Set No. _____

Specifications, Proposal,
and Contract Documents for:

132ND Avenue NE Pedestrian Improvements

CIP No. NMC3000010
Job No. 27-24-PW

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

CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS

132nd Avenue NE Pedestrian Improvements
CIP NO. NMC3000010
JOB NO. 27-24-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.

Darren Murata, P.E.
Senior Civil Engineer
DOWL, LLC

Approved for Construction:

_____

Rod Steitzer, P.E.
Capital Projects Manager
City of Kirkland

CITY OF KIRKLAND
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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 2pm-2:30pm, local time on July 30th 2024, for the project hereinafter referred to as:

132nd Avenue NE Pedestrian Improvements
CIP NO. NMC3000010
PROJECT JOB NO. 27-24-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 **132nd Avenue NE Pedestrian Improvements**.
Specific work includes, but is not limited to:

- Traffic Control
- Temporary Erosion and Sediment Control
- Vegetation Removal
- Sidewalk Improvements
- Park Frontage Improvements
- Asphalt Pavement Installation
- Storm Drain Improvements
- Retaining Wall Construction
- Rectangular Rapid Flashing Beacon (RRFB) Construction
- Utility Coordination

The estimated cost for this project is in the range of $1,100,000 to $1,300,000 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 Ling Wang-Staley via email at lwangstaley@kirklandwa.gov. Questions via phone will not be accepted. Bidders shall submit questions no later than 5pm on July 24th, 2024.

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 – July 16th, 2024 and July 23rd, 2024

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

   This agreement is to be executed by the successful bidder.

2. PERFORMANCE AND PAYMENT BOND

   To be executed by the successful bidder and its surety company.

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

132nd Avenue NE Pedestrian Improvements
CIP NO. NMC3000010
JOB NO. 27-24-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.

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 **132nd Avenue NE Pedestrian Improvements Project; JOB NO. 27-24-PW** for the following:

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

Washington State Sales Tax **10.2%** *(in figures)*: $_____

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 **132nd Avenue NE Pedestrian Improvements, JOB NO. 27-24-PW.**

CITY OF KIRKLAND
BID SCHEDULE

132nd Avenue NE Pedestrian Improvements
JOB NO. 27-24-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	1-04	1	FA	$ 25,000	$ 25,000
2	Roadway Surveying	1-05	1	LS		
3	Mobilization	1-09	1	LS		
4	Project Temporary Traffic Control	1-10	1	LS		
5	Clearing and Grubbing	2-01	0.53	AC		
6	Tree Removal	2-01	13	EA		
7	Roadside Cleanup	2-01	1	EST		
8	Removing Wood Fence	2-02	230	LF		
9	Removal Of Structures and Obstructions	2-02	1	LS		
10	Removing Cement Conc. Sidewalk	2-02	10	SY		
11	Removing Cement Conc. Curb and Gutter	2-02	20	LF		
12	Removing Asphalt Conc. Pavement	2-02	1,130	SY		
13	Removing Asphalt Conc. Curb	2-02	110	LF		
14	Roadway Excavation incl. Haul	2-03	1,070	CY		
15	Gravel Borrow incl. Haul	2-03	160	CY		
16	Crushed Surfacing Base Course	4-04	520	TON		
17	Crushed Surfacing Top Course	4-04	125	TON		
18	Asphalt Treated Base, PG 58-22	4-06	320	TON		
19	HMA Cl. 1/2" PG 58-22	5-04	190	TON		
20	Safety Railing	6-05	105	LF		
21	Retaining Wall	6-11	1	LS		
22	Debris Barrier for Culvert Pipe	7-02	2	EA		
23	Solid Wall PVC Storm Sewer Pipe 12 In. Diam.	7-04	170	LF		
24	Catch Basin Type 1	7-05	3	EA		
25	Catch Basin Type 2 48 in. Diam.	7-05	1	EA		
26	Adjust Catch Basin	7-05	6	EA		
27	Connection To Drainage Structure	7-05	3	EA		
28	Locking Solid Metal Cover and Frame for Catch Basin	7-05	2	EA		
29	Replacement Of Brick Riser with Precast Riser	7-05	1	FA	$ 2,000	$ 2,000
30	Structure Excavation Class B incl. Haul	7-08	80	CY		

31	Plugging Existing Pipe	7-08	1	EA		
32	Replace Water Meter Box	7-15	1	EA		
33	Ductile Iron Sewer Pipe 12 in. Diam.	7-17	20	LF		
34	Sewer Cleanout	7-19	1	EA		
35	Silt Fence	8-01	120	LF		
36	Inlet Protection	8-01	13	EA		
37	Erosion/Water Pollution Control	8-01	1	EST	$ 37,500	$ 37,500
38	Seeding And Fertilizing	8-02	0.35	AC		
39	Fine Compost	8-02	470	SY		
40	Cement Conc. Traffic Curb and Gutter	8-04	1,080	LF		
41	Cement Conc. Pedestrian Curb	8-04	70	LF		
42	Cement Conc. Driveway Entrance Type Dropdown	8-06	20	SY		
43	Split Rail Fencing	8-12	170	LF		
44	Cement Conc. Sidewalk	8-14	590	SY		
45	Cement Conc. Curb Ramp Type Parallel	8-14	3	EA		
46	Cement Conc. Curb Ramp Type Perpendicular	8-14	2	EA		
47	Park Sign Concrete Pad	8-14	7	SF		
48	Mailbox Support Type 1	8-18	2	EA		
49	Permanent Signing	8-21	1	LS		
50	Rectangular Rapid Flashing Beacon System	8-20	1	LS		
51	Removing Paint Line	8-22	240	LF		
52	Removing Plastic Traffic Marking	8-22	2	EA		
53	Paint Line	8-22	1,570	LF		
54	Plastic Bicycle Lane Symbol	8-22	7	EA		

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
132nd Avenue NE Pedestrian Improvements Project
CIP NO. NMC3000010
JOB NO. 27-24-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: **132nd Ave NE Pedestrian Improvements.**

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

132nd Avenue NE Pedestrian Improvements

JOB NO. 27-24-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: "132nd Avenue NE Pedestrian Improvements, Job No. 27-24-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: _____
Tracey Dunlap, 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 **132nd Avenue NE Pedestrian Improvements**, **Job No 27-24-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 **132nd Avenue NE Pedestrian Improvements, Job No 27-24-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
132nd Avenue Pedestrian Improvements
JOB NO. 27-24-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 **PRINICPAL**

By:_____ By:_____
Name/Title 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
132nd Avenue NE Pedestrian Improvements
JOB NO. 27-24-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:

By: _____
Signature

_____
Print or Type Name

_____
Title

Address: _____

_____

CITY OF KIRKLAND:

By: _____
Signature

_____
Print or Type Name

_____
Title

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 generation 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

DIVISION 01 – GENERAL REQUIREMENTS

DIVISION 02 – EARTHWORK

DIVISION 03 – AGGREGATE PRODUCTION AND ACCEPTANCE

DIVISION 04 – BASES

DIVISION 05 – SURFACE TREATMENTS AND PAVEMENTS

DIVISION 06 – STRUCTURES

DIVISION 07 – DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS, AND CONDUITS

DIVISION 08 – MISCELLANEOUS CONSTRUCTION

DIVISION 09 – MATERIALS

GSP DIVISION 1

City of Kirkland

SPECIAL PROVISIONS

Supplement to

2024

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, **2024** edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions 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 **132nd Avenue NE Pedestrian Improvements**.

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.

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

DIVISION 1 - GENERAL REQUIREMENTS

DESCRIPTION OF WORK

This contract provides for temporary erosion control, vegetation removal, sidewalk improvements, park frontage improvements, asphalt pavement installation, storm drain improvements, retaining wall construction, rectangular rapid flashing beacon (RRFB) construction, and all related Work, all in accordance with the Contract Plans, these Contract Special Provisions, and the Standard Specifications.

1-01 DEFINITIONS AND TERMS

(January 4, 2016 APWA GSP)

1-01.3 Definitions

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" in Standard Specifications.

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.

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

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.

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

(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.

(July 31, 2017 APWA GSP)

1-02.5 Proposal Forms

Delete this section and replace it with the following:

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

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

(January 1, 2024 APWA GSP Option B)

1-02.6 Preparation of Proposal

Supplement the second paragraph with the following:

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

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

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 copy of the partnership agreement shall be submitted with the Bid Form if any DBE requirements are to be satisfied through such an agreement.

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

(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.

(January 4, 2024 APWA GSP, Option A)

1-02.9 Delivery of Proposal

Delete this section and replace it with the following:

DBE DOCUMENT SUBMITTAL REQUIREMENTS

General

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

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

- DBE Utilization Certification (WSDOT 272-056)
- DBE Written Confirmation Document (WSDOT 422-031) from each DBE firm listed on the Bidder's completed DBE Utilization Certification
- Good Faith Effort (GFE) Documentation (if applicable)
- DBE Bid Item Breakdown (WSDOT 272-054)

Proposals that are received as required will be publicly opened and read as specified in Section 1-02.12. The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" (DBE confirmations, or GFE documentation) that is received after the time specified above, or received in a location other than that specified in the Call for Bids.

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received at the office designated for receipt of bids as specified in Section 1-02.12 the time specified for receipt of the Proposal will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the normal work processes of the Contracting Agency resume.

DBE Utilization Certification (WSDOT Form 272-056)
The DBE Utilization Certification shall be received at the same location and no later than the time required for delivery of the Proposal. The Contracting Agency will not open or consider any Proposal when the DBE Utilization Certification is received after the time specified for receipt of Proposals or received in a location other than that specified for receipt of Proposals. The DBE Utilization Certification may be submitted in the same envelope as the Bid deposit.

DBE Written Confirmation (WSDOT Form 422-031) and/or GFE Documentation, (if applicable)
The DBE Written Confirmation Documents and/or GFE Documents are not required to be submitted with the Proposal. The DBE Written Confirmation Document(s) and/or GFE (if any) shall be received either with the Bid Proposal or as a Supplement to the Bid. The documents shall be received no later than 48 hours (not including Saturdays, Sundays and Holidays) after the time for delivery of the Proposal. To be considered responsive, Bidders shall submit Written Confirmation Documentation from each DBE firm listed on the Bidder's completed DBE Utilization Certification and/or the GFE as required by Section 1-02.6.

DBE Bid Item Breakdown (WSDOT form 272-0-54)
The DBE Bid Item Breakdown shall be received either with the Bid Proposal or as a Supplement to the Bid. The documents shall be received no later than 48 hours (not including Saturdays, Sundays and Holidays) after the time for delivery of the Proposal. The successful Bidder shall submit a completed DBE Bid Item Breakdown, however, minor errors and corrections to DBE Bid Item Breakdown will be returned for correction for a period up to five calendar days after bid opening (not including Saturdays, Sundays and Holidays) DBE Bid Item Breakdown that are still incorrect after the correction period will be determined to be non-responsive.

The DBE Bid Item Breakdown will not be included as part of the executed 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

(January 4, 2024 APWA GSP)

Delete this section and replace it with the following:

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

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

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

(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

(January 4, 2024 APWA GSP Option A)

This section is supplemented with the following:

Within 5 calendar days of the Award date (not including Saturdays, Sundays and Holidays), the successful Bidder shall provide DBE Trucking Credit Form(s) (WSDOT Form 272-058) when trucking appears on the DBE Utilization Certificate (WSDOT Form 272-056). The DBE Trucking Credit Form shall document how the DBE Trucking firm will be able to perform the scope of work subcontracted to them.

Trucking forms will be returned for correction. Trucking Credit Form(s) will not be included as part of the executed Contract.

DBE Trucking Credit Forms shall be submitted in one of the following ways:

1) By E-mail $$1$$ or

2) By Mail to: $$2$$

3) By $$3$$

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

(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

(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 Contractors 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.

(July 23, 2015 APWA GSP)

Add new Section 1-05.4(2).

1-05.4(2) Bridge and Structure Surveys

For all structural work such as bridges and retaining walls, the Contractor shall retain as a part of Contractor's organization an experienced team of surveyors.

The Contractor shall provide all surveys required to complete the structure, except the following primary survey control which will be provided by the Engineer:

1. Centerline or offsets to centerline of the structure.
2. Stations of abutments and pier centerlines.
3. A sufficient number of bench marks for levels to enable the Contractor to set grades at reasonably short distances.
4. Monuments and control points as shown in the Plans.

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	± 0.01 foot
Alignment	± 0.01 foot (between successive points)
Superstructure Elevations	± 0.01 foot (from plan elevations)
Substructure Elevations	± 0.05 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.

(October 1, 2005 APWA GSP)

1-05.7 Removal of Defective and Unauthorized Work

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.

(August 14, 2013 APWA GSP)

1-05.13 Superintendents, Labor and Equipment of Contractor

Delete the sixth and seventh paragraph of this section.

1-05.14 Cooperation With Other Contractors

Section 1-05.14 is supplemented with the following:

(March 13, 1995)
Other Contracts Or Other Work
It is anticipated that the following work adjacent to or within the limits of this project will be performed by others during the course of this project and will require coordination of the work:

Description	Location	Coordination Required
Existing Utility Pole To Be Relocated By Others	Sta 81+29.65, 32.6' LT	Contractor shall coordinate relocation of existing utility pole at NE 113th St and 132nd Ave NE (Site 1) with PSE. Contractor shall complete the construction of the proposed retaining wall first prior to relocation of existing utility pole. Once the retaining wall is complete, contractor shall allow PSE six weeks to complete the relocation of the utility pole. Once the utility pole has been set and the relocation completed, Contractor shall resume work on the curb, gutter, and sidewalk.
Existing Utility Vault To Be Relocated By Others	Sta 61+68.11, 25.81' LT	Contractor shall coordinate relocation of existing power cabinet at NE 108th St and 132nd Ave NE (Site 4) with Comcast. Contractor shall allow Comcast 4 weeks to complete the relocation of the power cabinet. Comcast will remove and relocate the power supply first. The cabinet will be removed once the power supply has been relocated. Once the power cabinet has been

		relocated, Contractor shall resume work on the curb, gutter, and sidewalk.

The Contractor shall coordinate construction activities with other contractors as required by site constraints and scheduling. The Contractor shall plan work to accommodate franchise utilities' construction schedules.

Measurement and Payment

The coordination of work with PSE and Comcast shall be incidental and included in other bid items and no separate payment will be made.

(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.

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 AWPA GSP)

1-06.1(4) Fabrication Inspection Expense

Delete this section in its entirety.

1-06.2(2)B Financial Incentive

(January 4, 2024 AWPA 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): N/A

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.

1-07.6(3) Additional Permits

Add new Section 1-07.6(3)

The Contractor shall obtain the following permits, and any additional permits as necessary. All costs to obtain and comply with permits shall be included in the applicable bid items for the work involved; no separate payment shall be made.

Permit	Work Involved

City of Redmond ROW Use Permit	RRFB Installation at NE 110th Pl and 132nd Ave NE (Site 2). Work also includes restoration of existing curb and gutter, sidewalk panels, and curb ramp on east side of 132nd Ave NE.
City of Kirkland Tree Removal Permit	Removal of landmark tree at NE 113th St and 132nd Ave NE (Site 1).
Electrical Permit	RRFB Installation at NE 110th Pl and 132nd Ave NE (Site 2).

1-07.9 Wages

(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.

(October 1, 2020 APWA GSP, Option A)

1-07.11 Requirements for Nondiscrimination

Supplement this section with the following:

Disadvantaged Business Enterprise Participation

The Disadvantaged Business Enterprise (DBE) requirements of 49 CFR Part 26 and USDOT's official interpretations (i.e., Questions & Answers) apply to this Contract. As such, the requirements of this Contract are to make affirmative efforts to solicit DBEs, provide information on who submitted a Bid or quote and to report DBE participation monthly as described elsewhere in these Contract Provisions. No preference will be included in the evaluation of Bids/Proposals, no minimum level of DBE participation shall be required as a Condition of Award and Bids/Proposals may not be rejected or considered non-responsive on that basis.

DBE Abbreviations and Definitions

Broker – A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract, or, persons/companies who arrange or expedite transactions.

Certified Business Description – Specific descriptions of work the DBE is certified to perform, as identified in the Certified Firm Directory, under the Vendor Information page.

Certified Firm Directory – A database of all Minority, Women, and Disadvantaged Business Enterprises. The on-line Directory is available to Contractors for their use in identifying and soliciting interest from DBE firms. The database is located under the Firm Certification section of the Diversity Management and Compliance System web page at: https://omwbe.diversitycompliance.com.

Commercially Useful Function (CUF)

49 CFR 26.55(c)(1) defines commercially useful function as: "*A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.*"

Contract – For this Special Provision only, this definition supplements Section 1-01.3. 49 CFR 26.5 defines contract as: "… a legally binding relationship obligating a seller to furnish supplies or services (including, but not limited to, construction and professional services)

and the buyer to pay for them. For purposes of this part, a lease is considered to be a contract."

Disadvantaged Business Enterprise (DBE) – A business firm certified by the Washington State Office of Minority and Women's Business Enterprises, as meeting the criteria outlined in 49 CFR 26 regarding DBE certification.

Force Account Work – Work measured and paid in accordance with Section 1-09.6.

Manufacturer (DBE) – A DBE firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the Contract. A DBE Manufacturer shall produce finished goods or products from raw or unfinished material or purchase and substantially alters goods and materials to make them suitable for construction use before reselling them.

Regular Dealer (DBE) – A DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a Contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a Regular Dealer, the DBE firm must be an established regular business that engages in as its principal business and in its own name the purchase and sale of the products in question. A Regular Dealer in such items as steel, cement, gravel, stone, and petroleum products need not own, operate or maintain a place of business if it both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by long-term formal lease agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions shall not be regarded as Regular Dealers within the meaning of this definition.

DBE Goals
No DBE goals have been assigned as part of this Contract.

Affirmative Efforts to Solicit DBE Participation
The Contractor shall not discriminate on the grounds of race, color, sex, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. DBE firms shall have an equal opportunity to compete for subcontracts in which the Contractor enters into pursuant to this Contract.

Contractors are encouraged to:

1. Advertise opportunities for Subcontractors or suppliers in a timely and reasonably designed manner to provide notice of the opportunity to DBEs capable of performing the Work. All advertisements should include a Contract Provision encouraging participation by DBE firms. This may be accomplished through general advertisements (e.g. newspapers, journals, etc.) or by soliciting Bids/Proposals directly from DBEs.

2. Establish delivery schedules that encourage participation by DBEs and other small businesses.

3. Participate with a DBE as a joint venture.

DBE Eligibility/Selection of DBEs for Reporting Purposes Only
Contractor may take credit for DBEs utilized on this Contract only if the firm is certified for the Work being performed, and the firm performs a commercially useful function (CUF).

Absent a mandatory goal, all DBE participation that is attained on this project will be considered as "race neutral" participation and shall be reported as such.

Crediting DBE Participation
All DBE Subcontractors shall be certified before the subcontract on which they are participating is executed.

Be advised that although a firm is listed in the directory, there are cases where the listed firm is in a temporary suspension status. The Contractor shall review the OMWBE Suspended DBE Firms list. A DBE firm that is included on this list may not enter into new contracts that count towards participation.

DBE participation is only credited upon payment to the DBE.

The following are some definitions of what may be counted as DBE participation.

DBE Prime Contractor
Only take credit for that portion of the total dollar value of the Contract equal to the distinct, clearly defined portion of the Work that the DBE Prime Contractor performs with its own forces and is certified to perform.

DBE Subcontractor
Only take credit for that portion of the total dollar value of the subcontract equal to the distinct, clearly defined portion of the Work that the DBE performs with its own forces. The value of work performed by the DBE includes the cost of supplies and materials purchased by the DBE and equipment leased by the DBE, for its work on the contract. Supplies, materials or equipment obtained by a DBE that are not utilized or incorporated in the contract work by the DBE will not be eligible for DBE credit.

The supplies, materials, and equipment purchased or leased from the Contractor or its affiliate, including any Contractor's resources available to DBE subcontractors at no cost, shall not be credited.

DBE credit will not be given in instances where the equipment lease includes the operator. The DBE is expected to operate the equipment used in the performance of its work under the contract with its own forces. Situations where equipment is leased and used by the DBE, but payment is deducted from the Contractor's payment to the DBE is not allowed.

If a DBE subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be credited only if the DBE's Lower-Tier Subcontractor is also a DBE. Work subcontracted to a non-DBE shall not be credited.

Count expenditures toward race/gender-neutral participation only if the DBE is performing a CUF on the contract.

DBE Subcontract and Lower Tier Subcontract Documents
There must be a subcontract agreement that complies with 49 CFR Part 26 and fully describes the distinct elements of Work committed to be performed by the DBE. The subcontract agreement shall incorporate requirements of the primary Contract. Subcontract agreements of all tiers, including lease agreements shall be readily available at the project site for the Engineer review.

DBE Service Provider
The value of fees or commissions charged by a DBE Broker, a DBE behaving in a manner of a Broker, or another service provider for providing a bona fide service, such as professional, technical, consultant, managerial services, or for providing bonds or insurance specifically required for the performance of the contract will only be credited as DBE

participation, if the fee/commission is determined by the Contracting Agency to be reasonable and the firm has performed a CUF.

Temporary Traffic Control
If the DBE firm is being utilized in the capacity of only "Flagging", the DBE firm must provide a Traffic Control Supervisor (TCS) and flagger, which are under the direct control of the DBE. The DBE firm shall also provide all flagging equipment (e.g. paddles, hard hats, and vests).

If the DBE firm is being utilized in the capacity of "Traffic Control Services", the DBE firm must provide a TCS, flaggers, and traffic control items (e.g., cones, barrels, signs, etc.) and be in total control of all items in implementing the traffic control for the project. In addition, if the DBE firm utilizes the Contractor's equipment, such as Transportable Attenuators and Portable Changeable Message Signs (PCMS) no DBE credit can be taken for supplying and operating the items.

Trucking
DBE trucking firm participation may only be credited as DBE participation for the value of the hauling services, not for the materials being hauled unless the trucking firm is also certified as a supplier. In situations where the DBE's work is priced per ton, the value of the hauling service must be calculated separately from the value of the materials in order to determine DBE credit for hauling.

The DBE trucking firm must own and operate at least one licensed, insured and operational truck on the contract. The truck must be of the type that is necessary to perform the hauling duties required under the contract. The DBE receives credit for the value of the transportation services it provides on the Contract using trucks it owns or leases, licenses, insures, and operates with drivers it employs.

The DBE may lease additional trucks from another DBE firm. The Work that a DBE trucking firm performs with trucks it leases from other certified DBE trucking firms qualify for 100% DBE credit

The trucking Work subcontracted to any non-DBE trucking firm will not receive credit for Work done on the project. The DBE may lease trucks from a non-DBE truck leasing company, but can only receive credit as DBE participation if the DBE uses its own employees as drivers.

DBE credit for a truck broker is limited to the fee/commission that the DBE receives for arranging transportation services.

Truck registration and lease agreements shall be readily available at the project site for the Engineer review.

DBE Manufacturer and DBE Regular Dealer
One hundred percent (100%) of the cost of the manufactured product obtained from a DBE Manufacturer can count as DBE participation.

Sixty percent (60%) of the cost of materials or supplies purchased from a DBE Regular Dealer may be credited as DBE participation. If the role of the DBE Regular Dealer is determined to be that of a pass-through, then no DBE credit will be given for its services. If the role of the DBE Regular Dealer is determined to be that of a Broker, then DBE credit shall be limited to the fee or commission it receives for its services. Regular Dealer status and the amount of credit is determined on a Contract-by-Contract basis.

Regular Dealer DBE firms must be approved before being used on a project. The WSDOT Approved Regular Dealer list published on WSDOT's Office of Equal Opportunity (OEO) web site must include the specific project for which approval is being requested. The Regular Dealer must submit the Regular Dealer Status Request form a minimum of five days prior to being utilized on the specific project.

Purchase of materials or supplies from a DBE which is neither a manufacturer nor a regular dealer, (i.e. Broker) only the fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, can count as DBE participation provided the fees are not excessive as compared with fees customarily allowed for similar services. Documentation will be required to support the fee/commission charged by the DBE. The cost of the materials and supplies themselves cannot be counted toward as DBE participation.

Note: Requests to be listed as a Regular Dealer will only be processed if the requesting firm is a material supplier certified by the Office of Minority and Women's Business Enterprises in a NAICS code that falls within the 42XXXX NAICS Wholesale code section.

Procedures Between Award and Execution

After Award and prior to Execution, the Contractor shall provide the additional information described below. Failure to comply shall result in the forfeiture of the Bidder's Proposal bond or deposit.

1. A list of all firms who submitted a bid or quote in attempt to participate in this project whether they were successful or not. Include the business name and mailing address.

   Note: The firms identified by the Contractor may be contacted by the Contracting Agency to solicit general information as follows: age of the firm and average of its gross annual receipts over the past three-years.

Procedures After Execution

Commercially Useful Function (CUF)

The Contractor may only take credit for the payments made for Work performed by a DBE that is determined to be performing a CUF. Payment must be commensurate with the work actually performed by the DBE. This applies to all DBEs performing Work on a project, whether or not the DBEs are COA, if the Contractor wants to receive credit for their participation. The Engineer will conduct CUF reviews to ascertain whether DBEs are performing a CUF. A DBE performs a CUF when it is carrying out its responsibilities of its contract by actually performing, managing, and supervising the Work involved. The DBE must be responsible for negotiating price; determining quality and quantity; ordering the material, installing (where applicable); and paying for the material itself. If a DBE does not perform "all" of these functions on a furnish-and-install contract, it has not performed a CUF and the cost of materials cannot be counted toward DBE COA Goal. Leasing of equipment from a leasing company is allowed. However, leasing/purchasing equipment from the Contractor is not allowed. Lease agreements shall be readily available for review by the Engineer.

In order for a DBE traffic control company to be considered to be performing a CUF, the DBE must be in control of its work inclusive of supervision. The DBE shall employ a Traffic Control Supervisor who is directly involved in the management and supervision of the traffic control employees and services.

The DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which the funds are passed in order to obtain the appearance of DBE participation.

The following are some of the factors that the Engineer will use in determining whether a DBE trucking company is performing a CUF:

- The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on the Contract. The owner demonstrates business related knowledge, shows up on site and is determined to be actively running the business.

- The DBE shall with its own workforce, operate at least one fully licensed, insured, and operational truck used on the Contract. The drivers of the trucks owned and leased by the DBE must be exclusively employed by the DBE and reflected on the DBE's payroll.

- Lease agreements for trucks shall indicate that the DBE has exclusive use of and control over the truck(s). This does not preclude the leased truck from working for others provided it is with the consent of the DBE and the lease provides the DBE absolute priority for use of the leased truck.

- Leased trucks shall display the name and identification number of the DBE.

Joint Checking
A joint check is a check between a Subcontractor and the Contractor to the supplier of materials/supplies. The check is issued by the Contractor as payer to the Subcontractor and the material supplier jointly for items to be incorporated into the project. The DBE must release the check to the supplier, while the Contractor acts solely as the guarantor.

A joint check agreement must be approved by the Engineer and requested by the DBE involved using the DBE Joint Check Request Form (form # 272-053) prior to its use. The form must accompany the DBE Joint Check Agreement between the parties involved, including the conditions of the arrangement and expected use of the joint checks.

The approval to use joint checks and the use will be closely monitored by the Engineer. To receive DBE credit for performing a CUF with respect to obtaining materials and supplies, a DBE must "be responsible for negotiating price, determining quality and quantity, ordering the material and installing and paying for the material itself." The Contractor shall submit DBE Joint Check Request Form for the Engineer approval prior to using a joint check.

Material costs paid by the Contractor directly to the material supplier is not allowed. If proper procedures are not followed or the Engineer determines that the arrangement results in lack of independence for the DBE involved, no DBE credit will be given for the DBE's participation as it relates to the material cost.

Prompt Payment
Prompt payment to all subcontractors shall be in accordance with Section 1-08.1. Prompt Payment requirements apply to progress payments as well as return of retainage.

Reporting
The Contractor and all subcontractors/suppliers/service providers that utilize DBEs to perform work on the project, shall maintain appropriate records that will enable the Engineer to verify DBE participation throughout the life of the project.

Refer to Section 1-08.1 for additional reporting requirements associated with this Contract.

Decertification
When a DBE is "decertified" from the DBE program during the course of the Contract, the participation of that DBE shall continue to count as DBE participation as long as the subcontract with the DBE was executed prior to the decertification notice. The Contractor is obligated to substitute when a DBE does not have an executed subcontract agreement at the time of decertification.

Consequences of Non-Compliance
Each contract with a Contractor (and each subcontract the Contractor signs with a Subcontractor) must include the following assurance clause:

The Contractor, subrecipient, or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

(1) Withholding monthly progress payments;

(2) Assessing sanctions;

(3) Liquidated damages; and/or

(4) Disqualifying the Contractor from future bidding as non-responsible.

Payment
Compensation for all costs involved with complying with the conditions of this Specification and any other associated DBE requirements is included in payment for the associated Contract items of Work, except otherwise provided in the Specifications.

(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

(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	Tom Chriest	(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
Street	City of Kirkland	123 Fifth Avenue Kirkland, WA 98033	Chris Gavigan	(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	Cheryl Schneider	(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 83rd Ave. S. Kent, WA 98032	Rusty Perdieu	(706) 889-6967
Cable Television	Comcast	1525 - 75th St SW, Suite 200 Everett, WA 98203	Chris Combs	(425) 273-7832
Network	Verizon/MCI	11311 NE 120th St Kirkland, WA 98034	Brad Landis Scott Christenson	(425) 201-0901 (425) 471-1079
School District Transportation	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 132nd Ave NE)	Seattle Public Utilities		Mike Freeman	(206) 684-8117

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.

(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 <u>not</u> satisfy these requirements – actual endorsements must be submitted.

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

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Contractor's maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the Contracting Agency's recourse to any remedy available at law or in equity.

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

1-07.18(5)A Commercial General Liability

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

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

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

Such policy must provide the following minimum limits:

$1,000,000	Each Occurrence
$2,000,000	General Aggregate
$2,000,000	Products & Completed Operations Aggregate
$1,000,000	Personal & Advertising Injury each offence
$1,000,000	Stop Gap / Employers' Liability each accident

1-07.18(5)B Automobile Liability

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

Such policy must provide the following minimum limit:

$1,000,000	Combined single limit each accident

1-07.18(5)C Workers' Compensation

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

(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.

(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.

(December 8, 2014 APWA GSP)

Add new Section 1-08.0(2).

1-08.0(2) Hours of Work

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

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

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 5 working days prior to the day(s) the Contractor is requesting to change the hours.

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

1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)
2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.
4. If a 4-10 work schedule is requested and approved the non working day for the week will be charged as a working day.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

(December 30, 2022 APWA GSP, Option A)
1-08.1 Subcontracting

Section 1-08.1 is supplemented with the following:

Prior to any subcontractor or lower tier subcontractor beginning work, the Contractor shall submit to the Engineer a certification (WSDOT Form 420-004) that a written agreement between the Contractor and the subcontractor or between the subcontractor and any lower tier subcontractor has been executed. This certification shall also guarantee that these subcontract agreements include all the documents required by the Special Provision Federal Agency Inspection.

A subcontractor or lower tier 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 (WSDOT Form 421-012), and

2. Contractor and Subcontractor or Lower Tier Subcontractor Certification for Federal-aid Projects (WSDOT Form 420-004).

The Contractor shall submit to the Engineer a completed Monthly Retainage Report (WSDOT Form 272-065) within 15 calendar days after receipt of every monthly progress payment until every subcontractor and lower tier subcontractor's retainage has been released.

The Contractor's records pertaining to the requirements of this Special Provision shall be open to inspection or audit by representatives of the Contracting Agency 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 lower tier subcontractors shall be available and open to similar inspection or audit for the same time period.

(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.

(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 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.

(December 30, 2022 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 of Amounts Credited as DBE Participation, as required by the Contract Provisions.
   d. Final Contract Voucher Certification
   e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
   f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
   g. Property owner releases per Section 1-07.24

(January 1, 2016 COK GSP)

Section 1-08.5 is supplemented with the following:

This project shall be substantially completed in its entirety within 60 working days.

(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 → LD = 0.15 × C ÷ T, and
For C ≤ $50,000 → LD = 0.30 × C ÷ 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

(December 30, 2022 APWA GSP, Option 2)
1-09.2(1) General Requirements for Weighing Equipment

Revise item 4 of the fifth paragraph to read:

4. Test results and scale weight records for each day's hauling operations are provided to the Engineer daily. Reporting shall utilize WSDOT form 422-027, Scaleman's Daily Report, unless the printed ticket contains the same information that is on the Scaleman's Daily Report Form. The scale operator must provide AM and/or PM tare weights for each truck on the printed ticket.

(January 1, 2016 COK GSP)

1-09.2(1) General Requirements for Weighing Equipment

The second to last 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.

(December 30, 2022 APWA GSP)

1-09.9 Payments

Section 1-09.9 is revised to read:

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

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make a determination based on information available. The Project Engineer's determination of the cost of work shall be final.

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

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

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

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

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

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

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

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

Upon completion of all Work and after final inspection (Section 1-05.11), the amount due the Contractor under the Contract will be paid based upon the final estimate made by the Engineer and presentation of a Final Contract Voucher Certification to be signed by the Contractor. The Contractor's signature on such voucher shall be deemed a release of all claims of the Contractor unless a Certified Claim is filed in accordance with the requirements of Section 1-09.11 and is expressly excepted from the Contractor's certification on the Final Contract Voucher Certification. The date the Contracting Agency signs the Final Contract Voucher Certification constitutes the final acceptance date (Section 1-05.12).

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

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

(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.

1-09.11 Disputes and Claims

(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.

1-09.13 Claims Resolution

(October 1, 2005 APWA GSP)Option A

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

Delete this Section and replace it with the following:

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

(November 30, 2018 APWA GSP)
1-09.13(3)A Administration of Arbitration

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.

END OF DIVISION 1

GSP DIVISION 2

City of Kirkland

DIVISION 2 – EARTHWORK

2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.3 Construction Requirements

(January 1, 2020 COK GSP)
2-01.3(1) Clearing

This Section is supplemented with the following:

7. 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.

2-01.4 Measurement

This Section is supplemented with the following:

Tree Removal will be measured per each tree removed.

2-01.5 Payment

This Section is supplemented with the following:

"Tree Removal", per each.

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.3 Construction Requirements

(******)

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

Supplement by adding the following:

The approximate thickness of the Asphalt Conc. pavement is 4 inches.

The approximate thickness of the Cement Conc. sidewalk is 4 inches.

