Rejection Without Testing (Mixture or Compaction)

The Engineer may, without sampling, reject any batch, load, or section of Roadway that appears defective. Material rejected before placement shall not be incorporated into the pavement. Any rejected section of Roadway shall be removed.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests that the rejected material be tested. If the Contractor elects to have the rejected material tested, a minimum of three representative samples will be obtained and tested. Acceptance of rejected material will be based on conformance with the nonstatistical acceptance Specification. If the CPF for the rejected material is less than 0.75, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

5-04.3(11)D Rejection - A Partial Sublot

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a normal sublot any material that is suspected of being defective in relative density, gradation or asphalt binder content. Such isolated material will not include an original sample location. A minimum of three random samples of the suspect material will be obtained and tested. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)E Rejection - An Entire Sublot

An entire sublot that is suspected of being defective may be rejected. When a sublot is rejected a minimum of two additional random samples from this sublot will be obtained. These additional samples and the original sublot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)F Rejection - A Lot in Progress

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced:

1. When the Composite Pay Factor (CPF) of a lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. When the Pay Factor (PF) for any constituent of a lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. When either the PFi for any constituent or the CPF of a lot in progress is less than 0.75.

5-04.3(11)G Rejection - An Entire Lot (Mixture or Compaction)

An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints

The Contractor shall conduct operations such that the placing of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed and the roller may pass over the unprotected end of the freshly laid mixture only when the placement of the course must be discontinued for such a length of time that the mixture will cool below compaction temperature. When the Work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course.

A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers or tamping irons shall be used to seal the joint.

5-04.3(12)A2 Longitudinal Joints

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than ½ of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than ⅛ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than ¼ inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, the pavement surface shall be corrected by one of the following methods:

1. Removal of material from high places by grinding with an approved grinding machine, or
2. Removal and replacement of the wearing course of HMA, or
3. By other method approved by the Engineer.

Correction of defects shall be carried out until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of $500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When utility appurtenances such as manhole covers and valve boxes are located in the traveled way, the utility appurtenances shall be adjusted to the finished grade prior to paving. This requirement may be waived when requested by the Contractor, at the discretion of the Engineer or when the adjustment details provided in the project plan or specifications call for utility appurtenance adjustments after the completion of paving.

Utility appurtenance adjustment discussions will be included in the Pre-Paving planing (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer prior to the start of paving.

5-04.3(14)B Paving and Planing Under Traffic

5-04.3(14)B1 General

In addition the requirements of Section 1-07.23 and the traffic controls required in Section 1-10, and unless the Contract specifies otherwise or the Engineer approves, the Contractor must comply with the following:

1. Intersections:

a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure, must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).

b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.

c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.

d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.

e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.

2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.
3. Permanent pavement marking must comply with Section 8-22.

5-04.3(14)B2 Submittals – Planing Plan and HMA Paving Plan

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the Engineer, the Contractor must provide each operation's traffic control plan on 24 x 36 inch or larger size Shop Drawings with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

The planing operation and the paving operation include, but are not limited to, metal detection, removal of asphalt and temporary asphalt of any kind, tack coat and drying, staging of supply trucks, paving trains, rolling, scheduling, and as may be discussed at the briefing.

When intersections will be partially or totally blocked, provide adequately sized and noticeable signage alerting traffic of closures to come, a minimum 2 Working Days in advance. The traffic control plan must show where police officers will be stationed when signalization is or may be, countermanded, and show areas where flaggers are proposed.

At a minimum, the planing and the paving plan must include:

1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's planing and paving. Briefly describe the sequencing of traffic control consistent with the proposed planing and paving sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's planing, and paving.
2. A copy of each intersection's traffic control plan.
3. Haul routes from Supplier facilities, and locations of temporary parking and staging areas, including return routes. Describe the complete round trip as it relates to the sequencing of paving operations.
4. Names and locations of HMA Supplier facilities to be used.
5. List of all equipment to be used for paving.
6. List of personnel and associated job classification assigned to each piece of paving equipment.
7. Description (geometric or narrative) of the scheduled sequence of planing and of paving, and intended area of planing and of paving for each day's work, must include the directions of proposed planing and of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection planing and paving scheduling and sequencing, and proposed notifications and coordinations to be timely made. The plan must show HMA joints relative to the final pavement marking lane lines.
8. Names, job titles, and contact information for field, office, and plant supervisory personnel.
9. A copy of the approved Mix Designs.
10. Tonnage of HMA to be placed each day.
11. Approximate times and days for starting and ending daily operations.

5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, Metro transit operations and working around energized overhead wires, school and nursing home and hospital and other accesses, other contractors who may be operating in the area, pedestrian and bicycle traffic, and emergency services. The Contractor, and Subcontractors that may be part of that day's operations, must meet with the Engineer and discuss the proposed operation as it relates to the submitted planing plan and paving plan, approved traffic control plan, and public convenience and safety. Such discussion includes, but is not limited to:

1. General for both Paving Plan and for Planing Plan:
   a. The actual times of starting and ending daily operations.
   b. In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.

c. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, to public convenience and safety, and to other con-tractors who may operate in the Project Site.
d. Notifications required of Contractor activities, and coordinating with other entities and the public as necessary.
e. Description of the sequencing of installation and types of temporary pavement markings as it relates to planing and to paving.
f. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed
g. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells, street car rail, and castings, before planing, see Section 5-04.3(14)B2.
h. Description of how flaggers will be coordinated with the planing, paving, and related operations.
i. Description of sequencing of traffic controls for the process of rigid pavement base repairs.
j. Other items the Engineer deems necessary to address.

2. Paving – additional topics:
a. When to start applying tack and coordinating with paving.
b. Types of equipment and numbers of each type equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type equipment as it relates to meeting Specification requirements.
c. Number of JMFs to be placed, and if more than one JMF how the Contractor will ensure different JMFs are distinguished, how pavers and MTVs are distinguished if more than one JMF is being placed at the time, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.
d. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and Supplier shutdown of operations.
e. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

5-04.3(16) HMA Road Approaches

HMA approaches shall be constructed at the locations shown in the Plans or where staked by the Engineer. The Work shall be performed in accordance with Section 5-04.

5-04.3(18) Uses for HMA

(Special Provision) *New*

Uses for "HMA Class ½" PG58h-22" shall consist of new roadway pavement, roadway overlay, preleveling lifts, and side street paving, utility adjustment and temporary HMA for walkways.

5-04.3(19) Incidental uses for HMA

(Special Provision) *New*

Incidental uses for Hot Mix Asphalt shall consist of restoration and adjustment to paved areas such as the back of sidewalks, sidewalk ramps, behind driveway approaches, placement of asphalt berms and other such uses as directed by the Project Engineer.

5-04.4 Measurement

(Special Provision) *Supplement*

The basis of measurement for "HMA Class ½" PG58H-22" and "Temporary HMA" will be by the ton based on certified truck tickets collected by the inspector at the end of each working day, with no deduction being made for the weight of asphalt binder, blending sand, mineral filler, or any other component of the HMA.

Tickets will be accepted for payment after the end of each working day only when prior arrangements have been made with the inspector.

All costs for tack coat shall be considered incidental to and included in other unit Contract prices.

Preparation of Untreated Roadway will be considered incidental and included in the various bid items and no additional payment will be made.

Cold Mix, if used by the Contractor, will not be measured for separate payment and shall be considered incidental to the lump sum bid item "Other Project Temporary Traffic Control".

5-04.5 Payment

Incidental and Temporary uses for HMA, shall be measured and paid under the "Temporary HMA" bid item.

(Special Provision) *Supplement*

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

HMA Cl ½" PG58H-22	**Per Ton**
Temporary HMA	**Per Ton**

Items to be included in the bid price, but shall not necessarily be limited to all necessary materials, labor, and equipment to satisfactorily complete furnishing, hauling and placement of HMA, compaction, preparation of existing roadway surfaces, furnishing and applying tack coat as defined in the Standard Specifications and Special Provisions.

All costs associated with Preparation of Existing Surfaces, Tack Coat, and Longitudinal Joint Seals shall be considered included in the cost of the Hot Mix Asphalt furnished and installed.

The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions.

END OF DIVISION 5

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

7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS

7-05.1 Description

(******)

Supplement this section with the following:

This work consists of furnishing and installing curb inlets, catch basins, and manholes of the type and size shown in the Plans, the Standard Specifications, and the Standard Plans, in reasonably close conformity with the lines and grades as shown on Plans and staked by the Contractor's surveyor.

All work necessary to intercept existing storm drain lines for the installation of catch basins, inlets, or manholes as shown on the Plans or as directed by the Engineer, shall be considered **incidental** to the type and size of drainage structure installed.

This work shall also consist of replacing existing grates with solid lids, furnishing and installing new catch basin vaned frames and grates, and furnishing and installing new manhole frames and covers as indicated on the Plans.

7-05.2 Materials

(******)

Supplement this section with the following:

New catch basins and inlets shall conform to the Standard Plans for the types and sizes specified. Included in the costs for all drainage structures shall be furnishing and installing frames and grates and solid covers as indicated on the Plans.

All new locking catch basin frames and grates shall have vaned grates, behind curb inlets, or solid lids, as indicated on the Plans. All frames and grates shall be the 18” x 24” size per WSDOT Standard Detail B-30.10-03.

Concrete adjustment rings shall conform to the ASTM C-32, Grade MA.

7-05.3 Construction Requirements

(******)

Supplement this section with the following:

The Contractor is advised that the locations of gas, water, telephone, and cable service lines are not necessarily shown on the Plans. It will be the Contractor’s responsibility to coordinate with franchise utilities so that services are adjusted and maintained per City standards. This will include coordination and making necessary arrangements with service providers for the reconnection or relocation of service lines away from the proposed storm drainage system.

All costs associated with temporarily plugging existing storm drain pipes so that new drainage structures can be installed shall be considered **incidental** to and included in the unit contract price for the type and size of structure installed.

New Catch Basin Adjustment to Grade

Newly installed drainage structures shall include at least one adjustment riser. If additional adjustment is required to achieve finished grade, the Contractor shall install a combination 2", 4", 6" and/or 12" precast risers so that no more than three risers are used at any one drainage structure.

Furnish and Install New Solid Locking Frame and Cover

Where indicated on the Plans, the Contractor shall remove existing frames, grates, and/or solid covers and install new locking ductile iron frame and covers and adjust the frame and cover to new finished grade as necessary. The removed catch basin grate shall become the property of the City and shall be delivered to the City Maintenance Shop. Work described in this section shall be paid under the item "Adjust Catch Basin or Manhole".

Furnish and Install New Locking Catch Basin Frame and Vaned Grate

Where indicated on the Plans, the Contractor shall remove existing frames and grates and install new locking ductile iron frames and vaned grates on the existing catch basin and adjust the frame and grate to finished grade as necessary. The removed catch basin frame and grates shall become the property of the City and shall be delivered to the City Maintenance Shop. New frame and vaned grates shall be adjusted vertically and horizontally to match the flowline of the newly constructed concrete curb and gutter shall be completely grouted on the inside prior to exposure to traffic loads and prior to placing asphalt overlay. Work described in this section shall be paid under the bid item "Adjust Catch Basin or Manhole".

Adjust and Install New Sanitary Sewer Manhole Frame and Cover

The Contractor shall remove existing frames and covers and install new ductile iron frames and covers on the existing sewer manhole and adjust the frame and cover to new finished grad as necessary, in locations on the Plans and/or as designated by the Engineer. The new frames and covers will be furnished to the contractor by the City and will be available for pickup at the City Maintenance Shop. The removed manhole frames and covers shall become the property of the City and shall be delivered to the City Maintenance Shop.

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

(******)

Supplement this section with the following:

Jackhammer around the casting with a maximum clearance of twelve (12) inches. Following the removal of the asphalt and concrete around the structure, clean the castings and the inside of the structure, and remove all tack coat, asphalt, paper, and other debris. Remove failed, crushed, or defective brickwork down to solid full-width bricks. Provide and install new concrete brick or concrete riser sections, conforming to Section 9-12.2, to bring the frame to the proper finished grade and cross slope of the finished asphalt pavement. Set the casting on full-width bricks or risers, using shims to make final grade adjustment. Completely grout the inside and outside to fill any voids between riser bricks. Remove all wooden shims prior to final grout work. Place "HMA Cl ½'' PG58H-22" around the casting in compacted lifts to match into the adjacent finished pavement. Seal all asphalt joints. Compaction shall be done using a pneumatic or hydraulic 'pogo stick'.

Any utility structure lid, casting, cover, grate, or asphalt patch in the traveled way whose finished grade is higher or lower than the adjacent finished asphalt pavement, as measured

by a six (6) foot straight edge, by ¼-inch or more shall be readjusted by the Contractor at his or her own expense.

Utility castings shown on the drawings or designated by the Engineer for replacement shall be installed and adjusted to final grade in the above described manner.

Payment will be made once for each structure that a Locking Frame & Grate has been furnished, installed, and adjusted to finished grade. No payment will be made for lowering castings to or interim adjustments to accommodate roadway grinding or other construction sequencing.

Concrete adjustment rings shall conform to the ASTM C-32, Grade MA.

Solid catch basin covers located in the proposed sidewalk shall be coated in slip resistant material. The slip resistant lid shall be treated with:

1. Mebac #1 as manufactured by IKG Industries, or
2. SlipNOT Grade 3-coarse as manufactured by W.S. Molnar Co.

Work described in this section shall be paid under the bid item “Adjust Catch Basin or Manhole”.

7-05.3(2)A Abandon Existing Storm Sewer Pipes

Where it is required that an existing storm sewer pipe be abandoned (or portions of pipe installed as part of this project which are to be abandoned as shown on the Plans), the structure shall be broken down to a depth of at least 4 feet below the revised surface elevation, all connections plugged, the manhole base shall be fractured to prevent standing water, and the manhole filled with sand and compacted to 90 percent density as specified in Section 2-03.3(14)C. Debris resulting from breaking the upper part of the manhole may be mixed with the sand subject to the approval of the Engineer. The ring and cover shall be salvaged and all other surplus material disposed of.

A cement-based grout shall be used to fill the void of the abandoned storm sewer pipe. The grouting material must have a strength of at least 100 psi and shall have flow characteristics appropriate for filling a storm sewer. The grout mix designed and method of installation shall be approved by the Engineer prior to beginning the operation (See Section 9-03.22).

Work described in this section shall considered incidental to the various bid items and no separate unit of measurement or payment shall be made.

7-04.4 Measurement

(******)

Supplement this section with the following:

The basis of measurement for “Adjust Catch Basin or Manhole’’ and ‘’Adjust and Install New Rectangular Solid Lid” will be per each structure adjusted to final grade, including lowering for paving operations.

7-04.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Adjust Catch Basin or Manhole	**Per Each**
Adjust and Install New Rectangular Solid Lid	**Per Each**

Items to be included in the bid price, but shall not necessarily be limited to all necessary materials, labor, and equipment to satisfactorily complete furnishing, hauling and placement of each structure frame and cover or grate, adjustment to final grade, including lowering for paving operations.

The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions.

7-12 VALVES FOR WATER MAINS

7-12.1 Description

(******)

Supplement this section with the following:

Adjusting Water Valves to Grade

Existing and new water valve boxes shall be adjusted to finished grade per the requirements of Adjusting Manholes and Catch Basins to Grade per 7-05.3(1) herein.

It shall be noted that valve cans may be adjusted into the gutter pan if necessary per the Plan.

7-12.2 Materials

(******)

Supplement this section with the following:

New water valve boxes (when needed to replace existing boxes) will be furnished to the Contractor by the City and will be available for pickup at the City Maintenance Shop.

7-12.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Adjust Water Valve Box	**Per Each**

The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as

defined in the Standard Specifications and these Special Provisions. Payment will only be made once per valve box upon adjustment to finished grade. Interim adjustments, if required, shall be included in the unit price bid for 'Adjust Water Valve Box'.

7-15 SERVICE CONNECTIONS

7-15.1 Description

(******)

Supplement this section with the following:

Adjusting Meter Box to Grade

Existing and new water meter boxes shall be adjusted to finished grade.

7-15.2 Materials

(******)

Supplement this section with the following:

New water meter boxes (when needed to replace existing boxes) will be furnished to the Contractor by the City and will be available for pickup at the City Maintenance Shop.

Meter boxes which are placed within the sidewalk shall be replaced and have slip resistant lids which meet the requirements of Americans with Disabilities Act (ADA) and Public Right-of-Way Accessibility Guideline (PROWAG). Approved products are:

1. Mebac1 (their most aggressive surface) manufactured by IKG Industries
2. SlipNOT Grade 3-coarse manufactured by W.S. Molnar Company.

7-15.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Adjust Water Meter Box	**Per Each**

The unit bid price for the above including all incidental work shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions. Payment will only be made once per meter box upon adjustment to finished grade. Interim adjustments, if required, shall be included in the unit price bid for 'Adjust Water Meter Box'.

END OF DIVISION 7

DIVISION 8: MISCELLANEOUS CONSTRUCTION

8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.1 Description

(******)

This section is supplemented with the following:

The Stormwater Pollution Prevention Plan (SWPPP) shall consist of the Contractor's complete requirement to comply with Section 8-01.3(1) of the Standard Specifications and these Special Provisions. The SWPPP shall update and modify as necessary the Site Preparation and Erosion Control Plan drawings provided as part of the Contract Plans to reflect the Contractor's actual sequence of work and BMP's to be utilized. The Contractor shall prepare, review, and modify the SWPPP as necessary to be consistent with the actual work schedule, sequencing, and construction methods that will be used on the project. The Contractor's SWPPP shall also incorporate the content and requirements for the Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with Section 1-07.15(1).

Water

The Contractor shall make, at the Contractor's expense, whatever arrangements may be necessary to ensure an adequate supply of water required for erosion control. The Contractor shall also furnish all necessary hose, equipment, attachments and accessories for the adequate irrigation of planted areas to be maintained through the one-year warranty period and as may be required to complete the work as specified. All costs shall be incidental to and included in the bid items involved and no additional compensation shall be made.

8-01.2 Materials

(Special Provision) *Supplement*

High Visibility Fence

High visibility fence shall be composed of orange high-density polyethylene material and shall be at least four feet in height. Posts for the fencing shall be steel or wood and shall be placed at six-foot centers or as needed to provide rigidity. The fencing shall be attached to the post every six inches with a polyethylene tie. Fencing shall not be fastened to trees. High visibility fence shall not be measured separately for payment and shall be considered incidental to the lump sum bid item "Erosion Control / Water Pollution Prevention."

8-01.3 Construction Requirements

8-01.3(1)A Submittals

(******)

This section is supplemented with the following new subsection:

8-01.3(1)A1 Temporary Erosion and Sediment Control

(******)

This section is supplemented with the following:

General

The Contractor shall develop a new site specific TESC Plan with catch basin inserts and silt fences placed as shown in the Plans. Contractor TESC Plans shall include all high visibility fence delineation shown on the Contracting Agency Contract Plans. All TESC Plans shall meet the requirements of the current edition of the WSDOT Temporary Erosion and Sediment Control Manual M 3109 and be adaptively managed as needed throughout construction. The Contractor shall develop a schedule for implementation of the TESC work and incorporate it into the Contractor's progress schedule.

The Contractor shall submit their TESC Plan (either the adopted plan or new plan) and implementation schedule as Type 2 Working Drawings. At the request of the Engineer, updated TESC Plans shall be submitted as Type 1 Working Drawings.

The Contractor shall provide a Construction Stormwater Pollution Prevention Plan (SWPPP) to the Engineer for review, which will include the SPCC Plan and implementation and maintenance of all approved Best Management Practices (BMPs) throughout the duration of the project.

8-01.3(1)A General

(******)

This section is supplemented with the following:

The Contractor shall install and maintain all temporary erosion control measures and Best Management Practices (BMP's) in accordance with the Contract Provisions. Erosion and sedimentation control measures and BMP's shall comply with the King County Storm Water Management Manual.

When construction operations are such that debris from the work is deposited on the streets or sidewalks, the Contractor shall remove on a daily basis, any deposits or debris which may accumulate on these surfaces. Should daily removal be insufficient to keep the streets clean, the Contractor shall perform removal operations on a more frequent basis. If the Contractor fails to keep the streets free from deposits and debris resulting from the work, the Contractor shall, upon order of the Engineer, provide facilities for and remove all deposits from trucks or other equipment prior to travel over paved streets.

All fines for non-compliance with applicable stormwater-related permits shall be the sole responsibility of the Contractor. No payment will be made to the Contractor for fines resulting from permit violations.

8-01.3(1)B Erosion and Sediment Control (ESC) Lead

(******)

Delete the second and third paragraphs and replace with the following:

The ESC Lead is responsible for ensuring the Contractor's compliance with all local, state, federal erosion and sediment control and water quality requirements. The ESC Lead shall

prepare, maintain, and update the Stormwater Pollution Prevention Plan (SWPPP) and Spill Prevention and Countermeasures (SPCC) plan file on-site.

The ESC Lead shall implement the Construction SWPPP. Implementation shall include but is not limited to following:

1. Maintain an on-site SWPPP that reflects current site conditions and work methods. Provide weekly updates to the Project Engineer. The SWPPP shall be updated within seven (7) days of the following occurrences:

    a. Significant changes in the design, construction, operation, or maintenance at the construction site that have, or could have, a significant effect on the discharge of pollutants to waters of the state.
    b. Inspections or investigations by site staff or local or state officials determine that the SWPPP is ineffective in controlling pollutants such that applicable discharge or surface water standards violations are apparent.

2. Identify arising needs for adaptive management and/or BMPs which were not originally identified in the SWPPP. Coordinate all proposed SWPPP activities with the Project Engineer.

3. Attend all weekly construction meetings and provide an update on current and planned SWPPP activities.

4. Ensure that all necessary Best Management Practices (BMP) are identified, implemented and maintained throughout construction.

5. Oversee the installation and maintenance of all BMP's to ensure continued performance of their intended function. Damaged or inadequate BMP's shall be corrected immediately through coordination with the Engineer.

6. The ESC Lead shall have the authority to act on behalf of the Contractor and shall be available, on-call, 24 hours a day throughout the project duration.

8-01.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1 for the following bid item(s):

Erosion Control / Water Pollution Prevention	**Per Lump Sum**

The lump sum contract price for the “Erosion Control and Water Pollution Prevention” shall be full pay for all costs associated with complying with these Special Provisions and the Standard Specifications; including creating, submitting, modifying and maintaining a SPCC Plan, and SWPPP, and a Project TESC Plan; design and submittal of erosion and sediment control BMPs including providing, maintaining on site the standby equipment and materials to comply with current edition of the WSDOT Temporary Erosion and Sediment Control Manual M 3109 and Washington Administrative Code (WAC) Chapter 173-201A; providing an ECS lead and all stormwater monitoring and reporting, and other specified SWPPP requirements.

8-02 ROADSIDE RESTORATION

8-02.1 Description

(******)

This section is supplemented with the following:

This section also includes further items in Property Restoration as defined in Section 1-07.16. All existing structures outside of the back of walk limits requiring adjustments shall be addressed under this section.

8-02.2 Materials

(******)

Materials shall also meet the requirements of the following sections of these Special Provisions:

Topsoil Type A	9-14.2(1)
Seed	9-14.3
Fertilizer	9-14.4
Bark or Wood Chip Mulch	9-14.5(3)
Root Barrier	9-14.9
Tree Watering Bags	9-14.10

8-02.3(1) Responsibility During Construction

(******)

Supplement this section with the following:

Throughout planting operations, the Contractor shall keep the premises clean, free of excess soils, plants, and other materials, including refuse and debris, resulting from his work. As pedestrians will be allowed continuous access the Contractor shall not stockpile materials or park equipment in any manner that may create a hazard and/or obstacles to pedestrians.

The Contractor shall be responsible for care and protection of all plant material temporarily stored on site prior to planting per Section 9-14.7(3).

At the end of each work day, and as each planting area is completed, it shall be neatly dressed, and all surrounding walks and paved areas shall be cleaned to the satisfaction of the Engineer. No flushing will be allowed without approval of the Engineer. At the conclusion of work, the Contractor shall remove surplus soils, materials, and debris from the construction site and shall leave project in a clean condition.

Landscape construction is anticipated to begin after all curbs, sidewalks, driveways, major utilities and associated roadside work is completed. Landscape materials shall not be installed until weather permits and installation has been authorized by the Engineer. If water restrictions are in force, planting landscape materials may be delayed.

The Contractor shall locate all underground utilities (both new and existing) prior to starting work and shall not disturb or damage them. Promptly notify the Engineer of any conflict

between the proposed work and any obstructions. The Contractor shall be responsible for making any and all repairs for damage caused by his or her activities.

8-02.3(2)A Roadside Work Plan

(******)

Supplement this section with the following:

The Work Plan shall be submitted to the Engineer at least one week prior to initiating proposed work. The use of chemical herbicides shall be considered on a case-by-case basis. The Contractor must submit, as part of the Work Plan, the intent to use chemical herbicides to the Engineer for approval prior to use.

8-02.3(3)A Chemical Pesticides

(******)

Supplement this section with the following:

No chemical herbicides will be allowed in planting areas without approval from the Engineer.

8-02.3(4) Topsoil

(******)

Supplement this section with the following:

Subgrade will require review and approval by the Engineer prior to the placement of topsoil.

Thoroughly loosen subgrade in planting and seeding areas to six (6) inches depth or as noted in the plans otherwise. Scarified subgrade shall be inspected and approved by the Engineer prior to placement of topsoil. Remove all construction debris and rocks over two (2) inches in diameter prior to the placement of topsoil.

Within the dripline of existing trees to remain, or in areas where significant tree roots are encountered, no tilling of subgrade required.

Upon approval of the subgrade by Engineer, place Topsoil Type A to depth as indicated on the Plans. In all Tree Planter areas, Topsoil Type A shall be installed in two lifts. The first six (6) inch lift shall be incorporated into the top six (6) inches of prepared subgrade by rototilling, then the remaining topsoil shall be installed in successive six (6) inch lifts to achieve the minimum depth as shown in the Plans. Materials shall be placed so that, after settlement, finish grade shall be one (1) inch plus the specified depth of mulch below the top of adjacent sidewalk/curb.

In Back-of-Walk Planter areas, and Roadway Planter areas, Topsoil Type A shall be installed in a single lift to depth required to bring finish grade to one (1) inch plus the specified depth of mulch below the top of adjacent sidewalk. Feather topsoil to create a smooth transition to the existing finish grade.

Lightly compact soil and establish a smooth and uniform finished grade that protects against obstruction to surface drainage and ponding.

The costs of removing all excess material and debris shall be considered incidental to and included in the unit contract prices of other items in this contract.

Contractor shall coordinate installation of root barrier with topsoil installation, where shown on the Plans. Root barrier shall conform to Section 9-14.9 of these Special Provisions.

8-02.3(6)B Fertilizer

(******)

Supplement this section with the following:

Fertilizers must be delivered to job sites, mixed as specified, in standard size unopened containers, showing weight, analysis and name of manufacturer. Material shall be uniform in composition, free-flowing and suitable for application by mechanical equipment. All elements shall be protected from the weather, particularly moisture, both on and off the job site.

Fertilizer shall conform to Section 9-14.4 of these special provisions and shall be supplied by a Contractor's supplied source, as approved by the Project Engineer.

Fertilize all plants at the rate recommended by the manufacturer. Fertilizer shall be considered incidental to and included in the unit contract price for plants.

8-02.3(8)B Plant Installation

(******)

Supplement this section with the following:

All plants shall be planted as detailed on the Plans.

Scarify sides and bottom of all planting pits prior to planting. Sufficient planting soil shall be placed around the plant and compacted so as to ensure that the location of the ground line at the top of the root ball is the same as the nursery.

Set plants upright and face to give best appearance or relationship to adjacent structures and roadway and hold rigidly in position until planting soil has been backfilled and tamped firmly around the root ball or roots.

When the pit is backfilled halfway, place the specified quantity of fertilizer in planting pit, unless otherwise specified on the plans. Evenly spread fertilizer adjacent to the root system at a depth that is between the middle and the bottom of the root system. Do not injure root system. Place and compact planting topsoil carefully to avoid injury to roots; fill all voids.

Install Tree Watering Bags, one each per tree, per manufacturer's instructions. Tree Watering Bags shall conform to Section 9-14.10 of these special provisions and shall be supplied by a Contractor's supplied source, as approved by the Project Engineer.

8-02.3(13) Plant Establishment

(******)

Supplement this section with the following:

It shall be the Contractor's responsibility to maintain all the landscaped area of this contract, including Seeded Lawn areas, from the time of installation until the project is completed and accepted by the Engineer as complete. The plant establishment period shall begin when the

planting and construction has been completed and accepted by the Engineer and shall be for a period of 365 calendar days. The contractor shall submit to the Engineer for approval a Plant Establishment Monthly Maintenance Schedule, itemizing the maintenance work to be performed during each month for a one year period.

All plant material shall be watered, pruned, fertilized, sprayed and otherwise maintained and protected throughout the plant establishment period. Lawn areas shall be mowed regularly to maintain a tidy appearance. Rejected plant materials shall be replaced. Plant material for replacement shall be inspected and approved as equal plant material prior to replacement being made. Acquisition of replacements shall be the responsibility of the Contractor with replacements to be made normally during the planting season.

All seeded lawn areas shall be kept in a neat and presentable condition; maintenance shall include removal of litter, mowing, trimming, removal of grass clippings, edging, fertilization, weed control, watering and repair and reseeding of any and all damaged areas. Mowing shall be performed every week during the growing season.

All plant material and lawn areas shall be watered by thorough sprinkling and Tree Watering Bags refilled every week during the dry season (May 15th through October 1st) or more often as needed to keep the ground moist, the plants and lawn areas healthy, and to prevent wilting. It shall be the Contractor's responsibility to provide water, by watering truck or other means.

Pruning shall be performed as to maintain a neat, healthy appearance, in accordance with good practice for the type of tree or plant. All cuts 0.75-inch in diameter or greater shall be painted with a tree sealer by the Contractor.

All bark covered areas shall be kept weed free. Frequency of weeding shall be sufficient to keep weeds from going to seed, and shall be done at least once each month. Chemical herbicides shall not be used for a period of 60 calendar days after the installation of plant material, and shall be approved by the Engineer. When using chemical herbicides, manufacturer's recommended application rates shall be followed. Any plant material damaged by use of herbicides shall be replaced at the Contractor's expense.

Cleanup shall be made immediately after and as part of the work done in the area. The cleanup shall include the entire area under this contract. The contract area shall be cleaned of litter and debris at least once each month. Such cleanup shall include the pickup and removal from the contract area of all clippings, trimmings, leaves, litter, and debris originating from any source whatsoever. Planting areas shall be neatly dressed and finished; walks and paved area shall be hosed off with water as necessary and otherwise kept clean and free from dirt, bark, and litter.

At the end of each month during the plant establishment period, the Contractor shall submit to the Engineer a Plant Establishment Monthly Statement of Maintenance form itemizing the maintenance work performed during the month. The list shall include a detailed account of the type of maintenance work performed, on what date, the materials used, and shall call to the attention of the Engineer any existing condition that may require special consideration or treatment.

Inspections of the project site will be performed by the Engineer. The Engineer will notify the Contractor in writing of any deficiencies in the maintenance work. The Contractor shall perform whatever additional maintenance work is necessary as directed by the Engineer.

Failure by the Contractor to perform any additional work within the time limits specified may result in forfeiture of the quarterly payment or a portion thereof.

8-02.3(17) Property Restoration

(******)

Add the following new section:

Property restoration shall consist of placement of plant materials, topsoil and seed and bark mulch, and other work not currently identified on the Plans, as directed by the Engineer. Work not identified on the Plans or for which there is no bid item shall be considered for payment under the "Property Restoration" bid item.

Restore all disturbed areas to original condition or better. Grass areas shall be restored with hydroseed.

Removal of tree roots outside the limits of construction, as directed by the Engineer and under the supervision of a certified arborist, shall be paid for under "Property Restoration".

All materials shall conform to Sections 9-14 of these Special Provisions and 9-15 of the Standard Specifications.

The force account provided for property restoration also includes any adjustments and or replacements of existing irrigation systems and modifying existing landscape lighting systems as may become necessary by these improvements.

The Contractor is advised that protecting existing private irrigation and lighting systems from damage does not constitute a basis for claim or extra work. "Property Restoration" has been provided as a basis for modifications or improvements to private lighting systems and irrigation systems that may become necessary, but could not be foreseen prior to construction.

The Contractor is specifically reminded that any unnecessary damage caused by construction activities will be repaired at the Contractor's expense.

8-02.4 Measurement

(******)

Supplement this section with the following:

The quantities for plant materials will be determined by count of the number of satisfactory installed trees, shrubs, groundcover and other landscape materials as directed and accepted by the Engineer.

8-02.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1 for each of the following Bid items that are included in the Proposal:

Property Restoration	**Per Force Account**

8-04 CURBS, GUTTERS, AND SPILLWAYS

8-04.1 Description

(******)

Supplement this section with the following:

*"*Cement Conc. Curb and Gutter*"* shall be constructed per City of Mercer Island Standard Detail ST-14 Cement Concrete Curb and Gutter Type A, in Appendix C.

All curbs and gutters shall be constructed per 8-04 of the Standard Specifications.

Depressed curb and gutter at driveway entrances and curb ramp opening shall be included in this section and paid as "Cement Concrete Curb and Gutter"

If depressed curb and gutter sections are poured concurrently with the adjacent driveway approaches, these sections of curb and gutter shall be included in the measurement and payment section for "*Cement Conc. Driveway Entrance"* and **NOT** under any other bid item.

This work shall also include cement concrete curb and gutter catch basin surrounds.

8-04.2 Materials

(******)

Supplement this section with the following:

Commercial concrete for integral curb & traffic curb & gutter will not be allowed.

8-04.3 Construction Requirements

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

(******)

Supplement this section with the following:

Cement concrete traffic curb & gutter shall be constructed with Class 4000 and meet 9-01.2(1) Portland Cement of the Standard Specifications.

Cement Conc. Traffic Curb and Gutter <u>SHALL NOT</u> be constructed with slip-form equipment.

Cement Conc. Traffic Curb <u>SHALL NOT</u> be constructed with slip-form equipment.

8-04.3(6) Adjustment of Curbs and Gutters

(******)

Add the following new section:

The Contractor shall allow for inspection of curb forms or string lines at least 24 hours ahead of concrete delivery. Upon the direction of the Engineer, string lines or curb forms shall be adjusted a minor amount not to exceed 6" at the discretion of the engineer.

The Contractor's progress schedule shall include the 24 hour inspection time and adjustments to the lines and grades shall constitute no basis for claims of delay.

8-04.4 Measurement

(******)

Supplement this section with the following:

''Cement Concrete Traffic Curb and Gutter, Type A-1'' shall be measured per linear foot of installed and accepted cement concrete curb and gutter. This measurement shall also include anu depressed curb and gutter or sloped curb and gutter at sidewalk ramps.

''Cement Concrete Pedestrian Curb'' shall be measured per linear foot of installed and accepted curbing.

''Cement Concrete Extruded Curb Type 6'' shall be measured per linear foot of installed and accepted curbing.

8-04.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Cement Concrete Traffic Curb and Gutter, Type A-1	**Per Linear Foot**
Cement Concrete Pedestrian Curb	**Per Linear Foot**
Cement Concrete Extruded Curb Type 6	**Per Linear Foot**

The contract bid prices above, including all incidental work, shall be full compensation for all labor, materials, tools, and equipment necessary to complete the Work as defined in the Plans, the Standard Specifications, and these Special Provisions.

8-09 RAISED PAVEMENT MARKERS

8-09.3 Construction Requirements

(******)

Supplement this section with the following:

Color Blue Type 2 Raised Pavement Markers shall be installed at fire hydrant locations one foot off the center line to the side of the hydrant and shall be paid under the bid item “Raised Pavement Markings Type 2”.

The markers shall be removed where indicated on the plans or as directed by the engineer. The contractor shall repair any divots or indentations in the pavement resulting from the removals with and asphalt/sand slurry mixture approved by the engineer. All costs associated with removing raised pavement markers and repairs needed due to their removal shall be considered incidental to the various bid items provided.

8-09.4 Measurement

(******)

Supplement this section with the following:

Measurement of Raised Pavement Markers, Type 1 and Type 2, will be per each for the type of marker furnished and installed.

8-09.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Raised Pavement Marker Type 1	**Per Each**
Raised Pavement Marker Type 2	**Per Each**

The contract bid prices above, including all incidental work, shall be full compensation for all labor, materials, tools, and equipment necessary, to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions.

8-12 CHAIN LINK AND WIRE FENCE

8-12.1 Description

(******)

Supplement this section with the following:

This work shall consist of constructing wood fencing to match the existing height and style.

8-12.2 Materials

(******)

Supplement this section with the following:

Post shall be pressure treated wood posts

8-12.3 Construction Requirements

(******)

Supplement this section with the following:

Fencing shall best match existing adjacent fences along the project limits.

8-12.4 Measurement

(******)

Supplement this section with the following:

All fence shall be measured by linear foot.

8-12.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Wood Fence, 8' Height	**Per Linear Foot**

Included in the unit contract price for 'Wood Fence, 8' Height'' shall be all labor, tools, equipment necessary to construct the hand railing per the details in the Plans.

8-14 CEMENT CONCRETE SIDEWALKS

8-14.1 Description

(******)

Supplement this section with the following:

This work shall consist of construction and installation scored cement concrete sidewalks and cement concrete for medians with a decorative stamped cement concrete finish and curb ramps including detectable warning surface.

Decorative stamped cement concrete finish shall consist of stamped concrete with a decorative finish with a color hardener, antique release agent and clear sealer (with additive) as specific in the Special Provisions.

8-14.2 Materials

(******)

Supplement this section with the following:

Commercial concrete for sidewalk will not be allowed.

8-14.3(5) Detectable Warning Surface

(******)

Add the following special provision:

Detectable warning surface shall be furnished and installed on all crosswalk landings at the intersection and as shown in the Plans.

All new detectable warning surfaces shall be by Vanguard ADA Systems or approved equal.

8-14.3(6) Cement Concrete Curb Ramps and Landings

(******)

Add the following new section:

Curb ramps and landings on this project may need to be modified from the standard details to fit the project conditions while meeting current ADA requirements.

Compliance with ADA Standards is taken very serious and minor modifications to the dimensions shown on the plans may be required to meet current standards. **Ramps poured which do not meet the current ADA standards shall be removed and replaced at the Contractors expense.**

Per the Standard Specifications, detectable warning surfaces shall be furnished and installed on each curb ramp landing.

Curb ramps shall be finished per the standard plans and specifications.

Decorative Stamped Cement Concrete Finish

Stamped Concrete Finish shall be installed on Cement Concrete Sidewalk with an imprinted finish consisting of a color hardener, color release agent and clear sealer, as detailed on Plans and as specified in these Special Provisions.

Stamped Concrete shall be finished with an imprint concrete stamp, polymer mat. Imprinted concrete pattern shall made from interlocking stamp patterns. The surface texture is that of new, unused brick, 3-5/8" wide by 7-5/8" long, edges are straight and corners are square, laid in a perpendicular pattern. Imprinted inside joints have appearance of raked, rough, sandy grout joint, 3/8" wide. Pattern shall be laid in a 90 degree angle to the corner radius.

The Stamped Concrete finish shall receive a two step color process, as follows:

- Color Hardener - Color "Red", shall be a high-opacity, UV resistant, powdered dry-shake color hardener broadcasted onto freshly laid concrete pavement prior to imprinting with stamp pattern to produce long-wearing horizontal surfaces.

- Color Release Agent - Color "Maroon", shall be a colored powder providing a natural, weathered antique appearance that accents the depth of the pattern and adds realistic variation to imprinted concrete.

- Clear Sealer – Shall be solvent-borne, clear matte finish, clear curing compound, protects the concrete surface from future staining, resistant to blushing, resistant to discoloration and ultraviolet light. Apply sealer at full strength per manufacturer's recommendations.

The color hardener and release agent shall be applied evenly to the surface of fresh concrete, and sealer applied according to the manufacturer's specifications.

Stamped Concrete Finish areas shall be allowed to cure for a minimum of 28 days prior to application of concrete color stain. Pressure wash area free of dust, contaminants and debris and allow to dry prior to application of concrete color stain. Apply stain according to manufacturer's recommendations, and to achieve the appearance of the approved sample.

All Stamped Concrete Finish shall be cured and sealed with a waterborne, low VOC, environmentally sound, clear curing compound and sealer for freshly placed colored concrete flatwork with compliance to ASTM C309. Sealer shall protect against future staining, resistant to abrasion, deicing salts and UV radiation.

8-14.4 Measurement

(******)

Supplement this section with the following:

''Cement Concrete Sidewalk'' shall be measured by the square yard of installed and accepted cement concrete sidewalk, regardless of thickness. This measurement shall also include the crosswalk landings at intersections.

''Decorative Stamped Cement Concrete Median'' shall be measured by the square yard of installed and accepted cement concrete median, regardless of thickness.

''Detectable Warning Surface'' shall be measured by the square foot of install detectable warning surface.

"Cement Concrete Curb Ramp Type ____" shall be measured per each.

8-14.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Decorative Stamped Cement Concrete Median	**Per Square Yard**
Cement Concrete Sidewalk	**Per Square Yard**
Detectable Warning Surface	**Per Square Foot**
Cement Concrete Curb Ramp Type ___	**Per Each**

The contract bid prices above, including all incidental work, shall be full compensation for all labor, materials, tools, and equipment necessary to complete the Work as defined in the Plans, the Standard Specifications, and these Special Provisions.

8-19 FRANCHISE UTILITIES

8-19.1 Description

(******)

Supplement this section with the following:

This work shall consist of adjusting existing gas valve lids to final grade. It shall be noted that gas valves may be adjusted into gutter pan, sidewalk, landscaping, or other proposed surfacing.

8-19.4 Measurement

(******)

Supplement this section with the following:

''Adjust Gas Valve'' shall be measured per each existing gas valve adjusted to final grade.

8-19.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Adjust Gas Valve	**Per Each**

The contract bid prices above, including all incidental work, shall be full compensation for all labor, materials, tools, and equipment necessary to complete the Work as defined in the Plans, the Standard Specifications, and these Special Provisions.

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

8-20.1 Description

(******)

Replace this section with the following:

This work shall consist of furnishing, installing and field testing all materials and equipment necessary to complete in place, fully functional systems in accordance with approved methods, the Plans, the latest edition of the Washington State Department of Transportation (WSDOT) Standard Specifications and the latest edition of the National Electric Code (NEC) and these Specifications.

The work shall consist of, but not necessarily be limited to:

- Installation of a new Rectangular Rapid Flashing Beacon (RRFB) System (AC powered) at SE 63rd St and Island Crest Way.
- Installation of a new Rectangular Rapid Flashing Beacon (RRFB) System (AC powered) at SE 62nd St and Island Crest Way.
- Installation of a new pedestrian half signal at Island Park Elementary southern parking exist Island Crest Way.
- Installation of lighting system and lighting system modifications at the three intersections listed above.
- Maintaining existing RRFB at Island Crest Elementary until new signal is operational.

Unless otherwise noted, the locations of foundations, poles, junction boxes and appurtenances shown in the Plans are approximate. The locations will be verified by the Engineer in the field.

This Work also consists of constructing accessible pedestrian facilities in accordance with details shown in the Plans, Standard Plans, these Specifications, the 2005 PROWAG, and in conformity to lines and grades shown in the Plans or as established by the Engineer.

This work shall also consist of furnishing all necessary materials including, but not limited to, pole risers, conduit, wiring, with a 30’ spool for PSE service connection at the connection points depicted in the plans.

8-20.1(1) Regulations and Codes

(******)

Supplement this section with the following:

The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to the performance of the Work, the protection of adjacent property, and the maintenance of all other facilities. The Contractor will be required to comply with all the provisions and shall save and hold the Contracting Agency harmless from any damage that may be incurred as a result of the Contractor's failure to comply with all the terms of these permits.

All materials and methods required under this section, unless otherwise superseded herein, shall conform to the 2024 edition of the Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction and Amendments (herein referred to as Standard Specifications), to all current amendments to the Standard Specifications, to the latest edition of the State of Washington Standard Plans for Road, Bridge, and Municipal Construction (herein referred to as the Standard Plans), to the State of Washington Sign Fabrication Manual, to the latest edition of the National Electrical Code (NEC), and to the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) as adopted by the State of Washington.

8-20.1(3) Permitting and Inspection

(******)

Supplement this section with the following:

The Contractor shall be responsible for coordinating, obtaining, and paying for all electrical inspection and testing necessary to complete this work in a timely fashion.

The Electrical Inspector shall inspect and approve the electrical portions of the project. The Contractor shall notify the Electrical Inspector at least 24 hours in advance of required field inspection. All costs associated with electrical inspection shall be included in the applicable bid items for the work involved. Before work begins, the Contractor shall contact City of Mercer Island Electrical Inspectors to coordinate a schedule of electrical inspection (call the request line at 206-275-7605). This project shall be accomplished in compliance with WAC 296-46B-010 Traffic Management Systems. This project shall conform to the current adopted version of the NEC.

Coordination with Associated Representatives

The Contractor shall contact following representatives for coordination with the below listed agencies:

For luminaire and RRFB final testing:

City Maintenance Representative: Brian Hartvigson (206) 275-7809

8-20.1(4) Restrictions on the Schedule of Work

(******)

Add the following new section:

1. Work in Roadway.

   The roadway shall be kept open to traffic at all times, except when specific tasks required by this Contract require construction in the roadway. All work within the traveled way of

any roadway shall be limited to the hours as specified in Section 1-08.0(2) of these Special Provisions. Work shall be accomplished such that at least one lane of traffic is open in each direction on every leg during working hours. Exceptions to this will require a 3-day advance approval from the Engineer and approval of a special traffic control plan to be developed by the Contractor.

8-20.1(5) Errors and Omissions

(******)

Add the following new section:

The Contractor shall immediately notify the Engineer upon discovery of any errors or omissions in the Contract Documents, in the layout as given by survey points and instructions, or of any discrepancy between the Contract Documents and the physical conditions of the locality. If deemed necessary, the Engineer shall rectify the matter and advise the Contractor accordingly. Any work done after such discovery without authorization by the Engineer will be done at the Contractor's risk.

8-20.2 Materials

(******)

Supplement this section with the following:

The Engineer reserves the right to inspect the manufacturing process of all materials. Final inspection and acceptance of the installed materials will not be given until final installation and testing has been completed on the systems. Approval to install materials and equipment must be obtained from the Engineer at the job site before installation.

All materials shall be handled in loading, unloading and erecting in such a manner that they will not be damaged. Any parts that are damaged due to the Contractor's operations shall be repaired or replaced at the Contractor's expense. All repairs shall be to the approval of the Engineer.

The Contractor shall provide all manufacturer warranty documents to the City of Mercer Island.

When submitting material lists for approval, the Contractor shall identify all revisions or changes to manufacturer names, component names, and model numbers listed in these Special Provisions. The Contractor shall also include a brief justification for the revision or change.

Conduit, Innerduct, and Outerduct

Foam Conduit Sealant

Section 9-29.1(11) is supplemented with the following:

(January 7, 2019 WSDOT GSP)

The following products are accepted for use as foam conduit sealant:

- CRC Minimal Expansion Foam (No. 14077)
- Polywater FST Foam Duct Sealant
- Superior Industries Foam Seal
- Todol Duo Fill 400

Flashing Beacon Control

Section 9-29.15 is supplemented with the following:

(January 7, 2019, WSDOT GSP)

Rapid Flashing Beacons

Rapid Flashing Beacon (RFB) indications shall comply with the dimensional, operational, and flash pattern requirements of Federal Highway Administration (FHWA) Interim Approval 21 (IA-21, Conditions 4, 5, and 6, excluding Condition 5f; https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm). RFB systems shall be capable of providing, at a minimum, the following two-channel flashing patterns:

1. NEMA Standard 50-50:

    - Channel one is ON and channel two is OFF for 0.5 seconds.
    - Channel one is OFF and channel two is ON for 0.5 seconds.

    (Cycle repeats; the total flashing pattern cycle length is 1.00 second.)

2. RFB "WW+S" Pattern (IA-21 Condition 5b):

    - Channel one is ON and channel two is OFF for 0.05 seconds.
    - Both channels are OFF for 0.05 seconds.
    - Channel one is OFF and channel two is ON for 0.05 seconds.
    - Both channels are OFF for 0.05 seconds.
    - Channel one is ON and channel two is OFF for 0.05 seconds.
    - Both channels are OFF for 0.05 seconds.
    - Channel one is OFF and channel two is ON for 0.05 seconds.
    - Both channels are OFF for 0.05 seconds.
    - Both channels are ON for 0.05 seconds.
    - Both channels are OFF for 0.05 seconds.
    - Both channels are ON for 0.05 seconds.
    - Both channels are OFF for 0.25 seconds.

    (Cycle repeats; the total flashing pattern cycle length is 0.80 seconds.)

The flashing pattern shall be user-selectable in the field.

RFB system pushbuttons shall include a locator tone, but shall not include tactile arrows, speech messages, or vibrotactile indications. RFB system pushbuttons may include speech message and vibrotactile functionality, provided these features can be deactivated. RFB system pushbuttons shall use a 9" x 12" R10-25 sign. The R10-25 sign may include integral yellow warning lights.

8-20.2(1) Equipment List and Drawings

(******)

Supplement this section with the following:

Manufacturer's technical information shall be submitted for all luminaires, junction boxes, conduit, wiring, and all other items to be furnished by the Contractor on the Project.

The Engineer shall have 14 calendar days to review information for each submittal that is made.

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

For each proposed material that is required to be submitted for approval using either the QPL or RAM process, the Contractor will be allowed to submit for approval three materials per material type at no cost. Additional materials may be submitted for approval and will be processed at a cost of $100.00 per material submitted by QPL submittal and $300.00 per material submitted by RAM. All costs for the processing of additional materials will be deducted from monies due or that may come due to the Contractor. Subject to a request by the Contractor and a determination by the Engineer, the costs for processing may be waived.

Any deficiencies will require additional time for approval based on the degree of the deficiency and the additional review time required. If the shop drawings are returned to the Contractor to correct deficiencies, an additional 10 calendar days may be required for the approval process.

All approvals by the Engineer must be received by the Contractor before material will be allowed on the job site.

Approval of shop drawings does not constitute final acceptance or guarantee of the material, but is solely to assist the Contractor in providing the specified materials.

The Contractor shall not attempt to adjust the location of an existing utility unless specifically agreed to by the utility owner.

8-20.3 Construction Requirements

8-20.3(1) General

(******)

Supplement this section with the following:

The Contractor shall follow specific requirements for electrical related work to be performed in the right-of-way as outlined in each applicable section of these Specifications.

All adjacent surfaces damaged by the Contractor's operations shall be repaired at the Contractor’s expense.

All equipment shall be handled and protected so as to prevent damage. Damaged equipment, if any, shall be repaired or replaced by the Contractor to the satisfaction of the Engineer at no additional cost to the Owner.

The City of Mercer Island has capacity to provide short term storage of signal and traffic related equipment. The Contractor is responsible for notification, coordination, procurement and transportation of equipment should the City’s storage be desired given the project’s schedule constraints.

No new foundations shall be constructed as part of this Contract that are in conflict with any existing utilities, or the code required thereby. It shall be the Contractor’s responsibility to locate all utilities whether above, on, or below the ground, and to protect against any and all

damages arising from work under this project. At least 48 hours before digging, the Contractor shall call the Utilities Underground Locator Center (telephone 1-800-424-5555). Contractor must maintain locates during the duration of the project once they have been identified.

Underground utilities of record will be shown on the Plans insofar as information is available. These, however, are shown for convenience only and the City assumes no responsibility for improper locations or failure to show utility locations on the construction plans.

The Contractor shall be responsible, if any conflicts with existing underground utilities are expected, for potholing to confirm underground utility locations prior to excavating for pole foundations. Any conflicts shall be brought to the attention of the Engineer for resolution.

The Contractor shall be entirely responsible for coordination with the utility companies and arranging for the movement or adjustment, either temporary or permanent, of their facilities within the project limits.

If a conflict is identified, the Contractor shall contact the Engineer. The Contractor and City shall determine alternative locations for poles, vaults or junction boxes. The Contractor shall get approval from the Engineer prior to installation. The Contractor may consider changing depth or alignment of conduit to avoid utility conflicts.

Before beginning any excavation work for foundations, junction boxes or conduit runs, the Contractor shall confirm that the location proposed on the Contract Plans does not conflict with utility location markings placed on the surface by the various utility companies. If a conflict is identified, the following process shall be used to resolve the conflict:

1. Contact the Engineer and determine if there is an alternative location for the foundation, junction box or conduit trench.

2. If an adequate alternate location is not obvious for the underground work, select a location that may be acceptable and pothole to determine the exact location of other utilities. Potholing must be approved by the Engineer.

3. If an adequate alternate alignment still cannot be identified following potholing operations, the pothole area should be restored and work in the area should stop until a new design can be developed.

The Contractor shall not attempt to adjust the location of an existing utility unless specifically agreed to by the utility owner and approved by the Engineer. Work associated with resolution of utility conflicts shall be paid per Section 8-33 of these Special Provisions.

The Contractor is advised that safe wiring labels required by the State of Washington Department of Labor and Industries shall apply on this project.

(WSDOT NWR May 15, 2000)

Energized Equipment

Work shall be coordinated so that electrical equipment, with the exception of the service cabinet, is energized within 72 hours of installation.

(WSDOT NWR June 20, 1995)

Pole Removal
Poles designated for removal shall not be removed prior to approval of the Engineer.

(WSDOT NWR January 11, 2005)

Signal Display Installation
Signal displays shall be installed no more than 30 days prior to scheduled signal turn-on or changeover.

8-20.3(2) Excavating and Backfilling

(******)

Supplement this section with the following:

Backfill for all trenches may consist of select native backfill from the excavation providing that such material is free of organic material, clay, or other deleterious material. If sufficient material from the excavation is not available, as determined by the Engineer, the Contractor shall furnish and install bank run gravel for trench backfill meeting the requirements of Section 9-03.19 of the Standard Specifications.

The Contractor warrants and represents awareness of the statutory provisions contained in RCW 19.122.010 through .900 that the Contractor has read and fully understands the same, and will comply with the requirements of these provisions which are incorporated by reference herein. The Contractor agrees that all trenching as well as excavating for all pole foundations shall be an “excavation” as defined under RCW Chapter 19.122 and that such utilities constitute underground facilities. The parties agree that remedies affected under RCW Chapter 19.122 are also incorporated by reference herein. Any cost to the Contractor as a result of this law shall be at the Contractor’s expense.

8-20.3(2)A Trench and Backfill

(******)

Add the following new section:

The Contractor shall provide trenching as specified herein, regardless of the material encountered, as necessary for complete and proper installation of electrical conduit. Trenching shall conform to the following:

A. Uniform Construction

Trenching for conduit runs shall be done in a neat manner, and the trench bottom shall be graded to provide a uniform grade, with a width and depth as specified herein. All trenches for placement of conduit shall be straight and as narrow in width as practical to provide a minimum of pavement disturbance.

B. Trench Inspection

No work shall be covered until it has been examined by the Engineer. Earth which fills around and over the conduit shall be free of rocks greater than 2 inches up to a depth of 6 inches. When trenching is being accomplished within the sidewalk area, the backfill can be made with acceptable materials from the excavation and shall be

considered a necessary part of, and incidental to, the excavation in accordance with the Standard Specifications. Hauling and disposal of un-used excavation material shall be incidental to the cost of trenching or excavating. The compaction requirements for the roadway backfill shall apply.

C. Saw Cut for Trench

Trenches in all paved areas shall be saw cut. The saw cuts shall be a minimum of 2-inches deep and shall be parallel. Thoroughly clean saw cuts where necessary by the use of high pressure water (1,400 psi or greater). All wastewater shall be collected and disposed of in accordance with Section 1-07.15 of these Special Provisions. Impervious surfaces contaminated from cutting operations shall be cleaned in accordance with Section 1-07.15 of these Special Provisions.

D. Pavement Removal

Pavement shall be removed in a manner approved by the Engineer. The Contractor shall take care in removing existing paving not to damage the pavement outside of the saw cut lines.

E. Trench Depth

Trench depth shall be in accordance with Section 8-20.3(5)D of the Standard Specifications, unless agreed to otherwise by the Engineer.

F. Trench Width

Trench width shall be in accordance with Section 8-20.3(5)E1 of the Standard Specifications, unless agreed to otherwise by the Engineer.

G. Trenching in Landscaped Areas

Trenches shall be placed to have minimum impact on existing landscaping and irrigation systems. Any damage due to the Contractor's operation shall be repaired or replaced by the Contractor at his own expense and to the satisfaction of the Engineer.

H. Trenching Through Concrete Sidewalk Areas

Trenching in these areas shall require removal and replacement of the concrete to the limits of the existing sidewalk joints. The costs for removal and replacement shall be incidental to the trenching.

8-20.3(4) Foundations

(******)

Supplement this section with the following:

The Contractor shall provide all materials for and construct the foundations for RRFB and Pedestrian Push Button poles to the dimensions specified in the Contract Plans.

Location of all concrete foundations shall be potholed and approved by the City Engineer prior to excavation.

Concrete foundations shall be placed against undisturbed earth if possible. CDF shall be used to backfill around pole foundations that are not placed against undisturbed earth. Before placing the concrete, the Contractor shall block out around any other underground utilities that lie in the excavated base so that the concrete will not adhere to the utility line. The Contractor shall secure the anchor bolts required for the item to be mounted on the

foundation. Concrete foundations shall be troweled, brushed, edged, and finished in a workmanship-like manner. Concrete shall be promptly cleaned from the exposed portion of the anchor bolts and conduit after placement. Concrete and steel rebar shall be furnished and placed as shown in the Contract Plans.

