

Set No. _____

**Specifications, Proposal,
and Contract Documents for:**

**NE 100th St / 132nd Ave NE
Intersection Improvements**

CIP No. TRC-1380000

Job No. 45-24-PW



**City of Kirkland
Department of Public Works
123 Fifth Avenue
Kirkland, Washington 98033**

**CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS**

**NE 100th St / 132nd Ave NE Intersection Improvements
CIP NO. TRC-1380000
JOB NO. 45-24-PW**

Certificate of Engineer:

The Special Provisions and drawings contained herein have been prepared by or under the direction of the undersigned, whose seal as a Professional Engineer licensed to practice in the State of Washington, is affixed below.



Justin K. Chan, P.E.
Transpo Group USA, Inc.

Approved for Construction:

A handwritten signature in blue ink, appearing to read "Rob English", written over a horizontal line.

Rob English
Capital Division Manager



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City of Kirkland

INVITATION TO BID

INVITATION TO BID

Notice is hereby given that the City of Kirkland will receive sealed bids in the office of the Purchasing Agent, City Hall, 123 Fifth Avenue, Kirkland, Washington, at 2:00 P.M., local time on September 18, 2025, for the project hereinafter referred to as:

NE 100th St / 132nd Ave NE Intersection Improvements
CIP NO. TRC-1380000
PROJECT JOB NO. 45-24-PW

At said time all bids will be opened and publicly read aloud. Each bid shall be accompanied by a bid proposal deposit in the form of a cashier's check or a bond issued on a form acceptable to your surety made payable to the City of Kirkland for a sum of not less than five percent (5%) of the total bid amount. No bid shall be considered unless accompanied by such bid proposal deposit. Incomplete proposals and proposals received after the time stated above will not be considered. Faxed or emailed responses are not acceptable.

The work to be performed under these specifications consists of furnishing all labor, tools, materials, and equipment necessary for constructions of the **NE 100th St / 132nd Ave NE Intersection Improvements**. Specific work includes, but is not limited to the construction of a new signalized intersection, including roadway illumination improvements, new curb ramps at the intersection, 2" grind and overlay of the intersection bounded by the curb returns, and new left-turn lanes. The estimated cost for this project is in the range of \$1,125,000 to \$1,375,000 based on the base bid.

The City will not sell bid packages. Plans, specifications, and addenda may be viewed and obtained online at www.bxwa.com. Click on: "Posted Projects"; "Public Works", "City of Kirkland". The Bidders List is maintained by the Builder's Exchange of Washington, Inc. Registration for the bidder's list may be made online, by phoning (425) 258-1303, or at Builder's Exchange of Washington located at 2607 Wetmore Ave, Everett, WA.

The City of Kirkland in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

Questions regarding this project shall be submitted in writing to Scott Gonsar, PE via email at SGonsar@kirklandwa.gov. Bidders shall submit questions no later than 4:00 P.M. on September 12, 2025.

The City reserves the right to reject any and all bids, and to waive any informalities in the bidding, and to make the award to the lowest, responsive, responsible bidder as best serves the interests of the City.

No bids may be withdrawn within forty-five (45) after the actual date of the bid opening.

Published: Daily Journal of Commerce – September 2, 2025 - September 9, 2025

GENERAL INFORMATION, PROPOSAL, & CONTRACT



City of Kirkland



CITY OF KIRKLAND

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CITY OF KIRKLAND INFORMATION FOR BIDDERS

Bidders must bid on all items contained in the proposal.

The omission or deletion of any bid item will be considered non-responsive and shall be cause for rejection of the bid.

Submit your proposal on the Bid Proposal and other forms which are enclosed, or make a copy of the required forms and submit these documents.

The following forms must be executed in full with submittal of the bid:

1. BIDDER RESPONSIBILITY CRITERIA CHECKLIST
2. SUBCONTRACTOR RESPONSIBILITY CRITERIA CHECKLIST
3. PROPOSAL

The lump sum or unit prices must be shown in the spaces provided on the bid schedule.

Show total bid price in both words and figures on the Proposal.

The Proposal form must be completed in full, signed and dated.

4. BID BOND

A surety issued bid bond must be executed by the bidder and its surety company. The amount of the bid bond shall be not less than five percent (5%) of the total amount bid and may be shown in dollars or on a percentage basis. (A cashier's check payable to the City of Kirkland and issued for an amount not less than 5% of the total bid may be submitted in lieu of a bid bond.)

5. NONCOLLUSION AFFIDAVIT - Notarized
6. STATEMENT OF BIDDER'S QUALIFICATIONS

This form must be filled in and signed. The owner reserves the right to check all statements and to judge the adequacy of the bidder's qualifications.

7. SUBCONTRACTOR IDENTIFICATION LIST

This form must be completed for HVAC, plumbing, and electrical subcontractors if the estimate exceeds \$1,000,000.

The following forms are to be executed after the contract is awarded:

1. CONTRACT
2. PERFORMANCE AND PAYMENT BOND
3. CONTRACTOR'S DECLARATION OF OPTION FOR MANAGEMENT OF STATUTORY
RETAINED PERCENTAGE; RETAINED PERCENTAGE ESCROW AGREEMENT

To be executed by the successful bidder based on bidder's selection of option.

4. CERTIFICATES OF INSURANCE

To be executed by the successful bidder and by an acceptable insurance company. The City of Kirkland must be named as an additional insured.

5. STATEMENT(S) OF INTENT TO PAY PREVAILING WAGES

Affidavit certifying all employees of Contractor and Subcontractor shall be paid no less than the Prevailing Wage Rate(s) as determined by the Industrial Statistician of the Washington State Department of Labor and Industries.

SPECIAL NOTE: Prior to commencing work, the contractor and all subcontractors must have applied and paid for a City of Kirkland business license

**CITY OF KIRKLAND
BIDDER RESPONSIBILITY CRITERIA**

It is the intent of City to award a contract to the low responsible bidder. Before award, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder. The bidder may be required by the City to submit documentation demonstrating compliance with the criteria. The bidder must:

- ☐ 1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of bid submittal;
- ☐ 2. Have a current Washington Unified Business Identifier (UBI) number;
- ☐ 3. Have:
 - a. Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - b. A Washington Employment Security Department number, as required in Title 50 RCW;
 - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
- ☐ 4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3). **Meet responsibility criteria in RCW 39.04.350**
- ☐ 5. Until December 31, 2017, not have violated more than one time the off-site, prefabricated, non-standard, project specific items reporting requirements of RCW 39.04.370.
- ☐ 6. For public works projects subject to the apprenticeship utilization requirements of RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the first date of advertising for the project.

CITY OF KIRKLAND
SUBCONTRACTOR RESPONSIBILITY CRITERIA

- ☐ A. The Contractor shall include the language of this section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this section apply to all subcontractors regardless of tier.
- ☐ B. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:
- ☐ 1. Have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
- ☐ 2. Have a current Washington Unified Business Identifier (UBI) number;
- ☐ 3. Have:
- a) Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RC
 - b) A Washington Employment Security Department number, as required in Title 50 RCW;
 - c) A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - d) An electrical contractor license, if required by Chapter 19.28 RCW;
 - e) An elevator contractor license, if required by Chapter 70.87 RCW.
- ☐ 4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3). **Meet responsibility criteria in RCW 39.04.350**
- ☐ 5. Until December 31, 2017, not have violated more than one time the off-site, prefabricated, non-standard, project specific items reporting requirements of RCW 39.04.370.
- ☐ 6. For public works projects subject to the apprenticeship utilization requirements of RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the first date of advertising for the project.

**CITY OF KIRKLAND
BID PROPOSAL**



NE 100th St / 132nd Ave NE Intersection Improvements

CIP NO. TRC-1380000

JOB NO. 45-24-PW

To: Director of Finance
City of Kirkland
123 Fifth Avenue
Kirkland, Washington 98033

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this proposal are those named herein; that this proposal is in all respects fair and without fraud; that it is made without collusion with any official or employee of the City of Kirkland, hereinafter called the Owner; and that the proposal is made without any connection or collusion with any person making another proposal on this contract.

The bidder further declares that it has carefully examined the contract documents for the construction of the project; that it has personally inspected the site; that it has satisfied itself as to the quantities involved, including materials and equipment and conditions of work involved, including the fact that the description of the quantities of work materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the contract documents; and that this proposal is made according to the provisions and under the terms of the contract documents, which documents are hereby made a part of this proposal.

The bidder further agrees that it has exercised its own judgment regarding the interpretation of subsurface information and has utilized all data which it believes pertinent from the engineer-architect, owner, and other sources in arriving at its conclusions.

The bidder agrees to hold its bid proposal open for 45 days after the actual date of bid opening and to accept the provisions of the Instructions to Bidders regarding disposition of bid bond.

The bidder agrees that if this proposal is accepted, it will, within ten (10) calendar days after notification of acceptance, execute the contract with the Owner in the form of contract included in the contract documents, and will, at the time of execution of the contract, deliver to the Owner the Performance and Payment Bond and all Certificates of Insurance required therein, and will, to the extent of its proposals, furnish all machinery, tools, apparatus, and other means of construction and do the work in the manner, in the time, and according to the methods as specified in the contract documents and required by the engineer or other project manager designated thereunder.

The bidder further agrees, if awarded the contract, to begin work within ten (10) calendar days after the date of the execution of the contract and to complete the construction within the time specified in Section 1-08.5 of the Special Provisions.

In the event the bidder is awarded the contract and shall fail to complete the work within the time limit or extended time limit agreed upon as more particularly set forth in the contract documents, liquidated damages shall be paid to the Owner per the specifications contained in the contract documents.

MUST BE SUBMITTED WITH PROPOSAL

The bidder further proposes to accept as full payment for the work proposed herein, the amounts computed under the provisions of the contract documents and based upon the lump sum and unit price amounts entered by the bidder for the various bid items included in the Bid Schedule. The bidder further agrees the lump sum and unit prices entered for the various bid items included in the Bid Schedule include all use taxes, overhead, profit, bond premiums, insurance premiums and all other miscellaneous and incidental expenses as well as all costs of materials, labor, tools and equipment required to perform and complete the work.

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

The undersigned bids and agrees to complete all construction of the **NE 100th St / 132nd Ave NE Intersection Improvement; JOB NO. 45-24-PW** for the following:

Total Computed Price (*in figures*): \$ _____

Washington State Sales Tax **10.3%** (*in figures*): N/A – Rule 171.

Total Bid (*in figures*): \$ _____

Total Bid (*in words*): _____

Receipt of Addenda No(s). _____ is hereby acknowledged.

I certify (or declare) under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct:

CONTRACTOR (Firm Name)

Location or Place Executed: (City, State)

By

Name and title of person signing

(Indicate whether Contractor is Partnership,
Corporation, or Sole Proprietorship)

Date

Washington State Contractor's
Registration Number

Contractor's Industrial Insurance
Account Number

MUST BE SUBMITTED WITH PROPOSAL

Employment Security Identification
Number

Uniform Business Identification
(UBI) Number

Contractor's Address:

Telephone Number

Fax Number

EMAIL

**** Bid proposal to be submitted in a sealed envelope marked "Bid Enclosed" for
NE 100th St / 132nd Ave NE Intersection Improvement, JOB NO. 45-24-PW.**

CITY OF KIRKLAND
BID SCHEDULE

NE 100th St / 132nd Ave NE Intersection Improvements
 JOB NO. 45-24-PW

Note: Unit prices for all items, all extensions, and the total amount of the bid must be shown. All entries must be typed or entered in ink.

Item No.	Item Description	Spec. Ref.	Est. Qty	Unit	Unit Price	Amount
1	Minor Change	SP 1-04.4	1	FA	\$20,000	
2	ADA Features Surveying	SP 1-05.4	1	LS		
3	Record Drawings (Minimum Bid \$2,500)	SP 1-05.18	1	LS		
4	SPCC Plan	1-07.15	1	LS		
5	Potholing	SP 1-07.17	4	EA		
6	Mobilization	SP 1-09.7	1	LS		
7	Off-Duty Uniformed Police Officer	SP 1-10.5	16	HR		
8	Project Temporary Traffic Control	SP 1-10.5	1	LS		
9	Sawcut Existing Pavement	SP 2-02	1596	LF		
10	Removal of Structures and Obstructions	SP 2-02	1	LS		
11	Crushed Surfacing Top Course	4-04	132	TON		
12	HMA CL 1/2" PG 58-22	SP 5-04	248	TON		
13	Planing Bituminous Pavement	SP 5-04	715	SY		
14	Pipe Conc. Storm Sewer Pipe 12 In. Diam.	SP 7-04	4	LF		
15	Ductile Iron Storm Sewer Pipe 12 In. Diam.	SP 7-04	29	LF		
16	Adjust Catch Basin to Grade	SP 7-05	2	EA		
17	Adjust Sanitary Sewer to Grade	SP 7-05	1	EA		
18	Catch Basin, Type 1	SP 7-05	2	EA		
19	Replace Frame and Grate with Vaned Grate	SP 7-05	3	EA		
20	Replace Frame and Grate with Solid Locking Lid	SP 7-05	1	EA		
21	Butterfly Valve 12 In.	7-12	2	EA		

MUST BE SUBMITTED WITH PROPOSAL

22	Hydrant Assembly	7-14	1	EA		
23	Erosion/Water Pollution Control	SP 8-01	1	LS		
24	Cement Conc. Traffic Curb and Gutter	8-04	253	LF		
25	Cement Conc. Pedestrian Curb	8-04	118	LF		
26	Raised Pavement Marker Type 1	SP 8-09	0.6	HUND		
27	Raised Pavement Marker Type 2	SP 8-09	1	HUND		
28	Cement Conc. Sidewalk	8-14	110	SY		
29	Cement Conc. Curb Ramp Type Perpendicular	8-14	2	EA		
30	Cement Conc. Curb Ramp Type Parallel	8-14	6	EA		
31	Traffic Signal System, Complete	SP 8-20	1	LS		
32	Permanent Signing	8-21	1	LS		
33	Removing Paint Line	8-22	3855	LF		
34	Plastic Stop Line	SP 8-22	142	SF		
35	Plastic Traffic Arrow	8-22	6	EA		
36	Plastic Bicycle Lane Symbol	8-22	8	EA		
37	Plastic Crosswalk Line	8-22	600	SF		
38	Paint Line	8-22	3855	LF		
39	Intersection/Conflict Zone Bike Lane Marking	SP 8-22	252	SF		

TOTAL COMPUTED BASE BID PRICE: \$_____



BID DEPOSIT

Herewith find deposit in the form of a cashier's check or certified check in the amount of \$ _____ which amount is not less than five percent (5%) of the total bid.

SIGN HERE _____

BID BOND

KNOW ALL PERSONS BY THESE PRESENTS:

That we, _____, as Principal, and
_____, as Surety, are
held and firmly bound unto the City of Kirkland, 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

Project Name

Job Number

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 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:

Note: If a Bid Bond is provided, it must be accompanied by a power of attorney which appoints the Surety's true and lawful attorney-in-fact to make, execute, seal and deliver this Bid Bond.

CITY OF KIRKLAND
NONCOLLUSION AFFIDAVIT
NE 100th St / 132nd Ave NE Intersection Improvements
CIP NO. TRC-1380000
JOB NO. 45-24-PW

STATE OF WASHINGTON)
) SS
COUNTY OF KING)

The undersigned, being duly sworn, on oath deposes and says that the person(s), firm, association, partnership or corporation herein named has 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.

Firm Name

Authorized Signature

Type Name

Title

Sworn to before me, this _____ day of _____, 20__.

Notary Public in and for the State of Washington
Residing at _____
My Commission Expires _____

NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., ET. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

CITY OF KIRKLAND STATEMENT OF BIDDER'S QUALIFICATIONS

Contractor Name: _____ Contact: _____

Business Address: _____

Business phone: _____ Fax: _____

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

Describe the general character of work performed by your company: _____

List five projects of a similar nature which Contractor has completed within the last 10 years. Include contract amount and contact information for references:

Project Name	Amount	Owner/Agency	Contact	Phone	Year Completed

List major equipment anticipated to be used on this project; indicate whether Contractor-owned or to be leased from others: _____

Bank reference(s): _____

Washington State Contractor Registration No.: _____

Uniform Business Identification No.: _____

I certify that other contracts now in progress or hereafter obtained will not interfere with timely performance of the City of Kirkland project should I become the successful bidder.

Authorized Signature: _____

Print Name: _____ Title: _____

CITY OF KIRKLAND
SUBCONTRACTOR IDENTIFICATION FOR CONTRACTS ESTIMATED TO BE
IN EXCESS OF ONE MILLION DOLLARS (\$1,000,000.00)

RCW 39.30.060 requires the following:

"(1) Every invitation to bid on a prime contract that is expected to cost one million dollars or more for the construction, alteration, or repair of any public building or public work of the state or a state agency or municipality as defined under RCW 39.04.010 ... shall require each prime contract bidder to submit:

(a) Within one hour after the published bid submittal time, the names of the subcontractors with whom the bidder, if awarded the contract, will subcontract for performance of the work of: HVAC (heating, ventilation, and air conditioning); plumbing as described in chapter 18.106 RCW; and electrical as described in chapter 19.28 RCW, or to name itself for the work; or

(b) Within forty-eight hours after the published bid submittal time, the names of the subcontractors with whom the bidder, if awarded the contract, will subcontract for performance of the work of structural steel installation and rebar installation.

The prime contract bidder shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the prime contract bidder must indicate which subcontractor will be used for which alternate. Failure of the prime contract bidder to submit as part of the bid the names of such subcontractors or to name itself to perform such work or the naming of two or more subcontractors to perform the same work shall render the prime contract bidder's bid non-responsive and, therefore, void."

Each bidder shall submit a list of:

1. HVAC, plumbing, electrical, structural steel installation, and rebar installation subcontractors; and
2. The specific items of work those subcontractors will perform on the contract; and
3. The specific items of work that will be performed by the bidder on the contract relating to work described in RCW 39.30.060.

**CITY OF KIRKLAND
SUBCONTRACTOR IDENTIFICATION LIST**

*REQUIRED IF ESTIMATE AMOUNT EXCEEDS \$1,000,000 (*Reference RCW 39.30.060 RCW*)

Proposed Subcontractors and items of work to be performed:

Subcontractor Name: _____

Item Numbers: _____

Subcontractor Name: _____

Item Numbers: _____

Subcontractor Name: _____

Item Numbers: _____

Subcontractor Name: _____

Item Numbers: _____

- make additional pages if necessary -

Work to be performed by Prime Contractor:

Item Numbers: _____

**CITY OF KIRKLAND
BIDDER'S CHECKLIST**

1. Have you reviewed the Bidder Responsibility and Subcontractor Responsibility Criteria?
2. Have you enclosed a bid bond or certified check with your bid? (Must be at least 5% of the total amount bid)
3. Have you entered a bid amount for all items and all schedules?
4. Do the written amounts of the proposal agree with the amounts shown in the figures?
5. Have you acknowledged receipt of addenda?
6. Has the proposal been properly completed and signed?
7. Have you completed the Statement of Bidder's Qualifications?
8. Have you completed the City of Kirkland Non-collusion Affidavit?
9. Have you completed the Subcontractor Identification List? (This is to be completed for HVAC, plumbing, and electrical subcontractors if the estimate amount exceeds \$1,000,000.)
10. Bid proposal to be submitted in a sealed envelope marked "Bid Enclosed" for:

CONTRACT

INFORMATION ONLY

The following forms must be executed and submitted by the successful bidder within ten (10) calendar days following Notice of Award.



City of Kirkland



CITY OF KIRKLAND

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CITY OF KIRKLAND PUBLIC WORKS AGREEMENT

Version:063020

NE 100th St / 132nd Ave NE Intersection Improvements
JOB NO. 45-24-PW

This agreement is made and entered into this ____ day of _____, 20____, by and between **CONTRACTOR NAME**, hereinafter called the "Contractor" and the City of Kirkland, hereinafter called the "City."

W I T N E S S E T H:

Whereas, pursuant to the invitation of the City extended through an officially published "Invitation to Bid," the Contractor did, in accordance therewith, file with the City a proposal containing an offer which was invited by said notice, and

Whereas, the City has heretofore determined that said offer was the lowest responsible bid submitted; now, therefore, it is agreed:

Section 1. That Contractor shall comply in every way with the requirements of those certain specifications entitled: "NE 100th St / 132nd Ave NE Intersection Improvements, Job No. 45-24-PW"

The further terms, conditions and covenants of the contract are set forth in the following contract documents which are hereby made a part of this agreement by actual attachment or by this reference thereto as follows:

- A. Invitation to Bid, as published by the City.
- B. Specifications prepared for this project by the City and named above by title.
- C. Detailed Plans listed and described in said Specifications, together with those which may be issued as supplements thereof.
- D. The bid proposals submitted by the Contractor as to those items and/or alternatives accepted by the City.
- E. Any written change orders, additions or deletions, if any, issued by the City, pursuant to this agreement.
- F. Indemnification and insurance provisions included in the project documents shall apply to this agreement.

Section 2. In consideration of faithful compliance with the terms and conditions of this agreement, whether set forth herein or incorporated by reference, the Owner shall pay to the Contractor, at the times and in the manner provided in said specifications, the total sum of _____ dollars (\$_____) which sum is subject, however, to increase or decrease in such proportion as the quantities named in said proposal are so changed, all as in said specifications and proposal provided.

In witness whereof, said Contractor and said City have caused this agreement to be executed on the day and year first written above.

CONTRACTOR (Firm Name)

Signature of authorized officer

Name and title of officer (print or type)

WA Contractor's Registration Number

Industrial Insurance Account Number

Uniform Business Identification (UBI) Number

Phone Number

(For corporations, LLC's and other legal entities)

STATE OF WASHINGTON)
) SS
COUNTY OF KING)

On this day before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared _____, to me known to be the _____ of _____, the legal entity that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said legal entity, for the uses and purposes therein set forth, and on oath stated that he/she was authorized to sign said instrument.

Given under my hand and official seal this _____ day of _____, 2____.

Print Name: _____
NOTARY PUBLIC in and for the State of
Washington, residing _____
Commission expires: _____

(For individuals and d/b/a's)

STATE OF WASHINGTON)
) SS
COUNTY OF KING)

On this day before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared _____ and _____ to me known to be the individual(s) described herein and who executed the foregoing instrument, and acknowledged that he/she/they signed the same as his/her/their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this _____ day of _____, 2____.

Print Name: _____
NOTARY PUBLIC in and for the State of
Washington, residing _____
Commission expires: _____

CITY OF KIRKLAND

BY: _____
Julie Underwood, Deputy City Manager



PERFORMANCE BOND

Surety to have an A.M. Best rating of A:-VII or better.

Bond No. _____

KNOW ALL PERSONS BY THESE PRESENTS, that **CONTRACTOR NAME**, as Principal, and _____, (insert name of surety), as Surety, a corporation duly organized under the laws of the State of _____, (insert Surety's state of incorporation), and authorized to do business as a surety in the State of Washington, are held and firmly bound unto the City of Kirkland (City) in the sum of _____ dollars (\$_____), lawful money of the United States of America, plus the total amount of extra orders issued by the City to the Principal pursuant to the terms of the Contract referred to in the next succeeding paragraph hereof, for the payment whereof Principal and Surety bind ourselves, and our heirs, executors, administrators, representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has been awarded, and is about to enter into, a written Contract with the City for **NE 100th St / 132nd Ave NE Intersection Improvements, Job No 45-24-PW**, which is hereby made a part of this bond as if fully set forth herein;

NOW, THEREFORE, the condition of this bond is such that:

1. If the Principal shall completely and faithfully perform all of its obligations under the Contract, including any warranties required thereunder, and all modifications, amendments, additions, and alterations thereto, including modifications which increase the contract price or time for completion, with or without notice to the surety; and
2. If the Principal shall indemnify and hold the City harmless from any and all losses, liability, damages, claims, judgments, liens, costs, and fees of any type that the City may be subject to because of the failure or default of the Principal in the performance of any of the terms, conditions, or obligations of the Contract, including all modifications, amendments, additions, and alterations thereto, and any warranties required thereunder;

THEN THIS obligation shall be null and void; otherwise to remain in full force and effect. If the City shall declare Principal to be in default of the Contract, and shall so notify Surety, Surety shall, within a reasonable time which shall not exceed 14 days, except for good cause shown, notify the City in writing of the manner in which surety will satisfy its obligations under this Bond.

Nonpayment of the Bond premium will not invalidate this Bond nor shall the City be obligated for the payment thereof. The Surety hereby waives notice of any modification of the Contract or extension of time made by the City.

Signed this _____ day of _____, 2____.

Principal: _____

Surety: _____

By: _____

By: _____

Title: _____

Title: _____

Address: _____

Address: _____

City/Zip: _____

City/Zip: _____

Telephone: () _____

Telephone: () _____

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



LABOR, MATERIAL AND TAXES PAYMENT BOND

Surety to have an A.M. Best rating of A:-VII or better.

Bond No. _____

KNOW ALL PERSONS BY THESE PRESENTS, that, **CONTRACTOR NAME**, as Principal, and _____, (insert name of surety), as Surety, a corporation duly organized under the laws of the State of _____ (insert Surety's state of incorporation), and authorized to do business as a surety in the State of Washington, are held and firmly bound unto the City of Kirkland (City) for the use and benefit of claimants as hereinafter defined, in the sum of _____ **Dollars (\$_____)**, lawful money of the United States of America, plus the total amount of any extra orders issued by the City, for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has been awarded, and is about to enter into, a Contract with City of Kirkland for **NE 100th St / 132nd Ave NE Intersection Improvements, Job No 45-24-PW**, which contract is by this reference made a part hereof;

WHEREAS, the contract is a public works contract, subject to the provisions of RCW Titles 39 and 60;

NOW, THEREFORE, the conditions of this obligation are such that, if the Principal shall promptly make payment to all claimants as hereinafter defined, for (a) all labor and material used or reasonably required for use in the performance of the contract and (b) all taxes, increases, and penalties incurred on the above-referenced contract under Titles 50, 51, and 82 RCW which may be due, then this obligation shall be void; otherwise, it shall remain in full force and effect, subject, however, to the following conditions: A claimant is defined as and includes (a) a person claiming to have supplied labor or materials for the prosecution of the work provided for in the contract, including any person having direct contractual relationship with the contractor furnishing the bond or direct contractual relationship with any subcontractor, or an assignee of such person, (b) the state with respect to taxes incurred on the above-referenced contract under Titles 50, 51, and 82 RCW which may be due and (c) any other person or entity as allowed or required by law.

3. The Principal and Surety hereby jointly and severally agree with the City that every claimant as herein defined, who has not been paid in full prior to Final Acceptance of the project, or materials were furnished by such claimant, has an action on this bond for such sum or sums as may be justly due claimant, and may have execution thereon. The City shall not be liable for the payment of any costs or expenses of any such suit or action.

(Form continues on next page)

4. No suit or action shall be commenced hereunder by any claimant (except the state with respect to taxes, increases, and penalties incurred on the above-referenced contract under Titles 50, 51, and 82 RCW which may be due) unless the claimant has sent the written notice required under RCW Title 39 to the Principal and to the City's Purchasing Agent by registered or certified mail, or by hand delivery, no later than 30 days after Final Acceptance of the Project.

The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against the improvement, whether or not claim for the amount of such lien be presented under and against this bond.

The Surety hereby waives notice of any modification of the contract or extension of time made by the City.

Signed this _____ day of _____, 2____

Principal: _____ Surety: _____

By: _____ By: _____

Title: _____ Title: _____

Address: _____ Address: _____

City/Zip: _____ City/Zip: _____

Telephone: () _____ Telephone: () _____

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

END OF LABOR, MATERIAL AND TAXES PAYMENT BOND FORM

CITY OF KIRKLAND
CONTRACTOR'S DECLARATION OF OPTION FOR MANAGEMENT
OF STATUTORY RETAINED PERCENTAGE

NE 100th St / 132nd Ave NE Intersection Improvements
JOB NO. 45-24-PW

Monies reserved under provisions of Chapter 60.28 RCW, at the option of the Contractor, shall be:

*Select
One*

- ☐ (1) Retained in a fund by the City. No interest will be earned on the retained percentage amount under this election.
- ☐ (2) Retainage Bond
- ☐ (3) Placed in escrow with a bank or trust company by the City. When the monies reserved are to be placed in escrow, the City will issue a check representing the sum of the monies reserved payable to the bank or trust company and the Contractor jointly. Such check shall be converted into bonds and securities chosen by the Contractor and approved by the City and the bonds and securities held in escrow. (For the convenience of those Contractors choosing option (3) a City approved Form of Escrow Agreement is included on the next page and should be completed and submitted with the executed contract.)

The Contractor in choosing option (3) agrees to assume full responsibility to pay all costs which may accrue from escrow services, brokerage charges or both, and further agrees to assume all risks in connection with the investment of the retained percentages in securities.

- ☐ (4) Deposited by the City in an interest-bearing account at the FDIC insured bank currently providing contracted banking services to the City of Kirkland. Interest on such account shall be paid to the contractor. Any fees incurred shall be the responsibility of the contractor.

CONTRACTOR:

Signature: _____

Print or Type Name: _____

Title: _____

Date: _____

RETAINAGE BOND
RETURN THIS FORM IF RETAINAGE BOND OPTION IS SELECTED

Contract Title	_____
Contract Number	_____
Contractor Name	_____

The Undersigned, _____, existing under and by virtue of the laws of the State of Washington and authorized to do business in the State of Washington as Principal, and _____ organized and existing under the laws of the State of _____ and authorized to transact business in the State of Washington as Surety, are jointly and severally held and bound unto _____, hereinafter called Obligee, and are similarly held and bound unto the beneficiaries of the trust fund created by RCW 60.28, in the penal sum of

(\$ _____), Which is 5% of the principal's price on Contract ID _____.

WHEREAS, on the _____ day of _____, 2____, the said principal herein executed a contract with the Obligee, for the Contract specified above, Contract ID Number _____.

WHEREAS, said contract and RCW 60.28 require the Obligee to withhold from the Principal the sum of ____% from monies earned on estimates during the progress of the construction, herein after referred to as earned retained funds.

NOW WHEREAS, Principal has requested that the Obligee not retain any earned retained funds as allowed under RCW 60.28.

NOW THEREFORE, the condition of the obligation is such that the Principal and Surety are held and bound unto the beneficiaries of the trust fund created by RCW 60.28 in the penal sum of _____ percent (____%) of the final contract cost which shall include any increases due to change orders, increases in quantities of work or the addition of any new item of work. If the Principal shall use the earned retained funds, which will not be retained, for the trust fund purposes of RCW 60.28, then this obligation shall be null and void; otherwise, it shall remain in full force and effect until release is authorized in writing by the Obligee. This bond and any proceeds therefrom shall be made subject to all claims and liens and in the same manner and priority as set forth for retained percentages in RCW 60.28.

PROVIDED HOWEVER, that:

1. The liability of the surety under this bond shall not exceed 5% or 50% of the total amount earned by the Principal if no monies are retained by the Obligee on estimates during the progress of construction.
2. Any suit under this bond must be instituted within the time provided by applicable law.

Witness our hands this _____ day of _____, 2____.

SURETY

PRINCIPAL

By: _____
Name/Title

By: _____
Name/Title

OF: _____

OF: _____

Surety Name and Local Office of Agent: _____

Surety Address and Phone of Local Office and Agent: _____

CITY OF KIRKLAND
RETAINED PERCENTAGE ESCROW AGREEMENT

NE 100th St / 132nd Ave NE Intersection Improvements
JOB NO. 45-24-PW

Escrow No. _____

City of Kirkland
123 Fifth Avenue
Kirkland, Washington 98033

Contractor: _____

Address: _____

Project Description: _____

TO: Escrow Bank or Trust Company:

Name: _____

Address: _____

Attention: _____

The undersigned, _____, herein referred to as the Contractor, has directed the City of Kirkland to deliver to you its warrants, which shall be payable to you and the Contractor jointly. Such warrants are to be held and disposed of by you in accordance with the following instructions and upon the terms and conditions hereinafter set forth.

INSTRUCTIONS

1. Warrants or checks made payable to you and the Contractor jointly upon delivery to you shall be endorsed by you and forwarded for collection. The moneys will then be used by you to purchase, as directed by the Contractor, bonds or other securities chosen by the Contractor and approved by the City of Kirkland. Attached is a list of such bonds, or other securities approved by the City of Kirkland. Other bonds or securities, except stocks, may be selected by the Contractor, subject to the express written approval of the City of Kirkland. Purchase of such bonds or other securities shall be in a form which shall allow you alone to reconvert such bonds or other securities into money if you are required to do so at the direction of the City of Kirkland and Contractor.
2. When and as interest on the securities held by you pursuant to this agreement accrues and is paid, you shall collect such interest and forward it to the Contractor at its address designated below unless otherwise directed by the Contractor.
3. You are not authorized to deliver to the Contractor all or any part of the securities held by you pursuant to this agreement (or any moneys derived from the sale of such securities, or the

negotiation of the City of Kirkland's warrants) except in accordance with written instructions from the City of Kirkland. Compliance with such instructions shall relieve you of any further liability related thereto. The estimated completion date on the contract underlying this Escrow Agreement is _____.

4. The Contractor agrees to pay you as compensation for your services hereunder as follows:

Payment of all fees shall be the sole responsibility of the Contractor and shall not be deducted from any property placed with you pursuant to this agreement until and unless the City of Kirkland directs the release to the Contractor of the securities and moneys held hereunder whereupon you shall be granted a first lien upon such property released and shall be entitled to reimburse yourself from such property for the entire amount of your fees as provided for hereinabove. In the event that you are made a party to any litigation with respect to the property held by you hereunder, or in the event that the conditions of this escrow are not promptly fulfilled or that you are required to render any service not provided for in these instructions, or that there is any assignment of the interests of this escrow or any modification hereof, you shall be entitled to reasonable compensation for such extraordinary services from the Contractor and reimbursement from the Contractor for all costs and expenses, including attorneys fees occasioned by such default, delay, controversy, or litigation.

5. This agreement shall not be binding until executed by the Contractor and the City of Kirkland and accepted by you.
6. This instrument contains the entire agreement between you, the Contractor and the City of Kirkland, with respect to this escrow and you are not a part nor bound by any instrument or agreement other than this; you shall not be required to take notice of any default or any other matter nor be bound by nor required to give notice or demand, nor required to take any action whatever, except as herein expressly provided; you shall not be liable for any loss or damage not caused by your own negligence or willful misconduct.
7. The foregoing provisions shall be binding upon the assigns, successors, personal representatives, and heirs of the parties hereto.
8. The Contractor's Federal Income Tax Identification number is _____.

** Please note: Written release will be issued by the Director of Finance & Administration. For further information, contact the Purchasing Agent at (425) 587-3123.

The undersigned have read and hereby approve the instructions as given above governing the administration of this escrow and do hereby execute this agreement on this ____ day of _____, 2____.

CONTRACTOR:

CITY OF KIRKLAND:

By: _____
Signature

By: _____
Signature

Print or Type Name

Print or Type Name

Title

Title

Address: _____

123 Fifth Avenue
Kirkland, Washington 98033

The above escrow instructions received and accepted this ____ day of _____, 2____.

ESCROW BANK OR TRUST CO:

By: _____
Authorized Signature

Print or Type Name

Title

Securities Authorized by City of Kirkland (select one):

1. Bills, certificates, notes or bonds of the United States;
2. Other obligations of the United States or its agencies;
3. Obligations of any corporation wholly-owned by the government of the United States;
4. Indebtedness of the Federal National Mortgage Association; and
5. Time deposits in commercial banks.

RETURN THIS SIGNED AGREEMENT TO:

City of Kirkland
Attn: Purchasing Agent
123 Fifth Avenue
Kirkland, Washington 98033



CITY OF KIRKLAND RETAINAGE RELEASE REQUIREMENTS

DOCUMENTS REQUIRED TO BE ON FILE PRIOR TO RELEASE OF RETAINAGE

1. Intent to Pay Prevailing Wage (Contractor must generate including for subcontractors)

Department of Labor/Industries
Employment Standards Division
General Administration Building
Olympia, Washington 98504
(360) 956-5335
2. Notice of Completion of Public Works Contract (City generates)

Department of Revenue
Excise Tax Division
Olympia, Washington 98504
3. Affidavit of Wages Paid (Contractor must generate including for subcontractors)

Department of Labor/Industries
4. Certificate of Release - State Excise Tax by Public Works Contractor (Letter from State to City)

Department of Revenue
Department of Labor and Industries
Employment Security Department
5. Receipt for Payment in full or Release of Lien signed by Lien Claimant and filed with City
(Responsibility of Contractor to obtain)

Claims against retainage or Payment Bond filed with City by any such
subcontractor, workman, or material supplier.
6. Current insurance certificate through retainage release (Contractor generates)
7. Produce final invoice for retainage if bond is not selected (Contractor generates)

GENERAL SPECIAL PROVISIONS



City of Kirkland

SPECIAL PROVISIONS

Supplement to

2025

**WSDOT Standard
Specifications**





City of Kirkland

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City of Kirkland Special Provisions

INTRODUCTION

The work on this project shall be accomplished in accordance with the Standard Specifications for Road, Bridge and Municipal Construction, **2025** edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions supersede any conflicting provisions of the Standard Specifications.

The accompanying Plans and these Specifications and any Addenda thereto, show and describe the location and type of work to be performed under the **NE 100th St / 132nd Ave NE Intersection Improvements** project.

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 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 titles of headings of the Sections and subsections herein are intended for convenience or reference and shall not be considered as having any bearing on their interpretation.

Several types of Special Provisions are included in this contract and are differentiated as follows:

General Special Provisions (GSPs) are similar to Standard Specifications in that they typically apply to many public works projects. These can include:

- **Local Agency/APWA Approved GSPs** are modifications to the Standard Specifications prepared by the APWA Division 1 subcommittee, which is comprised of representatives of local agencies throughout the State of Washington. These GSPs are generally used throughout the state. APWA GSPs replace what was formerly referred to as "Division 1-99 APWA Supplement" in previous editions of the Standard Specifications for Road, Bridge and Municipal Construction. Denoted as: **(date APWA GSP)**
- **City of Kirkland GSPs** are modifications to the Standard Specifications prepared by the City of Kirkland Public Works Department, and commonly applicable to City of Kirkland projects. Denoted as: **(date COK GSP)**

Project-Specific Special Provisions normally appear only in the contract for which they were developed. Denoted as: **(*****)**

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.
- City of Kirkland Public Works Department Pre-Approved Plans and Policies, current year edition.
- City of Redmond Standard Specifications and Details, current year edition.
- NFPA 70, National Electrical Code, current edition.

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

DIVISION 1 – GENERAL REQUIREMENTS

DESCRIPTION OF WORK

This contract provides for the construction of a new signalized intersection, including roadway illumination improvements, new curb ramps at the intersection, 2" grind and overlay of the intersection bounded by the curb returns, and new left-turn lanes and all related Work, all in accordance with the Contract Plans, these Contract Special Provisions, and the Standard Specifications.

1-01 DEFINITIONS AND TERMS

1-01.3 Definitions

(January 19, 2022 APWA GSP)

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

Dates

Bid Opening Date

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

Award Date

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

Contract Execution Date

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

Notice to Proceed Date

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

Substantial Completion Date

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

Physical Completion Date

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

Completion Date

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

Final Acceptance Date

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

Supplement this Section with the following:

All references in the Standard Specifications or WSDOT General Special Provisions, to the terms "Department of Transportation", "Washington State Transportation Commission",

“Commission”, “Secretary of Transportation”, “Secretary”, “Headquarters”, and “State Treasurer” shall be revised to read “Contracting Agency”.

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

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

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

Additive

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

Alternate

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

Business Day

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

Contract Bond

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

Contract Documents

See definition for “Contract”.

Contract Time

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

Notice of Award

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

Notice to Proceed

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

Traffic

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

1-02 BID PROCEDURES AND CONDITIONS

(January 24, 2011 APWA GSP)

1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder

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.

(July 31, 2017 APWA GSP)

1-02.1(1) Supplemental Qualifications Criteria

Add the following new section:

In addition, the Contracting Agency has established Contracting Agency-specific and/or project-specific supplemental criteria, in accordance with RCW 39.04.350(3), for determining Bidder responsibility, including the basis for evaluation and the deadline for appealing a determination that a Bidder is not responsible. These criteria are contained in Section 1-02.14 Option C of these Special Provisions.

(January 1, 2016 COK GSP)

Bidders shall complete and sign the Statement of Bidder's Qualification contained in the Proposal. Said form must be submitted with the bid proposal.

After bids are opened, Contracting Agency may request that a bidder or all bidders provide supplemental information concerning responsibility in accordance with RCW 39.04.350(2). Such supplemental information shall be provided to Contracting Agency in writing within two (2) business days of the request. Whether bidder supplies this supplemental information within the time and manner specified or not, in addition to consideration of this additional information, Contracting Agency may also base its determination of responsibility on any available information related to the supplemental criteria.

If Contracting Agency determines that a bidder is not responsible, Contracting Agency will provide, in writing, the reasons for such determination at which point the contractor will be deemed disqualified in accordance with WSDOT Standard Specification 1-02.14(10) and the proposal rejected. The bidder may appeal the determination within two (2) business days after receipt of the determination by presenting additional information to Contracting Agency. Contracting Agency will consider the additional information before issuing its final decision. If Contracting Agency's final decision affirms that the bidder is not responsible, Contracting Agency will not execute a contract with any other bidder until two (2) business days after the bidder determined to be not responsible has received Contracting Agency's final determination. The failure or omission of a bidder to receive or examine any form, instrument, addendum or other document shall in no way relieve any bidder from obligations with respect to the bid or to the contract.

Any bidder may, within five (5) business days before the bid submittal deadline, request that Contracting Agency modify the supplemental criteria. Contracting Agency will evaluate the information submitted by the bidder and respond before the submittal deadline. If the

evaluation results in a change of the criteria, the Contracting Agency will issue an Addendum to the bidding documents identifying the new criteria.

Supplemental Criteria. Contracting Agency acknowledges that Change Orders (changes, extra work, requests for equitable adjustment and claims (defined as including demands for money or time in excess of the contract amount or contract time)) are ubiquitous on public works construction projects. The expeditious resolution of Change Orders is critical to the on budget and on time successful completion of a public works project. Thus, the City has established the following relevant supplemental bidder responsibility criteria applicable for the project:

1. Criterion. The bidder must demonstrate a record of successful and timely resolution of Change Orders including compliance with public contract Change Order resolution procedures (e.g. timely notice of event giving rise to the Change Order, timely submission of a statement of the cost and/or impact of the Change Order unless the bidder is able to show extenuating circumstances that explain bidder's failure to timely provide such information to the satisfaction of Contracting Agency.
2. Documentation. As evidence that the bidder meets the supplemental responsibility criteria, after bids are opened and within two (2) business days of the public notice of Contracting Agency's tabulation of bids, the lowest responsive bidder must submit the following documentation of public works projects completed within the previous three (3) years and include for each project the following:
 - a. The Owner and contact information for the Owner;
 - b. A listing of Change Orders and a signed statement from the bidder that the project timelines concerning resolution of Change Orders was complied with, and if not, provide a written explanation of what the bidder believes to be the extenuating circumstances excusing compliance with the Contract Change Order notice and claim provisions.

Contracting Agency may contact owners listed by the bidders to validate the information provided by a bidder.

(June 27, 2011 APWA GSP)

1-02.2 Plans and Specifications

Delete this section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed can be found in the Call for Bids (Invitation 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")	2	Furnished automatically upon award.
Contract Special Provisions	2	Furnished automatically upon award.

Large plans (e.g., 22" x 34")	N/A	Furnished only upon request.
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Additional plans and Contract Provisions may be obtained by the Contractor from the source stated in the Call for Bids, at the Contractor's own expense.

(December 30, 2022 APWA GSP Option A)

1-02.4(1) General

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

Prospective Bidders desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing soon enough to allow a written reply to reach all prospective Bidders before the submission of their Bids.

(March 8, 2013 APWA GSP)

1-02.4(2) Subsurface Information

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

The Summary of Geotechnical Conditions and the boring logs, if and when included as an appendix to the Special Provisions, shall be considered as part of the Contract.

1-02.5 Proposal Forms

(November 25, 2024 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 DBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be in legible figures (not words) written in ink or typed and expressed in U.S. dollars. 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

(November 25, 2024 APWA Option B)

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.

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

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency. 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.

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 bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture.

(March 8, 2013 APWA GSP)

1-02.7 Bid Deposit

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.

(January 1, 2016 COK GSP)

1-02.8 Noncollusion Declaration and Lobbying Certification

The following new paragraph is inserted at the end of Section 1-02.8:

Conflict of Interest

The bidder affirms that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services

hereunder. The Contractor further covenants that in the performance of this contract, no person having any conflicting interest shall be employed. Any interest on the part of the Contractor or its employees must be disclosed forthwith to the City of Kirkland. If this contract is within the scope of a Federal Housing and Community Development Block Grant program, the Contractor further covenants that no person who presently exercises any functions or responsibilities in connection with the block grant program has any personal financial interest, direct or indirect, in this contract.

(July 23, 2015 APWA GSP)

1-02.10 Withdrawing, Revising, or Supplementing Proposal

Delete this section, and replace it with the following:

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

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

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

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

1-02.13 Irregular Proposals

(September 3, 2024 APWA GSP)

Delete this section and replace it with the following:

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

- applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
- h. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award in accordance with Section 1-07.11;
 - i. The Bidder fails to submit a DBE Bid Item Breakdown (WSDOT Form 272-054), if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
 - j. The Bidder fails to submit the Bidder Questionnaire (DOT Form 272-022), if applicable as required by Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions; or
 - k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.
2. A Proposal may be considered irregular and may be rejected if:
- a. The Proposal does not include a unit price for every Bid item;
 - b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
 - c. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;
 - d. The completed Proposal form contains unauthorized additions, deletions, alternate Bids, or conditions;
 - e. Receipt of Addenda is not acknowledged;
 - f. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
 - g. If Proposal form entries are not made in ink.

(May 17, 2018 APWA GSP, Option A)

1-02.14 Disqualification of Bidders

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.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1). To assess bidder responsibility, the Contracting Agency reserves the right to request documentation as needed from the Bidder and third parties concerning the Bidder's compliance with the mandatory bidder responsibility criteria.

If the Contracting Agency determines the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1) 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.

(December 30, 2022 APWA GSP)

1-02.15 Pre Award Information

Revise this section to read:

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

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

1-03 AWARD AND EXECUTION OF CONTRACT

(December 30, 2022 APWA GSP)

1-03.1 Consideration of Bids

Revise this section to read:

After opening Bids, if two or more lowest responsive Bid totals are exactly equal, then the tie-breaker will be the Bidder with an equal lowest bid, that proposed to use the highest percentage of recycled materials in the Project, per the form submitted with the Bid Proposal. If those percentages are also exactly equal, then the tie-breaker will be determined by drawing as follows: Two or more slips of paper will be marked as follows: one marked "Winner" and the other(s) marked "unsuccessful". The slips will be folded to make the marking unseen. The slips will be placed inside a box. One authorized representative of each Bidder shall draw a slip from the box. Bidders shall draw in alphabetic order by the name of the firm as registered with the Washington State Department of Licensing. The slips shall be unfolded and the firm with the slip marked "Winner" will be determined to be the successful Bidder and eligible for Award of the Contract. Only those Bidders who submitted a Bid total that is exactly equal to the lowest responsive Bid, and with a proposed recycled materials percentage that is exactly equal to the highest proposed recycled materials amount, are eligible to draw.

1-03.3 Execution of Contract

(July 8, 2024 APWA GSP Option A)

Revise this section to read:

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

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

Within three (3) calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer of Coverage form for the Construction Stormwater General Permit with sections I, III, and VIII completed when provided. Before execution of the contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

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

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within the calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of five (5) additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

(January 1, 2016 COK GSP)

1-03.4 Contract Bond

Revise the first paragraph to read:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. Separate payment and performance bonds are required and 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, and
 - c. Have an A.M. best rating of A:VII or better.
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).

(December 30, 2022 APWA GSP)

1-03.7 Judicial Review

Revise this section to read:

All decisions 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 36.01.050 shall control venue and jurisdiction.

1-04 SCOPE OF THE WORK

(January 1, 2016 COK GSP)

1-04.1 Intent of the Contract

Section 1-04.1 is supplemented with the following:

All materials, tools, labor, and guarantees thereof of required to complete the work shall be furnished and supplied in accordance with the Plans, these Special Provisions, the Standard Specifications, and City of Kirkland Pre-Approved (Standard) Plans and Policies. The Contractor shall include all costs of doing this work within the contract bid item prices.

(December 30, 2022 APWA GSP)

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

Revise the second paragraph to read:

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

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

7. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

(May 30, 2019 APWA GSP)

1-04.4(1) Minor Changes

Delete the first paragraph and replace it with the following:

Payments or credits for changes amounting to \$20,000 or less may be made under the Bid item "Minor Change". At the discretion of the Contracting Agency, this procedure for Minor Changes may be used in lieu of the more formal procedure as outlined in Section 1-04.4, Changes. All "Minor Change" work will be within the scope of the Contract Work and will not change Contract Time

1-04.6 Variation in Estimated Quantities

(December 30, 2022 APWA GSP, Option B;)

Revise the first paragraph to read:

Payment to the Contractor will be made only for the actual quantities of Work performed and accepted in conformance with the Contract. When the accepted quantity of Work performed under a unit item varies from the original Proposal quantity, payment will be at the unit Contract price for all Work unless the total accepted quantity of the Contract item, adjusted to exclude added or deleted amounts included in change orders accepted by both parties, increases or decreases by more than 25 percent from the original Proposal quantity, and if the total extended bid price for that item at time of award is equal to or greater than 10 percent of the total contract price at time of award. In that case, payment for contract work may be adjusted as described herein:

(January 1, 2016 COK GSP)

1-04.11 Final Cleanup

Section 1-04.11 is deleted in its entirety and replaced with the following:

The Contractor shall perform final cleanup as provided in this Section. The Engineer will not establish the Physical Completion Date until this is done. All public and private property the Contractor occupied to do the Work, including but not limited to the Street Right of Way, material sites, borrow and waste sites, and construction staging area shall be left neat and presentable. Immediately after completion of the Work, the Contractor shall cleanup and remove all refuse and unused materials of any kind resulting from the Work. Failure to do the final cleanup may result in the final cleanup being done by the Owner and the cost thereof charged to the Contractor and deducted from the Contractor's final progress estimate.

The Contractor shall:

1. Remove all rubbish, surplus materials, discarded materials, falsework, piling, camp buildings, temporary structures, equipment, and debris;
2. Remove from the Project, all unneeded, oversized rock left from grading, surfacing, or paving unless the Contract specifies otherwise or the Engineer approves otherwise;

3. On all concrete and asphalt pavement work, flush the pavement clean and remove the wash water and debris;
4. Sweep and flush structure decks and remove wash water and debris;
5. Clean out from all open culverts and drains, inlets, catch basins, manholes and water main valve chambers, within the limits of the Project Site, all dirt and debris of any kind that is the result of the Contractor's operations;
6. Level and fine grade all excavated material not used for backfill where the Contract requires;
7. Fine grade all slopes;
8. Upon completion of grading and cleanup operations at any privately-owned site for which a written agreement between the Contractor and property owner is required, the Contractor shall obtain and furnish to the Engineer a written release from all damages, duly executed by the property owner, stating that the restoration of the property has been satisfactorily accomplished.;

All costs associated with cleanup shall be incidental to the Work and shall be included in the various Bid items in the Bid, and shall be at no additional cost to the Owner.

(January 27, 2021 COK GSP)

Add new Section 1-04.12.

1-04.12 Water, Electrical Power, Telecommunications, and Sanitary Sewer Requirements

Except where specifically indicated otherwise in the Contract Documents, the Contractor shall make all necessary arrangements and bear all costs as incidental to the Contract for permits, temporary hook-ups, usage fees, and decommissioning of temporary services for all water, electrical power, telecommunications, and/or sanitary sewer services necessary for performance of the Work.

1-05 CONTROL OF WORK

(January 27, 2021 COK GSP)

1-05.1 Authority of the Engineer

Section 1-05.1 is supplemented with the following:

When directed by the Engineer for purposes such as (but not limited to) maintaining unrestricted public access and use outside the Work area, maintaining an appropriate construction site appearance, and/or allowing full access to the Work by the Engineer or other City personnel, the Contractor shall cleanup and remove debris, refuse, and discarded materials of any kind resulting from the Work to meet those purposes. These activities shall be incidental to the bid items associated with the Work that generated the debris, refuse, and discarded materials. Failure to do so may result in cleanup done by the Owner and the cost thereof charged to the Contractor by either deducting from the next Progress Payment to the Contractor or direct billing from the City

(November 4, 2024, WSDOT GSP)

1-05.1(2) Requests for Information (RFI)

The fourth paragraph of Section 1-05.1(2) is revised to read

The Contractor may submit a RFI for one of the following reasons:

1. The Contractor believes there is information missing from the Contract Documents (Missing Information).
2. The Contractor believes a clarification of one or more of the Contract requirements is necessary (Clarification).
3. The Contractor needs to substitute a material that provides an equal or better level of performance as the one specified in the Contract (RFC - Material Substitution). Requests shall indicate the location(s), quantity, and shall describe how the material provides an equal or better level of performance as the material originally specified.
4. The Contractor requests a change to the Contract requirements for a reason other than one listed in items 1-3 of this Section (RFC - Other). To be considered, the request must not meet the requirements of a Value Engineering Change Proposal. To be considered, the request shall qualify as a Minor Change in accordance with Section 1-04.4(1) and shall describe how the change is beneficial to the project.

(January 1, 2020 COK GSP)

1-05.4 Conformity with and Deviations from Plans and Stakes

Section 1-05.4 is supplemented with the following:

Unless otherwise identified on Plans or in the Special Provisions, Unit Bid prices shall cover all costs for all surveying labor, equipment, materials, and supervision required to perform the Work. This shall include any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordination efforts.

(January 1, 2016 COK GSP)

Add new Section 1-05.4(1).

1-05.4(1) Roadway and Utility Surveys

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of the improvements under this contract. Except for the survey control data furnished by the Owner, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

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

To facilitate the establishment of lines and elevations, the Owner will provide the Contractor with primary survey control information consisting of descriptions of two primary control points used for the horizontal and vertical control. Primary control points will be described and shown on the right-of-way Plans. The Contractor shall check all control points for horizontal and vertical locations prior to use and report any discrepancy to the Engineer. Errors resulting from using control points which have not been verified, shall be the Contractor's responsibility.

At a minimum the Contractor shall provide following survey staking shall be required:

1. Construction centerline or an offset to construction centerline shall be staked at all angle points and 100-foot intervals on tangents.
2. Offset stakes of JUT Centerline at all angle points and at 50-foot intervals on tangents
 - a. Cut/fill shall reference the elevations of the lowest conduit.
 - b. Offset shall reference the location of the center of trench and list the width of the trench section.
3. Offset stakes of all structure control/location points shown on the undergrounding Plans.
 - a. Each vault, handhold, and junction box shall have a sets of off-set points provided each location point shown in the location tables Cut/Fill shall reference elevations of the finish grade of the top lid of the structure.
 - b. Each pole riser and stub up, shall have at least one set of off-set hubs provided with cut/fills to finish ground elevations.
 - c. Finish grade elevations of all structures shall be determined by the Contractor based on the typical sections and details provide on the Contract Drawings.
4. Offset stakes at face or walls.
5. Offset staking of all drainage structures and drainage pipes at 50-foot intervals.
6. Location of all right-of-way and easements adjacent to the work area as shown on the right-of-way Plans.
7. Offset of all permanent concrete sidewalks, curb ramps, and driveways.

Each stake shall have the following information: Hub elevation, offset distance to items being staked, cut/fill to proposed elevations, design elevation of items being staked.

The above information shall also be shown on a written Cut Sheet and provided to the City inspector 48-hours prior to installation of the items being staked.

The Contractor shall establish all secondary survey controls, both horizontal and vertical, as necessary to assure proper placement of all project elements based on the primary control points provided by the Engineer. Survey work shall be within the following tolerances:

Stationing	+.01 foot
Alignment	+.01 foot (between successive points)
Superstructure Elevations	+.01 foot (from plan elevations)
Substructure Elevations	+.05 foot (from plan elevations)
Sidewalk and Curb Ramp Elevations	+.01 foot (from plan elevations)

During the progress of the work, the Contractor shall make available to the Engineer all field books including survey information, footing elevations, cross sections and quantities.

The Contractor shall be fully responsible for the close coordination of field locations and measurements with appropriate dimensions of structural members being fabricated.

(March 9, 2023, WSDOT GSP, Option 4)

Contractor Surveying – ADA Features

ADA Feature Staking Requirements

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, and grades necessary for the construction of the ADA features. Calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility. The Contractor shall build the ADA features within the specifications in the Standard Plans and contract documents.

ADA Feature Contract Compliance

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

ADA Feature As-Built Measurements

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

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

Payment

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

"ADA Features Surveying", lump sum.

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

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

1-05.7 Removal of Defective and Unauthorized Work

Section 1-05.7, including title and subsections, is deleted and replaced with the following:

(November 4, 2024, WSDOT GSP)

Nonconforming Work

The Contracting Agency will not pay for Nonconforming Work.

Nonconforming Work is Work that in any way fails to meet the requirements of the Contract. This includes, but is not limited to:

- Work that does not conform to Contract requirements
- Work that does not meet Contract requirements

- Work done beyond the lines and grades set by the Plans or the Engineer
- Extra Work and materials furnished without the Engineer's written approval
- Defective Work
- Noncompliant Work
- Nonconforming Work
- Out of specification Work
- Rejected Work
- Unacceptable Work
- Unauthorized Work
- Unsuitable Work
- Unsatisfactory Work

Identification of Nonconforming Work

The Contractor is responsible for quality control and shall identify all Nonconforming Work. The Contracting Agency may also identify Nonconforming Work during inspection of Work that has been completed, is at an identified hold point, or has been identified by the Contractor as ready for inspection. However, failure by the Contracting Agency to identify Nonconforming Work shall not relieve the Contractor from their responsibility for the quality of the Work, nor shall it constitute acceptance or approval of the Nonconforming Work.

Reporting of Nonconforming Work

Unless otherwise specified, the Contractor shall immediately report all Nonconforming Work to the Engineer along with any relevant information about how the Nonconforming Work shall be remediated. The Contractor shall be responsible and bear all costs for remediating Nonconforming Work.

If the Contract requires the use of the WSDOT Unifier system for Document Control in accordance with Section 1-04.2, reporting and remediation submittals shall follow the "Nonconformance Report" business process in Unifier.

Remediation of Nonconforming Work

Remediation to correct Nonconforming Work shall be completed as soon as possible. However, unless otherwise specified, the Contractor shall not proceed with implementing the remedy until the Engineer has accepted the Contractor's proposed remedy. Any remedial work done prior to the Engineer's acceptance shall be at the Contractor's sole risk and will be subject to further rejection or remediation. The Engineer has the right to reject all or part of the Nonconforming Work, and the Engineer's decision is final and not subject to protest.

Remediation shall be classified in one of the following categories:

1. Rework to Contract requirements

2. Remove and replace
3. Repair to acceptable standards

When disputes occur over which category a remedy belongs, the Engineer's decision will be final and binding.

Rework to Contract Requirements

To be considered rework, the design and construction standards of the proposed completed Work, in the sole judgment of the Engineer, shall meet the design and construction standards applicable to the project.

Reporting of Nonconforming Work that is reworked is not required if all of the following conditions are met:

1. The remediation shall be completed in the same shift as the Nonconforming Work was identified.
2. It shall be remedied without damaging other Work.
3. It shall be remedied without putting the public at risk.
4. The Contractor's proposed remedy is in accordance with the Contract requirements.
5. The Engineer does not request the Nonconforming Work be reported.

Examples of Nonconforming Work that may not need reported if reworked include:

- Missing dobies prior to concrete pouring
- Rebar spacing and missing rebar
- Out of plumb luminaire or sign pole/post

For all other rework the Contractor shall submit all relevant information to the Engineer. The Contractor shall include Type 2 Working Drawings. The Type 2 Working Drawings shall explain how the nonconforming work will be reworked including repairs that will achieve the Contract requirements. For preapproved repair procedures, Type 1 Working drawings shall be included in lieu of the Type 2 Working Drawings.

Remove and Replace

To be considered as remove and replace, the Nonconforming Work shall be removed and replaced and the design and construction standards of the proposed completed Work, in the sole judgment of the Engineer, shall meet the design and construction standards applicable to the project.

Reporting of Nonconforming Work that is removed and replaced is not required if all of the following conditions are met:

1. The remedy shall be completed in the same shift the Nonconforming Work was identified.

2. It shall be removed and replaced without damaging other Work.
3. Both the removal and the replacement meet all Contract requirements.
4. The Engineer does not request the Nonconforming Work be reported.

Examples of Nonconforming Work that may not need reported if removed and replaced include:

- Decompacting and recompacting a lift of embankment to meet compaction requirements
- Removing and replacing an installed and dented luminaire pole with a new one.

For all other remove and replace Work, the Contractor shall submit all relevant information, including Working Drawings of the Type requested by the Engineer.

The Working Drawings shall include how the nonconforming Work will be removed and replaced including protection of other Work if needed. Type 2 Working Drawings shall be required, unless the remediation requires engineering, in which case, Type 2E Working Drawings shall be provided.

Repair to an Acceptable Standard

At the Contractor's written request, the Engineer may approve remediation that includes repairing to an acceptable standard that does not meet the Contract requirements with an appropriate price reduction that may range from no reduction to no payment.

To request to repair Nonconforming work to an acceptable standard, the Contractor shall submit all relevant information. Remedies proposed for this category shall include Type 2E Working Drawings. The Type 2E working drawings shall indicate whether the Work, as repaired, will achieve the same load carrying capacity, and shall assess the effects of the repair on the durability of the Work. Calculations shall be provided to demonstrate that the Work, as repaired, will perform the intended functions for its intended design life.

(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.

(January 1, 2016 COK GSP)

1-05.9 Equipment

The following new paragraph is inserted between the second and third paragraphs:

Use of equipment with metal tracks will not be permitted on concrete or asphalt surfaces unless otherwise authorized by the Engineer.

(January 1, 2016 COK GSP)

1-05.10 Guarantees

Section 1-05.10 is supplemented as follows:

Guarantees and maintenance bonds shall be in accordance with City of Kirkland, State of Washington, Public Works Performance and Payment Bond forms and requirements. The performance bond shall be in the full amount of contract. The Contractor guarantees all items of material, equipment, and workmanship against mechanical, structural, or other defects for which the Contractor is responsible that may develop or become evident within a period of one year from and after acceptance of the work by the Owner. This guarantee shall be understood to require prompt remedy of defects upon written notification to the Contractor. If the Owner determines the defect requires immediate repair, the Owner may, without further notice to the Contractor, make the necessary corrections, the cost of which shall be borne by the Contractor. To support the above guarantee, the Contractor's performance bond shall remain in full force and effect for one year following the acceptance of the project by the Owner.

(October 1, 2005 APWA GSP)

1-05.11 Final Inspection

Delete this section and replace it with the following:

1-05.11 Final Inspections and Operational Testing

1-05.11(1) Substantial Completion Date

When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor's request shall list the specific items of work that remain to be completed in

order to reach physical completion. The Engineer will schedule an inspection of the work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

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

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

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

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

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

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

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

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

1-05.11(3) *Operational Testing*

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore when the work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar work it may be desirable for the Engineer to have the Contractor operate and test the work for a period of time after final inspection but prior to the physical completion date. Whenever items of work are listed in the Contract

Provisions for operational testing they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

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

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

(March 8, 2013 APWA GSP)

1-05.12 Final Acceptance

Add new Section 1-05.12(1).

1-05.12(1) One-Year Guarantee Period

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.

(August 14, 2013 APWA GSP)

1-05.13 Superintendents, Labor and Equipment of Contractor

Delete the sixth and seventh paragraph of this section.

(January 4, 2024 APWA GSP)

1-05.15 Method of Serving Notices

Revise the second paragraph to read:

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

(March 8, 2013 APWA GSP)

Add new Section 1-05.18.

1-05.18 Record Drawings

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

This Record Drawing set shall be used for this purpose alone, shall be kept separate from other Plan sheets, and shall be clearly marked as Record Drawings. These Record Drawings shall be kept on site at the Contractor's field office, and shall be available for review by the Contracting Agency at all times. The Contractor shall bring the Record Drawings to each progress meeting for review.

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

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

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

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

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

	Vertical	Horizontal
As-built sanitary & storm invert and grate elevations	± 0.01 foot	± 0.01 foot

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

Making Entries on the Record Drawings:

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

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

Payment will be made for the following bid item:

Record Drawings (Minimum Bid \$2,500)	Lump Sum
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Payment for this item will be made on a prorated monthly basis for work completed in accordance with this section up to 75% of the lump sum bid. The final 25% of the lump sum item will be paid upon submittal and approval of the completed Record Drawings set prepared in conformance with these Special Provisions.

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

(November 19, 2019 COK GSP)

Add new Section 1-05.19.

1-05.19 Daily Construction Report

The Contractor and Subcontractors shall maintain daily, a Daily Construction Report of the Work. The Diary must be kept and maintained by Contractor's designated project

superintendent(s). Entries must be made on a daily basis and must accurately represent all of the project activities on each day. Contractor shall provide signed copies of diary sheets from the previous week to Engineer at each Weekly Coordination Meeting.

Every single diary sheet/page must have:

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

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

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

It is expressly agreed between Contractor and Contracting Agency that the Daily Diary maintained by Contractor shall be the "Contractor's Book of Original Entry" for the documentation of any potential claims or disputes that might arise during this Contract. Failure

of Contractor to maintain this Diary in the manner described above will constitute a waiver of any such claims or disputes by Contractor.

Preparation of the Daily Diary by the contractor shall be incidental to the unit prices for applicable bid items. No separate payment shall be made for preparation and maintaining the Daily Diary.

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

1-06 CONTROL OF MATERIAL

(January 1, 2016 COK GSP)

1-06.1 Approval of Materials Prior to Use

Section 1-06.1 is supplemented as follows:

Approval of a Material source shall not mean acceptance of the Material. The Material shall meet the requirements of the Contract.

(February 17, 2022 COK GSP)

1-06.1(2) Request for Approval of Materials (RAM)

Revise the first paragraph to read:

The RAM shall be used for all submittals unless directed otherwise by the Engineer. The RAM shall be prepared by the Contractor in accordance with the instructions on Form 350-071 and submitted to the Engineer for approval before the material is incorporated into the Work.

(June 27, 2011 AWWA GSP)

1-06.1(4) Fabrication Inspection Expense

Delete this section in its entirety.

1-06.2(2)B Financial Incentive

(January 4, 2024 AWWA GSP)

Replace the first sentence of this Section with the following:

The maximum Composite Pay Factor shall be 1.00.

(January 4, 2016 APWA GSP)

1-06.6 Recycled Materials

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 Table 9-03.21(1)E 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.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

(January 1, 2021 COK GSP)

1-07.1 Laws to Be Observed

Section 1-07.1 is supplemented with the following:

The Contractor shall at all times eliminate noise to the maximum practicable extent. Air compressing plants shall be equipped with silencers, and the exhaust of all gasoline motors or other power equipment shall be provided with mufflers. Special care shall be used to avoid noise or other nuisances, and the Contractor shall strictly observe all federal, state, and local regulations concerning noise.

The Contractor shall make an effort to reduce carbon emissions by turning off engines on construction equipment not in active use, and on trucks that are idling while waiting to load or unload material for five minutes or more.

Compliance with Laws

The Contractor shall comply with the requirements of all other City ordinances, state statutes, laws, and regulations, whether or not stated herein, which are specifically applicable to the public improvements and work to be performed.

The Contractor shall be subject to City of Kirkland Code enforcement, as required by Kirkland Municipal Code (KMC) Chapter 1.12. The Contractor shall fully comply with and satisfy all fines and costs assessed by code enforcement(s) prior to the Completion Date, unless otherwise authorized by the City of Kirkland in writing.

(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.

(January 1, 2016 COK GSP)

Supplement this section with the following:

Contractor's Safety Responsibilities

These construction documents and the joint and several phases of construction hereby contemplated are to be governed at all times by applicable provisions of the federal law(s), including but not limited to the latest amendments of the following:

Williams-Steiger Occupational Safety and Health Act of 1980, Public Law 91-596.

Part 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations.

This project, the Contractor and its subcontractors, shall, at all times, be governed by Chapter XIII of Title 29, Code of Federal Regulations, Part 1518 - Safety and Health Regulations for Construction (35 CFR 75), as amended to date.

To implement the program, and to provide safe and healthful working conditions for all persons, the construction superintendent or his/her designated safety officer shall conduct general project safety meetings at the site at least once each month during the course of construction.

The Contractor and all subcontractors shall immediately report all accidents, injuries, and health hazards to the Owner, in writing. This shall not obviate any mandatory reporting under the provisions of the Occupational Safety and Health Act of 1970. This program shall become a part of the contract documents and the contract between the Owner and the Contractor, and all subcontractors, as though fully written therein.

Where the location of the work is in proximity to overhead wires and power lines, the Contractor shall coordinate all work with the utility and shall provide for such measures as may be necessary for the protection of the workers.

(June 27, 2011 APWA GSP)

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

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).