The following Miscellaneous Obstructions shall be removed and disposed of:

1. STA 82+17.21 (L) - Removal of Rockery Retaining Wall – 70 SF
2. STA 82+12.20, 38.57' (L) - 82+12.19, 16.93' (L) - Removing Drainage Pipe – 22 LF
3. STA 82+12.19, 16.93' (L) - 82+24.84, 22.9' (L) - Removing Drainage Pipe – 14 LF
4. STA 82+12.19, 16.93' (L) - Removing Drainage Structure – 1 EA

5. STA 81+96.66, 33.64' (L) - Removing Sewer Cleanout – 1 EA
6. STA 81+22.76, 16.87' (L) - 82+12.19, 16.93' (L) - Removing Drainage Pipe – 89 LF
7. STA 81+22.76, 16.87' (L) - 81+21.64, 36.89' (L) - Removing Drainage Pipe – 37 LF
8. STA 81+22.76, 16.87' (L) - Removing Drainage Structure – 1 EA
9. STA 67+83.87, 50.82' (L) - 67+85.17, 18.67' (L) - Removing Drainage Pipe – 32 LF
10. STA 61+69.29, 24.26' (L) - Removing Bollard – 3 EA
11. STA 60+76.91, 17.31' (L) - 62+19.27, 17.68' (L) - Removing Drainage Pipe – 142 LF
12. STA 60+76.91, 17.31' (L) - Removing Drainage Structure – 1 EA
13. STA 58+83.58, 26.66' (L) - Removing Bollard – 2 EA
14. STA 58+22.66, 28.50' (L) - Remove Wooden Park Sign – 1 EA
15. STA 57+45.27, 26.17' (L) - Removing Bollard – 2 EA
16. STA 55+17.61, 17.41' (L) - 55+25.77, 24.87' (L) – Removing Drainage Pipe – 11 LF
17. STA 55+25.77, 24.87' (L) - Removing Drainage Structure – 1 EA
18. STA 31+21.10, 31.50' (L) - STA 31+19.45, 19.12' (L) – Removing Wooden Divider – 13 LF

(******)

2-02.4 Measurement

This Section is supplemented with the following:

Sidewalk removal will be measured by the square yard.

Asphalt pavement removal will be measured by the square yard.

Curb removal will be measured by the linear foot.

Curb and Gutter Removal will be measured by the linear foot.

Fence removal will be measured by the linear foot.

(******)

2-02.5 Payment

This Section is replaced with the following:

“Removal of Structures and Obstructions”, lump sum.

The lump sum price for “Removal of Structures and Obstructions” shall be full pay for all materials, labor, tools, equipment and supplies necessary for removal of all Miscellaneous Obstructions listed in Section 2-02.3(2).

"Removing Cement Conc. Sidewalk”, per square yard.

"Removing Asphalt Conc. Pavement”, per square yard.

The unit bid price for "Removing Cement Conc. Sidewalk” and "Removing Asphalt Conc. Pavement” shall be full pay for all materials, labor, tools, equipment and supplies necessary for removal, including saw cutting of the existing sidewalk and pavement.

“Removing Cement Conc. Curb”, per linear foot.

“Removing Asphalt Conc. Curb”, per linear foot.

“Removing Cement Conc. Curb and Gutter”, per linear foot.

“Removing Wood Fence”, per linear foot.

END OF DIVISION 2

GSP DIVISION 3

City of Kirkland

DIVISION 3 – AGGREGATE PRODUCTION AND ACCEPTANCE

END OF DIVISION 3

GSP DIVISION 4

City of Kirkland

DIVISION 4 – BASES

(May 5, 2015 APWA GSP)

Add the new Section 4-06:

4-06 ASPHALT TREATED BASE (ATB)

4-06.1 Description

Asphalt treated base (ATB) consists of a compacted course of base material which has been weatherproofed and stabilized by treatment with an asphalt binder.

The Work shall consist of one or more courses of asphalt treated base placed on the Subgrade in accordance with these Specifications and in conformity with the lines, grades, thicknesses, and typical cross-sections shown in the Plans or as staked.

4-06.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt	9-02.1
Anti-Stripping Additive	9-02.4
Aggregates	9-03.6

The grade of paving asphalt shall be as required in the Contract.

4-06.3 Construction Requirements

4-06.3(1) Asphalt Mixing Plant

Asphalt mixing plants for asphalt treated base shall meet the following requirements:

Heating
The plant shall be capable of heating the aggregates to the required temperature.

Proportioning
The mixing plant shall be capable of proportioning: the aggregates to meet the Specifications, and the asphalt binder will be introduced at the rate specified in the approved mix design. If the aggregates are supplied in two or more sizes, means shall be provided for proportioning or blending the different sizes of aggregates to produce material meeting the Specification requirements.

Recycled asphalt pavement (RAP) may be used in the production of ATB. If utilized, the amount of RAP shall not exceed 30 percent of the total weight of the ATB. The final gradation and asphalt binder content will conform to the approved Job Mix Formula (JMF). ATB will be evaluated under Commercial Evaluation as shown in section 9-03.8(7). Va limts under 9-03.8(7) are excluded from ATB evaluation criteria.

Mixing
The mixer shall be capable of producing a uniform mixture of uniformly coated aggregates meeting the requirements of these Specifications.

4-06.3(2) Preparation of Aggregates

Aggregates for asphalt treated base shall be stockpiled before use in accordance with the requirements of Section 3-02.

The aggregates shall be heated as required by the Engineer.

4-06.3(2)A Mix Design

The mix design requirements for asphalt treated base shall be as described in Section 9-03.6(3). N_{design} will be 100 gyrations for all ATB design applications. The asphalt binder shall be PG 64-22 unless specifically altered in the project specifications. The proposed mix design will be submitted for review on WSDOT Form 350-042 with included notes applicable to the ATB design evaluation.

4-06.3(3) Vacant

4-06.3(4) Mixing

The asphalt treated base shall be mixed in accordance with the requirements of Section 5-04.3(8).

4-06.3(5) Hauling Equipment

Hauling equipment for asphalt treated base shall conform to the requirements of Section 5-04.3(2).

4-06.3(6) Spreading and Finishing

Asphalt treated base shall be spread with a spreading machine equipped with a stationary, vibratory, or oscillating screed or cut-off device, subject to the approval of the Engineer. Approval of the equipment shall be based on a job demonstration that the finished product will meet all requirements of the Specifications. Automatic controls will not be required. Unless otherwise directed by the Engineer, the nominal compacted depth of any ATB layer shall not exceed 0.40 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.

The internal temperature of the ATB mixture at the time compaction is achieved shall be a minimum of 185°F. Rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F.

4-06.3(6)A Subgrade Protection Course

Unless otherwise specified by the Engineer, the Contractor shall place the asphalt treated base as a protection for the prepared Subgrade on all sections of individual Roadways which are to receive asphalt treated base as soon as 10,000 square yards of Subgrade is completed. This requirement shall not be limited to contiguous areas on the project.

The surface of the Subgrade protection layer when constructed on a grading project shall conform to grade and smoothness requirements that apply to the Subgrade upon which it is placed.

4-06.3(6)B Finish Course

The final surface course of the asphalt treated base, excluding Shoulders, shall not deviate at any point more than ⅜ inch from the bottom of a 10-foot straightedge laid in any direction on the surface on either side of the Roadway crown. Failure to meet this requirement shall necessitate sufficient surface correction to achieve the required tolerance, as approved by the Engineer, at no expense to the Contracting Agency.

When portland cement concrete pavement is placed on an asphalt base, the surface tolerance of the asphalt base shall be such that no elevation lies more than 0.05 feet below nor 0.00 feet 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 Engineer, at no expense to the Contracting Agency.

4-06.3(7) Density

The asphalt treated base shall be compacted to a density of not less than 80% percent of the maximum theoretical density established for the mix by WSDOT FOP for AASHTO T 209. The density of the base shall be determined by means of tests on cores taken from the Roadway or with the nuclear gauge in accordance with Section 5-04.3(10)B. The frequency of these tests shall be at the discretion of the Engineer, but in no case shall it be less than one control lot for each normal day's production. The use of equipment which results in damage to the materials or produces substandard workmanship will not be permitted.

4-06.3(8) Anti-Stripping Additive

An anti-stripping additive shall be added to the asphalt binder material in accordance with Section 9-02.4 in the amount designated in a WSDOT mix design/anti-strip evaluation report for a dense graded hot mix asphalt design from the same gravel source within the last 24 months or as evaluated separately by an accredited lab using current WSDOT test methods (AASHTO T324 – Hamburg or WSDOT TM T718 – Modified Lottman). Alternately, the ATB may be evaluated for anti-strip additive using ASTM D3625 (Standard Practice for Effect of Water on Bituminous-Coated Aggregate Using Boiling Water) by an accredited lab. The anti-stripping additive required will be the minimum amount necessary to achieve a passing evaluation.

4-06.4 Measurement

Asphalt treated base including paving asphalt will be measured by the ton.

4-06.5 Payment

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

"Asphalt Treated Base, PG XX-XX", per ton.

"Anti-Stripping Additive", if required by one of the evaluation methods allowed in 4-06.3(8), shall be added and included in the unit contract price for Asphalt Treated Base, PG XX-XX, per ton. There will be no separate additional payment for the required anti-strip additive.

END OF DIVISION 4

GSP DIVISION 5

City of Kirkland

DIVISION 5 – SURFACE TREATMENTS AND PAVEMENTS

(July 18, 2018 APWA GSP)
Delete Section 5-04 and all amendments and replace it with the following Section 5-04:

5-04 Hot Mix Asphalt

5-04.1 Description

This Work shall consist of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base in accordance with these Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans. The manufacture of HMA may include warm mix asphalt (WMA) processes in accordance with these Specifications. WMA processes include organic additives, chemical additives, and foaming.

HMA shall be composed of asphalt binder and mineral materials as may be required, mixed in the proportions specified to provide a homogeneous, stable, and workable mixture.

5-04.2 Materials

Materials shall meet the requirements of the following sections:

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

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

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

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

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

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

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

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

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

5-04.2(1)A Vacant

5-04.2(2) Mix Design – Obtaining Project Approval

No paving shall begin prior to the approval of the mix design by the Engineer.

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

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

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

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

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

Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).

- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324, or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

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

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

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

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

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

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

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

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

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

Minimum Surface Temperature for Paving

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

5-04.3(2) Paving Under Traffic

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

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

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

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

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

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

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

1. **Equipment for Preparation of Asphalt Binder** – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
2. **Thermometric Equipment** – An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
3. **Heating of Asphalt Binder** – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.
4. **Sampling and Testing of Mineral Materials** – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).
5. **Sampling HMA** – The HMA plant shall provide for sampling HMA by one of the following methods:

a. A mechanical sampling device attached to the HMA plant.
b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment

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

The contractor shall provide an environmentally benign means to prevent the HMA mixture from adhering to the hauling equipment. Excess release agent shall be drained prior to filling hauling equipment with HMA. Petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA shall not be used. For live bed trucks, the conveyer shall be in operation during the process of applying the release agent.

5-04.3(3)C Pavers

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

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

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

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

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

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

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

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

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

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

To be approved for use, an MTV:

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

To be approved for use, an MTD:

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

5-04.3(3)E Rollers

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

5-04.3(4) Preparation of Existing Paved Surfaces

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

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

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

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

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

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

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

5-04.3(4)A Crack Sealing

5-04.3(4)A1 General

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

Cleaning: Ensure that cracks are thoroughly clean, dry and free of all loose and foreign material when filling with crack sealant material. Use a hot compressed air lance to dry and warm the pavement surfaces within the crack immediately prior to filling a crack with the sealant material. Do not overheat pavement. Do not use direct flame dryers. Routing cracks is not required.

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

The sand slurry shall consist of approximately 20 percent CSS-1 emulsified asphalt, approximately 2 percent portland cement, water (if required), and the remainder clean Class 1 or 2 fine aggregate per section 9-03.1(2). The components shall be thoroughly mixed and then poured into the cracks and joints until full. The following day, any cracks or joints that are not completely filled shall be topped off with additional sand slurry. After the sand slurry is placed, the filler shall be struck off flush with the

existing pavement surface and allowed to cure. The HMA overlay shall not be placed until the slurry has fully cured. The requirements of Section 1-06 will not apply to the portland cement and sand used in the sand slurry.

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

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

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

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

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

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

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

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

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

5-04.3(4)B Vacant

5-04.3(4)C Pavement Repair

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

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

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

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

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

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

5-04.3(5)A Vacant

5-04.3(6) Mixing

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

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved by the Engineer. Also, when a WMA additive is included in the manufacture of HMA, the discharge temperature of the HMA shall not exceed the maximum recommended by the manufacturer of the WMA additive. A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, the moisture content shall be reduced as directed by the Engineer.

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

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

5-04.3(7) Spreading and Finishing

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture.

Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

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

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

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

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

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

5-04.3(9) HMA Mixture Acceptance

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

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

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

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

HMA Tolerances and Adjustments

1. **Job Mix Formula Tolerances** – The constituents of the mixture at the time of acceptance shall be within tolerance. The tolerance limits will be established as follows:
   For Asphalt Binder and Air Voids (Va), the acceptance limits are determined by adding the tolerances below to the approved JMF values. These values will also be the Upper Specification Limit (USL) and Lower Specification Limit (LSL) required in Section 1-06.2(2)D2

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

For Aggregates in the mixture:

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

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

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

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

5-04.3(9)A Vacant

5-04.3(9)B Vacant

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

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

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

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

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

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

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling

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

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

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

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

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

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

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

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

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

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

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

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

5-04.3(9)C5 Vacant

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

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

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

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

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

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

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

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

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

5-04.3(10) HMA Compaction Acceptance

HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density). The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the

pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

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

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

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

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

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

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

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

Test Results

For a sublot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core be used for determination of the relative density of the sublot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the sublot and will be used for calculation of the CPF and acceptance of HMA compaction lot.

When cores are taken by the Contracting Agency at the request of the Contractor, they shall be requested by noon of the next workday after the test results for the sublot have been provided or made available to the Contractor. Core locations shall be outside of wheel paths and as determined by the Engineer. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted from any monies due or that may become due the Contractor under the Contract at the rate of $200 per core and the Contractor shall pay for the cost of the traffic control.

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

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

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. Unless the Engineer has approved otherwise, rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat. Rollers shall only be operated in static mode on bridge decks.

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

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

5-04.3(10)C Vacant

5-04.3(10)D HMA Nonstatistical Compaction

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

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

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to one day's production or 400 tons, whichever is less except that the final sublot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per sublot per WSDOT T 738.

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

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

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

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

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

5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a sublot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For compaction below the required 92% a Non-Conforming Compaction Factor (NCCF) will be determined. The NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of CPF, the quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of mix.

5-04.3(11) Reject Work

5-04.3(11)A Reject Work General

Work that is defective or does not conform to Contract requirements shall be rejected. The Contractor may propose, in writing, alternatives to removal and replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in Section 1-06.2(2) and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

5-04.3(11)B Rejection by Contractor

The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

5-04.3(11)C Rejection Without Testing (Mixture or Compaction)

The Engineer may, without sampling, reject any batch, load, or section of Roadway that appears defective. Material rejected before placement shall not be incorporated into the pavement. Any rejected section of Roadway shall be removed.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests that the rejected material be tested. If the Contractor elects to have the rejected material tested, a minimum of three representative samples will be obtained and tested. Acceptance of rejected material will be based on conformance with the nonstatistical acceptance Specification. If the CPF for the rejected material is less than 0.75, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

5-04.3(11)D Rejection - A Partial Sublot

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a normal sublot any material that is suspected of being defective in relative density, gradation or asphalt binder content. Such isolated material will not include an original sample location. A minimum of three random samples of the suspect material will be obtained and tested. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)E Rejection - An Entire Sublot

An entire sublot that is suspected of being defective may be rejected. When a sublot is rejected a minimum of two additional random samples from this sublot will be obtained. These additional samples and the original sublot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)F Rejection - A Lot in Progress

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced:

1. When the Composite Pay Factor (CPF) of a lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. When the Pay Factor (PF) for any constituent of a lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. When either the PFi for any constituent or the CPF of a lot in progress is less than 0.75.

5-04.3(11)G Rejection - An Entire Lot (Mixture or Compaction)

An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints

The Contractor shall conduct operations such that the placing of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed and the roller may pass over the unprotected end of the freshly laid mixture only when the placement of the course must be discontinued for such a length of time that the mixture will cool below compaction temperature. When the Work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course.

A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers or tamping irons shall be used to seal the joint.

5-04.3(12)A2 Longitudinal Joints

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course

shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than ½ of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

5-04.3(12)B Bridge Paving Joint Seals

5-04.3(12)B1 HMA Sawcut and Seal

Prior to placing HMA on the bridge deck, establish sawcut alignment points at both ends of the bridge paving joint seals to be placed at the bridge ends, and at interior joints within the bridge deck when and where shown in the Plans. Establish the sawcut alignment points in a manner that they remain functional for use in aligning the sawcut after placing the overlay.

Submit a Type 1 Working Drawing consisting of the sealant manufacturer's application procedure.

Construct the bridge paving joint seal as specified ion the Plans and in accordance with the detail shown in the Standard Plans. Construct the sawcut in accordance with the detail shown in the Standard Plan. Construct the sawcut in accordance with Section 5-05.3(8)B and the manufacturer's application procedure.

5-04.3(12)B2 Paved Panel Joint Seal

Construct the paved panel joint seal in accordance with the requirements specified in section 5-04.3(12)B1 and the following requirement:

1. Clean and seal the existing joint between concrete panels in accordance with Section 5-01.3(8) and the details shown in the Standard Plans.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than ⅛ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than ¼ inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, the pavement surface shall be corrected by one of the following methods:

1. Removal of material from high places by grinding with an approved grinding machine, or
2. Removal and replacement of the wearing course of HMA, or
3. By other method approved by the Engineer.

Correction of defects shall be carried out until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of $500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When utility appurtenances such as manhole covers and valve boxes are located in the traveled way, the utility appurtenances shall be adjusted to the finished grade prior to paving. This requirement may be waived when requested by the Contractor, at the discretion of the Engineer or when the adjustment details provided in the project plan or specifications call for utility appurtenance adjustments after the completion of paving.

Utility appurtenance adjustment discussions will be included in the Pre-Paving planning (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer prior to the start of paving.

5-04.3(14) Planing (Milling) Bituminous Pavement

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

Locations of existing surfacing to be planed are as shown in the Drawings.

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, unless otherwise specified by the Contract Documents or approved by the Engineer in writing, the Contractor shall comply with the following:

1. Intersections:
   a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure, must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).
   b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.
   c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.
   d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.
   e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.
2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.
3. Permanent pavement marking must comply with Section 8-22.

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

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

may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

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

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

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

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

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

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, Metro transit operations and working around energized overhead wires, school and nursing home and hospital and other accesses, other contractors who may be operating in the area, pedestrian and bicycle traffic, and emergency services. The Contractor, and Subcontractors that may be part of that day's operations, must meet with the Engineer and discuss the proposed operation as it relates to the submitted planing plan and paving plan, approved traffic control plan, and public convenience and safety. Such discussion includes, but is not limited to:

1. General for both Paving Plan and for Planing Plan:
   a. The actual times of starting and ending daily operations.

b. In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.
c. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, to public convenience and safety, and to other contractors who may operate in the Project Site.
d. Notifications required of Contractor activities, and coordinating with other entities and the public as necessary.
e. Description of the sequencing of installation and types of temporary pavement markings as it relates to planning and to paving.
f. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed
g. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells, street car rail, and castings, before planning, see Section 5-04.3(14)B2.
h. Description of how flaggers will be coordinated with the planing, paving, and related operations.
i. Description of sequencing of traffic controls for the process of rigid pavement base repairs.
j. Other items the Engineer deems necessary to address.

2. Paving – additional topics:
   a. When to start applying tack and coordinating with paving.
   b. Types of equipment and numbers of each type equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type equipment as it relates to meeting Specification requirements.
   c. Number of JMFs to be placed, and if more than one JMF how the Contractor will ensure different JMFs are distinguished, how pavers and MTVs are distinguished if more than one JMF is being placed at the time, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.
   d. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and Supplier shutdown of operations.
   e. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

5-04.3(15) Sealing Pavement Surfaces

Apply a fog seal where shown in the plans. Construct the fog seal in accordance with Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to traffic.

5-04.3(16) HMA Road Approaches

HMA approaches shall be constructed at the locations shown in the Plans or where staked by the Engineer. The Work shall be performed in accordance with Section 5-04.

5-04.4 Measurement

HMA Cl. ___ PG ___, HMA for ___ Cl. ___ PG ___, 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.

Preparation of untreated roadway will be measured by the mile once along the centerline of the main line Roadway. No additional measurement will be made for ramps, Auxiliary Lanes, service roads, Frontage Roads, or Shoulders. Measurement will be to the nearest 0.01 mile.

Soil residual herbicide will be measured by the mile for the stated width to the nearest 0.01 mile or by the square yard, whichever is designated in the Proposal.

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

Asphalt for prime coat will be measured by the ton in accordance with Section 1-09.2.

Prime coat aggregate will be measured by the cubic yard, truck measure, or by the ton, whichever is designated in the Proposal.

Asphalt for fog seal will be measured by the ton, as provided in Section 5-02.4.

Longitudinal joint seals between the HMA and cement concrete pavement will be measured by the linear foot along the line and slope of the completed joint seal.

Planing bituminous pavement will be measured by the square yard.

Temporary pavement marking will be measured by the linear foot as provided in Section 8-23.4.

Water will be measured by the M gallon as provided in Section 2-07.4.

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.

"Preparation of Untreated Roadway", per mile.

The unit Contract price per mile for "Preparation of Untreated Roadway" shall be full pay for all Work described under 5-04.3(4) , with the exception, however, that all costs involved in patching the Roadway prior to placement of HMA shall be included in the unit Contract price per ton for "HMA Cl. ___ PG ___" which was used for patching. If the Proposal does not include a Bid item for "Preparation of Untreated Roadway", the Roadway shall be prepared as specified, but the Work shall be included in the Contract prices of the other items of Work.

“Preparation of Existing Paved Surfaces”, per mile.

The unit Contract Price for “Preparation of Existing Paved Surfaces” shall be full pay for all Work described under Section 5-04.3(4) with the exception, however, that all costs involved in patching the Roadway prior to placement of HMA shall be included in the unit Contract price per ton for “HMA Cl. ___ PG ___” which was used for patching. If the Proposal does not include a Bid item for “Preparation of Untreated Roadway”, the Roadway shall be prepared as specified, but the Work shall be included in the Contract prices of the other items of Work.

“Crack Sealing”, by force account.

“Crack Sealing” will be paid for by force account as specified in Section 1-09.6. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total Bid by the Contractor.

“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.

“Asphalt for Fog Seal”, per ton.

Payment for “Asphalt for Fog Seal” is described in Section 5-02.5.

“Longitudinal Joint Seal”, per linear foot.

The unit Contract price per linear foot for “Longitudinal Joint Seal” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(12).

“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).

“Temporary Pavement Marking”, per linear foot.

Payment for “Temporary Pavement Marking” is described in Section 8-23.5.

“Water”, per M gallon.

Payment for “Water” is described in Section 2-07.5.

“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 other Work associated with the coring (e.g., traffic control) shall be incidental and included within the unit Bid price per each and no additional payments will be made.

“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

GSP DIVISION 6

City of Kirkland

DIVISION 6 – STRUCTURES

6-06 BRIDGE RAILINGS

6-06.4 Measurement

This Section is supplemented with the following:

Safety Railing will be measured by the linear foot.

6-06.5 Payment

This Section is supplemented with the following:

"Safety Railing", per Linear Foot.

The unit price per linear foot shall be full pay for all materials, labor, tools, equipment and supplies necessary to furnish and install the steel handrail as specified and shown on Plans.

6-11 REINFORCED CONCRETE WALLS

6-11.4 Measurement

This Section is supplemented with the following:

No specific unit of measurement shall apply to the lump sum item for "Retaining Wall".

6-11.5 Payment

This Section is supplemented with the following:

"Retaining Wall", per Lump Sum.

The lump sum Contract price for "Retaining Wall" shall be full pay for all materials, labor, tools, equipment and supplies necessary to construct the cast-in-place concrete retaining wall as specified and shown on Plans; including, but not limited to, the wall, footing, architectural finish, weephole, rebar, dowel bars, underdrain, gravel backfill for drains, geotextile wrap, structural excavation, shoring or extra excavation, backfill for excavation, crushed surfacing base course, and any necessary restoration following construction.

END OF DIVISION 6

GSP DIVISION 7

City of Kirkland

DIVISION 7 – DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS, AND CONDUITS

7-02 CULVERT PIPE

7-05.4 Measurement

This Section is supplemented with the following:

Debris Barrier for Culvert Pipe will be measured per Each.

7-05.5 Payment

This Section is supplemented with the following:

"Debris Barrier for Culvert Pipe", per Each.

The unit price per each shall be full pay for all materials, labor, tools, equipment and supplies necessary to furnish and install the debris barrier as specified and shown on the Plans.

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

7-05.4 Measurement

This Section is supplemented with the following:

Locking Solid Metal Cover and Frame for Catch Basin will be measured per Each.

7-05.5 Payment

This Section is supplemented with the following:

"Locking Solid Metal Cover and Frame for Catch Basin", per Each.

"Replacement of Brick Riser with Precast Riser", by force account as provided in Section 1-09.6.

The unit price per each shall be full pay for all materials, labor, tools, equipment and supplies necessary to furnish and install the frame and cover as specified and shown on the Plans.

7-15 SERVICE CONNECTIONS

7-05.4 Measurement

This Section is supplemented with the following:

Replace Water Meter Box will be measured per Each.

7-05.5 Payment

This Section is supplemented with the following:

"Replace Water Meter Box", per Each.

The unit price per each shall be full pay for all materials, labor, tools, equipment and supplies necessary to replace the water meter box as specified and shown on the Plans.

END OF DIVISION 7

GSP DIVISION 8

City of Kirkland

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.

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 force account as provided in Section 1-09.6.

Installation, maintenance, and removal of erosion and water pollution control devices **(except inlet protection as provided in Section 5-04))**, 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".

8-12 CHAIN LINK FENCE AND WIRE FENCE

8-12.2 Materials

Supplement by adding the following:

Materials for Split Rail Fence will be provided by the City.

8-12.3 Construction Requirements

8-12.3(1) Chain Link Fence and Gates

Supplement by adding the following:

The Contractor must install Split Rail Fence where shown in the Plans or as directed by the Engineer.

8-12.4 Measurement

Supplement by adding the following:

Split Rail Fence will be measured by the linear foot.

8-12.5 Payment

Supplement by adding the following:

"Split Rail Fence", per linear foot.

(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.”

8-14.3(4) Measurement

Section 8-14.3(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.

Concrete sign pad will be measured by the square foot of finished surface.

8-14.3(4) Payment

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

“Park Sign Concrete Pad”, per square foot.

8-20 ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, AND ELECTRICAL

8-20.1 Description

Section 8-20.1 is replaced with the following:

This Work consists of furnishing, installing and field testing all materials and equipment necessary to complete in place, fully functional system(s) of any of the following types, including modifications to an existing system, partial removal of an existing system, or complete removal of an existing system, all in accordance with approved methods, the Plans, the Special Provisions, the City of Kirkland Standard Specifications and Details, and the latest edition of the Washington State Department of Transportation (WSDOT) Standard Specifications:

1 Rectangular Rapid Flashing Beacon (RRFB) System

Unless otherwise noted, the locations of foundations, poles, junction boxes, and appurtenances shown in the Plans are approximate; and the exact location(s) will be verified by the Engineer in the field.

8-20.1(2)Industry Codes and Standards

Section 8-20.1(2) is supplemented with the following:

- National Electrical Safety Code (NESC), Secretary NESC, NESC Committee, IEEE
  Post Office Box 1331445 Hoes Lane
  Piscataway, NJ 08855-1331
- The SCL Material Standards, SCL Construction Standards, and Requirements for Electrical Service Connection documents, as published at the time of Bid Opening
- State of Washington Electrical Workers Safety Rules, Chapter 296-45 WAC

8-20.1(3) Permitting and Inspection

Replace the second and third paragraphs of Section 8-20.1(3) with the following:

The Contractor shall be responsible for coordinating, obtaining, and paying for all permits, including electrical service applications, necessary to complete the work in a timely fashion. All costs to obtain and comply with electrical permits shall be included in the applicable bid items for the work involved. All required electrical permits shall be obtained before beginning trench excavation.

Puget Sound Energy Electrical Inspector shall inspect and approve the electrical portions of the project. The Contractor shall notify the Inspector at least 24 hours in advance of required field inspection. This project shall be accomplished in compliance with WAC 296-46B-010 Traffic Management Systems and shall conform to the current adopted version of the NEC.

Prior to PSE energizing service cabinets, an electrical inspection must be passed with a copy of the electrical control permit and inspection sticker inside cabinets.

8-20.1(4) Errors and Omissions

NEW Section:

The Contractor shall immediately notify the Engineer upon discovery of any errors or omissions in the Contract Documents, in the layout as given by survey points and instructions, or of any discrepancy between the Contract Documents and the physical conditions of the locality. If deemed necessary, the Engineer shall rectify the matter and advise the Contractor accordingly. Any work done after such discovery without authorization by the Engineer will be done at the Contractor's risk.

8-20.2 Materials

Section 8-20.2 is supplemented with the following:

All materials shall be handled in loading, unloading and erecting in such a manner that they will not be damaged. Any parts that are damaged due to the Contractor's operations shall be repaired or replaced at the Contractor's expense. All repairs shall be to the approval of the Engineer.

Controlled density fill shall meet the requirements of Section 2-09.3(1)E of the Standard Specifications.

Crushed surfacing top course and crushed surfacing base course shall meet the requirements of Section 9-03.9(3) of the Standard Specifications.

Bedding material shall consist of 5/8-inch minus crushed rock free of any deleterious substances per Section 9-03.1(5)A of the Standard Specifications.

The Engineer reserves the right to inspect the manufacturing process of all materials. Final inspection and acceptance of the installed materials will not be given until final installation and testing has been completed on the systems. Approval to install materials and equipment must be obtained from the Engineer at the job site before installation.

The Contractor shall provide all manufacturer warranty documents to the City.

Conduit, Innerduct, and Outerduct

Foam Conduit Sealant
Section 9-29.1(11) is supplemented with the following:

(January 7, 2019)
The following products are accepted for use as foam conduit sealant:

- CRC Minimal Expansion Foam (No. 14077)
- Polywater FST Foam Duct Sealant
- Superior Industries Foam Seal
- Todol Duo Fill 400

Junction Boxes, Cable Vaults, and Pull Boxes
Section 9-29.2 is supplemented with the following:

(September 3, 2019)
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**

Flashing Beacon Control
Section 9-29.15 is supplemented with the following:

(January 7, 2019)
Rapid Flashing Beacons
Rapid Flashing Beacon (RFB) indications shall comply with the dimensional, operational, and flash pattern requirements of Federal Highway Administration (FHWA) Interim Approval 21 (IA-21, Conditions 4, 5, and 6, excluding Condition 5f; https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm). RFB systems shall be capable of providing, at a minimum, the following two-channel flashing patterns:

1. NEMA Standard 50-50:

   - Channel one is ON and channel two is OFF for 0.5 seconds.

   - Channel one is OFF and channel two is ON for 0.5 seconds.

   (Cycle repeats; the total flashing pattern cycle length is 1.00 second.)

2. RFB “WW+S” Pattern (IA-21 Condition 5b):

   - Channel one is ON and channel two is OFF for 0.05 seconds.

   - Both channels are OFF for 0.05 seconds.

   - Channel one is OFF and channel two is ON for 0.05 seconds.

   - Both channels are OFF for 0.05 seconds.

- Channel one is ON and channel two is OFF for 0.05 seconds.
- Both channels are OFF for 0.05 seconds.
- Channel one is OFF and channel two is ON for 0.05 seconds.
- Both channels are OFF for 0.05 seconds.
- Both channels are ON for 0.05 seconds.
- Both channels are OFF for 0.05 seconds.
- Both channels are ON for 0.05 seconds.
- Both channels are OFF for 0.25 seconds.

(Cycle repeats; the total flashing pattern cycle length is 0.80 seconds.)

The flashing pattern shall be user-selectable in the field.

RFB system pushbuttons shall include a locator tone, but shall not include tactile arrows, speech messages, or vibrotactile indications. RFB system pushbuttons may include speech message and vibrotactile functionality, provided these features can be deactivated. RFB system pushbuttons shall use a 9" x 12" R10-25 sign. The R10-25 sign may include integral yellow warning lights. RFB system parts should include all parts necessary to install either a fully functional AC powered RFB systems or a fully functional solar powered RFB system. Final direction shall be given to the contractor via the Engineer in consultation with Traffic Engineering. Remaining parts shall be provided to Traffic Engineering via the Engineer.
The following materials are approved for application as RFB systems:

1. Carmanah SC315-G
2. TraffiCalm SA328 RRFB

Service Cabinets
Section 9-29.24 is replaced with the following:

In addition to the requirements for service cabinets indicated in the Contract, the following requirements shall apply:

Overhead electrical service shall be brought to the load center through a conduit riser and a weatherhead on the service pole. The service shall be split into a 120-volt circuit for signals. All circuit breakers shall be clearly marked or labeled.

Underground service shall be brought to the load center in minimum 2-inch conduit. The service shall be split in the load center into a 120-volt circuit for signals. The Contractor shall provide conduit from the electrical service to ten feet up the power pole from which service is provided. Standoff brackets 14-inches long shall be installed on the pole every ten feet. In addition, the Contractor shall provide service conductors from the electrical service to the top of the conduit on the power pole with 30 feet of service wire coiled at the top and provide the local electrical utility with 30 feet of 2-inch conduit to make the service connection, unless otherwise directed by the local electrical utility.

Electrical Circuit Breakers and Contactors

Section 9-29.24(2) The second paragraph is deleted in its entirety.

8-20.2(1) Equipment List and Drawings

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

Delete "If required to do so," in the first sentence of the second paragraph.

Section 8-20.2(1) The fifth paragraph is revised to read:

Manufacturer's technical information shall be submitted for all cabinets, poles, junction boxes, conduit, wiring, wire connectors, fuse holders, fuses, splice kits, ground rods and clamps and all other items to be used on the Project. All approvals by the Engineer must be received by the Contractor before material will be allowed on the job site. Materials not approved will not be permitted on the job site.

The Engineer shall have fourteen (14) calendar days to review information for each submittal that is made. Approval of shop drawings does not constitute final acceptance or guarantee of the material, but is solely to assist the Contractor in providing the specified materials.

For each proposed material that is required to be submitted for approval using either the QPL or RAM process the Contractor will be allowed to submit for approval three materials per material type at no cost. Additional materials may be submitted for approval and will be processed at a cost of $100.00 per material submitted by QPL submittal and $300.00 per material submitted by RAM. All costs for processing additional materials will be deducted from monies due or that may come due to the Contractor. Subject to a request by the Contractor and a determination by the Engineer the costs for processing may be waived.

Manufacturer's data for materials proposed for all illumination systems, for use in the Contract which require approval, shall be submitted in one complete package.

8-20.3 Construction Requirements

8-20.3(2) Excavation and Backfilling

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

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

The 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 any underground conflicts arise.

If a conflict is identified, the Contractor shall contact the Engineer. The Contractor and City shall locate alternative locations for poles, 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.

Before beginning any excavation work for foundations, junction boxes or conduit runs, the Contractor shall confirm that the location proposed on the Contract Plans does not conflict with utility location

markings placed on the surface by the various utility companies. If a conflict is identified, the following process shall be used to resolve the conflict:

- Contact the Engineer and determine if there is an alternative location for the foundation, junction box, or conduit trench.
- 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.
- 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.