All excess materials shall be removed from the construction site and disposed of at the Contractor's expense.

After a curing period of 7 days, the Contractor may install the RRFB poles on the new foundations.

8-20.3(5) Conduit

8-20.3(5)A General

(******)

Supplement this section with the following:

The conduit runs shown on the Plans are schematic; exact alignment shall be approved by the Engineer prior to excavation. All conduits shall be installed within the City or WSDOT right-of-way. Runs may be revised, as directed by the Engineer, to allow for unforeseen conflicts or easements.

All covered underground conduit shall be capped during construction using manufactured seals to prevent entrance of water and debris. Prior to pulling wire, all conduits shall be cleaned with an approved sized mandrel and blown out with compressed air.

When conduit or casing is to be placed under pavement it shall be placed prior to the placement of a sub-base, base, surfacing, and pavement.

Spare conduit shall contain detectable pull tape and shall be labeled City of Mercer Island.

Where sidewalk panels need to be removed for the installation of conduit or junction boxes, the Contractor is responsible for restoring the area near the back of sidewalk as needed to repair damage from sidewalk panel formwork.

Where intercepting and splicing to an existing conduit is called out on the Plans, the Contractor shall verify the conduit size and schedule before ordering the new conduit sections. The size provided on the Plans is an estimation.

The Electrical Inspector shall be notified 48 hours prior to commencing boring operations and shall be present during the boring operations.

8-20.3(5)A3 Damaged or Blocked Conduits

(******)

Supplement this section with the following:

Damaged or blocked conduits and stubouts shall be repaired by the Contractor. The Contractor shall attempt to remove debris in the conduit by blowing in air. The Contractor shall be careful not to blow air towards the service or controller cabinet. If the blockage doesn't break free, the Contractor shall identify the potential blocked/damaged location using a fish tape. Once the blockage location is identified, the Contractor shall attempt to remove the existing cabling (if any) from the conduit. If the cabling is removed, the Contractor shall attempt to pass a fish tape through the conduit again. If the fish tape passes through the conduit past the identified blockage point easily, the Contractor shall attempt to reinstall all existing cabling along with the new cabling called out in the Contract Plans.

If the existing cabling cannot be removed, or reinstalled after removal, the Contractor shall excavate down to the conduit blockage point and repair the conduit break. The Contractor shall obtain approval from the Engineer prior to removing existing cabling or beginning excavation. All cabling shall be removed from the conduit prior to repairing the broken conduit. Once the conduit is repaired, the Contractor shall restore the disturbed area. The removal of cable, excavation, conduit repair, and surface restoration will be paid for by change order or Minor Change as determined by the Engineer. The cost for other work needed to identify and remedy blocked conduits as described in this Section shall be incidental.

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

(******)

Supplement this section with the following:

The Contractor shall supply all junction boxes. Junction boxes shall conform to the requirements of the following:

Junction Box Type 1 and Type 2: WSDOT Standard Plan J-40.10

Junction Box Type 8: WSDOT J-40.30-04

The locations of the junction boxes as shown on the Plans are approximate and the exact locations shall be determined in the field by the Engineer. The new junction boxes shall not interfere with any other previous or relocated installation. Junction boxes shall be located outside the traveled way, wheelchair ramps and landings, construction joints and driveways.

If the junction boxes are placed in the pedestrian pathway, they shall have slip resistant lids and shall not be placed closer than 12 inches from the edge of any sidewalk or sidewalk joint. Pre-molded joint filler for expansion joints shall be placed around junction boxes installed in sidewalks. All junction box lids shall be set flush with the finished grade.

Prior to the use of any existing junction box, the Contractor shall verify that sufficient bending radius, as defined by the Code, is available both approaching and within the box for the cable being installed. If such is not the case, the Contractor shall notify the Engineer, who shall be the sole judge of whether new conduit bends or a new junction box shall be installed.

When using an existing junction box, the Contractor shall modify the junction box such that it will be bonded to the grounding system. All junction box lids shall be grounded in a manner that will allow removal of the lid without breaking the ground.

Existing junction boxes shall either be replaced or raised to match the new elevation of the sidewalk or shoulder. Wiring shall be replaced if sufficient slack as specified in Section 8-20.3(8) is not maintained. The six-inch gravel pad required in Standard Plans J-40.10 shall be maintained. When existing junction boxes do not have this gravel pad, it shall be installed as part of the adjustment to finished grade.

When junction 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. The joint filler shall be removed prior to adjustment to finished grade.

The Contractor shall not damage any existing conduits when replacing or excavating existing junction boxes. The Contractor is to maintain the integrity of all junction boxes during reconfiguration of the conduits, installation of new conduits or when excavating.

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, unless installation is necessary to

maintain system operation. If wire is installed for this reason, sufficient slack shall be left to allow for final adjustment.

8-20.3(8) Wiring

(******)

Supplement this section with the following:

All wire splices shall be made in the presence of the Engineer.

For installing new cables in existing occupied or empty conduit, the Contractor shall be responsible for the following steps: 1) Install a new pull rope using a rod/fish tape in the conduit for pulling in the new cabling if a pull rope does not already exist. 2) If the Contractor cannot get the rod/fish tape to pass through the conduit, the Contractor shall blow air through the conduit to remove any debris blocking the rod/fish tape path. The Contractor shall be careful not to blow air into controller or service cabinets. 3) If the rod/fish tape still does not pass through the conduit after blowing air, the Contractor shall disconnect a single existing wire as agreed to by the Engineer (if the conduit is occupied) and use that wire to pull the new wiring plus a new cable to replace the existing cable that is being used for pulling. 4) If no existing wire can be used to pull in the new wire, the Contractor shall try another conduit run if one exists, or pull out all existing wiring from the conduit and use to pull in the new wiring plus all new cabling to replace existing cabling. Rodding, fish taping, blowing air, and disconnecting/ reconnecting cable shall be the Contractor's cost responsibility. In an event that none of these steps led to successful wire installation, the Contractor shall install new conduit as directed by the Engineer.

When removing existing cabling, if the cable won't initially move, the Contractor shall attempt to blow air through the conduit to loosen debris around the cable. Blowing air into the conduit is considered incidental to the cable removal. If the cable will not move after blowing air into the conduit, the Contractor shall contact the Engineer.

(WSDOT GSP March 13, 1995)
Field Wiring Chart

501	AC+ Input	516-520 Railroad Pre-empt
502	AC- Input	5A1-5D5 Emergency Pre-empt
503-510	Control-Display	541-580 Coordination
511-515	Sign Lights	581-599 Spare

Movement Number	1	2	3	4	5	6	7	8	9
Vehicle Head									
Red 611	621	631	641	651	661	671	681	691	
Yellow 612	622	632	642	652	662	672	682	692	
Green 613	623	633	643	653	663	673	683	693	
Spare 614	624	634	644	654	664	674	684	694	
Spare 615	625	635	645	655	665	675	685	695	
AC- 616	626	636	646	656	666	676	686	696	
Red Auxiliary	617	627	637	647	657	667	677	687	697
Yellow Auxiliary	618	628	638	648	658	668	678	688	698
Green Auxiliary	619	629	639	649	659	669	679	689	699
Pedestrian Heads & Dets.									
Hand 711	721	731	741	751	761	771	781	791	
Man 712	722	732	742	752	762	772	782	792	

AC- 713	723	733	743	753	763	773	783	793	
Detection 714	724	734	744	754	764	774	784	794	
Common-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(9) Bonding, Grounding

(******)

Supplement this section with the following:

Supplemental grounding shall be provided for RRFB poles. Foundations for these poles shall be installed with a bare 4 AWG copper wire, which is connected to the reinforcing cage with an approved acorn clamp or exothermic weld and routed to connect to the pole at the grounding lug.

Contractor shall provide and install bonding and grounding wires as described in Standard Specifications and the National Electric Code for any new metallic junction boxes and any modified existing junction boxes. For the purposes of this section, a box shall be considered “modified” if new current-carrying conductors are installed or modified, including low-voltage conductors.

At points where shields of shielded conductors are grounded, the shields shall be neatly wired and terminated on suitable grounding lugs.

Junction box lids and frames shall be grounded in accordance with Department of Labor and Industries standards, and shall be grounded so that the ground will not break when the lid is removed and laid on the ground next to the junction box.

Location wires shall not be connected to the equipment-grounding system.

8-20.3(11) Testing

(******)

Supplement this section with the following:

All work shall be completed in a manner that provides the Inspector and Engineer with full knowledge of the construction. The work shall proceed in accordance with the approved construction schedule previously supplied to and approved by the Engineer. The Inspector and Engineer may, at their option, require work completed without their knowledge or inspection to be dismantled so that it can be inspected to their satisfaction.

8-20.3(13)C Luminaires

(******)

Supplement this section with the following:

All luminaires shall be provided with markers for positive identification of light source type and wattage. Markers shall conform to ANSI C136.15-2011 “American National Standard for Roadway and Area Lighting Equipment – Luminaire Field Identification”

Each Roadway luminaire shall be installed with a 7-pin shorting cap on each individual luminaire fixture.

8-20.3(14)A Signal Controller

(******)

Supplement this section with the following:

The traffic controller cabinet, controller, and all its components shall be furnished by the Contractor and shall be delivered to the King County Signal Maintenance Shop (at Monroe Avenue NE, Renton, Washington). The Contractor’s field work shall be limited to placing cabinets and equipment, connecting the field wiring to field terminal strips and testing.

Once the controller cabinet, controller, and all its components are approved and procured the Contractor shall contact the King County Signal Maintenance Shop Representative within 2 weeks ahead of delivery for assembly and testing. All equipment shall be delivered in one single delivery to King County. King County Signal Maintenance Shop shall have 4 weeks for assembly and testing.

The controller will be furnished with all necessary load switches, flashers, conflict monitor, detector amplifiers, emergency vehicle preemption phase selectors, cabinet and all necessary

equipment which are typically located within the cabinet. The cabinet will be a pedestal-mounted type.

The Contractor shall furnish mounting hardware and silicone sealant around the base and under the lip of the cabinet to prevent water leakage. The Contractor shall not make any connections in the controller cabinet or turn on any signal systems, or parts thereof, without the presence of the Engineer.

Only journey level work, in the presence of the Traffic Operations and Maintenance Department Representatives, is allowed in controller cabinet.

Following acceptance of the cabinet, King County forces will deliver the cabinet to the site. Power (120 Volts AC) must be available prior to delivery of the cabinet. The controller and

auxiliary equipment will be delivered to the site by County forces immediately prior to signal turn-on. The Contractor shall notify and coordinate delivery with King County.

8-20.3(14)B Signal Heads

(******)

Supplement this section with the following:

All newly installed vehicle and pedestrian signal heads shall be fully covered with opaque (non-translucent), white, yellow or khaki material, unless otherwise approved by the Electrical Inspector, and shall be of sufficient size to entirely cover the display immediately upon installation.

The covering shall extend over all edges of the signal housing and shall be securely fastened at the back. The covering shall remain attached until a signal turn on.

8-20.3(14)E Signal Standards

(******)

Supplement this section with the following:

The poles shall be installed on leveling nuts and washers secured to the anchor bolts and with locking nuts and washers on the top of the base flange. The pole shall be plumbed by adjusting the leveling nuts or as otherwise directed by the Engineer. The space between the concrete base and the bottom of the pole flange shall be filled with dry pack mortar to completely fill the space under the flange and be neatly troweled to the contour of the pole flange. A barrier shall be placed around the anchor bolts to prevent grout from entering the conduits. A plastic drain hose (3/8-inch diameter) shall be inserted through the mortar to provide drainage from the interior of the pole base and be trimmed flush with the interior and exterior surface of the mortar. Dry pack mortar shall consist of a 1 to 3 mixture of cement and fine sand.

The signal standards shaft shall have hand-holes with covers. The bottom handhole shall be within eighteen (18) inches of the base. It shall provide access to a standard ground connection on the signal standard or have a grounding adapter in the rim. For standards with mast arms, the top handhole shall be designed for luminaire davit-top attachment and to assist in wiring the signal standard.

Traffic signal standards shall be fabricated as shown in the Plans. All parts shall be galvanized in accordance with ASTM specifications A-123 after fabrication.

After delivering the poles or arms to the job site and before they are installed, they shall be stored in a place that will not inconvenience the public. All poles and arms shall be installed in compliance with Washington State Utility and Electrical Codes and per manufacturer's recommendations.

Longitudinal seam welds shall have full penetration for not less than 98 percent of their full length.

Butt welds in the shafts shall have back-up rings and full penetration for 100 percent of the circumference.

8-20.3(14)F Terminal Cabinets

(******)

Supplement this section with the following:

A terminal cabinet with a terminal strip shall be furnished and installed on each X, Y, Z, or SD traffic signal pole. The terminal cabinets shall be mounted on the pole using a 4-inch-wide aluminum channel away from the traffic side, with the bottom of the cabinet above the pedestrian signal heads where present and in no case less than 8 feet above the ground level.

8-20.3(14)G Emergency Vehicle Preemption Detectors

(******)

Supplement this section with the following:

Emergency Vehicle preemption detectors shall be installed in a drilled and taped hole in the top of the mast arm as shown on the Plans. They shall be tightly fitted to point in the direction shown in the Plans. Lead in cable, back to the controller, shall have no splices. All lead-in cables shall be connected to terminals in the controller cabinet as shown in the wiring diagram. The shields shall be grounded to the grounding bar.

8-20.3(14)H Pedestrian Push Button Assembly

(******)

Supplement this section with the following:

The Contractor shall furnish and field-install the four-wire APS style pedestrian push button assemblies and associated signs on signal poles.

The position of the pedestrian push buttons shall be determined by the Engineer in the field.

8-20.3(17) "As-Built" Plans

(******)

Supplement this section with the following:

Upon completion of the construction, the Contractor shall furnish "as-built" plans of the intersection showing all pole locations, junction boxes, miscellaneous equipment, conduit, conductors and with a special symbol identifying those items that have been changed from the original Contract Drawings. All items shall be located within 1-foot horizontal distance and 6 inches vertical distance above, below, or at the surface.

8-20.3(18) Rectangular Rapid Flashing Beacon (RRFB) System

(******)

Add the following new section:

RRFB system shall be furnished and installed by the Contractor and shall comply with all other specifications for RRFB systems. The system shall include all materials and work needed to provide a complete working system as shown on the plans, including but not limited to pedestrian push buttons, beacon heads, poles, foundations, conduit, junction boxes, and controller and service cabinets and components needed for complete operation. All the components shall be installed per manufacturer's recommendations and per the Plans. The method and locations of installation shall be approved by the Engineer in the field, prior to drilling holes in the supporting poles.

8-20.4 Measurement

(******)

Revise this section with the following:

When bid items are shown as lump sums in Section 8-20.5, no specific unit of measurement will apply, but measurement will be for the sum total of all items for a complete system to be furnished and installed.

8-20.5 Payment

(******)

Revise this section with the following:

Payment will be made in accordance with Section 1-04.1 for the following bid item(s) when included in the proposal:

Pedestrian Signal System, Island Crest Way and Island Park Elementary School South Entrance, Complete	**Per Lump Sum**
RRFB system, Island Crest Way and SE 62nd St, Complete	**Per Lump Sum**
RRFB system, Island Crest Way and SE 63rd St, Complete	**Per Lump Sum**
Modifications of Existing Illumination System	**Per Lump Sum**
Maintenance of Existing RRFB System	**Per Lump Sum**

The lump sum contract price for above listed bid items shall be measured for the total of all labor, materials, tools and equipment necessary or incidental to the installation of complete permanent systems. All items and labor necessary to supply, install and test the powered illumination, RRFB systems and traffic signal system, including traffic signal cabinet, luminaires, poles, foundations, potholing, controller and cabinet assemblies, traffic signal heads, RRFB light bars, push button assemblies, junction boxes, conduit, wiring, excavation, backfill, restoring facilities destroyed or damaged during construction, salvaging existing materials, transporting and installing City-furnished equipment, coordination with local agencies and utility companies, electrical inspections and testing, as-built plans, pole risers, spare wiring spools, meter boxes, and all other components necessary to make complete systems shall be included within the lump sum price.

Sawcutting required shall be incidental to lump sum items and no separate measurement will be made.

Conduit bedding and crushed surfacing top course (CSTC) required for trench backfill shall be incidental to the lump sum items and no separate measurement will be made.

Temporary surface restoration items required for resuming pedestrian and vehicular traffic prior to final surfacing, including steel sheeting, crushed rock, and cold mix asphalt, shall be incidental to the lump sum items and no separate measurement will be made.

The cost of conduit trenching, backfilling, compaction, and landscape restoration outside of paved areas and trenching and backfill for the pipe zone within paved areas shall be included in the above listed bid items lump sums.

Bidders are cautioned to include in the lump sum bid items for “Systems, Complete”, all costs related to protection of items to remain, removal and disposal costs of removed items not specified to be salvaged, and costs associated with obtaining electrical inspection and system testing as required.

The lump sum contract price for ‘’Maintenance of Existing RRFB System’’ shall consist of all planning, phasing, temporary facilities, all labor, materials, tools and equipment necessary or incidental to ensure the operation of the existing RRFB system at Island Park Elementary School South Entrance while the contract work is being performed at this location until the new pedestrian signal is operational. Once new signal is operational, RRFB system and its components may be taken offline, removed from the site and hauled away. No additional compensation shall be made for final removal of RRFB, its components, its foundations and junction boxes, and wiring, and it shall be considered incidental to ‘’Removal of Structures and Obstructions’’ and ‘’ Pedestrian Signal System, Island Crest Way and Island Park Elementary School South Entrance, Complete’’

Any shifts in pole locations as a result of the potholing information provided and within the parameters described in 8-26 shall not constitute renegotiation of project components described in this section.

8-21 PERMANENT SIGNING

8-21.1 Description

(******)

Supplement this section with the following:

Permanent Signing shall include all work to reset, relocate, remove, and install new signage within the project limits as identified in the Plans.

8-21.3 Construction Requirements

(******)

Supplement this section with the following:

Sign Code Numbers indicated on the Plans are in reference to the Washington State Department of Transportation Sign Fabrication Manual and the Manual on Uniform Traffic Control Devices (MUTCD).

Upon completion of the project, the Contractor shall reset all signs, which have been disturbed or removed during the construction, in their permanent location to the satisfaction of the Owner. Existing concrete at the base of the sign post shall be removed prior to installation in new concrete.

Relocated signs shall be installed on new posts per the standard detail, unless otherwise directed by the engineer.

All signs shall be mounted on 2’’ X 2’’, 14 Guage metal posts otherwise indicated on the Plans or directed by the Engineer. Relocated signs shall be installed on new posts.

Locations are subject to adjustment by the Engineer.

All stop and yield signs to be installed and/or replaced shall be installed on 4'' x 4'' pressure treated posts. All posts shall be unpainted unless otherwise indicated on the plans.

Posts shall have 3' minimum embedment into finished grade.

8-21.4 Measurement

(******)

Supplement this section with the following:

There shall be no unit of measurement for the lump sum bid item ''Permanent Signing''. Measurement will be based on a completed and accepted signage installation in accordance with the Plans and as directed by the Engineer.

8-21.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Permanent Signing	**Per Lump Sum**

The lump sum contract price for above listed bid items shall be measured for the total of all labor, materials, tools and equipment necessary or incidental to the completed and accepted signage installation in accordance with the Plans and as directed by the Engineer.

8-22 PAVEMENT MARKING

8-22.1 Description

(******)

Supplement this section with the following:

Pavement markings in conflict with the proposed improvements shall be removed.

8-22.2 Materials

(******)

Supplement this section with the following:

All channelization work to be performed under this contract shall be done in conformance with the "Manual on Uniform Traffic Control Devices" as is currently adopted by the Washington State Department of Transportation or as modified by the Plans and these Special Provisions.

This work shall consist of furnishing and installing pavement markings upon the roadway surface at locations shown in the Plans or as directed by the Engineer. Prior to installing pavement markings the Contractor shall pre-mark the layout of all channelization and receive approval from the Engineer. See Section 8-22.3(1) Preliminary Spotting herein.

Materials for pavement markings shall be paint, plastic, or retroreflective film as noted on the Plans and herein. Paint and sprayed or extruded plastic materials shall be applied with a top dressing of glass beads.

The following markings shall meet Type A Liquid Hot Applied Thermoplastic per 9-34.3(1) of the Standard Specifications:

- Plastic Stop Lines
- Plastic Crosswalk Lines
- Plastic Traffic Arrows

Refer to the current Qualified Products List (QPL) for manufacturers.

8-22.3 Construction Requirements

(******)

Supplement this section with the following:

Contractor shall coordinate with the Engineer to field mark the channelization to be removed. Part of this effort will include the Contractor field locating the proposed channelization to verify that the proposed channelization matches the existing channelization to remain. Contractor shall be responsible for coordinating this effort with the Engineer. Engineer shall approve the channelization removal extents before the Contractor conducts actual removal.

8-22.4 Measurement

(******)

Supplement this section with the following:

No specific unit of measurement shall be applied to the Bid item “Remove Pavement Markings”. All conflicting channelization shall be removed and any other channelization directed by the engineer.

“Paint Line”,__ Inch shall be measured per Linear foot.

8-22.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Remove Pavement Markings	**Per Lump Sum**
Paint Line, 4 Inch	**Per Linear Foot**
Paint Line, 6 Inch	**Per Linear Foot**
Plastic Crosswalk Line	**Per Linear Foot**
Plastic Stop Line	**Per Linear Foot**
Plastic Traffic Arrow	**Per Each**

The lump sum cost for "Remove Pavement Markings" shall be full compensation for all labor, tools, equipment, and materials necessary or incidental to removing the pavement markings in conflict with the proposed improvements or as necessary to ensure that the proposed pavement markings line up with the existing pavement markings.

8-23 TEMPORARY PAVEMENT MARKINGS

8-23.3 Construction Requirements

(******)

Supplement this section with the following:

Placement of temporary pavement markings shall mimic existing channelization along Island Crest Way and side streets by the end of each work day.

8-23.5 Payment

(******)

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Temporary Pavement Markings	**Per Lump Sum**

The lump sum cost for "Temporary Pavement Markings" shall be full compensation for all labor, tools, equipment, and materials necessary or incidental to removing the pavement markings in conflict with the proposed improvements or as necessary to ensure that the proposed pavement markings line up with the existing pavement markings.

8-26 POTHOLING NEW SECTION

8-26.1 Description

During the Preliminary Notice to Proceed the contractor perform Potholing. This work shall consist of all labor, tools, equipment, and traffic control to perform potholing up to 15

locations including, but not limited to, all pole foundations depicted in the Plans (12), and up to three potholes as directed by the Engineer during the potholing operation. Anticipated Engineer requested potholes are Telcom facilities, stormwater conveyance systems, and water systems. Specific locations will be determined in the field in the presence of contractor and agreed upon in writing.

8-26.3 Construction Requirements

Contractor shall mobilize all traffic control and equipment necessary to perform potholing at the pole foundations location identified in the Plans.

The contractor shall excavate by vactor truck a hole large enough and deep enough, but not larger or deeper than necessary to install foundation, to confirm successful installation of foundation, conduit, and all associated signal and electrical component at that location.

The contractor shall provide potholing results in writing to Engineer for confirmation of pole locations. Information shall include location of pothole from fixed objects to remain (fire hydrants, cabinets, transformers, manholes), photos of pothole, depth and size of all conduits, utilities, or other obstructions that may exist within the excavation. The Engineer may take up to 10 working days to review the information and provide any necessary design revisions required to avoid other utility conflicts. Plan revisions are not anticipated however, based on the results of the potholing, the Engineer may adjust pole locations up to 10' in any direction to avoid utility conflicts.

The contractor shall backfill pothole or cover and secure with steel sheet to allow the safe travel of vehicles and pedestrians over the pothole locations.

8-26.4 Measurement

Supplement this section with the following:

Potholing shall be measured per each pothole completed and information provided to engineer.

8-26.5 Payment

Supplement this section with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

Potholing	**Per Each**

The per each cost for "Potholing" shall be full compensation for all traffic control, labor, tools, equipment, and materials necessary or incidental to potholing the pole foundation locations indicated in the plans. Design revisions within the above-described parameters as a result of any pole shift shall not constitute renegotiation of signal, RRFB, or other affected bid items.

This shall also include the three owner directed potholes described herein.

END OF DIVISION 8

DIVISION 9: MATERIALS

9-03 AGGREGATES

9-03.8(2) HMA Test Requirements

(March 10, 2010 APWA GSP) *Supplement*

Section 9-03.8(2) is supplemented with the following:

ESAL's

The number of ESAL's for the design and acceptance of the HMA shall be *** 2 *** million.

9-03.8(7) HMA Tolerances and Adjustments

(March 10, 2010 APWA GSP) *Revision*

Delete Item 1 and replace it with the following:

1. **Job Mix Formula Tolerances**. After the JMF is determined as required in 5-04.3(7)A, the constituents of the mixture at the time of acceptance shall conform to the following tolerances:

	Nonstatistical Evaluation	**Commercial Evaluation**
Aggregate, percent passing		
1", ¾", ½", and 3/8" sieves	±6%	±8%
U.S. No. 4 sieve	±6%	±8%
U.S. No. 8 sieve	±6%	±8%
U.S. No. 200 sieve	±2.0%	±3.0%
Asphalt Binder	±0.5%	±0.7%

These tolerance limits constitute the allowable limits as described in Section 1-06.2. The tolerance limit for aggregate shall not exceed the limits of the control points section, except the tolerance limits for sieves designated as 100% passing will be 99-100. The tolerance limits on sieves shall only apply to sieves with control points.

9-14 EROSION CONTROL AND ROADSIDE PLANTING

9-14.1(1) Topsoil Type A

(******)

Supplement this section with the following:

Topsoil Type A mix shall be a 50%/50% mixture of pure compost, and sand, sandy loam or silty sand. The soil shall be high in organic content and compromised of fully composted and mature organic materials.

Refer to Section 9-14.4(8) Compost of the Standard Specifications for compost requirements. No fresh sawdust or other fresh wood by-products shall be added to extend the volume after the composting process.

Chemical and physical characteristic of Topsoil Type A shall comply with the following:

Screen Size	7/16” Maximum
(Approximate Particle Size)	
Total Nitrogen	0.25% Minimum
Organic Matter	10% Minimum
pH Range	5.5 to 7.5
Conductivity	5 mmhos/cm Maximum

The Contractor shall provide a complete analysis of Topsoil Type A with one cubic foot sample for review and approval.

9-14.2 Seed

(******)

Supplement this section with the following:

The grass seed dealer shall mix the grass seed only. The Contractor shall furnish the Engineer with a dealer’s guaranteed statement of the composition, mixture, and the percentage of purity and germination of each variety.

“Seeded Lawn Mix” shall be composed of the following varieties mixed in the proportions indicated:

Mixture Proportions			
Name	**% by Weight**	**% Purity**	**% Germination**
Chewings Fescue (Longfellow, Waldorf, Bargreen)	30%	98%	90%
Hard Fescue	20%	98%	90%
Perennial Rye (blend of two – Fiesta II, Prelude II, Palmer II, Commander)	50%	95%	90%

All seed mixes shall be certified as 99% weed-free and 90% viable seeds by germination tests and by age specifications by species. Apply hydroseed mulch, tackifier, seed and fertilizer per supplier’s recommendations.

9-14.3 Fertilizer

(******)

Supplement this section with the following:

All Fertilizer applications for grass or trees and shrubs shall follow Washington State University, National Arborist Association or other accepted agronomic or horticultural standards.

Fertilizer for trees and shrubs shall be Best-Paks Biodegradable Packet, 20-10-5, or City of Mercer Island approved equal. Apply per manufacturer’s recommendations.

9-14.7(2) Quality

Section 9-14.7(2) is supplemented with the following:

Plant material shall be free from disfiguring knots, swollen grafts, sunscald injuries, bark abrasions, evidence of improper pruning or other objectionable disfigurement.

Potted and container stock shall be well rooted and vigorous enough to ensure survival and healthy growth. Shrubs shall have full foliage (not leggy). Container stock shall be grown in its delivery container for not less than six (6) months, but not for more than two (2) years. Root bound or broken containers will not be accepted. Bare root, liner and root stock with dried or shriveled roots from exposure will not be accepted.

Trees shall meet WSDOT standard “Street Tree Grade” and will be provided with untapped, straight, single leaders, and shall be free of branches to minimum six (6) feet above ground line. Trees shall have full crowns and balanced branching.

Measurements, caliper, branching, grading, quality, balling and burlapping shall follow the Code of Standards of the American Associate of Nurserymen in the American Standard for Nursery Stock, ANSI 260.1, latest edition. Measurements shall be taken with all branches in their normal growing position. Plants shall not be pruned prior to delivery to site.

9-14.7(3) Handling and Shipping

Section 9-14.7(3) is supplemented with the following:

All plant material shall be transported to planting locations with care to prevent damage. Tie back branches as necessary and protect bark from chafing with burlap bags. Do not drag plant materials along ground without proper protection of roots and branches. Protect rootballs from environmental or mechanical damage and water as necessary to keep roots moist.

All plant material shall be legibly tagged. Tagging may be by species or variety with minimum of one tag per ten trees, shrubs, groundcovers. Remove all tagging prior to final acceptance.

The Contracting Agency shall reserve the option of selecting and inspecting plant material at the nursery. The Contractor shall provide the Contracting Agency with at least one week notice prior to preparing plants for shipping and delivery. The Contractor shall neither deliver to site nor install plant materials until authorized by the Contracting Agency.

Cold storage of plants shall not be permitted.

If planting is delayed more than 24 hours after delivery, set balled and burlapped plants on the ground, well protected with soil or wet peat. Adequately cover all roots of bare root material with soil or wet peat. Protect rootballs from freezing, sun, drying winds or mechanical damage. Water plant material as necessary until planted.

Plants shall not be stored for more than one week. Longer storage period at project site will result in rejection of plant materials by the Contracting Agency.

Add New Section 9-14.9:

9-14.9 Root Barrier

(******)

Supplement this section with the following:

Root Barrier shall be 24” depth, flexible interlocking panels with half-inch (1/2”) raised vertical reinforcing ribs, horizontal ground-lock tabs to prevent lifting and double top edge. Panels shall be made from injection molded High Impact Polypropylene (HIPP) with built-in UV inhibitors and a minimum thickness of 0.080 inches.

9-14.10 Tree Watering Bag System

(******)

Supplement this section with the following:

Tree watering bag system shall be commercially available, 15-gallon, slow-release watering bag with two (2) water-release points per bag. Materials: UV-stabilized polyethylene with nylon zipper and polypropylene handle straps; color: green.

9-29 ILLUMINATION, SIGNAL, ELECTRICAL

Section 9-29 is supplemented with the following:

(******)

General

All bolts, nuts, washers, and other fasteners shall be stainless steel unless otherwise specified herein.

Where applicable, all materials, equipment, and installation procedures shall conform to the current requirements and standards of the State of Washington Department of Labor and Industries.

9-29.1 Conduit, Innerduct, and Outerduct

Section 9-29.1 is supplemented with the following:

(WSDOT NWR August 10, 2009)
Conduit Sealing
Mechanical plugs for cabinet conduit sealing shall be one of the following:

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

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

(January 7, 2019 WSDOT GSP)
The following products are accepted for use as foam conduit sealant:

- CRC Minimal Expansion Foam (No. 14077)
- Polywater FST Foam Duct Sealant
- Superior Industries Foam Seal
- Todol Duo Fill 400

9-29.1(4)C HDPE Conduit

(******)

Supplement this section with the following:

If the Contractor elects to directional bore, bored conduit shall be High Density Polyethylene (HDPE). All piping system components shall be the products of one manufacturer. The conduit and fittings shall be free, within commercial tolerances of objectionable lines, striations, bubbles, welds or other manufacturing defects which would impair the service of the conduit or fittings. Conduit shall be appropriate for the stress generated by the selected equipment and field conditions. Bored conduit couplings shall meet or exceed all ASTM strength and composition standards for the particular type used. All couplings shall be leak proof. Drilling fluid used for directional boring shall be an inert mixture of water and bentonite clay conforming to the drilling equipment manufacturer's recommendations.

Expansion fittings, deflection fittings, and expansion/deflection fittings embedded in concrete shall be PVC coated.

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

9-29.2(1)A Standard Duty Junction Boxes

(******)

Supplement this section with the following:

The Contractor shall supply all junction boxes. Junction boxes, and pull boxes shall conform to the requirements of the following:

Junction box Type 1: Standard Plan J-40.10

Junction box Type 2: Standard Plan J-40.10

Junction box Type 8: Standard Plan J-40.30

Junction boxes, cable vaults and pull boxes which are placed within the sidewalk shall have slip resistant lids which meet the requirements of Americans with Disabilities Act (ADA) and Public Right-of-Way Accessibility Guideline (PROWAG). Approved products are:

1. Mebac1 (their most aggressive surface) manufactured by IKG Industries
2. SlipNOT Grade 3-coarse manufactured by W.S. Molnar Company.

Grounding lugs shall be stainless steel and shall be mechanically and electrically bonded.

9-29.6 Light and Signal Standards

(******)

Supplement this section with the following:

(June 6, 2023, WSDOT GSP)
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 F 3125 Grade A325 connecting bolts tightening shall comply with Section 6-03.3(33).

Traffic signal standard types, applicable characteristics, and foundation types 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:

Fabricator	Pre-Approved Drawing No.
Valmont Ind., Inc.	DB01165 Rev. B (4 sheets)
Ameron Pole Products Division	WA15TR10-1 Rev. C (1 sheet) and WA15TR10-3 Rev. B (1 sheet)
Millerbernd Manufacturing, Co.	74514-WA-PED-PPB Rev J (2 sheets)

Foundations shall be as noted in Standard Plan J-20.10

Type PS, Type I, Type RM, and Type FB
Type PS pedestrian signal standards, Type I vehicle signal standards, Type RM ramp meter signal standards, and Type FB flashing beacon standards shall conform to Standard Plan J-20.16, J-21.15, J-21.16, and J-22.15 respectively, or to one of the following pre-approved plans:

Fabricator	Pre-Approved Drawing No.
Valmont Ind., Inc.	DB01165 Rev. B (4 sheets)
Ameron Pole Products Division	WA15TR10-1 Rev. C (1 sheet) and WA15TR10-2 Rev. C (1 sheet)
Millerbernd Manufacturing, Co.	74514-WA-PED-FB Rev. H (2 sheets)
Millerbernd Manufacturing Co.	74514-WA-PED-SB Rev. H (2 sheets)

Foundations shall be as noted in Standard Plan J-21.10.

Type II
Type II signal standards are single mast arm signal standards with no luminaire arm or extension. Type II standards shall conform to one of the following pre-approved plans.

Maximum arm length (in feet) and wind load (XYZ value, in cubic feet) is noted for each manufacturer.

Fabricator	Pre-Approved Drawing No.	Max. Arm Length (ft)	Max. Wind Load (XYZ) (ft^3)
Valmont Ind., Inc.	DB01162 Rev. B (5 sheets)	65	3206
Ameron Pole Products Division	WA15TR3724-1 Rev. C (sheet 1 of 2), and WA15TR3724-2 Rev. D (sheet 2 of 2)	65	2935
Millerbernd Manufacturing, Co.	74516-WA-TS-II Rev. L (4 sheets)	65	3697

Foundations shall be as noted in the Plans and Standard Plan J-26.10. Type II signal standards with two mast arms installed 90 degrees apart may use these pre-approved drawings. Standards with two arms at any other angle are Type SD and require special design.

9-29.6(1) Steel Light and Signal Standards

(******)

Supplement this section with the following:

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 signal poles and mast arms shall be designed in accordance with the "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals," AASHTO, 2009, as revised.

Galvanized steel signal standards shall not be painted.

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 Standard Specifications, 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 AASHTO M 164 connecting bolts shall be tightened to 40 percent of proof load.

The vertical deflection at the free end of any cantilever arm to the dead load of the signals and signs shall not exceed 2 percent of the cantilever arm length. The horizontal deflection perpendicular to the arm at the free end of any cantilever arm due to the design wind load on the signals and signs and structure shall not exceed 5 percent of the cantilever arm length.

The Contractor shall submit complete calculations for structural design shall be submitted with the shop drawings for approval before fabrication or ordering material. These calculations shall include the stresses in the pole and cantilever arms; the deflections at the free end of the cantilever; the attachment of the signals and signs to the structure; the connection between the cantilever arms and vertical pole; and the pole section at handhole, base plate, anchor bolts, and foundation.

The pole and mast arm tapered shafts shall be round in cross section and have a uniform taper.

The pole shaft and signal mast arm shall not vary in roundness greater than 1/16 inch in the straight sections of the mast arm assembly. The round tapered pole shafts shall be made of 1-ply, hot rolled, basic open hearth steel. Structural steel having a minimum yield point of 40,000 psi or more shall be used for all structural parts. All butt welds in the shafts shall have back-up rings and full penetration for 100 percent of the circumference and shall conform to all applicable sections of the Standard Specifications. A flange plate for the purpose of mounting the vehicle signal mast arm on the pole shaft shall be attached to the pole shaft and shall be supported with side plates tangent to the shaft and gusset plates both top and bottom. Provisions for installing the signal wires between the vehicle signals and pole shaft shall be provided. All materials and construction shall conform to the Pole Schedule.

Traffic signal poles, so indicated in the Plans, shall be equipped with davit style luminaire Type 1 arms, and shall incorporate a smooth 26.5-inch radius bend at the end. A pipe tenon of diameter and length specified by the lighting manufacturer shall be provided in the end of the arm for attachment of the luminaire. A tenon shall be 2 degrees above level at the end.

A minimum 4-inch by 6-1/2-inch handhole reinforcing frame, complete with removable rain-tight cover, shall be welded into the shaft 18 inches above the base on the opposite side as the signal mast arm attachment. A second similar handhole shall be welded into the signal pole shaft directly behind the mast arm attachment. A grounding nut or provision in the handhole frame near the pole base for accommodating a threaded bolt or stud shall be provided on the inside of the shaft.

A J-hook wire support shall be welded on the inside of the pole shaft at the height of the vehicle signal mast arm attachment.

The shaft end of the vehicle signal mast arm shall have a steel flange plate welded to it that will permit the arm to be securely mounted on the flange plate specified for the pole shaft. The flange plate shall telescope the large end of the arm and shall be welded by 2 continuous electric arc welds, one being on the outside of the plate, adjacent to the shaft, and the other one on the inside at the end of the tubular cross section. The flange plate shall have 4 holes for the high-tensile bolts, which shall match the 4 tapped holes in the mounting plate on the pole shaft, as well as an opening to match that provided in the pole shaft for installing the signal wire. Tenons shall be welded to the mast arm at locations specified on the Signal Pole Specifications sheet, for the purpose of mounting the traffic signals. Unused tenons shall have a secure detachable cover.

A 1-piece steel anchor base shall be secured to the lower end of the shaft by 2 continuous electric arc welds. The base shall telescope the shaft and the one weld shall be on the inside of the base at the end of the shaft, while the other weld shall be on the outside at the top of the base as indicated on the Signal Pole Schedule. The design shall be such that the welded connection shall develop the full strength of the adjacent shaft section to resist bending action. Four (4) holes of adequate size to receive the

anchor bolts shall be drilled in the base. Slotted holes ¼ inch maximum larger than the anchor bolt diameter shall not be permitted. Two-piece (2-piece) anchor bolt covers shall be included and provisions made for mounting same with stainless steel screws.

Four (4) steel anchor bolts, nuts, and washers shall be furnished with each pole. Each anchor bolt shall have 1 round bearing plate with 1 hex nut tack welded to the bottom of the plate and shall have 7-inch-minimum thread on the top. All anchor bolts shall be furnished complete with 2 heavy hex nuts and 2 hardened washers. Anchor bolts for Type X, Y, Z and SD signal poles shall meet the requirements of ASTM A 449. Nuts shall be heavy hex meeting the requirements of AASHTO M 291, Grade C, D, or DH. Washers shall meet the requirements of AASHTO M 293.

All traffic signal standards, mast arms, terminal cabinets and all associated sub-components shall be galvanized after fabrication in accordance with ASTM A123.

9-29.7 Luminaire Fusing and Electrical Connections at Light Standard Bases, Cantilever Bases and Sign Bridge Bases

(******)

Supplement this section with the following:

Signal pole mounted luminaire wiring shall have in-line fuse holders with the fuses mounted inside the pole and readily accessible from the handhole.

Pole fuse kits shall be Homac #SLK-M or SEC #1791-SF

Fuses shall be Bussmann FMN-10, 10 amp

Putty Tape shall be Scotchcast electrical insulation.

9-29.10(2) Shoebox Style Roadway Luminaires

(******)

Add the following new section:

Shoebox style roadway luminaire shall be GAA Galleonaire by Eaton (or approved equal), LED type, wattage per the luminaire schedule on the Plans, Type III distribution, 4000K, B3-U0-G4, 120-277V, with quick mount short arm. The luminaire housing shall be open frame die cast aluminum, with end caps providing structural support for the housing and heat sinks and shall be 3G vibration tested. Access shall be toolless to enable easy entry into electrical chamber. The luminaire shall be IP66 rated. Photocontrol receptacle shall be PER7 (install shorting cap). Color of the housing shall be Graphite Metallic.

9-29.13(3) Traffic Signal Controller

(******)

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

Fully populated traffic controller cabinet (**Econolite ASC/3, NEMA TS1, by McCain**) shall be furnished by the Contractor and delivered to the King County Signal Maintenance Shop Representative (at Monroe Avenue Northeast, Renton, Washington). The Contractor's field work shall be limited to placing cabinets and equipment, connecting the field wiring to field terminal strips and testing.

9-29.13(6) Emergency Preemption

(******)

Revise this section with the following:

Immediately after a valid call has been received, the preemption controls shall cause the signals to display the required clearance intervals and subsequent preemption intervals. Preemption shall sequence as noted in the contract. Preemption equipment shall be installed so that internal wiring of the controller, as normally furnished by the manufacturer, is not altered.

Emergency devices shall be 3M Opticom brand, 700-series, as specified in the Plans.

9-29.13(10)A Auxiliary Equipment for NEMA Controllers

(******)

Revise this section with the following:

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

Load Switches: Load switches shall conform to NEMA TS2 specifications and be “I/O” type. Each cabinet shall include 16 Load switches and 16 Unused Red jumpers.

Solid State Flasher: The flasher shall conform to physical and electrical characteristics specified in NEMA Publication No. TS2-2000 Part 8. In addition, the flash rate shall be determined from the source voltage frequency by digital timing techniques.

Conflict Monitor Unit/Malfunction Management Unit: The CMU/MMU shall be an Eberle Design Inc. MMU2-16LE or approved equivalent. It shall conform to the physical and electrical characteristics specified in NEMA Publication No. TS2-2000. The monitor shall have a LCD-type display with separate indications for red, yellow, green, walk and don’t walk intervals for each channel. The monitor shall clearly display the status of each input during normal operation and failure condition. No flashing indications shall be accepted. The monitor shall log the type of failure, the channels involved, the time and the date for a minimum of nine events. Clearing the log shall be possible from the front panel.

Flash Transfer Relay: The Flash Transfer Relay shall be RENO A&E Model TR-200.

Signal Loop Amplifiers (if required): Amplifiers shall conform to current TS2 specs, Reno Model E-1200-SS, full width cards,or an approved equal with the following characteristics:

Operating Conditions: Loop amplifiers shall operate on 10.8 to 30 Vdc, in temperatures ranging between –30°F to +165°F without giving false calls. They shall operate up to ten six-foot by six-footloops and lead-ins with a total inductance range of 50 to 550 microhenries and detect any type of Washington State licensed vehicle over each loop. They shall have an LED indicator to show when the detector has an output.

Operating Modes: The amplifiers shall have a switch to select one of two (minimum) operating modes labeled “Pulse” and “Presence.” Pulse mode shall cause a pulse not to exceed 150 milliseconds to occur each time a vehicle enters the detection area. Presence mode shall hold a continuous output for a minimum of three minutes when any vehicle is over the detection area.

Operating Frequency: Operating frequency shall be selectable.

Sensitivity: The amplifiers shall have at least three sensitivity level selections via front panel switches to select the level of sensitivity. The “High” level of sensitivity shall detect up to 0.02 percent change in loop inductance. “Medium” sensitivity shall detect 0.07 to 0.12 percent change, and “Low” a 0.16 to 0.32 percent change.

Tuning: Tuning the amplifiers shall be accomplished by switching each channel from presence mode to pulse mode and back to presence mode. Once tuned, changes in roadway environment shall be automatically compensated for by tracking the characteristics of the loop.

Connector: Amplifiers shall be rack-mounted. The amplifier edge connectors shall be gold-flashed. Quick disconnects shall be provided for the racks.

Extension and Delay: Must meet TS2 spec and be available from the front panel of the detector.

Front Panel: The detector shall be 4 channels and use an LCD to display detector settings, including but not limited to Operating Mode, Sensitivity, Operating Frequency, Extension and Delay.

Testing: Supplier shall deliver amplifiers to King County Signal Shop at 155 Monroe Avenue Northeast, Renton, Washington for a 30- to 45-day testing period.

9-29.13(10)C NEMA Controller Cabinets

(******)

Revise this section with the following:

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

The fully populated cabinet shall be Type “M”, NEMA TS1 and shall be furnished by the Contractor and delivered to the King County Signal Maintenance Shop Representative (at Monroe Avenue Northeast, Renton, Washington). The Contractor’s field work shall be limited to placing cabinets and equipment, connecting the field wiring to field terminal strips and testing.

All leads in the signal cabinet shall be tied down and neatly dressed to the satisfaction of the Engineer.

The load bay for these cabinets shall consist of 12 load switches, 4 flash transfer relays and 1 flasher. The load switches shall be phases 1-8, peds 2, 4, 6 and 8.

The cabinet(s) shall contain the following accessories:

AC Delay Relay: A delay relay, Tyco CNS-35-72, which shall delay AC power to the controller and CMU/MMU. This relay shall be programmable for 1 to 5 seconds of delay upon restoration of power to the cabinet.

Power Supply: Power supplies shall comply with current TS2 Section 5.3.5 specifications, except that it shall have a 12Vdc 5A capacity. The power supply shall be free standing. The power supply shall be separate from the controller power supply.

Detector Disconnect/Test Switches: All eight controller phase and eight aux inputs shall have test switches. All eight pedestrian phases shall have test switches. These switches shall be mounted horizontally and in groups of 8. The three position switch shall be labeled “Normal” (up), which shall connect the controller to its detector output; “Off” (center), which shall isolate the controller from the detector output; and “Test” (down), which shall provide a momentary logic ground to the controller detection input. These switches shall be located inside the cabinet door and labeled by associated phase number. A see-through one piece Plexiglas cover shall cover all detector test switches; this cover shall not have sharp edges.

Conflict Monitor Unit/Malfunction Management Unit: The cabinet shall be wired to accept an Eberle Designs Inc. MMU-16LE or approved equivalent, wired to operate as a CMU. The CMU/MMU shall be wired so that the controller power supply is monitored by +24Vdc #1 and the external power supply is monitored by +24Vdc #2.

Fourth (D) Connector: A fourth connector (part no CPC 63) shall be provided with the following pin assignments:

1 Emergency Preempt 4 Out	2
3	4 Special Function 2 Out
5	6
7	8
9	10
11 Flash Out	12
13 Auxiliary Detection #8	14
15 Special Function 3 Out 16	16
17 Auxiliary Detection #1	18 Auxiliary Detection #4
19 System Enable	20
21	22 Emergency Preempt 2 Out
23 Emergency Preempt Railroad	24
25 on Special Function 2 In	26 Special Function 1 In
27 Free/Coordinate Out	28 Special Function 1 Out
29	30 Auxiliary Detection #5
31 Auxiliary Detection #3	32 Emergency Preempt 1 Out
33	34 Emergency Preempt 3 Out
35 Special Function 3 In	36
37 Flash Status In	387
39 Auxiliary Detection #6	40 Auxiliary Detection #7
41	42
43	44
45	46
47 Auxiliary Detection #2	48
49 EVP-1 (In)	50 EVP-2 (In)
51	52
53	54
55 EVP-3 (In)	56 EVP-4 (In)

57 Railroad Preempt (In)	58
59	60
61	62

Each pin shall be connected to a separate terminal block panel so that a service technician can easily make field changes.

The detector racks shall be configured as follows:

NEMA 1	NEMA 5	AUX 1	AUX 5	Pre-empt 1
NEMA 2	NEMA 6	AUX 2	AUX 6	Pre-empt 2
NEMA 3	NEMA 7	AUX 3	AUX 7	Pre-empt 3
NEMA 4	NEMA 8	AUX 4	AUX 8	Pre-empt 4

“Plug and Play” cabinets are not acceptable.

“Modular” Main Panels shall not be permitted.

The controller cabinet(s) provided under these specifications shall be a NEMA rain-tight, outdoor cabinet(s) with a shelf or shelves of sufficient size to easily house the controller, detectors, Opticom phase selector(s), a Conflict Monitor Unit/Malfunction Management Unit, harnesses, etc., without utilizing the floor of the cabinet. The cabinet shall be 0.125-inch thick aluminum with a smooth natural finish interior and exterior. The cabinet roof shall have a minimum 1.5” slope to the rear to prevent rain accumulation. The main door of the cabinet shall include a two-position, three-point bar stop and shall be secured with a spring-loaded Best lock or approved equal that has a construction core, and secured to the cabinet with a continuous stainless steel piano hinge the full length of the door. The door handle shall be cast aluminum or stainless steel. The lock core shall be replaceable by King County personnel without the use of tools. The main door shall also contain a police door with a conventional police lock. Both locks shall be provided with a key. A switch shall be installed on each door that will close contact when door is open. Each switch will be connected to a controller alarm input that can report via a system when either door is open. All cabinet seams shall be continuously welded. There shall be “unistrut” rails in the cabinet to mount panels and equipment; these rails shall extend to within 5” of the top and 4” of the bottom of the cabinet.

All leads in the signal cabinet shall be tied down and neatly dressed to the satisfaction of the Engineer.

The load bay shall be in a “Z” type configuration.

The load bay/main panel shall be hinged at the bottom and have sufficient clearance to lower the load bay/main panel.

The load bay shall energize the flash transfer relays for RYG operation.

All cabinet terminations shall be accessible with a minimum 6” screw driver without moving or removing any wiring or equipment.

The inputs to “I/O” type load switches shall be visible during flashing operation.

The cabinet(s) shall contain the following accessories:

Vent Fan: The cabinet shall have an air intake and vent fan. The vent fan shall be at the top of the cabinet and thermostatically controlled. Thermostat terminals and wires shall not be exposed. Heaters shall not be installed in cabinets.

Convenience Outlet & Lamp Socket: One convenience outlet with a ground fault interrupter, a second convenience outlet without ground fault interrupter and a lamp socket shall be furnished in the cabinet(s). The ground fault outlet shall be mounted on the right side of the cabinet, near the top shelf; the non-ground fault outlet shall be mounted on the left side of the cabinet, near the top shelf. These outlets shall be mounted in an FS box, plastic cover, the outlets facing towards the center of the cabinet with a minimum of 4" clearance on all sides.

No outlets shall be mounted on the door. A switch shall activate an incandescent lamp when the door is open. An incandescent 100-watt bulb shall be provided.

Wire Size: All 115VAC wires shall have a minimum size of 18 AWG regardless of current load. All other wires shall be sized to allow a safety factor of five times the expected load. All wiring shall be stranded.

Schematics and Manuals: The cabinet(s) shall have a waterproof envelope with a side access attached to the inside of the door. At the time of delivery the envelope shall contain one complete set of schematics and maintenance and operations manuals for all assemblies and sub-assemblies, including circuit schematics for each model of the following:

1. Controller
2. Conflict Management Unit/Malfunction Management Unit
3. Opticom Equipment
4. Loop Amplifiers (if required)

In addition, the cabinet shall arrive with three sets of cabinet prints and one CD copy of the cabinet print in AutoCAD format.

Service Panel Switches

Power Switches: There shall not be a main power switch inside the cabinet(s) that shall render all control equipment electrically dead when turned off. There shall be a two position switch located inside the cabinet door identified as the Controller Power switch. Its positions shall be labeled "On" (up) and "Off" (down). With the switch in the On position, it shall render only the controller electrically dead while maintaining flashing operation for purposes of changing the controller. The CMU/MMU and external power supply shall remain active. The switch shall be a general-purpose bat-style toggle switch with a 0.688-inchlong bat. The switch shall have a protective cover MS27752-1 or approved equivalent.

Stop Time Switch: There shall be a three-position switch located inside the cabinet door identified as the Stop Time switch. Its positions shall be labeled "Normal" (up), "Off" (center), and "On" (down). With the switch in its Normal position, a stop-timing command may be applied to the controller by the police flash switch or the conflict monitor unit. When the switch is in its "Off" position, stop-timing commands shall be removed from the controller. The "On" position of the switch shall cause the controller to stop timing. The switch shall be a general-purpose bat-style

toggle switch with a 0.688-inch long bat. The switch shall have a protective cover MS27752-1 or approved equivalent.

Technician Flash Switch: There shall be a two position switch inside the cabinet to place the signal in flashing operation while the controller continues to operate. Its positions shall be “Auto” (up) and “Flash” (down). When this switch is in the Flash position it shall have no effect on the operation of the controller or conflict monitor. Returning to Auto shall return immediately to RYG operation with out restarting the controller. The switch shall be a general-purpose bat-style toggle switch with a 0.688-inch long bat. The switch shall have a protective cover MS27752-1 or approved equivalent.

Police Panel Switches

Police Flash Switch: Inside the police door there shall be a flash switch, which shall be the only switch on that panel. The switch shall have two positions, “Auto” and “Flash”. The up position shall be “Auto” and result in normal signal operation. The down position shall be “Flash” and will put the signal into flashing operation and apply stop time to the controller.

When the flash switch is returned to the “Automatic” position, the controller shall restart except when the conflict monitor has commanded flash operation. The switch shall be a general-purposebat-style toggle switch with a 0.688-inch long bat. The switch shall have a protective cover MS27752-1 or approved equivalent.

Red Flash Program: Flash operation shall be programmable without removing field wiring. The cabinet shall be delivered programmed for all red flash.

Supplemental Loads: Pedestrian WALK / DON’T WALK, overlap and odd phase GREENS / YELLOWS shall be loaded with a 2.2K-ohm, 10-watt resistor. Each load resistor shall be installed on the back of the load switch socket.

Pedestrian Detector Field Wiring: All pedestrian detectors shall be connected to their appropriate field terminals. The terminals shall be grouped together and located in the lower left side panel.

Cabinet Relays: All mechanical relays shall be commonly available from more than one manufacturer and have 24-volt DC or 120-volt AC relay coils. Every socket that has the capacity of accepting a relay or load switch shall have the appropriate relay or load switch installed. The relays shall be easily accessible, not covered by equipment or wiring. Each cabinet shall be supplied with 16 unused red jumpers for each load switch and flash relay socket.

Preemption Equipment: Cabinets shall be equipped to accept one 4-channel Opticom 754 Discriminator. Each call channel of the discriminator shall be wired through a disconnect/test switch, located on the service panel. The three position switch shall be labeled “Normal” (up), which shall connect the controller to its detector output; “Off” (center), which shall isolate the controller from the detector output; and “Test” (down), which shall provide a momentary logic ground to the controller detection input. The discriminator shall be located in a rack separate from the detectors. No calls shall be placed on the non-preempt phases. The Opticom equipment shall be de-energized during flashing operation. A 3M 700 series Aux/Green Sense harness shall be wired into the cabinet, the aux channels shall be located near other pre-empt field wires. The green sense wires shall be connected to the appropriate controller field wires.

Signal Field Wiring Terminals: There shall be terminal strips for field wiring in the controller cabinet. The terminals shall be numbered in accordance to the field wiring chart included in these specifications, they shall be mounted horizontally along the bottom of the cabinet attached to the back wall and sequence green-yellow-red or walk-don't walk from left to right.

Common bus bars shall be included; they shall be copper, they will be designed so that the screw slug extends past the bus bar when tightened with no wire installed. There shall be 2 spare empty 13 position neutral bus bars along the bottom of each side of the cabinet. There shall also be 1 empty logic ground bus bar at the bottom left and 1 empty chassis ground bus bar along the bottom of each side of the cabinet. King County numbers shall be shown on all field terminals. Detector loop terminations shall be on terminal blocks that shall not be printed circuit board mounted.

Power Panel: The cabinet shall contain a power panel with Square D bracket mount circuit breakers or approved equal, Radio Interference Suppressor, Normally Open Solid State Relay (Crydom, Model CWA4850 or equal). The power panel shall be covered by an easily removable, clear Plexiglas cover.

Radio Interference Suppressor: The cabinet(s) shall include an RIS. Additionally, all power supplies of equipment used here shall have electrical interference immunity from other devices within the cabinet.

Surge Protector (Lightning Arrester): The cabinet(s) shall have an input voltage surge protector (Innovative Technologies HS-P-SP-120A-60A-RJ or equivalent) that shall protect the cabinet power input supply from any voltage surges that could damage it. The LED indicator shall be easily viewed from the front. The surge suppressor shall be wired in series. Interconnect cable terminal strips shall be equipped with lightening surge protectors.

Testing of Equipment: All equipment supplied under these specifications shall be shop tested to the satisfaction of the Engineer. Testing shall be at the King County Signal Shop at 155 Monroe Ave. N.E., Renton, Washington. The County will make space available for the required tests. All equipment shall be delivered complete (no partial shipments). The supplier shall provide written notification that all components have been tested with the cabinet including the controller, conflict monitor, detection, Opticom equipment, and signal loop amplifiers prior to shipment. Said written notification shall not relieve the supplier of any responsibility relative to the proper functioning of all equipment supplied when field installed. All elements shall function properly as a complete system for a period of 240 hours or as determined by the Engineer. The test period need not be continuous. Any malfunction shall stop the test period until all parts are satisfactorily operating. In the event of component malfunction or failure at any time during the last 72 hours of the test demonstration, the test shall be extended until a minimum of 72 hours continuous satisfactory performance of the entire integrated system has been demonstrated.

