Contract Provisions

For Construction of:

2018 Intersection Improvements Project

June 2018

CITY OF SAMMAMISH
PUBLIC WORKS DEPARTMENT
801 228th AVENUE SE
SAMMAMISH, WA 98075

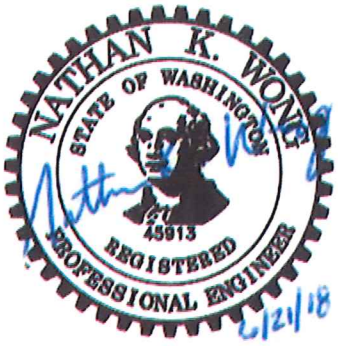
CONTRACT PROVISIONS
for
2018 Intersection Improvements Project

City of Sammamish
King County, Washington
Public Works Department
801 228th Avenue SE
Sammamish, WA 98075
(425) 295-0500
FAX (425) 295-0600

Approved for Construction:

6/21/18
Andrew Zagars, P.E. Date
City Engineer**

6/21/18
Steven Chen, P.E. Date
Project Manager



****Pursuant to Chapter 6, Section 6.2 of the 2016 Public Works Standards, the signature of the City Engineer on these Contract Provisions shall serve as written approval for all variations to the Public Works Standards contained within this project.**

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PART 1

PROPOSAL INTRODUCTION

NOTICE TO CONTRACTORS

CITY OF SAMMAMISH
2018 Intersection Improvements Project

Sealed proposals will be received by the City Clerk up to 2:00 p.m. (local time) on July 10, 2018, for furnishing the necessary labor, materials, equipment, tools, and guarantees thereof to construct the *2018 INTERSECTION IMPROVEMENTS PROJECT*. Bids received after the time and date listed above will not be considered.

Sealed proposals should be addressed to the following:

City of Sammamish
801 228th Avenue SE
Sammamish, WA 98075
Attn: City Clerk

This Contract provides for the removal of existing landscaped traffic islands and restore each area with left-turn pocket travel lanes at five (5) locations within the City of Sammamish, King County.

- 228th Avenue SE & SE 8th Street – Northbound left-turn pocket extension
- 228th Avenue NE & NE 8th Street – Northbound left turn pocket extension, southbound turn pocket extension, Boys and Girls Club driveway modifications (right-in, right-out only), and northbound 228th Avenue NE channelization revisions.
- 228th Avenue NE & NE 4th Street – Southbound left-turn pocket extension
- 228th Avenue SE & Issaquah-Pine Lake Road SE – Channelization modifications and signal head installation to provide signal timing overlap for the westbound right-turn with the southbound left turn.
- 228th Avenue SE & SE 20th Street – Northbound left turn pocket extension and southbound left-turn pocket extension at the northern Discovery Elementary Driveway.

The project includes removal of existing landscaped medians (including trees, irrigation, illumination, signage, etc.), the restoration of each area as extended left-turn pockets, and other work noted in these documents.

The work shall be completed within seventy-five (75) working days after the commencement date stated in the Notice to Proceed. All bidding and construction shall be performed in compliance with the Contract Documents for this project and any addenda issued thereto which are on file at the office of the City Clerk, City Hall, City of Sammamish, Washington.

At the time and date stated above, the proposals will be publicly opened and read aloud. Proposals are to be submitted only on the form provided with the Specifications. All Proposals must be accompanied by a certified check, cashier's check, money order, or bid bond payable to the "City of Sammamish" of value not less than five percent (5%) of the total amount bid.

Plans, Specifications, addenda, Bidders list, and plan holders list for this Project are available through the City of Sammamish's on-line plan room at http://bxwa.com. Click on "Posted Projects"; "Public Works", "City of Sammamish", and "Projects Bidding". Bidders are required to register in order to receive automatic e-mail notification of future addenda and to be placed on the Bidders List. Contact Builders Exchange of Washington at 425-258-1303 should you require assistance.

Funding for this Project will be provided by the City of Sammamish. The City of Sammamish expressly reserves the right to reject any or all bids and to waive minor irregularities or informalities and to further make award of the Project to the lowest responsive, responsible bidder as it best serves the interest of the City.

Melonie Anderson
City Clerk

Dates of Publication: Daily Journal of Commerce: June 25, 2018 and July 2, 2018

Seattle Times: June 25, 2018 and July 2, 2018

BIDDER'S CHECKLIST

1. REQUIRED FORMS

The Bidder shall submit the following forms as part of the proposal. The forms must be executed in full and submitted with the Proposal.

_____ **Proposal**

_____ **Schedule of Prices**

_____ **Bid Security Form**

_____ **Acknowledgement of Receipt of Addenda**

_____ **Bidder Information and Signature**

_____ **Non-Collusion and Debarment Affidavit**

_____ **Minimum Wage Affidavit Form**

The two lowest bidders shall submit the following forms within 48 hours after the bid opening. Failure to submit these forms may result in the Contracting Agency refusal to accept the Bid.

_____ **Statement of Bidder's Qualifications**

_____ **Responsible Bidder Criteria**

2. CONTRACT DOCUMENT FORMS

The following forms (a., b., and c.) are to be executed and the following Certificates of Insurance (d. and e.) are to be provided after the Contract is awarded and prior to Notice to Proceed.

a. Contract Agreement
b. Performance Bond
c. Labor and Material Payment Bond
d. Certificate of Insurance
e. Certificate of Builder's Risk "All Risk" Insurance

PART 2

PROPOSAL

Print Contractor Name

PROPOSAL

Honorable Mayor and Council
City of Sammamish
801 228th Avenue NE
Sammamish, WA 98075

This Contract provides for the removal of existing landscaped traffic islands and restore each area with left-turn pocket travel lanes at five (5) locations within the City of Sammamish, King County.

- 228th Avenue SE & SE 8th Street – Northbound left-turn pocket extension
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- 228th Avenue SE & Issaquah-Pine Lake Road SE – Channelization modifications and signal head installation to provide signal timing overlap for the westbound right-turn with the southbound left turn.
- 228th Avenue SE & SE 20th Street – Northbound left turn pocket extension and southbound left-turn pocket extension at the northern Discovery Elementary Driveway.

The project includes removal of existing landscaped medians (including trees, irrigation, illumination, signage, etc.), the restoration of each area as extended left-turn pockets, and other work noted in these documents.

All bidding and construction shall be performed in compliance with the Notice to Contractors, Bid Proposal, Plans, Specifications, and Contract for this project and any addenda issued thereto which are on file at the office of the City Clerk, City Hall, City of Sammamish, Washington.

It is understood herein that after the date and hour set for the opening of bids, no Bidder may withdraw its Proposal, unless the award of the Contract is delayed for a period exceeding forty (40) consecutive calendar days.

The undersigned has examined the site(s), local conditions, Addenda, Contract Provisions, Plans, and all applicable laws and ordinances covering the Work contemplated. In accordance with the terms, provisions, and requirements of the foregoing, all of their respective terms and conditions are incorporated herein by this reference and the following unit and lump sum prices are tendered as an offer to perform the Work and furnish the equipment, materials, appurtenances, and guarantees, complete in place, in good working order.

_____
Print Contractor Name

The undersigned freely states that it is familiar with the provisions of the competitive bidding statutes of the State of Washington, and specifically the provisions of RCW Chapter 9.18, and certifies that with respect to this Proposal, there has been no collusion or understanding with any other person, persons, or corporation, to prevent or eliminate full and unrestricted competition among Bidders on this Project.

The undersigned agrees that in the event of contract award, it shall employ only Contractor and Subcontractors duly licensed by the State of Washington.

The undersigned agrees that the Owner reserves the right to reject any or all bids and to waive any minor informalities.

The undersigned hereby agrees that the Owner reserves the right to award the contract to the lowest responsible, responsive bidder whose Proposal is in the best interest of the Owner. The Owner will determine at the time of award of the Project which additives, if any, will be included in the Contract.

The undersigned agrees that the Owner is authorized to obtain reports from all references included herein.

I, the undersigned, hereby certify, under penalty of perjury under the laws of the State of Washington, on behalf of the firm identified below that, to the best of my knowledge and belief, this firm has NOT been determined by a final and binding citation and notice of assessment issued by the Washington State 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 RCW chapters 49.46, 49.48, or 49.52 within three (3) years prior to this project's bid solicitation date.

Very Truly Yours,

_____
Print Company Name

_____
By (Print Name)

_____
By (Signature)

_____
Title

_____
Date

Print Contractor Name

SCHEDULE OF PRICES

NOTE:

- **Unit prices for all items, all extensions, and the total amount bid must be shown.**
- **The project must be in its entirety, including all bid items and any bid additive bid items as specifically listed in the Proposal, in order to be considered a responsive bid.**
- **Where conflict occurs between the unit price and the total amount named for any item the unit price shall prevail, and totals shall be corrected to conform thereto.**
- **All entries must be typed or printed and entered in ink. Award of the Contract shall be based on the lowest, responsive bid.**

(Standard Specifications and Special Provision references shown are provided for information only to assist bidders in the preparation of their proposal. Bidders shall not rely on this information and must thoroughly examine the contract requirements during the preparation of their proposal.)

Item No.	Item With Unit Priced Bid	Section Reference	Unit	Approx. Quantity	Unit Price	Amount
1.	MINOR CHANGES	1-04 SS	FA	1	$45,000	$45,000
2.	RECORD DRAWINGS	1-05 SP	LS	1		
3.	SPCC PLAN	1-07 SS	LS	1		
4.	LOCATE EXISTING UTILITIES	1-07 SP	LS	1		
5.	MOBILIZATION	1-09 SS	LS	1		
6.	PROJECT TEMPORARY TRAFFIC CONTROL	1-10 SS	LS	1		
7.	FLAGGERS AND SPOTTERS	1-10 SS	HR	1,100		
8.	TRAFFIC CONTROL SUPERVISOR	1-10 SS	LS	1		
9.	TREE REMOVAL	2-01 SP	EA	4		
10.	REMOVAL OF STRUCTURE AND OBSTRUCTION	2-02 SP	LS	1		

PROPOSAL – Continued

Print Contractor Name

Item No.	Item With Unit Priced Bid	Section Reference	Unit	Approx. Quantity	Unit Price	Amount
11.	ROADWAY EXCAVATION INCL. HAUL	2-03 SS	CY	810		
12.	CRUSHED SURFACE BASE COURSE	4-04 SS	TN	530		
13.	HMA CL. 1/2 IN. PG 64-22	5-04 SS	TN	750		
14.	ADJUST MANHOLE	7-05 SS	EA	1		
15.	EROSION/WATER POLLUTION CONTROL	8-01 SP	LS	1		
16.	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	8-01 SP	LS	1		
17.	STREET CLEANING	8-01 SP	LS	1		
18.	INLET PROTECTION	8-01 SS	EA	32		
19.	RESTORATION AND ROADSIDE CLEANUP	8-02 SP	FA	1	$6,000	$6,000
20.	REMOVE AND CAP IRRIGATION SYSTEM	8-03 SP	LS	1		
21.	CEMENT CONC. TRAFFIC CURB AND GUTTER	8-04 SS	LF	30		
22.	PRECAST SLOPED MOUNTABLE CURB	8-07 SS	LF	35		
23.	PRECAST DUAL FACED SLOPED MOUNTABLE CURB	8-07 SS	LF	817		
24.	RAISED PAVEMENT MARKER TYPE 1	8-09 SS	HUND	2.0		
25.	RAISED PAVEMENT MARKER TYPE 2	8-09 SS	HUND	3.0		
26.	18-INCH DELINEATION POST	8-10 SS	EA	20		
27.	CEMENT CONC. SIDEWALK	8-14 SS	SY	70		
28.	TRAFFIC SIGNAL SYSTEM, COMPLETE	8-20 SP	LS	1		
29.	ILLUMINATION SYSTEM, COMPLETE	8-20 SP	LS	1		
30.	PERMANENT SIGNING	8-21 SP	LS	1		
31.	PROJECT SIGN	8-21 SP	EA	2		

PROPOSAL – Continued

Print Contractor Name

Item No.	Item With Unit Priced Bid	Section Reference	Unit	Approx. Quantity	Unit Price	Amount
32.	PLASTIC WIDE LANE LINE	8-22 SS	LF	1,060		
33.	PAINTED LINE	8-22 SS	LF	325		
34.	PLASTIC TRAFFIC ARROW	8-22 SS	EA	14		
35.	REMOVING PLASTIC LINE	8-22 SS	LF	690		
36.	REMOVING PLASTIC TRAFFIC MARKER	8-22 SS	EA	6		

TOTAL CONSTRUCTION COST ..... $_____

Note: Contractor is advised to be familiar with Washington State Revenue Rule 171 as no separate, distinct sales tax monies will be reimbursed to the Contractor. See Special Provisions 1-07.2(1).

_____
Print Contractor Name

BID SECURITY FORM

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

Sign here _____

Know All Men by These Presents:

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

The condition of this obligation is such that if the Obligee shall make any award to the Principal for _____ according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for the faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall, in case of failure to do so, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

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

_____
Principal

_____
Surety

Received return of deposit in the sum of $_____

_____
Print Contractor Name

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

By signing below, Bidder acknowledges receipt and understanding of the following Addenda to the Contract Documents:

Addendum No.	Date of Receipt	Signature
1		
2		
3		
4		
5		
6		

NOTE:
Failure to acknowledge receipt of Addenda may be considered as an irregularity in the Bid Proposal and the City reserves the right to determine whether the Bid will be disqualified.

Print Contractor Name

BIDDER INFORMATION AND SIGNATURE

The Bidder proposes to accept as full payment for the Work proposed herein, the amount computed under the provisions of the Contract Provisions. The undersigned Bids for the following described Project:

2018 INTERSECTION IMPROVEMENTS PROJECT

The party by whom this Bid is submitted and by whom the Contract will be entered into, in the event the award is made to this party, is:

Contractor (Firm Name)	Signature
Address	Name (Print) & Title
Phone Number	Date of Signing
Contractor's Washington State License Number	(Indicate whether contractor is partnership, joint venture, corporation, or sole proprietorship)*

*If Bidder is a corporation, write State of Incorporation under signature. If partnership, give full names of all partners.

The name of the President, Treasurer, and/or Manager of the Bidding corporation, or the names of all persons and parties interested in this Bid as partners or principals, are as follows:

Name	Address

_____
Print Contractor Name

IF SOLE PROPRIETOR OR PARTNERSHIP

IN WITNESS hereto, the undersigned has set his (its) hand this _____ day of _____, 20____.

_____
Signature of Bidder

_____
Title

IF CORPORATION

IN WITNESS WHEREOF, the undersigned corporation has caused this instrument to be executed by its duly authorized officers this _____ day of _____, 20____.

Attest:

_____
Name of Corporation

_____ by_____
Secretary

_____
Title

Sworn to me before me this _____ day of

_____, 20____.
Notary Public in and for the State of
Washington Residing at

_____

NOTES:

If the Bidder is a co-partnership, give firm name under which business is transacted; Proposal must be executed by a partner. If the Bidder is a corporation, Proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign).

_____
Print Contractor Name

NON-COLLUSION AND DEBARMENT AFFIDAVIT

* STATE OF WASHINGTON)
)
** COUNTY OF _____)

I, the undersigned, an authorized representative of ***_____, being first duly sworn on oath do hereby certify that said 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.

I further certify that, except as noted below, the firm, association or corporation or any person in a controlling capacity associated therewith or any position involving the administration of federal funds; is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against said person, firm, association or corporation by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

I further acknowledge that by signing the signature page of the proposal, I am deemed to have signed and have agreed to the provisions of this affidavit.

_____
Name of Project

_____
Name of Bidder's Firm

_____
Signature of Authorized Representative of Bidder

_____
Printed Name of Authorized Representative of Bidder

_____
Date

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument and acknowledged it to be (his/her) free and voluntary act for the uses and purposes mentioned in the instrument.

Dated _____

_____
Notary Public in and for the State
of Washington residing at _____
Notary (print): _____
My appointment expires: _____

NOTE:

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate above to whom it applies, initiating agency, and dates of action. Providing false information may result in criminal prosecution or administrative sanctions.

* A suspending or debarring official may grant an exception permitting a debarred, suspended, or excluded person to participate in a particular transaction upon a written determination by such official stating the reason(s) for deviating form the Presidential policy established by Executive order 12549..." (49 CFR Part 29 Section 29.215).

* If notarization of proposal takes place outside of Washington State, DELETE WASHINGTON, and enter appropriate State.

** Fill in county where notarization of proposal takes place.

_____
Print Contractor Name

MINIMUM WAGE AFFIDAVIT FORM

STATE OF WASHINGTON)
) SS
COUNTY OF KING)

I, the undersigned, having been duly sworn, deposed, say and certify that in connection with the performance of the work of this project, I will pay each classification of laborer, workman, or mechanic employed in the performance of such work; not less than the prevailing rate of wage or not less than the minimum rate of wages as specified in the principal contract; that I have read the above and foregoing statement and certificate, know the contents thereof and the substance as set forth therein is true to my knowledge and belief.

_____
Name of Project

_____
Name of Bidder's Firm

_____
Signature of Authorized Representative of Bidder

_____
Printed Name of Authorized Representative of Bidder

_____
Date

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument and acknowledged it to be (his/her) free and voluntary act for the uses and purposes mentioned in the instrument.

Dated _____

Notary Public in and for the State
of Washington residing

at

Notary

(print):

My appointment expires:

_____
Print Contractor Name

STATEMENT OF BIDDER'S QUALIFICATIONS

Name of Firm: _____

Address: _____

Telephone No. _____

Contact Person for this Project: _____

Number of years the Contractor has been engaged in the construction business under the present firm name, as indicated above: _____

Gross dollar amount of work currently under contract: _____

Gross dollar amount of contracts currently not completed: _____

General character of work performed by the firm: _____

List all of the projects over one-half million dollars total of a similar nature which have been completed by the Contractor within the last five (5) years and the gross dollar amount of each project, together with the Owner's name and phone number, and the Engineer's name.

Project Name	Amount	Owner	Phone	Engineer's Name

_____
Print Contractor Name

List five major pieces of equipment which are anticipated to be used on this project by the Contractor and note which items are owned by the Contractor and which are to be leased or rented from others:

1. _____
2. _____
3. _____
4. _____
5. _____

Bank Reference: _____

How many general superintendents or other responsible employees in a supervisory position do you have at this time, and how long have they been with the firm?

_____

Identify who will be the general superintendent or project superintendent on this Project and list the number of years with the firm.

_____

Have you changed bonding company within the last three (3) years? _____

If so, why? _____

_____

Have you ever been sued or engaged in arbitration by the Owner or have you ever sued or demanded arbitration from an Owner on any public works contract for a special utility district, private utility company, municipality, county or state

government? _____ For what reason?_____

_____

Disposition of case, if settled: _____

Do you have any outstanding payments due to the Department of Revenue? ____

If yes, explain: _____

Bidder agrees that the Owner shall retain the right to obtain any and all credit reports.

Yes: ____ No ____

_____
Print Contractor Name

RESPONSIBLE BIDDER CRITERIA

In accordance with RCW 39.04, before award of a Public Works Contract, a Bidder must meet the following responsibility criteria to be considered a responsible Bidder and qualified to be awarded a Public Works Project. The Bidder must:

1. At the time of Bid submittal, have a certificate of registration in compliance with chapter 18.27 RCW
2. Have a current state unified business identifier (UBI) number
3. If applicable, have industrial insurance coverage for the Bidder's employees working Washington as required in Title 51 RCW
4. If applicable, have an employment security department number as required in Title 50 RCW
5. If applicable, have a state excise tax registration number as required in Title 82 RCW
6. Not be disqualified from Bidding on any Public Works Contract under RCW 39.06.010 or 39.12.065(3)

In accordance with RCW 39.06, a Public Works Contractor must 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 and possesses an electrical contractor license, if required by RCW 19.28, or an elevator contractor license, if required by RCW 70.87. This verification requirement, as well as the responsibility criteria, must include every Public Works Contract and subcontract of every tier.

Providing the following information is **MANDATORY** in order to meet "Responsible Bidder" requirements. Failure to provide this information may disqualify your Bid as being **"Non-Responsive"**. *If your business is not required to have one of the following numbers, provide an explanation.*

1. State of Washington Contractor Registration No. _____

2. State of Washington Unified Business Identifier No. _____

3. Employment Security Department No. _____

4. State Excise Tax Registration No. _____

5. Is the payment of Worker's Compensation (Industrial Insurance) Premiums current? If your business does not have a Worker's Comp account with the WA State Dept. of Labor & Industry please explain why.
   [ ] Yes
   [ ] No (If No, you are not eligible to bid on this project
   [ ] No Account – Explain why: _____

6. Are you disqualified from Bidding on Public Works Projects in the State of Washington?
   [ ] Yes (If Yes, you are not eligible to Bid on this Project)
   [ ] No

PART 3

CONTRACT DOCUMENT FORMS

CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 20____. by and between THE CITY OF SAMMAMISH, Washington, a municipal corporation of the State of Washington, hereinafter referred to as "CITY" and _____, hereinafter referred to as "CONTRACTOR."

WITNESSETH:

1) The Contractor shall within the time stipulated, (to-wit: within **75 WORKING DAYS** working days from date of commencement hereof as required by the Contract, of which this agreement is a component part) perform all the work and services required to be performed, and provide and furnish all of the labor, materials, appliances, machines, tools, equipment, utility and transportation services necessary to perform the Contract, and shall complete the construction and installation work in a workmanlike manner, in connection with the City's Project:

2018 INTERSECTION IMPROVEMENTS PROJECT

This Contract provides for the removal of existing landscaped traffic islands and restore each area with left-turn pocket travel lanes at five (5) locations within the City of Sammamish, King County.

- 228th Avenue SE & SE 8th Street – Northbound left-turn pocket extension
- 228th Avenue NE & NE 8th Street – Northbound left turn pocket extension, southbound turn pocket extension, Boys and Girls Club driveway modifications (right-in, right-out only), and northbound 228th Avenue NE channelization revisions.
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- 228th Avenue SE & Issaquah-Pine Lake Road SE – Channelization modifications and signal head installation to provide signal timing overlap for the westbound right-turn with the southbound left turn.
- 228th Avenue SE & SE 20th Street – Northbound left turn pocket extension and southbound left-turn pocket extension at the northern Discovery Elementary Driveway.

The project includes removal of existing landscaped medians (including trees, irrigation, illumination, signage, etc.), the restoration of each area as extended left-turn pockets, and other work all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

2) All the foregoing shall be timely performed, furnished, constructed, installed and completed in strict conformity with the plans and specifications, including any and all addenda issued by the City and all other documents hereinafter enumerated, and in full compliance with all applicable codes, ordinances and regulations of the City of Sammamish and any other governmental authority having jurisdiction there over. It is further agreed and stipulated that all of said labor, materials, appliances, machines, tools, equipment and services shall be furnished and the construction installation performed and completed to the satisfaction and the approval of the City's Public Works Director as being in such conformity with the plans, specifications and all requirements of or arising under the Contract.

The aforesaid Contract, entered into by the acceptance of the Contractor's bid and signing of this agreement, consists of the following documents, all of which are component parts of said Contract and as fully a part thereof as if herein set out in full, and if not attached, as if hereto attached.

a) This Agreement
b) Instruction to Bidders
c) Project Proposal
d) Specifications
e) Maps and Plans
f) Bid
g) Advertisement for Bids
h) Special Provisions, if any
i) Addenda, if any

and all modifications or changes issued pursuant to the Contract Documents.

3) If the Contractor refuses or fails to prosecute the work or any part thereof, with such diligence as will insure its completion within the time specified in this Contract, or any extension in writing thereof, or fails to complete said work with such time, or if the Contractor shall be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver shall be appointed on account of the Contractor's insolvency, or if he or any of his subcontractors should violate any of the provisions of this Contract, the City may then serve written notice upon him and his surety of its intention to terminate the Contract, and unless within ten (10) days after the serving of such violation or non-compliance of any provision of the Contract shall cease and satisfactory arrangement for the correction thereof be made, this Contract, shall, upon the expiration of said ten (10) day period, cease and terminate in every respect. In the event of any such termination, the City shall immediately serve written notice thereof upon the surety and the Contractor and the surety shall have the right to take over and perform the Contract, provided, however, that if the surety within fifteen (15) days after the serving upon it of such notice of termination does not perform the Contract or does not commence performance thereof within thirty (30) days from the date of serving such notice, the City itself may take over the work under the Contract and prosecute the same to completion by Contract or by any other method it may deem advisable, for the account and at the expense of the Contractor, and his surety shall be liable to the City for any excess cost or other damages occasioned the City thereby. In such event, the City, if it so elects, may, without liability for so doing, take possession of and utilize in completing said Contract such materials, machinery, appliances, equipment, plants and other properties belonging to the Contractor as may be on site of the project and useful therein.

4) The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the City.

5) Contractor agrees and covenants to hold and save the City, its officers, agents, representatives and employees harmless and to promptly indemnify same from and against any and all claims, actions, damages, liability of every type and nature including all costs and legal expenses incurred by reason of any work arising under or in connection with the Contract to be performed hereunder, including loss of life, personal injury and/or damage to property arising from or out of any occurrence, omission or activity upon, on or about the premises worked upon or in any way relating to this Contract. This hold harmless

and indemnification provision shall likewise apply for or on account of any patented or unpatented invention, process, article or appliance manufactured for use in the performance of the Contract, including its use by the City, unless otherwise specifically provided for in this Contract.

In the event the City shall, without fault on its part, be made a party to any litigation commenced by or against Contractor, then Contractor shall proceed and hold the City harmless and he shall pay all costs, expenses and reasonable attorney's fees incurred or paid by the City in connection with such litigation. Furthermore, Contractor agrees to pay all costs, expenses and reasonable attorney's fees that may be incurred or paid by City in the enforcement of any of the covenants, provisions and agreements hereunder.

6) Any notice from one party to the other party under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by its duly authorized representative of such party. Any such notice as heretofore specified shall be given by personal delivery thereof or by depositing same in the United States mail, postage prepaid, certified or registered mail.

7) The Contractor shall commence performance of the Contract no later than 10 calendar days after Contract final execution, and shall complete the full performance of the Contract not later than 75 working days from the date of commencement. For each and every working day of delay after the established day of completion, it is hereby stipulated and agreed that the damages to the City occasioned by said delay shall be a sum calculated and imposed in compliance with 2018 WSDOT Standard Specifications, Section 1-08.9, Liquidated Damages (and not as a penalty) for each such day, which shall be paid by the Contractor to the City.

8) Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of any installation provided for by this Contract shall relieve the Contractor of liability in respect to any warranties or responsibility for faulty materials or workmanship. The Contractor shall be under the duty to remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within the period of one (1) year from the date of final acceptance only that work listed in Group(s) none of the Summary of quantities in the Contract Plans, i.e. the "Federal Non-participating Items," unless a longer period is specified. However, all manufacturer's warranties or guarantees on electrical and mechanical equipment, consistent with those provided as customary trade practice, shall be assigned to the City at the time of project acceptance. The Contractor shall further be required to supply warranties or guarantees providing for satisfactory in-service operation of any mechanical and electrical equipment and related components involved in Group(s) none of the Summary of Quantities in the Contract Plans, i.e. "Federal Participating Items" for a period not to exceed 6 months following project acceptance. The City will give notice of observed defects as heretofore specified with reasonable promptness after discovery thereof, and Contractor shall be obligated to take immediate steps to correct and remedy any such defect, fault or breach at the sole cost and expense of Contractor.

9) The Contractor and each subcontractor, if any, shall submit to the City such schedules of quantities and costs, progress schedules, payrolls, reports, estimates, records and miscellaneous data pertaining to the Contract as may be requested by the City from time to time.

10) The Contractor shall furnish a surety bond or bonds as security for the faithful performance of the Contract, including the payment of all persons and firms performing labor on the construction project under this Contract or furnishing materials in connection with this Contract; said bond to be in the full amount of the Contract price as specified in Paragraph 11. The surety or sureties on such bond or bonds must be duly licensed as a surety in the State of Washington.

11) The total amount of this contract is the sum of _____
numbers

_____
written words

which includes any required Washington State Sales Tax. Payments will be made to Contractor as specified in the "Standard Specifications" of this Contract.

IN WITNESS WHEREOF, the City has caused these presents to be signed by its City Manager and attested by its City Attorney and the Contractor has hereunto set his hand and seal the day and year first above-written.

CONTRACTOR	CITY OF SAMMAMISH
_____	_____
President/Partner/Owner	City Manager
	ATTEST
_____	_____
Secretary	City Attorney

dba _____
Firm Name

check one
☐ Individual ☐ Partnership ☐ Corporation Incorporated in _____

Attention:

If business is a CORPORATION, name of the corporation should be listed in full and both President and Secretary must sign the contract, OR if one signature is permitted by corporation by-laws, a copy of the by-laws shall be furnished to the City and made a part of the contract document.

If business is a PARTNERSHIP, full name of each partner should be listed followed by d/b/a (doing business as) and firm or trade name; any one partner may sign the contract.

If business is an INDIVIDUAL PROPRIETORSHIP, the name of the owner should appear followed by d/b/a and name of the company.

CONTRACTOR'S RETAINAGE AGREEMENT

IDENTIFICATION AND DESCRIPTION

Project Title: 2018 INTERSECTION IMPROVEMENTS PROJECT

Contractor:_____

Representative:_____

Bid Date:_____ City Clerk:_____

City Council Award Date:_____

CONTRACTOR'S INSTRUCTIONS

Pursuant to R.C.W. 60.28.01 0 I hereby notify the City of Sammamish of my instructions to ☐ invest ☐ not to invest the retainage withheld under the terms of this contract.

Type of Investment: _____

_____

RETAINAGE FORMULA

In accordance with applicable State Statutes, the following provisions will be made for the disposition of the retainage held for investment:

1. All investments selected are subject to City approval.

2. Retainage under this agreement will be held in escrow by the _____, the terms of which are specified by separate escrow agreement. The cost of the investment program is to be borne entirely by the contractor.

3. The final disposition of the contract retainage will be made in accordance with applicable statutes.

Contractor: _____ Date: _____
Firm Name

By: _____ _____
Signature Title

Address: _____

Phone: _____ Federal ID # _____

Estimated Completion Date: _____

CITY APPROVAL
Approval of Investment Program and Retainage Agreement

_____

Finance Department Date

LABOR AND MATERIAL PAYMENT BOND

We _____as Principal, and

_____as Surety, jointly and severally bind ourselves, our heirs, successors and assigns as set forth herein to CITY OF SAMMAMISH (hereinafter called the Owner) for payment of the penal sum of

_____ Dollars ($_____), lawful money of the United States in connection with the owner's award to the Contractor of the contract for construction ("Contract") of the following project:

2018 INTERSECTION IMPROVEMENTS PROJECT

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Contractor shall in all respects faithfully perform all obligations and provisions in the said Contract, and pay all laborers, mechanics, and subcontractors and material men, taxing authorizes and all persons who supply such person or persons or subcontractors with material, equipment and supplies for the carrying on of such work, this obligation shall become null and void; otherwise, it shall remain in full force and effect, and Surety shall defend and indemnify Owner against any loss or damage due to the failure of the Principal to strictly perform all obligations of the Contract.

This bond shall be in force until completion of the Project and acceptance by the Owner, and also for such period thereafter during which the law allows claims to be filed and sued upon.

This bond is provided pursuant to and in compliance with R.C.W. Chapter 39.08, the terms and requirements of which statute are incorporated herein as though fully set forth herein.

Surety agrees that no change, extension of time, modifications or addition to the terms of the Contract, or the work to be performed thereunder, or to the specifications shall in any way affect its obligation on this bond, and it hereby waives notice thereof.

The Contractor and Surety agree that if the Owner is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay the Owner reasonable attorney's fees incurred, with or without suit, in addition to the penal sum.

Surety certifies that it is an authorized surety bond issuer, properly authorized to transact surety business in Washington. Surety agrees to be bound by the laws of the State of Washington and subject itself to the jurisdiction of the courts of the State of Washington.

Executed in four original counterparts on _____, 20_____

_____

CONTRACTOR

By _____

_____

(Title)

(Attach acknowledgment of authorized representative of Contractor).

_____ (Name and Address of Surety)

_____

_____

_____ (Name and Address of Surety's agent for service of process in Washington if different from above)

_____ (Telephone No. of Surety's Washington agent)

(Attach acknowledgment)

_____

Surety

By _____

Its Attorney-in-fact

Notice: Sureties must be authorized to conduct surety business in Washington and have an agent for service of process in Washington. Certified copy of Power of Attorney must be attached.

PERFORMANCE BOND TO THE CITY OF SAMMAMISH

We, the undersigned _____as

principal, and _____ corporation organized and

existing under the laws of the State of _____ as a surety corporation, and qualified under the laws of the State of Washington to become surety upon bonds of contractors with municipal corporations, as surety are jointly and severally held and

firmly bound to the City of Sammamish in the penal sum of $_____ for the payment of which sum on demand we bind ourselves and our successors, heirs, administrators or person representatives, as the case may be.
This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinance of the City of Sammamish.

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

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

WHEREAS, under and pursuant to Public Works Construction Contract _____

providing for construction of **2018 INTERSECTION IMPROVEMENTS PROJECT** the principal is

required to furnish a bond for the faithful performance of the contract; and
WHEREAS, the principal has accepted, or is about to accept, the contract, and undertake to perform the work therein provided for in the manner and within the time set forth;

NOW, THEREFORE, if the said _____
shall faithfully perform all of the provisions of said contract in the manner and within the time therein set forth, or within such extensions of time as may be granted under said contract, and shall pay all laborers, mechanics, subcontractors and material-men, and all persons who shall supply said principal or subcontractors with provisions and supplies for the carrying on of said work, and shall hold said City of Sammamish harmless from any loss or damage occasioned to any person or property by reason of any carelessness or negligence on the part of said principal, or any subcontractor in the performance of said work, and shall indemnify and hold the City of Sammamish harmless from any damage or expense by reason of failure of performance as specified in said contract or from defects appearing or developing in the operation of any mechanical or electrical equipment and related components provided under such contract within a period of (2) two years a after its acceptance thereof by the City of Sammamish, then his obligation shall become null and void, otherwise it shall be and remain in full force. Customary trade warranties or guarantees on electrical and mechanical equipment shall be assigned to the City of Sammamish.

Principal	Surety
Signature	Signature
Title	Title

PART 4

AMENDMENTS TO THE STANDARD SPECIFICATIONS

INTRO.AP1

INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2018 Standard Specifications for Road, Bridge, and Municipal Construction.

AMENDMENTS TO THE STANDARD SPECIFICATIONS

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

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

1-02.AP1

Section 1-02, Bid Procedures and Conditions
January 2, 2018

1-02.4(1) General

This section is supplemented with the following:

Prospective Bidders are advised that the Contracting Agency may include a partially completed Washington State Department of Ecology (Ecology) Transfer of Coverage (Ecology Form ECY 020-87a) for the Construction Stormwater General Permit (CSWGP) as part of the Bid Documents. When the Contracting Agency requires the transfer of coverage of the CSWGP to the Contractor, an informational copy of the Transfer of Coverage and the associated CSWGP will be included in the appendices. As a condition of Section 1-03.3, the Contractor is required to complete sections I, III, and VIII of the Transfer of Coverage and return the form to the Contracting Agency.