(January 1, 2021 COK GSP)

1-07.5(2) State Department of Fish and Wildlife

Supplement this section with the following:

New Zealand mud snails are an aquatic invasive species of concern for the Puget Sound region, as they have already invaded waterways near the City of Kirkland. Contractors working in-water (e.g. natural stream, small ponds and lakes, wetlands, etc.), including all construction equipment and vehicles used in-water, shall follow the Level 1 decontamination protocols and implement all Special Protocols for personnel and equipment as described in the “Invasive Species Management Protocols” published by the Washington State Department of Fish and Wildlife (WDFW) (Draft Version 3, February 2016). This document can be found on the WDFW website.

For Work that will be performed in-water in the City of Kirkland, all Contractor vehicles and/or heavy equipment previously used for in-water work outside the City of Kirkland shall be cleaned by the Contractor as indicated for “Boats and other Large Aquatic Conveyances Transported Overland”, as described in the “Invasive Species Management Protocols” published by the Washington State Department of Fish and Wildlife (WDFW) (Draft Version 3, February 2016).

The Contractor is only required to follow Level 2 Decontamination Protocols in the Work area when indicated in the Contract documents.

All labor and materials required for completing decontamination and cleaning protocols shall be incidental to the Contract bid items, unless otherwise indicated in the Contract Documents.

(January 1, 2021 COK GSP)

1-07.5(3) State Department of Ecology

Supplement this section with the following:

Contractor shall comply with all requirements of the Construction Stormwater General Permit (CSWGP), if this permit has been issued for this Work. Additionally, Contractor shall comply with all applicable requirement of Kirkland Municipal Code KMC 15.52, as this local code has been adopted to meet Washington State Department of Ecology requirements for city stormwater management.

CSWGP Permit Number (if issued): Not Required

CSWGP coverage is typically only issued by the State Department of Ecology in the event the disturbed area for the Work is greater than one (1) acre. In the event CSWGP coverage has been issued for this Work, Contractor shall coordinate the Transfer of the permit from the Contracting Agency to the Contractor prior to any ground disturbance commencing in the Work area.

Unless identified otherwise in the Contract Documents, compliance with all requirements of this Section, the CSWGP, and the Kirkland Municipal Code KMC 15.52 shall be incidental to Contract pay items.

Revise the paragraph 6 to read:

6. When a violation of the Construction Stormwater General Permit (CSWGP) and/or Kirkland Municipal Code KMC 15.52 occurs, Contractor shall immediately notify the City of Kirkland Spill Hotline (425) 587-3900. Contractor shall also report to the Engineer and other agencies as identified in the Contractor's Spill Prevention, Control, and Countermeasures (SPCC) Plan (prepared in accordance with Section 1-07.15(1).

Revise the paragraph 8 to read:

8. If directed by the Contracting Agency and instead of or in partial conjunction with a Notice of Completion, 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 destabilized from erosion.

(January 1, 2021 COK GSP)

1-07.5(6) U.S. Fish and Wildlife Service and National Marine Fisheries Service

Delete this section and replace it with the following:

The Contractor shall provide all required fish exclusion and handling services required by the Work, unless otherwise indicated in the Contract Documents. If the Contractor discovers any fish stranded by the project, they shall immediately transfer and release the fish alive into a flowing stream or open water outside the Work area.

(January 1, 2021 COK GSP)

1-07.6 Permits and Licenses

Replace item 6 of the second paragraph of this section with the following:

6. The permit costs the Contracting Agency nothing. This shall include, but not be limited to, application and initial review fees, costs associated with fulfillment of all permit requirements, additional operational fees assessed during the life of the permit.

Supplement second paragraph of this section with the following:

7. When a violation of the Construction Stormwater General Permit (CSWGP) and/or Kirkland Municipal Code KMC 15.52 occurs, Contractor shall immediately notify the City of Kirkland Spill Hotline (425) 587-3900. Contractor shall also report to the Engineer and other agencies as identified in the Contractor's Spill Prevention, Control, and Countermeasures (SPCC) Plan (prepared in accordance with Section 1-07.15(1).

(January 1, 2021 COK GSP)

1-07.6(1) Permits for Sanitary Sewer Discharge for Construction Dewatering

Add new Section 1-07.6(1)

The Contracting Agency has not obtained a King County Authorization for Construction Dewatering or local sanitary sewer operating permits for this Work. Contractor proposals for this method of construction stormwater disposal will be supported by the Contracting Agency only if, as determined by the Engineer, the proposal meets all the requirements indicated in Section 1-07.6 and this Section.

Contractors proposing to use sanitary sewer methods for construction dewatering and discharge are directed to the King County web page for "Construction Dewatering" for applications and information on the application process.

In addition to the requirements of Section 1-07.6, Contractor shall provide to the Engineer the written permission obtained by the Contractor from the local sanitary sewer operating agency for use of the sanitary sewer for construction dewatering discharge in advance of the Contractor applying for either general or individual King County Authorization for Construction Dewatering.

Unless otherwise indicated in the Contract Documents or by the Engineer in writing, no claims for equitable adjustment of Contract Time will be approved in order to obtain King County Authorizations and/or local sanitary sewer operating permits.

(January 1, 2021 COK GSP)

1-07.6(2) Permits for Off-site Staging and Storage Areas

Add new Section 1-07.6(2)

The Contracting Agency has not obtained any City of Kirkland Temporary Use Permits for temporary use(s) of off-site areas or properties in the City of Kirkland for the purposes of staging, materials storage, and/or any other Contractor-desired temporary uses during the Work. A City of Kirkland Temporary Use Permit must be obtained by the Contractor for temporary use for the Work of any off-site areas or properties not located in a City of Kirkland right-of-way (ROW). This requirement is in addition to any permissions and/or agreements reached between the Contractor and the property owner(s) as required in Section 1-07.24.

"Off-site" will be taken to mean any area not designated as part of the Work in the Plans or

other Contract Documents.

A City of Kirkland Temporary Use Permit is not required for additional use of areas located in a City of Kirkland right-of-way (ROW) and not indicated in the Plans or other Contract Documents. However, the Contractor shall not occupy additional City of Kirkland ROW not shown as part of the Work without advance written approval by the Engineer. Contractor shall photograph and/or video document the existing conditions of ROW used. Any damage or degradation of the existing conditions in these areas shall be repaired and/or replaced by the Contractor at no additional cost to the City of Kirkland.

Contractor shall apply for a City of Kirkland Temporary Use Permit from the City of Kirkland Planning and Building Department through <http://mybuildingpermit.com> . Contractor shall also notify the Engineer when the Temporary Use Permit application has been submitted.

Unless otherwise indicated in the Contract Documents or by the Engineer in writing, no claims for equitable adjustment of Contract Time will be allowed requesting additional time required for the Contractor to obtain a City of Kirkland Temporary Use Permit for temporary use of any off-site area or property not designated as part of the Work area in the Plans.

(January 3, 2020 APWA GSP)

1-07.9(5) Required Documents

Delete this section and replace it with the following:

General

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

Intents and Affidavits

On forms provided by the Industrial Statistician of State L&I, the Contractor shall submit to the Engineer the following for themselves and for each firm covered under RCW 39.12 that will or has provided Work and materials for the Contract:

1. The approved “Statement of Intent to Pay Prevailing Wages” State L&I’s form number F700-029-000. The Contracting Agency will make no payment under this Contract until this statement has been approved by State L&I and reviewed by the Engineer.
2. The approved “Affidavit of Prevailing Wages Paid”, State L&I’s form number F700-007-000. The Contracting Agency will not grant Completion until all approved Affidavit of Wages paid for the Contractor and all Subcontractors have been received by the Engineer. The Contracting Agency will not release to the Contractor any funds retained under RCW 60.28.011 until “Affidavit of Prevailing Wages Paid” forms have been approved by State L&I and all of the approved forms have been submitted to the Engineer for every firm that worked on the Contract.

The Contractor is responsible for requesting these forms from State L&I and for paying any fees required by State L&I.

Certified Payrolls

Certified payrolls are required to be submitted by the Contractor for themselves, all Subcontractors and all lower tier subcontractors. The payrolls shall be submitted weekly on all Federal-aid projects and no less than monthly on State funded projects.

Penalties for Noncompliance

The Contractor is advised, if these payrolls are not supplied within the prescribed deadlines, any or all payments may be withheld until compliance is achieved. In addition, failure to provide these payrolls may result in other sanctions as provided by State laws (RCW 39.12.050) and/or Federal regulations (29 CFR 5.12).

1-07.9(5)A Required Documents

(December 30, 2022 APWA GSP)

This section is revised to read as follows:

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

(November 4, 2024, WSDOT GSP)

1-07.8 High-Visibility Apparel

The third and fourth paragraphs of Section 1-07.8 are revised to read:

High-visibility garments shall always be the outermost garments worn in a manner to ensure 360 degrees of uninterrupted background and retroreflective material encircling the torso.

High-visibility garments shall be labeled as, and in a condition compliant with the ANSI/ISEA 107-2015 publication entitled “American National Standard for High-Visibility Safety Apparel and Accessories,” or equivalent revisions.

(November 4, 2024, WSDOT GSP)

1-07.8(1) Traffic Control Personnel

Section 1-07.8(1) is revised to read:

All personnel performing the Work described in Section 1-10 (including traffic control supervisors, flaggers, and others performing traffic control labor of any kind) shall comply with the following:

1. During daylight hours with clear visibility, workers shall wear a high-visibility ANSI/ISEA 107 Type R Class 2 or 3 garment with background material that are fluorescent yellow-green, fluorescent orange-red, or fluorescent red in color; and a high visibility hardhat that is white, yellow, yellow-green, orange, or red in color; and
2. During hours of darkness ($\frac{1}{2}$ hour before sunset to $\frac{1}{2}$ hour after sunrise) or other low-visibility conditions (snow, fog, etc.), workers shall wear a high-visibility ANSI/ISEA 107 Type R Class 2 or 3 garment with background material that are fluorescent yellow-green, fluorescent orange-red, or fluorescent red in color; a high-visibility lower garment meeting ANSI/ISEA 107 Class E, and a

high visibility hardhat marked with at least 12 square inches of retroreflective material applied to provide 360 degrees of visibility.

(January 1, 2016 COK GSP)

1-07.14 Responsibility for Damage

Section 1-07.14 is supplemented with the following:

The Contractor further agrees that it is waiving immunity under Industrial Insurance Law Title 51 RCW for any claims brought against the City by its employees. In the event Contractor fails, after receipt of timely notice from the City, to appear, defend, or pay as required by the first paragraph of this section, then in that event and in that event only, the City may in its sole discretion, deduct from the progress payments to the Contractor and pay any amount sufficient to pay any claim, of which the City may have knowledge and regardless of the informalities of notice of such claim, arising out of the performance of this contract, provided the City has theretofore given notice of receipt of such claim to the Contractor and the Contractor has failed to act thereon.

1-07.15 Temporary Water Pollution/Erosion Control

(January 10, 2019 COK GSP)

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

Add the following paragraph under the second paragraph of this section:

In the event the Contractor uses an SPCC Plan template that either follows the WSDOT SPCC Plan Template or contains the same or similar content and/or format, the following changes shall be required:

1. Replace all references to “WSDOT” as either the Contracting Agency or project owner with “City of Kirkland”, except where indicated in this Section.
2. Add into all Spill Reporting and related section(s): “The City of Kirkland Spill Response Hotline at (425) 587-3900 shall be the first point of contact in the event of a spill. Notification to the City of Kirkland Spill Response Hotline shall precede the spill notifications to federal and state agencies.”
3. Delete all references to the “WSDOT Environmental Compliance Assurance Procedure” (ECAP) in the SPCC.

Supplement the following referenced SPCC Plan Element Requirements in this Section as follows:

For SPCC Plan Element Requirement Number 2, add the following: “The City of Kirkland Spill Response Hotline at (425) 587-3900 shall be the first point of contact in the event of a spill.”

For SPCC Plan Element Requirement Number 8, add the following: “As part of Contractor spill response procedure, the Contractor shall contact the City of Kirkland Spill Response Hotline at (425) 587-3900 to report the spill regardless of whether or not the Contractor has fully contained, controlled, and/or cleaned up the spill.”

1-07.16 Protection and Restoration of Property

(October 3, 2022, WSDOT GSP, Option 1)

1-07.16(1) Private/Public Property

Private Property

Section 1-07.16(1)C is supplemented with the following:

The Contractor shall not access the worksite from adjacent properties without permission from the Engineer. The Contractor shall submit a Type 2 Working Drawing to the Engineer in accordance with Section 1-05.3 prior to accessing the project site from adjacent properties. The Working Drawing shall include the methods, materials, equipment, and restoration measures used to access the worksite

(January 1, 2016 COK GSP)

1-07.16(3) Fences, Mailboxes, Incidentals

Section 1-07.16(3) is supplemented with the following:

U.S. Postal Service Collection Boxes, Mail Receptacles, and other Structures: U.S. Postal Service collection box and other Structures requiring temporary relocation to accommodate construction, the Contractor shall contact the Kirkland Postmaster at least 5 Working Days in advance for coordination. Only the U.S. Post Office will move Postal Service-owned property.

(January 1, 2020 COK GSP)

1-07.17 Utilities and Similar Facilities

Section 1-07.17 is supplemented with the following:

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

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

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

The Contractor shall give advance notice to all utility companies 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 following utility companies:

4. Water, sewer, storm, streets – minimum two working days in advance
5. Power (Electric and Natural Gas) – minimum 48 hours in advance
6. Telephone – minimum 30 days in advance
7. Natural Gas – minimum 48 hours in advance
8. Cable Television – minimum 48 hours in advance
9. Transit – minimum 21 days in advance

The following is a list of some utilities serving the Kirkland area. This is not intended or represented to be a complete list and is provided for the Contractor's convenience.

Utility	Agency/Company	Address	Contact	Phone
Water/Sewer	City of Kirkland	123 Fifth Avenue Kirkland, WA 98033	Cody Gray	(425) 587-3900
Storm Drainage	City of Kirkland	123 Fifth Avenue Kirkland, WA 98033	Jason Osborn	(425) 587-3900
Water / Sewer (North area of Kirkland)	Northshore Utility District	6380 NE 185th St Kenmore, WA 98028	George Matote Kelly Nesbitt	(425) 398-4400 (425) 521-3750
Streets	City of Kirkland	123 Fifth Avenue Kirkland, WA 98033	Micah Stansberry	(425) 587-3900
Natural Gas	Puget Sound Energy	P.O. Box 97034 EST-11W Bellevue, WA 98009-9734	Kiara Skye	(425) 213-9205
Electric	Puget Sound Energy	35131 SE Center St Snoqualmie, WA 98065	Kiara Skye	(425) 213-9205
Telephone/ FIOS	Ziply Fiber	P.O. Box 1127 Everett, WA 98206	Sheri Brediger Mike Hakahan	(425) 585-8210 (425) 949-0230
FIOS	Astrobound/Wave Broadband		Richard Hays	(360) 631-4134
FIOS	CenturyLink/Lumen	22817 SE Issaquah- Fall City Rd, WA, 98027	Kayvan Fassnacht	(425) 213-9378
FIOS	Zayo	22651 83 rd Ave. S. Kent, WA 98032	Rusty Perdieu	(706) 889-6967
Cable Television	Comcast	1525 - 75th St SW, Suite 200 Everett, WA 98203	Johnny Buckett Bianca Crawford	(253) 999-3067 (253) 303-2723
Network	Verizon/MCI	11311 NE 120 th St Kirkland, WA 98034	Brad Landis Scott Christenson	(425) 201-0901 (425) 471-1079
School District Transportatio n	Lake Washington School District	15212 NE 95th St Redmond, WA 98052	Laura DeGooyer	(425) 936-1133
Transit	King County METRO	MS SVQ-TR-0100 1270 6th Ave S Seattle, WA 98134	David Freeman	(206) 477-1140 (206) 477-0438
Water (Northeast area of Kirkland)	Woodinville Water District	17238 NE Woodinville Duvall Road, Woodinville, WA 98072	Christian Hoffman	(425) 487-4142
Olympic Pipeline	BP		Kenneth Metcalf Joseph Stone	(425) 981-2575 (425) 981-2506

Water (along 132 nd Ave NE)	Seattle Public Utilities		Mike Freeman	(206) 684-8117
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Note that most utility companies may be contacted for locations through the “One Call” system, 1-800-424-5555. In the event of a gas emergency, call 911 and then the PSE hotline at 1-888-225-5773 (1-888-CALL-PSE).

The Contractor shall coordinate the work with these utilities and shall notify the Engineer in advance of any conflicts affecting the work schedule. The utility companies shall witness or perform all shutdowns, connections or disconnections.

Wherever in the course of the construction operation it becomes necessary to cause an outage of utilities, it shall be the Contractor's responsibility to notify the affected users not less than twenty-four (24) hours in advance of the creation of such outage. The Contractor shall make reasonable effort to minimize the duration of outages.

The Contractor shall be responsible for any breakage of utilities or services resulting from its operations and shall hold the City and its agents harmless from any claims resulting from disruption of, or damage to, same.

Other Notifications

Service Area Turn Off: All service area turn off notices must be distributed to affected parties two working days in advance of any scheduled shut off. City to provide door hangers and affected service area map. The contractor shall fill in all required information prior to hanging door hanger.

Entry onto Private Property: Each property owner shall be given two working days advance Written Notice prior to entry by the Contractor.

Loop Detection Systems: Where an excavation is to take place through a signal loop detector system, the Contractor shall provide at least five (5) Working Days advance notice to the City Signal Shop at (425) 587-3920 to coordinate temporary signal wire disconnect and installation of temporary signal detection equipment.

Survey Monuments: When proposed pavement removal is close to existing survey monumentation, or proposed pavement removal includes existing survey monumentation, the Contractor shall provide a minimum 4 Working Days advance notice to the Engineer to allow survey crews to tie the monument out and reset the monument after pavement installation.

(*****)

Add the following new section:

1-07.17(1)A Potholing

1-07.17(1)A(1) General

The Contractor shall physically locate, uncover, and document the location of underground non-franchise utilities at locations identified by the Engineer in the field. The purpose of utility potholing is to allow sufficient time ahead of construction operations to identify underground conflicts, allow ample time to make minor design adjustments and generally facilitate the Contractor's work schedule.

The Contractor shall submit a potholing plan/schedule to the Engineer for review and/or approval prior to commencing potholing operations. The plan shall show the proposed location and clearly state the purpose for each proposed potholing location. The Engineer may add or delete potholing locations.

In no way shall the work described under Potholing relieve the Contractor of any of the responsibilities described in Section 1-07.17 of the Standard Specifications and these Special Provisions.

1-07.17(1)A(2) Measurement

“Potholing” will be measured per each non-franchise pothole excavated that meets all of the following conditions:

1. The pothole is shown on the pothole plan submittal approved by the Engineer.
2. The pothole data, including soil type, utility material and size, horizontal location within 1/2 foot, and vertical location within 1/10 foot, is provided in writing to the Engineer at least 72 hours ahead of contract work relevant to the pothole.
3. Pothole is not within 10 feet of any other pothole. No adjustment shall be made for pothole depth or size. No measurement will be made for potholes that do not meet the above criteria.

1-07.17(1)A(3) Payment

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

“Potholing”, Per Each

Payment for “Potholing” will include all costs for locating, uncovering, and documenting the underground location of non-franchise utilities, as well as all subsurface and surface restoration measures.

(January 1, 2016 COK GSP)

1-07.17(2) Utility Construction, Removal or Relocation by Others

Section 1-07.17(2) is supplemented with the following:

Under no circumstances will discrepancies in location or incompleteness in description of existing utilities or improvements, whether they are visible from the surface, buried, or otherwise obscured, be considered as a basis for additional compensation to the Contractor.

1-07.18 Public Liability and Property Damage Insurance

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

1-07.18 Insurance

(January 4, 2024 APWA GSP)

1-07.18(1) General Requirements

- A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.
- B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.
- C. If any insurance policy is written on a claims-made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.
- D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.
- E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.
- F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency
- G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.
- H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.
- I. Under no circumstances shall a wrap up policy be obtained, for either initiating or maintaining coverage, to satisfy insurance requirements for any policy required under this Section. A "wrap up policy" is defined as an insurance agreement or arrangement under which all the parties working on a specified or designated project are insured under one policy for liability arising out of that specified or designated project.

1-07.18(2) Additional Insured

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

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

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

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

1-07.18(3) Subcontractors

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

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

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

1-07.18(4) Verification of Coverage

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

Verification of coverage shall include:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement.
3. Any other amendatory endorsements to show the coverage required herein.

4. A notation of coverage enhancements on the Certificate of Insurance shall not 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.

(January 1, 2016 COK GSP)

1-07.23 Public Convenience and Safety

Section 1-07.23 is supplemented with the following:

No road or street shall be closed to the public except as permitted in these plans and specifications or with the approval of the Engineer and proper governmental authority. Fire hydrants on or adjacent to the work shall be kept accessible to fire fighting equipment at all times. Provision shall be made by the Contractor to ensure the proper functioning of all gutters, sewer inlets, drainage ditches and culverts, irrigation ditches and natural water courses, and storm sewer facilities throughout the project. Temporary interruption of service will be allowed only with the permission of the Engineer.

The Kirkland Police Department and Kirkland Fire Department shall be notified at least four (4) hours in advance of any actions by the Contractor that may affect the functions of either the Police Department or Fire Department.

The Contractor shall conduct its work and take preventative measures so that dust or other particulate matter in the project area shall not become objectionable to the adjacent property owners or general public. Should the Owner determine the Contractor is not fulfilling its obligation in this regard; the Owner reserves the right to take such action as may be necessary to remedy the objectionable condition and to charge the Contractor with any cost that may be incurred in such remedial action. All work shall be carried on with due regard for the safety of the public. No driveway, whether public, commercial, or private, may be closed without prior approval of the Owner, project supervisor, or Engineer unless written authority has been given by the affected property owner. The Contractor shall be responsible for notifying the affected property owners 24 hours in advance of scheduled interruptions to access.

(January 1, 2016 COK GSP)

Pedestrian Control and Protection

When the work area encroaches upon a sidewalk, walkway or crosswalk area, special consideration must be given to pedestrian safety. Maximum effort must be made to separate pedestrians from the work area. Protective barricades, fencing, and bridges, together with warning and guidance devices and signs, shall be utilized so that the passageway for pedestrians is safe and well defined. Whenever pedestrian walkways are provided across excavations, they shall be provided with suitable handrails. Footbridges shall be safe, strong, free of bounce and sway, have a slip resistant coating, and be free of cracks, holes, and irregularities that could cause tripping. Ramps shall be provided at the entrance and exit of all raised footbridges, again to prevent tripping. Adequate illumination and reflectorization shall be provided during hours of darkness. All walkways shall be maintained with at least 4 feet clear width.

Where walks are closed by construction, an alternate walkway shall be provided, preferably within the planting strip.

Where it is necessary to divert pedestrians into the roadway, barricading or channeling devices shall be provided to separate the pedestrian walkway from the adjacent vehicular

traffic lane. At no time shall pedestrians be diverted into a portion of a street used concurrently by moving vehicular traffic.

At locations where adjacent alternate walkways cannot be provided, appropriate signs shall be posted at the limits of construction and in advance of the closure at the nearest crosswalk or intersection to divert pedestrians across the street.

Physical barricades shall be installed to prevent visually impaired people from inadvertently entering a closed area. Pedestrian walkways shall be wheelchair accessible at all times. Pedestrian access shall be maintained to all properties adjacent to the construction site.

(May 2, 2017 APWA GSP)

1-07.23(1) Construction under Traffic

Revise the third sentence of the second paragraph to read:

Accessibility to existing or temporary pedestrian push buttons shall not be impaired; if approved by the Contracting Agency activating pedestrian recall timing or other accommodation may be allowed during construction.

(July 23, 2015 APWA GSP)

1-07.24 Rights of Way

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.

(January 1, 2021 COK GSP)

In addition to all agreements and releases between the Contractor and private property owner(s) described in this Section and as required in Section 1-07.6(2), the Contractor shall apply for a City of Kirkland Temporary Use Permit from the City of Kirkland Planning and Building Department for any temporary uses of real property (including both private property and City-owned real property) for temporary construction facilities, storage of materials, or other Contractor needs.

The Contractor shall file with the Engineer signed property release forms (in the format as detailed below) for all properties disturbed or damaged by the Contractor's operations.

PROPERTY RELEASE

(Contractor's name and address)

DATE: _____

I, _____ owner of

_____, hereby release _____,
(Contractor's name)

from any property damage or personal injury resulting from construction on or adjacent to my property located at _____ during construction of the _____. My signature below is my acknowledgment and acceptance that my property, as identified above, was returned to a satisfactory condition.

Signed: _____

Name: _____

Address: _____

Phone: _____

1-08 PROSECUTION AND PROGRESS

Add the following new section:

(May 25, 2006 APWA GSP)

1-08.0 Preliminary Matters

Add the following new section:

(October 10, 2008 APWA GSP)

1-08.0(1) Preconstruction Conference

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.

(January 1, 2021 COK GSP)

Add new Section 1-08.0(2).

1-08.0(2) Hours of Work

Except in the case of emergency, unless otherwise indicated in the Contract Documents, or unless otherwise approved by the Contracting Agency in advance, the allowable working hours for this Contract Work shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. of a working day. A maximum 1-hour lunch break is allowable between 7:00 a.m. and 6:00 p.m. and does not count for purposes of the 8-hour working period. The Contract assumes a 5-day work week, exclusive of weekends and holidays observed by the City of Kirkland and identified in Section 1-08.5 of the Standard Specifications.

The normal straight time 8-hour working period for the contract shall be established at the preconstruction conference or prior to the Contractor commencing the Work.

Except in the event of an emergency, unless otherwise indicated in the Contract Documents, or unless otherwise approved in advance by the Contracting Agency (including the Contractor obtaining approval for all applicable City of Kirkland permits as required by the City of Kirkland Zoning Code), no Work shall be allowed between the hours of 6:00 p.m. and 7:00 a.m., during weekends (except driveway construction), or during holidays observed by the City of Kirkland and identified in Section 1-08.5 of the Standard Specifications.

The Contracting Agency may consider specific and limited requests by the Contractor to allow Work during one or more periods in which Work is not allowed by this Section, but approval of these requests is solely at the discretion of the Contracting Agency as a benefit to the general public. Contractor shall submit a request in writing to the Engineer, including a full and accurate explanation of the type(s) of work to be performed, the period or periods of time outside normal Work hours, and the explanation(s) for why this work cannot be performed during the allowable Work hours.

The Engineer will consider requests and determine conditions and limitations as the Engineer deems necessary, in conformance with the conditions of support for local permitting described in Section 1-07.6 of the Standard Specifications and these Special Provisions. These conditions and limitations are additional to any conditions or limitations that may be required by Contracting Agency permits and/or variances. These conditions may include, but are not limited to:

1. Require the Engineer or such assistants as the Engineer may deem necessary to be present during the Work, including (but not limited to):
 - a. Survey crews
 - b. Personnel from the Contracting Agency's material testing laboratory
 - c. Inspectors
 - d. City operations and maintenance staff
 - e. Police, fire, or other public safety officials

- f. Any other Contracting Agency employees who, in the opinion of the Engineer, are a necessary presence for the Work outside of the allowable working hours;
2. Require the Contractor to reimburse the Contracting Agency for all additional costs and expenses in excess of straight-time costs incurred for Contracting Agency employees and expenses during such times;
3. Measure Work performed on nights, weekend days, and holidays as working days with regards to the Contract Time; and/or,
4. Consider multiple work shifts (such as a sequential 8-hour day period followed by an 8-hour night period) as multiple working days with respect to Contract Time, even if those multiple shifts occur in a single 24-hour period.

If the Engineer approves the Contractor's written request and all conditions and/or restrictions the Engineer applies to that approval are acceptable by the Contractor, the Contractor shall be responsible for obtaining work hours and noise variances as required by Section 1-07.6. The Contractor shall apply to the City of Kirkland Planning and Building Department using <http://mybuildingpermit.com>. The Engineer can provide supporting documentation, as deemed appropriate by the Engineer, to the Contractor for submission with this application.

Unless otherwise indicated in the Contract Documents or indicated by the Engineer in writing, no claims for equitable adjustments of Contract will be allowed for review and approval time frames for the Contractor to obtain approval for requests to Work outside the approved working hours in this Section. No claims for equitable adjustments of the Contract will be allowed for requirements, including limitations, in approvals to work outside of the allowed working hours in this Section.

Approved Work outside the allowable working hours in this Section is subject to additional noise control requirements. Approval to continue work during these hours may be revoked at any time the Contractor exceeds the Contracting Agency's noise control regulations or complaints are received from the public or adjoining property owners regarding the noise from the Contractor's operations. The Contractor shall have no claim for damages or delays should such permission be revoked for these reasons.

Arterial Streets

No work will be performed on arterial streets during the peak traffic hours of 7:00 a.m. – 9:00 a.m. and 3:00 p.m. – 6:00 p.m., except emergency work to restore services, unless a City-approved traffic control plan allows work during the peak hours. A minimum of two travel lanes, one in each direction, shall remain open at all times on arterials. The following streets are classified as arterials:

<i>STREET</i>	<i>FROM</i>	<i>TO</i>
Central Way/NE 85th St	Market St	132nd Ave NE
Juanita Dr NE /NE Juanita Dr	NE 143 rd St (City Limits)	98th Ave NE
Juanita Woodinville Way	100 th Ave NE	NE 145 th St (City Limits)

Lake St/Lake Washington Blvd/Northup Wy	Central Way	Northup Way (City Limits)
Kirkland Ave/Kirkland Way	Lake St	NE 85 th St
Lakeview Dr /NE 68th St/NE 70th St	Lake Washington Blvd	132nd Ave NE
Market St/98th Ave NE/100th Ave NE	Central Way	NE 145 th St (City Limits)
NE 116th St	98th Ave NE	Slater Ave NE
NE 120th St/132nd Ave NE	Slater Ave NE	NE 60th St (City Limits)
NE 124th St	100th Ave NE	East City Limits
NE 128th St	116 th Ave NE/116 th Way NE	120 th Ave NE
Simonds Rd NE	92 nd Ave NE (City Limits)	100 th Ave NE
Slater Ave NE	NE 116 th St	NE 124 th St
Totem Lake Blvd	NE 132nd St	124th Ave NE
3 rd Street/State Street	Central Way	NE 68 th Street/Lakeview Dr.
6 th St/6 th St S/108 th Ave NE	Central Way/NE 85 th St	South City Limits
90 th Ave NE/NE 131st Way/NE 132nd St	NE 134 th St	132nd Ave NE
120 th Ave NE/116 th Ave NE/116 th Way NE	NE 112 th St	NE 132 nd St
124th Ave NE	NE 85th St	NE 124th St
124th Ave NE	NE 132 nd St	NE 145 th Pl (City Limits)
132nd Ave NE	NE 50th St	NE 120th St

(December 30, 2022 APWA GSP, Option B)

1-08.1 Subcontracting

Delete the ninth paragraph, beginning with “On all projects, the Contractor shall certify...”.

(January 1, 2016 COK GSP)

1-08.1 Subcontracting

Section 1-08.1 is supplemented with the following:

A Subcontractor or an Agent to the Subcontractor will not be permitted to perform any work under the contract until the following documents have been completed and submitted to the Engineer:

1. Request to Sublet Work (form 421-012).
2. Statement of Intent to Pay Prevailing Wages (Form 700-029-000).

The Contractor's records pertaining to the requirements of this Special Provision shall be open to inspection or audit by representatives of the Department during the life of the contract and for a period of not less than three years after the date of acceptance of the contract. The Contractor shall retain these records for that period. The Contractor shall

also guarantee that these records of all Subcontractors and Agents shall be open to similar inspection or audit for the same period.

1-08.1(7)A Payment Reporting

(January 4, 2024 APWA GSP)

Revise this section to read: "Vacant".

(January 1, 2016 COK GSP)

1-08.3 Progress Schedule

The order of work will be at the Contractor's option, in keeping with good construction practice and the terms of the contract. All work shall be carried out in accordance with the requirements of the City of Kirkland in compliance with the plans and specifications. However, the Contractor shall so schedule the work within the time constraints noted in the various contract documents, including any permits. The Contractor is cautioned to review said documents and permits and schedule the work appropriately as no additional compensation will be made to the Contractor due to the time constraints imposed by such documents.

(December 30, 2022 APWA GSP)

1-08.3(2)A Type A Progress Schedule

Revise this section to read:

The Contractor shall submit three (3) 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.

1-08.3(2)D Preliminary Progress Schedules

(January 4, 2024 APWA GSP)

Revise the second paragraph to read:

1. The preliminary progress schedule shall be submitted no later than the preconstruction conference for all Type B and Type C progress schedules.

(July 23, 2015 APWA GSP)

1-08.4 Prosecution of Work

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

1-08.4 Notice to Proceed and Prosecution of Work

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.

(November 25, 2024 APWA GSP, Option A)

1-08.5 Time for Completion

Revise the third and fourth paragraphs to read:

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

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and all partial or whole days the Engineer declares as unworkable. The statement will be identified as a Written Determination by the Engineer. If the Contractor does not agree with the Written Determination of working days, the Contractor shall pursue the protest procedures in accordance with Section 1-04.5. By failing to follow the procedures of Section 1-04.5, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

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

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
 - a. Certified Payrolls (per Section 1-07.9(5)).
 - b. Material Acceptance Certification Documents
 - c. Monthly Reports in DMCS of the amounts paid including the final payment confirmation to all firms required by Section 1-08.1(7)A if applicable

- d. Final Contract Voucher Certification
- e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
- f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
- g. Property owner releases per Section 1-07.24

(January 1, 2016 COK GSP)

Section 1-08.5 is supplemented with the following:

This project shall be substantially completed in its entirety within **50** working days.

1-08.6 Suspension of Work

Section 1-08.6 is supplemented with the following:

(February 6, 2023, WSDOT GSP, Option 2)

Contract time may be suspended for procurement of critical materials (Procurement Suspension). In order to receive a Procurement Suspension, the Contractor shall within 21 calendar days after execution by the Contracting Agency, place purchase orders for all materials deemed critical by the Contracting Agency for physical completion of the contract. The Contractor shall provide copies of purchase orders for the critical materials. Such purchase orders shall disclose the purchase order date and estimated delivery dates for such critical material.

The Contractor shall show procurement of the materials listed below as activities in the Progress Schedule. If the approved Progress Schedule indicates that the materials procurement are critical activities, and if the Contractor has provided documentation that purchase orders are placed for the critical materials within the prescribed 21 calendar days, then contract time will be suspended upon physical completion of all critical work except that work dependent upon the below listed critical materials:

- Type III traffic signal standards and mast arms
- Pedestrian signal standards
- Traffic signal controller cabinet and components

For this project Critical Work required to be completed prior to suspension shall mean the following items are completed: curbs and gutter, HMA, concrete, signing that is not impacted by the Critical Materials, foundation for signal and illumination poles are installed and anchor bolts are protected, temporary traffic control plan for the suspension is approved and in-place.

Charging of contract time will resume upon delivery of the critical materials to the Contractor or 270 calendar days after execution by the Contracting Agency, whichever occurs first.

(January 1, 2016 COK GSP)

1-08.9 Liquidated Damages

The third paragraph of Section 1-08.9 is revised to read as follows:

Accordingly, the Contractor agrees:

1. To pay (according to the following formula) liquidated damages for each working day beyond the number of working days established for Physical Completion, and
2. To authorize the Engineer to deduct these liquidated damages from any money due or coming to the Contractor.

LIQUIDATED DAMAGES FORMULA

For $C > \$50,000 \rightarrow LD = 0.15 \times C \div T$, and
For $C \leq \$50,000 \rightarrow LD = 0.30 \times C \div T$.

Where:

LD = liquidated damages per working day (rounded to the nearest dollar)

C = original Contract amount

T = original time for Physical Completion

1-09 MEASUREMENT AND PAYMENT

1-09.2 Weighing Equipment

(January 1, 2016 COK GSP)

1-09.2(1) General Requirements for Weighing Equipment

The second to last paragraph of Section 1-09.2(1) is supplemented with the following:

Trucks and Tickets

All tickets shall, at a minimum, contain the following information:

7. Ticket serial number
8. Date and hour of weighing
9. Weigher's identification

Duplicate tally tickets shall be prepared to accompany each truckload of materials delivered to the project.

It is the responsibility of the Contractor to see that tickets are given to the Inspector on the project for each truckload of material delivered. Pay quantities will be prepared on the basis of said tally tickets, delivered to the Inspector at time of delivery of materials. Tickets not collected at the time of delivery will not be honored for payment.

(December 30, 2022 APWA GSP)
1-09.2(5) Measurement

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.

(December 30, 2022 APWA GSP)

1-09.6 Force Account

Supplement this section with the following:

The Contracting Agency has estimated and included in the Proposal, dollar amounts for all items to be paid per force account, only to provide a common proposal for Bidders. All such dollar amounts are to become a part of Contractor's total bid. However, the Contracting Agency does not warrant expressly or by implication, that the actual amount of work will correspond with those estimates. Payment will be made on the basis of the amount of work actually authorized by the Engineer.

(December 30, 2022 APWA GSP)

1-09.7 Mobilization

Delete this Section and replace it with the following:

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

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

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

1. When 5 percent of the total original Bid Schedule amount is earned from other Contract items on that original Bid Schedule, excluding amounts paid for materials on hand, 50 percent of the Bid Item for mobilization on that original Bid Schedule, 5 percent of the total of that original Bid Schedule, or 5 percent of the total original Contract amount, whichever is the least, will be paid.
2. When 10 percent of the total original Bid Schedule amount is earned from other Contract items on that original Bid Schedule, excluding amounts paid for materials on hand, 100 percent of the Bid Item for mobilization on that original Bid Schedule, 10 percent of the total of that original Bid Schedule, or 10 percent of the total original Contract amount, whichever is the least, will be paid.

3. When the Substantial Completion Date has been established for the project, payment of any remaining amount Bid for mobilization will be paid.

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

(*****)

Supplement this section with the following:

All costs for project outreach signs shall be considered incidental to the lump sum Contract price for "Mobilization" and will not be measured for separate payment.

1-09.9 Payments

(July 8, 2024 APWA GSP, Option A)

Supplement this section with the following:

Lump sum item breakdowns are not required when the bid price for the lump sum item is less than \$20,000.

1-09.9 Payments

(July 8, 2024, APWA GSP, Option B)

Delete the fourth paragraph and replace it with the following:

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 payment. 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.

(January 1, 2016 COK GSP)

Unless otherwise agreed to by both parties, the work period shall coincide with the calendar month. A check will be mailed or made available to the Contractor no later than thirty (30) days following the last day of the work period.

(December 30, 2022 APWA GSP)

1-09.11(3) Time Limitation and Jurisdiction

Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that all 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 all 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 36.01.050 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 all such claims or causes of action. It is further mutually agreed by the parties that when 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 all records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

(January 19, 2022 APWA GSP)

1-09.13(1) General

Revise this section to read:

Prior to seeking claims resolution through arbitration or litigation, the Contractor shall proceed in accordance with Sections 1-04.5 and 1-09.11. The provisions of Sections 1-04.5 and 1-09.11 must be complied with in full as a condition precedent to the Contractor's right to seek claim resolution through binding arbitration or litigation.

Any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be resolved, as prescribed herein, through binding arbitration or litigation.

The Contractor and the Contracting Agency mutually agree that those claims or causes of action which total \$1,000,000 or less, which are not resolved by mediation, shall be resolved

through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

The Contractor and the Contracting Agency mutually agree that those claims or causes of action in excess of \$1,000,000, which are not resolved by mediation, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13 Claims Resolution

(February 1, 2021 COK GSP) Option B

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

Delete this Section and replace it with the following:

The Contractor and the Contracting Agency mutually agree that those claims that total \$1,000,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding Alternative Dispute Resolution (ADR) processes, **provided Contracting Agency agreed to engage such ADR processes**, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Arbitration General

(January 19, 2022 APWA GSP)

Revise the third paragraph to read:

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

(December 30, 2022 APWA GSP)

1-09.13 (4) Venue for Litigation

Revise this section to read:

Litigation shall be brought in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. It is mutually agreed by the parties that when litigation occurs, the Contractor shall permit the Contracting Agency to have timely access to all records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-10 TEMPORARY TRAFFIC CONTROL

(January 1, 2016 COK GSP)

1-10.2 Traffic Control Management

1-10.2(2) Traffic Control Plans

The first and second sentences of Section 1-10.2(2) are deleted and replaced with the following:

The Contractor shall submit a traffic control plan or plans showing a method of handling traffic including pedestrian and bicycle traffic. All construction signs, flaggers, spotters and other traffic control devices shall be shown on the traffic control plan(s) except for emergency situations. The contractor shall conform with City of Kirkland Pre-Approved Plans Policy R-29 for traffic control plan requirements and guidelines unless approved by a City of Kirkland Transportation Division Engineer.

(May 16, 2006 COK GSP)

1-10.3 Traffic Control Labor, Procedures, and Devices

1-10.3(1)B Other Traffic Control Labor

Section 1-10.3(1)B is supplemented with the following:

Off Duty Police

When construction activities occur at or near a signalized intersection, the Contractor shall provide an off-duty uniformed police officer to control the flow of traffic through the intersection. It is the Contractor's responsibility to coordinate the scheduling of the Uniformed Police Officer (UPO). The contractor shall conform with City of Kirkland Pre-Approved Plans Policy R-29 for UPO requirements and guidelines unless approved by a City of Kirkland Transportation Division Engineer.

(***)**

1-10.3(3)A Construction Signs

Supplement this section with the following:

The Contractor shall install temporary W20-901 (Traffic Revision Ahead) signs on each leg of the intersection, located a minimum of 250 feet in advance of the stop bars, per WSDOT Standard Plans G-20.10 and G-22.10, and as approved by the City of Kirkland Transportation Division Engineer. The Contractor shall remove the signs 8 weeks after Substantial Completion.

(April 18, 2018 COK GSP)

1-10.3(3)C Portable Changeable Message Sign

Supplement this section with the following:

Two Portable Changeable Message Signs (PCMS) shall be provided for the duration of the project. Proposed locations shall be shown on Traffic Control Plan(s) submitted by the contractor. Contractor shall submit proposed message(s) to be displayed and receive approval by the Engineer prior to placement. Contractor is responsible for programming of the approved message into the PCMS('s), set-up, placement, and removal upon project completion.

1-10.5 Payment

(May 16, 2006 COK GSP)

1-10.5(2) Item Bids with Lump Sum for Incidentals

Section 1-10.5(2) is supplemented with the following:

“Off-duty Uniformed Police Officer”, per hour.

The unit contract price per hour for “Off-duty Uniformed Police Officer” shall be full pay for the work described herein. No additional compensation will be made for hours of work on holidays, weekends, or overtime.

(May 16, 2006 COK GSP)

1-10.5(3) *Reinstating Unit Items with Lump Sum Traffic Control*

Supplement this Section with the following:

“Off-duty Uniformed Police Officer”, per hour.

The unit Contract price per hour for “Off-duty Uniformed Police Officer” shall be full pay for the work described herein. No additional compensation will be made for hours of work on holidays, weekends, or overtime.

The quantity for “Off-duty Uniformed Police Officer” is not subject to the provisions of Section 1-04.6 of the Standard Specifications.

“Project Temporary Traffic Control”, lump sum.

Costs for layout, installation, removal, and transport of project signage shall be included with the Contract lump sum price for “Project Temporary Traffic Control.” This Bid item shall also constitute full compensation for all labor, tools, equipment, and materials necessary and incidental to maintaining temporary driving surface as required by Section 1-07.23(1), traffic and pedestrian control as required throughout the project duration in compliance with the MUTCD including, but not limited to, reflective signage, barricades, lights, traffic cones, and temporary pavement markings. Providing a minimum of two (2) flaggers and one (1) Traffic Control Supervisor during all periods of construction activities shall be included in the lump sum Bid item “Project Temporary Traffic Control”.

Providing, operating, and maintaining two (2) Portable Changeable Message Signs from 7 calendar days prior to the start of construction and throughout the project duration shall be included in the lump sum Bid item “Project Temporary Traffic Control”.

No separate payment will be made for preparation of the Traffic Control or Detour Plans. All costs for developing, updating, and implementing Traffic Control or Detour Plans shall be included in “Project Temporary Traffic Control”.

No separate payment will be made for materials used to maintain temporary traffic that are not incorporated into the final improvements. Such materials shall be included in and considered incidental to “Project Temporary Traffic Control”.

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

The Lump Sum bid item for “Project Temporary Traffic Control” shall cover the cost to provide temporary traffic control for the for each and every working day (the entire contract duration) allowed as defined in Section 1-08.5 of these Special Provisions. The total allowable working days defined for this contract includes sufficient time to complete all work associated with items paid as “Minor Change” and/or as other Force Account items. Should the Contractor complete the work in fewer working days than allowed the Contract Lump Sum item will be paid in full and shall be consider an incentive to the Contractor for early completion.

For additional working days approved via a change order for work that is not identified to be paid by force account, the daily cost for Project Temporary Traffic Control shall be determined by dividing the lump sum Contract price for "Project Temporary Traffic Control" by the original allowed contract working days as defined in Section 1-08.5 of these Special Provisions.

END OF DIVISION 1

DIVISION 2 – EARTHWORK

2-01 Clearing, Grubbing, and Roadside Cleanup

(February 17, 2022 COK GSP)

2-01.3(1) Clearing

This Section is supplemented with the following:

8. Trees removal shall be performed in a manner that does not damage overhead utilities. The Contractor shall coordinate tree removal activities with the affected utility companies, including meeting all applicable requirements.

(January 1, 2020 COK GSP)

2-01.3(2) Grubbing

This Section is supplemented with the following:

3. Remove stumps of removed trees by grinding. Contractor shall grind stumps to a minimum of 6 inches below either the existing or final ground surface elevation, whichever is lower. The Contractor shall coordinate stump removal activities with the affected utility companies, including meeting all applicable requirements.

2-02 Removal of Structures and Obstructions

(January 1, 2020 COK GSP)

2-02.3 Construction Requirements

Section 2-02.3 is supplemented with the following:

Additional Construction Requirements at Locations Near Trees

At locations where the contractor will be working and exposing tree roots, the Contractor shall exercise extreme caution. The contractor shall notify the Inspector a minimum of 2 working days prior to removal of the existing sidewalk panels. Concrete panels in these areas shall be removed by breaking the existing concrete with a jackhammer or other means. Backhoes or other mechanical excavating equipment shall not be used to remove existing concrete in these areas. Care shall be taken during the sidewalk removal in order to not damage the tree roots. Hand tools (shovels, trowels, etc.) shall be used when working around the roots. If root trimming in these areas is unavoidable, it shall be performed per **Section 8-02** of these specifications. The City Inspector shall be on-site at all times during the concrete removal, excavation and base preparation and shall identify the extent of root trimming that is required.

2-02.3(3) *Removal of Pavement, Sidewalks, Curbs, and Gutters*

This Section is supplemented with the following:

(*****)

Prior to removal of pavement, the Contractor shall make a full-depth sawcut to delineate the areas of pavement removal from those areas of pavement to remain. The Engineer shall approve the equipment and procedures used to make the full-depth sawcut. No wastewater from the sawcutting operation shall be released directly to any stream or storm sewer system.

2-02.4 *Vacant*

This Section is deleted and replaced with the following:

(*****)

2-02.4 *Measurement*

“Saw Cut Existing Pavement” shall be measured by the linear foot along the surface being cut.

No specific unit of measurement shall apply to the lump sum item of “Removal of Structures and Obstructions”.

2-02.5 *Payment*

This Section is supplemented with the following:

(*****)

“Saw Cut Existing Pavement”, per linear foot.

“Removal of Structures and Obstructions”, per lump sum

The lump sum price for “Removal of Structures and Obstructions” shall be full pay for furnishing all labor, equipment, materials, tools, and supplies necessary or incidental to the removal of items including but not limited to pavement, curbs, gutters, and sidewalks, street trees and grates, catch basins, storm sewer pipes, and hydrants within the entire project limits.

END OF DIVISION 2

DIVISION 4 – BASES

4-04 BALLAST AND CRUSHED SURFACING

(*****)

4-04.3 Construction Requirements

Supplement this section with the following:

Crushed Surfacing Top Course shall be placed in trench as backfill; beneath pipes as bedding; beneath HMA for trench restoration; as a leveling pad for walls; and beneath concrete sidewalks, driveways, and curbs, and as shown on the Plans and in the City of Kirkland Standard Details.

(*****)

4-04.4 Measurement

Supplement this section with the following:

Crushed Surfacing Top Course” will be measured by the ton based on certified truck tickets supplied by the Contractor to the Project Engineer (or Representative) at the end of each Working Day. To be counted for payment tickets must be provided on the Working Day the material was delivered. Ticket totals shall not be accepted in lieu of individual certified truck tickets. Tickets will be accepted for payment after the end of each Working Day only when prior arrangements have been made with the Project Engineer (or Representative).

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

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

Water used in placing and compacting surfacing materials shall be considered incidental to the material being placed.

(*****)

4-04.5 Payment

Supplement this section with the following:

“Crushed Surfacing Top Course”, per ton.

The contract Bid price for “Crushed Surfacing Top Course” shall be full compensation for all labor, materials, tools, and equipment necessary to satisfactorily complete the work as defined in the Plans, Standard Specifications and these Special Provisions. Work elements shall include, but not be limited to procuring, hauling, placing, grading, and compacting crushed surfacing material.

END OF DIVISION 4

DIVISION 5 – SURFACE TREATMENTS AND PAVEMENTS

5-04 Hot Mix Asphalt

(January 31, 2023 APWA GSP)

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

5-04.1 Description

This Work shall consist of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base in accordance with these Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans. 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 (RAP)	9-03.8(3)B, 9-03.21
Reclaimed Asphalt Shingles (RAS)	9-03.8(3)B, 9-03.21
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21

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.

If the Contractor wishes to utilize High RAP/Any RAS, the design must be listed on the WSDOT Qualified Products List (QPL).

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

5-04.3(4) Preparation of Existing Paved Surfaces

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

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

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

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

leveled and compacted thoroughly. Prior to the application of tack coat, or paving, the condition of the surface shall be approved by the Engineer.

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

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

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

5-04.3(4)A Crack Sealing

When the Proposal includes a pay item for crack sealing, seal cracks in accordance with Section 5-03.

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 $\frac{3}{4}$ " and HMA Class $\frac{1}{2}$ "	
wearing course	0.30 feet
other courses	0.35 feet
HMA Class $\frac{3}{8}$ "	0.15 feet

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

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

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

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

5-04.3(9) HMA Mixture Acceptance

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

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

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

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

HMA Tolerances and Adjustments

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

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

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

For Aggregates in the mixture:

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

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

- b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that

none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.

2. Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.

a. **Aggregates** –2 percent for the aggregate passing the 1½", 1", ¾", ½", ⅜", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).

b. **Asphalt Binder 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 subplot shall be equal to one day's production or 800 tons, whichever is less except that the final subplot 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 subplot.

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling

Samples for acceptance testing shall be obtained by the Contractor when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with AASH-TO T 168. A minimum of three samples should be taken for each class of HMA placed on a project. If used in a structural application, at least one of the three samples shall 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 CPF shall be performed.

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

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

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

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

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

For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting Agency will determine a 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 CPF.

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

The Contractor may request a subplot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, V_a . The results of the retest will be used for the acceptance of the HMA in place of the original subplot 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 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 CPF of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density). The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

Tests for the determination of the pavement density will be taken in accordance with the required procedures for measurement by a nuclear density gauge or Roadway cores after completion of the finish rolling.

If the Contracting Agency uses a nuclear density gauge to determine density the test procedures FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on the day the mix is placed and prior to opening to traffic.

Roadway cores for density may be obtained by either the Contracting Agency or the Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches minimum, unless otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.

If the Contract includes the Bid item "Roadway Core", the cores shall be obtained by the Contractor in the presence of the Engineer on the same day the mix is placed and at locations designated by the Engineer. If the Contract does not include the Bid item "Roadway Core", the Contracting Agency will obtain the cores.

For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

Test Results

For a subplot 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 subplot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the subplot 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 subplot have been provided or made available to the Contractor. Core locations shall be outside of wheel paths and as determined by the Engineer. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted from any monies due or that may become due the Contractor under the Contract at the rate of \$200 per core and the Contractor shall pay for the cost of the traffic control.

5-04.3(10)A HMA Compaction – General Compaction Requirements

Compaction shall take place when the mixture is in the proper condition so that no undue displacement, cracking, or shoving occurs. Areas inaccessible to large compaction equipment shall be compacted by other mechanical means. Any HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective, shall be removed and replaced with new hot mix that shall be immediately compacted to conform to the surrounding area.

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. Unless the Engineer has approved otherwise, rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F.

Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat. Rollers shall only be operated in static mode on bridge decks.

5-04.3(10)B HMA Compaction - Cyclic Density

Low cyclic density areas are defined as spots or streaks in the pavement that are less than 90 percent of the theoretical maximum density. At the Engineer's discretion, the Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will follow WSDOT SOP 733. A \$500 Cyclic Density Price Adjustment will be assessed for any 500-foot section with two or more density readings below 90 percent of the theoretical maximum density.

5-04.3(10)C Vacant

5-04.3(10)D HMA Nonstatistical Compaction

5-04.3(10)D1 HMA Nonstatistical Compaction - Lots and Sublots

HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 400 tons, whichever is less except that the final subplot 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 subplot per WSDOT T 738.

The subplot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing

The location of the HMA compaction acceptance tests will be randomly selected by the Engineer from within each subplot, with one test per subplot.

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 subplot 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 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 PF 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 $\frac{1}{2}$ 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

Bridge Paving Joint Seals shall be in accordance with Section 5-03.

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 $\frac{1}{8}$ 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 $\frac{1}{4}$ 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 and Pre-Planing Briefing (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) Planing Bituminous Pavement

The planing plan must be approved by the Engineer and a pre-planing meeting must be held prior to the start of any planing. See Section 5-04.3(14)B2 for information on planing submittals.

Where planing an existing pavement is specified in the Contract, the Contractor must remove existing surfacing material and to reshape the surface to remove irregularities. The finished product must be a prepared surface acceptable for receiving an HMA overlay.

Use the cold milling method for planing unless otherwise specified in the Contract. Do not use the planer on the final wearing course of new HMA.

Conduct planing operations in a manner that does not tear, break, burn, or otherwise damage the surface which is to remain. The finished planed surface must be slightly grooved or roughened and must be free from gouges, deep grooves, ridges, or other imperfections. The Contractor must repair any damage to the surface by the Contractor's planing equipment, using an Engineer approved method.

Repair or replace any metal castings and other surface improvements damaged by planing, as determined by the Engineer.

A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a minimum of 4 inches of curb reveal after placement and compaction of the final wearing course. The dimensions of the wedge must be as shown on the Drawings or as specified by the Engineer.

A tapered wedge cut must also be made at transitions to adjoining pavement surfaces (meet lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line with vertical faces 2 inches or more in height, producing a smooth transition to the existing adjoining pavement.

After planing is complete, planed surfaces must be swept, cleaned, and if required by the Contract, patched and preleveled.

The Engineer may direct additional depth planing. Before performing this additional depth planing, the Contractor must conduct a hidden metal in pavement detection survey as specified in Section 5-04.3(14)A.

5-04.3(14)A Pre-Planing Metal Detection Check

Before starting planing of pavements, and before any additional depth planing required by the Engineer, the Contractor must conduct a physical survey of existing pavement to be planed with equipment that can identify hidden metal objects.

Should such metal be identified, promptly notify the Engineer.

See Section 1-07.16(1) regarding the protection of survey monumentation that may be hidden in pavement.

The Contractor is solely responsible for any damage to equipment resulting from the Contractor's failure to conduct a pre-planing metal detection survey, or from the Contractor's failure to notify the Engineer of any hidden metal that is detected.

5-04.3(14)B Paving and Planing Under Traffic

5-04.3(14)B1 General

In addition, the requirements of Section 1-07.23 and the traffic controls required in Section 1-10, and unless the Contract specifies otherwise or the Engineer approves, the Contractor must comply with the following:

1. Intersections:
 - a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure

must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).

b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.

c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.

d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.

e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.

2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.
3. Permanent pavement marking must comply with Section 8-22.

5-04.3(14)B2 Submittals - Planing Plan and HMA Paving Plan

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the Engineer, the Contractor must provide each operation's traffic control plan on 24 x 36 inch or larger size Shop Drawings with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

The planing operation and the paving operation include, but are not limited to, metal detection, removal of asphalt and temporary asphalt of any kind, tack coat and drying, staging of supply trucks, paving trains, rolling, scheduling, and as may be discussed at the briefing.

When intersections will be partially or totally blocked, provide adequately sized and noticeable signage alerting traffic of closures to come, a minimum 2 Working Days in advance. The traffic control plan must show where police officers will be stationed when signalization is or may be, countermanded, and show areas where flaggers are proposed.

At a minimum, the planing and the paving plan must include:

1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's planing and paving. Briefly describe the sequencing of traffic control consistent with the proposed planing and paving sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's planing, and paving.
2. A copy of each intersection's traffic control plan.
3. Haul routes from supplier facilities, and locations of temporary parking and staging areas, including return routes. Describe the complete round trip as it relates to the sequencing of paving operations.
4. Names and locations of HMA supplier facilities to be used.
5. List of all equipment to be used for paving.
6. List of personnel and associated job classification assigned to each piece of paving equipment.
7. Description (geometric or narrative) of the scheduled sequence of planing and of paving and intended area of planing and of paving for each day's work, must include the directions of proposed planing and of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection planing and paving scheduling and sequencing, and proposed notifications and coordinations to be timely made. The plan must show HMA joints relative to the final pavement marking lane lines.
8. Names, job titles, and contact information for field, office, and plant supervisory personnel.
9. A copy of the approved Mix Designs.

10. Tonnage of HMA to be placed each day.

11. Approximate times and days for starting and ending daily operations.

5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, 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 the Paving and Planing:
 - 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, public convenience and safety, and other Contractors who may operate in the Project limits.
 - 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 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, streetcar rail, and castings, before planing as per 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 of 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 of equipment as it relates to meeting Specification requirements.
 - c. Number of JMFs to be placed, and if more than one JMF is used, how the Contractor will ensure different JMFs are distinguished, how pavers and how MTVs are distinguished, 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

Construct HMA approaches at the locations shown in the Plans or where staked by the Engineer, in accordance with Section 5-04.

5-04.4 Measurement

HMA CI. ____ PG ____, HMA for ____ CI. ____ PG ____, and Commercial HMA 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.

Roadway cores will be measured per each for the number of cores taken.

Pavement repair excavation will be measured by the square yard of surface marked prior to excavation.

Planing bituminous pavement will be measured by the square yard.

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.

“HMA for Approach Cl. ____ PG ____”, per ton.

“HMA for Preleveling Cl. ____ PG ____”, per ton.

“HMA for Pavement Repair Cl. ____ PG ____”, per ton.

“Commercial HMA”, per ton.

The unit Contract price per ton for “HMA Cl. ____ PG ____”, “HMA for Approach Cl. ____ PG ____”, “HMA for Preleveling Cl. ____ PG ____”, “HMA for Pavement Repair Cl. ____ PG ____”, and “Commercial HMA” shall be full compensation for all costs, including anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal.

“Pavement Repair Excavation Incl. Haul”, per square yard.

The unit Contract price per square yard for “Pavement Repair Excavation Incl. Haul” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4) with the exception, however, that all costs involved in the placement of HMA shall be included in the unit Contract price per ton for “HMA for Pavement Repair Cl. ____ PG ____”, per ton.

“Asphalt for Prime Coat”, per ton.

The unit Contract price per ton for “Asphalt for Prime Coat” shall be full payment for all costs incurred to obtain, provide and install the material in accordance with Section 5-04.3(4).

“Prime Coat Agg.”, per cubic yard, or per ton.

The unit Contract price per cubic yard or per ton for “Prime Coat Agg.” shall be full pay for furnishing, loading, and hauling aggregate to the place of deposit and spreading the aggregate in the quantities required by the Engineer.

“Planing Bituminous Pavement”, per square yard.

The unit Contract price per square yard for “Planing Bituminous Pavement” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(14).

“Job Mix Compliance Price Adjustment”, by calculation.

“Job Mix Compliance Price Adjustment” will be calculated and paid for as described in Section 5-04.3(9)C6.

“Compaction Price Adjustment”, by calculation.

“Compaction Price Adjustment” will be calculated and paid for as described in Section 5-04.3(10)D3.

“Roadway Core”, per each.

The Contractor’s costs for all Work associated with the coring (e.g., traffic control) shall be incidental and included in the unit Bid price per each.

“Cyclic Density Price Adjustment”, by calculation.

“Cyclic Density Price Adjustment” will be calculated and paid for as described in Section 5-04.3(10)B.

(April 20, 2012 COK GSP)

Supplement this section as follows:

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 1/8 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 Project 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 in a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Project Engineer, will not produce satisfactory results will be removed and replaced at the contractor's expense.

When Portland cement concrete pavement is to be placed on HMA, the surface tolerance of the HMA shall be such that no surface elevation lies above the plan grade minus the specified plan depth of Portland cement concrete pavement. Prior to placing the Portland cement concrete pavement, any such irregularities shall be brought to the required tolerance by grinding or other means approved by the Project Engineer.

When utility appurtenances such as manhole covers and valve boxes are located in the traveled way, the roadway shall be paved before the utility appurtenances are adjusted to the finished grade.

END OF DIVISION 5

DIVISION 7 – DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWER

7-04.2 Materials

The materials list in Section 7-04.2 is modified as follows:

Acceptable pipe materials within City of Kirkland right of way are:

Ductile Iron Pipe

9-30.1

7-04.3 Construction Requirements

(*****)

Section 7-04.3(1) is supplemented with the following:

7-04.3(1) Cleaning and Testing

Cleaning and testing of the sanitary sewer system is required prior to placing the new section into service and shall be incidental to the sanitary sewer pipe and structures, unless otherwise specified under bid items herewith. Such tests shall be conducted in accordance with the reference material specification for the material being used. Tests on the completed installation shall be made as specified below.

Cleaning and Flushing

All gravity sewer pipes shall be cleaned and flushed after side sewer installation and after backfilling and compaction. The pipe shall be cleaned and flushed by passing an inflatable rubber ball through the completed section or using a flush truck. Any obstruction, such as cemented grout or debris found in the completed section, shall be removed.

Alignment and Grade

Alignment and grade will be inspected by lamping each completed section. Any section which appears to exceed the allowance for variance in line or grade shall be further inspected by an approved video monitoring system (TV inspection). If this inspection confirms that the section does not meet the specified requirements for the line and grade, the sections or portion not in compliance shall be re-excavated and re-laid at Contractor's expense.

All costs incurred for TV inspection shall be considered incidental to and included in various related bid item included in the proposal.

Deflection Test for Gravity Sewer Pipe

All gravity sewer pipes shall be tested for deflection at least 30 days after completion of trench backfill and compaction in accordance with requirements of Section 7-17.3(2)G of the Standard Specifications.

Leakage Tests

All gravity sewers, including all connected side sewers, shall be tested for water tightness in accordance with the provisions of Section 7-17.3(2)F (Low Pressure Air Test) of the Standard Specifications.

Acceptable water tightness testing criteria is revised as follows: Air testing will require a minimum pressure of 4 psi for 15 minutes with no pressure drop. No other test procedures will be allowed except by written approval of the Project Engineer. Whenever ground water is encountered in the sewer construction, an approved water level monitoring device shall be installed at each manhole. The device shall be used in the conduct of the sewer testing to determine the water pressure above the sewer being tested.

(*****)

Add the following new subsection:

7-04.3(2) Existing Utilities

Existing utilities of record are shown on the Plans. These are shown for convenience only, and the Engineer assumes no responsibility for improper locations or failure to show utility locations on the Plans. When utility services occupy the same space as the new storm sewer main, the Contractor shall complete necessary excavation to fully expose such services. The Contractor shall protect said services, and work around them during excavating and pipe laying operations. Any damages to services resulting from the Contractor's operation shall be reported to the appropriate utility. Such damage shall be repaired at the Contractor's expense.

The Contractor shall anticipate the potential for crossing over or under an occasional shallow existing side sewers and roof drains that are not part of the one-call utility locate. If such a side sewer or drain is encountered, the Contractor shall immediately notify the Owner's on-site representative and then take the necessary steps to determine whether or not the side sewer is active. If a side sewer is damaged by construction activity, the Contractor is responsible for repairing the side sewer. All costs associated with determining the viability and repair of the existing side sewer shall be considered incidental to the cost of the storm sewer pipe and no additional payment will be made.

(*****)

Add the following new subsection:

7-04.3(2)A Potholing

The Contractor shall pothole to determine the exact horizontal and vertical location of existing utilities and determine if a conflict exists. If a conflict should exist, the Engineer shall be notified prior to any change in storm sewer line grade. All costs associated with adjustments in depth to avoid conflicts with existing utilities shall be considered incidental to the cost of the storm sewer pipe and no additional payment will be made. The Engineer shall approve the potholing prior to the Contractor performing the potholing. Potholing done without prior to approval from the Engineer will not be paid. See Section 8-05 herein for potholing measurement and payment.

7-04.4 Measurement

(*****)

Section 7-04.4 is supplemented with the following:

Potholing, shall be incidental to the installation of Storm Sewer Pipe.

7-04.5 Payment

(***)**

Section 7-04.5 is supplemented with the following:

The unit contract prices for Storm Sewer Pipe, regardless of size and material, shall be full compensation for all labor, material, tools and equipment necessary for and incidental to furnish and install the storm sewer as shown on the plans and as specified herein, including the following:

1. Removal, loading, hauling, and disposal of existing asphalt concrete pavement as necessary for trench excavations in paved areas. This shall include removal of existing pavement beyond the trench as necessary and as indicated on the drawings prior to final pavement patch.
2. All required potholing to verify locations of existing utilities.
3. Trench excavation and dewatering, furnishing and installation of pipe on line and grade, wyes, tees, special fittings, manhole adapters.
4. Removal, loading, hauling, and disposal of native excavation material.
5. Pipe bedding material and compaction.
6. Extra depth, including excavation, backfill and compaction, required to clear existing buried utilities or other obstacles.
7. Extra depth, including excavation, backfill and compaction, required to clear existing buried utilities or other obstacles.
8. Steel sheeting for covering excavations as necessary.
9. Maintenance, restoration and/or relocation, if required, of existing culverts, storm drainage pipe, other utilities and structures affected by construction that are to remain.
10. Cleaning and testing of all storm sewers and catch basins including CCTV inspection of the mains.
11. Crushed Surfacing Top Course and compaction for roadway base.
12. Placing and maintaining temporary cold mix asphalt concrete patching consisting of a minimum 3-inches of cold asphalt mix over compacted backfill within existing paved areas, and removal of the temporary cold mix asphalt mix prior to placement of trench patch (paid for under "HMA Class 1/2-inch, PG 64-22").

7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS

(January 22, 2018 COK GSP)

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

Section 7-05.3(1) is supplemented with the following

Catch basins and similar structures shall be brought to finished grades by methods of construction as required in Section 7-05 and City of Kirkland Pre-Approved Plans. Steel risers are not allowed. Patch adjacent

pavement with Class G asphalt concrete pavement. Seal joint with AR4000W and dry sand after patching.

“ADJUST CATCH BASIN TO GRADE” shall be constructed in accordance with the Plans.

Any damage to existing catch basins resulting from the Contractor’s operations shall be repaired at the Contractor’s expense.

Contractor shall install agency supplied storm drain markers and adhesive on any new or altered catch basins that have a vaned grate and/or inlet. To install, follow the “Storm Drain Marking” instruction sheet supplied with the storm drain markers. Any work associated with installation of storm drain markers is incidental to other bid items.

7-05.5 Payment

(*****)

Section 7-05.5 is supplemented with the following:

Payment will be made for the following bid item(s):

CATCH BASIN, TYPE I	PER EACH
REPLACE FRAME AND GRATE WITH VANED GRATE	PER EACH
REPLACE FRAME AND GRATE WITH SOLID LOCKING LID	PER EACH
ADJUST CATCH BASIN TO GRADE	PER EACH
ADJUST SANITARY SEWER TO GRADE	PER EACH

The contract bid prices above, including all incidental work, shall be full compensation for all labor, material, tools, and equipment necessary to satisfactorily complete the work as defined in the Standard Specifications and these Special Provisions.

Precast adjusting rings/risers, bricks, grout, Class G asphalt concrete, and AR4000W asphalt shall be considered **incidental** and included in the unit contract price for the items in this section.

END OF DIVISION 7

DIVISION 8 – MISCELLANEOUS CONSTRUCTION

8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

(June 20, 2017 COK GSP)

8-01.1 Description

Section 8-01.1 is supplemented with the following:

Implementation of appropriate TESC BMP's at the appropriate construction phases is very important to prevent siltation of the subgrade, aggregate courses, and final permeable pavement. The Contractor shall install and maintain all temporary and permanent erosion control measures and Best Management Practices (BMPs) in accordance with the Contract Documents, Standard Specifications, Permit Conditions, the Contractors "Stormwater Pollution Prevention Plan" (SWPPP) and as directed by the Engineer prior to clearing, grubbing, or grading or as necessary, as clearing and grading progress. Such measures shall include, but are not necessarily limited to:

- Commercial construction entrances per CK-E.02.
- Quarry Spall outfall pads for temporary erosion control
- Rock, Wattle, Compost sock check dams
- Straw mulch, netting and tackifier
- Concrete wash
- Baker tanks and/or Settling ponds
- Stabilized construction entrance / exit
- Inlet protection on existing and proposed drainage structures
- Reinforced silt fencing
- Plastic Covering
- Temporary pipe slope drains
- Temporary HMA Curb
- Disposal of sediments and materials
- TESC seeding
- Maintenance of BMPs including in the event of emergencies and as weather and field conditions dictate; and also including installation of additional BMPs which may become required as field and weather conditions evolve.
- Street sweeping and Cleaning
- ESC Lead per 8-01 of the Standard Specifications
- All materials, tools and equipment necessary to meet these requirements

The Contractor shall provide erosion control as required for all stockpiled materials at no cost to the Contracting Agency. The Engineer, in the event of an emergency, and as weather and field conditions dictate, may require additional erosion controls and BMPs.