Trench Installation

Construction: The Contractor shall provide trenching as specified herein, regardless of the material encountered, as necessary for complete and proper installation of the conduit. The Contractor shall provide a reasonably straight and level trench for placement of conduit. Additional bends shall not be installed unless approved by the Engineer. Trenching for conduit runs shall be done in a neat manner, and the trench bottom shall be graded to provide a uniform grade, with a width and depth as specified herein. To avoid conflict with other utilities the trench may be sloped or drifted. Locations of existing conduit runs are in accordance with available information obtained without uncovering, measuring or other verification. Existing conduit may be vacant or partially filled with other cables.

All trenches for placement of conduit shall be straight and as narrow in width as practical to provide a minimum of pavement disturbance. Trench width shall be wide enough to allow all of the necessary conduit (and bedding when necessary) to be properly installed. The minimum cover depth is 24 inches. Contractor may be required to place a concrete cap on the conduits in areas where the minimum cover criteria cannot be met.

Trench Inspection: No work shall be covered until it has been examined by the Engineer. Earth which fills around and over the conduit shall be free of rocks greater than 2 inches up to a depth of 6 inches. When trenching is being accomplished within the sidewalk area, the backfill can be made with acceptable materials from the excavation and shall be considered a necessary part of and incidental to the excavation in accordance with the Standard Specifications. The compaction requirements for the roadway backfill shall apply.

Trenches in landscaped areas shall be placed to have minimum impact on existing landscaping and irrigation systems. Any damage due to the Contractor's operation shall be repaired or replaced by the Contractor at his own expense and to the satisfaction of the Engineer. Compaction below topsoil should be 80 percent of the standard compaction requirements and per Plans.

Conduit Trench Bedding: Use compacted CSTC for bedding for conduit trenches.

Conduit Trench Backfill: All conduit trenches shall be backfilled with select material per the Plan details. All backfill shall be mechanically compacted by a power-operated tamper or approved alternate. Trenches shall be compacted per Section 2-03.3(14)C Compacting Earth Embankments, Method C of the Standard Specifications and as indicated on the Typical Trench Detail shown in the Plans.

Temporary patching, if required, shall be as directed by the Engineer.

The City reserves the right to make additions or deletions to the trenching which prove necessary for the completion of this Project.

8-20.3(4) Foundations

Section 8-20.3(4) is revised to read:

The Contractor shall provide all materials to construct the foundations for RRFB poles, service cabinets, and push button posts.to the dimensions specified in the Plans.

Top of pole foundations in or adjacent to sidewalks shall be placed flush with the finished surface of the sidewalk. The foundation and sidewalk shall be separated by a ¾ inch expansion joint such that the foundation can be removed without damage to the surrounding sidewalk. The top 4 inches of all foundations shall be square with sides equal to the diameter.

Concrete shall be placed against undisturbed earth where possible. CDF shall be used to backfill around foundations that are not placed against undisturbed earth. Prior to placing the concrete, the Contractor shall block out around any other underground utilities that may lie in the excavated base to prevent foundation adherence to the utility line. The Contractor shall secure the anchor bolts required for the item to be mounted on the foundation. Concrete foundations shall be troweled, brushed, edged, and finished in a workmanship-like manner. Concrete shall be promptly cleaned from the exposed portion of the anchor bolts and conduit after placement.

All excess materials shall be removed from the construction site and disposed of at the Contractor's expense.

The dry pack mortar consists of 1:3 cement to fine sand mixture with enough water to allow the mixture to stick together when molded into a ball by hand but will not extrude water when pressed.

Location of all concrete foundations shall be approved by the Engineer prior to excavations.

8-20.3(5) Conduit

Section 8-20.3(5) is revised to read:

General

Conduit must be installed in the number, type, size and location shown on the Drawings.

Conduit cable runs parallel to curbs must be placed adjacent to back of curb unless detailed otherwise on the Drawings.

Changes of conduit direction must be made with manufactured or fabricated elbows of radius not less than that noted in the NEC.

Conduit installed within the metering and disconnect enclosure must be rigid metal and may be without PVC coating.

The Contractor may use larger size conduit when approved by the Engineer. Where larger size conduit is used, it must be for the entire length of the run from outlet to outlet.

Conduit terminating in enclosures (such as but not limited to poles, cabinets and pedestals) must extend vertically above the foundation a minimum of 1 inch, unless indicated otherwise on the Drawings. Exceptions to the 1-inch minimum are indicated on Standard Plans 500a, 521, 524, and 550a. Reducing

couplings are not permitted. Conduit must not change size between handholes, or condulet access point. Conduit entering through the bottom of a handhole must be located near the end walls to leave the major portion of the box clear and terminate 3 inches above the bottom of the handhole. Conduit entering through the sides of the handhole must enter from the direction of the run, and terminate flush with the box wall.

All conduit must be thoroughly cleaned and an appropriately sized mandrel pulled through it before installing wires or pull cord. Mandreling must be done in the presence of the Engineer.

Conduit repairs: When small portions of damaged conduit repairs are necessary, repairs are permitted by using PVC in its place. The PVC must be coupled to the local conduit by beveled edge couplings slipped into place and then sealed with PVC cement. On repairs to steel conduit using PVC, a bonding #6 AWG jumper must be installed connecting the metal sections together with bonding clamps approved by the Engineer.

Marker stakes or tacks must be set flush with the ground to locate the ends of stubbed out conduits which may be buried so that they may be located in the future. All stubbed out conduits must be capped.

Conduit entrances into metal junction boxes must be drilled and tapped a minimum of 3 full threads for the size conduit used. Bosses must be provided where the wall thickness is not sufficient for the minimum number of threads.

Entry to electrical vaults or other Structures must be made such that the physical integrity of the vault or Structure is not impaired. Any hole for entry to vaults or Structures must be core drilled of a diameter no greater than 1-1/2 times the diameter of the conduit entering the vault. See Section 1-05.2(2) for site safety and coordination with PSE's Electrical Safety Observer. Annular spaces around conduit, equipment grounding conductor, ducts, at wall penetrations of vault or other structural walls must be filled with non-shrink cement sand grout see Section 9-04.3(2). Threaded inserts must be coated with an approved rust preventative compound which is soluble in petroleum solvent.

At locations designated by the Engineer, fittings must be installed to provide a conduit channel that permits freedom for installing the electrical control wires. When conduit fittings are required, the Contractor must also furnish all necessary covers and gaskets. Expansion/deflection fittings per Standard Plans must be installed at all Structure expansion joints.

Conduits must be attached to walls and other surfaces (except poles) using approved one hole malleable iron pipe clamps and clamp backs.

Rigid steel conduit may be jacked or bored when approved by the Engineer.

New conduit that does not have wire installed (spare) must have a pull cord installed extending at least 3 feet beyond the conduit at each end and fastened down.

All conduit, including spare conduit, shall be installed with bushings. PVC conduit shall be installed with molded one-piece end bell bushings, non-threaded couplers and conduit caps. When couplings or conduit caps are removed, the threaded ends shall be provided with approved conduit bushings. All conduit stubs shall be capped. The use of any plugs, even though temporary, in lieu of the conduit couplings and conduit caps is expressly prohibited. Rigid Galvanized Steel conduit shall be installed with insulated grounding bushings with standard threading which extends around the entire circumference of the bushing.

Nonmetallic conduit bends, where allowed, shall conform to Article 347-13 of the NEC Code. Bends shall be no less than a 2-foot radius (except bridge structure mounted).

The conduit runs shown on the Plans are schematic; exact alignment shall be approved by the Engineer prior to excavation. All conduit shall be installed within the City or WSDOT right-of-way. Runs may be revised, as directed by the Engineer, to allow for unforeseen conflicts.

Conduits entering through the cabinet foundation shall be arranged toward the front of the cabinet for maximum accessibility or as directed by the Engineer. Conduit stub-outs within cabinet foundations shall be placed so that they do not interfere with cabinet installation. A 2-inch spare conduit shall be capped out past the foundation. Modification of the cabinet to accommodate stub-out placement is not allowed.

All conduits including spare conduits shall be capped during construction using manufactured seals, which shall not be removed until installation of conductors or detectable pull tape, to prevent entrance of water and debris. The conduits shall be cleaned before installation of pulling wire. Spare conduits shall be labeled “City of Kirkland”.

The same type of conduit shall be used for the entire length of the run from outlet to outlet. Where PVC or HDPE conduit is used, the same schedule shall be used for the entire length of the run from outlet to outlet.

Spacing of unistrut type channel supports for surface mounted conduit shall not exceed 5 feet.

Pull Cord

Pull cords must be 1/4-inch polypropylene.

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

Section 8-20.3(6) is revised to read:

All new junction boxes installed in the sidewalks shall use non-skid lids. All junction boxes shall be labeled “S/L”.

Wiring shall not be pulled into any conduit until all associated junction boxes have been adjusted to or installed in their final grade and location, unless installation is necessary to maintain system operation. If wire is installed for this reason, sufficient slack shall be left to allow for final adjustment.

8-20.3(8) Wiring

Section 8-20.3(8) is revised to read:

The Contractor must coil a minimum 10 feet of wire at the source of secondary service to allow for connections by Puget Sound Energy. The Contractor must coil 3 feet of excess conductor in each type handhole. Each “hot” conductor must have an in line fuse holder and insulating boots.

Caution must be exercised in working near and within Puget Sound Energy vaults and the electrical distribution system. Voltages in vaults can be 26,000 volts or higher. Vault wiring will not be de energized while the qualified Contractor is working.

When cables or single conductors are being installed, use care to not exceed tension limitations recommended by the manufacturer. Conductors may be pulled directly by hand; however, conductors pulled by mechanical means must use a dynamometer with drop needle hand on every pull. On mechanical pulls, either the insulation must be stripped off each conductor and conductors formed into a pulling eye and firmly taped before pulling, or a cable grip must be used. Apply the pulling force must

directly to the conductor. Secondary insulator racks required for new construction must be per PSE Material Standards and installed per PSE Construction Guidelines.

Where new cable will be installed in occupied existing conduits, the Contractor must protect existing wiring from damage. Use a cable pulling compound to minimize cable pulling tensions and adverse effects on existing wire insulation, jacket, and shield. Use care in pulling cable into poles and pedestals, as sharp metal edges may be present.

Wire insulation must be removed by a method that does not "ring" or nick the wire. "Ringing" will be cause for rejection of the splice.

Wire splices must be made mechanically and electrically secure. Each individual splice or termination of extra leads must be insulated and made waterproof.

All cables must be marked with a permanent stainless-steel tag in handholes or access points with feed point circuit number. Racking of cables is required.

For above ground splices, the connector must be torqued to the manufacturer's recommended level. The splice and termination of extra leads must be covered with rubber base insulating and waterproofing tape. This tape must be worked around the wire insulation to insure a water-tight assembly. The splice assembly must be protected with 2 layers of electrician tape.

For below ground splices, connectors must be tightened or crimped per the manufacturer's specifications. Use only manufacturer's approved crimping tools to compress crimp splices. Center the metal splice in the enclosure. The encapsulant must be mixed and installed per manufacturer's recommendation. The encapsulant must completely fill the enclosure and be free of voids and impurities.

(DECEMBER 9, 2004 COK GSP)

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

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

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(17) "As-Built" Plans

Section 8-20.3(17) is replaced with the following:

Upon completion of the construction, the Contractor shall furnish "as-built" plans of cabinet locations, pole, junction boxes, miscellaneous equipment, conductors, cable wires up to the electrical service cabinets, and with a special symbol identifying those items that have been changed from the original Contract Drawings. All items shall be located within 1-foot horizontal distance and 6 inches vertical distance above, below, or at the surface.

8-20.5 Payment

Section 8-20.5 is replaced with the following:

Payment will be made for each of the following bid items that are included in the proposal:

a) “Rectangular Rapid Flashing Beacon System”, Lump Sum.

Item (a) shall include full pay for the construction of the complete and operational electrical and RRFB system at the pedestrian crossing as shown in the Plans, including, but not limited to excavation, backfilling, concrete foundations, conduit, wiring, restoring facilities destroyed or damaged during construction, salvaging existing materials, field verification of electrical systems and wiring, and for making all required tests. Configuration of the installed communication system and all network equipment shall be included as part of this pay item. All additional materials and labor, not shown in the plans or called for herein and which are required to complete the electrical and traffic signal system, shall be included in the lump sum contract price.

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.

END OF DIVISION 8

GSP DIVISION 9

City of Kirkland

DIVISION 9 – MATERIALS

9-03.6 Vacant

Delete this Section and replace it with the following:

9-03.6 Aggregates for Asphalt Treated Base (ATB)
(May 5, 2015 APWA GSP)

9-03.6(1) General Requirements
Aggregates for asphalt treated base shall be manufactured from ledge rock, talus, or gravel, in accordance with the provisions of Section 3-01 that meet the following test requirements:

Los Angeles Wear, 500 Rev. 30% max.
Degradation Factor 15 min.

9-03.6(2) Grading
Aggregates for asphalt treated base shall meet the following requirements for grading:

Sieve Size	Percent Passing
2″	100
½″	56-100
No. 4	32-72
No. 10	22-57
No. 40	8-32
No. 200	2.0-9.0

All percentages are by weight.

9-03.6(3) Test Requirements
When the aggregates are combined within the limits set forth in Section 9-03.6(2) and mixed in the laboratory with the designated grade of asphalt, the mixture shall be capable of meeting the following test values:

% of Theoretical Maximum Specific Gravity (GMM) (approximate) 93 @ 100 gyrations
AASHTO T324, WSDOT TM T718 or ASTM D3625 Pass
(Acceptable anti-strip evaluation tests)

The sand equivalent value of the mineral aggregate for asphalt treated base (ATB) shall not be less than 35.

9-29.2(1) Standard Duty and Heavy Duty Junction Boxes

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

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

Non-concrete junction boxes shall not be accepted in the City of Kirkland.

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

Use 2024 rates
(published date – August 1st, 2024)

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 jvandervaart@kirklandwa.gov.

APPENDIX A: PLANS

City of Kirkland

CITY OF KIRKLAND

132ND AVENUE NE PEDESTRIAN IMPROVEMENTS

JOB NO.: 27-24-PW

JULY 03, 2024

CIP PROJECT NO.: NMC 3000010

CITY OFFICIALS

KELLI CURTIS	MAYOR
JAY ARNOLD	DEPUTY MAYOR
NEAL BLACK	COUNCIL MEMBER
PENNY SWEET	COUNCIL MEMBER
AMY FALCONE	COUNCIL MEMBER
JOHN TYMCZYSZYN	COUNCIL MEMBER
JON PASCAL	COUNCIL MEMBER
KURT TRIPLETT	CITY MANAGER
TRUC DEVER	PUBLIC WORKS DIRECTOR
ROD STEITZER, PE	CAPITAL PROJECTS MANAGER

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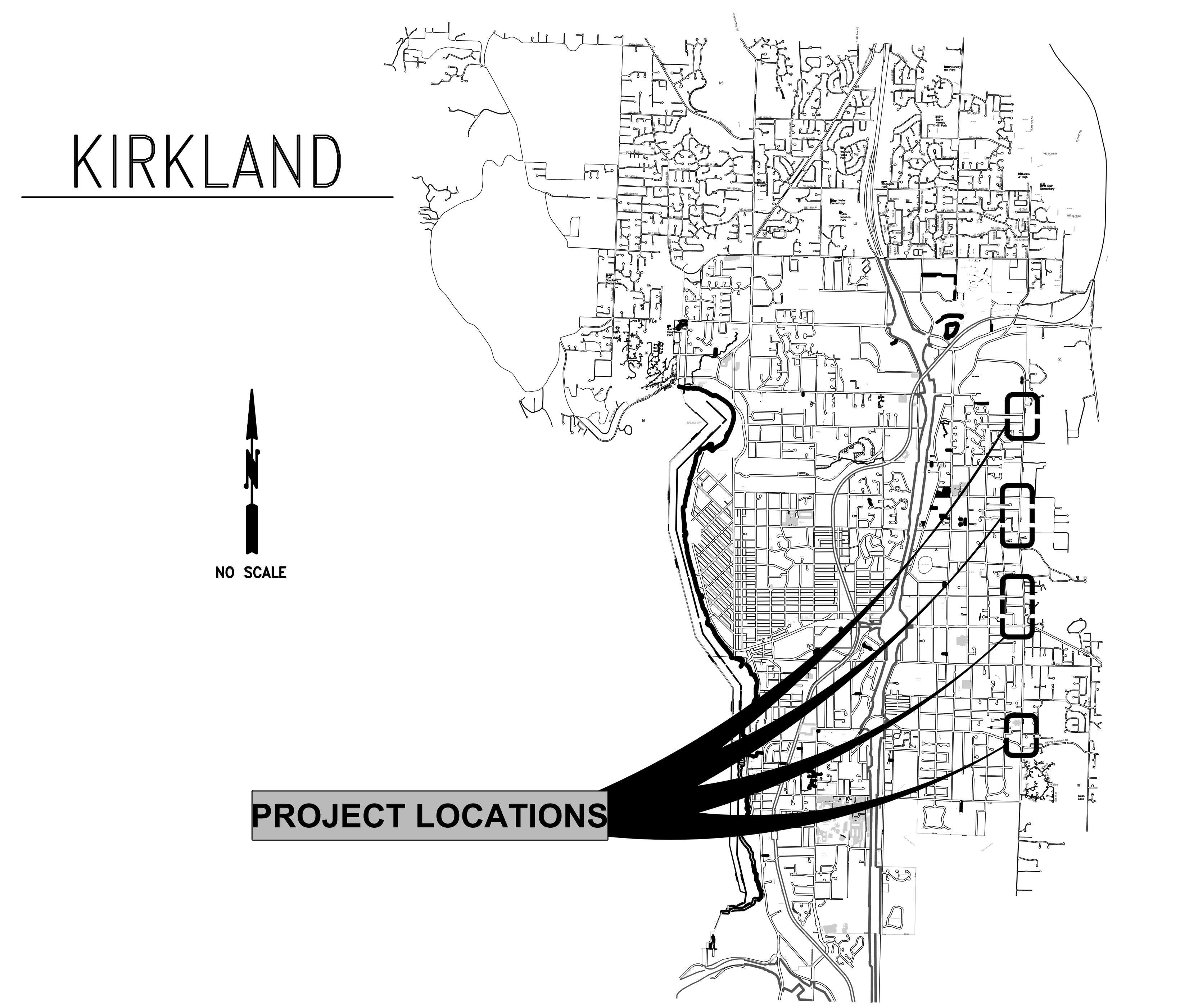

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29–31	ADA CURB RAMP PLAN
32–37	CHANNELIZATION AND SIGNING PLAN
38–44	DETAILS AND STANDARD PLANS

100% SUBMITTAL

DATE	NO.	REVISION	BY

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K. EAGLE 05-2024
DESIGNED BY: DATE

K. EAGLE 05-2024
DRAWN BY: DATE

D. MURATA 07-2024
CHECKED BY: DATE

DARREN K. M. MURATA — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 100% NOT FOR CONSTRUCTION

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132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

COVER SHEET

SHEET 1 OF 44 SHEETS

July 11, 2024 - 2:40 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\2215223-0165CAD\CIVIL\SA-GN-CV-15223-01.DWG - Layout Name: 1 COVER SHEET

GENERAL PROJECT LEGEND

EXISTING ITEMS

- MAJOR CONTOUR (5.00' INTERVAL)
- MINOR CONTOUR (1.00' INTERVAL)
- EDGE OF ASPHALT
- ASPHALT HATCH
- BUILDING OUTLINE
- BUILDING OUTLINE HATCH
- BUILDING OVERHANG
- BOULDER
- BOLLARD
- BORE HOLE
- CHANNEL CENTERLINE
- CONCRETE HATCH
- CONTROL POINT
- CURB AND GUTTER
- FENCE
- GUARDRAIL
- EDGE OF GRAVEL
- GRAVEL HATCH
- IRRIGATION LINE
- IRRIGATION SPRINKLER
- IRRIGATION CONTROL BOX
- IRRIGATION VALVE
- MAILBOX
- MONITOR WELL
- PARKING METER
- RAILROAD
- RIPRAP HATCH
- SIGN
- FLAGPOLE
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL HEAD
- TRAFFIC CONTROL BOX
- MILE POST MARKER
- ROADSIDE DELINEATOR
- COMMUNICATION LINE
- OVERHEAD COMMUNICATION LINE
- COMMUNICATION MANHOLE
- COMMUNICATION VAULT
- COMMUNICATION BOX
- COMMUNICATION SATELLITE DISH
- ELECTRIC LINE
- OVERHEAD ELECTRIC LINE
- UTILITY POLE
- UTILITY GUY POLE
- UTILITY ANCHOR
- LIGHT
- LUMINAIRE
- LANDSCAPE LIGHT
- ELECTRIC METER
- ELECTRIC MANHOLE
- ELECTRIC VAULT
- ELECTRIC VEHICLE OUTLET
- ELECTRIC TRANSFORMER
- JUNCTION BOX
- ELECTRIC PULL BOX
- FIBER OPTIC LINE

EXISTING ITEMS

- FIBER OPTIC PULL BOX
- FUEL LINES
- FUEL VALVE
- FUEL MANHOLE
- FUEL METER
- NATURAL GAS LINE
- GAS VALVE
- GAS SERVICE
- GAS MANHOLE
- GAS METER
- SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER SERVICE
- STORM DRAIN LINE
- STORM DRAIN CULVERT
- CULVERT FLARED ENDS
- STORM DRAIN MANHOLE
- STORM DRAIN CATCH BASIN
- STORM DRAIN FLOWLINE CATCH BASIN
- STORM DRAIN INLET
- STORM DRAIN CLEANOUT
- TELEPHONE LINE
- TELEPHONE PULL BOX
- WATER LINE
- WATER VALVE
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECT
- WATER METER
- WATER MANHOLE
- WATER VAULT
- WATER END CAP
- WATER SERVICE
- WATER WELL
- VEGETATION
- VEGETATION HATCH
- DECIDUOUS TREE
- CONIFEROUS TREE
- SHRUB
- BUSH
- SIDEWALK EDGE
- EASEMENT
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- POTHOLE LOCATION
- VIDEO PIPE INSPECTION LOCATION
- PAVEMENT CORING LOCATION

PROPOSED ITEMS

- MAJOR CONTOUR (5.00' INTERVAL)
- MINOR CONTOUR (1.00' INTERVAL)
- BUILDING OUTLINE
- BUILDING OUTLINE HATCH
- BUILDING OVERHANG
- BOLLARD
- BORE HOLE
- CONTROL POINT
- FENCE
- GUARDRAIL
- MAILBOX
- MONITOR WELL
- RAILROAD
- RIPRAP HATCH
- EDGE OF ASPHALT
- CONCRETE HATCH
- GRAVEL HATCH
- CURB
- SIGN
- SIDEWALK EDGE
- COMMUNICATION LINE
- OVERHEAD COMMUNICATION LINE
- COMMUNICATION MANHOLE
- COMMUNICATION VAULT
- COMMUNICATION BOX
- COMMUNICATION SATELLITE DISH
- ELECTRIC LINE
- OVERHEAD ELECTRIC LINE
- UTILITY POLE
- UTILITY ANCHOR
- LIGHT
- LUMINAIRE
- LANDSCAPE LIGHT
- ELECTRIC METER
- ELECTRIC MANHOLE
- ELECTRIC VAULT
- VEHICLE OUTLET
- ELECTRIC TRANSFORMER
- JUNCTION BOX
- FIBER OPTICS LINE
- FUEL LINE
- NATURAL GAS LINE
- GAS VALVE
- GAS SERVICE
- GAS MANHOLE
- GAS METER
- SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER END CAP

PROPOSED ITEMS

- SANITARY SEWER SERVICE
- STORM DRAIN LINE
- STORM DRAIN MANHOLE
- STORM DRAIN CATCH BASIN
- STORM DRAIN INLET
- STORM DRAIN CLEANOUT
- STORM DRAIN CULVERT
- CULVERT FLARED ENDS
- TELEPHONE LINE
- WATER LINE
- WATER VALVE
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECT
- WATER METER
- WATER MANHOLE
- WATER VAULT
- WATER END CAP
- IRRIGATION SPRINKLER
- WATER SERVICE
- WATER WELL
- PIPE END CAP
- MJ 22.5° BEND
- MJ 45° BEND
- FLxMJ ADAPTER
- BLOW OFF VALVE
- VALVE
- MJ TEE
- THRUST BLOCK
- MJ SLEEVE
- VEGETATION
- DECIDUOUS TREE
- CONIFEROUS TREE
- SHRUB
- BUSH
- EASEMENT
- PROPERTY LINE
- WETLAND
- POTHOLE LOCATION
- CONSTRUCTION ALIGNMENT
- VIDEO PIPE INSPECTION LOCATION
- PAVEMENT CORING LOCATION

COMMON ABBREVIATIONS

ABAND.	ABANDON IN-PLACE
ARFS	AS REQUIRED FOR SAFETY
BH	BOREHOLES
BLK	BLOCK
C.B.	CATCH BASIN
CL	CENTERLINE
CL	CLASS
COK	CITY OF KIRKLAND
CONC	CONCRETE
CONC	CONCRETE SIDEWALK ELEVATION
CP	CONTROL POINT
CSP	CORRUGATED STEEL PIPE
CY	CUBIC YARDS
DEMO	DEMOLITION
DH	DRILL HOLE
DIA.	DIAMETER
D/S	DOWNSTREAM
E	EAST
EG	EXISTING GRADE
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EOP	EDGE OF PAVEMENT
EX.	EXISTING
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FL	FLOWLINE, FLANGE
FT	FEET
I.E.	INVERT ELEVATION
INV.	INVERT
INV. EL.	INVERT ELEVATION
LF	LINEAL FEET
LT	LEFT
MH	MANHOLE
MIN.	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH
NE	NORTHEAST
NW	NORTHWEST
O.D.	OUTSIDE DIAMETER
OE	OVERHEAD ELECTRIC
OHP	OVERHEAD POWER
PP	POWER POLE
PROP	PROPERTY
PSI	POUNDS PER SQUARE INCH
RCP	REINFORCED CONCRETE PIPE
RJ	RESTRAINED JOINT
RT	RIGHT
S	SOUTH
S=	SLOPE
SD	STORM DRAIN
SE	SOUTHEAST
SF	SQUARE FEET
STA.	STATION
SUB	SUBDIVISION
SW	SOUTHWEST
SY	SQUARE YARD
TBC	TOP BACK OF CURB
TOC	TOP OF CURB
TEL	UNDERGROUND TELEPHONE
TVG	TOP OF VALLEY GUTTER
(TYP.)	TYPICAL
UGP	UNDERGROUND POWER
UNK	UNKNOWN LOCATION
U/S	UPSTREAM
W	WEST
WALL	TOP OF RETAINING WALL
@	AT

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132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

LEGEND AND ABBREVIATIONS

SHEET 2 OF 44 SHEETS

GENERAL NOTES

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. BEFORE ANY CONSTRUCTION MAY OCCUR, THE CONTRACTOR SHALL HAVE PLANS ON THE JOB SITE 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.

3. THE LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEANS TO PROTECT EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY AND ALL UTILITIES IN THE AREA PRIOR TO BEGINNING WORK ON THIS PROJECT. 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 HIS OR HER 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.

4. 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 PERFORMANCE BOND.

5. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, WIDTHS, THICKNESSES, 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.

6. 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.

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY TRAFFIC CONTROL TO ENSURE TRAFFIC SAFETY DURING CONSTRUCTION ACTIVITIES. THEREFORE, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE PUBLIC WORKS DEPARTMENT AT LEAST 48 HOURS PRIOR TO STARTING ANY WORK IN THE RIGHT-OF-WAY. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) OR AS MODIFIED BY THE TRAFFIC ENGINEER.

STORM DRAINAGE - PLAN NOTES

1. SEE GENERAL NOTE 1.

2. SEE GENERAL NOTE 2.

3. 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).

4. ANY DEVIATION FROM THE APPROVED PLANS WILL REQUIRE WRITTEN APPROVAL, ALL CHANGES SHALL BE SUBMITTED TO THE CITY.

5. SEE GENERAL NOTE 2.

6. 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.

7. 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.

8. NOT USED.

9. 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.

10. 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.

11. ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF ONE FOOT. RECYCLED CONCRETE SHALL NOT BE USED FOR EROSION PROTECTION, INCLUDING FOR CONSTRUCTION ENTRANCE OR TEMPORARY STABILIZATION ELSEWHERE ON SITE.

12. 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 LOOSENED, 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.

13. 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.

14. NOT USED.

15. 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.

16. 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.

17. 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.

18. ALL MANHOLE LADDERS SHALL BE FIRMLY ATTACHED AND EXTEND TO WITHIN 1' OF THE BOTTOM OF THE STRUCTURE.

19. SEE GENERAL NOTE 3.

20. SEE GENERAL NOTE 3.

21. SEE GENERAL NOTE 5.

22. 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.

23. SEE GENERAL NOTE 6.

24. SEE GENERAL NOTE 4.

25. GROUT ALL SEAMS AND OPENINGS IN ALL INLETS, CATCH BASINS, AND MANHOLES. JETSET GROUT IS NOT ALLOWED.

26. NOT USED.

27. NOT USED.

28. RECYCLED CONCRETE SHALL NOT BE USED AROUND STORMWATER FACILITIES.

29. ALL FASTENERS (BOLTS, NUTS, WASHERS, ETC.) ON MANHOLE AND CATCH BASIN LIDS TO BE STANDARD SIZE. NO METRIC FASTENERS ALLOWED.

30. A SPECIAL INSPECTION USING CCTV IS REQUIRED FOR PROJECTS THAT CREATE MORE THAN 100 FEET TOTAL OF NEW STORM PIPES (OR AT PW INSPECTOR'S DISCRETION) THAT ARE PUBLICLY OWNED AND MAINTAINED BEFORE INSPECTOR SIGN OFF.

ROADWAY - PLAN NOTES

1. SEE GENERAL NOTE 1.

2. ALL ROADWAY WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH THE CURRENT APWA AND CITY OF KIRKLAND STANDARDS AND SPECIFICATIONS.

3. 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.

4. SEE GENERAL NOTE 4.

5. 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.

6. ALL COMMERCIAL AND RESIDENTIAL DRIVEWAYS MUST CONFORM TO THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS DRIVEWAY POLICY.

7. ALL CONCRETE FOR SIDEWALKS AND CURB AND GUTTER MUST BE 4,000 PSI MINIMUM. (5-3/4 SACK MIX.)

8. IN THE CASE OF NEW ROAD CONSTRUCTION OR RECONSTRUCTION REQUIRING MAILBOXES TO BE MOVED OR REARRANGED, THE DEVELOPER/CONTRACTOR SHALL COORDINATE WITH THE U.S. POSTAL SERVICE FOR THE NEW LOCATION OF THE MAILBOX STRUCTURE.

9. ANY ROADWAY SIGNAGE OR STRIPING REMOVED OR TEMPORARILY MOVED BY THE CONTRACTOR SHALL BE RESTORED TO MEET THE CURRENT CITY OF KIRKLAND STANDARDS.

10. SEE GENERAL NOTE 7.

11. WHERE A SIDEWALK IS TO BE CONSTRUCTED ABOVE A SLOPE OR ADJACENT TO A ROCKERY OR RETAINING WALL WHERE THE LOWEST FINISHED ELEVATION OF THE SLOPE, ROCKERY, OR RETAINING WALL IS TO BE THIRTY INCHES (30") OR MORE BELOW THE FINISHED ELEVATION OF THE SIDEWALK, A SAFETY RAILING SHALL BE REQUIRED WHEN: (A) THE PLANE OF THE WALL FACE IS LESS THAN 4' IN HORIZONTAL DISTANCE FROM THE OUTSIDE EDGE OF THE SIDEWALK; (B) THE SLOPES ADJACENT TO THE SIDEWALK AVERAGE GREATER THAN TWO TO ONE.

12. THE MAXIMUM GRADE FOR PRIVATE ROADWAYS SHALL BE TWENTY PERCENT (20%), OR FIFTEEN PERCENT (15%) IF USED FOR FIRE ACCESS. FOR PUBLIC ROADWAYS, THE MAXIMUM GRADE SHALL BE FIFTEEN PERCENT (15%).

13. DEAD-END STREETS SHALL BE APPROPRIATELY SIGNED AND BARRICADED. SEE MOST CURRENT EDITION OF THE MUTCD.

14. SIDEWALK AND CURB AND GUTTER CANNOT BE POURED MONOLITHICALLY. THERE MUST BE A COLD JOINT OR FULL-DEPTH EXPANSION JOINT BETWEEN THEM.

15. 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.

16. NOT USED.

17. WHEN AN EXISTING ROADWAY IS TO RECEIVE A HALF-STREET OVERLAY, THE EXISTING ROADWAY MUST BE COLD PLANED AT THE EDGE OF THE GUTTER AND CENTERLINE. WHEN THE EXISTING ROADWAY IS TO RECEIVE A FULL-STREET OVERLAY, IT MUST BE COLD PLANED AT THE EDGE OF BOTH GUTTERS. SEE CITY OF KIRKLAND STANDARD DETAIL NO. R.13.

18. NOT USED.

19. WHEN INSTALLING NEW SIDEWALK, THE AREA BEHIND THE SIDEWALK MUST BE GRADED SO THAT THE YARD DRAINAGE DOES NOT DRAIN OVER THE SIDEWALK.

20. ANY EXISTING PUBLIC IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED PRIOR TO FINAL INSPECTION.

21. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL PUBLIC STREETS FREE FROM MUD AND DEBRIS AT ALL TIMES. THE CONTRACTOR SHALL BE PREPARED TO USE POWER SWEEPERS OR OTHER PIECES OF EQUIPMENT NECESSARY TO KEEP THE ROADWAYS CLEAN.

22. 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.

23. NOT USED.

24. WHEN AN EXISTING ROADWAY IS TO BE WIDENED, THE EXISTING PAVEMENT MUST BE SAW CUT AT LEASE 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.