Following acceptance of the cabinet, King County forces will deliver the cabinet to the site. Power (120 Volts AC) must be available prior to delivery of the cabinet. The controller and auxiliary equipment will be delivered to the site by County forces immediately prior to signal turn-on.

9-29.16(2)A LED Programmable Array

(******)

Supplement this section with the following:

Light Emitting Diode (LED) light sources are required for all vehicle displays. All LED displays shall be fully populated.

The manufacturer of the LED traffic signal displays shall provide a written warranty against defects in materials and workmanship for the LED signal modules for a period of 60 months after the installation of the modules. All warranty documentation shall be given to the Engineer prior to installation.

9-29.16(2)B Signal Housing

(******)

Supplement this section with the following:

The signal head housing shall be Federal Yellow (FHWA) and shall consist of an assembly of separate sections, expandable type for vertical mounting, substantially secured together in a weather-tight manner to form a unit of pleasing appearance. Each section shall house an individual optical unit. They shall be designed to withstand winds of 80 mph with a gust factor of 0.25 without permanent distortion or failing (torque at attachment of 6,000 pound-feet).

9-29.17 Signal Head Mounting Brackets and Fittings

(******)

Supplement this section with the following:

All hardware for signal head mounts shall be painted with two coats of factory-applied traffic signal Federal Yellow (FHWA) baked enamel.

9-29.19 Pedestrian Push Buttons

(******)

Supplement this section with the following:

This section is deleted and replaced with the following:

The Contractor shall provide and install 4-wire APS style pedestrian push buttons assembly, model AGPS 915 by Campbell or approved equal, pedestrian signal mounted controller, and signs. The position of the pedestrian push buttons shall be located in a manner such that the tactile arrow is aligned parallel to the direction of travel for the crosswalk which the pushbutton is intended to serve; however final positioning for the optimum effectiveness shall be approved by the Engineer. The Contractor shall submit completed planning form to the Engineer for an approval. Accessible Pedestrian Pushbutton units shall meet the following requirements:

Pushbuttons shall be mounted to the poles by means of stainless steel bolts. All mountings shall be securely fastened as approved by the Engineer.

The APS Push Button Controller shall be mounted in the pedestrian signal head. The APS Push Button Controller and APS Style Pedestrian Push Button shall be connected by four conductor shielded cable, and per the Plans and manufacturer’s recommendations.

Splicing of APS Style Pedestrian Push Button wiring outside of the traffic signal controller cabinet or pole mounted terminal cabinet will not be allowed.

The sign legend to be used shall be sign designation R10-3e and shall be nine (9) inches by fifteen (15) inches. All mounting bolts shall be non-corrosive stainless steel.

The pedestrian pushbutton housing shall be aluminum and shall be painted yellow. Unit(s) shall operate at a temperature range of -35C to 85C. Power requirements shall be 120 VAC, 60 Hz (100 ma, typical +/- 20%).

Pedestrian indicators shall include an audible speaker, call confirmation LED and vibrotactile arrow. The audible speaker shall be programmable to have a button locator tone, acknowledgement tone/message, walk cycle tone/message and clearance tone/message. The unit(s) shall have automatic volume controls for message strength over ambient noise levels. The walk tone/message shall be programmable to stop with the walk signal or other user settable time. The unit(s) shall be user settable for Accessible Pedestrian Signal (APS) message initiation with an extended press or on call.

The call confirmation LED shall be red with 160 degree view ability and once activated shall remain illuminated until the corresponding walk indication is given. An audible acknowledgement message of “WAIT” shall accompany each activation of the call confirmation LED.

The locator tone shall be active for a time of 0.15 seconds or less and shall repeat at 1 second intervals. The locator tone shall be intensity responsive to ambient sound and be audible from six (6) feet to twelve (12) feet from the pushbutton with a maximum of 5 dBA louder than ambient sound. The final locator tone intensity shall be field adjusted in the presence of the Engineer.

A walk cycle audible message shall be set by the Contractor for each pushbutton unit and the message shall be per City’s instructions. The walk cycle message shall be intensity responsive to ambient sound with a volume 5 dBA above ambient sound up to a maximum volume of 100 dBA. The walk cycle message shall be audible from the beginning of the associated crosswalk during the walk interval only.

The vibrotactile arrow shall be located on the pushbutton and shall have high visibility contrast of either light on dark or dark on light. The pushbutton units shall be installed in a manner such that the vibrotactile arrow is aligned parallel to the direction of travel for the crosswalk which the pushbutton is intended to serve. The vibrotactile arrow shall activate with the walk cycle.

9-29.20 Pedestrian Signals

(******)

Revise this section with the following:

Pedestrian signals shall be light-emitting diode (LED), countdown type.

All pedestrian signals supplied to any one project shall be from the same manufacturer and type but need not be from the same manufacturer as the vehicle heads.

Word messages, when specified, shall provide letters a minimum of 9 inches high. Symbol messages, when specified, shall be a minimum of 12 inches high and 7 inches in width.

Housings shall be polycarbonate or die-cast aluminum and the aluminum housings shall be painted with two coats of factory applied Federal Yellow (FHWA) enamel. All hinges and latches and interior hardware shall be stainless steel.

9-29.21 Flashing Beacon

(Special Provision) *Replacement*

Rectangular Rapid Flashing Beacon (RRFB) System

The rectangular rapid flashing beacons (RRFB) poles, assembly lights and controller shall be furnished by the Contractor and shall be AC SC315-G (AC powered system) by Carmanah and as shown on the Plans. RRFB equipment pole placement shall be per the Plans and details and shall be complete in all respects. Signs shall be per the Plans.

Rectangular Rapid Flashing Beacon (RRFB) indications shall comply with the dimensional, operational, and flash pattern requirements of Federal Highway Administration (FHWA) Interim Approval 21 (IA-21, Conditions 4, 5,and 6, excluding Condition 5f; https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm).

The flashing pattern shall be user-selectable in the field.

The rectangular rapid flashing beacon (RRFB) pole and base assembly shall be furnished by the contractor and shall be as described below, and on the Plans and details. The RRFB assembly shall be complete in all respects, capable of supporting RRFB equipment per the Plans, and shall consist of two (2) subassemblies. Pole length shall be a minimum of 14’.

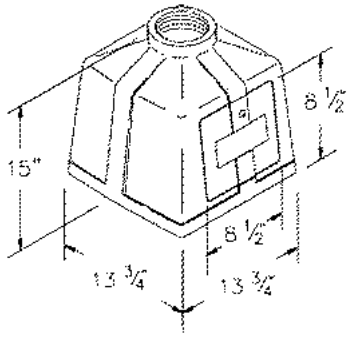
Pole Subassembly
The pole shall be a 4-1/2 inch outside diameter spun aluminum Schedule 40 pipe.

The bottom of the pipe shall be threaded to screw into a breakaway base assembly. Threading and deburring of the pole shall be in accordance with the basic dimensions of American National Standard Taper Pipe Threads, NPT (ANSI B1.2).

Base Subassembly
The pole base shall be breakaway, square aluminum pedestal base with aluminum door meeting the following minimum requirements:

- Square cast aluminum with natural finish, minimum weight of 21 lbs. with dimensions as shown in the Figure below.

- Upper end shall be threaded to receive a 4-1/2" outside diameter NPT pipe shaft. Base



threads shall be tapped to allow full pole engagement w/o exposed threads on the pole.

- The base shall be of such design that it may be fastened to a foundation with four (4) 3/4" anchor bolts located 90 degrees apart on the bottom of the base.

- There shall be slots in the bottom of the base 1½" wide and 2½" long measured along the circumference of the bolt circle, allowing a proper fit even if the bolts are placed slightly off center. The base plate shall accommodate bolt circle of 12" and anchor bolts with a diameter of 3/4".

- The base shall be equipped with a removable aluminum door. Door opening shall be free of burrs and sharp edges and be no less than 8½" square. The door shall be attached to the base using one stainless steel socket button head screw to prevent unauthorized entry.

- The base housing and its components shall be fabricated free of voids, pits, dents, molding and excessive foundry grinding marks. All design radii shall be smooth and intact. Exterior surface finish shall be smooth and cosmetically acceptable by being free of molding fins, cracks and other exterior blemishes.

- Frangibility: The base shall meet or exceed 1985 AASHTO breakaway requirements. Test reports from an FHWA approved independent laboratory shall be provided certifying that the base has been tested and meets all applicable requirements. In addition, a statement of certification from the FHWA stating such tests have been accepted and approved shall be supplied.

- Structural Integrity: To prove structural soundness a certification from a recognized independent structural laboratory shall be provided certifying that the base will withstand a bending moment of 10,750 ft. lbs. Such test shall be performed in the following manner:

    - A force shall be applied at a distance from the bottom of the base to produce a moment. All bases must reach a moment capacity of 10,750 ft. lbs. without breaking, cracking or rupturing in any manner.

    - After force has been removed, the lever arm shall return to within .250" of its original rest position.

    - All tests shall be made using 4" schedule 40 Steel Pipe.

- Hardware: (6) 5/16"-18 x 1½" Socket Head Capscrews (3) 5/16" Dia. x 3/4" Roll Pins

- Finish: Collar Segment: Alodine 1200.

- Fasteners: Zinc w/ Yellow Di-Chromate.

- Packaging: Threaded end shall have protective cap to prevent thread damage. Cardboard sleeve shall cover the entire length of shaft to protect surface finish during storage and shipment.

- The pole shall be galvanized after fabrication per the Standard Specification Section 6-07.3(11)B2 Galvanizing.

9-29.26 Detectable Pull Tape

(Special Provision) *New*

The Contractor shall furnish and install a flat polyester woven pre-lubed tape that contains a 22-gauge wire.

The tape shall be marked with sequential footage markings and be continuous.

The tape shall meet or exceed a breaking strength of 900 lb., with a width of 1/2-inch.

END OF DIVISION 9

APPENDIX A

PREVAILING MINIMUM HOURLY WAGE RATES

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: 04/11/2024

County	Trade	Job Classification	Wage	Holiday	Overtime	Note	*Risk Class
King	Asbestos Abatement Workers	Journey Level	$59.07	5D	1H		View
King	Boilermakers	Journey Level	$74.29	5N	1C		View
King	Brick Mason	Journey Level	$69.07	7E	1N		View
King	Brick Mason	Pointer-Caulker-Cleaner	$69.07	7E	1N		View
King	Building Service Employees	Janitor	$29.33	5S	2F		View
King	Building Service Employees	Traveling Waxer/Shampooer	$29.78	5S	2F		View
King	Building Service Employees	Window Cleaner (Non-Scaffold)	$32.93	5S	2F		View
King	Building Service Employees	Window Cleaner (Scaffold)	$33.93	5S	2F		View
King	Cabinet Makers (In Shop)	Journey Level	$22.74		1		View
King	Carpenters	Acoustical Worker	$74.96	15J	4C		View
King	Carpenters	Bridge, Dock And Wharf Carpenters	$74.96	15J	4C		View
King	Carpenters	Floor Layer & Floor Finisher	$74.96	15J	4C		View
King	Carpenters	Journey Level	$74.96	15J	4C		View
King	Carpenters	Scaffold Erector	$74.96	15J	4C		View
King	Cement Masons	Application of all Composition Mastic	$72.87	15J	4U		View
King	Cement Masons	Application of all Epoxy Material	$72.37	15J	4U		View
King	Cement Masons	Application of all Plastic Material	$72.87	15J	4U		View
King	Cement Masons	Application of Sealing Compound	$72.37	15J	4U		View
King	Cement Masons	Application of Underlayment	$72.87	15J	4U		View
King	Cement Masons	Building General	$72.37	15J	4U		View
King	Cement Masons	Composition or Kalman Floors	$72.87	15J	4U		View
King	Cement Masons	Concrete Paving	$72.37	15J	4U		View
King	Cement Masons	Curb & Gutter Machine	$72.87	15J	4U		View
King	Cement Masons	Curb & Gutter, Sidewalks	$72.37	15J	4U		View
King	Cement Masons	Curing Concrete	$72.37	15J	4U		View
King	Cement Masons	Finish Colored Concrete	$72.87	15J	4U		View

King	Cement Masons	Floor Grinding	$72.87	15J	4U		View
King	Cement Masons	Floor Grinding/Polisher	$72.37	15J	4U		View
King	Cement Masons	Green Concrete Saw, self-powered	$72.87	15J	4U		View
King	Cement Masons	Grouting of all Plates	$72.37	15J	4U		View
King	Cement Masons	Grouting of all Tilt-up Panels	$72.37	15J	4U		View
King	Cement Masons	Gunite Nozzleman	$72.87	15J	4U		View
King	Cement Masons	Hand Powered Grinder	$72.87	15J	4U		View
King	Cement Masons	Journey Level	$72.37	15J	4U		View
King	Cement Masons	Patching Concrete	$72.37	15J	4U		View
King	Cement Masons	Pneumatic Power Tools	$72.87	15J	4U		View
King	Cement Masons	Power Chipping & Brushing	$72.87	15J	4U		View
King	Cement Masons	Sand Blasting Architectural Finish	$72.87	15J	4U		View
King	Cement Masons	Screed & Rodding Machine	$72.87	15J	4U		View
King	Cement Masons	Spackling or Skim Coat Concrete	$72.37	15J	4U		View
King	Cement Masons	Troweling Machine Operator	$72.87	15J	4U		View
King	Cement Masons	Troweling Machine Operator on Colored Slabs	$72.87	15J	4U		View
King	Cement Masons	Tunnel Workers	$72.87	15J	4U		View
King	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	$129.71	15J	4C		View
King	Divers & Tenders	Dive Supervisor/Master	$93.94	15J	4C		View
King	Divers & Tenders	Diver	$129.71	15J	4C	8V	View
King	Divers & Tenders	Diver On Standby	$88.94	15J	4C		View
King	Divers & Tenders	Diver Tender	$80.82	15J	4C		View
King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	$93.26	15J	4C		View
King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	$98.26	15J	4C		View
King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	$102.26	15J	4C		View
King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	$107.26	15J	4C		View
King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	$109.76	15J	4C		View
King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	$114.76	15J	4C		View
King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	$116.76	15J	4C		View
King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	$118.76	15J	4C		View

King	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	$120.76	15J	4C		View
King	Divers & Tenders	Manifold Operator	$80.82	15J	4C		View
King	Divers & Tenders	Manifold Operator Mixed Gas	$85.82	15J	4C		View
King	Divers & Tenders	Remote Operated Vehicle Operator/Technician	$80.82	15J	4C		View
King	Divers & Tenders	Remote Operated Vehicle Tender	$75.41	15J	4C		View
King	Dredge Workers	Assistant Engineer	$79.62	5D	3F		View
King	Dredge Workers	Assistant Mate (Deckhand)	$79.01	5D	3F		View
King	Dredge Workers	Boatmen	$79.62	5D	3F		View
King	Dredge Workers	Engineer Welder	$81.15	5D	3F		View
King	Dredge Workers	Leverman, Hydraulic	$82.77	5D	3F		View
King	Dredge Workers	Mates	$79.62	5D	3F		View
King	Dredge Workers	Oiler	$79.01	5D	3F		View
King	Drywall Applicator	Journey Level	$75.73	15O	11S		View
King	Drywall Tapers	Journey Level	$75.73	15O	11S		View
King	Electrical Fixture Maintenance Workers	Journey Level	$38.69	5L	1E		View
King	Electricians - Inside	Cable Splicer	$109.35	7C	4E		View
King	Electricians - Inside	Cable Splicer (tunnel)	$117.52	7C	4E		View
King	Electricians - Inside	Certified Welder	$105.63	7C	4E		View
King	Electricians - Inside	Certified Welder (tunnel)	$113.43	7C	4E		View
King	Electricians - Inside	Construction Stock Person	$51.53	7C	4E		View
King	Electricians - Inside	Journey Level	$101.92	7C	4E		View
King	Electricians - Inside	Journey Level (tunnel)	$109.35	7C	4E		View
King	Electricians - Motor Shop	Journey Level	$48.68	5A	1B		View
King	Electricians - Powerline Construction	Cable Splicer	$93.00	5A	4D		View
King	Electricians - Powerline Construction	Certified Line Welder	$85.42	5A	4D		View
King	Electricians - Powerline Construction	Groundperson	$55.27	5A	4D		View
King	Electricians - Powerline Construction	Heavy Line Equipment Operator	$85.42	5A	4D		View
King	Electricians - Powerline Construction	Journey Level Lineperson	$85.42	5A	4D		View
King	Electricians - Powerline Construction	Line Equipment Operator	$73.35	5A	4D		View
King	Electricians - Powerline Construction	Meter Installer	$55.27	5A	4D	8W	View
King	Electricians - Powerline Construction	Pole Sprayer	$85.42	5A	4D		View
King	Electricians - Powerline Construction	Powderperson	$63.50	5A	4D		View
King	Electronic Technicians	Journey Level	$65.66	7E	1E		View
King	Elevator Constructors	Mechanic	$111.26	7D	4A		View
King	Elevator Constructors	Mechanic In Charge	$120.27	7D	4A		View
King	Fabricated Precast Concrete Products	All Classifications - In-Factory Work Only	$21.34	5B	1R		View

King	Fence Erectors	Fence Erector	$50.07	15J	11P	8Y	View
King	Fence Erectors	Fence Laborer	$50.07	15J	11P	8Y	View
King	Flaggers	Journey Level	$50.07	15J	11P	8Y	View
King	Glaziers	Journey Level	$79.16	7L	1Y		View
King	Heat & Frost Insulators And Asbestos Workers	Journey Level	$87.15	15H	11C		View
King	Heating Equipment Mechanics	Journey Level	$96.42	7F	1E		View
King	Hod Carriers & Mason Tenders	Journey Level	$62.49	15J	11P	8Y	View
King	Industrial Power Vacuum Cleaner	Journey Level	$16.28		1		View
King	Inland Boatmen	Boat Operator	$61.41	5B	1K		View
King	Inland Boatmen	Cook	$56.48	5B	1K		View
King	Inland Boatmen	Deckhand	$57.48	5B	1K		View
King	Inland Boatmen	Deckhand Engineer	$58.81	5B	1K		View
King	Inland Boatmen	Launch Operator	$58.89	5B	1K		View
King	Inland Boatmen	Mate	$57.31	5B	1K		View
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator	$49.48	15M	11O		View
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Foamer Operator	$49.48	15M	11O		View
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$49.48	15M	11O		View
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$47.41	15M	11O		View
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$41.20	15M	11O		View
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	TV Truck Operator	$44.31	15M	11O		View
King	Insulation Applicators	Journey Level	$74.96	15J	4C		View
King	Ironworkers	Journeyman	$87.80	15K	11N		View
King	Laborers	Air, Gas Or Electric Vibrating Screed	$59.07	15J	11P	8Y	View
King	Laborers	Airtrac Drill Operator	$60.90	15J	11P	8Y	View
King	Laborers	Ballast Regular Machine	$59.07	15J	11P	8Y	View
King	Laborers	Batch Weighman	$50.07	15J	11P	8Y	View
King	Laborers	Brick Pavers	$59.07	15J	11P	8Y	View
King	Laborers	Brush Cutter	$59.07	15J	11P	8Y	View
King	Laborers	Brush Hog Feeder	$59.07	15J	11P	8Y	View
King	Laborers	Burner	$59.07	15J	11P	8Y	View
King	Laborers	Caisson Worker	$60.90	15J	11P	8Y	View
King	Laborers	Carpenter Tender	$59.07	15J	11P	8Y	View
King	Laborers	Cement Dumper-paving	$60.15	15J	11P	8Y	View
King	Laborers	Cement Finisher Tender	$59.07	15J	11P	8Y	View
King	Laborers	Change House Or Dry Shack	$59.07	15J	11P	8Y	View

King	Laborers	Chipping Gun (30 Lbs. And Over)	$60.15	15J	11P	8Y	View
King	Laborers	Chipping Gun (Under 30 Lbs.)	$59.07	15J	11P	8Y	View
King	Laborers	Choker Setter	$59.07	15J	11P	8Y	View
King	Laborers	Chuck Tender	$59.07	15J	11P	8Y	View
King	Laborers	Clary Power Spreader	$60.15	15J	11P	8Y	View
King	Laborers	Clean-up Laborer	$59.07	15J	11P	8Y	View
King	Laborers	Concrete Dumper/Chute Operator	$60.15	15J	11P	8Y	View
King	Laborers	Concrete Form Stripper	$59.07	15J	11P	8Y	View
King	Laborers	Concrete Placement Crew	$60.15	15J	11P	8Y	View
King	Laborers	Concrete Saw Operator/Core Driller	$60.15	15J	11P	8Y	View
King	Laborers	Crusher Feeder	$50.07	15J	11P	8Y	View
King	Laborers	Curing Laborer	$59.07	15J	11P	8Y	View
King	Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	$59.07	15J	11P	8Y	View
King	Laborers	Ditch Digger	$59.07	15J	11P	8Y	View
King	Laborers	Diver	$60.90	15J	11P	8Y	View
King	Laborers	Drill Operator (Hydraulic, Diamond)	$60.15	15J	11P	8Y	View
King	Laborers	Dry Stack Walls	$59.07	15J	11P	8Y	View
King	Laborers	Dump Person	$59.07	15J	11P	8Y	View
King	Laborers	Epoxy Technician	$59.07	15J	11P	8Y	View
King	Laborers	Erosion Control Worker	$59.07	15J	11P	8Y	View
King	Laborers	Faller & Bucker Chain Saw	$60.15	15J	11P	8Y	View
King	Laborers	Fine Graders	$59.07	15J	11P	8Y	View
King	Laborers	Firewatch	$50.07	15J	11P	8Y	View
King	Laborers	Form Setter	$60.15	15J	11P	8Y	View
King	Laborers	Gabian Basket Builders	$59.07	15J	11P	8Y	View
King	Laborers	General Laborer	$59.07	15J	11P	8Y	View
King	Laborers	Grade Checker & Transit Person	$62.49	15J	11P	8Y	View
King	Laborers	Grinders	$59.07	15J	11P	8Y	View
King	Laborers	Grout Machine Tender	$59.07	15J	11P	8Y	View
King	Laborers	Groutmen (Pressure) Including Post Tension Beams	$60.15	15J	11P	8Y	View
King	Laborers	Guardrail Erector	$59.07	15J	11P	8Y	View
King	Laborers	Hazardous Waste Worker (Level A)	$60.90	15J	11P	8Y	View
King	Laborers	Hazardous Waste Worker (Level B)	$60.15	15J	11P	8Y	View
King	Laborers	Hazardous Waste Worker (Level C)	$59.07	15J	11P	8Y	View
King	Laborers	High Scaler	$60.90	15J	11P	8Y	View
King	Laborers	Jackhammer	$60.15	15J	11P	8Y	View
King	Laborers	Laserbeam Operator	$60.15	15J	11P	8Y	View
King	Laborers	Maintenance Person	$59.07	15J	11P	8Y	View
King	Laborers	Manhole Builder-Mudman	$60.15	15J	11P	8Y	View

King	Laborers	Material Yard Person	$59.07	15J	11P	8Y	View
King	Laborers	Mold Abatement Worker	$59.07	15J	11P	8Y	View
King	Laborers	Motorman-Dinky Locomotive	$62.59	15J	11P	8Y	View
King	Laborers	nozzleman (concrete pump, green cutter when using combination of high pressure air & water on concrete & rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster)	$62.49	15J	11P	8Y	View
King	Laborers	Pavement Breaker	$60.15	15J	11P	8Y	View
King	Laborers	Pilot Car	$50.07	15J	11P	8Y	View
King	Laborers	Pipe Layer (Lead)	$62.49	15J	11P	8Y	View
King	Laborers	Pipe Layer/Tailor	$60.15	15J	11P	8Y	View
King	Laborers	Pipe Pot Tender	$60.15	15J	11P	8Y	View
King	Laborers	Pipe Reliner	$60.15	15J	11P	8Y	View
King	Laborers	Pipe Wrapper	$60.15	15J	11P	8Y	View
King	Laborers	Pot Tender	$59.07	15J	11P	8Y	View
King	Laborers	Powderman	$60.90	15J	11P	8Y	View
King	Laborers	Powderman's Helper	$59.07	15J	11P	8Y	View
King	Laborers	Power Jacks	$60.15	15J	11P	8Y	View
King	Laborers	Railroad Spike Puller - Power	$60.15	15J	11P	8Y	View
King	Laborers	Raker - Asphalt	$62.49	15J	11P	8Y	View
King	Laborers	Re-timberman	$60.90	15J	11P	8Y	View
King	Laborers	Remote Equipment Operator	$60.15	15J	11P	8Y	View
King	Laborers	Rigger/Signal Person	$60.15	15J	11P	8Y	View
King	Laborers	Rip Rap Person	$59.07	15J	11P	8Y	View
King	Laborers	Rivet Buster	$60.15	15J	11P	8Y	View
King	Laborers	Rodder	$60.15	15J	11P	8Y	View
King	Laborers	Scaffold Erector	$59.07	15J	11P	8Y	View
King	Laborers	Scale Person	$59.07	15J	11P	8Y	View
King	Laborers	Sloper (Over 20")	$60.15	15J	11P	8Y	View
King	Laborers	Sloper Sprayer	$59.07	15J	11P	8Y	View
King	Laborers	Spreader (Concrete)	$60.15	15J	11P	8Y	View
King	Laborers	Stake Hopper	$59.07	15J	11P	8Y	View
King	Laborers	Stock Piler	$59.07	15J	11P	8Y	View
King	Laborers	Swinging Stage/Boatswain Chair	$50.07	15J	11P	8Y	View
King	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	$60.15	15J	11P	8Y	View
King	Laborers	Tamper (Multiple & Self-propelled)	$60.15	15J	11P	8Y	View
King	Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	$60.15	15J	11P	8Y	View
King	Laborers	Toolroom Person (at Jobsite)	$59.07	15J	11P	8Y	View
King	Laborers	Topper	$59.07	15J	11P	8Y	View
King	Laborers	Track Laborer	$59.07	15J	11P	8Y	View
King	Laborers	Track Liner (Power)	$60.15	15J	11P	8Y	View
King	Laborers	Traffic Control Laborer	$53.54	15J	11P	9C	View
King	Laborers	Traffic Control Supervisor	$56.73	15J	11P	9C	View

King	Laborers	Truck Spotter	$59.07	15J	11P	8Y	View
King	Laborers	Tugger Operator	$60.15	15J	11P	8Y	View
King	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	$175.79	15J	11P	9B	View
King	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	$180.82	15J	11P	9B	View
King	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	$184.50	15J	11P	9B	View
King	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	$190.20	15J	11P	9B	View
King	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	$192.32	15J	11P	9B	View
King	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	$197.42	15J	11P	9B	View
King	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	$199.32	15J	11P	9B	View
King	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	$201.32	15J	11P	9B	View
King	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	$203.32	15J	11P	9B	View
King	Laborers	Tunnel Work-Guage and Lock Tender	$62.59	15J	11P	8Y	View
King	Laborers	Tunnel Work-Miner	$62.59	15J	11P	8Y	View
King	Laborers	Vibrator	$60.15	15J	11P	8Y	View
King	Laborers	Vinyl Seamer	$59.07	15J	11P	8Y	View
King	Laborers	Watchman	$45.51	15J	11P	8Y	View
King	Laborers	Welder	$60.15	15J	11P	8Y	View
King	Laborers	Well Point Laborer	$60.15	15J	11P	8Y	View
King	Laborers	Window Washer/Cleaner	$45.51	15J	11P	8Y	View
King	Laborers - Underground Sewer & Water	General Laborer & Topman	$59.07	15J	11P	8Y	View
King	Laborers - Underground Sewer & Water	Pipe Layer	$60.15	15J	11P	8Y	View
King	Landscape Construction	Landscape Construction/ Landscaping Or Planting Laborers	$45.51	15J	11P	8Y	View
King	Landscape Construction	Landscape Operator	$82.25	15J	11G	8X	View
King	Landscape Maintenance	Groundskeeper	$17.87		1		View
King	Lathers	Journey Level	$75.73	15O	11S		View
King	Marble Setters	Journey Level	$69.07	7E	1N		View
King	Metal Fabrication (In Shop)	Fitter/Certified Welder	$42.17	15I	11E		View
King	Metal Fabrication (In Shop)	General Laborer	$30.07	15I	11E		View
King	Metal Fabrication (In Shop)	Mechanic	$43.63	15I	11E		View
King	Metal Fabrication (In Shop)	Welder/Burner	$39.28	15I	11E		View
King	Millwright	Journey Level	$76.51	15J	4C		View
King	Modular Buildings	Cabinet Assembly	$16.28		1		View
King	Modular Buildings	Electrician	$16.28		1		View
King	Modular Buildings	Equipment Maintenance	$16.28		1		View
King	Modular Buildings	Plumber	$16.28		1		View
King	Modular Buildings	Production Worker	$16.28		1		View
King	Modular Buildings	Tool Maintenance	$16.28		1		View

King	Modular Buildings	Utility Person	$16.28		1		View
King	Modular Buildings	Welder	$16.28		1		View
King	Painters	Journey Level	$51.71	6Z	11J		View
King	Pile Driver	Crew Tender	$80.82	15J	4C		View
King	Pile Driver	Journey Level	$75.41	15J	4C		View
King	Plasterers	Journey Level	$70.91	7Q	1R		View
King	Plasterers	Nozzleman	$74.91	7Q	1R		View
King	Playground & Park Equipment Installers	Journey Level	$16.28		1		View
King	Plumbers & Pipefitters	Journey Level	$103.19	6Z	1G		View
King	Power Equipment Operators	Asphalt Plant Operators	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Assistant Engineer	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Barrier Machine (zipper)	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Batch Plant Operator: concrete	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Boat Operator	$83.95	7A	11H	8X	View
King	Power Equipment Operators	Bobcat	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Brokk - Remote Demolition Equipment	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Brooms	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Bump Cutter	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Cableways	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Chipper	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Compressor	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Concrete Finish Machine - Laser Screed	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Conveyors	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Cranes Friction: 200 tons and over	$86.48	7A	11H	8X	View
King	Power Equipment Operators	Cranes, A-frame: 10 tons and under	$78.95	7A	11H	8X	View
King	Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$84.77	7A	11H	8X	View
King	Power Equipment Operators	Cranes: 20 tons through 44 tons with attachments	$83.20	7A	11H	8X	View
King	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$85.66	7A	11H	8X	View
King	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	$86.48	7A	11H	8X	View

King	Power Equipment Operators	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	$83.95	7A	11H	8X	View
King	Power Equipment Operators	Cranes: Friction cranes through 199 tons	$85.66	7A	11H	8X	View
King	Power Equipment Operators	Cranes: through 19 tons with attachments, a-frame over 10 tons	$82.56	7A	11H	8X	View
King	Power Equipment Operators	Crusher	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Deck Engineer/Deck Winches (power)	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Derricks, On Building Work	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Dozers D-9 & Under	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Drilling Machine	$84.46	15J	11G	8X	View
King	Power Equipment Operators	Elevator and man-lift: permanent and shaft type	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Forklift: 3000 lbs and over with attachments	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Forklifts: under 3000 lbs. with attachments	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Gradechecker/Stakeman	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Guardrail Punch	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Horizontal/Directional Drill Locator	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Horizontal/Directional Drill Operator	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	$82.56	7A	11H	8X	View
King	Power Equipment Operators	Hydralifts/boom trucks: 10 tons and under	$78.95	7A	11H	8X	View
King	Power Equipment Operators	Leverman	$85.33	15J	11G	8X	View
King	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Loaders, Overhead Under 6 Yards	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Loaders, Plant Feed	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Loaders: Elevating Type Belt	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Locomotives, All	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Material Transfer Device	$82.88	15J	11G	8X	View

King	Power Equipment Operators	Mechanics: All (Leadmen - $0.50 per hour over mechanic)	$84.46	15J	11G	8X	View
King	Power Equipment Operators	Motor Patrol Graders	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Overhead, bridge type Crane: 20 tons through 44 tons	$83.20	7A	11H	8X	View
King	Power Equipment Operators	Overhead, bridge type: 100 tons and over	$84.77	7A	11H	8X	View
King	Power Equipment Operators	Overhead, bridge type: 45 tons through 99 tons	$83.95	7A	11H	8X	View
King	Power Equipment Operators	Pavement Breaker	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Pile Driver (other Than Crane Mount)	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Posthole Digger, Mechanical	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Power Plant	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Pumps - Water	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Quick Tower: no cab, under 100 feet in height base to boom	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Rigger and Bellman	$78.95	7A	11H	8X	View
King	Power Equipment Operators	Rigger/Signal Person, Bellman(Certified)	$82.56	7A	11H	8X	View
King	Power Equipment Operators	Rollagon	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Roller, Other Than Plant Mix	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Roto-mill, Roto-grinder	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Saws - Concrete	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Scrapers - Concrete & Carry All	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Service Engineers: Equipment	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Shotcrete/Gunite Equipment	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$82.25	15J	11G	8X	View

King	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$84.46	15J	11G	8X	View
King	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$85.33	15J	11G	8X	View
King	Power Equipment Operators	Slipform Pavers	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Spreader, Topsider & Screedman	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Subgrader Trimmer	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Tower Bucket Elevators	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	$85.66	7A	11H	8X	View
King	Power Equipment Operators	Tower crane: up to 175' in height base to boom	$84.77	7A	11H	8X	View
King	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	$86.48	7A	11H	8X	View
King	Power Equipment Operators	Transporters, All Track Or Truck Type	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Trenching Machines	$82.25	15J	11G	8X	View
King	Power Equipment Operators	Truck Crane Oiler/Driver: 100 tons and over	$83.20	7A	11H	8X	View
King	Power Equipment Operators	Truck crane oiler/driver: under 100 tons	$82.56	7A	11H	8X	View
King	Power Equipment Operators	Truck Mount Portable Conveyor	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Vac Truck (Vactor Guzzler, Hydro Excavator)	$82.88	15J	11G	8X	View
King	Power Equipment Operators	Welder	$83.62	15J	11G	8X	View
King	Power Equipment Operators	Wheel Tractors, Farmall Type	$78.65	15J	11G	8X	View
King	Power Equipment Operators	Yo Yo Pay Dozer	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operators	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator, Concrete	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Boat Operator	$83.95	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Bobcat	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Brooms	$78.65	15J	11G	8X	View

King	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cableways	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Chipper	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Compressor	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine - Laser Screed	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Conveyors	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	$86.48	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes, A-frame: 10 tons and under	$78.95	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$84.77	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 tons through 44 tons with attachments	$83.20	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$85.66	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	$86.48	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	$83.95	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	$85.66	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Cranes: through 19 tons with attachments, a-frame over 10 tons	$82.56	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Crusher	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/Deck Winches (power)	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Derricks, On Building Work	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	$82.25	15J	11G	8X	View

King	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Drilling Machine	$84.46	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Elevator and man-lift: permanent and shaft type	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 lbs and over with attachments	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Forklifts: under 3000 lbs. with attachments	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Gradechecker/Stakeman	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Guardrail Punch	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Horizontal/Directional Drill Locator	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Horizontal/Directional Drill Operator	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: 10 tons and under	$78.95	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: over 10 tons	$82.56	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Leverman	$85.33	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Mechanics: All (Leadmen - $0.50 per hour over mechanic)	$84.46	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Motor Patrol Graders	$83.62	15J	11G	8X	View

King	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type Crane: 20 tons through 44 tons	$83.20	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 100 tons and over	$84.77	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 45 tons through 99 tons	$83.95	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Power Plant	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Quick Tower: no cab, under 100 feet in height base to boom	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Rigger and Bellman	$78.95	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman(Certified)	$82.56	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Rollagon	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	$83.62	15J	11G	8X	View

King	Power Equipment Operators-Underground Sewer & Water	Shotcrete/Gunite Equipment	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$84.46	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$85.33	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	$85.66	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Tower crane: up to 175' in height base to boom	$84.77	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom	$86.48	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	$82.25	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/Driver: 100 tons and over	$83.20	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Truck crane oiler/driver: under 100 tons	$82.56	7A	11H	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Vac Truck (Vactor Guzzler, Hydro Excavator)	$82.88	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Welder	$83.62	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	$78.65	15J	11G	8X	View
King	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	$82.88	15J	11G	8X	View
King	Power Line Clearance Tree Trimmers	Journey Level In Charge	$57.22	5A	4A		View
King	Power Line Clearance Tree Trimmers	Spray Person	$54.32	5A	4A		View
King	Power Line Clearance Tree Trimmers	Tree Equipment Operator	$57.22	5A	4A		View

King	Power Line Clearance Tree Trimmers	Tree Trimmer	$51.18	5A	4A		View
King	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$38.99	5A	4A		View
King	Refrigeration & Air Conditioning Mechanics	Journey Level	$95.89	6Z	1G		View
King	Residential Brick Mason	Journey Level	$69.07	7E	1N		View
King	Residential Carpenters	Journey Level	$36.44		1		View
King	Residential Cement Masons	Journey Level	$46.64		1		View
King	Residential Drywall Applicators	Journey Level	$74.96	15J	4C		View
King	Residential Drywall Tapers	Journey Level	$36.36		1		View
King	Residential Electricians	Journey Level	$48.80		1		View
King	Residential Glaziers	Journey Level	$28.93		1		View
King	Residential Insulation Applicators	Journey Level	$28.18		1		View
King	Residential Laborers	Journey Level	$29.73		1		View
King	Residential Marble Setters	Journey Level	$27.38		1		View
King	Residential Painters	Journey Level	$23.47		1		View
King	Residential Plumbers & Pipefitters	Journey Level	$45.40		1		View
King	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	$96.42	7F	1E		View
King	Residential Sheet Metal Workers	Journey Level	$96.42	7F	1E		View
King	Residential Soft Floor Layers	Journey Level	$57.11	5A	3J		View
King	Residential Sprinkler Fitters (Fire Protection)	Journey Level	$63.61		1		View
King	Residential Stone Masons	Journey Level	$69.07	7E	1N		View
King	Residential Terrazzo Workers	Journey Level	$62.36	7E	1N		View
King	Residential Terrazzo/Tile Finishers	Journey Level	$24.39		1		View
King	Residential Tile Setters	Journey Level	$21.04		1		View
King	Roofers	Journey Level	$64.45	5A	3H		View
King	Roofers	Using Irritable Bituminous Materials	$67.39	5A	3H		View
King	Sheet Metal Workers	Journey Level (Field or Shop)	$96.42	7F	1E		View
King	Shipbuilding & Ship Repair	New Construction Boilermaker	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Carpenter	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Crane Operator	$43.16	7V	1		View
King	Shipbuilding & Ship Repair	New Construction Electrician	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	$87.15	15H	11C		View
King	Shipbuilding & Ship Repair	New Construction Laborer	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Machinist	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Operating Engineer	$43.16	7V	1		View
King	Shipbuilding & Ship Repair	New Construction Painter	$51.95	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Pipefitter	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Rigger	$51.85	7X	4J		View

King	Shipbuilding & Ship Repair	New Construction Sheet Metal	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Shipwright	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	New Construction Warehouse/ Teamster	$43.16	7V	1		View
King	Shipbuilding & Ship Repair	New Construction Welder / Burner	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Boilermaker	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Carpenter	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Crane Operator	$45.06	7Y	4K		View
King	Shipbuilding & Ship Repair	Ship Repair Electrician	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	$87.15	15H	11C		View
King	Shipbuilding & Ship Repair	Ship Repair Laborer	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Machinist	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Operating Engineer	$45.06	7Y	4K		View
King	Shipbuilding & Ship Repair	Ship Repair Painter	$51.95	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Pipefitter	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Rigger	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Sheet Metal	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Shipwright	$51.85	7X	4J		View
King	Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	$45.06	7Y	4K		View
King	Sign Makers & Installers (Electrical)	Journey Level	$58.04	0	1		View
King	Sign Makers & Installers (Non-Electrical)	Journey Level	$37.08	0	1		View
King	Soft Floor Layers	Journey Level	$66.32	15J	4C		View
King	Solar Controls For Windows	Journey Level	$16.28		1		View
King	Sprinkler Fitters (Fire Protection)	Journey Level	$95.49	5C	1X		View
King	Stage Rigging Mechanics (Non Structural)	Journey Level	$16.28		1		View
King	Stone Masons	Journey Level	$69.07	7E	1N		View
King	Street And Parking Lot Sweeper Workers	Journey Level	$19.09		1		View
King	Surveyors	Assistant Construction Site Surveyor	$82.56	7A	11H	8X	View
King	Surveyors	Chainman	$78.95	7A	11H	8X	View
King	Surveyors	Construction Site Surveyor	$83.95	7A	11H	8X	View
King	Surveyors	Drone Operator (when used in conjunction with survey work only)	$78.95	7A	11H	8X	View
King	Surveyors	Ground Penetrating Radar Operator	$78.95	7A	11H	8X	View
King	Telecommunication Technicians	Journey Level	$65.66	7E	1E		View
King	Telephone Line Construction - Outside	Cable Splicer	$40.36	5A	2B		View
King	Telephone Line Construction - Outside	Hole Digger/Ground Person	$26.92	5A	2B		View

King	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$33.74	5A	2B		View
King	Telephone Line Construction - Outside	Telephone Lineperson	$38.15	5A	2B		View
King	Terrazzo Workers	Journey Level	$62.36	7E	1N		View
King	Tile Setters	Journey Level	$62.36	7E	1N		View
King	Tile, Marble & Terrazzo Finishers	Finisher	$53.19	7E	1N		View
King	Traffic Control Stripers	Journey Level	$89.54	15L	1K		View
King	Truck Drivers	Asphalt Mix Over 16 Yards	$74.95	15J	11M	8L	View
King	Truck Drivers	Asphalt Mix To 16 Yards	$74.02	15J	11M	8L	View
King	Truck Drivers	Dump Truck	$74.02	15J	11M	8L	View
King	Truck Drivers	Dump Truck & Trailer	$74.95	15J	11M	8L	View
King	Truck Drivers	Other Trucks	$74.95	15J	11M	8L	View
King	Truck Drivers - Ready Mix	Transit Mix	$74.95	15J	11M	8L	View
King	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$17.71		1		View
King	Well Drillers & Irrigation Pump Installers	Oiler	$16.28		1		View
King	Well Drillers & Irrigation Pump Installers	Well Driller	$18.00		1		View

Washington State Department of Labor and Industries
Policy Statement
(Regarding the Production of "Standard" or "Non-standard" Items)

Below is the department's (State L&I's) list of criteria to be used in determining whether a prefabricated item is "standard" or "non-standard". For items not appearing on WSDOT's predetermined list, these criteria shall be used by the Contractor (and the Contractor's subcontractors, agents to subcontractors, suppliers, manufacturers, and fabricators) to determine coverage under RCW 39.12. The production, in the State of Washington, of non-standard items is covered by RCW 39.12, and the production of standard items is not. The production of any item outside the State of Washington is not covered by RCW 39.12.

1. Is the item fabricated for a public works project? If not, it is not subject to RCW 39.12. If it is, go to question 2.

2. Is the item fabricated on the public works jobsite? If it is, the work is covered under RCW 39.12. If not, go to question 3.

3. Is the item fabricated in an assembly/fabrication plant set up for, and dedicated primarily to, the public works project? If it is, the work is covered by RCW 39.12. If not, go to question 4.

4. Does the item require any assembly, cutting, modification or other fabrication by the supplier? If not, the work is not covered by RCW 39.12. If yes, go to question 5.

5. Is the prefabricated item intended for the public works project typically an inventory item which could reasonably be sold on the general market? If not, the work is covered by RCW 39.12. If yes, go to question 6.

6. Does the specific prefabricated item, generally defined as standard, have any unusual characteristics such as shape, type of material, strength requirements, finish, etc? If yes, the work is covered under RCW 39.12.

Any firm with questions regarding the policy, WSDOT's Predetermined List, or for determinations of covered and non-covered workers shall be directed to State L&I at (360) 902-5330.

WSDOT's
Predetermined List for
Suppliers - Manufactures - Fabricator

Below is a list of potentially prefabricated items, originally furnished by WSDOT to Washington State Department of Labor and Industries, that may be considered non-standard and therefore covered by the prevailing wage law, RCW 39.12. Items marked with an X in the "YES" column should be considered to be non-standard and therefore covered by RCW 39.12. Items marked with an X in the "NO" column should be considered to be standard and therefore not covered. Of course, exceptions to this general list may occur, and in that case shall be evaluated according to the criteria described in State and L&I's policy statement.

	ITEM DESCRIPTION	YES	NO
1.	Metal rectangular frames, solid metal covers, herringbone grates, and bi-directional vaned grates for Catch Basin Types 1, 1L, 1P, and 2 and Concrete Inlets. See Std. Plans		X
2.	Metal circular frames (rings) and covers, circular grates, and prefabricated ladders for Manhole Types 1, 2, and 3, Drywell Types 1, 2, and 3 and Catch Basin Type 2. See Std. Plans		X
3.	Prefabricated steel grate supports and welded grates, metal frames and dual vaned grates, and Type 1, 2, and 3 structural tubing grates for Drop Inlets. See Std. Plans.		X
4.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		X
5.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		X
6.	Corrugated Steel Pipe - Steel lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, 1 thru 5.		X
7.	Corrugated Aluminum Pipe - Aluminum lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, #5.		X

	ITEM DESCRIPTION	YES	NO
8.	Anchor Bolts & Nuts - Anchor Bolts and Nuts, for mounting sign structures, luminaries and other items, shall be made from commercial bolt stock. See Contract Plans and Std. Plans for size and material type.		X
9.	Aluminum Pedestrian Handrail - Pedestrian handrail conforming to the type and material specifications set forth in the contract plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).	X	
10.	Major Structural Steel Fabrication - Fabrication of major steel items such as trusses, beams, girders, etc., for bridges.	X	
11.	Minor Structural Steel Fabrication - Fabrication of minor steel Items such as special hangers, brackets, access doors for structures, access ladders for irrigation boxes, bridge expansion joint systems, etc., involving welding, cutting, punching and/or boring of holes. See Contact Plans for item description and shop drawings.	X	
12.	Aluminum Bridge Railing Type BP - Metal bridge railing conforming to the type and material specifications set forth in the Contract Plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).		X
13.	Concrete Piling--Precast-Prestressed concrete piling for use as 55 and 70 ton concrete piling. Concrete to conform to Section 9-19.1 of Std. Spec..	X	
14.	Precast Manhole Types 1, 2, and 3 with cones, adjustment sections and flat top slabs. See Std. Plans.		X
15.	Precast Drywell Types 1, 2, and with cones and adjustment Sections. See Std. Plans.		X
16.	Precast Catch Basin - Catch Basin type 1, 1L, 1P, and 2 With adjustment sections. See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
17.	Precast Concrete Inlet - with adjustment sections, See Std. Plans		X
18.	Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		X
19.	Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		X
20.	Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		X
21.	Precast Concrete Utility Vaults - Precast Concrete utility vaults of various sizes. Used for in ground storage of utility facilities and controls. See Contract Plans for size and construction requirements. Shop drawings are to be provided for approval prior to casting		X
22.	Vault Risers - For use with Valve Vaults and Utilities X Vaults.		X
23.	Valve Vault - For use with underground utilities. See Contract Plans for details.		X
24.	Precast Concrete Barrier - Precast Concrete Barrier for use as new barrier or may also be used as Temporary Concrete Barrier. Only new state approved barrier may be used as permanent barrier.		X
25.	Reinforced Earth Wall Panels – Reinforced Earth Wall Panels in size and shape as shown in the Plans. Fabrication plant has annual approval for methods and materials to be used. See Shop Drawing. Fabrication at other locations may be approved, after facilities inspection, contact HQ. Lab.	X	
26.	Precast Concrete Walls - Precast Concrete Walls - tilt-up wall panel in size and shape as shown in Plans. Fabrication plant has annual approval for methods and materials to be used	X	

	ITEM DESCRIPTION	YES	NO
27.	Precast Railroad Crossings - Concrete Crossing Structure Slabs.	X	
28.	12, 18 and 26 inch Standard Precast Prestressed Girder – Standard Precast Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
29.	Prestressed Concrete Girder Series 4-14 - Prestressed Concrete Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A .	X	
30.	Prestressed Tri-Beam Girder - Prestressed Tri-Beam Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
31.	Prestressed Precast Hollow-Core Slab – Precast Prestressed Hollow-core slab for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A.	X	
32.	Prestressed-Bulb Tee Girder - Bulb Tee Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
33.	Monument Case and Cover See Std. Plan.		X

	ITEM DESCRIPTION	YES	NO
34.	Cantilever Sign Structure - Cantilever Sign Structure fabricated from steel tubing meeting AASHTO-M-183. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
35.	Mono-tube Sign Structures - Mono-tube Sign Bridge fabricated to details shown in the Plans. Shop drawings for approval are required prior to fabrication.	X	
36.	Steel Sign Bridges - Steel Sign Bridges fabricated from steel tubing meeting AASHTO-M-138 for Aluminum Alloys. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
37.	Steel Sign Post - Fabricated Steel Sign Posts as detailed in Std Plans. Shop drawings for approval are to be provided prior to fabrication		X
38.	Light Standard-Prestressed - Spun, prestressed, hollow concrete poles.	X	
39.	Light Standards - Lighting Standards for use on highway illumination systems, poles to be fabricated to conform with methods and materials as specified on Std. Plans. See Specia Provisions for pre-approved drawings.	X	
40.	Traffic Signal Standards - Traffic Signal Standards for use on highway and/or street signal systems. Standards to be fabricated to conform with methods and material as specified on Std. Plans. See Special Provisions for pre-approved drawings	X	
41.	Precast Concrete Sloped Mountable Curb (Single and DualFaced) See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
42.	Traffic Signs - Prior to approval of a Fabricator of Traffic Signs, the sources of the following materials must be submitted and approved for reflective sheeting, legend material, and aluminum sheeting. **NOTE:** *** Fabrication inspection required. Only signs tagged "Fabrication Approved" by WSDOT Sign Fabrication Inspector to be installed	X	X
		Custom Message	Std Signing Message
43.	Cutting & bending reinforcing steel		X
44.	Guardrail components	X	X
		Custom End Sec	Standard Sec
45.	Aggregates/Concrete mixes	Covered by WAC 296-127-018	
46.	Asphalt	Covered by WAC 296-127-018	
47.	Fiber fabrics		X
48.	Electrical wiring/components		X
49.	treated or untreated timber pile		X
50.	Girder pads (elastomeric bearing)	X	
51.	Standard Dimension lumber		X
52.	Irrigation components		X

ITEM DESCRIPTION	YES	NO
53. Fencing materials		X
54. Guide Posts		X
55. Traffic Buttons		X
56. Epoxy		X
57. Cribbing		X
58. Water distribution materials		X
59. Steel "H" piles		X
60. Steel pipe for concrete pile casings		X
61. Steel pile tips, standard		X
62. Steel pile tips, custom	X	

Prefabricated items specifically produced for public works projects that are prefabricated in a county other than the county wherein the public works project is to be completed, the wage for the offsite prefabrication shall be the applicable prevailing wage for the county in which the actual prefabrication takes place.

It is the manufacturer of the prefabricated product to verify that the correct county wage rates are applied to work they perform.

See RCW 39.12.010
(The definition of "locality" in RCW 39.12.010(2) contains the phrase "wherein the physical work is being performed." The department interprets this phrase to mean the actual work site.

WSDOT's List of State Occupations not applicable to Heavy and Highway Construction Projects

This project is subject to the state hourly minimum rates for wages and fringe benefits in the contract provisions, as provided by the state Department of Labor and Industries.
The following list of occupations, is comprised of those occupations that are not normally used in the construction of heavy and highway projects.
When considering job classifications for use and / or payment when bidding on, or building heavy and highway construction projects for, or administered by WSDOT, these Occupations will be excepted from the included "Washington State Prevailing Wage Rates For Public Work Contracts" documents.

- Building Service Employees
- Electrical Fixture Maintenance Workers
- Electricians - Motor Shop
- Heating Equipment Mechanics
- Industrial Engine and Machine Mechanics
- Industrial Power Vacuum Cleaners
- Inspection, Cleaning, Sealing of Water Systems by Remote Control
- Laborers - Underground Sewer & Water
- Machinists (Hydroelectric Site Work)
- Modular Buildings
- Playground & Park Equipment Installers
- Power Equipment Operators - Underground Sewer & Water
- Residential *** ALL ASSOCIATED RATES ***
- Sign Makers and Installers (Non-Electrical)
- Sign Makers and Installers (Electrical)
- Stage Rigging Mechanics (Non Structural)

The following occupations may be used only as outlined in the preceding text concerning "WSDOT's list for Suppliers - Manufacturers - Fabricators"

- Fabricated Precast Concrete Products
- Metal Fabrication (In Shop)

Definitions for the Scope of Work for prevailing wages may be found at the Washington State Department of Labor and Industries web site and in WAC Chapter 296-127.

Washington State Department of Labor and Industries
Policy Statements
(Regarding Production and Delivery of Gravel, Concrete, Asphalt, etc.)

WAC 296-127-018 Agency filings affecting this section

Coverage and exemptions of workers involved in the production and delivery of gravel, concrete, asphalt, or similar materials.

(1) The materials covered under this section include but are not limited to: Sand, gravel, crushed rock, concrete, asphalt, or other similar materials.

(2) All workers, regardless of by whom employed, are subject to the provisions of chapter 39.12 RCW when they perform any or all of the following functions:

(a) They deliver or discharge any of the above-listed materials to a public works project site:

(i) At one or more point(s) directly upon the location where the material will be incorporated into the project; or

(ii) At multiple points at the project; or

(iii) Adjacent to the location and coordinated with the incorporation of those materials.

(b) They wait at or near a public works project site to perform any tasks subject to this section of the rule.

(c) They remove any materials from a public works construction site pursuant to contract requirements or specifications (e.g., excavated materials, materials from demolished structures, clean-up materials, etc.).

(d) They work in a materials production facility (e.g., batch plant, borrow pit, rock quarry, etc.,) which is established for a public works project for the specific, but not necessarily exclusive, purpose of supplying materials for the project.

(e) They deliver concrete to a public works site regardless of the method of incorporation.

(f) They assist or participate in the incorporation of any materials into the public works project.

(3) All travel time that relates to the work covered under subsection (2) of this section requires the payment of prevailing wages. Travel time includes time spent waiting to load, loading, transporting, waiting to unload, and delivering materials. Travel time would include all time spent in travel in support of a public works project whether the vehicle is empty or full. For example, travel time spent returning to a supply source to obtain another load of material for use on a public works site or returning to the public works site to obtain another load of excavated material is time spent in travel that is subject to prevailing wage. Travel to a supply source, including travel from a public works site, to obtain materials for use on a private project would not be travel subject to the prevailing wage.

(4) Workers are not subject to the provisions of chapter 39.12 RCW when they deliver materials to a stockpile.

(a) A "stockpile" is defined as materials delivered to a pile located away from the site of incorporation such that the stockpiled materials must be physically moved from the stockpile and transported to another location on the project site in order to be incorporated into the project.

(b) A stockpile does not include any of the functions described in subsection (2)(a) through (f) of this section; nor does a stockpile include materials delivered or distributed to multiple locations upon the project site; nor does a stockpile include materials dumped at the place of incorporation, or adjacent to the location and coordinated with the incorporation.

(5) The applicable prevailing wage rate shall be determined by the locality in which the work is performed. Workers subject to subsection (2)(d) of this section, who produce such materials at an off-site facility shall be paid the applicable prevailing wage rates for the county in which the off-site facility is located. Workers subject to subsection (2) of this section, who deliver such materials to a public works project site shall be paid the applicable prevailing wage rates for the county in which the public works project is located.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.051 and 43.22.270. 08-24-101, § 296-127-018, filed 12/2/08, effective 1/2/09. Statutory Authority: Chapters 39.04 and 39.12 RCW and RCW 43.22.270. 92-01-104 and 92-08-101, § 296-127-018, filed 12/18/91 and 4/1/92, effective 8/31/92.]

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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.

Overtime Codes Continued

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.

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.

Overtime Codes Continued

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.

   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.

   M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double 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.

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.

   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.

   J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a 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.

   K. 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 5 am to 6pm 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, and all hours worked in excess of twelve (12) hours in a single shift 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. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

Overtime Codes Continued

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

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.

D. 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 Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:
On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the 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.

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 Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. 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.

G. All hours worked on Saturdays 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. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.

S. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, work performed in excess of (10) hours shall be paid at one and one half (1-1/2) times the hourly rate of pay. On Monday through Friday, work performed outside the normal work hours of 6:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations).

All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Multiple Shift Operations: When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. Special Shifts: The Special Shift Premium is the basic hourly rate of pay plus $2.00 an hour. When due to conditions beyond the control of the employer or when an owner (not acting as the contractor), a government agency or the contract specifications require more than four (4) hours of a special shift can only be performed outside the normal 6am to 6pm shift then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday).

U. 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. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. X. 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. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

   The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

   When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

   When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

11. 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 After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   C 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 overtime hours worked, except Labor Day, and all hours on Sunday 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. All non-overtime and non-holiday hours worked between 4:00 pm and 5:00 am, Monday through Friday, shall be paid at a premium rate of 15% over the hourly rate of wage.

Overtime Codes Continued

11. D. All hours worked on Saturdays and holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   E. The first two (2) hours after eight (8) regular hours Monday through Friday, the first ten (10) hours on Saturday, and the first ten (10) hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, and Sundays shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Overtime Codes Continued

11. F. 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 Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one-half times the hourly rate of wage for the first eight (8) hours. 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.