Site Specific BMPs and SWPPP Plan

Temporary Erosion / Water Pollution Control notes and performance criteria are noted in the Contract Documents. The Contractor shall submit his or her own Storm Water Pollution Prevention Plan (SWPPP) to the Contracting Agency for review and approval prior to the commencement of clearing, grubbing, or grading activities.

Water quality testing and discharge volume reporting required by the project permits shall be performed by the Contractor and is a condition of approval of the SWPPP. The reporting data shall be provided to the Engineer as soon as practical, at regular intervals and prior to reporting deadlines established in the permits. The Contractor will provide a copy of the reporting information within 24 hours of a request to do so by the Engineer. All costs to perform these reporting requirements are to be included in the lump sum contract price for "Erosion/Water Pollution Control".

(June 20, 2017 COK GSP)

8-01.3 Construction Requirements

Section 8-01.3 is supplemented with the following:

The Contractor shall bear sole responsibility for damage to completed portions of the project and to property located off the project caused by erosion, siltation, runoff, or other related items during the construction of the project. The Contractor shall also bear sole responsibility for any pollution of rivers, streams, groundwater, or other water that may occur as a result of construction operations.

Any area not covered with established, stable vegetation where no further work is anticipated for a period of 15 days, shall be immediately stabilized with the approved erosion and sedimentation control methods (e.g., seeding and mulching, straw). Where seeding for temporary erosion control is required, fast germinating grasses shall be applied at an appropriate rate (e.g., perennial rye applied at approximately 80 pounds per acre).

At no time shall more than 1 foot of sediment be allowed to accumulate within a catch basin. All catch basins and conveyance lines shall be cleaned at a time designated by the Contracting Agency Construction Inspector.

The cleaning operation shall not flush sediment-laden water into the downstream system. The cleaning shall be conducted using an approved vacuum truck capable of jet rodding the lines. The collection and disposal of the sediment shall be the responsibility of the Contractor at no cost to the Contracting Agency.

8-01.3(1) General

(June 20, 2017 COK GSP)

8-01.3(1)A Submittals

Section 8-01.3(1)A is supplement with the following:

Stormwater Pollution Prevention Plan

The Contractor shall prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with Department of Ecology requirements.

The Contractor shall incorporate the SWPPP implementation schedule into the Contractor's progress schedule. The SWPPP and implementation schedule shall be submitted in accordance with Sections 1-05.3 and 1-08.3.

In addition, the SWPPP shall outline the procedures to be used to prevent high pH stormwater. The plan shall include how the pH of the water will be maintained between pH

6.5 and pH 8.5 prior to being discharged from the project or entering surface waters. Prior to beginning any concrete or grinding work, the Contractor shall submit the plan, for the Engineer's review and approval.

The Ecology template can be found at the following link:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/>

The SWPPP is considered a "living" document that shall be revised to account for additional erosion control/pollution prevention BMPs as they become necessary and are implemented in the field during project construction. A copy of the most current SWPPP shall remain on-site at all times and an additional copy shall be forwarded to the Engineer. At the Contractor's preference, revisions to the SWPPP may be forwarded to the Engineer rather than submitting a complete document. Revisions to the SWPPP may be kept on-site in a file along with the original SWPPP document.

(June 20, 2017 COK GSP)

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

Supplement this the second paragraph with the following:

3. Inspecting all on-site erosion and sediment control BMPs at least once every five working days and within 24 hours of every runoff event. A SWPPP Inspection report or form shall be prepared for each inspection and shall be included in the SWPPP file. A copy of each SWPPP Inspection report or form shall be submitted to the Engineer no later than the end of the next working day following the inspection. The report or form shall include, but not be limited to the following:
 - a. When, where, and how BMPs were installed, maintained, modified, and removed.
 - b. Observations of BMP effectiveness and proper placement.
 - c. Recommendations for improving future BMP performance with upgraded or replacement BMPs when inspections reveal SWPPP inadequacies.
 - d. Approximate amount of precipitation since last inspection and when last inspection was performed.
4. Updating and maintaining a SWPPP file on site that includes, but is not limited to the following:
 - a. SWPPP Inspection Reports or Forms.
 - b. SWPPP narrative.
 - c. Other applicable permits.

(June 20, 2017 COK GSP)

8-01.3(1)C Water Management

Section 8-01.3(1)C is supplemented with the following:

The Contractor will be responsible for meeting the SWPPP requirements.

The Bid Item "Erosion/Water Pollution Control" shall include the cost of providing temporary detention/retention facilities as illustrated in the Contractor's SWPPP Plan as

well as modifications, additions and removals of such facility as dictated by the Contractor's sequence of work and may include, but are not limited to:

1. Temporary detention/retention facilities such as ponds, Baker Tanks, or other facilities.
2. If any permanent stormwater facilities are utilized, such as the detention vault, for SWPPP compliance, the Contractor shall remove accumulated sediment and clean the facility prior to final acceptance at no additional cost to the Contracting Agency.
3. Temporary facilities such as wheel wash stations or similar.
4. Temporary construction entrances.
5. Silt Fence
6. Straw Wattles

No additional compensation shall be made for construction, alteration, removal, maintenance, and any additional requirements necessary for "Erosion/Water Pollution Control". No additional compensation shall be made for conflicts with existing or proposed improvements or construction sequencing of work when facilities are utilized to meet permit requirements.

(*****)

8-01.5 Payment

Section 8-01.5 is deleted in its entirety and replaced with the following:

Payment will be made for the following bid item(s):

"Erosion/Water Pollution Control", by lump sum.

Installation, 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 under the item "Erosion/Water Pollution Control".

8-02 ROADSIDE RESTORATION

8-02.3 Construction Requirements

(December 14, 2005 COK GSP)

8-02 ROADSIDE RESTORATION

8-02.3 Construction Requirements

(November 3, 2010 COK GSP)

8-02.3(9) Pruning, Staking, Guying and Wrapping

Section 8-02.3(9) is supplemented with the following:

If removal of canopy material is necessary to allow access for equipment, a Certified Arborist shall be consulted to ensure that proper pruning techniques are used.

All costs associated with pruning and staking trees shall be considered incidental and included in the contract price for cement concrete sidewalk construction.

(*****)

8-05 VACANT

Section 8-05 is deleted in its entirety and replaced with the following:

8-05 PROJECT OUTREACH SIGN

8-05.1 Description

The Contractor shall install and maintain, for the duration of the project, the City-provided informational sign for this project.

8-05.3 Construction Requirements

The City-provided chloroplast or aluminum sign will be a maximum of 4 feet by 8 feet in size. The Contractor shall mount chloroplast signs to plywood sheets of the same size. This mounting can be skipped for aluminum signs. The Contractor shall install signs by furnishing and setting two 4 x 4 posts (per sign) a minimum of 36 inches below grade, set apart consistent with the width of the sign, and backfilling with soil at the location agreed upon by the City and the Contractor. The Contractor shall secure the sign so that the top is 7 feet above ground level. The Contractor shall remove the sign at Substantial Completion.

8-05.5 Payment

All costs associated with installing the City-provided sign shall be included into the lump sum contract price for "Mobilization."

(DECEMBER 28, 2006 COK GSP)

8-14 CEMENT CONCRETE SIDEWALK

8-14.3 Construction Requirements

8-14.3(3) Placing and Finishing Concrete

The fourth paragraph of Section 8-14.3(3) shall be replaced with the following:

Sidewalk ramps shall be of the type specified in the Plans. The detectable warning pattern shall have the truncated dome shape shown in the Standard Plans and shall be installed by adding a manufactured material before the concrete has cured. Acceptable manufacturers' products are shown on the Qualified Products List.

Section 8-14.3(5) is replaced with the following:

8-14.3(5) ADA Sidewalk Ramps

Construction of ADA sidewalk ramps shall conform to Washington State Dept of Transportation (WSDOT) Standards included herein. Pre-approved manufactured products include: Detectable Warning Systems, Inc or approved equivalent.

All costs associated with the installation of ramps shall be considered included in the unit contract price for "Cement Concrete Sidewalk."

8-14.4 Measurement

Section 8-14.4 is replaced with the following:

Cement concrete sidewalks will be measured by the square yard of finished surface and will include the surface area of the sidewalk ramps. Included in the unit contract price shall be all labor, tools, equipment, materials, and incidental items of work including, but not limited to, providing expansion joints, joint filler, finishing the surface, thickened edges in curb returns, raised edge for back of walk, materials and labor for ADA sidewalk ramps and providing white polyethylene sheeting for curing.

The unit contract price listed above shall be full compensation for all labor, tools, materials, and equipment necessary to complete the work as specified herein.

Ramp detectible warning retrofit will be measured by the square foot of truncated dome material installed on the existing ramp.

8-20 Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical

8-20.1 Description

Section 8-20.1 is supplemented with the following:

(*****)

The Contractor shall provide all labor, equipment, and materials for a complete and operational signal and illumination system(s) in accordance with the Plans, City of Kirkland Standards, City of Kirkland Pre-Approved Plans, WSDOT Standard Specifications, WSDOT Standard Plans, and these Special Provisions. Work to be performed shall include, but not be limited to the following items:

- Furnish and install a fully functioning traffic signal system, including but not limited to signal poles, mast arms, foundations, signal heads, Accessible Pedestrian Signal systems, detection systems, PTZ cameras, traffic signal controller cabinet, fiber optic communications, and all associated equipment, junction boxes, conduits, wiring, coordination with utility providers, and all other hardware necessary to provide a fully functioning system.
- Furnish and install a fully functioning roadway illumination system, including but not limited to luminaire arms, luminaire fixtures, service cabinet, service connection, and all associated equipment, junction boxes, conduits, wiring, coordination with utility providers, and all other hardware necessary to provide a fully functioning system.

8-20.1(1) Regulations and Code

Section 8-20.1(1) is supplemented with the following:

(June 12, 2019 COK GSP)

Prior to start of Work, all necessary licenses, permits, and approvals shall be obtained. The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to the performance of the Work, the protection of adjacent property, and the maintenance of all other facilities. The Contractor will be required to comply with all the provisions of these instruments and shall save and hold the Contracting Agency harmless from any damage that may be incurred as a result of the Contractor's failure to comply with all the terms of these permits.

All materials and methods required under this section, unless otherwise superseded herein, shall conform to the 2025 edition of the Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction.

8-20.2 Materials

8-20.2(1) Equipment List And Drawings

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

(***)**

The Contractor shall also be required to submit product data for the following:

- Video detection equipment and mounting hardware
- Video detection cabling
- Emergency vehicle pre-emption system
- PTZ cameras, mounting hardware, and cabling
- Vehicle signal heads and mounting hardware
- Pedestrian signal heads and mounting hardware
- Conduit and innerduct
- Conductors
- Junction boxes and cable vaults
- Service cabinets and service connections
- Traffic signal controller cabinet and components
- APS pushbuttons, control unit, and mounting hardware

Approval of submittals may require up to 20 calendar days from the date the Engineer receives the submittals until they are returned to the Contractor. The actual time required for approval is dependent upon the completeness and appropriateness of the drawings as submitted.

Any deficiencies will require additional time for approval based on the degree of the deficiency and the additional review time required. If the submittals are returned to the Contractor to correct deficiencies, an additional 20 calendar days may be required for the approval process.

If more than 20 calendar days are required for routine approval of submittals that are completed and accurate, the Contractor will be granted an extension of time equal to the additional review time.

Materials not approved by the Engineer will not be permitted on the jobsite. All materials for review shall be submitted in a single package.

(March 13, 1995, WSDOT GSP)

Pole base to light source distances (H1) for lighting standards with pre-approved plans shall be as noted in the Plans.

Pole base to light source distances (H1) for lighting standards without pre-approved plans will be furnished by the Engineer as part of the final approved shop drawings, prior to fabrication.

(March 13, 1995, WSDOT GSP)

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

8-20.3(1) General

Section 8-20.3(1) is supplemented with the following:

(**)***

Requests for traffic signal turn-ons shall only be received when traffic signal, signage, and channelization are substantially complete. Signal turn-ons shall be limited to Tuesdays through Thursdays, 7AM to 2PM only. The City of Kirkland prefers that cabinet turn-ons be scheduled on Tuesdays, if possible. All wires are to be pulled and brought to the terminal cans when possible, prior to scheduling a switch over to ensure all pathways are usable and cables are of the proper length. Signal turn-on and flash-out will be coordinated by the City Inspector with the City of Kirkland's Signal Technicians a minimum of 5 working days in advance of performing the turn-on, Ohms test for APS pushbuttons per Section 8-20.3(14)G and flash-out. During this period, City Transportation Division Staff will confirm all head directionality, signage, and channelization. Signal turn-on will then be performed.

All equipment shall be handled and protected so as to prevent damage. Damaged equipment, if any, shall be repaired or replaced by the Contractor to the satisfaction of the Engineer at no additional cost to the Owner.

No new fixtures shall be constructed as part of this Contract, which are in conflict with any existing utilities, or the code required thereby. It shall be the Contractor's responsibility to locate all utilities whether above, on, or below the ground, and to protect against any and all damages arising from work under this project. At least 48 hours before digging, the Contractor shall call the Utilities Underground

Locator Center (telephone 1-800-424-5555). Contractor must maintain locates during the duration of the project once they have been identified.

All manufacturers' warranties or guarantees on all electrical and mechanical equipment, consistent with those provided as customary trade practice, shall be assigned to the City of Kirkland.

(*****)

Salvaged Equipment

The following equipment designated for removal shall remain the property of the City of Kirkland:

- Rectangular Rapid Flashing Beacon (RRFB) poles, bases, flashing beacons, signs, cabinets, solar panels, pushbuttons

The contractor shall coordinate with the City of Kirkland to deliver salvaged equipment during normal business hours to the City of Kirkland Public Works Maintenance building, or other location as appropriate.

All other existing electrical equipment and materials designated to be removed shall become the property of the Contractor and be removed from the project.

8-20.3(2) Excavating and Backfilling

Section 8-20.3(2) is supplemented with the following:

(*****)

Backfill for all electrical trenches shall consist of crushed surfacing top course meeting the requirements of Section 9-03.9(3) of the Standard Specifications.

All trenches shall be mechanically compacted by a power operated mechanical tamper or other mechanical compaction device approved by the Engineer. Compaction shall be in conformance with Section 2-30.3(14), Method C of the Standard Specifications. The temporary restoration of conduit trenches shall be as directed by the Engineer.

The Contractor warrants and represents awareness of the statutory provisions contained in RCW 19.122.010 through .900, that the Contractor has read and fully understands the same, and will comply with the requirements of these provisions, which are incorporated by reference herein. The Contractor agrees that all trenching as well as excavating for all pole foundations shall be an "excavation" as defined under RCW Chapter 19.122 and that such utilities constitute underground facilities. The parties agree that remedies affected under RCW Chapter 19.122 are also incorporated by reference herein. Any cost to the Contractor as a result of this law shall be at the Contractor's expense.

Add the following new sub-section:

(*****)

8-20.3(2)A Resolving Utility Conflicts

Underground utilities of record will be shown on the construction plans insofar as it is possible to do so. These, however, are shown for convenience only and the City and Engineer assumes no responsibility for improper locations or failure to show utility locations on the construction plans.

The location of existing underground utilities, when shown on the plans, is approximate only, and the Contractor shall be responsible for determining their exact location. The Contractor shall check with the utility companies concerning any possible conflict prior to commencing excavation in any area, as not all utilities may be shown on the plans.

The Contractor shall be entirely responsible for coordination with the utility companies and arranging for the movement or adjustment, either temporary or permanent, of their facilities within the project limits.

If a conflict is identified, the Contractor shall contact the Engineer. The Contractor and City shall locate alternative locations for cabinet or junction boxes. The Contractor shall get approval from the Engineer prior to installation. The Contractor may consider changing depth or alignment of conduit to avoid utility conflicts. Potholing alternative locations, as directed by the Engineer, will be paid for by a separate bid item with approval of the engineer.

Before beginning any excavation work for foundations, vaults, junction boxes or conduit runs, the contractor shall confirm that the location proposed on the Contract Plans does not conflict with utility location markings placed on the surface by the various utility companies. If a conflict is identified, the following process shall be used to resolve the conflict:

1. Contact the Engineer and determine if there is an alternate location for the foundation, junction box, vault or conduit trench.
2. If an adequate alternate location is not obvious for the underground work, select a location that may be acceptable and pothole to determine the exact location of other utilities. Potholing must be approved by the Engineer.
3. If an adequate alternate alignment still cannot be identified following potholing operations, the pothole area should be restored and work in the area should stop until a new design can be developed.

The Contractor shall not attempt to adjust the location of an existing utility unless specifically agreed to by the utility owner.

8-20.3(4) Foundations

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

(*****)

The foundations for the traffic signal controller cabinet with service cabinet shall conform to Kirkland Standard Plan CK-TS.04. Concrete for traffic signal controller and service cabinet foundations shall be mechanically consolidated in the forms.

8-20.3 CONSTRUCTION REQUIREMENTS

8-20.3(5) Conduit

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

(MARCH 4, 2024 COK GSP)

All conduit shall be Schedule 80 rigid PVC under roadway crossings or under high-volume driveways. All other conduits in standard trench locations shall be Schedule 40 rigid PVC.

Each empty conduit run shall contain a 200-pound breaking strength polyolefin pull cord, which shall be tied off at both ends. Pull rope or tape removed from fiber optic conduit runs shall be replaced with new pull tape.

All conduit installed underground shall have polyethylene Underground Hazard Marking Tape, 6 inches wide, red legend "Caution-Electrical Line Buried Below," placed approximately 12-inches above the conduit.

The location of the conduit within the junction box shall be such that the side of the junction box through which the conduit enters shall indicate from which direction the conduit came.

Where intercepting and splicing to an existing conduit is called out on the plans, the Contractor shall verify the conduit size and schedule before ordering the new conduit sections.

Conduits installed for future use shall be prepared as follows: After final assembly in place, the conduit shall be blown clean with compressed air. Then, in the presence of the Engineer, a cleaning mandrel correctly sized for each size of conduit shall be pulled through to ensure that the conduit has not been deformed. As soon as the mandrel has been pulled through, both ends of the conduit shall be sealed with watertight conduit caps designed specifically to prevent entrance of water and debris. All conduits scheduled for future use shall originate in a foundation or junction box and terminate in a junction box. All equipment grounding conductors, and the bonding conductor for metallic conduits shall be bonded in all junction boxes in accordance with Section 8-20.3(9).

Detectable Pull Tape

For all conduits that do not contain electrical conductors, the Contractor shall add a detectable pull tape in one of the conduits in the same trench. The detectable pull tape shall be flat polyester woven pre-lubed tape that contains a 22-gauge wire and marked with sequential continuous footage markings. All other spare conduit may utilize non-detectable pull tape.

8-20.3(5)A1 *Fiber Optic Conduit*

Section 8-20.3(5)A1 is supplemented with the following:

(MARCH 4, 2024 COK GSP)

Fiber optic cable shall be located at least 12-inches from any other conductor.

Fiber optic cables shall not be coiled in the traffic signal controller cabinet.

8-20.3(5)D *Conduit Placement*

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

(MARCH 4, 2024 COK GSP)

Conduit shall extend 2-inches above traffic signal cabinet foundation.

A 1-inch conduit shall be installed under service cabinet for grounding.

Open cuts shall be backfilled with CDF, unless otherwise directed by the Engineer.

Turns in conduit shall occur only at junction boxes.

The contractor may install conduit by trenching or directional boring. No “blind” drilling shall be permitted.

Conduit may be spliced by glued joints only.

Conduits shall be terminated with a bushing.

The conductor shall perform an independent utility verification prior to conduit installation and inform the Engineer immediately if any conflict is found.

The final location of all conduits shall be approved by the Engineer prior to installation.

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

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

(**)***

Junction boxes shall be located and oriented as shown on the Plans but may be adjusted in the field by the Engineer to better fit existing conditions. No junction boxes shall be located in pedestrian ramp areas.

8-20.3(8) *Wiring*

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

(March 13, 1995, WSDOT GSP)

Field Wiring Chart

501	AC+ Input	516-520 Railroad Pre-empt
502	AC- Input	5A1-5D5 Emergency Pre-empt
503-510	Control-Display	541-580 Coordination
511-515	Sign Lights	581-599 Spare

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

Loop 6 In	918	928	938	948	958	968	978	988	998
Spare	919	929	939	949	959	969	979	989	999

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

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

(December 9, 2004 COK GSP)

Connection to Puget Sound Energy power source shall be where shown on the plans. All connections and interfacing with Puget Sound Energy shall conform to Puget Sound Energy requirements.

8-20.3(14) Signal Systems

8-20.3(14)A Signal Controllers

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

(***)**

The persons performing the controller cabinet installation and wiring and their Supervisor shall be personally experienced in traffic signal and controller cabinet systems and shall have been engaged in this work for a minimum of three years. Qualifications shall be submitted to the Engineer at least 30 calendar days prior to the start of the first controller cabinet replacement. These qualifications shall include:

1. The name of each person who will be performing controller cabinet and traffic signal wiring work and their employer's name, business address and telephone number.
2. The name and addresses of 5 similar projects that the foregoing people have worked on during the past 3 years.
3. All information required showing the experience criteria have been met.

8-20.3(14)C Induction Loop Vehicle Detectors

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

(***)**

Construction Requirements

Install loop detectors during conditions of zero precipitation and when the pavement temperature is between 40 degrees F and 100 degrees F.

Clean roadway surface of debris, standing water, or other material which may enter the saw cut and thereby degrade the quality of the installation.

Loops shall be installed as shown in the Plans.

Loop wires shall be connected to lead-in cable using uninsulated butt splices. The connection shall be soldered and the connection shall then be encapsulated using approved heat shrinkable, thin wall, flexible, polyolefin tubing or 3M Scotch 2200 Vinyl Mastic Pads wrapped in 3M Scotch Super 88 Vinyl Electrical Tape.

In areas where no conduit exists between the junction box and the edge of the roadway, conduit stub outs shall be installed. This installation may require curb and/or side walk replacement to install the required conduit sweeps. Holes greater than 3.5 inches in diameter may require an asphalt patch. Existing stub outs not being re-used shall be plugged or removed from the junction box. Install a 2-inch conduit between each saw cut in the pavement surface and the junction box.

Saw Cutting Round Loops

Round loops shall be constructed in accordance with requirements of Method A (Circular Saw). Construction shall conform to WSDOT Standard Plans J-50.12 and J-50.15, as modified by the following:

1. Round saw cuts shall be 6 feet in diameter and shall be constructed using equipment designed for cutting round loops. The equipment shall use a concave, diamond-segmented blade. The saw cuts shall be vertical and shall be a minimum of 0.25 inches wide. The saw cut depth shall be a minimum of 2.5 inches measured at any point along the perimeter. Other methods of constructing the saw cut, such as anchoring a router or flat blade saw, will not be allowed.
2. The bottom of the saw cut shall be smooth. No edges created by the differences in saw cut depths will be allowed.
3. All saw cuts corner shall be rounded to a minimum 1.6 inches radius.
4. All saw cuts shall be cleaned with a 1000-psi high pressure washer. Wash water and slurry shall be vacuumed out. Saw cuts shall be blown out dry with compressed air.
5. Loops shall be installed after paving the final lift of asphalt.
6. The loops shall be constructed using three turns of conductor if its home run is less than 400 feet, and four turns of conductor if its home run is greater than 400 feet. The conductor shall be installed one turn on top of the previous turn. All turns shall be installed in clockwise direction.

Loop Materials

Loop sealant shall be MSI 34271. Loop sealant shall be installed in two layers. The first layer shall be allowed to cool before the second layer is applied. Installation of the sealant shall completely encapsulate the loop conductors. A minimum of 1-inch of sealant shall be provided between the top conductors and the top of the saw cut. All sealant shall be installed per

manufacturer recommendations using equipment recommended by the manufacturer.

Electrical conductors shall conform to the requirements of Section 9-29.3 Conductors, Cable of the Standard Specifications, unless otherwise noted. Electrical wiring shall conform to the requirements of Section 8-20.3(8) Wiring of the Standard Specifications.

Loop wire shall be No. 12 AWG Class B stranded copper wire with cross-linked polyethylene type USE insulation. Loop lead-in wire shall be IMSA loop cable specification 50-2-1984, #14 AWG

Loop Wire Installation

A minimum of 2-inch-diameter PVC conduit shall be used to contain the loop lead-in from the saw cut in the roadway to the junction box.

The Contractor shall coil at least 10 feet extra wire at the junction box prior to placing it in the saw cut so that the loop wire will not require any splices.

The loop wires shall be placed in the saw cut so that at no time is any tension placed on the wires. The wires shall not bind against the pavement at any point in the saw cut.

The loop wires in the lead-in saw cut and loop conduit shall be twisted in a symmetrical fashion with a minimum of 3 twists per foot at a uniform rate of turns per foot between the loop saw cut and the junction box. The twisted loop wire shall be pulled into the junction box through the conduit placed between the saw cut and the junction box. Unless specified by the Engineer there shall be wiring for no more than 3 (three) loops (6 twisted loop wire conductors) in each lead-in (home run) saw cut.

Loop Testing

Loop installation shall be tested in accordance with Section 8-20.3(14)D Test for Induction Loops and Lead-in Cable of the Standard Specifications. In addition, prior to installing the loop sealant material the Contractor shall perform the required inductance testing. The inductance reading shall not be less than 60 nor greater than 120 microhenries. If any of the installation fail to pass all tests, the installation shall be repaired or re-tested until satisfactory results are obtained.

(*****)

Add the following new section:

8-20.3(14)F Video Detection

The Contractor shall furnish, install, and test a complete Video Detection System capable of providing presence and advance vehicle detection at locations defined in the Contract Plans, consistent with manufacturer's recommendations. The Contractor shall coordinate with the City of Kirkland Signal Shop for all configurations.

The Video Detection System shall be comprised of components from the same manufacturer, with the exception of the LED monitors.

Detection cameras shall be located approximately as noted on the Plans; however, the locations shall be field adjusted as directed by the Engineer and equipment manufacturer for maximum coverage. Detection shall be fully operable before request can be made for turn on of intersection. The installation shall include all field equipment as well as all equipment required in the controller cabinet, including but not limited to:

- Video detection cameras
- Mounting equipment
- Central control unit and modules, as needed.
- 8-inch video monitor
- Programming devices, configuration tools, licenses, and/or software
- Surge suppressors
- Power over Ethernet injectors/switches
- Communications and power cabling
- All other equipment necessary for a fully operable detection system

If the installation cannot be completed in one day, the controller shall be put on fixed time operation by the Contracting Agency.

Detection cameras shall be mounted at a sufficient height to prevent occlusion from cross traffic. A factory-certified representative of the equipment manufacturer shall install controller cabinet equipment, and program the cameras to provide detection. The Contractor shall notify the Engineer 48 hours in advance of changes that will require Contracting Agency staff to reprogram cameras.

All detection system equipment shall remain the property of the City of Kirkland upon completion of the Contract Work. The Contractor shall be responsible for any damage to the detection equipment.

A factory-certified representative of the equipment manufacturer shall also be on-site during the installation of the permanent equipment to supervise the installation and testing of the equipment. The factory representative shall install, make fully operational, and test the system as indicated in the Plans and in these Special Provisions.

The equipment manufacturer shall provide 2 days training to Contracting Agency personnel in the operation, setup, and maintenance of the Video Detection System. Instruction and materials shall be provided for a maximum of 10 persons and shall be conducted at a location selected by the Contracting Agency. The Contracting Agency shall be responsible for travel, room and board, and other related expenses for its own personnel.

(*****)

Add the following new section:

8-20.3(18) PTZ Camera

Add the following new sub-section:

8-20.3(18)A PTZ Camera

The PTZ cameras shall be furnished and installed by the Contractor as shown in the mounting details in the Plans. PTZ cameras shall be mounted 90 degrees from attachment point (i.e. mast arm). The Contractor is responsible for installing cameras and mounts per manufacturer recommendations, including correct sealing to make camera housing watertight.

After all cameras are installed the Contractor shall arrange an interactive session with the Engineer to fine-tune and test the cameras in the field. The Contractor shall test the PTZ system using a Contractor-supplied control device such as a laptop computer running Vendor-supplied software. All test cables and connections shall be the responsibility of the Contractor. The Contractor shall demonstrate to the Engineer the following features of the camera installation:

1. Display camera video on the Contractor-provided monitor.
2. Pan and tilt the camera with no detectable delay.
3. Zoom and focus the camera in both fast and slow modes.
4. Turn the camera off and on.
5. Change the iris to auto and manual.
6. Demonstrate faceplate wiper operation.

The Contractor is required to document video output for the following video level measurements and show their results in comparison to the required range provided by the camera manufacturer:

1. Signal-to-noise ratio
2. Horizontal resolution
3. Vertical phase
4. Color and black and white Lux levels
5. Video output

PTZ Camera Cabling

The Contractor shall install and terminate the PTZ camera cabling into the PTZ using a RJ45 IP67 coupler. The Contractor shall furnish and install a PoE++ injector and termination block in each traffic signal cabinet at camera locations per manufacturer's recommendation for termination of the camera control cable and PoE++ injector power supply cable. Cable shall be identified and marked by the Contractor.

(*****)

Add the following new section:

8-20.3(19) Communication Vault

The location of all communication vaults shall be as indicated on the Plans and shall be field verified by the Contractor.

Communication vaults shall be configured such that the tensile and bending limitations of the fiber optic cable are not compromised. Communication

vaults shall be configured to mechanically protect the fiber optic cable against installation force as well as inert forces after cable pulling operations.

Where indicated on the Plans, new communication vaults shall be installed as described herein and shown in the details on the Plans. The Contractor shall furnish and install racking hardware for cable storage in all new communication vaults and in all existing communication vaults where cable storage is identified on the plans. The Contractor shall secure and store the cable in the racking hardware per manufacturer's instruction.

New communication vaults shall be adjusted to be flush with the finished grade and such that water drainage will continue after the installation. In some instances the soil grading will be sufficient, while in other instances gravel may have to be placed at specified depths. The location of the communication vault should be away from traffic conditions that could cause injury to personnel, yet it should be easily accessible for maintenance. All voids created in and around the communication vault while adjusting it to grade shall be filled with grout.

8-20.4 Measurement

Section 8-20.4 is supplemented with the following:

(*****)

"Traffic Signal System – _____, Complete" shall be measured per lump sum for the total of all items for a complete traffic signal system. All items and labor necessary to supply, install, and test the conduit, junction boxes, service circuit breaker and connections, signal/service cabinets and foundation(s), vehicular and pedestrian signal heads, pedestrian pushbuttons, emergency vehicle preemption, vehicle detection system, connections with existing conduit and junction boxes, mast arm mounted traffic signs, restoring facilities destroyed or damaged during construction, salvaging existing materials, and all other components necessary to make a complete traffic signal system shall be included within the lump sum measurement. Luminaires, photocells, and luminaire arms positioned on signal poles will be considered a part of the traffic signal system lump sum measurement. Removal of an existing signal system or existing signal components shall be included within the lump sum measurement. After construction is complete, it is Contractor's responsibility to adjust, relocate, and reposition all traffic signal heads to their final position as shown on the Contract Documents, and shall be considered incidental to the lump sum measurement. All painting of components shall be considered incidental to the lump sum measurement. No specific unit of measurement shall apply, but measurement will be made for the sum total of all items to be furnished and installed.

Excavation, trenching and bedding, backfill of trenches, pavement restoration of trenches and conduit/junction box installations containing traffic signal system elements as well as illumination system, and/or interconnect system elements will be included in the lump sum measurement for "Traffic Signal System – _____, Complete".

8-20.5 Payment

Section 8-20.5 is supplemented with the following:

(*****)

Payment will be made in accordance with Section 1-04.1 for each of the following Bid Items:

"Traffic Signal System – _____, Complete", per lump sum.

The lump sum price for "Traffic Signal System – _____, Complete" shall be full pay for furnishing all labor, equipment, materials, tools and supplies necessary or incidental to the construction to complete the work as specified in the Plans and as defined in the Standard Specifications and these Special Provisions. The lump sum bid price shall include all costs associated with the construction of the cement concrete pad and pedestal for the controller and service cabinets, construction of the cement concrete pads around signal poles, and illumination positioned on signal poles. All costs for installing signing on signal mast arms or temporary signal installations shall be incidental to the bid item(s) in this section and no additional compensation will be made.

Coordination of service connections and relocations/adjustments of overhead facilities with Puget Sound Energy shall be considered incidental to the bid items included in this section and no additional compensation will be made.

Coordination of communication connections and relocations/adjustments of overhead facilities with communication providers affected by this project shall be considered incidental to the bid items included in this section and no additional compensation will be made.

All costs for installing junction boxes and conduit containing traffic signal system, illumination system, and/or interconnect system wiring shall be incidental to the one bid item per this section and Section 8-20.4 and no additional compensation will be made.

All costs for painting shall be incidental and included in the bid items included in this section and no additional compensation will be made.

Restoration of facilities destroyed or damaged during construction shall be considered incidental to the bid items included in this section and no additional compensation will be made.

8-21 PERMANENT SIGNING

8-21.2 Materials

Section 8-21.2 is supplemented with the following:

(*****)

Sign sheeting shall be Type III (High Intensity Grade) retroreflective in accordance with Section 9-28.

8-21.5 Payment

Section 8-21.5 is supplemented with the following:

(*****)

“Permanent Signing” includes the installation, removal, relocation, and disposal of existing and new signs.

8-22 PAVEMENT MARKING

8-22.4 Measurement

Section 8-22.4 is supplemented with the following:

(*****)

“Plastic Stop Line” and “Intersection/Conflict Zone Bike Lane Marking” will be measured by the square foot of marking installed.

8-22.5 Payment

Section 8-22.5 is supplemented with the following:

(*****)

“Plastic Stop Line”, per square foot.

“Intersection/Conflict Zone Bike Lane Marking”, per square foot.

END OF DIVISION 8

DIVISION 9 – MATERIALS

9-21 Raised Pavement Markers (RPM)

9-21.1 Raised Pavement Markers Type 1

Section 9-21.1 is supplemented with the following:

(***)**

All Type 1 RPMs within City of Redmond shall be 4” round model B10 as manufactured by Ennis Flint.

9-21.2 Raised Pavement Markers Type 2

Section 9-21.2 is supplemented with the following:

(***)**

All Type 2 RPMs within City of Redmond shall be square Stimsonite model 88 or Stimsonite model C80 as manufactured by Ennis-Flint.

9-28 Signing Materials and Fabrication

9-28.1 General

Section 9-28.1 is supplemented with the following:

(***)**

All sign panels shall include an anti-graffiti coating or protective overlay film to provide a transparent barrier to staining by spray paint and permanent markers. The anti-graffiti coating shall be guaranteed for the same number of years as the reflective sign sheeting to which it is applied and shall not impede visibility or reflectivity of the sign. The anti-graffiti coating shall be applied so that graffiti can be cleaned from the surface of the finished sign panel using a mild solvent without damage to the sign panel or its reflectivity.

9-29 Illumination, Signal, Electrical

9-29.1 Conduit, Innerduct, and Outerduct

Section 9-29.1 is supplemented with the following:

(MARCH 4, 2024 COK GSP)

Mechanical plugs for cabinet conduit sealing shall be one of the following, unless otherwise approved by the Engineer:

1. Duo-fill 400 – self expanding waterproof foam
2. Tyco Electronics – TDUX

3. Jackmoon – Triplex Duct Plugs
4. O-Z Gedney – Conduit Sealing Bushings

9-29.1(11) *Foam Conduit Sealant*

Section 9-29.1(11) is supplemented with the following:

(MARCH 4, 2024 COK GSP)

The following products are accepted for use as foam conduit sealant:

1. CRC Minimal Expansion Foam (No. 14077)
2. Polywater FST Foam Duct Sealant
3. Superior Industries Foam Seal
4. Todol Duo Fill 400

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

9-29.2(1) *Junction Boxes*

Section 9-29.2 is supplemented with the following:

(September 3, 2019, WSDOT GSP)

Slip-Resistant Surfacing for Junction Boxes, Cable Vaults, and Pull Boxes

Where slip-resistant junction boxes, cable vaults, or pull boxes are required, each box or vault shall have slip-resistant surfacing material applied to the steel lid and frame of the box or vault. Where the exposed portion of the frame is ½ inch wide or less, slip-resistant surfacing material may be omitted from that portion of the frame.

Slip-resistant surfacing material shall be identified with a permanent marking on the underside of each box or vault lid where it is applied. The permanent marking shall be formed with a mild steel weld bead, with a line thickness of at least 1/8 inch. The marking shall include a two character identification code for the type of material used and the year of manufacture or application. The following materials are approved for application as slip-resistant material, and shall use the associated identification codes:

1. Harsco Industrial IKG, Mebac #1 - Steel: **M1**
2. W. S. Molnar Co., SlipNOT Grade 3 – Coarse: **S3**
3. Thermion, SafTrax TH604 Grade #1 – Coarse: **T1**

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

(November 13, 2018 COK GSP)

Junction boxes with metal lids located in pedestrian walkway or sidewalk areas shall have non-slip lids provided and installed. Retrofit or replacement lids shall be non-slip.

9-29.2 (1)A2 Non-Concrete Junction Boxes

Section 9-29.2(1)A2 is supplemented with the following:

(November 13, 2018 COK GSP)

Non-concrete junction boxes shall not be accepted in the City of Kirkland.

9-29.3 Fiber Optic Cable, Electrical Conductors, and Cable

9-29.3(1) Fiber Optic Cable

Add the following new sub-section:

(*****)

9-29.3(1)C Fiber Optic Splicing and Termination Materials

A. Fiber Optic Pigtailes

Fiber optic pigtailes shall be 6 and 12 count color coded fiber optic simplex LC/UPC pigtail kits for splicing the field fiber into the 6 or 12 port connector panels used in new or existing patch panels. The pigtail shall be factory connectorized with simplex LC/UPC connectors, unless otherwise notes on the Plans. The LC/UPC connectors shall meet the following requirements:

- Insertion Loss Change (SM): < 0.30 dB
- Connector ratings shall be from -22 degrees to 140 degrees Fahrenheit for operations and from -40 degrees to 140 degrees Fahrenheit for storage.
- Connectors shall have protective caps.
- Reflectance (UPC) < -40dB
- Apex Offset: < 50 µm

B. 6 and 12-Port Wall Mount Fiber Patch Panels

The 6 and 12 port wall mount fiber patch panels shall be a wall mounted fiber termination panel for all terminations in traffic signal controller cabinets. Refer to 9-29.13(10)C for additional details. The panel shall meet the following requirements:

- The panel shall be a maximum of 6.5" high, 5.5" wide and 2" deep.
- The panel shall contain 6 or 12 LC/UPC fiber ports that are equipped with dust covers. The panel shall include a splice holder for up to 12 fusion splices. The Contractor shall fusion splice the lateral fiber cable to pre-connectorized pig tail.
- The panel shall have cable entrances on the top and bottom. All cable entrances shall have a gasket to prevent the ingress of foreign material into the panel.

C. Fiber Optic Splice Closure

The closure shall be a Tyco FOSC 450 or equivalent and shall be suitable for both vault and aerial applications. The enclosure will meet the following requirements:

- The contractor shall supply a fiber optic splice enclosure made of two injection-molded high-density thermoplastic shells that is a maximum of 25 inches in length and can store up to six splice trays. The shell shall bolt together with stainless steel bolts and shall be fitted with a neoprene gasket.
- The closure shall have a cable entry block on one end that is sealed with a gel profile. The closure shall accommodate up to six cables. The block shall be re-enterable without having to replace the gel. The block shall accommodate cables that are between 0.35" and 1.00". Upon sealing the closure, the Contractor shall show that the closure maintains 10psi of pressure for a 24 hour period.
- The splice closure shall be re-enterable and shall not require a re-enter kit.
- The splice closure shall be rated for 1310 and 1550 nanometer wavelengths
- The splice enclosure shall be suitable for outdoor applications with a temperature range of -10°C to 60°C.
- The splice enclosure shall provide sufficient space to allow entry of fiber optic cable without exceeding the cable minimum bending radius.
- The enclosure shall protect the splices from moisture and mechanical damage and shall be resistant to corrosion.
- The enclosure shall permit selective splicing to allow one or more fibers to be cut and spliced without disrupting other fibers.
- The enclosure shall have strain relief for the cable to prevent accidental tension from disturbing the splices.
- Each splice tray shall be hinged and shall accommodate a minimum of 12 individual fusion splices securely.
- The Contractor shall furnish and install the mounting hardware for mounting the splice closure to splice box hangers at both splice locations.

D. Fiber Optic LC Connectors

The Contractor shall supply Single-mode LC Fiber Optic Straight Polished Connectors that utilize epoxy for attaching to the tight-buffered lateral cables terminated in traffic signal controller cabinets. The connectors shall meet the following standard and specifications and be tested to Telcordia GR-326, Issue 3:

- Insertion Loss (SM): < 0.30 dB
- Insertion Loss (MM): < 0.50 dB
- Reflectance (APC): < -65 dB
- Fiber Height: ± 50 nm
- Radius of Curvature (APC): 5 - 12 mm
- Apex Offset: < 50 μ m
- Designed for terminating single mode fiber with 125 μ m cladding
- Factory-measured attenuation less than 0.5 dB

- Connector attenuation will not change more than 0.2 dB following 1000 matings

9-29.3(2) *Electrical Conductors and Cable*

9-29.3(2)A1 *Single Conductor Current Carrying*

Section 9-29.3(2)A1 is revised to read:

(*****)

All current carrying single conductors shall be stranded copper conforming to ASTM B3 and B8. Insulation shall be Type USE-2, and rated for 600-volts or higher.

9-29.3(2)J *Ethernet Cable*

Section 9-29.3(2)J is supplemented with the following:

(*****)

All Category 6 (Cat6) cabling shall be suitable for outdoor use with a UV stabilized, lead-free, polyethylene jacket. The cable shall comply with TIA/EIA-568-B.2-1 Category 6. The cabling shall be suitable for horizontal, vertical, and aerial applications. The performance requirements shall be compatible with Gigabit Ethernet.

Cabling shall be 23 AWG, 4-pair unshielded twisted pair conductors. Cabling shall be shielded where cabling is shown on the Plans to be installed in conduit with cabinet power cabling. Cable shall be listed to UL Standard 444. Flammability shall comply to NEC article 800. Cable shall be constructed with water blocking material.

Cable shall, at a minimum, meet IEEE 802.3bt Type 3 ratings.

9-29.6 *Light And Signal Standards*

Section 9-29.6 is supplemented with the following:

(January 6, 2025, WSDOT GSP)

Traffic Signal Standards

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

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

Hardened washers shall be used with all signal arm connecting bolts instead of lockwashers. All signal arm ASTM F 3125 Grade A325 connecting bolts tightening shall comply with Section 6-03.3(33).

Traffic signal standard types, applicable characteristics, and foundation types are as follows:

Type PPB

Pedestrian push button posts and their foundations shall conform to Standard Plan J-20.15.

Type PS, Type I, Type RM, and Type FB

Type PS pedestrian signal standards, Type I vehicle signal standards, Type RM ramp meter signal standards, and Type FB flashing beacon standards shall conform to Standard Plan J-20.16, J-21.15, J-21.16, and J-22.15 respectively, or to one of the following pre-approved plans:

Fabricator	Pre-Approved Drawing No.
Valmont Ind., Inc.	DB01165 Rev. B (4 sheets)
Ameron Pole Products Division	WA15TR10-1 Rev. C (1 sheet) and WA15TR10-2 Rev. C (1 sheet)
Millerbernd Manufacturing, Co.	74514-WA-PED-FB Rev. J (2 sheets)
Millerbernd Manufacturing Co.	74514-WA-PED-SB Rev. K (2 sheets)

Foundations shall be as noted in Standard Plan J-21.10.

Type II

Type II signal standards are single mast arm signal standards with no luminaire arm or extension. Type II standards shall conform to one of the following pre-approved plans. Maximum arm length (in feet) and wind load (XYZ value, in cubic feet) is noted for each manufacturer.

Fabricator	Pre-Approved Drawing No.	Max. Arm Length (ft)	Max. Wind Load (XYZ) (ft³)
Valmont Ind., Inc.	DB01162 Rev. B (5 sheets)	65	3206
Ameron Pole Products Division	WA15TR3724-1 Rev. C (sheet 1 of 2), and WA15TR3724-2 Rev. D (sheet 2 of 2)	65	2935
Millerbernd Manufacturing, Co.	74516-WA-TS-II Rev. L (4 sheets)	65	3697

Foundations shall be as noted in the Plans and Standard Plan J-26.10. Type II signal standards with two mast arms installed 90 degrees apart may use these pre-approved drawings. Standards with two arms at any other angle are Type SD and require special design.

Type III

Type III signal standards are single mast arm signal standards with one Type 1 (radial davit type) luminaire arm. The luminaire arm has a maximum length of 16 feet and a mounting height of 30, 35, 40, or 50 feet, as noted in the Plans. Type III standards shall conform to one of the following pre-approved plans. Maximum arm length (in feet) and wind load (XYZ value, in cubic feet) is noted for each manufacturer. Wind load limit includes a luminaire arm up to 16 feet in length.

Fabricator	Pre-Approved Drawing No.	Max. Arm Length (ft)	Max. Wind Load (XYZ) (ft³)
Valmont Ind., Inc.	DB00162 Rev. B (5 sheets), with Type "J" luminaire arm	65	3259
Ameron Pole Products Division	WA15TR3724-1 Rev. C (sheet 1 of 2), and WA15TR3724-2 Rev. D (sheet 2 of 2), with Series "J" luminaire arm	65	2988
Millerbernd Manufacturing, Co.	74516-WA-TS-III-J Rev. L (5 sheets)	65	3750

Foundations shall be as noted in the Plans and Standard Plan J-26.10. Type III signal standards with two mast arms installed 90 degrees apart may use these pre-approved drawings. Standards with two arms at any other angle are Type SD and require special design.

Type IV

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

Fabricator	Pre-Approved Drawing No.
Valmont Ind., Inc.	DB01167 Rev. B (2 sheets)
Ameron Pole Products Division	WA15TR15 Rev. A (2 sheets)
Millerbernd Manufacturing, Co.	74554-WA-SP-IV Rev. H (2 sheets)

Foundations shall be as noted in the Plans and Standard Plan J-27.10.

Type V

Type V strain poles are combination strain pole and light standards, with Type 1 (radial davit type) luminaire arms. Luminaire arms may be up to 16 feet in length, and a mounting height of 40 or 50 feet, as noted in the Plans. Type V strain poles shall be consistent with the Plans and Standard Plan J-27.15 or one of the following pre-approved plans:

Fabricator	Pre-Approved Drawing No.
Valmont Ind., Inc.	DB01167 Rev. B (2 sheets),
Ameron Pole Products Division	WA15TR15 Rev. A (2 sheets)
Millerbernd Manufacturing, Co.	74554-WA-SP-V Rev. J (3 sheets)

Foundations shall be as noted in the Plans and Standard Plan J-27.10.

Type CCTV

Type CCTV camera pole standards shall conform to Standard Plan J-29.15 or to one of the following pre-approved plans:

Fabricator	Pre-Approved Drawing No.
Valmont Ind., Inc.	DB01166 Rev. C (4 sheets)
Ameron Pole Products Division	WA15CCTV01 Rev. B (2 sheets)
Millerbernd Manufacturing, Co.	74577-WA-LC1 Rev. H (2 sheets)
Millerbernd Manufacturing, Co.	74577-WA-LC2 Rev. H (2 sheets)
Millerbernd Manufacturing, Co.	74577-WA-LC3 Rev. H (3 sheets)

Foundations shall be as noted in the Plans and Standard Plan J-29.10.

Type SD

Type SD signal standards are outside the basic requirements of any pre-defined signal standard and require special design. All special design shall be based on the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and pre-approved plans and as follows:

1. A 115 mph wind loading shall be used.
2. The Mean Recurrence Interval shall be 1700 years.
3. Fatigue category shall be III.

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

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

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

Foundations for Type SD standards shall be as noted in the Plans.

9-29.6(3) *Timber Light Standards, Timber Strain Poles, Timber Service Supports*

The third and fourth paragraph of Section 9-29.6(3) are revised to read:

(November 20, 2023, WSDOT GSP)

All poles shall be treated with DiChloro-Octyl-Isothiazolin (DCOI) or pentachlorophenol in accordance with Section 9-09.3(1).

Tops shall be sawed before treatment. Where holes are field bored in poles to accommodate hanging bolts for brackets, transformers, guy assemblies, or other accessories, such holes shall be painted with an appropriate repair preservative in accordance with Standard Specification 9-09.3(1) (Copper Naphthenate or Oxine Copper in accordance with AWWA Standard M4).

9-20.10 Luminaires

9-29.10(1) *Conventional Roadway Luminaires*

(**)***

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

Section 9-29.10(1)B is supplemented with the following:

The LED Conventional Roadway Luminaire shall be as noted on the Plans.

9-29.13 Control Cabinet Assemblies

(*****)

9-29.13(10)C NEMA and Type 2070 Controllers and Cabinets

Section 9-29.13(10)C is supplemented with the following:

Cabinet Minimum Requirements

The cabinet shall be completely wired and tested to the 2003 NEMA Traffic Controller Assemblies specification with NTCIP Requirements Version 02.06 (as amended here in). In addition, and at a minimum, the following requirements shall be met:

1. City of Kirkland traffic signal cabinet specification shall supersede any applicable parts of the State of Washington, Department of Transportation Standard Specifications and Standard plans. This specification shall apply to all controller cabinet types with noted exceptions.
2. All items not covered by these specifications shall conform to State of Washington, Department of Transportation Standard Specifications and Standard Plans. Traffic signal cabinets shall also comply with NEMA specifications where applicable.
3. The controller cabinet shall be furnished and installed by the contractor. The controller cabinet shall be equipped with all auxiliary equipment and plug-ins required to operate 8 vehicle phases, 4 pedestrian phases and 4 overlap phases (NEMA TS-2, Type 1). Solid-state switching devices shall conform to the provisions in Section Solid-State Switching Devices," of these Special Provisions and the following:
4. The cabinet manufacturer shall install and wire in the APS iCCU-S2 cabinet controller unit and any required cabling during assembly.
5. The cabinet manufacturer shall be pre-approved by the City of Kirkland signal shop, prior to bid letting, on any cabinet that they propose to provide to the City. Said pre-approval shall have been obtained no less than 60 days prior to the closing date of the bid.
6. The cabinet shall be designed for 16 channel operation where each dual load switch socket and channel can be configured for a vehicle phase, pedestrian phase or overlap operation. These load switch sockets shall be configured in this manner without rewiring the back side of the load-bay. BIU load switch drivers 1-16 shall be wired to their appropriate load switch sockets via a terminal block located on the front side of the load bay, to allow voltage inputs to the load switch sockets to be checked without lowering the load bay.

7. The cabinet shall be wired for up to a minimum of (64) channels of detection, (4) channels of Opticom™ preemption.
8. The use of PC boards shall not be allowed except in detector racks, SDLC interface panels or BIU cages.
9. The use of plug and play modules shall not be allowed, except for detector racks.
10. The cabinet shall be wired to provide a 55-pin “A” connector.
11. All cabinet 120VAC wires shall be 18AWG or greater, including controller “A” and MMU “A & B” cables.
12. The entire cabinet assembly with electronics shall undergo complete input/output function testing by the manufacturer before being released to the City of Kirkland. Testing shall be done via service feed to the 120VAC field terminal. Service power shall be routed through the generator bypass switch and UPS inverter before being connected to the power panel so that all service load circuits are tested.
13. The following additional test shall be required:
14. If the cabinet comes with a UPS system (BBS) and batteries; the entire controller cabinet assembly shall undergo a BBS field test procedure where the cabinet is run off battery power.
15. The wired cabinet facility shall use the latest technology applicable and shall be 100% compliant with Section 1605 of the American Recovery and Reinvestment Act of 2009, requiring the use of American iron, steel and manufactured goods.
16. The cabinet assembly shall be completely manufactured in the United States of America.

Cabinet Enclosure

At a minimum, the Stretched P cabinets shall meet the following criteria:

- It shall have nominal dimensions of 70” high x 44” width x 25.5” depth and meet the footprint dimensions as specified in Section 7.3, table 7-1 of NEMA TS2 standards for a Type P cabinet. The cabinet base shall have continuously welded interior mounting reinforcement plates with the same anchor bolt hole pattern as the footprint dimensions.
- Shall be fabricated from 5052-H32 0.125-inch thick aluminum.

- The cabinet shall be double-flanged where it meets the cabinet door.
- The top of the cabinet shall be sloped 1" towards the rear to facilitate water runoff. And shall bend at a 90° angle at the front of the cabinet. Lesser slope angles are not allowed.
 - The inside of the cabinet shall have (2) separate compartments. The main compartment shall be accessible from the front door and shall house the cabinet load facilities and electronics.
 - The UPS compartment shall be accessible from the side door and shall contain the UPS system batteries. The UPS inverter and transfer switch assemblies shall be mounted in the UPS compartment but shall be accessible when the main compartment door is open.
- The inside of the cabinet shall utilize C channel rails. (3) Welded on the back wall. The outer two are on 34" center. The third is 8.5" on center with the farthest right C channel. There are (4) welded on each side wall on 8" center with 2" gap between sets. The C channel rails shall on the back wall shall be 48" in length and start 5" from the bottom of the cabinet interior. The C channel rails on the side walls shall be 59" in length and start 5" from the bottom of the cabinet interior. Adjustable rails are not allowed.
- The Cabinet shall be supplied with the following finishes; the interior natural mill finish. The exterior natural mill finish.
- All external fasteners shall be stainless steel. Pop rivets shall not be allowed on any external surface.
- The front door handle shall be ¾" round stock stainless steel bar. The side door shall use a recessed hexagonal socket in lieu of a door handle. All door handle mechanisms shall be interchangeable and field replaceable.
- The front door shall contain (2) flush mount locking recessed compartments. The upper compartment that houses a police door with a conventional police lock, and a lower compartment that houses a generator bypass receptacle and a Best™ CX series green core lock with a tapered bolt. The main door lock shall be a Best™ CX series green core lock with a deadbolt. The police and generator doors shall be recessed so that it is flush with the main door. A stiffener plate shall be welded to the inside of the front door to prevent flexing. A bar stop shall be provided that provides a two-position, three-point stop accommodating open-angles of 90°, 125°, and 150°. A louvered air entrance located at the bottom of the main door shall satisfy NEMA rod entry test requirements for 3R ventilated enclosures. Bearing rollers shall be applied to ends of

door latches to discourage metal-on-metal surfaces from rubbing. The main front door lock assembly shall be positioned so the door handle does not cause interference with the key when opening the door.

- The generator bypass receptacle compartment shall have an integrated door slide mechanism that allows the door to be closed and locked after a generator has been connected to the internal receptacle. This compartment is used by maintenance personnel for emergency generator operation in the absence of service power or UPS control.
- The side door shall be one-piece construction without any recessed compartments. It shall have a three-position, two-point door stop that accommodates open-angles at roughly 80°, 100°, and 120°. A louvered air entrance located at the bottom of the side door shall satisfy NEMA rod entry test requirements for 3R ventilated enclosures. Bearing rollers shall be applied to ends of door latches to discourage metal-on-metal surfaces from rubbing. Lock assembly shall be positioned so handle does not cause interference with key when opening the door.
- The cabinet shall be equipped with a universal lock brackets capable of accepting Best™ CX style lock or Corbin #2 tumbler series locks.
- Closed-cell, neoprene gaskets shall be bonded to the inside of the cabinet doors. The gaskets shall cover all areas where the doors contact the double flanged cabinet housing exterior and be thick enough to provide a watertight seal.
- A key shall be provided for each cabinet lock.
- The cabinet shall be supplied with three (3) door switches which control the door and police door open status and the cabinet interior lighting circuits.
- All exterior seams shall be manufactured with neatly formed continuously weld construction. The weld for the police box door shall be done on the inside of the cabinet door. All welds shall be free from burrs, cracks, blowholes or other irregularities.
- The fan baffle panel seams shall be sealed with RTV sealant or equivalent material on the interior of the cabinet.
- The cabinet shall come with lifting ears affixed to the upper exterior of the cabinet. These ears shall utilize only one bolt for easy reorientation. *(The cabinet lifting ears should not be utilized when batteries are installed in the cabinet).*

- The cabinet shall come with two (2) dual-ply Dustlock™ Media polyester, disposable air filter; and the filter performance shall conform to listed UL 900 Class 2 and conform to MERV-8 & ASHRAE Standard 52.2-1999. The filter element shall be secured to louvered entrance on the main door with Velcro type mounting on all four edges, a metal filter cover shall be placed over the filter. The filter and metal cover shall be secured to entrance on main and UPS doors by two (2) horizontally-mounted restraints.
- All cabinet doors shall be mounted with a single continuous stainless-steel piano hinge that runs the length of the door. The hinge shall be attached via stainless steel tamper resistant bolts.
- The cabinet enclosure shall be a SP+ style Western Systems Part # 3017500000.
- The cabinet top level wiring/assembly shall be Western Systems Part # 2515510001.
- The cabinet shall be UL listed

Labels

A permanent, printed thermo-vinyl, engraved or silk-screened label shall be provided for all terminals and sockets. Labels shall be legible and shall not be obstructed by cabinet wiring, panels or cables. All labels shall conform to the designations on the cabinet wiring prints.

Shelves

Shall come with (3) 33.25" double beveled shelves 10" deep that are reinforced welded with V channel, fabricated from 5052-H32 0.125-inch thick aluminum with double flanged edges rolled front to back. Slotted hole shall be inserted every 7" for the purpose of tying off wire bundles. The UPS compartment shall come with (4) shelves designed to hold batteries and capable of supporting 75lbs each.

Cabinet Layout

The shelves shall be populated as follows:

- The controller and malfunction management unit shall be placed on the bottom shelf. The power supply, two (2) detector racks and the video detection cabinet interface unit shall be placed on the middle shelf left to right. The Polara iCCU-S2 shall be placed on the top shelf, left side. The remainder of the top shelf shall be left empty for future electronics.
- The roll out drawer shall be mounted under the bottom shelf just left of center.
- Load bay shall be mounted on the back wall with 5" of clearance to the bottom of the cabinet.

- A 12"x10" blank panel shall be mounted on the lower left wall.
- The detector panel for all field inputs shall be mounted on the left wall above the 12" x 10" blank panel.
- The SDLC and power supply interface panels shall be mounted on the left wall between the middle and bottom shelves.
- One 120VAC quad convenience outlet shall be mounted on the left wall above the top shelf.
- The power panel shall be mounted on the lower right wall.
- The Opticom™ 768 auxiliary interface panel shall be mounted on the right wall under the bottom shelf.
- A 12"x36" blank panel shall be mounted on the right wall above the power panel.
- One 120VAC quad convenience outlet shall be mounted on the right wall above the top shelf.

Ventilating Fans

The cabinet shall be provided with two (2) finger safe din rail mounted thermostatically controlled (adjustable between 4-176° Fahrenheit) ventilation fans. The fans shall be installed in the top left and right side of the cabinet plenum. The safe touch thermostat fuse holder and power terminal block shall be din rail mounted on right side of cabinet plenum.

Computer Shelf

A slide-out computer shelf 16" length by 12" width by 2" depth shall be installed below the middle shelf underneath the controller. The shelf shall be mounted just right of center so that controller cables will not interfere with the operation of the shelf when equipment is installed. The shelf shall have a hinged cover that opens from the front and shall be powder-coated black. It shall be a General Devices Part # VC4080-99-1168. The drawer when fully extended shall hold up to 50lbs.

Main Panel Configuration (Load-Bay)

The design of the panel shall conform to NEMA TS2 Section 5, Terminals and Facilities, unless modified herein. This panel shall be the termination point for the controller unit (CU) MSA, (MMU) MSA & B cables, bus interface units 1 & 2 (BIU) and field terminal facilities. The terminal and facilities layout shall be arranged in a manner that allows all equipment in the cabinet and all screw terminals to be readily accessible by maintenance personnel.

The load-bay shall be fully wired and meet the following requirements:

- The load-bay shall have the following dimensions; constructed from aluminum with a nominal thickness of 0.125", a maximum height of 16" and maximum width of 18" including attaching wiring bundles.
- The entire assembly shall roll down and provide access to all the back of panel wiring. All solder terminals shall be accessible when the load-bay is rolled down. The assembly shall be able to roll down without requiring other components, cables or switches to be removed.
- The load-bay shall be designed so that all other cabinet screw terminals are accessible without removing cabinet electronics.
- All the controller (CU) and malfunction management (MMU) cables shall be routed through the back of the load-bay so that they will not be subject to damage during load-bay roll down.
- The top of the load-bay panel shall attach directly to "C" channel and detach without the use of tools or loose hardware for roll down purposes.
- The load-bay shall be balanced such that it will not roll down when the top of the load bay is detached from the "C" channel, even when fully loaded with BIUs, load switches, flasher and flash transfer relays.
- The load-bay facility shall be wired for 16 channels. dual load switches 1-4 shall be vehicle phases 1-8; dual load switches 5-6 shall be pedestrian phases 2, 4, 6 & 8; dual load switches 7-8 shall be overlaps A, B, C & D. All load switches shall be routed through a flash transfer relay.
- (8) Dual load switch sockets spaced on 1.25" center.
- (8) Mini flash transfer relay sockets.
- (1) Dual flasher socket.
- All load switches and the flasher shall be supported by a bracket extending at least ½ the length of the load switch.
- (2) Bus interface unit rack slots for BIU's 1 and 2. The main panel BIU racks shall be in the top left corner of the load-bay, placed horizontally, and shall accommodate ½ width BIU's.
- BIU socket wire connections to the PCB shall be via (2) 34 pin connectors with locking latches.

- All BIU wiring utilized shall be soldered to backside of a screw terminal.
- Wiring for one Type-16 MMU. All utilized MMU wiring shall be soldered to backside of a screw terminal.
- All 24VDC relays shall have the same base socket, but it shall be different from the 120VAC relays.
- All 120VAC relays shall have the same base socket, but it shall be different from the 24VDC relays. (not applicable to flash transfer relays)
- The cabinet shall have a relay that drops +24VDC to the load switches when the cabinet is in flash.
- The load-bay shall be silkscreened on both sides. Silkscreen shall be numbers and functions on the front side, and numbers only on the back side. The back side shall have labels upside down, so when load bay is rolled down labels will be oriented correctly for maintenance or service personnel.
- The field terminals shall be labeled with 300 series numbers for load-bay wiring purposes, and 600 & 700 series numbers for termination of field wiring.

Channel Wiring chart:

Red:	611, 621, 631, 641, 651, 661, 671, 681, 721, 741, 761, 781, 6A1, 6B1, 6C1, 6D1
Yellow:	612, 622, 632, 642, 652, 662, 672, 682, 722, 742, 762, 782, 6A2, 6B2, 6C2, 6D2
Green:	613, 623, 633, 643, 653, 663, 673, 683, 723, 743, 763, 783, 6A3, 6B3, 6C3, 6D3

- Field wiring terminations shall be per channel across the bottom of the load-bay. Each channel shall have 3 terminations corresponding to the appropriate channel indications. Default wiring shall be left to right green/walk, yellow/ped clearance and red/don't walk. Vehicle phases 1-8, pedestrian phases 2, 4, 6, 8 and overlap channels A, B, C, and D following the order of the load switches. Field terminals shall be #10 screw terminal and be rated for 600V.
- All cable wires shall be terminated. No tie-off of unused terminals will be allowed.
- Shall be 100% manufactured in the United States of America.

All wiring shall conform to NEMA TS2 Section 5.2.5 and table 5-1. Conductors shall conform to military specification MIL-W-16878D,

Electrical insulated high heat wire, type B. Conductors #14 or larger shall be permitted to be UL type THHN. Main panel wiring shall conform to the following colors and minimum wire sizes:

Vehicle green load switch output	16 gauge brown
Vehicle yellow load switch output	16 gauge yellow
Vehicle red load switch output	16 gauge red
Pedestrian Don't Walk switch	16 gauge orange
Pedestrian Walk switch	16 gauge blue
Pedestrian Clearance load switch	16 gauge yellow
Vehicle green load switch input	22 gauge brown
Vehicle yellow load switch input	22 gauge yellow
Vehicle red load switch input	22 gauge red
Pedestrian Don't Walk input	22 gauge orange
Pedestrian Walk input	22 gauge blue
Pedestrian Clearance input	22 gauge yellow
Logic Ground	18 gauge white with red tracer
+24V DC	18 gauge red with white tracer
+12V DC	18 gauge pink
AC+ Line	14 gauge black
AC- Line	14 gauge white
Earth Ground	16 gauge green
AC line (load bay)	16 gauge black
AC neutral (load bay)	16 gauge white
Controller A cables	22 gauge blue <i>except for power wires (AC+ Black, AC- White & Earth Ground Green) these wires shall be 18AWG</i>
MMU A & B cables	22 gauge orange <i>except for power wires (AC+ Black, AC- White & Earth Ground Green Start Delay Relay Common Black, normally open Black & Normally Closed Black) These wires shall be 18AWG</i>

Two conductors will supply alternating current (AC) power to the load switch sockets. The load switch sockets shall be supplied 1-4 & 5-8 by each conductor.

The vehicle field terminal blocks shall have a screw Type No. 10 post capable of accepting no less than 3 No. 12 AWG wires fitted with spade connectors. Four (4) 12-position terminal blocks shall be provided in two (2) rows across the bottom of the main panel. Spade lugs from internal cabinet wiring are not allowed on field terminal screws.

There shall be a Phoenix Contact plug-in bridge with (16) 3-position panel mount sockets and (16) 2-position plugs with screw terminals located below the flash transfer relays. These connections shall operate the flash programming between flash circuit 1 & 3 or 2 & 4. It shall be changeable from the front of the load-bay.

The terminal block above the pedestrian field terminals shall be tied to the Don't Walk and Walk terminals via orange or blue 14AWG wire. This shall provide termination for pushbutton control wires without utilizing field terminals. There shall also be access to flash circuits 1 and 2.

The power terminal blocks shall have a screw Type No. 10 post capable of accepting no less than (3) No. 12 AWG wires fitted with spade connectors. One (1) 12-position terminal block provided vertically on the right side of the load bay. The placement of the power terminal block on any other panel shall not be allowed.

All load switch, flasher, and flash transfer relay sockets shall be marked and mounted with screws. Rivets and clip-mounting is unacceptable.

Wire size 16 AWG or smaller at solder joints shall be hooked or looped around the eyelet or terminal block post prior to soldering to ensure circuit integrity. All wires shall have lugs or terminal fittings when not soldered. Lap joint/tack on soldering is not acceptable. All soldered connections shall be made with 60/40 solder and non-corrosive, non-conductive flux. All wiring shall be run neatly and shall use mechanical clamps and conductors shall not be spliced between terminations. Cables shall be sleeved in braided nylon mesh and wires shall not be exposed.

Load-Bay and Panel Wire Termination

All wires terminated behind the main panel or on the back side of other panels shall be SOLDERED. No pressure or solder-less connectors shall be used. Printed circuit boards shall only be used on the load bay where connecting to the bus interface units (BIU).

Cabinet Light Assembly

The cabinet shall have two (2) LED lighting fixtures with 15 high power LEDs. LEDs shall use a cool white color emitting 300lm min @ 12VDC/750mA. The LED shall be a Rodeo Electronics TS-LED-05M02. The LED fixture shall be powered by a Mean Well class 2 power supply LPV-20-12 that shall be mounted on the inside top of the cabinet's main

compartment near the front edge. The cabinet light circuit shall be designed so both LED fixtures can be installed in the cabinet without the need a of a second power supply. The second LED shall be attached under the cabinet drawer so that it remains stationary when drawer is extended. An on/off switch that is turned on when the cabinet door is opened and off when it is closed shall activate the lighting fixture(s) power supply.

Convenience Outlet

The cabinet shall be wired with one (1) convenience outlet with a ground fault interrupter (GFI) and two (2) quad convenience outlets without ground fault interrupters. The ground fault outlet (GFI) shall be mounted on the right side of the cabinet on or near the power panel. The two quad convenience outlets shall be mounted near the top shelf on the left and right sides. Outlets shall not be mounted on the door. The GFI power shall be fed through the auxiliary breaker (CB2). The convenience outlets shall be fed through the main breaker (CB1).

Auxiliary Panel

The cabinet shall include an auxiliary switch panel mounted to the interior side of the police panel compartment on the cabinet door. The panel shall be secured to the police panel compartment by (2) screws and shall be hinged at the bottom to allow access to the soldered side of the switches with the use of only a Phillips screwdriver. Both sides of the panel shall be silkscreened. Silk-screening on the backside of the switch panel shall be upside down so that when the panel is opened for maintenance the silk-screening will be right side up. All the switches shall be protected by a hinged see-through Plexiglas cover.