25. NOT USED.

100% SUBMITTAL

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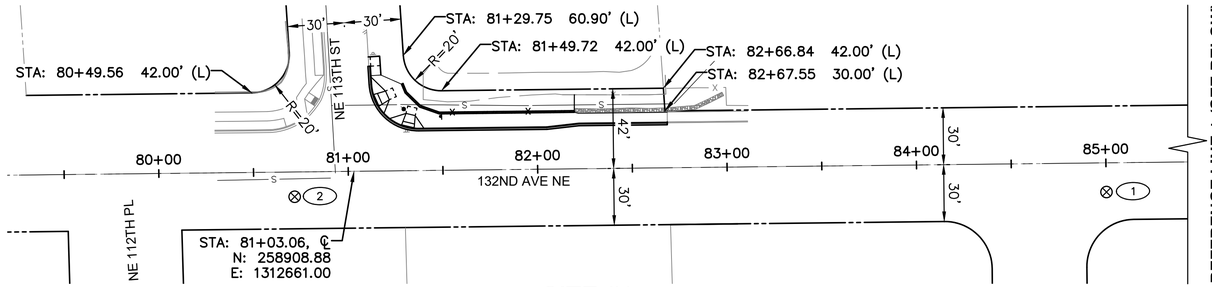
GENERAL NOTES

SHEET 3 OF 44 SHEETS



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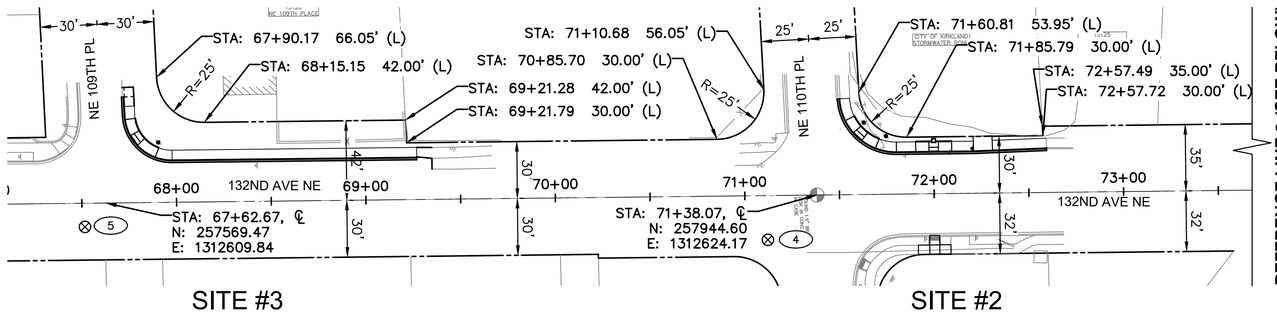

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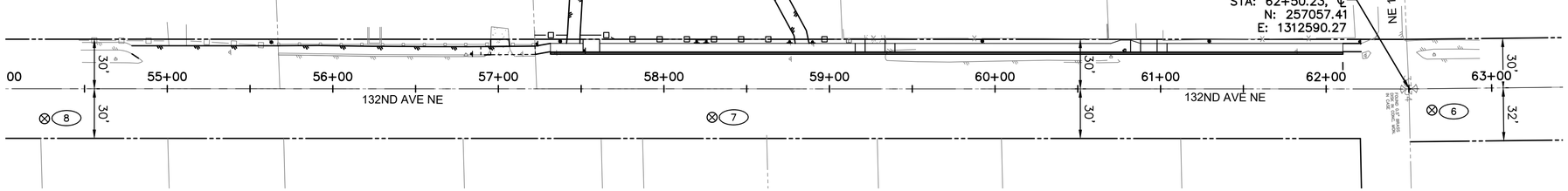

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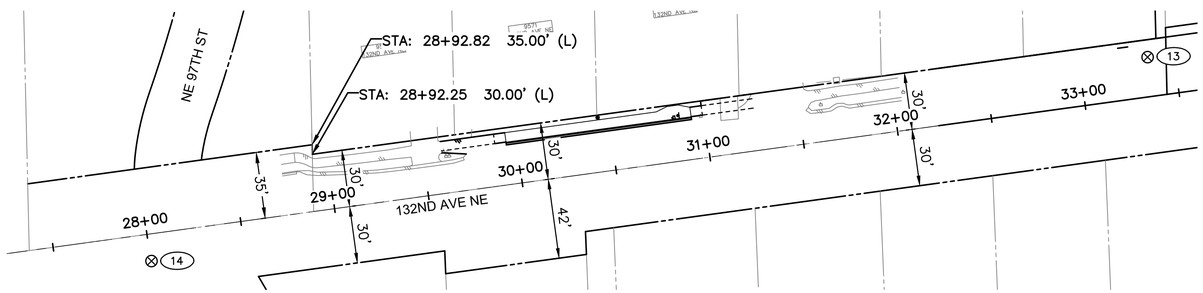
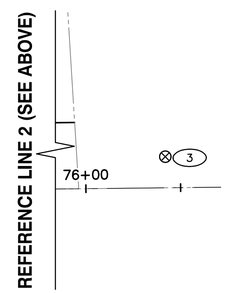
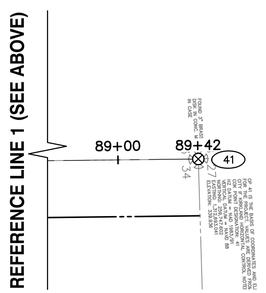


SITE #6





SURVEY CONTROL POINTS

NO	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP #1	85+00.14	15.41' RT	259305.09	1312691.55	340.02	Z MAG
CP #2	80+71.57	13.07' RT	258876.92	1312672.86	340.31	Z MAG
CP #3	76+42.08	16.41' LT	258448.87	1312627.01	339.63	RAMSET NAIL
CP #4	71+11.96	23.37' RT	257917.62	1312646.52	339.41	Z MAG TC
CP #5	67+51.50	12.48' RT	257557.83	1312621.87	339.41	Z MAG
CP #6	62+63.76	12.98' RT	257070.43	1312603.77	341.27	Z MAG
CP #7	58+29.10	17.24' RT	256635.94	1312586.64	343.06	Z MAG

SURVEY CONTROL POINTS

NO	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP #8	54+25.87	18.11' RT	256233.16	1312567.54	341.52	Z MAG
CP #13	33+36.08	20.85' LT	254145.50	1312450.52	313.48	Z MAG
CP #14	28+00.46	14.26' RT	253614.95	1312532.01	306.25	Z MAG
CP #41	89+42.39	0.00' T	259747.60	1312693.04	339.94	3" BRASS DISK IN MON. CASE

40 0 40 80
SCALE IN FEET

HORIZONTAL AND VERTICAL CONTROL:

SOURCE OF DATA: CITY OF KIRKLAND HORIZONTAL CONTROL NOTEBOOK
HORIZONTAL DATUM: WASHINGTON STATE PLANE COORDINATE SYSTEM – NORTH ZONE (NAD 83/91)
VERTICAL DATUM: NAVD 88

BASIS OF COORDINATES AND ELEVATION:

POINT DESIGNATION: 41
CROSS IN 3" BRASS DISK IN CONCRETE MONUMENT IN CASE, LOCATED ON THE CENTERLINE OF 132ND AVENUE NE, 65'± NORTH OF THE ENTRANCE TO LAKE WASHINGTON VOC–TECH
NORTHING: 259,747.60
EASTING: 1,312,693.04
ELEVATION: 339.94

BASIS OF BEARING: WASHINGTON STATE PLANE COORDINATE SYSTEM – NORTH ZONE (NAD 83/91)

SURVEY NOTES:

THIS SURVEY WAS PERFORMED DURING THE MONTHS OF APRIL AND MAY, 2023. ALL MONUMENTS SHOWN HEREON AS FOUND MONUMENTS WERE LOCATED DURING THE COURSE OF THAT SURVEY.

INSTRUMENTATION FOR THIS SURVEY WAS A TRIMBLE S–7 TOTAL STATION WITH ELECTRONIC MEASURING UNIT, AS WELL AS A TRIMBLE R10 GPS UNIT.

PROCEDURES USED IN THIS SURVEY WERE FIELD TRAVERSE MEETING OR EXCEEDING STANDARDS SET BY WAC 332–130–090.

THE UNDERGROUND UTILITIES SHOWN HEREON REPRESENT A COMBINATION OF RECORD INFORMATION AND FIELD LOCATES OF UNDERGROUND UTILITIES LOCATED BY A UTILITY LOCATING COMPANY. THE SURFACE VISIBLE UTILITIES WERE LOCATED IN THE FIELD, BUT ALL UNDERGROUND LINES ARE APPROXIMATIONS AT BEST. THERE MAY ALSO EXIST ADDITIONAL LINES THAT DID NOT APPEAR IN THE RECORDS OR WERE NOT DETECTED BY THE UTILITY LOCATING COMPANIES.

LEGEND

- PROPERTY LINE
- RIGHT–OF–WAY
- CONSTRUCTION CENTERLINE
- SECTION CORNER
- 1/4 SECTION CORNER
- STREET CL MONUMENT
- PROPERTY CORNER FOUND (AS NOTED)
- ⊗ CP5 SURVEY CONTROL POINT
- (1) CONTROL POINT #

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

K. EAGLE	05-2024
DESIGNED BY:	DATE
K. EAGLE	05-2024
DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

DARREN K. MURATA — STATE OF WASHINGTON — 22115 — REGISTERED PROFESSIONAL ENGINEER

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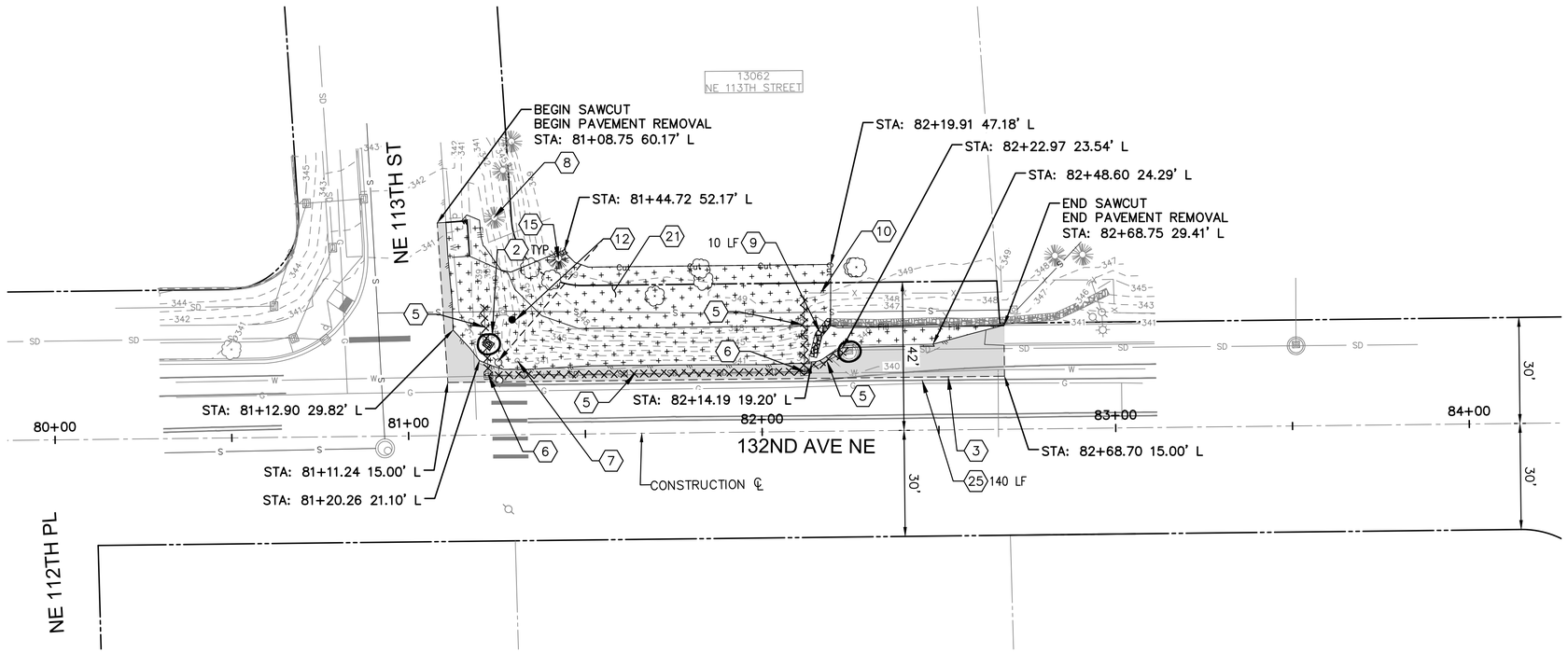
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

SURVEY CONTROL PLAN

SHEET 4 OF 44 SHEETS



NOTE: THE NEW RETAINING WALL MUST BE CONSTRUCTED PRIOR TO THE RELOCATION OF THE UTILITY POLE AT THE NORTHWEST CORNER OF 132ND AVE AND 113TH ST. THE CONTRACTOR SHALL COORDINATE WITH CITY STAFF AND PSE TO CONFIRM THE CONSTRUCTION SCHEDULE.

20 0 20 40
SCALE IN FEET

GENERAL NOTES

1. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE.
2. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES.

(#) SITE PREPARATION/ EROSION CONTROL NOTES

1. REMOVE EXISTING BICYCLE LANE PAVEMENT MARKING.
2. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STD PLAN I-40.20-00.
3. SAWCUT AND REMOVE EXISTING ASPHALT CONC. PAVEMENT.
4. REMOVE EXISTING CEMENT CONC. SIDEWALK.
5. REMOVE EXISTING PIPE.
6. REMOVE EXISTING DRAINAGE STRUCTURE.
7. REMOVE EXISTING SIGN.
8. PROTECT EXISTING TREE.
9. REMOVE PORTION OF EXISTING WALL.
10. PROTECT EXISTING FENCE.
11. REMOVE EXISTING VEGETATION (CLEARING AND GRUBBING).
12. EXISTING UTILITY POLE TO BE RELOCATED BY OTHERS.
13. EXISTING UTILITY VAULT/FACILITY TO BE RELOCATED BY OTHERS.
14. EXISTING LIGHT POLE TO BE RELOCATED BY OTHERS.
15. REMOVE EXISTING TREE.
16. REMOVE EXISTING FENCE.
17. REMOVE EXISTING BOLLARDS.
18. RELOCATE MAILBOX.
19. PLUG EXISTING PIPE.
20. REMOVE EXISTING CURB OR CURB & GUTTER.
21. REMOVE EXISTING LANDSCAPING ELEMENTS AND SALVAGE TO OWNER.
22. PROTECT EXISTING CONCRETE BLOCKS.
23. PROTECT EXISTING MAILBOX.
24. REMOVE EXISTING WOODEN DIVIDER AND SALVAGE TO OWNER.
25. REMOVE PAINT LINE.

LEGEND

- STORM DRAIN INLET PROTECTION
- PROPERTY LINE
- RIGHT-OF-WAY
- SAWCUT
- REMOVE EXISTING PIPE
- REMOVE EXISTING ASPHALT CONC. PAVEMENT
- REMOVE EXISTING CEMENT CONC. SIDEWALK
- CLEARING AND GRUBBING
- CUT/FILL LIMITS

100% SUBMITTAL

DATE	NO.	REVISION	BY

811 Know what's below. Call 811 before you dig.

K. EAGLE	05-2024
DESIGNED BY:	DATE
K. EAGLE	05-2024
DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

DARREN K. MURATA — STATE OF WASHINGTON — 19345 — REGISTERED PROFESSIONAL ENGINEER

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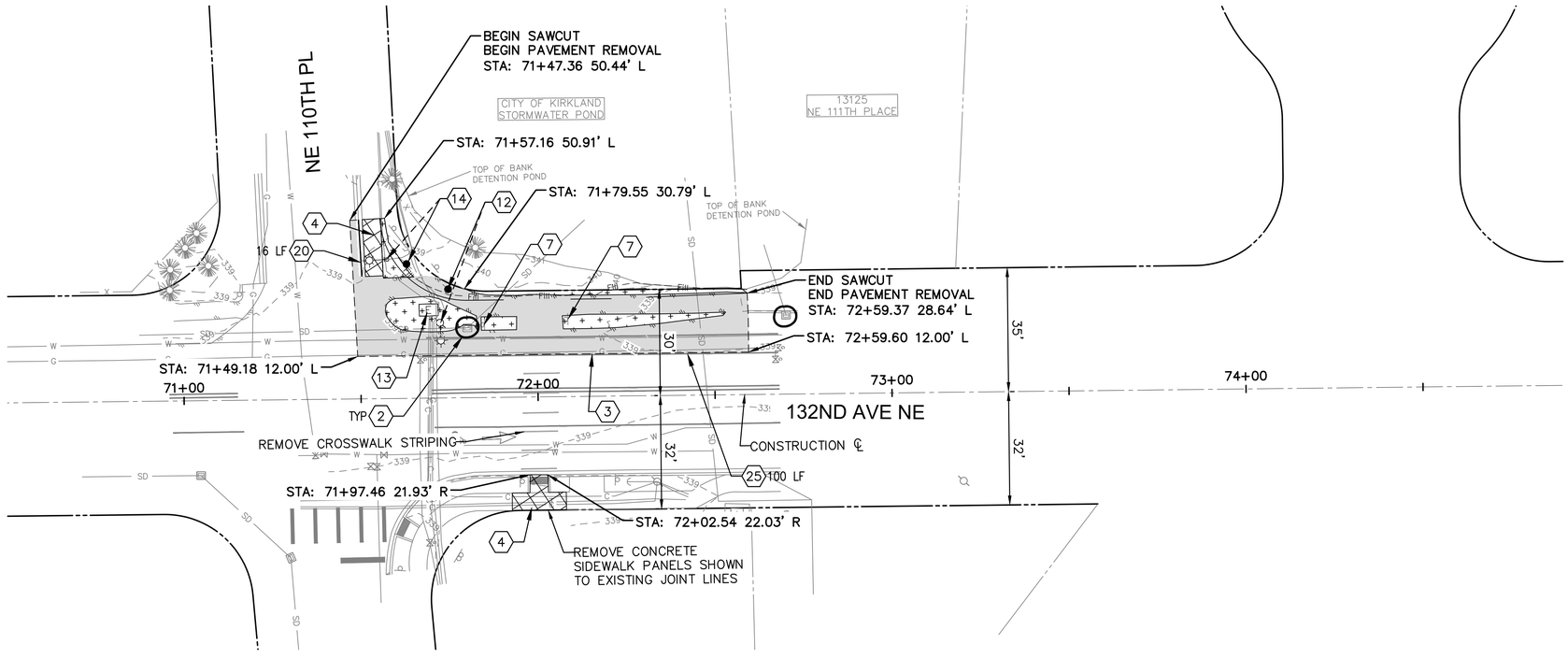
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

SITE PREPARATION-TESC PLAN (SITE #1)

SHEET 5 OF 44 SHEETS

July 11, 2024 - 2:42 PM - KEAGLE - \\DOWL.COM\JPROJECTS\2215223-01165CAD\CIVIL\SC-CT-EC-15223-01.DWG - Layout Name: 5 SITE PREPARATION-TESC PLAN (SITE #1)



20 0 20 40
SCALE IN FEET

GENERAL NOTES

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2. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES.

(#) SITE PREPARATION/ EROSION CONTROL NOTES

1. REMOVE EXISTING BICYCLE LANE PAVEMENT MARKING.
2. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STD PLAN I-40.20-00.
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18. RELOCATE MAILBOX.
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22. PROTECT EXISTING CONCRETE BLOCKS.
23. PROTECT EXISTING MAILBOX.
24. REMOVE EXISTING WOODEN DIVIDER AND SALVAGE TO OWNER.
25. REMOVE PAINT LINE.

LEGEND

- STORM DRAIN INLET PROTECTION
- PROPERTY LINE
- RIGHT-OF-WAY
- SAWCUT
- REMOVE EXISTING PIPE
- REMOVE EXISTING ASPHALT CONC. PAVEMENT
- REMOVE EXISTING CEMENT CONC. SIDEWALK
- CLEARING AND GRUBBING
- CUT/FILL LIMITS

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

K. EAGLE 05-2024 DESIGNED BY: DATE
K. EAGLE 05-2024 DRAWN BY: DATE
D. MURATA 07-2024 CHECKED BY: DATE

DARREN K. MURATA STATE OF WASHINGTON 100% ELECTRONICALLY SIGNED REGISTERED PROFESSIONAL ENGINEER

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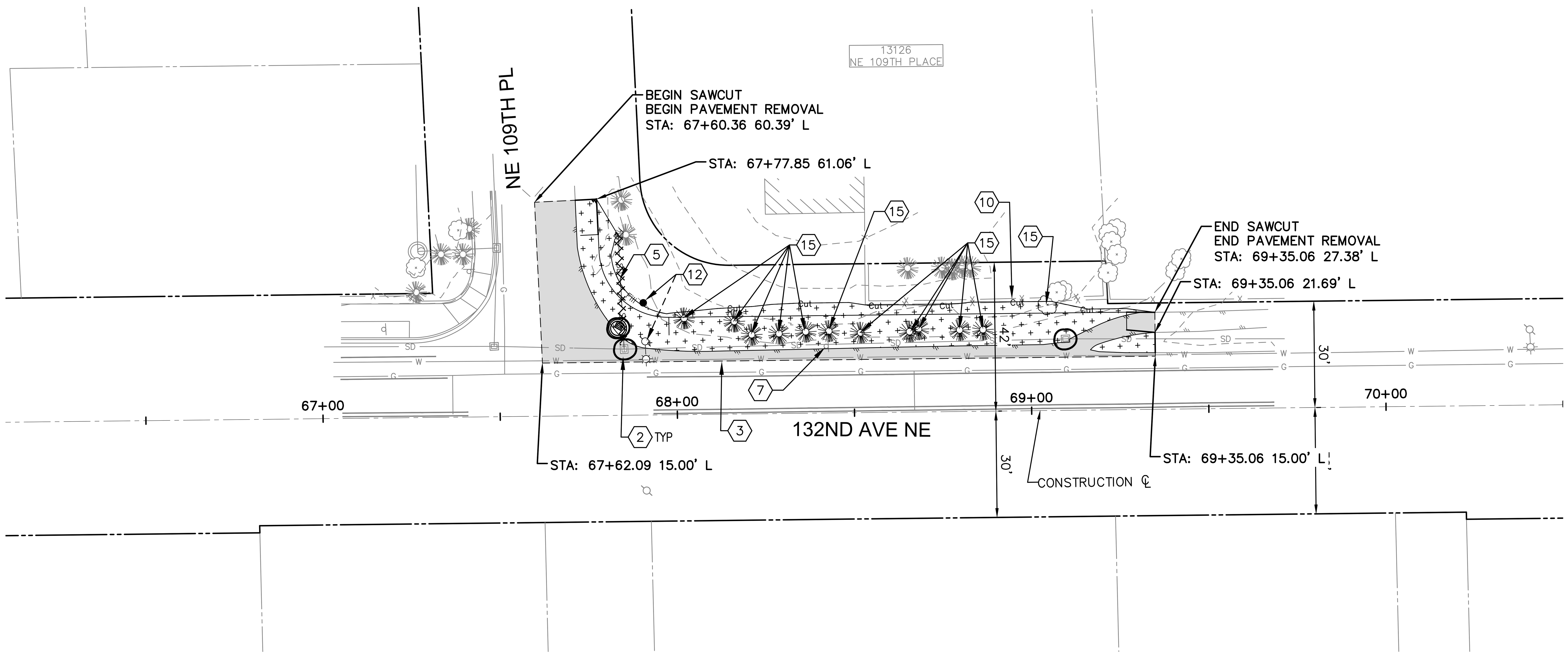
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

SITE PREPARATION-TESC PLAN (SITE #2)

SHEET 6 OF 44 SHEETS

July 11, 2024 - 2:42 PM - KEAGLE - \\DOWL.COM\JPROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-EC-15223-01.DWG - Layout Name: 6 SITE PREPARATION-TESC PLAN (SITE #2)

SCALE IN FEET: 20 0 20 40



GENERAL NOTES

1. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE.
2. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES.

SITE PREPARATION/ EROSION CONTROL NOTES

1. REMOVE EXISTING BICYCLE LANE PAVEMENT MARKING.
2. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STD PLAN I-40.20-00.
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23. PROTECT EXISTING MAILBOX.
24. REMOVE EXISTING WOODEN DIVIDER AND SALVAGE TO OWNER.
25. REMOVE PAINT LINE.

LEGEND

- STORM DRAIN INLET PROTECTION
- PROPERTY LINE
- RIGHT-OF-WAY
- SAWCUT
- REMOVE EXISTING PIPE
- REMOVE EXISTING ASPHALT CONC. PAVEMENT
- REMOVE EXISTING CEMENT CONC. SIDEWALK
- CLEARING AND GRUBBING
- Cut / Fill — CUT/FILL LIMITS

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

K. EAGLE	05-2024
DESIGNED BY:	DATE
K. EAGLE	05-2024
DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

DARREN K. M. MURATA, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER

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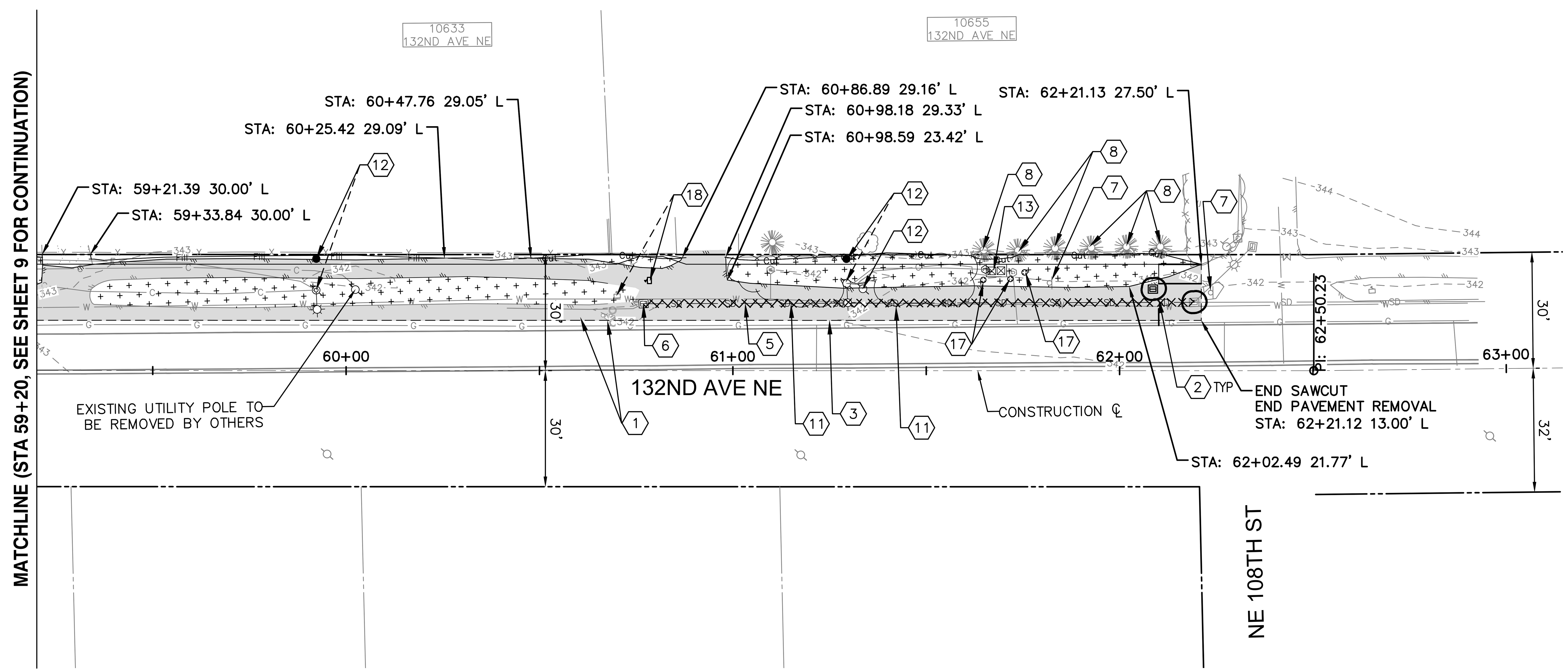
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

SITE PREPARATION-TESC PLAN (SITE #3)

SHEET 7 OF 44 SHEETS

July 11, 2024 - 2:42 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-EC-15223-01.DWG - Layout Name: 8 SITE PREPARATION-TESC PLAN (SITE #4)

SCALE IN FEET: 20 0 20 40



GENERAL NOTES

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25. REMOVE PAINT LINE.

LEGEND

- STORM DRAIN INLET PROTECTION
- PROPERTY LINE
- RIGHT-OF-WAY
- SAWCUT
- REMOVE EXISTING PIPE
- REMOVE EXISTING ASPHALT CONC. PAVEMENT
- REMOVE EXISTING CEMENT CONC. SIDEWALK
- CLEARING AND GRUBBING
- CUT/FILL LIMITS

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

K. EAGLE	05-2024
DESIGNED BY:	DATE
K. EAGLE	05-2024
DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

DARREN K. MURATA, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER

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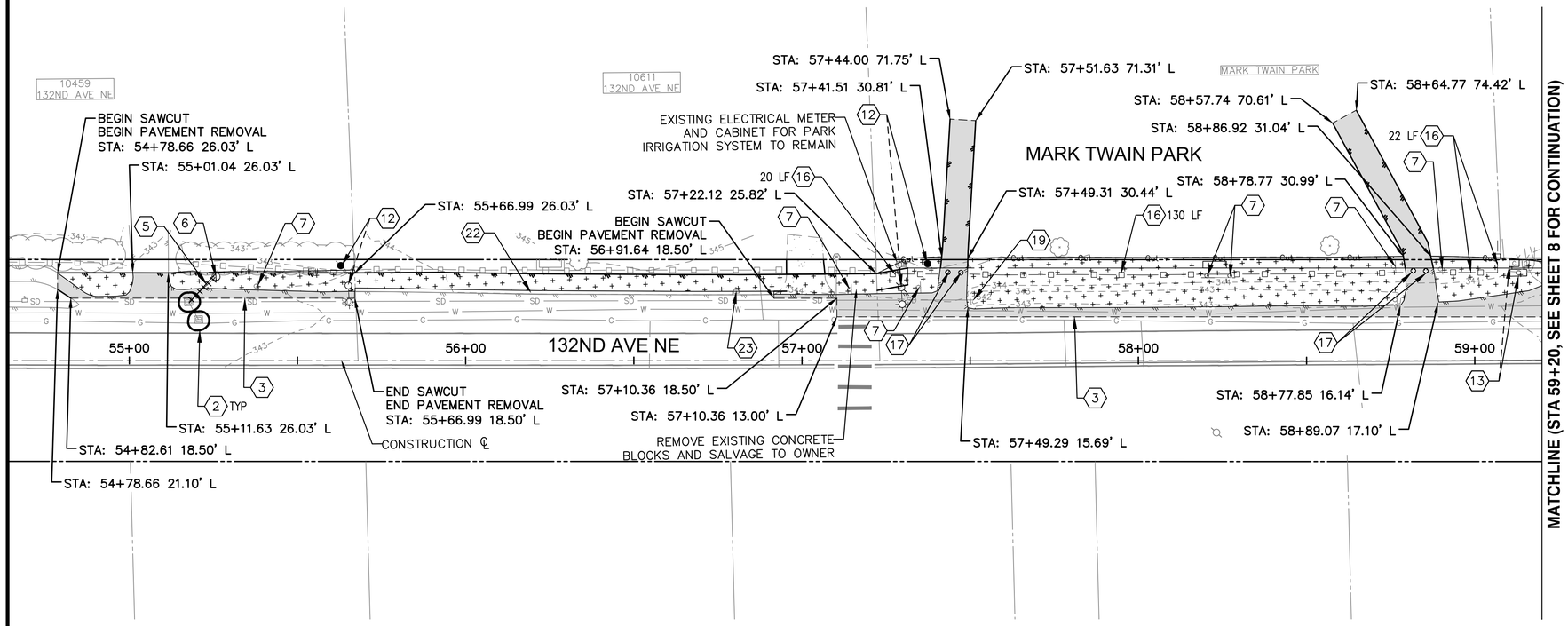
132ND AVENUE NE
PEDESTRIAN IMPROVEMENTS PROJECT

SITE PREPARATION-TESC PLAN
(SITE #4)

SHEET 8 OF 44 SHEETS



20 0 20 40
SCALE IN FEET

GENERAL NOTES

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2. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES.

(#) SITE PREPARATION/ EROSION CONTROL NOTES

1. REMOVE EXISTING BICYCLE LANE PAVEMENT MARKING.
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25. REMOVE PAINT LINE.

LEGEND

- STORM DRAIN INLET PROTECTION
- PROPERTY LINE
- RIGHT–OF–WAY
- SAWCUT
- REMOVE EXISTING PIPE
- REMOVE EXISTING ASPHALT CONC. PAVEMENT
- REMOVE EXISTING CEMENT CONC. SIDEWALK
- CLEARING AND GRUBBING
- CUT/FILL LIMITS

100% SUBMITTAL

DATE	NO.	REVISION	BY

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K. EAGLE 05-2024 DRAWN BY: DATE
D. MURATA 07-2024 CHECKED BY: DATE

DARREN K. MURATA — STATE OF WASHINGTON — 19045 — REGISTERED PROFESSIONAL ENGINEER

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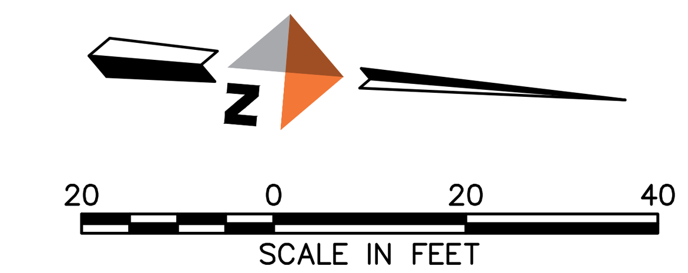
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

SITE PREPARATION-TESC PLAN (SITE #5)

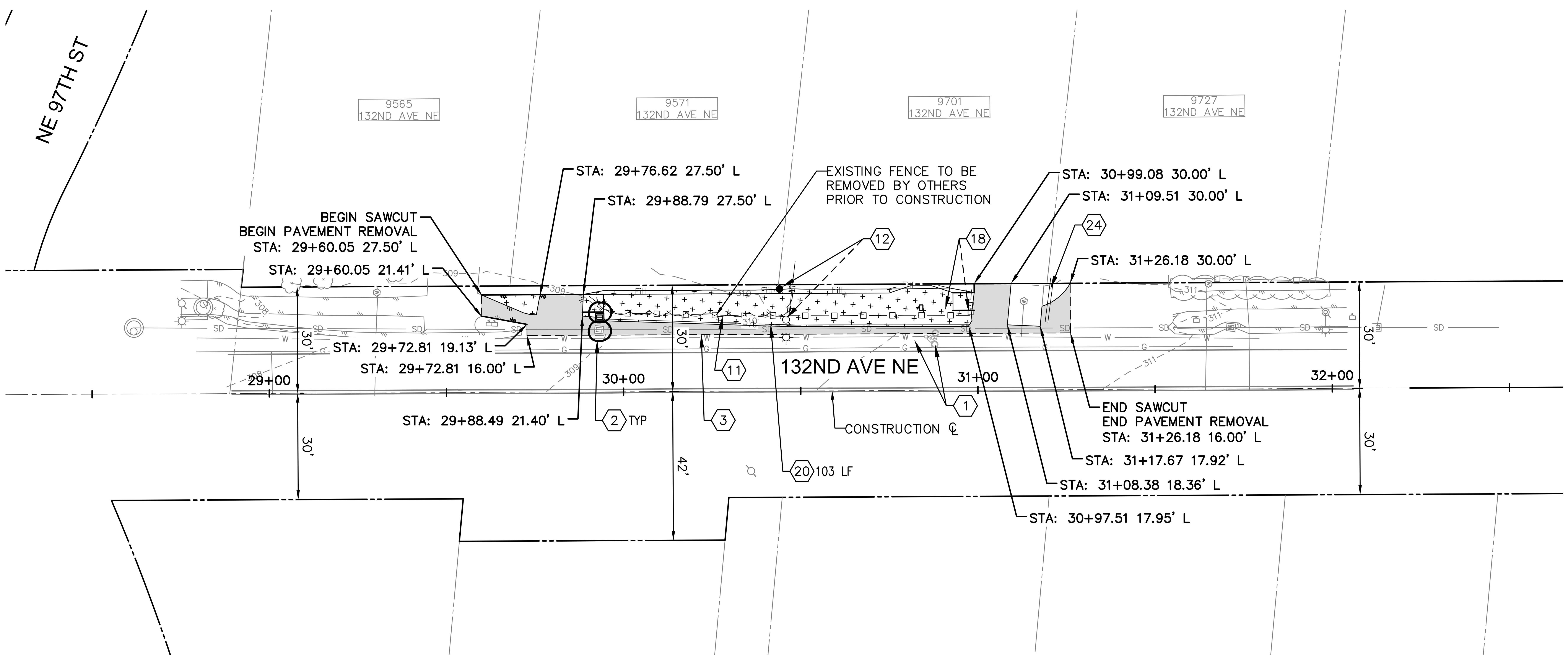
SHEET 9 OF 44 SHEETS

July 11, 2024 - 2:42 PM - KEAGLE - \\DOWL.COM\JPROJECTS\2215223-01165CAD\CIVIL\SC-CT-EC-15223-01.DWG - Layout Name: 9 SITE PREPARATION-TESC PLAN (SITE #5)



GENERAL NOTES

1. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE.
2. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES.