G. 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 5 am to 6pm 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, and all hours worked in excess of twelve (12) hours in a single shift 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 nine (9) hours or more. When an employee returns to work without at least nine (9) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the nine (9) hours rest period.

H. 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 5 am to 6pm 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, and all hours worked in excess of twelve (12) hours in a single shift 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 ten (10) hours or more. When an employee returns to work without at least ten (10) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the ten (10) hours rest period.

Overtime Codes Continued

11. J. All hours worked on holidays shall be paid at double the hourly rate of wage.

K. On Monday through Friday hours worked outside 4:00 am and 5:00 pm, and the first two (2) hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked over 10 hours per day Monday through Friday, and all hours worked on Saturdays, Sundays, and Holidays worked shall be paid at double the hourly rate of wage.

L. An employee working outside 5:00 am and 5:00 pm shall receive an additional two dollar ($2.00) per hour for all hours worked that shift. All hours worked on holidays shall be paid at one and one-half 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.

Overtime Codes Continued

11. M. 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.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 am to 6:00 pm, then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten shifts.

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. All work performed after 6:00 pm Saturday to 5:00 am Monday, all work performed over twelve (12) hours, and all work performed on holidays shall be paid at double the straight time rate of pay.

Shift Pay Premium: In an addition to any overtime already required, all hours worked between the hours of 6:00 pm and 5:00 am shall receive an additional two dollars ($2.00) per hour.

N. All work performed over twelve hours in a shift and all work performed on Sundays and Holidays shall be paid at double the straight time rate.

Any time worked over eight (8) hours on Saturday shall be paid double the straight time rate, except employees assigned to work six 10-hour shifts per week shall be paid double the straight time rate for any time worked on Saturday over 10 hours.

O. All work performed on Saturdays, Sundays, and Holidays shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Overtime Codes Continued

11. P. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 a.m. to 6:00 p.m., then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shifts shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten-hour shifts.

In the event the job is down due to weather conditions, 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 work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

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.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Q. 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 35% over the hourly rate of wage. Work performed on Sundays shall be paid at double time. All hours worked on holidays shall be paid at double the hourly rate of wage.

R On Monday through Saturday hours worked outside 6:00 am and 7:00 pm, and all hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

When a holiday falls on a Saturday, the Friday before shall be the observed holiday. When a holiday falls on a Sunday, the following Monday shall be the observed holiday.

S. The first ten (10) 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, or other conditions beyond the control of the Employer, then Saturday may be worked at the straight time rate, for the first eight (8) hours, or the first ten (10) hours when a four day ten hour workweek has been established.

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.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

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).

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).

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

5. 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).

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.

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.

Holiday Codes Continued

7. 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.

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.

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.

V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.

Holiday Codes Continued

7. X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.

Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, Christmas Eve, and Christmas Day (9). Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday. Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Holiday Codes Continued

15. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (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.

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, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (9). 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.

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, Independence Day, Labor Day, Veteran's 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. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

M. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day and Christmas Day (9). 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.

Holiday Codes Continued

15. N. 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). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

O. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, the day before Christmas day, and Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Note Codes

8. 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.

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.

U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do "pioneer" work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

Note Codes Continued

8. V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

   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 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

   Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

   W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

   X. 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. Special Shift Premium: Basic hourly rate plus $2.00 per hour.

   When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

   Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

   Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

   Z. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

   Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Note Codes Continued

9. A. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid $0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130’ to 199’ – $0.50 per hour over their classification rate.
(B) – 200’ to 299’ – $0.80 per hour over their classification rate.
(C) – 300’ and over – $1.00 per hour over their classification rate.

B. 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.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

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.

D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. 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.

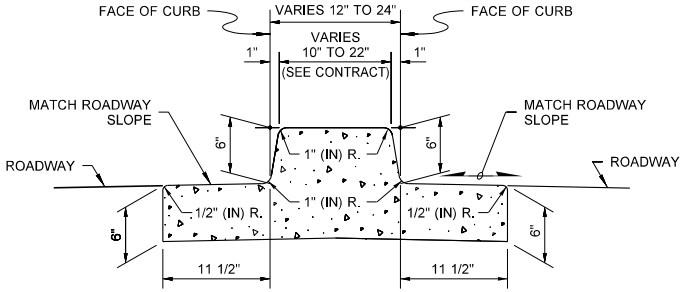
Note Codes Continued

9. F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

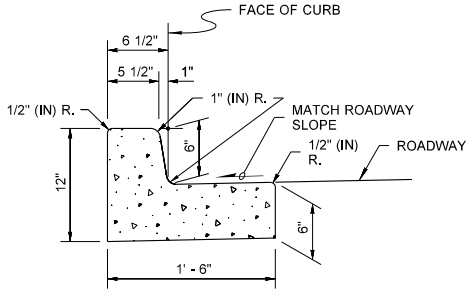
H. One (1) person crew shall consist of a Party Chief. (Total Station or similar one (1) person survey system). Two (2) person survey party shall consist of a least a Party Chief and a Chain Person. Three (3) person survey party shall consist of at least a Party Chief, an Instrument Person, and a Chain Person.

APPENDIX B

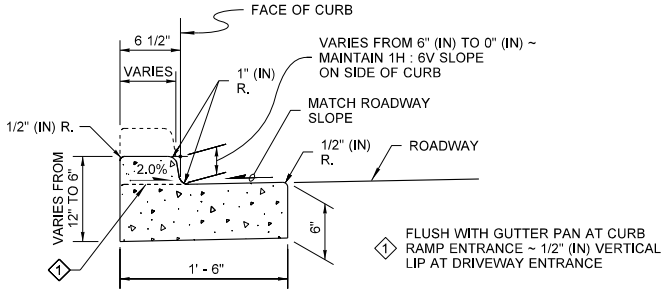
STANDARD DETAILS



DUAL-FACED CEMENT CONCRETE TRAFFIC CURB AND GUTTER



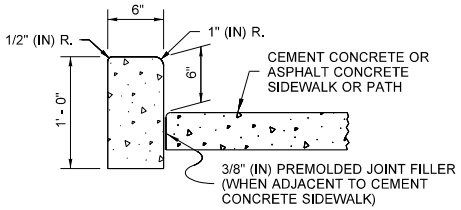
CEMENT CONCRETE TRAFFIC CURB AND GUTTER



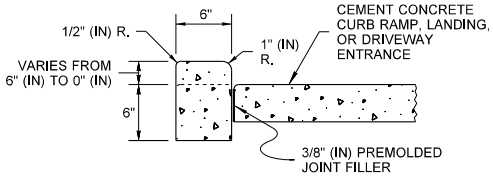
DEPRESSED CURB AND GUTTER SECTION

AT CURB RAMPS AND DRIVEWAY ENTRANCES

DRAWN BY: FERN LIDDELL



CEMENT CONCRETE PEDESTRIAN CURB

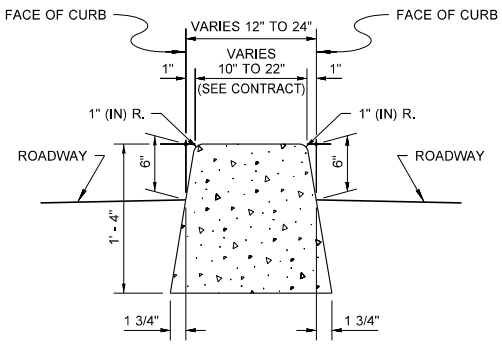


CEMENT CONCRETE PEDESTRIAN CURB

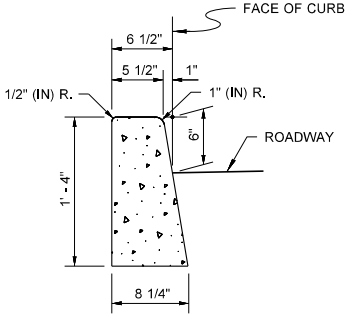
AT CURB RAMPS, LANDINGS, AND DRIVEWAY ENTRANCES

NOTE

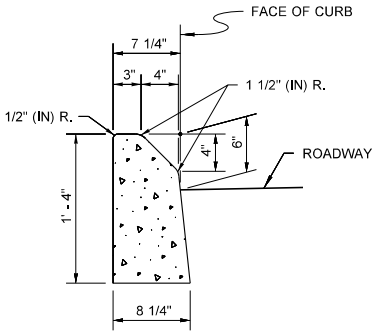
1. See **Standard Plan F-30.10** for Curb Expansion and Contraction Joint spacing. See **Standard Specification, Sections 8-04 and 9-04** for additional requirements.



DUAL-FACED CEMENT CONCRETE TRAFFIC CURB



CEMENT CONCRETE TRAFFIC CURB



MOUNTABLE CEMENT CONCRETE TRAFFIC CURB

Michael S Fleming

Digitally signed by Michael S Fleming
Date: 2020.09.24 07:39:38 -07'00'

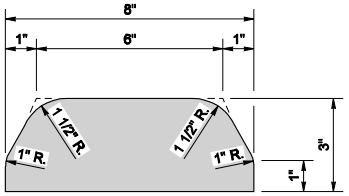
CEMENT CONCRETE CURBS

STANDARD PLAN F-10.12-04

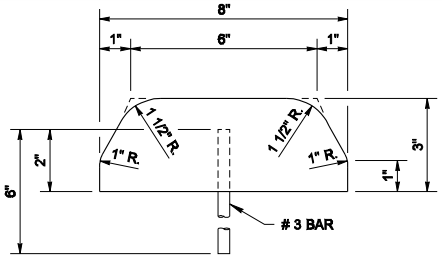
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Date: 2020.09.24 07:57:43 -07'00'
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: BILL BERENS



TYPE 1
(HOT MIX ASPHALT)



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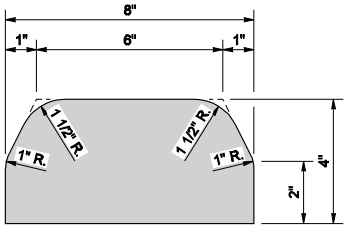

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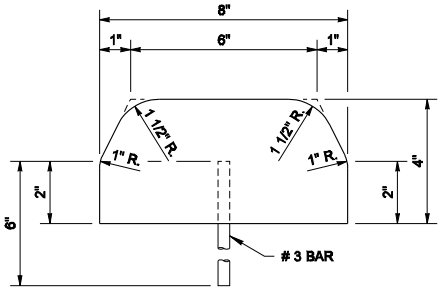
(HOT MIX ASPHALT)



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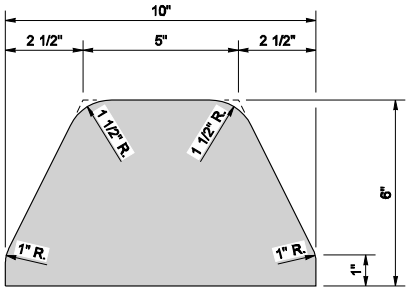

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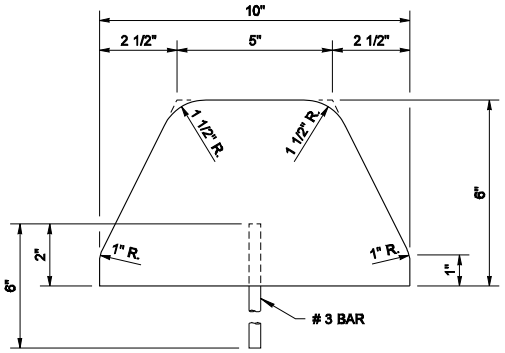
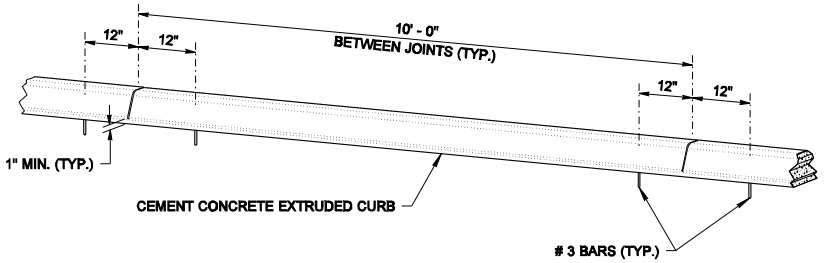


TYPE 6
(CEMENT CONCRETE)



SPACING OF ANCHOR BARS
(FOR TYPES 4, 5, AND 6)

NOTE

JOINTS MAY BE FORMED DURING INSTALLATION USING A RIGID DIVIDER OR SAWCUT AFTER CONCRETE CURES TO MINIMUM STRENGTH.

KEN LEROY SMITH
STATE OF WASHINGTON
31805
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES AUGUST 26, 2007

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

EXTRUDED CURB

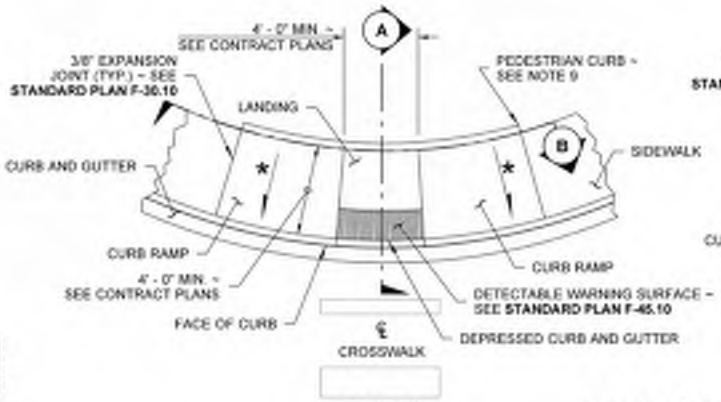
STANDARD PLAN F-10.42-00

SHEET 1 OF 1 SHEET

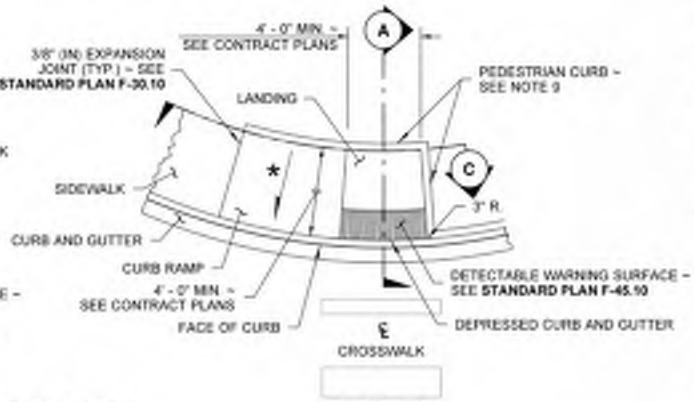
APPROVED FOR PUBLICATION

Ken L. Smith — STATE DESIGN ENGINEER
01-23-07 — DATE

Washington State Department of Transportation



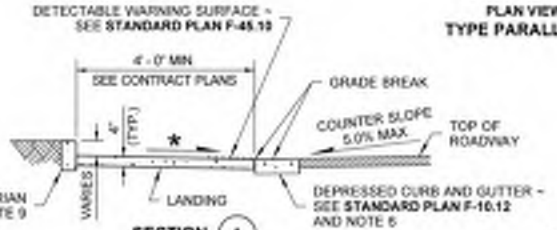
PLAN VIEW
TYPE PARALLEL A



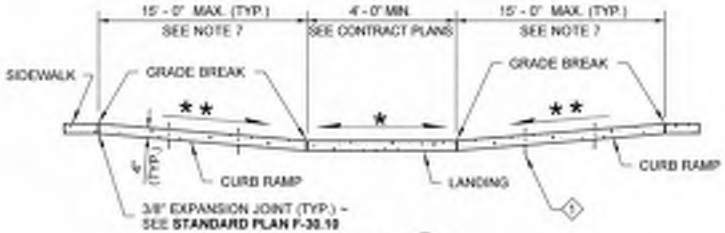
PLAN VIEW
TYPE PARALLEL B

DRAWN BY: FERN LIDDELL

1 CONTRACTION JOINT (TYP.) ~ SEE **STANDARD PLAN F-30.1** FOR CURB RAMP LENGTHS GREATER THAN 6' - 0" PROVIDE CONTRACTION JOINT EQUALLY SPACED 4' - 0" MIN. OC.

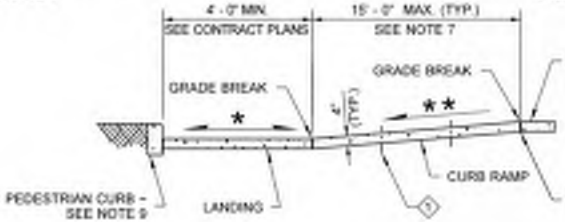


SECTION (A)



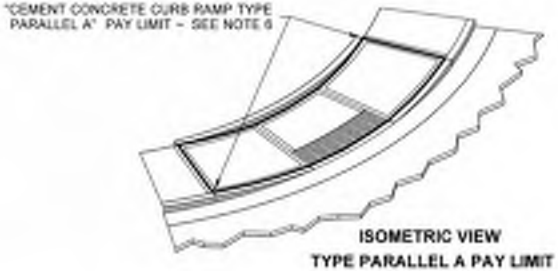
SECTION (B)

(ALONG INSIDE RADIUS AT BACK OF WALKWAY)

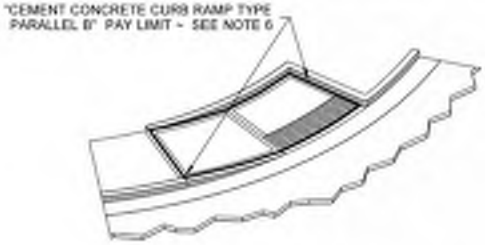


SECTION (C)

(ALONG INSIDE RADIUS AT BACK OF WALKWAY)



ISOMETRIC VIEW
TYPE PARALLEL A PAY LIMIT



ISOMETRIC VIEW
TYPE PARALLEL B PAY LIMIT

NOTES

1. At marked crosswalks, the connection between the landing and the roadway must be contained within the width of the crosswalk markings.
2. Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
3. Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in the Depressed Curb and Gutter where the Landing connects to the roadway.
4. See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
5. See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
6. The Bid Item "Cement Concrete Curb Ramp Type __" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
7. The Curb Ramp length is not required to exceed 15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length, the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet. Do not include abutting landing(s) in the15-foot max. measurement. When a ramp is constructed on a radius, the 15-foot max. length is measured on the inside radius along the back of the walkway.
8. Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14.**
9. Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will be no material to retain.

LEGEND

⟋	SLOPE IN EITHER DIRECTION
*	1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)
**	7.5% OR FLATTER RECOMMENDED FOR DESIGN/ FORMWORK (8.3% MAX.) ~ SEE NOTE 7

R. SCOTT ZELLER
STATE OF WASHINGTON
28680
REGISTERED
PROFESSIONAL ENGINEER

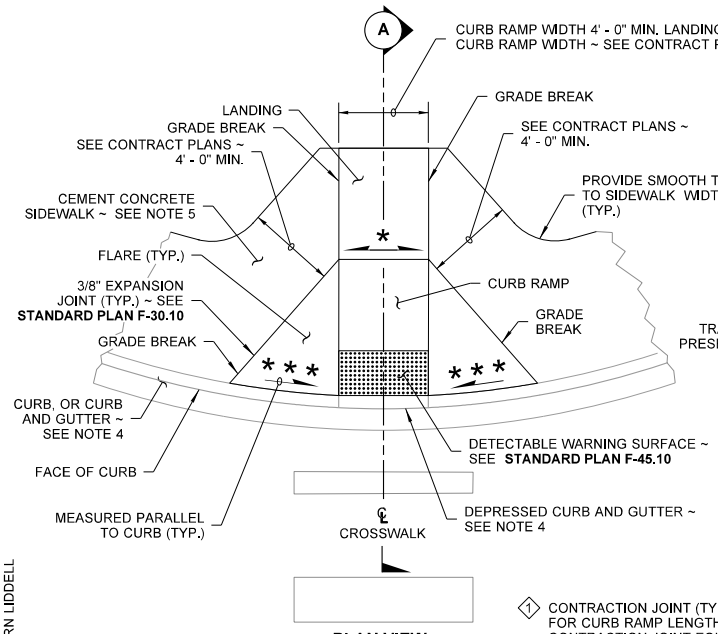
Zeller, Scott
Jun 24 2016 7:19 AM

PARALLEL CURB RAMP

STANDARD PLAN F-40.12-03

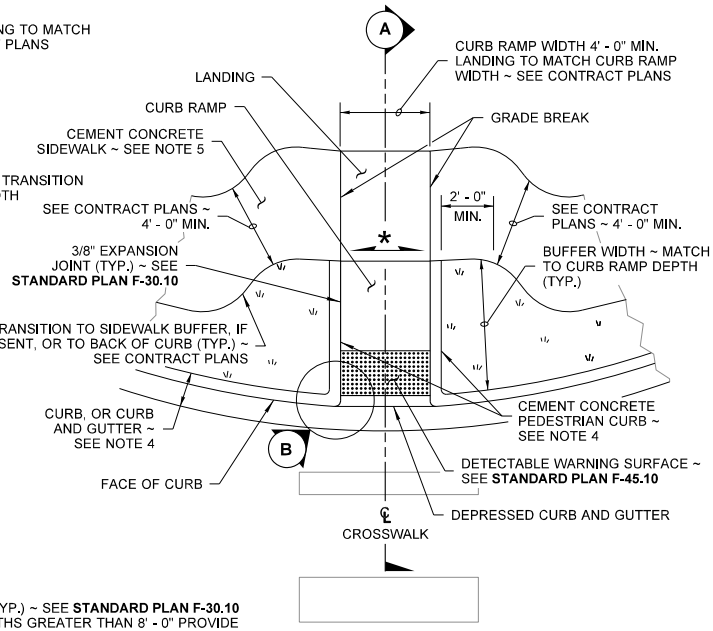
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jun 29 2016 2:27 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation



PLAN VIEW

TYPE PERPENDICULAR A

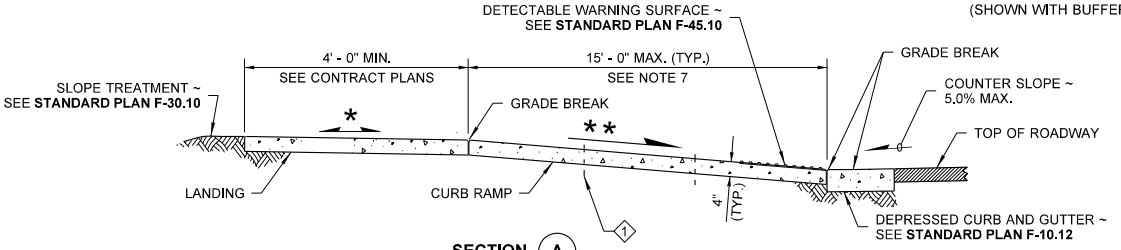


PLAN VIEW

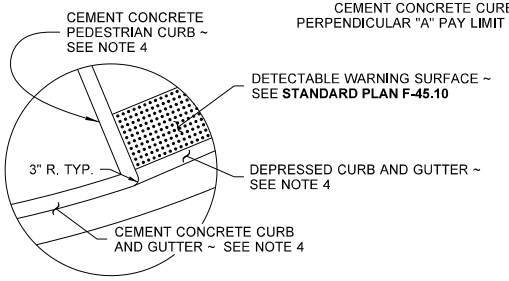
TYPE PERPENDICULAR B

(SHOWN WITH BUFFER)

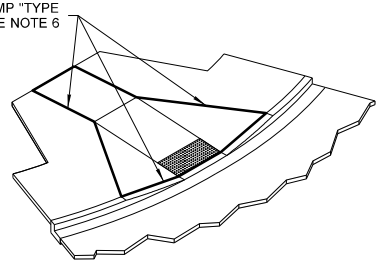
① CONTRACTION JOINT (TYP.) ~ SEE **STANDARD PLAN F-30.10** FOR CURB RAMP LENGTHS GREATER THAN 8' - 0" PROVIDE CONTRACTION JOINT EQUALLY SPACED 4' - 0" MIN. OC.



SECTION (A)

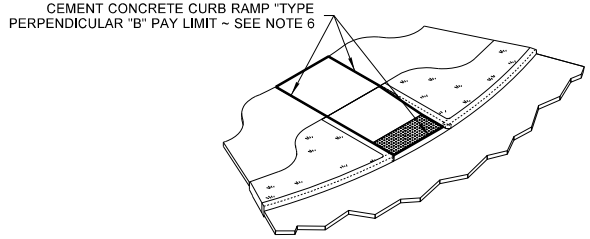


CURB RADIUS DETAIL (B)



ISOMETRIC VIEW

TYPE PERPENDICULAR A PAY LIMIT



ISOMETRIC VIEW

TYPE PERPENDICULAR B PAY LIMIT

NOTES

1. At marked crosswalks, the connection between the curb ramp and the roadway must be contained within the width of the crosswalk markings.
2. Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
3. Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in front of the Curb Ramp where it connects to the roadway.
4. See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
5. See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
6. The Bid Item "Cement Concrete Curb Ramp Type __" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
7. The Curb Ramp length is not required to exceed 15 feet (unless shown otherwise in the Contract Plans). When applying the 15-foot max. length, the running slope of the Curb Ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the landing over a horizontal distance of 15 feet. Do not include the abutting landing in the 15-foot max. measurement.
8. Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14.**
9. Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will not be material to retain.

LEGEND

← →	SLOPE IN EITHER DIRECTION
*	1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)
* *	7.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (8.3% MAX.)
* * *	9.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (10% MAX.)

DRAWN BY: FERN LIDDELL

R. SCOTT ZELLER STATE OF WASHINGTON 28680 REGISTERED PROFESSIONAL ENGINEER

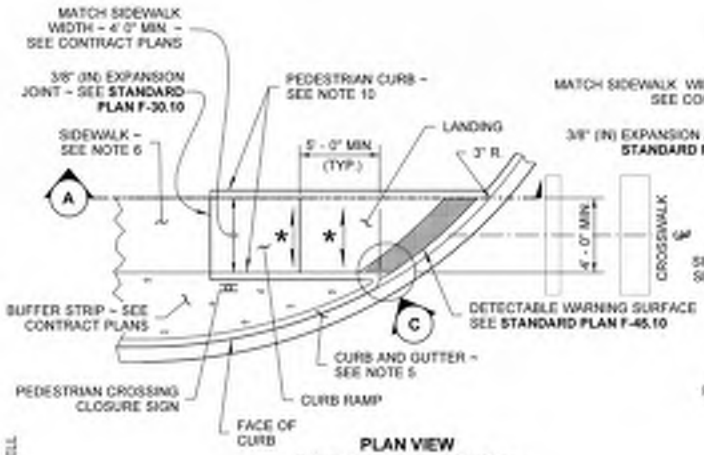
Digitally signed by R. Scott Zeller
Date: 2020.09.22 13:23:53 -07'00'

PERPENDICULAR CURB RAMP

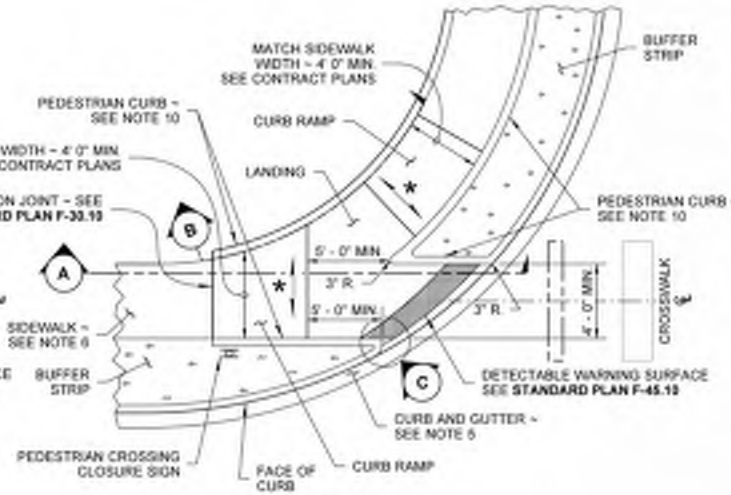
STANDARD PLAN F-40.15-04

SHEET 1 OF 1 SHEET

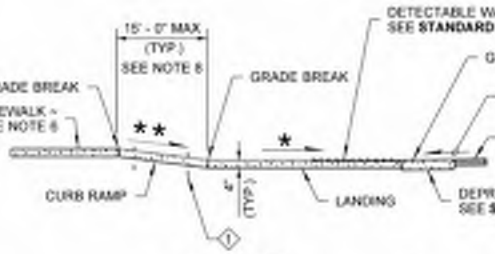
APPROVED FOR PUBLICATION
Date: 2020.09.25 14:44:37 -07'00'
STATE DESIGN ENGINEER
Washington State Department of Transportation



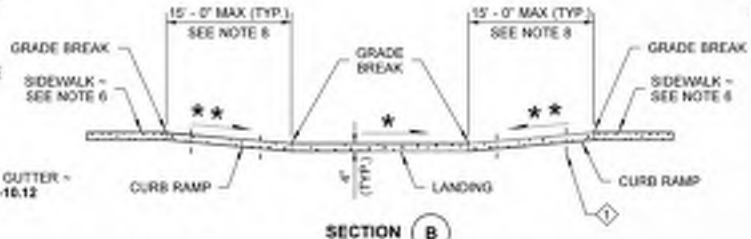
PLAN VIEW
TYPE SINGLE DIRECTION A



PLAN VIEW
TYPE SINGLE DIRECTION B



SECTION (A)



SECTION (B)

① CONTRACTION JOINT (TYP.) = SEE **STANDARD PLAN F-30.10** FOR CURB RAMP LENGTHS GREATER THAN 8' - 0" PROVIDE CONTRACTION JOINT EQUALLY SPACED 4' - 0" MIN. OC.

(ALONG INSIDE RADIUS AT BACK OF WALKWAY)

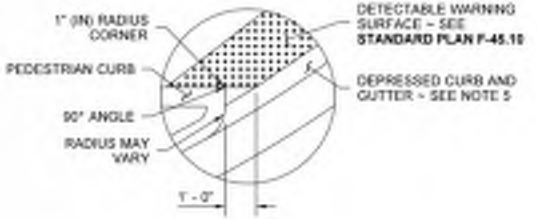
NOTES

1. This plan is to be used where pedestrian crossing in one direction is not permitted.
2. At marked crosswalks, the connection between the Landing and the roadway must be contained within the width of the crosswalk markings.
3. Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
4. Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing or in the Depressed Curb and Gutter where the Landing connects to the roadway.
5. See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb, Gutter and Pedestrian Curb details.
6. See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
7. The Bid Item "Cement Concrete Curb Ramp Type __" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
8. The Curb Ramp length is not required to exceed 15 feet (unless shown otherwise in the Contract Plans). When applying the 15-foot max. length (measured from back of sidewalk) the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet.
9. Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14.**
10. Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will not be material to retain.

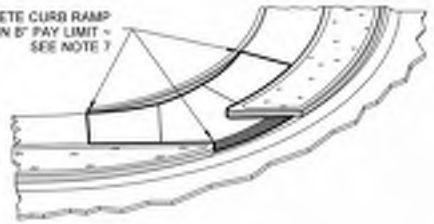
LEGEND

⟷	SLOPE IN EITHER DIRECTION
*	1.5 OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)
**	7.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (8.3% MAX.) SEE NOTE 7

ISOMETRIC VIEW
TYPE SINGLE DIRECTION A
PAY LIMIT



DETAIL (C)



ISOMETRIC VIEW
TYPE SINGLE DIRECTION B
PAY LIMIT

R. SCOTT ZELLER
STATE OF WASHINGTON
28680
REGISTERED
PROFESSIONAL ENGINEER

Zeller, Scott
Jun 24 2016 7:21 AM

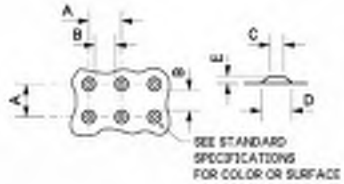
SINGLE DIRECTION CURB RAMP

STANDARD PLAN F-40.16-03

SHEET 1 OF 1 SHEET

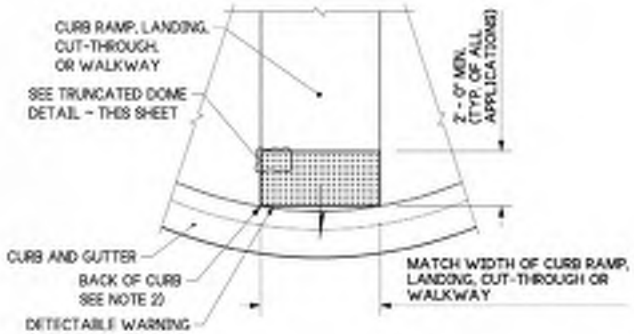
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jun 29 2016 2:29 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL

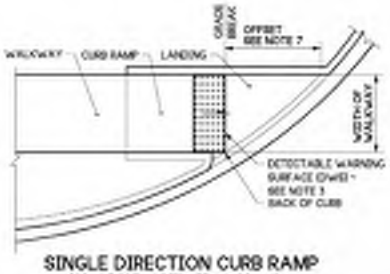


	MIN.	MAX.
A	1.60"	2.40"
B	0.65"	—
C	0.45"	0.90"
D	0.90"	1.40"
E	0.20"	0.20"

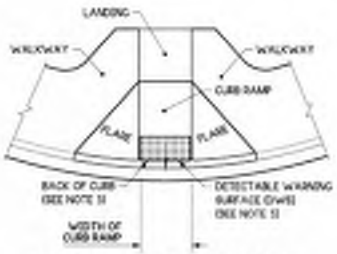
TRUNCATED DOME DETAILS
SEE NOTE 3



DETECTABLE WARNING SURFACE DETAIL

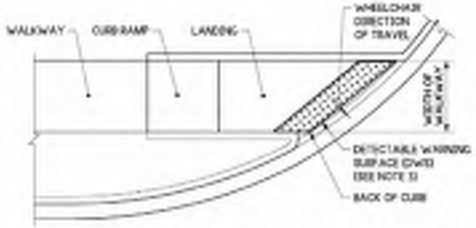


SINGLE DIRECTION CURB RAMP
(GRADE BREAK BETWEEN CURB AND LANDING < 5 FEET FROM BACK OF CURB)
(SEE NOTE 5)

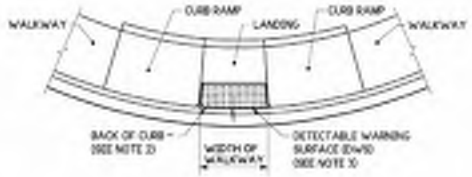


PERPENDICULAR CURB RAMP
(SEE NOTE 6)

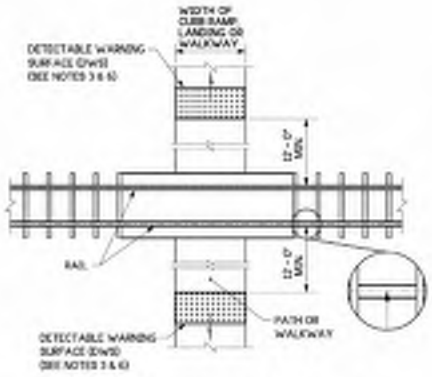
ISLAND CUT-THROUGH



SINGLE DIRECTION CURB RAMP
(GRADE BREAK BETWEEN CURB AND LANDING > 5 FEET FROM BACK OF CURB)
(SEE NOTE 5)

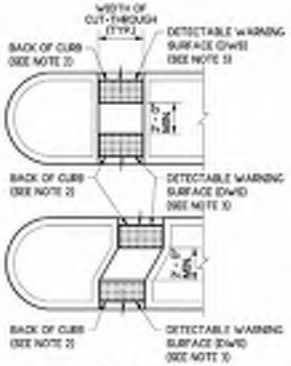


PARALLEL CURB RAMP
(SEE NOTE 6)

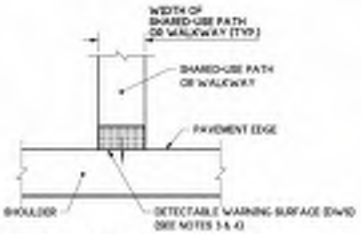


PEDESTRIAN RAILROAD CROSSING

ROUNDABOUT SPLITTER ISLAND



MEDIAN CUT-THROUGH



SHARED-USE PATH CONNECTION

NOTES

1. Permanent Detectable Warning Surfaces (DWS) shall extend the full width of the curb ramp, landing, or other roadway entrance as applicable. Exception: If the manufacturer of the DWS requires a concrete border around the DWS, a variance of up to 2" (in) on each side of the DWS is permitted.
2. Permanent Detectable Warning Surfaces (DWS) shall be placed on a minimum 4" (in) thick concrete pad. The DWS panel shall be placed adjacent to the back of the curb and with no more than a 2" (in) gap between the DWS and the back of the curb measured at the center of the DWS panel. Exception: If the Manufacturer of the selected DWS requires a concrete border around the DWS, a variance of up to 2" (in) from the back of the curb is permitted (measured at the leading corners of the DWS panel).
3. The rows of truncated domes shall be aligned to be parallel to the direction of travel, and perpendicular to the grade break at the back of curb.
4. If curb and gutter are not present, such as a shared-use path connection, the Detectable Warning Surface shall be placed at the pavement edge.
5. See Standard Plans for sidewalk and curb ramp details.
6. If a curb ramp is required, the location of the Detectable Warning Surface must be at the bottom of the ramp and within the required distance from the rail crossing.
7. When the grade break between the curb ramp and the landing is less than or equal to 5 feet from the back of curb at all points, place the Detectable Warning Surface on the bottom of the curb ramp directly above the grade break.
8. Glued or stick down Detectable Warning Surfaces are allowed only for temporary work zone applications.

Oct 13, 2023

DETECTABLE WARNING SURFACE

STANDARD PLAN F-45.10-04

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Oct 16, 2023

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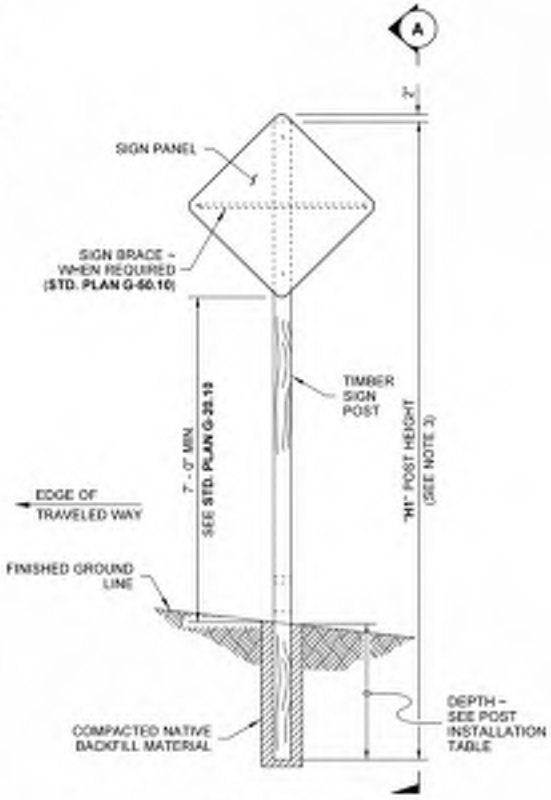
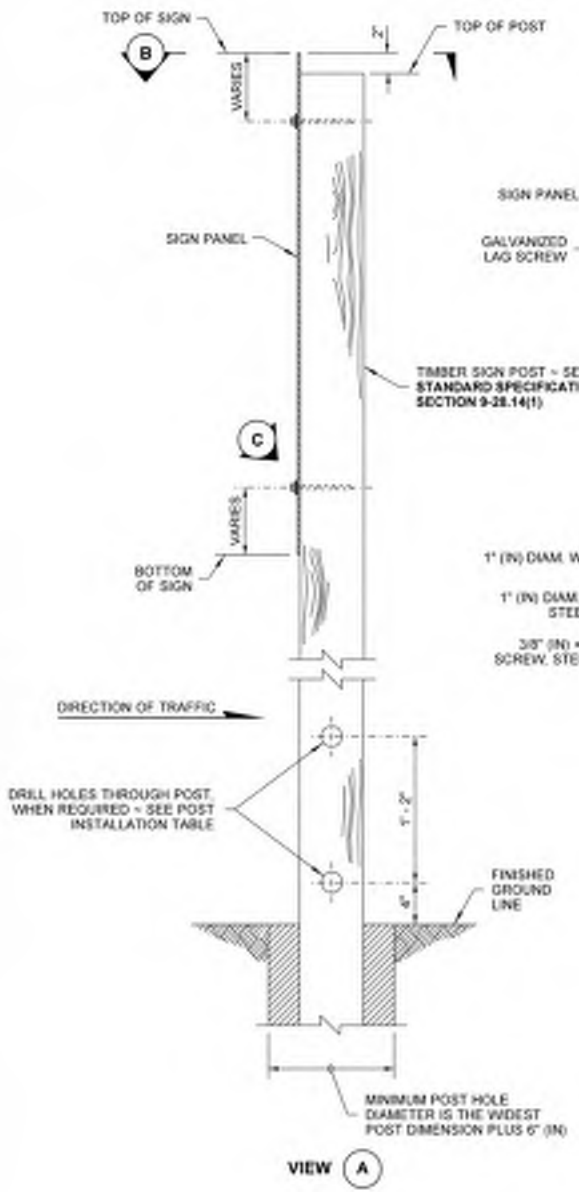
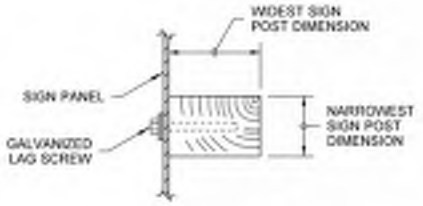


ELEVATION VIEW

SINGLE-POST INSTALLATION



VIEW (A)



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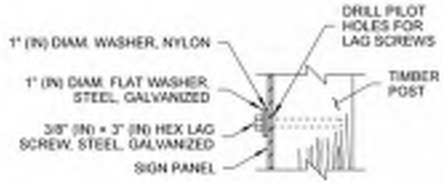

DETAIL (C)

NOTES

1. Notch is only required with multiple post installations.
2. 6×10, 8×10, and 6×12 Timber Sign Posts cannot be made breakaway and do not have holes or notches. These posts shall not be installed within the Design Clear Zone. They may be installed behind traffic barrier.
3. For "**X**", "**Y**", "**H1**", "**H2**", "**H3**", and "**H4**", refer to the Sign Specification Sheet in the Contract.
4. For 6×6 posts and larger, 7' (ft) minimum spacing is required between posts.
5. All materials shall meet the requirements of **Standard Specification Section 9-28**.

POST INSTALLATION TABLE

POST SIZE (NOM.)	DEPTH	HOLE DIAMETER	NOTCH DEPTH (SEE NOTE 1)
4×4	3' - 0"	NOT REQ'D	NOT REQ'D
4×6	4' - 0"	1 1/2"	1 1/2"
6×6	4' - 0"	2" SEE NOTES 3 & 4	2" SEE NOTES 3 & 4
6×8	5' - 0"	3" SEE NOTES 3 & 4	3" SEE NOTES 3 & 4
6×10	6' - 0"	SEE NOTE 2	SEE NOTE 2
8×10	6' - 0"	SEE NOTE 2	SEE NOTE 2
6×12	7' - 0"	SEE NOTE 2	SEE NOTE 2

JOHN C. NISBET STATE OF WASHINGTON 29115 REGISTERED PROFESSIONAL ENGINEER

Nisbet, John Digitally signed by Nisbet, John Date: 2018.06.27 11:29:46 -07'00'

TIMBER SIGN SUPPORT

STANDARD PLAN G-22.10-04

SHEET 1 OF 3 SHEETS

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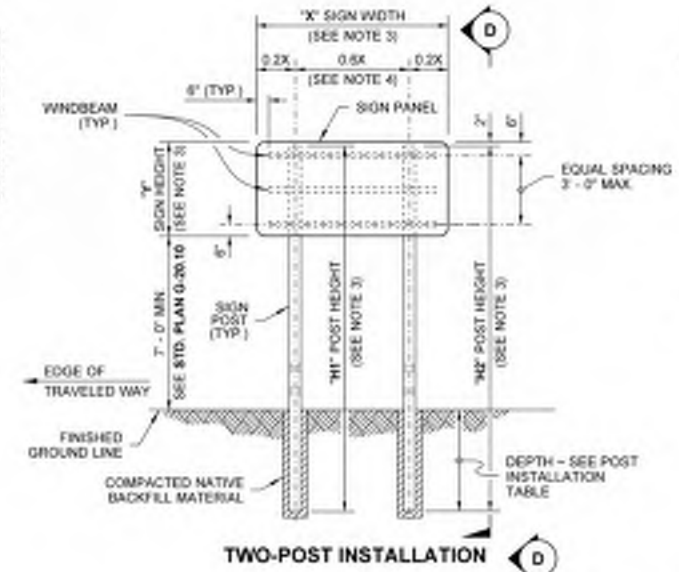
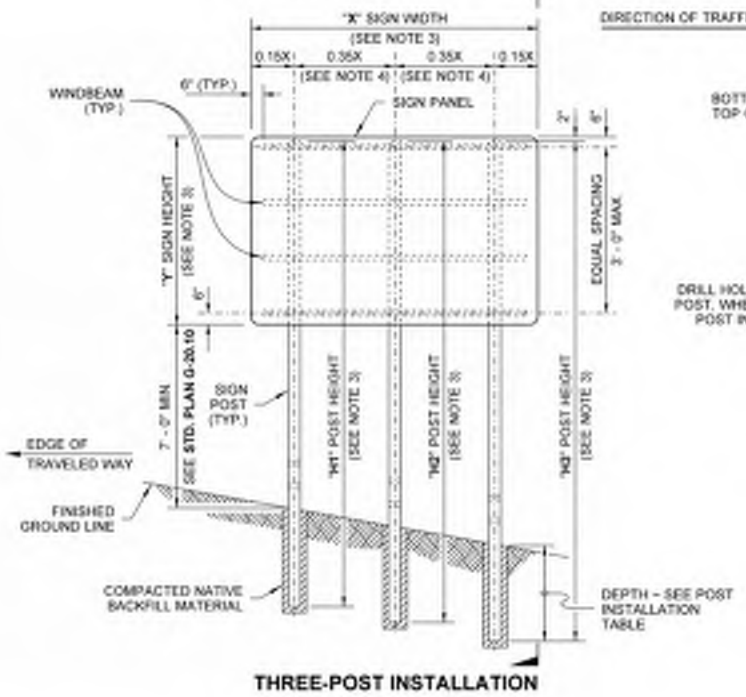
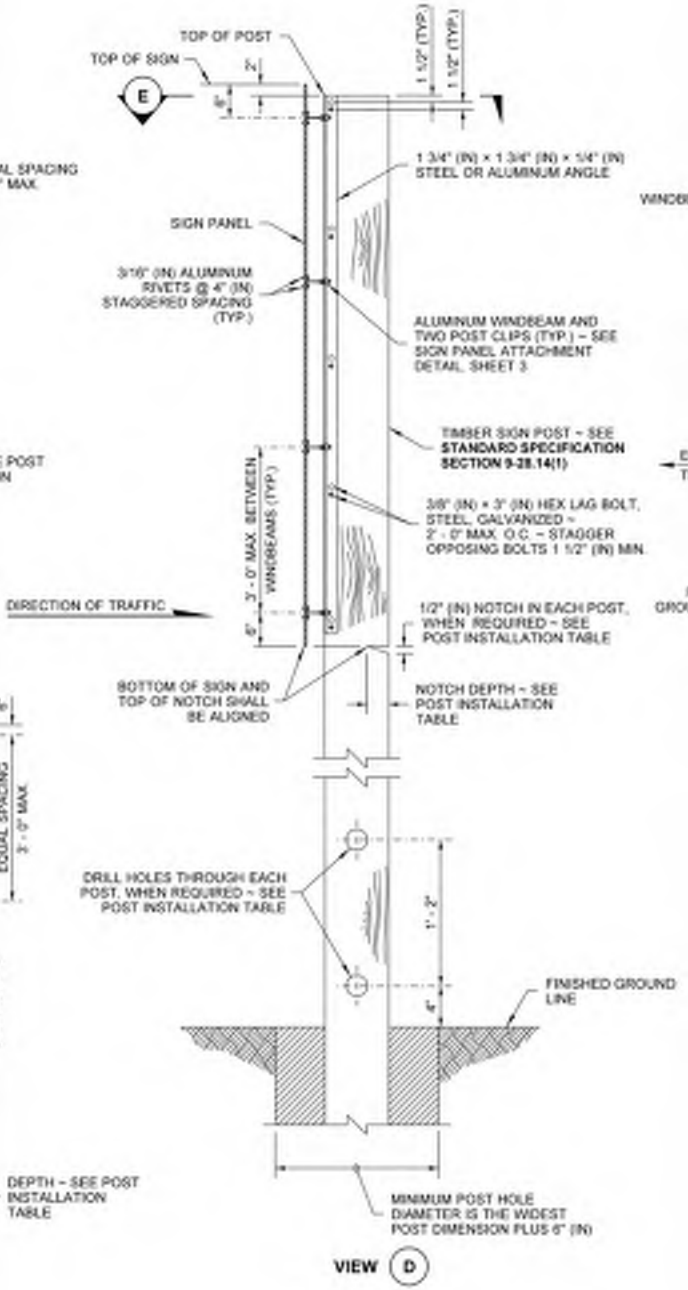


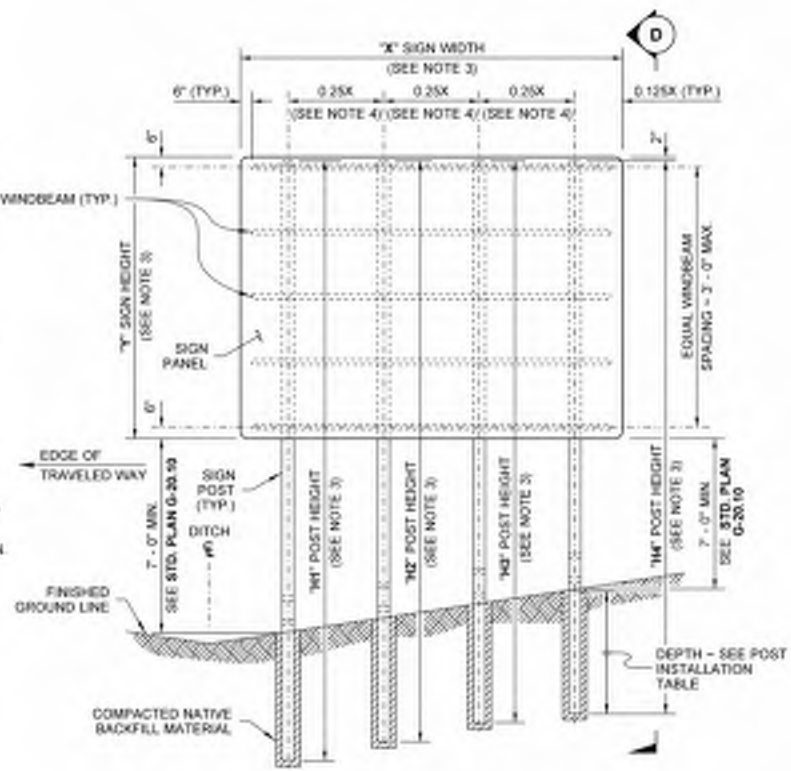
TWO-POST INSTALLATION



THREE-POST INSTALLATION



VIEW D



JOHN C. NISBET
STATE OF WASHINGTON
29115
REGISTERED
PROFESSIONAL ENGINEER

Nisbet, John
Digitally signed by Nisbet, John
Date: 2018.06.27 11:30:31 -07'00'

TIMBER SIGN SUPPORT

STANDARD PLAN G-22.10-04

SHEET 2 OF 3 SHEETS

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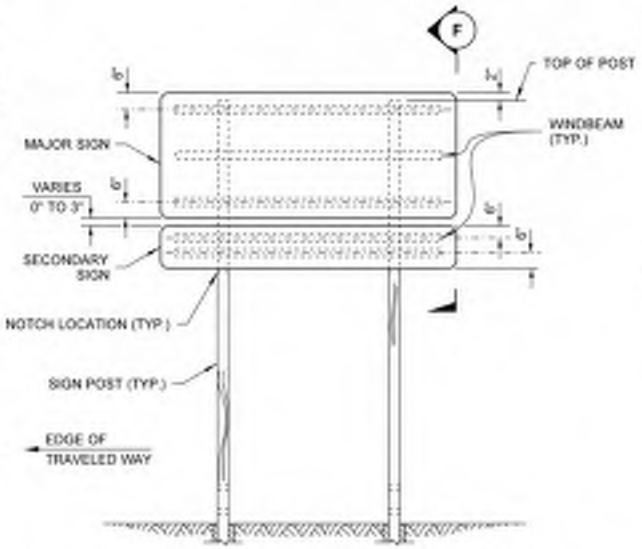
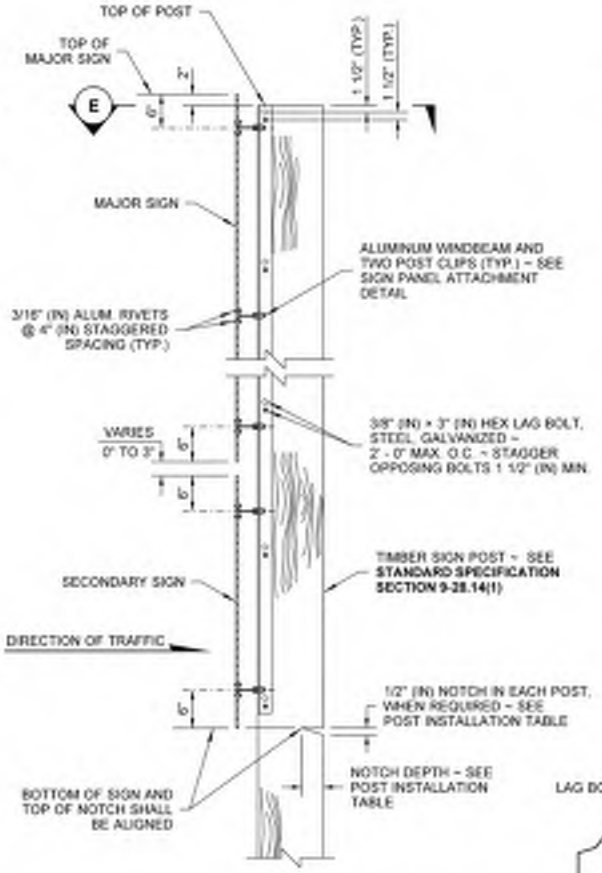
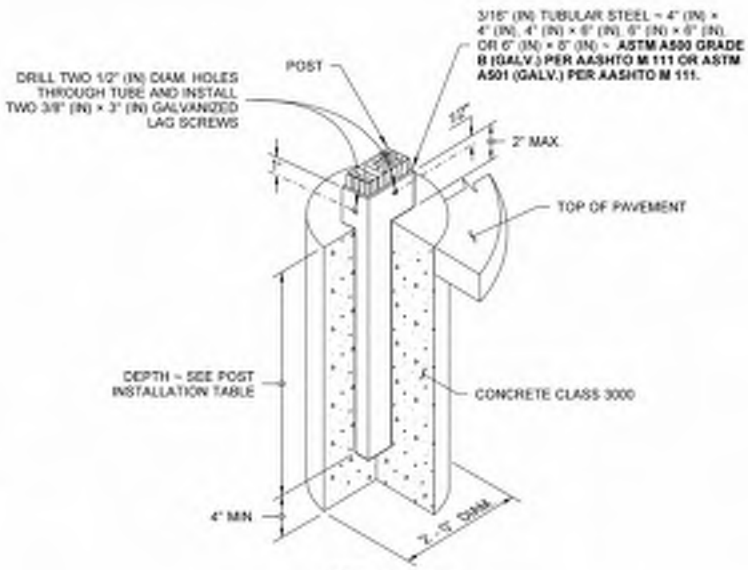


MAJOR AND SECONDARY SIGN INSTALLATION



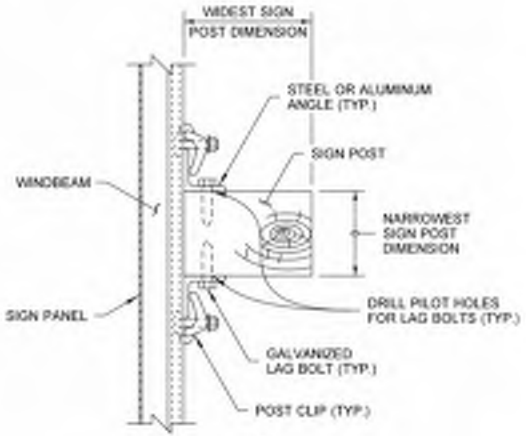
VIEW (F)



ISOMETRIC VIEW

CONCRETE FOUNDATION SLEEVE DETAIL

TO BE USED WHEN PLACING TIMBER POST IN A PAVED AREA



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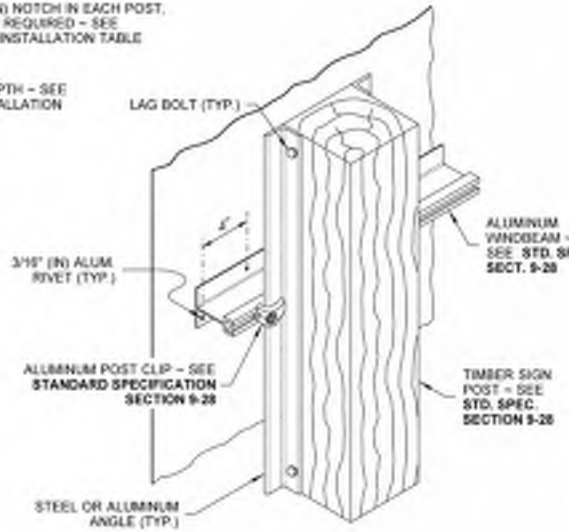

ISOMETRIC VIEW

SIGN PANEL ATTACHMENT DETAIL

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STATE OF WASHINGTON
29115
REGISTERED
PROFESSIONAL ENGINEER

Nisbet, John
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Date: 2018.06.27 11:32:12 -07'00'

TIMBER SIGN SUPPORT

STANDARD PLAN G-22.10-04

SHEET 3 OF 3 SHEETS

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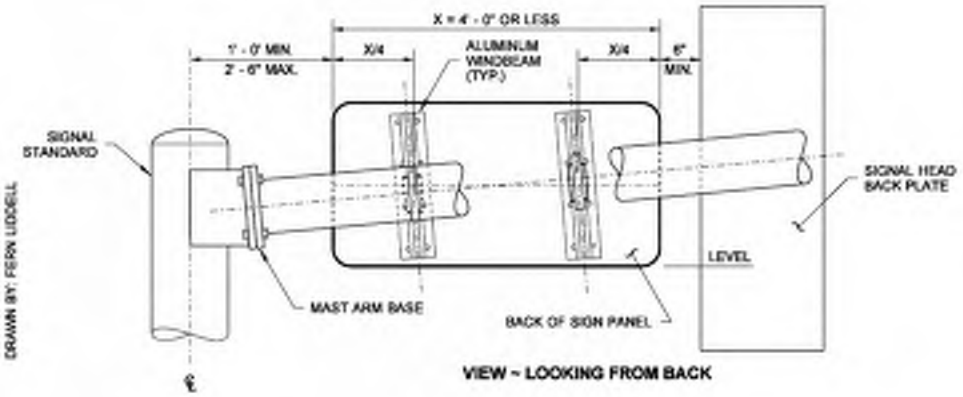
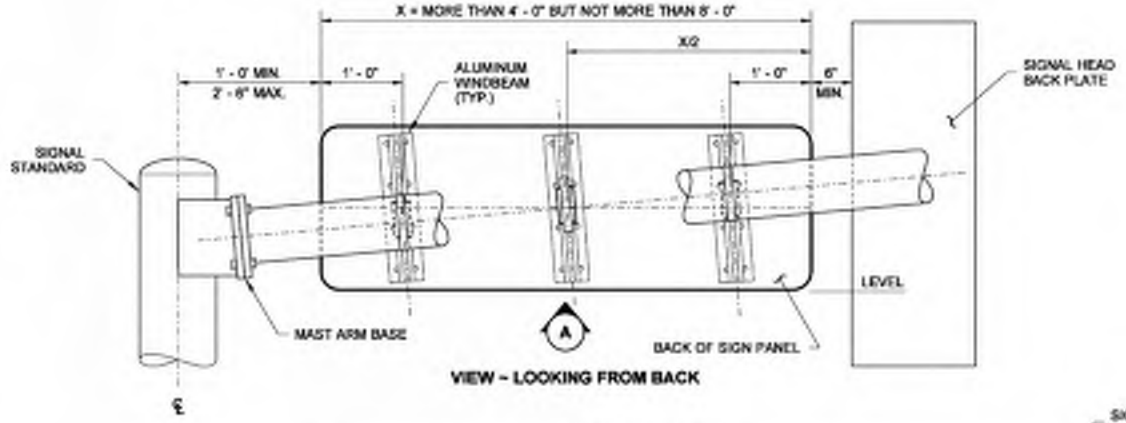
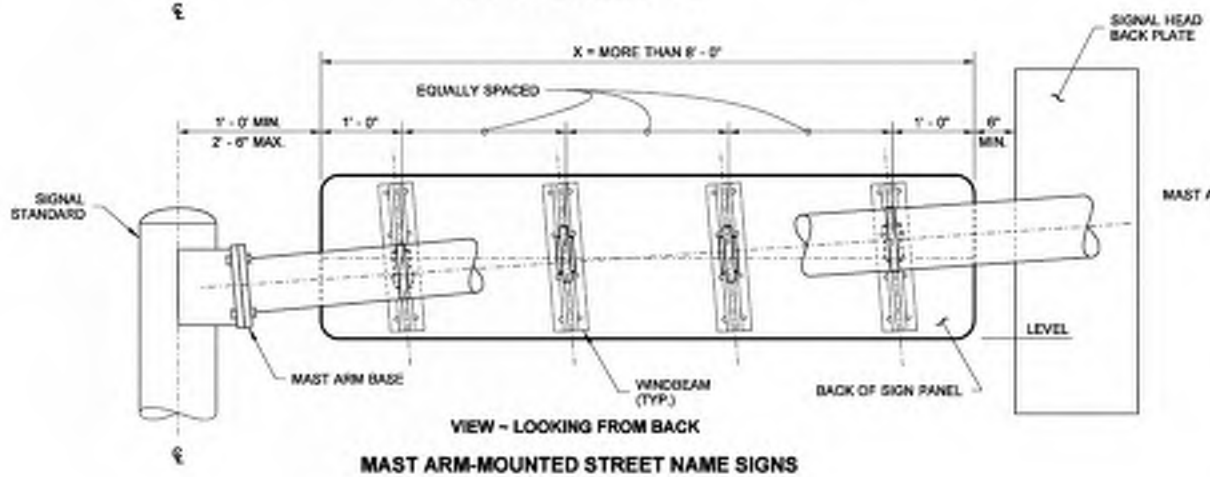


VIEW ~ LOOKING FROM BACK



VIEW ~ LOOKING FROM BACK

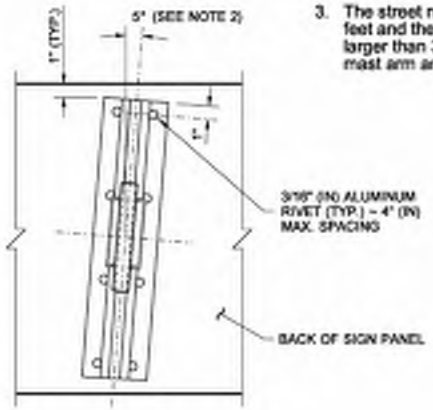


VIEW ~ LOOKING FROM BACK

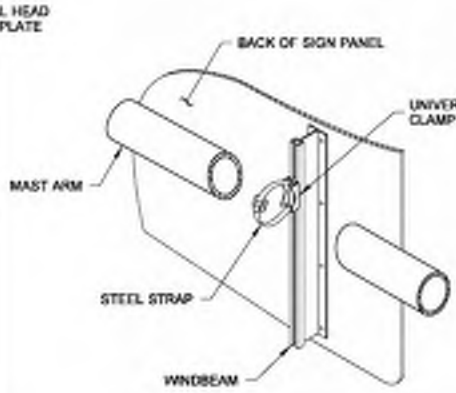
MAST ARM-MOUNTED STREET NAME SIGNS

NOTES

1. Mounting brackets with steel straps shall be a stainless steel band and buckle system product or an approved equal. Mounting brackets shall be universal channel clamps; steel straps shall be 3/4" (in) wide and 0.030" (in) thick.
2. All signs installed on mast arms or standards (poles) require windbeams. All signs shall be installed with horizontal edges level. A skewed windbeam is required only when the sign is mounted within 12" (in) of the mast arm base (see Detail "A").
3. The street name sign shall be a maximum of 36 square feet and the sign height is a maximum of 3' (ft); signs larger than 36 square feet require a special design mast arm and signal pole.