At a minimum the following switches shall be included:

- **Controller ON/OFF Switch:** There shall be a switch that renders the controller and load-switching devices electrically dead while maintaining flashing operations for purpose of changing the controller or load-switching devices. The switch shall be a general-purpose bat style toggle switch with .688-inch long bat.
- **Stop Time Switch:** There shall be a 3-position switch labeled "Normal" (up), "Off" (center), and "On" (down). With the switch in the "Normal" position, a stop timing command shall be applied to the controller by the police flash switch or the MMU (Malfunction Management Unit). When the switch is in its "Off" position, stop timing commands shall be removed from the controller. The "On" position shall cause the controller to stop time. The switch shall be a general-purpose bat style toggle switch with .688-inch long bat.
- **Technician Flash Switch:** There shall be a switch that places the field signal displays in flashing operation

while the controller continues to operate. This flash shall have no effect on the operation of the controller or MMU. The switch shall be a general-purpose bat style toggle switch with .688-inch long bat.

- **Signals ON/OFF Switch:** There shall be a switch that renders the field signal displays electrically dead while maintaining controller operation for purpose of monitoring controller operations. The switch shall be a general-purpose bat style toggle switch with .688-inch long bat.
- **Vehicle Test Switches:** All eight vehicle phase inputs shall have momentary pushbutton test switches with black caps. The switches shall directly input a call to the related controller vehicle phase without routing the call through the detector rack(s) when pushed. These switches shall be labeled 1, 2, 3, 4, 5, 6, 7 and 8.
- **Pedestrian Test Switches:** All eight pedestrian phase inputs shall have momentary pushbutton test switches with black caps. The switches shall directly input a call to the related controller pedestrian phase. These switches shall be labeled 1, 2, 3, 4, 5, 6, 7 and 8.
- **Pre-Empty Test Switches:** All four preempt inputs shall have a (3) position disconnect/test switch. The switch positions shall be labeled "On" (up), "Off" (center) and "Test" (down). When in the "On" position it shall connect the appropriate preemption phase GTT/Opticom output to the controller, The "Off" position shall disconnect the GTT/Opticom output to the controller, and the "Test" position which shall provide a momentary true output to the corresponding controller preemption channel. These switches shall be labeled 1, 2, 3 and 4.

Police Panel

Behind the police panel door there shall be switches for use by emergency personnel. The wiring for these switches shall be accessible when the auxiliary panel is open. The following switches shall be included;

- **Flash Switch:** There shall be a switch for the police that puts the cabinet into flashing operations. The switch shall have two positions, "Auto" (up) and "Flash" (down). The "Auto" position shall allow normal signal operation. The "Flash" position shall immediately cause all signal displays to flash as programmed for emergency flash and apply stop time to the controller. When the police flash switch is returned to "Auto", the controller shall restart except when

the MMU has commanded flash operation. The effect shall be to disable the police panel switch when the MMU has detected a malfunction and all controller and MMU indications shall be available to the technician regardless of the position of the police flash switch. The switch shall be a general-purpose bat style toggle switch with .688-inch long bat.

Cables

All wire cable bundles shall be encased in flex or expandable braided sleeving along their entire free length.

All SDLC cables shall be terminated on both ends, securely terminated to the SDLC interface panel with screw type connection and professionally routed in the cabinet interior to easily reach the load bay, controller, malfunction management unit and detector racks. All SDLC connectors shall be fully populated with 15 pins each.

Flashing Operation

All cabinets shall be wired to flash for all channels. Flashing operation shall alternate between the flasher circuits 1 & 3 (channels 1, 3, 5, 7, 9, 11, 13 & 15) and flasher circuits 2 & 4 (channels 2, 4, 6, 8, 10, 12, 14 & 16). To change a channel from one flasher circuit to another shall be done from the front of the load bay without the use of tools. Flash programming shall be either red, yellow or no flash simply by changing the programmed connector on the front of the load-bay. Cabinet shall be supplied with vehicle and overlap phases programed to red flash, and pedestrian channels to no flash.

Detector Racks

At a minimum, the cabinet shall be wired to accommodate (64) channels of detection as follows:

1. One detector rack shall be half width size and support (32) channels of loop detection, two (2) Bus Interface Units (BIU), and four (4) channel of Opticom™ preemption. This rack shall be capable of using half width four channel detection devices or Opticom™ cards.
2. One detector rack shall be half width size and support (32) channels of loop detection and two (2) Bus Interface Units (BIU). These racks shall be capable of using half width four channel detection devices.
3. The loop cabling shall be connected via a 37-pin DB connector using spring clips. The Opticom cable shall be connected via a 24-pin connector using locking latches. The power cable shall be a 6-pin connector. All power wires shall be 18AWG. The addressing of detector racks shall be accomplished via dipswitches mounted to the PCB. There shall be the capability to turn off the TS2 status to the BIU

for the uses of TS1 detector equipment via dipswitches mounted to the PCB. There shall be a 34-pin connector using locking latches that breaks the output from the detector to the input of the BIU, there shall also be +24VDC and logic ground on this connector. All racks shall have space at the bottom front for labeling. All racks shall be designed for horizontal stacking. Separate racks for detection and preemption are not allowed.

768 Panel

There shall be an Opticom™ GTT 768 interface panel installed in the cabinet. At a minimum it shall be soldered to the load switch green outputs and to the advanced vehicle preemption terminal block on the detector panel. This panel shall have a protective plastic cover. It shall be mounted on the lower right wall of the cabinet, under the bottom shelf.

Detection Panel

The detection panel shall support (64) channels of vehicle detection, (4) channels of emergency vehicle preemption, (8) channels of auxiliary emergency vehicle preemption, (8) channels of pedestrian detection and (8) pedestrian returns on a single panel. The pedestrian call terminal block shall be (2) single row terminals.

The loop wires shall be a 22AWG twisted pair, color coded as follows; channel one brown, channel two red, channel three orange and channel four yellow. One of the twisted pair wires of all colors shall have a white tracer and land on the second position terminal of each loop.

The emergency preempt wires shall be color coded as follows; +24VDC orange, preempt inputs yellow and ground blue.

This panel will be mounted on the left side of the cabinet below the bottom shelf. The panel shall also include a (19) position solid aluminum, tin plated neutral and ground buss bars with raised slotted & torque style screws heads. They shall be mounted vertically at the bottom of the panel.

The Opticom and pedestrian terminal blocks shall be labeled as follows:

Opticom + orange: 581, 587

Opticom call yellow: 582, 585, 588, 591

Opticom – blue: 583, 589

Pedestrian Calls: 714, 724, 734, 744, 754, 764, 774, 784

Pedestrian returns: 715, 725, 735, 745, 755, 765, 775, 785

Power Supply Interface Panel

The power supply interface panel shall include terminations for all the cabinet power supply inputs and outputs. It shall have a protective plastic cover. This panel shall be mounted on the left wall of the cabinet.

SDLC Panel

The SDLC panel shall have (12) 15 socket DB connectors mounted to a PCB. The PCB shall be mounted to an "L" bracket for attaching to cabinet "C" channel. All SDLC cables shall attach with screw type retainers. There shall be one position with latching blocks to mate with latching spring blocks. This panel shall be mounted on the left wall of the cabinet between the shelves.

Service Surge Suppression

The cabinet shall be equipped with an CITEL surge protection device model DS72US-120S/G-F-ASSM mounted on the power panel. It shall be installed after the main breaker (CB1). The spare breaker (CB3) shall be wired after the SPD.

Generator Bypass Compartment and Cable

The cabinet main door shall have a locking generator bypass compartment that shall be used to connect a generator to operate the cabinet during extended loss of service line power. The generator compartment shall be capable of being closed and locked while a generator is connected. The mechanism for allowing generator cable access, while the compartment is closed, shall be an integral part of the generator bypass door, that will normally be in the closed position. Inside the compartment there shall be a silkscreened panel that holds a Hubbell HBL2615 30A / 125V flanged inlet receptacle capable of accepting a standard 30-amp generator plug, a BACO HC52DQG cam switch with split 120VAC line and neutral feeds, and two (2) LED lamps with sockets. The cam switch shall be a break before make type switch. Switch is isolating service line and neutral from the generator power. One LED shall be illuminated when the cabinet has service line power available and the other when the cabinet has generator power available. LED's shall be field replaceable without putting the intersection in flash and shall carry a 5-year manufacturer warranty.

All wiring to and from the generator bypass compartment shall be contained in a single cable bundle. The cable shall connect to the backside of the electrical components and shall only be accessible from the inside of the cabinet front door. All electrical components on the inside of the front door that carry AC voltage shall be covered by a see-through plexiglass cover. The generator bypass cable shall terminate at the same power panel location as service line voltage.

Generator Cord

A 14ft generator power cord shall be supplied with the cabinet that connects between the generator bypass compartment and an external 15A/125V generator.

Additional Panels

Sheet metal panels shall be installed in the available space on the lower left and upper right & left sides of the cabinet. The lower left side panel shall be 10" x 12". The upper right-side panels shall be 36" x 12".

Supplemental Loads

The supplemental load panel shall have all field yellow and green outputs loaded with 2.5K-Ohm, 10-Watt resistors. There shall be a disconnect between the load resistor and the field output. Connecting and disconnecting the load resistor Each load resistor from the field circuit shall be done with the use of simple tools. There shall be no live 120VAC exposed.

Power Panel

The power panel shall handle all the power distribution and protection for the cabinet and shall be mounted in the bottom right side of the facility. All equipment shall be mounted on a 12" x 17" or smaller silkscreened aluminum panel and include at a minimum the following equipment:

1. A 30-amp main breaker shall be supplied. This breaker shall supply power via CITELE DS72US-120S/G-F-ASSM to the load bay, load switches, auxiliary panel, controller, MMU, power supply, detector racks and quad AC convenience outlets.
2. A 15-amp auxiliary breaker shall supply power to the fan, light and GFI.
3. A 15-amp auxiliary breaker wired for future use.
4. A 60-amp, 125 VAC radio interference line filter.
5. A normally open, 75-amp, solid-state relay. The relay shall have a red LED light that is on when energized.
6. The CITELE surge shall consist of a modular surge protector for the AC line, another modular surge protector for the AC neutral and ground. There shall also be a radio interference suppressor (RIS), this device shall be a CITELE DUC31.
7. One see through plexiglass cover over the utility power block terminals.
8. Two (19) position solid aluminum, tin plated neutral buss bar with raised slotted & torque style screw heads. No tube bars shall be allowed.
9. One (19) position solid aluminum, tin plated ground buss bar with raised slotted & torque style screw heads. No tube bars shall be allowed.

Manuals and Documentation

The cabinet shall be furnished with (3) complete sets of cabinet prints. All cabinet wiring, and layout shall come on (1) E1 size sheet, multiple pages shall not be allowed. Upon request (1) USB memory stick with AutoCAD v2008 cabinet drawing for the cabinet wiring can be provided direct to the agency.

Cabinet Electronics and ITS Devices

Controller Unit (CU)

The controller shall be configurable to meet, at a minimum, all applicable sections of the NEMA Standards Publication for TS2 and ATC standards. Traffic signal controller shall operate within Temperature Range: -37°C to +74°C, Service Voltage: 89 to 135 VAC, 57 to 63 Hz, Power Consumption shall be typically 25 Watts and shall not exceed 120 Watts.

Traffic signal controller supplier shall provide a letter from an independent testing laboratory certifying controller compliance to the environmental standards NEMA TS 2-2003 and ATC Standard version 5.2b upon request.

It shall be possible to configure the controller for multiple configurations including: ATC Configuration: Standard version 5.2b specifications or TS-2 Type 2 NEMA Configuration: NEMA TS2-2003 without ATC compliance. An upgrade kit shall be available to convert TS2 to ATC with simple tools.

The controller shall be suitable for both a direct parallel connection to load switches and detectors and an SDLC port to communicate with NEMA BIUs.

The CPU shall provide the following:

1. Linux Operating System with runtime license and Kernel x.y.z
2. MPC 8270 microprocessor operating at 266 MHz
3. 512 Megabytes minimum dynamic random-access memory (DRAM).
4. 512 Megabytes minimum FLASH memory organized as a disk drive.
5. 2 Megabytes minimum static random-access memory (SRAM).
6. Time of Day (TOD) clock with hours, minutes, seconds, month, year, and automatic day- light savings time adjustment. TOD may be implemented in the CPU via electronic circuitry, operating system software, or a combination.
7. During power failures, the SRAM and TOD shall be powered by STANDBY voltage from the power supply.

The ATC Communication module shall be a plug-in type module, and shall provide the following communications options:

1. Four built-in USB 2.0 ports
2. Built-in 10 Base-T Ethernet with four RJ-45 connectors.

3. Built-in 9pin EIA-574 SP8 Port for GPS connection
4. Built-in 8MB Data-key Port
5. Dedicated normally flashing red 'CPU Active' LED to indicate CPU failure.

In addition to ATC 5.2b requirements, the Power Supply shall provide the following: Line Frequency Reference signal shall be generated by a crystal oscillator, which shall synchronize to the 60-Hz VAC incoming power line at 120 and 300 degrees. A continuous square wave signal shall be +5 VDC amplitude, 8.333ms half-cycle pulse duration, and 50 +/- 1% duty cycle. The Line Frequency Reference shall compensate for missing pulses and line noise during normal operation. The Line Frequency Reference shall continue through 450 mS power interruptions.

STANDBY voltage via supercapacitor for backup power during loss of service voltage shall be provided. Supercapacitor shall have a minimum of 15-farad nominal size. No batteries of any type are allowed.

In addition to ATC 5.2b requirements, Keyboard and Display shall provide the following:

1. Removable by pulling off, installed by pushing on, with retaining screw.
2. Emulation of terminal per Joint NEMA/AASHTO/ITE ATC Standard.
3. Key quantity and function per Joint NEMA/AASHTO/ITE ATC Standard.
4. Liquid Crystal Display (LCD) with 16 lines of 40 characters.
5. LCD contrast adjustment accomplished via the keypad, no contrast knob allowed.
6. Light-emitting diode backlight for the LCD.
7. Audible electronic bell.
8. Connector compatible with C60 of Joint NEMA/AASHTO/ITE ATC Standard, with the addition of +5VDC supplied by the controller on C60, Pin 1.
9. Keyboard and display may be removed for cost savings by the Agency.
10. It shall be possible to view the active status screens simultaneously with other programming menu screens.

11. It shall be possible to assign a specific menu screen to one of the available function buttons on the keyboard.
12. The operator shall be able to evoke a Help screen using a clearly identified HELP button.
13. For ease of operation for first responders and agency staff, the controller shall provide a clearly identified Auxiliary ON/OFF switch on the keypad.

In addition to ATC 5.2b requirements, the controller shall provide the following:

1. Built-in 10 Base-T Ethernet with five RJ-45 connectors on controller front panel.
2. Built-in Internet Protocol (IP) address assigned by Institute of Electrical and Electronic Engineers (IEEE), two unique IP addresses for each controller.
3. Built-in 1200 bps Frequency Shift Keying (FSK) modem. Modem is optional per Agency specification. Choice of 2 or 4 wire operation per Agency specification.
4. Built-in EIA-232 port for uploading and downloading applications software, as well as to update the operating system.
5. Built-in C60 connector for use with removable Keyboard and Display, Personal Computer COM1 or Personal Digital Assistant (PDA). C60 protocol per Joint NEMA/AASHTO/ITE ATC standard.
6. Four built-in USB 2.0 ports on controller front panel.

In addition to the ATC 5.2b requirements, the controller housing shall provide the following:

1. One slot with card guides for standard Joint NEMA/AASHTO/ITE ATC modems.
2. Polycarbonate construction, except back panel, rear mounting tabs and power supply mounting plate shall be aluminum for electrical grounding.
3. Built-in carrying handle.
4. Two adjustable front mounting feet, to raise the front cables and vary the display viewing-angle.
5. The controller identification label shall be located on the front of the controller and include the controller part or model number,

serial number and product code to decipher controller month and year of manufacture.

6. The CU shall be a SIEMENS M62 series ATC model EPAC6138M62 with 8Mb data key.

Local Intersection Software

The CU shall function with SEPAC 5.2 software version. It shall also be completely operable with TACTICS 3.0 central system or greater, and the SCOOT adaptive control system.

Fiber Optic Termination Panel

The cabinet shall come with a 12 port wall mounted fiberoptic termination panel with loaded duplex single-mode LC coupler plates and splice tray. The panel shall be a Corning SPH-01P with (1) CCH-CP12-A9 coupler plate.

Ethernet Switch

The Ethernet switch shall be Cisco model IE3300 with the following:

Part Number	Description	Qty
IE-3300-8T2X-A	Catalyst IE3300 w/ 8 GE Copper & 2 10G SFP, Modular, NA	1
CON-SNT-IE33008A	SNTC-8X5XNBD Catalyst IE3300 w8 GE Copper 2 10G S	1
PWR-IE65W-PC-AC	PoE AC Input Power Module for IE3000/2000	1
IE3300-NW-A	Cisco Network Advantage license for IE3300 Series	1
DIGITAL-DL-CODE	Digital Download Code for Software License	1
IOT-SMART-CITIES	Smart Cities and Communities Solutions; For tracking only.	1
IOT-CITIES-INFRA	Connected Communities Infrastructure CCI; For tracking only.	1
IE3300X_SW	Software for Catalyst IE3300 10G Rugged series	1
IE3300-DNA-A	Cisco Catalyst Center Advantage license for IE3300 Series	1
IE3300-DNA-A-3Y	IE 3300 Catalyst Center Advantage 3 Year Term license	1
SFP-10G-LR10-I= or SFP-10G-LR-X	10GBASE-LR, CPRI, SFP Module, Industrial Temp	2

or		
SFP-10G-LR-X-AX		

The following cables and cords shall be supplied with the Ethernet switch:

1. Two single mode patch cords (LC to LC)
2. Six Cat6 patch cables

Malfunction Management Unit (MMU)

The cabinet shall come with a (MMU) that meets all the requirements of NEMA TS2-2003 while remaining downward compatible with NEMA TS1. It shall have (2) high contrast LCD displays and an internal diagnostic wizard. It shall come with a 10/100 ethernet port. It shall come with software to run flashing yellow arrow operation. The MMU shall be an Eberle Design, Inc. model MMU2-16LEip.

Load Switch

The cabinet shall come with (8) dual channel load switches. All load switches shall be solid state circuit board type with a 2-piece aluminum case. LED indications shall be provided for both the input and output side of the loads for both channels. The load switches shall be Western Systems model SSS-216.

Flasher

The cabinet shall come with (1) dual channel flasher. The flasher shall be solid state circuit board type with a 2-piece aluminum case. LED indications shall be provided for both channels. The flasher shall be Western Systems model SSF-216.

Flasher Transfer Relay

The cabinet shall come with (8) heavy duty mini flash transfer relays. The relays shall operate 120VAC and be compatible with a Struthers-Dunn SH-TRF8-MW socket. The flash transfer relays shall be Western Systems model FTR-216.

Bus Interface Unit (BIU)

The cabinet shall come with (6) bus interface units (BIU). These shall meet all the requirements of NEMA TS-2 1998 standards. In addition, all BIUs shall provide separate front panel indicator LED's for DC power status and SDLC Port 1 transmit and receive status. The BIU's shall utilize only 1 rack position. The (BIU)'s shall be Eberle Design, Inc. model BIU-700H.

Power Supply (PS)

The cabinet shall come with a shelf mounted cabinet power supply meeting at minimum TS 2-2003 standards. It shall be a heavy-duty device that provides +12VDC at 5 Amps / +24VDC at 2 Amps / 12VAC at .25 Amp, and line frequency reference at 50 mA. The power supply shall

provide a separate front panel indicator LED for each of the four outputs. Front panel banana jack test points for 24VDC and logic ground shall also be provided. The power supply shall provide 5A of power and be able to cover the load of four (4) complete detector racks. The (PS) shall be Eberle Design, Inc. model PS250.

Loop Amplifiers

The cabinet shall come with (8) 4-channel rack mounted half width loop amplifiers. These devices shall have LCD displays and have audible detect signal buzzer for diagnostic purposes. These devices must have the capability to perform directional logic and 3rd car queuing for protected/permissive operation. Each 4 channel loop amplifier card shall utilize only (1) card rack position. The loop amplifiers shall be Reno A&E model E/2-1200-SS.

Video Detection System

The Video Detection System shall be Miovision TrafficLink with Miovision SmartView 360 detection camera(s) and associated mounting bracket(s) per the Plans, Miovision SmartView Approach detection camera(s) and associated mounting bracket(s) per the Plans, and Miovision Core DCM cabinet interface unit. The system shall come with the Detection Plus package with perpetual license, providing traffic signal detection, continuous turning movement counts, intersection monitoring, and detection metrics (e.g., occupancy ratios, arrivals on red, arrivals on green, phase intervals).

Video Detection System Warranty

The supplier shall provide a three-year warranty on the detection system from the date of installation.

Device firmware and software shall continue to be updated for the life of the product.

During the warranty period, updates to software, web application updates, and security patches shall be available from the supplier without charge

Video Detection Maintenance and Support

The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the detection system. These parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale for said parts.

The supplier shall maintain an ongoing program of technical support for the detection system. This technical support shall be available via email, telephone, or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale for on site technical support services.

Installation or training support shall be provided by a factory-authorized representative and shall be a minimum IMSA-Level II Traffic Signal Technician certified.

All product documentation shall be written in the English language.

Opticom

The cabinet shall come with (1) 4-channel rack mounted Opticom™ phase selectors. This device shall be capable of receiving encoded signals from Opticom series 700 emitters and detectors. The Opticom™ phase selectors shall be Global Traffic Technologies model 764 or approved equivalent. (1) Opticom™ 768 auxiliary interface panels shall be supplied for each Opticom™ phase selector supplied. (1) Opticom™ Model 3100 GPS radio unit with antenna and 500ft of Model 1070 GPS radio cable shall be shipped with each cabinet.

PBS Control Station

The cabinet shall come with shelf mount intelligent control unit for accessible push button stations (PBS) wired in prior to delivery. It shall have a backlit LCD status display, Ethernet, USB and SDLC port on the front and be compatible with all iNS2 pushbuttons stations. The control unit shall be a Polara Engineering model iCCU-S2 with cable harnesses A and C.

UPS System

The cabinet shall come with a complete uninterruptable power system (UPS) which shall include at a minimum a UPS inverter module with SNMP adapter, an automatic transfer switch assembly, batteries, battery cables and a remote battery management system. All other auxiliary equipment for a complete functioning UPS system shall be included.

UPS Module

The cabinet shall come with (1) FXM HP 1100W high performance uninterruptible power supply that supplies clean reliable power control and management. It shall have Automatic Voltage Regulation (AVR), an Ethernet SNMP interface and a control and power connection panel that is rotatable for viewing in any vertical or horizontal orientation. It shall have nominal dimensions of 5.22" x 15.5" x 8.75" and come with mounting brackets. It shall have a tough screen and advanced analytics built-in. The UPS module shall be an Alpha model 0170024-001.

UATS/UGTS Assembly

The cabinet shall come with (1) universal automatic transfer switch and universal generator transfer switch connected between the UPS module and the batteries. It shall have surge protection, have dimensions of 3.25" x 15.5" x 6.00" and come with mounting brackets. The ATS module shall be an Alpha model 020-168-25.

UPS Batteries

The cabinet shall come with (4) high performance silver alloy sealed valve regulated lead acid AlphaCell™ XTV Gel Cell batteries with 112Ah runtime. The UPS batteries shall be Alpha model 240XTV.

UPS Battery Harness

The cabinet shall come with (1) battery cable (8) foot long, with 13" black offset extension, wired for (4) batteries. The battery harness shall be Alpha model 740-628-32.

Battery Management System

The cabinet shall come with a Remote Battery Management System which extends and monitors the battery operational life. It shall be an Alpha model 0370260-002. The RBMS cable assembly shall be loomed and tie-wrapped in with the UPS battery harness prior to delivery.

9-29.19 Pedestrian Push Buttons

Section 9-29.19 is supplemented with the following:

(*****)

Accessible Pedestrian Signal (APS) Pushbuttons

When required in the Contract, APS Pushbuttons shall be provided. Each accessible pedestrian signal (APS) shall be a complete APS pushbutton system at each pedestrian pushbutton location shown in the Plans. Equipment shall be the following system:

1. Polara Engineering: iNavigator 2-Wire (iNS2); Part Number: iNS29VN1

Each pushbutton station shall include the following:

1. Flat black colored housing.
2. High contrast pushbutton arrow (dark on a light background or light on a dark background). White on silver or silver on white are not acceptable as high contrast.
3. Integral 9" x 12" R10-3 Sign. Braille shall not be included. Adaptor plates shall be included if required to accommodate the sign.
4. Appropriate controller module equipped in the traffic signal controller cabinet. Refer to 9-29.13(10)C for additional details.
5. Percussive tone / rapid tick walk indication.
6. Voice messages, as specified below, pre-installed. Voice shall be male.

The following shall be provided at each intersection:

1. One USB flash drive with copies of all voice message audio files for that intersection, placed in the traffic signal cabinet drawer or drawing envelope. A separate flash drive is required for each intersection.

2. One USB cable of the appropriate type (A to A, A to B, male/female, etc.), placed in the traffic signal cabinet drawer or drawing envelope.

Provide one Polara iNavigator iN-DGL Bluetooth Dongle for the entire Contract.

Dual button adaptor brackets are required for all installations with two APS pushbuttons on the same Type PPB, Type PS, or Type I Signal Standard. Where dual button adaptor brackets or extension brackets are required, they shall be obtained from the same manufacturer as the pushbutton station. Brackets and extensions from other manufacturers shall not be used.

APS Speech Messages

Speech messages shall be provided in the following format:

- "Wait."
- "Wait to cross ____ (A) ____ at ____ (B) ____."
- "Walk sign is on to cross ____ (A) ____."

The following table lists the entries for (A) and (B) above, as well as quantities for button and arrow orientations:

PPB	(A)	(B)	Quantity	Arrow Orientation
28	132nd Ave NE	NE 100th St	1	Right
29	132nd Ave NE	NE 100th St	1	Left
48	NE 100th St	132nd Ave NE	1	Right
49	NE 100th St	132nd Ave NE	1	Left
68	132nd Ave NE	NE 100th St	1	Right
69	132nd Ave NE	NE 100th St	1	Left
88	NE 100th St	132nd Ave NE	1	Right
89	NE 100th St	132nd Ave NE	1	Left

Order forms shall be completed by the Contractor using the information presented above.

9-29.24 Service Cabinets

Section 9-29.24 is supplemented with the following:

(*****)

New contractor-furnished service cabinet shall meet the requirements of Kirkland Pre-Approved Plans CK-TS-05A through C. The cabinet shall be a Skyline Electric & Mfg. Company Series #62460-R1 or approved equivalent.

(*****)

Add the following new section:

9-29.26 PTZ Camera Equipment

PTZ Camera Assembly

The PTZ camera shall consist of Axis Q6075-E system equipment, software and mounting components.

The following PTZ camera components shall be manufactured by Axis:

1. PTZ Camera Equipment:

Axis Q6075-E 60 Hz

AXIS T8061 Ethernet Surge Protector

AXIS T8144 60 W Industrial Midspan PoE Injector

The Contractor shall submit catalog cuts with the Request for Approval of Material prior to ordering this material for review and approval by the Project Engineer.

PTZ Camera Cabling

Cable connections between the camera control cabinet and the traffic signal cabinet shall be provided per the manufacturer's recommendation to support the Axis Q6075-E model provided.

(*****)

Add the following new section:

9-29.27 Detectable Pull Tape

The Contractor shall furnish and install a flat polyester woven pre-lubed tape that contains a 22-gauge wire. The tape will be marked with sequential footage markings and be continuous. The tape shall meet or exceed a breaking strength of 900 lb., with a width of 1/2 inch.

END OF DIVISION 9

PREVAILING WAGES



City of Kirkland

PREVAILING WAGE RATES

Prevailing wage rates can be found at:
www.lni.wa.gov/tradeslicensing/prevwage/wagerates

September 18, 2025

King County

A copy of the applicable wage rates is available for viewing in our office:

City Hall Annex
310 1st Street
Kirkland, WA 98033

The City of Kirkland will mail a hard copy of the applicable wage rates upon request.
Send your request to the Project Engineer, or SGonsar@kirklandwa.gov.

APPENDIX A: PLANS



City of Kirkland

CITY OF KIRKLAND

JOB NO. 45-24-PW

NE 100TH ST / 132ND AVE NE INTERSECTION IMPROVEMENTS

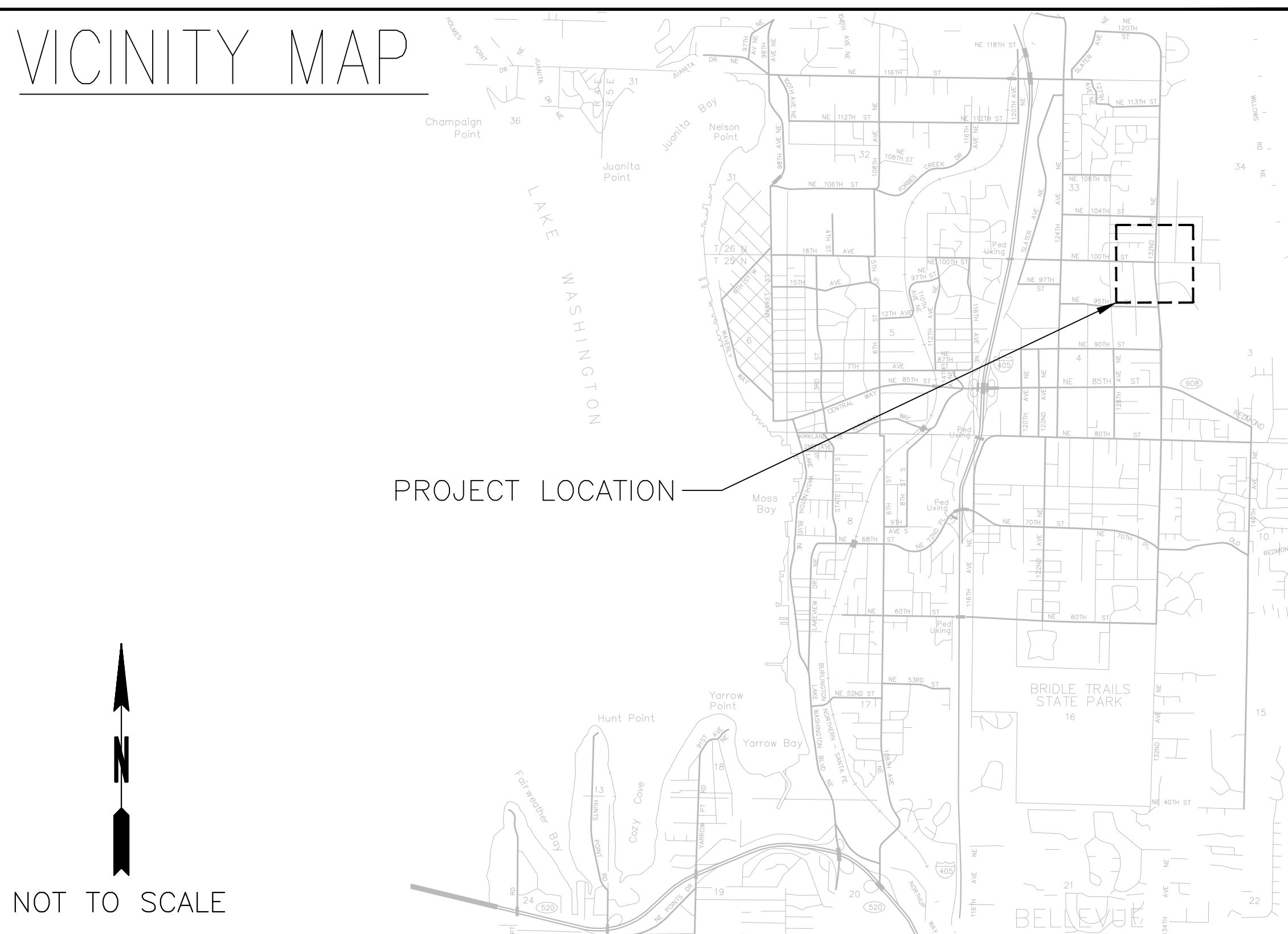
CITY OFFICIALS

KELLI CURTIS	MAYOR
JAY ARNOLD	DEPUTY MAYOR
NEAL BLACK	COUNCIL MEMBER
AMY FALCONE	COUNCIL MEMBER
JON PASCAL	COUNCIL MEMBER
PENNY SWEET	COUNCIL MEMBER
JOHN TYMCZYSZYN	COUNCIL MEMBER
KURT TRIPLETT	CITY MANAGER
TRUC DEVER	DIRECTOR OF PUBLIC WORKS
ROB ENGLISH	CAPITAL DIVISION MANAGER
SCOTT GONSAR, PE	PROJECT ENGINEER

CONTACT PERSONNEL

NAME	AGENCY	PHONE
SCOTT GONSAR	COK PROJECT ENGINEER	425.587.3830
RIK MAYER	COK FIELD REPRESENTATIVE	206.496.4265
MICAH STANSBERRY	COK STREETS DEPARTMENT	425.567.3922
NICK BELDEAN	COK GROUNDS DEPARTMENT	425.587.3909
JASON OSBORN	COK SURFACE WATER	425.587.3901
CODY GRAY	COK WATER/WASTEWATER	425.567.3938
DISPATCH	COK POLICE DEPARTMENT	425.587.3400
DISPATCH	COK FIRE DEPARTMENT	425.864.3650
DISPATCH	COK SPILL RESPONSE HOTLINE	425.587.3900
KIARA SKYE	PUGET SOUND ENERGY-ELEC	425.213.9205
KIARA SKYE	PUGET SOUND ENERGY-GAS	425.213.9205
BRAD LANDIS	VERIZON BUSINESS	425.201.0901
RAYMOND PILKENTON	COMCAST CABLE	425.263.5332
CONST.COORDINATOR	KING COUNTY METRO	206.447.1140
JEFF MILES	LAKE WASH. SCHOOL DISTRICT	425.936.1120
GEORGE MATOTE	NORTHSHORE UTILITY DISTRICT	425.398.4400
KEN McDOWELL	WOODINVILLE WATER DISTRICT	425.487.4104
JAY SCHWAB	ZIPLY FIBER	425.263.4019
RICHARD COX	SEATTLE PUBLIC UTILITIES	206.684.8117
EMERGENCY		911
ONE CALL UTILITY LOCATE		800.424.5555

VICINITY MAP



INDEX OF DRAWINGS

SHEET TITLE	SHEET NAME	PAGE NUMBER
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ALIGNMENT CONTROL	AL01	3
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DEMOLITION PLAN	DM02	5
PAVING PLAN	PV01	6
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APPROVED FOR CONSTRUCTION

Robert T. Crittenden	8/13/2025
ROBERT T. CRITTENDEN, P.E.	DATE
CITY ENGINEER	



		DATE	REVISION	BY	DATE
DESIGNED BY	CBS/TYK	07/11/2025			
DRAWN BY	CBS/TYK	07/11/2025			
REVIEWED BY	JC	07/11/2025			



CITY OF KIRKLAND

DEPARTMENT OF PUBLIC WORKS



12131 113TH AVENUE NE, SUITE 203
KIRKLAND, WASHINGTON 98034

(TEL) 425 821-3665
(FAX) 425 825-8434



NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND

JULY 2025

COVER

COV

SHEET
1
OF
24
SHEETS

GENERAL NOTES

1. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH CITY OF KIRKLAND STANDARDS, WSDOT/APWA STANDARD PLANS AND STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
4. A COPY OF THE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE TRAFFIC CONTROL TO ENSURE TRAFFIC SAFETY DURING CONSTRUCTION ACTIVITIES. THEREFORE, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE PUBLIC WORKS DEPARTMENT PRIOR TO STARTING ANY WORK IN THE RIGHT OF WAY. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE CONTRACTOR SHALL CONFORM TO THE GUIDELINES IN CITY OF KIRKLAND PRE-APPROVED POLICY R-29 FOR TRAFFIC CONTROL PLANS.
6. ANY EXISTING PUBLIC IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE PRIOR TO FINAL INSPECTION.
7. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL PUBLIC STREETS FREE OF MUD AND DEBRIS AT ALL TIMES. THE CONTRACTOR SHALL BE PREPARED TO USE POWER SWEEPERS OR OTHER PIECE OF EQUIPMENT NECESSARY TO KEEP THE ROADWAYS CLEAN.
8. ANY ROADWAY/INTERSECTION SIGN/MARKING REMOVED OR TEMPORARILY MOVED BY THE CONTRACTOR SHALL BE RESTORED BY THE END OF DAY AS TO COMPLY WITH THE CURRENT CITY OF KIRKLAND STANDARDS.
9. ALL PUBLIC ROADWAYS SHALL BE CONSTRUCTED OF 2" CLASS "B" AC PAVING ON 4" ASPHALT-TREATED BASE (ATB), UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DEPARTMENT.
10. DENSITY TEST REPORTS WILL BE REQUIRED FOR ALL PUBLIC ROADWAYS AND ALL PRIVATE ROADWAYS WITHIN PLATS. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.
11. ALL CONCRETE FOR SIDEWALKS AND CURB AND GUTTER MUST BE 4,000 PSI MINIMUM (5-3/4 SACK MIX).
12. BACKFILL IN ALL STREET CUTS ON ARTERIALS WILL BE CONTROL DENSITY FILL (CDF). CONTRACTOR MUST PROVIDE STEEL PLATING NECESSARY TO ALLOW THE CDF TO CURE.
13. SIDEWALK AND CURB AND GUTTER CANNOT BE POURED MONOLITHICALLY. THERE MUST BE A COLD JOINT OR FULL-DEPTH EXPANSION JOINT BETWEEN THEM.
14. MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROVIDE GROUND COVER IN AREAS WITHIN THE RIGHT-OF-WAY WHICH HAVE BEEN STRIPPED OF NATURAL VEGETATION OR HAVE A POTENTIAL FOR EROSION.
15. WHEN INSTALLING NEW SIDEWALK, THE AREA BEHIND THE SIDEWALK MUST BE GRADED SO THAT THE YARD DRAINAGE DOES NOT DRAIN OVER THE SIDEWALK.
16. ANY EXISTING PUBLIC IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED PRIOR TO FINAL INSPECTION.
17. WHEN CONSTRUCTING NEW CURB AND GUTTER WHICH DOES NOT ALIGN WITH THE EXISTING EDGE OF PAVEMENT, THE ROADWAY MUST BE TAPERED FROM THE ENDS OF THE NEW CURB AND GUTTER TO MATCH THE EXISTING PAVEMENT. THE ENTRY TAPER INTO THE NEW IMPROVEMENTS SHALL BE 5:1 AND LEAVING THE NEW IMPROVEMENTS SHALL BE 10:1.
18. WHEN AN EXISTING ROADWAY IS TO BE WIDENED, THE EXISTING PAVEMENT MUST BE SAW CUT AT LEAST ONE FOOT FROM THE EDGE TO PROVIDE A PROPER MATCH BETWEEN NEW AND EXISTING ASPHALT. HOWEVER, WHEN THE EXISTING PAVEMENT CONTAINS ALLIGATORED AREAS, THOSE AREAS MUST BE REMOVED PRIOR TO WIDENING. ALL SAW CUTS SHALL BE PARALLEL OR PERPENDICULAR TO THE RIGHT-OF-WAY CENTERLINE.

\\P:\1\24064\00 - Kirkland NE 100th St & 132nd Ave NE\Engineering\CD\Plan Sheets\24064-10-0015.dwg (380) Start: Km 7/10/2025 11:22 AM



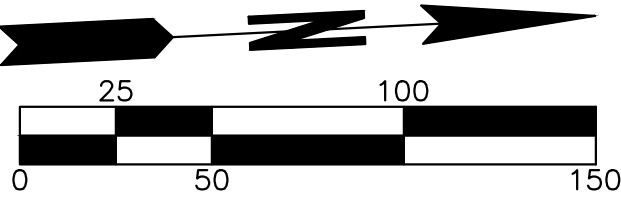
	DATE	REVISION	BY	DATE	 CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS	 12131 113TH AVENUE NE, SUITE 203 KIRKLAND, WASHINGTON 98034 (TEL) 425 821-3665 (FAX) 425 825-8434		NE 100TH ST/132ND AVE NE INTERSECTION IMPROVEMENTS	CITY OF KIRKLAND	JULY 2025	GN01
DESIGNED BY	CBS/TYK	07/11/2025									SHEET 2 OF 24 SHEETS
DRAWN BY	CBS/TYK	07/11/2025									
REVIEWED BY	JC	07/11/2025									

SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.



CL-132							
Number	Length	Radius	Line/Chord Direction	BEGIN STATION	BEGIN N/E	END STATION	END N/E
L1	651.710	NA	N04° 58' 55.44"W	20+00.00	N: 253683.50, E: 1312511.77	26+51.71	N: 254332.75, E: 1312455.17
L2	680.485	NA	N02° 50' 19.39"E	26+51.71	N: 254332.75, E: 1312455.17	33+32.19	N: 255012.40, E: 1312488.87

CL-100							
Number	Length	Radius	Line/Chord Direction	BEGIN STATION	BEGIN N/E	END STATION	END N/E
L3	435.297	NA	S88° 24' 32.83"E	10+00.00	N: 254344.83, E: 1312020.04	14+35.30	N: 254332.75, E: 1312455.17
L4	456.685	NA	S89° 30' 23.61"E	14+35.30	N: 254332.75, E: 1312455.17	18+91.98	N: 254328.81, E: 1312911.84



		DATE	REVISION	BY	DATE
DESIGNED BY	TYK	07/11/2025			
DRAWN BY	TYK	07/11/2025			
REVIEWED BY	KBC	07/11/2025			



CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS



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7/11/2025

NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND
ALIGNMENT CONTROL
JULY 2025

ALO1

SHEET
3
OF
24
SHEETS

SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.

DEMOLITION NOTES

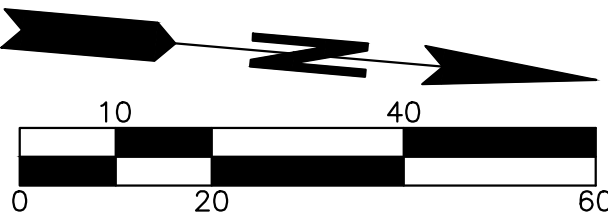
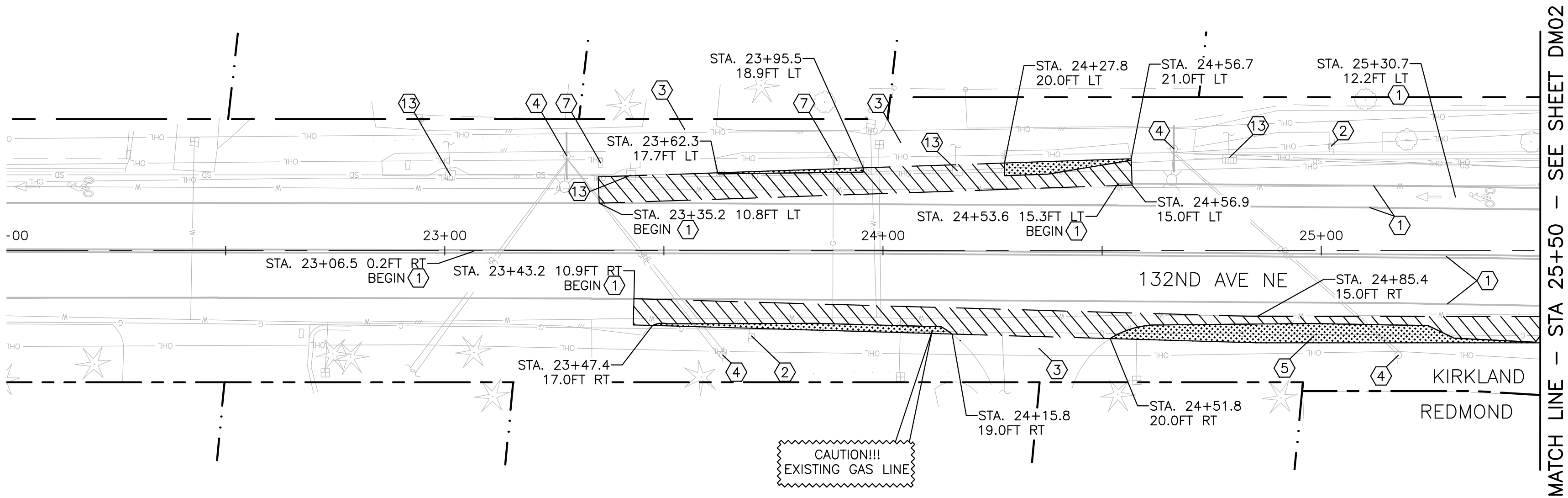
1. REMOVE CONCRETE TO THE NEAREST JOINT UNLESS OTHERWISE INDICATED.
2. CONTRACTOR TO POTHOLE EXISTING GAS LINE TO VERIFY DEPTH PRIOR TO SAWCUT. NOTIFY CITY ENGINEER IF DEPTH TO LINE IS INSUFFICIENT TO AVOID IMPACTS.
3. EXISTING STORM DRAINAGE SYSTEM TO BE PROTECTED UNLESS OTHERWISE NOTED ON DRAINAGE PLANS.

DEMOLITION LEGEND

RIGHT-OF-WAY	
CITY OF KIRKLAND-CITY OF REDMOND BOUNDARY	
PARCEL LINE	
TEMPORARY CONSTRUCTION EASEMENT	
SAWCUT LINE	
CONSTRUCTION NOTE	
CONCRETE REMOVAL	
CURB REMOVAL	
ASPHALT REMOVAL	
ASPHALT PLANE 2" DEPTH	
CLEAR AND GRUB	

DEMOLITION CONSTRUCTION NOTES (THIS SHEET ONLY)

- 1 REMOVE EXISTING PAVEMENT MARKINGS. SEE CHANNELIZATION PLANS FOR DETAILS.
- 2 EXISTING SIGN AND SIGN POST. SEE CHANNELIZATION PLANS FOR DETAILS.
- 3 PROTECT EXISTING DRIVEWAY, MAINTAIN ACCESS DURING CONSTRUCTION.
- 4 PROTECT EXISTING UTILITY POLE.
- 5 RELOCATE EXISTING MAIL BOX. SEE PAVING PLANS FOR FINAL LOCATION AND FOUNDATION DETAILS.
- 7 PROTECT EXISTING MAILBOX.
- 13 EXISTING STORM DRAIN STRUCTURE. SEE DRAINAGE PLANS FOR DETAILS.



		DATE	REVISION	BY	DATE
DESIGNED BY	TYK	07/11/2025			
DRAWN BY	TYK	07/11/2025			
REVIEWED BY	KBC	07/11/2025			



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DEPARTMENT OF PUBLIC WORKS



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NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

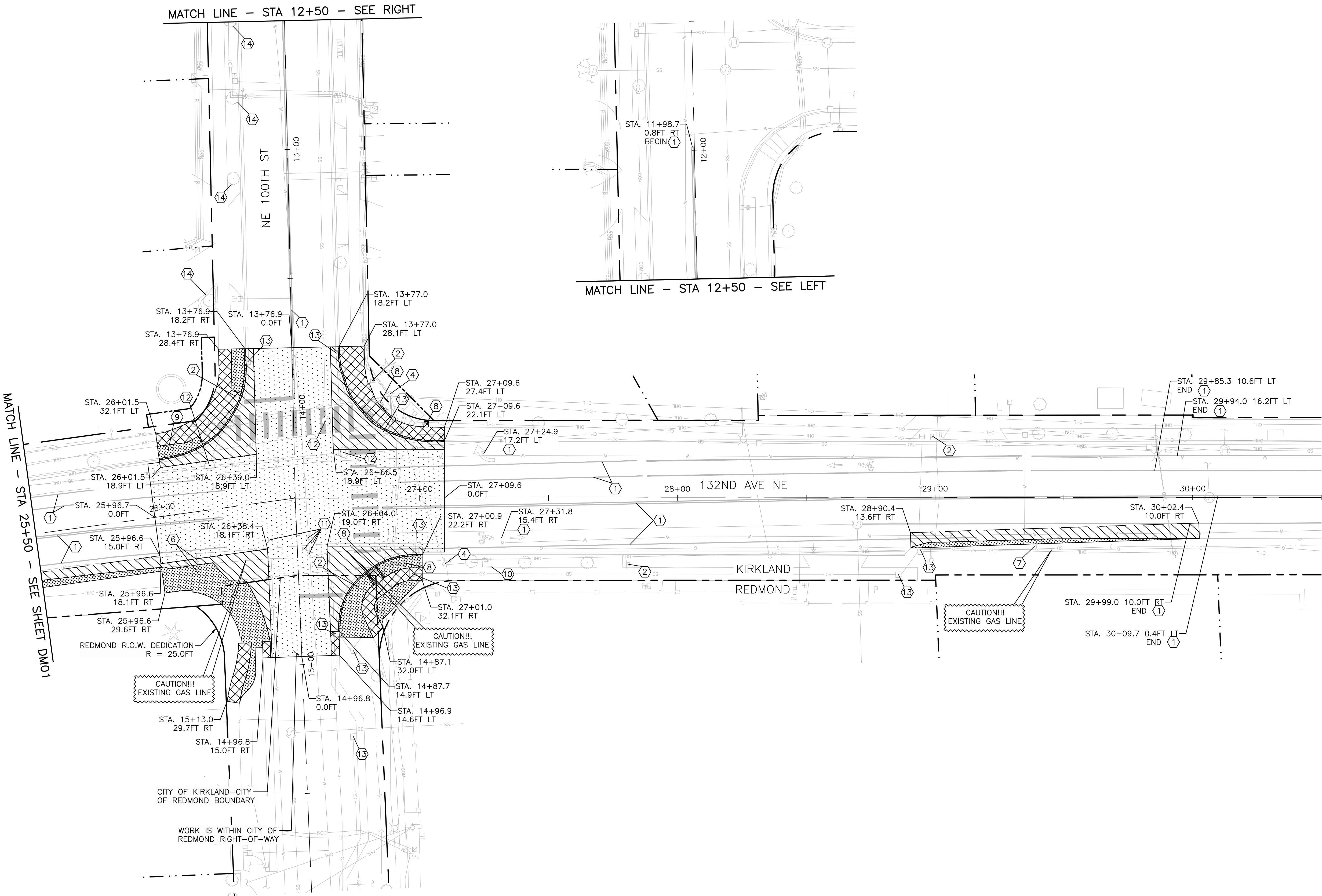
CITY OF KIRKLAND
JULY 2025

DEMOLITION PLAN

DM01

SHEET
4
OF
24
SHEETS

SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.



DEMOLITION LEGEND

RIGHT-OF-WAY _____

CITY OF KIRKLAND-CITY OF REDMOND BOUNDARY _____

PARCEL LINE _____

TEMPORARY CONSTRUCTION EASEMENT _____

SAWCUT LINE _____

CONSTRUCTION NOTE

CONCRETE REMOVAL

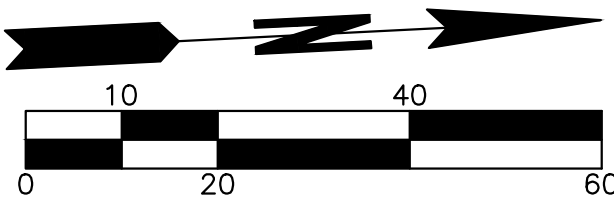
CURB REMOVAL

ASPHALT REMOVAL

ASPHALT PLANE 2" DEPTH

CLEAR AND GRUB

- DEMOLITION CONSTRUCTION NOTES (THIS SHEET ONLY)**
- ① REMOVE EXISTING PAVEMENT MARKINGS. SEE CHANNELIZATION PLANS FOR DETAILS.
 - ② EXISTING SIGN AND SIGN POST. SEE CHANNELIZATION PLANS FOR DETAILS.
 - ④ PROTECT EXISTING UTILITY POLE.
 - ⑥ RELOCATE EXISTING HYDRANT. SEE DRAINAGE PLANS FOR DETAILS.
 - ⑦ PROTECT EXISTING MAILBOX.
 - ⑧ REMOVE EXISTING RECTANGULAR RAPID FLASHING BEACON SYSTEM. SEE TRAFFIC SIGNAL PLANS FOR DETAILS.
 - ⑨ REMOVE EXISTING TREE.
 - ⑩ PROTECT EXISTING COMMUNICATIONS CABINET.
 - ⑪ PROTECT EXISTING WATER VALVE.
 - ⑫ PROTECT EXISTING MANHOLE.
 - ⑬ EXISTING STORM DRAIN STRUCTURE. SEE DRAINAGE PLANS FOR DETAILS.
 - ⑭ CITY OF KIRKLAND TO TRIM EXISTING TREE PER SECTION 2-01.3 OF THE STANDARD SPECIFICATIONS.



\\pwr-dfs-wa\Projects\2412400400 - Kirkland, NE 100th St & 132nd Ave NE\Engineering\2401\Plan Sheets\24004-TC-DEMOL-PLAN.dwg (DM02) Job: 7/10/2025 12:41 PM

		DATE	REVISION	BY	DATE	 CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS	 transpogroup WHAT TRANSPORTATION CAN BE. 12131 113TH AVENUE NE, SUITE 203 KIRKLAND, WASHINGTON 98034 (TEL) 425 821-3665 (FAX) 425 825-8434	 7/11/2025	NE 100TH ST/132ND AVE NE INTERSECTION IMPROVEMENTS		DM02	
DESIGNED BY	TYK	07/11/2025							CITY OF KIRKLAND			JULY 2025
DRAWN BY	TYK	07/11/2025										
REVIEWED BY	KBC	07/11/2025										

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PAVING LEGEND

RIGHT-OF-WAY

CITY OF KIRKLAND-CITY OF REDMOND BOUNDARY

PARCEL LINE

TEMPORARY CONSTRUCTION EASEMENT

CONSTRUCTION NOTE

CONCRETE SIDEWALK

ASPHALT RESTORATION

ASPHALT OVERLAY

DETECTABLE WARNING SURFACE (PER WSDOT STD. PLAN F-45.10-04)

PAVEMENT DESIGN

ASPHALT RESTORATION

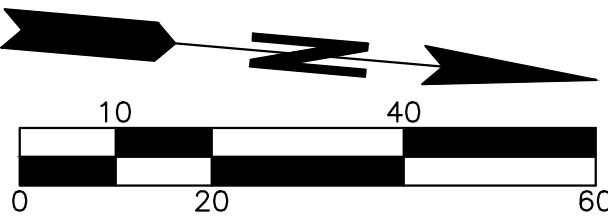
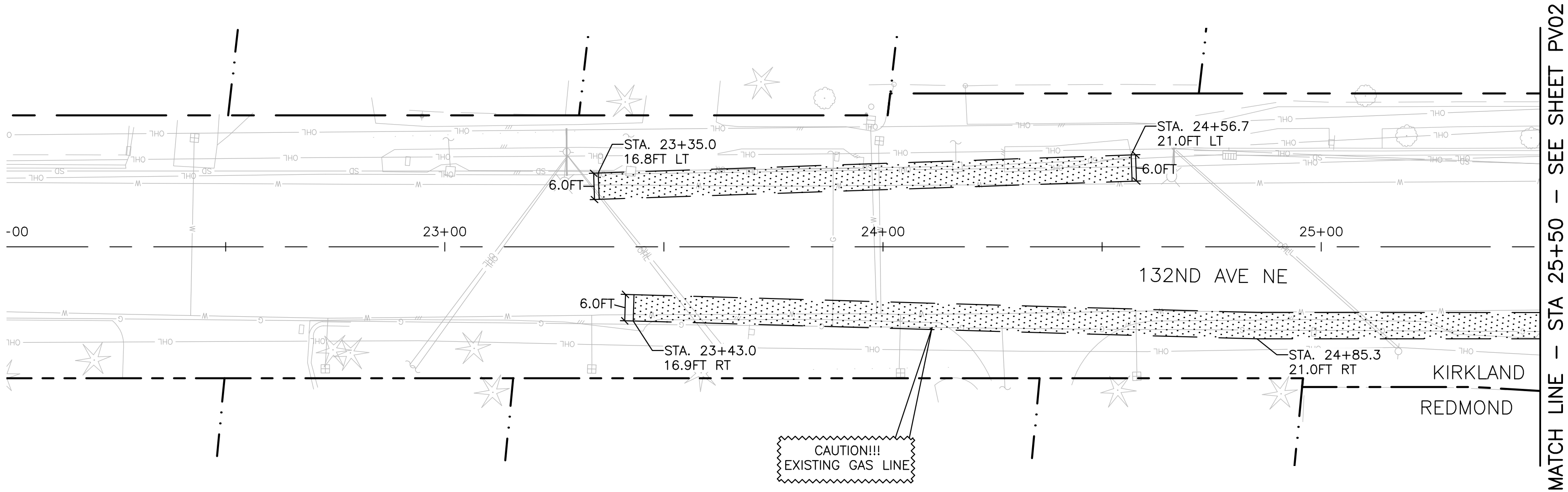
6" HMA CL. 1/2" PG 58-22

4" CRUSHED SURFACING TOP COURSE

ASPHALT OVERLAY

2" PLANING

2" HMA CL. 1/2" PG 58-22



		DATE	REVISION	BY	DATE
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REVIEWED BY	KBC	07/11/2025			



CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS

transpogroup

WHAT TRANSPORTATION CAN BE.

12131 113TH AVENUE NE, SUITE 203

KIRKLAND, WASHINGTON 98034

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NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND JULY 2025

PAVING PLAN

PV01

SHEET
6
OF
24
SHEETS

SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.

PAVING NOTES

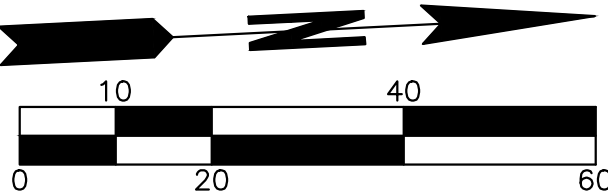
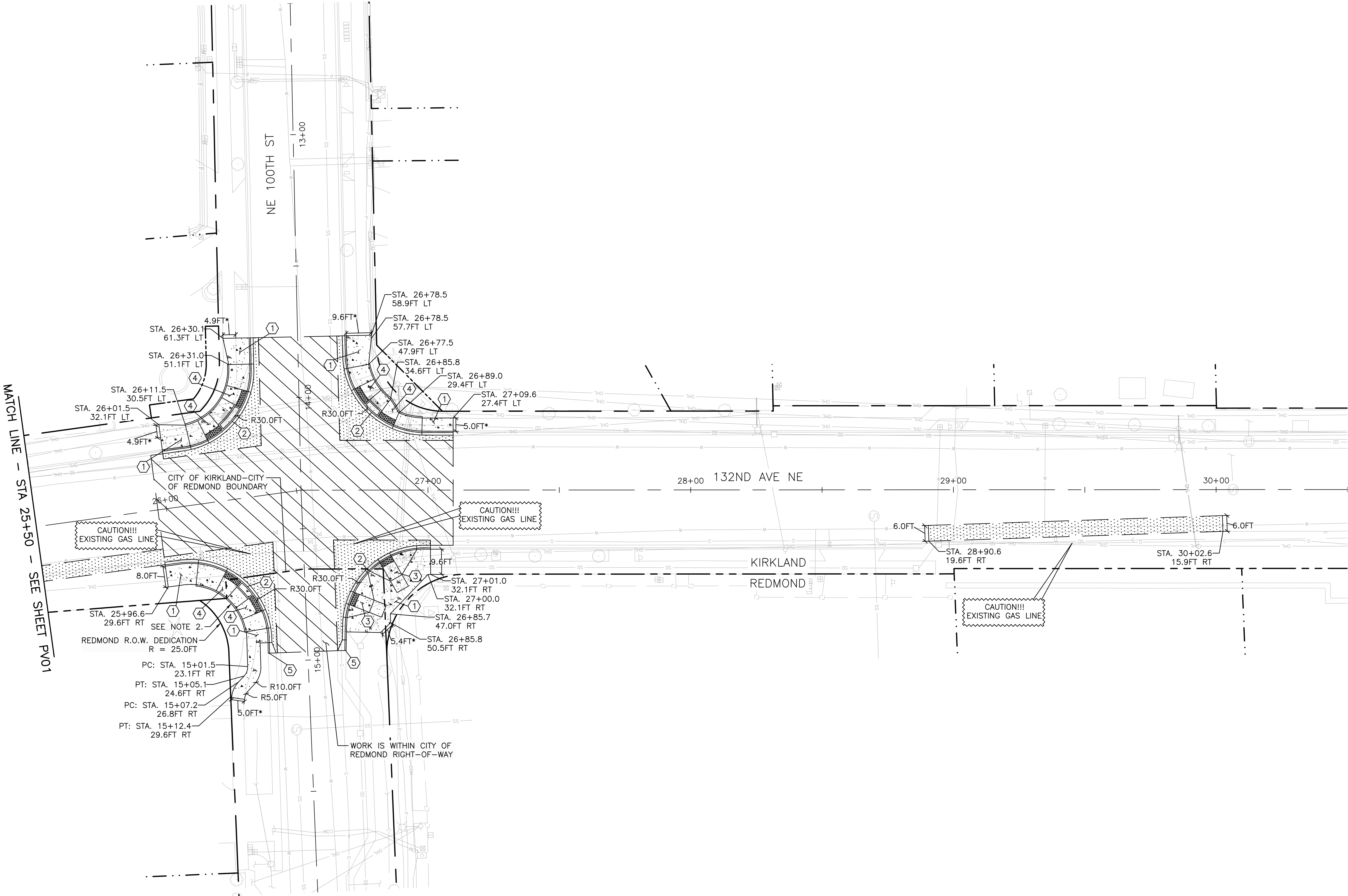
1. SEE SHEET PV01 FOR PAVEMENT DESIGN.
 2. COORDINATE INSTALLATION OF PEDESTRIAN CURB WITH INSTALLATION OF SIGNAL POLE. SEE TRAFFIC SIGNAL PLANS FOR DETAILS.
- * EXISTING DATA MEASUREMENT FROM SURVEY. CONTRACTOR TO FIELD VERIFY.

PAVING LEGEND

- RIGHT-OF-WAY _____
- CITY OF KIRKLAND-CITY OF REDMOND BOUNDARY - - - - -
- PARCEL LINE
- TEMPORARY CONSTRUCTION EASEMENT - - - - -
- CONSTRUCTION NOTE
- CONCRETE SIDEWALK
- ASPHALT RESTORATION
- ASPHALT OVERLAY
- DETECTABLE WARNING SURFACE (PER WSDOT STD. PLAN F-45.10-04)

PAVING CONSTRUCTION NOTES (THIS SHEET ONLY)

- ① CONSTRUCT CEMENT CONCRETE SIDEWALK PER CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.23.
- ② CONSTRUCT TYPE A CONCRETE CURB AND GUTTER PER CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.17. SEE PAVING DETAILS FOR ALIGNMENTS AND PROFILES.
- ③ CONSTRUCT PERPENDICULAR CURB RAMP PER WSDOT STANDARD PLAN F-40.15-04.
- ④ CONSTRUCT PARALLEL CURB RAMP PER WSDOT STANDARD PLAN F-40.12-03.
- ⑤ CONSTRUCT 4FT TRANSITION OF TYPE A CONCRETE CURB HEIGHT AND WIDTH TO MATCH EXISTING RIBBON CURB.