SITE PREPARATION/ EROSION CONTROL NOTES

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2. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STD PLAN I-40.20-00.
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LEGEND

- STORM DRAIN INLET PROTECTION
- PROPERTY LINE
- RIGHT-OF-WAY
- SAWCUT
- REMOVE EXISTING PIPE
- REMOVE EXISTING ASPHALT CONC. PAVEMENT
- REMOVE EXISTING CEMENT CONC. SIDEWALK
- CLEARING AND GRUBBING
- CUT/FILL LIMITS

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

K. EAGLE	05-2024
DESIGNED BY:	DATE
K. EAGLE	05-2024
DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

DARREN K. MURATA, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER

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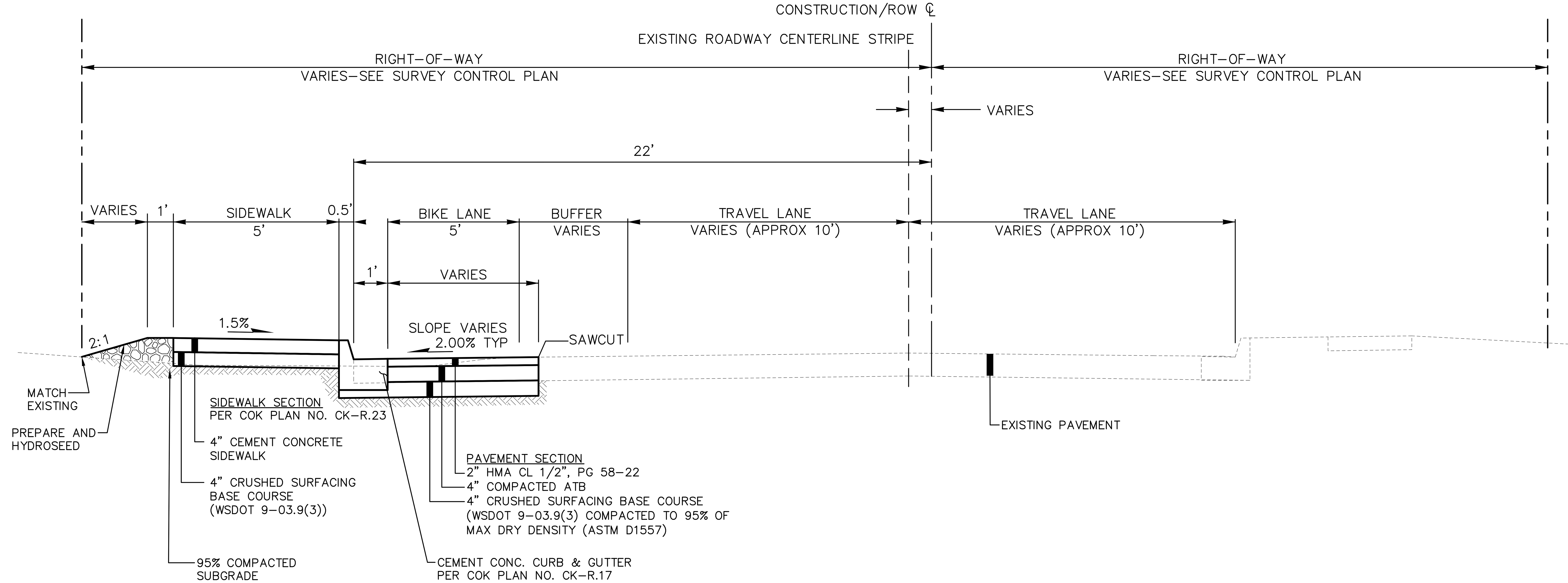
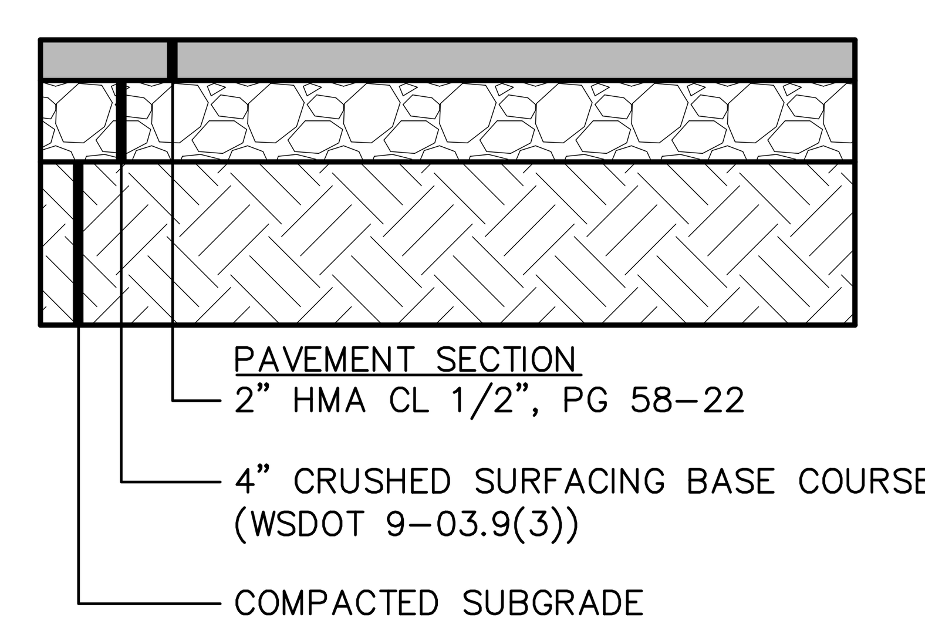
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

SITE PREPARATION-TESC PLAN (SITE #6)

SHEET 10 OF 44 SHEETS



TYPICAL SIDEWALK SECTION
NOT TO SCALE



ASPHALT CONCRETE PAVEMENT SECTION FOR PEDESTRIAN WALKWAY
NOT TO SCALE

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

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K. EAGLE 05-2024 DRAWN BY: DATE
D. MURATA 07-2024 CHECKED BY: DATE

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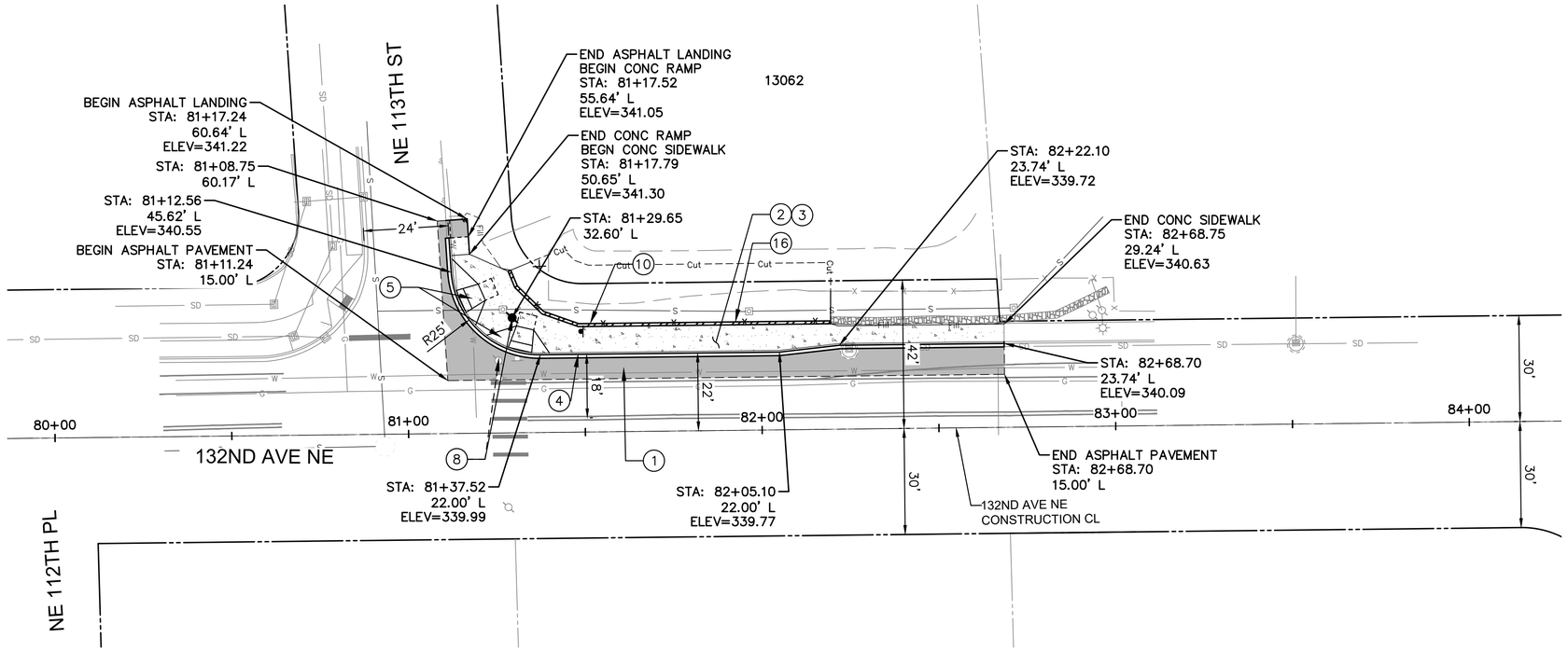
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

TYPICAL SECTIONS AND DETAILS

SHEET 11 OF 44 SHEETS



NOTE: THE RETAINING WALL MUST BE CONSTRUCTED PRIOR TO THE RELOCATION OF THE UTILITY POLE AT THE NORTHWEST CORNER OF 132ND AVE AND 113TH ST. THE CONTRACTOR SHALL COORDINATE WITH CITY STAFF AND PSE TO CONFIRM THE CONSTRUCTION SCHEDULE.

20 0 20 40
SCALE IN FEET

(#) SIDEWALK CONSTRUCTION NOTES

1. CONSTRUCT ASPHALT ROADWAY PER TYPICAL SECTION SHEET 11.
2. CONSTRUCT SIDEWALK PER TYPICAL SECTION SHEET 11.
3. CONSTRUCT CEMENT CONC. SIDEWALK PER COK PLAN NO. CK–R.23.
4. CONSTRUCT CEMENT CONC. CURB & GUTTER PER COK PLAN NO. CK–R.17.
5. CONSTRUCT CEMENT CONC. CURB RAMP.
6. NOT USED.
7. PROTECT EXISTING UTILITY POLE.
8. EXISTING UTILITY POLE TO BE RELOCATED BY OTHERS.
9. RELOCATE MAILBOX.
10. CONSTRUCT RETAINING WALL. SEE SHEET 27 FOR WALL PROFILE AND DETAILS.
11. CONSTRUCT CONCRETE DRIVEWAY.
12. EXISTING UTILITY FACILITY/VAULT TO BE RELOCATED BY OTHERS.
13. INSTALL RRFB ASSEMBLY.
14. REMOVE ALL EXISTING TREES WITHIN IMPROVEMENT LIMITS. EXISTING ELECTRICAL METER AND CABINET TO REMAIN.
15. REPLACE WITH NEW WATER METER BOX PER COK PLAN NO. CK–W.23.
16. INSTALL SAFETY RAILING PER SHEET 27.
17. INSTALL SPLIT RAIL FENCING PER DETAIL ON SHEET 38.
18. INSTALL CONCRETE PAD PER DETAIL ON SHEET 38.
19. INSTALL MAILBOX PER DETAIL ON SHEET 43.
20. INSTALL WIDENED SIDEWALK FOR BUS STOP (8' WIDE X 10' LONG)

LEGEND

- SD — EXISTING STORM
- W — EXISTING WATER
- G — EXISTING GAS
- TC — EXISTING COMMUNICATIONS
- SS — EXISTING SANITARY SEWER
- EXISTING RIGHT–OF–WAY
- PROPOSED CEMENT CONC SIDEWALK
- PROPOSED CURB & GUTTER
- PROPOSED ASPHALT PAVEMENT
- Cut / Fill — PROPOSED CUT/FILL
- PROPOSED STORM PIPE
- PROPOSED STORM STRUCTURES
- PROPOSED RETAINING WALL

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

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DESIGNED BY:	DATE
K. EAGLE	05-2024
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D. MURATA	07-2024
CHECKED BY:	DATE

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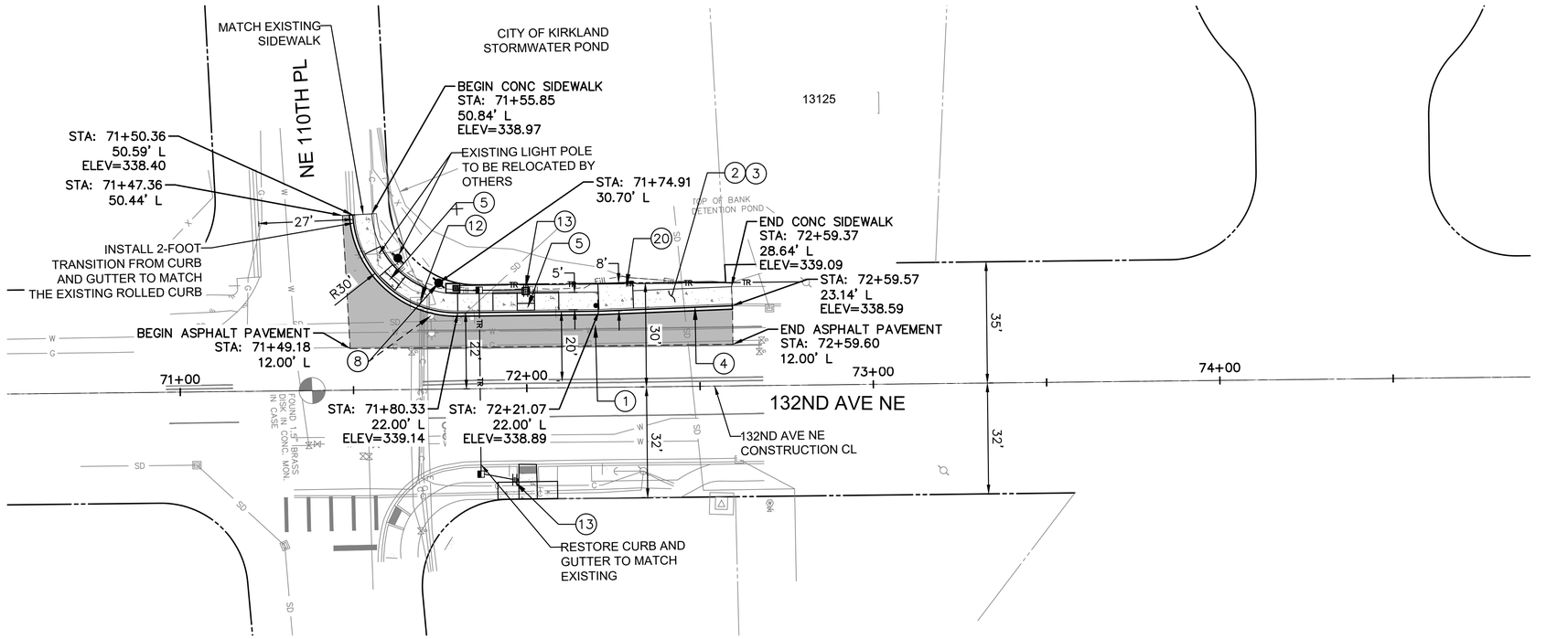
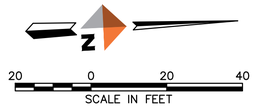
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

ROADWAY PAVING PLAN (SITE #1)

SHEET 12 OF 44 SHEETS





(#) SIDEWALK CONSTRUCTION NOTES

1. CONSTRUCT ASPHALT ROADWAY PER TYPICAL SECTION SHEET 11.
2. CONSTRUCT SIDEWALK PER TYPICAL SECTION SHEET 11.
3. CONSTRUCT CEMENT CONC. SIDEWALK PER COK PLAN NO. CK–R.23.
4. CONSTRUCT CEMENT CONC. CURB & GUTTER PER COK PLAN NO. CK–R.17.
5. CONSTRUCT CEMENT CONC. CURB RAMP.
6. NOT USED.
7. PROTECT EXISTING UTILITY POLE.
8. EXISTING UTILITY POLE TO BE RELOCATED BY OTHERS.
9. RELOCATE MAILBOX.
10. CONSTRUCT RETAINING WALL. SEE SHEET 27 FOR WALL PROFILE AND DETAILS.
11. CONSTRUCT CONCRETE DRIVEWAY.
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13. INSTALL RRFB ASSEMBLY.
14. REMOVE ALL EXISTING TREES WITHIN IMPROVEMENT LIMITS. EXISTING ELECTRICAL METER AND CABINET TO REMAIN.
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16. INSTALL SAFETY RAILING PER SHEET 27.
17. INSTALL SPLIT RAIL FENCING PER DETAIL ON SHEET 38.
18. INSTALL CONCRETE PAD PER DETAIL ON SHEET 38.
19. INSTALL MAILBOX PER DETAIL ON SHEET 43.
20. INSTALL WIDENED SIDEWALK FOR BUS STOP (8' WIDE X 10' LONG)

LEGEND

- SD — EXISTING STORM
- W — EXISTING WATER
- G — EXISTING GAS
- TC — EXISTING COMMUNICATIONS
- SS — EXISTING SANITARY SEWER
- EXISTING RIGHT–OF–WAY
- PROPOSED CEMENT CONC SIDEWALK
- PROPOSED CURB & GUTTER
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CUT/FILL
- PROPOSED STORM PIPE
- PROPOSED STORM STRUCTURES
- PROPOSED RETAINING WALL

100% SUBMITTAL

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CHECKED BY:	DATE

DARREN K. MICHAELS — STATE OF WASHINGTON — 21801 — REGISTERED PROFESSIONAL ENGINEER

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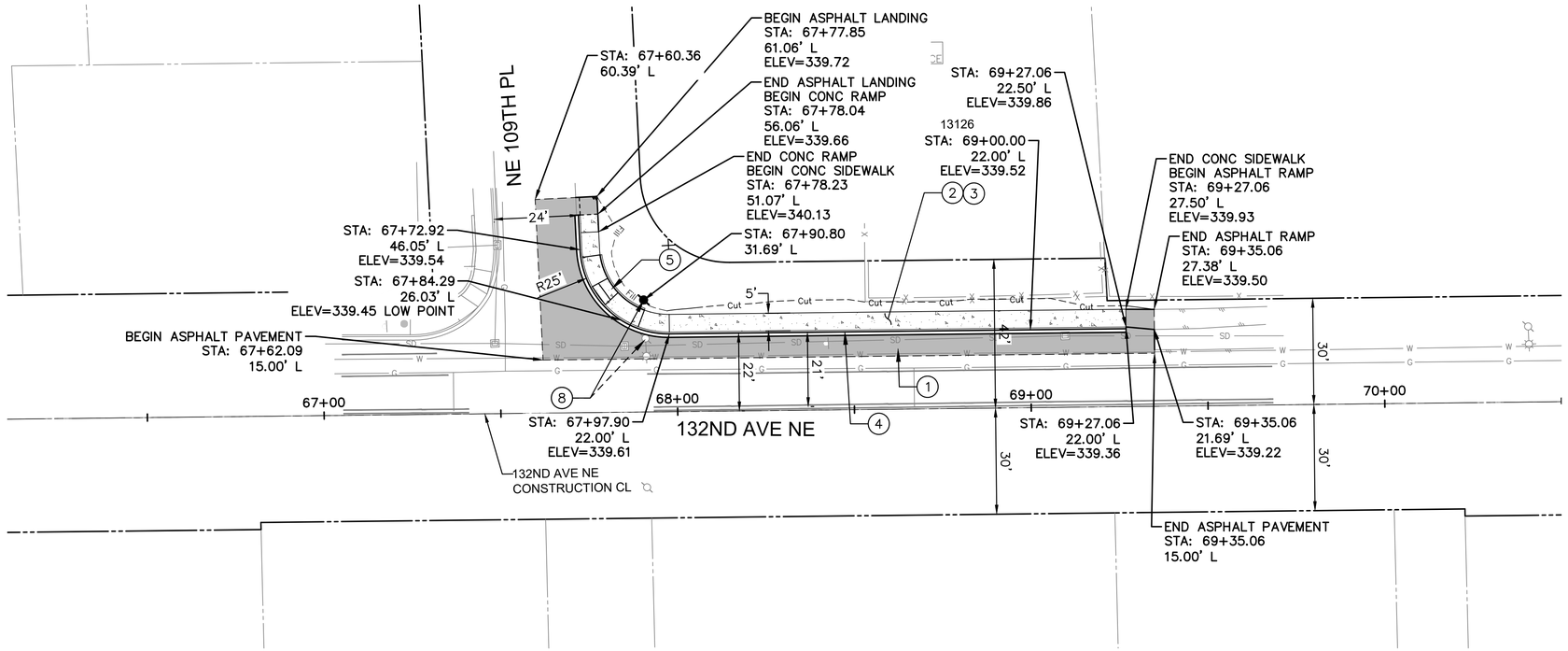
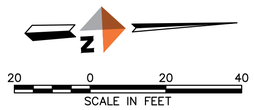
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

ROADWAY PAVING PLAN (SITE #2)

SHEET 13 OF 44 SHEETS

July 11, 2024 - 2:44 PM - KEAGLE - \\DOWL.COM\JPROJECTS\2215223-01165CAD\CIVIL\SC-CT-PV-15223-01.DWG - Layout Name: 13 ROADWAY PAVING PLAN (SITE #2)





SIDEWALK CONSTRUCTION NOTES

1. CONSTRUCT ASPHALT ROADWAY PER TYPICAL SECTION SHEET 11.
2. CONSTRUCT SIDEWALK PER TYPICAL SECTION SHEET 11.
3. CONSTRUCT CEMENT CONC. SIDEWALK PER COK PLAN NO. CK–R.23.
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5. CONSTRUCT CEMENT CONC. CURB RAMP.
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20. INSTALL WIDENED SIDEWALK FOR BUS STOP (8' WIDE X 10' LONG)

LEGEND

- SD — EXISTING STORM
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100% SUBMITTAL

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DARREN K. MURATA — STATE OF WASHINGTON — 20016 — REGISTERED PROFESSIONAL ENGINEER

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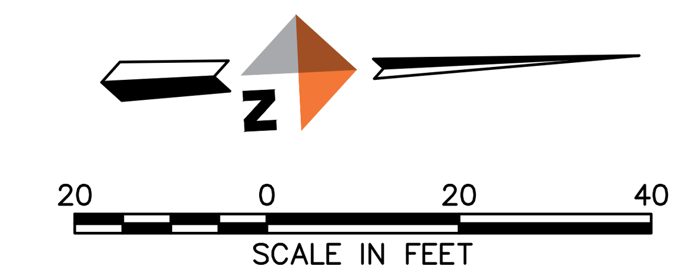
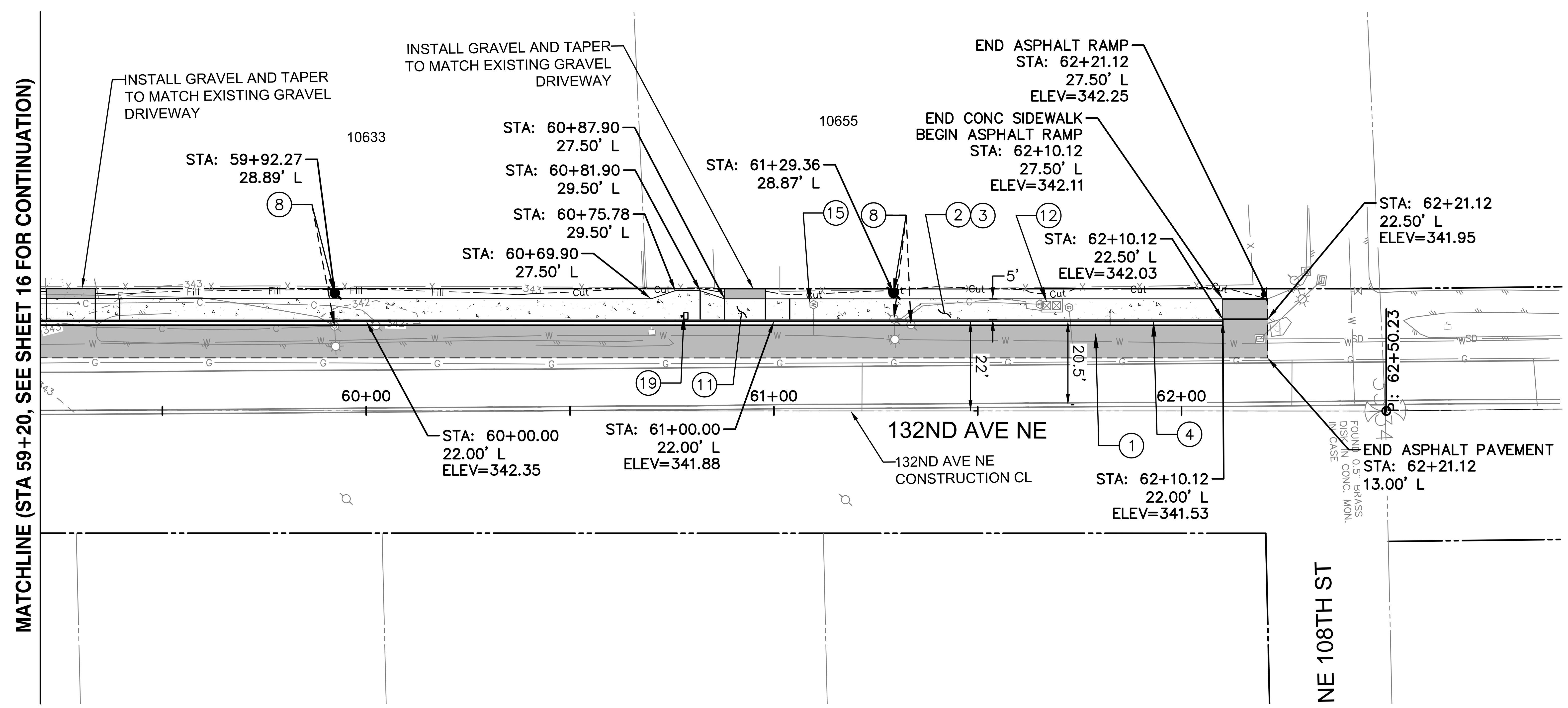
ROADWAY PAVING PLAN (SITE #3)

SHEET 14 OF 44 SHEETS

July 11, 2024 - 2:44 PM - KEAGLE - \\DOWL.COM\JPROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-PV-15223-01.DWG - Layout Name: 14 ROADWAY PAVING PLAN (SITE #3)





SIDEWALK CONSTRUCTION NOTES

1. CONSTRUCT ASPHALT ROADWAY PER TYPICAL SECTION SHEET 11.
2. CONSTRUCT SIDEWALK PER TYPICAL SECTION SHEET 11.
3. CONSTRUCT CEMENT CONC. SIDEWALK PER COK PLAN NO. CK–R.23.
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5. CONSTRUCT CEMENT CONC. CURB RAMP.
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9. RELOCATE MAILBOX.
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19. INSTALL MAILBOX PER DETAIL ON SHEET 43.
20. INSTALL WIDENED SIDEWALK FOR BUS STOP (8' WIDE X 10' LONG)

LEGEND

- SD — EXISTING STORM
- W — EXISTING WATER
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- EXISTING RIGHT–OF–WAY
- PROPOSED CEMENT CONC SIDEWALK
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- PROPOSED STORM PIPE
- PROPOSED STORM STRUCTURES
- PROPOSED RETAINING WALL

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132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT
ROADWAY PAVING PLAN (SITE #4)

SHEET 15 OF 44 SHEETS

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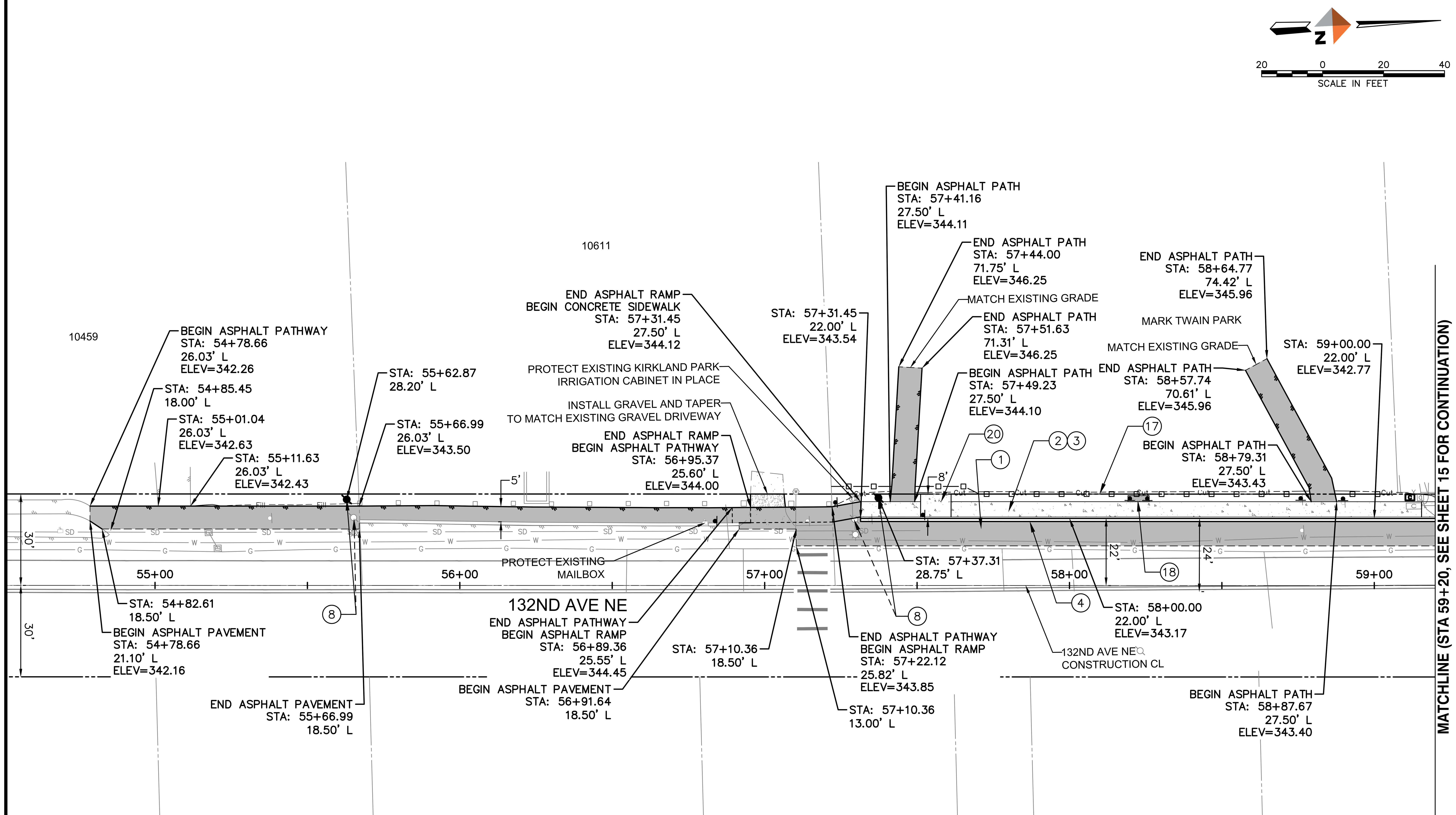

SIDEWALK CONSTRUCTION NOTES

1. CONSTRUCT ASPHALT ROADWAY PER TYPICAL SECTION SHEET 11.
2. CONSTRUCT SIDEWALK PER TYPICAL SECTION SHEET 11.
3. CONSTRUCT CEMENT CONC. SIDEWALK PER COK PLAN NO. CK–R.23.
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5. CONSTRUCT CEMENT CONC. CURB RAMP.
6. NOT USED.
7. PROTECT EXISTING UTILITY POLE.
8. EXISTING UTILITY POLE TO BE RELOCATED BY OTHERS.
9. RELOCATE MAILBOX.
10. CONSTRUCT RETAINING WALL. SEE SHEET 27 FOR WALL PROFILE AND DETAILS.
11. CONSTRUCT CONCRETE DRIVEWAY.
12. EXISTING UTILITY FACILITY/VAULT TO BE RELOCATED BY OTHERS.
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14. REMOVE ALL EXISTING TREES WITHIN IMPROVEMENT LIMITS. EXISTING ELECTRICAL METER AND CABINET TO REMAIN.
15. REPLACE WITH NEW WATER METER BOX PER COK PLAN NO. CK–W.23.
16. INSTALL SAFETY RAILING PER SHEET 27.
17. INSTALL SPLIT RAIL FENCING PER DETAIL ON SHEET 38.
18. INSTALL CONCRETE PAD PER DETAIL ON SHEET 38.
19. INSTALL MAILBOX PER DETAIL ON SHEET 43.
20. INSTALL WIDENED SIDEWALK FOR BUS STOP (8' WIDE X 10' LONG)

LEGEND

Symbol	Description
SD	EXISTING STORM
W	EXISTING WATER
G	EXISTING GAS
TC	EXISTING COMMUNICATIONS
SS	EXISTING SANITARY SEWER
	EXISTING RIGHT–OF–WAY
	PROPOSED CEMENT CONC SIDEWALK
	PROPOSED CURB & GUTTER
	PROPOSED ASPHALT PAVEMENT
Cut / Fill	PROPOSED CUT/FILL
	PROPOSED STORM PIPE
	PROPOSED STORM STRUCTURES
	PROPOSED RETAINING WALL

100% SUBMITTAL

DATE	NO.	REVISION	BY

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K. EAGLE	05-2024
DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