DETAIL (A)
TYPICAL FOR EACH CONNECTION



TYPICAL MAST ARM INSTALLATION

JOHN C. NISBET
STATE OF WASHINGTON
29115
REGISTERED
PROFESSIONAL ENGINEER

Jun 22 2015 9:49 AM

SIGN INSTALLATION ON SIGNAL AND LIGHT STANDARDS STANDARD PLAN G-30.10-04

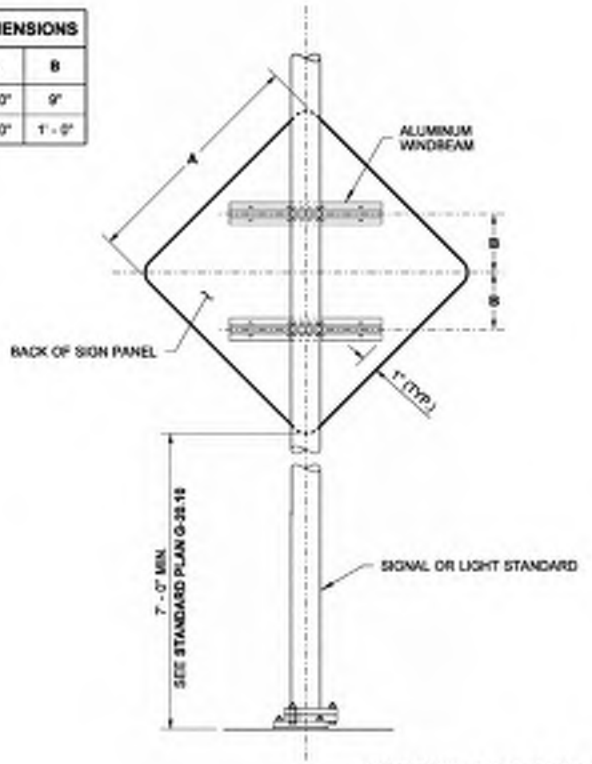
SHEET 1 OF 2 SHEETS

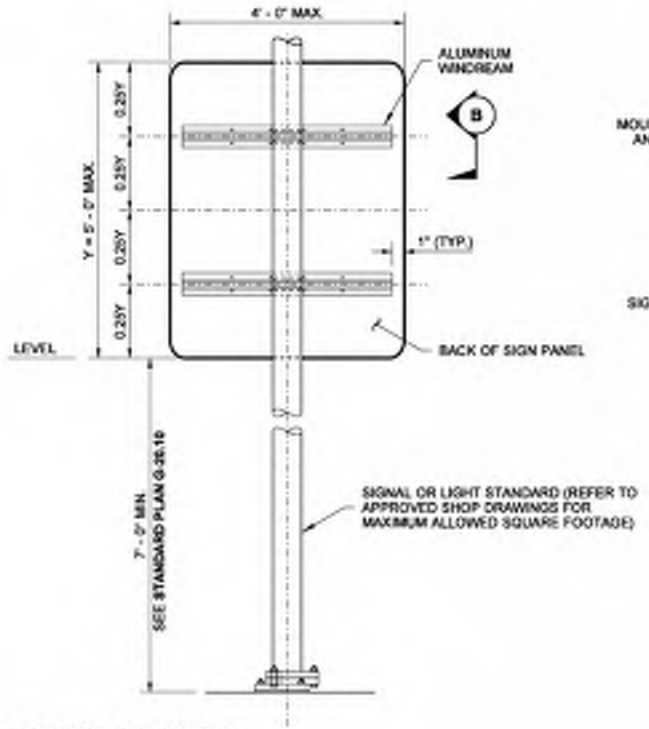
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jun 23 2015 7:31 AM
STATE DESIGN ENGINEER

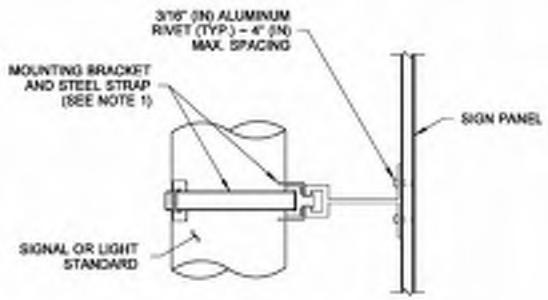
Washington State Department of Transportation

DRAWN BY: FERN LICKTEIG

DIMENSIONS	
A	B
3' - 0"	9"
4' - 0"	1' - 0"







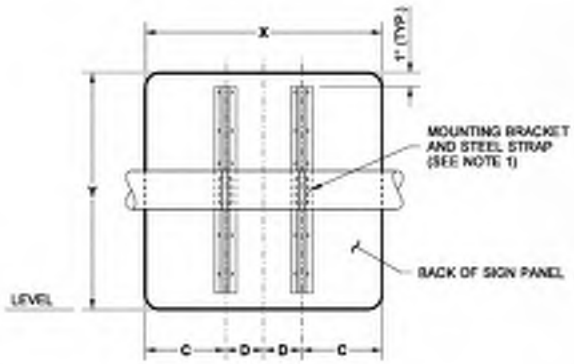
SECTION (B)

SIGN INSTALLATION ON SIGNAL OR LIGHT STANDARD

DIMENSIONS			
X	Y	C	D
3' - 0"	2' - 6"	1' - 0"	6"
3' - 0"	3' - 0"	1' - 0"	6"
3' - 0"	4' - 0"	1' - 3"	9"
4' - 0"	2' - 6"	1' - 3"	9"

NOTE:

Any Lane Use Sign greater than 7.5 sq ft. requires a Special Design Mast Arm and Signal Pole.



MAST ARM-MOUNTED LANE USE SIGNS

Nisbet, John
Jun 22 2015 9:50 AM

SIGN INSTALLATION ON SIGNAL AND LIGHT STANDARDS STANDARD PLAN G-30.10-04

SHEET 2 OF 2 SHEETS

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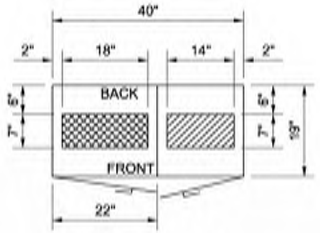
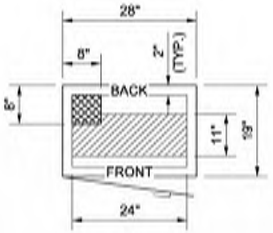
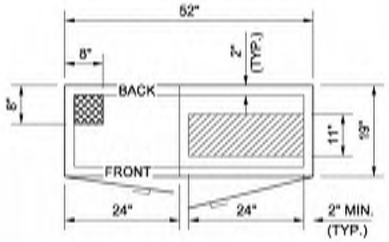


TYPE B MODIFIED SERVICE CABINET



TYPE D SERVICE CABINET

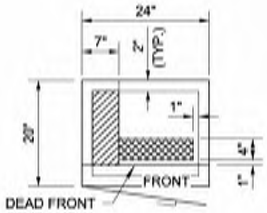


TYPE E SERVICE CABINET

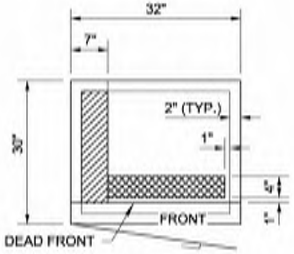
ANCHOR BOLT
(SEE NOTE 1)

CONDUIT PLACEMENT LOCATION AREA

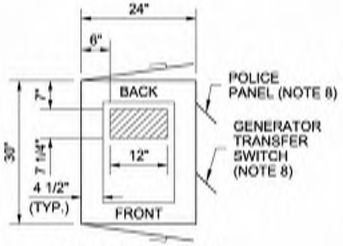
SERVICE: UTILITY CONDUIT AREA
TRANSFORMER: HIGH VOLTAGE CONDUIT AREA



XFMR-S
(TRANSFORMER - SMALL)
(UP TO 12.5 KVA)



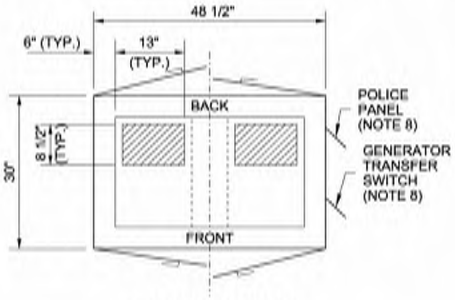
XFMR-L
(TRANSFORMER - LARGE)
(12.6 TO 37.5 KVA)



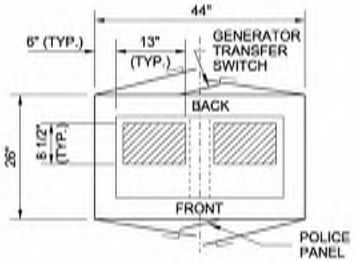
TYPE 33x CABINET

CABINET REFERENCE TABLE			
SERVICE CABINETS	**SIZE W × D (IN)**	**CAPACITY CONDUIT DIAMETER (IN)**	**STANDARD PLAN**
TYPE B MOD.	40" x 19"	12"	J-10.20
TYPE D	28" x 19"	24"	J-10.21
TYPE E	52" x 19"	48"	J-10.22
TRANSFORMER CABINETS	**SIZE W × D (IN)**		
XFMR-S (UP TO 12.5 KVA)	24" × 20"	12"	J-10.25
XFMR-L (12.6 TO 37.5 KVA)	32" × 30"	15"	J-10.25
SIGNAL AND ITS CABINETS	**SIZE W × D (IN)**		
TYPE 33x	24" × 30"	12"	J-12.15
TYPE 33xD	48.5" × 30"	24" (1)	J-12.16
TYPE 342LX	44" × 26"	24" (1)	J-12.16
NEMA P44	44" × 26"	15"	N/A

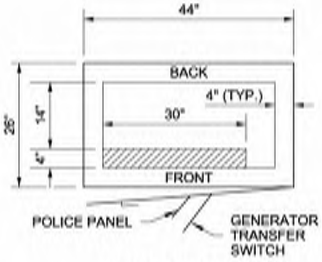
(1) 12" (IN) OF CONDUIT IN EACH LOCATION SHOWN



TYPE 33xD CABINET



TYPE 342LX CABINET



NEMA P44 CABINET

PLAN VIEWS
CABINET ORIENTATION, FOOTPRINT, AND CONDUIT PLACEMENT LOCATIONS

GENERAL NOTES

1. Each pad mounted cabinet shall be attached to the foundation with four 1/2" (in.) x 10" (in.) x 2" (in.) x 4" (in.) anchor bolts (see Anchor Bolt Detail this Sheet). Bolts, washers, and nuts shall be hot-dip galvanized in accordance with **AASHTO M232** and meet the requirements of Standard Specification 9-06.5(1). Stainless steel epoxy anchors may be used as an alternative, and shall be 1/2" (in.) diameter x 9" (in.) or 5/8" (in.) diameter x 8" (in.). Epoxy anchors shall use Type 304 stainless steel hardware: ASTM F593 all threaded rod, ASTM A240 washers, and ASTM F594 nuts. Anchor bolts shall extend 1 1/2" (in.) min. to 2" (in.) max. above the concrete pad.
2. All reinforcing steel shall be embedded 2" (in.) below the surface of concrete.
3. A 1/2" (in.) bead of silicone is required between each cabinet and the concrete foundation.
4. Concrete shall be Class 3000, in accordance with **Standard Specification 8-20.3(4)**. All concrete corners shall have a 1" (in.) chamfer, unless abutting sidewalk, where it shall be square and seaparated from the sidewalk with joint filler.
5. 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.
6. Foundations require additional level clear space to achieve a minimum of 4 feet of level clear space between the face of any cabinet or cabinet riser and the edge of the level clear space. Clear space beyond the edge of the concrete pad shall be made up of crushed surfacing meeting the requirements of **Standard Specification 9-03.9(1)**. Special design may be required where slopes are 3H : 1V or steeper. As an alternative, the concrete pad may be extended out to provide the required clear space.
7. Verify overall pad and concrete riser dimensions with the Engineer prior to placing concrete.
8. Not all Type 33x and 33xD cabinets have a police panel and/or a generator transfer switch (GTS) panel. See Contract for specific cabinet requirements.

WILLIAM FLINT JACKSON
STATE OF WASHINGTON
48821
REGISTERED
PROFESSIONAL ENGINEER

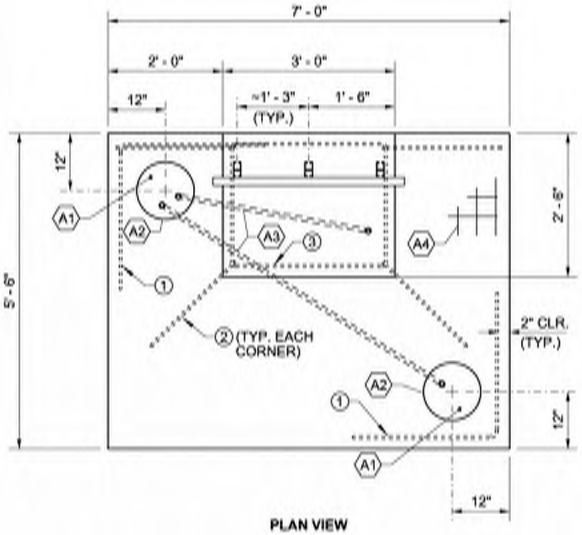
Jackson, Flint
Aug 24 2020 9:36 AM

CABINET ORIENTATION CONDUIT LAYOUT AND FOUNDATION DETAIL
STANDARD PLAN J-10.10-04

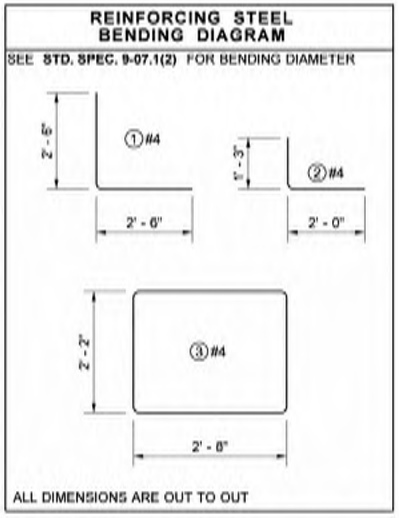
SHEET 1 OF 6 SHEETS

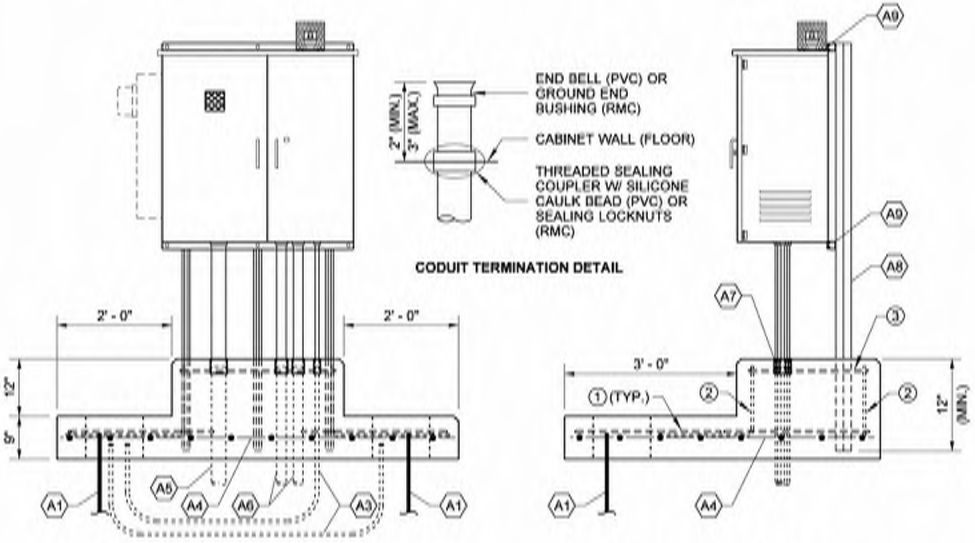
APPROVED FOR PUBLICATION
Date: 2020.09.16 10:06:06 -07'00'
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: BILL BERENS



PLAN VIEW





CODUIT TERMINATION DETAIL

STRUT MOUNT SERVICE CABINET
(TYPE B MODIFIED SERVICE CABINET SHOWN)

NOTES - SINGLE STRUT MOUNT CABINET (SHEET 2 OF 6)

A1. Drive gound rods before placing concrete. Ground rods shall be a minimum of 6 feet apart. **See Standard Plan J-60.05** for additional details.

A2. Welded Wire Fabirc (WWF) shall be 4.0 (in.) x 4.0 (in.) ~ W4.0 x W4.0 ~ meeting the requirements of **Standard Specification 9-07.7**. As an alternative, a grid of #3 rebar may be used, with bars spaced at 1'- 0" centers laterally and longitudinally.

A3. Install conduit couplings on all conduits. Couplers shall be installed with the top of the coupler flush with the top of concrete. For PVC conduits, the conduit segment above the coupler shall not be glued to the coupler.

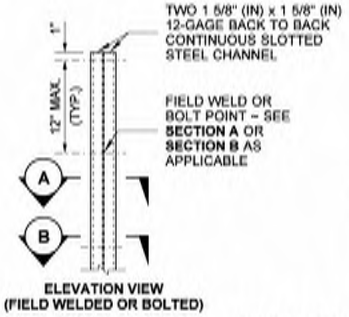
A4. Vertical steel supports shall be two continuous 1 5/8" (in.) x 1 5/8" (in.) 12-gage slotted steel channels installed back-to-back (3 pairs required) ~ see Strut Mount Support Details this sheet for connection details. As an alternative, continuous 1 5/8" (in.) x 3 1/4" (in.) 12-gage slotted steel channel may be used in place of each channel pair. Channels shall be embedded a minimum of 12" (in.) into the concrete foundation. Supports shall be evenly spaced, with the center support centered in the concrete riser, and the outer supports tied to the riser rebar hoop.

A5. Horizontal steel supports shall be continuous 1 5/8" (in.) x 1 5/8" (in.) 12-gage slotted steel channels (two required).

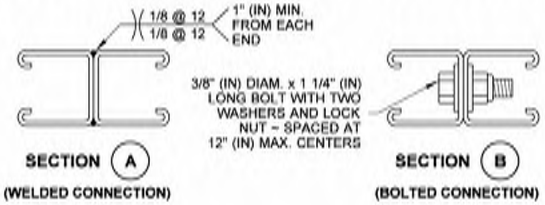
A6. Cabinet height shall be determined by the required height of the utility meter - verify height with serving utilty (typically 5 to 6 feet).

A7. Serving utility may require meter socket to be installed on the outside of the cabinet. Utility feeder conduit shall still terminate in the utility section of the cabinet unless otherwise required by the utility.

A8. Additional gravel pad not shown. Gravel pad shall extend two feet in front of the concrete pad for the full width of the concrete pad. If the utility meter socket is installed on the outside of the service cabinet, gravel pad shall also extend three feet from the utility side of the cabinet pad. Final gravel area shall be a rectangle.



ELEVATION VIEW
(FIELD WELDED OR BOLTED)



STRUT MOUNT SUPPORT DETAILS
(SEE NOTE A4)

KEY NOTES - SHEET 2 OF 6

A1 Ground rod ~ See Note A1, this sheet.
A2 Ground rod well (Ground tile) - 12" diameter concrete
A3 Service ground electrode conduits.
A4 Welded wire fabric ~ See Note A2, this sheet.
A5 Utility entrance conduit. Conduit shall terminate in the utility section of the service cabinet.
A6 Conduits to field equipment. Conduits shall terminate in the customer section of the service cabinet.
A7 Conduit couplers ~ See Note A3, this sheet.
A8 Vertical support steel channel ~ See Note A4, this sheet.
A9 Horizontal support steel channel ~ See Note A5, this sheet.

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CABINET ORIENTATION CONDUIT LAYOUT AND FOUNDATION DETAIL

STANDARD PLAN J-10.10-04

SHEET 2 OF 6 SHEETS

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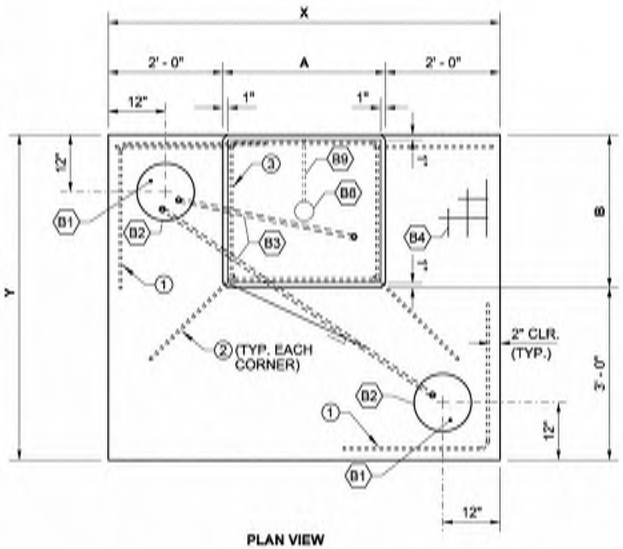


PLAN VIEW

KEY NOTES - SHEET 3 OF 6

(B1) Ground rod ~ See Note B1, this sheet.

(B2) Ground rod well (Ground tile) - 12" diameter concrete

(B3) Service ground electrode conduits.

(B4) Welded wire fabric ~ See Note B2, this sheet.

(B5) Utility entrance (service cabinet) or input power (transformer cabinet) conduit. Conduit shall terminate in the utility or high-voltage section of the cabinet (as applicable).

(B6) Conduits to field equipment. Conduits shall terminate in the customer section (service cabinet) or low-voltage (transformer cabinet) of the cabinet.

(B7) Conduit couplers ~ See Note B4, this sheet.

(B8) 4" (in.) diam. x 1/2" (in.) deep sump.Slope foundation within cabinet footprint toward sump.

(B9) 3/8" (in.) diam. polyethylene or copper tubing for drain. Tubing shall be straight, but slope downward a minimum of 1" (in.).

NOTES - SINGLE PAD MOUNT SERVICE OR TRANSFORMER CABINET (SHEET 3 OF 6)

B1. Drive gound rods before placing concrete. Ground rods shall be a minimum of 6 feet apart. See **Standard Plan J-60.05** for additional details.

B2. Welded Wire Fabirc (WWF) shall be 4.0 (in.) x 4.0 (in.) ~ W4.0 x W4.0 ~ meeting the requirements of **Standard Specification 9-07.7**. As an alternative, a grid of #3 rebar may be used, with bars spaced at 1'-0" centers laterally and longitudinally.

B3. Omit concrete riser and bar #3 for Type D and Type E service cabinets.

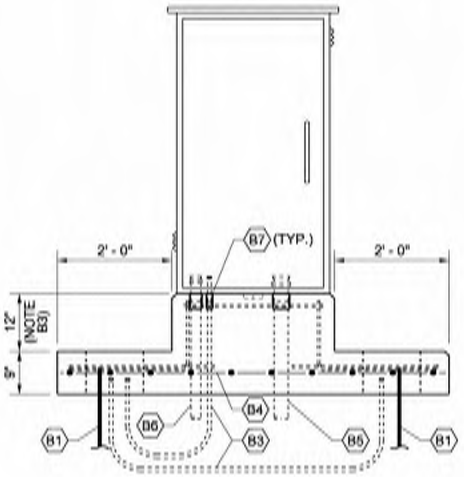
B4. Install conduit couplings on all conduits. Couplers shall be installed with the top of the coupler flush with the top of concrete. For PVC conduits, the conduit segment above the coupler shall not be glued to the coupler.

B5. Conduits shall extend a minimum of 2" (in.) and a maximum of 3" (in.) into the cabinet, as measured from the concrete surface to the top of the end bell (PVC) or ground bushing (RMC).

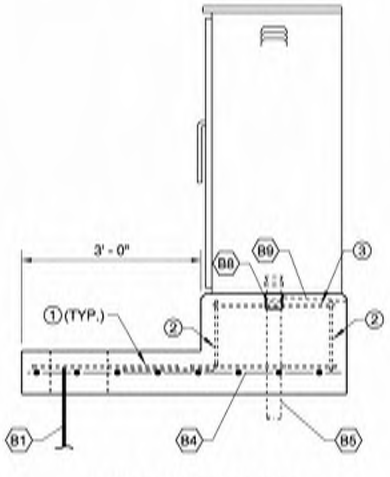
B6. Serving utility may require meter socket to be installed on the outside of the cabinet. Utility feeder conduit shall still terminate in the utility section of the cabinet unless otherwise required by the utility.

B7. Additional gravel pad not shown. Gravel pad shall extend two feet in front of the concrete pad for the full width of the concrete pad. If the utility meter socket is installed on the outside of the service cabinet, gravel pad shall also extend three feet from the side of the cabinet pad where the meter is installed. Final gravel area shall be a rectangle.

B8. See **Standard Plan J-10.14** for additional details when service or transformer cabinet is installed in fence line.



FRONT ELEVATION VIEW



RIGHT SIDE ELEVATION VIEW

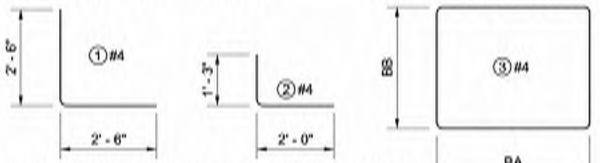
SINGLE PAD MOUNT SERVICE OR TRANSFORMER CABINET (XFMR-L CABINET SHOWN)

FOUNDATION SIZE REFERENCE TABLE

SERVICE CABINETS	PAD WIDTH (X)	PAD DEPTH (Y)	RISER WIDTH (A)	RISER DEPTH (B)	HOOP ③ WIDTH (BA)	HOOP ③ DEPTH (BB)
TYPE D	6' - 4"	3' - 8"	N/A	N/A	N/A	N/A
TYPE E	8' - 4"	3' - 8"	N/A	N/A	N/A	N/A
TRANSFORMER CABINETS	**PAD WIDTH (X)**	**PAD DEPTH (Y)**	**RISER WIDTH (A)**	**RISER DEPTH (B)**	**HOOP ③ WIDTH (BA)**	**HOOP ③ DEPTH (BB)**
XFMR-S (UP TO 12.5 KVA)	6' - 2"	4' - 11"	2' - 2"	1' - 11"	1' - 10"	1' - 7"
XFMR-L (12.6 TO 37.5 KVA)	6' - 10"	5' - 8"	2' - 10"	2' - 8"	2' - 6"	2' - 4"

REINFORCING STEEL BENDING DIAGRAM

SEE **STD. SPEC. 9-07.1(2)** FOR BENDING DIAM. ALL DIMENSIONS ARE OUT TO OUT



NOTE: BAR 3 DIMENSIONS ARE ALWAYS FOUR INCHES SMALLER THAN THEIR ASSOCIATED CONCRETE RISER DIMENSIONS.

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CABINET ORIENTATION CONDUIT LAYOUT AND FOUNDATION DETAIL

STANDARD PLAN J-10.10-04

SHEET 3 OF 6 SHEETS

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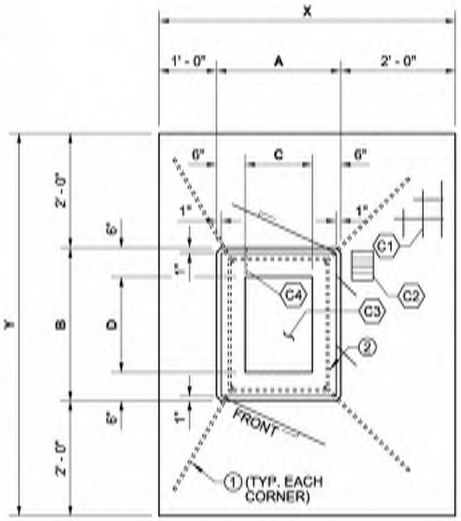


PLAN VIEW

KEY NOTES - SHEET 4 OF 6

(C1) Welded wire fabric ~ See Note C1, this sheet.

(C2) Generator Tie-Down Anchor ~ See Note C2, this sheet.

(C3) Cabinet Well ~ See Note C3, this sheet.

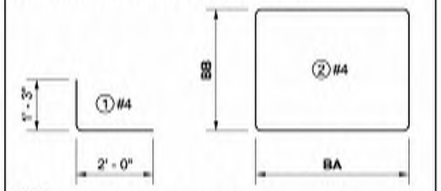
(C4) 3/8" (in.) diam. polyethylene or copper tubing for drain. Tubing shall be straight, but slope downward a minimum of 1" (in.)

(C5) Conduits ~ See Contract Plans for number, type, and function.

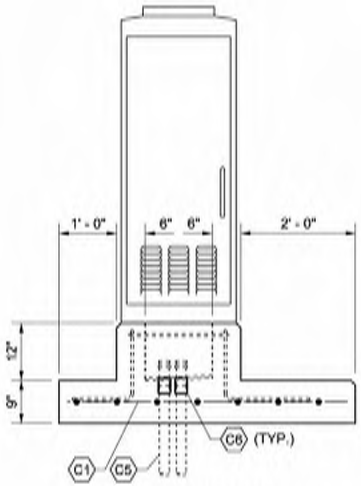
(C6) Conduit couplers ~ See Note C4, this sheet.

REINFORCING STEEL BENDING DIAGRAM

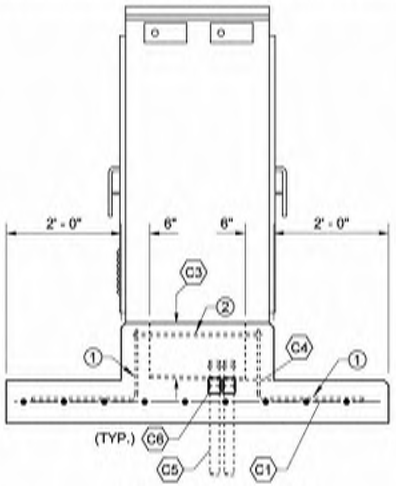
SEE STD. SPEC. 9-07.1(2) FOR BENDING DIAM.



NOTE:
ALL DIMENSIONS ARE OUT TO OUT.
BAR 3 DIMENSIONS ARE ALWAYS FOUR INCHES SMALLER THAN THEIR ASSOCIATED CONCRETE RISER DIMENSIONS.

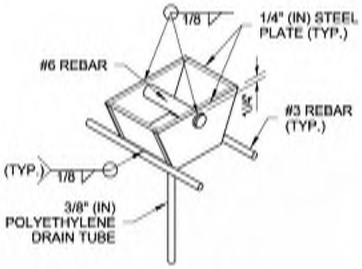


FRONT ELEVATION VIEW

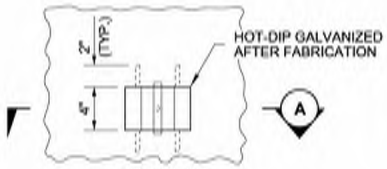


RIGHT SIDE ELEVATION VIEW

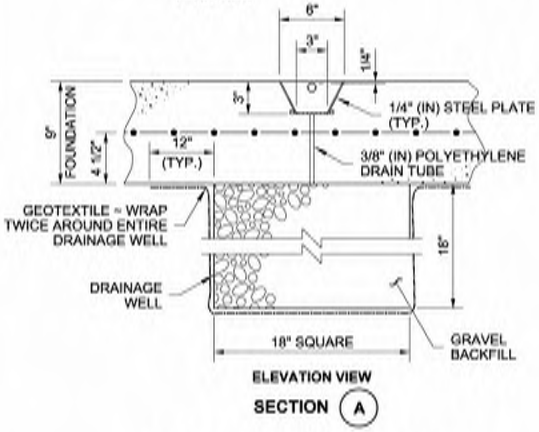
SINGLE PAD MOUNT TRAFFIC SIGNAL OR ITS CABINET
(TYPE 33x CABINET SHOWN)



ISOMETRIC VIEW



PLAN VIEW



ELEVATION VIEW

SECTION (A)

GENERATOR TIE-DOWN ANCHOR
(FABRICATE IF NOT AVAILABLE COMMERCIALLY)

NOTES - SINGLE PAD MOUNT TRAFFIC SIGNAL OR ITS CABINET (SHEET 4 OF 6)

C1. Welded Wire Fabirc (WWF) shall be 4.0 (in.) x 4.0 ~ W4.0 (in.) x W4.0 ~ meeting the requirements of **Standard Specification 9-07.7**. As an alternative, a grid of #3 rebar may be used, with bars spaced at 1'- 0" centers laterally and longitudinally.

C2. Generator Tie-Down Anchors are only required for cabinets with Generator Transfer Switches (GTS). Anchor shall along the side of the cabinet near the back corner of the cabinet riser as shown.

C3. Cabinet well shall be a nominal 10" (in.) deep, sloping towards the corner where the drain tube is installed. Well dimensions are 12" (in.) smaller than the riser length and width dimensions (**A** and **B**). See Cabinet Well Reference Table, this sheet.

C4. Install conduit couplings on all conduits. Couplers shall be installed with the top of the coupler flush with the top of concrete. For PVC conduits, the conduit segment above the coupler shall not be glued to the coupler.

C5. Conduits shall extend a minimum of 2" (in.) and a maximum of 3" (in.) into the cabinet, as measured from the concrete surface to the top of the end bell (PVC) or ground bushing (RMC).

C6. Additional gravel pad not shown. Gravel pad shall extend two feet beyond the front, right, and back of the cabinet pad where the pad is two feet wide. Final gravel area shall be a rectangle.

CABINET WELL REFERENCE TABLE

SIGNAL AND ITS CABINETS	WELL WIDTH (C)	WELL LENGTH (D)
TYPE 33x	1' - 2"	1' - 8"
TYPE 33xD	3' - 2"	1' - 8"
TYPE 342LX / NEMA P44	2' - 10"	1' - 4"

FOUNDATION SIZE REFERENCE TABLE

SIGNAL AND ITS CABINETS	PAD WIDTH (X)	PAD DEPTH (Y)	RISER WIDTH (A)	RISER DEPTH (B)	HOOP (2) WIDTH (BA)	HOOP (2) DEPTH (BB)
TYPE 33x	5' - 2"	6' - 8"	2' - 2"	2' - 8"	1' - 10"	2' - 4"
TYPE 33xD	6' - 3"	6' - 8"	4 - 3"	2' - 8"	3' - 11"	2' - 4"
TYPE 342LX / NEMA P44	5' - 10"	6' - 4"	3' - 10"	2' - 4"	3' - 6"	2' - 0"

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CABINET ORIENTATION CONDUIT LAYOUT AND FOUNDATION DETAIL

STANDARD PLAN J-10.10-04

SHEET 4 OF 6 SHEETS

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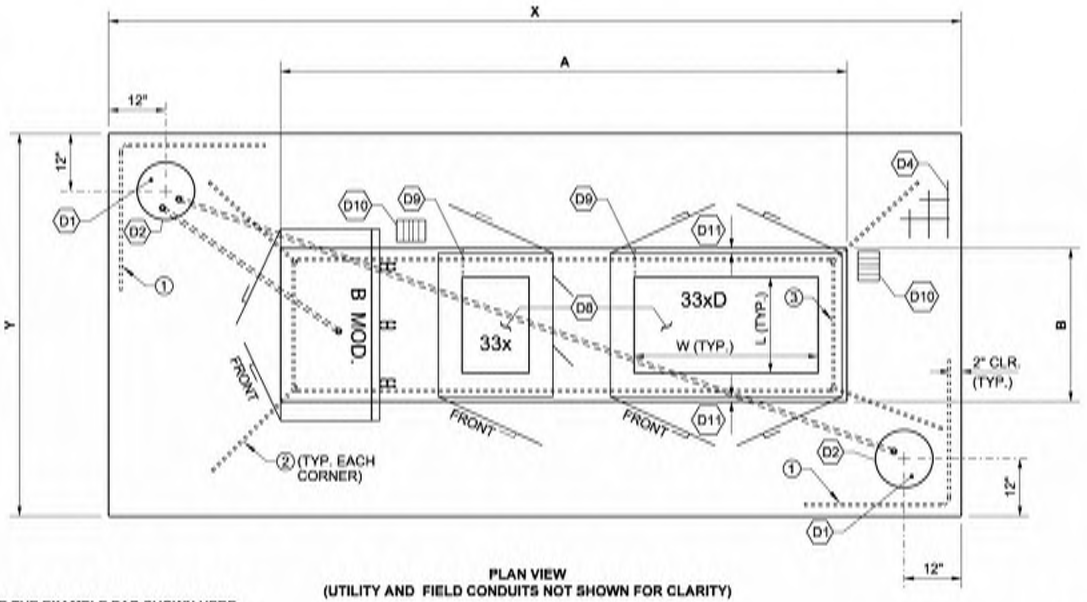
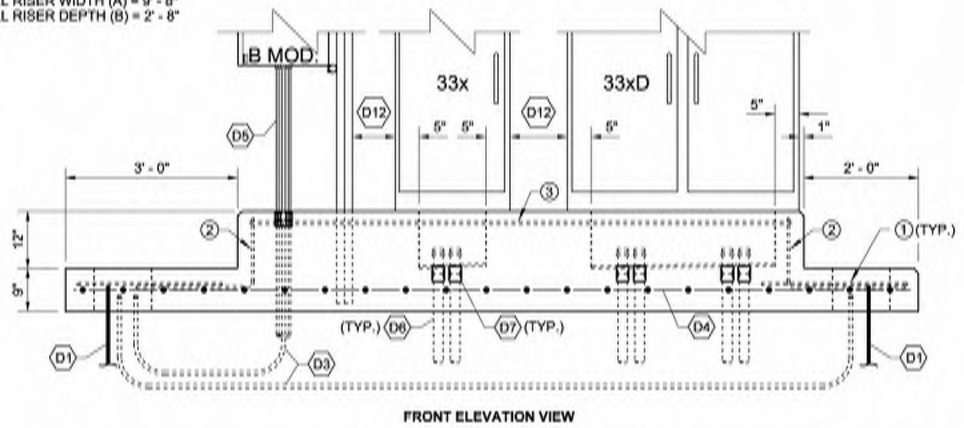


PLAN VIEW
(UTILITY AND FIELD CONDUITS NOT SHOWN FOR CLARITY)

FOR THE EXAMPLE PAD SHOWN HERE:
- SPACE BETWEEN TYPE B MOD. CABINET AND 33x CABINET IS 6" (IN.)
- SPACE BETWEEN 33x AND 33xD CABINET IS 1' - 0"
- OVERALL PAD WIDTH (X) = 14' - 8"
- OVERALL PAD DEPTH (Y) = 6' - 8"
- OVERALL RISER WIDTH (A) = 9' - 8"
- OVERALL RISER DEPTH (B) = 2' - 8"

FOUNDATION PAD DIMENSIONS X, Y, A, AND B SHOULD BE PROVIDED IN THE CONTRACT PLANS.



FRONT ELEVATION VIEW

TYPE A (NARROW) MULTI-CABINET FOUNDATION PAD
(TYPE B MODIFIED SERVICE CABINET, TYPE 33x CABINET, AND TYPE 33xD CABINET SHOWN)

NOTES - TYPE A (NARROW) AND TYPE B (WIDE) MULTI-CABINET FOUNDATION PAD (SHEETS 5 AND 6 OF 6)

D1. Drive gound rods before placing concrete. Ground rods shall be a minimum of 6 feet apart. See **Standard Plan J-60.05** for additional details.

D2. Welded Wire Fabirc (WWF) shall be 4.0 (in.) x 4.0 (in.) – W4.0 x W4.0 – meeting the requirements of **Standard Specification 9-07.7**. As an alternative, a grid of #3 rebar may be used, with bars spaced at 1'-0" centers laterally and longitudinally.

D3. See Sheet 3 for reinforcing steel bending diagrams.

D4. Concrete riser shall not include Type D or Type E Service Cabinets.

D5. Install conduit couplings on all conduits. Couplers shall be installed with the top of the coupler flush with the top of concrete. For PVC conduits, the conduit segment above the coupler shall not be glued to the coupler.

D6. Conduits shall extend a minimum of 2" (in.) and a maximum of 3" (in.) into the cabinet, as measured from the concrete surface to the top of the end bell (PVC) or ground bushing (RMC).

D7. Serving utility may require meter socket to be installed on the outside of the cabinet. Utility feeder conduit shall still terminate in the utility section of the cabinet unless otherwise required by the utility.

D8. Additional gravel pad not shown. Gravel pad shall extend two feet in front of the concrete pad for the full width of the concrete pad. If the utility meter socket is installed on the outside of the service cabinet, gravel pad shall also extend three feet from the side of the cabinet pad where the meter is installed. Final gravel area shall be a rectangle.

D9. Cabinet wells shall be provided for all Type 33x, Type 33xD, Type 342LX, and NEMA P44 Cabinets. See Note C3 on sheet 4 for Cabinet Well dimensions.

D10. At least one Generator Tie-Down Anchor shall be provided for each multi-cabinet pad foundation. A second Anchor shall be provided if there is a second cabinet with a Generator Transfer Switch (GTS). If a service or transformer cabinet is present, install one Anchor at either of the locations shown, closest to the cabinet with the GTS. If there is no service or transformer cabinet, install Anchors only at the ends of the cabinet riser.

KEY NOTES - SHEET 5 OF 6

(D1) Ground rod – See Note D1, this sheet.
(D2) Ground rod well (Ground tile) - 12" diameter concrete
(D3) Service ground electrode conduits.
(D4) Welded wire fabric – See Note D2, this sheet.
(D5) Utility entrance (service cabinet) or input power (transformer cabinet) conduit. Conduit shall terminate in the utility or high voltage section of the cabinet (as applicable).
(D6) Conduits to field equipment. Conduits shall terminate in the customer section (service cabinet) or low-voltage (transformer cabinet) of the cabinet.
(D7) Conduit couplers – See Note D5, this sheet.
(D8) Cabinet Well – See Note D9, this sheet.
(D9) 3/8" (in.) diam. polyethylene or copper tubing for drain. Tubing shall be straight, but slope downward a minimum of 1" (in.)
(D10) Generator Tie-Down Anchor – See Note D10, this sheet.
(D11) Riser lip shall be 1" (in.) from the base edge of the largest cabinet to the face of the concrete riser. Smaller cabinets shall be positioned so that the front riser lip is 1" (in.) wide.
(D12) For a Type A (Narrow) Pad, cabinet spacing shall be as follows:
a. 12" (in.) between cabinets where at least one cabinet has a police panel or GTS door.
b. 6" (in.) between cabinets where no police panel or GTS door is present.

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CABINET ORIENTATION CONDUIT LAYOUT AND FOUNDATION DETAIL

STANDARD PLAN J-10.10-04

SHEET 5 OF 6 SHEETS

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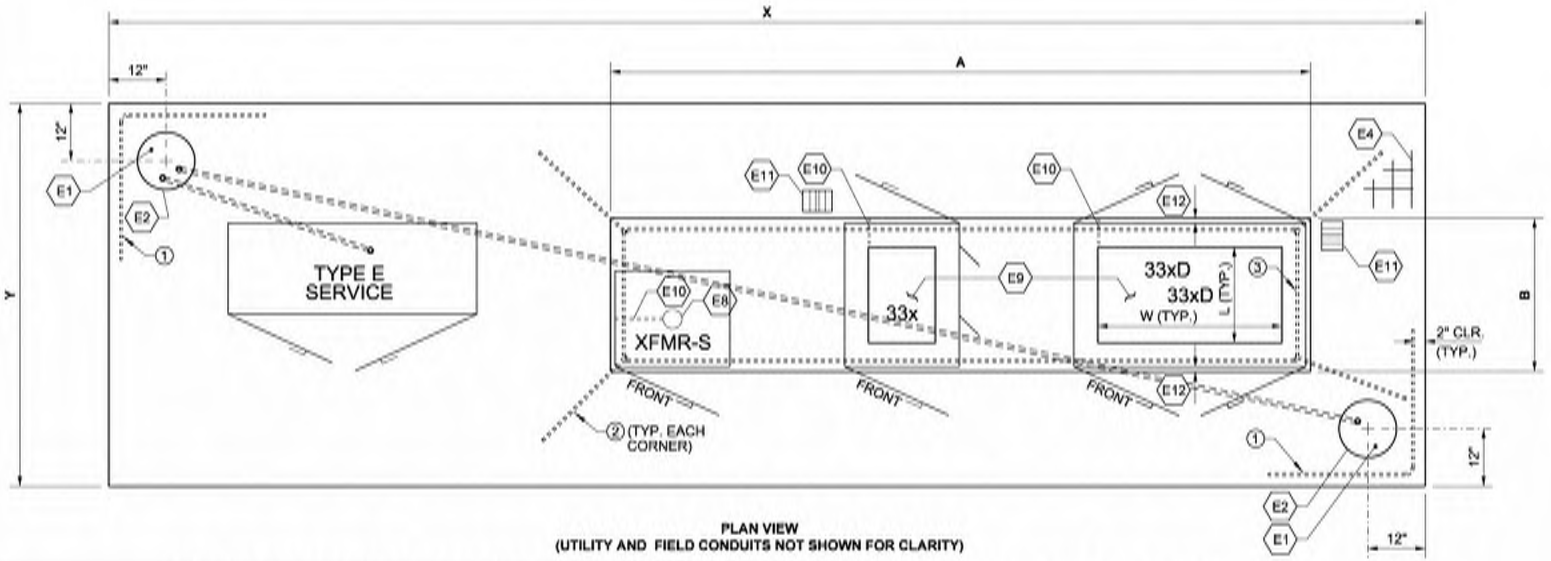


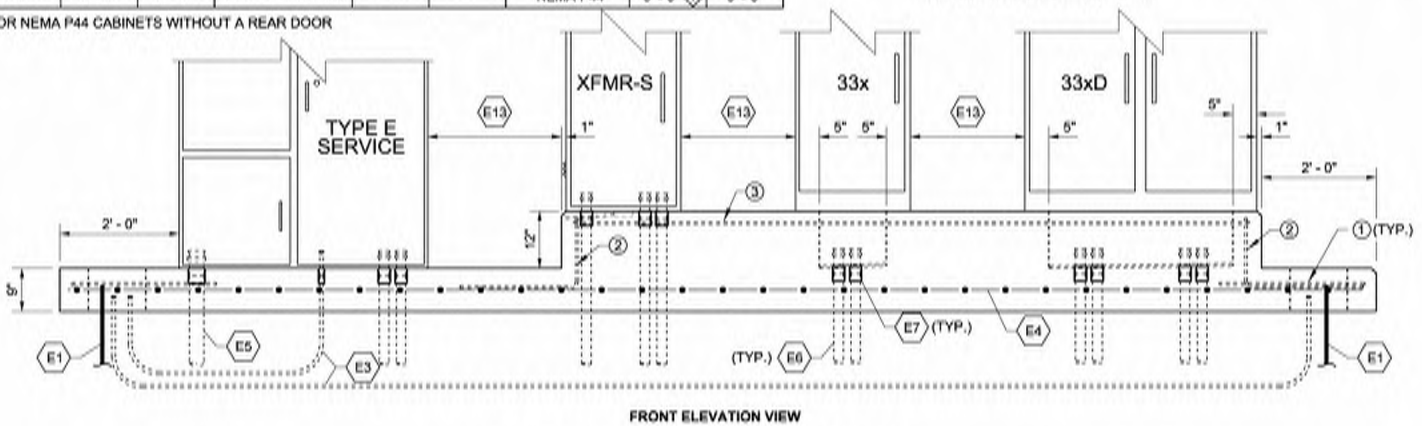
PLAN VIEW
(UTILITY AND FIELD CONDUITS NOT SHOWN FOR CLARITY)

CABINET CLEARANCE REFERENCE TABLE								
SERVICE CABINETS	LEFT SIDE	RIGHT SIDE	TRANSFORMER CABINETS	LEFT SIDE	RIGHT SIDE	SIGNAL AND ITS CABINETS	LEFT SIDE	RIGHT SIDE
TYPE B MOD.	1' - 10"	1' - 6"	XFMR-S (UP TO 12.5 KVA)	2' - 0"	6"	TYPE 33x	2' - 0"	2' - 0"
TYPE D	2' - 4"	6"				TYPE 33xD	2' - 0"	2' - 0"
TYPE E	2' - 0"	2' - 4"	XFMR-L (12.6 TO 37.5 KVA)	3' - 8"	6"	TYPE 342LX	1' - 10"	1' - 10"
						NEMA P44	3' - 8" 1	3' - 8"

1 6" FOR NEMA P44 CABINETS WITHOUT A REAR DOOR

FOR THE EXAMPLE PAD SHOWN HERE:
- SPACE BETWEEN TYPE E CABINET AND FACE OF CONCRETE RISER IS 2' - 4"
- SPACE BETWEEN XFMR-S CABINET AND 33x CABINET IS 2' - 0"
- SPACE BETWEEN 33x AND 33xD CABINET IS 2' - 0"
- OVERALL PAD WIDTH (X) = 22' - 11"
- OVERALL PAD DEPTH (Y) = 6' - 8"
- OVERALL RISER WIDTH (A) = 12' - 3"
- OVERALL RISER DEPTH (B) = 2' - 6"

FOUNDATION PAD DIMENSIONS X, Y, A, AND B SHOULD BE PROVIDED IN THE CONTRACT PLANS.



FRONT ELEVATION VIEW

TYPE B (WIDE) MULTI-CABINET FOUNDATION PAD
(TYPE E SERVICE CABINET, XFMR-S CABINET, TYPE 33x CABINET, AND TYPE 33xD CABINET SHOWN)

KEY NOTES - SHEET 6 OF 6

- E1 Ground rod ~ See Note D1, Sheet 5 of 6.
- E2 Ground rod well (Ground tile) - 12" diameter concrete
- E3 Service ground electrode conduits.
- E4 Welded wire fabric ~ See Note D2, Sheet 5 of 6.
- E5 Utility entrance (service cabinet) or input power (transformer cabinet) conduit. Conduit shall terminate in the utility or high voltage section of the cabinet (as applicable).
- E6 Conduits to field equipment. Conduits shall terminate in the customer section (service cabinet) or low-voltage (transformer cabinet) of the cabinet.
- E7 Conduit couplers ~ See Note D5, Sheet 5 of 6.
- E8 4" (in.) diam. x 1/2" (in.) deep sump. Slope foundation within cabinet footprint toward sump.
- E9 Cabinet Well ~ See Note D9, Sheet 5 of 6.
- E10 3/8" (in.) diam. polyethylene or copper tubing for drain. Tubing shall be straight, but slope downward a minimum of 1" (in.)
- E11 Generator Tie-Down Anchor ~ See Note D10, Sheet 5 of 6.
- E12 Riser lip shall be 1" (in.) from the base edge of the largest cabinet to the face of the concrete riser. Smaller cabinets shall be positioned so that the front riser lip is 1" (in.) wide.
- E13 For a **Type B** (Wide) Pad, spacing between the cabinets shall match the widest door of the two adjacent cabinets. For **Type D** and **Type E** Service Cabinets, the clearance is to the face of the adjacent concrete riser (when present). See left and right clearance table this sheet.