The Contracting Agency is responsible for compliance with the CSWGP until the end of day that the Contract is executed. Beginning on the day after the Contract is executed, the Contractor shall assume complete legal responsibility for compliance with the CSWGP and full implementation of all conditions of the CSWGP as they apply to the Contract Work.

1-02.6 Preparation of Proposal

Item number 1 of the second paragraph is revised to read:

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

The following new paragraph is inserted before the last paragraph:

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form (WSDOT Form 272-009). Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

1-03.AP1

Section 1-03, Award and Execution of Contract
January 2, 2018

1-03.3 Execution of Contract

The first paragraph is revised to read:

Within 20 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, and shall be registered as a contractor in the state of Washington.

1-03.5 Failure to Execute Contract

The first sentence is revised to read:

Failure to return the insurance certification and bond with the signed Contract as required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's Business Enterprise information if required in the Contract, or failure or refusal to sign the Contract, or failure to register as a contractor in the state of Washington, or failure to return the completed Transfer of Coverage for the Construction Stormwater General Permit to the Contracting Agency when provided shall result in forfeiture of the proposal bond or deposit of this Bidder.

1-06.AP1

Section 1-06, Control of Material
January 2, 2018

1-06.1(3) Aggregate Source Approval (ASA) Database

This section is supplemented with the following:

Regardless of status of the source, whether listed or not listed in the ASA database the source owner may be asked to provide testing results for toxicity in accordance with Section 9-03.21(1).

1-06.2(2)D Quality Level Analysis

This section is supplemented with the following new subsection:

1-06.2(2)D5 Quality Level Calculation – HMA Compaction

The procedures for determining the quality level and pay factor for HMA compaction are as follows:

1. Determine the arithmetic mean, X_m, for compaction of the lot:

$$X_m = \frac{\sum x}{n}$$

Where:

x = individual compaction test values for each sublot in the lot.

$\sum x$ = summation of individual compaction test values

n = total number test values

2. Compute the sample standard deviation, “S”, for each constituent:

$$S = \left[\frac{n\sum x^2 - \left(\sum x\right)^2}{n(n-1)} \right]^{\frac{1}{2}}$$

Where:
$\sum x^2$ = summation of the squares of individual compaction test values
$(\sum x)^2$ = summation of the individual compaction test values squared

3. Compute the lower quality index (Q_L):

$$Q_L = \frac{X_m - LSL}{S}$$

Where:
LSL = 91.5

4. Determine P_L (the percent within the lower Specification limit which corresponds to a given Q_L) from Table 1. For negative values of Q_L, P_L is equal to 100 minus the table P_L. If the value of Q_L does not correspond exactly to a figure in the table, use the next higher value.

5. Determine the quality level (the total percent within Specification limits):

Quality Level = P_L

6. Using the quality level from step 5, determine the composite pay factor (CPF) from Table 2.

7. If the CPF determined from step 6 is 1.00 or greater: use that CPF for the compaction lot; however, the maximum HMA compaction CPF using an LSL = 91.5 shall be 1.05.

8. If the CPF from step 6 is not 1.00 or greater: repeat steps 3 through 6 using an LSL = 91.0. The value thus determined shall be the HMA compaction CPF for that lot; however, the maximum HMA compaction CPF using an LSL = 91.00 shall be 1.00.

1-06.2(2)D4 Quality Level Calculation

The first paragraph (excluding the numbered list) is revised to read:

The procedures for determining the quality level and pay factors for a material, other than HMA compaction, are as follows:

1-07.AP1

Section 1-07, Legal Relations and Responsibilities to the Public
January 2, 2018

1-07.5(3) State Department of Ecology

This section is supplemented with the following:

9. When a violation of the CSWGP occurs, immediately notify the Engineer and fill out WSDOT Form 422-011, Contractor ECAP Report, and submit the form to the Engineer within 48 hours of the violation.

10. Once Physical Completion has been given, prepare a Notice of Termination (Ecology Form ECY 020-87) and submit the Notice of Termination electronically to the Engineer in a PDF format a minimum of 7 calendar days prior to submitting the Notice of Termination to Ecology.

11. Transfer the CSWGP coverage to the Contracting Agency when Physical Completion has been given and the Engineer has determined that the project site is not stabilized from erosion.

12. Submit copies of all correspondence with Ecology electronically to the Engineer in a PDF format within four calendar days.

1-07.7(1) General

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

When the Contractor moves equipment or materials on or over Structures, culverts or pipes, the Contractor may operate equipment with only the load-limit restrictions in Section 1-07.7(2).

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

Unit prices shall cover all costs for operating over Structures, culverts and pipes.

1-07.9(2) Posting Notices

The second sentence of the first paragraph (up until the colon) is revised to read:

The Contractor shall ensure the most current edition of the following are posted:

In items 1 through 10, the revision dates are deleted.

1-07.11(2) Contractual Requirements

In this section, “creed” is revised to read “religion”.

Item numbers 1 through 9 are revised to read 2 through 10, respectively.

After the preceding Amendment is applied, the following new item number 1 is inserted:

1. The Contractor shall maintain a Work site that is free of harassment, humiliation, fear, hostility and intimidation at all times. Behaviors that violate this requirement include but are not limited to:

a. Persistent conduct that is offensive and unwelcome.

b. Conduct that is considered to be hazing.

c. Jokes about race, gender, or sexuality that are offensive.

d. Unwelcome, unwanted, rude or offensive conduct or advances of a sexual nature which interferes with a person's ability to perform their job or creates an intimidating, hostile, or offensive work environment.

e. Language or conduct that is offensive, threatening, intimidating or hostile based on race, gender, or sexual orientation.

f. Repeating rumors about individuals in the Work Site that are considered to be harassing or harmful to the individual's reputation.

1-07.11(5) Sanctions

This section is supplemented with the following:

Immediately upon the Engineer's request, the Contractor shall remove from the Work site any employee engaging in behaviors that promote harassment, humiliation, fear or intimidation including but not limited to those described in these specifications.

1-07.11(6) Incorporation of Provisions

The first sentence is revised to read:

The Contractor shall include the provisions of Section 1-07.11(2) Contractual Requirements (1) through (5) and the Section 1-07.11(5) Sanctions in every subcontract including procurement of materials and leases of equipment.

1-07.18 Public Liability and Property Damage Insurance

Item number 1 is supplemented with the following new sentence:

This policy shall be kept in force from the execution date of the Contract until the Physical Completion Date.

1-08.AP1

Section 1-08, Prosecution and Progress
January 2, 2018

1-08.5 Time for Completion

Item number 2 of the sixth paragraph is supplemented with the following:

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).

1-08.7 Maintenance During Suspension

The fifth paragraph is revised to read:

The Contractor shall protect and maintain all other Work in areas not used by traffic. All costs associated with protecting and maintaining such Work shall be the responsibility of the Contractor.

2-09.AP2

Section 2-09, Structure Excavation
January 2, 2018

2-09.3(3)D Shoring and Cofferdams

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

Structural shoring and cofferdams shall be designed for conditions stated in this Section using methods shown in Division I Section 5 of the AASHTO *Standard Specifications for Highway Bridges* Seventeenth Edition – 2002 for allowable stress design, or the AASHTO *LRFD Bridge Design Specifications* for load and resistance factor design.

5-04.AP5

Section 5-04, Hot Mix Asphalt
January 2, 2018

5-04.1 Description

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

The manufacture of HMA may include additives or processes that reduce the optimum mixing temperature (Warm Mix Asphalt) or serve as a compaction aid in accordance with these Specifications.

5-04.2 Materials

The reference to “Warm Mix Asphalt Additive” is revised to read “HMA Additive”.

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

The last bullet in the first paragraph is revised to read:

- Do not include HMA additives that reduce the optimum mixing temperature or serve as a compaction aid when developing a mix design or submitting a mix design for QPL evaluation. The use of HMA additives is not part of the process for obtaining approval for listing a mix design on the QPL. Refer to Section 5-04.2(2)B.

In the table, “WSDOT Standard Practice QC-8” is revised to read “WSDOT Standard Practice QC-8 located in the WSDOT Materials Manual M 46-01”.

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

Item number 3 of the first paragraph is revised to read:

3. Changes in modifiers used in the asphalt binder.

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

This section, including title, is revised to read:

5-04.2(2)B Using HMA Additives

The Contractor may, at the Contractor's discretion, 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 in accordance with Section 5-04.3(6) in the production of High RAP/Any RAS mixtures.

- Before using additives, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.3(3)A Mixing Plant

In item number 5 of the first paragraph, "WSDOT T 168" is revised to read "FOP for AASHTO T 168".

5-04.3(4) Preparation of Existing Paved Surfaces

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

Unless otherwise approved by the Engineer, use cationic emulsified asphalt CSS-1, CSS-1h, or Performance Graded (PG) asphalt for tack coat.

5-04.3(6) Mixing

The first paragraph is revised to read:

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

The seventh paragraph is revised to read:

Upon discharge from the mixer, ensure that the temperature of the HMA does not exceed the optimum mixing temperature shown on the approved Mix Design Report by more than 25°F, or as approved by the Engineer. When an additive is included in the manufacture of HMA, do not heat the additive (at any stage of production including in binder storage tanks) to a temperature higher than the maximum recommended by the manufacturer of the additive.

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

The following new paragraph is inserted after the first paragraph:

The Contracting Agency's combined aggregate bulk specific gravity (Gsb) blend as shown on the HMA Mix Design will be used for VMA calculations until the Contractor submits a written request for a Gsb test. The new Gsb will be used in the VMA calculations for HMA from the date the Engineer receives the written request for a Gsb retest. The Contractor may request aggregate specific gravity (Gsb) testing be performed by the Contracting Agency twice per project. The Gsb blend of the combined stockpiles will be used to calculate voids in mineral aggregate (VMA) of any HMA produced after the new Gsb is determined.

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

The following new row is inserted after the second row in Table 9:

VMA	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4[2]	None[4]

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

In Table 9a, the test property "Gradation, Asphalt Binder, and V_a" is revised to read "Gradation, Asphalt Binder, VMA, and V_a"

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

In Table 11, "V_a" is revised to read "VMA and V_a"

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

The following new row is inserted above the last row in Table 12:

Voids in Mineral Aggregate (VMA)	2

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

The second to last sentence is revised to read:

> The sample will be tested for a complete gradation analysis, asphalt binder content, VMA and Va, and the results of the retest will be used for the acceptance of the HMA mixture in place of the original mixture sublot sample test results.

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

The bulleted item in the fourth paragraph is revised to read:

- For a compaction lot in progress with a compaction CPF less than 0.75 using an LSL = 91.0, a new compaction lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.

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

In the table, "WSDOT FOP for AASHTO T 355" is revised to read "FOP for AASHTO T 355".

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

In the first paragraph, "WSDOT FOP for AASHTO T 355" is revised to read "FOP for AASHTO T 355".

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

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

> For each HMA compaction lot (that is accepted by Statistical Evaluation) which does not meet the criteria in the preceding paragraph, the compaction lot shall be evaluated in accordance with Section 1-06.2(2)D5 to determine the appropriate Composite Pay Factor (CPF).

The last two paragraphs are revised to read:

> Determine the Compaction Price Adjustment (CPA) from the table below, selecting the equation for CPA that corresponds to the value of CPF determined above.

Calculating HMA Compaction Price Adjustment (CPA)	
Value of CPF	**Equation for Calculating CPA**
When CPF > 1.00	CPA = [0.80 x (CPF – 1.00)] x Q x UP
When CPF = 1.00	CPA = $0
When CPF < 1.0	CPA = [0.40 x (CPF – 1.00)] x Q x UP

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

6-01.AP6

Section 6-01, General Requirements for Structures
January 2, 2018

6-01.10 Utilities Supported by or Attached to Bridges

In the third paragraph, “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

6-01.12 Final Cleanup

The second paragraph is deleted.

6-02.AP6

Section 6-02, Concrete Structures
January 2, 2018

6-02.3(2)A Contractor Mix Design

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

For all other concrete, air content shall be a minimum of 4.5 percent and a maximum of 7.5 percent for all concrete placed above the finished ground line unless noted otherwise.

6-02.3(2)A1 Contractor Mix Design for Concrete Class 4000D

Item number 5 of the first paragraph is deleted.

Item number 6 of the first paragraph (after the preceding Amendment is applied) is renumbered to 5.

6-02.3(4)D Temperature and Time For Placement

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

The upper temperature limit for placement for Class 4000D concrete may be increased to a maximum of 80°F if allowed by the Engineer.

6-02.3(6)A1 Hot Weather Protection

The first paragraph is revised to read:

The Contractor shall provide concrete within the specified temperature limits. Cooling of the coarse aggregate piles by sprinkling with water is permitted provided the moisture content is monitored, the mixing water is adjusted for the free water in the aggregate and the coarse aggregate is removed from at least 1 foot above the bottom of the pile. Sprinkling of fine aggregate piles with water is not allowed. Refrigerating mixing water or replacing all or part of the mixing water with crushed ice is permitted, provided the ice is completely melted by placing time.

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

These surfaces include forms, reinforcing steel, steel beam flanges, and any others that touch the concrete.

6-02.3(10)D5 Bridge Deck Concrete Finishing and Texturing

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

The Contractor shall texture the bridge deck surface to within 3-inches minimum and 24-inches maximum of the edge of concrete at expansion joints, within 1-foot minimum and 2-feet maximum of the curb line, and within 3-inches minimum and 9-inches maximum of the perimeter of bridge drain assemblies.

6-02.3(13)A Strip Seal Expansion Joint System

In item number 3 of the third paragraph, “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

6-02.3(24)C Placing and Fastening

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

All epoxy-coated bars in the top mat of the bridge deck shall be tied at all intersections, however they may be tied at alternate intersections when spacing is less than 1 foot in each direction and they are supported by continuous supports meeting all other requirements of supports for epoxy-coated bars.

The sixth paragraph (excluding the numbered list) is revised to read:

Precast concrete supports (or other accepted devices) shall be used to maintain the concrete coverage required by the Plans. The precast concrete supports shall:

Item number 2 of the sixth paragraph is revised to read:

2. Have a compressive strength equal to or greater than that of the concrete in which they are embedded.

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

In slabs, each precast concrete support shall have either: (1) a grooved top that will hold the reinforcing bar in place, or (2) an embedded wire that protrudes and is tied to the reinforcing steel.

The eighth paragraph is revised to read:

Precast concrete supports may be accepted based on a Manufacturer's Certificate of Compliance.

The ninth paragraph (excluding the numbered list) is revised to read:

In lieu of precast concrete supports, the Contractor may use metal or all-plastic supports to hold uncoated bars. Any surface of a metal support that will not be covered by at least ½ inch of concrete shall be one of the following:

The tenth paragraph is revised to read:

In lieu of precast concrete supports, epoxy-coated reinforcing bars may be supported by one of the following:

1. Metal supports coated entirely with a dielectric material such as epoxy or plastic,

2. Other epoxy-coated reinforcing bars, or

3. All-plastic supports.

The following new paragraph is inserted after the tenth paragraph:

Damaged coatings on metal bar supports shall be repaired prior to placing concrete.

The twelfth paragraph (after the preceding Amendment is applied) is revised to read:

All-plastic supports shall be lightweight, non-porous, and chemically inert in concrete. All-plastic supports shall have rounded seatings, shall not deform under load during normal temperatures, and shall not shatter or crack under impact loading in cold weather. All-plastic supports shall be placed at spacings greater than 1 foot along the bar and shall have at least 25 percent of their gross place area perforated to compensate for the difference in the coefficient of thermal expansion between plastic and concrete. The shape and configuration of all-plastic supports shall permit complete concrete consolidation in and around the support.

The thirteenth paragraph (after the preceding Amendment is applied) is revised to read:

A "mat" is two adjacent and perpendicular layers of reinforcing steel. In bridge decks, top and bottom mats shall be supported adequately enough to hold both in their proper positions. If bar supports directly support, or are directly supported on No. 4 bars, they shall be spaced at not more than 3-foot intervals (or not more than 4-foot intervals for bars No. 5 and larger). Wire ties to girder stirrups shall not be considered as supports. To provide a rigid mat, the Contractor shall add other supports and tie wires to the top mat as needed.

6-02.3(28)D Contractors Control Strength

In the first paragraph, "WSDOT FOP for AASHTO T 23" is revised to read "FOP for AASHTO T 23".

6-05.AP6

Section 6-05, Piling
January 2, 2018

6-05.3(9)A Pile Driving Equipment Approval

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

> For prestressed concrete piles, the allowable driving stress in kips per square inch shall be $0.095 \cdot \sqrt{f'_c}$ plus prestress in tension, and $0.85f'_c$ minus prestress in compression, where f'_c is the concrete compressive strength in kips per square inch.

6-07.AP6

Section 6-07, Painting
January 2, 2018

6-07.3(6)A Paint Containers

In item number 2 of the first paragraph, “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

6-08.AP6

Section 6-08, Bituminous Surfacing on Structure Decks
January 2, 2018

6-08.3(7)A Concrete Deck Preparation

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

> The Contractor, with the Engineer, shall inspect the exposed concrete deck to establish the extent of bridge deck repair in accordance with Section 6-09.3(6).

6-09.AP6

Section 6-09, Modified Concrete Overlays
January 2, 2018

6-09.3 Construction Requirements

This section is supplemented with the following new subsection:

6-09.3(15) Sealing and Texturing Concrete Overlay

After the requirements for checking for bond have been met, all joints and visible cracks shall be filled and sealed with a high molecular weight methacrylate resin (HMWM). The Contractor may use compressed air to accelerate drying of the deck surface for crack identification and sealing. Cracks 1⁄16 inch and greater in width shall receive two applications of HMWM. Immediately following the application of HMWM, the wetted surface shall be coated with sand for abrasive finish.

After all cracks have been filled and sealed and the HMWM resin has cured, the concrete overlay surface shall receive a longitudinally sawn texture in accordance with Section 6-02.3(10)D5.

Traffic shall not be permitted on the finished concrete until it has reached a minimum compressive strength of 3,000 psi as verified by rebound number determined in accordance with ASTM C805 and the longitudinally sawn texture is completed.

6-09.3(1)B Rotary Milling Machines

This section is revised to read:

Rotary milling machines used to remove an upper layer of existing concrete overlay, when present, shall have a maximum operating weight of 50,000 pounds and conform to Section 6-08.3(5)B.

6-09.3(1)C Hydro-Demolition Machines

The first sentence of this section is revised to read:

Hydro-demolition machines shall consist of filtering and pumping units operating in conjunction with a remote-controlled robotic device, using high-velocity water jets to remove sound concrete to the nominal scarification depth shown in the Plans with a single pass of the machine, and with the simultaneous removal of deteriorated concrete.

6-09.3(1)D Shot Blasting Machines

This section, including title, is revised to read:

6-09.3(1)D Vacant

6-09.3(2) Submittals

Item number 1 and 2 are revised to read:

1. A Type 1 Working Drawing consisting of catalog cuts and operating parameters of the hydro-demolition machine selected by the Contractor for use in this project to scarify concrete surfaces.

2. A Type 1 Working Drawing consisting of catalog cuts, operating parameters, axle loads, and axle spacing of the rotary milling machine (if used to remove an upper layer of existing concrete overlay when present).

The first sentence of item number 3 is revised to read:

A Type 2 Working Drawing of the Runoff Water Disposal Plan.

6-09.3(5)A General

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

All areas of the deck that are inaccessible to the selected scarifying machine shall be scarified to remove the concrete surface matrix to a maximum nominal scarification depth shown in the Plans by a method acceptable to the Engineer.

This section is supplemented with the following:

Concrete process water generated by scarifying concrete surface and removing existing concrete overlay operations shall be contained, collected, and disposed of in accordance with Section 5-01.3(11) and Section 6-09.3(5)C, and the Section 6-09.3(2) Runoff Water Disposal Plan.

6-09.3(5)B Testing of Hydro-Demolition and Shot Blasting Machines

This section's title is revised to read:

Testing of Hydro-Demolition Machines

The second paragraph is revised to read:

In the “sound” area of concrete, the equipment shall be programmed to remove concrete to the nominal scarification depth shown in the Plans with a single pass of the machine.

6-09.3(5)D Shot Blasting

This section, including title, is revised to read:

6-09.3(5)D Vacant

6-09.3(5)E Rotomilling

This section, including title, is revised to read:

6-09.3(5)E Removing Existing Concrete Overlay Layer by Rotomilling

When the Contractor elects to remove the upper layer of existing concrete overlay, when present, by rotomilling prior to final scarifying, the entire concrete surface of the bridge deck shall be milled to remove the surface matrix to the depth specified in the Plans with a tolerance as specified in Section 6-08.3(5)B. The operating parameters of the rotary milling machine shall be monitored in order to prevent the unnecessary removal of concrete below the specified removal depth.

6-09.3(6) Further Deck Preparation

The first paragraph is revised to read::

Once the lane or strip being overlaid has been cleaned of debris from scarifying, the Contractor, with the Engineer, shall perform a visual inspection of the scarified surface. The Contractor shall mark those areas of the existing bridge deck that are authorized by the Engineer for further deck preparation by the Contractor.

Item number 4 of the second paragraph is deleted.

The first sentence of the third paragraph is deleted.

6-09.3(6)A Equipment for Further Deck Preparation

This section is revised to read:

Further deck preparation shall be performed using either power driven hand tools conforming to Section 6-09.3(1)A, or hydro-demolition machines conforming to Section 6-09.3(1)C.

6-09.3(6)B Deck Repair Preparation

The second paragraph is deleted.

The last sentence of the second paragraph (after the preceding Amendment is applied) is revised to read:

In no case shall the depth of a sawn vertical cut exceed ¾ inch or to the top of the top steel reinforcing bars, whichever is less.

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

Where existing steel reinforcing bars inside deck repair areas show deterioration greater than 20-percent section loss, the Contractor shall furnish and place steel reinforcing bars alongside the deteriorated bars in accordance with the details shown in the Standard Plans.

The last paragraph is deleted.

6-09.3(7) Surface Preparation for Concrete Overlay

The first seven paragraphs are deleted and replaced with the following:

Following the completion of any required further deck preparation the entire lane or strip being overlaid shall be cleaned to be free from oil and grease, rust and other foreign material that may still be present. These materials shall be removed by detergent-cleaning or other method accepted by the Engineer followed by sandblasting.

After detergent cleaning and sandblasting is completed, the entire lane or strip being overlaid shall be swept clean in final preparation for placing concrete using either compressed air or vacuum machines.

Hand tool chipping, sandblasting and cleaning in areas adjacent to a lane or strip being cleaned in final preparation for placing concrete shall be discontinued when final preparation is begun. Scarifying and hand tool chipping shall remain suspended until the concrete has been placed and the requirement for curing time has been satisfied. Sandblasting and cleaning shall remain suspended for the first 24 hours of curing time after the completion of concrete placing.

Scarification, and removal of the upper layer of concrete overlay when present, may proceed during the final cleaning and overlay placement phases of the Work on adjacent portions of the Structure so long as the scarification and concrete overlay removal operations are confined to areas which are a minimum of 100 feet away from the defined limits of the final cleaning or overlay placement in progress. If the scarification and concrete overlay removal impedes or interferes in any way with the final cleaning or overlay placement as determined by the Engineer, the scarification and concrete overlay removal Work shall be terminated immediately and the scarification and concrete overlay removal equipment removed sufficiently away from the area being prepared or overlaid to eliminate the conflict. If the grade is such that water and contaminants from the scarification and concrete overlay removal operation will flow into the area being prepared or overlaid, the scarification and concrete overlay removal operation shall be terminated and shall remain suspended for the first 24 hours of curing time after the completion of concrete placement.

6-09.3(12) Finishing Concrete Overlay

The third paragraph is deleted.

The last paragraph is deleted.

6-09.3(13) Curing Concrete Overlay

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

As the finishing operation progresses, the concrete shall be immediately covered with a single layer of clean, new or used, wet burlap.

The last sentence of the second paragraph is deleted.

The following two new paragraphs are inserted after the second paragraph:

As an alternative to the application of burlap and fog spraying described above, the Contractor may propose a curing system using proprietary curing blankets specifically manufactured for bridge deck curing. The Contractor shall submit a Type 2 Working Drawing consisting of details of the proprietary curing blanket system, including product literature and details of how the system is to be installed and maintained.

The wet curing regimen as described shall remain in place for a minimum of 42-hours.

The last paragraph is deleted.

6-09.3(14) Checking for Bond

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

After the requirements for curing have been met, the entire overlaid surface shall be sounded by the Contractor, in a manner accepted by and in the presence of the Engineer, to ensure total bond of the concrete to the bridge deck.

The last sentence of the first paragraph is deleted.

The second paragraph is deleted.

6-18.AP6

Section 6-18, Shotcrete Facing
January 2, 2018

6-18.3(3) Testing

In the last sentence of the first paragraph, “AASHTO T 24” is revised to read “ASTM C1604”.

6-18.3(3)B Production Testing

In the last sentence, “AASHTO T 24” is revised to read “ASTM C1604”.

6-18.3(4) Qualifications of Contractor’s Personnel

In the last sentence of the second paragraph, “AASHTO T 24” is revised to read “ASTM C1604”.

6-19.AP6

Section 6-19, Shafts
January 2, 2018

6-19.3(3)C Conduct of Shaft Casing Installation and Removal and Shaft Excavation Operations

The first paragraph is supplemented with the following:

In no case shall shaft excavation and casing placement extend below the bottom of shaft excavation as shown in the Plans.

6-19.3(6)E Thermal Wire and Thermal Access Point (TAPS)

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

The thermal wire shall extend from the bottom of the reinforcement cage to the top of the shaft, with a minimum of 5-feet of slack wire provided above the top of shaft.

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

All thermal wires in a shaft shall be equal lengths.

7-02.AP7

Section 7-02, Culverts
January 2, 2018

7-02.3(6)A4 Excavation and Bedding Preparation

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

The bedding course shall be a 6-inch minimum thickness layer of culvert bedding material, defined as granular material either conforming to Section 9-03.12(3) or to AASHTO Grading No. 57 as specified in Section 9-03.1(4)C.

8-01.AP8

Section 8-01, Erosion Control and Water Pollution Control
January 11, 2018

8-01.1 Description

This section is revised to read:

This Work consists of furnishing, installing, maintaining, removing and disposing of best management practices (BMPs), as defined in the Washington Administrative Code (WAC) 173-201A, to manage erosion and water quality in accordance with these Specifications and as shown in the Plans or as designated by the Engineer.

The Contracting Agency may have a National Pollution Discharge Elimination System Construction Stormwater General Permit (CSWGP) as identified in the Contract Special Provisions. The Contracting Agency may or may not transfer coverage of the CSWGP to the Contractor when a CSWGP has been obtained. The Contracting Agency may not have a CSWGP for the project but may have another water quality related permit as identified in the Contract Special Provisions or the Contracting Agency may not have water quality related permits but the project is subject to applicable laws for the Work. Section 8-01 covers all of these conditions.

8-01.2 Materials

The first paragraph is revised to read:

Materials shall meet the requirements of the following sections:

Corrugated Polyethylene Drain Pipe	9.05.1(6)
Quarry Spalls	9-13
Erosion Control and Roadside Planting	9-14
Construction Geotextile	9-33

8-01.3(1) General

This section is revised to read:

Adaptive management shall be employed throughout the duration of the project for the implementation of erosion and water pollution control permit requirements for the current condition of the project site. The adaptive management includes the selection and utilization of BMPs, scheduling of activities, prohibiting unacceptable practices, implementing maintenance procedures, and other managerial practices that when used singularly or in combination, prevent or reduce the release of pollutants to waters of the State. The adaptive management shall use the means and methods identified in this section and means and methods identified in the Washington State Department of Transportation's Temporary Erosion and Sediment Control Manual or the Washington State Department of Ecology's Stormwater Management Manuals for construction stormwater.

The Contractor shall install a high visibility fence along the site preservation lines shown in the Plans or as instructed by the Engineer.

Throughout the life of the project, the Contractor shall preserve and protect the delineated preservation area, acting immediately to repair or restore any fencing damaged or removed.

All discharges to surface waters shall comply with surface water quality standards as defined in Washington Administrative Code (WAC) Chapter 173-201A. All discharges to the ground shall comply with groundwater quality standards WAC Chapter 173-200.

The Contractor shall comply with the CSWGP when the project is covered by the CSWGP. Temporary Work, at a minimum, shall include the implementation of:

1. Sediment control measures prior to ground disturbing activities to ensure all discharges from construction areas receive treatment prior to discharging from the site.

2. Flow control measures to prevent erosive flows from developing.

3. Water management strategies and pollution prevention measures to prevent contamination of waters that will be discharged to surface waters or the ground.

4. Erosion control measures to stabilize erodible earth not being worked.

5. Maintenance of BMPs to ensure continued compliant performance.

6. Immediate corrective action if evidence suggests construction activity is not in compliance. Evidence includes sampling data, olfactory or visual evidence such as the presence of suspended sediment, turbidity, discoloration, or oil sheen in discharges.

To the degree possible, the Contractor shall coordinate this temporary Work with permanent drainage and erosion control Work the Contract requires.

Clearing, grubbing, excavation, borrow, or fill within the Right of Way shall never expose more erodible earth than as listed below:

Western Washington (West of the Cascade Mountain Crest)	
May 1 through September 30	17 Acres
October 1 through April 30	5 Acres

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

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

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

Erodible earth not being worked, whether at final grade or not, shall be covered within the specified time period (see the table below), using BMPs for erosion control.

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

Eastern Washington (East of the Cascade Mountain Crest)	
October 1 through June 30	5 days maximum
November 1 through March 31	10 days maximum

When applicable, the Contractor shall be responsible for all Work required for compliance with the CSWGP including annual permit fees.

If the Engineer, under Section 1-08.6, orders the Work suspended, the Contractor shall continue to comply with this division during the suspension.

Nothing in this Section shall relieve the Contractor from complying with other Contract requirements.

8-01.3(1)A Submittals

This section's content is deleted.

This section is supplemented with the following new subsection:

8-01.3(1)A1 Temporary Erosion and Sediment Control

A Temporary Erosion and Sediment Control (TESC) plan consists of a narrative section and plan sheets that meets the Washington State Department of Ecology's Stormwater Pollution Prevention Plan (SWPPP) requirement in the CSWGP. Abbreviated TESC plans are used on small projects that disturb soil and have the potential to discharge but are not covered by the CSWGP. The contract uses the term "TESC plan" to describe both TESC plans and abbreviated TESC plans. When the Contracting Agency has developed a TESC plan for a Contract, the narrative is included in the appendix to the Special

Provisions and the TESC plan sheets are included in the Contract Plans. The Contracting Agency TESC plan will not include off-site areas used to directly support construction activity.

The Contractor shall either adopt the TESC Plan in the Contract or develop a new TESC Plan. If the Contractor adopts the Contracting Agency TESC Plan, the Contractor shall modify the TESC Plan to meet the Contractor's schedule, method of construction, and to include off-site areas that will be used to directly support construction activity such as equipment staging yards, material storage areas, or borrow areas. 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 based on site inspections and discharge samples to maintain compliance with the CSWGP. 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.

8-01.3(1)B Erosion and Sediment Control (ESC) Lead

This section is revised to read:

The Contractor shall identify the ESC Lead at the preconstruction discussions and in the TESC Plan. The ESC Lead shall have, for the life of the Contract, a current Certificate of Training in Construction Site Erosion and Sediment Control from a course approved by the Washington State Department of Ecology. The ESC Lead must be onsite or on call at all times throughout construction. The ESC Lead shall be listed on the Emergency Contact List required under Section 1-05.13(1).

The ESC Lead shall implement the TESC Plan. Implementation shall include, but is not limited to:

1. Installing, adaptively managing, and maintaining temporary erosion and sediment control BMPs to assure continued performance of their intended function. Damaged or inadequate BMPs shall be corrected immediately.

2. Updating the TESC Plan to reflect current field conditions.

3. Discharge sampling and submitting Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology in accordance with the CSWGP.

4. Develop and maintain the Site Log Book as defined in the CSWGP. When the Site Log Book or portion thereof is electronically developed, the electronic documentation must be accessible onsite. As a part of the Site Log Book, the Contractor shall develop and maintain a tracking table to show that identified TESC compliance issues are fully resolved within 10 calendar days. The table shall include the date an issue was identified, a description of how it was resolved, and the date the issue was fully resolved.

The ESC Lead shall also inspect all areas disturbed by construction activities, all on-site erosion and sediment control BMPs, and all stormwater discharge points at least once every calendar week and within 24-hours of runoff events in which stormwater discharges from the site. Inspections of temporarily stabilized, inactive sites may be reduced to once every calendar month. The Washington State Department of Ecology's Erosion and Sediment Control Site Inspection Form, located at http://www.ecy.wa.gov/programs/wq/stormwater/construction/InspectionForm.docx, shall be completed for each inspection and a copy shall be submitted to the Engineer no later than the end of the next working day following the inspection.

8-01.3(1)C Water Management

This section is supplemented with the following new subsections:

8-01.3(1)C5 Water Management for In-Water Work Below Ordinary High Water Mark (OHWM)

Work over surface waters of the state (defined in WAC 173-201A-010) or below the OHWM (defined in RCW 90.58.030) must comply with water quality standards for surface waters of the state of Washington.

8-01.3(1)C6 Environmentally Acceptable Hydraulic Fluid

All equipment containing hydraulic fluid that operates over surface waters of the state or below the OHWM, shall be equipped with an environmentally acceptable hydraulic fluid. The fluid shall meet specific requirements for biodegradability, aquatic toxicity, and bioaccumulation in accordance with the United States Environmental Protection Agency (EPA) publication EPA800-R-11-002. Acceptance shall be in accordance with Section 1-06.3, Manufacturer's Certification of Compliance.

The designation of environmentally acceptable hydraulic fluid does not mean fluid spills are acceptable. The Contractor shall respond to spills to land or water in accordance with the Contract.

8-01.3(1)C7 Turbidity Curtain

All Work for the turbidity curtain shall be in accordance with the manufacturer's recommendations for the site conditions. Removal procedures shall be developed and used to minimize silt release and disturbance of silt. The Contractor shall submit a Type 2 Working Drawing, detailing product information, installation and removal procedures, equipment and workforce needs, maintenance plans, and emergency repair/replacement plans.

Turbidity curtain materials, installation, and maintenance shall be sufficient to comply with water quality standards.

The Contractor shall notify the Engineer 10 days in advance of removing the turbidity curtain. All components of the turbidity curtain shall be removed from the project.

8-01.3(1)C1 Disposal of Dewatering Water

This section is revised to read:

When uncontaminated groundwater is encountered in an excavation on a project it may be infiltrated within vegetated areas of the right of way not designated as Sensitive Areas or incorporated into an existing stormwater conveyance system at a rate that will not cause erosion or flooding in any receiving surface water.