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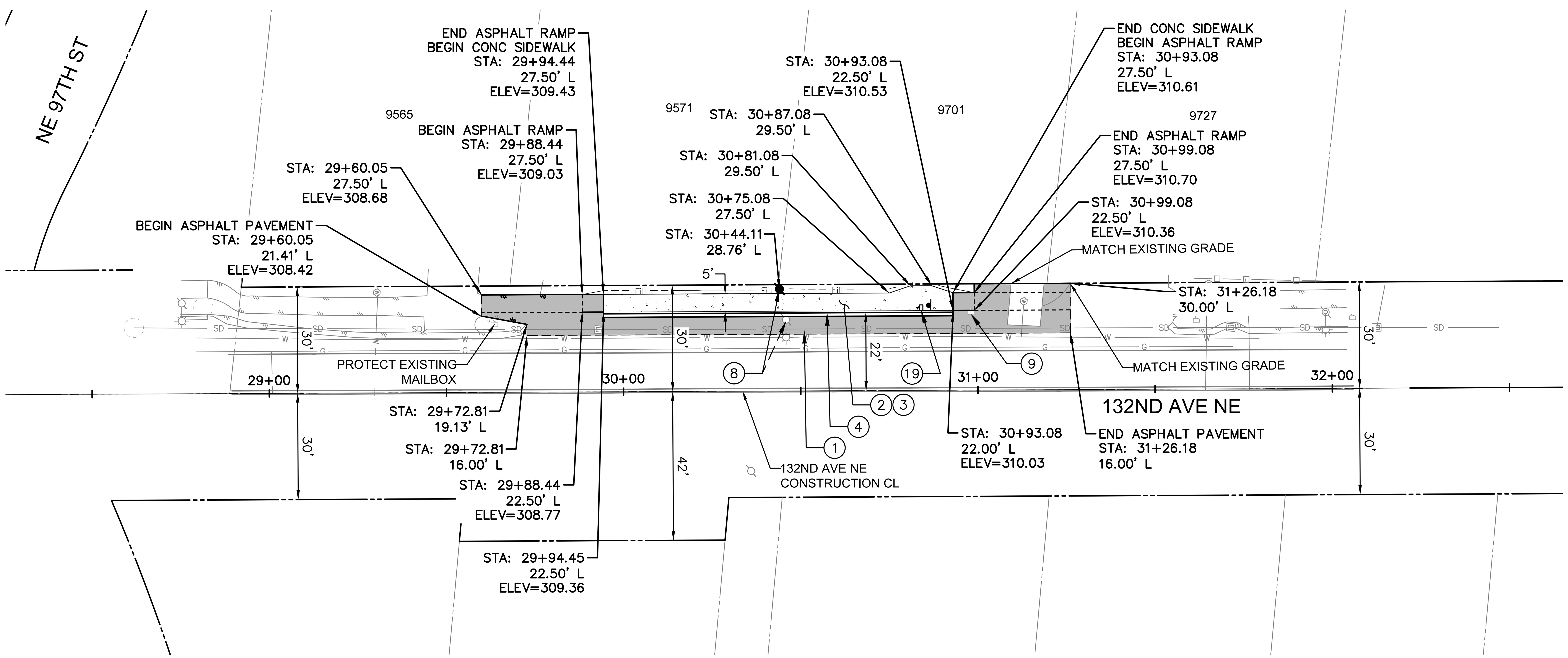
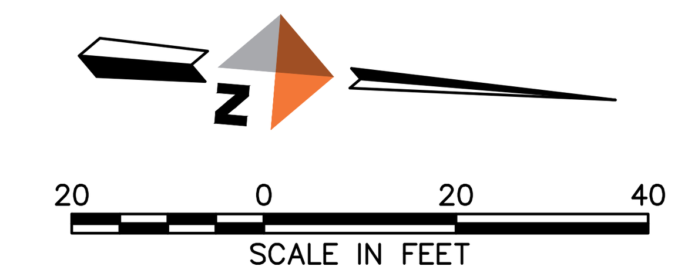
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

ROADWAY PAVING PLAN (SITE #5)

SHEET 16 OF 44 SHEETS





SIDEWALK CONSTRUCTION NOTES

1. CONSTRUCT ASPHALT ROADWAY PER TYPICAL SECTION SHEET 11.
2. CONSTRUCT SIDEWALK PER TYPICAL SECTION SHEET 11.
3. CONSTRUCT CEMENT CONC. SIDEWALK PER COK PLAN NO. CK–R.23.
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5. CONSTRUCT CEMENT CONC. CURB RAMP.
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19. INSTALL MAILBOX PER DETAIL ON SHEET 43.
20. INSTALL WIDENED SIDEWALK FOR BUS STOP (8' WIDE X 10' LONG)

LEGEND

Symbol	Description
SD	EXISTING STORM
W	EXISTING WATER
G	EXISTING GAS
TC	EXISTING COMMUNICATIONS
SS	EXISTING SANITARY SEWER
	EXISTING RIGHT–OF–WAY
	PROPOSED CEMENT CONC SIDEWALK
	PROPOSED CURB & GUTTER
	PROPOSED ASPHALT PAVEMENT
Cut / Fill	PROPOSED CUT/FILL
	PROPOSED STORM PIPE
	PROPOSED STORM STRUCTURES
	PROPOSED RETAINING WALL

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

K. EAGLE 05-2024 — DESIGNED BY: DATE
K. EAGLE 05-2024 — DRAWN BY: DATE
D. MURATA 07-2024 — CHECKED BY: DATE

DARREN K. M. MURATA, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER — 100% NOT FOR CONSTRUCTION

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132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

ROADWAY PAVING PLAN (SITE #6)

SHEET 17 OF 44 SHEETS

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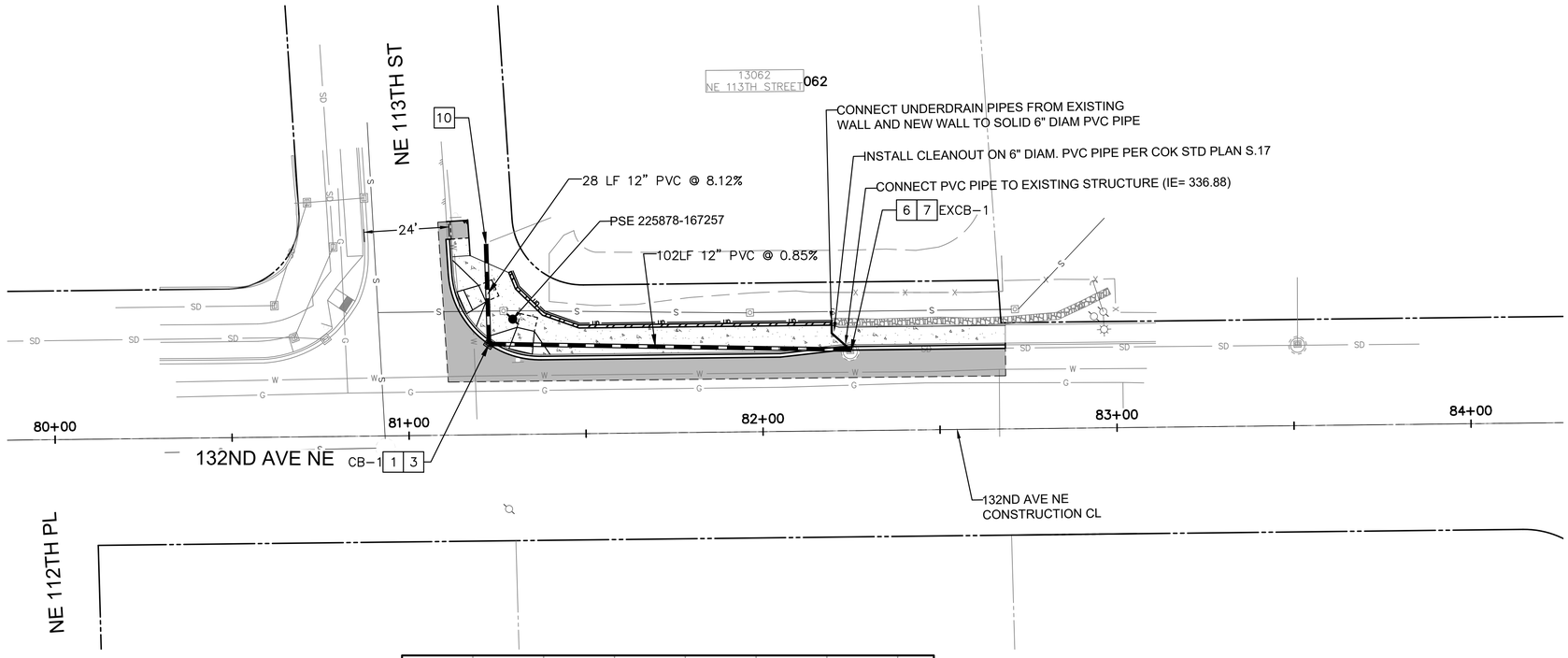

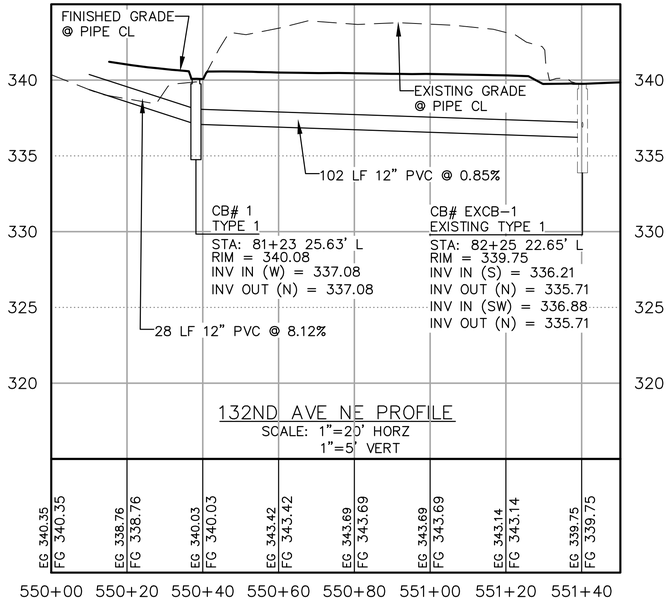

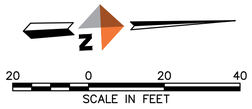

STORM DRAINAGE NOTES

1. INSTALL CATCH BASIN TYPE 1 PER COK PLAN NO. CK-D.07
2. INSTALL THROUGH-CURB INLET FRAME AND GRATE PER COK PLAN NO. CK-D.16
3. INSTALL VANED GRATE PER COK PLAN NO. CK-D.14
4. INSTALL SOLID LOCKING METAL COVER PER COK PLAN NO. CK-D.18
5. CONNECT TO EXISTING PIPE
6. CONNECT TO EXISTING STRUCTURE
7. ADJUST TO GRADE
8. INSTALL CATCH BASIN TYPE 2-48" PER COK PLAN NO. CK-D.09
9. REPLACE EXISTING FRAME AND GRATE WITH SOLID LOCKING METAL FRAME AND COVER PER DETAIL ON SHEET 41
10. INSTALL DEBRIS BARRIER ON PIPE END PER COK PLAN NO. CK-D.27

LEGEND

- SD — EXISTING STORM
- W — EXISTING WATER
- G — EXISTING GAS
- TC — EXISTING COMMUNICATIONS
- SS — EXISTING SANITARY SEWER
- EXISTING RIGHT-OF-WAY
- PROPOSED CEMENT CONC SIDEWALK
- PROPOSED CURB & GUTTER
- PROPOSED ASPHALT PAVEMENT
- Cut / Fill — PROPOSED CUT/FILL
- PROPOSED STORM PIPE
- PROPOSED STORM STRUCTURES
- PROPOSED RETAINING WALL

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

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K. EAGLE 05-2024 DRAWN BY: DATE
D. MURATA 07-2024 CHECKED BY: DATE

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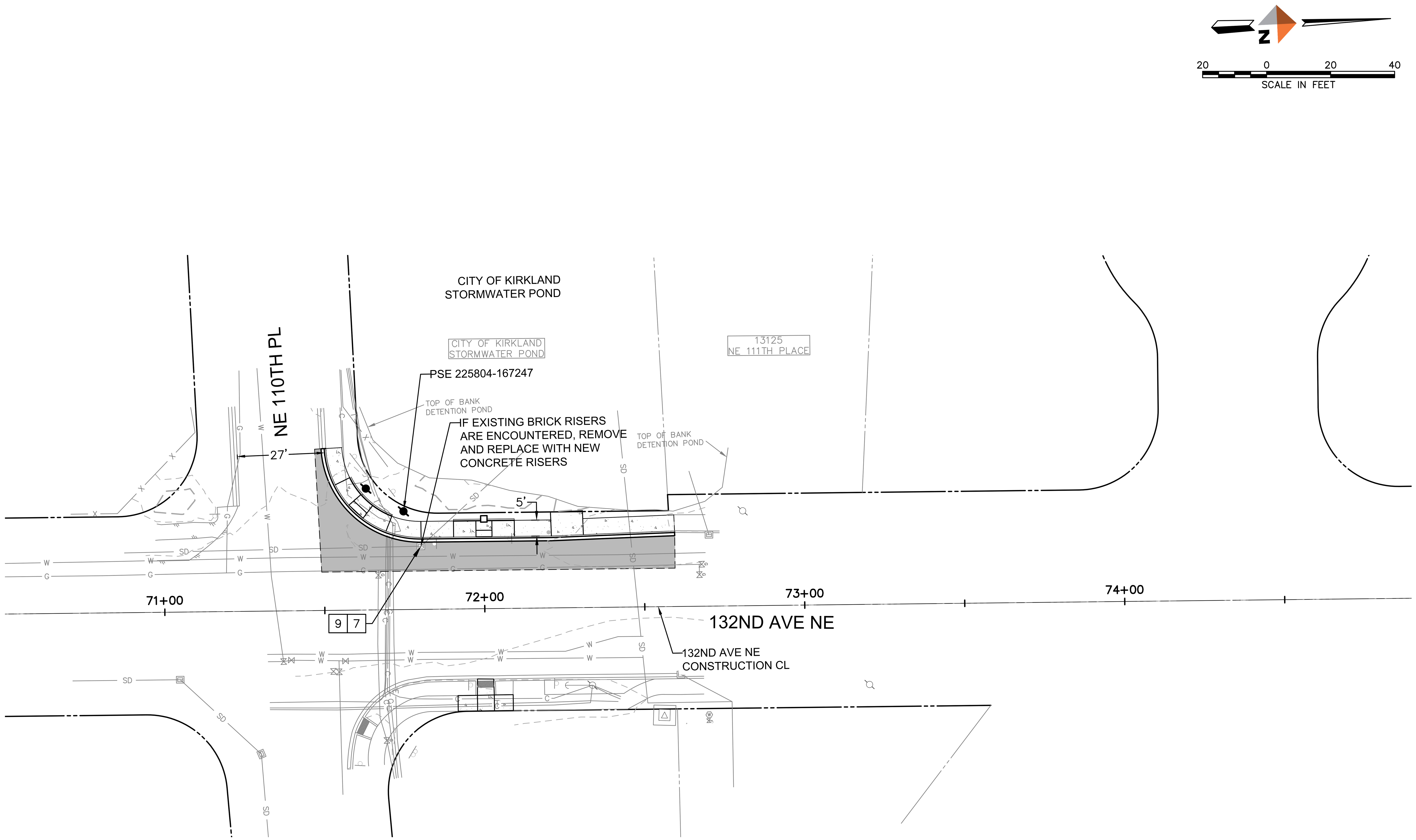
132ND AVENUE NE
PEDESTRIAN IMPROVEMENTS PROJECT

DRAINAGE PLAN AND PROFILE (SITE #1)

SHEET 18 OF 44 SHEETS



STORM DRAINAGE NOTES

1. INSTALL CATCH BASIN TYPE 1 PER COK PLAN NO. CK–D.07
2. INSTALL THROUGH–CURB INLET FRAME AND GRATE PER COK PLAN NO. CK–D.16
3. INSTALL VANED GRATE PER COK PLAN NO. CK–D.14
4. INSTALL SOLID LOCKING METAL COVER PER COK PLAN NO. CK–D.18
5. CONNECT TO EXISTING PIPE
6. CONNECT TO EXISTING STRUCTURE
7. ADJUST TO GRADE
8. INSTALL CATCH BASIN TYPE 2–48" PER COK PLAN NO. CK–D.09
9. REPLACE EXISTING FRAME AND GRATE WITH SOLID LOCKING METAL FRAME AND COVER PER DETAIL ON SHEET 41
10. INSTALL DEBRIS BARRIER ON PIPE END PER COK PLAN NO. CK–D.27

LEGEND

SD	EXISTING STORM
W	EXISTING WATER
G	EXISTING GAS
TC	EXISTING COMMUNICATIONS
SS	EXISTING SANITARY SEWER
	EXISTING RIGHT–OF–WAY
	PROPOSED CEMENT CONC SIDEWALK
	PROPOSED CURB & GUTTER
	PROPOSED ASPHALT PAVEMENT
Cut / Fill	PROPOSED CUT/FILL
	PROPOSED STORM PIPE
	PROPOSED STORM STRUCTURES
	PROPOSED RETAINING WALL

100% SUBMITTAL

DATE	NO.	REVISION	BY

Know what's below. Call 811 before you dig.

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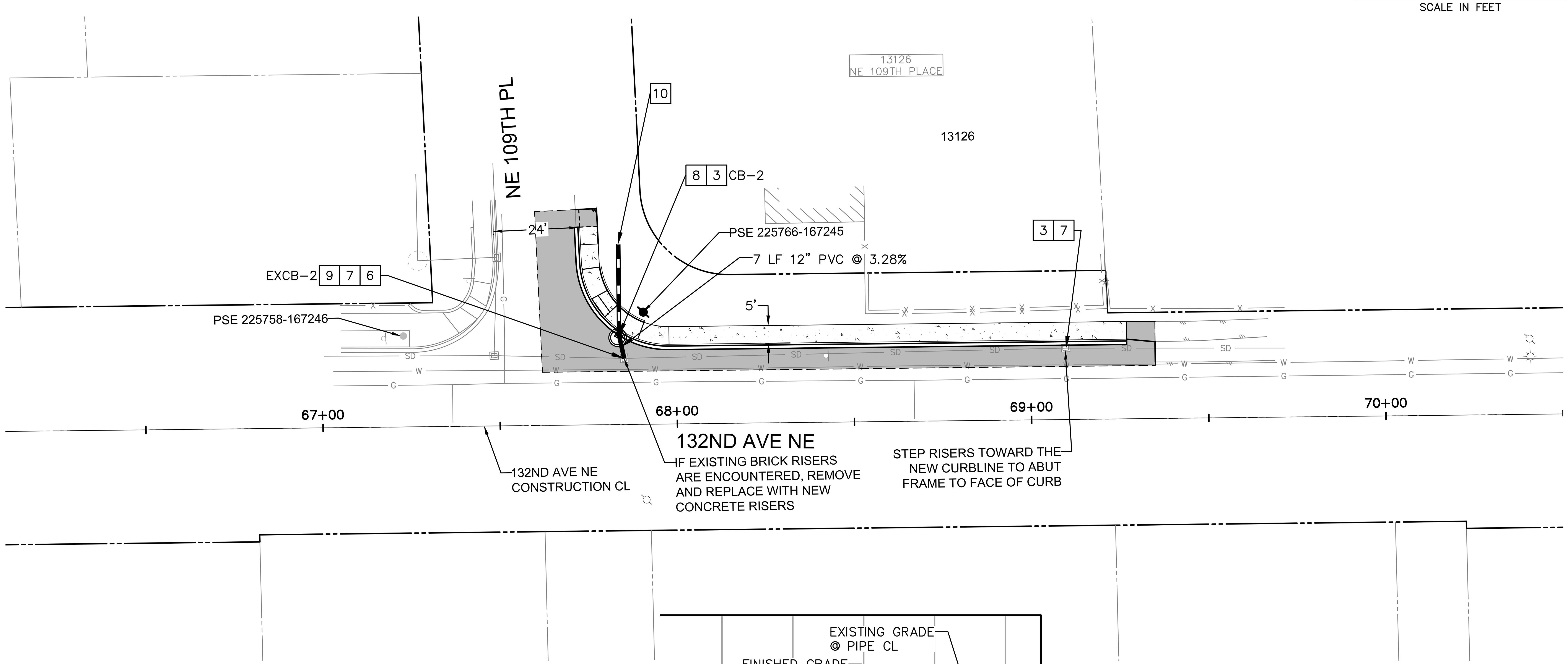
DRAINAGE PLAN AND PROFILE (SITE #2)

SHEET 19 OF 44 SHEETS

July 11, 2024 - 2:46 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\2\15223-01\65CAD\CIVIL\SC-CT-SD-15223-01.DWG - Layout Name: 19 DRAINAGE PLAN AND PROFILE (SITE #2)



STORM DRAINAGE NOTES

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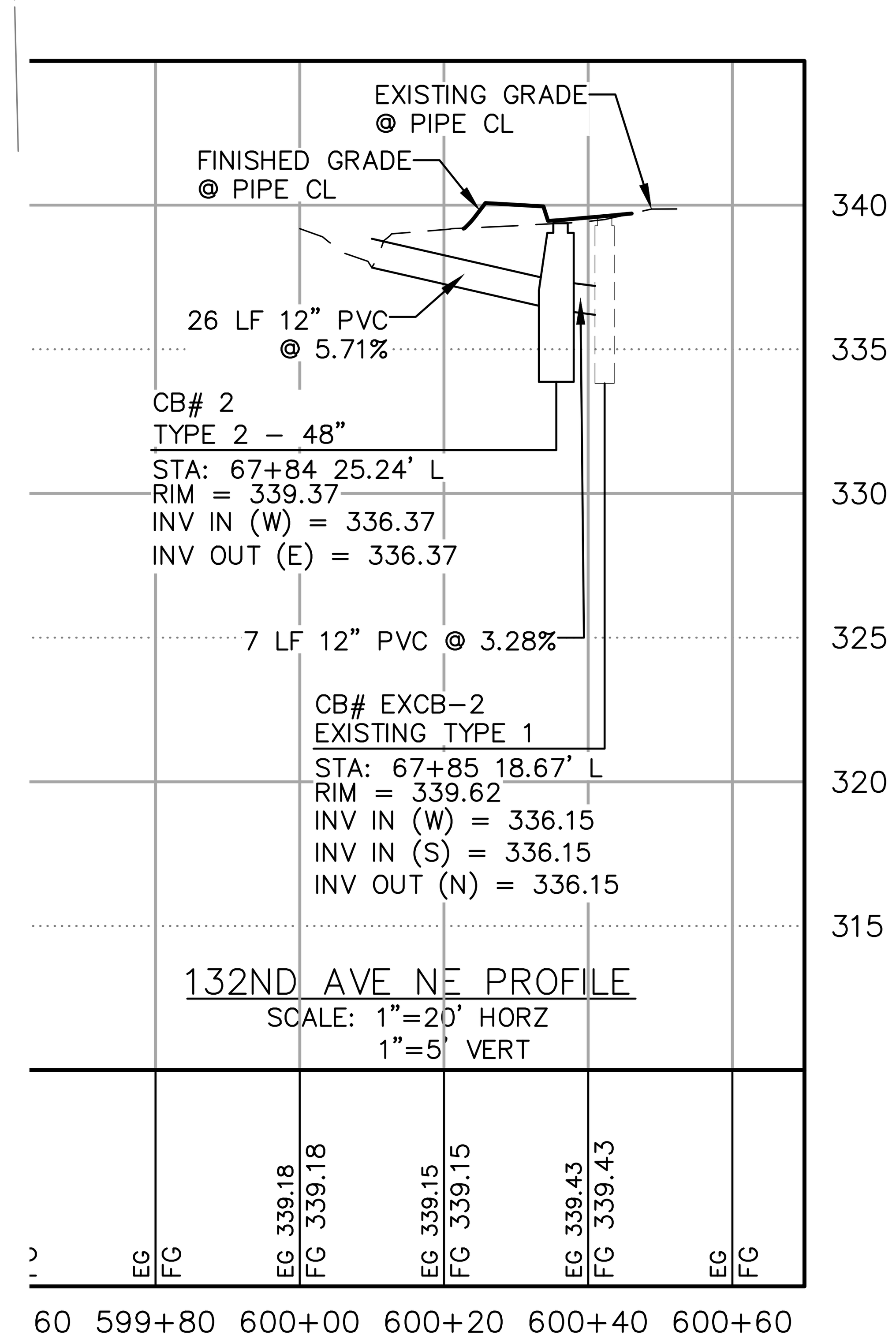
LEGEND

- EXISTING STORM
- EXISTING WATER
- EXISTING GAS
- EXISTING COMMUNICATIONS
- EXISTING SANITARY SEWER
- EXISTING RIGHT–OF–WAY
- PROPOSED CEMENT CONC SIDEWALK
- PROPOSED CURB & GUTTER
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CUT/FILL
- PROPOSED STORM PIPE
- PROPOSED STORM STRUCTURES
- PROPOSED RETAINING WALL



132ND AVE NE PROFILE
SCALE: 1"=20' HORZ
1"=5' VERT

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DARREN K. M. MURATA, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER

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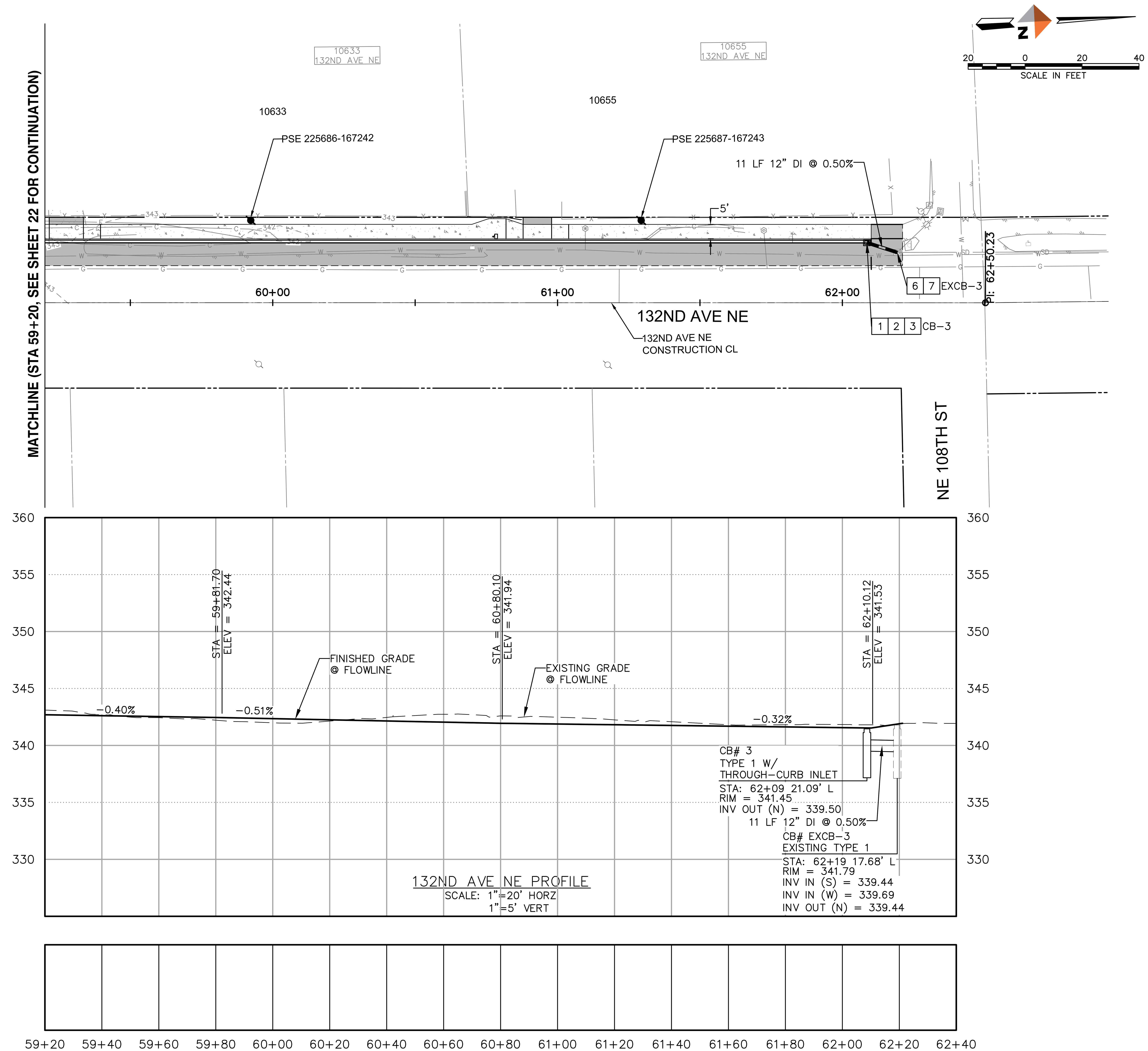
DRAINAGE PLAN AND PROFILE (SITE #3)

SHEET 20 OF 44 SHEETS

July 11, 2024 - 2:46 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-SD-15223-01.DWG - Layout Name: 20 DRAINAGE PLAN AND PROFILE (SITE #3)



STORM DRAINAGE NOTES

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LEGEND

- SD — EXISTING STORM
- W — EXISTING WATER
- G — EXISTING GAS
- TC — EXISTING COMMUNICATIONS
- SS — EXISTING SANITARY SEWER
- EXISTING RIGHT-OF-WAY
- PROPOSED CEMENT CONC SIDEWALK
- PROPOSED CURB & GUTTER
- PROPOSED ASPHALT PAVEMENT
- Cut/Fill — PROPOSED CUT/FILL
- PROPOSED STORM PIPE
- PROPOSED STORM STRUCTURES
- PROPOSED RETAINING WALL

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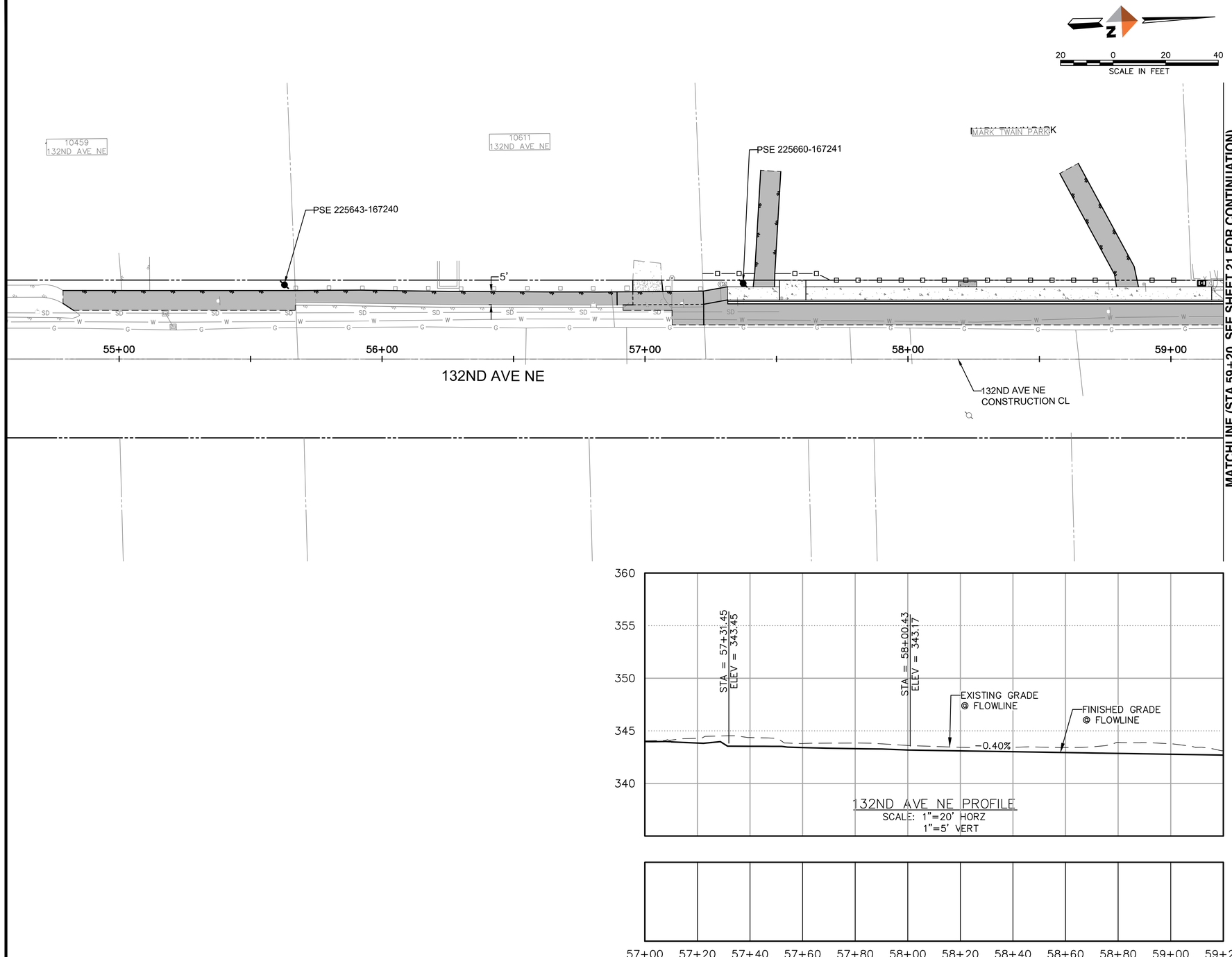
DRAINAGE PLAN AND PROFILE (SITE #4)

SHEET 21 OF 44 SHEETS



MATCHLINE (STA 59+20, SEE SHEET 21 FOR CONTINUATION)

20 0 20 40
SCALE IN FEET

STORM DRAINAGE NOTES

1. INSTALL CATCH BASIN TYPE 1 PER COK PLAN NO. CK-D.07
2. INSTALL THROUGH-CURB INLET FRAME AND GRATE PER COK PLAN NO. CK-D.16
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LEGEND

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- PROPOSED STORM PIPE
- PROPOSED STORM STRUCTURES
- PROPOSED RETAINING WALL