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CABINET ORIENTATION CONDUIT LAYOUT AND FOUNDATION DETAIL

STANDARD PLAN J-10.10-04

SHEET 6 OF 6 SHEETS

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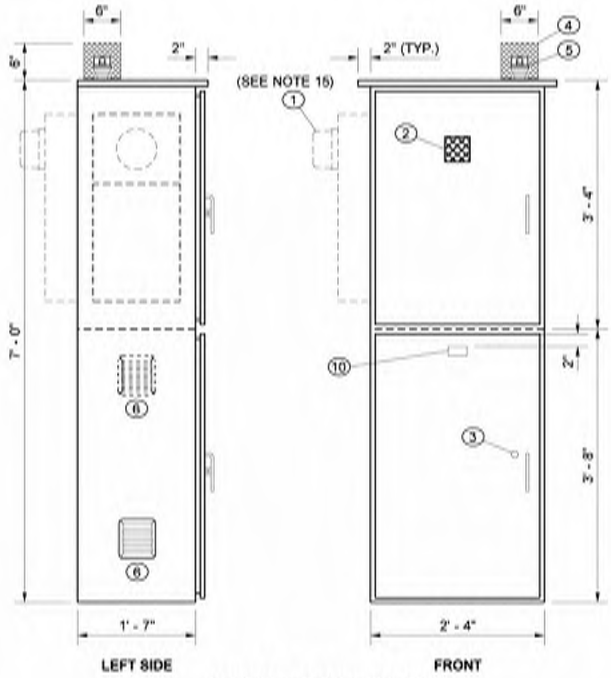
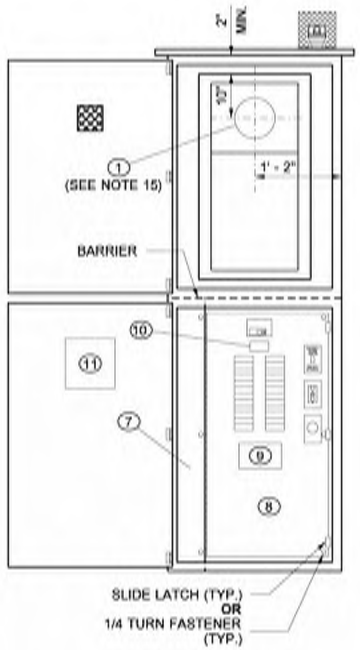


SERVICE CABINET DETAIL

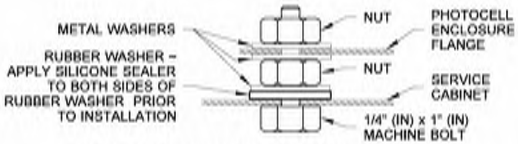


FRONT
(SHOWN WITH DOORS OPEN AND DEAD FRONT CLOSED)

SERVICE CABINET INTERIOR

KEY

1. METER SOCKET/BASE PANEL PER UTILITY REQUIREMENTS ~ UTILITY MAY REQUIRE METER TO BE INSTALLED ON THE OUTSIDE OF THE CABINET INSTEAD OF INSIDE THE UTILITY SECTION OF THE CABINET
2. UTILITY SECTION DOOR ~ HINGED FRONT FACING DOOR WITH 4" (IN) x 4" (IN) MINIMUM POLISHED WIRE GLASS WINDOW
3. CUSTOMER SECTION DOOR WITH BEST CX 6-PIN LOCK CORE
4. PHOTOCELL ENCLOSURE ~ SEE PHOTOCELL MOUNTING DETAIL ~ ENCLOSURE SHALL BE FABRICATED FROM EITHER:
   A. 6/8" (IN) EXPANDED STEEL MESH WITH WELDED SEAMS AND MOUNTING FLANGES ~ HOT-DIP GALVANIZED AFTER FABRICATION ~ OR ~
   B. TYPE 5052 - H32 ALUMINUM WITH 5/8" (IN) x 5/8" (IN) OPENINGS EQUIVALENT TO 5/8" (IN) EXPANDED STEEL MESH
5. PHOTOELECTRIC CONTROL ~ SEE **STANDARD SPECIFICATION, SECTION 9-29.11(2).**
6. SCREENED VENTS ~ TWO REQUIRED, ONE EACH SIDE ~ LOUVERED PLATES
7. 6" (IN) x 6" (IN) MIN. UTILITY WIREWAY ~ BACK LEFT CORNER OF CUSTOMER SECTION ~ SHALL REQUIRE TOOLS TO OPEN ~ LABEL WITH "UTILITY WIREWAY"
8. HINGED DEAD FRONT WITH 1/4 TURN FASTENERS OR SLIDE LATCHES ~ DEAD FRONT PANEL BOLTS SHALL NOT EXTEND INTO VERTICAL LIMITS OF THE BREAKER ARRAY(5)
9. ARC FLASH AND SHOCK HAZARD LABEL (FIELD INSTALLED) ~ SEE DETAIL
10. CABINET BUSSWORK RATING LABEL
11. METAL WIRING DIAGRAM HOLDER



PHOTOCELL ENCLOSURE MOUNTING DETAIL

NOTES

1. See **Standard Specification Section 9-29.24** (Service Cabinets).
2. Cabinet shall be rated NEMA 3R and shall include two rain-tight vents.
3. Dimensions shown are minimum and shall be adjusted to accommodate the various sizes of equipment installed. A 1% tolerance is allowed for all dimensions.
4. Doors shall be pad-lockable and gasketed. Customer side door shall include a Best CX 6-pin Construction core lock. Each door shall use either a continuous piano hinge, three two-piece hinges, or two heavy-duty lift-off type hinges.
5. Hinges with pins shall have stainless steel or brass pins - see **Standard Plan J-10.20** door hinge details. When using two piece hinge type on galvanized enclosure, remove hinge pin prior to welding hinge to cabinet and prior to hot-dip galvanizing. After galvanizing, replace pin with brass pin and solder in place.
6. Equipment identified by Key Numbers **14**, **16**, **17**, **18**, **19**, **20**, **21**, **22**, **23**, and **28** shall have an appropriately engraved phenolic name plate attached with screws or rivets. The name plate for Key Number 21 (Test Switch only) shall read as follows:
   "PHOTOCELL BYPASS TEST ON" AND "PHOTOCELL TEST OFF - AUTOMATIC."
   See service cabinet detail.
7. All busswork shall be **ASTM B187** copper and shall have a minimum rating of 250 amps. All breakers shall bolt on to the busswork. Jumpering of breakers shall not be allowed. Busswork shall accommodate all future equipment as shown in the Breaker Schedule.
8. All nuts, bolts, and washers used for mounting the photocell enclosure shall be stainless steel.
9. The photocell unit shall be centered in the photocell enclosure to permit 360 degree rotation of the photocell without removal of the photocell unit or the photocell enclosure.
10. All internal wire runs shall be identified with "TO - FROM" coded tags labeled with the code letters and/or numbers shown on the Schedules. Approved PVC or polyolefin wire marking sleeves shall be used.
11. Key items **23**, **24**, and **25** shall be connected to the cabinet main bonding jumper assembly by appropriately sized wire.
12. See Contract for Breaker and Contactor Schedule.
13. Buss bars shall be sized to accommodate up to **#4** AWG wires.
14. The meter base portion of this service was designed to meet metering portion of **EUSERC Drawing 309** requirements.
15. Metering arrangements vary with different serving Utilities. The Utility may require meter base mounting in the enclosure, on the side, or on the back of the enclosure. The Utility may require the dimension between the door and the front of the safety socket box to be less than the 11" (in) shown in the Left Side - Safety Socket Box Mounting Detail. The Contractor shall verify the serving Utility's requirements prior to fabrication and installation of the service equipment.
16. Verify the meter setback position with the utility and adjust the meter socket backplate to the required position. For cabinets with separate metering, remove the meter socket or install shunts in the meter socket.

ARC FLASH AND SHOCK HAZARD LABEL DETAIL
(9)

Aug 18, 2021

SERVICE CABINET TYPE D (0 - 200 AMP TYPE 120/240 VOLT SINGLE PHASE)

STANDARD PLAN J-10.21-02

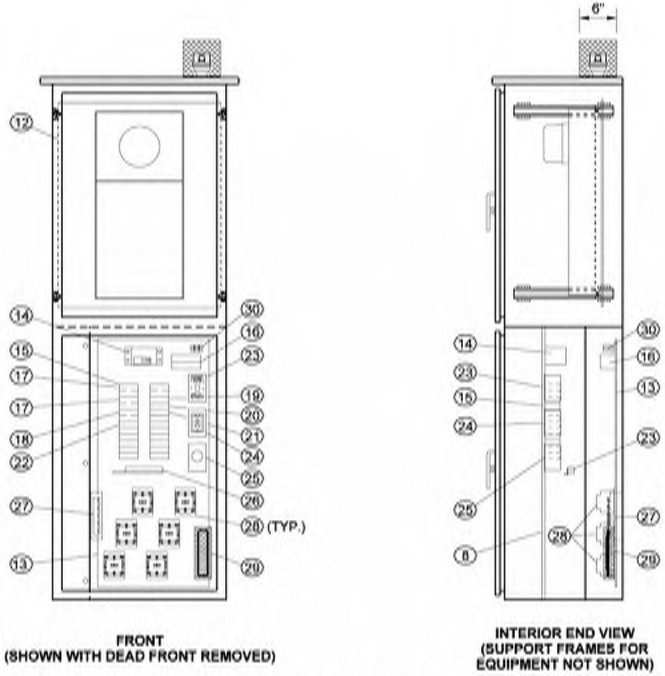
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Aug 18, 2021
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL

KEY (CONTINUED)

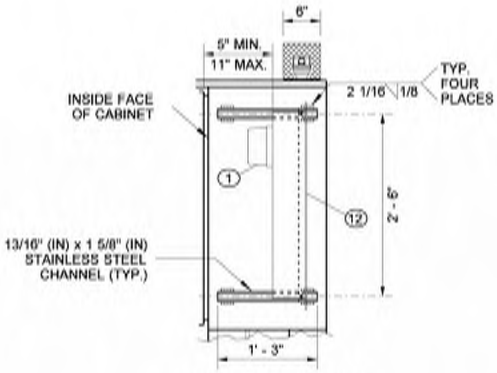
(12) ALUMINUM BACKPLATE FOR METER SOCKET/BASE
(13) 18" (IN) WIDE BY 40" (IN) TALL ALUMINUM BACKPLATE FOR CUSTOMER SECTION EQUIPMENT
(14) MAIN BREAKER ~ DPST ~ SIZE PER BREAKER SCHEDULE
(15) 24-CIRCUIT PANEL BOARD ~ MINIMUM SIZE WITH SEPARATE MAIN BREAKER
(16) 20 KA TYPE 1 OR TYPE 2 SURGE PROTECTION DEVICE ~ DIN RAIL MOUNT WITH PLUG-IN MODULE(S)
(17) DPST BRANCH BREAKER ~ SEE BREAKER SCHEDULE
(18) SPARE BRANCH BREAKER ~ 20 AMP DPST ~ OMIT IF BREAKER ARRAY IS FULL (SEE BREAKER SCHEDULE)
(19) PHOTOCELL BREAKER ~ SPST 15 AMP
(20) RECEPTACLE BREAKER ~ SPST 20 AMP
(21) HEATER BREAKER ~ SPST 15 AMP
(22) SPST BRANCH BREAKER ~ SEE BREAKER SCHEDULE
(23) SINGLE GANG BOX WITH TEST SWITCH ~ 120/277 VOLT 15 AMP SPDT SNAP ACTION - POSITIVE CLOSE - "T" RATED
(24) SINGLE GANG BOX WITH RECEPTACLE (GROUNDED) ~ 125 VOLT 20 AMP GFCI
(25) SINGLE GANG BOX WITH THERMOSTAT CONTROL ~ 40° F CLOSURE - 3 DIFFERENTIAL
(26) ISOLATED NEUTRAL BUSS ~ 14 LUG COPPER (SEE NOTE 12)
(27) CABINET MAIN BONDING JUMPER ASSEMBLY ~ BUSS SHALL BE 14 LUG TINNED COPPER (SEE NOTE 12) ~ SEE CABINET MAIN BONDING JUMPER ASSEMBLY DETAIL
(28) CONTACTOR (BEHIND DEAD FRONT) ~ SEE BREAKER SCHEDULE
(29) STRIP HEATER (100 WATT NOMINAL) WITH EXPANDED STEEL MESH ENCLOSURE FOR TOUCH PROTECTION
(30) THREE POSITION DIN RAIL MOUNTED TERMINAL BLOCK ~ TERMINAL BLOCK SECTIONS SHALL BE BLACK, WHITE, AND RED AS SHOWN IN CABINET WIRING DIAGRAM.



FRONT
(SHOWN WITH DEAD FRONT REMOVED)

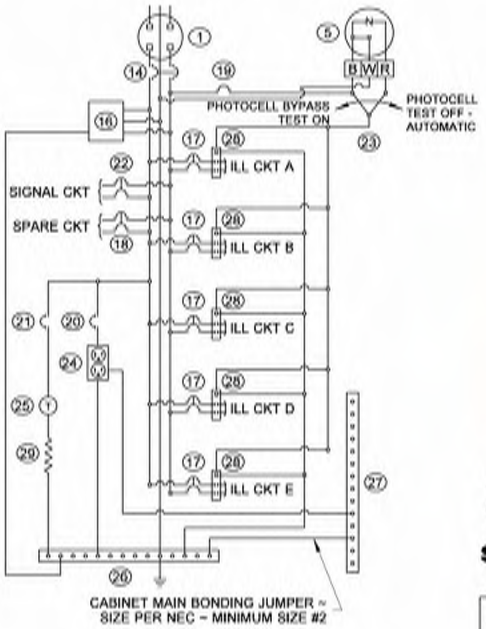
INTERIOR END VIEW
(SUPPORT FRAMES FOR EQUIPMENT NOT SHOWN)

SERVICE CABINET INTERIOR DETAIL

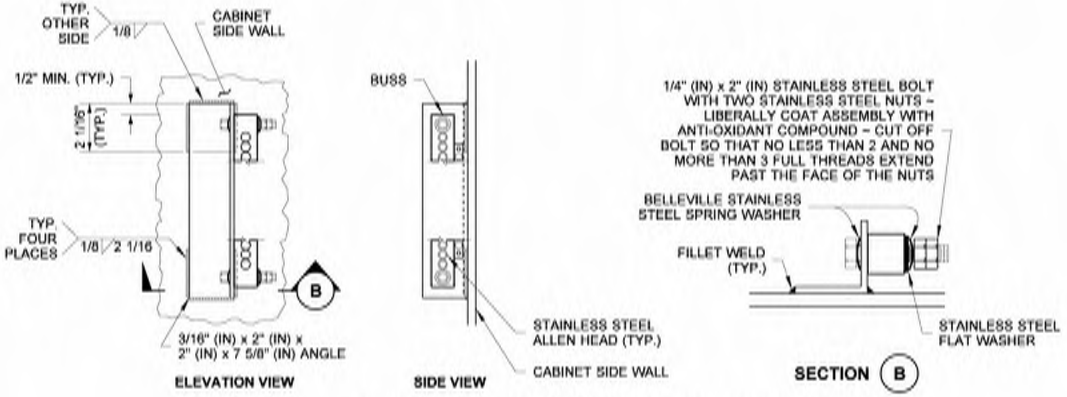


UTILITY SECTION DETAIL

TEST SWITCH LABEL DETAIL
(23)



WIRING SCHEMATIC



CABINET MAIN BONDING JUMPER ASSEMBLY DETAIL

Aug 18, 2021

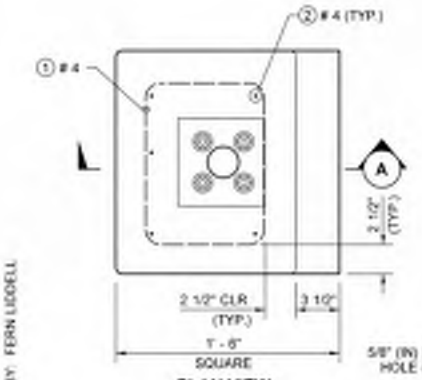
SERVICE CABINET TYPE D (0 - 200 AMP TYPE 120/240 VOLT SINGLE PHASE)

STANDARD PLAN J-10.21-02

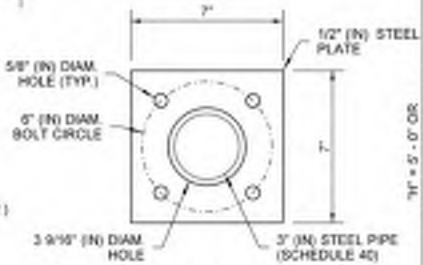
SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION
Aug 18, 2021
STATE DESIGN ENGINEER
Washington State Department of Transportation

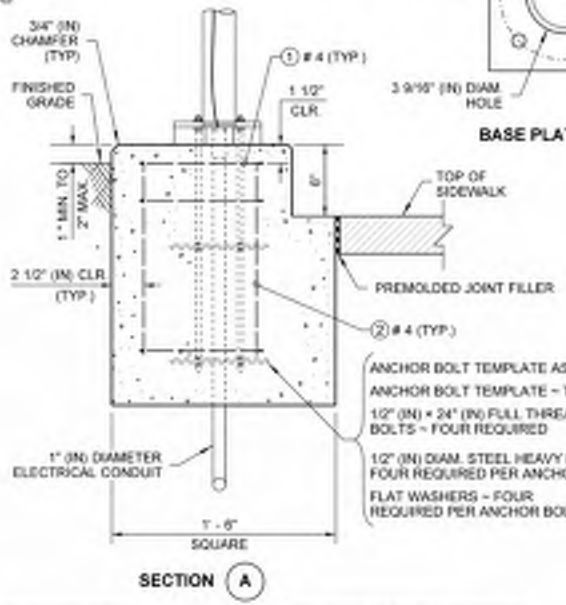
DRAWN BY: FERN LEDELL



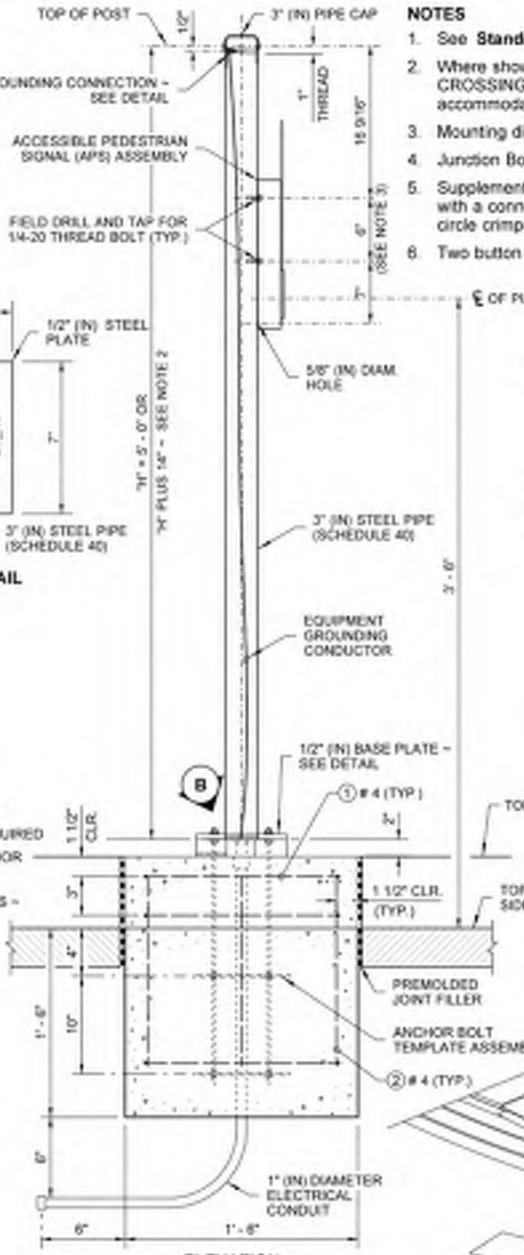
PLAN VIEW



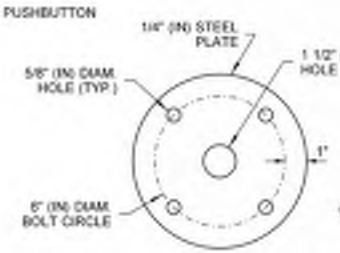
BASE PLATE DETAIL



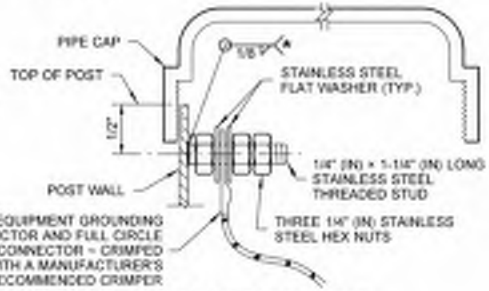
SECTION (A)



ELEVATION



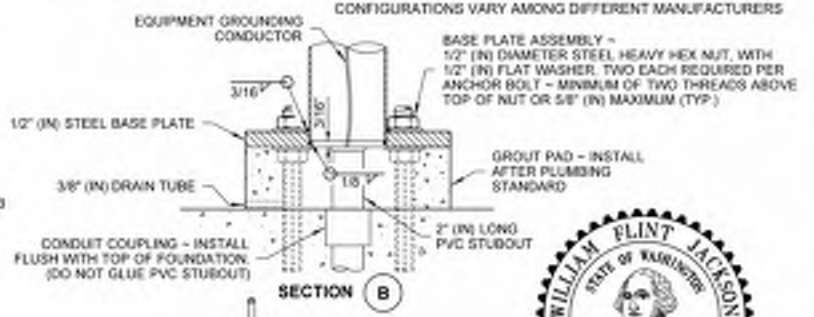
ANCHOR BOLT TEMPLATE



GROUNDING CONNECTION DETAIL

* WELD STUD TO POLE WALL TO MAXIMUM EXTENT POSSIBLE ~ 1/2" (IN) MINIMUM WELD

CONFIGURATIONS VARY AMONG DIFFERENT MANUFACTURERS



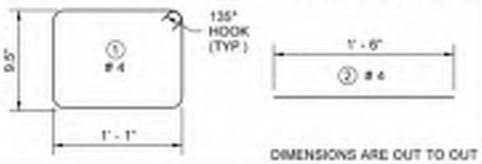
SECTION (B)

NOTES

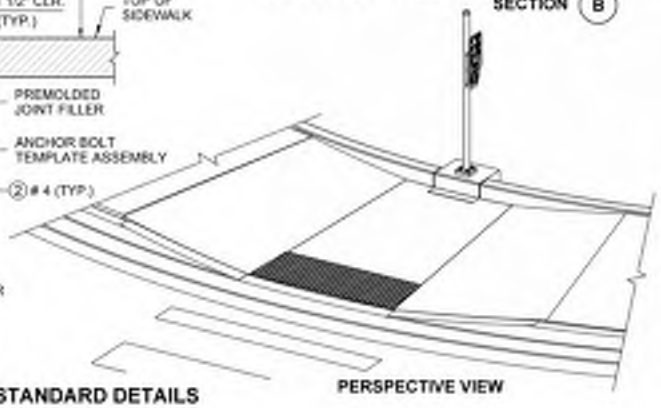
1. See **Standard Plan J-20.26** for Accessible Pedestrian Pushbutton details.
2. Where shown in the plans, install plaque (R10-32P) "PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME" above the Accessible Pedestrian Signal (APS) assembly. Add 14" (in) to the PPB post height to accommodate plaque and leave a 2" (in) space between signs.
3. Mounting distances vary between manufacturers. See manufacturers recommendations for mounting information.
4. Junction Box serving the Standard shall preferably be located 5' - 0" (10' - 0" Max.) from the Standard.
5. Supplemental Grounding Conductor shall be non-insulated #4 AWG stranded copper and shall be clamped to vertical rebar with a connector suitable for use embedded in concrete: Provide 3' - 0" min. slack. Attach to pole grounding stud with a full circle crimp-on connector (crimped with a manufacturer recommended crimper).
6. Two button installation may require adaptor(s).

REINFORCING STEEL BENDING DIAGRAM

SEE **STD. SPEC. SECTN. 9-07.1(2)** FOR BENDING DIAMETERS



DIMENSIONS ARE CUT TO CUT



PERSPECTIVE VIEW

TYPE PPB STANDARD DETAILS

WILLIAM FLINT JACKSON
STATE OF WASHINGTON
49821
REGISTERED
PROFESSIONAL ENGINEER

Jackson, Flint
Jul 29 2019 2:54 PM

ACCESSIBLE PEDESTRIAN PUSHBUTTON WITH CURB BASE
STANDARD PLAN J-20.11-03

SHEET 1 OF 2 SHEETS

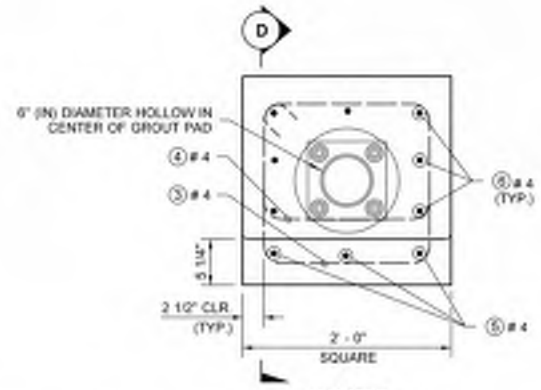
APPROVED FOR PUBLICATION

Roark, Steve
Jul 31 2019 12:14 PM

STATE DESIGN ENGINEER

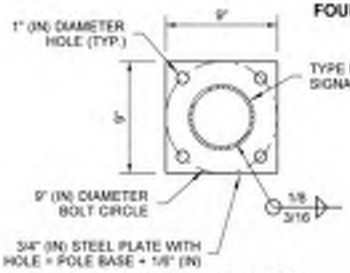
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



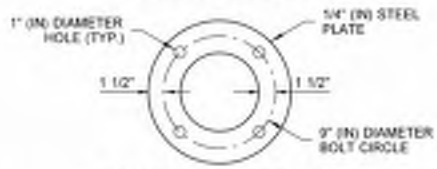
PLAN VIEW

FOUNDATION DETAILS

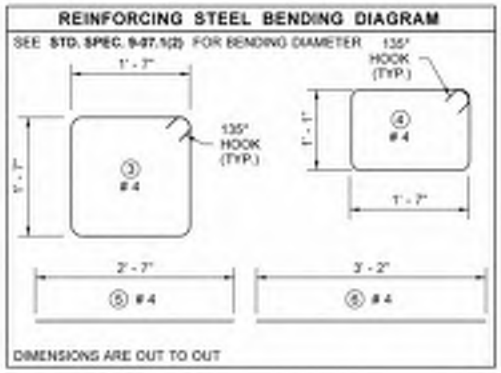


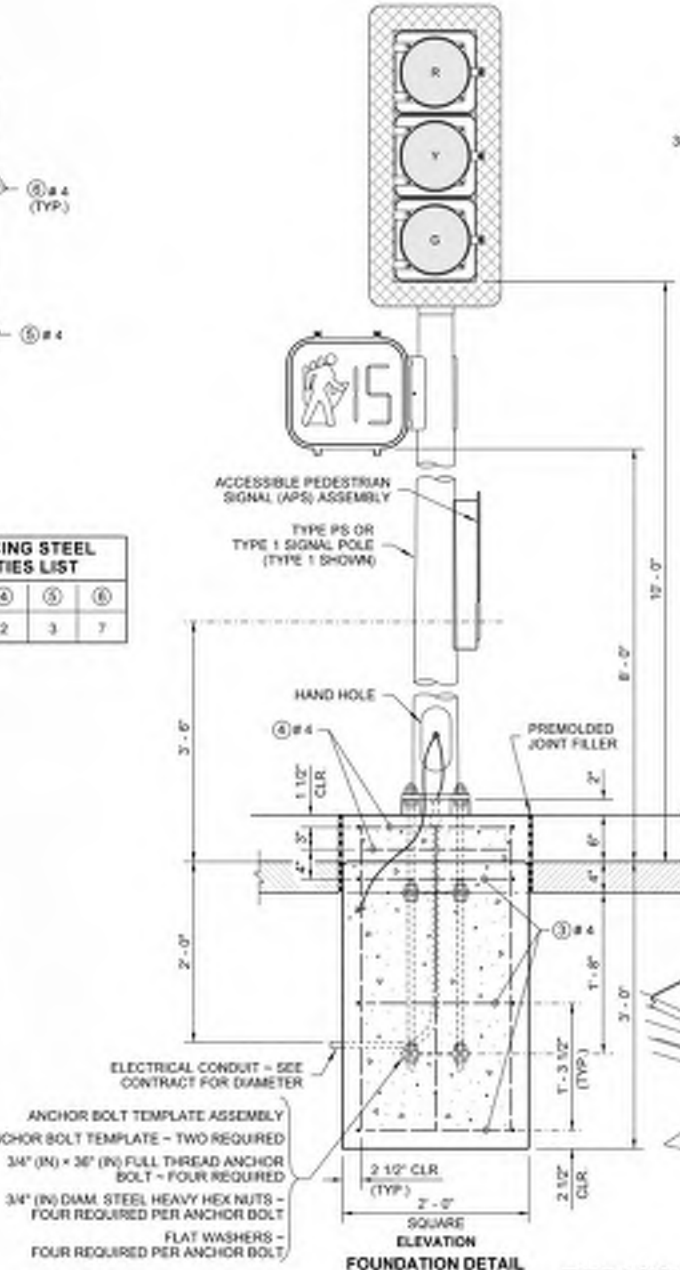
BASE PLATE DETAIL

REINFORCING STEEL QUANTITIES LIST				
MARK	③	④	⑤	⑥
QTY.	3	2	3	7



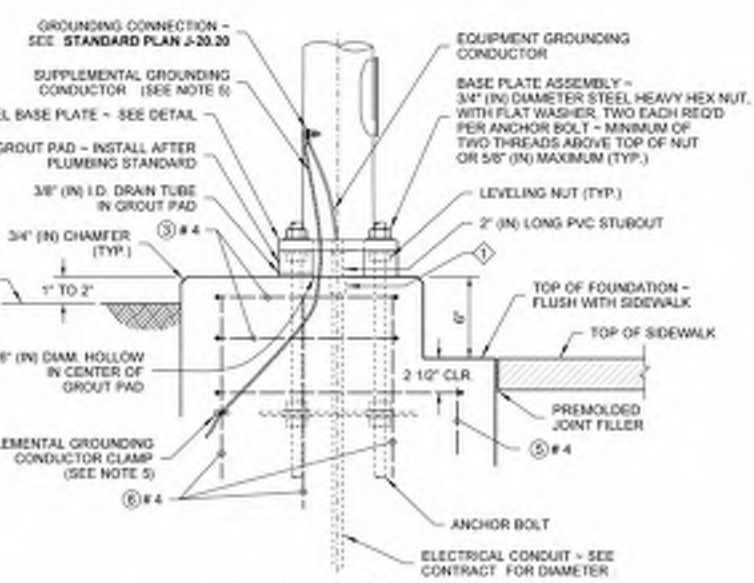
ANCHOR BOLT TEMPLATE





ELEVATION

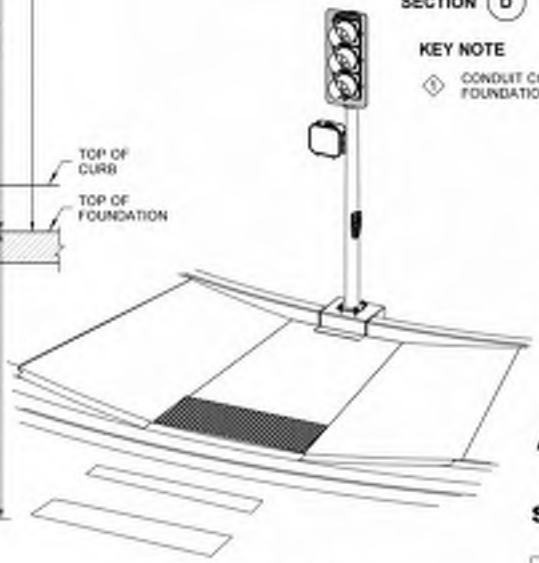
FOUNDATION DETAIL



SECTION D

KEY NOTE

1 CONDUIT COUPLING ~ INSTALL FLUSH WITH TOP OF FOUNDATION. (DO NOT GLUE PVC STUBOUT)



PERSPECTIVE VIEW

TYPE 1 SIGNAL STANDARD DETAILS

Jackson, Flint
Jul 29 2019 2:14 PM

ACCESSIBLE PEDESTRIAN PUSHBUTTON WITH CURB BASE STANDARD PLAN J-20.11-03

SHEET 2 OF 2 SHEETS

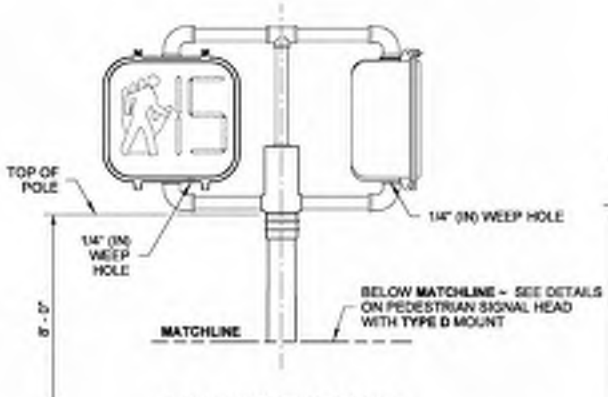
APPROVED FOR PUBLICATION

Roach, Steve
Jul 31 2019 12:14 PM

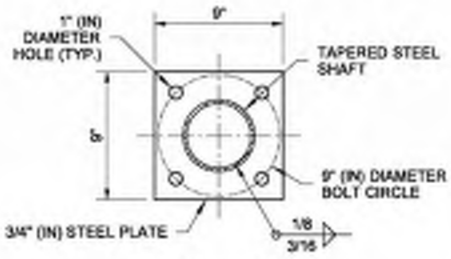
STATE DESIGN ENGINEER

Washington State Department of Transportation

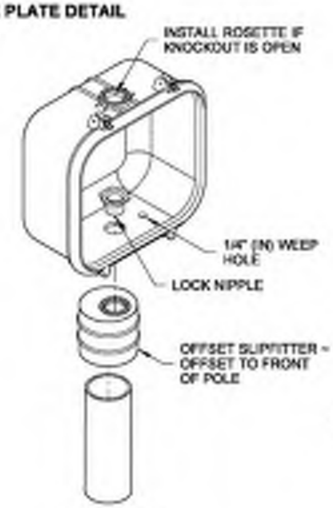
DRAWN BY: FERN LIDDELL



TYPE C MOUNT PLACEMENT

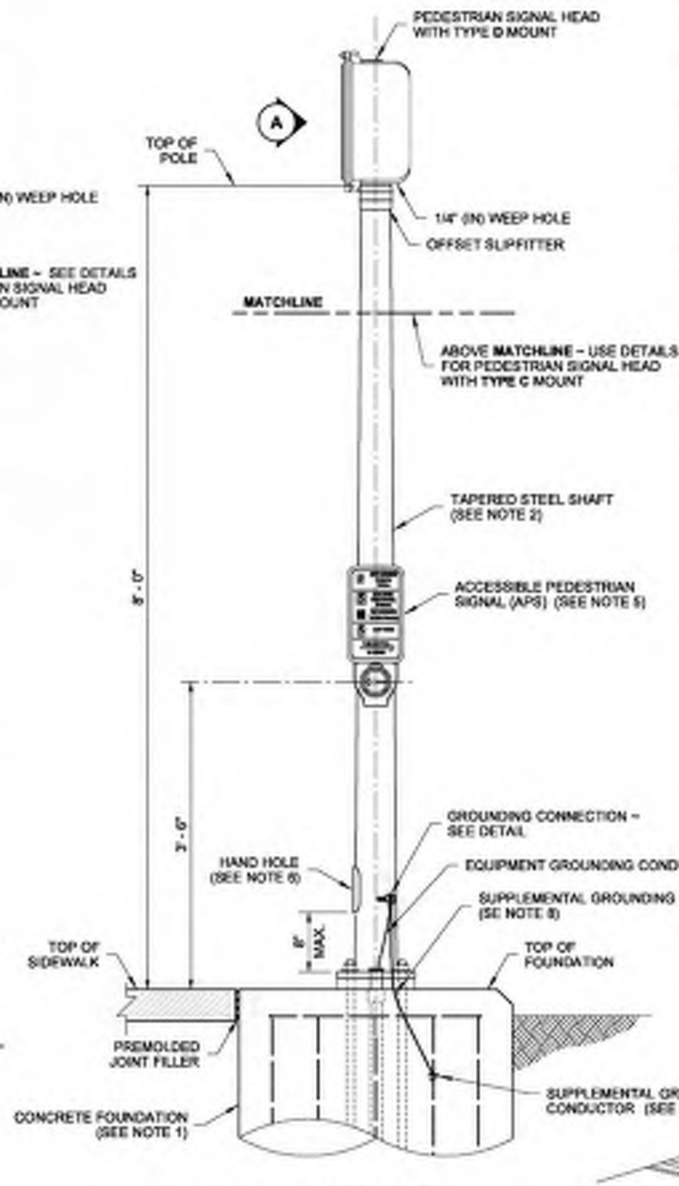


BASE PLATE DETAIL



VIEW (A)

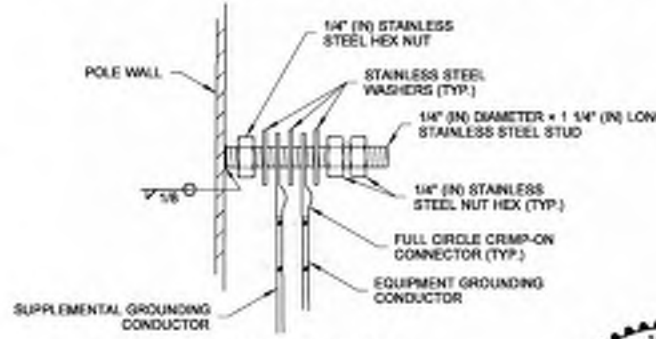
TYPE D MOUNTING DETAIL



TYPE D MOUNT
PEDESTRIAN SIGNAL STANDARD
(FIXED BASE SHOWN)

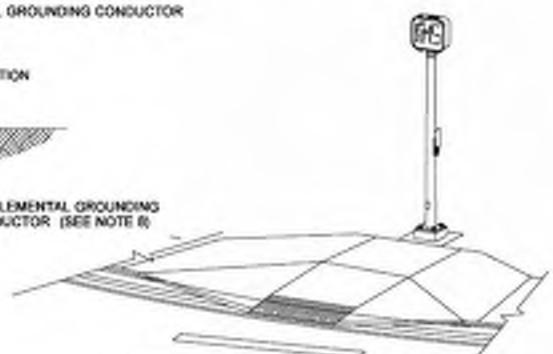
NOTES

1. See **Standard Plan J-21.10** for Signal Standard Foundation with Fixed Base and Slip Base details.
2. Steel shaft shall be tapered either round or dodecagon (12-sided), 11 gage, 4 1/2" (in) O.D. at slipfitter weld. Taper shall be 0.14" (in) per foot.
3. Welding of structures shall be in accordance with the latest edition of the AWS D1.1 Structural Welding Code - Steel. All butt welds shall be ground flush with base metal.
4. See **Standard Plan J-20.26** for Accessible Pedestrian Pushbutton details.
5. See **Standard Plan J-20.20** for Accessible Pedestrian Signal Standard Electrical details.
6. Hand holes shall include a removable, rain-tight cover and gasket, fastened with two stainless steel screws (ASTM 593).
7. Supplemental grounding conductor shall be non-insulated #4 AWG stranded copper and shall be clamped to vertical rebar with a connector suitable for use embedded in concrete. Provide 3' - 0" min. slack. Attach to pole grounding stud with a full circle crimp-on connector (crimped with a manufacturer recommended crimper).
8. The junction box serving the standard shall preferably be located 5' - 0" (10' - 0" max.) from the standard.
9. Where shown in the plans, install plaque (R10 - 32P) "PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME" two inches above the Accessible Pedestrian Signal (APS) Assembly.



GROUNDING CONNECTION DETAIL

Bailey, Ted
Jun 26 2014 4:26 PM



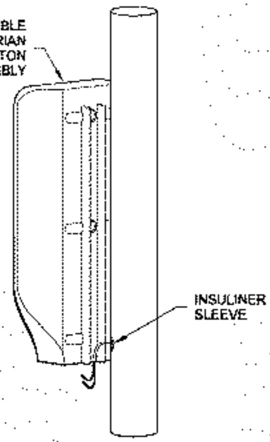
PERSPECTIVE VIEW

PEDESTRIAN SIGNAL STANDARD (TYPE PS) DETAILS
STANDARD PLAN J-20.16-02

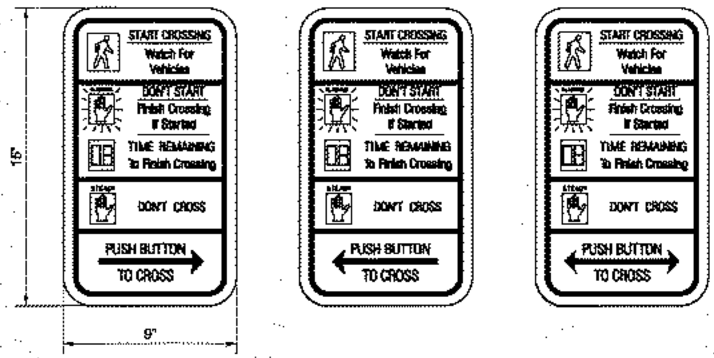
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Bakotich, Pasco
Jun 30 2014 3:12 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: LISA CYFORD

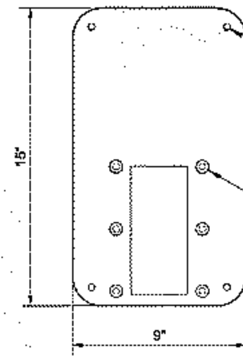


WIRE ROUTING
PERSPECTIVE VIEW

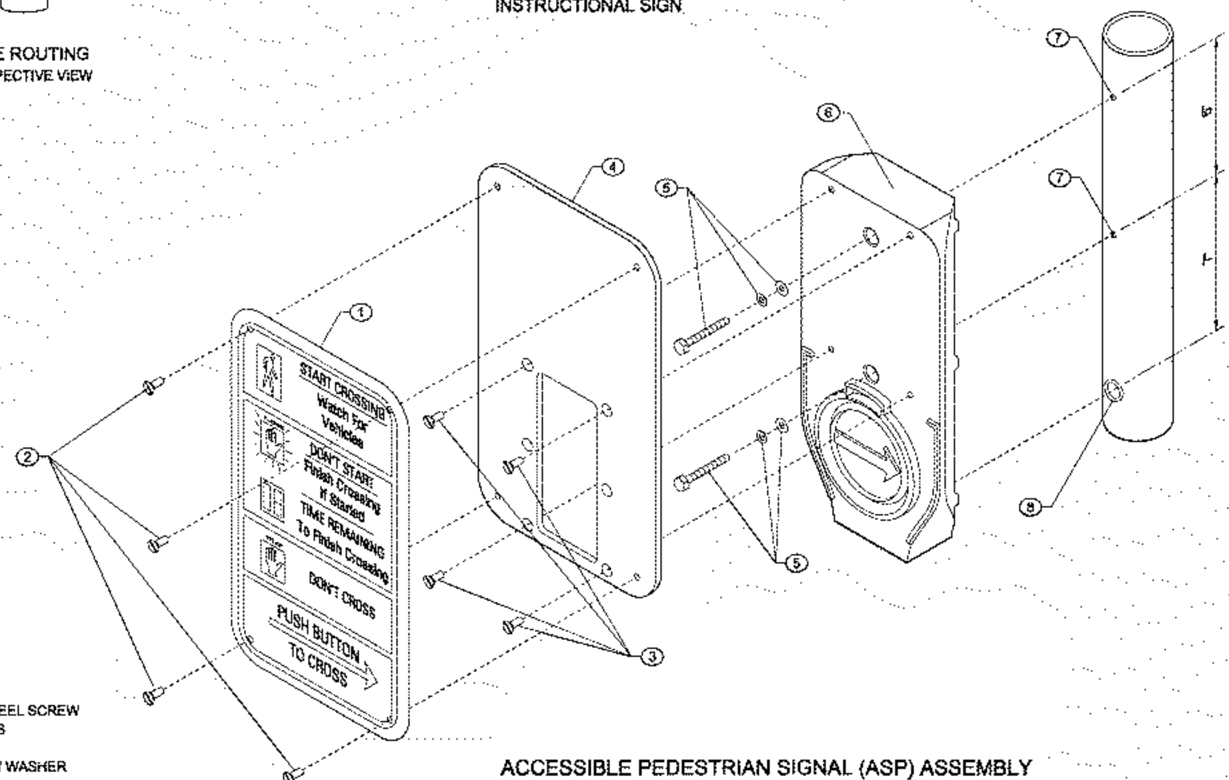


R10-3e (RIGHT) R10-3e (LEFT) R10-3e (MOD.)

PEDESTRIAN PUSHBUTTON INSTRUCTIONAL SIGN



PEDESTRIAN PUSHBUTTON FRAME ADAPTER

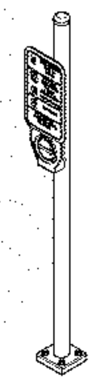


ACCESSIBLE PEDESTRIAN SIGNAL (ASP) ASSEMBLY

METAL POLE INSTALLATION
PPB-M

KEY

1. FACE PLATE
2. 1/4-20 × 3/8" LONG STAINLESS STEEL SCREW
3. 1/4-20 STAINLESS STEEL SCREWS
4. PUSHBUTTON FRAME ADAPTER
5. 1/4-20 STAINLESS STEEL BOLT W/ WASHER AND LOCK WASHER
6. PUSHBUTTON STATION
7. DRILL AND TAP SHAFT FOR 1/4" DIAM. BOLT
8. DRILL AND TAP SHAFT FOR 5/8" WIRE GUIDE HOLE - ADD INSULINER



ISOMETRIC VIEW
(METAL POLE SHOWN)

ACCESSIBLE PEDESTRIAN PUSHBUTTON (PPB) DETAILS

STANDARD PLAN J-20.26-01

SHEET 1 OF 2 SHEETS

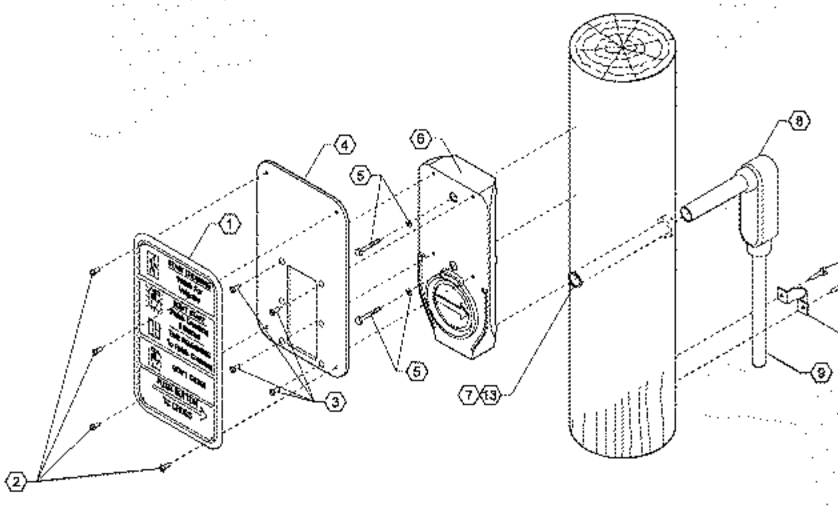
APPROVED FOR PUBLICATION

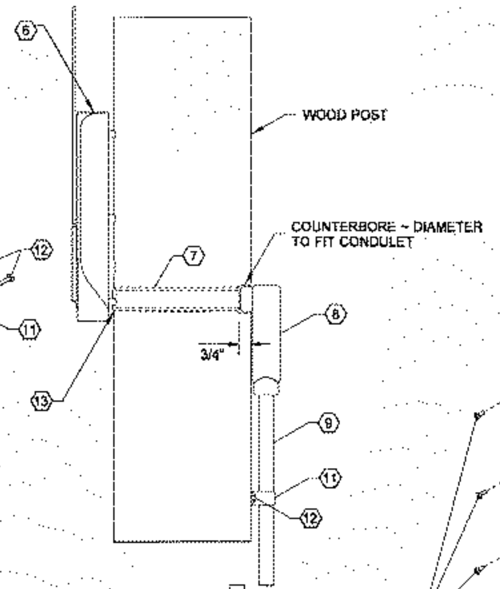
Pasco Bakotich III 7/12/12

STATE DESIGN ENGINEER DATE

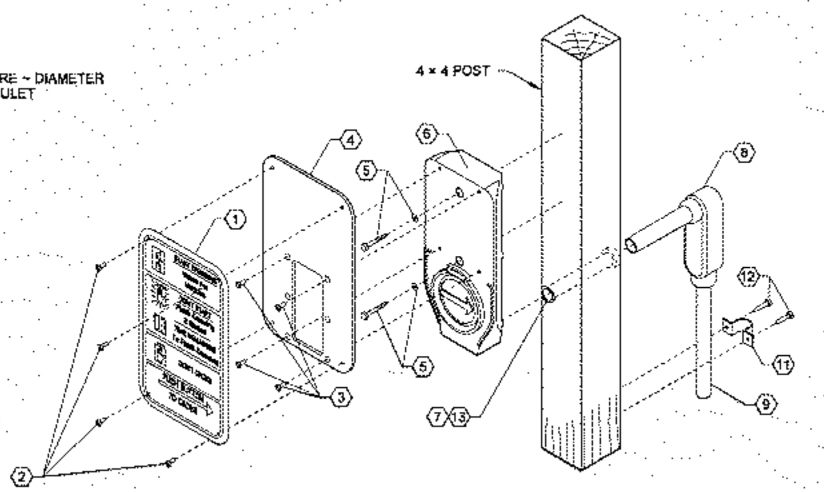
Washington State Department of Transportation

DRAWN BY: LISA CYFORD

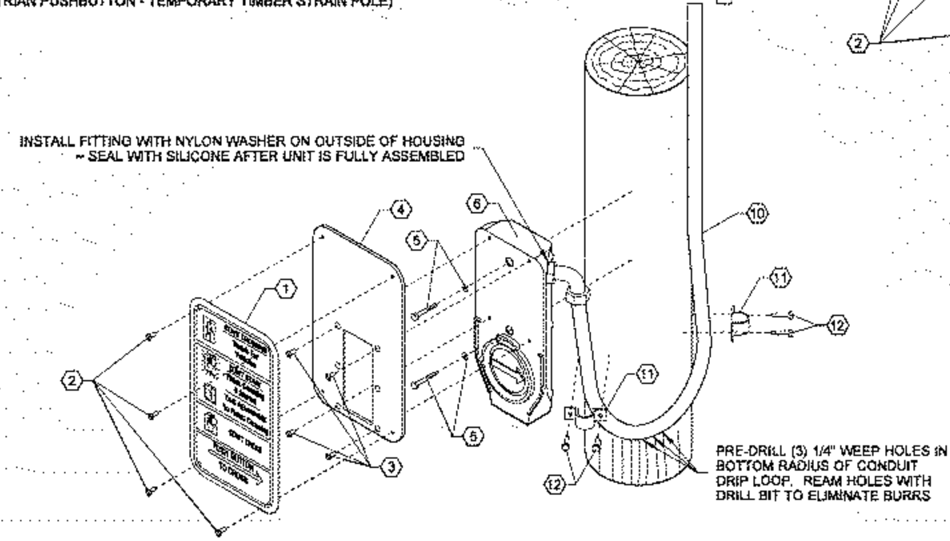




WOOD POLE INSTALLATION
ALTERNATIVE 1
PPB-W
(ACCESSIBLE PEDESTRIAN PUSHBUTTON - TEMPORARY TIMBER STRAIN POLE)



WOOD POLE INSTALLATION
ALTERNATIVE 3
PPB-W
(ACCESSIBLE PEDESTRIAN PUSHBUTTON - TEMPORARY TIMBER POLE)



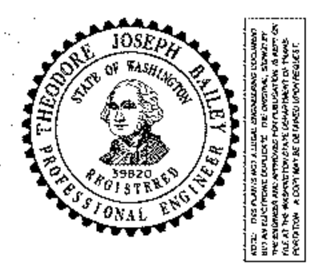
KEY

1. FACE PLATE
2. 1/4-20 × 3/8" LONG STAINLESS STEEL SCREW
3. 1/4-20 STAINLESS STEEL SCREWS
4. PUSHBUTTON FRAME ADAPTER
5. LAG BOLT WITH WASHER
6. PUSHBUTTON STATION
7. CONDUIT DIAMETER + 1/8" HOLE THRU POLE
8. CONDULET
9. 3/4" CONDUIT
10. LIQUID-TITE FLEX CONDUIT
11. ONE PIECE TWO HOLE CLAMP
12. LAG BOLT
13. INSULINER SLEEVE

ACCESSIBLE PEDESTRIAN SIGNAL (ASP) ASSEMBLY

WOOD POLE INSTALLATION
ALTERNATIVE 2
PPB-W
(ACCESSIBLE PEDESTRIAN PUSHBUTTON - TEMPORARY TIMBER STRAIN POLE)

TEMPORARY TIMBER POLE



ACCESSIBLE PEDESTRIAN PUSHBUTTON (PPB) DETAILS

STANDARD PLAN J-20.26-01

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

Pasco Bakotich III — STATE DESIGN ENGINEER — *7/12/12* — DATE

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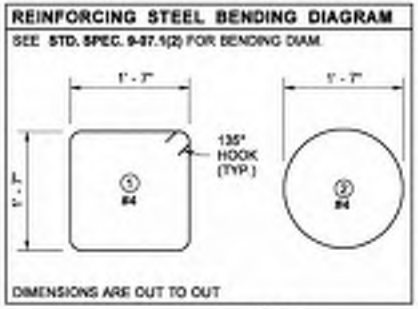
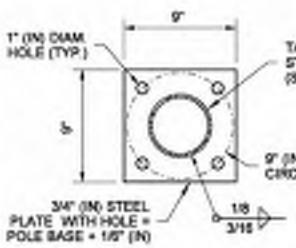
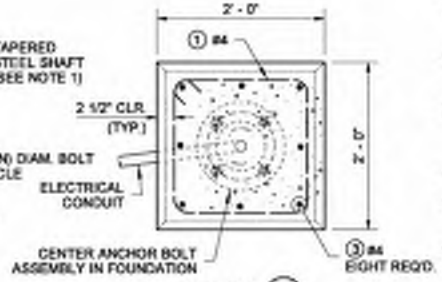




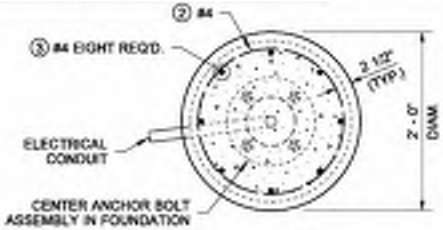
BASE PLATE DETAIL



SECTION (B)

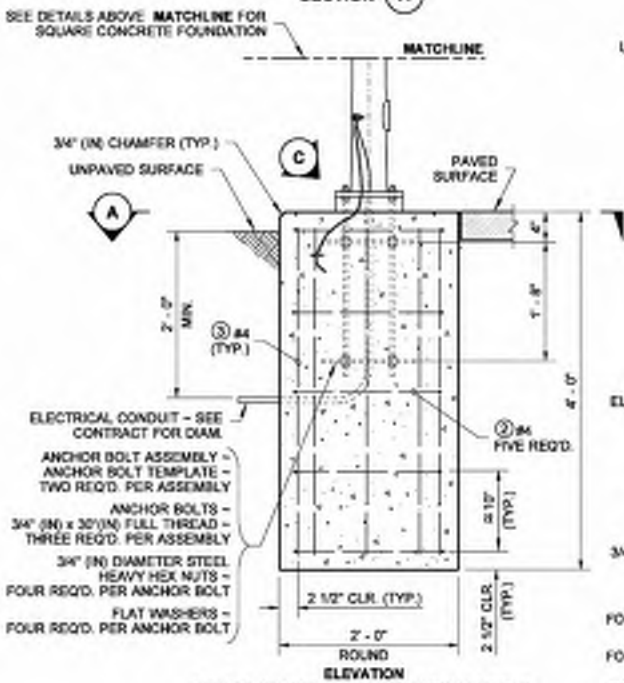
NOTES

1. Clamping bolts shall be tightened to 50 ft-lbs max. torque. After state inspection, burr threads to prevent nut rotation. DO NOT OVERTIGHTEN.
2. The final height of the Anchor Bolts shall be below the top of the slip plate assembly to ensure proper function of the slip base.
3. Supplemental grounding conductor shall be non-insulated #4 AWG stranded copper and shall be clamped to vertical rebar with a connector suitable for use embedded in concrete. Provide 3' - 0" min. slack. Attach to pole grounding stud with a full circle crimp-on connector (crimped with a manufacturer recommended crimper).
4. Junction box serving the Standard shall preferably be located 5' - 0" (10' - 0" Max.) from the Standard.
5. Provide cable tie at wiring entering the junction box (for slip base installations only) – See **Detail A, Standard Plan J-28.70**.
6. Keeper Plate shall not extend beyond the edges of the pole base plate.