Alternatively, the Contractor may pursue independent disposal and treatment alternatives that do not use the stormwater conveyance system provided it is in compliance with the applicable WACs and permits.

8-01.3(1)C2 Process Wastewater

This section is revised to read:

Wastewater generated on-site as a byproduct of a construction process shall not be discharged to surface waters of the State. Some sources of process wastewater may be infiltrated in accordance with the CSWGP with concurrence from the Engineer. Some sources of process wastewater may be disposed via independent disposal and treatment alternatives in compliance with the applicable WACs and permits.

8-01.3(1)C3 Shaft Drilling Slurry Wastewater

This section is revised to read:

Wastewater generated on-site during shaft drilling activity shall be managed and disposed of in accordance with the requirements below. No shaft drilling slurry wastewater shall be discharged to surface waters of the State. Neither the sediment nor liquid portions of the shaft drilling slurry wastewater shall be contaminated, as detectable by visible or olfactory indication (e.g., chemical sheen or smell).

1. Water-only shaft drilling slurry or water slurry with approved flocculants may be infiltrated on-site. Flocculants used shall meet the requirements of Section 9-14.5(1) or shall be chitosan products listed as General Use Level Designation (GULD) on the Washington State Department of Ecology's stormwater treatment technologies webpage for construction treatment. Infiltration is permitted if the following requirements are met:

    a. Wastewater shall have a pH of 6.5 – 8.5 prior to discharge.

    b. The amount of flocculant added to the slurry shall be kept to the minimum needed to adequately settle out solids. The flocculant shall be thoroughly mixed into the slurry.

    c. The slurry removed from the shaft shall be contained in a leak proof cell or tank for a minimum of 3 hours.

    d. The infiltration rate shall be reduced if needed to prevent wastewater from leaving the infiltration location. The infiltration site shall be monitored regularly during infiltration activity. All wastewater discharged to the ground shall fully infiltrate and discharges shall stop before the end of each work day.

    e. Drilling spoils and settled sediments remaining in the containment cell or tank shall be disposed of in accordance with Section 6-19.3(4)F.

    f. Infiltration locations shall be in upland areas at least 150 feet away from surface waters, wells, on-site sewage systems, aquifer sensitive recharge areas, sole source aquifers, well head protection areas, and shall be marked on the plan sheets before the infiltration activity begins.

g. Prior to infiltration, the Contractor shall submit a Shaft Drilling Slurry Wastewater Management and Infiltration Plan as a Type 2 Working Drawing. This Plan shall be kept on-site, adapted if needed to meet the construction requirements, and updated to reflect what is being done in the field. The Working Drawing shall include, at a minimum, the following information:

i. Plan sheet showing the proposed infiltration location and all surface waters, wells, on-site sewage systems, aquifer-sensitive recharge areas, sole source aquifers, and well-head protection areas within 150 feet.

ii. The proposed elevation of soil surface receiving the wastewater for infiltration and the anticipated phreatic surface (i.e., saturated soil).

iii. The source of the water used to produce the slurry.

iv. The estimated total volume of wastewater to be infiltrated.

v. The approved flocculant to be used (if any).

vi. The controls or methods used to prevent surface wastewater runoff from leaving the infiltration location.

vii. The strategy for removing slurry wastewater from the shaft and containing the slurry wastewater once it has been removed from the shaft.

viii. The strategy for monitoring infiltration activity and adapting methods to ensure compliance.

ix. A contingency plan that can be implemented immediately if it becomes evident that the controls in place or methods being used are not adequate.

x. The strategy for cleaning up the infiltration location after the infiltration activity is done. Cleanup shall include stabilizing any loose sediment on the surface within the infiltration area generated as a byproduct of suspended solids in the infiltrated wastewater or soil disturbance associated with BMP placement and removal.

2. Shaft drilling mineral slurry, synthetic slurry, or slurry with polymer additives not approved for infiltration shall be contained and disposed of by the Contractor at an approved disposal facility in accordance with Section 2-03.3(7)C. Spoils that have come into contact with mineral slurry shall be disposed of in accordance with Section 6-19.3(4)F.

8-01.3(1)C4 Management of Off-Site Water

This section is revised to read:

Prior to clearing and grubbing, the Contractor shall intercept all sources of off-site surface water and overland flow that will run-on to the project. Off-site surface water run-on shall be diverted through or around the project in a way that does not introduce construction related pollution. It shall be diverted to its preconstruction discharge location in a manner that does not increase preconstruction flow rate and velocity and protects contiguous properties and waterways from erosion. The Contractor shall submit a Type 2 Working Drawing consisting of the method for performing this Work.

8-01.3(1)E Detention/Retention Pond Construction

This section is revised to read:

Whether permanent or temporary, ponds shall be constructed before beginning other grading and excavation Work in the area that drains into that pond. Detention/retention ponds may be constructed concurrently with grading and excavation when allowed by the Engineer. Temporary conveyances shall be installed concurrently with grading in accordance with the TESC Plan so that newly graded areas drain to the pond as they are exposed.

8-01.3(2)F Dates for Application of Final Seed, Fertilizer, and Mulch

In the table, the second column heading is revised to read:

Eastern Washington[1]
(East of the Cascade Mountain Crest)

Footnote 1 in the table is revised to read:

Seeding may be allowed outside these dates when allowed or directed by the Engineer.

8-01.3(5) Plastic Covering

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

Erosion Control – Plastic coverings used to temporarily cover stockpiled materials, slopes or bare soils shall be installed and maintained in a way that prevents water from intruding under the plastic and prevents the plastic cover from being damaged by wind.

8-01.3(7) Stabilized Construction Entrance

The first paragraph is revised to read:

Temporary stabilized construction entrance shall be constructed in accordance with the *Standard Plans*, prior to construction vehicles entering the roadway from locations that generate sediment track out on the roadway. Material used for stabilized construction entrance shall be free of extraneous materials that may cause or contribute to track out.

8-01.3(8) Street Cleaning

This section is revised to read:

Self-propelled pickup street sweepers shall be used to remove and collect dirt and other debris from the Roadway. The street sweeper shall effectively collect these materials and prevent them from being washed or blown off the Roadway or into waters of the State. Street sweepers shall not generate fugitive dust and shall be designed and operated in compliance with applicable air quality standards. Material collected by the street sweeper shall be disposed of in accordance with Section 2-03.3(7)C.

When allowed by the Engineer, power broom sweepers may be used in non-environmentally sensitive areas. The broom sweeper shall sweep dirt and other debris from the roadway into the work area. The swept material shall be prevented from entering or washing into waters of the State.

Street washing with water will require the concurrence of the Engineer.

8-01.3(12) Compost Socks

The first two sentences of the first paragraph are revised to read:

Compost socks are used to disperse flow and sediment. Compost socks shall be installed as soon as construction will allow but before flow conditions create erosive flows or discharges from the site. Compost socks shall be installed prior to any mulching or compost placement.

8-01.3(13) Temporary Curb

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

Temporary curbs shall be a minimum of 4 inches in height.

8-01.3(14) Temporary Pipe Slope Drain

The third and fourth paragraphs are revised to read:

The pipe fittings shall be water tight and the pipe secured to the slope with metal posts, wood stakes, sand bags, or as allowed by the Engineer.

The water shall be discharged to a stabilized conveyance, sediment trap, stormwater pond, rock splash pad, or vegetated strip, in a manner to prevent erosion and maintain water quality compliance.

The last paragraph is deleted.

8-01.3(15) Maintenance

This section is revised to read:

Erosion and sediment control BMPs shall be maintained or adaptively managed as required by the CSWGP until the Engineer determines they are no longer needed. When deficiencies in functional performance are identified, the deficiencies shall be rectified immediately.

The BMPs shall be inspected on the schedule outlined in Section 8-01.3(1)B for damage and sediment deposits. Damage to or undercutting of BMPs shall be repaired immediately.

In areas where the Contractor's activities have compromised the erosion control functions of the existing grasses, the Contractor shall overseed at no additional cost to the Contracting Agency.

The quarry spalls of construction entrances shall be refreshed, replaced, or screened to maintain voids between the spalls for collecting mud and dirt.

Unless otherwise specified, when the depth of accumulated sediment and debris reaches approximately ⅓ the height of the BMP the deposits shall be removed. Debris or contaminated sediment shall be disposed of in accordance with Section 2-03.3(7)C. Clean sediments may be stabilized on-site using BMPs as allowed by the Engineer.

8-01.3(16) Removal

This section is revised to read:

The Contractor shall remove all temporary BMPs, all associated hardware and associated accumulated sediment deposition from the project limits prior to Physical Completion unless otherwise allowed by the Engineer. When the temporary BMP materials are made of natural plant fibers unaltered by synthetic materials the Engineer may allow leaving the BMP in place.

The Contractor shall remove BMPs and associated hardware in a way that minimizes soil disturbance. The Contractor shall permanently stabilize all bare and disturbed soil after removal of BMPs. If the installation and use of the erosion control BMPs have compacted or otherwise rendered the soil inhospitable to plant growth, such as construction entrances, the Contractor shall take measures to rehabilitate the soil to facilitate plant growth. This may include, but is not limited to, ripping the soil, incorporating soil amendments, or seeding with the specified seed.

At the request of the Contractor and at the sole discretion of the Engineer the CSWGP may be transferred back to the Contracting Agency. Approval of the Transfer of Coverage request will require the following:

1. All other Work required for Contract Completion has been completed.

2. All Work required for compliance with the CSWGP has been completed to the maximum extent possible. This includes removal of BMPs that are no longer needed and the site has undergone all Stabilization identified for meeting the requirements of Final Stabilization in the CSWGP.

3. An Equitable Adjustment change order for the cost of Work that has not been completed by the Contractor.

4. Submittal of the Washington State Department of Ecology Transfer of Coverage form (Ecology form ECY 020-87a) to the Engineer.

If the Engineer approves the transfer of coverage back to the Contracting Agency, the requirement in Section 1-07.5(3) for the Contractor's submittal of the Notice of Termination form to the Washington State Department of Ecology will not apply.

8-01.4 Measurement

This section's content is deleted and replaced with the following new subsections:

8-01.4(1) Lump Sum Bid for Project (No Unit Items)

When the Bid Proposal contains the item "Erosion Control and Water Pollution Prevention" there will be no measurement of unit or force account items for Work defined in Section 8-01 except as described in Sections 8-01.4(3) and 8-01.4(4). Also, except as described in Section 8-01.4(3), all of Sections 8-01.4(2) and 8-01.5(2) are deleted.

8-01.4(2) Item Bids

When the Proposal does not contain the items “Erosion Control and Water Pollution Prevention”, Section 8-01.4(1) and 8-01.5(1) are deleted and the Bid Proposal will contain some or all of the following items measured as noted.

ESC lead will be measured per day for each day that an inspection is made and a report is filed.

Biodegradable erosion control blanket and plastic covering will be measured by the square yard along the ground slope line of surface area covered and accepted.

Turbidity curtains will be measured by the linear foot along the ground line of the installed curtain.

Check dams will be measured per linear foot one time only along the ground line of the completed check dam. No additional measurement will be made for check dams that are required to be rehabilitated or replaced due to wear.

Stabilized construction entrances will be measured by the square yard by ground slope measurement for each entrance constructed.

Tire wash facilities will be measured per each for each tire wash installed.

Street cleaning will be measured by the hour for the actual time spent cleaning pavement, refilling with water, dumping and transport to and from cleaning locations within the project limits, as authorized by the Engineer. Time to mobilize the equipment to or from the project limits on which street cleaning is required will not be measured.

Inlet protections will be measured per each for each initial installation at a drainage structure.

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

Wattles and compost socks will be measured by the linear foot.

Temporary curbs will be measured by the linear foot along the ground line of the completed installation.

Temporary pipe slope drains will be measured by the linear foot along the flow line of the pipe.

Coir logs will be measured by the linear foot along the ground line of the completed installation.

Outlet protections will be measured per each initial installation at an outlet location.

Tackifiers will be measure by the acre by ground slope measurement.

8-01.4(3) Reinstating Unit Items with Lump Sum Erosion Control and Water Pollution Prevention

The Contract Provisions may establish the project as lump sum, in accordance with Section 8-01.4(1) and also include one or more of the items included above in Section 8-01.4(2). When that occurs, the corresponding measurement provision in Section 8-01.4(2) is not deleted and the Work under that item will be measured as specified.

8-01.4(4) Items not included with Lump Sum Erosion Control and Water Pollution Prevention

Compost blanket will be measured by the square yard by ground slope surface area covered and accepted.

Mulching will be measured by the acre by ground slope surface area covered and accepted.

Seeding, fertilizing, liming, mulching, and mowing, will be measured by the acre by ground slope measurement.

Seeding and fertilizing by hand will be measured by the square yard by ground slope measurement. No adjustment in area size will be made for the vegetation free zone around each plant.

Fencing will be measured by the linear foot along the ground line of the completed fence.

8-01.5 Payment

This section's content is deleted and replaced with the following new subsections:

8-01.5(1) Lump Sum Bid for Project (No Unit Items)

Payment will be made for the following Bid item when it is included in the Proposal:

"Erosion Control and Water Pollution Prevention", lump sum.

The lump sum Contract price for "Erosion Control and Water Pollution Prevention" shall be full pay to perform the Work as described in Section 8-01 except for costs compensated by Bid Proposal items inserted through Contract Provisions as described in Section 8-01.4(2). Progress payments for the lump sum item "Erosion Control and Water Pollution Prevention" will be made as follows:

1. The Contracting Agency will pay 15 percent of the bid amount for the initial set up for the item. Initial set up includes the following:

    a. Acceptance of the TESC Plan provided by the Contracting Agency or submittal of a new TESC Plan,

    b. Submittal of a schedule for the installation of the BMPs, and

    c. Identifying water quality sampling locations.

2. 70 percent of the bid amount will be paid in accordance with Section 1-09.9.

3. Once the project is physically complete and copies of the all reports submitted to the Washington State Department of Ecology have been

submitted to the Engineer, and, if applicable, transference of the CSWGP back to the Contracting Agency is complete, the remaining 15 percent of the bid amount shall be paid in accordance with Section 1-09.9.

8-01.5(2) Item Bids

"ESC Lead", per day.

"Turbidity Curtain", per linear foot.

"Biodegradable Erosion Control Blanket", per square yard.

"Plastic Covering", per square yard.

"Check Dam", per linear foot.

"Inlet Protection", per each.

"Gravel Filter Berm", per linear foot.

"Stabilized Construction Entrance", per square yard.

"Street Cleaning", per hour.

"Silt Fence", per linear foot.

"Wood Chip Berm", per linear foot.

"Compost Berm", per linear foot.

"Wattle", per linear foot.

"Compost Sock", per linear foot.

"Coir Log", per linear foot.

"Temporary Curb", per linear foot.

"Temporary Pipe Slope Drain", per linear foot.

"Temporary Seeding", per acre.

"Outlet Protection", per each.

"Tackifier", per acre.

"Erosion/Water Pollution Control", by force account as provided in Section 1-09.6.

Maintenance and removal of erosion and water pollution control devices including removal and disposal of sediment, stabilization and rehabilitation of soil disturbed by these activities, and any additional Work deemed necessary by the Engineer to control erosion and water pollution will be paid by force account in accordance with Section 1-09.6.

To provide a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the Contractor's total Bid.

8-01.5(3) Reinstating Unit Items with Lump Sum Erosion Control and Water Pollution Prevention

The Contract may establish the project as lump sum, in accordance with Section 8-01.4(1) and also reinstate the measurement of one or more of the items described in Section 8-01.4(2), except for Erosion/Water Pollution Control, by force account. When that occurs, the corresponding payment provision in Section 8-01.5(2) is not deleted and the Work under that item will be paid as specified.

8-01.5(4) Items not included with Lump Sum Erosion Control and Water Pollution Prevention

Payment will be made for each of the following Bid items when they are included in the Proposal:

"Compost Blanket", per square yard.

"Mulching", per acre

"Mulching with PAM", per acre

"Mulching with Short-Term Mulch", per acre.

"Mulching with Moderate-Term Mulch", per acre.

"Mulching with Long-Term Mulch", per acre.

"Seeding, Fertilizing and Mulching", per acre.

"Seeding and Fertilizing", per acre.

"Seeding and Fertilizing by Hand", per square yard.

"Second Application of Fertilizer", per acre.

"Liming", per acre.

"Mowing", per acre.

"Seeding and Mulching", per acre.

"High Visibility Fence", per linear foot.

8-02.AP8

Section 8-02, Roadside Restoration
January 2, 2018

8-02.2 Materials

The reference to the material "Soil" is revised to read "Topsoil".

8-02.5 Payment

The following new paragraph is inserted following the Bid item "Plant Selection ___", per each:

The unit Contract price for "Plant Selection ___", per each shall be full pay for all Work to perform the work as specified within the planting area prior to planting for weed control, planting area preparation and installation of plants with initial watering.

The paragraph following the Bid item "PSIPE ___", per each is revised to read:

The unit Contract price for "PSIPE ___", per each, shall be full pay for all Work to perform the work as specified within the planting area for weed control and planting area preparation, planting, cleanup, and water necessary to complete planting operations as specified to the end of first year plant establishment.

8-04.AP8

Section 8-04, Curbs, Gutters, and Spillways
January 2, 2018

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

The first paragraph is supplemented with the following:

Roundabout truck apron cement concrete curb and gutter shall be constructed with air entrained concrete Class 4000 conforming to the requirements of Section 6-02.

8-14.AP8

Section 8-14, Cement Concrete Sidewalks
January 2, 2018

8-14.2 Materials

In the second paragraph, each reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

8-20.AP8

Section 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical
January 2, 2018

8-20.1(1) Regulations and Code

The last paragraph is revised to read:

Persons performing electrical Work shall be certified in accordance with and supervised as required by RCW 19.28.161. Proof of certification shall be worn at all times in accordance with WAC 296-46B-942. Persons failing to meet these certification requirements may not perform any electrical work, and shall stop any active electrical work, until their certification is provided and worn in accordance with this Section.

8-20.3(4) Foundations

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

Concrete for Type II, III, IV, V, and CCTV signal standards and light standard foundations shall be Class 4000P and does not require air entrainment.

8-20.3(5)A General

The last two sentences of the last paragraph is deleted.

This section is supplemented with the following:

All conduits shall include a pull tape with the equipment grounding conductor. The pull tape shall be attached to the conduit near the end bell or grounded end bushing, or to duct plugs or caps if present, at both ends of the conduit.

8-20.3(8) Wiring

The seventeenth paragraph is supplemented with the following:

Pulling tape shall meet the requirements of Section 9-29.1(10). Pull string may not be used.

8-21.AP8

Section 8-21, Permanent Signing
January 2, 2018

8-21.3(9)F Foundations

Item number 3 of the twelfth paragraph is supplemented with the following new sentence:

Class 4000P concrete for roadside sign structures does not require air entrainment.

9-02.AP9

Section 9-02, Bituminous Materials
January 2, 2018

9-02.1 Asphalt Material, General

The second paragraph is revised to read:

The Asphalt Supplier of Performance Graded (PG) asphalt binder and emulsified asphalt shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 2 “Standard Practice for Asphalt Suppliers That Certify Performance Graded and Emulsified Asphalts”. The Asphalt Supplier’s QCP shall be submitted and receive the acceptance of the WSDOT State Materials Laboratory. Once accepted, any change to the QCP will require a new QCP to be submitted for acceptance. The Asphalt Supplier of PG asphalt binder and emulsified asphalt shall certify through the Bill of Lading that the PG asphalt binder or emulsified asphalt meets the Specification requirements of the Contract.

9-02.1(4) Performance Graded Asphalt Binder (PGAB)

This section’s title is revised to read:

Performance Graded (PG) Asphalt Binder

The first paragraph is revised to read:

PG asphalt binder meeting the requirements of AASHTO M 332 Table 1 of the grades specified in the Contract shall be used in the production of HMA. For HMA with greater than 20 percent RAP by total weight of HMA, or any amount of RAS, the new asphalt binder, recycling agent and recovered asphalt (RAP and/or RAS) when blended in the

proportions of the mix design shall meet the PG asphalt binder requirements of AASHTO M 332 Table 1 for the grade of asphalt binder specified by the Contract.

The second paragraph, including the table, is revised to read:

In addition to AASHTO M 332 Table 1 specification requirements, PG asphalt binders shall meet the following requirements:

		Additional Requirements by Performance Grade (PG) Asphalt Binders			
Property	**Test Method**	**PG58H-22**	**PG58V-22**	**PG64H-28**	**PG64V-28**
RTFO Residue: Average Percent Recovery @ 3.2 kPa	AASHTO T 350[1]		30% Min.	25% Min.	30% Min.
[1]Specimen conditioned in accordance with AASHTO T 240 – RTFO.					

The third paragraph is revised to read:

The RTFO J_{nrdiff} and the PAV direct tension specifications of AASHTO M 332 are not required.

9-02.1(6) Cationic Emulsified Asphalt

This section is revised to read:

Cationic Emulsified Asphalt meeting the requirements of AASHTO M 208 Table 1 of the grades specified in the Contract shall be used.

9-02.5 Warm Mix Asphalt (WMA) Additive

This section, including title, is revised to read:

9-02.5 HMA Additive

Additives for HMA shall be approved by the Engineer.

9-03.AP9

Section 9-03, Aggregates
January 2, 2018

9-03.1(1) General Requirements

The second paragraph (up until the colon) is revised to read:

Aggregates for Portland Cement Concrete shall meet the following test requirements:

9-03.1(5)B Grading

In the last paragraph, “WSDOT FOP for WAQTC/AASHTO T 27/T 11” is revised to read “FOP for WAQTC/AASHTO T 27/T 11”.

9-03.4(1) General Requirements

The first paragraph (up until the colon) is revised to read:

Aggregate for bituminous surface treatment shall be manufactured from ledge rock, talus, or gravel, in accordance with Section 3-01. Aggregates for Bituminous Surface Treatment shall meet the following test requirements:

9-03.8(1) General Requirements

The first paragraph (up until the colon) is revised to read:

Aggregates for Hot Mix Asphalt shall meet the following test requirements:

9-03.8(7) HMA Tolerances and Adjustments

In the table in item number 1, the fifth row is revised to read:

Asphalt binder	-0.4% to 0.5%		±0.7%

In the table in item number 1, the following new row is inserted before the last row:

Voids in Mineral Aggregate, VMA	-1.5%		

9-03.9(1) Ballast

The second paragraph (up until the colon) is revised to read:

Aggregates for ballast shall meet the following test requirements:

9-04.AP9

Section 9-04, Joint and Crack Sealing Materials
January 2, 2018

9-04.1(2) Premolded Joint Filler for Expansion Joints

In this section, each reference to “AASHTO T 42” is revised to read “ASTM D 545”.

9-04.2(1)A1 Hot Poured Sealant for Cement Concrete Pavement

This section is supplemented with the following:

Hot poured sealant for cement concrete pavement is acceptable for installations in joints where cement concrete pavement abuts a bituminous pavement.

9-04.2(1)A2 Hot Poured Sealant for Bituminous Pavement

This section is supplemented with the following:

Hot poured sealant for bituminous pavement is acceptable for installations in joints where cement concrete pavement abuts a bituminous pavement.

9-06.AP9

Section 9-06, Structural Steel and Related Materials
January 2, 2018

9-06.5 Bolts

This section’s title is revised to read:

Bolts and Rods

9-06.5(4) Anchor Bolts

This section, including title, is revised to read:

9-06.5(4) Anchor Bolts and Anchor Rods

Anchor bolts and anchor rods shall meet the requirements of ASTM F1554 and, unless otherwise specified, shall be Grade 105 and shall conform to Supplemental Requirements S2, S3, and S4.

Nuts for ASTM F1554 Grade 105 black anchor bolts and anchor rods shall conform to ASTM A563, Grade D or DH. Nuts for ASTM F1554 Grade 105 galvanized anchor bolts and anchor rods shall conform to either ASTM A563, Grade DH, or AASHTO M292, Grade 2H, and shall conform to the overtapping, lubrication, and rotational testing requirements in Section 9-06.5(3). Nuts for ASTM F1554 Grade 36 or 55 black or galvanized anchor bolts and anchor rods shall conform to ASTM A563, Grade A or DH. Washers shall conform to ASTM F436.

The bolts and rods shall be tested by the manufacturer in accordance with the requirements of the pertinent Specification and as specified in these Specifications. Anchor bolts, anchor rods, nuts, and washers shall be inspected prior to shipping to the project site. The Contractor shall submit to the Engineer for acceptance a Manufacturer's Certificate of Compliance for the anchor bolts, anchor rods, nuts, and washers, as defined in Section 1-06.3. If the Engineer deems it appropriate, the Contractor shall provide a sample of the anchor bolt, anchor rod, nut, and washer for testing.

All bolts, rods, nuts, and washers shall be marked and identified as required in the pertinent Specification.

9-06.18 Metal Bridge Railing

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

Steel used for metal railings, when galvanized after fabrication in accordance with AASHTO M111, shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

9-08.AP9

Section 9-08, Paints and Related Materials
January 2, 2018

9-08.1(2)K Orange Equipment Enamel

In the second sentence of the first paragraph, the reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

9-08.1(8) Standard Colors

In the first paragraph, the reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

9-13.AP9

Section 9-13, Riprap, Quarry Spalls, Slope Protection, and Rock for Erosion and Scour Protection and Rock Walls
January 2, 2018

9-13.1(1) General

The last paragraph is revised to read:

Riprap and quarry spalls shall be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather and shall meet the following test requirements:

9-13.7(1) Rock for Rock Walls and Chinking Material

The first paragraph (up until the colon) is revised to read:

Rock for rock walls and chinking material shall be hard, sound and durable material, free from seams, cracks, and other defects tending to destroy its resistance to weather, and shall meet the following test requirements:

9-14.AP9

Section 9-14, Erosion Control and Roadside Planting
January 2, 2018

9-14.4(2) Hydraulically Applied Erosion Control Products (HECPs)

In the second column of Table 1, “ASTM D 586” is revised to read “AASHTO T 267”.

In Table 1, the second to last row is deleted.

9-20.AP9

Section 9-20, Concrete Patching Material, Grout, and Mortar
January 2, 2018

9-20.5 Bridge Deck Repair Material

Item number 3 of the first paragraph is revised to read:

3. Permeability of less than 2,000 coulombs at 28-days or more in accordance with AASHTO T 277.

9-21.AP9

Section 9-21, Raised Pavement Markers (RPM)
January 2, 2018

9-21.2 Raised Pavement Markers Type 2

This section’s content is deleted.

9-21.2(1) Physical Properties

This section, including title, is revised to read:

9-21.2(1) Standard Raised Pavement Markers Type 2

The marker housing shall contain reflective faces as shown in the Plans to reflect incident light from either a single or opposite directions and meet the requirements of ASTM D 4280 including Flexural strength requirements.

9-21.2(2) Optical Requirements

This section, including title, is revised to read:

9-21.2(2) Abrasion Resistant Raised Markers Type 2

Abrasion Resistant Raised Markers Type 2 shall comply with Section 9-21.2(1) and meet the requirements of ASTM D 4280 with the following additional requirement: The coefficient of luminous intensity of the markers shall be measured after subjecting the entire lens surface to the test described in ASTM D 4280 Section 9.5 using a sand drop apparatus. After the exposure described above, retroreflected values shall not be less than 0.5 times a nominal unblemished sample.

9-21.2(3) Strength Requirements

This section is deleted in its entirety.

9-28.AP9

Section 9-28, Signing Materials and Fabrication
January 2, 2018

9-28.11 Hardware

The last paragraph is revised to read:

All steel parts shall be galvanized in accordance with AASHTO M111. Steel bolts and related connecting hardware shall be galvanized in accordance with ASTM F 2329.

9-28.14(2) Steel Structures and Posts

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

Anchor rods for sign bridge and cantilever sign structure foundations shall conform to Section 9-06.5(4), including Supplemental Requirement S4 tested at -20°F.

In the second sentence of the fourth paragraph, “AASHTO M232” is revised to read “ASTM F 2329”.

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

Except as otherwise noted, steel used for sign structures and posts shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

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

If such modifications are contemplated, the Contractor shall submit a Type 2 Working Drawing of the proposed modifications.

9-29.AP9

Section 9-29, Illumination, Signal, Electrical
January 2, 2018

9-29.1 Conduit, Innerduct, and Outerduct

This section is supplemented with the following new subsection:

9-29.1(10) Pull Tape

Pull tape shall be pre-lubricated polyester pulling tape. The pull tape shall have a minimum width of ½-inch and a minimum tensile strength of 500 pounds. Pull tape may have measurement marks.

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

In the table in the last paragraph, the fourth, fifth and sixth rows are revised to read:

Slip Resistant Lid	ASTM A36 steel
Frame	ASTM A36 steel
Slip Resistant Frame	ASTM A36 steel

9-29.6 Light and Signal Standards

In the first sentence of the third paragraph, “AASHTO M232” is revised to read “ASTM F 2329”.

Item number 2 of the last paragraph is revised to read:

2. The steel light and signal standard fabricator’s shop drawing submittal, including supporting design calculations, submitted as a Type 2E Working Drawing in accordance with Section 8-20.2(1) and the Special Provisions.

9-29.6(1) Steel Light and Signal Standards

In the second paragraph, “AASHTO M232” is revised to read “ASTM F 2329”.

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

Steel used for light and signal standards shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

9-29.6(5) Foundation Hardware

In the last paragraph, “AASHTO M232” is revised to read “ASTM F 2329”.

9-29.10(1) Conventional Roadway Luminaires

This section is revised to read:

All conventional roadway luminaires shall meet 3G vibration requirements as described in ANSI C136.31.

All luminaires shall have housings fabricated from aluminum. The housing shall be painted flat gray, SAE AMS Standard 595 color chip No. 26280, unless otherwise specified in the Contract. Painted housings shall withstand a 1,000 hour salt spray test as specified in ASTM B117.

Each housing shall include a four bolt slip-fitter mount capable of accepting a nominal 2” tenon and adjustable within +/- 5 degrees of the axis of the tenon. The clamping

bracket(s) and the cap screws shall not bottom out on the housing bosses when adjusted within the +/- 5 degree range. No part of the slipfitter mounting brackets on the luminaires shall develop a permanent set in excess of 0.2 inch when the cap screws used for mounting are tightened to a torque of 32 foot-pounds. Each luminaire shall include leveling reference points for both transverse and longitudinal adjustment.

All luminaires shall include shorting caps when shipped. The caps shall be removed and provided to the Contracting Agency when an alternate control device is required to be installed in the photocell socket. House side shields shall be included when required by the Contract. Order codes shall be modified to the minimum extent necessary to include the option for house side shields.

This section is supplemented with the following new subsections:

9-29.10(1)A High Pressure Sodium (HPS) Conventional Roadway Luminaires

HPS conventional roadway luminaires shall meet the following requirements:

1. General shape shall be “cobrahead” style, with flat glass lens and full cutoff optics.

2. Light pattern distribution shall be IES Type III.

3. The reflector of all luminaires shall be of a snap-in design or secured with screws. The reflector shall be polished aluminum or prismatic borosilicate glass.

4. Flat lenses shall be formed from heat resistant, high-impact, molded borosilicate or tempered glass.

5. The lens shall be mounted in a doorframe assembly, which shall be hinged to the luminaire and secured in the closed position to the luminaire by means of an automatic latch. The lens and doorframe assembly, when closed, shall exert pressure against a gasket seat. The lens shall not allow any light output above 90 degrees nadir. Gaskets shall be composed of material capable of withstanding the temperatures involved and shall be securely held in place.

6. The ballast shall be mounted on a separate exterior door, which shall be hinged to the luminaire and secured in the closed position to the luminaire housing by means of an automatic type of latch (a combination hex/slot stainless steel screw fastener may supplement the automatic-type latch).

7. Each luminaire shall be capable of accepting a 150, 200, 250, 310, or 400 watt lamp complete and associated ballast. Lamps shall mount horizontally.

9-29.10(1)B Light Emitting Diode (LED) Conventional Roadway Luminaires

LED Conventional Roadway Luminaires are divided into classes based on their equivalent High Pressure Sodium (HPS) luminaires. Current classes are 200W, 250W, 310W, and 400W. LED luminaires are required to be pre-approved in order to verify their photometric output. To be considered for pre-approval, LED luminaires must meet the requirements of this section.

LED luminaires shall include a removable access door, with tool-less entry, for access to electronic components and the terminal block. The access door shall be removable, but include positive retention such that it can hang freely without disconnecting from the luminaire housing. LED drivers may be mounted either to the interior of the luminaire housing or to the removable door itself.

LED drivers shall be removable for user replacement. All internal modular components shall be connected by means of mechanical plug and socket type quick disconnects. Wire nuts may not be used for any purpose. All external electrical connections to the luminaire shall be made through the terminal block.

LED luminaires shall include a 7-pin NEMA photocell receptacle. The LED driver(s) shall be dimmable from ten volts to zero volts. LED output shall have a Correlated Color Temperature (CCT) of 4000K nominal (4000-4300K) and a Color Rendering Index (CRI) of 70 or greater. LED output shall be a minimum of 85% at 75,000 hours at 25 degrees Celsius.

LED luminaires shall be available for 120V, 240V, and 480V supply voltages. Voltages refer to the supply voltages to the luminaires present in the field. LED power usage shall not exceed the following maximum values for the applicable wattage class:

Class	Max. Wattage
200W	110W
250W	165W
310W	210W
400W	275W

Only one brand of LED conventional roadway luminaire may be used on a Contract. They do not necessarily have to be the same brand as any high-mast, underdeck, or wall-mount luminaires when those types of luminaires are specified in the Contract. LED luminaires shall include a standard 10 year manufacturer warranty.

The list of pre-approved LED Conventional Roadway Luminaires is available at http://www.wsdot.wa.gov/Design/Traffic/ledluminaires.htm.

9-29.10(2) Decorative Luminaires

This section, including title, is revised to read:

9-29.10(2) Vacant

9-29.12 Electrical Splice Materials

This section is supplemented with the following new subsections:

9-29.12(3) Splice Enclosures

9-29.12(3)A Heat Shrink Splice Enclosure

Heat shrink splice enclosures shall be medium or heavy wall cross-linked polyolefin, meeting the requirements of AMS-DTL-23053/15, with thermoplastic adhesive sealant. Heat shrink splices used for “wye” connections require rubber electrical mastic tape.

9-29.12(3)B Molded Splice Enclosure

Molded splice enclosures shall use epoxy resin in a clear rigid plastic mold. The material used shall be compatible with the insulation material of the insulated conductor or cable. The component materials of the resin insulation shall be packaged ready for convenient mixing without removing from the package.

9-29.12(4) Re-Enterable Splice Enclosure

Re-enterable splice enclosures shall use either dielectric grease or a flexible resin contained in a two-piece plastic mold. The mold shall either snap together or use stainless steel hose clamps.

9-29.12(5) Vinyl Electrical Tape for Splices

Vinyl electrical tape in splicing applications shall meet the requirements of MIL-I-24391C.