		DATE	REVISION	BY	DATE
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REVIEWED BY	KBC	07/11/2025			



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INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND

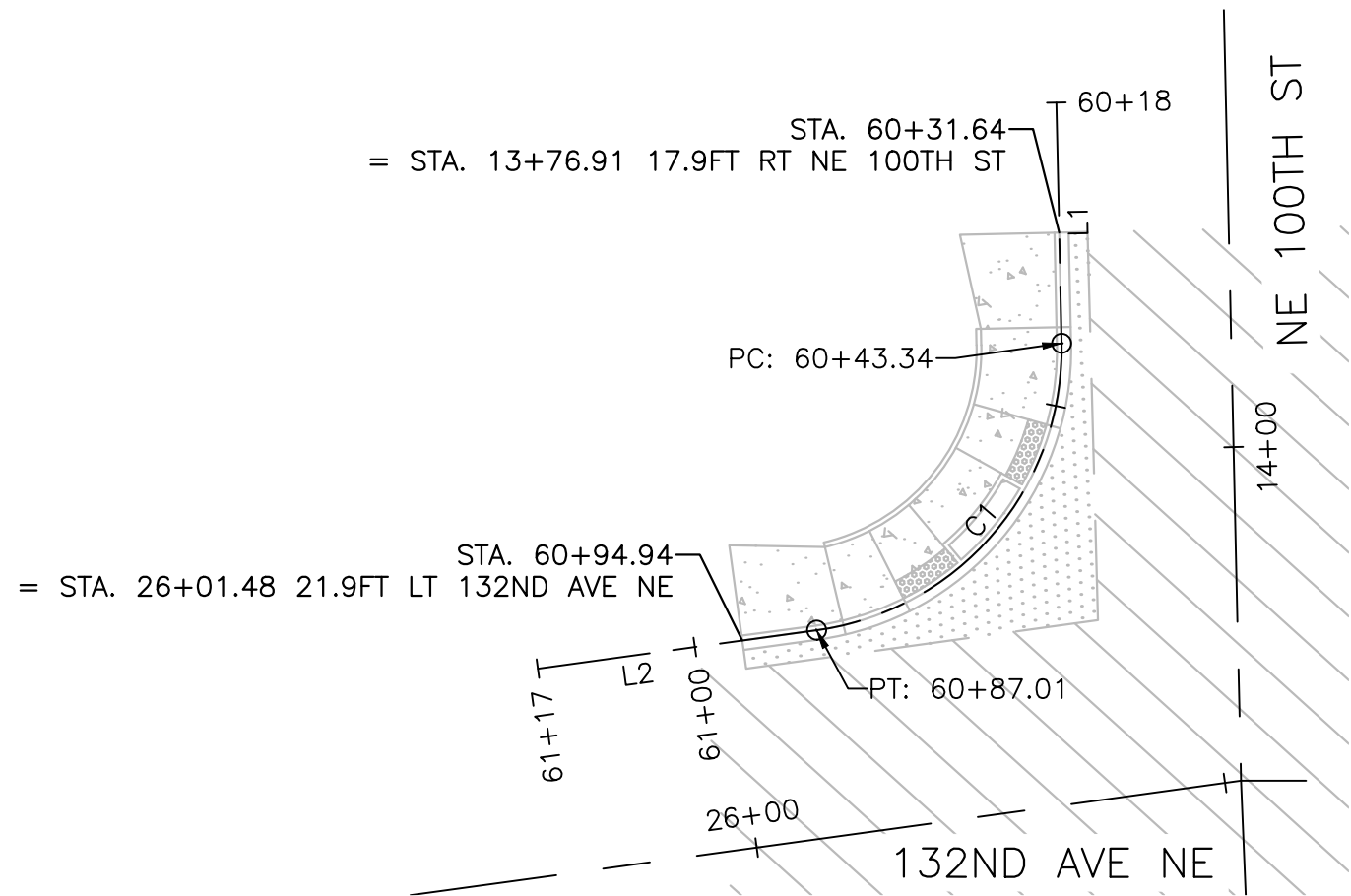
JULY 2025

PAVING PLAN

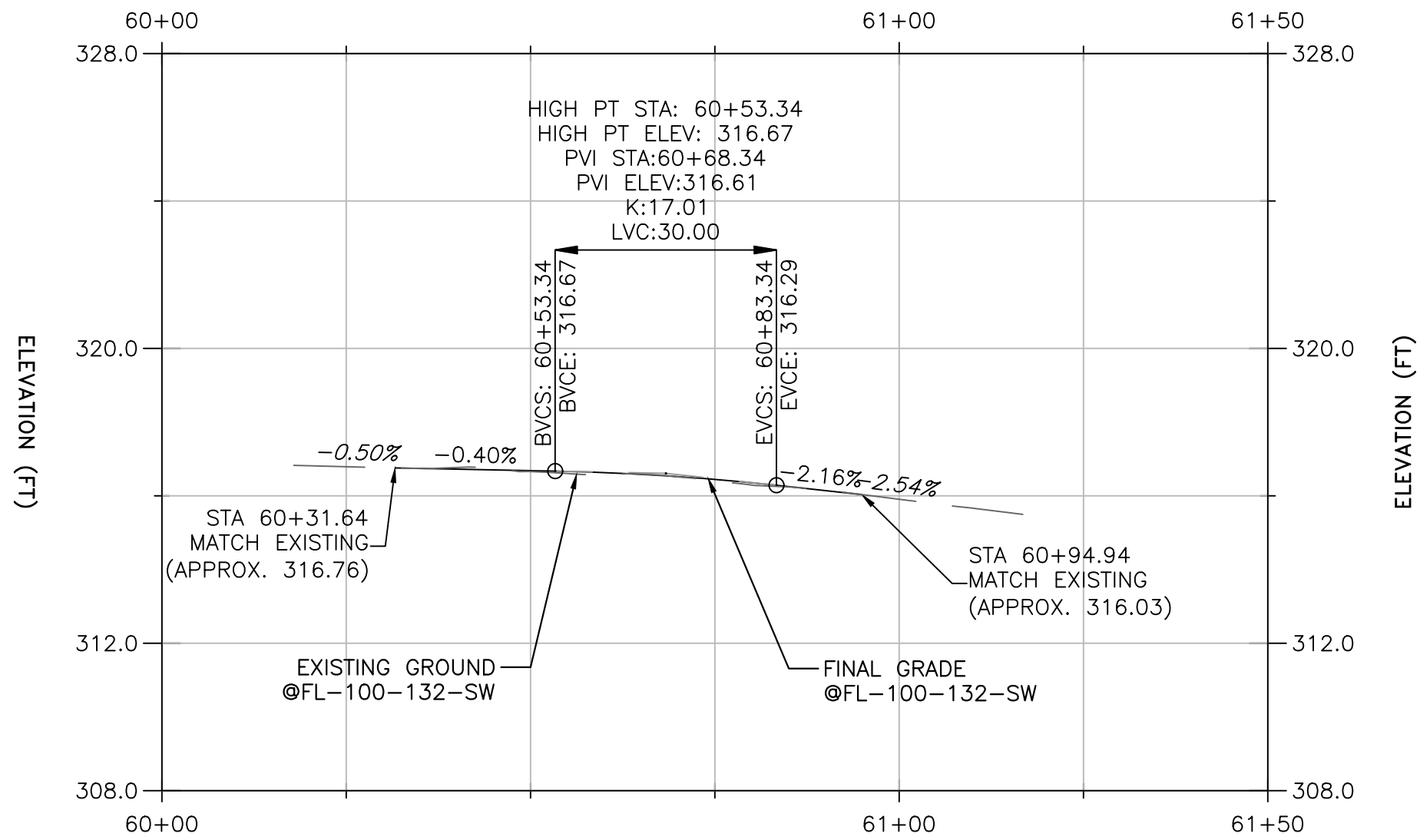
PV02

SHEET
7
OF
24
SHEETS

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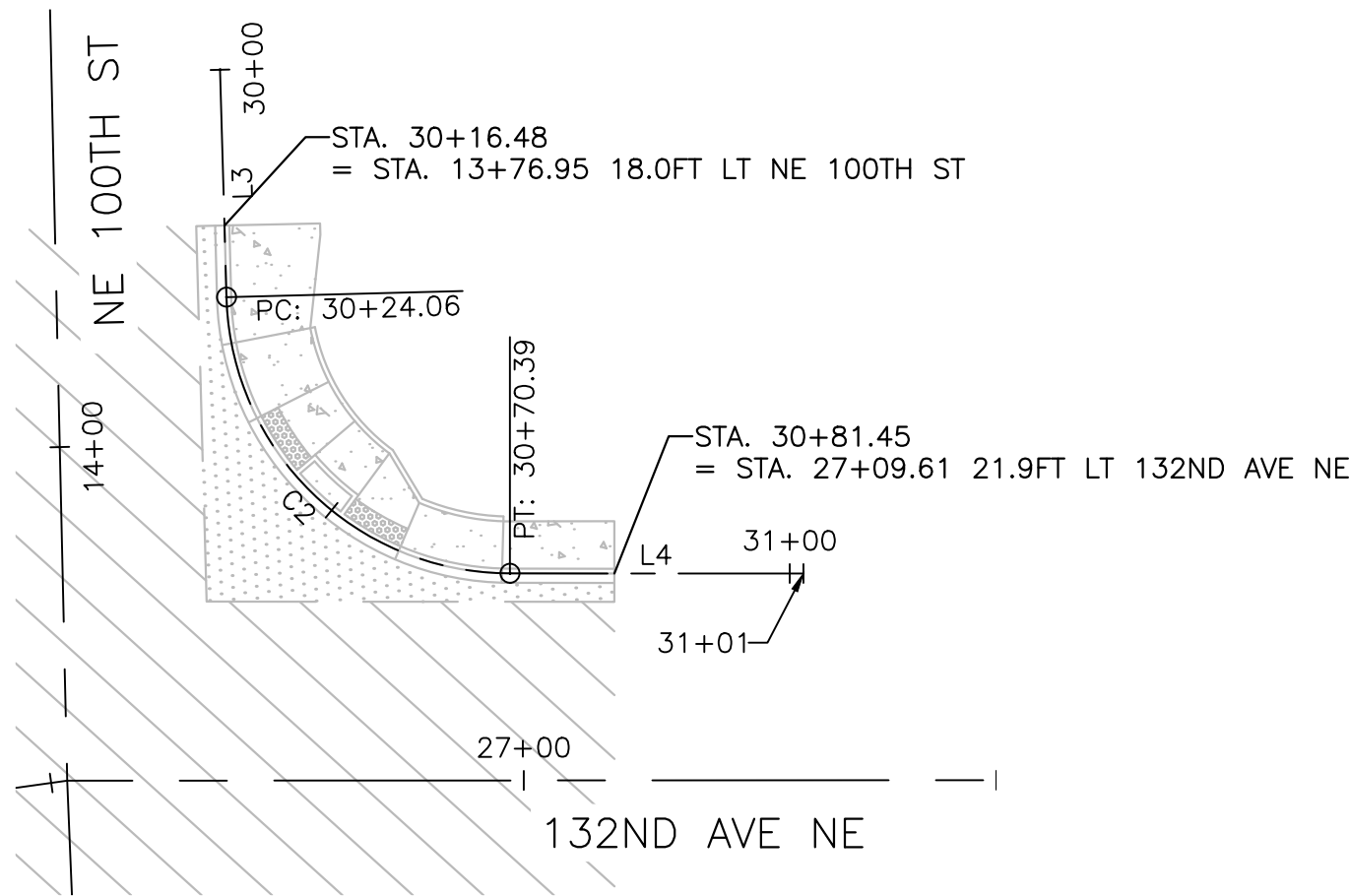


FL-100-132-SW							
NUMBER	RADIUS	LENGTH	LINE/CHORD DIRECTION	BEGIN STATION	BEGIN N/E	END STATION	END N/E
L1	NA	25.46	S88° 20' 27.29"E	60+17.88	N: 254316.84, E: 1312382.56	60+43.34	N: 254316.10, E: 1312408.01
C1	30.00	43.66	S46° 38' 48.08"E	60+43.34	N: 254316.10, E: 1312408.01	60+87.01	N: 254288.71, E: 1312437.03
L2	NA	29.76	S4° 57' 08.90"E	60+87.01	N: 254288.71, E: 1312437.03	61+16.77	N: 254259.06, E: 1312439.60

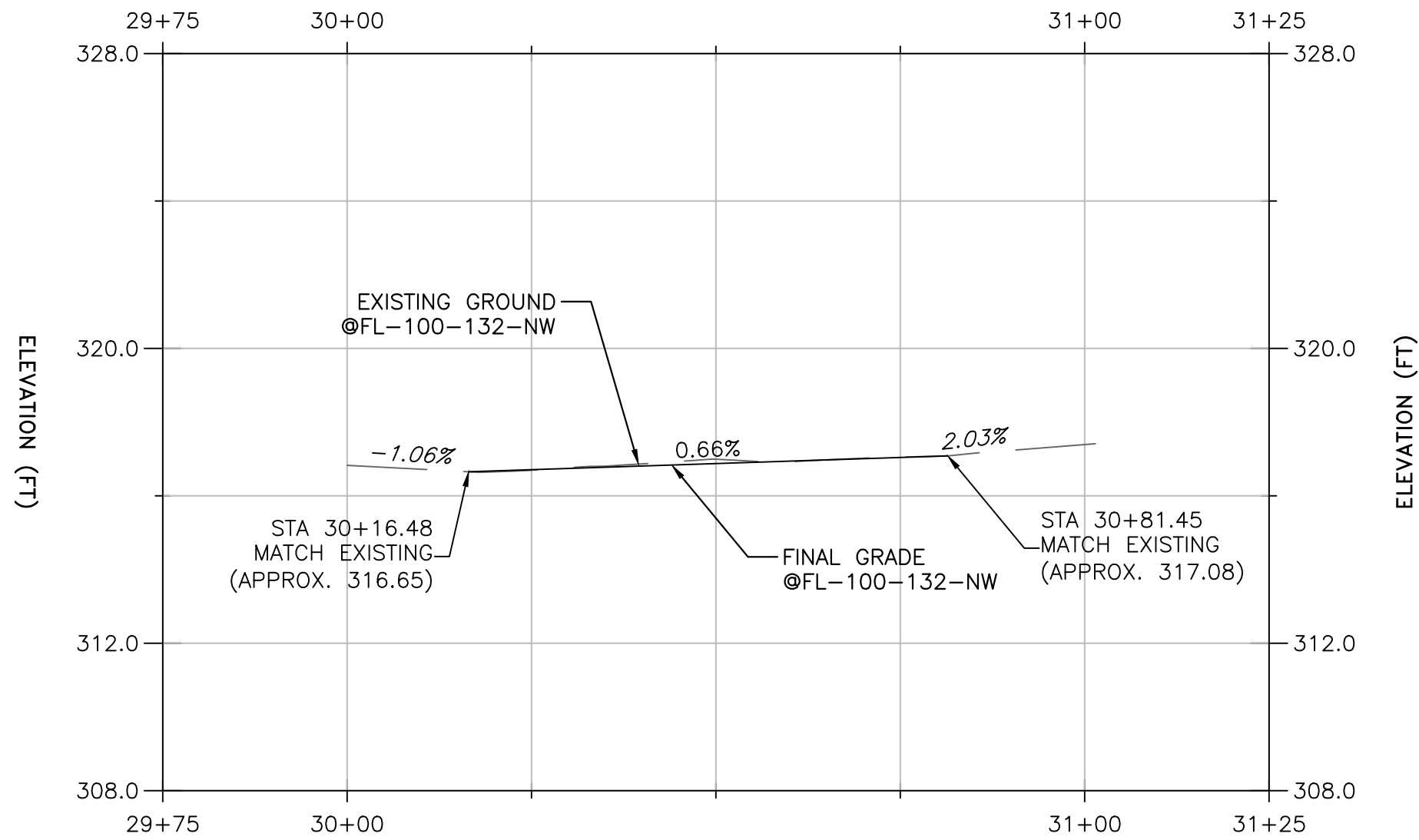


PROFILE VIEW – FL-100-132-SW

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



FL-100-132-NW							
NUMBER	RADIUS	LENGTH	LINE/CHORD DIRECTION	BEGIN STATION	BEGIN N/E	END STATION	END N/E
L3	NA	24.06	S88° 45' 07.66"E	30+00.00	N: 254352.66, E: 1312380.87	30+24.06	N: 254352.13, E: 1312404.93
C2	30.00	46.33	N47° 08' 19.33"E	30+24.06	N: 254352.13, E: 1312404.93	30+70.39	N: 254380.61, E: 1312435.62
L4	NA	31.06	N2° 53' 46.79"E	30+70.39	N: 254380.61, E: 1312435.62	31+01.45	N: 254411.63, E: 1312437.18



PROFILE VIEW – FL-100-132-NW

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



		DATE	REVISION	BY	DATE
DESIGNED BY	TYK	07/11/2025			
DRAWN BY	TYK	07/11/2025			
REVIEWED BY	KBC	07/11/2025			



CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS



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KIRKLAND, WASHINGTON 98034

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7/11/2025

NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

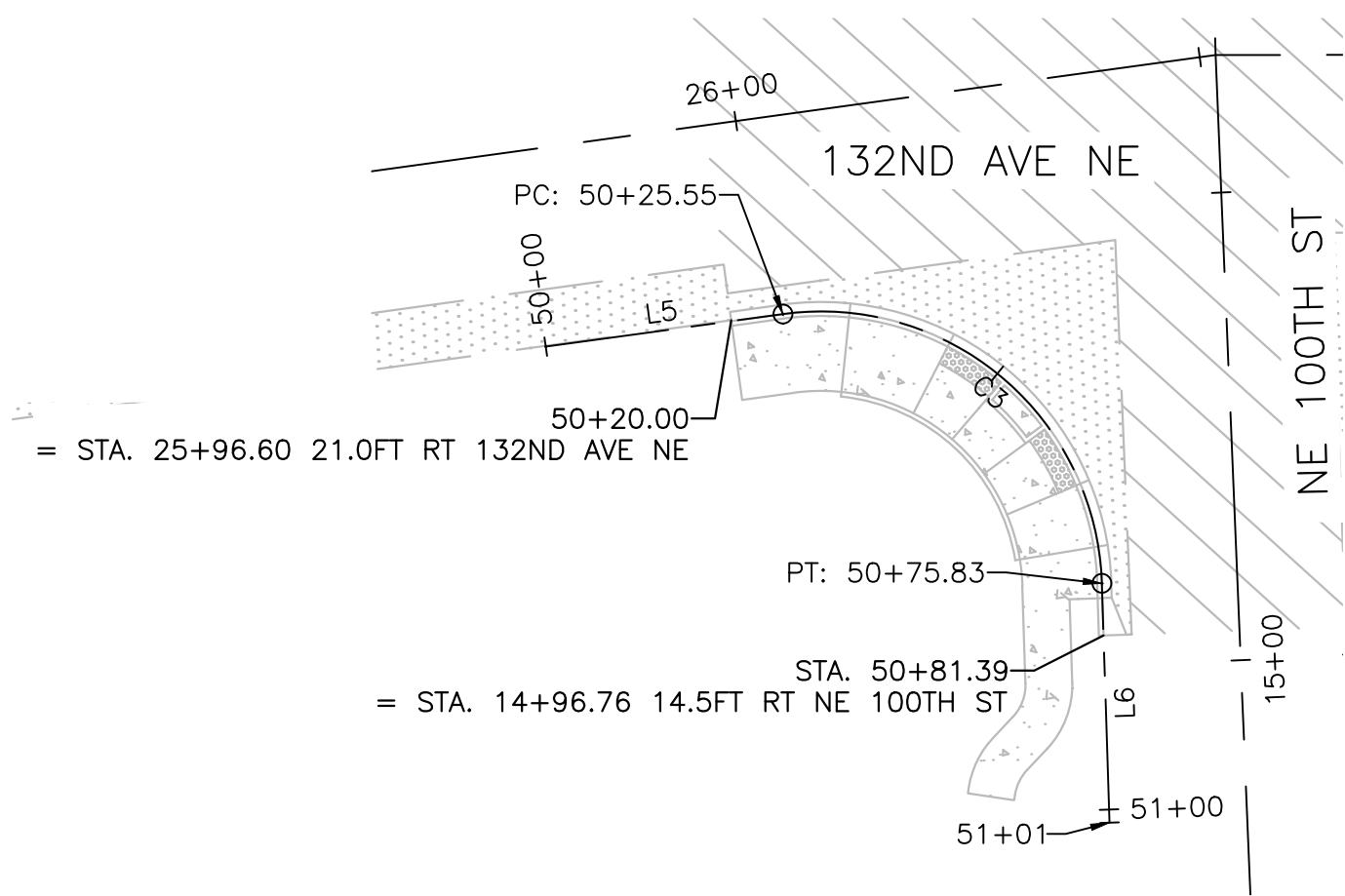
CITY OF KIRKLAND
JULY 2025

FLOWLINE PROFILES

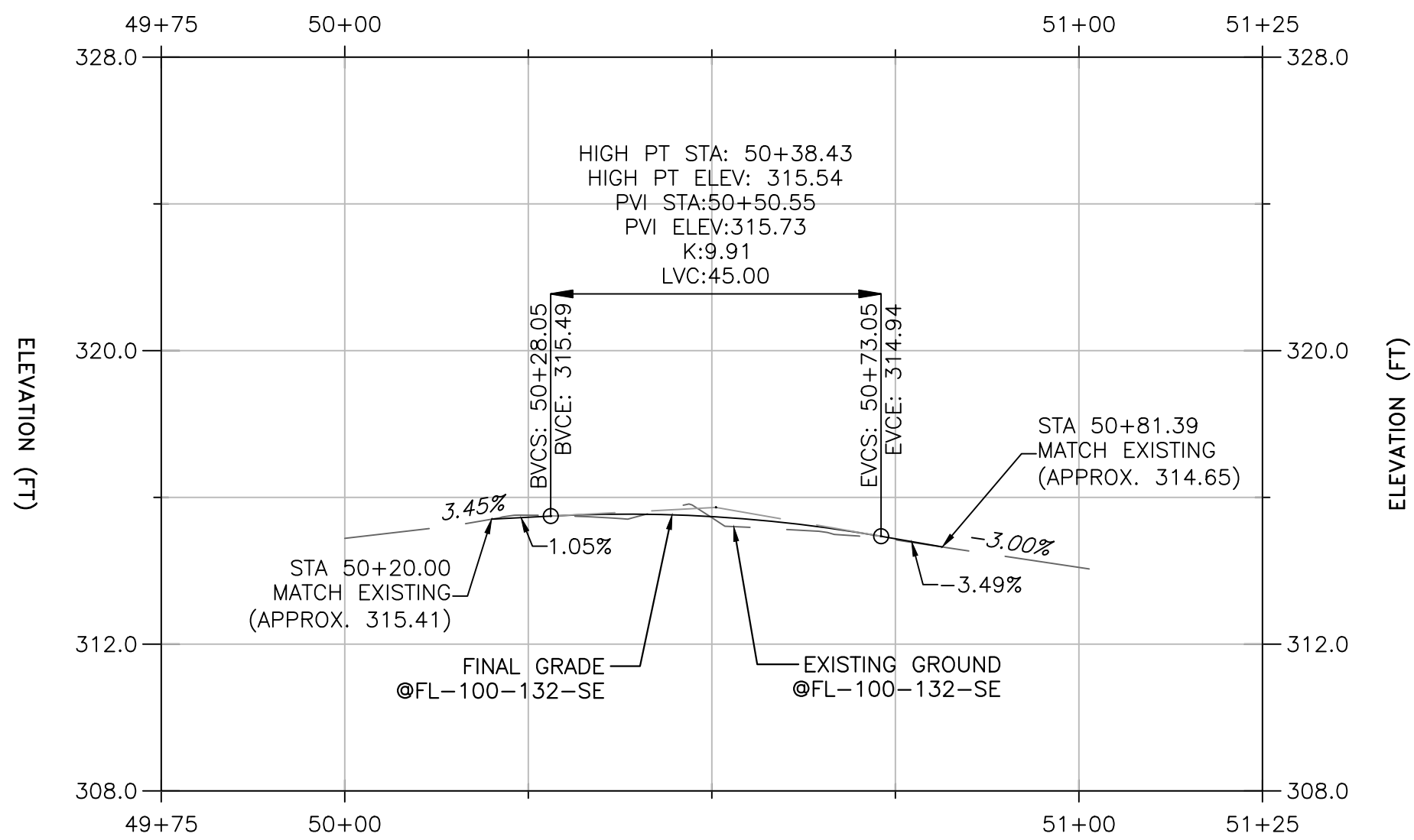
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SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.

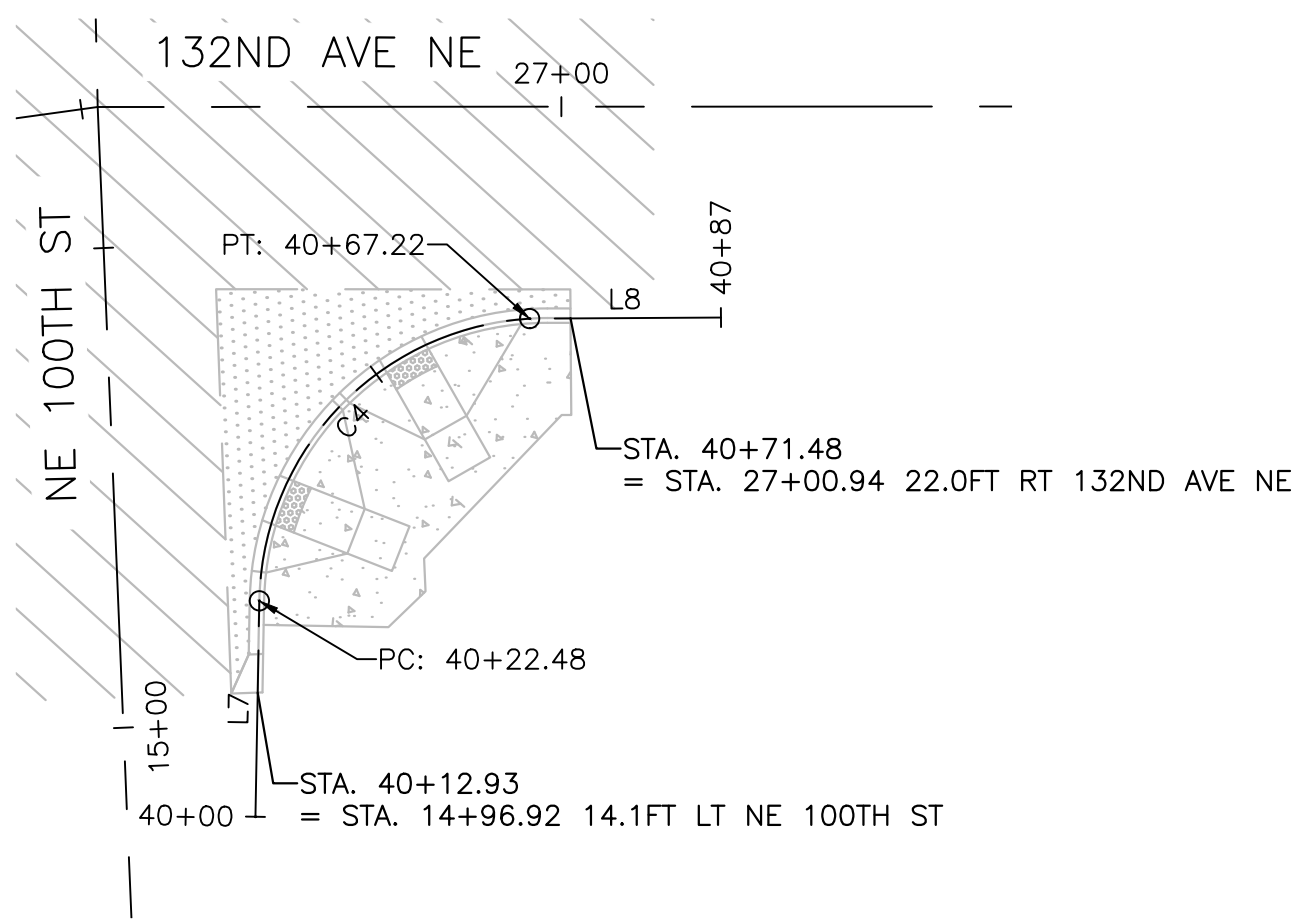


FL-100-132-SE							
NUMBER	RADIUS	LENGTH	LINE/CHORD DIRECTION	BEGIN STATION	BEGIN N/E	END STATION	END N/E
L5	NA	25.55	N4° 57' 08.90"W	50+00.00	N: 254259.75, E: 1312482.70	50+25.55	N: 254285.21, E: 1312480.49
C3	30.00	50.27	N43° 03' 22.60"E	50+25.55	N: 254285.21, E: 1312480.49	50+75.83	N: 254317.80, E: 1312510.94
L6	NA	25.56	S88° 56' 05.90"E	50+75.83	N: 254317.80, E: 1312510.94	51+01.39	N: 254317.32, E: 1312536.50

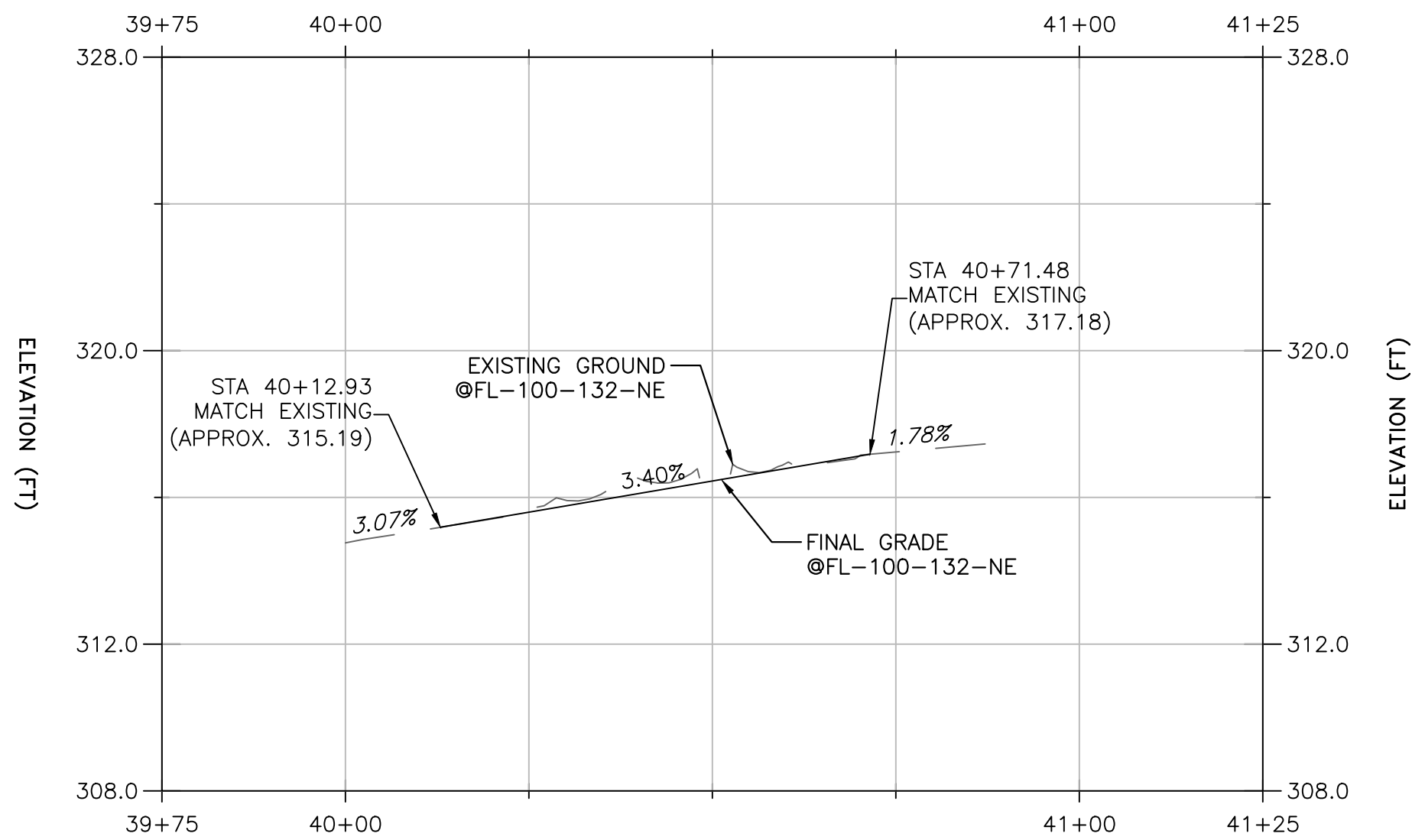


PROFILE VIEW – FL-100-132-SE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

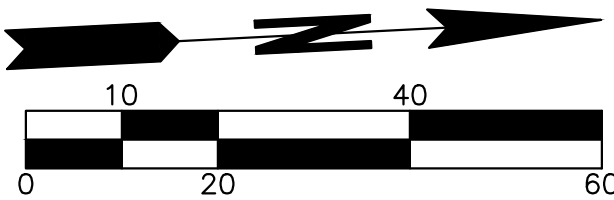


FL-100-132-NE							
NUMBER	RADIUS	LENGTH	LINE/CHORD DIRECTION	BEGIN STATION	BEGIN N/E	END STATION	END N/E
L7	NA	22.48	N86° 05' 29.92"W	40+00.00	N: 254345.45, E: 1312529.82	40+22.48	N: 254346.98, E: 1312507.39
C4	30.00	44.73	N43° 22' 32.16"W	40+22.48	N: 254346.98, E: 1312507.39	40+67.22	N: 254376.57, E: 1312479.44
L8	NA	19.94	N2° 33' 16.08"E	40+67.22	N: 254376.57, E: 1312479.44	40+87.16	N: 254396.49, E: 1312480.32



PROFILE VIEW – FL-100-132-NE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



		DATE	REVISION	BY	DATE
DESIGNED BY	TYK	07/11/2025			
DRAWN BY	TYK	07/11/2025			
REVIEWED BY	KBC	07/11/2025			



CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS



12131 113TH AVENUE NE, SUITE 203
KIRKLAND, WASHINGTON 98034
(TEL) 425 821-3665
(FAX) 425 825-8434



NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND JULY 2025

FLOWLINE PROFILES

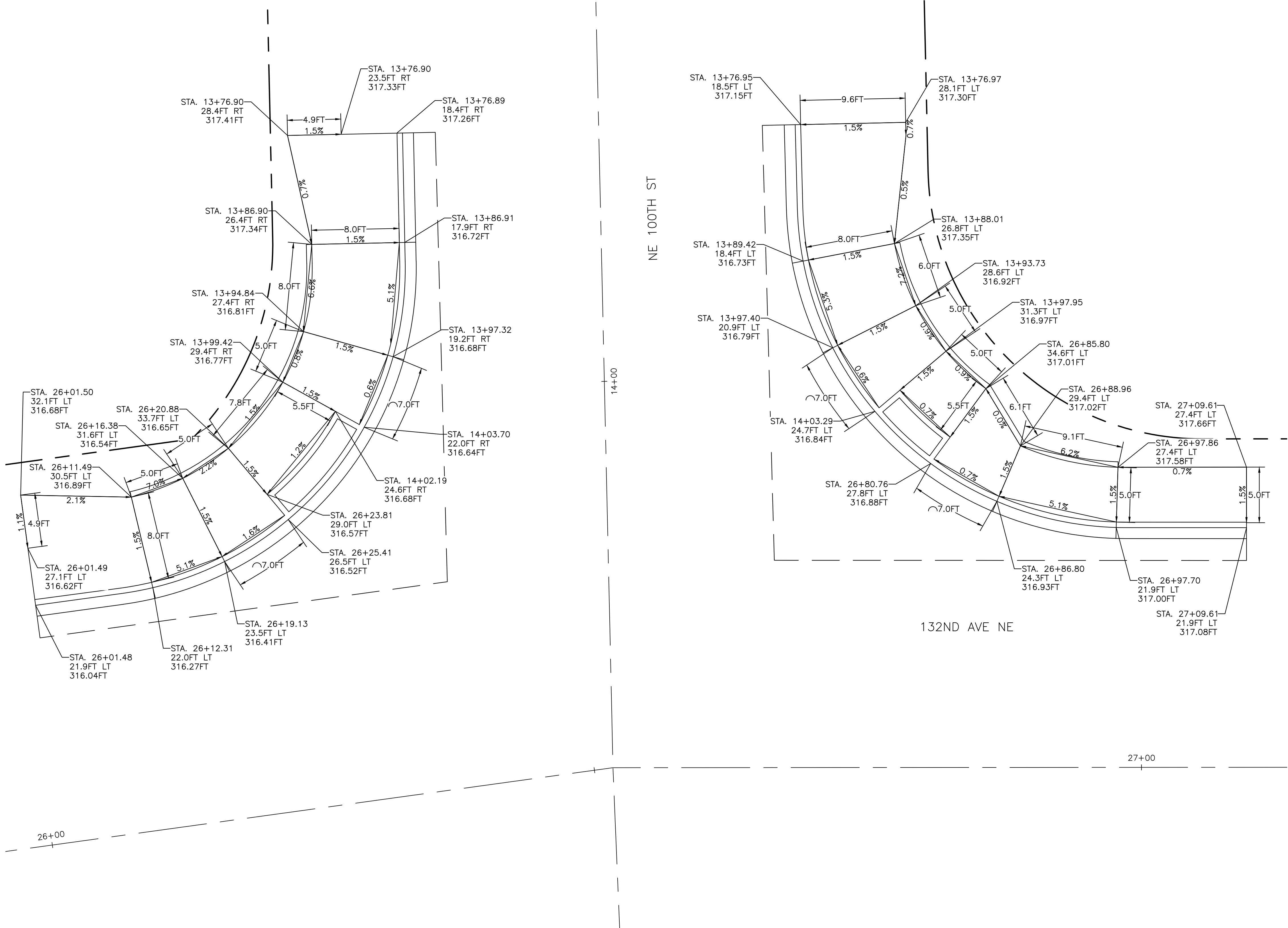
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SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.

PAVING DETAILS NOTES

1. FIELD STAKE FINAL CURB, GUTTER, SIDEWALK, AND CURB RAMP. LOCATIONS TO BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE INTENT OF THESE CONSTRUCTION DETAILS IS TO PROVIDE ADA-COMPLIANT CURB RAMP. THE LOCATIONS AND ELEVATIONS SHOWN ON THIS PLAN ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENT BY THE ENGINEER TO ACHIEVE ADA-COMPLIANT CURB RAMP DURING CONSTRUCTION.
2. CURB RAMP LENGTHS MAY BE ADJUSTED TO ACHIEVE REQUIRED SLOPES AND TO ACCOMMODATE EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CURB RAMP THAT CANNOT BE CONSTRUCTED TO FULL COMPLIANCE PRIOR TO PLACING CONCRETE. ANY WORK THAT IS COMPLETE THAT IS NON-COMPLIANT SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. COMPLIANCE OF CURB RAMP SLOPES SHALL BE MEASURED WITH A 2' MAXIMUM LENGTH LEVEL.
3. ELEVATIONS ARE PROVIDED AT FLOWLINES. TOP OF CURB SHOULD BE +0.5' WHERE FULL HEIGHT CURB IS IDENTIFIED ON THE STANDARD DETAILS.



CURB RAMP DETAILS
NE 100TH ST & 132ND AVE NE
SOUTHWEST AND NORTHWEST CURB RAMP



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DESIGNED BY	TYK	07/11/2025			
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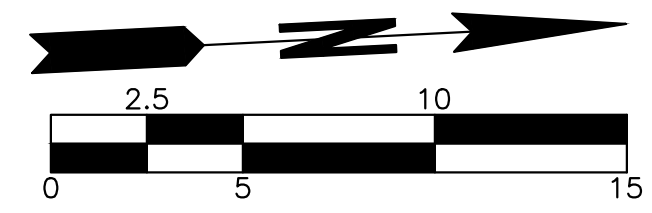
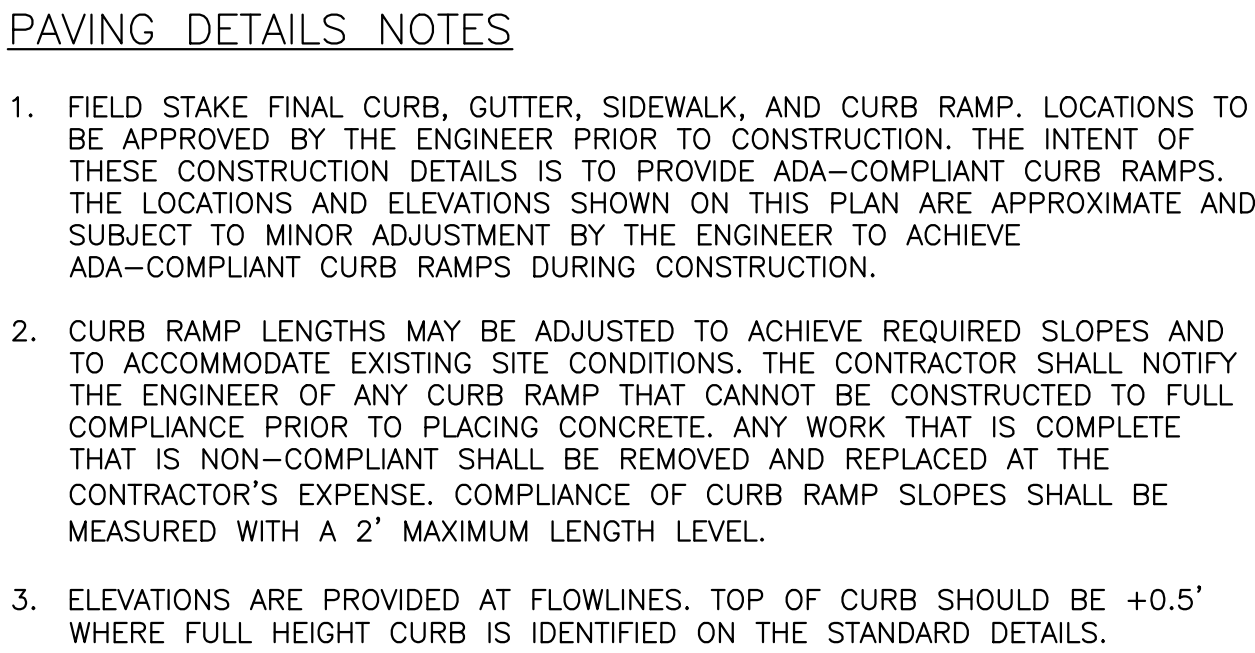


NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND
JULY 2025
PAVING DETAILS

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Know what's below.
Call before you dig.

		DATE	REVISION	BY	DATE
DESIGNED BY	TYK	07/11/2025			
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REVIEWED BY	KBC	07/11/2025			



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KIRKLAND, WASHINGTON 98034 (FAX) 425 825-8434



7/11/2025

NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND JULY 2025

PAVING DETAILS

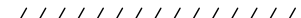
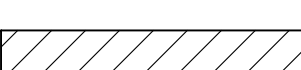
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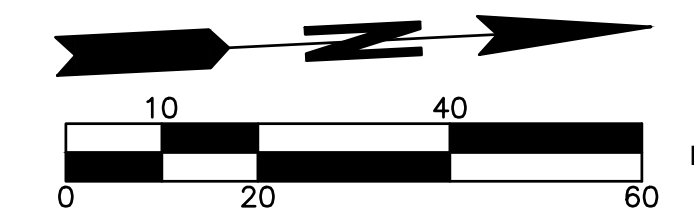
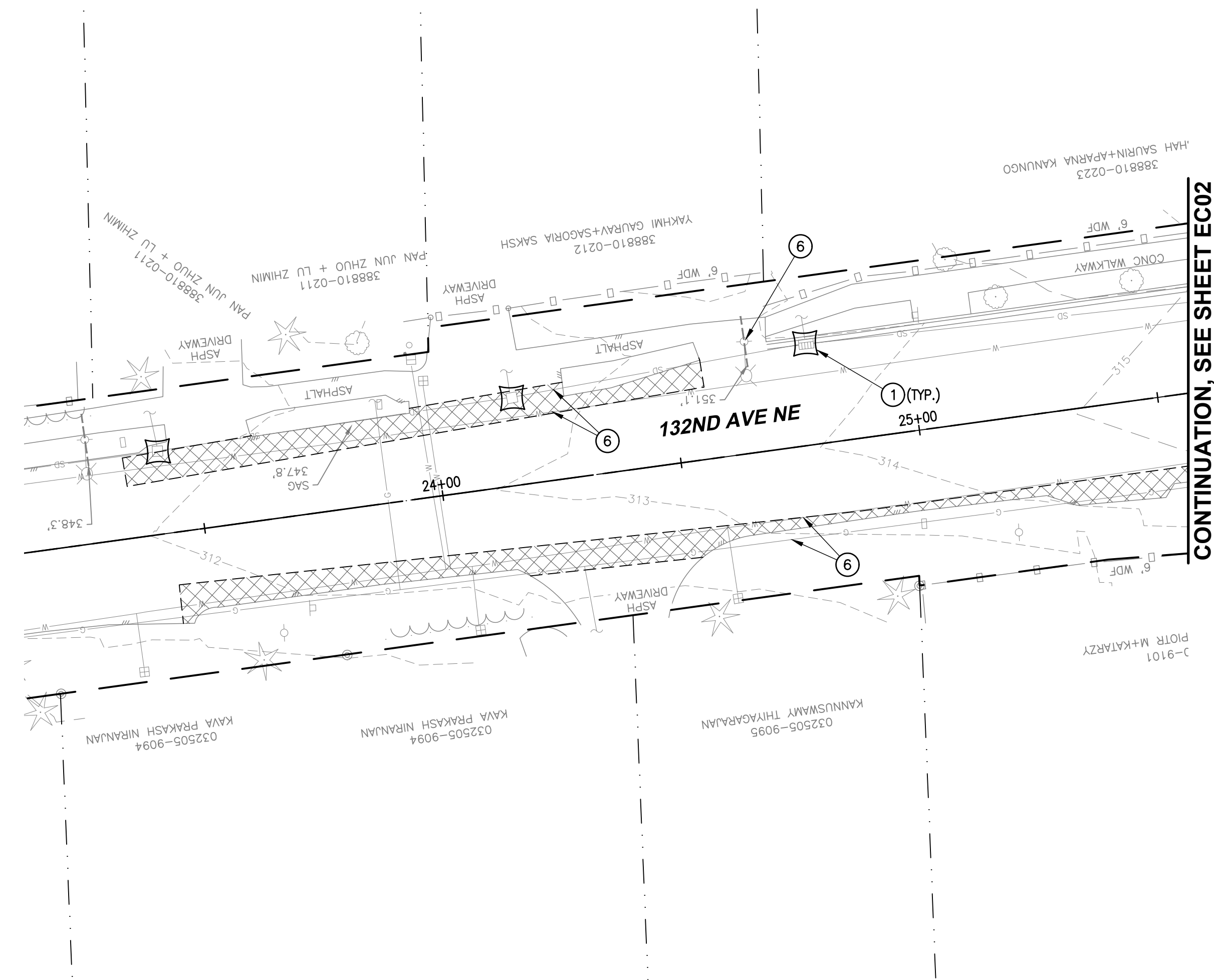
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OF
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SHEETS

KEYED NOTES

1. INSTALL CATCH BASIN PROTECTION PER COK STD PLAN NO. CK-E.11.
2. INSTALL SILT FENCE PER COK STD PLAN NO. CK-E.03.
3. INSTALL STRAW WATTLE PER COK STD PLAN NO. CK-E.10.
4. UTILITY TO BE RELOCATED.
5. SIGN TO BE RELOCATED.
6. PROTECT EXISTING UTILITY.
7. REMOVE EXISTING CURB AND GUTTER
8. REMOVE EXISTING CATCH BASIN
9. REMOVE EXISTING STORM DRAIN

LEGEND

- | | |
|---|------------------------------|
|  | SILT FENCE |
|  | SAWCUT LINE |
|  | DEMOLITION LINE |
|  | INLET PROTECTION |
|  | STRAW WATTLES |
|  | OBJECT REMOVAL |
|  | CONCRETE/ASPHALT/C&G REMOVAL |
|  | PAVEMENT GRINDING |



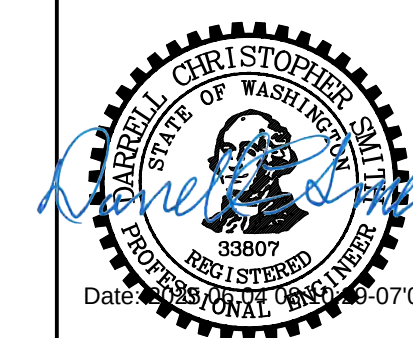
		DATE	REVISION	BY	DATE
DESIGNED BY	TLB	06/06/2025			
DRAWN BY	TLS	06/06/2025			
REVIEWED BY	DCS	06/06/2025			



CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS



PACE Engineers
11255 Kirkland Way, Suite 300
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NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND

JUNE 2025

TESC PLAN

EC01

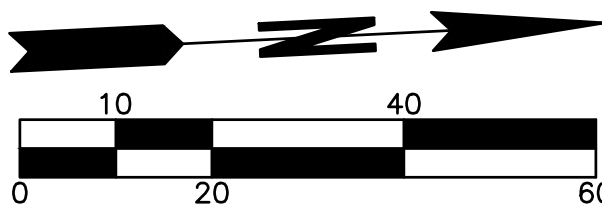
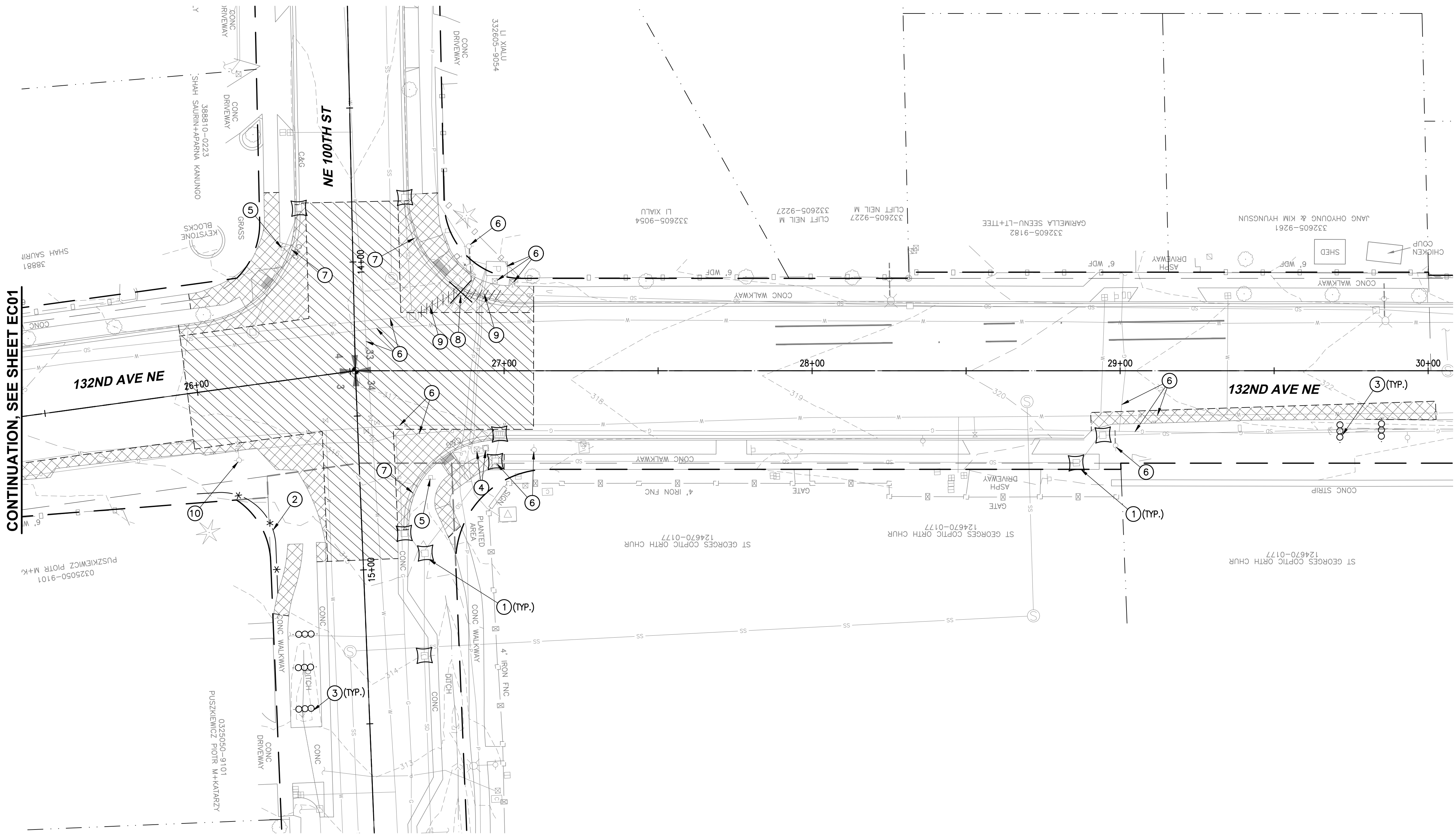
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6. PROTECT EXISTING UTILITY.
7. REMOVE EXISTING CURB AND GUTTER
8. REMOVE EXISTING CATCH BASIN
9. REMOVE EXISTING STORM DRAIN PIPE
10. REMOVE EXISTING HYDRANT & GATE VALVE. CAP AT WATER MAIN. COORDINATE WITH CITY OF KIRKLAND

LEGEND

- * * SILT FENCE
- SAWCUT LINE
- //// DEMOLITION LINE
- INLET PROTECTION
- ∞∞ STRAW WATTLES
- ✕ OBJECT REMOVAL
- CONCRETE/ASPHALT/C&G REMOVAL
- PAVEMENT GRINDING



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NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND

JUNE 2025

TESC PLAN

EC02

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OF
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SHEETS

EROSION/SEDIMENTATION CONTROL NOTES

1. THE APPROVED CONSTRUCTION SEQUENCE SHALL BE AS FOLLOWS:

A. CONDUCT PRE-CONSTRUCTION MEETING.

B. FLAG OR FENCE CLEARING LIMITS.

C. POST SIGN WITH NAME AND PHONE NUMBER OF TESC SUPERVISOR.

D. INSTALL CATCH BASIN PROTECTION IF REQUIRED.

E. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).

F. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).

G. CONSTRUCT SEDIMENT PONDS AND TRAPS.

H. GRADE AND STABILIZE CONSTRUCTION ROADS.

I. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.

J. MAINTAIN EROSION CONTROL MEASURE IN ACCORDANCE WITH CITY OF KIRKLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

K. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY TESC MINIMUM REQUIREMENTS.

L. COVER ALL AREAS WITHIN THE SPECIFIED TIME FRAME WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, CRUSHED ROCK OR EQUIVALENT.

M. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN 7 DAYS.

N. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.

O. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.
2. CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS CLEAN AND FREE OF CONTAMINANTS AT ALL TIMES AND FOR PREVENTING AN ILLICIT DISCHARGE (KMC 15.52) INTO THE MUNICIPAL STORM DRAIN SYSTEM. IF YOUR CONSTRUCTION PROJECT CAUSES AN ILLICIT DISCHARGE TO THE MUNICIPAL STORM DRAIN SYSTEM, THE CITY OF KIRKLAND STORM MAINTENANCE DIVISION WILL BE CALLED TO CLEAN THE PUBLIC STORM SYSTEM, AND OTHER AFFECTED PUBLIC INFRASTRUCTURE. THE CONTRACTOR(S), PROPERTY OWNER, AND ANY OTHER RESPONSIBLE PARTY MAY BE CHARGED ALL COSTS ASSOCIATED WITH THE CLEAN-UP AND MAY ALSO BE ASSESSED MONETARY PENALTIES (KMC 1.12.200). THE MINIMUM FINE IS \$500. A FINE FOR A REPEAT VIOLATION SHALL BE DETERMINED BY MULTIPLYING THE SURFACE WATER FINE BY THE NUMBER OF VIOLATIONS. A FINE MAY BE REDUCED OR WAIVED FOR PERSONS WHO IMMEDIATELY SELF-REPORT VIOLATION TO THE CITY AT 425-587-3900. A FINAL INSPECTION OF YOUR PROJECT WILL NOT BE GRANTED UNTIL ALL COSTS ASSOCIATED WITH THE CLEAN-UP, AND PENALTIES, ARE PAID TO
- THE CITY OF KIRKLAND.

3. CONSTRUCTION DEWATERING DISCHARGES SHALL ALWAYS MEET WATER QUALITY GUIDELINES LISTED IN COK POLICY E-1. SPECIFICALLY, DISCHARGES TO THE PUBLIC STORMWATER DRAINAGE SYSTEM MUST BE BELOW 25NTU, AND NOT CONSIDERED AN ILLICIT DISCHARGE (PER KMC 15.52.090). TEMPORARY DISCHARGES TO SANITARY SEWER REQUIRE PRIOR AUTHORIZATION AND PERMIT FROM KING COUNTY INDUSTRIAL WASTE PROGRAM (206-263-3000) AND NOTIFICATION TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR.

4. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF KIRKLAND STANDARDS AND SPECIFICATIONS.

5. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE SET BY SURVEY AND CLEARLY FLAGGED IN THE FIELD BY A CLEARING CONTROL FENCE PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE OR REMOVAL OF ANY GROUND COVER BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE PERMITTEE/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.

6. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

7. THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.

8. A COPY OF THE APPROVED ESC PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

9. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.

10. THE ESC FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THE APPROVED PLANS. LOCATIONS MAY BE MOVED TO SUIT FIELD CONDITIONS, SUBJECT TO APPROVAL BY THE ENGINEER AND THE CITY OF KIRKLAND INSPECTOR.

11. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G., ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS. ADDITIONALLY, MORE ESC FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL.
- THEREFORE, DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED.

12. THE ESC FACILITIES SHALL BE INSPECTED BY THE PERMITTEE/CONTRACTOR DAILY DURING NON-RAINFALL PERIODS, EVERY HOUR (DAYLIGHT) DURING A RAINFALL EVENT, AND AT THE END OF EVERY RAINFALL, AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, TEMPORARY SILTATION PONDS AND ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED. WRITTEN RECORDS SHALL BE KEPT DOCUMENTING THE REVIEWS OF THE ESC FACILITIES.

13. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.

14. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

15. ALL DENUDED SOILS MUST BE STABILIZED WITH AN APPROVED TESC METHOD (E.G. SEEDING, MULCHING, PLASTIC COVERING, CRUSHED ROCK) WITHIN THE FOLLOWING TIMELINES:

-MAY 1 TO SEPTEMBER 30 -SOILS MUST BE STABILIZED WITHIN 7 DAYS OF GRADING.

-OCTOBER 1 TO APRIL 30 -SOILS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING.

-STABILIZE SOILS AT THE END OF THE WORKDAY PRIOR TO A WEEKEND, HOLIDAY, OR PREDICTED RAIN EVENT.

16. THE LONG-TERM USE OF PLASTIC COVERING ON A SITE SHALL BE LIMITED TO ONE WET SEASON (OCTOBER 1 TO APRIL 30). AFTER THAT, THE SITE WILL BE REQUIRED TO HYDROSEED OR INSTALL OTHER TESC METHODS AS APPROVED BY THE PUBLIC WORKS DEPARTMENT.

17. WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (EXAMPLE: ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).

18. WHERE STRAW MULCH IS REQUIRED FOR TEMPORARY EROSION CONTROL, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2".

19. ALL LOTS ADJOINING OR HAVING ANY NATIVE GROWTH PROTECTION EASEMENTS (NGPE) SHALL HAVE A 6' HIGH TEMPORARY CONSTRUCTION FENCE (CHAIN LINK WITH PIER BLOCKS) SEPARATING THE LOT (OR
- BUILDABLE PORTIONS OF THE LOT) FROM THE AREA RESTRICTED BY THE NGPE AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR CLEARING AND REMAIN IN PLACE UNTIL THE PLANNING DEPARTMENT AUTHORIZES REMOVAL.

20. CLEARING LIMITS SHALL BE DELINEATED WITH A CLEARING CONTROL FENCE. THE CLEARING CONTROL FENCE SHALL CONSIST OF A 6-Ft. HIGH CHAIN LINK FENCE ADJACENT THE DRIP LINE OF TREES TO BE SAVED, WETLAND OR STREAM BUFFERS, AND SENSITIVE SLOPES. CLEARING CONTROL FENCES ALONG WETLAND OR STREAM BUFFERS OR UPSLOPE OF SENSITIVE SLOPES SHALL BE ACCOMPANIED BY AN EROSION CONTROL FENCE. IF APPROVED BY THE CITY, A FOUR-FOOT HIGH ORANGE MESH CLEARING CONTROL FENCE MAY BE USED TO DELINEATE CLEARING LIMITS IN ALL OTHER AREAS.

21. OFF-SITE STREETS MUST BE KEPT CLEAN AT ALL TIMES. IF DIRT IS DEPOSITED ON THE PUBLIC STREET SYSTEM, THE STREET SHALL BE IMMEDIATELY CLEANED WITH POWER SWEEPER OR OTHER EQUIPMENT. ALL VEHICLES SHALL LEAVE THE SITE BY WAY OF THE CONSTRUCTION ENTRANCE AND SHALL BE CLEANED OF ALL DIRT THAT WOULD BE DEPOSITED ON THE PUBLIC STREETS.

22. ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF 1' AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-8" ROCK/40%-70% PASSING; 2"-4" ROCK/30%-40% PASSING; AND 1"-2" ROCK/10%-20% PASSING. RECYCLED CONCRETE SHALL NOT BE USED FOR EROSION PROTECTION, INCLUDING CONSTRUCTION ENTRANCE OR TEMPORARY STABILIZATION ELSEWHERE ON THE SITE.

23. IF ANY PART(S) OF THE CLEARING LIMIT BOUNDARY OR TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN IS/ARE DAMAGED, IT SHALL BE REPAIRED IMMEDIATELY.

24. ALL PROPERTIES ADJACENT TO THE PROJECT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND RUNOFF.

25. AT NO TIME SHALL MORE THAN 1' OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED IMMEDIATELY FOLLOWING REMOVAL OF EROSION CONTROL BMPS. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.

26. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION OR DISPERSION SYSTEM, THE FACILITY SHALL NOT BE USED AS A TEMPORARY SETTLING BASIN. NO UNDERGROUND DETENTION TANK, DETENTION VAULT, OR SYSTEM WHICH BACKS UNDER OR INTO A POND SHALL BE USED AS A TEMPORARY SETTLING BASIN.
27. ALL EROSION/SEDIMENTATION CONTROL PONDS WITH A DEAD STORAGE DEPTH EXCEEDING 6" MUST HAVE A PERIMETER FENCE WITH A MINIMUM HEIGHT OF 3'.

28. THE WASHED GRAVEL BACKFILL ADJACENT TO THE FILTER FABRIC FENCE SHALL BE REPLACED AND THE FILTER FABRIC CLEANED IF IT IS NONFUNCTIONAL BY EXCESSIVE SILT ACCUMULATION AS DETERMINED BY THE CITY OF KIRKLAND. ALSO, ALL INTERCEPTOR SWALES SHALL BE CLEANED IF SILT ACCUMULATION EXCEEDS ONE-QUARTER DEPTH.

29. PRIOR TO THE OCTOBER 1 OF EACH YEAR (THE BEGINNING OF THE WET SEASON), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. THE IDENTIFIED DISTURBED AREA SHALL BE SEEDED WITHIN ONE WEEK AFTER OCTOBER 1. A SITE PLAN DEPICTING THE AREAS TO BE SEEDED AND THE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR. THE INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

30. ANY AREA TO BE USED FOR INFILTRATION OR PERVIOUS PAVEMENT (INCLUDING A 5-FOOT BUFFER) MUST BE SURROUNDED BY SILT FENCE PRIOR TO CONSTRUCTION AND UNTIL FINAL STABILIZATION OF THE SITE TO PREVENT SOIL COMPACTION AND SILTATION BY CONSTRUCTION ACTIVITIES.

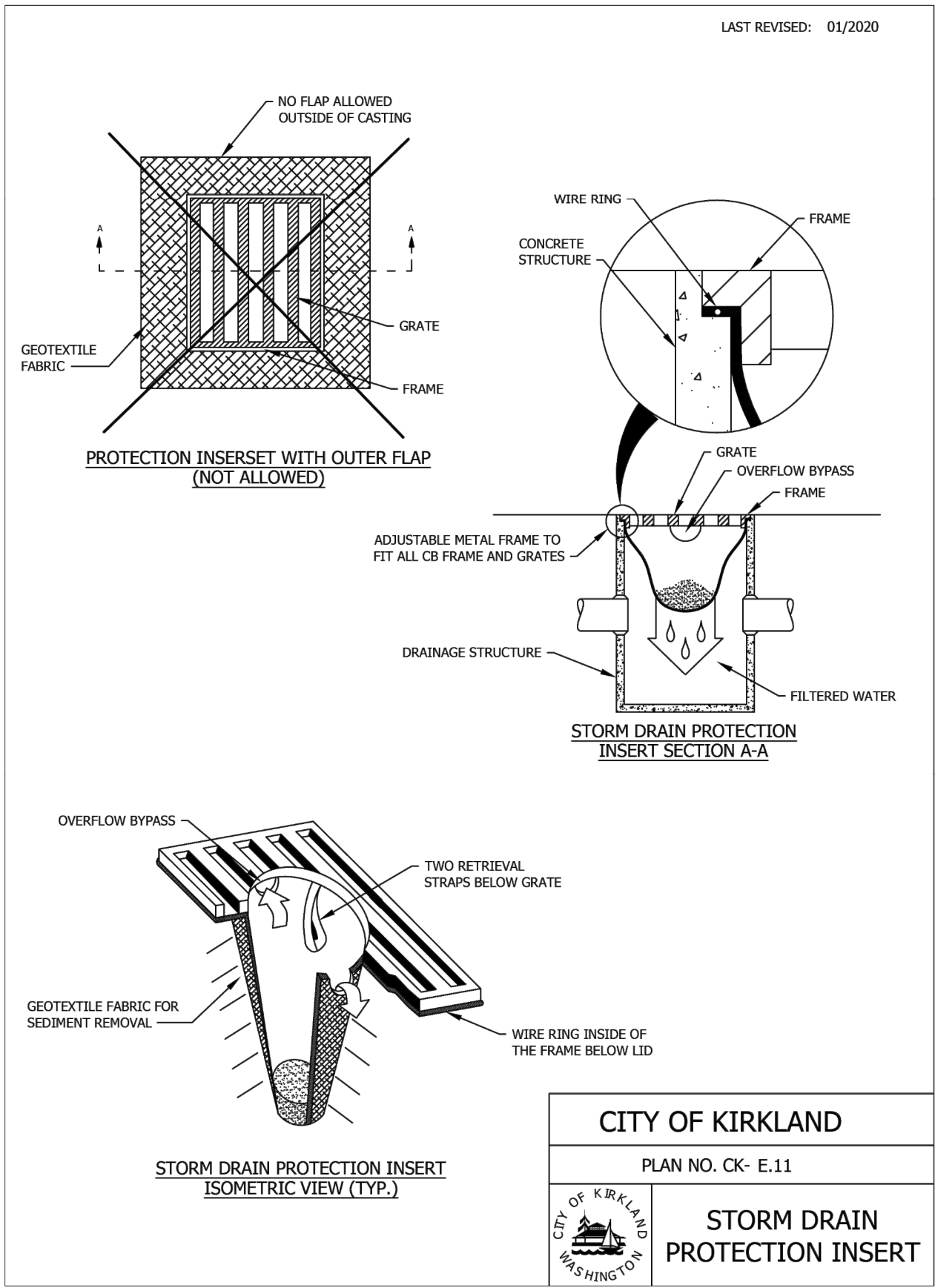
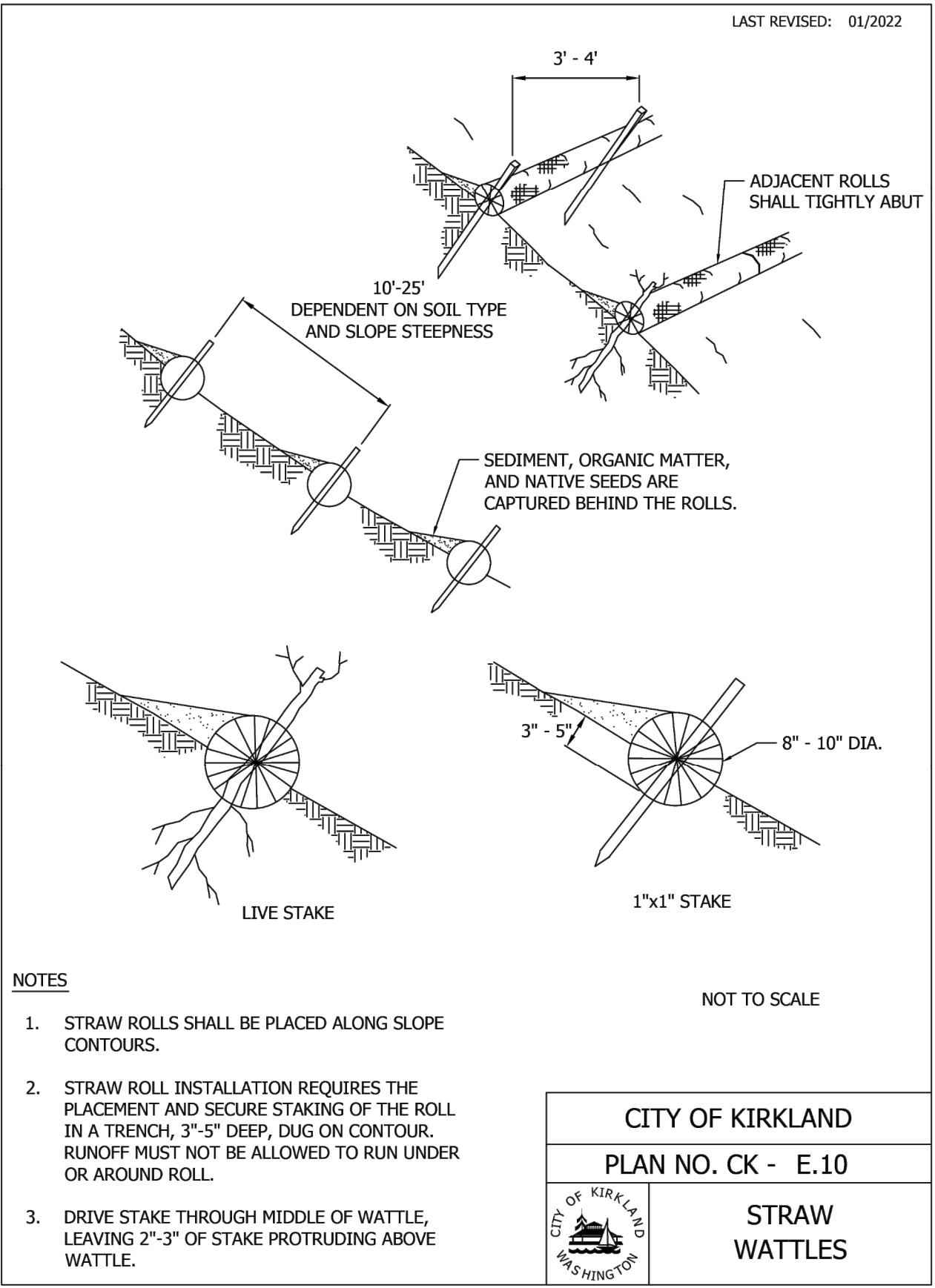
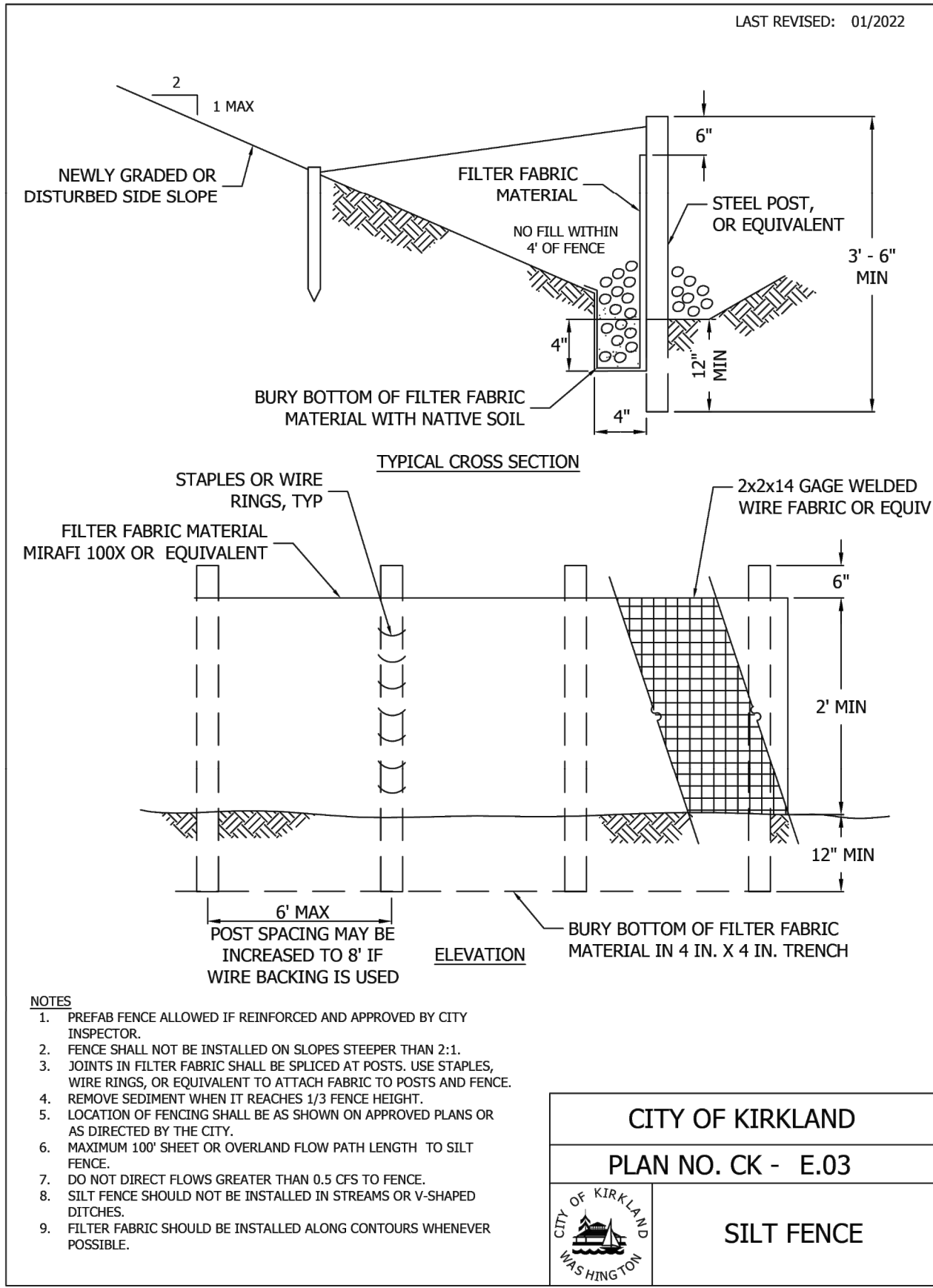
31. IF THE TEMPORARY CONSTRUCTION ENTRANCE OR ANY OTHER AREA WITH HEAVY VEHICLE LOADING IS LOCATED IN THE SAME AREA TO BE USED FOR INFILTRATION OR PERVIOUS PAVEMENT, 6" OF SEDIMENT BELOW THE GRAVEL SHALL BE REMOVED PRIOR TO INSTALLATION OF THE INFILTRATION FACILITY OR PERVIOUS PAVEMENT (TO REMOVE FINES ACCUMULATED DURING CONSTRUCTION).