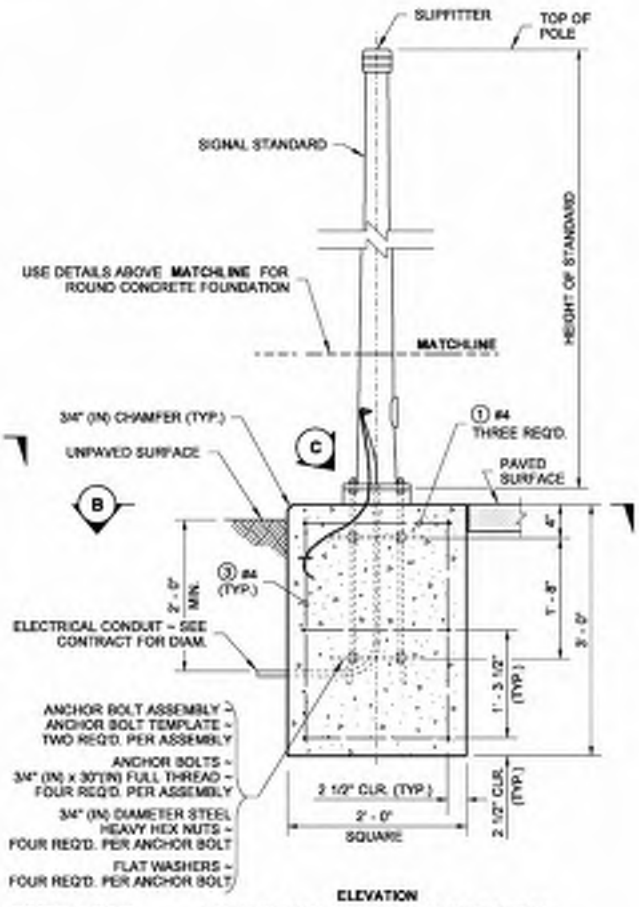
SECTION (A)

DRAWN BY: PERN UDDELL



ELEVATION

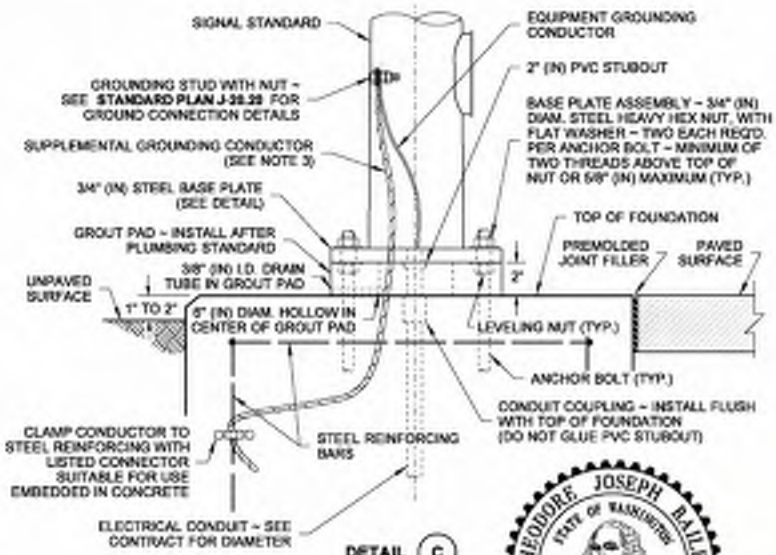
ROUND CONCRETE FOUNDATION DETAIL



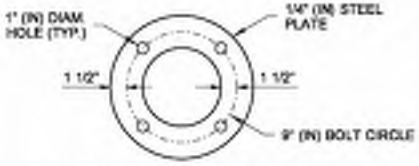
ELEVATION

SQUARE CONCRETE FOUNDATION DETAIL

FIXED BASE



DETAIL (C)



ANCHOR BOLT TEMPLATE

Bailey, Ted
Jun 26 2014 4:29 PM

TYPE PS, TYPE 1, RM & FB SIGNAL STANDARD FOUNDATION DETAILS

STANDARD PLAN J-21.10-04

SHEET 1 OF 2 SHEETS

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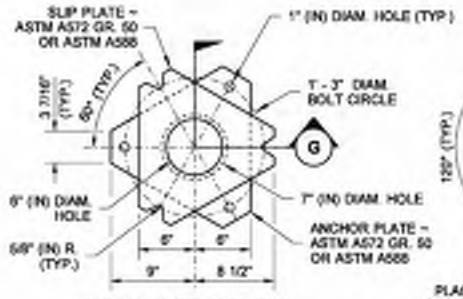
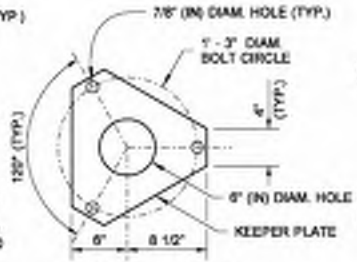


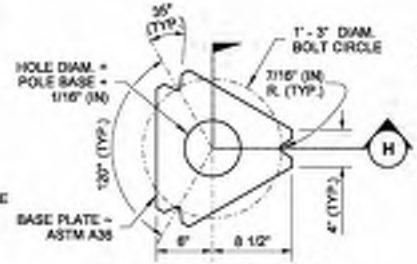
FOR DIMENSIONS NOT SHOWN, SEE BASE PLATE DETAIL

SLIP AND ANCHOR PLATES DETAIL



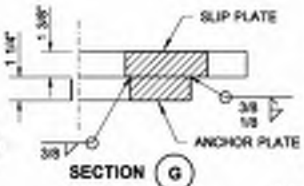
(28 GAGE SHEET METAL) PLACE BETWEEN POLE BASE PLATE AND SLIP PLATE ON TOP OF MIDDLE WASHERS – SEE **STANDARD PLAN J-28.42**

KEEPER PLATE DETAIL

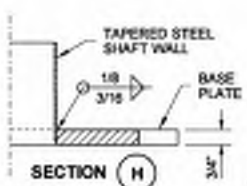


FOR DIMENSIONS NOT SHOWN, SEE SLIP AND ANCHOR PLATES DETAIL

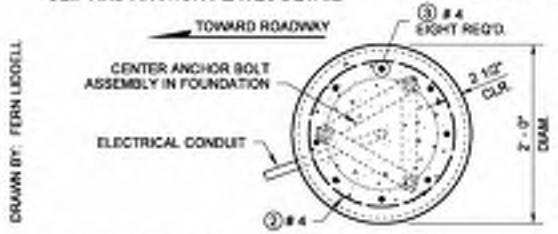
BASE PLATE DETAIL



SECTION G



SECTION H



SECTION D

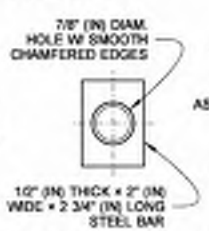
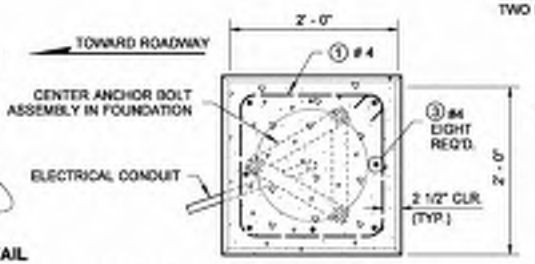
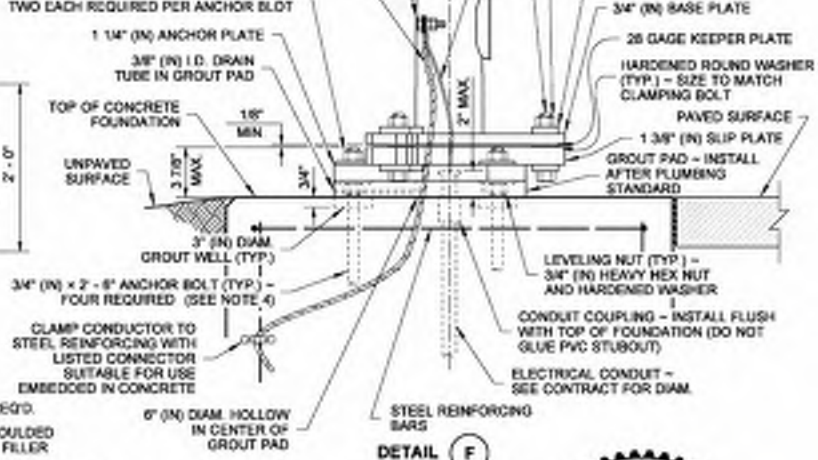


PLATE WASHER DETAIL



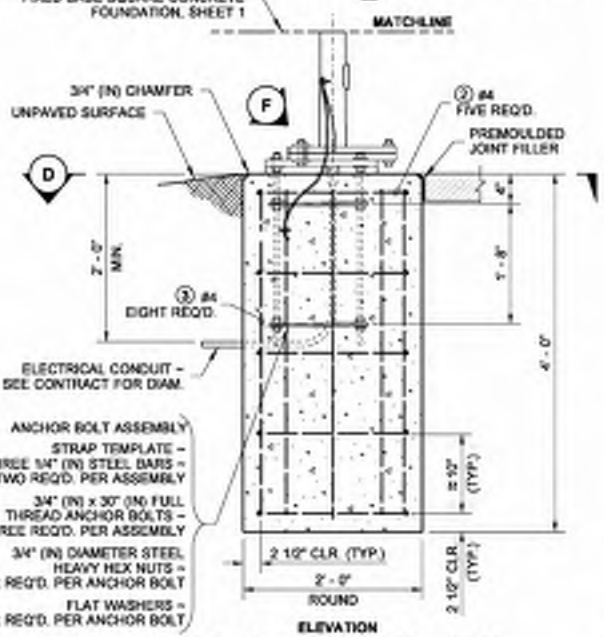
SECTION E



DETAIL F

SQUARE FOUNDATION SHOWN

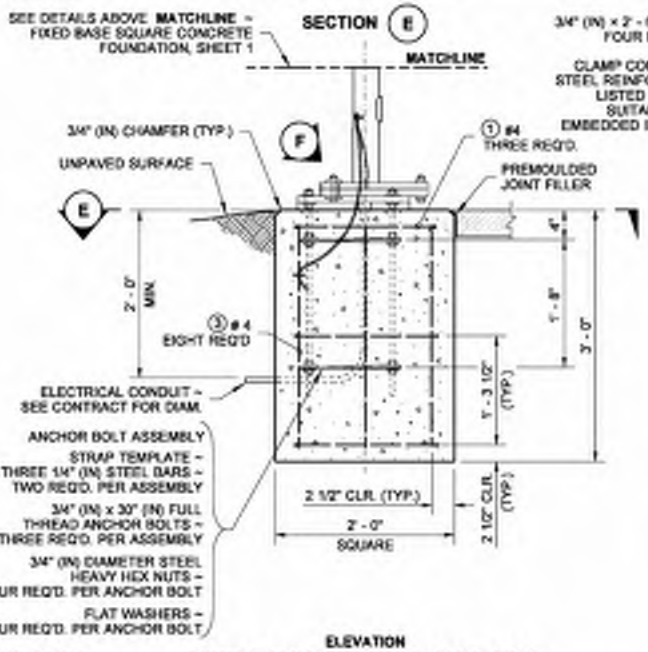
SEE DETAILS ABOVE **MATCHLINE** – FIXED BASE SQUARE CONCRETE FOUNDATION, SHEET 1



ELEVATION

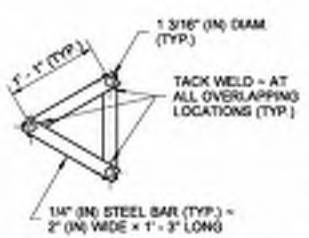
ROUND CONCRETE FOUNDATION DETAIL

SEE DETAILS ABOVE **MATCHLINE** – FIXED BASE SQUARE CONCRETE FOUNDATION, SHEET 1



ELEVATION

SQUARE CONCRETE FOUNDATION DETAIL



STRAP TEMPLATE DETAIL

SLIP BASE

DRAWN BY: FERN LEDELL

THEODORE JOSEPH BAILEY STATE OF WASHINGTON 39820 REGISTERED PROFESSIONAL ENGINEER

Bailey, Ted Jun 26 2014 4:29 PM

TYPE PS, TYPE 1, RM & FB SIGNAL STANDARD FOUNDATION DETAILS

STANDARD PLAN J-21.10-04

SHEET 2 OF 2 SHEETS

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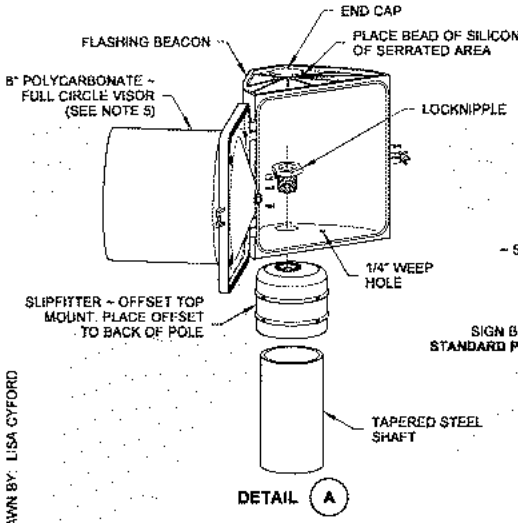
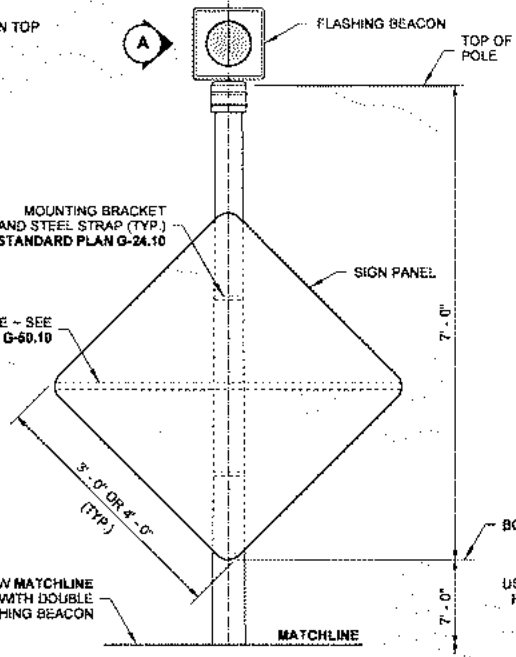
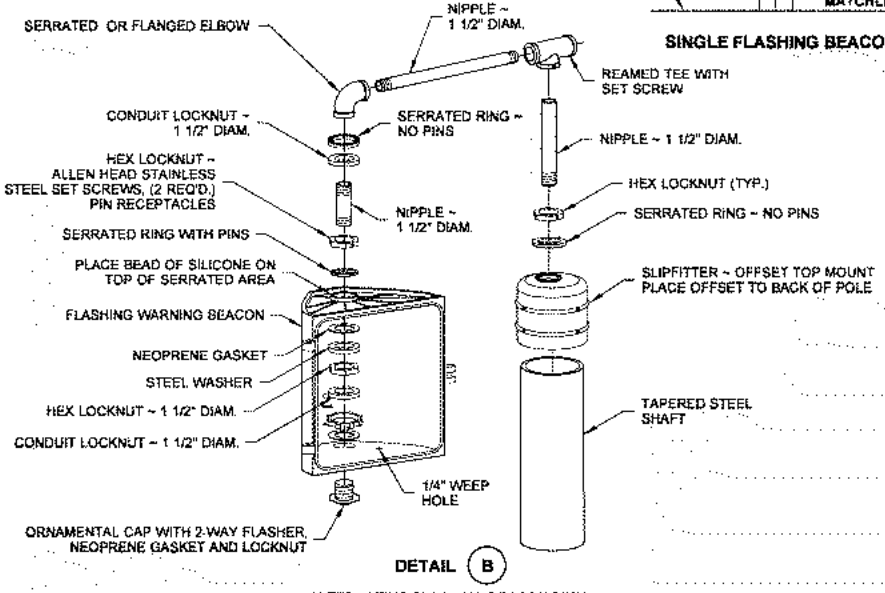


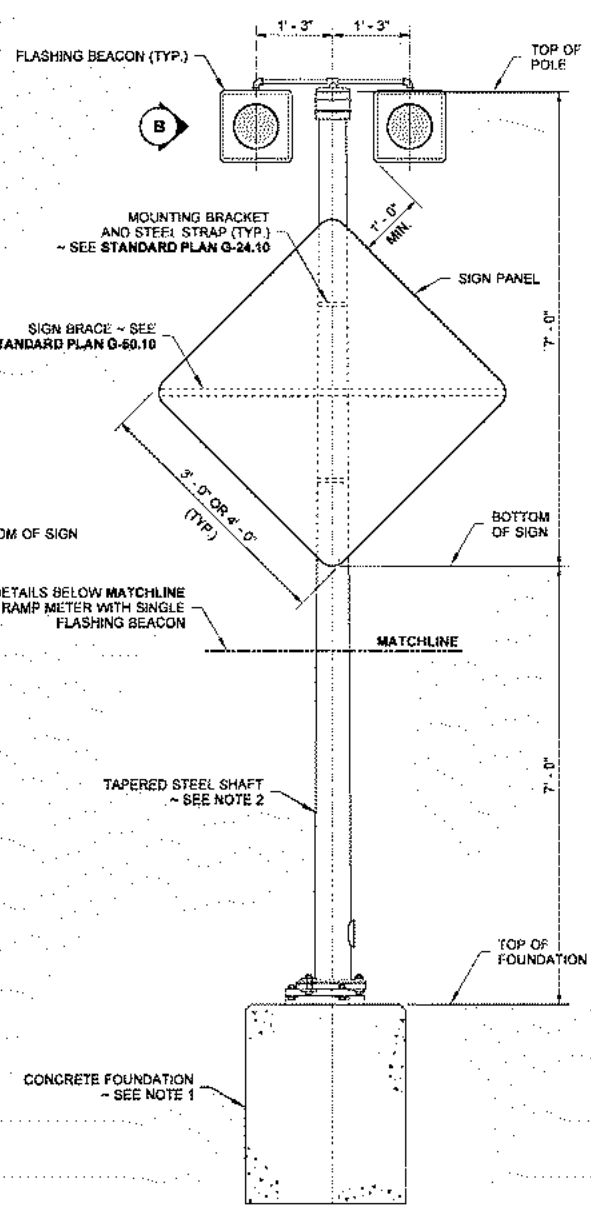
SINGLE FLASHING BEACON DETAIL



SINGLE FLASHING BEACON



ALTERNATING FLASHING BEACON DETAIL
(SHOWN WITHOUT HINGE DOOR FOR CLARITY)



ALTERNATING FLASHING BEACON
FLASHING BEACON TYPE 1
SLIP BASE SHOWN

DRAWN BY: LISA CYFORD

NOTES

1. See **Standard Plan J-21.10** for Signal Standard Foundation details.
2. All poles shall be hot dip galvanized per AASHTO M111.
3. Welding of structures shall be in accordance with the latest edition of the AWS D1.1 Structural Welding Code - Steel. All butt welds shall be ground flush with base metal.
4. Visor shall be 8" Polycarbonate, fully enclosed circle at bottom to reduce glare on sign. Display shall be of appropriate color needed.
5. See **Standard Plan J-21.17** for Electrical details.
6. Junction Box serving the Standard shall preferably be located 5' - 0" (10' - 0" Max.) from the Standard.

FLASHING BEACON TYPE 1 SIGNAL STANDARD DETAILS STANDARD PLAN J-21.16-01

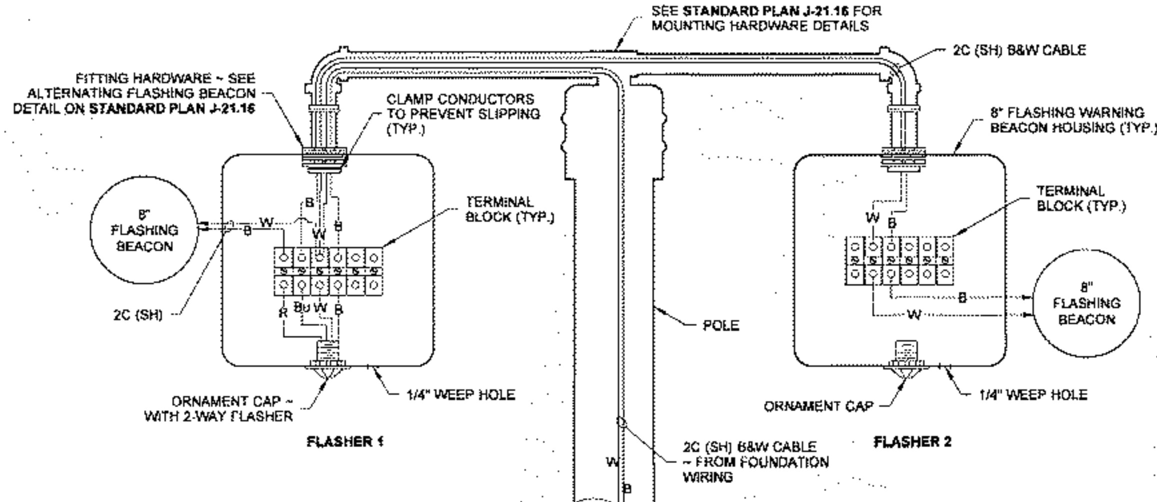
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III — STATE DESIGN ENGINEER — *6/10/13* — DATE

Washington State Department of Transportation

DRAWN BY: FERN LIDDELL

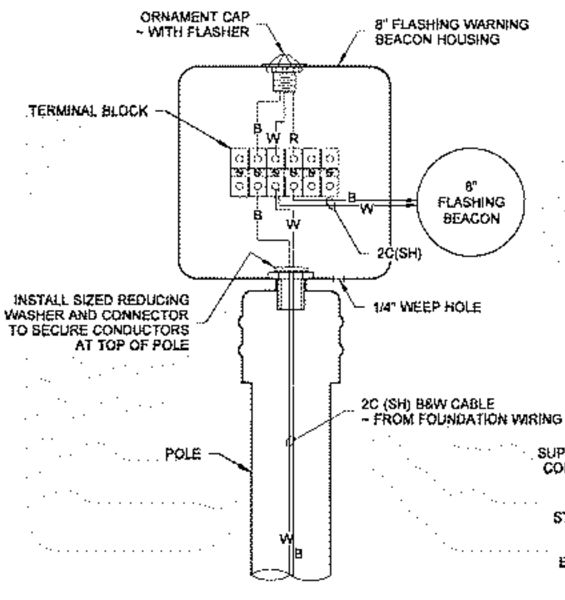


DETAIL (A)

FLASHING BEACON WIRING

ALTERNATING FLASH WIRING SHOWN

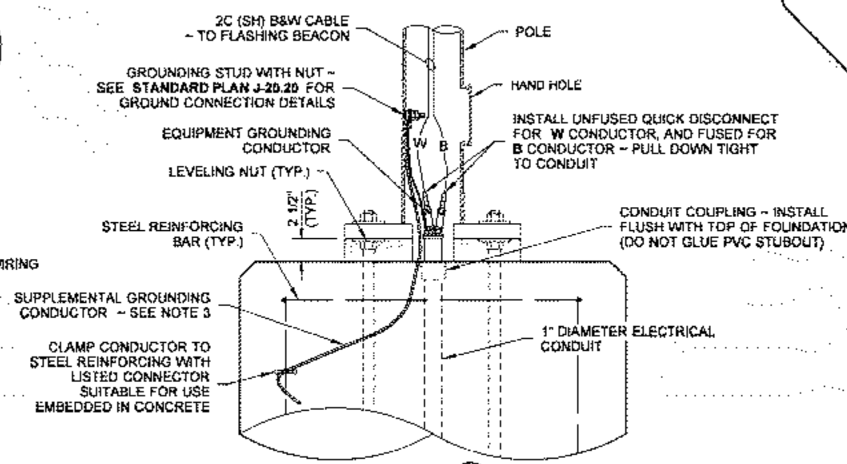
COLOR CODE	USE
B	POWER
W	NEUTRAL
R	FLASHER 1
Bu	FLASHER 2



DETAIL (B)

FLASHING BEACON WIRING

SINGLE FLASH WIRING SHOWN



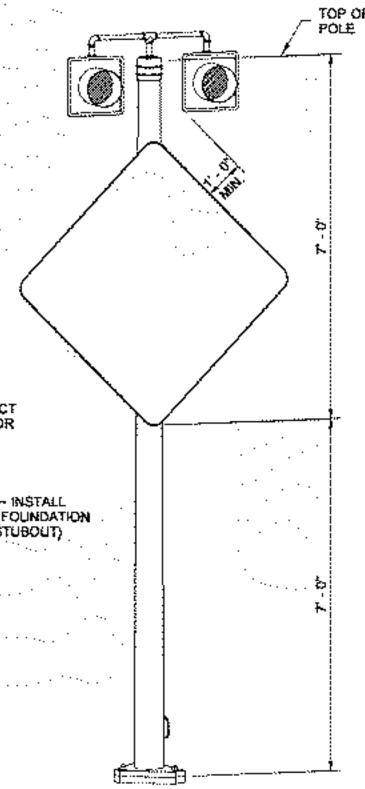
DETAIL (C)

FOUNDATION WIRING

FIXED BASE SHOWN

NOTES

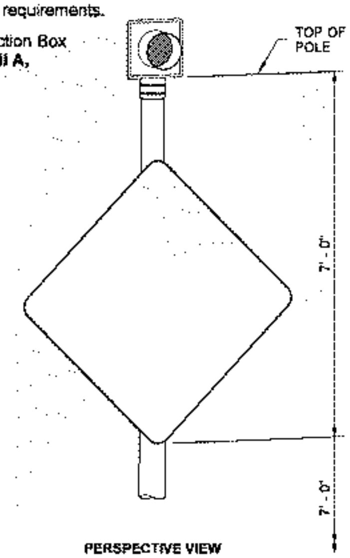
1. See **Standard Specification 9-29.3** for Cable Conductor requirements.
2. See **Standard Plan J-21.16** for Flashing Beacon Type 1 Signal Standard details.
3. Supplemental Grounding Conductor shall be non-insulated #4 AWG stranded copper, provide 3' - 0" min. slack. Clamp to vertical steel reinforcing bar with listed connector suitable for use embedded in concrete.
4. See **Standard Plan J-21.10** for foundation requirements.
5. Provide Cable Tie at wiring entering the Junction Box (for Slip Base installations only) ~ See **Detail A, Standard Plan J-28.70.**



PERSPECTIVE VIEW

FLASHING BEACON TYPE 1

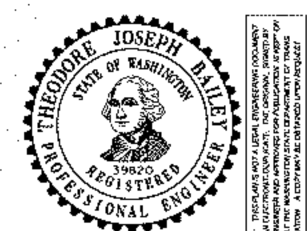
ALTERNATING FLASH BEACON SHOWN



PERSPECTIVE VIEW

FLASHING BEACON TYPE 1

SINGLE FLASH BEACON SHOWN



FLASHING BEACON TYPE 1 SIGNAL STANDARD ELECTRICAL DETAILS

STANDARD PLAN J-21.17-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III — *6/10/13*

STATE DESIGN ENGINEER — DATE

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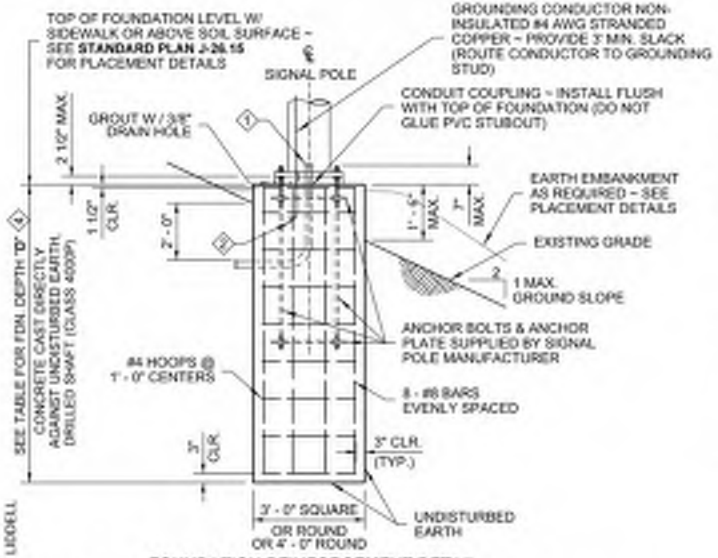
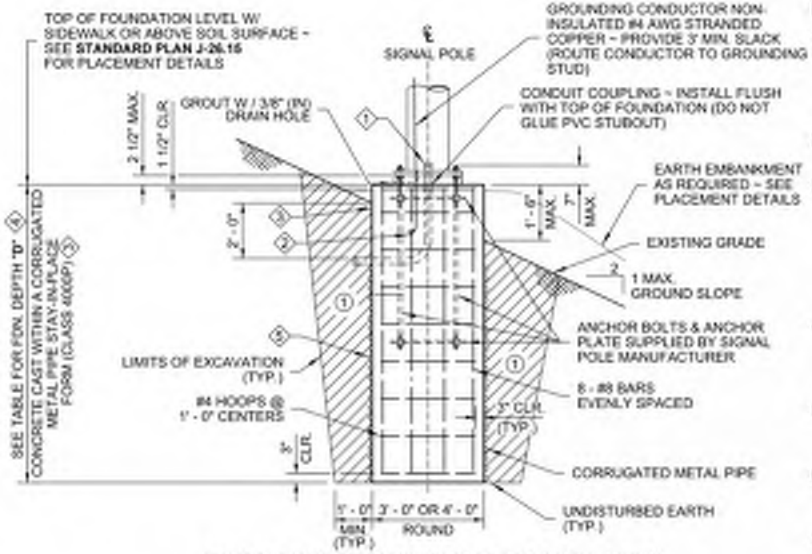


FOUNDATION REINFORCEMENT DETAIL

CONCRETE CAST DIRECTLY AGAINST UNDISTURBED EARTH, DRILLED SHAFT

ALTERNATE # 1



FOUNDATION REINFORCEMENT AND BACKFILL DETAIL

5 CONCRETE CAST WITHIN A CORRUGATED METAL PIPE STAY-IN-PLACE FORM

ALTERNATE # 2

1. CONDUIT SIZE AND QUANTITY AS SHOWN IN THE CONTRACT. CAP BOTH ENDS.
2. CLAMP CONDUCTOR TO STEEL REINFORCING WITH LISTED CONNECTOR SUITABLE FOR USE EMBEDDED IN CONCRETE
3. PAPER OR CARDBOARD FORM SHALL NOT STAY-IN-PLACE
4. SEE NOTE 5

DRAWN BY: FERN LUDELL

NOTES

1. This structure has been designed according to the Fifth Edition 2009 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. Basic wind velocity is 90 mph, Design Life/Recurrence Interval 50 years, and Fatigue Category III.
2. Foundations are designed for Type II, III, and SD Signal Standards with a maximum mast arm length of 65'.
3. Foundations are designed for Single Mast Arm Standards and Double Mast Arm Standards with 90° between arms. Special foundation design is required for Double Arm Standards where the angle between mast arms is other than 90°. For Double Mast Arm Standards with 90° between arms, use larger XYZ value for foundation depth selection.
4. Foundations not within the parameters of this standard require Special Design. Contact the **WSDOT Bridge and Structures Office** through the Engineer for Special Foundation Designs.
5. Where a foundation is constructed within a Media Filter Drain, the foundation depth shown in the Contract Plans shall be increased by the depth of the Media Filter Drain.
6. The top 2 feet of the foundation shall use a smooth form (such as paper or cardboard). After the concrete has cured, this entire form shall be removed.
7. For design parameters between the values listed in Table, depth requirements may be interpolated between the values provided.
8. Install Signal Foundation Identification Tag. See **Standard Plan J-26.15** for details.

FOUNDATION DEPTH "D" TABLE

ALTERNATE # 1 DRILLED SHAFT-TYPE CONSTRUCTION
FOR LATERAL BEARING PRESSURE = 2500 PSF & Ø = 34°, 1500 PSF & Ø = 28°, 1000 PSF & Ø = 26°

GROUND SLOPE = 3H : 1V OR FLATTER

ALLOWABLE LATERAL BEARING PRESSURE	FOUNDATION TYPE	XYZ (FT) 700	900	1350	1500	1900	2300	2600	3000
1000 PSF	3' - 0" ROUND	10' - 0"	10' - 0"	11' - 0"	11' - 0"	15' - 0"	18' - 0"	20' - 0"	20' - 0"
	3' - 0" SQUARE	8' - 0"	8' - 0"	9' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	12' - 0"
	4' - 0" ROUND	8' - 0"	8' - 0"	9' - 0"	9' - 0"	10' - 0"	11' - 0"	12' - 0"	12' - 0"
1500 PSF	3' - 0" ROUND	8' - 0"	8' - 0"	9' - 0"	11' - 0"	13' - 0"	15' - 0"	18' - 0"	18' - 0"
	3' - 0" SQUARE	7' - 0"	7' - 0"	7' - 0"	8' - 0"	8' - 0"	9' - 0"	10' - 0"	10' - 0"
	4' - 0" ROUND	7' - 0"	7' - 0"	7' - 0"	8' - 0"	8' - 0"	9' - 0"	10' - 0"	10' - 0"
2500 PSF OR GREATER	3' - 0" ROUND	6' - 0"	6' - 0"	7' - 0"	8' - 0"	9' - 0"	11' - 0"	15' - 0"	15' - 0"
	3' - 0" SQUARE	6' - 0"	6' - 0"	6' - 0"	6' - 0"	7' - 0"	7' - 0"	8' - 0"	8' - 0"
	4' - 0" ROUND	6' - 0"	6' - 0"	6' - 0"	6' - 0"	7' - 0"	7' - 0"	8' - 0"	8' - 0"

GROUND SLOPE = GREATER THAN 3H : 1V TO 2H : 1V

ALLOWABLE LATERAL BEARING PRESSURE	FOUNDATION TYPE	XYZ (FT) 700	900	1350	1500	1900	2300	2600	3000
1000 PSF	3' - 0" ROUND	SPECIAL FOUNDATION TYPE							
	3' - 0" SQUARE	SPECIAL FOUNDATION TYPE							
	4' - 0" ROUND	SPECIAL FOUNDATION TYPE							
1500 PSF	3' - 0" ROUND	11' - 0"	11' - 0"	12' - 0"	14' - 0"	16' - 0"	18' - 0"	21' - 0"	21' - 0"
	3' - 0" SQUARE	10' - 0"	10' - 0"	10' - 0"	11' - 0"	11' - 0"	12' - 0"	13' - 0"	13' - 0"
	4' - 0" ROUND	10' - 0"	10' - 0"	10' - 0"	11' - 0"	11' - 0"	12' - 0"	13' - 0"	13' - 0"
2500 PSF OR GREATER	3' - 0" ROUND	9' - 0"	9' - 0"	10' - 0"	12' - 0"	12' - 0"	14' - 0"	16' - 0"	16' - 0"
	3' - 0" SQUARE	9' - 0"	9' - 0"	9' - 0"	9' - 0"	10' - 0"	10' - 0"	11' - 0"	11' - 0"
	4' - 0" ROUND	9' - 0"	9' - 0"	9' - 0"	9' - 0"	10' - 0"	10' - 0"	11' - 0"	11' - 0"

ALTERNATE # 2 CORRUGATED METAL PIPE TYPE CONSTRUCTION
FOR LATERAL BEARING PRESSURE = 2500 PSF & Ø = 23°, 1500 PSF & Ø = 18°, 1000 PSF & Ø = 17°

GROUND SLOPE = 3H : 1V OR FLATTER

ALLOWABLE LATERAL BEARING PRESSURE	FOUNDATION TYPE	XYZ (FT) 700	900	1350	1500	1900	2300	2600	3000
1000 PSF	3' - 0" ROUND	10' - 0"	10' - 0"	11' - 0"	15' - 0"	20' - 0"	25' - 0"	28' - 0"	28' - 0"
	4' - 0" ROUND	8' - 0"	8' - 0"	9' - 0"	12' - 0"	13' - 0"	14' - 0"	15' - 0"	15' - 0"
1500 PSF	3' - 0" ROUND	8' - 0"	8' - 0"	11' - 0"	15' - 0"	18' - 0"	21' - 0"	25' - 0"	25' - 0"
	4' - 0" ROUND	7' - 0"	7' - 0"	7' - 0"	8' - 0"	10' - 0"	13' - 0"	15' - 0"	15' - 0"
2500 PSF OR GREATER	3' - 0" ROUND	6' - 0"	6' - 0"	7' - 0"	11' - 0"	13' - 0"	18' - 0"	20' - 0"	20' - 0"
	4' - 0" ROUND	6' - 0"	6' - 0"	6' - 0"	6' - 0"	7' - 0"	9' - 0"	9' - 0"	9' - 0"

GROUND SLOPE = GREATER THAN 3H : 1V TO 2H : 1V

ALLOWABLE LATERAL BEARING PRESSURE	FOUNDATION TYPE	XYZ (FT) 700	900	1350	1500	1900	2300	2600	3000
1000 PSF	3' - 0" ROUND	SPECIAL FOUNDATION TYPE							
	4' - 0" ROUND	SPECIAL FOUNDATION TYPE							
1500 PSF	3' - 0" ROUND	11' - 0"	11' - 0"	14' - 0"	18' - 0"	21' - 0"	24' - 0"	28' - 0"	23' - 0"
	4' - 0" ROUND	10' - 0"	10' - 0"	10' - 0"	11' - 0"	13' - 0"	16' - 0"	18' - 0"	18' - 0"
2500 PSF OR GREATER	3' - 0" ROUND	9' - 0"	9' - 0"	10' - 0"	14' - 0"	16' - 0"	21' - 0"	23' - 0"	23' - 0"
	4' - 0" ROUND	9' - 0"	9' - 0"	9' - 0"	9' - 0"	10' - 0"	12' - 0"	12' - 0"	12' - 0"

When the existing soil will not retain a vertical face, over-excavate the foundation area and install a 36" or 48" diameter corrugated metal (pipe) form. The top of the corrugated metal form shall terminate 1 foot below final grade. Continue forming to full height using paper or cardboard form to achieve a smooth finish on final exposed cement concrete. Support the form as necessary to remain plumb.

Place the concrete foundation.

After concrete has cured, remove the entire paper or cardboard form portion.

1 Shoring or Extra Excavation as required. Excavated area shall be backfilled with Controlled-Density Fill (CDF), or with soil in accordance with **Standard Specification Section 8-20.3(2)** and Compaction Method 1 of **Standard Specification Section 2-09.3(1)E.**

ALTERNATE #2 - CONSTRUCTION METHOD
METAL (SUBSURFACE) FORM REQUIRED

RICHARD P. ZELDENRUST — STATE OF WASHINGTON — 25470 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

Zeldenrust, Richard
Jul 28 2016 8:25 AM

TRAFFIC SIGNAL STANDARD FOUNDATION

STANDARD PLAN J-26.10-03

SHEET 1 OF 1 SHEET

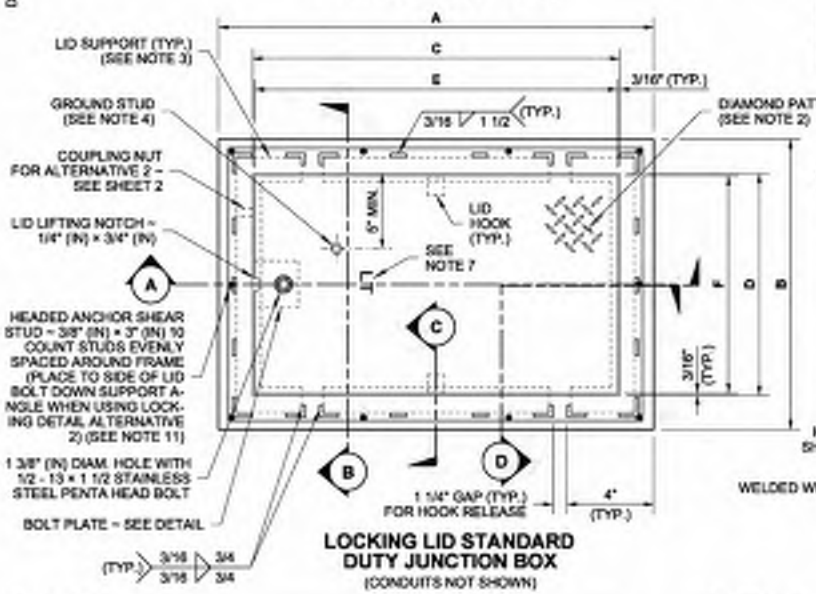
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 21 2016 8:21 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: LISA CYFORD

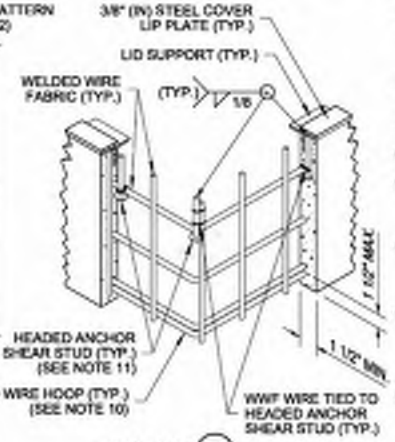
DIVIDER PLATE
ELEVATION VIEW
(FOR TYPE 2 JUNCTION BOX ONLY)

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	INSIDE LENGTH OF JUNCTION BOX	18" ~ 19"	28" ~ 29"
D	INSIDE WIDTH 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"



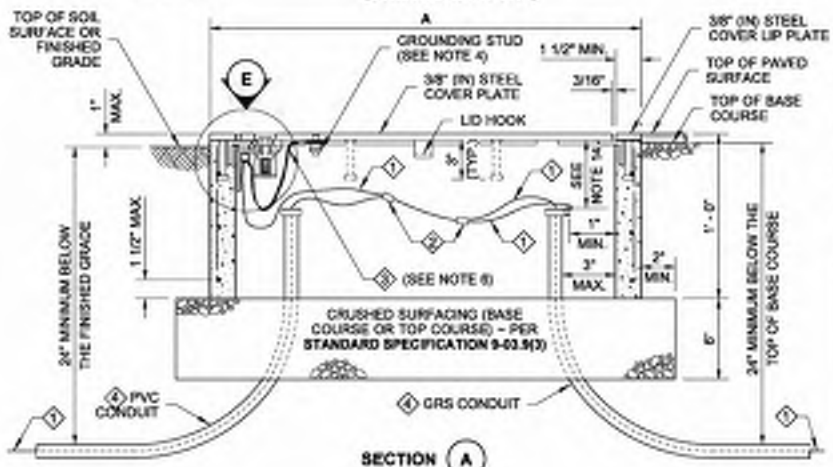
LOCKING LID STANDARD DUTY JUNCTION BOX
(CONDUITS NOT SHOWN)



SECTION (D)
PERSPECTIVE VIEW

NOTES

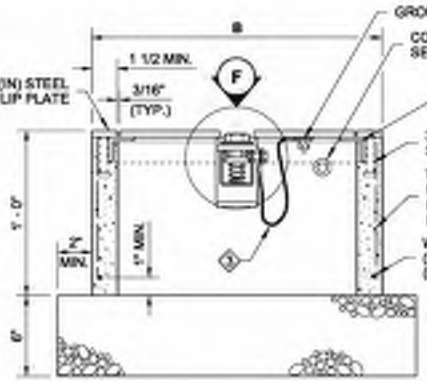
1. All box dimensions are approximate. Exact configurations vary among manufacturers.
2. Minimum lid thickness shown. Junction Boxes installed in sidewalks, walkways, and shared-use paths shall have a slip-resistant coating on the lid and lip cover plate, and shall be installed with the surface flush 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" (in) line thickness formed with a mild steel weld bead and shall be placed prior to hot-dip galvanizing.
3. Lid support members shall be 3/16" (in) minimum thick steel C, L, or T shape, welded to the frame.
4. A 1/4-20 NC × 3/4" (in) stainless steel ground stud shall be welded to the bottom of the lid; include (2) stainless steel nuts and (2) stainless steel flat washers.
5. Bolts and nuts shall be liberally coated with anti-seize compound.
6. Equipment Bonding Jumper shall be # 6 AWG min. × 4' (ft) of tinned braided copper.
7. The System Identification letters shall be 1/8" (in) line thickness formed with a mild steel weld bead. See Cover Marking detail. Grind off diamond pattern before forming letters. For System Identification details, **see Standard Specification 9-29.2(4)**.
8. When required in the Contract, provide a 10" (in) x 27 1/2" (in), 10 gage divider plate, complete, with fasteners, in each Type 2 Junction Box where specified.
9. When required in Contract, provide a 12" (in) deep extension for each Type 2 Junction Box where specified.
10. See the **Standard Specifications** for alternative reinforcement and class of concrete.
11. Headed Anchor Shear Studs must be welded to the Steel Cover Lip Plate and wire tied in two places to the vertical Welded Wire Fabric when in contact with each other. Wire tie all other Headed Anchor Shear Studs to the horizontal Welded Wire Fabric.
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 drawings 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 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.
14. Distance between the top of the conduit and the bottom of the Junction Box lid shall be 6" (in) min. to 8" (in) 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" (in) min. to 10" (in) max. See **Standard Specification 8-20.3(6)**.



SECTION (A)

① Equipment Grounding Conductor
② Copper Solderless Crimp Connector
③ Equipment Bonding Jumper (See Note 6)
④ See Contract for conduit size and number

COVER MARKING DETAIL



SECTION (B)
(CONDUITS NOT SHOWN)

THEODORE JOSEPH BAILEY
STATE OF WASHINGTON
29820
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PROFESSIONAL ENGINEER

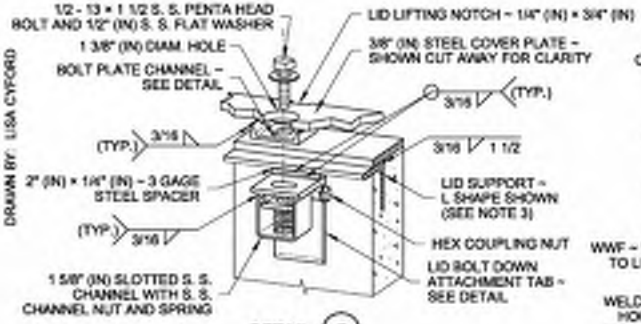
Bailey, Ted
Apr 25 2016 9:32 AM

LOCKING LID STANDARD DUTY JUNCTION BOX
TYPES 1 & 2
STANDARD PLAN J-40.10-04

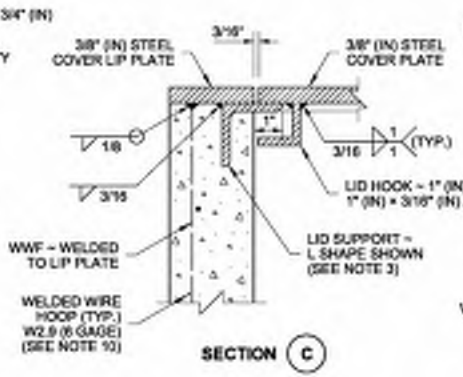
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Carpenter, Jeff
Carpenter, Jeff
Apr 29 2016 3:12 PM
Washington State Department of Transportation

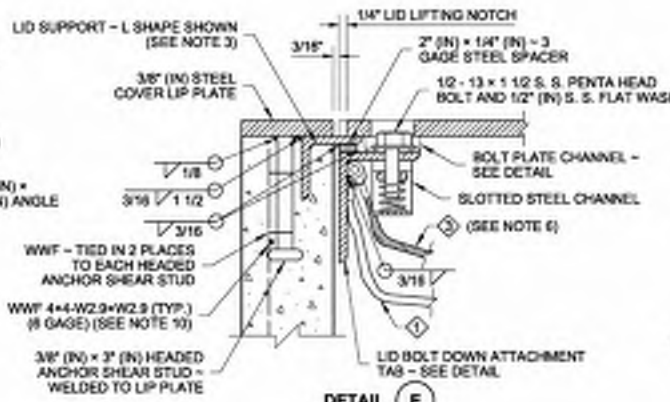
DRAWN BY: LISA CYFORD



DETAIL (F)
ALTERNATIVE 1 SHOWN
PERSPECTIVE VIEW



SECTION (C)



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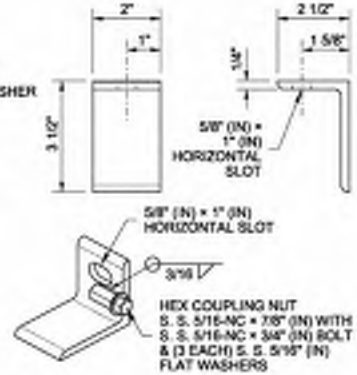
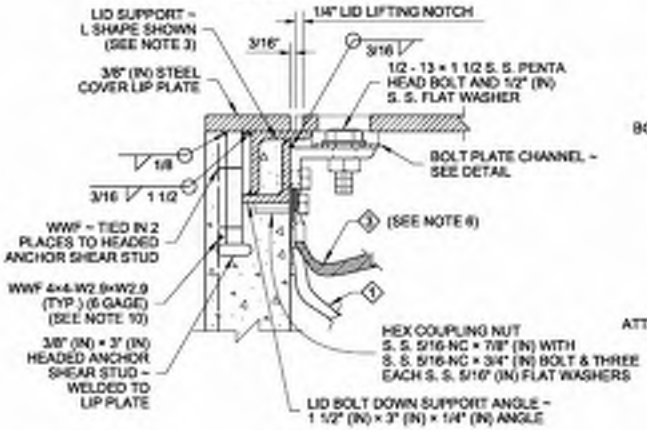


ALTERNATIVE 1
LID BOLT DOWN ATTACHMENT TAB
(SEE NOTE 12)



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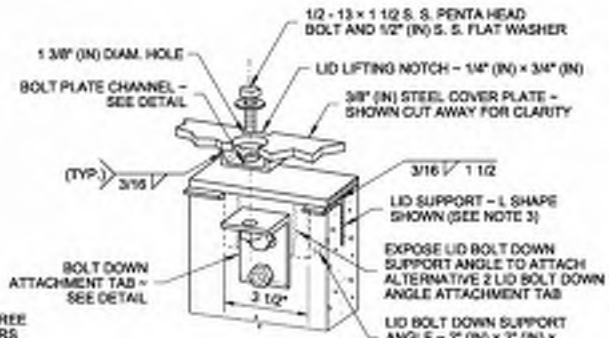
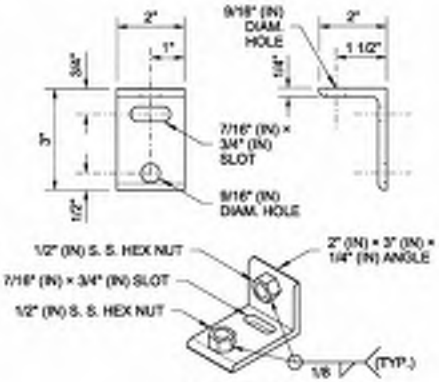
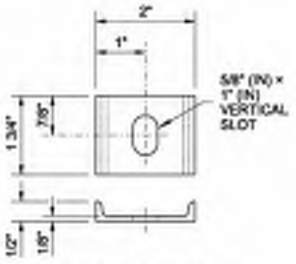


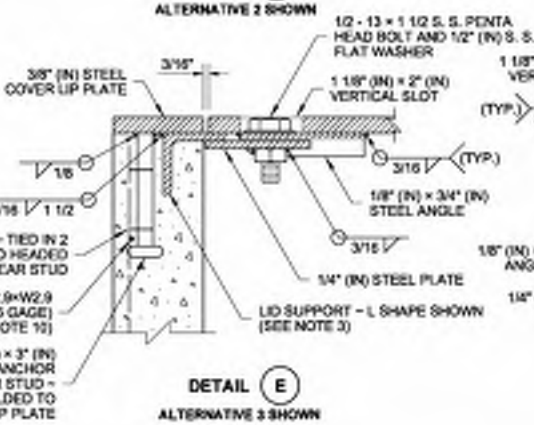
DETAIL (F)
ALTERNATIVE 2 SHOWN
PERSPECTIVE VIEW



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



BOLT PLATE CHANNEL



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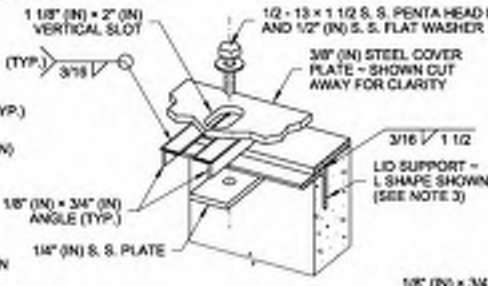
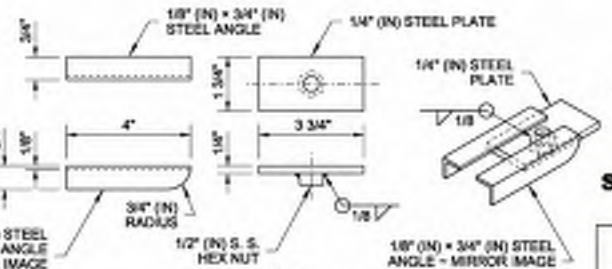


DETAIL (F)
ALTERNATIVE 3 SHOWN
PERSPECTIVE VIEW



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

THEODORE JOSEPH BAILEY
STATE OF WASHINGTON
39820
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PROFESSIONAL ENGINEER

Bailey, Ted
Apr 25 2016 9:33 AM

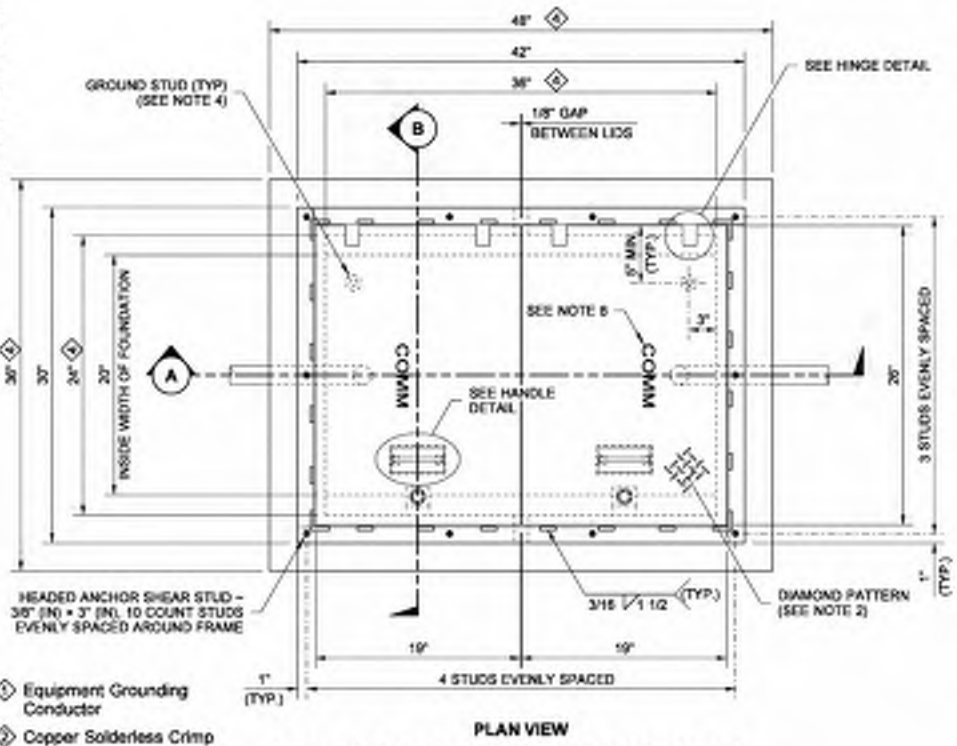
LOCKING LID STANDARD DUTY JUNCTION BOX TYPES 1 & 2 STANDARD PLAN J-40.10-04

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION
Carpenter, Jeff
Apr 28 2016 5:12 PM

Washington State Department of Transportation

DRAWN BY: LISA CYFORD

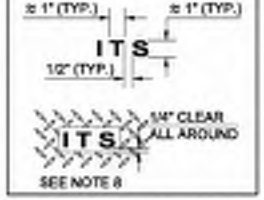


PLAN VIEW

LOCKING LID STANDARD DUTY JUNCTION BOX

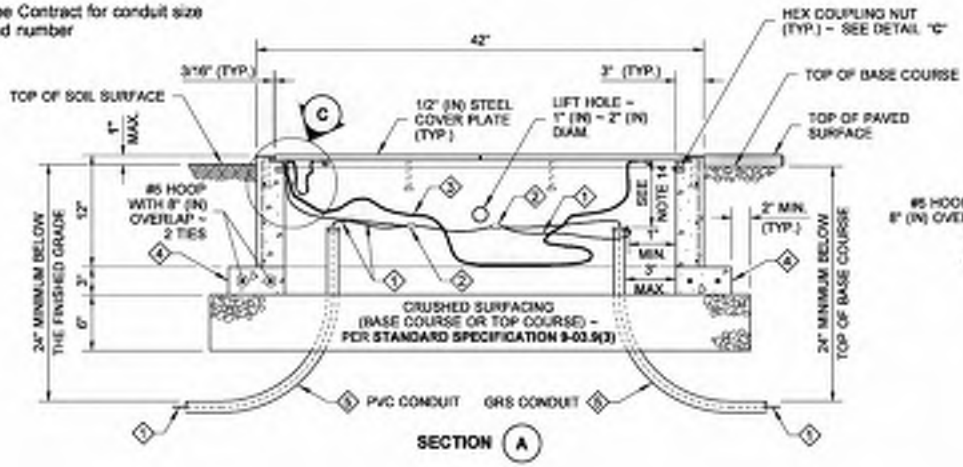
1. Equipment Grounding Conductor
2. Copper Solderless Crimp Connector
3. Equipment Bonding Jumper
4. Foundation
5. See Contract for conduit size and number

COVER MARKING DETAIL

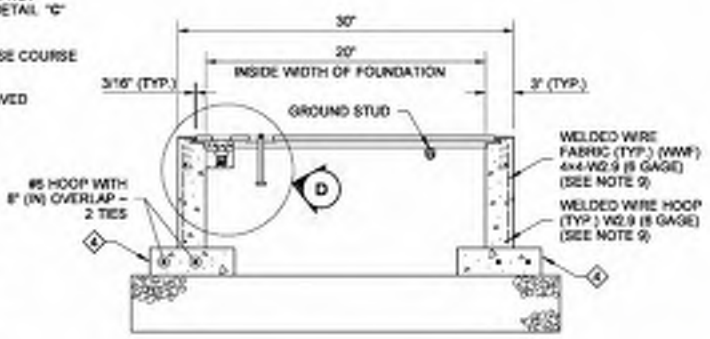


NOTES

1. All box dimensions are approximate. Exact configurations vary among manufacturers.
2. Minimum lid thicknesses are shown. 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" (in) line thickness formed with a mild steel weld bead and shall be placed prior to hot-dip galvanizing.
3. Lid support members shall be 3/16" (in) min. thick steel C, L, or T shape, welded to the frame. Exact configurations vary among manufacturers.
4. A 1/4-20 NC × 3/4" (in) 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 × 3/4" (in) S. S. bolt, (2) each S. S. nuts, and (2) each S. S. flat washers. Equipment Bonding Jumper shall be #8 AWG min. × 4' (ft) of tinned braided copper.
8. The System Identification letters shall be 1/8" (in) line thickness formed by a mild steel weld bead. See Cover Marking detail. Grind off diamond pattern before forming letters. See **Standard Specification 9-29.2(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 Fabric and Headed Anchor Shear Stud attachment details.
11. Capacity ~ conduit diameter = 24" (in)
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" (in) min. to 8" (in) 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" (in) min. to 10" (in) max. See **Standard Specification 8-20.3(6)**.