9-29.12(1) Illumination Circuit Splices

This section is revised to read:

Underground illumination circuit splices shall be solderless crimped connections capable of securely joining the wires, both mechanically and electrically, as defined in Section 8-20.3(8). Aerial illumination splices shall be solderless crimp connectors or split bolt vice-type connectors.

9-29.12(1)A Heat Shrink Splice Enclosure

This section is deleted in its entirety.

9-29.12(1)B Molded Splice Enclosure

This section is deleted in its entirety.

9-29.12(2) Traffic Signal Splice Material

This section is revised to read:

Induction loop splices and magnetometer splices shall use an uninsulated barrel-type crimped connector capable of being soldered.

9-29.16(2)E Painting Signal Heads

In the first sentence, “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

9-29.17 Signal Head Mounting Brackets and Fittings

In the first paragraph, item number 2 under **Stainless Steel** is revised to read:

2. Bands or cables for Type N mount.

9-29.20 Pedestrian Signals

In item 2C of the second paragraph, “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

9-34.AP9

Section 9-34, Pavement Marking Material
January 2, 2018

9-34.2(2) Color

Each reference to “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

9-34.2(5) Low VOC Waterborne Paint

The heading “Standard Waterborne Paint” is supplemented with “Type 1 and 2”.

The heading “High-Build Waterborne Paint” is supplemented with “Type 4”.

The heading “Cold Weather Waterborne Paint” is supplemented with “Type 5”.

In the row beginning with “° @90°F”, each minimum value is revised to read “60”.

In the row beginning with “Fineness of Grind, (Hegman Scale)”, each minimum value is revised to read “3”.

The last four rows are replaced with the following:

Vehicle Composition	ASTM D 2621	100% acrylic emulsion	100% cross-linking acrylic[4]	100% acrylic emulsion
Freeze-Thaw Stability, KU	ASTM D 2243 and D 562	@ 5 cycles show no coagulation or change in viscosity greater than ± 10 KU	@ 5 cycles show no coagulation or change in viscosity greater than ± 10 KU	@ 3 cycles show no coagulation or change in viscosity greater than ± 10 KU
Heat Stability	ASTM D 562[2]	± 10 KU from the initial viscosity	± 10 KU from the initial viscosity	± 10 KU from the initial Viscosity
Low Temperature Film Formation	ASTM D 2805[3]	No Cracks*		No Cracks
Cold Flexibility[5]	ASTM D522	Pass at 0.5 in mandrel*		
Test Deck Durability[6]	ASTM D913	≥70% paint retention in wheel track*		
Mud Cracking	(See note 7)	No Cracks	No Cracks	

After the preceding Amendments are applied, the following new column is inserted after the “Standard Waterborne Paint Type 1 and 2” column:

Semi-Durable Waterborne Paint Type 3			
White		**Yellow**	
Min.	**Max.**	**Min.**	**Max.**
Within ± 0.3 of qualification sample			
80	95	80	95
60		60	
77		77	
	65		65
43		43	
	1.25		1.25
3		3	
0.98		0.96	

88		50	
100°		100°	
9.5		9.5	
	10		10
100% acrylic emulsion			
@ 5 cycles show no coagulation or change in viscosity greater than ± 10 KU			
± 10 KU from the initial viscosity			
No Cracks			
Pass at 0.25 in mandrel			
≥70% paint retention in wheel track			
No Cracks			

The footnotes are supplemented with the following:

[4]Cross-linking acrylic shall meet the requirements of federal specification TT-P-1952F Section 3.1.1.

[5]Cold Flexibility: The paint shall be applied to an aluminum panel at a wet film thickness of 15 mils and allowed to dry under ambient conditions (50±10% RH and 72±5 ˚F) for 24 hours. A cylindrical mandrel apparatus (in accordance with ASTM D522 method B) shall be put in a 40°F refrigerator when the paint is drawn down After 24 hours, the aluminum panel with dry paint shall be put in the 40°F refrigerator with the mandrel apparatus for 2 hours. After 2 hours, the panel and test apparatus shall be removed and immediately tested to according to ASTM D522 to evaluate cold flexibility. Paint must show no evidence of cracking, chipping or flaking when bent 180 degrees over a mandrel bar of specified diameter.

[6]NTPEP test deck, or a test deck conforming to ASTM D713, shall be conducted for a minimum of six months with the following additional requirements: it shall be applied at 15 wet mils to a test deck that is located at 40N latitude or higher with at least 10,000 ADT and which was applied during the months of September through November.

[7]Paint is applied to an approximately 4”x12” aluminum panel using a drawdown bar with a 50 mil gap. The coated panel is allowed to dry under ambient conditions (50±10% RH and 72±5 ˚F) for 24 hours. Visual evaluation of the dry film shall reveal no cracks.

9-34.3 Plastic

In the first sentence of the last paragraph, “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

9-34.3(2) Type B – Pre-Formed Fused Thermoplastic

In the last two paragraphs, each reference to “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

9-34.7(1) Requirements

The first paragraph is revised to read:

Field performance evaluation is required for low VOC solvent-based paint per Section 9-34.2(4), Type A – liquid hot applied thermoplastic per Section 9-34.3(1), Type B – preformed fused thermoplastic per Section 9-34.3(2), Type C – cold applied preformed tape per Section 9-34.3(3), and Type D – liquid applied methyl methacrylate per Section 9-34.3(4).

The last paragraph is deleted.

9-34.7(1)C Auto No-Track Time

The first paragraph is revised to read:

> Auto No-Track Time will only be required for low VOC solvent-based paint in accordance with Section 9-34.2(4).

The second and third sentences of the second paragraph are deleted.

PART 5

SPECIAL PROVISIONS

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INTRODUCTION TO THE SPECIAL PROVISIONS

(August 14, 2013 APWA GSP)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2018 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 the Amendments to the Standard Specifications and 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 project-specific Special Provisions are not labeled as such. 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 WSDOT GSP)
(May 1, 2013 City of Sammamish)

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/APWA, current edition
- *KING COUNTY Department of Transportation Road Services Division 2007 Design and Construction Standards*
- *CITY OF SAMMAMISH 2016 Sammamish Public Works Standards*

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

DIVISION 1
GENERAL REQUIREMENTS

DESCRIPTION OF WORK

This Contract provides for the removal of existing landscaped traffic islands and restore each area with left-turn pocket travel lanes at five (5) locations within the City of Sammamish, King County.

- 228th Avenue SE & SE 8th Street – Northbound left-turn pocket extension
- 228th Avenue NE & NE 8th Street – Northbound left turn pocket extension, southbound turn pocket extension, Boys and Girls Club driveway modifications (right-in, right-out only), and northbound 228th Avenue NE channelization revisions.
- 228th Avenue NE & NE 4th Street – Southbound left-turn pocket extension
- 228th Avenue SE & Issaquah-Pine Lake Road SE – Channelization modifications and signal head installation to provide signal timing overlap for the westbound right-turn with the southbound left turn.
- 228th Avenue SE & SE 20th Street – Northbound left turn pocket extension and southbound left-turn pocket extension at the northern Discovery Elementary Driveway.

The project includes removal of existing landscaped medians (including trees, irrigation, illumination, signage, etc.), the restoration of each area as extended left-turn pockets, and other work all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

SECTION 1-01, DEFINITIONS AND TERMS

1-01.3 Definitions

(January 4, 2016 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, Amendments, 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.

SECTION 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)

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.

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")	3	Furnished automatically upon award.
Contract Provisions	3	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	1	Furnished automatically upon award.

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

1-02.4 Examination of Plans, Specifications, and Site of Work

1-02.4(1) General

(June 2006 City of Sammamish)

Section 1-02.4(1) General numbered paragraph 3 is replaced with the following:

> Has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered <u>including existing utilities and utility relocation Work</u> insofar as this information is reasonably ascertainable from an inspection of the Work site (including material sites) as well as from the Bid Documents and other information made a part of this Contract.

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; the bidder's UDBE/DBE/M/WBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if such be to the advantage of the Contracting Agency. The

bidder shall bid on all alternates and additives set forth in the Proposal Form unless otherwise specified.

1-02.6 Preparation of Proposal

(May 17, 2018 APWA GSP)

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.
5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last two paragraphs, and replace them with the following:

If no Subcontractor is listed, the Bidder acknowledges that it does intend to use any Subcontractor to perform those items of work.

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

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

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

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

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.

1-02.9 Delivery of Proposal

(May 17, 2018 APWA GSP, Option A)

Delete this section and replace it with the following:

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

To be considered responsive on a FHWA-funded project, the Bidder may be required to submit the following items, as required by Section 1-02.6:

- UDBE Written Confirmation Document from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification (WSDOT 272-056U)
- Good Faith Effort (GFE) Documentation

These documents, if applicable, shall be received either with the Bid Proposal or as a supplement to the Bid. These documents shall be received **no later than 24 hours** (not including Saturdays, Sundays and Holidays) after the time for delivery of the Bid Proposal.

If submitted after the Bid Proposal is due, the document(s) must be submitted in a sealed envelope labeled the same as for the Proposal, with "Supplemental Information" added. All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" (UDBE confirmations, or GFE documentation) that is received after the time specified above, or received in a location other than that specified in the Call for Bids.

1-02.10 Withdrawing, Revising, or Supplementing Proposal

(July 23, 2015 APWA GSP)

Delete this section in its entirety, 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.

1-02.12 Public Opening of Proposals

Section 1-02.12 is supplemented with the following:

Date of Opening Bids

Sealed Bids are to be received at one of the following locations prior to the time specified:

1. At Sammamish City Hall until **2:00 p.m.** of the Bid opening date.

   Sammamish City Hall
   801 228th Avenue SE
   Sammamish, WA 98075

The Bid opening date for this project is as specified on the Notice to Contractors. Bids received will be publicly opened and read after **2:00 p.m.** on this date.

1-02.13 Irregular Proposals

(June 20, 2017 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 authorized Proposal form furnished by the Contracting Agency is not used or is altered;
   c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
   d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
   e. A price per unit cannot be determined from the Bid Proposal;
   f. The Proposal form is not properly executed;

g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;
h. The Bidder fails to submit or properly complete an Underutilized Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
i. The Bidder fails to submit written confirmation from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification that they are in agreement with the bidder's UDBE 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;
j The Bidder fails to submit UDBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
l. More than one Proposal is submitted for the same project from a Bidder under the same or different names.

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. Receipt of Addenda is not acknowledged;
   d. 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
   e. 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

(August 14, 2013 APWA GSP)

Revise this section to read:

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the 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.

SECTION 1-03, AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of Bids

(January 23, 2006 APWA GSP)

Revise the first paragraph to read:

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

1-03.3 Execution of Contract

(October 1, 2005 APWA GSP)

Revise this Section to read:

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

Within 10 calendar days after the award date, the successful Bidder shall return the signed Contracting Agency-prepared Contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the Contract by the Contracting Agency, the successful Bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

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

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

1-03.4 Contract Bond

(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).

(June 2006 City of Sammamish)
Section 1-03.4 is supplemented with the following*:*

The Contractor shall furnish both a Performance Bond and a Labor and Material Payment Bond, each in the full amount of the Contract price which shall guarantee the faithful performance of the Contract and the payment for all taxes, labor, material, Subcontractors and material suppliers. The Labor and Material Payment Bond shall be in force until completion of the project and acceptance by the Contracting Agency, and also for such period thereafter during which the law allows claims to be filed and sued upon. All Bonds required hereunder shall be issued by a corporate surety company authorized to do business in the state in which the Work is located, and which is also a company acceptable to the Contracting Agency, and on the form attached hereto.

1-03.7 Judicial Review

(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

Any decision made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.05 shall control venue and jurisdiction.

SECTION 1-04, SCOPE OF THE WORK

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

(March 13, 2012 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. Amendments to the Standard Specifications,
6. Standard Specifications,
7. Contracting Agency's Standard Plans or Details (if any), and
8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.4 Changes

Delete the fifth paragraph and replace with the following:

B. When an item of Work, as defined elsewhere in the Contract, is increased in excess of 125 percent or decreased below 75 percent of the original Contract quantity, and if the Item of Work represents more than 10 percent of the total Contract price. For the purpose of this Section, an item of Work will be defined as any item that qualifies for adjustment under the provisions of Section 1-04.6.

1-04.6 Variation in Estimated Quantities

(July 23, 2015 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 any 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 $25,000. In that case, payment for contract work may be adjusted as described herein.

SECTION 1-05, CONTROL OF WORK

1-05.3 Plans and Working Drawings

1-05.3(1) Record Drawings (New Section)

(June 2006 City of Sammamish)

Section 1-05.3(1) is added as follows:

Record drawings refer to those documents to be maintained and annotated by the Contractor during construction and are defined as (1) a neatly and legibly marked set of Contract Plans showing the final location of piping, new structures, paving limits, curbs, gutters, sidewalks, relocated utility structures, monuments, channelization, etc.; (2) additional documents such as schedules, lists, drawings, and easement/permit forms included in the specifications; and (3) Contractor layout and installation drawings.

Unless otherwise specified, record drawings shall be half size (11" x 17") and maintained in a clean, dry, and legible condition. Record documents shall not be used for construction purposes and shall be available for review by the Engineer during normal working hours at the Contractor's field office. At the completion of the Work, prior to final payment, all record drawings and attachments shall be submitted to the Engineer. This Work does not require a field survey of "as-built" conditions.

Marking of the drawings shall be kept current and shall be done at the time materials and equipment are installed. Annotations to the record documents shall be made with an erasable colored pencil conforming to the following color code:

Additions	Red
Deletions	Green
Comments -	Blue
Dimensions -	Graphite

Legibly mark to record actual depths, horizontal and vertical location of underground utilities and cables, and appurtenances referenced to permanent surface improvements.

The Contractor will be provided with one set of blueprint construction drawings for this purpose. At the end of the project, each record drawing shall be signed by a person with authority to represent the Contractor, attesting to the accuracy of the drawing.

The Contractor's record drawings will be reviewed bi-monthly for completeness by the Resident Engineer. If the record drawings do not reflect the Work performed, payment for those items of Work not reflected on the drawings will not be included in the current monthly progress estimate.

Payment

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

"Record Drawings", lump sum.

1-05.4 Conformity With and Deviations From Plans and Stakes

Section 1-05.4 is supplemented with the following:

(August 7, 2017 WSDOT GSP)

Contractor Surveying - Roadway

Copies of the Contracting Agency provided primary survey control data are available for the bidder's inspection at the office of the Engineer.

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.

To facilitate the establishment of these lines and elevations, the Contracting Agency will provide the Contractor with primary survey control information consisting of descriptions of two primary control points used for the horizontal and vertical control, and descriptions of two additional primary control points for every additional three miles of project length. Primary control points will be described by reference to the project alignment and the coordinate system and elevation datum utilized by the project. In addition, the Contracting Agency will supply horizontal coordinates for the beginning and ending points and for each Point of Intersection (PI) on each alignment included in the project.

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

	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.

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 therefore.

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.

1-05.13(1) Emergency Contact List

(June 2006 City of Sammamish)

Section 1-05.13(1) shall be supplemented with the following:

The Contractor shall designate and shall provide the Contracting Agency and the Engineer with names and telephone numbers of those persons who will be available at all times in case of emergency. The Contractor will be charged for such expenses as may be incurred by the Contracting Agency to provide such service, if said emergency is not immediately rectified.

1-05.14 Cooperation With Other Contractors
(March 13, 1995 WSDOT GSP)

Section 1-05.14 is supplemented with the following:

Other Contracts Or Other Work

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

2018 Flashing Yellow Arrow Signals Project

1-05.15 Method of Serving Notices
(March 25, 2009 APWA GSP)

Revise the second paragraph to read:

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

Add the following new Section:

1-05.16 Water and Power
(October 1, 2005 APWA GSP)

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

SECTION 1-06, CONTROL OF MATERIAL

1-06.1 Approval of Materials Prior to Use
(June 2006 City of Sammamish)

Section 1-06.1 is supplemented with the following:

1. Within these Contract Documents, certain items are specified by brand, style, trade name, or manufacturer in order to set forth a standard of quality, and/or preference by the Contracting Agency. It is not the intent of these Specifications to exclude other processes or materials of a type and quality equal to those designated.

2. Whenever a manufacturer’s name, brand, or item designation is given, it shall be understood that the words “or equal” follow such name or designation whether in fact they do so or not.

3. The phrase “or equal” is not to be construed to mean that material or equipment will be necessarily approved as equal by the Engineer; any such approval shall only be effective when the item has been specifically approved in advance and in writing by the Engineer.

4. No additional compensation or extension of time will be allowed the Contractor for any changes required to adopt substituted materials or equipment.

1-06.1(5) Submittals (New Section)

(June 2006 City of Sammamish)

Section 1-06.1(5) is added as follows:

1-06.1(5)1.0 General

The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of Work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the requirements of the Specifications and drawings. Submittal documents shall be clearly edited to indicate only those items, models, or series of materials or equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and specifically notify the Contracting Agency in each case where his/her submittal may affect the Work of another Contractor or the Contracting Agency. The Contractor shall ensure coordination of submittals among the related crafts and sub-Contractors. If the Contractor proposes to provide material, equipment, or method of Work, which deviates from the project Specifications, the Contractor shall indicate so under "deviations" on the transmittal form accompanying the submittal copies.

1-06.1(5)1.1 Work Included

Submittals required for this Work shall include any or all of the following as required by the particular Specification section and the submittal schedule:

a. Manufacturer's Literature
b. Shop Drawings
c. Material Samples
d. Test Report

1-06.1(5)1.2 Submittal Information

Shop, catalog, and other appropriate drawings shall be submitted to the Engineer for review prior to fabrication or ordering of all equipment or materials specified. The number of copies of submittal information to be submitted shall be as indicated in the following parts of this Section.

All submittal information shall be sent to the Contracting Agency or the Agency's designated representative through the general Contractor.

1-06.1(5)2.0 Product Submittals

1-06.1(5)2.1 General

Each submittal shall be accompanied by a letter of transmittal showing the date of transmittal, Specification section or drawing number to which the submittal pertains, and a brief description of the material submitted.

When the Contract documents require a submittal, the Contractor shall submit the specified information as follows:

1. One (1) reproducible original and five (5) copies of all the submitted information.
2. The original and three (3) copy sets will be retained for Contracting Agency and Engineer records. Two (2) copy sets will be returned to the Contractor with the approval action noted.

1-06.1(5)2.2 Manufacturer's Literature

Where the contents of submitted literature includes data is not pertinent to the submittal, the portion(s) of the contents being submitted for the Engineer's review shall be clearly indicated.

1-06.1(5)2.3 Shop Drawings

Shop Drawings shall be submitted in the form of blue-line or black-line prints of each sheet. Blueprint submittals will not be acceptable.

All Shop Drawings shall be accurately drawn to a scale sufficiently large enough to show pertinent features and method of connection or joining. On all Shop Drawings, figure dimensions shall be used as opposed to scaled dimensions.

Shop Drawings shall bear the Contractor's certification that it has reviewed, checked, and approved the Shop Drawings.

1-06.1(5)2.4 Material Samples

All material samples shall be of the exact article proposed to be furnished and shall be submitted in the quantity required to be returned to the Contractor, plus one additional sample to be retained by the Engineer.

1-06.1(5)2.5 Test Reports

A minimum of four (4) copies of test reports shall be submitted to the Contracting Agency and/or its designated representative.

1-06.1(5)2.6 Resubmittals

When material is resubmitted for any reason, it shall be resubmitted under a new letter of transmittal and referenced to the previous submittal.

1-06.1(5)2.7 Timing of Product Submittals

1-06.1(4)2.7.1 General

1. All submittals shall be made far enough in advance of installation to provide all required time for reviews and securing of necessary approvals.
2. In scheduling, the Contractor shall allow at least twenty (20) calendar days for the Engineer's review following its receipt of the submittal.
3. A minimum of six (6) copies are required for submittal (Shop Drawings, manufacturer's literature, etc.) four (4) copies will be retained by the Engineer. The remaining copies will be returned to the Contractor.

1-06.1(5)2.7.2 Delays

Cost of delays occasioned by tardiness of submittals on the part of the Contractor will not be borne by the Contracting Agency, or the Engineer.

1-06.1(5)2.8 Substitutions

1-06.1(5)2.8.1 General

1. Wherever possible throughout the Specifications, the minimum acceptable quality of workmanship and materials has been defined either by manufacturer's name and catalog number, by reference to recognized industry standards, or by performance requirements.
2. To ensure that the specified products are furnished and installed in accordance with the design intent, procedures have been established for advance submittal of design data and for review and approval or rejection by the Engineer.

1-06.1(5)2.8.2 Engineer's Review Required

1. Comply with the requirements of the Standard Specifications unless modified herein.
2. The Engineer will consider proposals for substitutions of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Engineer to evaluate the proposals.
3. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this Work by the Engineer.
4. If the Contractor desires to furnish items of minor equipment by manufacturers other than those specified, he shall secure the approval of the Engineer prior to placing a purchase order.
5. Where the phrase "or equal" occurs in the Contract Documents, do not assume that material, equipment, or methods will be approved as equal by the Engineer unless the item has been specifically approved in writing for this Work by the Engineer.

1-06.1(5)2.8.3 Availability of Specified Items

1. Verify prior to Bidding that all specified items will be available in time for installation during orderly and timely progress of the Work.
2. In the event the specified item or items will not be available, notify the Engineer prior to receipt of Bids.
3. Costs of delays because of non-availability of specified items, when such delays could have been avoided by the Contractor, shall not be borne by the Contracting Agency. Under such conditions, the Contractor is subject to liquidated damages should Contract time expire.

1-06.1(5)3.0 Payment

No separate payment will be made for submittals or equipment manuals, or the corresponding services, and operations required by the Contractor to complete the furnishing of equipment information in accordance with these Specifications. All costs shall be considered as incidental to the Work.

1-06.4 Handling and Storing Materials

1-06.4(1) On-Site Storage (New Section)

(June 2006 City of Sammamish)

Section 1-06.4(1) is added as follows:

The Contractor shall store all equipment and materials in a safe and suitable place in accordance with the Manufacturer's recommendations. Materials shall be covered or wrapped to protect them from moisture, dust and deterioration as required. All on-site storage areas shall be approved in advance by the Engineer.

1-06.4(2) Off-Site Storage (New Section)

(June 2006 City of Sammamish)

Section 1-06.4(2) is added as follows:

The Contractor may be required to provide off-site storage of equipment and materials to enable construction to occur at the construction site. The Contractor has full responsibility to secure all off-site storage areas, if needed, and shall include the costs for providing such storage areas in the Contract Bid Proposal for the individual equipment and material items requiring offsite storage. All off-site storage areas shall be fenced, secure and have access restricted or withheld from the General Public.

1-06.6 Recycled Materials

(January 4, 2016 APWA GSP)

Delete this section, including its subsections, and replace it with the following:

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

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

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

1-07.1 Laws to be Observed

(October 1, 2005 APWA GSP)

Supplement this Section with the following:

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

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

The Contractor shall maintain at the project site office, or other well-known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to Work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

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

1-07.2 State Taxes

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(3) 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 if 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 60.28.051). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1) State Sales Tax — Rule 171

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

1-07.2(2) State Sales Tax — Rule 170

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

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

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

1-07.2(3) Services

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

1-07.5 Environmental Regulations

1-07.5(1) General

(June 2006 City of Sammamish)

Supplement this Section with the following:

The Contractor's attention is directed to Section 1-07.5 in its entirety, in addition to the following. The Contractor shall provide for the flow of all watercourses, including streams, ditches, drains, and sewers intercepted during the progress of the Work and shall completely restore the same in as good condition as found or shall make such final provisions for restoration as the Contracting Agency may require. The Contractor shall not obstruct the flow of water but shall use all proper measures to provide for the free passage of surface water.

The Contractor shall make provisions to take care of all surplus water, mud, silt, slickings, or other runoff pumped from excavations or resulting from sluicing or other operations and shall be responsible for any damage of whatever nature resulting from failure to provide for the adequate control of runoff.

No direct payment shall be allowed for the above Work. Payment for the cost thereof shall be included in the prices Bid for the various items which comprise the Contract Work.

1-07.7 Load Limits

Section 1-07.7 is supplemented with the following:

(March 13, 1995 WSDOT GSP)

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.

1-07.16 Protection and Restoration of Property

1-07.16(1) Private/Public Property

(June 2006 City of Sammamish)

Section 1-07.16(1) shall be supplemented with the following:

Only equipment with rubber tires or smooth tracks will be allowed on the finished roads or road surfaces which are not to be reconstructed as a part of this project. Tracks with cleats or other devices which damage the road surfacing will not be allowed. All outriggers shall be equipped with street pads.

Along the street to be improved, there are privately owned improvements on the properties abutting the right-of-way. Even though all reasonable precaution is to be taken by the Contractor, these improvements may in some instances be damaged. In the event such occurs, and claims for damages are filed by the individuals, the Contracting Agency will request that the Contractor give evidence that he has requested his insurance company to make personal contact with the claimant. Any settlement for insurance claims shall be strictly an act restricted to the claimant, the Contractor and his insurance company.

Any additional costs due to delays or restrictions due to the construction within the Right-of-Way and furnishing access to adjacent property owners shall be considered incidental to the project, and shall also be merged in the respective unit and lump sum prices Bid.

1-07.17 Utilities and Similar Facilities

Utilities and Similar Facilities

Section 1-07.17 is supplemented with the following:

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

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

Puget Sound Energy intends to temporarily de-energize the overhead line in proximity of soldier pile wall for wall construction while Comcast and Frontier intend to lash lines to tree to provide space as needed.

The Contractor shall attend a mandatory utility preconstruction meeting with the Engineer, all affected subcontractors, and all utility owners and their Contractors prior to beginning onsite Work.

The following addresses and telephone numbers of utility companies or their Contractors that will be adjusting, relocating, replacing or constructing utilities within the project limits are supplied for the Contractor's use:

Puget Sound Energy (Gas & Electric)
P.O. BOX 90868
Bellevue, WA 98009-0868
Attn: Dennis Booth
425-417-9188

Century Link (Telecommunications)
Paul DeLong
1550 Newport Way NW
Issaquah, WA 98027
425-345-6258

Comcast (Telecommunications)
Joe Fordon
1525 75th Street SW #200
Everett, WA 98203
425-263-5348

Sammamish Plateau Water and Sewer District [SPWSD] (Water & Sewer)
1510 – 228th Avenue SE
Sammamish, WA 98075
Attn: Kyle Wong
425-392-4931 ext. 217

Frontier
1800 41st Street
Everett, WA 98203
Thomas Dacy
425-261-6342

The Contractor shall give fourteen (14) calendar-day's notice before planned work requiring relocations and forty-eight (48) hours-notice to all utility companies/agencies involved where work is to take place and in all other respects comply with the provisions of Chapter 19.122 RCW. Notice shall include, but not be limited to, the utility companies/agencies serving the area.

Locate Existing Utilities

A reasonable attempt has been made to locate existing utilities; however, the exact location and/or depth is unknown in most instances. It is the responsibility of the Contractor to locate the existing utilities and their respective depths.

Accordingly, a bid item has been provided in the proposal to cover the cost of field exploration through excavation or other means to locate more precisely the underground utilities as to their precise location and depth. The contractor shall decide on the difficulties to be encountered in constructing the project and determine therefrom the extent of exploration (beyond that specifically referenced and required by the contract documents) required to facilitate the construction of this project to first prevent damage to those utilities by field verifying excavation locations, and secondly to determine if the new construction is to go around, over, or under an existing utility, or when paralleling an existing utility to insure adequate separation and alignment can be maintained.

The Lump Sum contract price for the item "Locate Existing Utilities" shall include all costs of digging exploratory pits, to further locate utilities more precisely, as to location and depth as required in the Contract Documents and as further needed for this project. Where underground utilities are found to be in close proximity or in the way

of construction, such condition shall not be deemed to be a changed or differing site condition, if minor pipe alignment or grade can be modified to facilitate construction, such minor alignment shall be provided at no additional cost to the Contracting Agency.

1-07.17(3) Utility Service (New Section)

(June 2006 City of Sammamish)

Section 1-07.17(3) is added as follows:

The Contractor shall maintain the operational service of all existing utilities, to include water, storm, power, telephone, cable TV, sanitary, and gas except where this Contract requires specifically for its temporary interruption. Where services are to be temporarily interrupted, affected parties shall be notified in writing at least 48 hours and not more than 72 hours in advance of the time and period of shut-down. Language, format, etc. of written notices shall be reviewed and approved by the Contracting Agency prior to distribution by the Contractor. The Contractor shall make every effort to keep scheduled shut downs to periods of anticipated minimum usage and for the least period of time.

No utility service shall be shut down or "out of service" for more than four (4) hours per day.

Should a non-scheduled shutdown of any utility be required for a period in excess of four hours, the Contractor shall take necessary measures to provide temporary service. The method of all temporary utility services shall first be approved by the Contracting Agency.

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, 2016 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.

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:

$1,000,000	Each Occurrence
$2,000,000	General Aggregate
$2,000,000	Products & Completed Operations Aggregate
$1,000,000	Personal & Advertising Injury each offence
$1,000,000	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:

(June 2006 City of Sammamish)

The Contractor shall be responsible for proper notification to and coordination with all school districts, police and fire departments, U.S. mail, and all other persons or agencies which provide public service types of business (refuse, etc.) which will be affected by this project, and written notification shall be given at least one (1) week in advance of construction. It shall be the Contractor's responsibility to keep the school district and fire departments and others fully advised of his construction progress, any required detours, and also the time of completion of the project.

(January 2, 2012 WSDOT GSP)

Work Zone Clear Zone

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

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

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

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

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

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

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

* or 2-feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

(January 5, 2015 WSDOT GSP)
Lane closures are subject to the following restrictions:

1. The Contractor shall maintain one (1) lane of traffic open at all times during construction.
2. Single lane closures shall be allowed during the following restrictions:
   a. 228th Avenue NE – south of NE 8th Street: 9:30 am to 3:00 pm
   b. 228th Avenue NE – north of NE 8th Street: 9:30 am to 3:30 pm
3. Vehicles in queues shall not be stopped for more than 15 minutes during single lane closures. During the operation of one-way traffic control, flaggers shall work to minimize the time that vehicles are waiting in queues.

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closure hours.

Lane closures are not allowed on any of the following:

1. A holiday,
2. A holiday weekend; holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
3. After 12:00 PM (noon) on the day prior to a holiday or holiday weekend, and
4. Before 7:00 AM on the day after the holiday or holiday weekend.

(NWR February 14, 2005)
Signs and Traffic Control Devices
All signs and traffic control devices for the permitted closures shall only be installed during the specified hours. Construction signs, if placed earlier than the specified hours of closure, shall be turned or covered so as not to be visible to motorists.

1-07.24 Rights of Way

(July 23, 2015 APWA GSP)

Delete this section 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.

SECTION 1-08, PROSECUTION AND PROGRESS

Add the following new Section:

1-08.0 Preliminary Matters

(May 25, 2006 APWA GSP)

Add the following new Section:

1-08.0(1) Preconstruction Conference

(October 10, 2008 APWA GSP)

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

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

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

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

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 noon on the working day 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(2)A Type A Progress Schedule

(March 13, 2012 APWA GSP)

Revise this section to read:

The Contractor shall submit 2 copies of a Type A Progress Schedule no later than at the preconstruction conference, or some other mutually agreed upon submittal time. The schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15 calendar days of receiving the submittal.

1-08.4 Prosecution of Work

Delete this section and replace it with the following:

1-08.4 Notice to Proceed and Prosecution of Work

(July 23, 2015 APWA GSP)

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.

1-08.5 Time for Completion

(September 12, 2016 APWA GSP, Option A)

Revise the third and fourth paragraphs to read:

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

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and any partial or whole day the Engineer declares as unworkable. Within 10 calendar days after the date of each statement, the Contractor shall file a written protest of any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed. By not filing such detailed protest in that period, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor 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. Property owner releases per Section 1-07.24

(March 13, 1995 WSDOT GSP)
Section 1-08.5 is supplemented with the following:

This project shall be physically completed within 75 working days noted in the Notice to Contractors.

1-08.9 Liquidated Damages

(August 14, 2013 APWA GSP)

Revise the fourth paragraph to read:

When the Contract Work has progressed to Substantial Completion as defined in the Contract, the Engineer may determine that the 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.

1-08.10 Termination of Contract

1-08.10(2) Termination for Public Convenience

(June 2006 City of Sammamish)

Section 1-08.10(2) is deleted and replaced with the following:

The Contracting Agency may by written notice terminate this Contract at any time in whole or in part, without cause, and except where termination is due to Contractor's default, the Contracting Agency shall pay the Contractor that portion of the Contract price corresponding to the work completed to the Contracting Agency's satisfaction, together with reasonable costs, as determined in the sole discretion of the Engineer, necessarily incurred by the Contractor in terminating the remaining portion of work, less any payments made before termination. In no event shall the Contracting Agency be required to pay the Contractor any amounts aggregating in excess of the Contract Price, nor shall Contracting Agency be required to pay Contractor any amount for lost anticipated profits on work which is not performed as a result of termination.

1-08.10(3) Termination for Public Convenience Payment Request

(June 2006 City of Sammamish)

Section 1-08.10(3) is deleted.

1-08.10(4) Payment for Termination for Public Convenience

(June 2006 City of Sammamish)

Section 1-08.10(4) is deleted.

SECTION 1-09, MEASUREMENT AND PAYMENT

1-09.2(5) Measurement

(May 2, 2017 APWA GSP)

Revise the first paragraph to read:

Scale Verification Checks – At the Engineer's discretion, the Engineer may perform verification checks on the accuracy of each batch, hopper, or platform scale used in weighing contract items of Work.

1-09.3 Scope of Payment

(June 2006 City of Sammamish)

Section 1-09.3 is supplemented with the following:

The Contractor shall, whenever so requested, give the Contracting Agency and/or the Engineer access to all invoices, bills of lading and other records relating to the Work, and shall, without charge therefore, provide measures and scales with adequate capacity for and assistance for measuring or weighing any of the materials.

1-09.6 Force Account

(October 10, 2008 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 Engineer.

(June 2006 City of Sammamish)

Prior to performing force account work, the Contractor shall submit to the Engineer an Equipment List containing pertinent information as to the type of equipment to be used, i.e., make, model, year, horse-power, serial numbers, optional attachments, capacity, etc., and the current equipment rental rates for such equipment. No force account payment will be made until the Engineer has received the completed Equipment List.

1-09.9 Payments

(March 13, 2012 APWA GSP)

Delete the first four paragraphs and replace them with the following:

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.

1-09.11 Disputes and Claims

1-09.11(3) Time Limitation and Jurisdiction

(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.05 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13 Claims Resolution

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

(October 1, 2005 APWA GSP)

Delete this Section and replace it with the following:

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 Administration of Arbitration

(July 23, 2015 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 36.01.05 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.