32. ANY CATCH BASINS COLLECTING RUNOFF FROM THE SITE, WHETHER THEY ARE ON OR OFF THE SITE, SHALL HAVE ADEQUATE PROTECTION FROM SEDIMENT. CATCH BASINS DIRECTLY DOWNSTREAM OF THE CONSTRUCTION ENTRANCE OR ANY OTHER CATCH BASIN AS DETERMINED BY THE CITY INSPECTOR SHALL BE PROTECTED WITH A "STORM DRAIN PROTECTION INSERT" OR EQUIVALENT.

33. IF A SEDIMENT POND IS NOT PROPOSED, A BAKER TANK OR OTHER TEMPORARY GROUND AND/OR SURFACE WATER STORAGE TANK MAY BE REQUIRED DURING CONSTRUCTION, DEPENDING ON WEATHER CONDITIONS.

34. DO NOT FLUSH CONCRETE BY-PRODUCTS OR TRUCKS NEAR OR INTO THE STORM DRAINAGE SYSTEM. IF EXPOSED AGGREGATE IS FLUSHED INTO THE STORM SYSTEM, IT COULD MEAN RE-CLEANING THE ENTIRE DOWNSTREAM STORM SYSTEM, OR POSSIBLY RE-LAYING THE STORM LINE.

35. RECYCLED CONCRETE SHALL NOT BE STOCKPILED ON SITE, UNLESS FULLY COVERED WITH NO POTENTIAL FOR RELEASE OF RUNOFF.



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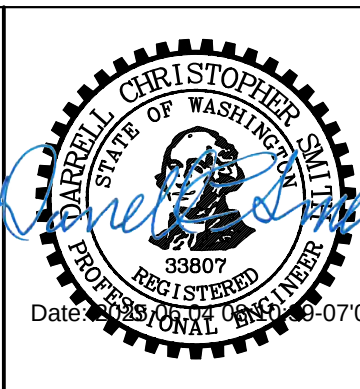
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REVIEWED BY	DCS	06/06/2025		



CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS



PACE Engineers
11255 Kirkland Way, Suite 300
Kirkland, WA 98033
p. 425.827.2014
www.paceengrs.com



NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

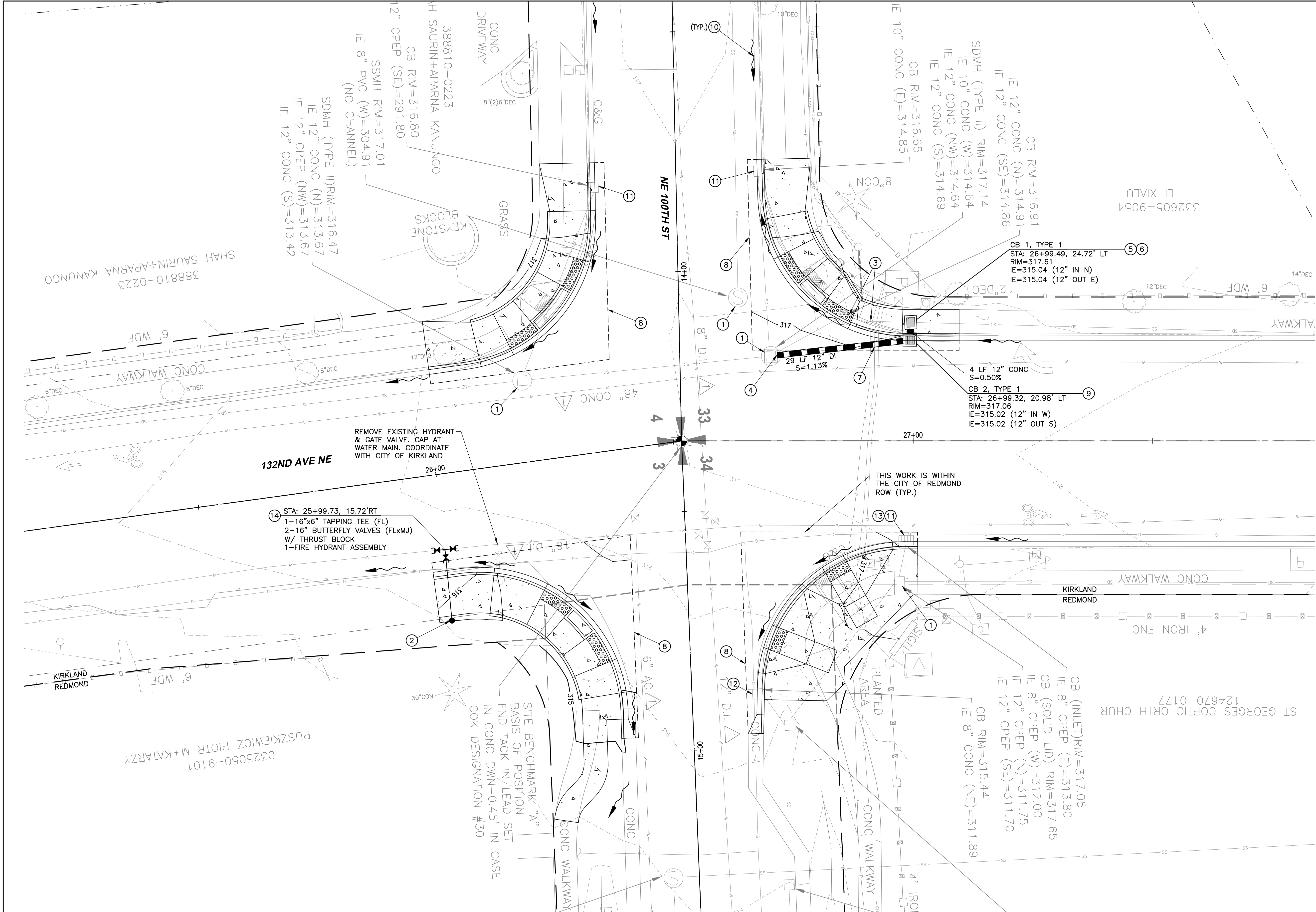
CITY OF KIRKLAND

JUNE 2025

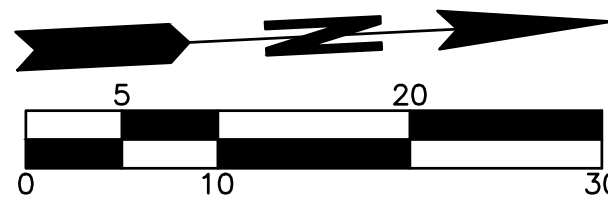
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- # KEYED NOTES**
1. CONTRACTOR SHALL ADJUST COVERS/LIDS & RISERS AS NEEDED TO MEET GRADE FOR ALL UTILITIES/MONUMENTS TO FINISHED GRADE PER COK STD PLAN CK-R-02 ON SHEET DR02 & CK-D.18A ON SHEET DR03.
 2. INSTALL NEW FIRE HYDRANT 12" BEHIND NEW SIDEWALK. SEE COK STD PLAN CK-W.14 ON SHEET DR02.
 3. REMOVE EXISTING CB AND PIPE DOWNSTREAM OF CB 1 (SEE SHEET EC02).
 4. CORE DRILL AND CONNECT NEW STORM DRAIN PIPE INTO EXISTING CATCH BASIN.
 5. INSTALL SOLID LOCKING, NON-SLIP LID PER COK STD PLAN CK-D.18A.
 6. CONNECT EXISTING 12" CONCRETE PIPE TO NEW STRUCTURE. VERIFY ELEVATION PRIOR TO CONSTRUCTION.
 7. POTHOLE PRIOR TO CONSTRUCTION TO VERIFY UNDERGROUND POWER ELEVATION. SEE PROFILE ON SHEET DR02.
 8. SAWCUT LINE.
 9. INSTALL TYPE 1 CATCH BASIN WITH VANED GRADE. SEE COK STD PLAN CK-D.14 ON SHEET DR02.
 10. RUNOFF FLOW ARROW
 11. REPLACE FRAME AND COVER PER COK STD PLAN CK-D.14.
 12. CITY OF REDMOND CATCH BASIN, ADJUST FRAME AND GRATE TO FINISH GRADE PER COR STD DETAIL 615.
 13. CONTRACTOR TO CONFIRM THIS CB WAS INSTALLED PER THE COK STANDARD. IF IT WASN'T INSTALLED PER THE COK STANDARD CONTACT THE ENGINEER.
 14. INSTALL TAPPING TEE PER COK STD PLAN CK-W-06. INSTALL THRUST BLOCKS PER COK STD PLAN CK-W-02 AND INSTALL GATE VALVES PER COK STD PLAN CK-W-35



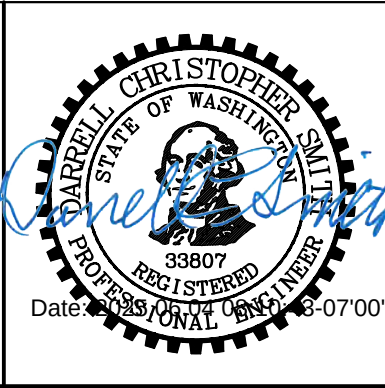
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NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND
JUNE 2025

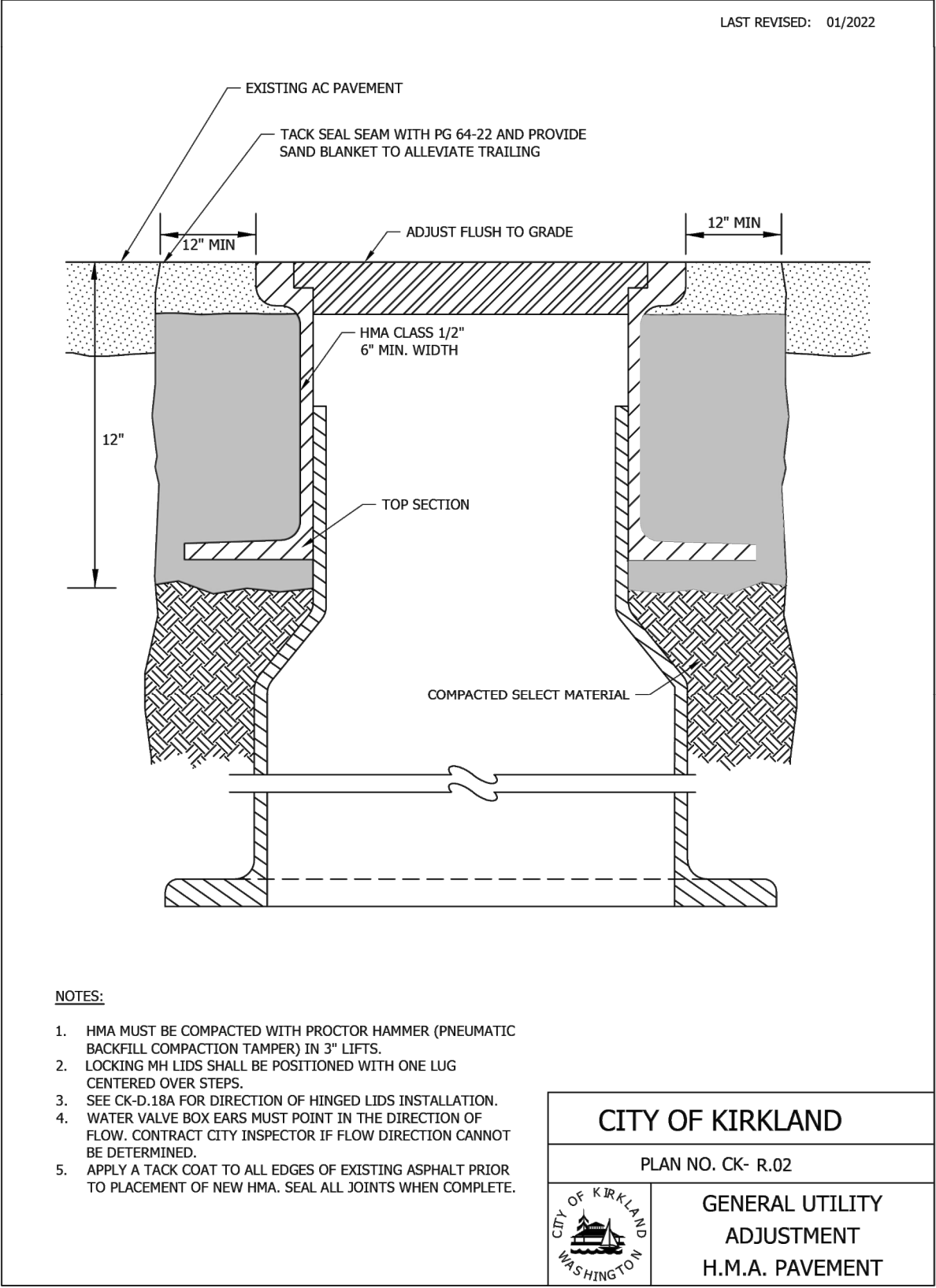
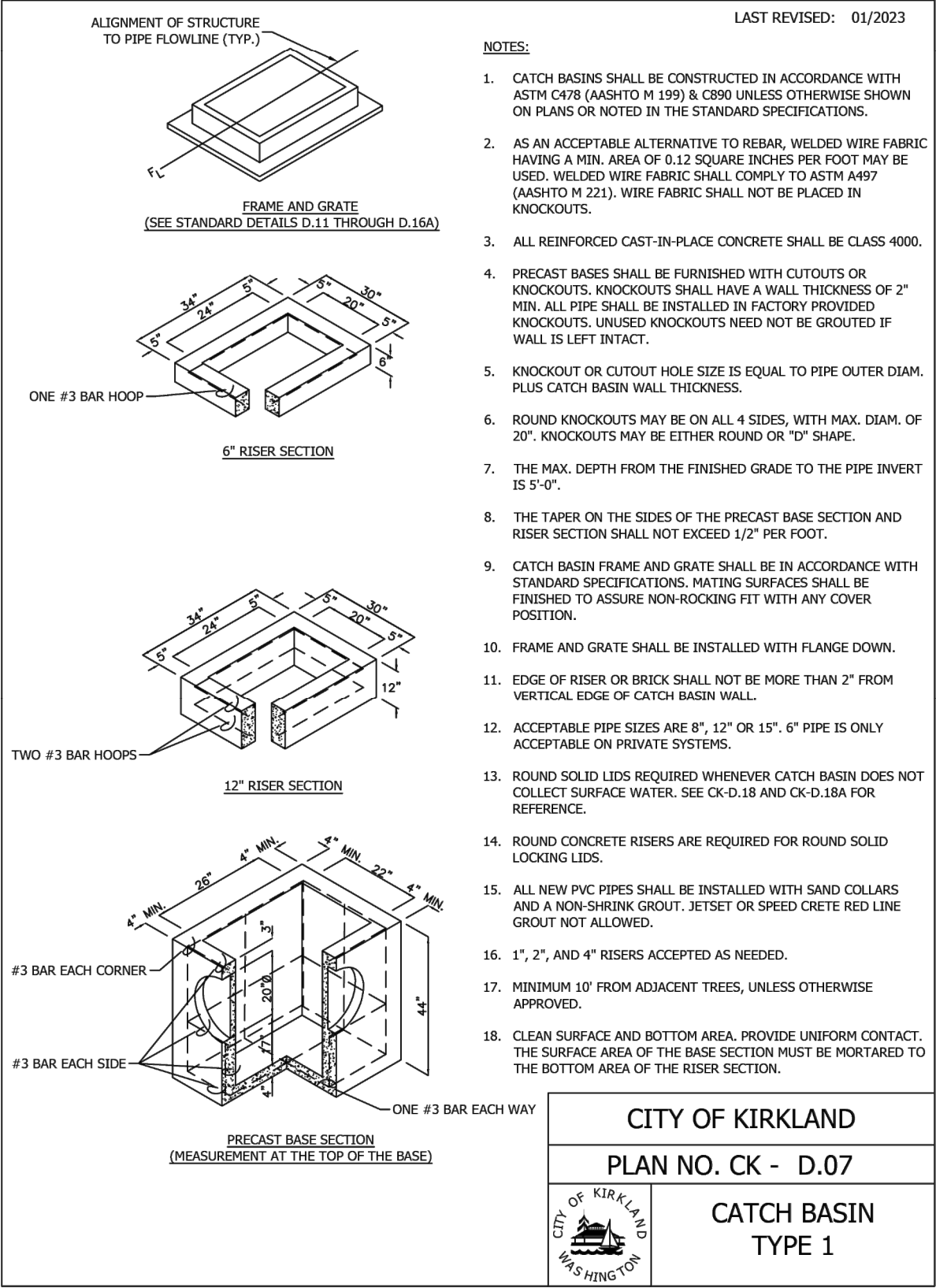
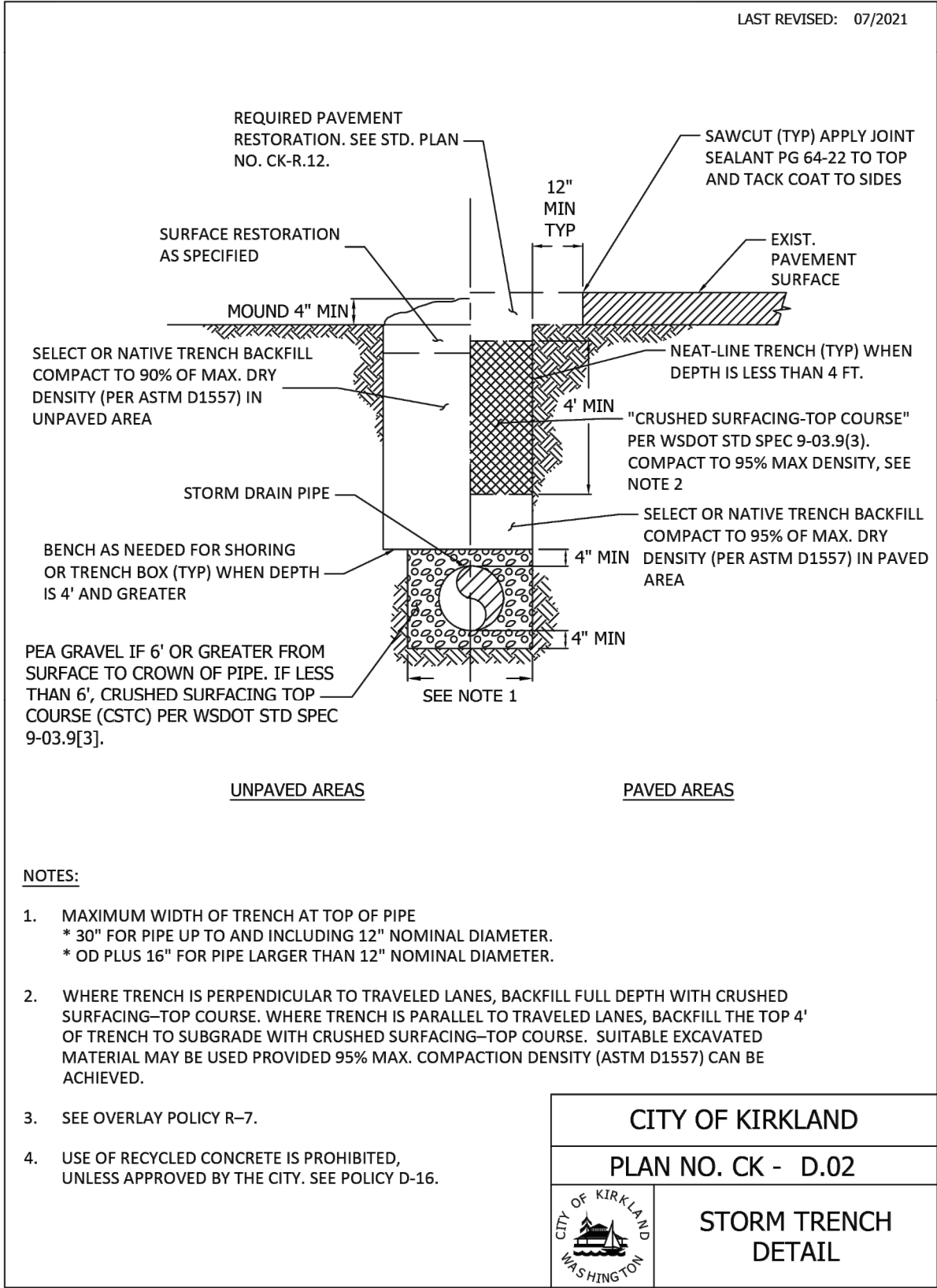
DRAINAGE & UTILITY PLAN

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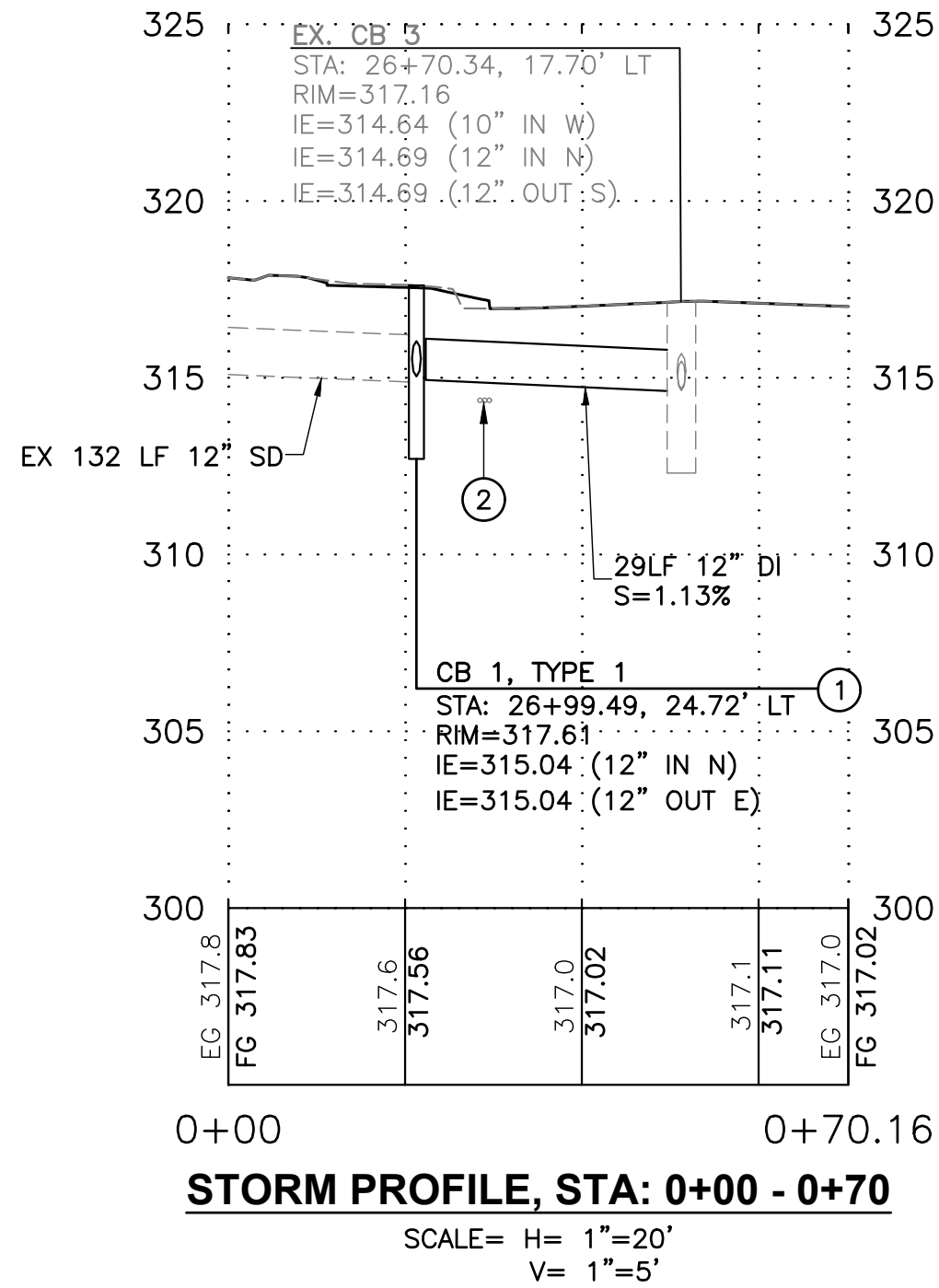
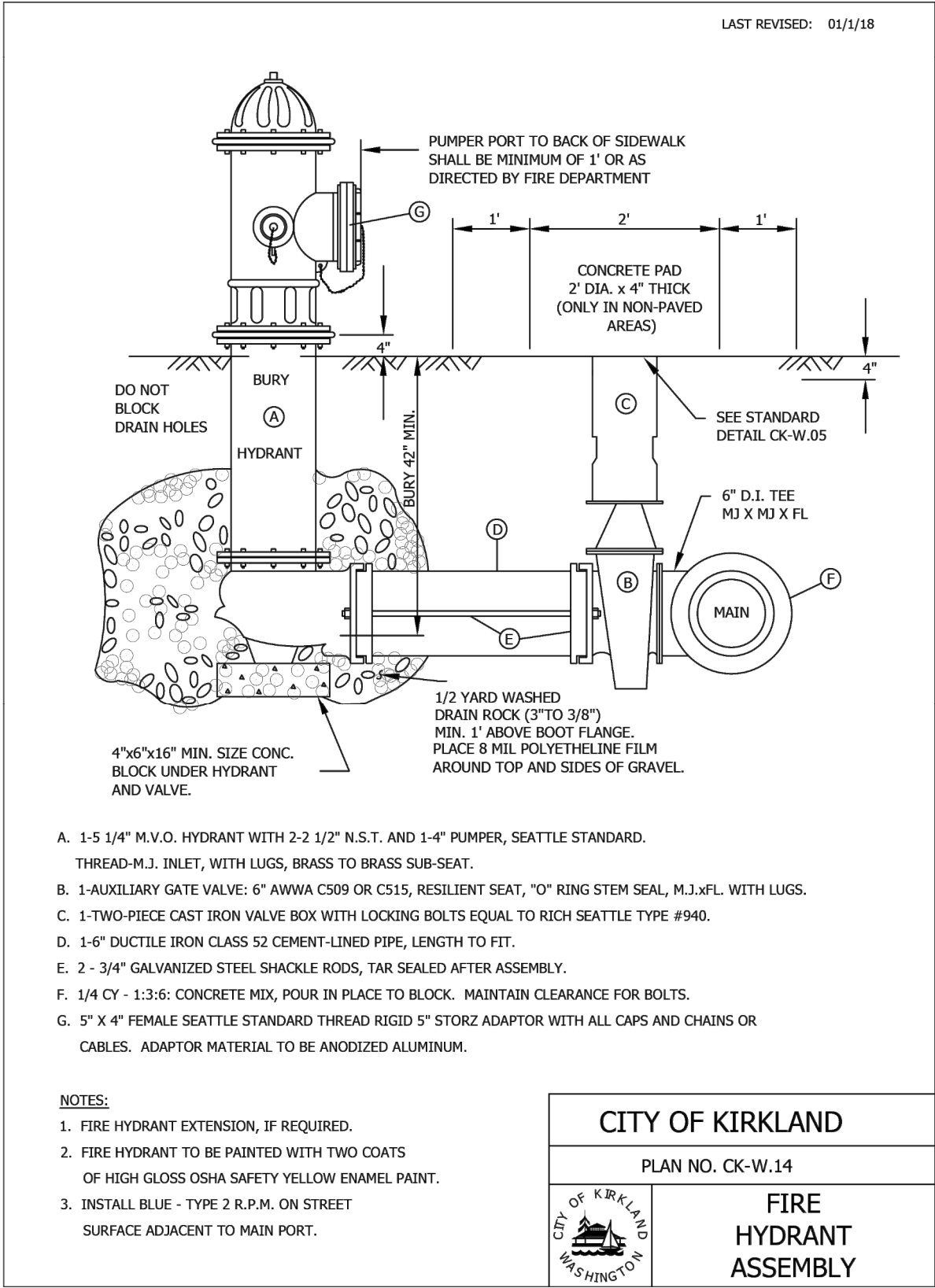
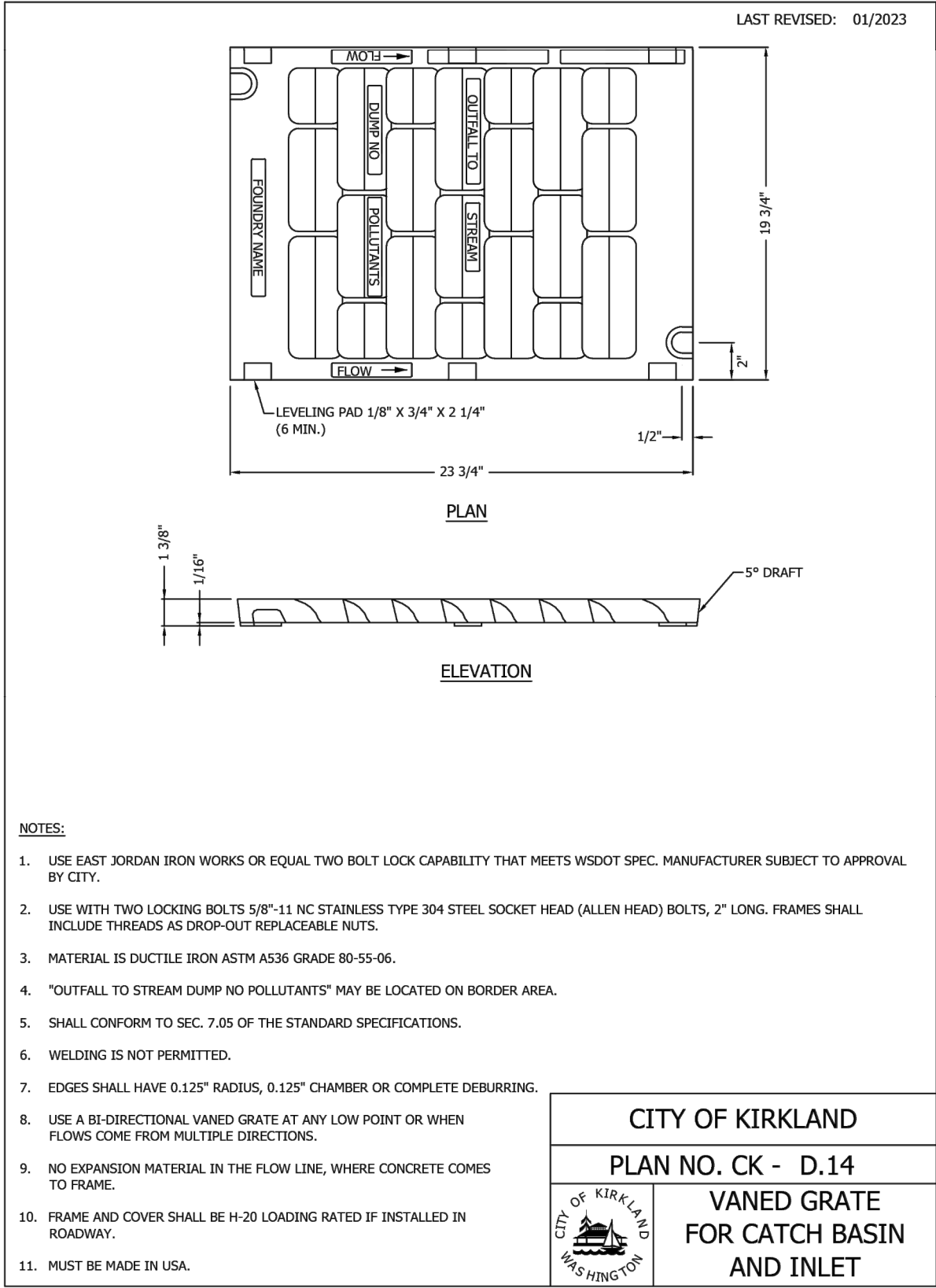
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KEYED NOTES

- SOLID NON-SLIP LID.
- EXISTING UNDERGROUND POWER. INSTALL ETHAFOAM BLOCK BETWEEN POWER AND STORM (ASSUMING 6" OF CLEARANCE. CONTRACTOR TO POT HOLE PRIOR TO CONSTRUCTION TO VERIFY ELEVATION.



STORM DRAINAGE NOTES

- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- BEFORE ANY CONSTRUCTION MAY OCCUR, THE CONTRACTOR SHALL HAVE PLANS WHICH HAVE BEEN SIGNED AND APPROVED BY THE CITY OF KIRKLAND PUBLIC WORKS DEPARTMENT, OBTAINED ALL CITY, COUNTY, STATE, FEDERAL AND OTHER REQUIRED PERMITS, AND HAVE POSTED ALL REQUIRED BONDS.
- ALL STORM DRAINAGE IMPROVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF KIRKLAND PUBLIC WORKS PRE-APPROVED PLANS AND POLICIES AND THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, PREPARED BY WSDOT AND THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA).
- ANY DEVIATION FROM THE APPROVED PLANS WILL REQUIRE WRITTEN APPROVAL, ALL CHANGES SHALL BE SUBMITTED TO THE CITY.
- A COPY OF THE APPROVED STORM WATER PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SIMILARLY STABILIZED TO THE SATISFACTION OF THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS FOR THE PREVENTION OF ON-SITE EROSION AFTER THE COMPLETION OF CONSTRUCTION.
- MINIMUM COVER OVER STORM DRAINAGE PIPES IN ROW OR VEHICULAR PATH SHALL BE SUBJECT TO PRE-APPROVED PLAN CK-D.01, UNLESS OTHER DESIGN IS APPROVED.
- ALL CATCH BASINS SHALL BE TYPE I UNLESS OTHERWISE NOTED. CATCH BASINS WITH A DEPTH OF OVER FIVE FEET (5') TO THE PIPE INVERT SHALL BE A TYPE II CATCH BASIN. TYPE II CATCH BASINS EXCEEDING FIVE FEET (5') IN DEPTH SHALL HAVE A STANDARD LADDER INSTALLED, UNLESS APPROVED BY CITY OF KIRKLAND ENGINEER.
- ALL STORM DRAINAGE MAIN EXTENSIONS WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE STAKED FOR LINE AND GRADE PRIOR TO STARTING CONSTRUCTION.
- ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF ONE FOOT (1') AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-8" ROCK/40%-70% PASSING; 2"-4" ROCK/30%-40% PASSING; 2"-MINUS ROCK/10%-20% PASSING. RECYCLED CONCRETE SHALL NOT BE USED FOR EROSION PROTECTION, INCLUDING FOR CONSTRUCTION ENTRANCE OR TEMPORARY STABILIZATION ELSEWHERE ON SITE.
- ALL PIPE, MANHOLES, CATCH BASINS, AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH THE CURRENT STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (WSDOT). THIS SHALL INCLUDE NECESSARY LEVELING OF THE TRENCH BOTTOM OR THE TOP OF THE FOUNDATION MATERIAL AS WELL AS PLACEMENT AND COMPACTION OF REQUIRED BEDDING MATERIAL TO UNIFORM GRADE SO THAT THE ENTIRE LENGTH OF THE PIPE WILL BE SUPPORTED ON A UNIFORMLY DENSE, UNYIELDING BASE. IF THE NATIVE MATERIAL IN THE BOTTOM OF THE TRENCH MEETS THE REQUIREMENTS FOR "GRAVEL BACKFILL FOR PIPE BEDDING," THE FIRST LIFT OF PIPE BEDDING MAY BE OMITTED PROVIDED THE MATERIAL IN THE BOTTOM OF THE TRENCH IS LOOSENEED, REGRADED, AND COMPACTED TO FORM A DENSE UNYIELDING BASE. ALL PIPE BEDDING SHALL BE APWA CLASS B, TYPE I, OR BETTER. PIPE SHALL NOT BE INSTALLED ON SOD, FROZEN EARTH, LARGE BOULDERS, OR ROCK. PIPE BEDDING FOR FLEXIBLE PIPES SHALL BE PEA GRAVEL TO THE SPRINGLINE OF THE PIPE.
- CONSTRUCTION OF DEWATERING DISCHARGES SHALL ALWAYS MEET WATER QUALITY GUIDELINES LISTED IN COK POLICY E-1. SPECIFICALLY, DISCHARGES TO THE PUBLIC STORMWATER DRAINAGE SYSTEM MUST BE BELOW 25NTU, AND NOT CONSIDERED A PROHIBITED DISCHARGE (PER KMC 15.52.090). TEMPORARY DISCHARGES TO SANITARY SEWER REQUIRE PRIOR AUTHORIZATION AND PERMIT FROM KING COUNTY INDUSTRIAL WASTE PROGRAM (206-263-3000) AND NOTIFICATION TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR.
- ISSUANCE OF A BUILDING OR LAND SURFACE MODIFICATION PERMIT BY THE CITY OF KIRKLAND DOES NOT RELIEVE THE OWNER OF THE CONTINUING LEGAL OBLIGATION AND/OR LIABILITY CONNECTED WITH STORM SURFACE WATER DISPOSITION. FURTHER, THE CITY OF KIRKLAND DOES NOT ACCEPT ANY OBLIGATION FOR THE PROPER FUNCTIONING AND MAINTENANCE OF THE SYSTEM DURING OR FOLLOWING CONSTRUCTION EXCEPT AS OUTLINED IN THE CITY OF KIRKLAND PUBLIC WORKS STANDARDS.
- ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, CONFINED SPACE PROTECTION, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE A TRAFFIC CONTROL PLAN APPROVED BY THE CITY OF KIRKLAND. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS, TRAFFIC CONTROL, AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL APPLY.
- NO FINAL CUT OR FILL SLOPE SHALL EXCEED SLOPES OF TWO (2) HORIZONTAL TO ONE (1) VERTICAL WITHOUT STABILIZATION BY ROCKERY OR BY A STRUCTURAL RETAINING WALL.
- ALL MANHOLE LADDERS SHALL BE FIRMLY ATTACHED AND EXTEND TO WITHIN 1' OF THE BOTTOM OF THE STRUCTURE.
- APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING UTILITY LOCATIONS WHETHER OR NOT THESE UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXERCISE ALL CARE TO AVOID DAMAGE TO ANY UTILITY. IF CONFLICTS WITH EXISTING UTILITIES ARISE DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY CONSTRUCTION INSPECTOR AND ANY CHANGES REQUIRED SHALL BE APPROVED BY THE DEVELOPMENT ENGINEER PRIOR TO COMMENCEMENT OF RELATED CONSTRUCTION ON THE PROJECT.
- THE UNDERGROUND UTILITY LOCATION SERVICE SHALL BE CONTACTED FOR FIELD LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. THE OWNER OR HIS REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS. FOR UTILITY LOCATION IN KING COUNTY, CALL 1-800-424-5555. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS, WIDTHS, THICKNESS, AND ELEVATIONS OF ALL EXISTING PAVEMENTS AND STRUCTURES THAT ARE TO INTERFACE WITH NEW WORK. PROVIDE ALL TRIMMING, CUTTING, SAW CUTTING, GRADING, LEVELING, SLOPING, COATING, AND OTHER WORK, INCLUDING MATERIALS AS NECESSARY, TO CAUSE THE INTERFACE WITH EXISTING WORKS TO BE PROPER, ACCEPTABLE TO THE ENGINEER AND THE CITY OF KIRKLAND, COMPLETE IN PLACE AND READY TO USE.
- ALL INLET, MANHOLE, AND CATCH BASIN FRAMES AND GRATES SHALL NOT BE ADJUSTED TO GRADE UNTIL IMMEDIATELY PRIOR TO FINAL PAVING. ALL CATCH BASIN GRATES SHALL BE SET 0.10' BELOW PAVEMENT LEVEL.
- OPEN CUT ROAD CROSSINGS FOR UTILITY TRENCHES ON EXISTING TRAVELED ROADWAY SHALL BE BACKFILLED ONLY WITH 5/8" MINUS CRUSHED ROCK AND MECHANICALLY COMPACTED (UNLESS OTHERWISE APPROVED BY THE CITY). FOR STREETS CLASSIFIED AS ARTERIALS OR COLLECTORS, BACKFILL FOR CROSSINGS SHALL BE CDF. CUTS INTO THE EXISTING ASPHALT SHALL BE NEAT LINE CUT WITH SAW OR JACKHAMMER IN A CONTINUOUS LINE. A TEMPORARY COLD MIX PATCH MUST BE PLACED IMMEDIATELY AFTER BACKFILL AND COMPACTION. A PERMANENT HOT MIX PATCH SHALL BE PLACED WITHIN 30 DAYS AND SHALL BE A MINIMUM OF 1" THICKER THAN THE ORIGINAL ASPHALT WITH A MINIMUM THICKNESS OF 2". SEE STANDARD D.02.
- ALL DAMAGES INCURRED TO PUBLIC AND/OR PRIVATE PROPERTY BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPAIRED TO THE SATISFACTION OF THE CITY CONSTRUCTION INSPECTOR BEFORE PROJECT APPROVAL AND/OR THE RELEASE OF THE PROJECT'S PERFORMANCE BOND.
- GROUT ALL SEAMS AND OPENINGS IN ALL INLETS, CATCH BASINS, AND MANHOLES. JETSET GROUT IS NOT ALLOWED.
- WHEN WIDENING AN EXISTING ROADWAY WHERE AN EXISTING TYPE I CATCH BASIN WILL REMAIN IN THE TRAVEL LANE, THE EXISTING FRAME AND COVER SHALL BE REPLACED WITH A ROUND, LOCKING FRAME AND COVER.
- FOR OTHER THAN SINGLE-FAMILY DWELLINGS, ALL EXPOSED OR READILY EXPOSED INDOOR STORM DRAINAGE PIPING/PLUMBING SHALL BE LABELED WITH THE WORDS "STORM DRAIN" WITH MINIMUM 2 INCH HIGH LETTERS.
- RECYCLED CONCRETE SHALL NOT BE USED AROUND STORMWATER FACILITIES.

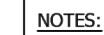


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REVIEWED BY	DCS	06/06/2025		



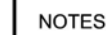
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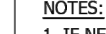
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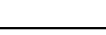
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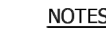
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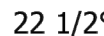
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1. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
2. ALL WATER MAIN WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH CURRENT AWWA, WSDOT, AND APWA STANDARD SPECIFICATIONS, AS AMENDED BY THE CITY OF KIRKLAND. ALL MATERIAL UTILIZED SHALL BE NEW, NO PARTS SHALL BE REUSED. ANY PART REMOVED FROM THE SYSTEM FOR ANY REASON MAY NOT BE REUSED AND SHALL BE REPLACED WITH A NEW PART. (E.G. A ROMAC WITH A BAD GASKET MUST BE REPLACED WITH AN ENTIRELY NEW ROMAC ASSEMBLY).
3. THE WATER MAIN SHALL BE CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51- 86 OR THE MOST RECENT REVISION. THE PIPE SHALL BE 1/16" CEMENT LINED AND SEALED IN ACCORDANCE WITH ANSI/AWWA C104/A21.4-90. THE CAST IRON OR DUCTILE IRON PIPE FITTINGS SHALL BE CLASS 250 AS PER ANSI/AWWA C110/A21.10-82. PIPE BEDDING SHALL BE COMPACTED TO 95 PERCENT OF ITS MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT. UNLESS IT IS NECESSARY TO CLEAR EXISTING UTILITIES, THE WATER MAIN SHOULD BE INSTALLED WITH UNDER 60° OF OVER BUT NEVER LESS THAN 36° OF COVER TO THE TOP OF THE PIPE. ANY DEVIATIONS FROM THIS SHALL BE APPROVED BY THE CITY OF KIRKLAND APPROVING AUTHORITY PRIOR TO START OF CONSTRUCTION ACTIVITIES.
4. CONCRETE BLOCKING FOR WATER MAINS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH AWWA AND CITY OF KIRKLAND SPECIFICATIONS AND SHALL BE INSTALLED AT ALL VERTICAL AND HORIZONTAL BENDS AND FITTINGS. PRIOR TO BLOCKING, THE FITTINGS SHALL BE WRAPPED WITH VISQUEEN.
5. ALL CONNECTIONS TO EXISTING MAINS AND ALL TESTING AND DISINFECTION SHALL BE PERFORMED UNDER THE SUPERVISION OF THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS INSPECTOR.
6. APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE LOCATIONS SHOWN AND FOR DISCOVERY OF POSSIBLE ADDITIONAL UTILITIES NOT SHOWN SO AS TO AVOID DAMAGE OR DISTURBANCE. THE UNDERGROUND UTILITY LOCATION SERVICE SHALL BE CONTACTED FOR FIELD LOCATION PRIOR TO ANY CONSTRUCTION. THE OWNER OR THEIR REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS. FOR UTILITY LOCATION IN KING COUNTY, CALL 1-800-424-5555. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
7. ALL CONTRACTORS WORKING WITH AC PIPE MUST BE STATE-CERTIFIED. THE CONTRACTOR SHALL PROVIDE PROTECTIVE CLOTHING AND EQUIPMENT (COVERALLS, GLOVES, BOOTS, HEAD COVERING, GOGGLES, RESPIRATORS, ETC.) TO CREWS WORKING WITH ASBESTOS CEMENT PIPE IN ORDER TO ASSURE THE WORKER'S EXPOSURE TO ASBESTOS MATERIAL IS AT OR BELOW THE LIMITS PRESCRIBED IN WAC 296-62-07705.
8. AN APPROVED COPY OF THE WATER PLAN MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
9. A 5' MINIMUM HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER FACILITIES AND UNDERGROUND POWER AND TELEPHONE FACILITIES, UNLESS OTHERWISE APPROVED BY THE CITY OF KIRKLAND.
10. FOR WATER MAIN AND SEWER MAIN SEPARATION REQUIREMENTS, SEE ITEM VIII.C OF THE SANITARY SEWER - DESIGN CRITERIA SECTION AND DETAIL W.01.
11. PRESSURE AND PURITY TESTING SHALL BE DONE IN THE PRESENCE OF, AND UNDER THE SUPERVISION OF, A CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS INSPECTOR. THE CONTRACTOR SHALL PROVIDE ALL PLUGS AND TEMPORARY BLOWOUT ASSEMBLIES FOR PRESSURE TESTING AND DISINFECTION PRIOR TO FINAL TIE-IN. NO CONNECTION SHALL BE MADE BETWEEN THE NEW MAIN AND THE EXISTING MAINS UNTIL THE NEW PIPING HAS BEEN DISINFECTED, FLUSHED, AND PASSED BOTH PRESSURE AND PURITY TESTING. TEMPORARY PLUGS AND BLOCKING SHALL BE INSTALLED AT THE POINTS OF CONNECTION TO THE EXISTING SYSTEM. FOR CONSTRUCTION OF NEW WATER MAIN, THE SERVICES, HYDRANTS ETC., WILL BE TESTED WITH THE MAIN. PRESSURE TESTING WILL REQUIRE A MINIMUM OF 200 PSI FOR 15 MINUTES WITH NO PRESSURE DROP. UPON SATISFACTORY COMPLETION OF THE PRESSURE TEST, THE LINE SHALL BE DISINFECTED, FLUSHED, AND THEN A SAMPLE SHALL BE TAKEN FOR PURITY TESTING BY THE PUBLIC WORKS INSPECTOR.
12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF KIRKLAND INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL WATER MAIN CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING AS-BUILT DRAWINGS OF ALL CONSTRUCTION NOT INSTALLED ACCORDING TO THE APPROVED PLANS. (THIS DOES NOT GIVE APPROVAL FOR AS-BUILT CONSTRUCTION.)
13. THE CONTRACTOR SHALL CONTACT THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS FIVE (5) DAYS PRIOR TO ANY WORK REQUIRING THE SHUTDOWN OF EXISTING WATER MAINS. THE CONTRACTOR IS REQUIRED TO GIVE TWO (2) WORKING DAYS NOTICE TO ALL CUSTOMERS AFFECTED BY A WATER MAIN SHUTDOWN (NOTICES AND MAPS FOR THE SHUTDOWN WILL BE PROVIDED BY THE WATER DIVISION). SHUTDOWNS SHALL BE SCHEDULED FOR MONDAYS, TUESDAYS, WEDNESDAYS, AND THURSDAYS BETWEEN 8:30 AM AND 2 PM. SHUTDOWNS AFFECTING INSTITUTIONS SHALL BE SCHEDULED AT NIGHT. ONLY WATER DIVISION PERSONNEL OR A DESIGNATE OF THE WATER DIVISION MANAGER MAY OPERATE VALVES, AND/OR HYDRANTS, BLOW-OFFS, ETC., FOR FILLS, SHUT DOWNS, FLUSHING, OR RECHARGING OF WATER LINES. TWO (2) WORKING DAYS NOTICE TO THE WATER DIVISION IS REQUIRED TO SCHEDULE FILLS.
14. THERE SHALL BE NO WATER MAIN CONSTRUCTION ON A SATURDAY, SUNDAY, OR HOLIDAYS OBSERVED BY THE CITY OF KIRKLAND.
15. SHOULD THE WATER MAIN WORK NECESSITATE THE CLOSING OF CERTAIN GATE VALVES WITHIN THE EXISTING SYSTEM, THE CITY OF KIRKLAND MAINTENANCE DEPARTMENT SHALL BE RESPONSIBLE FOR THE OPERATION OF SUCH VALVES.
16. THE FIRE FLOW SYSTEM SHALL BE INSTALLED, TESTED, AND APPROVED PRIOR TO ABOVE-GROUND COMBUSTIBLE CONSTRUCTION.
17. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.
18. MEGA-LUGS (OR SIMILAR PRODUCT) SHALL BE REQUIRED ON ALL FITTINGS AND VALVES FOR TIE-INS, OR BUILDOUTS FOR TIE-INS PRIOR TO A FINAL CONNECTION TO THE EXISTING WATER MAIN. APPROPRIATE CONCRETE BLOCKING IS ALSO REQUIRED IN ADDITION TO MEGA-LUGS.
19. FOR THE DURATION OF ANY WATER MAIN INSTALLATION PROJECT, ALL EXISTING AND NEWLY INSTALLED VALVE CANS ARE TO REMAIN ACCESSIBLE TO WATER DIVISION PERSONNEL.
20. WHEN IT BECOMES NECESSARY TO RE-PLUMB THE CUSTOMER'S SIDE OF AN EXISTING WATER METER AS THE RESULT OF THE RELOCATION OF THE EXISTING SERVICE OR TO COMPLY WITH OTHER CITY OF KIRKLAND PUBLIC WORKS SPECIFICATIONS, THE CUSTOMER'S SIDE SHALL BE RECONNECTED WITH THE APPROPRIATE PLUMBING MATERIALS (AND RELATED FITTINGS) SUCH AS BRASS, COPPER, POLYETHYLENE WITH A 200 P.S.I. RATING, OR PVC. ALL PARTS, PIPE, AND/OR FITTINGS SHALL BE NEW FROM THE BACK SIDE OF THE METER TO THE CONNECTION POINT OF THE CUSTOMER'S SERVICE.
21. NO TIE-IN WILL BE ALLOWED INTO THE EXISTING TAILPIECE ON THE CUSTOMER'S SIDE OF THE METER. IF THE EXISTING METER DOES NOT HAVE A CHECK VALVE INSTALLED ON THE BACK SIDE OF THE METER (CUSTOMER'S SIDE) A CHECK VALVE CANNOT BE INSTALLED WHEN DOING THE TIE-IN.
22. IF A FITTING, EITHER DURING INSTALLATION OR AFTER, IS FOUND TO BE DEFECTIVE IN ANY WAY AS DETERMINED BY THE CITY, THE CONTRACTOR SHALL REPLACE THE ENTIRE FITTING AND NOT JUST THE DEFECTIVE COMPONENT.
23. BEGINNING JANUARY 1, 2014, ALL PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND PLUMBING FIXTURES USED FOR POTABLE WATER, MUST HAVE A MAXIMUM LEAD CONTENT NOT TO EXCEED 0.25%, PER "LEAD FREE" STANDARDS AS DEFINED IN SECTION 9 OF NSF/ANSI STANDARD 61.

[illegible]

DEPARTMENT OF PUBLIC WORKS



CITY OF KIRKLAND JUNE

SHEET
17
OF
24
SHEETS

SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.

EXISTING SIGNS TO REMAIN							
SIGN NO.	FIELD LOCATION				SIGN DESIGNATION	DESCRIPTION	COMMENTS
	CENTERLINE	STATION	OFFSET	LT RT			
E1	132ND AVE NE	EX.			CUSTOM	BUS STOP SIGN	
E2	NE 100TH ST	EX.			R1-1	STOP	
					D3-102	STREET NAME SIGN (131ST PL NE)	
					D3-102	STREET NAME SIGN (NE 100TH ST)	
E3	132ND AVE NE	EX.			CUSTOM	BUS STOP SIGN	
E4	132ND AVE NE	EX.			R3-5R	RIGHT ONLY	

EXISTING SIGNS TO BE REMOVED							
SIGN NO.	FIELD LOCATION				SIGN DESIGNATION	DESCRIPTION	
	CENTERLINE	STATION	OFFSET	LT RT			
R1	132ND AVE NE	EX.			S1-1	SCHOOL	
R2	NE 100TH ST	EX.			W16-9P	AHEAD	
					R1-1	STOP	
					D3-102	STREET NAME SIGN (132ND AVE NE)	
R3	NE 100TH ST	EX.			D3-102	STREET NAME SIGN (NE 100TH ST)	
					R1-1	STOP	
R4	132ND AVE NE	EX.			D3-102	STREET NAME SIGN (132ND AVE NE)	
R5	NE 100TH ST	EX.			D3-102	STREET NAME SIGN (NE 100TH ST)	
R5	NE 100TH ST	EX.			S1-1	SCHOOL	
					I6-901 (MOD)	ADOPT-A-ROAD	
R5	NE 100TH ST	EX.			I6-902 (MOD)	IN LOVING MEMORY	
					I6-902 (MOD)	IN LOVING MEMORY	

CHANNELIZATION GENERAL NOTES

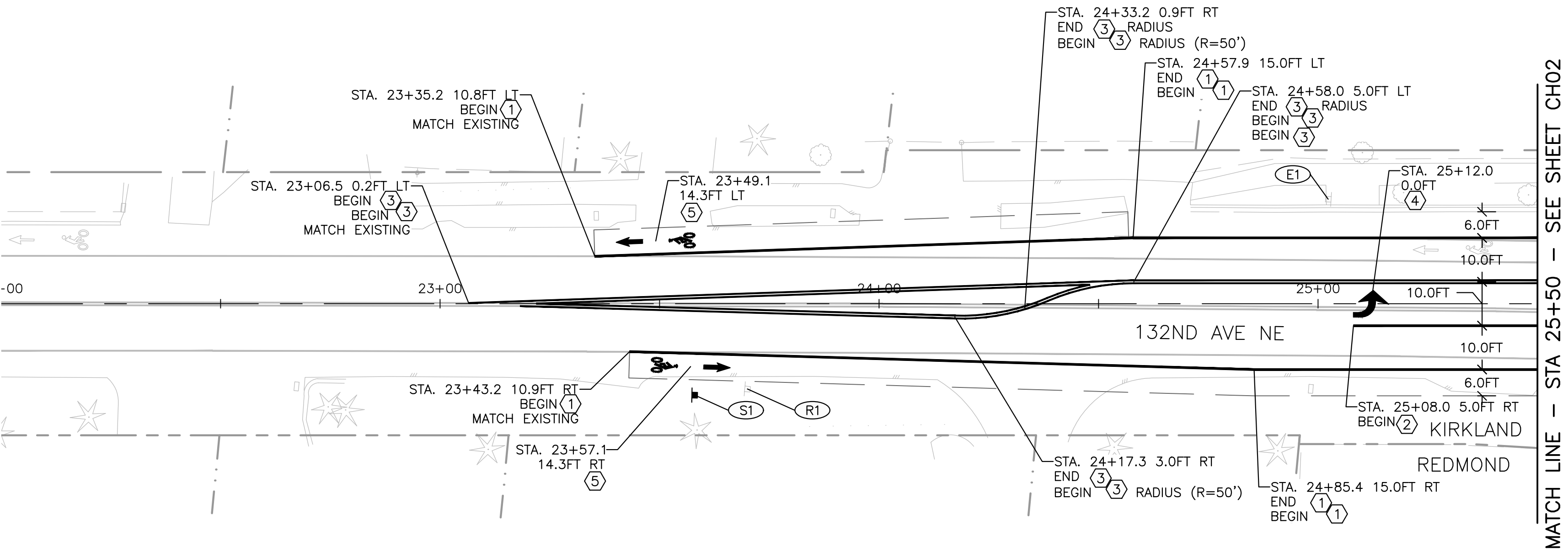
- CONTRACTOR SHALL REMOVE EXISTING CHANNELIZATION AND SIGNING IN CONFLICT WITH PROPOSED CHANNELIZATION AND SIGNING, WITHIN PROJECT LIMITS, AS SHOWN ON THESE PLANS OR AS DIRECTED BY THE ENGINEER. REFER TO THE DEMOLITION PLANS FOR ADDITIONAL DETAILS. ANY ROADWAY SIGNAGE OR STRIPING REMOVED, DISTURBED, DAMAGED, OR TEMPORARILY MOVED BY THE CONTRACTOR SHALL BE RESTORED TO MEET THE CURRENT CITY OF KIRKLAND STANDARDS WHEN WITHIN CITY OF KIRKLAND'S PUBLIC RIGHT-OF-WAY, OR THE CURRENT CITY OF REDMOND STANDARDS WHEN WITHIN THE CITY OF REDMOND'S PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL FIELD VERIFY FINAL LOCATIONS OF ALL PROPOSED SIGNS WITH THE ENGINEER PRIOR TO INSTALLATION. ALL PROPOSED SIGNS SHALL BE LOCATED WITHIN RIGHT-OF-WAY AND PANELS SHALL NOT OVERHANG OUTSIDE OF RIGHT-OF-WAY. SIGN PANELS THAT OVERHANG SIDEWALKS/PATHWAYS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 7FT FROM THE BOTTOM OF THE LOWEST PANEL TO THE ADJACENT SIDEWALK/PATHWAY SURFACE. GROUND MOUNTED SIGNS SHALL BE INSTALLED PER CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.43 AND WSDOT STANDARD PLAN G-20.10, UNLESS OTHERWISE NOTED.

CHANNELIZATION LEGEND

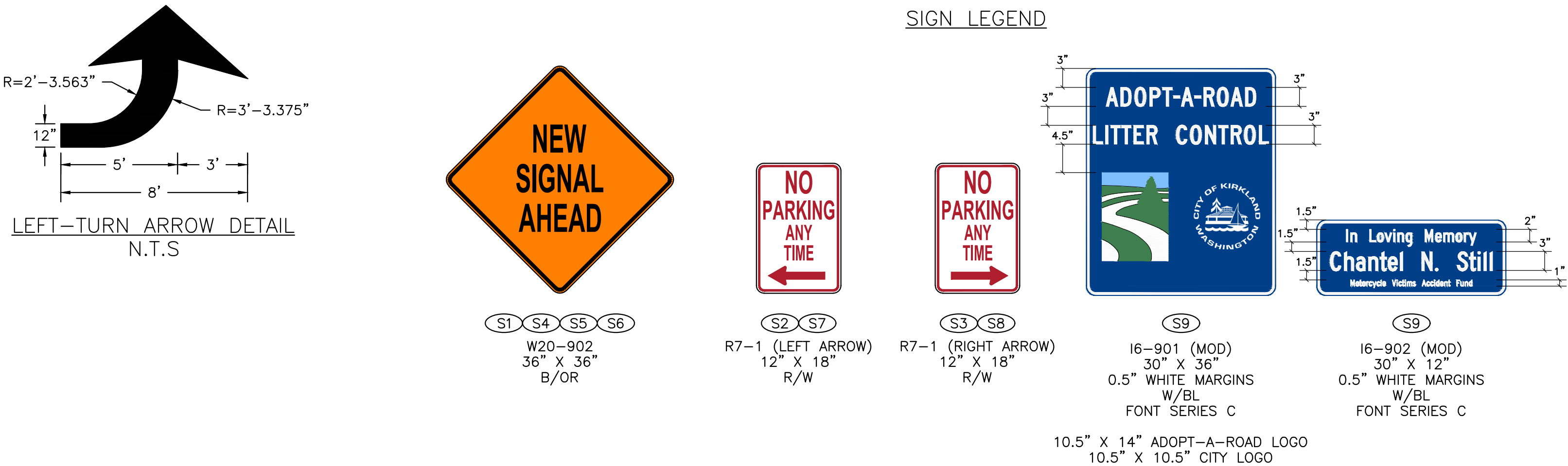
DESCRIPTION	EXISTING	PROPOSED
RIGHT-OF-WAY	---	---
CITY OF KIRKLAND-CITY OF REDMOND BOUNDARY	---	---
PARCEL LINE	---	---
TEMPORARY CONSTRUCTION EASEMENT		---
CONSTRUCTION NOTE		##
SIGN NOTE		##
SIGN		■

CHANNELIZATION CONSTRUCTION NOTES (THIS SHEET ONLY)

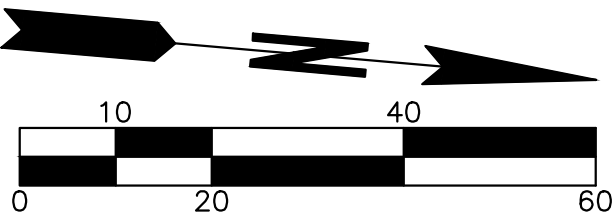
- INSTALL 6" PAINTED WHITE EDGE LINE IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.35.
- INSTALL 8" PAINTED WHITE GORE STRIPE WITH RAISED PAVEMENT MARKERS IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.31.
- INSTALL 4" PAINTED DOUBLE YELLOW CENTER LINE WITH RAISED PAVEMENT MARKERS IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.31.
- INSTALL WHITE THERMOPLASTIC LEFT-TURN ARROW IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.30 AND DETAIL ON SHEET CH01.
- INSTALL WHITE THERMOPLASTIC BICYCLE LANE SYMBOL IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.34.



SIGN LEGEND



NEW SIGNS							
SIGN NO.	FIELD LOCATION				SIGN DESIGNATION	DESCRIPTION	COMMENTS
	CENTERLINE	STATION	OFFSET	LT RT			
S1	132ND AVE NE	23+58.0	20.8'		X	W20-902	NEW SIGNAL AHEAD
S2	NE 100TH ST	15+02.0'	16.6'		X	R7-1	NO PARKING (LEFT ARROW)
S3	NE 100TH ST	15+86.5	19.4'		X	R7-1	NO PARKING (RIGHT ARROW)
S4	NE 100TH ST	16+45.6	15.2'	X		W20-902	NEW SIGNAL AHEAD
S5	132ND AVE NE	29+44.4	25.9'	X		W20-902	NEW SIGNAL AHEAD
S6	NE 100TH ST	11+30.0	22.1'	X		W20-902	NEW SIGNAL AHEAD
S7	NE 100TH ST	12+30.0	20.7'		X	R7-1	NO PARKING (LEFT ARROW)
S8	NE 100TH ST	12+30.0	20.5'	X		R7-1	NO PARKING (RIGHT ARROW)
S9	NE 100TH ST	13+73.6	21.9'	X		I6-901 (MOD)	ADOPT-A-ROAD
						I6-902 (MOD)	IN LOVING MEMORY



		DATE	REVISION	BY	DATE
DESIGNED BY	TYK	07/11/2025			
DRAWN BY	TYK	07/11/2025			
REVIEWED BY	JC	07/11/2025			



CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS



transpogroup
WHAT TRANSPORTATION CAN BE.

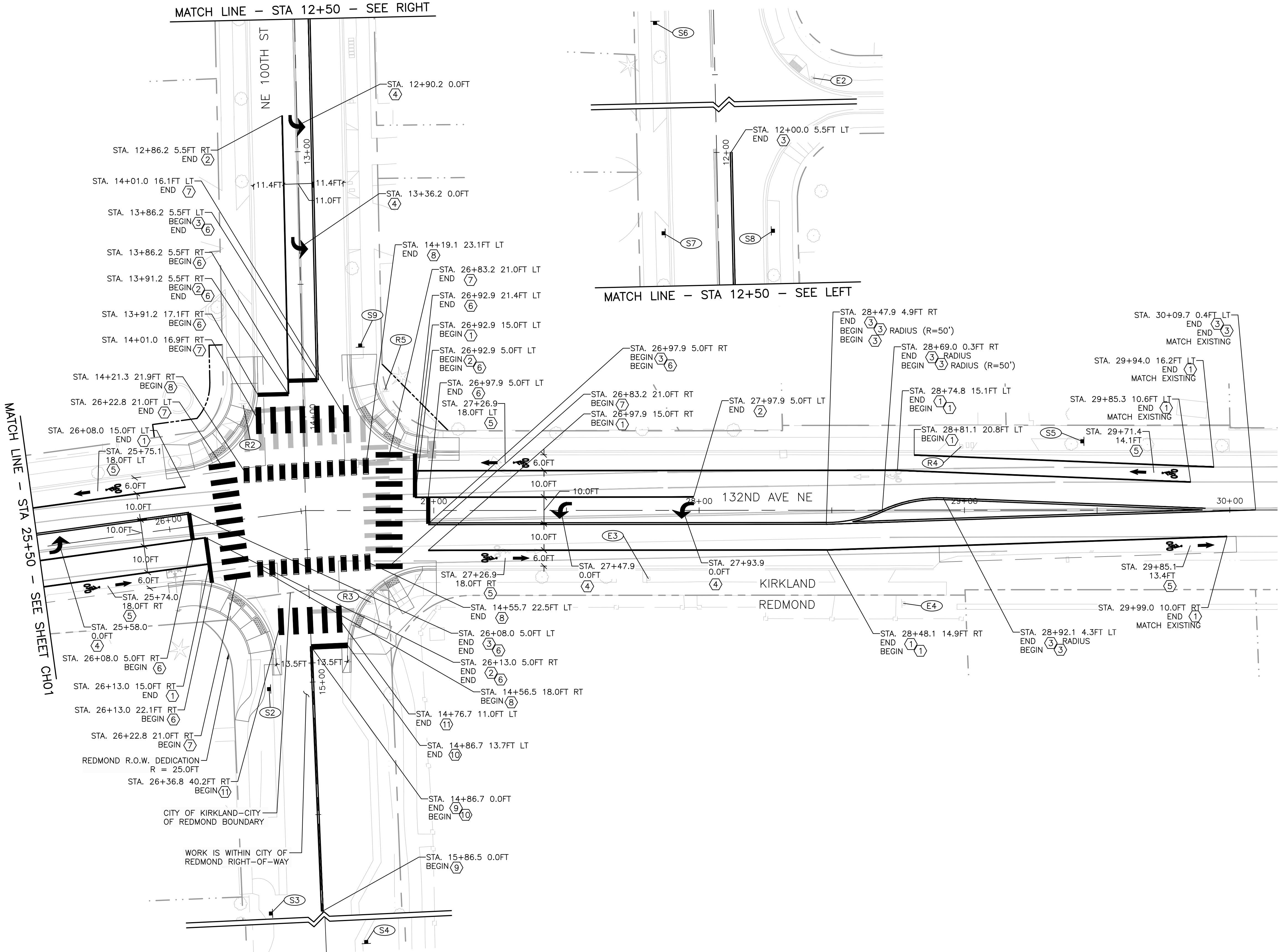


NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS
CITY OF KIRKLAND
JULY 2025
CHANNELIZATION PLAN

CH01
SHEET 18 OF 24 SHEETS

SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.

MATCH LINE - STA 12+50 - SEE RIGHT



NOTES

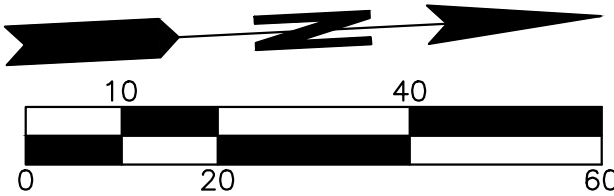
- SEE SHEET GN01 FOR GENERAL NOTES.
- SEE SHEET CH01 FOR CHANNELIZATION GENERAL NOTES, SIGN LEGEND, AND SIGN SCHEDULE.