SECTION (A)



SECTION (B)

CONDUITS NOT SHOWN

THEODORE JOSEPH BAILEY
STATE OF WASHINGTON
39820
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PROFESSIONAL ENGINEER

Bailey, Ted
Apr 25 2016 5:09 PM

LOCKING LID STANDARD DUTY JUNCTION BOX TYPE 8 STANDARD PLAN J-40.30-04

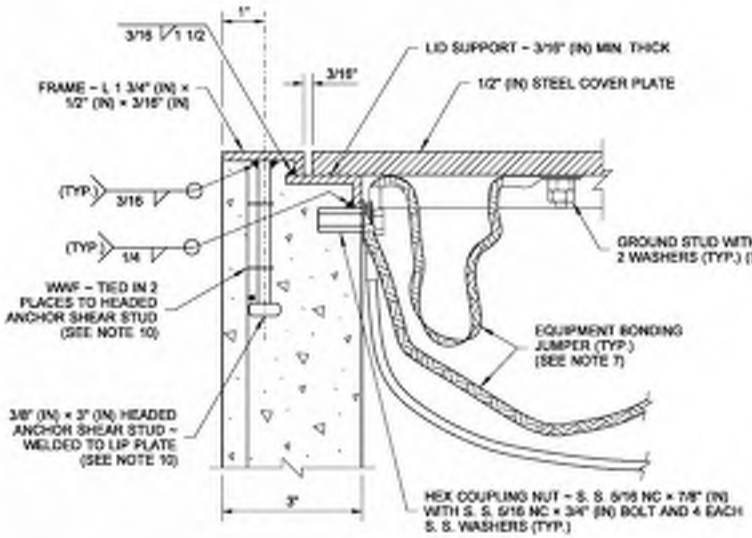
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

Carpenter, Jeff
Apr 28 2016 3:15 PM

Washington State Department of Transportation

DRAWN BY: LISA CYFORD



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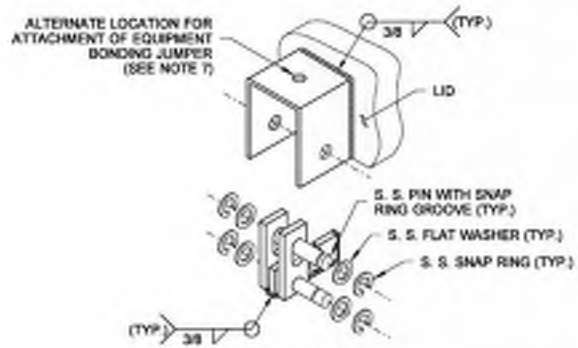
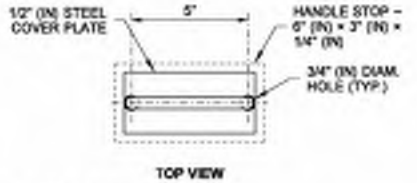
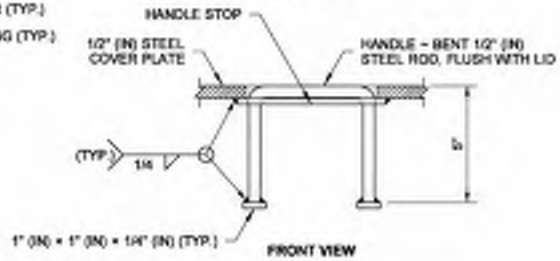


HINGE DETAIL

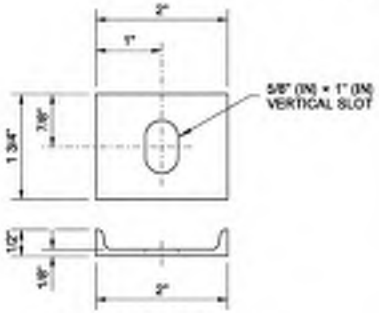


TOP VIEW

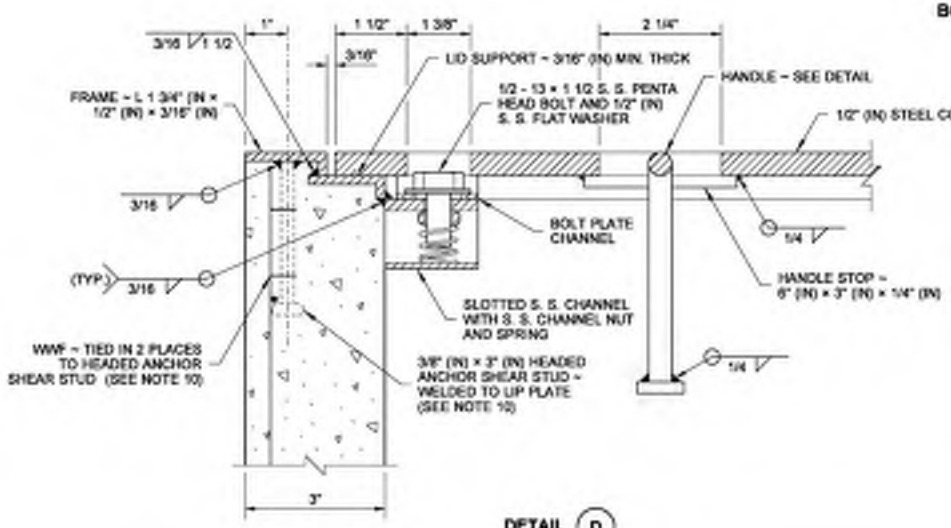


FRONT VIEW

HANDLE DETAIL



BOLT PLATE CHANNEL



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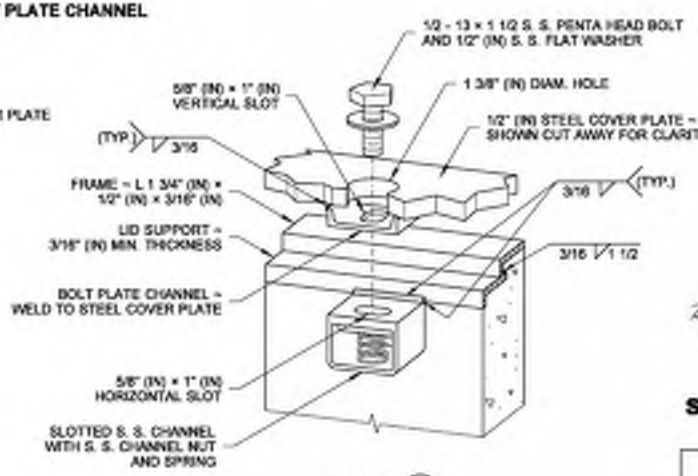


DETAIL (D)
ISOMETRIC VIEW

THEODORE JOSEPH BAILEY
STATE OF WASHINGTON
39820
REGISTERED
PROFESSIONAL ENGINEER

Apr 25 2016 5:10 PM

LOCKING LID STANDARD DUTY JUNCTION BOX TYPE 8
STANDARD PLAN J-40.30-04

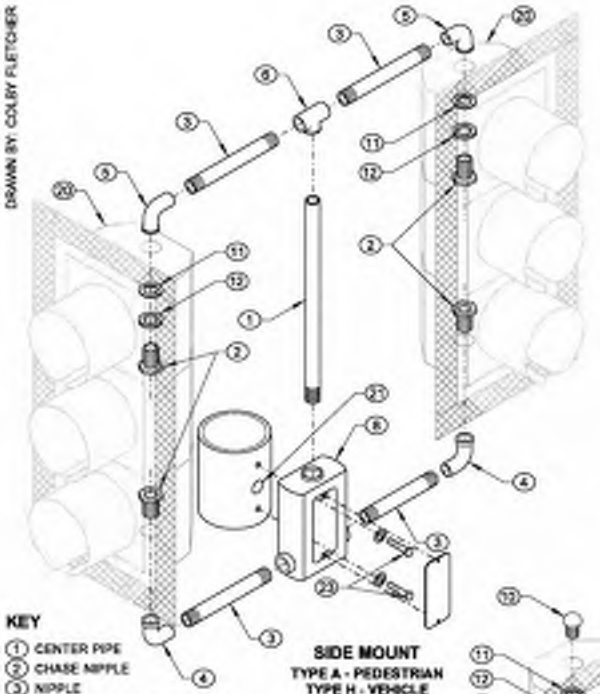
SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

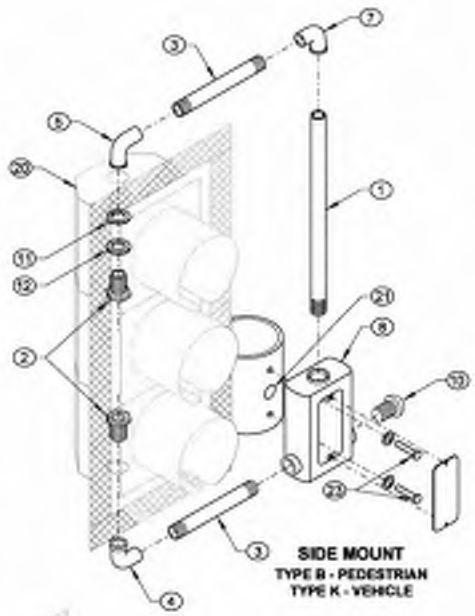
Carpenter, Jeff
Apr 28 2016 3:13 PM

Washington State Department of Transportation

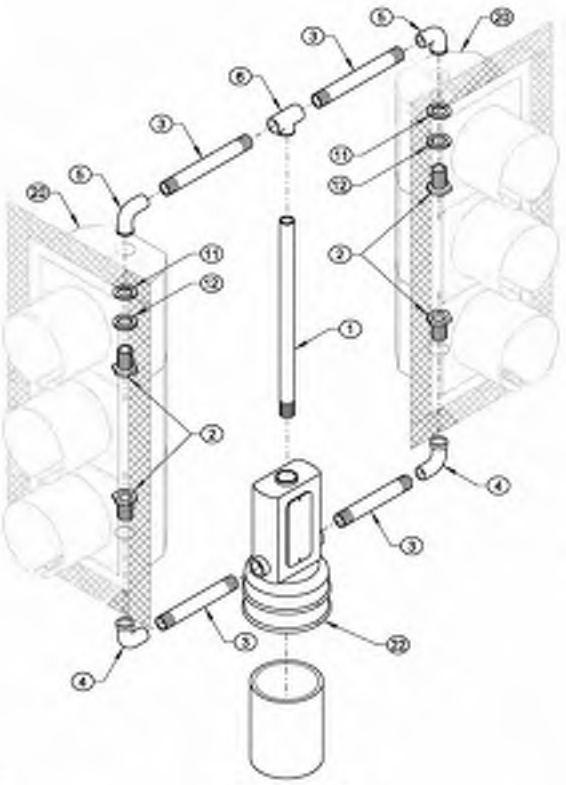
DRAWN BY: COLBY FLETCHER



SIDE MOUNT
TYPE A - PEDESTRIAN
TYPE H - VEHICLE



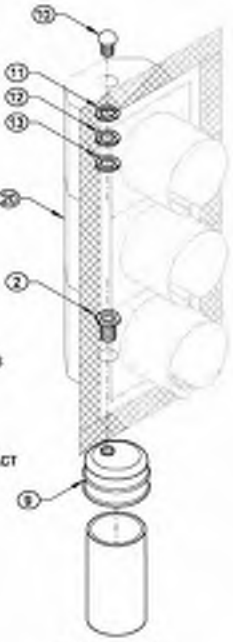
SIDE MOUNT
TYPE B - PEDESTRIAN
TYPE K - VEHICLE



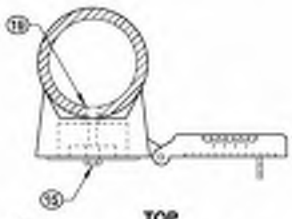
TOP MOUNT
TYPE C - PEDESTRIAN
TYPE F - VEHICLE

KEY

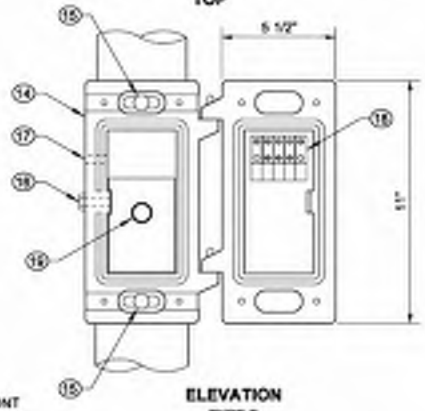
1. CENTER PIPE
2. CHASE NIPPLE
3. NIPPLE
4. SERRATED ELBOW
5. SERRATED OR FLANGED ELBOW
6. REAMED TEE WITH SET SCREW
7. REAMED ELBOW WITH SET SCREW
8. BRONZE TERMINAL COMPARTMENT WITH:
   - GASKETED COVER
   - FASTENERS
   - WIRE LEADS
   - MOUNTING SADDLE FOR SIDE MOUNTS ON ROUND/TAPERED POLES ~ OMIT SADDLE ON MULTI-SIDED POLES
   - 1/4" (IN) DIAM. DRAIN HOLE
   - 12-POSITION TERMINAL STRIP
   - WIREWAY FOR SIDE MOUNTS
9. BRONZE COLLAR ~ 4 1/4" (IN) I.D. OFFSET OPENING W/SET SCREWS
10. ORNAMENT CAP
11. NEOPRENE GASKET
12. WASHER
13. CONDUIT LOCKNUT
14. TYPE E HINGE CLAMSHELL MOUNT ~ LEFT OR RIGHT, SEE CONTRACT
15. FASTENER WITH SPACER ~
    - 1/2" (IN) LAG SCREWS ON WOOD POLE
    - 1/2" (IN) BOLTS TAPPED TO METAL POLE
16. FLATHEAD SOCKET BOLT
17. 1/2" (IN) INSERT HOLE FOR EXTERNAL WIRE ENTRANCE (REQUIRED ON TIMBER POLE MOUNTING ONLY)
18. TERMINAL BLOCK AND PHENOLIC TAG
19. INSULINER ~ 1" (IN) MIN. DIAM. HOLE
20. SIGNAL HEAD WITH BACKPLATE
21. FIELD DRILL POLE AND INSERT AN INSULINER OR SIMILAR DEVICE TO PROTECT CONDUCTORS
22. SIMILAR TO (8) WITH BRONZE INTEGRAL COLLAR
23. 1/2" (IN) DIAM. x 3" (IN) LONG BOLT WITH WASHER



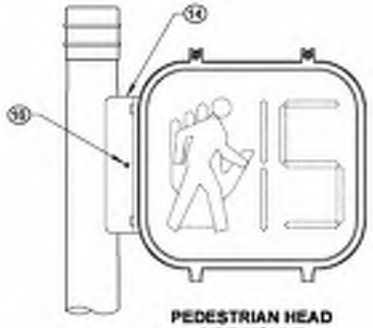
TOP MOUNT
TYPE D - PEDESTRIAN ~ OFFSET BRONZE COLLAR TO FRONT
OR VEHICLE (SHOWN) ~ OFFSET BRONZE COLLAR TO BACK



TOP



ELEVATION
TYPE E
MOUNTING DETAILS



PEDESTRIAN HEAD
SIDE MOUNT
(LEFT SIDE SHOWN)
TYPE E - COUNTDOWN LED
PEDESTRIAN HEAD

NOTES

1. See Contract for head type, mounting height, and orientation.
2. All nipples, fittings, and center pipes shall be 1 1/2" (in) diameter.
3. Install neoprene gasket inside head when flanged elbows are supplied.
4. Extend wire sheath a minimum of 1" (in) 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. See **Standard Specification 9-29.16** for backplate requirements. Where required, prismatic sheeting shall be applied in accordance with the manufacturer's recommendations. The application surface of the backplate shall be cleaned, degreased with isopropyl alcohol, and dried prior to application of the sheeting.
7. Drill a 1/4" (in) drain hole in the bottom of each signal display assembly, and one in the bottom of each pedestrian head. When signal display assembly is mounted horizontally, drill a 1/4" (in) drain hole at the lowest point of each section of the signal assembly.

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29820
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PROFESSIONAL ENGINEER

Bailey, Ted
Jul 8 2015 3:09 PM

SIGNAL HEAD MOUNTING DETAILS ~ POLE AND POST TOP MOUNTINGS

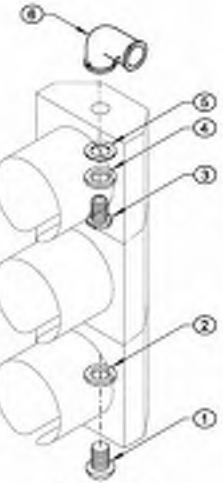
STANDARD PLAN J-75.10-02

SHEET 1 OF 1 SHEET

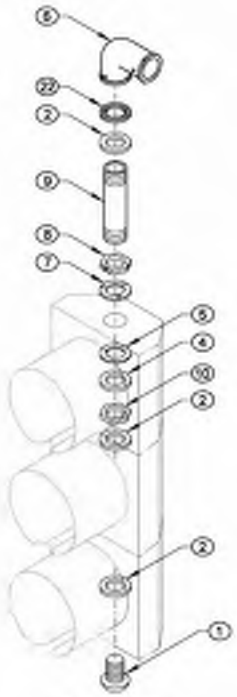
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 10 2015 7:19 AM

Washington State Department of Transportation

DRAWN BY: COLBY FLETCHER



ARM MOUNT
TYPE L



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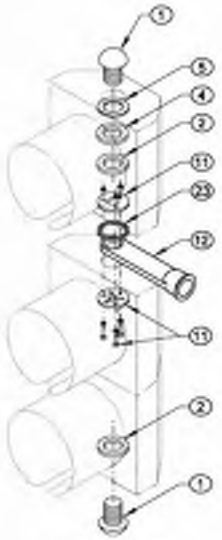
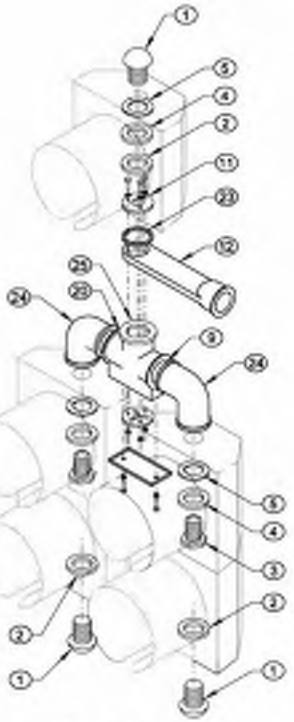
TYPE LE



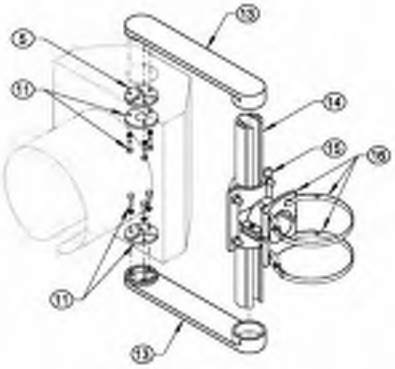
ARM MOUNT
TYPE M



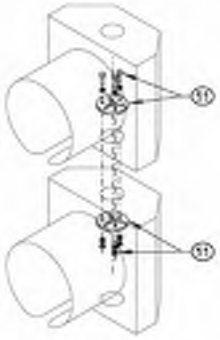
ARM MOUNT
TYPE M-5S
(TYPE M WITH
5-SECTION HEAD)

KEY

1. END CAP
2. 1 1/2" (IN) DIAM. CONDUIT LOCKNUT
3. 1 1/2" (IN) DIAM. CHASE NIPPLE
4. STEEL WASHER
5. NEOPRENE GASKET
6. BRONZE SERRATED ELL FITTING WITH:
   - 3/8" (IN) 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" (IN) DIAM. CONDUIT NIPPLE
10. 1 1/2" (IN) DIAM. HEX LOCKNUT
11. MOUNTING ASSEMBLY
12. BRONZE ELEVATOR PLUMBIZER WITH 3/8" (IN) STAINLESS STEEL THROUGH BOLT, WASHERS, AND TWO NUTS
13. ALUMINUM ARM WITH SET SCREW
14. SLOTTED TUBE WITH CLOSURE STRIP
15. 2 1/2" (IN) I.D. MIN. TUBE CLAMP
16. INTERNALLY THREADED CLAMP ASSEMBLY WITH:
    - TWO SET SCREWS
    - 1/2" (IN) x 0.045" (IN) STAINLESS STEEL BANDS
    - 7/16" (IN) SCREW BUCKLES WITH SWIVELS, NUTS, AND WASHERS
    - BAND CLIPS WITH ALLEN HEAD STAINLESS STEEL SET SCREWS
17. BRONZE MESSENGER HANGER WITH:
    - 1/2" (IN) DIAM. J-BOLTS
    - CABLE LOCK BAR
    - RIVET
    - COTTER KEY
18. BRONZE INTERNALLY THREADED WIRE ENTRANCE WITH:
    - BUSHING INSERT OR RUBBER GROMMET
    - ALLEN HEAD STAINLESS STEEL SET SCREW
19. BRONZE BALANCE ADJUSTER (WHERE REQUIRED)
20. MULTI-HEAD MOUNTING ASSEMBLY
21. LOWER ARM ASSEMBLY
22. SERRATED RING WITH NO PINS
23. SERRATED WASHER
24. 1 1/2" (IN) DIAM. SERRATED OR FLANGED ELBOW
25. CENTER SUPPORT WITH 1 1/2" (IN) DIAM. HUBS WITH COVER AND GASKET
26. 1 1/2" (IN) DIAM. SERRATED COUPLING
27. 1 1/2" (IN) BREAKAWAY TETHER ASSEMBLY WITH OPTIONAL EXTENDER BAR
28. SERRATED CROSS



ARM MOUNT
TYPE N



HOUSING FIXTURE
CONNECTION DETAIL

NOTES

1. Type M mounting shall have "O" ring groove and seal on top and bottom of signal attachment.
2. Type M mounting for conventional heads shall have a 2" (in) diameter opening at the signal attachment.
3. Type M mounting for optically programmed heads shall have a 3 1/2" (in) diameter opening at the signal attachment.
4. Type N mounting with optically programmed heads shall be installed with 14" (in) 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.
7. See **Standard Specification 9-29.16** for backplate requirements. Where required, prismatic sheeting shall be applied in accordance with the manufacturer's recommendations. The application surface of the backplate shall be cleaned, degreased with isopropyl alcohol, and dried prior to application of the sheeting.
8. Drill a 1/4" (in) drain hole in the bottom of each signal assembly. When signal display assembly is mounted horizontally, drill a 1/4" (in) drain hole at the lowest point of each section of the signal assembly.

NOTE: BACKPLATES NOT SHOWN FOR CLARITY

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Jul 8 2015 3:10 PM

SIGNAL HEAD MOUNTING DETAILS ~ MAST ARM AND SPAN WIRE MOUNTINGS

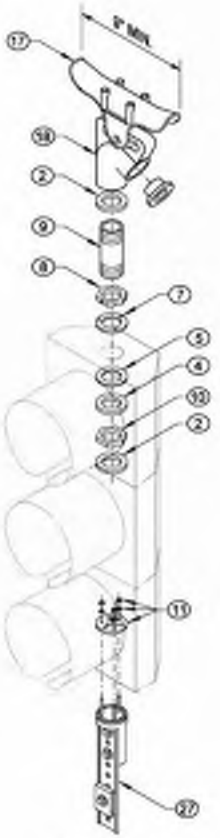
STANDARD PLAN J-75.20-01

SHEET 1 OF 2 SHEETS

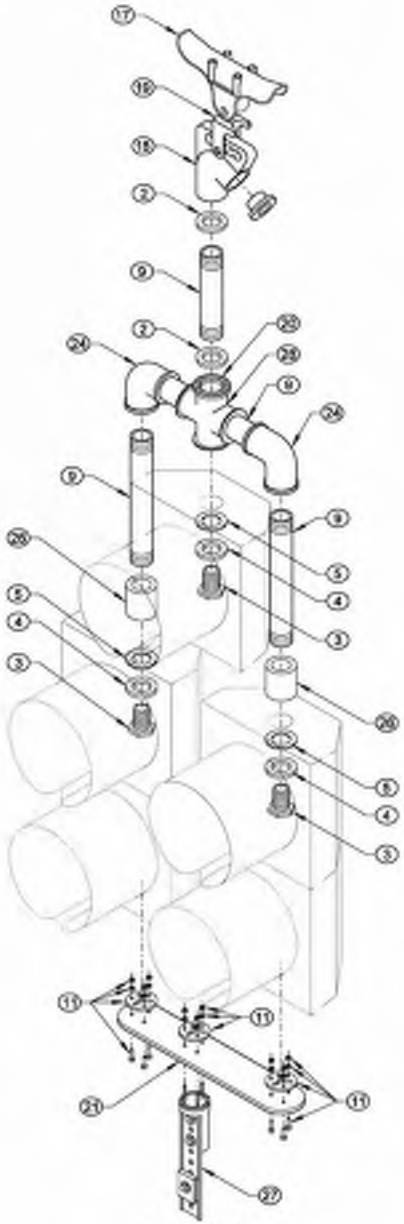
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 10 2015 7:18 AM

Washington State Department of Transportation

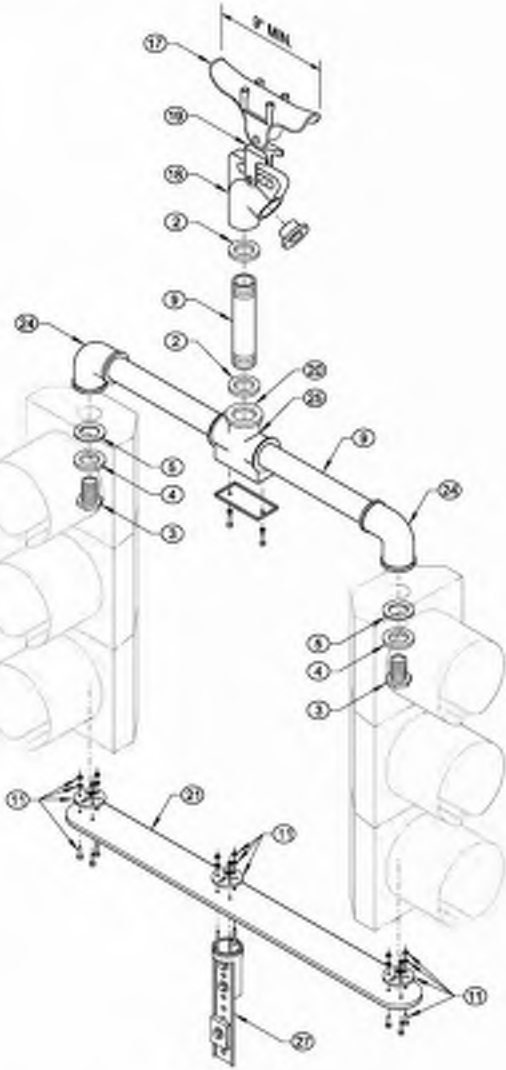
DRAWN BY: COLBY FLETCHER



SPAN WIRE
TYPE P (1 HEAD)



SPAN WIRE
TYPE P-5S
(TYPE P WITH 5-SECTION HEAD)



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

NOTE: BACKPLATES NOT SHOWN FOR CLARITY

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SIGNAL HEAD MOUNTING DETAILS ~ MAST ARM AND SPAN WIRE MOUNTINGS

STANDARD PLAN J-75.20-01

SHEET 2 OF 2 SHEETS

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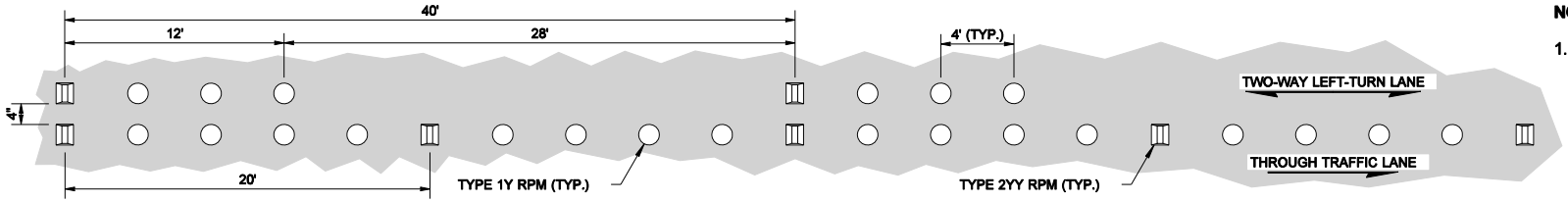
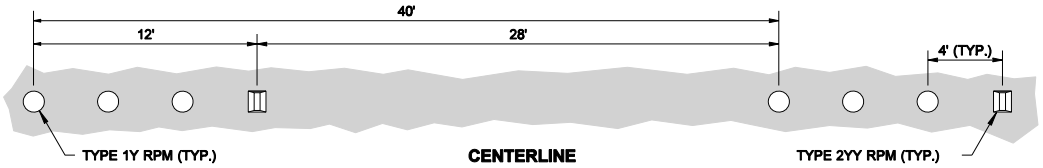


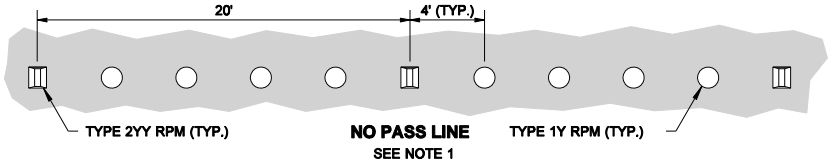
TWO-WAY LEFT-TURN CENTERLINE

NOTE

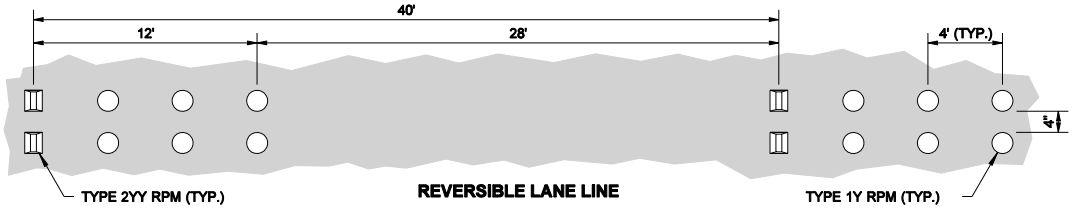
1. The NO PASS LINE (when required) is applied parallel to the CENTERLINE, 4" away, with the Type 2YY RPM's aligned (similar to TWO-WAY LEFT-TURN LINE).



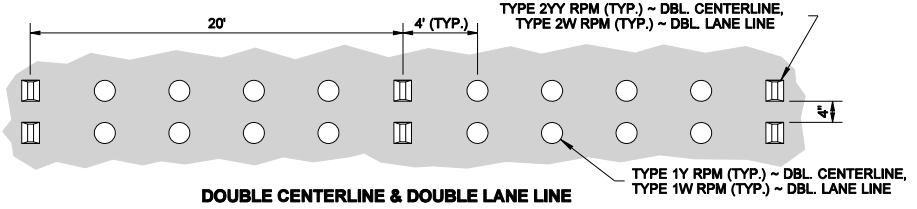
CENTERLINE



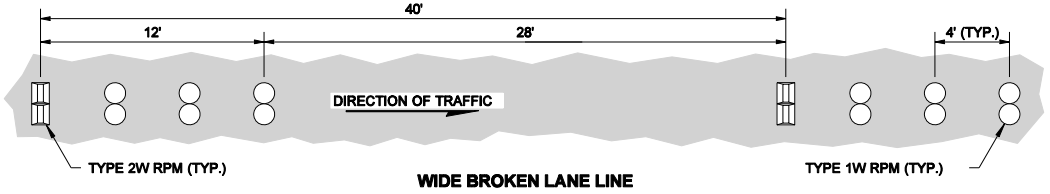
NO PASS LINE
SEE NOTE 1



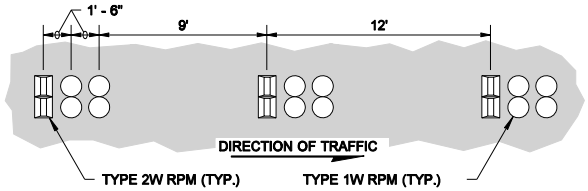
REVERSIBLE LANE LINE



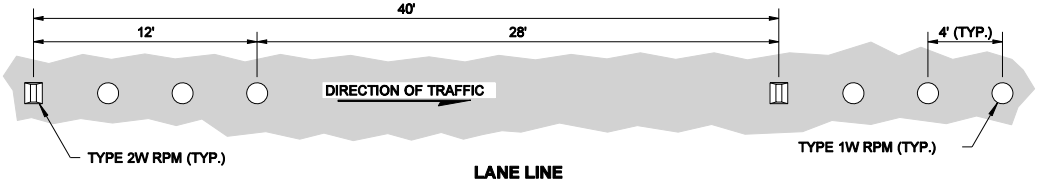
DOUBLE CENTERLINE & DOUBLE LANE LINE



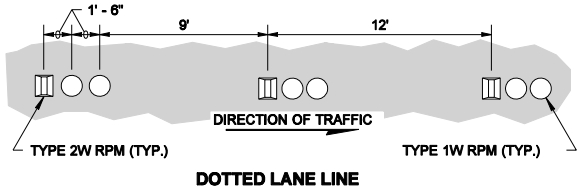
WIDE BROKEN LANE LINE



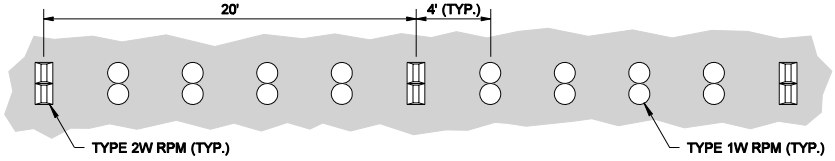
WIDE DOTTED LANE LINE



LANE LINE



DOTTED LANE LINE



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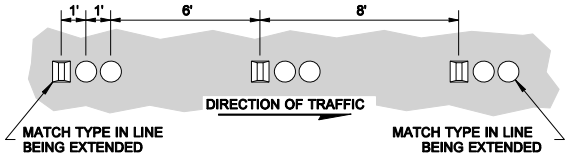

DOTTED EXTENSION LINE

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29115
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PROFESSIONAL ENGINEER

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LONGITUDINAL MARKING SUBSTITUTION W/RAISED PAVEMENT MARKERS

STANDARD PLAN M-20.50-02

SHEET 1 OF 1 SHEET

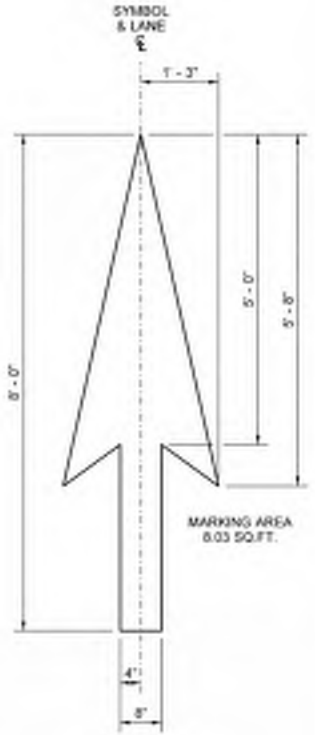
APPROVED FOR PUBLICATION

Pasco Bakotich III — STATE DESIGN ENGINEER — *06-03-11* — DATE

Washington State Department of Transportation

NOTE

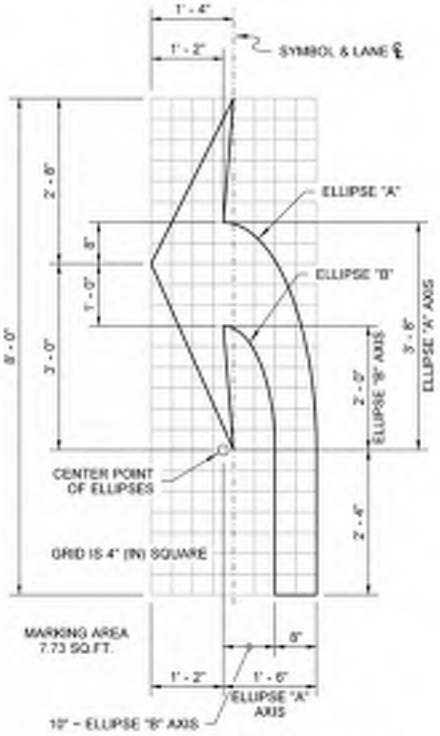
Use the dimensions shown on this plan for each type of Traffic Arrow being placed on roadways with a posted speed limit of 40 mph or lower.



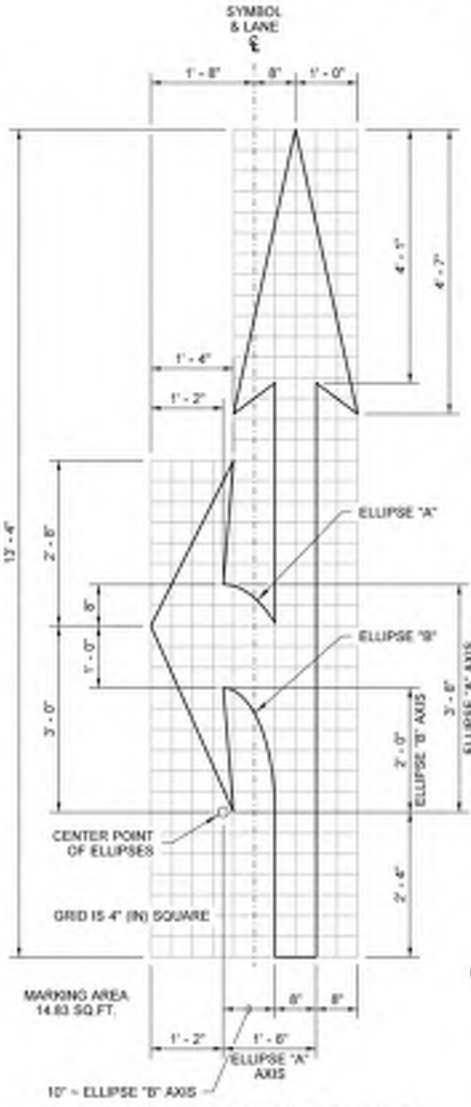
TYPE 1S TRAFFIC ARROW

TYPE 2SR (RIGHT) TRAFFIC ARROW

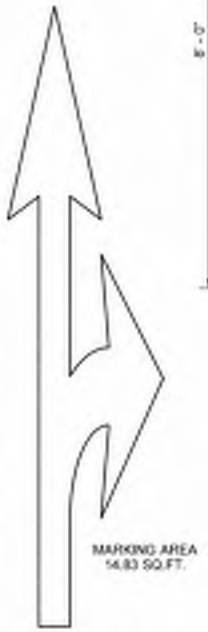
MIRROR IMAGE OF TYPE 2SL TRAFFIC ARROW (SHOWN AT REDUCED SCALE)



TYPE 2SL (LEFT) TRAFFIC ARROW

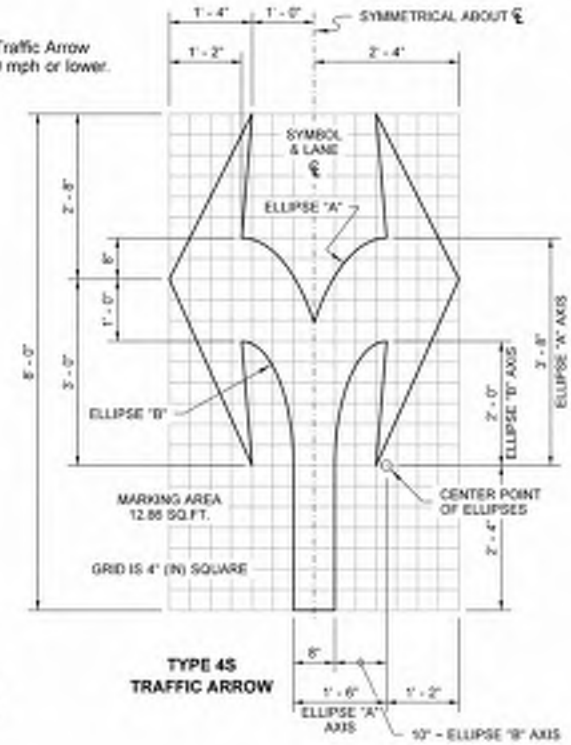


TYPE 3SL (LEFT) TRAFFIC ARROW



TYPE 3SR (RIGHT) TRAFFIC ARROW

MIRROR IMAGE OF TYPE 3SL TRAFFIC ARROW (SHOWN AT REDUCED SCALE)



TYPE 4S TRAFFIC ARROW

DRAWN BY: COLBY FLETCHER

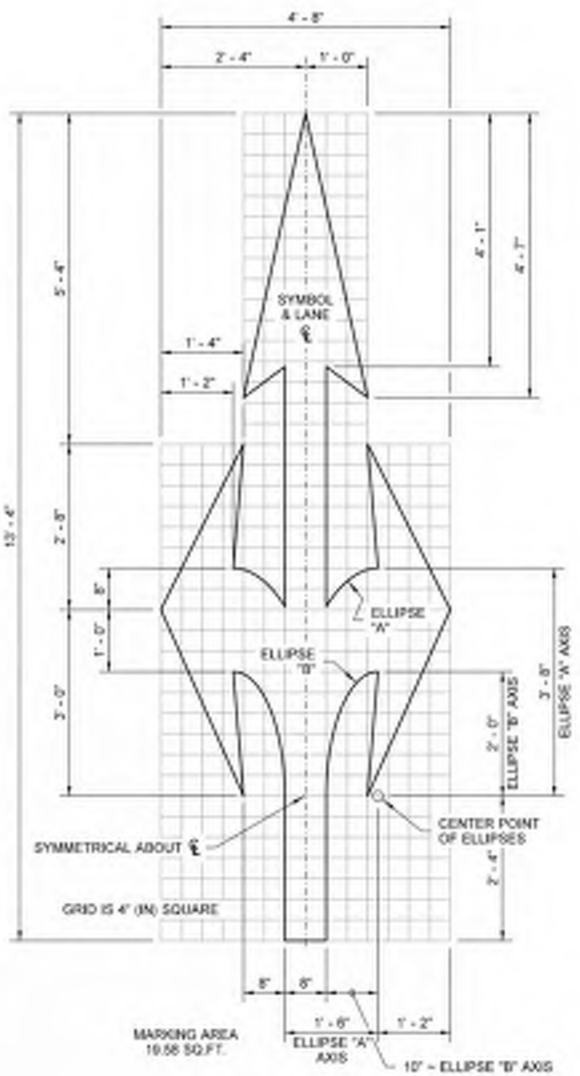
BRIAN J. WALSH
STATE OF WASHINGTON
16103
REGISTERED
PROFESSIONAL ENGINEER

Walsh, Brian
Apr 16 2015 2:21 PM

SYMBOL MARKINGS ~ TRAFFIC ARROWS FOR LOW-SPEED ROADWAYS STANDARD PLAN M-24.40-02

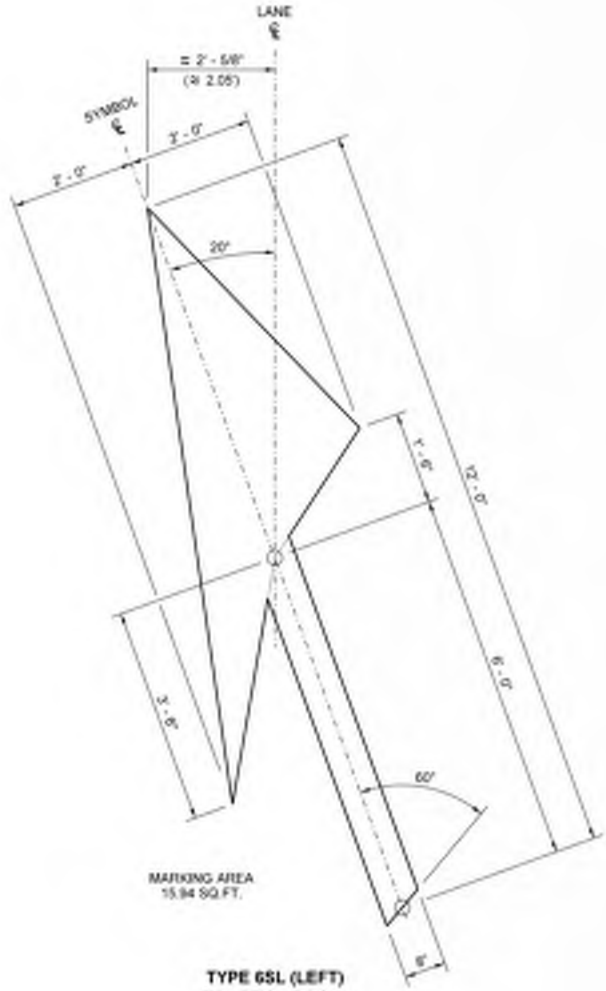
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Bakich, Peter
Apr 20 2015 10:11 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation



MARKING AREA
19.58 SQ.FT.

TYPE 7S TRAFFIC ARROW



MARKING AREA
15.94 SQ.FT.

TYPE 6SL (LEFT)
TRAFFIC ARROW

MARKING AREA
15.94 SQ.FT.

TYPE 6SR (RIGHT)
TRAFFIC ARROW

MIRROR IMAGE OF TYPE 6SL
(MIRRORED ABOUT LANE CENTERLINE)
(SHOWN AT REDUCED SCALE)

BRIAN J. WALSH
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER

Walsh, Brian
Apr 16 2015 2:21 PM

SYMBOL MARKINGS ~ TRAFFIC ARROWS FOR LOW-SPEED ROADWAYS STANDARD PLAN M-24.40-02

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER

Washington State Department of Transportation

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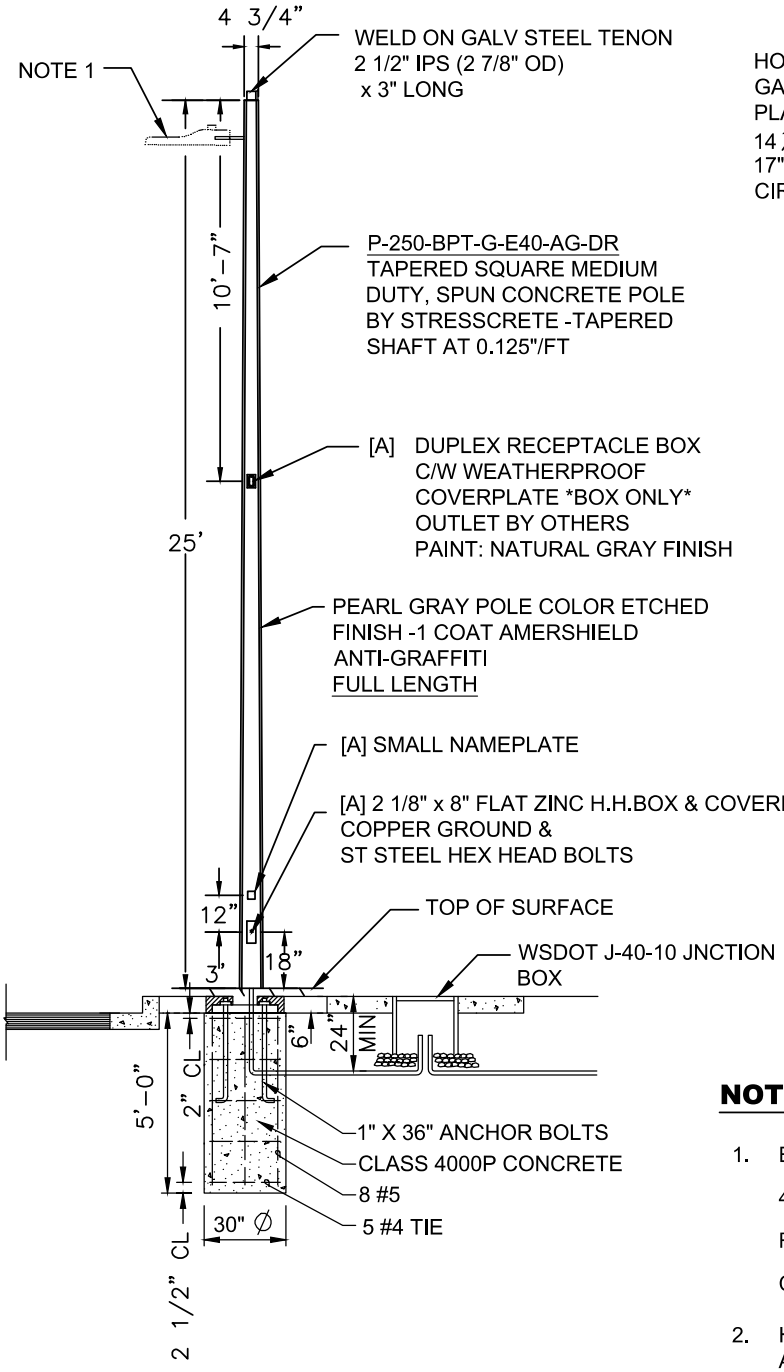
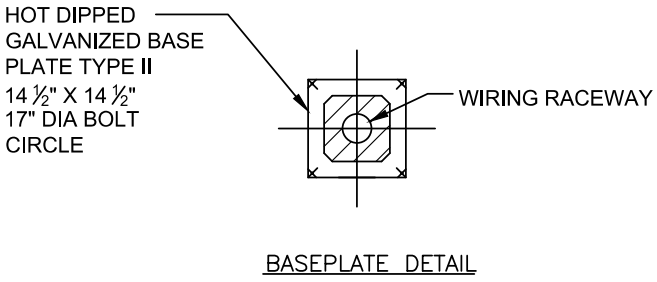




BASEPLATE DETAIL

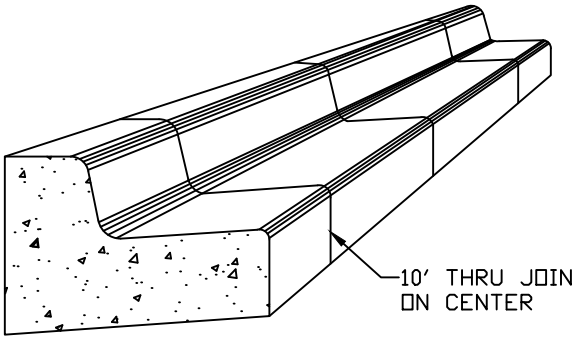
NOTES

1. EATON, STREETWORKS GAA GALLEON LED LUMINARIE
   480V TYPE III WITH SPILL CONTROL, PHOTO CONTROL
   RECEPTACLE, AND MAST ARM ADAPTER
   CUSTOM COLOR BRONZE
2. HOUSE SIDE SHIELDS SHALL BE INSTALLED WHEN ABUTTING RESIDENTIAL STRUCTURES
3. EACH FIXTURE SHALL INCLUDE A PHOTOCELL OR GROUNDING CAP BASED ON EXISTING CIRCUIT CONFIGURATION.
4. A PULL STRING FURNISHED FROM BASEPLATE TO POLE TOP

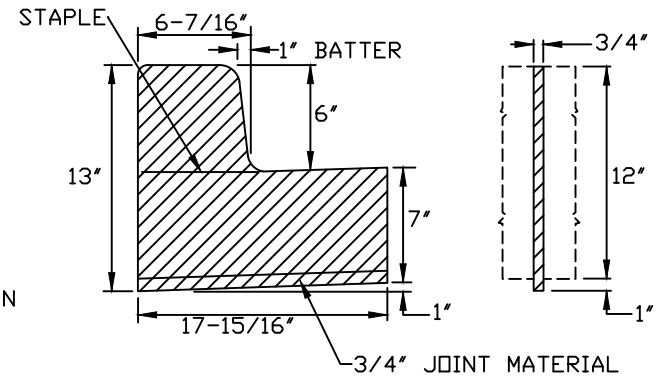
CITY OF MERCER ISLAND
STANDARD DETAILS
ILLUMINATION

CONCRETE POLE LIGHTING
DETAIL W/FOUNDATION

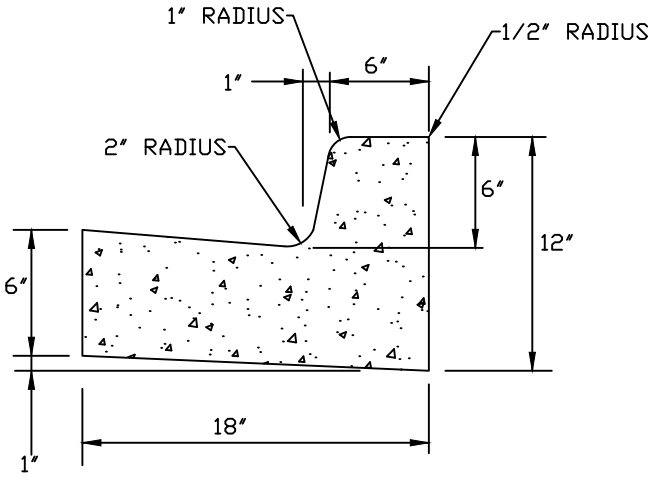
6/17/2022	NO SCALE	**IL-1B**



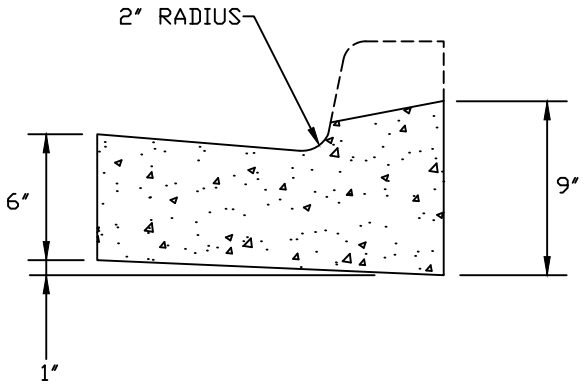
TYPICAL SECTION



JOINT DETAIL



CONCRETE CURB AND GUTTER



CONCRETE CURB AND GUTTER AT DRIVEWAY

NOTES

1. FORMS SHALL BE STEEL AND SET TRUE TO LINE AND GRADE AND SECURELY STAKED. INSPECTION IS REQUIRED PRIOR TO PLACEMENT OF CONCRETE.
2. CONCRETE SHALL BE CEMENT CONCRETE CLASS 5-3/4 SACK OR 6 SACK, 4,000 P.S.I.
3. THE 1" RADIUS ON UPPER FACE OF CURB MAY BE FORMED BY EDGER OR BUILT INTO FACE OF FORM. 1" RADIUS ON LOWER FACE OF CURB WILL BE FORMED BY THE FACE FORM.
4. DUMMY JOINS OF NOT LESS THAN 3/16" THICKNESS SHALL BE OF THE SAME DIMENSIONS AS THE CURB AND GUTTER EXCEPT THAT IT SHALL EXTEND ON 2-1/4" INTO GUTTER SECTION.
5. DUMMY JOINTS SHALL BE PLACE NOT TO EXCEED 15' O.C. NOR LESS THAN 10' O.C. THRU JOINTS SHALL BE PLACED ONLY AT POINTS OF TANGENCY ON STREETS, ALLEY AND DRIVEWAY RETURNS. ALL JOINTS SHALL BE CLEAN AND IN THE GUTTER SECTION THEY SHALL BE EDGED.
6. MATERIALS AND PROCEDURES FOR FORMS, FORM SETTING, PLACING, FINISHING AND CURING SHALL BE AS OUTLINED IN THESE SPECIFICATIONS.

CITY OF MERCER ISLAND
STANDARD DETAILS
STREETS

CEMENT CONCRETE CURB AND GUTTER TYPE "A"

1-1-2000	NO SCALE	ST-14