SECTION 1-10, TEMPORARY TRAFFIC CONTROL

1-10.1 General

(June 2006 City of Sammamish)

Section 1-10.1 is supplemented with the following:

The Contractor shall conduct its operations so as to offer the least possible obstruction and inconvenience to the public, and the Contractor shall have under construction no greater length or amount of Work than the Contractor can prosecute properly with due regards to the rights of the public. The Contractor shall not open up sections of the Work and leave them unfinished, but rather, the Work shall be finished as it proceeds, insofar as practicable. The Contractor shall further note that daily cleanup, waste haul, pavement restoration requirements, etc., are also important and are required as further noted herein.

All public traffic shall be permitted to pass through the Work with as little inconvenience and delay as possible. The Contracting Agency will not furnish flagmen or any devices for the control of traffic.

The Contractor shall keep all existing roads, temporary detour roadway, and streets adjacent to or within the limits of the project open and maintained in a good and safe condition for traffic at all times unless otherwise specified herein or approved by the Contracting Agency. The Contractor shall promptly remove any deposits or debris and shall repair any damage resulting from its operations. Trenches shall be completely backfilled and capped with approved asphalt mix or be steel plated (suitable for HS-20 loading) at the end of each day. Temporary patching of pavement cuts with an approved asphalt concrete mix shall be completed prior to opening to traffic. Temporary patches shall be maintained in a "smooth" condition by the Contractor at all times and checked on a daily basis. Temporary striping shall be provided.

Construction shall also be conducted so as to cause as little inconvenience as possible to abutting property owners. Convenient and clearly marked access to driveways, houses and buildings along the line of Work shall be maintained and temporary approaches to crossing or intersecting streets shall be provided and kept in good and smooth condition. When the abutting owners' access across the Rights-of-Way line is to be replaced under the Contract by other access, the existing access shall not be closed until the replacement access facility is available. Adjacent property owner’s driveways must be left open and accessible at all times during the course of the project unless otherwise specified herein or approved by the Contracting Agency.

Upon completion of trench backfilling and compaction and prior to opening to vehicular traffic, all trenches shall be brought to a smooth, even condition free of bumps and depressions, satisfactory for the use of public traffic with steel plates, controlled density fill, or approved temporary asphalt mix, as required per these Special Provisions.

Roadways, streets and driveways, including sidewalks, shall be swept clean at the conclusion of each day's operations and at such other times to insure the safety of the traveling public and to prevent inconvenience to the public and owners of private property adjacent to the project. This will be paid under the lump sum bid item for "Street Cleaning".

The Contracting Agency reserves the right to restrict the Contractor to various streets and times of construction during the entire project; all costs of which shall be included in other pay items involved on the project.

The Contractor shall be responsible for constructing, furnishing, placing, and maintaining all barricades, warning lights, and related traffic control signs, and for the furnishing of all flag persons, equipment for flag persons, pilot cars, and labor for traffic control as necessary and in accordance with the traffic control plan(s), modified traffic control plan(s), or temporary access plan(s) approved by the Engineer. If a modification to traffic control is deemed necessary by the Engineer, the Contractor shall immediately implement any requested modification(s). The need for flashing warning lights shall be as determined by the Engineer.

The Contractor shall patrol the traffic control area at the beginning of the work day, twice during the work day, at the end of the work day, and more often if necessitated to reset all disturbed or missing signs and traffic control devices or immediately re-furnish such items if they have been stolen or permanently damaged. All control signs necessary for nighttime traffic control shall be effective and have flashing lights installed to enhance visibility.

Upon failure of the Contractor to provide immediately such flagmen and provide, erect, maintain, and remove such signs when ordered to do so by the Contracting Agency, the Contracting Agency shall be at liberty, without further notice to the Contractor or its Surety, to provide the necessary flagmen, and labor to erect, maintain, install and/or remove barricades and lights and to erect, maintain and remove additional signs and deduct all of the costs thereof from any payments due or coming due the Contractor.

1-10.2 Traffic Control Management

1-10.2(1) General

(January 3, 2017 WSDOT GSP)

Section 1-10.2(1) is supplemented with the following:

Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State of Washington. The Traffic Control Supervisor shall be certified by one of the following:

The Northwest Laborers-Employers Training Trust
27055 Ohio Ave.
Kingston, WA 98346
(360) 297-3035

Evergreen Safety Council

12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778

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

1-10.2(2) Traffic Control Plans

(June 2006 City of Sammamish)

The first paragraph is revised to read:

The Contractor will prepare a Traffic Control Plan showing a method of handling traffic through the work areas conforming to the Contractor's method of construction sequencing. This plan shall be prepared in accordance with the latest issue of the MUTCD, WSDOT Standard Plans and these Specifications. All construction signs, flaggers, spotters, and other traffic control devices are to be shown on the traffic control plan. This plan shall be provided to the Engineer for approval at least 10-calendar days in advance of the time the signs and other traffic control devices are scheduled to be installed and utilized.

Section 1-10.2(2) is supplemented with the following:

The Contractor shall be responsible for traffic control in the vicinity of the Work being performed to include furnishing, supplying and maintaining proper barricading, flagmen and signing. It is the intent of the Contracting Agency to have Roadways "open" during construction. The Contractor shall allow access by local traffic and emergency vehicles at all times during construction. Temporary closures, detours, or restricted use may be approved by the Contracting Agency due to special construction situations or concerns; however, the Contractor shall Bid the project to leave the Roadway open during construction activities and to provide adequate traffic control.

The minimum lane widths through traffic control zones shall be ten feet with a minimum shy distance of one foot to any pavement edge, shoulder obstruction, or traffic control device.

1-10.3(1)A Flaggers

Section 1-10.3(1)A is supplemented with the following:

All flaggers shall be certified and have cards present at all times.

1-10.4 Measurement

1-10.4(3) Reinstating Unit Items With Lump Sum Traffic Control

Section 1-10.4(3) is supplemented with the following:

(August 2, 2004)
The bid proposal contains the item "Project Temporary Traffic Control," lump sum and the additional temporary traffic control items listed below. The provisions of Section 1-10.4(1), Section 1-10.4(3), and Section 1-10.5(3) shall apply.

Traffic Control Supervisor
Flaggers

1-10.5 Payment

Section 1-10.5 is supplemented with the following:

Section 1-04.6 shall not apply to Bid items listed in Section 1-10.

"Project Temporary Traffic Control", lump sum.

The lump sum Contract payment for "Project Temporary Traffic Control" shall be full compensation for all costs incurred by the Contractor in performing Contract Work defined in Section 1-10, including all Portable Changeable Message Signs (PCMS), except for costs compensated by other items in the Bid Proposal.

DIVISION 2
EARTHWORK

SECTION 2-01, CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.3 Construction Requirements

Section 2-01.3 is supplemented with the following:

2-01.3(3)A Surface Improvements (New Section)

Section 2-01.3(3)A is added as follows:

The Contractor shall be responsible for the protection and preservation of existing surface improvements and trees outside the construction limits, and any damage resulting from the Contractor's operations shall be the Contractor's sole responsibility.

2-01.3(3)B Subsurface Improvements (New Section)

Section 2-01.3(3)B is added as follows:

The Contractor shall be responsible for locating subsurface improvements/utilities, and for coordinating activities with utilities and others.

2-01.3(5) Tree Removal (NEW SECTION)

Trees identified for removal shall be completely removed, including the roots, and disposed of offsite unless the Engineer determines that complete removal is not necessary. In such cases, the trunk shall be cut at ground level and treated with an approved herbicide.

2-01.4 Measurement

Tree Removal shall be measured per each tree removed.

2-01.5 Payment

"Clearing and Grubbing" will not be measured. Clearing and grubbing is inclusive with Removal of Structure and Obstruction.

"Tree Removal", per each.

SECTION 2-02, REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.3 Construction Requirements

Section 2-02.3 is supplemented with the following:

Removal of Structure and Obstruction

The following items shall be included in the item "Removal of Structure and Obstruction":

Item	Approximate Quantity
Curb Removal	1,351 LF
Sidewalk Removal	70 SY
Sign Removal	6 EA
Landscape Boulders	1,620 SF
Clearing and Grubbing	6,500 SF

2-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters

Section 2-02.3(3), item 3, is supplemented with the following:

All full-depth sawcuts shall be continuous, and shall be made with saws specifically equipped for the purpose. No skip cutting or jack hammering will be allowed unless specifically approved otherwise in writing by the Engineer. The location of all pavement cuts shall be where shown in the Plans or as approved by the Engineer in the field before cutting commences.

The approximate thickness of the asphalt concrete pavement is 8 inches based on pothole investigations made in specific locations and no additional compensation will be made for thicker sections of asphalt concrete pavement to be removed.

All sawcutting performed in the Contract shall provide for and include removal and disposal of slurry created from water cooling/lubrication, in accordance with the Washington State Department of Ecology regulations. Waste material (slurry) shall not be allowed to enter drainage systems, ditches, or streams.

2-02.5 Payment

Section 2-02.5 is supplemented with the following:

Sawcutting regardless of depth encountered or the material to be cut, including collection, removal, and disposal of slurry will not be measured. Sawcutting required for sidewalk, curb and pavement removal shall be included in the unit Contract price of the related item of Work.

SECTION 2-03, ROADWAY EXCAVATION AND EMBANKMENT

2-03.3 Construction Requirements

2-03.3(3) Excavation Below Grade

Section 2-03.3(3) is supplemented with the following:

Any over-excavation not specifically authorized by the Engineer shall be replaced with Gravel Backfill for Foundation, Class B meeting the requirements of Section 9-03.12(1)B, and compacted in accordance with Section 2-03.3(14), by the Contractor at no expense to the Contracting Agency.

2-03.3(7) Disposal of Surplus Material

Section 2-03.3(7) is supplemented with the following:

A waste site has not been provided by the Contracting Agency for the disposal and/or storage of surplus materials and debris.

2-03.3(14) Embankment Construction

2-03.3(14)E Unsuitable Foundation Excavation

Section 2-03.3(14)E is supplemented with the following:

Excavated unsuitable foundation material shall be replaced with Gravel Backfill for Foundation, Class B meeting the requirements of Section 9-03.12(1)B.

2-03.4 Measurement

Section 2-03.4 is supplemented with the following:

(March 13, 1995 WSDOT GSP)

Only one determination of the original ground elevation will be made on this project. Measurement for Roadway excavation and embankment will be based on the original ground elevations recorded previous to the award of this Contract.

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

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

Copies of the ground cross-section notes will be available for the Bidder's inspection, before the opening of Bids, at the office of City of Sammamish Public Works.

Upon award of the Contract, copies of the original ground cross-sections will be furnished to the successful Bidder on request to the Project Engineer.

2-03.5 Payment

Section 2-03.5 is supplemented with the following:

Excavation and removal of items specified in Section 2-02 will not be considered as “Roadway Excavation Including Haul.”

All costs for subgrade preparation shall be included in the unit contract price per cubic yard for “Roadway Excavation Including Haul”.

DIVISION 5
SURFACE TREATMENTS AND PAVEMENTS

SECTION 5-04, HOT MIX ASPHALT

(March 5, 2018 APWA GSP)

Delete this entire section 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. The manufacture of HMA may include warm mix asphalt (WMA) processes in accordance with these Specifications. WMA processes include organic additives, chemical additives, and foaming.

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.

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 & signature) 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 otherwise 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, oscilatory, 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 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 conform to the following tolerances:

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

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, except the tolerance limits for sieves designated as 100 percent passing will be 99-100.

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 Content** – 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 AASHTO 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 Va will at the option of the Contracting Agency. If tested, compliance of Va 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, Va. 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 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.

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.

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, with a maximum of 15 sublots per lot; the final lot for a mix design may be increased to 25 sublots. Sublots will be uniform in size with a maximum sublot size based on original Plan quantity tons of HMA as specified in the table below. 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 Original Plan Quantity (tons)	Sublot Size (tons)
<20,000	100
20,000 to 30,000	150
>30,000	200

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(12)B Bridge Paving Joint Seals

5-04.3(12)B1 HMA Sawcut and Seal

Prior to placing HMA on the bridge deck, establish sawcut alignment points at both ends of the bridge paving joint seals to be placed at the bridge ends, and at interior

joints within the bridge deck when and where shown in the Plans. Establish the sawcut alignment points in a manner that they remain functional for use in aligning the sawcut after placing the overlay.

Submit a Type 1 Working Drawing consisting of the sealant manufacturer's application procedure.

Construct the bridge paving joint seal as specified ion the Plans and in accordance with the detail shown in the Standard Plans. Construct the sawcut in accordance with the detail shown in the Standard Plan. Construct the sawcut in accordance with Section 5-05.3(8)B and the manufacturer's application procedure.

5-04.3(12)B2 Paved Panel Joint Seal

Construct the paved panel joint seal in accordance with the requirements specified in section 5-04.3(12)B1 and the following requirement:

1. Clean and seal the existing joint between concrete panels in accordance with Section 5-01.3(8) and the details shown in the Standard Plans.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than 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 planning (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 peace 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 contractors 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 planning 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 planning, 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(15) Sealing Pavement Surfaces

Apply a fog seal where shown in the plans. Construct the fog seal in accordance with Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to traffic.

5-04.3(16) HMA Road Approaches

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.

5-04.4 Measurement

HMA Cl. ___ PG ___, HMA for ___ Cl. ___ PG ___, will be measured by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt binder, mineral filler, or any other component of the mixture. If the Contractor elects to remove and replace mix as allowed by Section 5-04.3(11), the material removed will not be measured.

5-04.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

"HMA Cl. ___ PG ___", per ton.

DIVISION 8
MISCELLANEOUS CONSTRUCTION

SECTION 8-01, EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.3(8) Street Cleaning

Section 8-01.3(8) is supplemented with the following:

The Contractor shall be responsible for controlling dust and mud within the project limits and on any street that is utilized by his equipment for the duration of the project. The Contractor shall be prepared to use power sweepers and any other pieces of equipment necessary to avoid creating a nuisance or safety hazard. All streets used by the Contractor under this Contract shall be maintained in a clean condition.

Contractors, operating dump trucks and other equipment on paved streets and roadways outside the area of construction, shall clean these streets at the conclusion of each day's operation and, if required by the Contracting Agency, during the day. Streets within the area of construction will require cleaning on a daily basis.

Any violation of these requirements will result in a citation for littering the traveled way and will be sufficient grounds for the Contracting Agency to order the roadways, streets, and appurtenances cleaned by others and to deduct all costs of such cleaning from any monies due or to become due to the Contractor.

Complaints of dust, mud, or unsafe practices and/or property damage to Contracting Agency will be transmitted to the Contractor and prompt action in correcting will be required. Written notice of correction of complaint items will be required should repetitive complaints be received by the Contracting Agency. Should the Contractor fail to perform, the Contracting Agency shall, at the Contractor's expense, hire the necessary work done.

When work is being performed that is not in accordance with standards established in the state safety codes, or when the Contracting Agency believes the condition endangers the safety of the general public and employees of the project, the Contracting Agency may immediately issue a written stop-work order describing the substandard work and deliver same to the Contractor. The Contractor shall cease all work and not resume work on any portion of the project until acceptable remedial action has been taken. Such protective measures shall not be construed as releasing the Contractor of any obligation or liability arising under the contract. Extensions of contract time will not be allowed for any period of time covered by such stop-work order.

Upon completion of the work, the Contractor shall remove all rubbish, scrap material, tools, surplus materials, and equipment used in and about the work. Before the Contract shall be considered complete and prior to final payment, the Contractor shall remove all surplus materials, temporary structures, including foundations, thereof, debris of every nature, resulting from his operations, shall

clean out all ditches that may have been filled during the work, replace damaged surfacing, and put the site in a neat, orderly condition.

8-01.4 Measurement

Section 8-01.4 is supplemented with the following:

No specific unit of measurement will apply to the lump sum items Erosion/Water Pollution Control, Stormwater Pollution Plan (SWPPP) and Street Cleaning.

8-01.5 Payment

Section 8-01.5 is supplemented with the following:

"Erosion/Water Pollution Control", lump sum.

The unit contract price for "Erosion/Water Pollution Control" shall be full pay for all Work associated with furnishing, installing, inspecting and managing all TESC measures and BMP's including silt fence, high visibility fence, inlet protection installation and removal.

"Stormwater Pollution Prevention Plan (SWPPP)", lump sum.

The unit contract price for "Stormwater Pollution Prevention Plan (SWPPP)", shall also be full pay for all Work and materials necessary to prepare and implement the SWPPP and achieve the runoff turbidity and pH levels compliant with the identified benchmarks and permit requirements including permit, reporting, and ESC lead activities. All erosion control measures are included in "Erosion/Water Pollution Control", except as otherwise noted in the Contract Documents.

"Street Cleaning", lump sum.

No specific unit of measurement will apply to the lump sum item "Street Cleaning".

SECTION 8-02, ROADSIDE RESTORATION

8-02.3(17) Property Restoration (New Section)

Section 8-02.3(17) is added as follows:

The Contractor shall blend the new construction into developed private property adjacent to the project using similar materials to those existing, (e.g. sod shall be used to match into lawn areas, bark shall be used to match into planting areas, topsoil shall be used to match into garden areas, etc.).

If the items used for the restoration have pay items in the Contract, they will be paid under those items.

If restoration of adjacent property requires use of materials that have no pay items, payment will be by force account under the item ”Restoration and Roadside Cleanup”.

8-02.4 Measurement

Section 8-02.4 is supplemented with the following:

No specific unit of measurement will apply to the force account item of “Restoration and Roadside Cleanup.”

8-02.5 Payment

Section 8-02.5 is supplemented with the following:

“Restoration and Roadside Cleanup”, per force account.

Payment for “Restoration and Roadside Cleanup” shall be by force account as described in Section 1-09.6 of the Standard Specifications and no other compensation will be allowed.

For the purpose of providing a common Bid Proposal for all Bidders and for that purpose only, the estimated cost of this Bid item has been arbitrarily entered in the Proposal to become part of the total Bid by the Contractor.

SECTION 8-03, IRRIGATION SYSTEMS

8-03.4 Measurement

Supplement this section with the following:

“Remove and Cap Irrigation System” shall be measured per lump sum.

8-03.5 Payment

Supplement this section with the following:

“Remove and Cap Irrigation System”, lump sum.

The lump sum Contract price for “Remove and Cap Irrigation System” shall be full payment to remove the existing irrigation system within the limits ,as shown on the plans. This shall include full pay for furnishing all labor, tools, equipment, and materials necessary to complete the removal and capping, modifying shut off valve and other items as applicable.

SECTION 8-10, GUIDE POST

8-10.4 Measurement

Supplement this section with the following:

18-Inch Delineation Posts will be measured by the unit for each post furnished and installed.

8-10.5 Payment

Supplement this section with the following:

"18-inch Delineation Post", per each.

This shall include full pay for furnishing all labor, tools, equipment, and materials necessary to install the delineation posts.

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

8-20.1 Description

This section is supplemented with the following:

The work performed under this Section consists of:

- Removing and installing of a 4-section traffic signal head with new Light Emitting Diode (LED) ball and arrow displays on existing traffic signal mast arms.
- The installation of new conductors as required by these plans.
- Removal of foundations, conduit bends, and luminaires (and all associated equipment).
- Installation of foundations; junction boxes; decorative poles, bases, mast arms, and fixtures; and conduit connections for new luminaires.
- Adjusting junction boxes to grade and replacing with H20 load rating lids.

8-20.1(1) Regulations and Code

The last paragraph is revised to read:

Persons performing electrical Work shall be certified in accordance with and supervised as required by RCW 19.28.161. Proof of certification shall be worn at all times in accordance with WAC 296-46B-942. Persons failing to meet these certification requirements may not perform any electrical work, and shall stop any active electrical work, until their certification is provided and worn in accordance with this Section.

8-20.2 Materials

8-20.2(1) Equipment List and Drawings

This section is supplemented with the following:

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

8-20.3 Construction Requirements

8-20.3(1) General

Add the following new sections:

8-20.3(1)A Electrical Equipment Removals

Removals associated with the electrical system shall not be stockpiled within the job site without the Engineer's approval.

8-20.3(1)B Contracting Agency/Operations Agency Owned Equipment

A portion of the existing electrical equipment to be removed shall remain the property of the Contracting Agency/Operations Agency.

The following shall be disconnected, dismantled, and delivered to the Contracting Agency/Operations Agency:

Signal heads
Signal displays
Mounting brackets
Signage
Luminaire poles, bases, mast arms, and heads.

Removed electrical equipment which remains the property of the Contracting Agency/Operations Agency shall be delivered to:

King County Traffic and Special Operations Unit Shop
Attn: Ula Tuifua
155 Monroe Avenue NE
Renton, WA 98056
Phone: (206) 477-1490

Five days written advance notice shall be delivered to both the Engineer and the Traffic Signal Technician at the address listed above. Delivery shall occur during the hours of 8:00 a.m. to 2:00 p.m. Monday through Friday. Material will not be accepted without the required advance notice.

Equipment damaged during removal or delivery shall be repaired or replaced to the Engineer's satisfaction at no cost to the Contracting Agency/Operations Agency.

The Contractor shall be responsible for unloading the equipment where directed by the Engineer at the delivery site.

8-20.3(1)C Contractor Owned Removals

All removals associated with an electrical system, which are not designated to remain the property of the Contracting Agency, shall become the property of the Contractor and shall be removed from the project.

The Contractor shall:

Remove all wires for discontinued circuits from the conduit system.

Remove elbow sections of abandoned conduit entering junction boxes.

Abandoned conduit encountered during excavation shall be removed to the nearest outlets or as directed by the Engineer.

Remove foundations entirely, unless the Plans state otherwise.

Backfill voids created by removal of foundations and junction boxes. Backfilling and compaction shall be performed in accordance with Section 2-09.3(1)E.

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

This section is supplemented with the following:

Unless otherwise noted in the Plans or approved by the Engineer, junction boxes, cable vaults and pull boxes shall not be placed within the traveled way or paved shoulders.

All junction boxes, cable vaults, and pull boxes placed within the traveled way or paved shoulders shall be heavy-duty.

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 future adjustment.

Prior to installing new cables or reinstalling existing cables into new or existing cable vaults, pull boxes or junction boxes, the cable vault, pull box or junction box shall be cleaned of all dirt and debris.

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

The six-inch gravel pad required in Standard Plan J-40.10-04 and J-40.30-04 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.

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

1. Excavation for junction boxes, cable vaults and pull boxes shall be sufficient to leave one foot in the clear between their outer surface and the earth bank.

2. Junction boxes, cable vaults and pull boxes shall be installed on a level 6-inch layer of crushed surfacing top course, in accordance with 9-03.9(3), placed on a compacted or undisturbed foundation. The

crushed surfacing shall be compacted in accordance with Section 2-09.3(1)E.

3. After installation, the lid/cover shall be kept bolted down during periods when work is not actively in progress at the junction box, cable vault or pull box.

4. Before closing the lid/cover, the lid/cover and the frame/ring shall be thoroughly brushed and cleaned of all debris. There shall be absolutely no visible dirt, sand or other foreign matter between the bearing surfaces.

5. When the lid/cover is closed for the final time, a liberal coating of anti-seize compound shall be applied to the bolts and nuts and the lid shall be securely tightened.

6. Hinges on the Type 4, 5 and 6 junction boxes shall be located on the side of the box, which is nearest to adjacent shoulder. Hinges shall allow the lid to open 180 degrees.

8-20.3(8) Wiring

This section is supplemented with the following:

8-20.3(8) Wire Labels

At each junction box, all illumination wires, power supply wires, and communication cable shall be labeled with a PVC marking sleeve. For illumination and power supply circuits the sleeve shall bear the circuit number. For communication cable the sleeve shall be marked “Comm.”.

8-20.3(9) Bonding, Grounding

This section is supplemented with the following:

Where shown in the Plans or where designated by the Engineer, the metal frame and lid of existing junction boxes shall be grounded to the existing equipment grounding system. The existing equipment grounding system shall be derived from the service serving the raceway system of which the existing junction box is a part.

8-20.5 Payment

Section 8-20.5 is supplemented with the following:

“Traffic Signal System Complete,” lump sum.

The lump sum bid price in the Proposal for “Traffic Signal System Complete” will be full compensation for the costs of all labor, tools, equipment, testing, and materials necessary or incidental to remove and install the complete signal head system as defined in the Plans, Standard Specifications, and these Special Provisions,

including:

1. Furnishing or removing all materials.
2. Assembling and installing all materials.
3. Modifying and connecting to existing electrical systems.
4. Conductors, signal heads, all in-cabinet controller equipment, , all other signal equipment identified in these plans, restoring facilities destroyed or damaged during construction, salvaging existing materials, for making all required tests, and all items included in the Plans and these Special Provisions. This also includes replacement of any items not shown on the Plans that are damaged during the installation of electrical materials and that are discovered in the field during construction.

"Illumination System Complete", per Lump Sum

The lump sum bid price for "Illumination System Complete" will be full compensation for the costs of all labor, tools, equipment, testing, and materials necessary or incidental to provide a complete and functioning decorative street light systems at the following locations:

- 228th Avenue SE & SE 8th Street
- 228th Avenue SE & SE 20th Street

"Illumination System Complete" shall include all testing, and application costs assessed by City of Sammamish for connections to a new electrical service cabinet. This shall also include removal of the existing light pole and foundation, existing junction box adjustment, locating and intercepting existing illumination conduit, splicing into the existing lighting circuitry.

All costs for installing conduit and junction boxes containing illumination wiring shall be included in the lump sum contract prices for the associated electrical system.

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

SECTION 8-21, PERMANENT SIGNING

8-21.1 Description

Section 8-21.1 is supplemented with the following:

This work shall also include installing Project Signs at the locations shown; in accordance with the details.

8-21.3 Construction Requirements

Section 8-21.3 is supplemented with the following:

The Contractor shall be responsible for picking up the project signs from the City of Sammamish Maintenance and Operation Center located at 1801 244th Ave NE,

Sammamish, WA providing and installing sign posts, maintaining, and disposing of the sign at the completion of the project.

The project signs shall be installed within one (1) week of the Notice to Proceed.

At completion of the project or when directed by the Engineer, the Contractor shall remove each project sign and restore the area where the sign was installed to its original or better condition.

For permanent signing, yellow advisory signs shall have MUTCD compliant vertical retroreflective strips installed on sign supports. Retroreflective material used on the sign support shall be at least 2 inches in width, it shall be placed for the full length of the support from the sign to within 2 feet above the edge of the roadway, and its color shall match the background color of the sign, except that the color of the strip for the YIELD and DO NOT ENTER signs shall be red. Vertical retroreflective strips shall be Vis-Z-Shield or approved equal.

8-21.3(4) Sign Removal

Section 8-21.3(4) is deleted and replaced with the following:

Existing signs within the project limits shall be removed, stored in a safe place, and reinstalled at the locations shown on the plans or as instructed by the Engineer. Removed signs which are not to be relocated shall be salvaged and delivered to the Contracting Agency.

The Contractor shall remove signs, posts, and appurtenances in such a manner to prevent damage to the items.

In the event that damage is caused to signs or appurtenances during the removal, storage, or installation of these items, the Contractor shall replace the damaged items at no cost to the Contracting Agency. The Engineer will determine and approve all sign locations.

8-21.4 Measurement

Section 8-21.4 is deleted and replaced with the following:

Measurement for Project Sign shall be per each. New posts will not be measured for separate payment.

Temporary signing will not be measured for separate payment.

8-21.5 Payment

Section 8-21.5 is supplemented with the following:

"Permanent Signing", per lump sum.

The lump sum unit price for "Permanent Signing" shall be full compensation for all labor, tools, materials, and equipment necessary to perform the work as shown on the plans, as specified herein, or as directed by the Engineer. This includes, but is not

limited to, furnish and install new signs, vertical retroreflective strips, existing sign removal and relocation and temporary signing.

"Project Sign", per each.

The unit bid price per each for "Project Sign" shall be full pay for all Work associated with the fabricating, installation, maintenance, removal, and disposal of project signs.

DIVISION 9
MATERIALS

SECTION 9-29, Illumination, Signal, and Electrical

9-29.2(1)A1 Concrete Junction Boxes

This section is supplemented with the following:

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

9-29.3(2)B Multi-Conductor Cable

This section is supplemented with the following:

Two-conductor through ten-conductor unshielded control cable shall be size 14 AWG.

9-29.16(2)A Optical Units

This section is supplemented with the following:

LED Signal Displays
All traffic signal displays shall be the Light Emitting Diode (LED) type and shall be from one of the following manufacturers:

Dialight Corporation
1913 Atlantic Avenue
Manasquan, NJ 08736
Telephone: (732) 223-9400
Fax: (732) 223-8788

GELcore, LLC
6810 Halle Drive
Valley View, OH 44125
Telephone: (216) 606-6555
Fax: (216) 606-6556

Precision Solar Controls, Inc.
2960 Market Street
Garland, TX 75041
Telephone: (972) 278-0553
Fax: (972) 271-9583

The manufacturer shall provide a written warranty against defects in materials and workmanship for the LED signal modules for a period of 60 months after the installation of the modules. All warranty documentation shall be given to the Engineer prior to installation.

APPENDICES

(January 2, 2012 WSDOT GSP)

The following appendices are attached and made a part of this Contract:

APPENDIX A: Prevailing Wage Rates
APPENDIX B: Standard Plans and Details

APPENDIX A

Prevailing 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: 07/10/2018

County	Trade	Job Classification	Wage	Holiday	Overtime	Note
King	Asbestos Abatement Workers	Journey Level	$46.57	5D	1H	
King	Boilermakers	Journey Level	$66.54	5N	1C	
King	Brick Mason	Journey Level	$55.82	5A	1M	
King	Brick Mason	Pointer-Caulker-Cleaner	$55.82	5A	1M	
King	Building Service Employees	Janitor	$23.73	5S	2F	
King	Building Service Employees	Traveling Waxer/Shampooer	$24.18	5S	2F	
King	Building Service Employees	Window Cleaner (Non-Scaffold)	$27.23	5S	2F	
King	Building Service Employees	Window Cleaner (Scaffold)	$28.13	5S	2F	
King	Cabinet Makers (In Shop)	Journey Level	$22.74		1	
King	Carpenters	Acoustical Worker	$57.18	5D	4C	
King	Carpenters	Bridge, Dock And Wharf Carpenters	$57.18	5D	4C	
King	Carpenters	Carpenter	$57.18	5D	4C	
King	Carpenters	Carpenters on Stationary Tools	$57.31	5D	4C	
King	Carpenters	Creosoted Material	$57.28	5D	4C	
King	Carpenters	Floor Finisher	$57.18	5D	4C	
King	Carpenters	Floor Layer	$57.18	5D	4C	
King	Carpenters	Scaffold Erector	$57.18	5D	4C	
King	Cement Masons	Journey Level	$57.21	7A	1M	
King	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	$110.54	5D	4C	
King	Divers & Tenders	Dive Supervisor/Master	$72.97	5D	4C	
King	Divers & Tenders	Diver	$110.54	5D	4C	8V
King	Divers & Tenders	Diver On Standby	$67.97	5D	4C	
King	Divers & Tenders	Diver Tender	$61.65	5D	4C	
King	Divers & Tenders	Manifold Operator	$61.65	5D	4C	
King	Divers & Tenders	Manifold Operator Mixed Gas	$66.65	5D	4C	
King	Divers & Tenders	Remote Operated Vehicle Operator/Technician	$61.65	5D	4C	
King	Divers & Tenders	Remote Operated Vehicle Tender	$57.43	5A	4C	
King	Dredge Workers	Assistant Engineer	$56.44	5D	3F	
King	Dredge Workers	Assistant Mate (Deckhand)	$56.00	5D	3F	

King	Dredge Workers	Boatmen	$56.44	5D	3F	
King	Dredge Workers	Engineer Welder	$57.51	5D	3F	
King	Dredge Workers	Leverman, Hydraulic	$58.67	5D	3F	
King	Dredge Workers	Mates	$56.44	5D	3F	
King	Dredge Workers	Oiler	$56.00	5D	3F	
King	Drywall Applicator	Journey Level	$56.78	5D	1H	
King	Drywall Tapers	Journey Level	$57.43	5P	1E	
King	Electrical Fixture Maintenance Workers	Journey Level	$28.99	5L	1E	
King	Electricians - Inside	Cable Splicer	$76.96	7C	4E	
King	Electricians - Inside	Cable Splicer (tunnel)	$82.24	7C	4E	
King	Electricians - Inside	Certified Welder	$74.38	7C	4E	
King	Electricians - Inside	Certified Welder (tunnel)	$79.80	7C	4E	
King	Electricians - Inside	Construction Stock Person	$39.69	7C	4E	
King	Electricians - Inside	Journey Level	$71.80	7C	4E	
King	Electricians - Inside	Journey Level (tunnel)	$76.96	7C	4E	
King	Electricians - Motor Shop	Craftsman	$15.37		1	
King	Electricians - Motor Shop	Journey Level	$14.69		1	
King	Electricians - Powerline Construction	Cable Splicer	$79.43	5A	4D	
King	Electricians - Powerline Construction	Certified Line Welder	$69.75	5A	4D	
King	Electricians - Powerline Construction	Groundperson	$46.28	5A	4D	
King	Electricians - Powerline Construction	Heavy Line Equipment Operator	$69.75	5A	4D	
King	Electricians - Powerline Construction	Journey Level Lineperson	$69.75	5A	4D	
King	Electricians - Powerline Construction	Line Equipment Operator	$59.01	5A	4D	
King	Electricians - Powerline Construction	Meter Installer	$46.28	5A	4D	8W
King	Electricians - Powerline Construction	Pole Sprayer	$69.75	5A	4D	
King	Electricians - Powerline Construction	Powderperson	$52.20	5A	4D	
King	Electronic Technicians	Journey Level	$31.00		1	
King	Elevator Constructors	Mechanic	$91.24	7D	4A	
King	Elevator Constructors	Mechanic In Charge	$98.51	7D	4A	
King	Fabricated Precast Concrete Products	All Classifications - In-Factory Work Only	$17.72	5B	1R	
King	Fence Erectors	Fence Erector	$15.18		1	
King	Flaggers	Journey Level	$39.48	7A	3I	
King	Glaziers	Journey Level	$61.81	7L	1Y	
King	Heat & Frost Insulators And Asbestos Workers	Journeyman	$67.93	5J	4H	
King	Heating Equipment Mechanics	Journey Level	$78.17	7F	1E	
King	Hod Carriers & Mason Tenders	Journey Level	$48.02	7A	3I	
King	Industrial Power Vacuum Cleaner	Journey Level	$11.50		1	