132ND AVE NE PROFILE
SCALE: 1"=20' HORZ
1"=5' VERT

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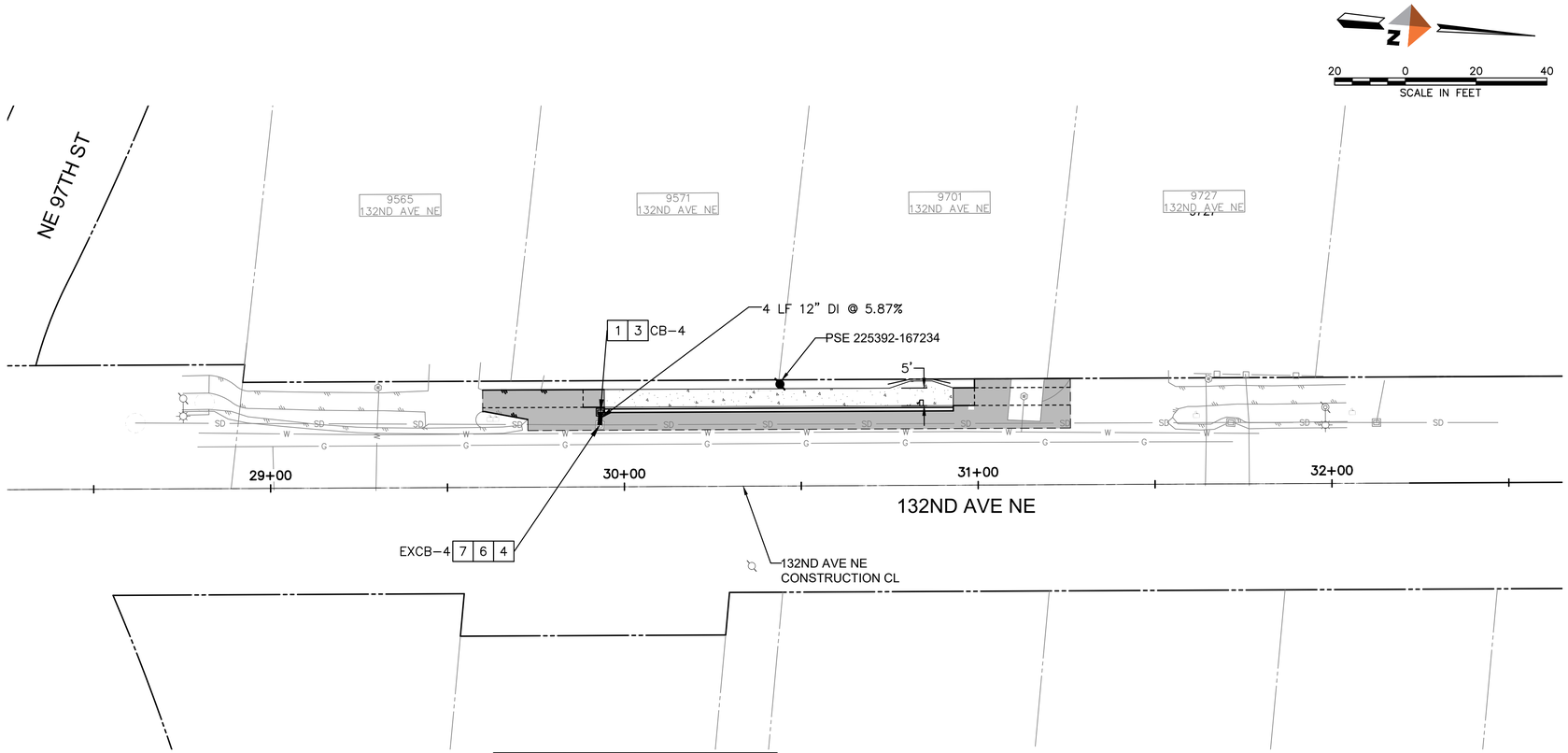
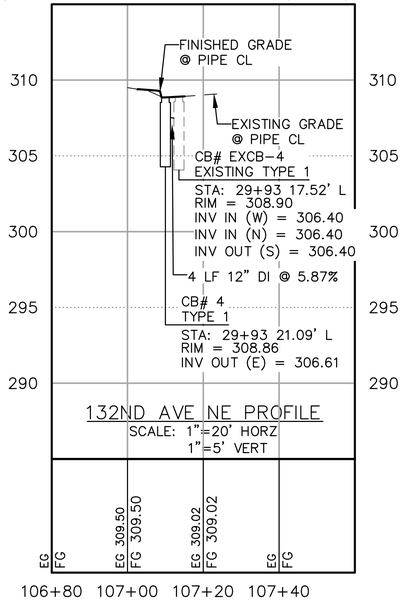
DRAINAGE PLAN AND PROFILE (SITE #5)

SHEET 22 OF 44 SHEETS

July 11, 2024 - 2:47 PM - KEAGLE - \\DOWL.COM\JPROJECTS\2215223-01165CAD\CIVIL\SC-CT-SD-15223-01.DWG - Layout Name: 22 DRAINAGE PLAN AND PROFILE (SITE #5)





132ND AVE NE PROFILE
SCALE: 1"=20' HORZ
1"=5' VERT

20 0 20 40
SCALE IN FEET

STORM DRAINAGE NOTES

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LEGEND

- SD — EXISTING STORM
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- G — EXISTING GAS
- TC — EXISTING COMMUNICATIONS
- SS — EXISTING SANITARY SEWER
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- Cut / Fill — PROPOSED CUT/FILL
- PROPOSED STORM PIPE
- PROPOSED STORM STRUCTURES
- PROPOSED RETAINING WALL

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DRAINAGE PLAN AND PROFILE (SITE #6)

SHEET 23 OF 44 SHEETS

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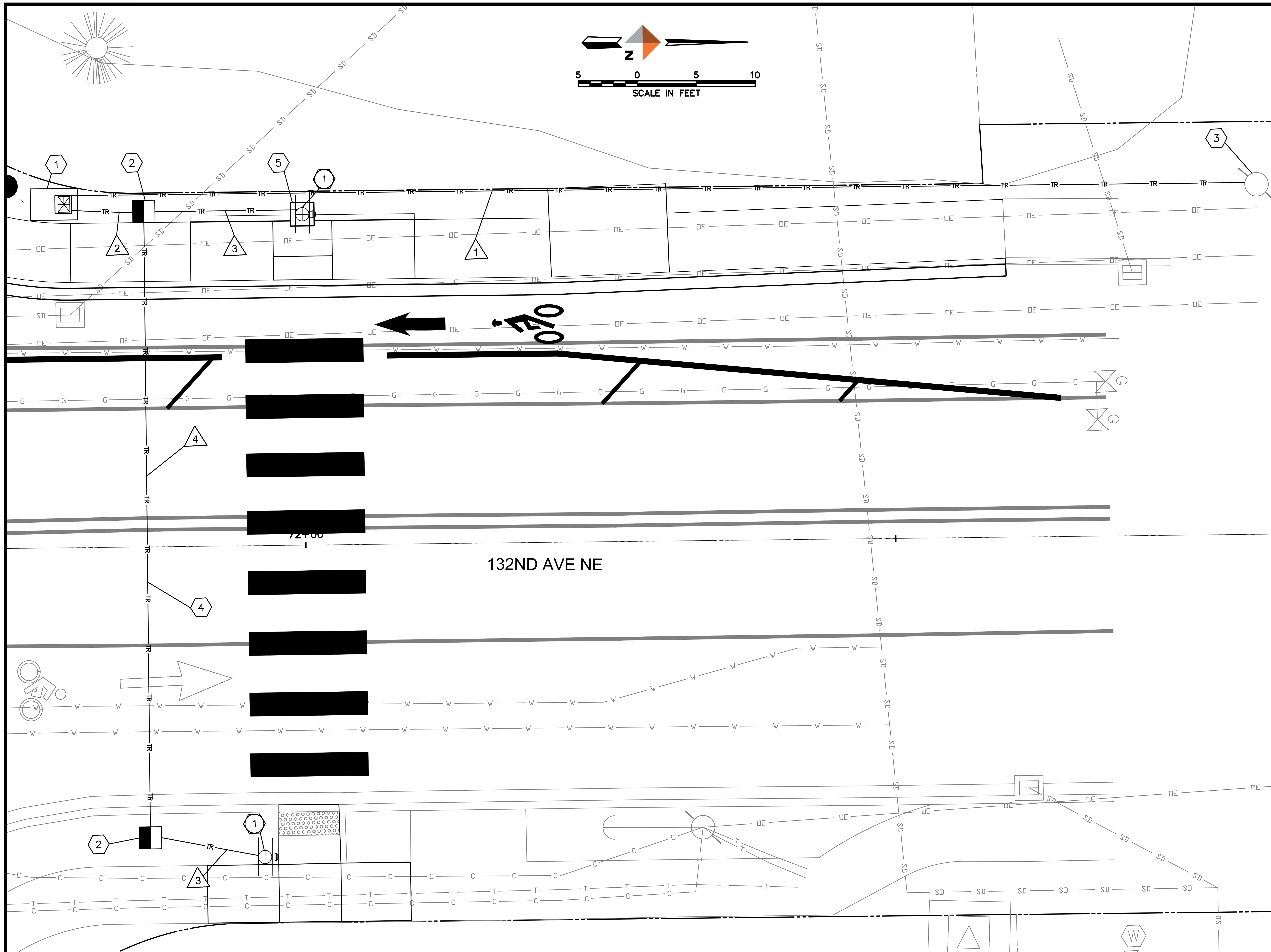

GENERAL NOTES

1. ALL DISCONNECTIONS: TEMPORARY OR FINAL SERVICE CONNECTIONS WILL BE MADE BY PUGET SOUND ENERGY (PSE) AT PROJECT'S EXPENSE. COORDINATE ALL ENERGIZING AND DE–ENERGIZING OR SERVICE WITH PSE ELECTRICAL SERVICE REPRESENTATIVE AND ENGINEER FIFTEEN (15) WORKING DAYS IN ADVANCE. ADDITIONAL TIME MAY BE NEEDED FOR CREW SCHEDULING AND MOBILIZATION.
2. ALL WIRING MUST BE CLEARLY LABELED.
3. CONTRACTOR MUST ASSIST THE INSPECTOR DURING INSPECTIONS, COMMISSIONING, AND FINAL CONNECTION PHASES OF THE PROJECT AS INSTRUCTED BY THE INSPECTOR. SUCH ASSISTANCE WILL INCLUDE, BUT NOT BE LIMITED TO OPENING HANDHOLES, MANHOLES, AND VARIOUS OTHER ACCESS COVERS, DISCONNECTING AND RECONNECTING FUSE HOLDERS AND MECHANICAL SPLICE CONNECTIONS, VERIFYING CONDUIT RUNS, ETC.
4. PRIOR TO REQUESTING FINAL SERVICE CONNECTION, CONTRACTOR MUST CORRECT ALL PUNCH LIST ITEMS AND CALL FOR A RE–INSPECTION WHERE REQUIRED BY THE INSPECTOR. CONTRACTOR MUST PREPARE A SIGNED AS–BUILT PLAN AND WIRING DIAGRAM WHICH INCLUDED WHICH DUCT IS USED IN EACH DUCT BANK.

SIGNAL POLE NOTES

(1) INSTALL ALUMINUM PIPE SIGNAL POLE ON FOUNDATION WITH ONE (1) ACCESSIBLE PPB STATION, (2) RRFB LIGHT BARS, CONTROL CABINET, AND ALL OTHER ASSOCIATED MOUNTING AND HARDWARE PER CONTRACT DETAILS AND SPECIFICATIONS. SEE SPECIFICATIONS FOR INSPECTION REQUIREMENTS.

CONSTRUCTION NOTES

(1) INSTALL SERVICE CABINET AND FOUNDATION IN ACCORDANCE WITH CITY OF KIRKLAND PRE–APPROVED PLANS CK–TS.10 AND CK–TS.11.

(2) INSTALL TYPE 2 JUNCTION BOX PER WSDOT STD. PLAN J–40.10–04.

(3) ATTACH 2" CONDUIT TO UTILITY POLE AND EXTEND 10.0 FEET MINIMUM ABOVE GROUND SURFACE. CALL PSE REPRESENTATIVE TO COORDINATE POWER CONNECTION AT POLE [(P02B) 225793–167256],. PSE–RRFB 5148135566.

(4) INSTALL CONDUIT BY TRENCHING OR BORING.

(5) INSTALL POLE FOUNDATION IN PER WSDOT STANDARD PLAN J–20.11–03.

WIRING SCHEDULE

#	CONDUIT SIZE	CONDUCTORS	COMMENTS
1	2"	3–#2	SERVICE
		1–#8	GROUND
2	2"	4–#8	PPB
		8–OPTI CABLE	RRFB
		1–#8	GROUND
		PULL CORD	PULL CORD
	2"	PULL CORD	PULL CORD
3	2"	2–#8	PPB
		4–OPTI CABLE	RRFB
		1–#8	GROUND
		PULL CORD	PULL CORD
4	3"	2–#8	PPB
		4–OPTI CABLE	RRFB
		1–#8	GROUND
		PULL CORD	PULL CORD
	2"	PULL CORD	PULL CORD

CONDUCTOR NOTES

1. CONDUIT SHALL BE SCHEDULE 80 PVC UNDER ROAD CROSSINGS. CONDUIT SCHEDULE 40 PVC IS ACCEPTABLE IN ALL OTHER LOCATIONS.
2. #2= SINGLE CONDUCTOR NO. 2 AWG, TYPE USE INSULATION, WSDOT SPEC 9–29.3(1) (APPROX AREA 0.05 SQ IN).
3. #8= SINGLE CONDUCTOR NO. 6 AWG, TYPE USE INSULATION, WSDOT SPEC 9–29.3(1) (APPROX AREA 0.01 SQ IN).
4. PULL CORD=1/8" DIA DETECTABLE NYLON PULL CORD WITH MINIMUM PULL STRENGTH OF 200 LBS.

LEGEND

- SIGNAL STANDARD NOTE
- CONSTRUCTION NOTE
- WIRING NOTE, SEE WIRING SCHEDULE
- LOCKING LID STANDARD DUTY JUNCTION BOX TYPE 2 (33"x22½")
- SERVICE CABINET
- PEDESTRIAN POLE
- PEDESTRIAN PUSHBUTTON
- —TR— PROPOSED SIGNAL CONDUIT

SIGNAL STANDARD DETAIL CHART

POLE NO.	STREET	FIELD LOCATION				POLE TYPE	POLE HEIGHT (FT)	POLE ATTACHMENT POINT ORIENTATION (DEGREES CW FROM NORTH)								REMARKS
		STATION	OFFSET	LT.	RT.			A1	A2	B1	B2	C1	C2	D	E	
1	132ND AVE	71+96.2	26.4		X	1	15	1	181	1	181	1	181	1	181	
2	132ND AVE	72+00.0	28.4	X		1	15	1	181	1	181	1	181	1	181	

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K. EAGLE 05-2024
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D. MURATA 07-2024
CHECKED BY: DATE

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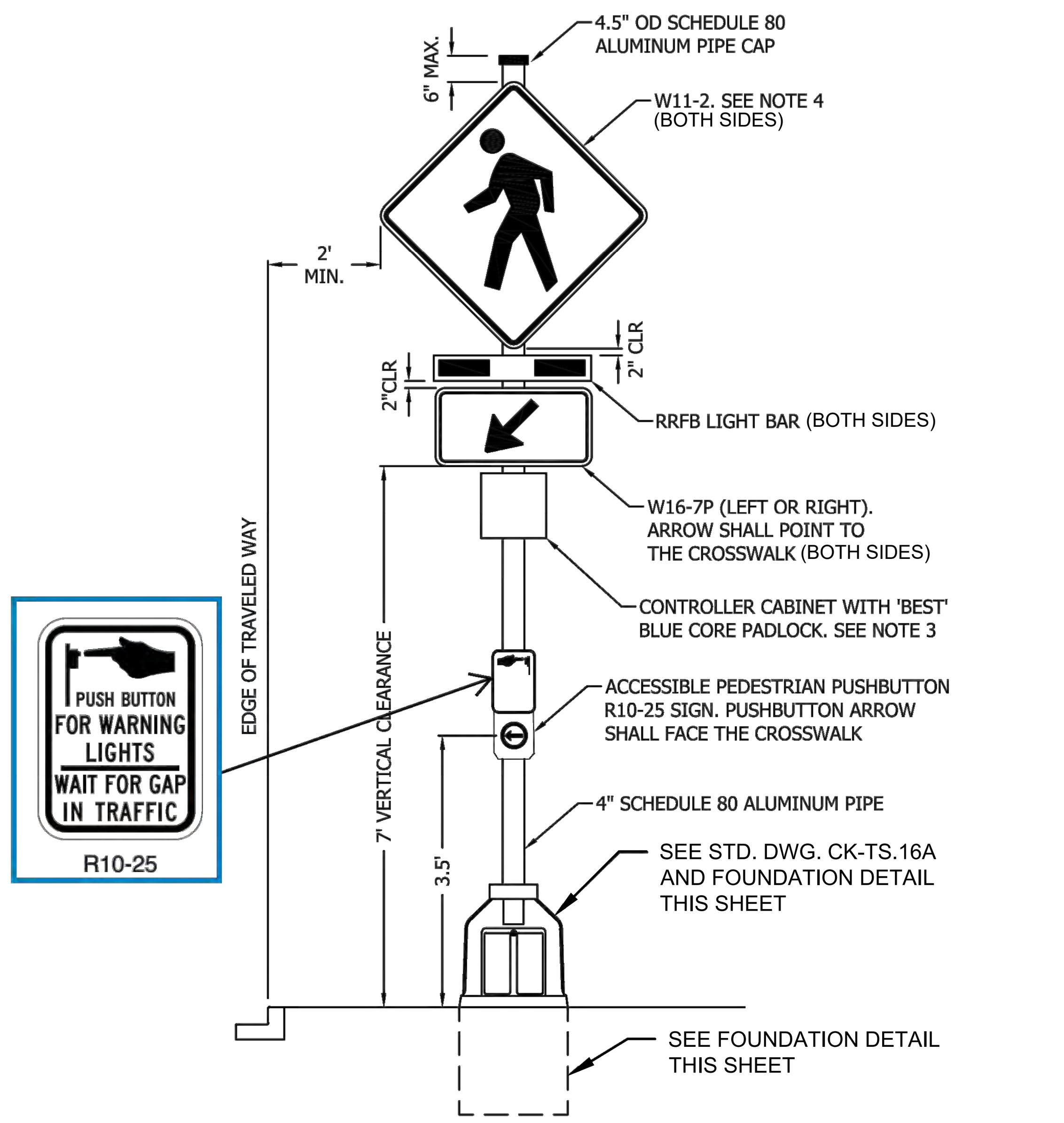
RRFB PLAN

SHEET 24 OF 44 SHEETS

July 11, 2024 - 2:48 PM - JSHROPE - \\DOWL.COM\J\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-SI-15223-01.DWG - Layout Name: 24 RRFB PLAN

LAST REVISED: 12/15/2023



NOTE: IF USED, ASSOCIATED PUSH BUTTON EXTENDER BRACKETS SHALL BE BLACK IN COLOR.

NOTES:

1. SEE CONTRACT PLANS AND SPECIFICATIONS FOR POLE HEIGHT, SIGN SIZES, SIGN SHEETING TYPE, AND OTHER DETAILS.
2. REFER TO THE CURRENT KIRKLAND SPECIAL PROVISIONS FOR APPROVED RRFB COMPONENTS.
3. THE PREFERRED PLACEMENT OF RRFB CONTROLLER CABINET HOUSING THE RRFB CONTROLLER IS BELOW THE W16-7P, OUT OF THE WALKING AREA.
4. FOR SCHOOL CROSSINGS, AN S1-1 SIGN SHALL BE USED INSTEAD OF W11-2.
5. THE RRFB POLE BASE AND FOUNDATION SHALL BE LOCATED SO THAT 4' MINIMUM CLEARANCE IS MAINTAINED FOR THE PEDESTRIAN ACCESS ROUTE.
6. ALL SIGNS SHALL HAVE ANTI-GRAFFITI COATING. SEE CONTRACT SPECIAL PROVISIONS FOR MORE INFORMATION.
7. THE PREFERRED PUSH BUTTON IS THE MOST CURRENT 2-WIRE POLARA INX MODEL, OR APPROVED EQUAL.

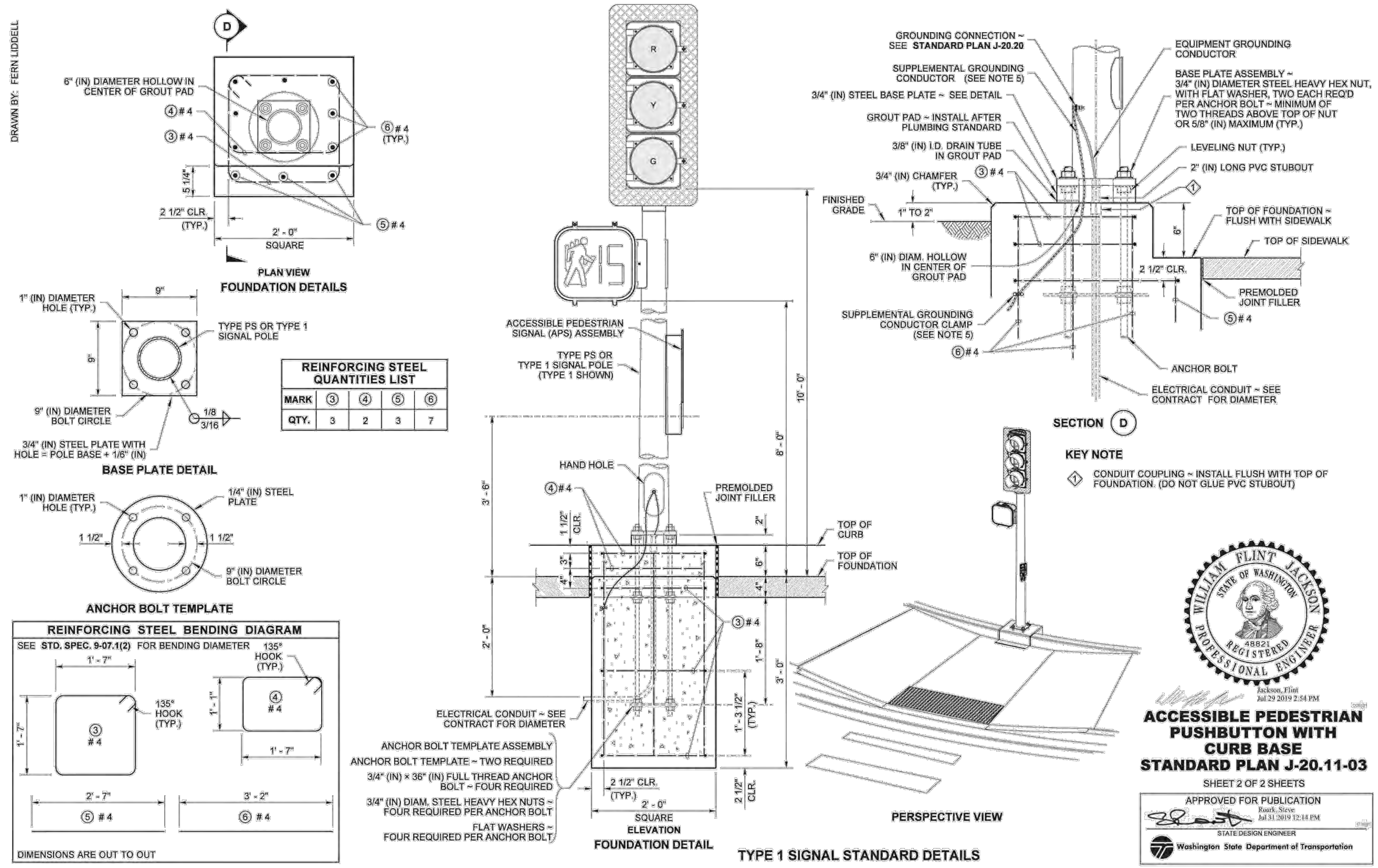
CITY OF KIRKLAND

PLAN NO. CK - TS.14

RECTANGULAR RAPID FLASHING BEACON DETAIL

RRFB ASSEMBLY DETAIL

NTS



WSDOT RRFB FOUNDATION DETAIL

NTS

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D. MURATA	07-2024
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RRFB DETAILS (1 OF 2)

SHEET 25 OF 44 SHEETS

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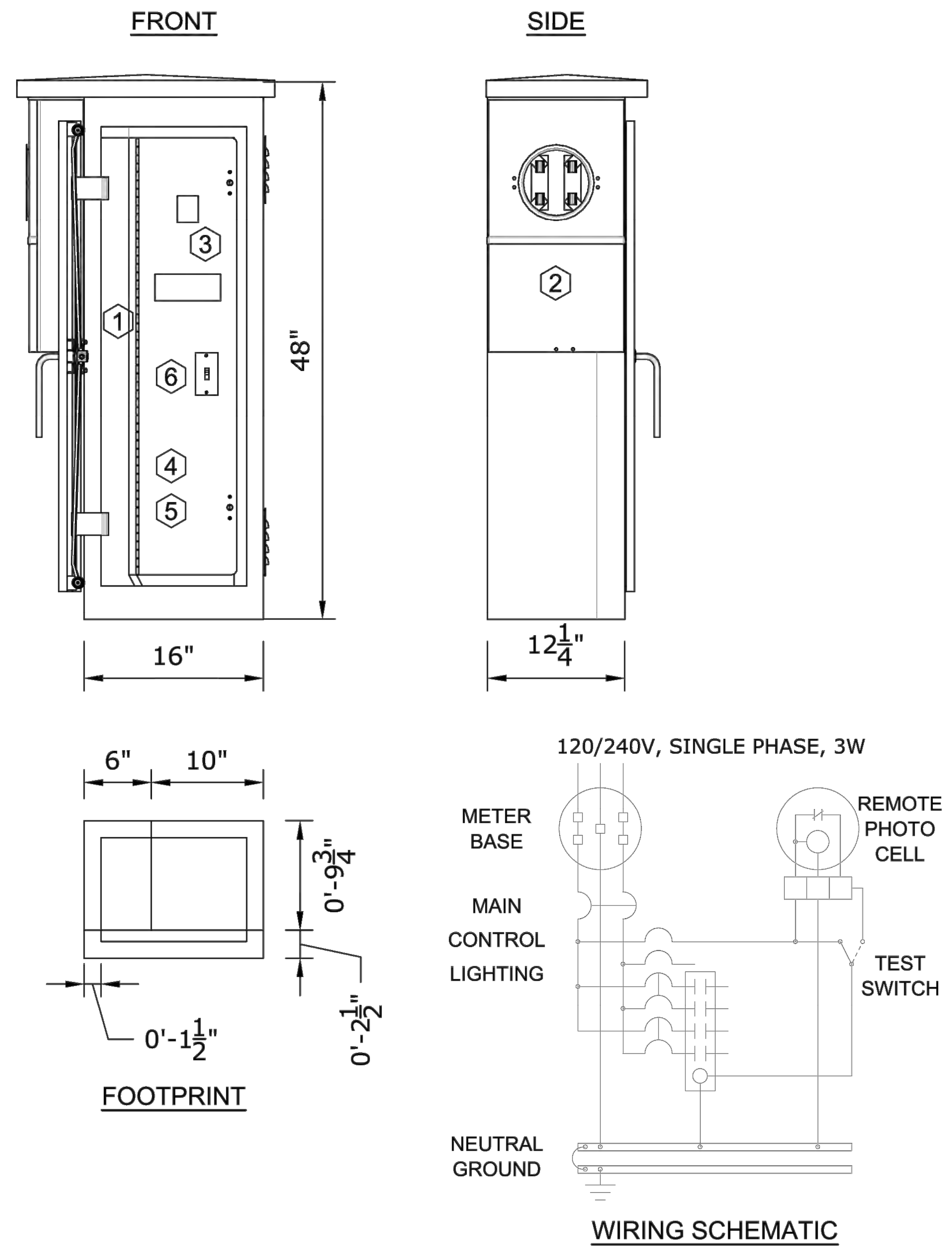


CITY OF KIRKLAND "TINY" CABINET LAST REVISED: 01/2023

SKYLINE SERIES# 62460-T1

CABINET:

CONSTRUCTION:
NEMA TYPE 3R, OUTDOOR PADMOUNT, 1/8" 5052-H32 ALUMINUM CONSTRUCTION, 2 SCREENED AND GASKETED VENTS, REMOVABLE EQUIPMENT MOUNTING PAN, CABINET GROUND WITH MINIMUM BONDING WIRE TO NEUTRAL

DOORS:
HEAVY-DUTY CONCEALED HINGES (LIFT-OFF TYPE), STAINLESS STEEL VAULT HANDLE WITH ROLLER RODS THAT PROVIDE 3- POINT COMPRESSION ON CLOSED CELL NEOPRENE GASKET, "BEST" LOCK

DEADFRONT:
HINGED AND SECURED WITH QUARTER-TURN FASTENERS

FINISH:
MILL FINISH ALUMINUM
DEADFRONT AND WIREWAY COVER -- WHITE

COMPONENT SCHEDULE:

1. SERVICE WIREWAY
2. METERBASE: 200A, 4 JAW, MANUAL BYPASS, B-LINE U264, W/ 5TH JAW
3. PANELBOARD: 120/240 VAC, 125 AMP COPPER BUS, 1 PHASE, 3 WIRE, 6 CKT, FULLY RATED AT 10K AIC, WITH ENGRAVED NAME PLATES
   MAIN BREAKER: 100 AMP, 2 POLE, EATON QC2100
   BRANCH BREAKERS, BOLT ON, EATON TYPE BAB:
   2 – 20/2 LIGHTING 1, 2
   1 – 20/1 RRFB
   1 – 15/1 CONTROL
4. CONTACTOR: LIGHTING RATED, 30A, 4 POLE, 120V COIL, SQD 8910DPA34V02U1
5. TERMINAL BLOCK FOR FIELD WIRE CONNECTION TO REMOTE PHOTO CELL
6. PHOTOCELL BYPASS SWITCH

CITY OF KIRKLAND
PLAN NO. CK– TS.10
TINY CABINET

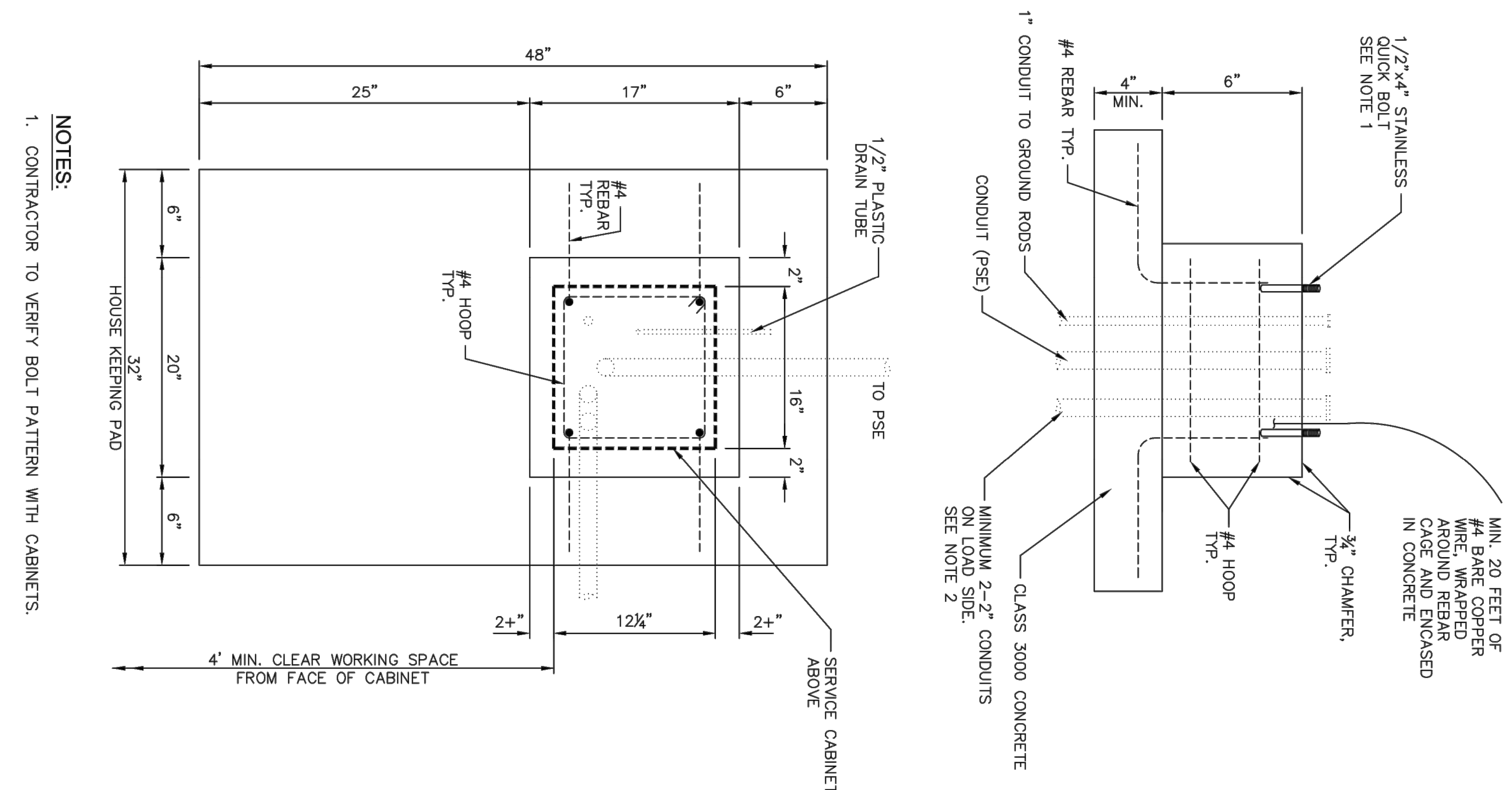
CITY OF KIRKLAND SERVICE CABINET DETAIL

NTS

LAST REVISED: 01/2023

"TINY" SERVICE CABINET FOUNDATION DETAIL

NOTES:
1. CONTRACTOR TO VERIFY BOLT PATTERN WITH CABINETS.