CHANNELIZATION LEGEND

DESCRIPTION	EXISTING	PROPOSED
RIGHT-OF-WAY	---	---
CITY OF KIRKLAND-CITY OF REDMOND BOUNDARY	---	---
PARCEL LINE	---	---
TEMPORARY CONSTRUCTION EASEMENT	---	---
CONSTRUCTION NOTE		##
SIGN NOTE		##
SIGN		##

CHANNELIZATION CONSTRUCTION NOTES (THIS SHEET ONLY)

- INSTALL 6" PAINTED WHITE EDGE LINE IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.35.
- INSTALL 8" PAINTED WHITE GORE STRIPE WITH RAISED PAVEMENT MARKERS IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.31.
- INSTALL 4" PAINTED DOUBLE YELLOW CENTER LINE WITH RAISED PAVEMENT MARKERS IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.31.
- INSTALL WHITE THERMOPLASTIC LEFT-TURN ARROW IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.30 AND DETAIL ON SHEET CH01.
- INSTALL WHITE THERMOPLASTIC BICYCLE LANE SYMBOL IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.34.
- INSTALL 18" WHITE THERMOPLASTIC STOP BAR IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.28.
- INSTALL 24" WHITE THERMOPLASTIC CROSSWALK BARS IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.28.
- INSTALL 24" GREEN AND WHITE METHYL METHACRYLATE (MMA) INTERSECTION/CONFLICT ZONE BIKE LANE PAVEMENT MARKINGS IN ACCORDANCE WITH CITY OF KIRKLAND PRE-APPROVED PLAN CK-R.36C.
- INSTALL TYPE B DOUBLE YELLOW CENTER LINE IN ACCORDANCE WITH CITY OF REDMOND STANDARD DETAIL 312.
- INSTALL 24" WHITE THERMOPLASTIC STOP BAR IN ACCORDANCE WITH CITY OF REDMOND STANDARD DETAIL 311B.
- INSTALL 24" WHITE THERMOPLASTIC CROSSWALK BARS IN ACCORDANCE WITH CITY OF REDMOND STANDARD DETAIL 311B.



		DATE	REVISION	BY	DATE
DESIGNED BY	TYK	07/11/2025			
DRAWN BY	TYK	07/11/2025			
REVIEWED BY	JC	07/11/2025			



CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS



12131 113TH AVENUE NE, SUITE 203
KIRKLAND, WASHINGTON 98034
(TEL) 425 821-3665
(FAX) 425 825-8434



NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND
JULY 2025
CHANNELIZATION PLAN

CH02
SHEET
19
OF
24
SHEETS

TRAFFIC SIGNAL GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD PLANS AND SPECIFICATIONS, CITY OF KIRKLAND STANDARDS, AND THE PROJECT SPECIFICATIONS.
2. AS A PART OF THE DESIGN PROCESS, THE ENGINEER HAS COORDINATED WITH PUGET SOUND ENERGY (PSE) TO CONFIRM THAT THERE ARE NO CONFLICTS WITH OVERHEAD POWER/COMMUNICATIONS LINES. OVERHEAD UTILITY RELOCATIONS WILL BE PERFORMED BY PSE PRIOR TO CONSTRUCTION START. HOWEVER, IT IS POSSIBLE FOR THE EXISTING OR PROPOSED CONDITIONS TO CHANGE PRIOR TO IMPLEMENTATION OF THE SCOPE OF WORK IDENTIFIED IN THESE DOCUMENTS. THE CONTRACTOR SHALL CONFIRM THAT THERE IS A MINIMUM 10-FOOT CIRCUMFERENTIAL CLEARANCE PROVIDED BETWEEN OVERHEAD POWER LINES AND THE PROPOSED TRAFFIC SIGNAL EQUIPMENT, AND THAT NO OVERHEAD COMMUNICATIONS LINES WILL OBSTRUCT THE VISIBILITY OF THE TRAFFIC SIGNAL INDICATIONS, PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY IF A CONFLICT IS DISCOVERED.
3. PER CHAPTER 49.17 OF THE RCW AND TITLE 296 OF THE WAC, THE CONTRACTOR IS REQUIRED TO ENSURE SAFETY WHILE INSTALLING TRAFFIC SIGNAL SYSTEMS UNDER POWER LINES. THE CONTRACTOR SHALL COORDINATE WITH PUGET SOUND ENERGY (PSE) TO DETERMINE INSTALLATION METHOD PRIOR TO WORK TAKING PLACE. IF LINES CAN NOT BE DE-ENERGIZED, A COMPANY WITH THE APPROPRIATE CERTIFICATION MAY BE REQUIRED TO PERFORM WORK UNDER THE OVERHEAD UTILITY LINES. THE CONTRACTOR IS REQUIRED TO COORDINATE WITH THE CITY AND UTILITY AGENCY TO ENSURE ALL APPLICABLE SAFETY STANDARDS ARE FOLLOWED.
4. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF KIRKLAND, PSE, AND COMMUNICATIONS PROVIDERS FOR CONSTRUCTION SEQUENCING.
5. THE LOCATIONS OF FEATURES AND UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION START.
6. ALL WORK SHALL BE CONSISTENT WITH UTILITY AGENCY REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE WITH AFFECTED UTILITY AGENCIES THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.
7. JUNCTION BOX AND CONDUIT LOCATIONS ARE SHOWN FOR ILLUSTRATIVE PURPOSES. ACTUAL LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD AND VERIFIED BY THE ENGINEER/INSPECTOR PRIOR TO INSTALLATION. COINCIDENT CONDUITS MAY OCCUPY THE SAME TRENCH.
8. NEW VEHICLE SIGNAL HEADS SHALL BE CONVENTIONAL TYPE ALUMINUM WITH 12IN LED LENSES, TUNNEL VISORS, AND BACKPLATES. VEHICLE SIGNAL HEADS SHALL BE FACTORY PAINTED FEDERAL GREEN. BACK PLATES SHALL HAVE A TWO-INCH YELLOW RETRO-REFLECTIVE STRIP AROUND ITS PERIMETER. NEW VEHICLE SIGNAL HEAD MOUNTS SHALL BE TYPE M MOUNTED ON MAST ARMS (WITH THE PLUMBIZER LOCATED BETWEEN THE RED AND YELLOW INDICATIONS), TYPE H OR TYPE K MOUNTED ON TYPE II AND TYPE III SIGNAL STANDARDS, AND TYPE D OR TYPE F MOUNTED ON TYPE 1 SIGNAL STANDARDS, PER WSDOT STANDARD PLAN J-75.20, UNLESS OTHERWISE NOTED.
9. NEW PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE LED WITH Z CRATE VISORS. HOUSING SHALL BE FACTORY PAINTED FEDERAL GREEN. NEW PEDESTRIAN SIGNAL HEAD MOUNTS SHALL BE TYPE E MOUNTED ON TYPE 1, TYPE II, AND TYPE III SIGNAL STANDARDS, AND TYPE C OR TYPE D MOUNTED ON TYPE PS POLES, PER WSDOT STANDARD PLAN J-75.10, UNLESS OTHERWISE NOTED.
10. NEW SPARE/EMPTY CONDUIT SHALL CONTAIN ELECTRICALLY DETECTABLE PULL TAPE AND BE MARKED AS "CITY OF KIRKLAND" CONDUIT.
11. NEW FOUNDATION LOCATIONS SHALL BE APPROVED BY THE ENGINEER. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY THAT A MINIMUM OVERHEAD CLEARANCE OF 16FT-6IN BETWEEN THE BOTTOM OF ALL VEHICLE SIGNAL HEADS, SIGNS, AND APPURTENANCES AND THE FINISHED ROADWAY IS ACHIEVED PRIOR TO POURING THE FOUNDATION. POLE LOCATIONS SHALL BE STAKED IN THE FIELD, POTHOLED TO VERIFY THAT NO POTENTIAL UTILITY CONFLICTS EXIST, AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
12. NEW JUNCTION BOXES SHALL BE INSTALLED PER WSDOT STANDARD PLANS J-40.10 AND J-40.30. JUNCTION BOXES LOCATED IN SIDEWALK SHALL HAVE NON-SLIP LIDS AND FRAMES.
13. NEW MAST ARM-MOUNTED SIGNS SHALL BE INSTALLED PER WSDOT STANDARD PLAN G-30.10.
14. NEW FIBER OPTIC CONDUIT SWEEPS SHALL BE 3FT RADIUS MINIMUM.
15. NEW FIBER OPTIC VAULTS SHALL BE INSTALLED PER CITY OF KIRKLAND STANDARD PLAN CK-TS.06.
16. COORDINATE THE CONFIGURATION OF VIDEO DETECTION ZONES IN THE FIELD WITH THE ENGINEER.
17. PEDESTRIAN PUSHBUTTONS HAVE BEEN LOCATED TO MEET CURRENT ADA STANDARDS AND SHALL BE: ADJACENT TO A 4-FOOT BY 4-FOOT LANDING, WITHIN A 10-INCH REACH FROM THE LANDING, HAVE THE FACE OF PEDESTRIAN PUSHBUTTON ALIGNED PARALLEL WITH THE ASSOCIATED CROSSWALK, AND HAVE THE PUSHBUTTON ARROW POINTING TOWARD THE DIRECTION OF TRAVEL WITH THE ASSOCIATED CROSSWALK. THE CONTRACTOR SHALL CONFIRM PLACEMENT OF NEW PEDESTRIAN PUSHBUTTONS WITH THE ENGINEER IN THE FIELD PRIOR TO INSTALLATION.
18. A 4.0FT LEVEL WORK ZONE SHALL BE PROVIDED ON ALL SIDES OF NEW CABINET INSTALLATIONS.
19. NEW CONDUCTORS INSTALLED BY THE CONTRACTOR SHALL BE LABELED IN EACH JUNCTION BOX, VAULT, AND CABINET.
20. VIDEO DETECTION CAMERA MOUNTING SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
21. INDUCTION LOOPS SHALL BE INSTALLED IN THE CENTER OF EACH LANE, AS SHOWN ON THE PLANS.
22. LUMINAIRE WIRING SHALL BE PER WSDOT STANDARD PLAN J-28.70.
23. FOUNDATIONS SHALL BE REMOVED IN ACCORDANCE WITH SECTION 2-02.3(1) OF THE STANDARD SPECIFICATIONS.
24. COIL AND RACK 100FT OF EACH NEW FIBER OPTIC CABLE IN EACH FIBER OPTIC VAULT.
25. CONTRACTOR SHALL MAINTAIN EXISTING TRAFFIC SIGNAL, ILLUMINATION, AND INTELLIGENT TRANSPORTATION SYSTEMS (ITS) AT ALL TIMES DURING CONSTRUCTION, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
26. REFER TO WSDOT STANDARD PLAN J-75.30 AND DETAILS ON SHEET TS05 FOR ADDITIONAL TRAFFIC SIGNAL DETAILS.
27. ALL SIGNAL SYSTEM COORDINATION WITH CITY OF KIRKLAND TRAFFIC SHALL BE DONE THROUGH THE CITY OF KIRKLAND CIP REPRESENTATIVE.
28. THE CONTRACTOR SHALL COORDINATE SCHEDULING WITH THE CITY'S PROJECT ENGINEER FOR THE INSTALLATION OF THE FIBER OPTIC SYSTEM (TO BE INSTALLED UNDER SEPARATE CONTRACT).

CONSTRUCTION NOTES

1. INSTALL TYPE III SIGNAL STANDARD WITH 35FT MAST ARM AND FOUNDATION PER WSDOT STANDARD PLAN J-26.10. INSTALL THREE VEHICLE SIGNAL HEADS, ONE EVP DETECTOR, ONE PTZ CAMERA, ONE R10-12A REGULATORY SIGN, AND ONE STREET NAME SIGN ON MAST ARM. INSTALL ONE TERMINAL CABINET AND TWO PEDESTRIAN SIGNAL HEADS ON POLE. INSTALL 133W LEOTEK LED LUMINAIRE FIXTURE (GCM3-60J-MV-30K-3R-GY-180-PCR7-WL-SC) AT 35FT MOUNTING HEIGHT ON A 12FT LUMINAIRE ARM. INSTALL ONE 360 VIDEO DETECTION CAMERA AND ONE APPROACH VIDEO DETECTION CAMERA ON LUMINAIRE ARM. TOP OF FOUNDATION SHALL BE FLUSH WITH FINISHED SIDEWALK.
2. INSTALL TYPE III SIGNAL STANDARD WITH 30FT MAST ARM AND FOUNDATION PER WSDOT STANDARD PLAN J-26.10. INSTALL TWO VEHICLE SIGNAL HEADS, ONE TENON, ONE EVP DETECTOR, ONE R10-12 REGULATORY SIGN, AND ONE STREET NAME SIGN ON MAST ARM. INSTALL ONE TERMINAL CABINET AND TWO PEDESTRIAN SIGNAL HEADS ON POLE. INSTALL 133W LEOTEK LED LUMINAIRE FIXTURE (GCM3-60J-MV-30K-3R-GY-180-PCR7-WL-SC) AT 35FT MOUNTING HEIGHT ON A 12FT LUMINAIRE ARM. TOP OF FOUNDATION SHALL BE FLUSH WITH FINISHED PEDESTRIAN CURB.
3. INSTALL TYPE III SIGNAL STANDARD WITH 40FT MAST ARM AND FOUNDATION PER WSDOT STANDARD PLAN J-26.10. INSTALL THREE VEHICLE SIGNAL HEADS, ONE EVP DETECTOR, ONE R10-12A REGULATORY SIGN, AND ONE STREET NAME SIGN ON MAST ARM. INSTALL ONE TERMINAL CABINET AND TWO PEDESTRIAN SIGNAL HEADS ON POLE. INSTALL 133W LEOTEK LED LUMINAIRE FIXTURE (GCM3-60J-MV-30K-3R-GY-180-PCR7-WL-SC) AT 35FT MOUNTING HEIGHT ON A 12FT LUMINAIRE ARM. INSTALL ONE APPROACH VIDEO DETECTION CAMERA ON LUMINAIRE ARM. TOP OF FOUNDATION SHALL BE FLUSH WITH FINISHED PEDESTRIAN CURB.
4. INSTALL TYPE III SIGNAL STANDARD WITH 40FT MAST ARM AND FOUNDATION PER WSDOT STANDARD PLAN J-26.10. INSTALL TWO VEHICLE SIGNAL HEADS, ONE TENON, ONE EVP DETECTOR, ONE R10-12 REGULATORY SIGN, AND ONE STREET NAME SIGN ON MAST ARM. INSTALL ONE TERMINAL CABINET AND TWO PEDESTRIAN SIGNAL HEADS ON POLE. INSTALL 133W LEOTEK LED LUMINAIRE FIXTURE (GCM3-60J-MV-30K-3R-GY-180-PCR7-WL-SC) AT 35FT MOUNTING HEIGHT ON A 12FT LUMINAIRE ARM. TOP OF FOUNDATION SHALL BE FLUSH WITH FINISHED PEDESTRIAN CURB.
5. INSTALL TYPE PPB POST WITH BREAKAWAY BASE AND FLAT FOUNDATION PER WSDOT STANDARD PLANS J-20.15 AND J-20.26 AND CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.12. INSTALL ONE APS PEDESTRIAN PUSHBUTTON ASSEMBLY ON POST.
6. INSTALL TYPE PPB POST WITH BREAKAWAY BASE AND FLAT FOUNDATION PER WSDOT STANDARD PLANS J-20.15 AND J-20.26 AND CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.12. INSTALL ONE APS PEDESTRIAN PUSHBUTTON ASSEMBLY ON POST.
7. INSTALL TYPE PPB POST WITH BREAKAWAY BASE AND CURB FOUNDATION PER WSDOT STANDARD PLANS J-20.15 AND J-20.26 AND CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.12. INSTALL ONE APS PEDESTRIAN PUSHBUTTON ASSEMBLY ON POST.
8. INSTALL TYPE PPB POST WITH BREAKAWAY BASE AND CURB FOUNDATION PER WSDOT STANDARD PLANS J-20.15 AND J-20.26 AND CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.12. INSTALL ONE APS PEDESTRIAN PUSHBUTTON ASSEMBLY ON POST.
9. INSTALL TYPE PPB POST WITH BREAKAWAY BASE AND CURB FOUNDATION PER WSDOT STANDARD PLANS J-20.15 AND J-20.26 AND CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.12. INSTALL ONE APS PEDESTRIAN PUSHBUTTON ASSEMBLY ON POST.
10. INSTALL TYPE PPB POST WITH BREAKAWAY BASE AND CURB FOUNDATION PER WSDOT STANDARD PLANS J-20.15 AND J-20.26 AND CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.12. INSTALL ONE APS PEDESTRIAN PUSHBUTTON ASSEMBLY ON POST.
11. INSTALL TYPE PPB POST WITH BREAKAWAY BASE AND CURB FOUNDATION PER WSDOT STANDARD PLANS J-20.15 AND J-20.26 AND CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.12. INSTALL ONE APS PEDESTRIAN PUSHBUTTON ASSEMBLY ON POST.
12. INSTALL TYPE PPB POST WITH BREAKAWAY BASE AND CURB FOUNDATION PER WSDOT STANDARD PLANS J-20.15 AND J-20.26 AND CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.12. INSTALL ONE APS PEDESTRIAN PUSHBUTTON ASSEMBLY ON POST.
13. INSTALL SIGNAL & SERVICE CABINET FOUNDATION PER CITY OF KIRKLAND PRE-APPROVED PLAN CK-TS.04. INSTALL FULLY EQUIPPED TYPE STRETCHED P-PLUS CABINET, TRAFFIC SIGNAL CONTROLLER, AND ALL ASSOCIATED EQUIPMENT AND CONNECT ALL FIELD WIRING. COORDINATE DELIVERY, TESTING, AND INSTALLATION WITH THE CITY OF KIRKLAND INSPECTOR. COORDINATE CABINET ORIENTATION WITH THE CITY OF KIRKLAND PROJECT INSPECTOR PRIOR TO CONSTRUCTION. INSTALL ELECTRICAL SERVICE CABINET (SKYLINE #62460-R1) PER CITY OF KIRKLAND PRE-APPROVED PLANS CK-TS.05A, CK-TS.05B, AND CK-TS.05C. CONTRACTOR SHALL VERIFY WITH PUGET SOUND ENERGY THAT THE SERVICE CABINET IS COMPLIANT PRIOR TO INSTALLATION. PHOTOELECTRIC CONTROL SHALL BE INSTALLED ON TOP OF SERVICE CABINET. TOP OF FOUNDATION SHALL BE FLUSH WITH FINISHED SIDEWALK.
14. PSE TO REMOVE EXISTING TREE.
15. INSTALL TYPE 1 JUNCTION BOX.
16. INSTALL TYPE 2 JUNCTION BOX.
17. INSTALL TYPE 8 JUNCTION BOX.
18. INSTALL FIBER OPTIC VAULT.
19. INSTALL 2" CONDUIT RISER, WEATHERHEAD, AND MOUNTING STRAPS ON POLE PER WSDOT STANDARD PLAN J-15.10. CITY OF KIRKLAND TO SPLICE EXISTING CITY OF KIRKLAND AERIAL FIBER OPTIC CABLE TO NEW 12CT SMFO CABLE AND ROUTE NEW 12CT SMFO CABLE TO THE TRAFFIC SIGNAL CONTROLLER CABINET. COORDINATE ALL WORK WITH PSE AND THE CITY OF KIRKLAND IT DEPARTMENT.
20. REMOVE EXISTING POLE, FOUNDATION, CONDUIT UPSWEEPS, AND ASSOCIATED RECTANGULAR RAPID-FLASHING BEACON SYSTEM. BACKFILL AND COMPACT VOID TO MATCH SURROUNDING AREA. SALVAGE AND DELIVER EQUIPMENT, INCLUDING EXISTING POLES, BASES, CONTROLLER CABINETS, PEDESTRIAN PUSHBUTTONS, SIGNS, LIGHT BARS, AND SOLAR PANELS, TO THE CITY OF KIRKLAND IN GOOD WORKING ORDER FOR RE-USE.
21. PUGET SOUND ENERGY AND/OR COMMUNICATIONS PROVIDER(S) TO RELOCATE EXISTING UTILITY POLE AND/OR RAISE EXISTING OVERHEAD LINES. OVERHEAD POWER LINES SHALL MAINTAIN A MINIMUM OF 10FT CIRCUMFERENTIAL CLEARANCE TO TRAFFIC SIGNAL/ILLUMINATION EQUIPMENT. OVERHEAD COMMUNICATIONS LINES SHALL NOT CONFLICT WITH TRAFFIC SIGNAL/ILLUMINATION EQUIPMENT AND SHALL NOT OBSTRUCT TRAFFIC SIGNAL INDICATIONS.
22. PSE TO REPLACE EXISTING LUMINAIRE FIXTURE WITH 129W GE LED LUMINAIRE FIXTURE (ERL1-0-16-C5-27-A-GRAY-351) ON EXISTING LUMINAIRE ARM.
23. PSE TO REPLACE EXISTING LUMINAIRE FIXTURE WITH 129W GE LED LUMINAIRE FIXTURE (ERL1-0-16-C5-30-A-GRAY-106) ON EXISTING LUMINAIRE ARM.
24. PSE TO REPLACE EXISTING LUMINAIRE FIXTURE WITH 212W GE LED LUMINAIRE FIXTURE (ERL2-0-27-C5-30-A-GRAY-004) ON EXISTING LUMINAIRE ARM.
25. PSE TO INSTALL POLE-MOUNTED TRANSFORMER AND ASSOCIATED CONDUIT RISER AND CONDUCTORS FOR NEW SERVICE CONNECTION. CONTRACTOR SHALL PROVIDE CONDUIT TRENCHES AND WORK PIT. COORDINATE ALL WORK WITH PSE.
26. REMOVE EXISTING POLE, ENCLOSURE, AND ASSOCIATED UN-USED JUNCTION BOXES, CONDUITS, AND WIRING. BACKFILL AND COMPACT VOID TO MATCH SURROUNDING AREA. PSE TO DISCONNECT AND REMOVE EXISTING SERVICE CONNECTION.
27. PSE TO INSTALL SECONDARY HANDHOLE AND CONDUCTORS. COORDINATE ALL WORK WITH PSE.
28. CITY OF KIRKLAND TO TRIM EXISTING TREE.
29. REMOVE EXISTING TREE. SEE DEMOLITION PLAN.

LEGEND

DESCRIPTION	EXISTING SYMBOL	PROPOSED SYMBOL
RIGHT-OF-WAY		
CITY OF KIRKLAND-CITY OF REDMOND BOUNDARY		
PARCEL LINE		
TEMPORARY CONSTRUCTION EASEMENT		
CONDUIT		
CONSTRUCTION NOTE		
SIGNAL POLE CONSTRUCTION NOTE		
WIRE NOTE		
SIGN NOTE		
SIGNAL POLE AND MAST ARM		
TYPE PS/TYPE 1 SIGNAL STANDARD		
PEDESTRIAN PUSHBUTTON POST		
VEHICLE SIGNAL HEAD		
VEHICLE SIGNAL TURN HEAD		
TENON		
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSHBUTTON		
EVP DETECTOR		
MAST ARM SIGN		
TRAFFIC SIGNAL CONTROLLER CABINET		
ELECTRICAL SERVICE CABINET		
JUNCTION BOX, TYPE 1		
JUNCTION BOX, TYPE 2		
JUNCTION BOX, TYPE 8		
FIBER OPTIC VAULT		
PSE HANDHOLE		
VIDEO DETECTION CAMERA		
PAN-TILT-ZOOM (PTZ) CAMERA		
VIDEO DETECTION ZONE		
LUMINAIRE		

		DATE	REVISION	BY	DATE
DESIGNED BY	CBS	07/11/2025			
DRAWN BY	CBS	07/11/2025			
REVIEWED BY	JC	07/11/2025			



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DEPARTMENT OF PUBLIC WORKS

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KIRKLAND, WASHINGTON 98034 (FAX) 425 825-8434



NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND JULY 2019

TRAFFIC SIGNAL NOTES AND LEGEND

TS01

SHEET
20
OF
24
SHEETS



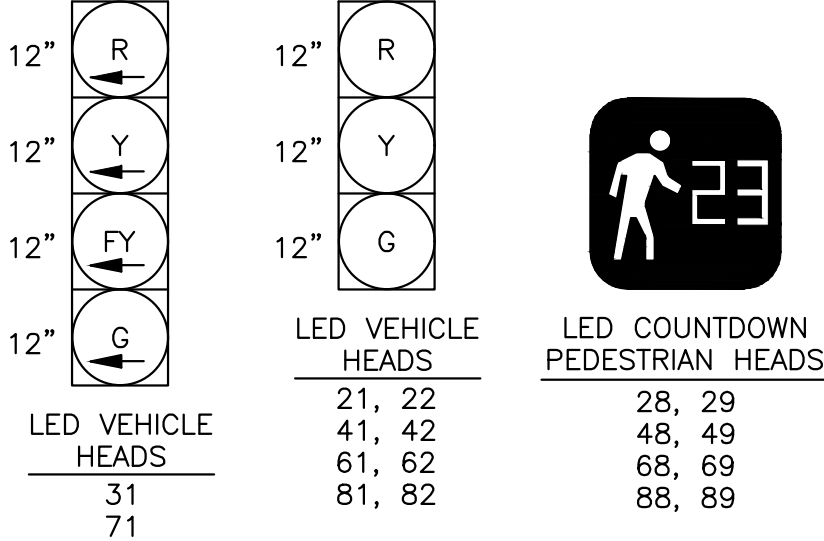
Know what's below.
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SEC. 03 & 04, T. 25 N., R. 05 E., W.M.; SEC. 33 & 34, T. 26N., R. 05 E., W.M.

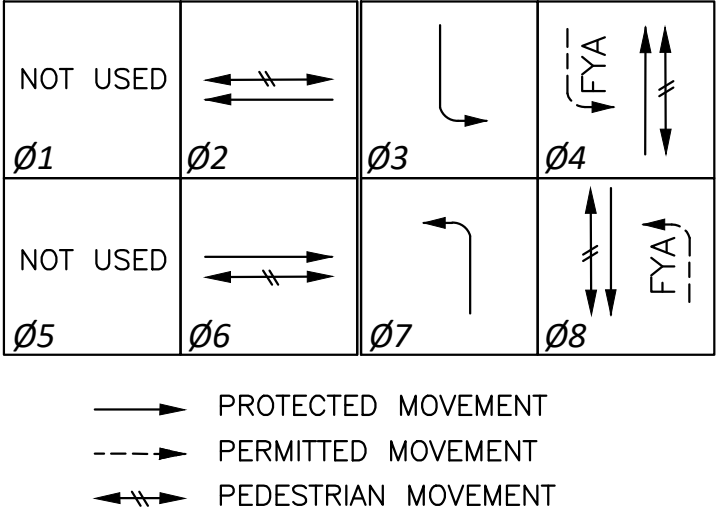
NOTES

1. SEE SHEET GN01 FOR GENERAL NOTES.
2. SEE SHEET TS01 FOR TRAFFIC SIGNAL GENERAL NOTES, CONSTRUCTION NOTES, AND LEGEND.
3. SEE SHEET TS03 FOR TRAFFIC SIGNAL FIELD WIRING TERMINATIONS.
4. SEE SHEET TS04 FOR TRAFFIC SIGNAL POLE CHART.

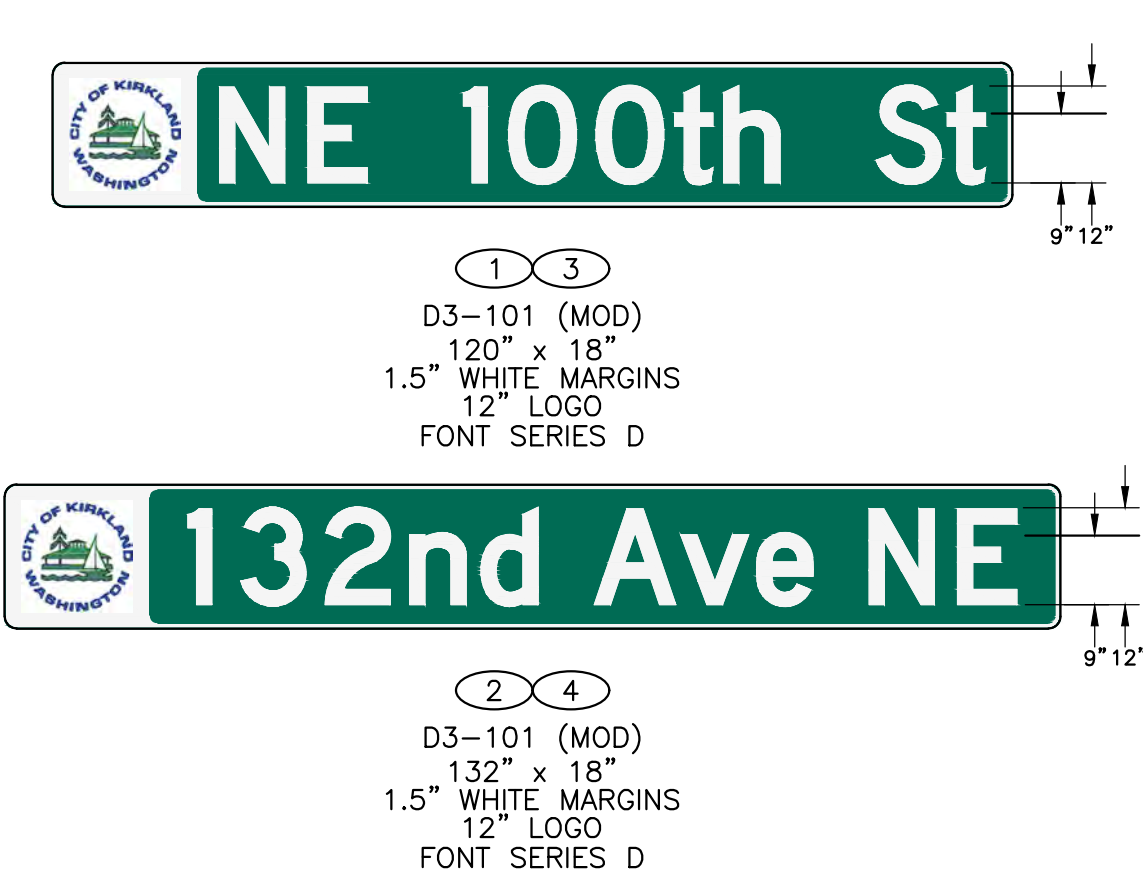
SIGNAL HEAD ASSIGNMENT



SIGNAL PHASING

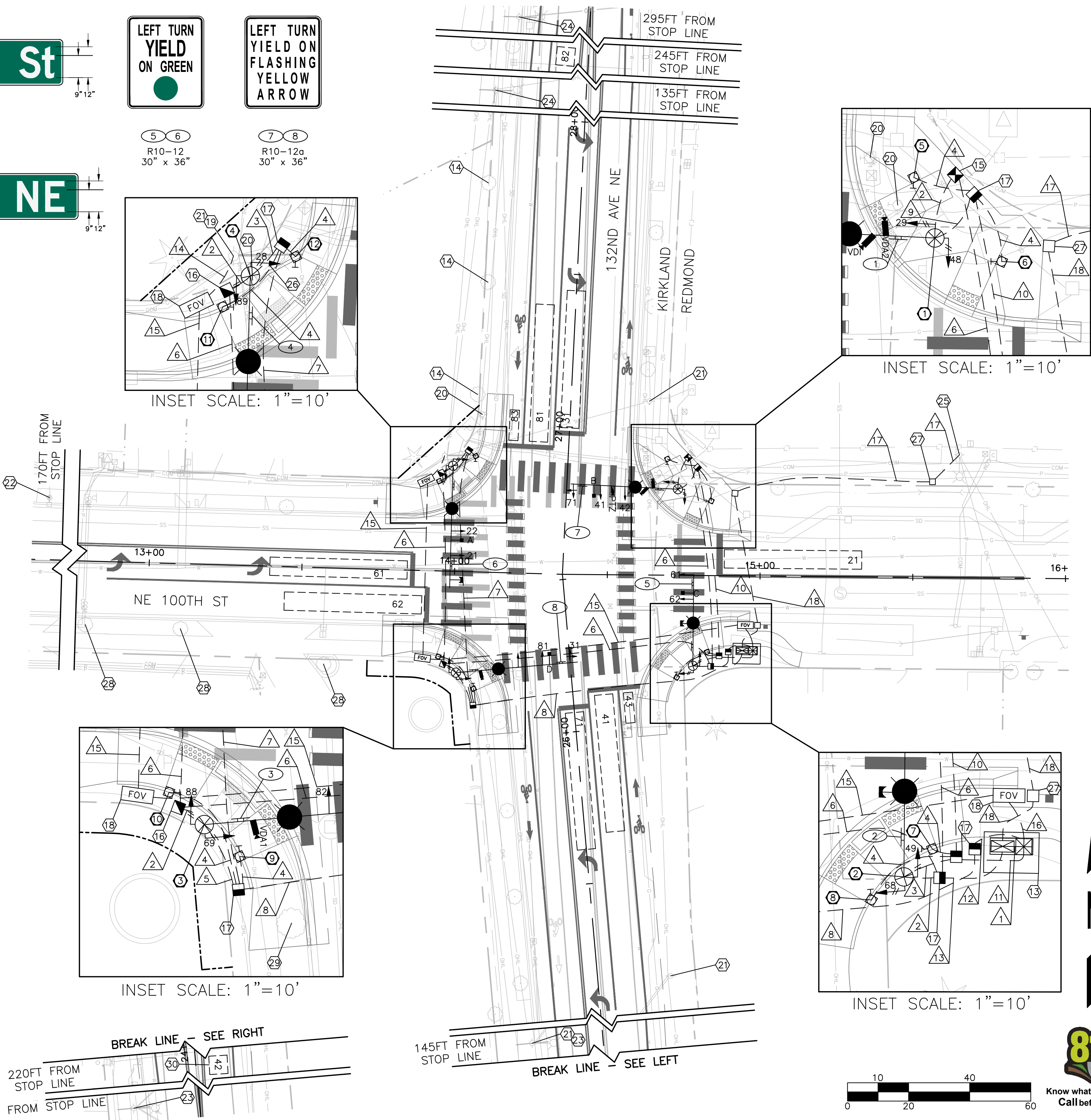


SIGN LEGEND



WIRING SCHEDULE													
NO #	RACEWAY CONDUIT SIZE*	PPB 2C(SH)	EVP DETECT 3C(SH)	VIDEO DETECT CAT6	PTZ CAT6	PED HEAD 5C	VEH HEAD 5C	VEH HEAD 7C	FIBER 12 SMFO	ILLUM #8	SIGNAL POWER #6	PSE SERVICE #3/0	CONDUIT FILL %
1	2" SCH40										2		7.38
2	2" SCH40									2			5.65
3	3" SCH40		1			2	1	1					9.93
	2" SCH40	SPARE (EMPTY WITH PULL TAPE)											
4	1" SCH40	1											18.28
5	3" SCH40		1	1		2	1	1					11.71
	2" SCH40	SPARE (EMPTY WITH PULL TAPE)											
6	2" SCH80									2			6.47
	2" SCH80	SPARE (EMPTY WITH PULL TAPE)											
7	3" SCH80	2	1										4.84
	3" SCH80					2	1	1					10.12
	2" SCH80	SPARE (EMPTY WITH PULL TAPE)											
8	3" SCH80	4	2	1									10.72
	3" SCH80					4	2	2					19.28
	2" SCH80	SPARE (EMPTY WITH PULL TAPE)											
9	3" SCH40		1	2	1	2	1	1					15.00
	2" SCH40	SPARE (EMPTY WITH PULL TAPE)											
10	3" SCH80	2	1	2	1								9.70
	3" SCH80					2	1	1					10.12
	2" SCH80	SPARE (EMPTY WITH PULL TAPE)											
11	3" SCH40	4	2	2	1								12.04
	3" SCH40					4	2	2					17.09
	2" SCH40	SPARE (EMPTY WITH PULL TAPE)											
12	3" SCH40	4	2	1									9.51
	3" SCH40					4	2	2					17.09
	2" SCH40	SPARE (EMPTY WITH PULL TAPE)											
13	2" SCH40									2			5.65
	2" SCH40	SPARE (EMPTY WITH PULL TAPE)											
14	2" SCH40								1***				5.90
15	2" SCH80								1***				6.75
	2" SCH80	SPARE (EMPTY WITH PULL TAPE)											
16	2" SCH40								1***				5.90
	2" SCH40	SPARE (EMPTY WITH PULL TAPE)											
17	3" SCH40											3**	13.29
18	3" SCH80											3**	14.99

* ALL CONDUIT SHALL CONTAIN A GROUND WIRE EQUAL IN SIZE TO THE LARGEST CONDUCTOR (NO. 8 MINIMUM), UNLESS OTHERWISE NOTED.
** INSTALLED BY PSE.
*** INSTALLED BY CITY OF KIRKLAND UNDER SEPARATE CONTRACT.



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DESIGNED BY		DATE	REVISION	BY	DATE
DRAWN BY		CBS	07/11/2025		
REVIEWED BY		JC	07/11/2025		



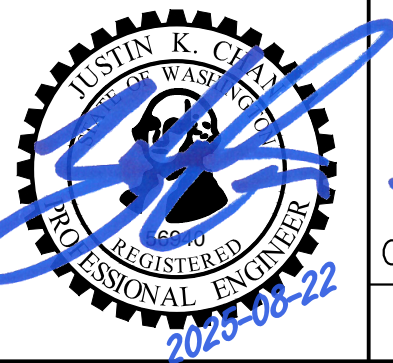
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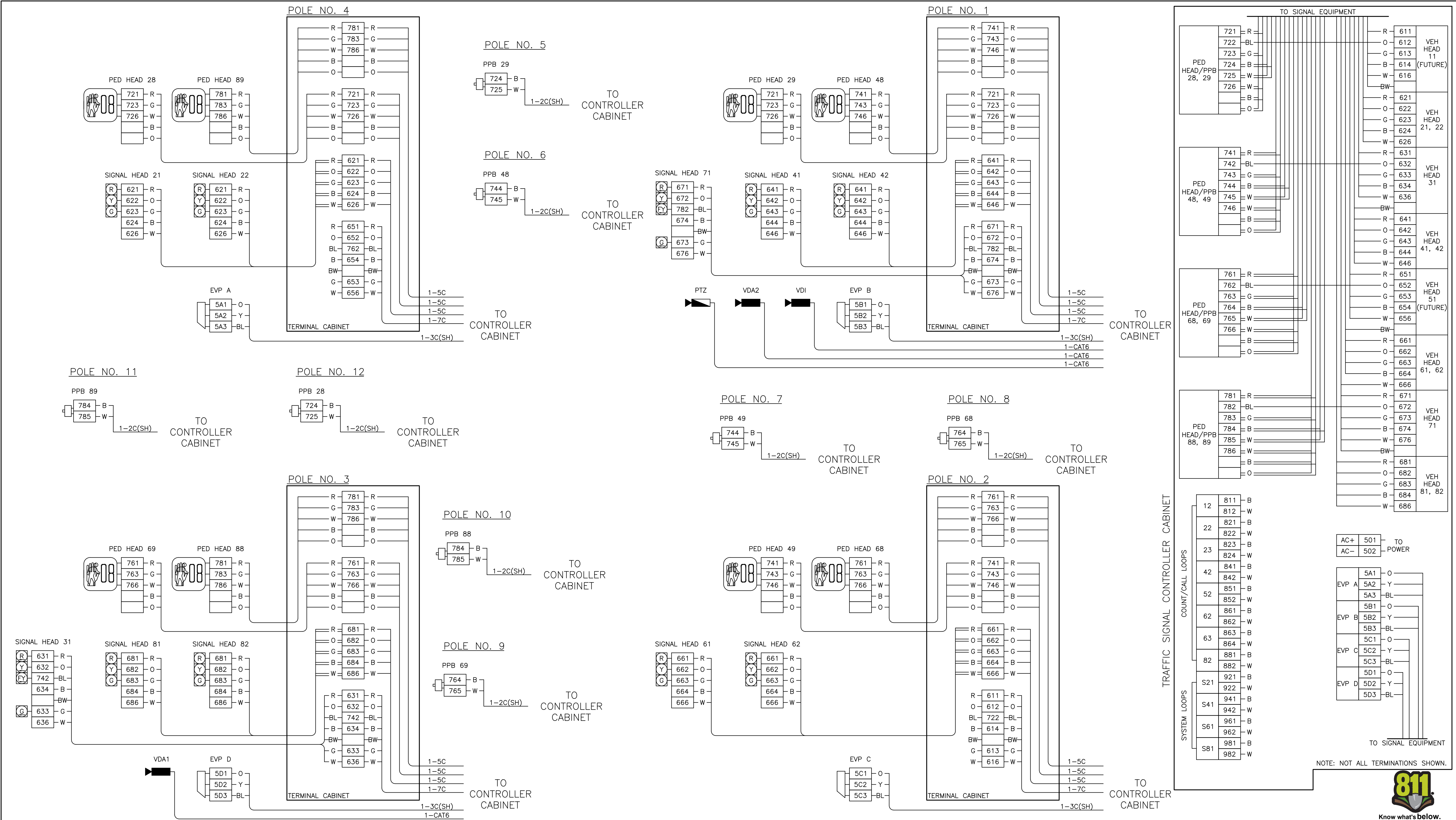
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JULY 2025

TRAFFIC SIGNAL PLAN

TS02

SHEET
21
OF
24
SHEETS

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DESIGNED BY	CBS	07/11/2025			
DRAWN BY	CBS	07/11/2025			
REVIEWED BY	JC	07/11/2025			



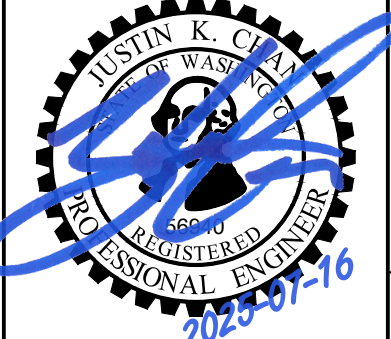
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NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND JULY 2025

TRAFFIC SIGNAL FIELD WIRE TERMINATIONS

TS03

SHEET 22 OF 24 SHEETS

SIGNAL STANDARD NOTES:

1. VARIABLE/DYNAMIC MESSAGE SIGNS MAY NOT BE INSTALLED ON THESE POLES. BLANK OUT SIGNS MAY BE INSTALLED ON MAST ARM OR VERTICAL POLE.
2. POLE ORIENTATION ANGLE IS MEASURED BETWEEN THE STATION OFFSET LINE AND THE CENTER OF THE BASEPLATE FRONT. THE POLE HAND HOLE IS ALWAYS AT THE BACK OF THE BASEPLATE (180° ON THE BASEPLATE).
3. B# POSITIONS HAVE TENONS INSTALLED AT POSITIONS SHOWN IN CHART UNLESS TYPE N MOUNT REQUIRED.
4. B# POSITIONS REQUIRING TYPE N MOUNTS AND ALL OTHER MAST ARM WIRED DEVICES SHALL HAVE MAST ARM FIELD DRILLED AND PLASTIC SPLIT BUSHING INSTALLED FOR CABLE ENTRANCE.
5. S#, SN, AND SP POSITIONS SHALL HAVE SIGNS FIELD INSTALLED. SIGN SIZES SHALL NOT EXCEED THE MAXIMUM VALUES LISTED FOR EACH POSITION.
6. SIGN SN SHALL BE 1' - 0" MIN. TO 2' - 6" MAX. FROM POLE CENTERLINE TO SIGN EDGE.
7. SIGN SP SHALL BE A MINIMUM OF 2' - 0" FROM THE EDGE OF THE SIGN TO THE FACE OF CURB OR EDGE OF SHOULDER.
8. FACE OF POLE SHALL BE A MINIMUM OF THE REQUIRED DEFLECTION DISTANCE SHOWN IN DESIGN MANUAL EXHIBIT 1610-3 FROM THE APPLICABLE BARRIER - OR 2' - 0" FROM FACE OF CURB, EDGE OF SHOULDER, OR BACK OF BARRIER - WHICHEVER IS LONGER.
9. PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED AT 3' - 6" FROM SURFACE OF SIDEWALK TO CENTER OF CIRCULAR PUSHBUTTON (NOT THE HOUSING)
10. WHERE TYPE E PEDESTRAIN SIGNAL DISPLAY MOUNTS ARE REQUIRED, AND AN 8-SIDED POLE IS PROVIDED, TYPE A OR B MOUNTS SHALL BE USED INSTEAD.
11. SEE STANDARD PLAN J-20.01 FOR REQUIRED POLE ID TAGS.

MAST ARM EQUIPMENT

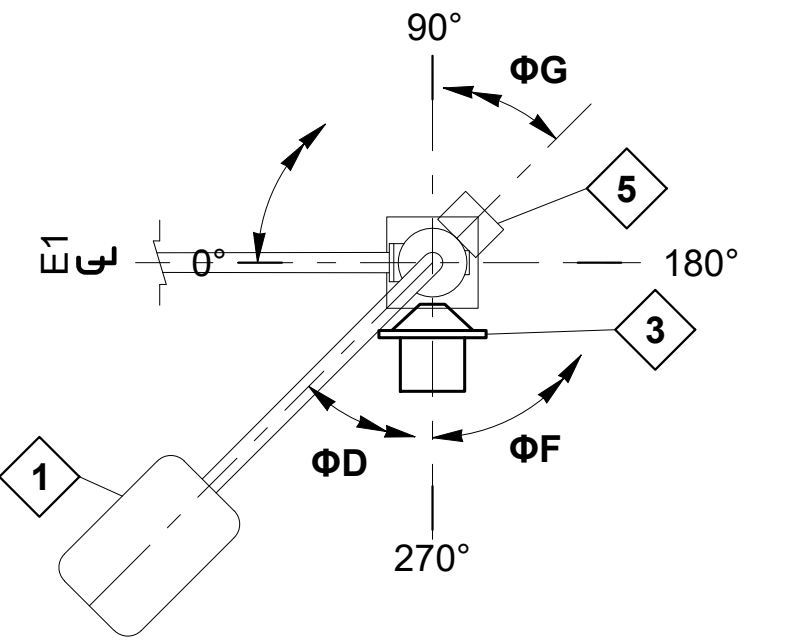
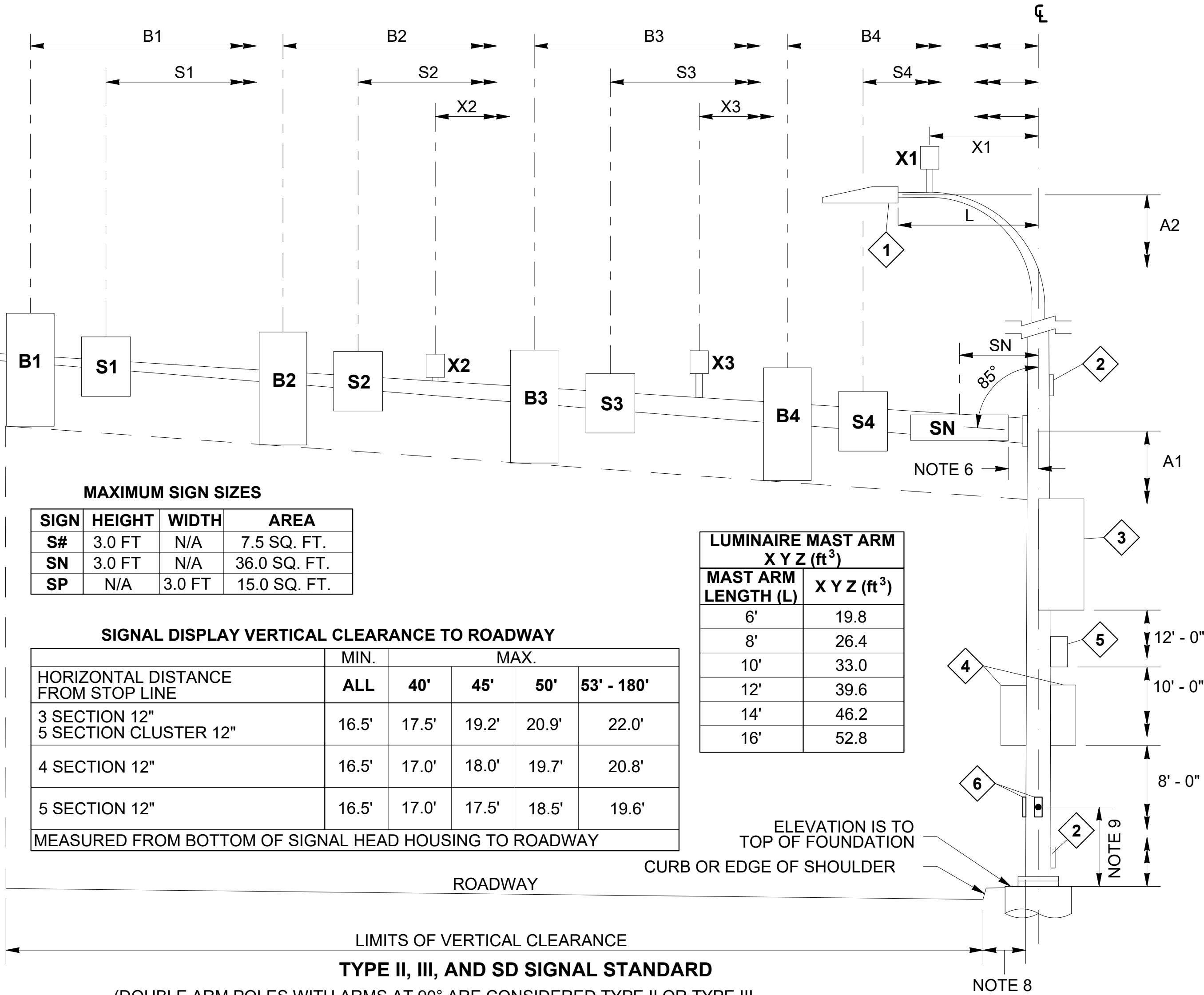
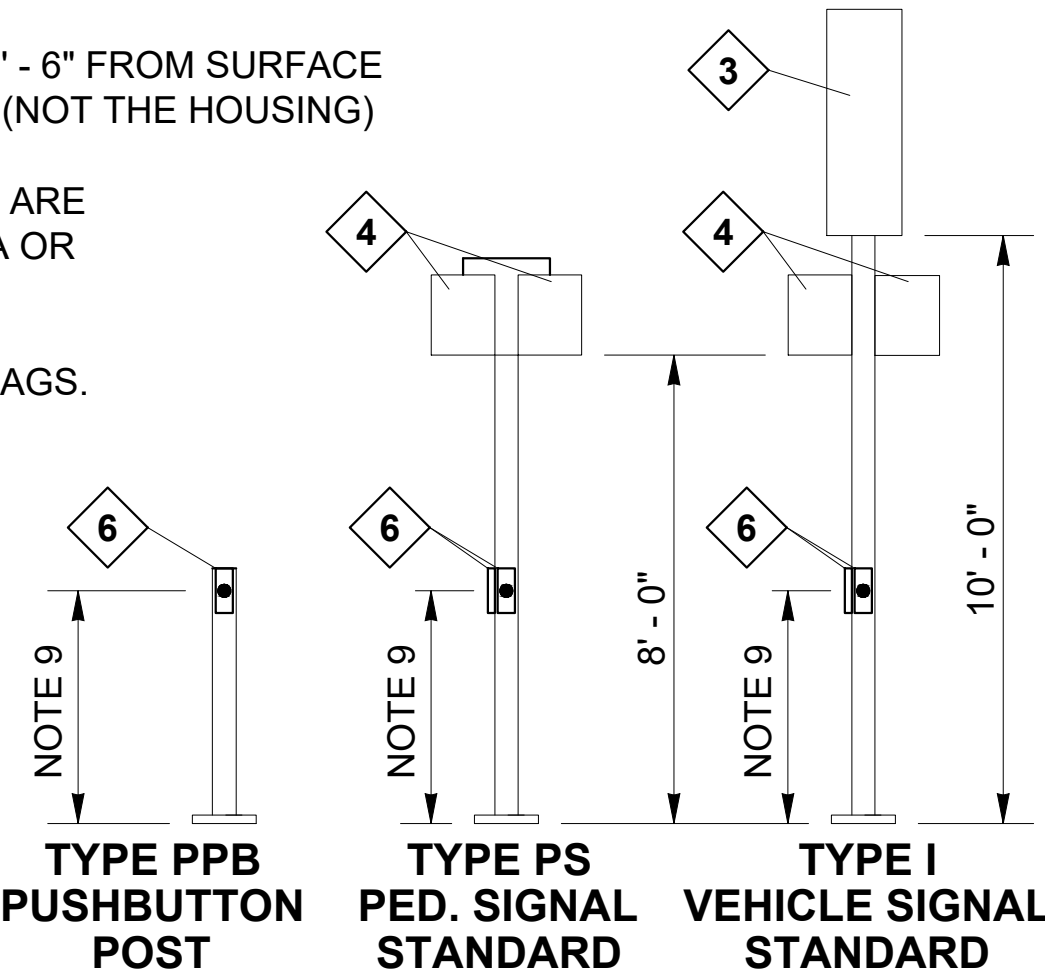
- B# VEHICLE DISPLAY
- S# MAST ARM SIGN
- SN MAST ARM STREET NAME SIGN
- X# PRE-EMPT, VIDEO, OR RADAR DETECTOR

NON-WINDLOAD DEVICES

LOC.	DEVICE	OFFSET POLE NO.			
		1	2	3	4
X1	VID. DET.	8.0*,10.0*	-	8.0*	-
X2	EVP DET.	27.5	24.0	30.5	24.5
X3	PTZ CAMERA	21.5	-	-	-

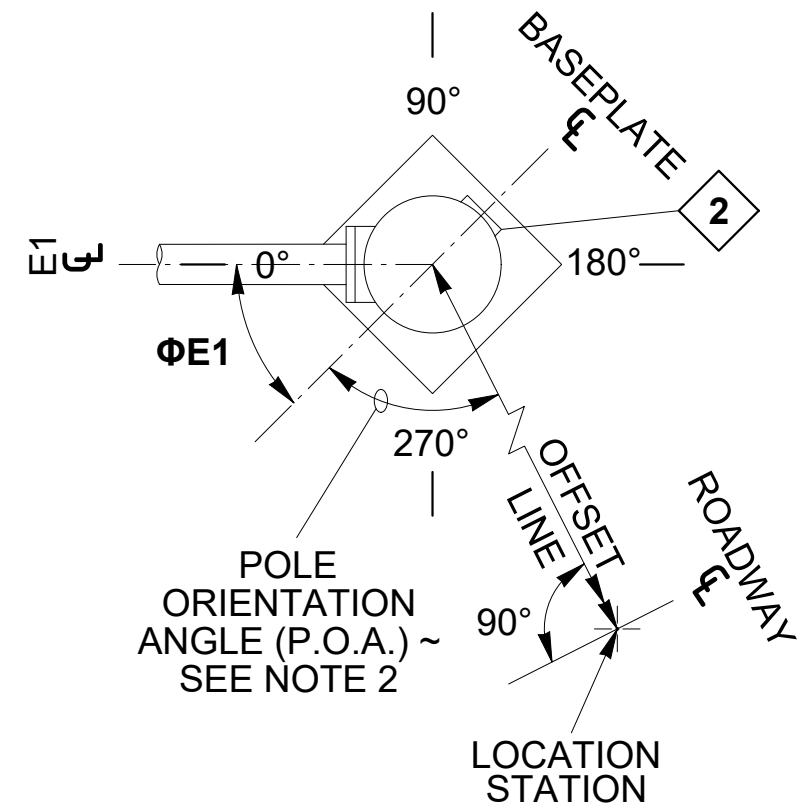
*ON LUMINAIRE ARM

STANDARD TYPE	STANDARD PLAN REFERENCES		
	POLE	FOUNDATION STANDARD	ELECTRICAL CURB
PPB	J-20.15	J-20.15	J-20.15
PS	J-20.16	J-21.10	J-20.20
I	J-21.15	J-21.10	J-21.20
II, III, SD	N/A	J-26.10, J-26.15	N/A



POLE MOUNTED EQUIPMENT ORIENTATION DETAIL

#	ITEM
1	LUMINAIRE
2	HAND HOLE
3	VEHICLE DISPLAY OR SIGN (SP)
4	PEDESTRIAN DISPLAY (FIELD ORIENT AND ALIGN WITH PROPOSED CROSSWALK)
5	TERMINAL CABINET
6	APS PPB-M (FIELD ORIENT AND ALIGN WITH PROPOSED CROSSWALK)



POLE ORIENTATION AND E1 ATTACHMENT POINT DETAIL

SIGNAL STANDARD DETAIL CHART																																								
STD. No.	CENTERLINE STATIONING	FIELD LOCATION						POLE TYPE	MOUNTING HEIGHT (FT)	SIGNAL MAST ARM DATA																		LUMINAIRE ARM (FT)	CALCULATED POLE XYZ(FT³)	POLE ATTACHMENT POINT ϕ ANGLES (deg.)						FOUNDATION DESIGN XYZ(FT³)	SOIL BEARING PRESSURE (PSF)#	FOUNDATION DEPTH (FT) ***		REMARKS
										OFFSET (FT) (Z) (POLE ϵ TO ATTACHMENT POINT)										WINDLOAD AREAS (FT²) (X)(Y)																		ALTERNATE 1	ALTERNATE 2	
		STATION	OFFSET (FT)	LT.	RT.	ELEV. (FT)	P.O.A			A1	A2	B1	S1	B2	S2	B3	S3	B4	S4	SN	B1	S1	B2	S2	B3	S3	B4	S4	SN	C	**	D	E1	E2	F	G	3' RD.	3' RD.		
1	132ND AVE NE	26+81.40	36.38		X	*	315	III	19.0	35.0	34.5	31.5	25.5		17.5			6.0	11.6	7.5	9.2				15.0	12	1161.7	0	45			180	1350	2500	7	7				
2	NE 100TH ST	14+78.27	29.61		X	*	315	III	19.0	35.0	30.0	27.0	22.0		14.0(F)			6.5	11.6(F)	7.5	9.2		9.2(F)			16.5	12	1028.6	0	45			180	1350	2500	7	7			
3	132ND AVE NE	26+22.65	37.56	X		*	225	III	18.0	35.0	37.5	34.5	28.5		20.5			6.0	11.6	7.5	9.2		9.2			15.0	12	1274.2	0	135			270	1500	2500	8	11			
4	NE 100TH ST	13+98.53	34.51	X		*	225	III	18.0	35.0	37.5(F)	32.5	29.5		21.5			6.5	11.6(F)	7.5	9.2		9.2			16.5	12	1294.8	0	135			270	1500	2500	8	11			
5	132ND AVE NE	26+91.13	32.46		X	*		PPB																																
6	NE 100TH ST	14+83.83	24.43	X		*		PPB																																
7	NE 100TH ST	14+82.89	25.01		X	*		PPB																																
8	132ND AVE NE	26+14.83	34.32		X	*		PPB																																
9	132ND AVE NE	26+16.92	32.23	X		*		PPB																																
10	NE 100TH ST	13+95.41	28.04		X	*		PPB																																
11	NE 100TH ST	13+94.18	29.35	X		*		PPB																																
12	132ND AVE NE	26+88.96	30.25	X		*		PPB																																

* ELEVATION IS TO TOP OF FOUNDATION. FIELD VERIFY ELEVATION PRIOR TO ORDERING SIGNAL STANDARDS. IF NO ELEVATION SHOWN, ELEVATION SHALL MATCH TOP OF SIDEWALK, CURB RAMP, CURB, OR ROAD SHOULDER AS APPLICABLE.

** CALCULATED POLE XYZ (FT³) IS THE SUM OF THE TOTAL XYZ (FT³) FOR THE SIGNAL MAST ARM AND THE XYZ (FT³) FOR THE LUMINAIRE ARM (IF PRESENT).

*** FOUNDATION DEPTH IS BASED ON A LATERAL BEARING PRESSURE OF AT LEAST 2,500 PSF (SEE # BELOW) AND A GROUND SLOPE OF 3H:1V OR FLATTER. CONTRACTOR SHALL VERIFY GROUND SLOPE PRIOR TO EXCAVATION.

PER GEOTECHNICAL ENGINEERING REPORT PREPARED BY HWA GEOSCIENCES INC DATED JANUARY 17, 2025.

(F) FUTURE SIGNAL HEAD/LOADING.

DESIGNED BY		DATE	REVISION		BY	DATE
CBS		07/11/2025				
DRAWN BY		CBS				
REVIEWED BY		JC				



CITY OF KIRKLAND
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NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND
JULY 2025
TRAFFIC SIGNAL POLE CHART

TS04
SHEET 23 OF 24 SHEETS

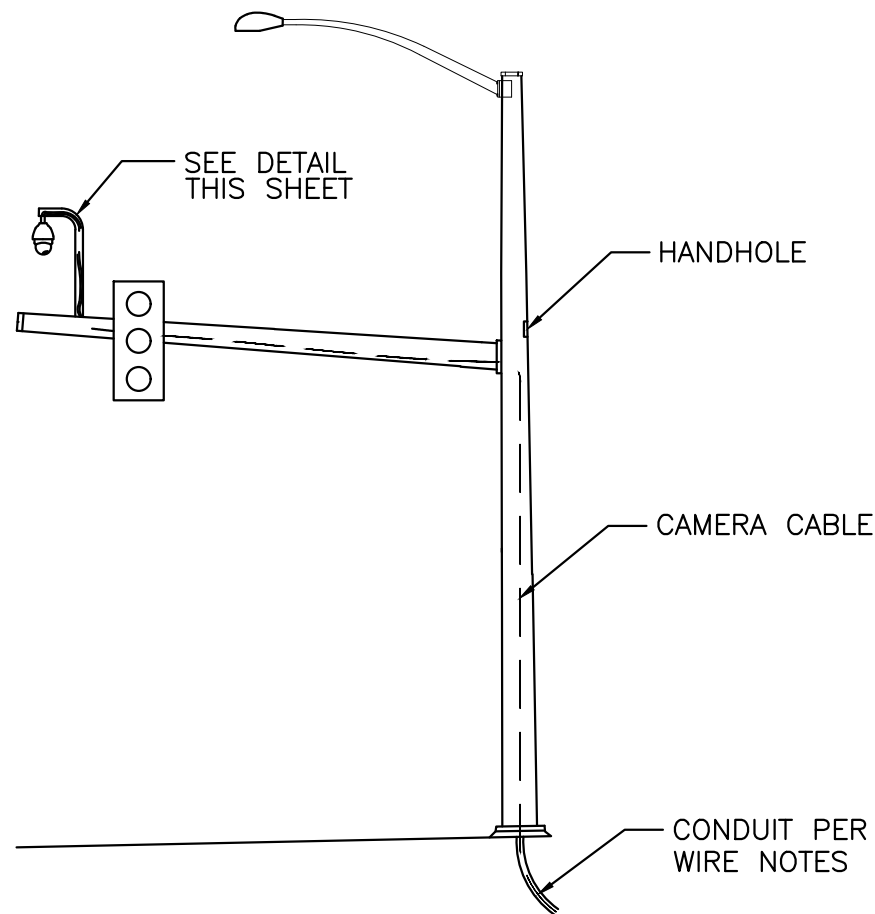
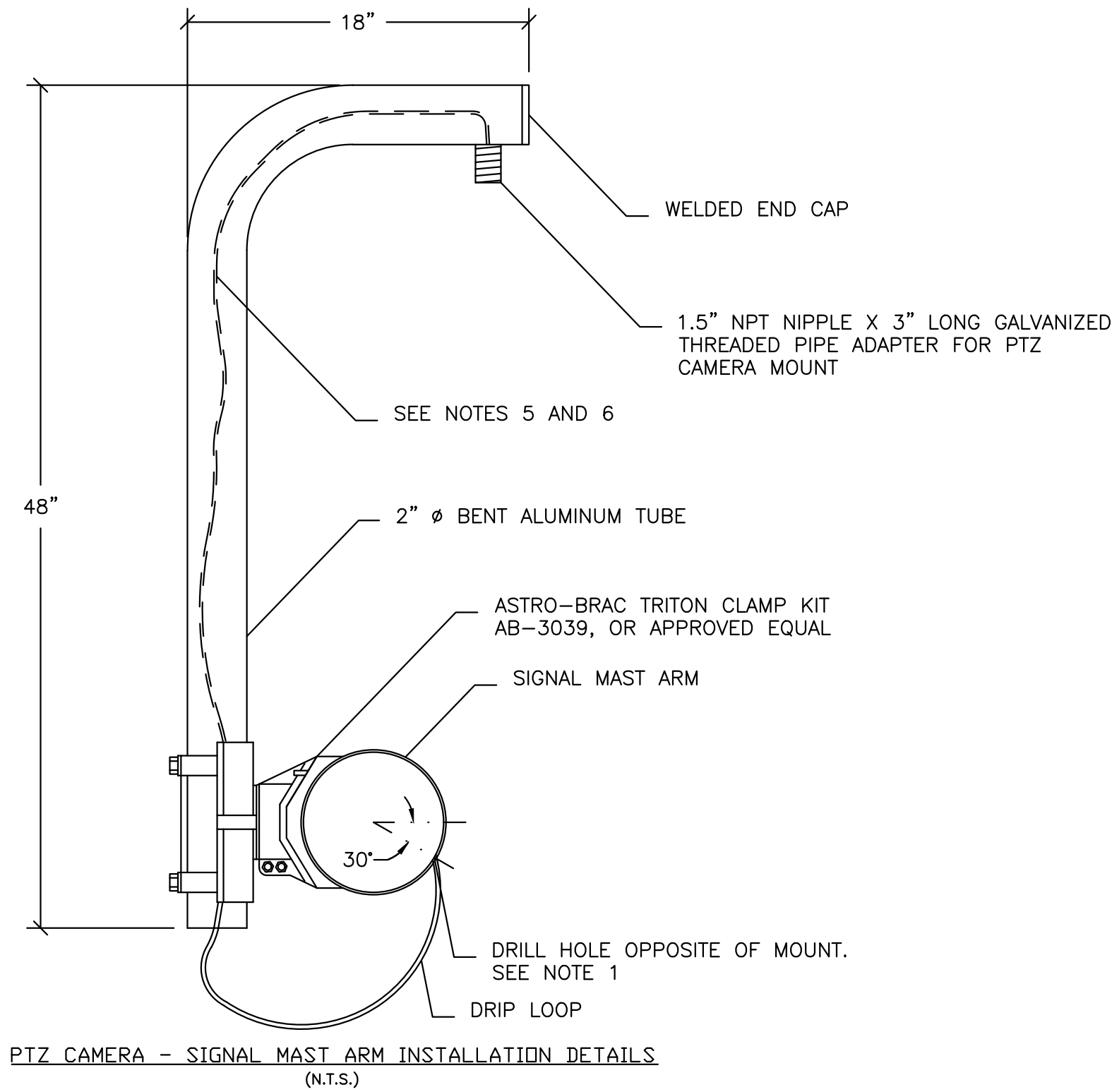


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PTZ CAMERA INSTALLATION NOTES:

1. THE CONTRACTOR SHALL DRILL A 1" HOLE IN THE BACK SIDE OF THE SIGNAL MAST ARM. TAP HOLE AND INSTALL GALVANIZED STRAIN RELIEF FITTING. VERIFY MOUNTING LOCATION WITH ENGINEER PRIOR TO DRILLING.
2. INSTALL THE MOUNTING BRACKET OVER THE 1" HOLE.
3. PULL THE CABLE THROUGH THE SIGNAL MAST ARM, THROUGH THE 1" HOLE, AND THROUGH THE ALUMINUM TUBE.
4. BOLT THE ALUMINUM TUBE TO THE MOUNTING BRACKET.
5. ROUTE THE CABLE THROUGH THE TUBE AND CONNECT TO THE CAMERA THROUGH THE CAMERA MOUNT, PER MANUFACTURER'S RECOMMENDATIONS.
6. CONTRACTOR TO DETERMINE CABLE LENGTH FOR MOUNTING BRACKET.



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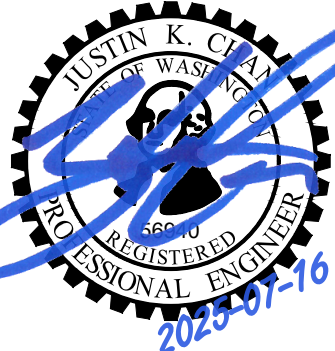
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REVIEWED BY	JC	07/11/2025			



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NE 100TH ST/132ND AVE NE
INTERSECTION IMPROVEMENTS

CITY OF KIRKLAND JULY 2025

TRAFFIC SIGNAL DETAILS

TS05

SHEET
24
OF
24
SHEETS

APPENDIX B: SWPPP & SPCC PLAN TEMPLATE



City of Kirkland

Construction Stormwater Pollution Prevention Plan (CSWPPP) - 2022



Submitted on	26 March 2025, 2:06PM
Receipt number	84
Related form version	3

Project Name	NE 100th St/132nd Ave NE Intersection Improvements
City of Kirkland Permit #	TRC-1380000
Email Address	jayp@paceengrs.com
Date Of Submittal	03/28/2025

Table of Contents

Project & CSWPP Information

- Purpose
- Disclaimer
- CSWPP Supervisor and Preparation

Instructions For Use

'Notice Of Intent' Advisory

Project Background

Part A – Erosion And Sediment Control (ESC) Plan [Required For All Projects]

1. Clearing Limits
2. Cover Measures
3. Perimeter Protection
4. Traffic Area Stabilization
5. Sediment Retention
6. Surface Water Collection
7. Dewatering Control
8. Dust Control
9. Flow Control
10. Control Of Pollutants
11. Protect Existing And Proposed Flow Control BMPs
12. Maintain Protective BMPs
13. Manage The Project

Part B - Stormwater Pollution Prevention And Spill (SWPPS) Measures [Required For All Projects]

1. Concrete Handling
2. Concrete Washout Area
3. Sawcutting And Surfacing Pollution Prevention
4. Material Delivery, Storage And Containment
5. Construction Stormwater Chemical Treatment
6. Construction Stormwater Filtration
7. High pH Neutralization Using CO2
8. pH Control For High pH Water
9. Use Of High pH Soil Amendments On Construction Sites
10. Maintain Protective BMPs
11. Manage The Project

Part C – Site Inspection, Monitoring, And Sampling Requirements And Enforcement

- Site Inspections
- Turbidity Control Requirements For Construction Stormwater Discharge
- Monitoring Of Discharges
- Enforcement Of Turbidity Control Requirements
- pH Control Requirements For Construction Stormwater Discharge

Next Steps

Project & CSWPP Information

Project

Site Address	Intersection of NE 100th Street and 132nd Avenue NE in Kirkland, WA
Parcel Number(s)	N/A
Receiving Waterbody	Sammanish River

Applicant Contact

Permittee/Owner	City of Kirkland
Permittee's/Owner's Phone Number	
Permittee's/Owner's Address	
Developer	City of Kirkland
Developer's Phone Number	
Developer's Address	
Operator/Contractor	TBD
Operator's/Contractor's Phone Number	TBD
Operator's/Contractor's Address	TBD

CSWPP Supervisor

CSWPP Supervisor's Name	TBD
CSWPP Supervisor's Organization	TBD
CSWPP Supervisor's Phone Number	TBD

CSWPP Prepared By

Preparer's Name	Jay Pullen
Preparer's Organization	PACE Engineers
Preparer's Phone Number	(425) 827-2014

Project Construction Dates

Activity/Phase	Site Construction
Start Date	08/01/2025
End Date	11/01/2025

Note: Bring the contact information for the CSWPP Supervisor and the contractor to the pre-submittal conference or first meeting with City officials following completion of the CSWPP. Complete this form with the best information available, and update as personnel/construction timeline changes.