King	Inland Boatmen	Boat Operator	$61.41	5B	1K	
King	Inland Boatmen	Cook	$56.48	5B	1K	
King	Inland Boatmen	Deckhand	$57.48	5B	1K	
King	Inland Boatmen	Deckhand Engineer	$58.81	5B	1K	
King	Inland Boatmen	Launch Operator	$58.89	5B	1K	
King	Inland Boatmen	Mate	$57.31	5B	1K	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	$31.49		1	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$11.50		1	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$24.91		1	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$19.33		1	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	$20.45		1	
King	Insulation Applicators	Journey Level	$57.18	5D	4C	
King	Ironworkers	Journeyman	$67.88	7N	1O	
King	Laborers	Air, Gas Or Electric Vibrating Screed	$46.57	7A	3I	
King	Laborers	Airtrac Drill Operator	$48.02	7A	3I	
King	Laborers	Ballast Regular Machine	$46.57	7A	3I	
King	Laborers	Batch Weighman	$39.48	7A	3I	
King	Laborers	Brick Pavers	$46.57	7A	3I	
King	Laborers	Brush Cutter	$46.57	7A	3I	
King	Laborers	Brush Hog Feeder	$46.57	7A	3I	
King	Laborers	Burner	$46.57	7A	3I	
King	Laborers	Caisson Worker	$48.02	7A	3I	
King	Laborers	Carpenter Tender	$46.57	7A	3I	
King	Laborers	Caulker	$46.57	7A	3I	
King	Laborers	Cement Dumper-paving	$47.44	7A	3I	
King	Laborers	Cement Finisher Tender	$46.57	7A	3I	
King	Laborers	Change House Or Dry Shack	$46.57	7A	3I	
King	Laborers	Chipping Gun (under 30 Lbs.)	$46.57	7A	3I	
King	Laborers	Chipping Gun(30 Lbs. And Over)	$47.44	7A	3I	
King	Laborers	Choker Setter	$46.57	7A	3I	
King	Laborers	Chuck Tender	$46.57	7A	3I	
King	Laborers	Clary Power Spreader	$47.44	7A	3I	
King	Laborers	Clean-up Laborer	$46.57	7A	3I	
King	Laborers	Concrete Dumper/chute Operator	$47.44	7A	3I	
King	Laborers	Concrete Form Stripper	$46.57	7A	3I	
King	Laborers	Concrete Placement Crew	$47.44	7A	3I	
King	Laborers	Concrete Saw Operator/core Driller	$47.44	7A	3I	

King	Laborers	Crusher Feeder	$39.48	7A	31	
King	Laborers	Curing Laborer	$46.57	7A	31	
King	Laborers	Demolition: Wrecking & Moving (incl. Charred Material)	$46.57	7A	31	
King	Laborers	Ditch Digger	$46.57	7A	31	
King	Laborers	Diver	$48.02	7A	31	
King	Laborers	Drill Operator (hydraulic,diamond)	$47.44	7A	31	
King	Laborers	Dry Stack Walls	$46.57	7A	31	
King	Laborers	Dump Person	$46.57	7A	31	
King	Laborers	Epoxy Technician	$46.57	7A	31	
King	Laborers	Erosion Control Worker	$46.57	7A	31	
King	Laborers	Faller & Bucker Chain Saw	$47.44	7A	31	
King	Laborers	Fine Graders	$46.57	7A	31	
King	Laborers	Firewatch	$39.48	7A	31	
King	Laborers	Form Setter	$46.57	7A	31	
King	Laborers	Gabian Basket Builders	$46.57	7A	31	
King	Laborers	General Laborer	$46.57	7A	31	
King	Laborers	Grade Checker & Transit Person	$48.02	7A	31	
King	Laborers	Grinders	$46.57	7A	31	
King	Laborers	Grout Machine Tender	$46.57	7A	31	
King	Laborers	Groutmen (pressure)including Post Tension Beams	$47.44	7A	31	
King	Laborers	Guardrail Erector	$46.57	7A	31	
King	Laborers	Hazardous Waste Worker (level A)	$48.02	7A	31	
King	Laborers	Hazardous Waste Worker (level B)	$47.44	7A	31	
King	Laborers	Hazardous Waste Worker (level C)	$46.57	7A	31	
King	Laborers	High Scaler	$48.02	7A	31	
King	Laborers	Jackhammer	$47.44	7A	31	
King	Laborers	Laserbeam Operator	$47.44	7A	31	
King	Laborers	Maintenance Person	$46.57	7A	31	
King	Laborers	Manhole Builder-mudman	$47.44	7A	31	
King	Laborers	Material Yard Person	$46.57	7A	31	
King	Laborers	Motorman-dinky Locomotive	$47.44	7A	31	
King	Laborers	Nozzleman (concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Gunite, Shotcrete, Water Bla	$47.44	7A	31	
King	Laborers	Pavement Breaker	$47.44	7A	31	
King	Laborers	Pilot Car	$39.48	7A	31	
King	Laborers	Pipe Layer Lead	$48.02	7A	31	
King	Laborers	Pipe Layer/tailor	$47.44	7A	31	
King	Laborers	Pipe Pot Tender	$47.44	7A	31	
King	Laborers	Pipe Reliner	$47.44	7A	31	
King	Laborers	Pipe Wrapper	$47.44	7A	31	
King	Laborers	Pot Tender	$46.57	7A	31	

King	Laborers	Powderman	$48.02	7A	3I	
King	Laborers	Powderman's Helper	$46.57	7A	3I	
King	Laborers	Power Jacks	$47.44	7A	3I	
King	Laborers	Railroad Spike Puller - Power	$47.44	7A	3I	
King	Laborers	Raker - Asphalt	$48.02	7A	3I	
King	Laborers	Re-timberman	$48.02	7A	3I	
King	Laborers	Remote Equipment Operator	$47.44	7A	3I	
King	Laborers	Rigger/signal Person	$47.44	7A	3I	
King	Laborers	Rip Rap Person	$46.57	7A	3I	
King	Laborers	Rivet Buster	$47.44	7A	3I	
King	Laborers	Rodder	$47.44	7A	3I	
King	Laborers	Scaffold Erector	$46.57	7A	3I	
King	Laborers	Scale Person	$46.57	7A	3I	
King	Laborers	Sloper (over 20")	$47.44	7A	3I	
King	Laborers	Sloper Sprayer	$46.57	7A	3I	
King	Laborers	Spreader (concrete)	$47.44	7A	3I	
King	Laborers	Stake Hopper	$46.57	7A	3I	
King	Laborers	Stock Piler	$46.57	7A	3I	
King	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	$47.44	7A	3I	
King	Laborers	Tamper (multiple & Self-propelled)	$47.44	7A	3I	
King	Laborers	Timber Person - Sewer (lagger, Shorer & Cribber)	$47.44	7A	3I	
King	Laborers	Toolroom Person (at Jobsite)	$46.57	7A	3I	
King	Laborers	Topper	$46.57	7A	3I	
King	Laborers	Track Laborer	$46.57	7A	3I	
King	Laborers	Track Liner (power)	$47.44	7A	3I	
King	Laborers	Traffic Control Laborer	$42.22	7A	3I	8R
King	Laborers	Traffic Control Supervisor	$42.22	7A	3I	8R
King	Laborers	Truck Spotter	$46.57	7A	3I	
King	Laborers	Tugger Operator	$47.44	7A	3I	
King	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	$92.60	7A	3I	8Q
King	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	$97.63	7A	3I	8Q
King	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	$101.31	7A	3I	8Q
King	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	$107.01	7A	3I	8Q
King	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	$109.13	7A	3I	8Q
King	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	$114.23	7A	3I	8Q
King	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	$116.13	7A	3I	8Q
King	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	$118.13	7A	3I	8Q
King	Laborers	Tunnel Work-Compressed Air	$120.13	7A	3I	8Q

		Worker 72.01-74.00 psi				
King	Laborers	Tunnel Work-Guage and Lock Tender	$48.12	7A	3I	8Q
King	Laborers	Tunnel Work-Miner	$48.12	7A	3I	8Q
King	Laborers	Vibrator	$47.44	7A	3I	
King	Laborers	Vinyl Seamer	$46.57	7A	3I	
King	Laborers	Watchman	$35.88	7A	3I	
King	Laborers	Welder	$47.44	7A	3I	
King	Laborers	Well Point Laborer	$47.44	7A	3I	
King	Laborers	Window Washer/cleaner	$35.88	7A	3I	
King	Laborers - Underground Sewer & Water	General Laborer & Topman	$46.57	7A	3I	
King	Laborers - Underground Sewer & Water	Pipe Layer	$47.44	7A	3I	
King	Landscape Construction	Irrigation Or Lawn Sprinkler Installers	$13.56		1	
King	Landscape Construction	Landscape Equipment Operators Or Truck Drivers	$28.17		1	
King	Landscape Construction	Landscaping or Planting Laborers	$17.87		1	
King	Lathers	Journey Level	$56.78	5D	1H	
King	Marble Setters	Journey Level	$55.82	5A	1M	
King	Metal Fabrication (In Shop)	Fitter	$15.86		1	
King	Metal Fabrication (In Shop)	Laborer	$11.50		1	
King	Metal Fabrication (In Shop)	Machine Operator	$13.04		1	
King	Metal Fabrication (In Shop)	Painter	$11.50		1	
King	Metal Fabrication (In Shop)	Welder	$15.48		1	
King	Millwright	Journey Level	$58.68	5D	4C	
King	Modular Buildings	Cabinet Assembly	$11.56		1	
King	Modular Buildings	Electrician	$11.56		1	
King	Modular Buildings	Equipment Maintenance	$11.56		1	
King	Modular Buildings	Plumber	$11.56		1	
King	Modular Buildings	Production Worker	$11.50		1	
King	Modular Buildings	Tool Maintenance	$11.56		1	
King	Modular Buildings	Utility Person	$11.56		1	
King	Modular Buildings	Welder	$11.56		1	
King	Painters	Journey Level	$41.60	6Z	2B	
King	Pile Driver	Crew Tender	$52.37	5D	4C	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	$71.35	5D	4C	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	$76.35	5D	4C	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	$80.35	5D	4C	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	$85.35	5D	4C	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	$87.85	5D	4C	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	$92.85	5D	4C	

King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	$94.85	5D	4C	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	$96.85	5D	4C	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	$98.85	5D	4C	
King	Pile Driver	Journey Level	$57.43	5D	4C	
King	Plasterers	Journey Level	$54.89	7Q	1R	
King	Playground & Park Equipment Installers	Journey Level	$11.50		1	
King	Plumbers & Pipefitters	Journey Level	$81.69	6Z	1G	
King	Power Equipment Operators	Asphalt Plant Operators	$60.49	7A	3C	8P
King	Power Equipment Operators	Assistant Engineer	$56.90	7A	3C	8P
King	Power Equipment Operators	Barrier Machine (zipper)	$59.96	7A	3C	8P
King	Power Equipment Operators	Batch Plant Operator, Concrete	$59.96	7A	3C	8P
King	Power Equipment Operators	Bobcat	$56.90	7A	3C	8P
King	Power Equipment Operators	Brokk - Remote Demolition Equipment	$56.90	7A	3C	8P
King	Power Equipment Operators	Brooms	$56.90	7A	3C	8P
King	Power Equipment Operators	Bump Cutter	$59.96	7A	3C	8P
King	Power Equipment Operators	Cableways	$60.49	7A	3C	8P
King	Power Equipment Operators	Chipper	$59.96	7A	3C	8P
King	Power Equipment Operators	Compressor	$56.90	7A	3C	8P
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$60.49	7A	3C	8P
King	Power Equipment Operators	Concrete Finish Machine -laser Screed	$56.90	7A	3C	8P
King	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	$59.49	7A	3C	8P
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$59.96	7A	3C	8P
King	Power Equipment Operators	Conveyors	$59.49	7A	3C	8P
King	Power Equipment Operators	Cranes Friction: 200 tons and over	$62.33	7A	3C	8P
King	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	$59.96	7A	3C	8P
King	Power Equipment Operators	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	$61.10	7A	3C	8P
King	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250’ of boom including jib with attachments	$61.72	7A	3C	8P
King	Power Equipment Operators	Cranes: 300 tons and over or 300’ of boom including jib with attachments	$62.33	7A	3C	8P
King	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	$60.49	7A	3C	8P
King	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	$56.90	7A	3C	8P

King	Power Equipment Operators	Cranes: Friction cranes through 199 tons	$61.72	7A	3C	8P
King	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	$59.49	7A	3C	8P
King	Power Equipment Operators	Crusher	$59.96	7A	3C	8P
King	Power Equipment Operators	Deck Engineer/deck Winches (power)	$59.96	7A	3C	8P
King	Power Equipment Operators	Derricks, On Building Work	$60.49	7A	3C	8P
King	Power Equipment Operators	Dozers D-9 & Under	$59.49	7A	3C	8P
King	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	$59.49	7A	3C	8P
King	Power Equipment Operators	Drilling Machine	$61.10	7A	3C	8P
King	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	$56.90	7A	3C	8P
King	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$59.96	7A	3C	8P
King	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	$59.49	7A	3C	8P
King	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	$56.90	7A	3C	8P
King	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$59.96	7A	3C	8P
King	Power Equipment Operators	Gradechecker/stakeman	$56.90	7A	3C	8P
King	Power Equipment Operators	Guardrail Punch	$59.96	7A	3C	8P
King	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$60.49	7A	3C	8P
King	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$59.96	7A	3C	8P
King	Power Equipment Operators	Horizontal/directional Drill Locator	$59.49	7A	3C	8P
King	Power Equipment Operators	Horizontal/directional Drill Operator	$59.96	7A	3C	8P
King	Power Equipment Operators	Hydralifts/boom Trucks Over 10 Tons	$59.49	7A	3C	8P
King	Power Equipment Operators	Hydralifts/boom Trucks, 10 Tons And Under	$56.90	7A	3C	8P
King	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	$61.10	7A	3C	8P
King	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$60.49	7A	3C	8P
King	Power Equipment Operators	Loaders, Overhead Under 6 Yards	$59.96	7A	3C	8P
King	Power Equipment Operators	Loaders, Plant Feed	$59.96	7A	3C	8P
King	Power Equipment Operators	Loaders: Elevating Type Belt	$59.49	7A	3C	8P
King	Power Equipment Operators	Locomotives, All	$59.96	7A	3C	8P
King	Power Equipment Operators	Material Transfer Device	$59.96	7A	3C	8P
King	Power Equipment Operators	Mechanics, All (leadmen - $0.50 Per Hour Over Mechanic)	$61.10	7A	3C	8P
King	Power Equipment Operators	Motor Patrol Graders	$60.49	7A	3C	8P

King	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$60.49	7A	3C	8P
King	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$56.90	7A	3C	8P
King	Power Equipment Operators	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	$59.49	7A	3C	8P
King	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	$59.96	7A	3C	8P
King	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	$61.10	7A	3C	8P
King	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	$60.49	7A	3C	8P
King	Power Equipment Operators	Pavement Breaker	$56.90	7A	3C	8P
King	Power Equipment Operators	Pile Driver (other Than Crane Mount)	$59.96	7A	3C	8P
King	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	$59.49	7A	3C	8P
King	Power Equipment Operators	Posthole Digger, Mechanical	$56.90	7A	3C	8P
King	Power Equipment Operators	Power Plant	$56.90	7A	3C	8P
King	Power Equipment Operators	Pumps - Water	$56.90	7A	3C	8P
King	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	$60.49	7A	3C	8P
King	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	$56.90	7A	3C	8P
King	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	$60.49	7A	3C	8P
King	Power Equipment Operators	Rigger And Bellman	$56.90	7A	3C	8P
King	Power Equipment Operators	Rigger/Signal Person, Bellman (Certified)	$59.49	7A	3C	8P
King	Power Equipment Operators	Rollagon	$60.49	7A	3C	8P
King	Power Equipment Operators	Roller, Other Than Plant Mix	$56.90	7A	3C	8P
King	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	$59.49	7A	3C	8P
King	Power Equipment Operators	Roto-mill, Roto-grinder	$59.96	7A	3C	8P
King	Power Equipment Operators	Saws - Concrete	$59.49	7A	3C	8P
King	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	$59.96	7A	3C	8P
King	Power Equipment Operators	Scrapers - Concrete & Carry All	$59.49	7A	3C	8P
King	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	$60.49	7A	3C	8P
King	Power Equipment Operators	Service Engineers - Equipment	$59.49	7A	3C	8P
King	Power Equipment Operators	Shotcrete/gunite Equipment	$56.90	7A	3C	8P
King	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	$59.49	7A	3C	8P
King	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$60.49	7A	3C	8P
King	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$59.96	7A	3C	8P
King	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric	$61.10	7A	3C	8P

		Tons				
King	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$61.72	7A	3C	8P
King	Power Equipment Operators	Slipform Pavers	$60.49	7A	3C	8P
King	Power Equipment Operators	Spreader, Topsider & Screedman	$60.49	7A	3C	8P
King	Power Equipment Operators	Subgrader Trimmer	$59.96	7A	3C	8P
King	Power Equipment Operators	Tower Bucket Elevators	$59.49	7A	3C	8P
King	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	$61.10	7A	3C	8P
King	Power Equipment Operators	Tower Crane: over 175’ through 250’ in height, base to boom	$61.72	7A	3C	8P
King	Power Equipment Operators	Tower Cranes: over 250’ in height from base to boom	$62.33	7A	3C	8P
King	Power Equipment Operators	Transporters, All Track Or Truck Type	$60.49	7A	3C	8P
King	Power Equipment Operators	Trenching Machines	$59.49	7A	3C	8P
King	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	$59.96	7A	3C	8P
King	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	$59.49	7A	3C	8P
King	Power Equipment Operators	Truck Mount Portable Conveyor	$59.96	7A	3C	8P
King	Power Equipment Operators	Welder	$60.49	7A	3C	8P
King	Power Equipment Operators	Wheel Tractors, Farmall Type	$56.90	7A	3C	8P
King	Power Equipment Operators	Yo Yo Pay Dozer	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operators	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator, Concrete	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Bobcat	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Brooms	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cableways	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Chipper	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Compressor	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	$56.90	7A	3C	8P
King	Power Equipment Operators-	Concrete Pump - Mounted Or	$59.49	7A	3C	8P

	Underground Sewer & Water	Trailer High Pressure Line Pump, Pump High Pressure.				
King	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Conveyors	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	$62.33	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	$61.10	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250’ of boom including jib with attachments	$61.72	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300’ of boom including jib with attachments	$62.33	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	$61.72	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Crusher	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Derricks, On Building Work	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Drilling Machine	$61.10	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Gradechecker/stakeman	$56.90	7A	3C	8P

King	Power Equipment Operators-Underground Sewer & Water	Guardrail Punch	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Locator	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Operator	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom Trucks Over 10 Tons	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	$61.10	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Mechanics, All (leadmen - $0.50 Per Hour Over Mechanic)	$61.10	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Motor Patrol Graders	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	$61.10	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	$59.96	7A	3C	8P
King	Power Equipment Operators-	Plant Oiler - Asphalt, Crusher	$59.49	7A	3C	8P

	Underground Sewer & Water					
King	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Power Plant	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Rigger And Bellman	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman (Certified)	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Rollagon	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Service Engineers - Equipment	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$61.10	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$61.72	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	$60.49	7A	3C	8P

King	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	$61.10	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175’ through 250’ in height, base to boom	$61.72	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250’ in height from base to boom	$62.33	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	$59.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	$59.96	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Welder	$60.49	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	$56.90	7A	3C	8P
King	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	$59.96	7A	3C	8P
King	Power Line Clearance Tree Trimmers	Journey Level In Charge	$50.02	5A	4A	
King	Power Line Clearance Tree Trimmers	Spray Person	$47.43	5A	4A	
King	Power Line Clearance Tree Trimmers	Tree Equipment Operator	$50.02	5A	4A	
King	Power Line Clearance Tree Trimmers	Tree Trimmer	$44.64	5A	4A	
King	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$33.67	5A	4A	
King	Refrigeration & Air Conditioning Mechanics	Journey Level	$77.86	6Z	1G	
King	Residential Brick Mason	Journey Level	$55.82	5A	1M	
King	Residential Carpenters	Journey Level	$28.20		1	
King	Residential Cement Masons	Journey Level	$22.64		1	
King	Residential Drywall Applicators	Journey Level	$42.86	5D	4C	
King	Residential Drywall Tapers	Journey Level	$57.43	5P	1E	
King	Residential Electricians	Journey Level	$30.44		1	
King	Residential Glaziers	Journey Level	$41.05	7L	1H	
King	Residential Insulation Applicators	Journey Level	$26.28		1	
King	Residential Laborers	Journey Level	$23.03		1	
King	Residential Marble Setters	Journey Level	$24.09		1	
King	Residential Painters	Journey Level	$24.46		1	
King	Residential Plumbers & Pipefitters	Journey Level	$34.69		1	
King	Residential Refrigeration & Air	Journey Level	$77.86	6Z	1G	

	Conditioning Mechanics					
King	Residential Sheet Metal Workers	Journey Level (Field or Shop)	$44.56	7F	1R	
King	Residential Soft Floor Layers	Journey Level	$47.61	5A	3J	
King	Residential Sprinkler Fitters (Fire Protection)	Journey Level	$46.58	5C	2R	
King	Residential Stone Masons	Journey Level	$55.82	5A	1M	
King	Residential Terrazzo Workers	Journey Level	$51.36	5A	1M	
King	Residential Terrazzo/Tile Finishers	Journey Level	$21.46		1	
King	Residential Tile Setters	Journey Level	$20.00		1	
King	Roofers	Journey Level	$51.02	5A	3H	
King	Roofers	Using Irritable Bituminous Materials	$54.02	5A	3H	
King	Sheet Metal Workers	Journey Level (Field or Shop)	$78.17	7F	1E	
King	Shipbuilding & Ship Repair	Boilermaker	$43.31	7M	1H	
King	Shipbuilding & Ship Repair	Carpenter	$41.06	7T	2B	
King	Shipbuilding & Ship Repair	Electrician	$42.07	7T	4B	
King	Shipbuilding & Ship Repair	Heat & Frost Insulator	$67.93	5J	4H	
King	Shipbuilding & Ship Repair	Laborer	$41.99	7T	4B	
King	Shipbuilding & Ship Repair	Machinist	$42.00	7T	4B	
King	Shipbuilding & Ship Repair	Operator	$41.95	7T	4B	
King	Shipbuilding & Ship Repair	Painter	$42.00	7T	4B	
King	Shipbuilding & Ship Repair	Pipefitter	$41.96	7T	4B	
King	Shipbuilding & Ship Repair	Rigger	$42.05	7T	4B	
King	Shipbuilding & Ship Repair	Sheet Metal	$41.98	7T	4B	
King	Shipbuilding & Ship Repair	Shipfitter	$42.05	7T	4B	
King	Shipbuilding & Ship Repair	Trucker	$41.91	7T	4B	
King	Shipbuilding & Ship Repair	Warehouse	$41.94	7T	4B	
King	Shipbuilding & Ship Repair	Welder/Burner	$42.05	7T	4B	
King	Sign Makers & Installers (Electrical)	Sign Installer	$22.92		1	
King	Sign Makers & Installers (Electrical)	Sign Maker	$21.36		1	
King	Sign Makers & Installers (Non-Electrical)	Sign Installer	$27.28		1	
King	Sign Makers & Installers (Non-Electrical)	Sign Maker	$33.25		1	
King	Soft Floor Layers	Journey Level	$47.61	5A	3J	
King	Solar Controls For Windows	Journey Level	$12.44		1	
King	Sprinkler Fitters (Fire Protection)	Journey Level	$75.64	5C	1X	
King	Stage Rigging Mechanics (Non Structural)	Journey Level	$13.23		1	
King	Stone Masons	Journey Level	$55.82	5A	1M	
King	Street And Parking Lot Sweeper Workers	Journey Level	$19.09		1	
King	Surveyors	Assistant Construction Site Surveyor	$59.49	7A	3C	8P
King	Surveyors	Chainman	$58.93	7A	3C	8P
King	Surveyors	Construction Site Surveyor	$60.49	7A	3C	8P

King	Telecommunication Technicians	Journey Level	$22.76		1	
King	Telephone Line Construction - Outside	Cable Splicer	$40.52	5A	2B	
King	Telephone Line Construction - Outside	Hole Digger/Ground Person	$22.78	5A	2B	
King	Telephone Line Construction - Outside	Installer (Repairer)	$38.87	5A	2B	
King	Telephone Line Construction - Outside	Special Aparatus Installer I	$40.52	5A	2B	
King	Telephone Line Construction - Outside	Special Apparatus Installer II	$39.73	5A	2B	
King	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	$40.52	5A	2B	
King	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$37.74	5A	2B	
King	Telephone Line Construction - Outside	Telephone Lineperson	$37.74	5A	2B	
King	Telephone Line Construction - Outside	Television Groundperson	$21.60	5A	2B	
King	Telephone Line Construction - Outside	Television Lineperson/Installer	$28.68	5A	2B	
King	Telephone Line Construction - Outside	Television System Technician	$34.10	5A	2B	
King	Telephone Line Construction - Outside	Television Technician	$30.69	5A	2B	
King	Telephone Line Construction - Outside	Tree Trimmer	$37.74	5A	2B	
King	Terrazzo Workers	Journey Level	$51.36	5A	1M	
King	Tile Setters	Journey Level	$51.36	5A	1M	
King	Tile, Marble & Terrazzo Finishers	Finisher	$42.19	5A	1B	
King	Traffic Control Stripers	Journey Level	$45.43	7A	1K	
King	Truck Drivers	Asphalt Mix Over 16 Yards (W. WA-Joint Council 28)	$52.70	5D	3A	8L
King	Truck Drivers	Asphalt Mix To 16 Yards (W. WA-Joint Council 28)	$51.86	5D	3A	8L
King	Truck Drivers	Dump Truck & Trailer	$52.70	5D	3A	8L
King	Truck Drivers	Dump Truck (W. WA-Joint Council 28)	$51.86	5D	3A	8L
King	Truck Drivers	Other Trucks (W. WA-Joint Council 28)	$52.70	5D	3A	8L
King	Truck Drivers	Transit Mixer	$43.23		1	
King	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$17.71		1	
King	Well Drillers & Irrigation Pump Installers	Oiler	$12.97		1	
King	Well Drillers & Irrigation Pump Installers	Well Driller	$18.00		1	

APPENDIX B

Standard Plans and Details

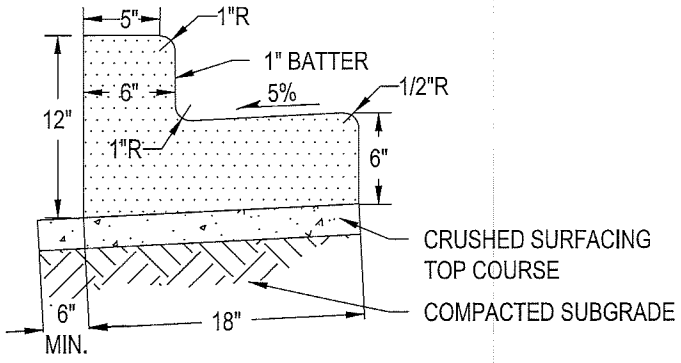
List of Standard Details

CITY OF SAMMAMISH STANDARD DETAILS

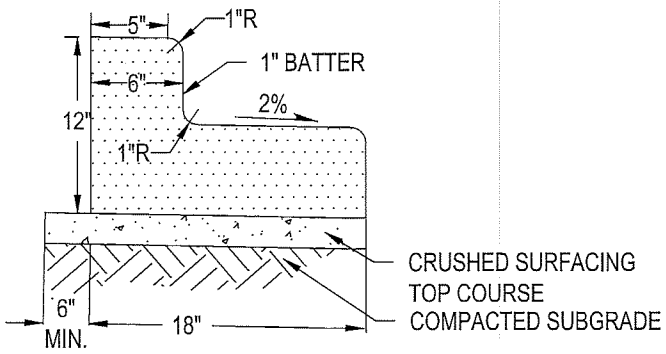
CURBS..... FIG. 3-08A
PAVEMENT MARKINGS..... FIG. 4-03A
RAISED PAVEMENT MARKERS..... FIG. 4-03B
PAVEMENT SYMBOLS ..... FIG. 4-05
STREET SIGN INSTALLATION ..... FIG. 4-06

WSDOT STANDARD DETAILS

PRECAST SLOPED MOUNTABLE CURB F-10.62-02
PRECAST DUAL FACED SLOPED MOUNTABLE CURB..... F-10.64-03
SIGN INSTALLATION ON SIGNAL AND LIGHT STANDARDS..... G-30.10-04
STEEL LIGHT STANDARD FOUNDATION TYPES A & B J-28.30-03
LOCKING LID STANDARD JUNCTION BOX TYPES 1 & 2 ..... J-40.10-04
SIGNAL HEAD MOUNTING DETAILS ~
MAST ARM AND SPAN WIRE MOUNTINGS..... J-75.20-01



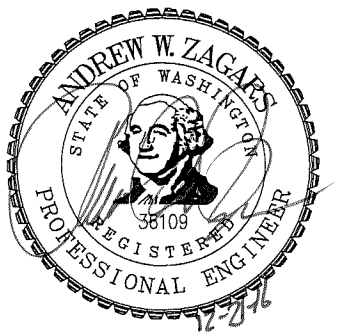
TYPE A CURB AND GUTTER



MEDIAN CURB AND GUTTER

NOTES:

1. CONSTRUCT 10 FT LONG CURB TYPE TRANSITION BETWEEN DIFFERENT CURB TYPES.



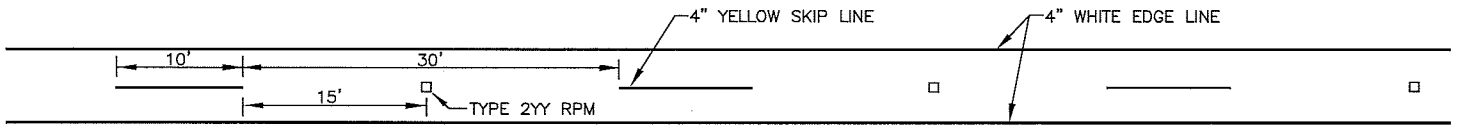
CITY OF SAMMAMISH
DEPARTMENT OF PUBLIC WORKS

CURBS

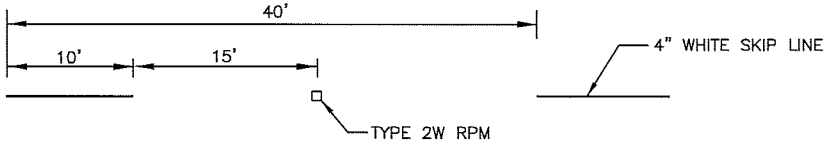
APPROVED BY
CITY ENGINEER _____ DATE _____

REV	DWN	CKD	DATE	FILE
	TTC	AWZ	AUG-XX-2015	FIG03-8a

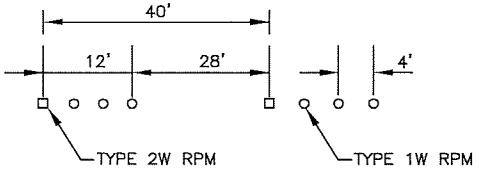
REV. NO. X



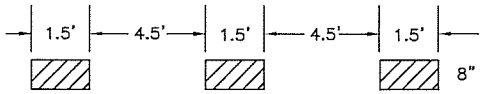
SINGLE LANE TWO-WAY TRAFFIC



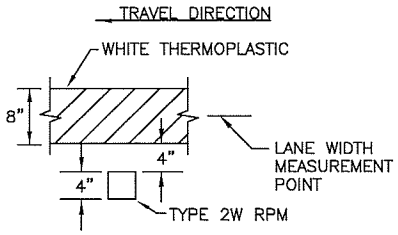
LANE SEPARATION



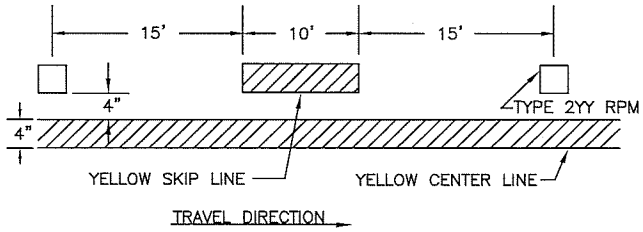
TRAVEL DIRECTION
ALTERNATE LANE MARKINGS



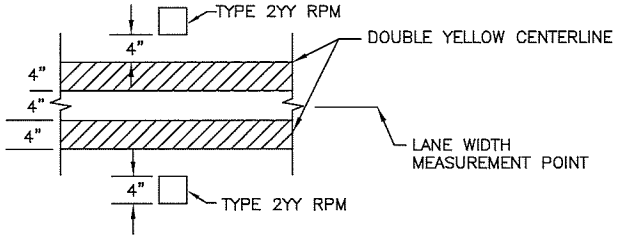
LANE EXTENSION LINE



WIDE LINE



TWO-WAY LEFT TURN LANE



CENTERLINE

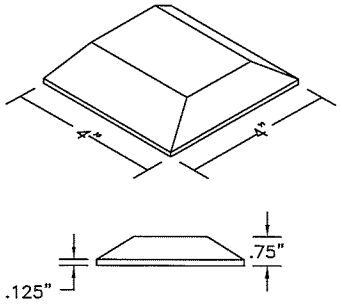
CITY OF SAMMAMISH
DEPARTMENT OF PUBLIC WORKS

PAVEMENT MARKINGS

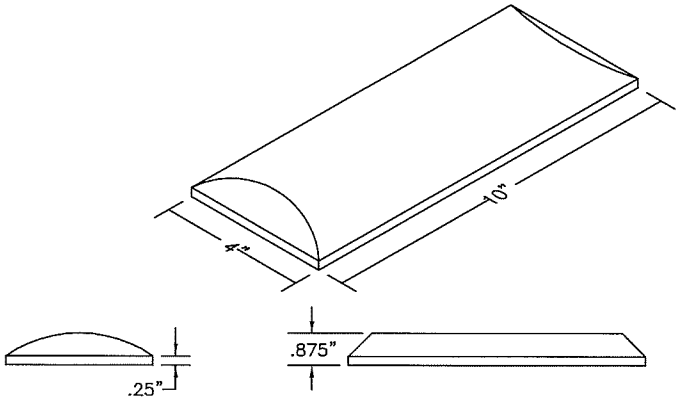
APPROVED BY
CITY ENGINEER _____ DATE _____

REV	DWN	CKD	DATE	FILE
	XXX	XXX	AUG-XX-2015	FIG04-03A

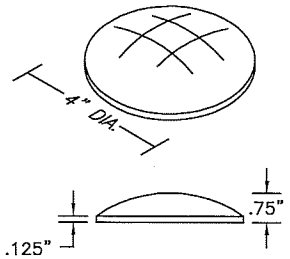
REV. NO. X



TYPE 2 RPM

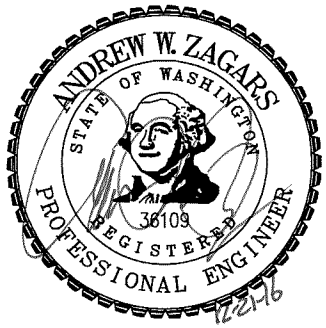


TYPE 3 RPM



TYPE 1 RPM

RAISED PAVEMENT MARKER COLORS	
TYPE 1W	NONREFLECTORIZED WHITE
TYPE 1Y	NONREFLECTORIZED YELLOW
TYPE 2W	REFLECTORIZED WHITE – ONE SIDE ONLY
TYPE 2Y	REFLECTORIZED YELLOW – ONE SIDE ONLY
TYPE 2YY	REFLECTORIZED YELLOW – BOTH SIDES



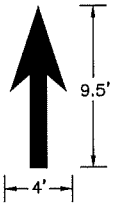
CITY OF SAMMAMISH
DEPARTMENT OF PUBLIC WORKS

RAISED PAVEMENT MARKERS

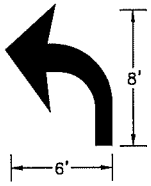
APPROVED BY
CITY ENGINEER _____ DATE _____

REV	DWN	CKD	DATE	FILE
	XXX	XXX	AUG-XX-2015	FIG04-03B

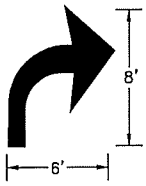
REV. NO. X



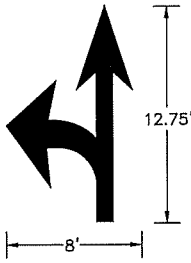
TYPE 1
THRU ARROW



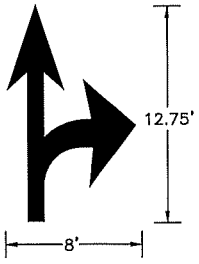
TYPE 2L
LEFT TURN ARROW



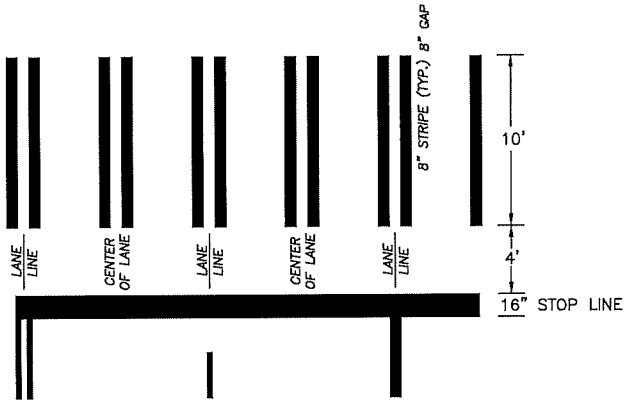
TYPE 2R
RIGHT TURN ARROW



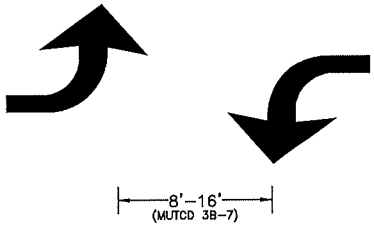
TYPE 3L
LEFT/THRU ARROW



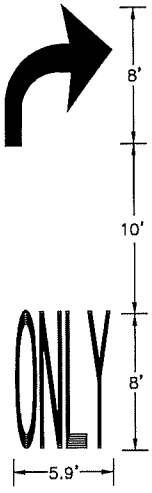
TYPE 3R
RIGHT/THRU ARROW



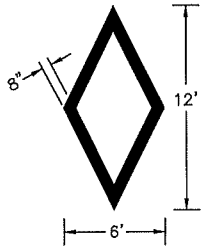
CROSSWALK STRIPING



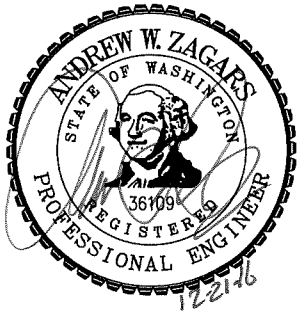
TWO WAY LEFT TURN LANE
ARROW SPACING



DROP LANE



HIGH OCCUPANCY VEHICLE (HOV)



NOTES

1. ALL PAVEMENT SYMBOLS SHALL BE THERMOPLASTIC.

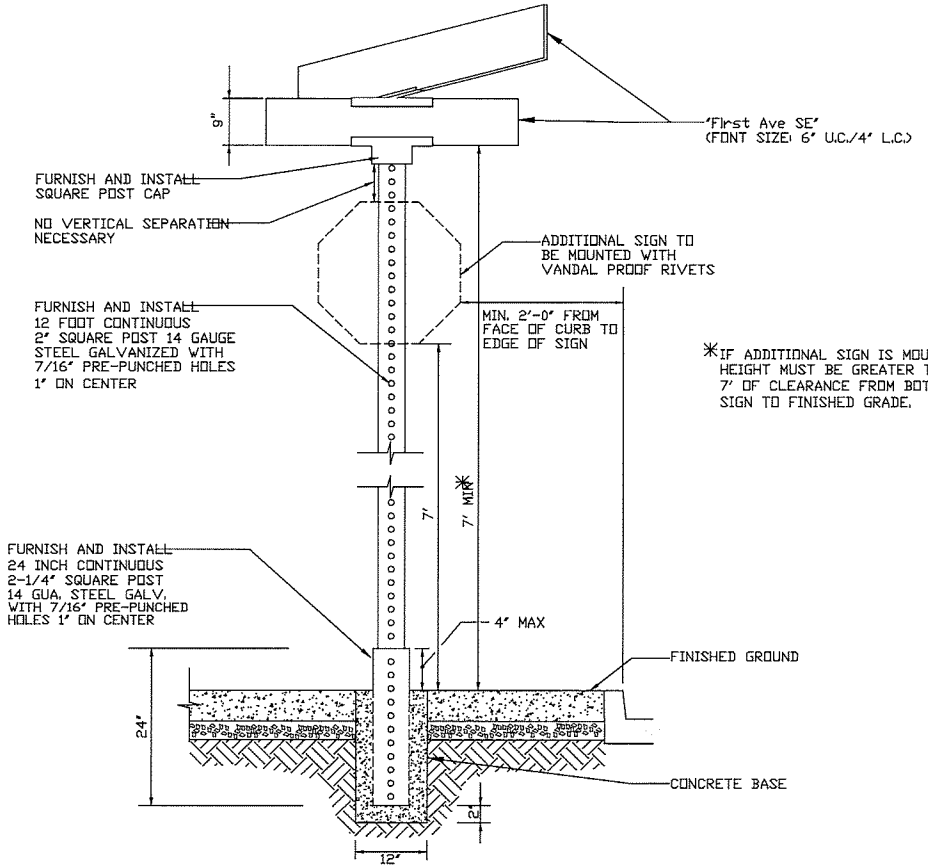
CITY OF SAMMAMISH
DEPARTMENT OF PUBLIC WORKS

PAVEMENT SYMBOLS

APPROVED BY
CITY ENGINEER _____ DATE _____

REV	DWN	CKD	DATE	FILE
	XXX	XXX	AUG-XX-2015	FIG04-05

REV. NO. X



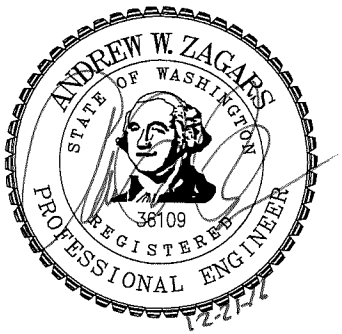
*IF ADDITIONAL SIGN IS MOUNTED ON POLE, HEIGHT MUST BE GREATER TO ALLOW FOR 7' OF CLEARANCE FROM BOTTOM OF SECOND SIGN TO FINISHED GRADE.

STREET SIGN INSTALLATION DETAIL

NOT TO SCALE

NOTES:

1. ALL EXISTING SIGNS THAT ARE TO BE RELOCATED SHALL BE INSTALLED ON NEW POSTS AND HARDWARE.
2. 2" TELESPARE GALVANIZED POSTS
3. 2 1/4" TELESPARE GALVANIZED ANCHORS, 24" LONG
4. SET ANCHORS 20" DEEP, WRAP ANCHORS AND SET IN CONCRETE. BOLTS TO BE 2" ABOVE FINISHED GRADE
5. SIGNS TO BE V.I.P. (DIAMOND GRADE)
6. SIGNS TO BE ATTACHED WITH VANDAL PROOF RIVETS
7. D-3'S TO BE E.G. BACKGROUND DIAMOND GRADE LETTERING
8. D-3'S TO BE MOUNTED WITH ALUMINUM CAPS AND CROSS BRACKETS
9. WHITE LEGEND ON GREEN BACKGROUND



CITY OF SAMMAMISH
DEPARTMENT OF PUBLIC WORKS

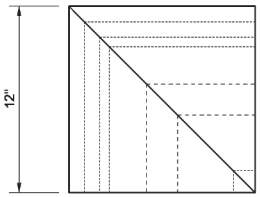
STREET SIGN INSTALLATION

APPROVED BY
CITY ENGINEER _____ DATE _____

REV	DWN	CKD	DATE	FILE
	XXX	XXX	AUG-XX-2015	FIG04-06

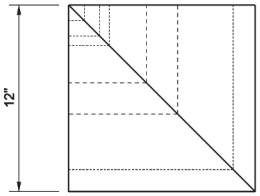
REV. NO. X

DRAWN BY: BILL BERENS



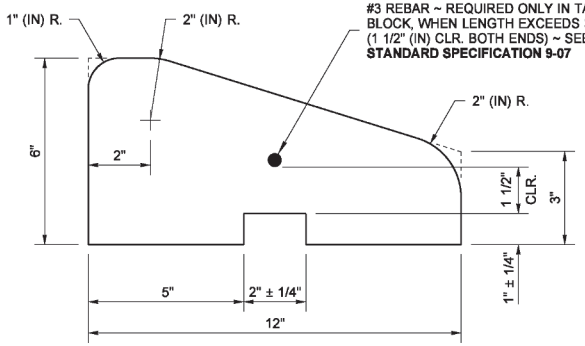
TOP VIEW

INSIDE CORNER BLOCK



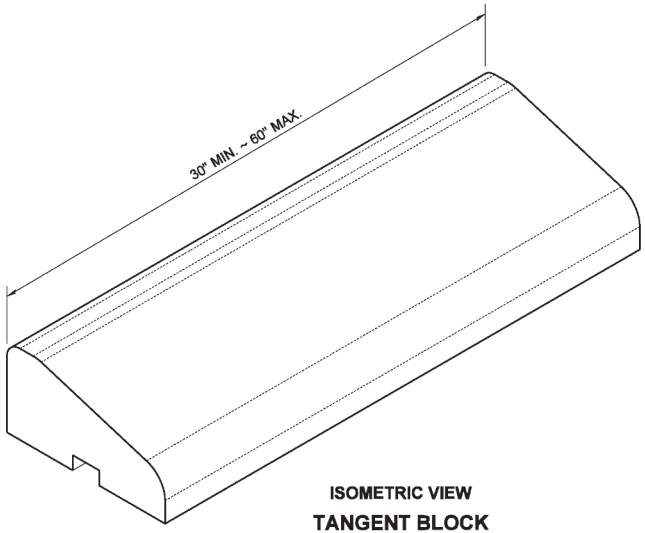
TOP VIEW

OUTSIDE CORNER BLOCK



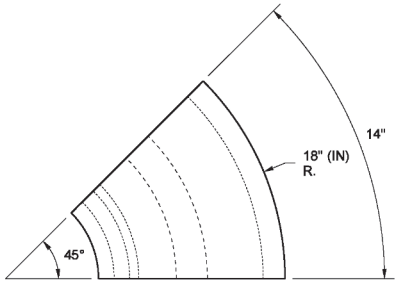
TYPICAL OF ALL

END VIEW



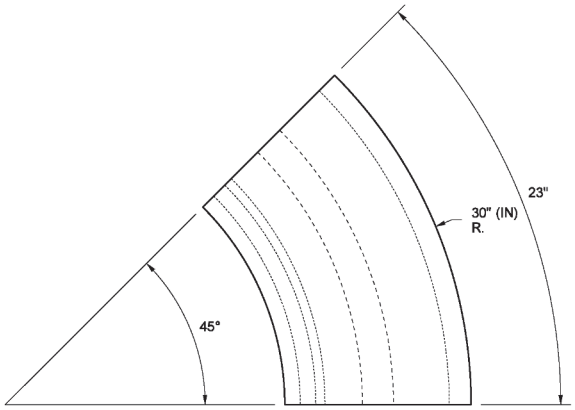
ISOMETRIC VIEW

TANGENT BLOCK



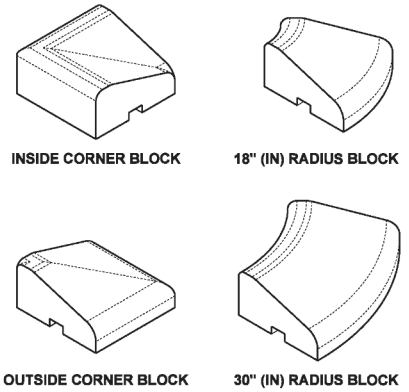
TOP VIEW

18" RADIUS BLOCK



TOP VIEW

30" RADIUS BLOCK



INSIDE CORNER BLOCK | 18" (IN) RADIUS BLOCK

OUTSIDE CORNER BLOCK | 30" (IN) RADIUS BLOCK

ISOMETRIC VIEWS

BAKOTICH, PASCO III
STATE OF WASHINGTON
24557
REGISTERED
PROFESSIONAL ENGINEER

Bakotich, Pasco
Apr 22 2014 9:18 AM

PRECAST SLOPED MOUNTABLE CURB

STANDARD PLAN F-10.62-02

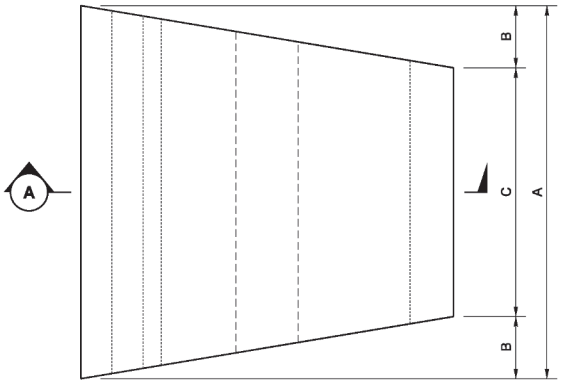
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Bakotich, Pasco
Apr 22 2014 9:18 AM

STATE DESIGN ENGINEER

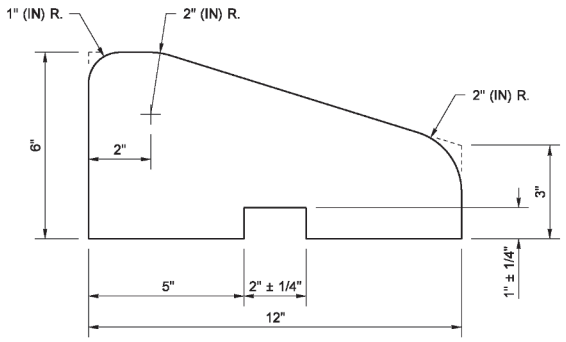
Washington State Department of Transportation

DRAWN BY: BILL BERENS

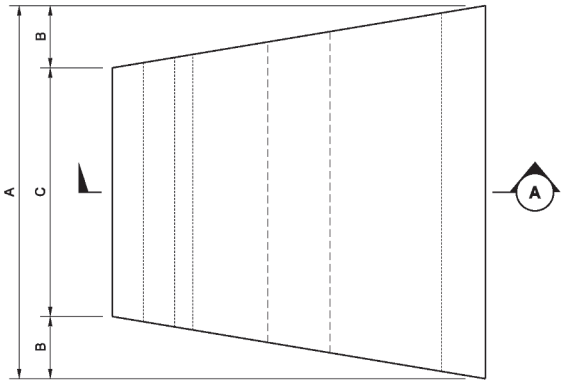


TOP VIEW

INSIDE RADIUS BLOCK



SECTION (A)



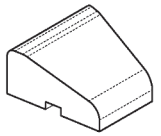
TOP VIEW

OUTSIDE RADIUS BLOCK

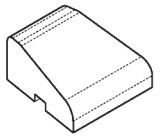
CURB RADIUS TABLE

CURB RADIUS	DIMENSION A	DIMENSION B	DIMENSION C
3'	12"	2"	8"
4' TO 5'	12"	1 1/2"	9"
6'	12"	1"	10"
7'	12"	7/8"	10 1/4"
8'	18"	1 1/8"	15 3/4"
9'	18"	1"	16"
10'	18"	7/8"	16 1/4"
11' TO 13'	18"	3/4"	16 1/2"
14' TO 15'	18"	5/8"	16 3/4"
16' TO 17'	24"	3/4"	22 1/2"
18' TO 22'	24"	5/8"	22 3/4"
23' TO 29'	24"	1/2"	23"
30' TO 34'	30"	1/2"	29"
35' TO 48'	30"	3/8"	29 1/4"
49' TO 60'	30"	1/4"	29 1/2"
OVER 60'	USE TANGENT BLOCK, SEE SHEET 1		

THIS TABLE LISTS THE CALCULATED DIMENSIONS FOR CASTING BLOCKS SUITABLE FOR CONSTRUCTING VARIOUS CURB RADII. CURVED BLOCKS, OR BLOCKS WITH DIFFERENT DIMENSIONS MAY BE ACCEPTABLE WITH PRIOR APPROVAL OF THE ENGINEER.



INSIDE RADIUS BLOCK



OUTSIDE RADIUS BLOCK

ISOMETRIC VIEWS

BAKOTICH, PASCO III
STATE OF WASHINGTON
24557
REGISTERED
PROFESSIONAL ENGINEER

Bakotich, Pasco
Apr 22 2014 9:20 AM

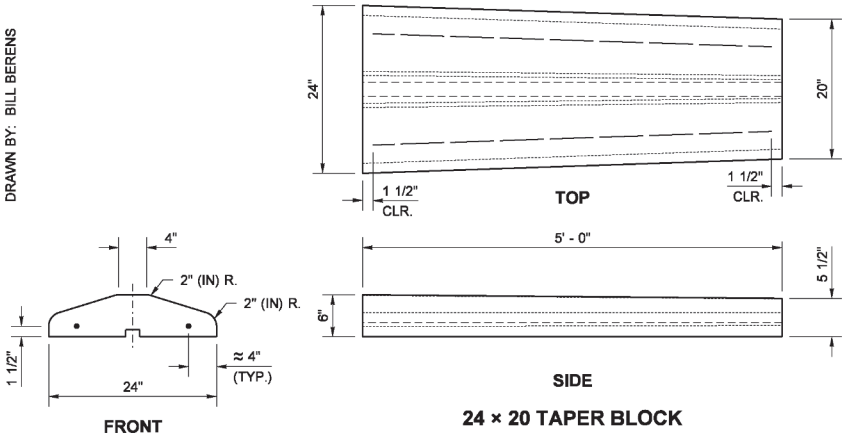
PRECAST SLOPED MOUNTABLE CURB

STANDARD PLAN F-10.62-02

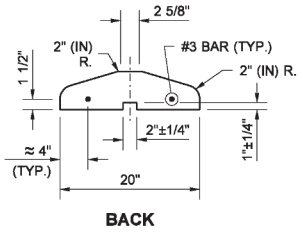
SHEET 2 OF 2 SHEETS

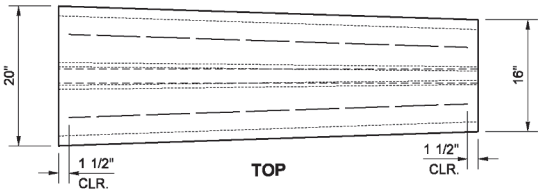
APPROVED FOR PUBLICATION
Bakotich, Pasco
Apr 22 2014 9:20 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: BILL BERENS

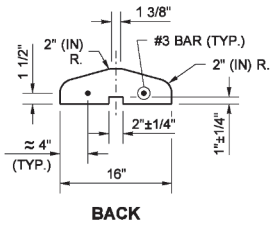


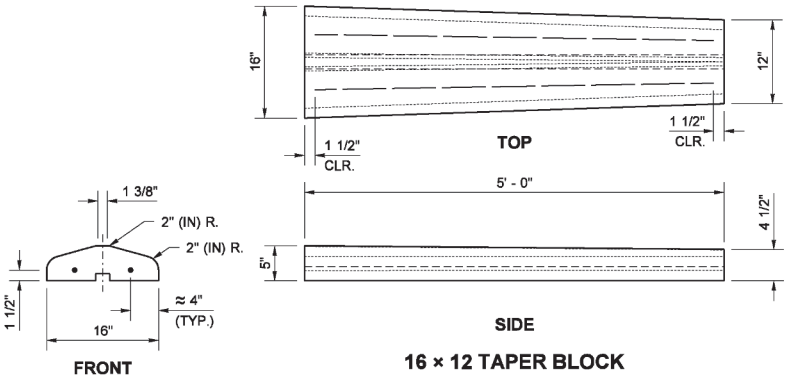
24 × 20 TAPER BLOCK



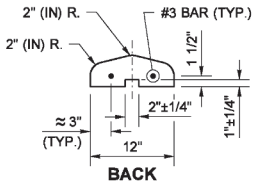


20 × 16 TAPER BLOCK



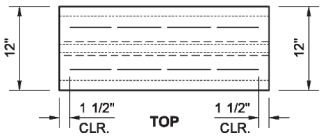


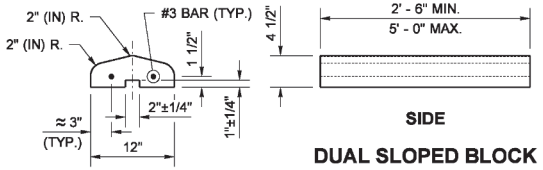
16 × 12 TAPER BLOCK



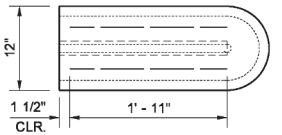
NOTES

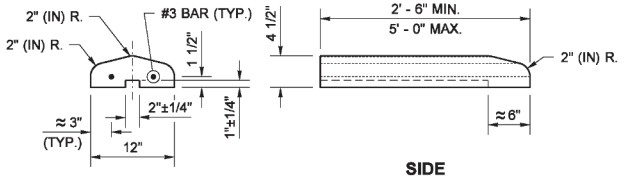
1. The dual faced curb may be constructed by using two precast sloped mountable curbs (longitundinal halves) so long as the installation is consistent with the dimensions shown in the plan.
2. Reinforcing steel shall conform to **Standard Specification 9-07**.



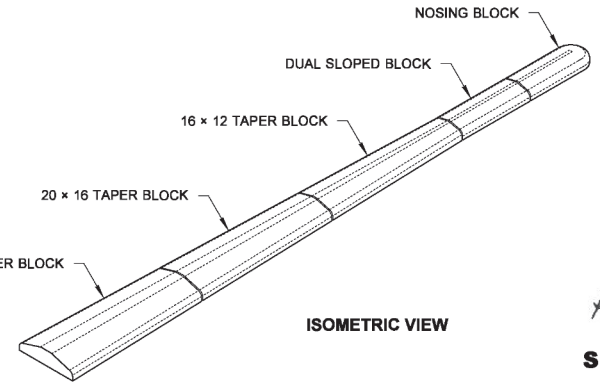


DUAL SLOPED BLOCK





NOSING BLOCK



ISOMETRIC VIEW

BAKOTICH, PASCO III
STATE OF WASHINGTON
24557
REGISTERED
PROFESSIONAL ENGINEER

Bakotich, Pasco
Apr 22 2014 9:21 AM

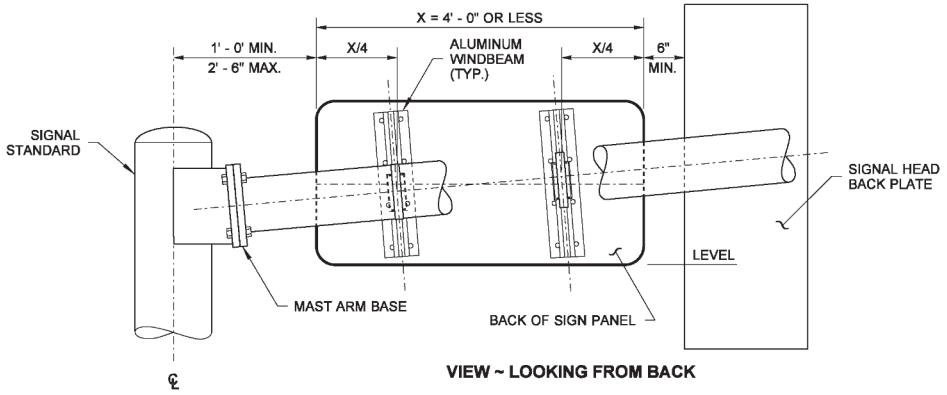
PRECAST DUAL FACED SLOPED MOUNTABLE CURB

STANDARD PLAN F-10.64-03

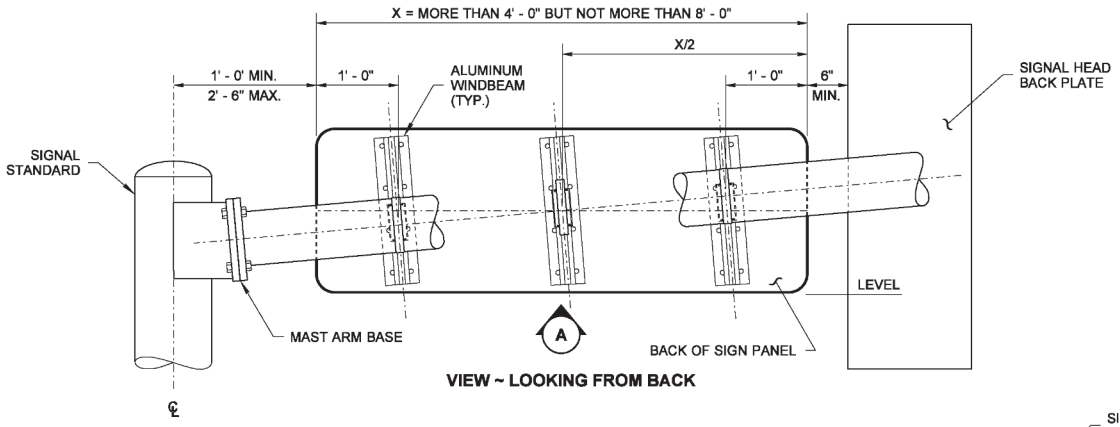
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Bakotich, Pasco
Apr 22 2014 9:21 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

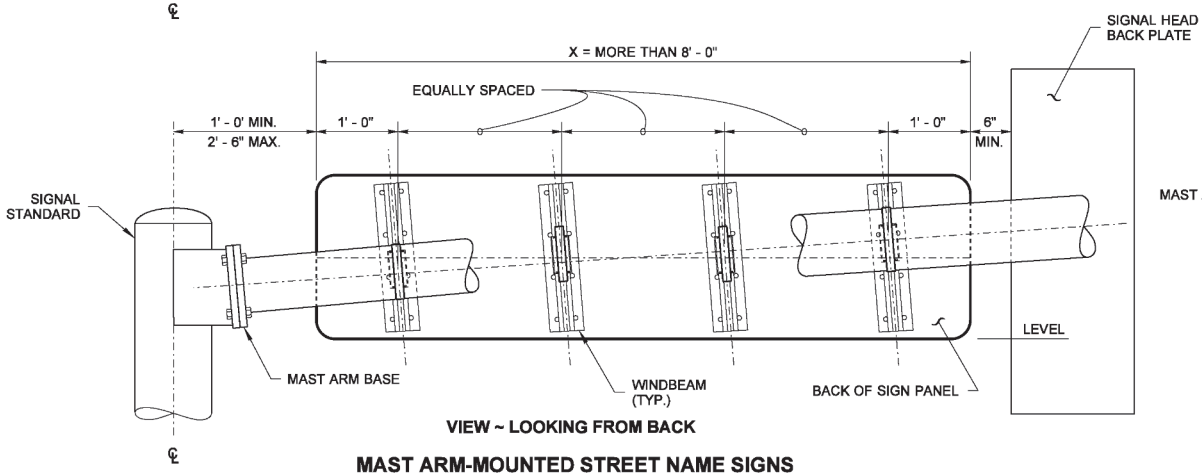
DRAWN BY: FERN LIDDELL



VIEW ~ LOOKING FROM BACK

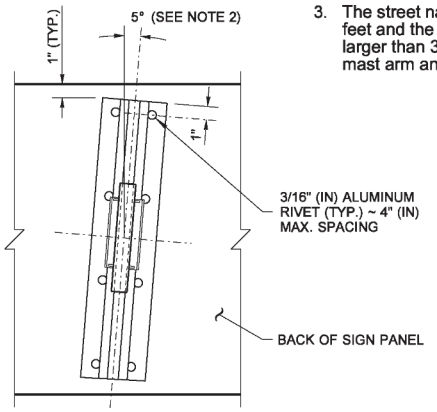


VIEW ~ LOOKING FROM BACK



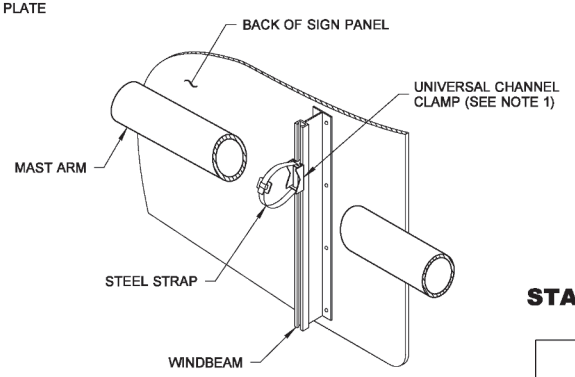
VIEW ~ LOOKING FROM BACK

MAST ARM-MOUNTED STREET NAME SIGNS



DETAIL (A)

TYPICAL FOR EACH CONNECTION



TYPICAL MAST ARM INSTALLATION

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.

JOHN C. NISBET STATE OF WASHINGTON 29115 REGISTERED PROFESSIONAL ENGINEER

Nisbet, John
Jun 22 2015 9:49 AM

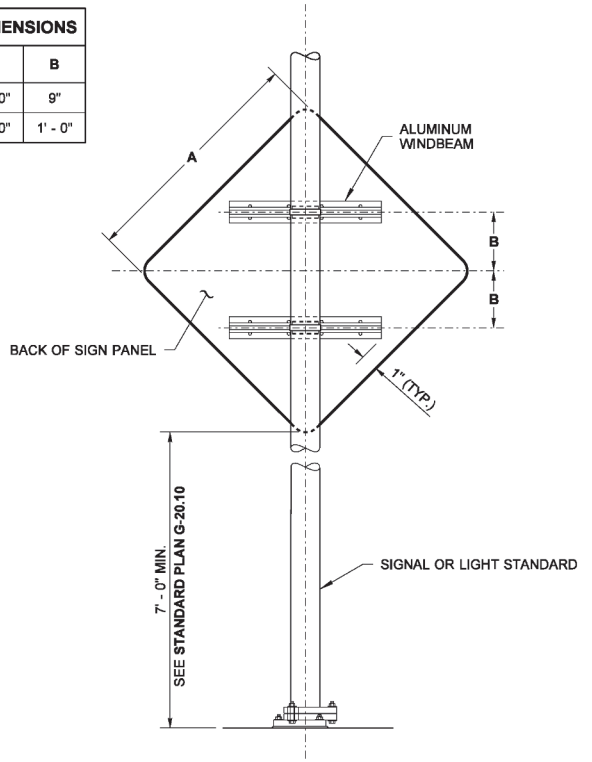
SIGN INSTALLATION ON SIGNAL AND LIGHT STANDARDS STANDARD PLAN G-30.10-04

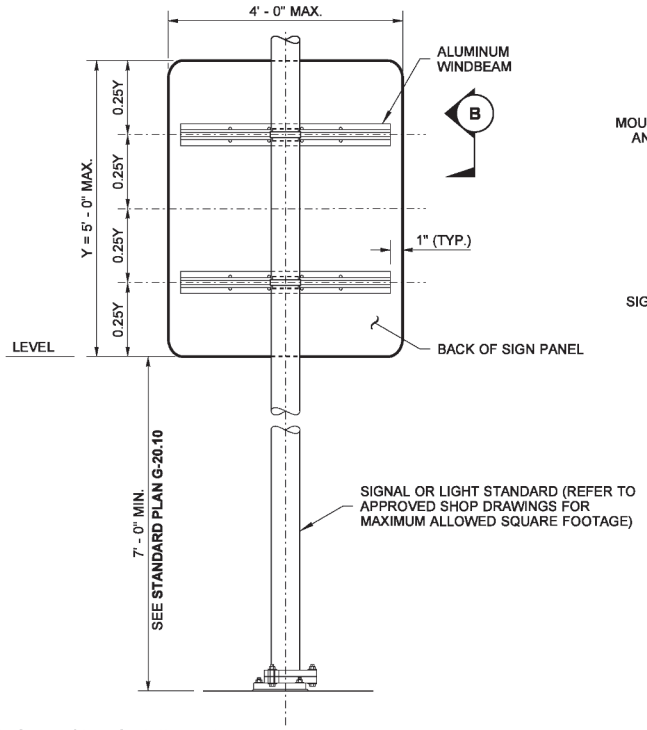
SHEET 1 OF 2 SHEETS

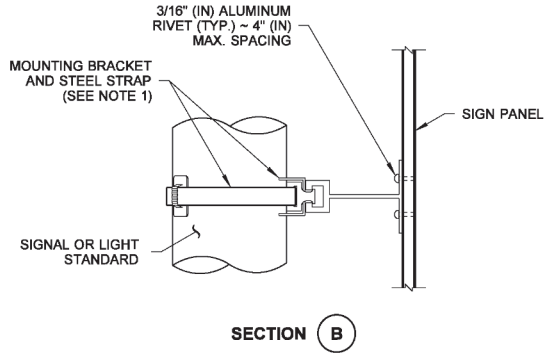
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jun 23 2015 7:31 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL

DIMENSIONS	
A	B
3' - 0"	9"
4' - 0"	1' - 0"





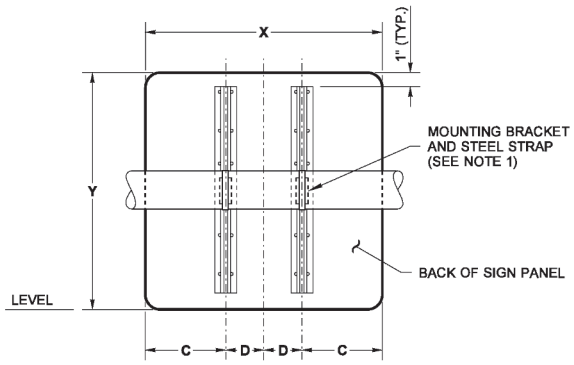


SIGN INSTALLATION ON SIGNAL OR LIGHT STANDARD

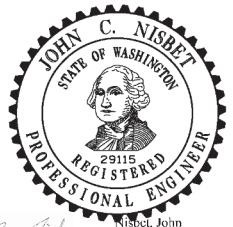
DIMENSIONS			
X	Y	C	D
3' - 0"	2' - 6"	1' - 0"	6"
3' - 0"	3' - 0"	1' - 0"	6"
3' - 0"	4' - 0"	1' - 3"	9"
4' - 0"	2' - 6"	1' - 3"	9"