Purpose

A Construction Stormwater Pollution Prevention (CSWPP) Plan shall be completed for proposed projects that will conduct construction activities onsite, or offsite, within the City of Kirkland (City or COK) that require a targeted or full drainage review to comply with the following:

- [Core Requirement #5 of the 2021 King County Surface Water Design Manual \(KCSWDM\)](#), and [Appendix D](#) of the KCSWDM (1.2.5.2.C/D.2.3.3).
- [Storm Drainage Policy D-12 of the COK Pre-Approved Plans](#).

Information provided in this document and on the plans shall be considered a minimum. The general contractor shall be solely responsible for providing necessary and adequate measures for proper erosion and sediment control related to the project site.

The general contractor is responsible for keeping streets clean and free of contaminants at all times and for preventing an illicit discharge (defined in KMC 15.52.090) into the municipal separate storm sewer system (MS4) or natural water body(ies). If construction activity causes an illicit discharge, the City of Kirkland Storm Maintenance Division will be instructed to clean and restore any publicly owned and maintained surface water assets, and other affected public infrastructure.

The Permittee, Contractor(s), Property Owner, and any other responsible party may be subject to cost recovery associated with the clean-up and response and may also be assessed monetary penalties (defined in KMC 1.12.200) associated with an illicit discharge. The minimum penalty is \$500. A fine may be reduced or waived for parties who immediately self-report violations to the City at (425) 587-3900. If a project is found in violation of the City's codes regarding an illicit discharge in the future, those violations will be deemed "repeat violations" and the fine shall be determined by multiplying a surface water fine by the number of prior violations. "Repeat violation" means a violation of the same regulation in any location in the city by the same person or responsible party for which compliance previously has been sought or a notice of civil violation has been issued (KMC 1.12.020(I)).

A Final Inspection of the project will not be granted until all costs associated with a cost recovery and penalties are paid in full to the City of Kirkland.

The CSWPP shall include project-related content in accordance with the Implementation Requirements detailed within the latest adoption of the KCSWDM. The following plans are **Required For All Projects**:

- **Erosion and Sediment Control (ESC) Plan**, and
- **Stormwater Pollution Prevention and Spill (SWPPS) Plan**

The CSWPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e. hand-written notes and deletions). Update the CSWPP when there is a deficiency in Best Management Practices (BMPs) or update to the original design (and any subsequent) CSWPP.

Disclaimer

It is the responsibility of the applicant to ensure that all applicable codes and regulations have been addressed. Use of this template does not relieve the applicant of meeting all the project's legal obligations, even if they are related to erosion sediment control and stormwater pollution prevention and do not appear in the template. Any conflicts between this document and 2021 KCSWDM shall defer to the manual, with consideration of the City's Pre-Approved Plan Policy D-10, *The Addendum to the 2021 King County Surface Water Design Manual*. Any references to DLS-Permitting within the 2021 KCSWDM shall be considered equivalent to City of Kirkland.

CSWPP Supervisor and Preparation

For all projects, the applicant must comply with the following:

- The applicant shall designate a CSWPP Supervisor who will be responsible for the performance, maintenance, and review of ESC and SWPPS measures and for compliance with all permit conditions relating to the CSWPP as described in the instructions of this template.

o The applicant's selection of a CSWPP Supervisor may require approval by the City. City approval may be rescinded for non-compliance or not meeting qualifications, requiring the applicant to select another CSWPP Supervisor and obtain City approval prior to continuing work on the project site.

o The City may require the CSWPP Supervisor to be a Certified Professional in Erosion and Sediment Control or a Certified Erosion and Sediment Control Lead if the City determines that onsite ESC measures are inadequately installed, located, or maintained. If the site is considered sensitive, the City may require the CSWPP Supervisor to have certification as well as be an individual with background in geology, soil science, or agronomy.

- The CSWPP Supervisor shall keep an organized logbook of construction activities.
- The CSWPP Supervisor is the primary point of contact for all ESC and SWPPS issues.

If the CSWPP Supervisor revises ESC measures that require engineering calculations, the revisions shall be stamped and sealed by the engineer of record for the project or by the CSWPP Supervisor if that individual is registered as a professional engineer in the State of Washington.

Instructions For Use

1. *Proceed through the template in order and provide information about the project as instructed (in italics) for each section. Project details should correspond to the project plan set found onsite during construction to guide the contractor in establishing erosion and sediment control.*
2. *If an entire section is not applicable to the project, please indicate this in the provided "Design & Installation" textbox under that section and state why it is not applicable.*
3. *Place drawings (e.g. ESC plan and details) directly after the page where they are requested or reference them as an appendix and attach them accordingly OR attached with submittal online.*
4. *Other additions (calculations, BMPs, maintenance guidelines, etc.) should be placed in an appendix. Reference them and attach accordingly. Additions may be attached with submittal online.*
5. *Update documents when changes are required.*

If this project does not require a full or targeted drainage review, please see the following:

- Simplified Drainage Review – submit a Small-Site CSWPP as outlined in [COK Policy D-12](#). The Simplified Drainage Review Template is found [here](#).
- Basic Drainage Review – not required to submit a CSWPP or Small-Site CSWPP. However, a drainage plan and ESC plan are still required for this type of review per [COK Policy D-2](#).

'Notice Of Intent' Advisory

For projects 1 acre or larger, applicants are required to submit a Notice of Intent (NOI) to WA State Department of Ecology (Ecology) and obtain coverage under [Ecology's Construction Stormwater General Permit](#) (CSWGP) issued as part of the Federal Clean Water Act. Applicants *instead* must submit a draft Ecology CSWPP at COK permit submittal, and final Ecology CSWPP at the COK Pre-Construction Meeting. The Ecology CSWPP meets King County and COK requirements listed above. For additional information, see the following Ecology

Project Background

Existing Conditions

Hydrology and topography (average slope, soil, presence of groundwater):

• Drainage patterns:	The project drains to the existing public storm system in the road, into an unnamed stream, and outfalls into the Sammamish River.
• Critical Areas (wetlands, streams, high erosion risk, steep or difficult to stabilize slopes):	Not applicable

City of Kirkland Waterbodies

Check the box next to the pollution type(s) (Category 5, unless advised otherwise) if the project site currently drains, or will drain during construction or developed condition, to the following waterbodies:

• Forbes Lake:	
• Forbes Creek:	
• Totem Lake:	
• Juanita Creek:	
• Lake Washington @ Marina Park:	
• Other:	

If the project site will cause an adverse impact to existing 303(d) impairments at one or more of the listed waterbodies above, indicate how the project site will control those pollutants and/or mitigate impacts. An adverse impact may be caused by diverting stormwater to and/or away from a waterbody.

Refer to <https://fortress.wa.gov/ecy/waterqualityatlas/map.aspx> for unnamed waterbodies with impairments if applicable to project site location and discharge.

Proposed Construction Activities

Description of site development (example: subdivision):	The proposed project will add ADA ramps and sidewalk at each corner of the intersection. A portion of the existing concrete in the intersection will be fully replaced for installation of the curb, gutter, and ramps. A majority of the intersection will receive an overlay
Description of construction activities (example: site preparation, demolition, excavation):	The project is expected to involve removal/grinding of existing concrete/asphalt, grading, and storm drain installation.
Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map to be attached:	Runoff from the proposed improvement area will maintain the existing runoff patterns and generally be captured by the existing public storm drain system. There will be new storm drain installed at the NW corner of the intersection to resolve a conflict with the proposed ramp – collected runoff from the proposed structures will immediately tie into the existing

system.

The west half of the intersection is conveyed to the south along 132nd Ave NE. The storm system reaches NE 97th St, it is conveyed to the east and eventually discharges to an existing detention pond. The detention pond outfalls into an unnamed stream and eventually into the Sammamish River.

The east half of the intersection is conveyed to the east along NE 100th St in the existing public storm drainage system for about 550 feet before it discharges into an unnamed stream. The unnamed stream discharges to the Sammamish River.

There are approximately 0.21 acres of upstream paved road that flows onto the project improvements. Runoff from these areas will continue to be captured by the existing public storm drainage system.

Description of final stabilization (example: extent of revegetation, paving, landscaping):

Seeding will be used on disturbed areas that have reached final grade or that will remain unworked for more than thirty days. Dust control will be implemented as needed, to prevent it being required. All roadways to be paved will receive early application of gravel base.

Land Use Areas

Total Project Site* Area - Predeveloped (in square feet)	13106
--	-------

Total Project Site* Area - Developed (in square feet)	13106
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Total Site+ Area - Predeveloped (in square feet)	47400
--	-------

Total Site+ Area - Developed (in square feet)	47400
---	-------

Land Disturbing Activity - Predeveloped (in square feet)	13106
--	-------

Land Disturbing Activity - Developed (in square feet)	13106
---	-------

Impervious Surface - Predeveloped (in square feet)	10940
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Impervious Surface - Developed (in square feet)	12760
---	-------

Percentage Impervious on Project Site* - Predeveloped (in percentage)	84
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Percentage Impervious on Project Site* - Developed (in percentage)	97
--	----

New Impervious Surface - Predeveloped (in square feet)	
--	--

New Impervious Surface - Developed	1840
---	------

(in square feet)

Replaced Impervious Surface - Predeveloped

(in square feet)

Replaced Impervious Surface - Developed (in square feet)	4570
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New Pollution Generating Impervious Surface - Predeveloped (in square feet)	0
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New Pollution Generating Impervious Surface - Developed (in square feet)	820
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Replaced Pollution Generating Impervious Surface - Predeveloped (in square feet)	0
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Replaced Pollution Generating Impervious Surface - Developed (in square feet)	1000
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Pervious Surface - Predeveloped (in square feet)	2166
--	------

Pervious Surface - Developed (in square feet)	346
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New Pervious Surface - Predeveloped (in square feet)	0
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New Pervious Surface - Developed (in square feet)	346
---	-----

Replaced Pervious Surface - Predeveloped (in square feet)	0
---	---

Replaced Pervious Surface - Developed (in square feet)	0
--	---

New Pollution Generating Pervious Surface - Predeveloped (in square feet)	0
---	---

New Pollution Generating Pervious Surface - Developed (in square feet)	0
--	---

Replaced Pollution Generating Pervious Surface - Predeveloped (in square feet)	0
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Replaced Pollution Generating Pervious Surface - Developed (in square feet)	0
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Predominant Soil Type	Till
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**Project Site* as defined within the 2021 King County Stormwater Drainage Manual

+*Site* as defined within the 2021 King County Stormwater Drainage Manual

Part A - Erosion and Sediment Control (ESC) Plan [Required For All Projects]

The implementation of this ESC plan and the construction, maintenance, replacement, and upgrading of applicable BMP facilities is the responsibility of the Permittee/Contractor until all construction is approved.

The ESC Plan may also include any and all of the following:

- Locations of all receiving waterbodies.
- Direction of stormwater flows from facilities.
- Locations of all ditches, pipes, swales, drains, inlets, outfalls or other stormwater conveyances existing or used during the construction phase.
- Location of construction stormwater discharge point(s).
- Locations of secondary containment structures.
- Locations and quantities of potential stormwater pollutants.
- Areas where spills occurred previously.
- Stormwater monitoring locations.
- Locations of fueling stations, offloading areas, outdoor maintenance and equipment storage, tanks, and transfer areas.
- Sources of run-on from adjacent properties that could cause pollution.
- Background turbidity levels.

Following this page, attach the ESC plan. See [COK General Policy G-7](#) for plan submittal requirements. See [COK Pre-Approved Plan CK-E.04](#) for an example plan. Design ESC elements to City of Kirkland standards. If a city standard is not available, refer to the equivalent King County design standards. If a county standard is not available, refer to the equivalent Ecology design standards found in the latest Stormwater Management Manual of Western Washington (SWMMWW). **Reference the standard(s) being used where appropriate.** Under the Design & Installation and Maintenance textboxes, add relevant information concerning the BMPs.

Please upload the ESC plan here.

Appendix A - Site Map.pdf

1. Clearing Limits

Prior to any site clearing or grading, areas to remain undisturbed during project construction will be delineated on the project's ESC plan and physically marked on the project site. The purpose of clearing limits is to prevent disturbance of those areas of the project site that are not designated for clearing or grading.

Check the box next to applicable clearing limit measures.

Silt Fence (CK-E.03)

Design & Installation (or why section is not applicable)

Use the following space to specify how clearing limits are to be delineated, and instructions on their installation.

The clearing limits are expected to be located by the project surveyor and identified with flags or silt fencing prior to construction. Tree protection fencing to be installed if necessary.

Maintenance

Use the following space to specify maintenance requirements for the clearing limits measures.

Any fence damage or visibility reduction shall be repaired or replaced immediately.

2. Cover Measures

Temporary and permanent cover measures will be provided to protect all disturbed areas, including the faces of cut and fill slopes. The

purpose of covering exposed soils is to prevent erosion, thus reducing reliance on less effective methods that remove sediment after it is entrained in runoff.	
If project site is within a landslide hazard area describe how slopes will be designed, constructed, and protected to minimize erosion; additional protective measures may be required.	
Check the box next to applicable cover measures.	Plastic Covering (D.2.1.2.4, p. D-20 and CK-E.05)
Design & Installation (or why section is not applicable) <i>Use the following space to specify the design and installation of cover measures.</i>	There are no steep slopes located on the site. If stockpiles are formed or there is exposed soil that should be covered at the end of the day, the contractor shall do so accordingly.
Maintenance <i>Use the following space to specify maintenance requirements for the cover measures.</i>	If the covering is damaged, it shall be replaced or repaired immediately.

3. Perimeter Protection

Perimeter protection to filter sediment from sheetflow will be located downslope of all disturbed areas and will be installed prior to upslope grading. The purpose of perimeter protection is to reduce the amount of sediment transported beyond the disturbed areas of the construction site.	
Check the box next to applicable perimeter protection measures.	Silt Fence (D.2.1.3.1, p. D-33 and CK-E.03)
Design & Installation (or why section is not applicable) <i>Use the following space to specify the design and installation of perimeter protection.</i>	The clearing limits are expected to be located by the project surveyor and identified with flags or silt fencing prior to construction.
Maintenance <i>Use the following space to specify maintenance requirements for the perimeter protection.</i>	Any fence damage or visibility reduction shall be repaired or replaced immediately.

4. Traffic Area Stabilization

Check this box if this section is not applicable to the project.	
Unsurfaced entrances, roads, and parking areas used by construction traffic will be stabilized to minimize erosion and tracking of sediment offsite. The purpose of traffic area stabilization is to reduce the amount of sediment transported offsite by construction vehicles and to reduce the erosion of areas disturbed by vehicle traffic.	
Check the box next to applicable traffic area stabilization measures.	
Design & Installation (or why section is not applicable) <i>Use the following space to specify the design and installation of traffic area stabilization measures.</i>	The existing roadway will be used as a construction entrance.
Maintenance <i>Use the following space to specify maintenance requirements for the traffic area stabilization measures.</i>	

5. Sediment Retention

Surface water collected from disturbed areas of the site will be routed through a sediment pond or trap or similar BMP prior to release from the site. The purpose of sediment retention facilities is to remove sediment from runoff generated from disturbed areas.

Check the box next to applicable sediment retention measures. Storm Drain Inlet Protection (D.2.1.5.3, p. D-53 and CK-E.08, E.11)

Design & Installation (or why section is not applicable)
Use the following space to specify the design and installation of sediment retention measures. Include 2- and 10-year peak flows modeled on a 15-minute time step for the developed conditions. Paste calculations under 'Sizing' section.

Storm drain inlet-protection devices will be installed at existing nearby catch basins prior to construction of the site, as well as in all new catch basins on-site once they are installed.

Maintenance
Use the following space to specify maintenance requirements for the sediment retention measures.

Inlet protection will be inspected weekly at a minimum and daily during storm events.

Sizing Modeling Report
In the space below, upload an image from WWHM/MGS Flood stating the 2- and 10-year peak flows modeled on a 15-minute time step for the developed conditions.

Sizing Requirement Calculations
The point of connection (POC) will be the basin outlet comparing pre-developed and post- clear-and-graded conditions.

In the space below or as attachment, upload calculations showing the sizing requirements.

6. Surface Water Collection

Check this box if this section is not applicable to the project.

All surface water from disturbed areas will be intercepted, conveyed to a sediment pond or trap, and discharged downslope of any disturbed areas. The purpose of surface water control is to collect and convey surface water so that erosion is minimized, and runoff from disturbed areas is treated by a sediment pond or trap.

Check the box next to applicable surface water collection measures.

Design & Installation (or why section is not applicable)
Use the following space to specify the design and installation of surface water collection measures.

The site is fully developed, swales/ditches will not be needed. Surface water will be conveyed via existing curb and gutter.

Maintenance
Use the following space to specify maintenance requirements for the surface water collection measures.

7. Dewatering Control

Check this box if this section is not applicable to the project.

The purpose of dewatering control is to prevent the untreated discharge of sediment-laden water from dewatering of utilities, excavated areas, foundations, etc.

Check the box next to applicable dewatering control measures.

Construction dewatering discharges shall always meet water quality guidelines listed in COK Policy E-1. Specifically, discharges to the public stormwater drainage system must be below 25 NTU, and not considered an illicit discharge (per KMC 15.52.090, enforcement measures

covered in Part C of this template). Temporary discharges to sanitary sewer require prior authorization and permit from King County Industrial Waste Program [(206) 477-5300] and notification to the Public Works Construction Inspector.

Design & Installation (or why section is not applicable)

Use the following space to specify the design and installation of dewatering control measures. If not applicable, include language from geotechnical report stating that no groundwater will be present on site. Note if there are contaminated soils on site.

No significant dewatering activity is anticipated. There are no contaminated soils on site. If groundwater is encountered and dewatering is deemed necessary, the contractor shall re-visit and implement control measures as needed.

Maintenance

Use the following space to specify maintenance requirements for the dewatering control measures.

8. Dust Control

Preventative measures to minimize the wind transport of soil will be taken when a traffic hazard may be created or when sediment transported by wind is likely to be deposited in water resources or adjacent properties. The purpose of dust control is to prevent wind transport of dust from exposed soil surfaces onto roadways, drainage ways, and surface waters.

Check the box next to applicable dust control measures.

Water

Specify Other:

Design & Installation (or why section is not applicable)

Use the following space to specify the design and installation of dust control measures.

The project intends to strip and stockpile the existing topsoil on-site under plastic covering or equivalent. At the conclusion of construction, the project is expected to spread the stockpiled topsoil over the disturbed landscaped areas. These areas are expected to be hydroseeded or sodded for stabilization at the conclusion of construction. As needed, a water truck shall be utilized to minimize the dust on site.

Maintenance

Use the following space to specify maintenance requirements for the dust control measures.

As needed, per the project CESCL.

9. Flow Control

Check this box if this section is not applicable to the project.

Surface water from disturbed areas must be routed through the project's onsite flow control facility or other provisions must be made to prevent increases in the existing site conditions 2-year and 10-year runoff peaks discharging from the project site during construction. The purpose of stormwater flow control is to mitigate increases in runoff peaks that occur during construction because of clearing vegetation, compacting the soil, and adding impervious surface. Such increases can cause or aggravate downstream flooding and erosion.

Design & Installation (or why section is not applicable)

Use the following space to specify the design and installation of flow control measures. Include 2- and 10-year peak flows for the developed conditions. Paste calculations under 'Sizing' section.

The project is exempt from flow control and this is not applicable for the site.

Maintenance

Use the following space to specify maintenance requirements for the flow control measures.

Sizing Modeling Report

In the space below, upload an image from WWHM/MGS Flood stating the 2- and 10-year peak flows modeled on a 15-minute time step for the developed conditions.

Sizing Requirement Calculations

The point of connection (POC) will be the basin outlet comparing pre-developed and post- clear-and-graded conditions.

In the space below or as attachment, upload calculations showing the sizing requirements.

10. Control Of Pollutants

The requirements for this section are covered in the SWPPS Plan, Part B of this document. SPPPS measures are required to prevent, reduce, or eliminate the discharge of pollutants to onsite or adjacent stormwater systems or water courses from construction-related activities such as materials delivery and storage, onsite equipment fueling and maintenance, demolition of existing buildings and disposal of demolition materials and other waste, and concrete handling, washout, and disposal.

11. Protect Existing And Proposed Flow Control BMPs

Check this box if this section is not applicable to the project.

Protection measures will be applied/installed and maintained to prevent adverse impacts to existing flow control BMPs and areas of proposed flow control BMPs for the project. The purpose of protecting existing and proposed flow control BMP areas is to avoid sedimentation and soil compaction that would adversely affect infiltration, and avoid contamination by other pollutants.

Design & Installation (or why section is not applicable)
Use the following space to specify the design and installation of flow control BMP protection measures.

There are no existing or proposed flow control BMPs on site.

Maintenance
Use the following space to specify maintenance requirements for the flow control BMP protection measures.

12. Maintain Protective BMPs

The purpose of maintaining protective BMPs is to provide continuous ESC protection throughout the life of the project, and avoid sedimentation, soil compaction and contamination by other pollutants that would adversely affect infiltration and surface runoff.

Maintenance (or why section is not applicable)
Use the following space to specify maintenance requirements for the protective BMPs.

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function. Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month. All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

13. Manage The Project

Projects shall assign a qualified CSWPP Supervisor (Section D.2.3.1) to be the primary contact for ESC issues and reporting, coordination with subcontractors and implementation of the CSWPP.

- Considerations:
- 1. Phase development projects to the maximum degree practicable and consider seasonal work limits.
 - 2. Inspection and monitoring – Inspect, maintain, and repair all BMPs as needed to assure continued performance of their intended

function throughout the life of the project.

3. Maintaining an updated CSWPP – Maintain, update, and implement the CSWPP throughout the life of the project.
4. Keep public works inspector informed on any changes.

The CSWPP Supervisor or inspector must have the skills to:

- Assess site conditions and construction activities that could impact the quality of stormwater (e.g., site grading operations, or concrete construction and dewatering operations for a detention vault).
- Assess effectiveness of ESC measures used to control the quality of stormwater discharges at least weekly and within 24 hours of significant storms (0.5 inches or greater).
- Examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen.
- Assess effectiveness of BMPs and determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges (procedure covered in Part C of this template).
- Update the site logbook accordingly with pertinent information related to above bullets.

Part B - Stormwater Pollution Prevention and Spill (SWPPS) Measures [Required For All Projects]

The purpose of SWPPS control is to prevent, reduce, or eliminate the discharge of pollutants to onsite or adjacent stormwater systems or watercourses from construction-related activities such as materials delivery and storage, onsite equipment fueling and maintenance, demolition of existing buildings and disposition of demolition materials and other waste, and concrete handling, washout, and disposal.

The implementation of this SWPPS plan and the construction, maintenance, replacement, and upgrading of the SWPPS facilities is the responsibility of the Permittee/Contractor until all construction is approved.

Contaminated Site Information:

N/A

Proposed activities regarding contaminated soils or groundwater (example: onsite treatment system, authorized sanitary sewer discharge) should be listed below:

All significant spills that have occurred in the past three years should be documented in Part B.

Following this page, attach the SWPPS plan. See [COK General Policy G-7](#) for plan submittal requirements. The level of detail should be similar to that of [COK Pre-Approved Plan CK-E.04](#). Plan for SWPPS measures to City of Kirkland standards. If a city standard is not available, refer to the equivalent King County design standards. If a county standard is not available, refer to the equivalent Ecology design standards found in the latest Stormwater Management Manual of Western Washington (SWMMWW). **Reference the standard(s) being used where appropriate.** Under the Design & Installation and Maintenance textboxes, add relevant information concerning the BMPs.

Please upload the SWPPS plan here.

Appendix A - Site Map.pdf

1. Concrete Handling

Concrete work can generate process water and slurry that contain fine particles and high pH, both of which can violate water quality standards in the receiving water. Concrete spillage or concrete discharge to surface waters of the State is prohibited. Use this BMP to minimize and eliminate concrete, concrete process water, and concrete slurry from entering waters of the state.

Procedures (or why section is not applicable)

Describe the management practices to be employed to prevent concrete washwater from discharging offsite. Specifically identify where unused concrete will be placed and how project will prevent washwater or slurry from discharging into storm drain.

All demolition materials shall be disposed of at an appropriate off-site location. Construction vehicle fueling/service shall be performed off-site to the greatest practical extent. In the event of a fuel/oil spill, the contaminated area should be isolated and cleaned immediately. Sawcutting debris should be vacuumed at the conclusion of sawcutting activity. A concrete washout area shall be constructed on-site, and excess concrete shall be returned to the mix plant for recycling, when possible.

2. Concrete Washout Area

Prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite or performing onsite washout in a designated area to prevent pollutants from entering surface waters or ground water.

Design and Installation Specifications (or why section is not applicable)

If concrete washout is performed onsite, specify the design and installation of the washout containment area(s). Specifically describe the type, size and location on site, and how you will prevent washwater or slurry from discharging into storm drain.

A minimum 10'x10' concrete washout area shall be constructed onsite, at least 50' from any storm drain or open ditch. The area shall be located at the SE corner of the intersection, within the ROW but outside of the improvement area. A berm shall be formed around the area to prevent runoff from this area.

Maintenance

Prescribe inspection and maintenance schedules and procedures to be conducted on the washout containment area(s). Specifically explain how you will ensure that containers don't overtop or leak.

The concrete washout area shall be regularly inspected for leaks and damage (daily and after heavy rain events). The capacity shall be monitored, and then the area reaches 75%, the water shall be vacuumed and disposed of properly. The washout area shall be covered before and heavy rain events. Proper signage shall be installed to identify the washout location.

3. Sawcutting and Surfacing Pollution Prevention

Sawcutting and surfacing operations generate slurry and process water that contains fine particles and high pH (concrete cutting), both of which can violate the water quality standards in the receiving water. Concrete spillage or concrete discharge to surface waters of the State is prohibited. Use this BMP to minimize and eliminate process water and slurry created through sawcutting or surfacing from entering waters of the State.

Procedures (or why section is not applicable)

Specify the management practices to be employed to prevent sawcutting and surfacing pollution from discharging offsite. Specifically describe how you will prevent slurry, cuttings or process water from discharging into storm drain.

Sawcutting debris should be vacuumed at the conclusion of sawcutting activity to prevent their runoff from entering the storm system. If needed, temporary barriers or berms shall be installed to prevent slurry/cuttings from running off and entering the system.

4. Material Delivery, Storage And Containment

Prevent, reduce, or eliminate the discharge of pollutants to the stormwater system or watercourses from material delivery and storage. Minimize the storage of hazardous materials onsite, store materials in a designated area, and install secondary containment.

Design and Installation Specifications (or why section is not applicable)

Specify the design and installation of measures to protect prevent hazardous materials from discharging offsite. Specifically describe the type, size and location on site of secondary containment and/or cover measures.

Hazardous materials are not anticipated to be onsite. Materials shall be stored within the ROW, but outside of the disturbed area. Contractor shall choose a clear location adjacent to the street and convenient for construction activity - likely the SW corner of the intersection. These areas shall be clearly designated and items shall be labeled and organized. Berms shall be installed if needed, and plastic covering shall be utilized in the event of a heavy rain event.

5. Construction Stormwater Chemical Treatment

Check this box if this section is not applicable to the project.

This BMP applies when using stormwater chemicals in batch treatment or flow-through treatment. Chemical treatment can reliably provide exceptional reductions of turbidity and associated pollutants. Chemical treatment may be required to meet turbidity stormwater discharge requirements, especially when construction is to proceed through the wet season.

Design and Installation Specifications (or why section is not applicable)

Specify the design and installation of the chemical treatment system(s) to be

The need for stormwater chemical treatment is not anticipated.

employed at the site.

Maintenance

Prescribe inspection and maintenance schedules and procedures to be conducted on the chemical treatment systems.

Sizing Modeling Report

In the space below, upload an image of the report from WWHM stating the 2- and 10-year peak flows modeled on a 15-minute time step for the developed conditions.

Sizing Requirement Calculations

The point of connection (POC) will be the basin outlet comparing pre-developed and post-clear-and-graded conditions.

In the space below, upload calculations showing the sizing requirements.

6. Construction Stormwater Filtration

Check this box if filtration will not be used on this project.

Filtration removes sediment from runoff originating from disturbed areas of the site.

Design and Installation Specifications (or why section is not applicable)

Specify the design and installation of the filtration system(s) to be employed at the site. Specifically describe the type, size and location on site of stormwater filtration.

Filtration devices are not anticipated to be needed for this project.

Maintenance Standards

Prescribe inspection and maintenance schedules and procedures to be conducted on the filtration system(s).

7. High pH Neutralization Using CO2

Check this box if CO2 sparging will not be used on this project.

When pH levels in stormwater rise above 8.5 it is necessary to lower the pH levels to the acceptable range of 6.5 to 8.5, this process is called pH neutralization. pH neutralization involves the use of solid or compressed carbon dioxide gas in water requiring neutralization. Neutralized stormwater may be discharged to surface waters under the General Construction National Pollution Discharge Elimination System (NPDES) permit.

Design and Installation Specifications (or why section is not applicable)

Specify the design and installation of the CO2 sparging system to be employed at the site. Specifically describe the type, capacity and location onsite of the sparging system.

It is not anticipated that a CO2 sparging system will be needed for this project.

Maintenance Standards

Prescribe inspection and maintenance schedules and procedures to be conducted on the filtration system(s).

8. pH Control For High pH Water

When pH levels in stormwater rise above 8.5 it is necessary to lower the pH levels to the acceptable range of 6.5 to 8.5, this process is called pH neutralization. Stormwater with pH levels exceeding water quality standards may be treated by infiltration, dispersion in vegetation or

compost, pumping to a sanitary sewer, disposal at a permitted concrete batch plant with pH neutralization capabilities, or carbon dioxide sparging (see previous page).	
Check the box next to applicable treatment measures.	Sanitary Sewer Disposal Concrete Batch Plant Disposal
Design and Installation Specifications (or why section is not applicable) <i>Specify the design and installation of the pH control system(s) to be employed at the site.</i>	There will not be greater than 1000 CY of concrete poured for this project. If deemed necessary by the contractor/CESCL, stormwater with pH levels exceeding water quality standards shall be pumped to a sanitary sewer or disposed at a concrete batch plant. Infiltration and dispersion are not feasible on site. Measures shall be taken to avoid contact between stormwater and concrete products (Concrete Handling procedures), but if contact is made, water shall be isolated and tested. If pH levels exceed 8.5, the contractor shall dispose of the water properly.
Maintenance Standards <i>Prescribe inspection and maintenance schedules and procedures to be conducted on the pH control system(s).</i>	Any stormwater exceeding the allowable pH levels shall be contained and covered prior to being disposed of. CESCL shall determine the pH testing method.

pH monitoring is required for “Significant concrete work” (i.e. greater than 1000 cubic yards poured concrete over the life of the project).The use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD] or fly ash) also requires pH monitoring. Recycled concrete is not allowed for use within the City.

For significant concrete work, pH sampling will start the first day concrete is poured and continue until it is cured, typically three (3) weeks after the last pour.

For engineered soils and recycled concrete, pH sampling begins when engineered soils or recycled concrete are first exposed to precipitation and continues until the area is fully stabilized.

If the measured pH is 8.5 or greater, the following measures will be taken:

1. Prevent high pH water from entering storm sewer systems or surface water.
2. Adjust or neutralize the high pH water to the range of 6.5 to 8.5 su using appropriate technology such as carbon dioxide (CO2) sparging (liquid or dry ice).
3. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO2 sparging or dry ice.
4. Provide details on disposal of water with elevated pH or of the treated water.

Method for sampling pH:	pH meter
Check the analysis method you will use:	pH test kit
Table 8 – pH Sampling Method	Wide range pH indicator paper

9. Use Of High pH Soil Amendments On Construction Sites

Check this box if high pH soil amendments will not be used on this site.	
Soil amendments used for stability purposes (as described on page D-97) are often high pH and require approval from City of Kirkland before use. Please use the following space to describe how the project will meet the conditions of COK Policy D-16 and Section D.2.2.9.	
Conditions (or why section is not applicable)	

10. Maintain Protective BMPs

Pollutant protection measures will be maintained to assure continued performance of their intended function. Reporting	Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or
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and documentation will be kept current and made available to City of Kirkland as indicated.

Maintenance (or why section is not applicable)

Describe the procedures required to maintain all pollutant control BMPs.

non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

11. Manage The Project

Projects shall assign a qualified CSWPP Supervisor (Section D.2.3.1) to be the primary contact for SWPPS issues and reporting, coordination with subcontractors and implementation of the CSWPP.

Considerations:

1. Phase development projects to the maximum degree practicable and consider seasonal work limits.
2. Inspection and monitoring – Inspect, maintain, and repair all BMPs as needed to assure continued performance of their intended function throughout the life of the project.
3. Maintaining an updated CSWPP – Maintain, update, and implement the CSWPP throughout the life of the project.
4. Keep public works inspector informed on any changes.

The CSWPP Supervisor or inspector must have the skills to:

- Assess site conditions and construction activities that could impact the quality of stormwater (e.g., site grading operations, or concrete construction and dewatering operations for a detention vault).
- Assess effectiveness of ESC measures used to control the quality of stormwater discharges at least weekly and within 24 hours of significant storms (0.5 inches or greater).
- Examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen.
- Assess effectiveness of BMPs and determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges (procedure covered in Part C of this template).
- Update the site logbook accordingly with pertinent information related to above bullets.

Part C - Site Inspection, Monitoring, And Sampling Requirements And Enforcement

A site logbook shall be maintained for all onsite construction activities and may include:

- Previous versions of the CSWPP and other permits related to the CSWPP.
- Dated visual site inspections.
- Stormwater sampling data (water quality parameters of concern).

Site Inspections

Site inspections will occur in all areas disturbed by construction activities and at all stormwater discharge points. The CSWPP Supervisor shall evaluate and document the effectiveness of the installed BMPs and determine if it is necessary to repair or replace any of the BMPs to improve the quality of stormwater discharges. All maintenance and repairs shall be documented in the site logbook. All new BMPs that are used shall be detailed in the amended CSWPP.

Turbidity Control Requirements For Construction Stormwater Discharge

The contractor is responsible for reporting an Illicit Discharge Detection and Elimination (IDDE) when construction stormwater discharge is

released offsite during a construction project that does not meet City water quality standards. City staff will investigate concerns as a violation of the Kirkland Municipal Code (KMC) 15.52.090. If a violation is determined, a sample will be taken at any location deemed to be a discharge point. This may be a point source (pipe) or non-point source (runoff). The public works construction inspector assigned to the project will work with the contractor to implement changes needed on the project's ESC and SWPPS plans to assure effort has been taken to reduce pollution caused by construction stormwater discharge.

Basis of Requirements:

Refer to the [2021 KCSWDM, Core Requirement 5, Chapter 1.2.5](#) and [Appendix D](#), and [Policy E-1 of the City of Kirkland Pre-Approved Plans](#) for more information on site discharge requirements. Refer to KMC 15.52.090 and KMC 01.12.200 for rules on enforcement.

If a violation results in a corrective action notice, the proposed changes found within the notice should be reflected in the updated CSWPP, technical information report (TIR), and plan set, if applicable.

The CSWPP Supervisor may create their own Discharge Sampling Log or use the Discharge Sampling Log used by the City, provided at the end of this template.

Monitoring Of Discharges

Following the guidelines detailed by King County (KCSWDM D.2.3.2), the CSWPP Supervisor shall do the following:

Daily:

- Inspect ESC and SWPPS facilities.
- Maintain ESC and SWPPS facilities to ensure continued proper functioning (KCSWDM D.2.4.1).
- Review the site for ESC and SWPPS during periods of active construction where maintenance conditions change with construction activity.

At least weekly, and within 24 hours of significant storms (see below for definition of *significant storm*) review the site for ESC and SWPPS:

- Sample at discharge locations, or any location where discharge off-site is occurring.
- Keep a log of all turbidity measurements (recorded as Nephelometric Turbidity Units [NTUs]) and make it available to the City of Kirkland upon request. If the project site is subject to a NPDES general permit for construction issued by the Ecology, then the project must also comply with the monitoring requirements of that permit.
- A *significant storm* is quantified as one resulting in greater than 0.5 inches of rain within the timespan of 24 hours; if temporary surface flow control or water quality facilities used for construction are overcapacity, a storm event can be categorized as significant.

Enforcement Of Turbidity Control Requirements

Enforcement will follow this procedure:

1. To verify turbidity readings, the CSWPP Supervisor will analyze discharge samples with a turbidity meter (following the procedures of KCSWDM 1.2.5.2.B/D.2.3.2).
2. If a discharge of the following characteristics is made to the municipal separate storm sewer system (MS4) or waters of the state, this may be considered an illicit discharge:
 - Turbidity test results in greater than the benchmark value of 25 NTU, but less than 250 NTU.
 - Observed to have a visible sheen or suspected to contain a pollutant.

The CSWPP Supervisor shall do all of the following in response:

- A. Report incident(s) to the City of Kirkland at (425) 587-3900.
- B. Review the ESC and SWPPS plans for compliance and make appropriate revisions as soon as possible but no later than 7 days of the discharge that exceeded the benchmark of 25 NTU. The City of Kirkland will issue a Corrective Action Notice as reference for advised improvements. The Permittee may be subject to code compliance for cost recovery related to an illicit discharge as reimbursement of work completed by the City of Kirkland.
- C. Fully implement and maintain appropriate ESC and SWPPS measures as soon as possible but no later than 10 days after the discharge that exceeded the benchmark.
- D. Document the ESC and SWPPS implementation and maintenance in the site logbook.

For projects discharging to a sensitive area (e.g. onsite wetland), see the following:

- a. If the turbidity level is found to be less than 5 NTU above background level if background turbidity is 50 NTU or less, OR

- b. If the turbidity level is found to be less than 10% above background level if background turbidity is greater than 50 NTU, THEN
- c. This discharge is allowed **but incident shall still be recorded and reported to the City of Kirkland**. Correction Action Notice may be provided but cost recovery and fines are not anticipated.
- d. Procedures for reducing turbidity are the same as above except the benchmark value is the background turbidity (instead of 25 NTU).
3. If the turbidity reading is higher than 250 NTUs for discharges made to the municipal separate storm sewer system (MS4) or waters of the state, the CSWPP Supervisor shall do all of the following:
- A. Report incident(s) to the City of Kirkland at (425) 587-3900.
- B. Review the ESC and SWPPS plans for compliance and make appropriate revisions as soon as possible but no later than 7 days of the discharge that exceeded the benchmark of 25 NTU. The City of Kirkland will issue a Corrective Action Notice as reference for advised improvements. The City may impose a "Stop Work Order" until turbidity levels return to a safe level (less than 250 NTUs). The Permittee may be subject to code compliance for cost recovery related to a discharge violation as reimbursement of work completed by the City of Kirkland. Cost recovery would be in addition to fines in relation to a violation of KMC 15.52.090.
- C. Fully implement and maintain appropriate ESC and SWPPS measures as soon as possible but no later than 10 days after the discharge that exceeded the benchmark.
- D. Document the ESC and SWPPS implementation and maintenance in the site logbook.
- E. Continue to sample discharges until turbidity is 25 NTU or lower, or the turbidity is no more than 10% over background turbidity. "Stop Work Order", if imposed, is lifted when turbidity samples are below 250 NTU.
4. If the project site is subject to a NPDES general permit for construction issued by the Ecology, then the project must also comply with the monitoring requirements of that permit.

pH Control Requirements For Construction Stormwater Discharge

Prior to discharge, treated stormwater shall be sampled and tested for compliance with pH levels. pH shall be within the range of 6.5 to 8.5 standard units and not cause a change in the pH of the receiving water of more than 0.2 standard units.

pH monitoring is required for "Significant concrete work" (i.e. greater than 1000 cubic yards poured concrete or recycled concrete over the life of the project). The use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD] or fly ash) also requires pH monitoring.

For significant concrete work, pH sampling will start the first day concrete is poured and continue until it is cured, typically three (3) weeks after the last pour.

For engineered soils and recycled concrete, pH sampling begins when engineered soils or recycled concrete are first exposed to precipitation and continues until the area is fully stabilized.

If the measured pH is expected to be 8.5 or greater, the following measures will be taken:

1. Prevent high pH water from entering storm sewer systems or surface water.
2. Method for sampling pH shall be by pH meter probe.
3. Adjust or neutralize the high pH water to the range of 6.5 to 8.5 standard units (su) using appropriate technology such as carbon dioxide (CO₂) sparging (liquid or dry ice).
4. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO₂ sparging or dry ice.
5. Provide details on disposal of water with elevated pH or of the treated water.

Recycled concrete and cement treatment are construction activities that result in the need for the pH control requirement. See [COK Policy D-16](#) for more information on these common practices to be better prepared for properly controlling pH in construction stormwater discharge.

Next Steps

Note:

Once you submit this form, you will receive an email confirmation from our third-party provider, OpenForms, along with a PDF copy of the form you submitted. Keep it for your records. Be sure to check your spam/junk folder so you don't miss it!

You will need to upload the PDF document to [MyBuildingPermit.com](https://mybuildingpermit.com) along with your permit application to complete this application process.

Title VI

To request information from this document in your language, please contact the Title VI Coordinator at titlevicoordinator@kirklandwa.gov or

425-587-3831.

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Чтобы запросить перевод этого документа на по-русски, свяжитесь с координатором по вопросам Раздела VI по электронной почте titlevicoordinator@kirklandwa.gov или по номеру 425-587 3831

Para pedir información sobre este documento en español, comuníquese con el coordinador del Título VI escribiendo a titlevicoordinator@kirklandwa.gov o llamando al 425-587-3831.

Para solicitar informações deste documento em português, entre em contato com o Coordenador do Título VI em titlevicoordinator@kirklandwa.gov ou 425-587-3831.

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Để yêu cầu thông tin từ tài liệu này bằng tiếng Việt, vui lòng liên hệ với Điều Phối Viên Tiêu Đề VI theo địa chỉ titlevicoordinator@kirklandwa.gov hoặc theo số (425) 587-3831.

Alternate Formats:

People with disabilities may request materials in alternate formats.

Title VI: Kirkland's policy is to fully comply with Title VI of the Civil Rights Act by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from its programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with the City.

To request an alternate format, file a complaint or for questions about Kirkland's Title VI Program, contact the Title VI Coordinator at 425-587-3831 (TTY Relay: 711) or TitleVICoordinator@kirklandwa.gov.

WSDOT DRAFT SPCC Plan Template

Check on WSDOT's [Stormwater and Water Quality](#) webpage under the tools, templates, and links tab for an updated version:

Instructions for use:

WSDOT designed this template for WSDOT contractors to use to develop Spill Prevention, Control and Countermeasures Plans (SPCC Plans) that satisfy the current WSDOT Standard Specification 1-07.15(1) and National Pollutant Discharge Elimination System (NPDES) requirements.

- Create the table of contents for the completed plan
- Insert Prime Contractor Name with Company Name
- Insert Names as appropriate; adjust table of content pages to the final content.
- Ensure that all names and contact information are active
- Include a map that addresses the details under #9 project area, work area, staging area, storage areas, waterways, and sensitive areas (including flow direction).
 - o This map may need to be updated or added to as the project is constructed.
- Delete this front page before printing the plan and submitting it to WSDOT for approval.

Please ensure the approved plans, if appropriate are available and uploaded with project changes.

WSDOT Plan Template

Spill Prevention, Control and Countermeasures Plan

WSDOT Project Name

WSDOT SR Milepost Numbers

WSDOT Contract Number

Prepared by

WSDOT Prime Contractor, Executive: Name

WSDOT Prime Contractor Project Manager: Name

WSDOT Prime Contractor, Superintendent: Name

Address

City, Washington Zip

Phone Number

Date

WSDOT Prime Contractor shall maintain a complete and updated copy of this plan in an accessible location for the duration of the project or must have the ability to electronically access this when on the project site at all times.

WSDOT Project Engineer (PE): Name

WSDOT PE Office Phone: Number

WSDOT PE Cell:

WSDOT Project Chief Inspector: Name

Office Phone: Number Cell Phone: Number

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SPCC Plan Implementation Requirements

WSDOT Standard Specification 1-07.15(1) and Project-specific special provisions (if applicable) require a Spill Prevention, Control and Countermeasures Plan (SPCC Plan or Plan) to be developed for each WSDOT project. The SPCC Plan purpose is to protect human health and the environment from spills and releases of “hazardous materials,” a generic term WSDOT uses to mean dangerous waste, problem waste, petroleum products, and hazardous substances. The SPCC Plan also address conditions that may be required by Section 3406 of the current International Fire Code, or as approved by the local Fire Marshal.

The **Prime Contractor** (**WSDOT Prime Contractor**) for **WSDOT Project Name, WSDOT Contract Number** (Project), developed this SPCC Plan to satisfy WSDOT Standard Specification 1-07.15(1) for the Project. All Subcontractors need to ensure they accept this plan or ensure provisions in their spill plan compliment and are consistent with the provisions in the **WSDOT Prime Contractor's** approved SPCC.

WSDOT Prime Contractor shall update this SPCC Plan throughout the Project to reflect actual site conditions and practices. **WSDOT Prime Contractor** shall fully implement this SPCC Plan, as accepted and updated, at all times.

Note: No on-site Project construction activities may commence until WSDOT reviews and accepts this Project-Specific SPCC Plan.

SPCC Plan Elements

1. Responsible Personnel

Table 1.1 identifies the active name(s), title(s), and the active contact information for the personnel responsible for implementing and updating the SPCC Plan, and for responding to spills. If spill response Subcontractor(s) will be used for spill response (as described in Section 8, Spill Response, below), the Subcontractor(s) company name(s) and contact information are also included in Table 1.1. Please Complete Table 1.1

Table 1.1 Responsible Personnel

Responsibility	Name, Company, and Position Title	Contact Information
Implementing and updating SPCC Plan (primary contact person):		Office Phone: Cell Phone: Email:
Implementing and updating SPCC Plan (secondary Contact person):		Office Phone: Cell Phone: Email:
On-Site Spill Responder (primary contact person)		Office Phone: Cell Phone: Email:
On-Site Spill Responder (secondary contact person)		Office Phone: Cell Phone: Email:

(delete this line if not applicable; add lines as appropriate if more than one Subcontractor will be used)

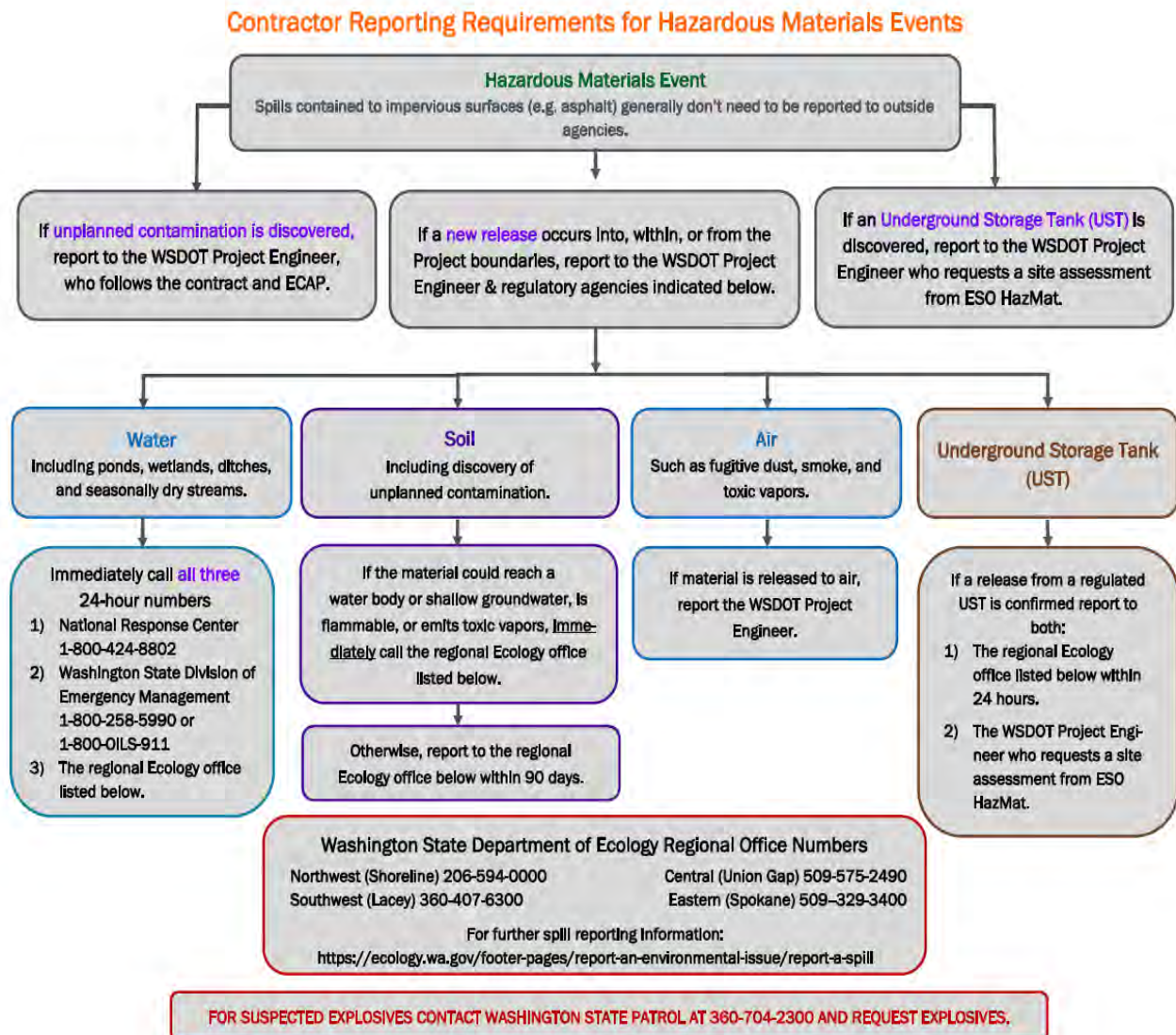
2. Spill Reporting

In the event of a spill, **WSDOT Prime Contractor** shall immediately notify the WSDOT Project Engineer and shall notify the Federal, State, and Local Agencies listed in Figure 2.1. The WSDOT Prime Contractor will also notify the WSDOT Project Chief Inspector.

Regulatory Reporting Requirements Flow Chart

Figure 2.1 Project-Specific Federal, State, and Local Agencies to be Notified in the Event of a Spill/Release.

3. SPCC Flowchart



4. Project and Site Information

Please describe the following items:

- A. The Project work: (briefly describe the construction activities that will take place)
- B. The site location and boundaries: (include city, county, and starting/ending mileposts, as well as Project work boundaries)
- C. The drainage pathways from the site: (either provide information here or complete Table 4.1)
- D. On or nearby waterways and sensitive areas and their distances from the site: (either provide information here or complete Table 4.1)

Either complete Table 4.1, below, or provide information above for 4.C and 4.D. and delete Table 4.1

Table 4.1 On/Nearby Waterways and Sensitive Areas

Waterway¹ or Sensitive Area²	Distance from Project Work	Direction of Flow from Project	Runoff Drainage Pathway from Project
Darby Creek	2000 feet north of project.	Gradual flow from south to north towards Darby Creek	Gradual downhill from south to north around the project area and a berm exists toward the creek.
Yakima River 100 year floodplain	Surrounding the project	Across the pavement to the south project boundary	Across the paved parking area to the curb cuts along the south boundary of the project through the rock retaining wall to the ground surface of the floodplain.

Notes

5. Potential Spill Sources

A description of each potential fuel, petroleum product and other hazardous material brought by the contractor or generated on-site is set forth in Table 5.1. The potential fuel, petroleum product and other hazardous materials listed on Table 5.1 include materials used for operating, refueling, maintaining, and cleaning equipment - including equipment used below the ordinary high-water line. Complete Table 5.1, listing information for EACH fuel, petroleum product and hazardous material. (e.g., gasoline, diesel, motor oil, hydraulic oil, cleaning solvent, paint). Do not bring hazardous materials on site that have no project specific purpose or intent.

¹ Waterways include streams, creeks, sloughs, rivers, Puget Sound, Pacific Ocean, etc.

² Sensitive areas are areas that typically contain populations that could be particularly sensitive to a hazardous materials spill or release. Such areas include wetlands, areas that provide habitat for threatened or endangered species, Sensitive areas also include areas where groundwater is used for drinking water, such as wellhead protection zones and sole source aquifer recharge areas. Nursing homes, hospitals, childcare centers, etc. are technically not sensitive areas like a stream, wetlands, etc. yet should be identified and considered when listing sensitive areas.

Table 5.1 Fuel, Petroleum Product and other Hazardous Materials Brought or Generated On-Site

Hazardous Material Name or Type	Intended Use of the Material	Estimated Maximum Amount of Material on Site at Any Time Period	Locations where Material will be Stored and Staged	Secondary Containment Practice and Structures	Distance of Material Staging and Storing from nearby Waterway³ or Sensitive Area⁴

Relevant Notes: 1 See also Section 8 (Spill Prevention, secondary containment and structures should be described in Table 5.1 and under Section 8D).

6. Pre-Existing Contamination

* Describe any pre-existing contamination and contaminant sources (such as buried pipes, buried tanks, buried drums or other buried containers) in the Project area that are described in the Contract documents; and

* Identify equipment and work practices that will be used to prevent or minimize the release of contamination including any secondary containment being used (even when stored or not used).

- if no pre-existing contamination or contaminant sources - are described in the Contract documents, write "N/A"

Example: Soil contaminated with petroleum products is suspected of existing near the southeast corner of the intersection of SR 99 and Cordane Street. If soil that is suspected of being contaminated is encountered, it will be stockpiled in the vicinity of the excavation for characterization sampling and determination of containment and disposal options. Soil that is suspected of being contaminated will be stockpiled separately from soil showing no indication of contamination. Soil that is suspected of being contaminated will be stockpiled on an impervious surface and will be set up to allow for

³ Waterways include streams, creeks, sloughs, rivers, Puget Sound, Pacific Ocean, etc.

⁴ Sensitive areas are areas that typically contain populations that could be particularly sensitive to a hazardous materials spill or release. Such areas include wetlands, areas that provide habitat for threatened or endangered species, Sensitive areas also include areas where groundwater is used for drinking water, such as wellhead protection zones and sole source aquifer recharge areas. Nursing homes, hospitals, childcare centers, etc. are technically not sensitive areas yet should be identified and considered when listing sensitive areas.

ease of sampling and load-out once characterization is complete. Stockpiles of suspected contaminated soil will be covered with plastic sheeting when not being worked; stormwater that could run into the base of such stockpiles will be diverted from the area.

**If a Project-specific soil management plan (SMP), water management plan (WMP), temporary erosion and sediment control (TESC) plan, contaminated media management plan (CMMP) or other plan concerning contaminated materials has been prepared for known SPCC-related Project conditions, please refer to them here and attach the relevant materials or link (if project can regularly access internet and download on-site) the final versions to this Plan.

7. Spill Prevention and Response Training

Describe how and when all Project personnel (including refueling personnel and other subcontractors) shall be trained in spill prevention, containment, and response to releases including communication of such events within the Site.

8. Spill Prevention

A. Spill response kit contents and location(s) (see Table 8.1). Appropriately stocked spill response kits shall be maintained in close proximity to hazardous materials and equipment and shall be immediately accessible to all Project personnel. Complete Table 8.1.

(e.g. vehicle kit drum kit, conex kit) (e.g., air horn to get attention of those working nearby, personal protective equipment (PPE, such as safety glasses, gloves, coveralls, boot covers), spill pads, absorbent, booms, catch basin covers, anti-static shovels, garbage bags, plastic sheeting, overpack or disposal drum, **complete copy of the updated SPCC Plan only if one cannot access the plan electronically**, etc.) (e.g., adjacent to in-water work, on bridge ramp, within 1,000' of active construction areas, next to portable toilets, on large equipment, outside main job trailer, in staging area conex, on mitigation site, below north end of bridge, etc.)

Table 8.1 Spill Response Kit Contents and Locations

Type of Spill Kits	Contents	Spill Kit Locations

B. Security measures for potential spill sources. Describe the security measures that will be maintained throughout the project to prevent accidental spills and vandalism, e.g.,

the staging area will be surrounded by a secured fence, hazardous materials will be stored inside a locked storage shed, equipment will be equipped with locked fuel caps, etc.

C. Methods used to prevent stormwater from contacting fuel, petroleum products and hazardous materials. Describe the methods that will be used to prevent stormwater contact with hazardous materials, e.g., contaminated soil will be placed on bermed plastic and covered.

D. Secondary containment for each potential spill source listed in Section 5, above. Ecology requires Describe here and/or in Table 5.1 the practices and structures that will be used to store and contain potential fuel, petroleum product and hazardous materials as well as the practices and structures that will be used to store and contain equipment used to transfer potential fuel, petroleum product and hazardous materials. The description must at least incorporate the following requirements:

- Secondary containment structures shall be in accordance with Section S9.D.9 of Ecology's Construction Stormwater General NPDES Permit, where secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. This NPDES Permit does not require additional secondary containment for double-walled tanks.
- Any more stringent secondary containment requirements (including for double-walled tanks) required by a 401 Permit for work in or over water, a special provision or other Permit/Contract requirement. Please attach or link a copy of the 401 Permit, Special Provision or any other Permit/Contract document indicating the more stringent requirement.
- Any more stringent secondary containment (including double-walled tanks) required by an IFC official (local fire marshal). Attach or link a copy of the IFC official documentation indicating the more stringent requirement.
- Secondary containment BMPs, as presented by Ecology, are required during fueling activity from fuel tanks, including double-walled tanks

E. Best Management Practices (BMP) Methods used to prevent discharges to ground or water during mixing and transfers of hazardous materials, petroleum product and fuel. Describe the methods to control pollutants using BMPs in accordance with Ecology's Construction Stormwater General NPDES Permit. BMP guidance is provided in Ecology's Stormwater Management Manuals, such as Volume II – Construction Stormwater Pollution Prevention, BMP C153 (Volume II Construction Stormwater Pollution Prevention) and Volume IV Source Control BMPs (Stormwater Manual Volume IV Source Control BMPs)).

F. Refueling procedures for equipment that cannot be moved from below the ordinary high-water line. Describe these procedures. Write N/A if no refueling work will be performed below the ordinary high-water line. For refueling above the ordinary high-water line, describe the location and what BMPs will be in place to ensure access to waterways are protected.

G. Daily inspection and cleanup procedures that ensure all equipment used, especially below the ordinary high-water line, is free of all external petroleum-based products. Describe the daily inspection will be recorded and how cleanup procedures will be implemented. If no work will be performed below the ordinary high-water line, please insert that statement.

H. Routine equipment, storage area, and structure inspection and maintenance practices to prevent drips, leaks or failures of hoses, valves, fittings, containers, pumps, or other systems that contain or transfer hazardous materials. Describe the equipment and structure inspection and maintenance practices, replenishing of used supplies, and how this will be formally tracked.

I. Site inspection procedures and frequency. Describe the site inspection frequency, site inspection procedures, and what adaptive measures are being applied.

9. Spill Response

Tables 9.1 and 9.2, below, outline the response procedures that WSDOT Prime Contractor shall follow for the scenarios described in the tables below, indicating that if hazardous materials are encountered or spilled to soil or water (including stormwater, as described in Section 7C) during construction, the WSDOT Prime Contractor shall do everything possible to control and contain the material until appropriate measures can be taken. The response procedures include a description of the actions that WSDOT Prime Contractor shall take to address each task shown in the tables as well as the specific on-site, spill response equipment that shall be used to perform each task. Complete Tables 9.1 and 9.2.

If WSDOT Prime Contractor plans to use a Subcontractor for spill response, provide contact information for the Subcontractor in Table 1 and, in the appropriate table below, identify when the Subcontractor shall be used and the actions that WSDOT Prime Contractor shall take at in the interim while waiting for the Subcontractor to respond. Add Subcontractor information to Tables 9.1 and 9.2 accordingly.

If WSDOT Prime Contractor encounters unanticipated pre-existing contamination within the Project area during Project work, WSDOT Prime Contractor shall immediately notify the WSDOT Project PE and contain the contamination.

Spill Response Task

Example: Identify each fuel, petroleum product and hazardous materials listed in Section 4, Stormwater that has come into contact with hazardous material, pre-existing contamination, or contaminant sources, and unknown pre-existing contamination of contamination sources. Exception: Complete Table 9.2 for spills that occur during work below the ordinary high- water line. (e.g., include in this or other columns a description of the internal, emergency assistance, WSDOT, and agency notifications that will be made as part of the response procedures, referencing and adding to Figure 2.1. as appropriate) (e.g. identify which area will be secured and how the area will be secured) (e.g. identify how the spill source will be contained and eliminated during spill response) (e.g., Identify how the spill will be cleaned up whether in soil or water, including stormwater that has contacted petroleum product, fuel or a hazardous material). Explain how the spilled material and all cleanup supplies will be disposed of; describe documentation substantiating such disposal that will be provided to the WSDOT PE and when it will be provided.

Notes: 1 Spilled fuel, petroleum product and hazardous materials, contaminated stormwater, contaminated soil and water, and all cleanup supplies shall be transported off site for disposal at a facility approved by the Department of Ecology. No potentially hazardous materials, contaminated soil or water, or cleanup supplies may be discharged to any sanitary sewer without approval of the local sewer authority. Contaminated stormwater will not be discharged to any sanitary sewer without approval of the local sewer authority.

Petroleum products, fuel, and hazardous material spills shall be addressed and shall be prevented from reaching storm drains or other discharge points.

It is acceptable to combine materials covered by the same response procedures, as long each material is clearly identified and will not change with the combination

Table 9.1. Spill Response Procedures, Including Actions to be Taken and Equipment to be Used

Hazardous Material and Location ¹	Assess the Spill	Secure the Area	Contain and Eliminate Spill Source	Cleanup Spilled Material, Decontaminate Equipment, Dispose of Spilled & Contaminated Material

Spill Response Task

Purpose is to identify the actions in response to each fuel, petroleum product, and hazardous material used below the ordinary high-water mark that was released/spilled. (e.g., include in this or other columns a description of the internal, emergency assistance, WSDOT, and agency notifications that will be made as part of the response procedures, referencing and adding to Figure 2.1 as appropriate) (e.g. identify which area will be secured and how the area will be secured) (e.g. identify procedures on how the spill source will be contained and eliminated during spill response) (e.g., Identify how the spill will be cleaned up whether in soil or water, including stormwater that has contacted petroleum product, fuel or a hazardous material). Explain how the spilled material and all cleanup supplies will be disposed of; describe documentation substantiating such disposal that will be provided to the WSDOT PE and when it will be provided.

Notes: 1 Spilled fuel, petroleum product and hazardous materials, contaminated stormwater, contaminated soil and water, and all cleanup supplies shall be transported off site for disposal at a facility permitted or approved to accept that waste. No potentially hazardous materials, contaminated soil or water (including stormwater), or cleanup supplies may be discharged to any sanitary sewer without approval of the local sewer authority. Write N/A if no equipment will be used below the ordinary high-water line and delete the following table (but not the table title, above).

Spill Response Task Table 9.2

Table 9.2 Spill Response Procedures for Spills Occurring During Work with Equipment Used Below the Ordinary High-Water Line (Including Actions to be Taken and Equipment to be Used)

Hazardous Material and Location below OHWM 1	Assess the Spill	Secure the Area	Contain and Eliminate Spill Source	Cleanup Spilled Material, Decontaminate Equipment, Dispose of Spilled & Contaminated Material

10. Project Site Map

Attach a project site map, clearly showing each of the following required or recommended items:

- A. Site location and boundaries.
- B. Site access roads.
- C. Drainage pathways from the site.
- D. Waterways (Waterways include streams, creeks, sloughs, rivers, Puget Sound, etc) and sensitive areas (within and nearby). Sensitive areas are areas that typically contain populations that could be particularly sensitive to a hazardous materials spill or release. Such areas include wetlands, areas that provide habitat for threatened or endangered species. Other areas or structures like nursing homes, hospitals, childcare centers, etc. at are technically not a sensitive area yet should be mapped and noted for consideration and included in the mapping Sensitive areas also include areas where groundwater aquifers exist and the groundwater recharges aquifers and streams and where that water can be stored and used for drinking water, such as wellhead protection zones and sole source aquifer recharge areas.
- E. Hazardous materials, equipment, and decontamination areas identified in Section 5 (Potential Spill Sources).
- F. Pre-existing contamination or contaminant sources described in Section 6 (Pre-Existing Contamination).
- G. Spill prevention and response equipment described in Section 8 (Spill Prevention) and Section 9 (Spill Response).
- H. Recommend providing the WSDOT Prime Contractor Executive, WSDOT Prime Contractor Project Manager and WSDOT Prime Contractor Superintendent initial sign-off.
- I. Recommend using Project-specific Plan Sheets or a consistent map scale with identifiable or readable map symbols for each Project SPCC Map.

11. Spill Report Form(s)

The appendix contains a copy of the spill report form that WSDOT Prime Contractor can use in the event of a release or spill is attached (at the end of this template)

If a different form is used, ensure it answers all the questions and statements provided in the attached copied form.

12. Plan Approval

This SPCC Plan is supported by the executives, project manager and the superintendents of WSDOT Prime Contractor having the authority to commit the necessary resources, including labor, equipment, and materials, to expeditiously control and remove any harmful quantity of fuel, petroleum product or hazardous materials spilled or released to the waters or land of the State of Washington.

Executive Signature

WSDOT Prime Contractor

Date Name

Title

WSDOT Prime Contractor

Project Manager Signature

WSDOT Prime Contractor

Date Name

Title

WSDOT Prime Contractor

Superintendent Signature

WSDOT Prime Contractor

Date Name

Title

WSDOT Prime Contractor

SPCC Plan Acknowledgement Form (to be signed by all Project personnel)

This is to certify that I read this Project SPCC Plan and understand its contents. I attended a Project orientation meeting discussing the elements of this SPCC Plan and the safety and health hazards associated with SPCC operations to be performed at this Project. Failure to comply with the requirements contained in this SPCC Plan may result in my removal from the Project.

PRINT NAME SIGNATURE DATE

APPENDIX A EXAMPLE SPILL OR INCIDENT REPORT FORM

Instructions: Complete for any type of petroleum product or hazardous materials/waste spill or incident. Provide a copy of this report to management.

1. WSDOT Personnel Involved in Spill Reporting:

Project/Construction Office: Name, Title, and Phone Number:

Regional Environmental Office: Name, Title, and Phone Number:

2. Contractor:

Name and Title of Person Responsible for Spill Response:

Phone Number:

3. General Spill Information:

Common Name of Spilled Substance:

Quantity Spilled (Estimate):

Describe Concentration of Material (Estimate):

Date of Spill: ____/____/____

Time Spill Started: ____ AM ____ PM Time Spill Ended: ____ AM ____ PM

4. Spill Location and Conditions:

Project Title:

Street Address and/or Milepost, City:

Weather Conditions:

If Spill to the Soil,

Type of soil (if known)

On or within 0.25 mile or less to a stormwater feature, surface water body, a drinking water well or water recharge area? (if so, please identify well or recharge area)

Describe Environmental Damage (i.e. vegetation, soils, etc).

If Spill to Water,

Name of Water Body (if ditch or culvert, identify the water body that the structure discharges to):

Identify the Discharge Point:

Estimate the Depth and Width of the Water Body:

Estimate Flow Rate (i.e., slow, moderate, or fast):

Describe Environmental Damage (i.e., vegetation, fish kill,):

5. Actions Taken:

To Contain Spill and/or Impact of Incident:

To Cleanup Spill and/ or Recover from Incident:

To Remove Cleanup Material:

To Store Cleanup Material:

To Document Disposal:

To Prevent Reoccurrence:

6. Reporting the Spill:

List all agencies contacted; include names, dates, and phone numbers for spoken with:

Record ERTS #, if issued by Ecology:

7. Person Responsible for Managing Termination/Closure of Incident or Spill:

Name and Phone:

Address and Fax:

8. Additional Notes/Information (if necessary)