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



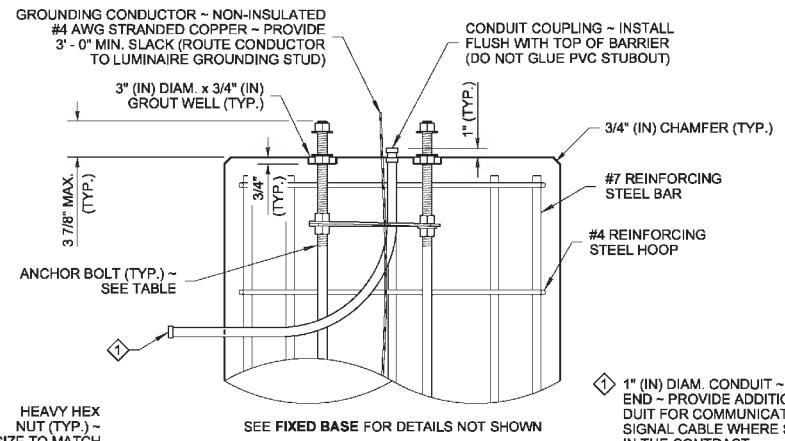
Nisbet, John
Jun 22 2015 9:50 AM

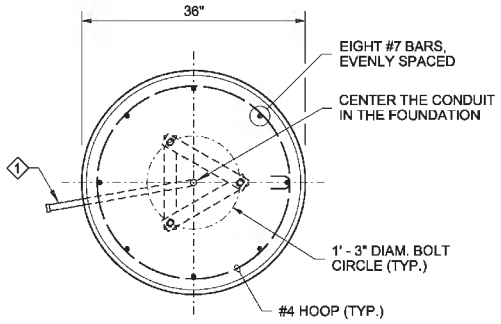
cosign

SIGN INSTALLATION ON SIGNAL AND LIGHT STANDARDS STANDARD PLAN G-30.10-04

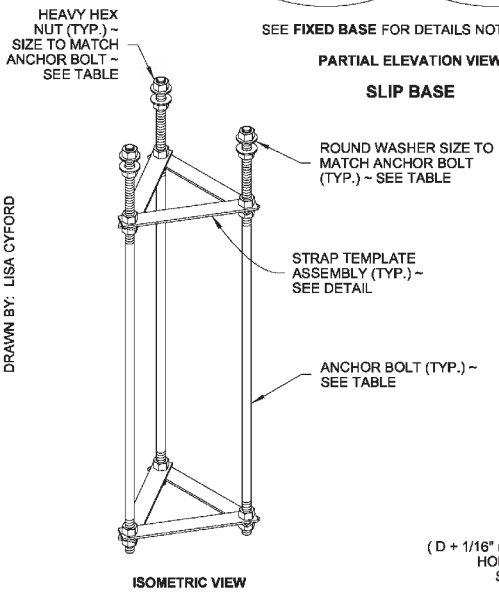
SHEET 2 OF 2 SHEETS

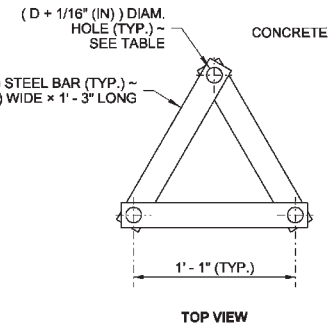
APPROVED FOR PUBLICATION
Carpenter, JeiT
Jun 23 2015 7:31 AM
cosign
STATE DESIGN ENGINEER
Washington State Department of Transportation

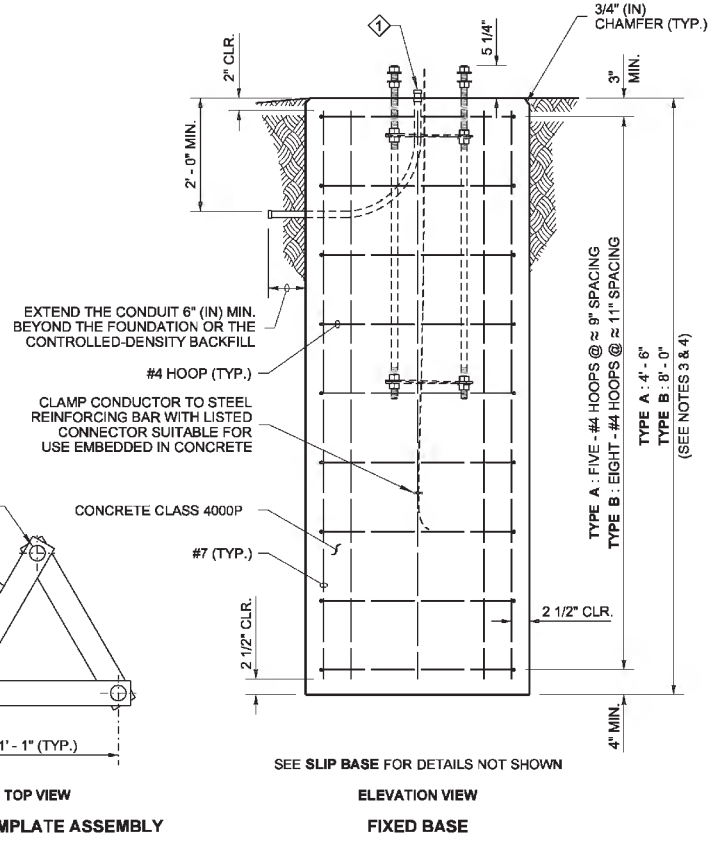




1 1" (IN) DIAM. CONDUIT ~ CAP EACH END ~ PROVIDE ADDITIONAL CONDUIT FOR COMMUNICATION OR SIGNAL CABLE WHERE SHOWN IN THE CONTRACT





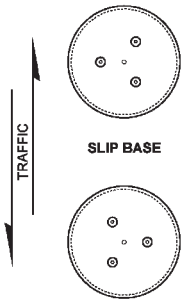


DRAWN BY: LISA CYFORD

ANCHOR BOLT TABLE			
LUMINAIRE HEIGHT (FT) (H1)	MAST ARM TYPE	MAST ARM LENGTH (FT)	ANCHOR BOLT DIAMETER (IN) "D"
20' TO 50'	SINGLE	6' TO 16'	1"
20' TO 50'	DOUBLE	6' TO 8'	1"
20' TO 45'	DOUBLE	10' TO 16'	1"
46' TO 50'	DOUBLE	10' TO 16'	1 1/8"

NOTES

1. See **Standard Plan J-28.40** for Luminaire Pole base mounting details.
2. The Strap Templates shall be held in place by nuts, 6" (in) from the top of the foundation and 3" (in) from the bottom of the anchor bolts. Eighteen heavy duty hex nuts and six round washers are required for a slip base assembly. Eighteen heavy duty hex nuts and six plate washers are required for a fixed base assembly.
3. Use Steel Light Standard Foundation **Type A** on level ground or slopes not exceeding 4H : 1V. Use **Type B** for slopes steeper than 4H : 1V, but not exceeding 2H : 1V. Slopes steeper than 2H : 1V shall require a special design.
4. These foundations are designed for a minimum of 2000 PSF **(TYPE A)** or 1500 PSF **(TYPE B)** allowable lateral bearing pressure for the soil. A special foundation shall be required for soil with allowable lateral bearing pressure lower than 1500 PSF.
5. The Luminaire Pole height shall not exceed 50' (ft) (**H1**).
6. Slip bases shall not be installed on 50' (ft) (**H1**) poles with Double Mast Arms, nor on poles weighing more than 1000 lbs.
7. Slip bases are required on poles installed inside the Design Clear Zone, and on poles installed behind traffic barrier that are within the traffic barrier deflection zone.
8. Foundations constructed within Media Filter Drains shall be increased in depth by the depth of the Media Filter Drain.
9. Exposed portions of the foundation shall be formed to create a Class 2 surface finish. All forming shall be removed upon completion of foundation construction.
10. For excavation, concrete placement, and backfill options, see METHOD 1 and METHOD 2 on Sheet 2 of 2.
11. The anchor bolts shall be high-strength steel, manufactured from ASTM F1554 Grade 105, with heavy hex nuts and hardened washers. Galvanize the anchor bolts according to ASTM F2329.
12. The foundation shall be grounded in accordance with the requirements of **Standard Specification 8-20.3(4).**
13. See **Standard Plans C-8b** and **C-85.14** for steel light standards on traffic barrier.



ANCHOR BOLT LAYOUT

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STEEL LIGHT STANDARD FOUNDATION TYPES A & B

STANDARD PLAN J-28.30-03

SHEET 1 OF 2 SHEETS

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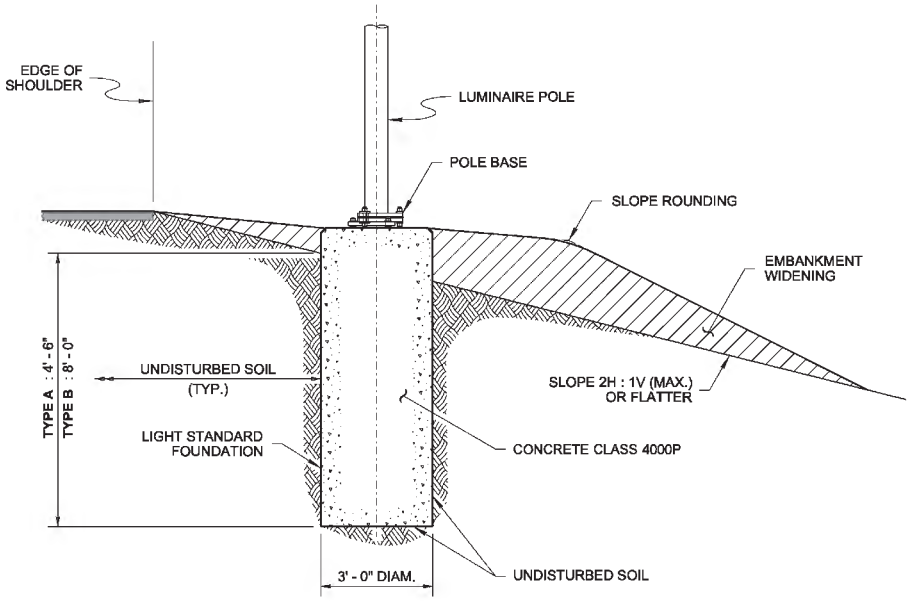


(CASE A SHOWN)

METHOD 1

NO SUBSURFACE FORM

This option is used only when the existing soil in the hole will remain standing and the cement concrete can be placed without causing the soil to collapse. Concrete shall be cast directly against undisturbed soil.

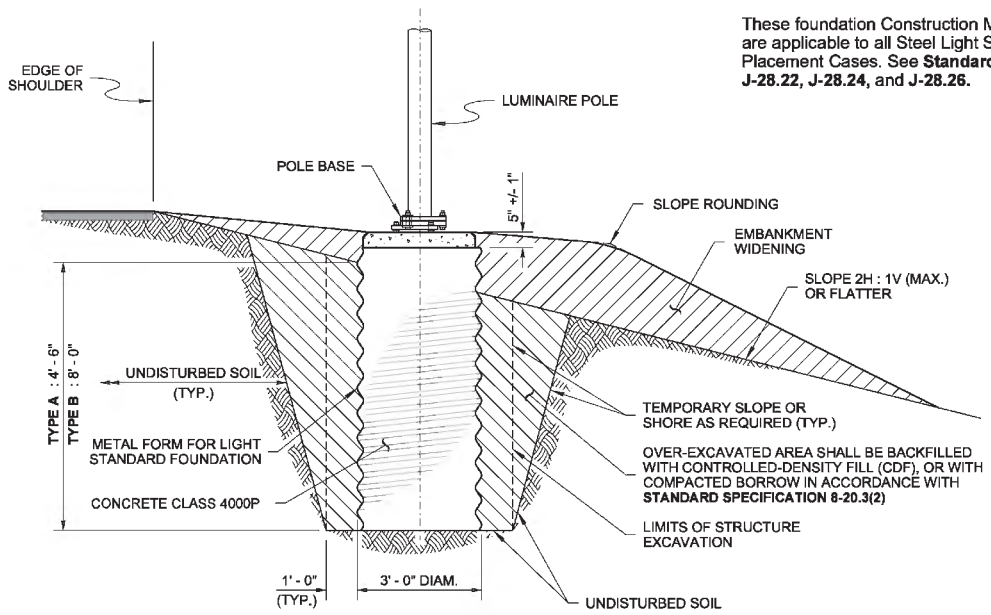
Auger the hole for the foundation. Use a paper or cardboard form to achieve a smooth finish on the final exposed cement concrete. Support the form as necessary to remain plumb.

See **Standard Plans J-28.24** and **J-28.26** for maximum heights of exposed foundation when no embankment widening is to be installed.

Place the concrete foundation.

After concrete has cured, remove the paper or cardboard form portion.

Construct the embankment widening (if required).



(CASE A SHOWN)

METHOD 2

METAL (SUBSURFACE) FORM REQUIRED

When the existing soil will not retain a vertical face, over-excavate the foundation area and install a 36" (in) diameter corrugated metal (pipe) form. The corrugated metal form shall not extend more than 5" (in) +/- 1" (in) below any portion of the foundation that will remain exposed upon final grading. Continue forming to full height using a paper or cardboard form to achieve a smooth finish on final exposed cement concrete. Support the form as necessary to remain plumb.

See **Standard Plans J-28.24** and **J-28.26** for maximum heights of exposed foundation when no embankment widening is to be installed.

Place the concrete foundation.

After concrete has cured, remove the paper or cardboard form portion.

Backfill with controlled-density fill or compacted borrow in accordance with **Standard Specification 8-20.3(2).**

Construct the embankment widening (if required).

NOTE

These foundation Construction Methods are applicable to all Steel Light Standard Placement Cases. See **Standard Plans J-28.22, J-28.24,** and **J-28.26.**

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CONSTRUCTION METHODS

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STEEL LIGHT STANDARD FOUNDATION TYPES A & B

STANDARD PLAN J-28.30-03

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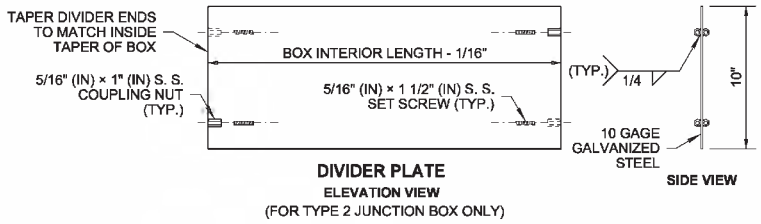


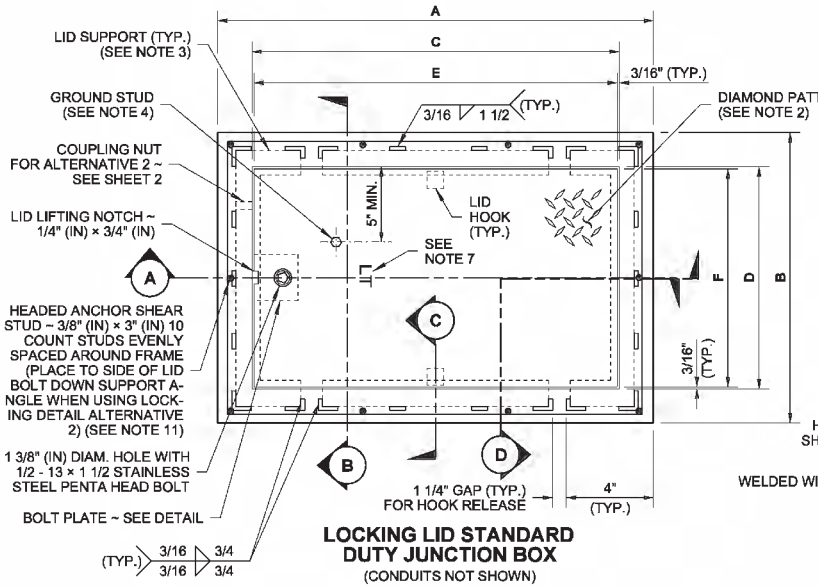
DIVIDER PLATE
ELEVATION VIEW
(FOR TYPE 2 JUNCTION BOX ONLY)

JUNCTION BOX DIMENSION TABLE

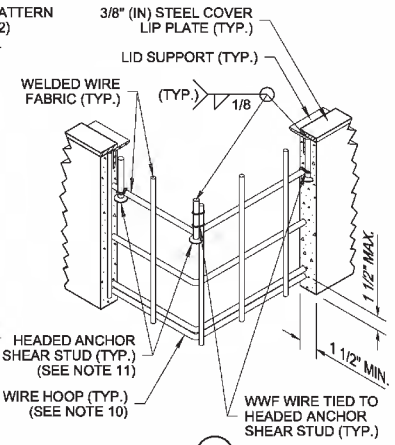
MARK	ITEM	BOX TYPE	
		TYPE 1	TYPE 2
A	OUTSIDE LENGTH OF JUNCTION BOX	22"	33"
B	OUTSIDE WIDTH OF JUNCTION BOX	17"	22 1/2"
C	INSIDE LENGTH OF JUNCTION BOX	16" ~ 19"	28" ~ 29"
D	INSIDE WIDTH OF JUNCTION BOX	13" ~ 14"	17" ~ 18"
E	LID LENGTH	17 5/8"	28 5/8"
F	LID WIDTH	12 5/8"	18 1/8"
	CAPACITY ~ CONDUIT DIAMETER	6"	12"

NOTES

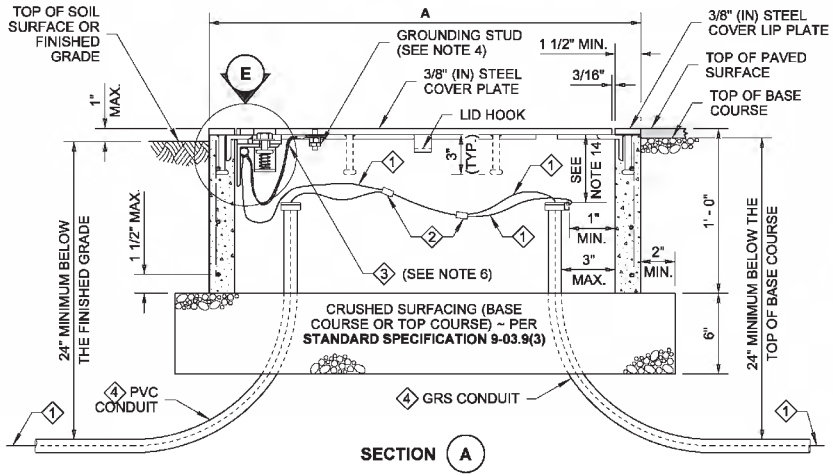
1. All box dimensions are approximate. Exact configurations vary among manufacturers.
2. Minimum lid thickness shown. Junction Boxes installed in sidewalks, walkways, and shared-use paths shall have a slip-resistant coating on the lid and lip cover plate, and shall be installed with the surface flush 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 # 8 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)**.



LOCKING LID STANDARD DUTY JUNCTION BOX
(CONDUITS NOT SHOWN)



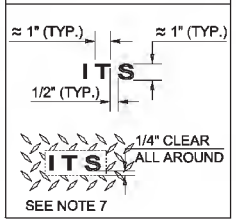
SECTION (D)
PERSPECTIVE VIEW

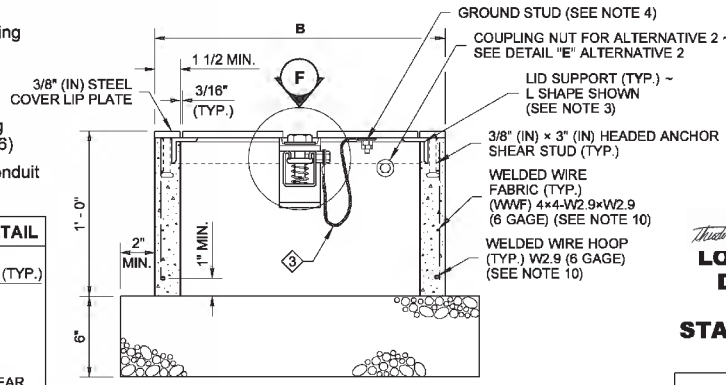


SECTION (A)

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)

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LOCKING LID STANDARD DUTY JUNCTION BOX
TYPES 1 & 2
STANDARD PLAN J-40.10-04

SHEET 1 OF 2 SHEETS

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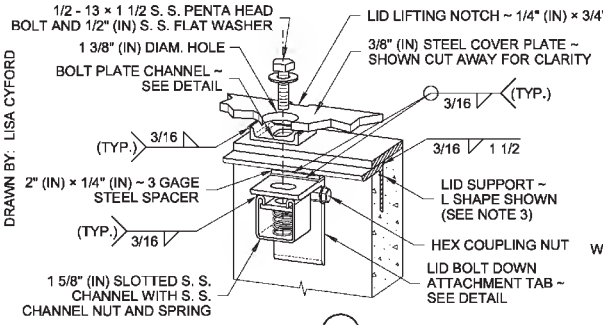
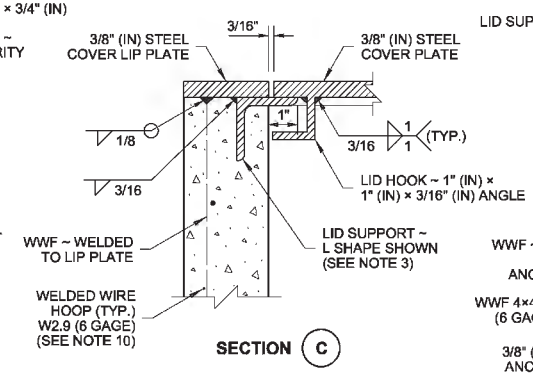


DETAIL (F)
ALTERNATIVE 1 SHOWN
PERSPECTIVE VIEW



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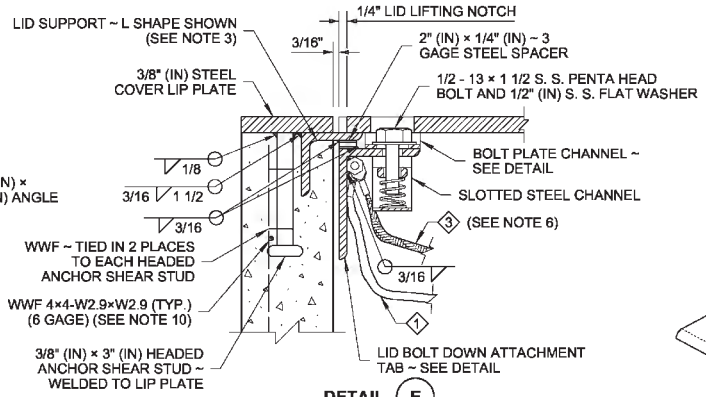

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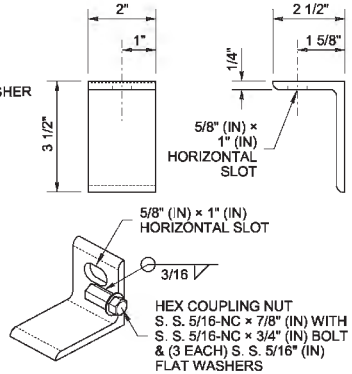
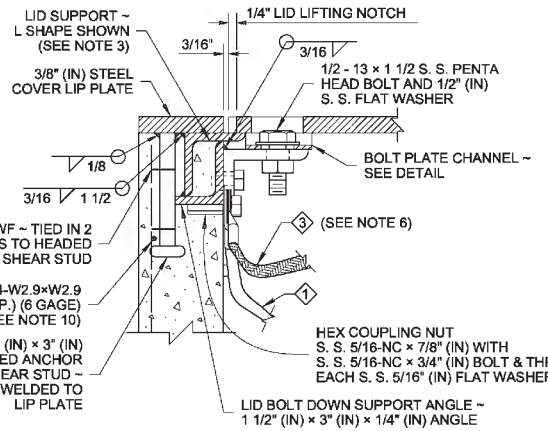


ALTERNATIVE 1
LID BOLT DOWN ATTACHMENT TAB
(SEE NOTE 12)



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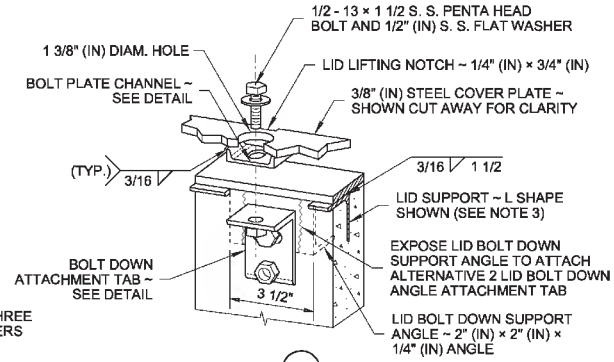

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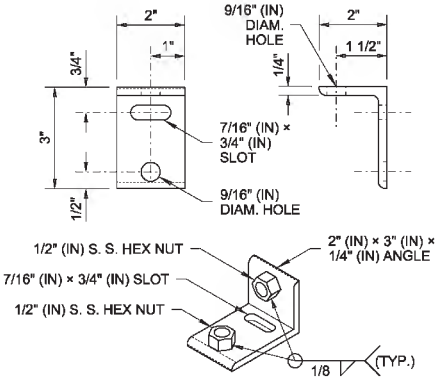
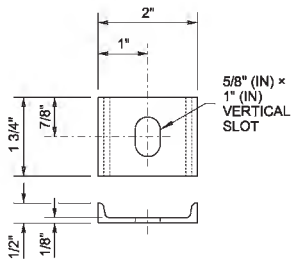
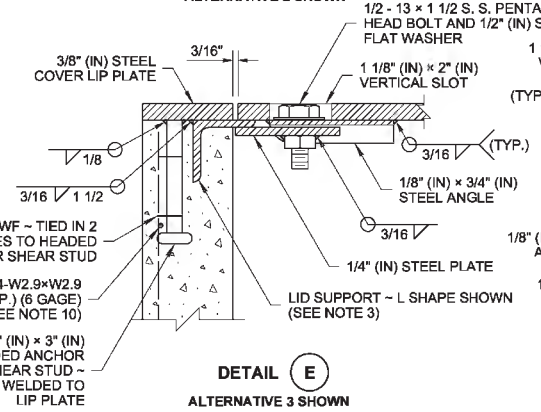
PERSPECTIVE VIEW



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



BOLT PLATE CHANNEL



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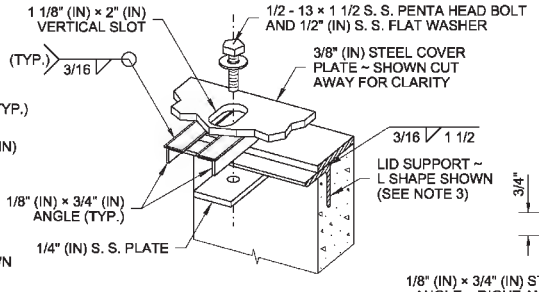

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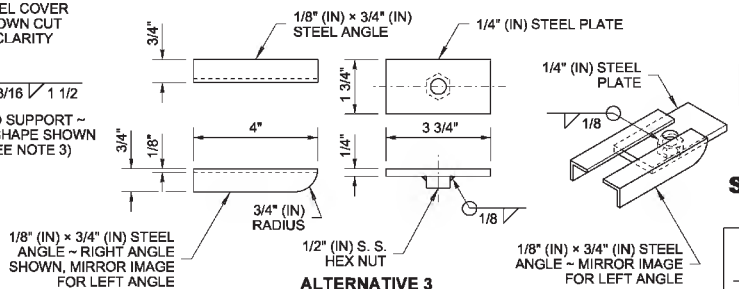
ALTERNATIVE 3 SHOWN
PERSPECTIVE VIEW



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

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LOCKING LID STANDARD DUTY JUNCTION BOX TYPES 1 & 2 STANDARD PLAN J-40.10-04

SHEET 2 OF 2 SHEETS

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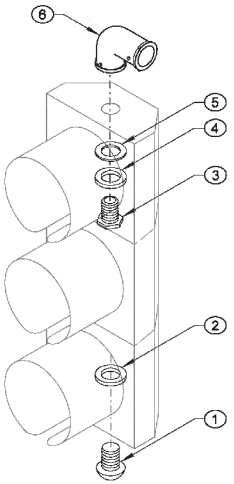
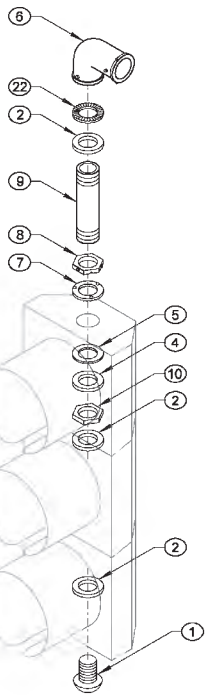


ARM MOUNT TYPE L



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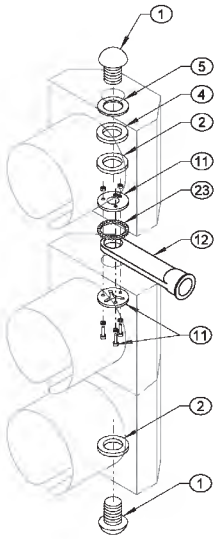

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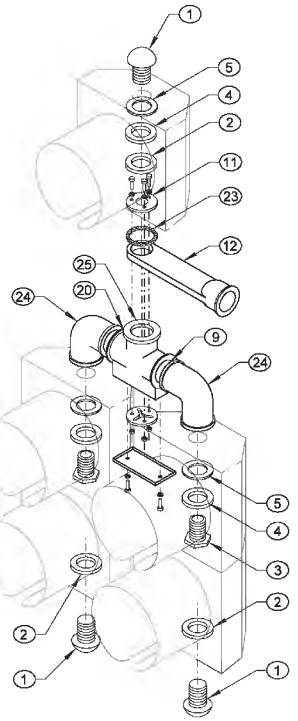
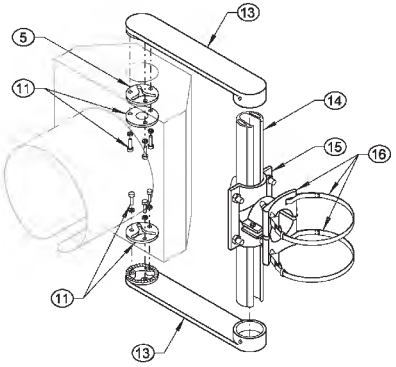


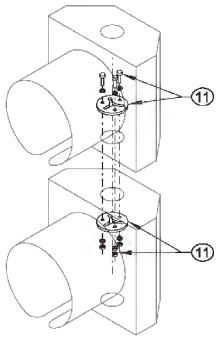
ARM MOUNT TYPE M-5S
(TYPE M WITH 5-SECTION HEAD)

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) × 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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SIGNAL HEAD MOUNTING DETAILS ~ MAST ARM AND SPAN WIRE MOUNTINGS

STANDARD PLAN J-75.20-01

SHEET 1 OF 2 SHEETS

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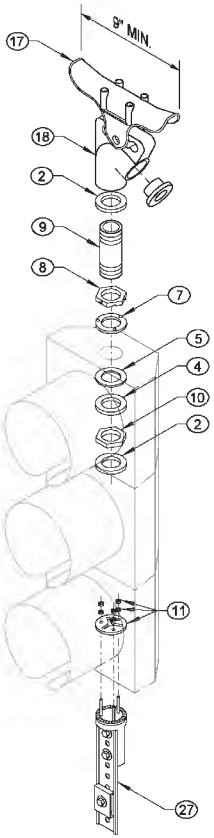
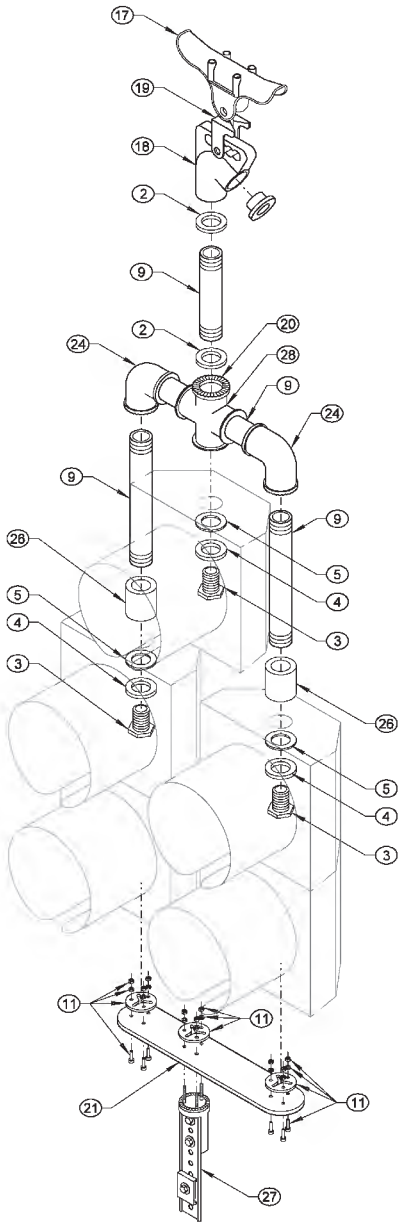
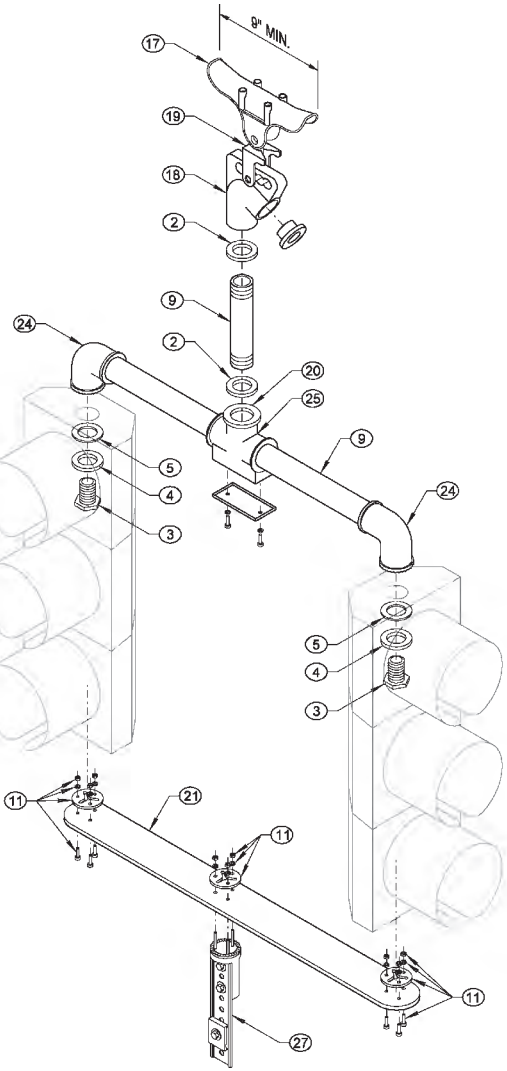


SPAN WIRE
TYPE P (1 HEAD)



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

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