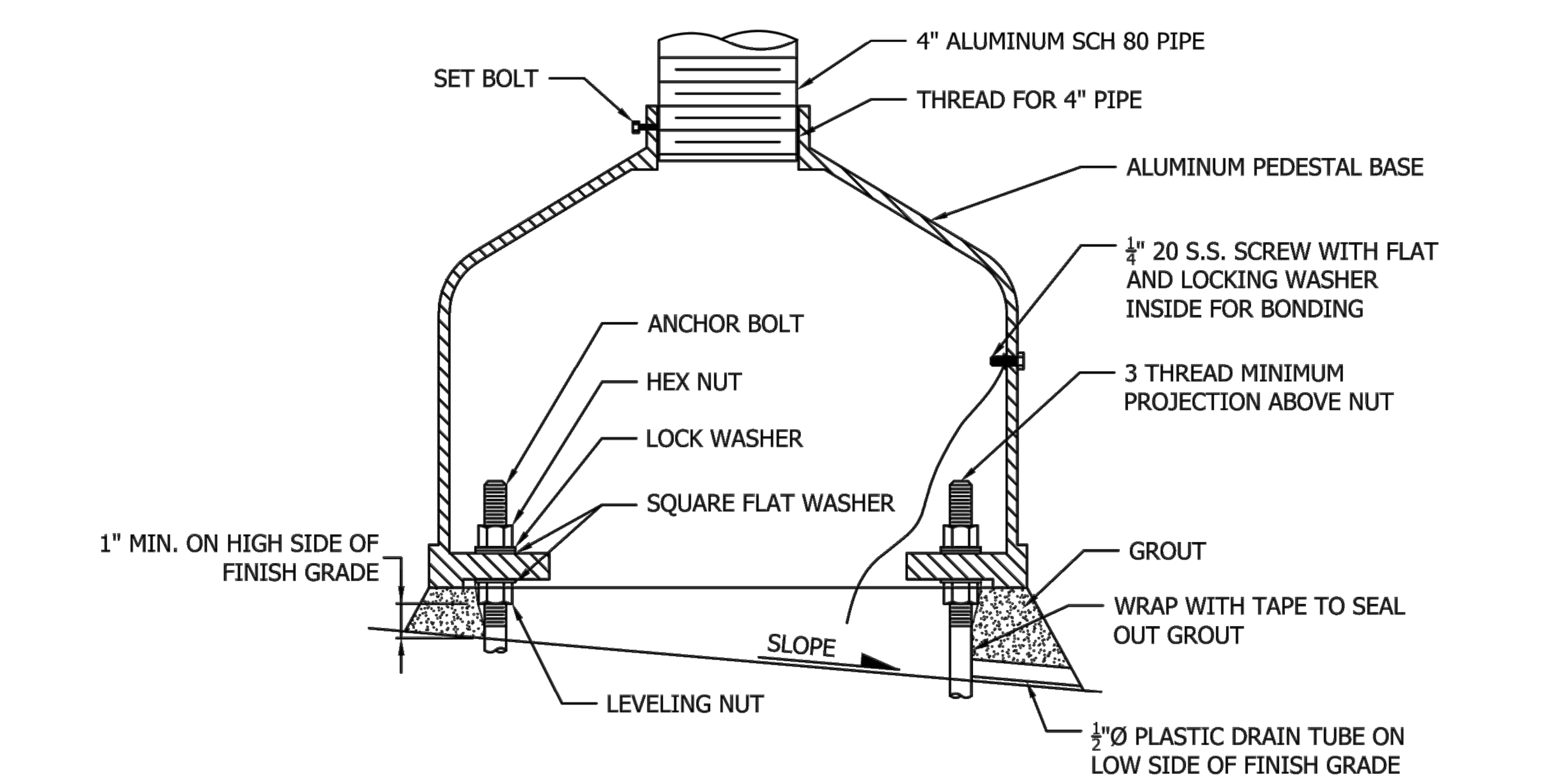


CITY OF KIRKLAND
PLAN NO. CK– TS.11
TINY SERVICE FOUNDATION

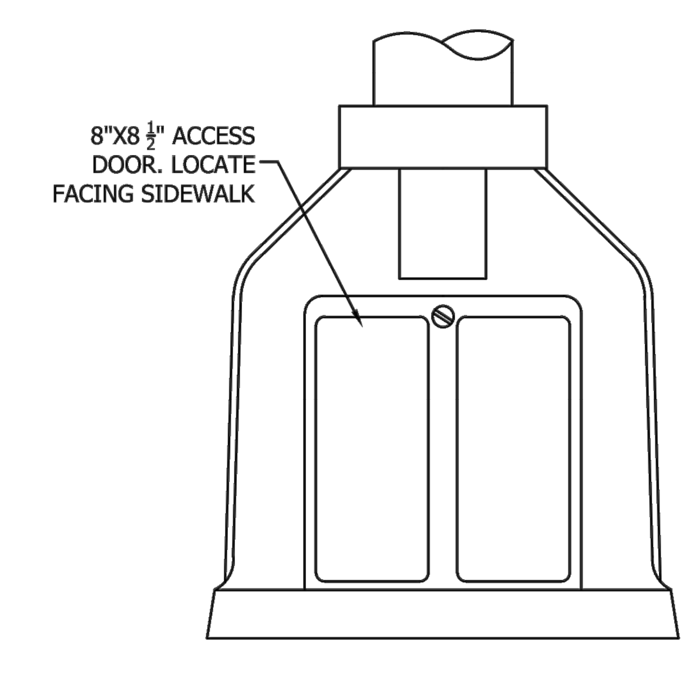
SERVICE CABINET FOUNDATION DETAIL

NTS

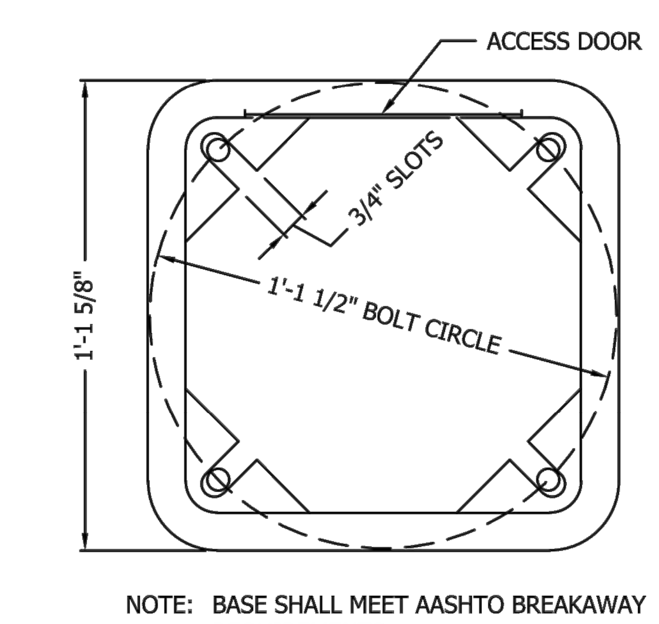
LAST REVISED: 12/15/2023



BASE MOUNTING DETAIL



BASE ELEVATION



NOTE: BASE SHALL MEET AASHTO BREAKAWAY REQUIREMENTS

BOTTOM VIEW

PEDESTAL OPTION A 1'-1 1/2" BOLT CIRCLE

CITY OF KIRKLAND
PLAN NO. CK - TS.16A
4" ALUMINUM POLE BASES DETAIL OPTION A

PEDESTAL DETAIL

NTS

July 11, 2024 - 2:48 PM - JSHROPE - \\DOWL.COM\J\PROJECTS\2215223-01\65CAD\CIVIL\SC-CT-SI-15223-01.DWG - Layout Name: 26 RRFB DETAILS (2 OF 2)

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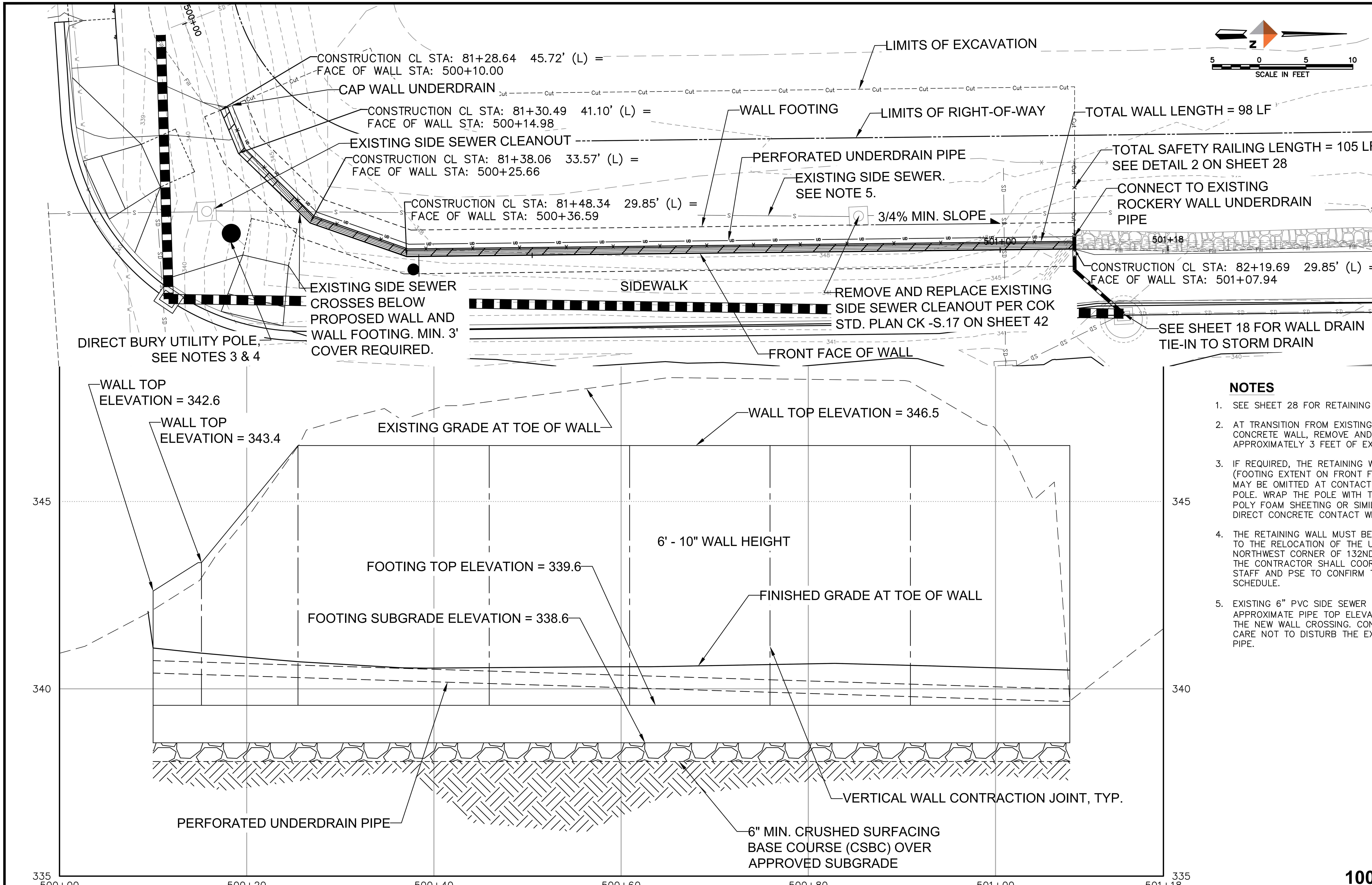
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

RRFB DETAILS (2 OF 2)

SHEET 26 OF 44 SHEETS



NOTES

1. SEE SHEET 28 FOR RETAINING WALL DETAILS.
2. AT TRANSITION FROM EXISTING ROCK WALL TO NEW CONCRETE WALL, REMOVE AND REPLACE IN-KIND APPROXIMATELY 3 FEET OF EXISTING ROCK WALL.
3. IF REQUIRED, THE RETAINING WALL FOOTING TOE (FOOTING EXTENT ON FRONT FACE SIDE OF WALL) MAY BE OMITTED AT CONTACT WITH THE NEW UTILITY POLE. WRAP THE POLE WITH TO LAYERS OF 1/2" POLY FOAM SHEETING OR SIMILAR MATERIAL TO AVOID DIRECT CONCRETE CONTACT WITH THE POLE.
4. THE RETAINING WALL MUST BE CONSTRUCTED PRIOR TO THE RELOCATION OF THE UTILITY POLE AT THE NORTHWEST CORNER OF 132ND AVE AND 113TH ST. THE CONTRACTOR SHALL COORDINATE WITH CITY STAFF AND PSE TO CONFIRM THE CONSTRUCTION SCHEDULE.
5. EXISTING 6" PVC SIDE SEWER IS BELIEVED TO BE AT APPROXIMATE PIPE TOP ELEVATION OF 333.50' AT THE NEW WALL CROSSING. CONTRACTOR SHALL TAKE CARE NOT TO DISTURB THE EXISTING SIDE SEWER PIPE.

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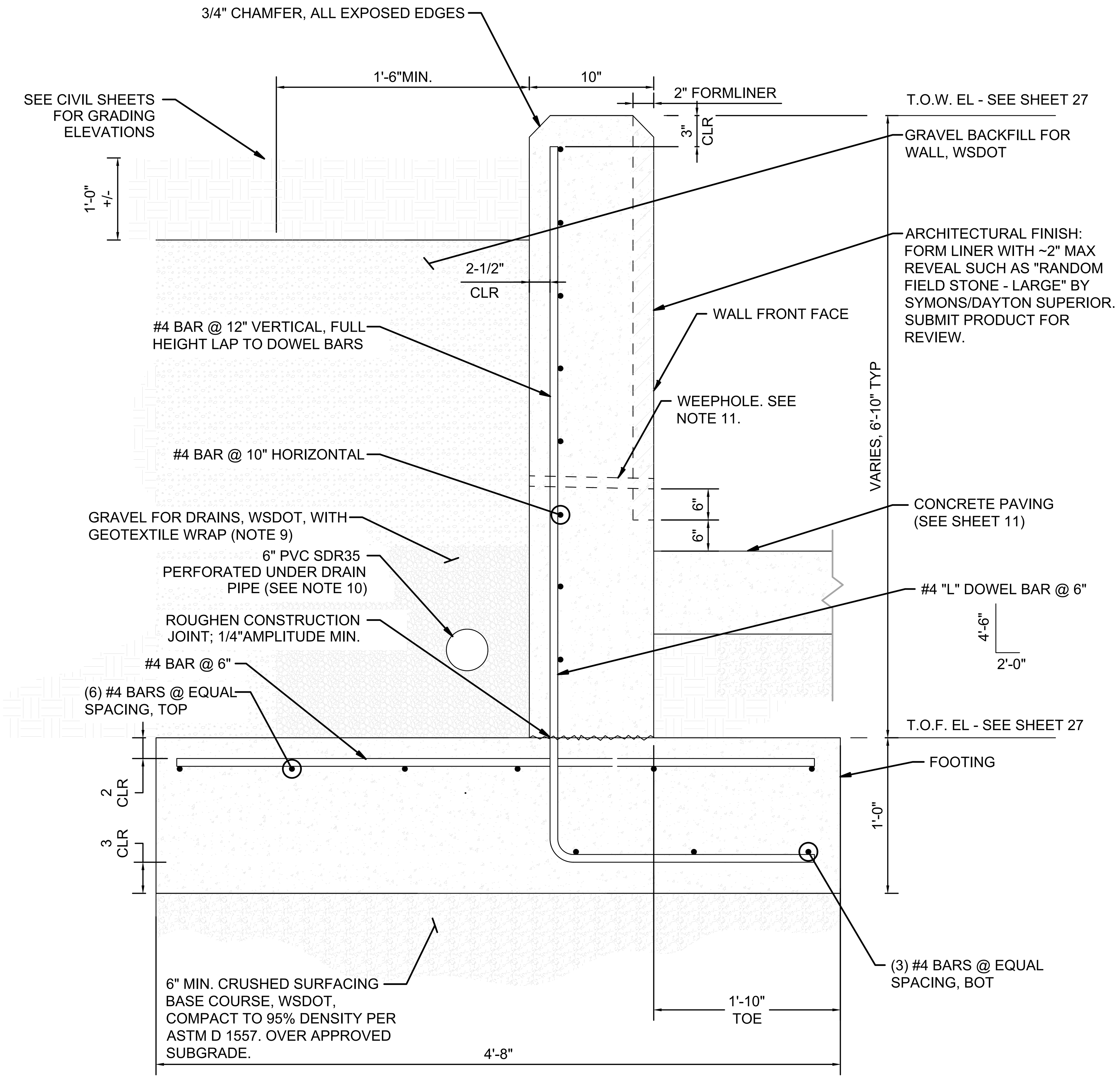
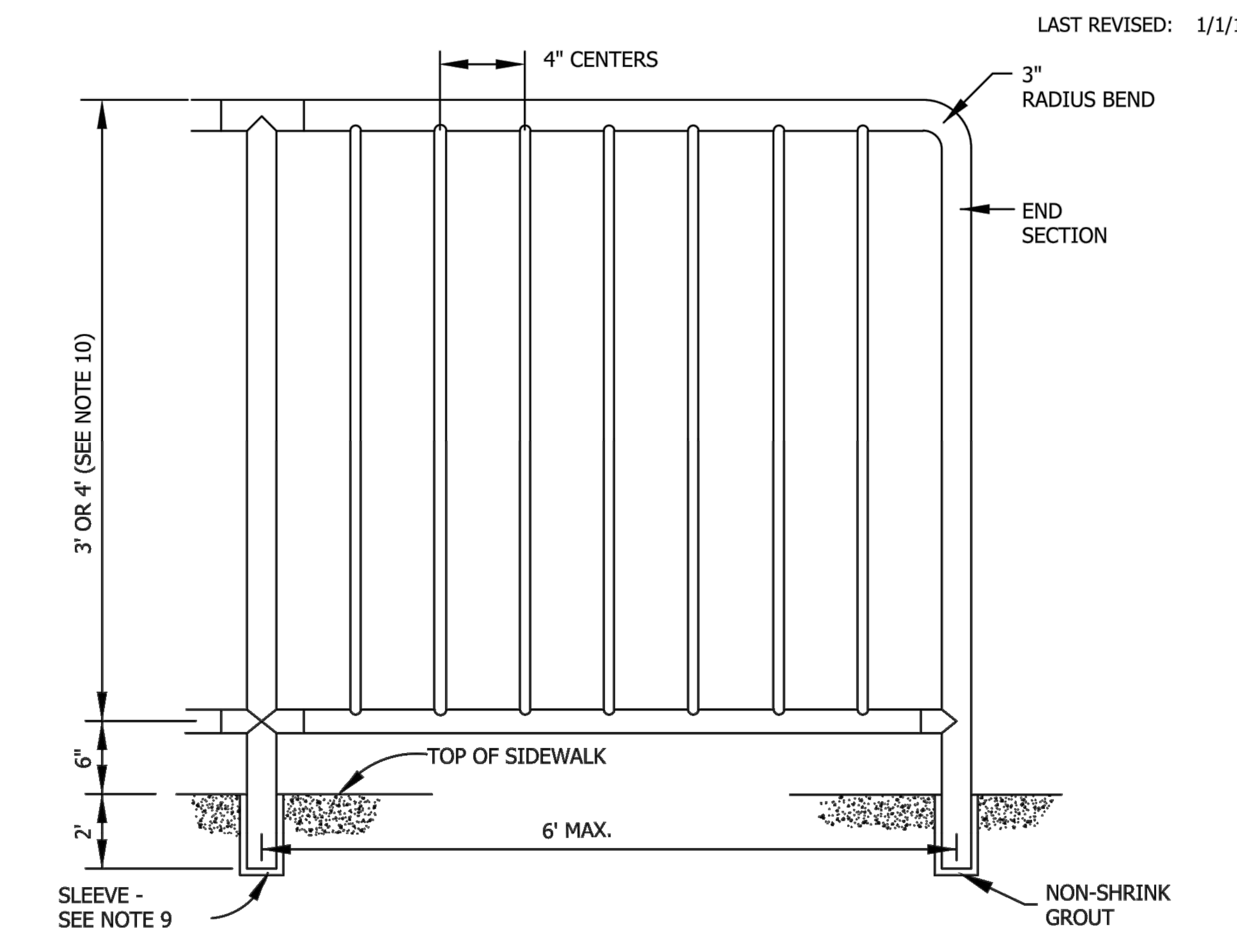
RETAINING WALL PLAN AND DETAILS

SHEET 27 OF 44 SHEETS

July 11, 2024 - 2:49 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\2215223-01\65CAD\CIVIL\SC-CT-RW-15223-01.DWG - Layout Name: 27 RETAINING WALL PLAN AND DETAILS



1 DETAIL
RETAINING WALL
NOT TO SCALE



PIPE SCHEDULE
(ALL DIMENSIONS O.D.)

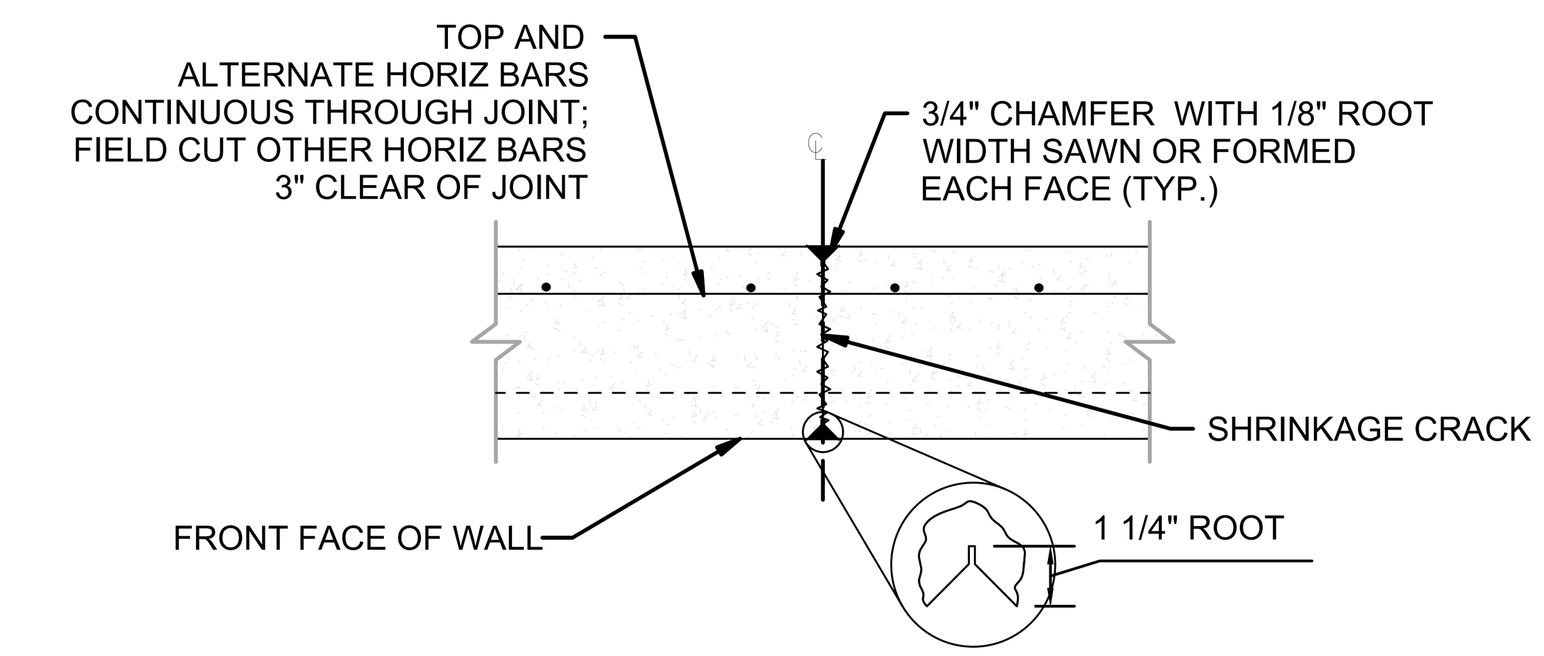
PANEL HEIGHT	TOP RAIL/POST	BOTTOM RAIL	BALUSTER
3'	1.90"	1.90"	.840"
4'	2.875"	2.375"	.840"

NOTES

1. RAILING SHALL BE ALUMINUM PIPE RAIL OR APPROVED EQUIVALENT. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.
2. SHOP DRAWINGS OF RAILING SHALL BE SUBMITTED FOR APPROVAL SHOWING COMPLETE DIMENSIONS AND DETAILS OF FABRICATION AND INCLUDING AN ERECTION DIAGRAM. MATERIALS BEING USED SHALL BE SPECIFIED IN THE SHOP DRAWINGS.
3. ALL ALUMINUM PARTS SHALL BE GIVEN A CLEAR ANODIC COATING AT LEAST 0.0006 INCH THICK AND BE HOT WATER SEALED AND SHALL HAVE A UNIFORM FINISH.
4. PIPE RAILING AND PIPE RAILING SPLICES MAY BE HEATED TO NOT MORE THAN 400°F FOR A PERIOD NOT TO EXCEED 30 MINUTES TO FACILITATE FORMING OR BENDING.
5. CUTTING SHALL BE DONE BY SAWING OR MILLING AND ALL CUTS SHALL BE TRUE AND SMOOTH. FLAME CUTTING WILL NOT BE PERMITTED.
6. PIPE RAILING, PIPE BALUSTERS AND PIPE RAILING SPLICES SHALL BE ADEQUATELY WRAPPED TO ENSURE SURFACE PROTECTION DURING HANDLING AND TRANSPORTATION TO THE JOB SITE.
7. WELDING OF ALUMINUM SHALL BE IN ACCORDANCE WITH THE LATEST AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.
8. ALLOW FOR EXPANSION AT APPROXIMATELY EVERY FOURTH POST.
9. RAILS, POSTS AND FORMED ELBOWS SHALL BE A.S.T.M B-241 OR B-429 ALLOY, 6063-T6 SCHEDULE 40 (STD. PIPE). BRACKETS, ENDCAPS AND OTHER FITTINGS SHALL BE A.S.T.M. 6063-T5. SPLICES AND REINFORCING SLEEVES SHALL BE DRAWN ALUMINUM TUBING 6063-T832. SLEEVE I.D. SHALL BE 1" GREATER THAN POST O.D.
10. PANEL HEIGHT: 3 FEET FOR PEDESTRIAN USES 4 FEET FOR COMBINED BICYCLE AND PEDESTRIAN USES

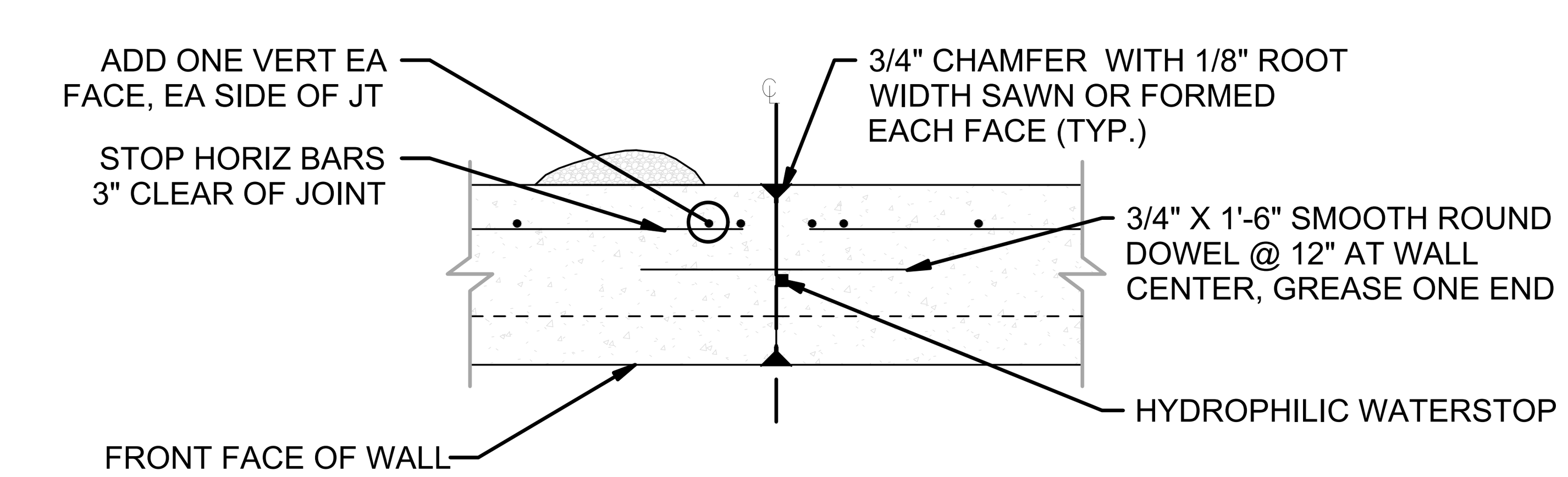
CITY OF KIRKLAND
PLAN NO. CK- R.51
SAFETY RAILING IN SIDEWALK

2 DETAIL
WALL TOP
NOT TO SCALE



3 DETAIL
CONCRETE WALL CONTRACTION JOINT PLACE @ 15'+/- MAX SPACING
NOT TO SCALE

WALL CONSTRUCTION JOINT MAY BE PLACED IN LIEU OF CONTRACTION JOINT AT CONTRACTOR'S OPTION



4 DETAIL
CONCRETE WALL CONSTRUCTION JOINT
NOT TO SCALE

RETAINING WALL NOTES:

1. CONCRETE DESIGN PER ACI 318-19.
2. GEOTECHNICAL CRITERIA - SEE THE "GEOTECHNICAL ENGINEERING LETTER REPORT" ORIGINATED FOR THE PROJECT BY HWA GEOSCIENCES.
3. WALL FOOTING SUBGRADE MUST BE APPROVED BY A GEOTECHNICAL REPRESENTATIVE.
4. FOOTING SUB-BASE AND WALL DRAINAGE ARE REQUIRED AS INDICATED.
5. CONCRETE, WSDOT CLASS 4000 STRUCTURAL CONCRETE - f'c = 4,000 PSI, 6.0% ENTRAINED AIR.
6. REINFORCING STEEL, ASTM A615 GRADE 60, BARE (UN-COATED).
7. LAP #4 REINFORCING BARS 1'-9" VERTICAL, OR 2'-3" HORIZONTAL, UNLESS INDICATED OTHERWISE.
8. WALL FACE INCLUDES AN ARCHITECTURAL TREATMENT.
9. CONSTRUCTOR'S OPTION TO INSTALL PREFABRICATED DRAINAGE MAT ASSEMBLY SUCH AS TREMDRAIN 2000NW IN LIEU OF CONVENTIONAL DRAINAGE GRAVEL BACKFILL.
10. PERFORATED UNDER DRAIN PIPE BEHIND RETAINING WALL HAS CAPPED HIGH POINT AND SLOPES TO DAYLIGHT OUTLET - SEE WALL PLAN SHEET 27.
11. 3" PVC WEEPHOLE AT 10'-0" MAXIMUM SPACING. COORDINATE LOCATION WITH VERTICAL WALL JOINT LOCATIONS.

100% SUBMITTAL

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D. MURATA 07-2024
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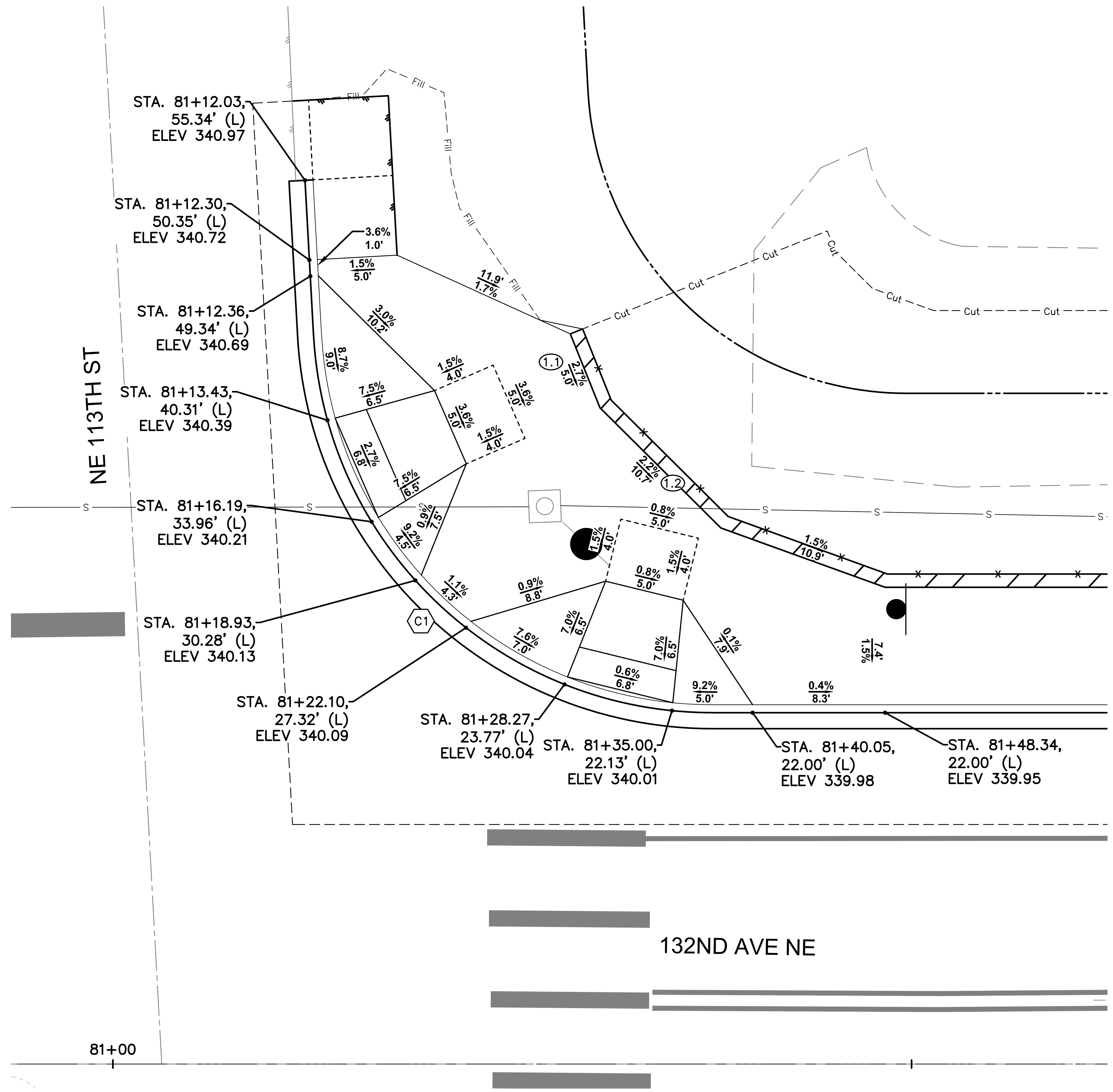
RETAINING WALL DETAILS

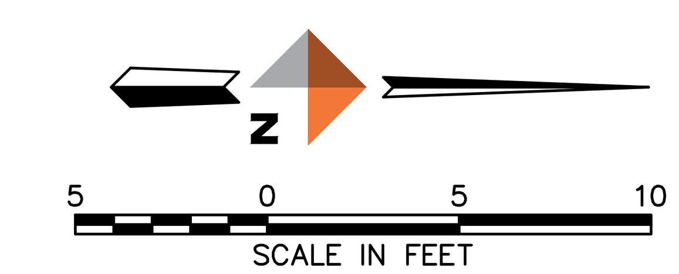
SHEET 28 OF 44 SHEETS

July 11, 2024 - 2:49 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-RW-DT-15223-01.DWG - Layout Name: 28 RETAINING WALL DETAILS



CURB RETURN TABLE

CURB RETURN NO.	POINT	STATION / OFFSET	ELEV.	CURVE GEOMETRY
C1	PC STA	STA 81+12.56, 45.62' LT	340.55	Δ=86°50'41" R=25.00 T=23.66 L=37.89
	1/4	STA 81+14.84, 36.49' LT	340.26	
	1/2	STA 81+20.34, 28.84' LT	340.10	
	3/4	STA 81+28.27, 23.77' LT	340.04	
	PT STA	STA 81+37.52, 22.00' LT	339.99	



CURB RAMP SCHEDULE

RAMP	WSDOT STD PLAN	MEF CODE
1.1	F-40.15-04	N/A
1.2	F-40.15-04	N/A

MEF CODES

*1 RIGHT-OF WAY AVAILABILITY
*2 ROADWAY STRUCTURE CONSTRAINT
*3 ADJACENT DEVELOPED FACILITY
*4 DRAINAGE
*5 HISTORIC FEATURE
*6 EXISTING ROAD/ SIDEWALK SLOPES
*7 EXISTING UTILITY OR UTILITY STRUCTURE
*8 (OTHER), DESCRIBE, ADD ANNOTATION

GENERAL NOTES

1. SEE SITE PREPARATION AND ROADWAY PLAN/PROFILE SHEETS FOR ADDITIONAL INFORMATION OF BELOW AND ABOVE SURFACE FEATURES.

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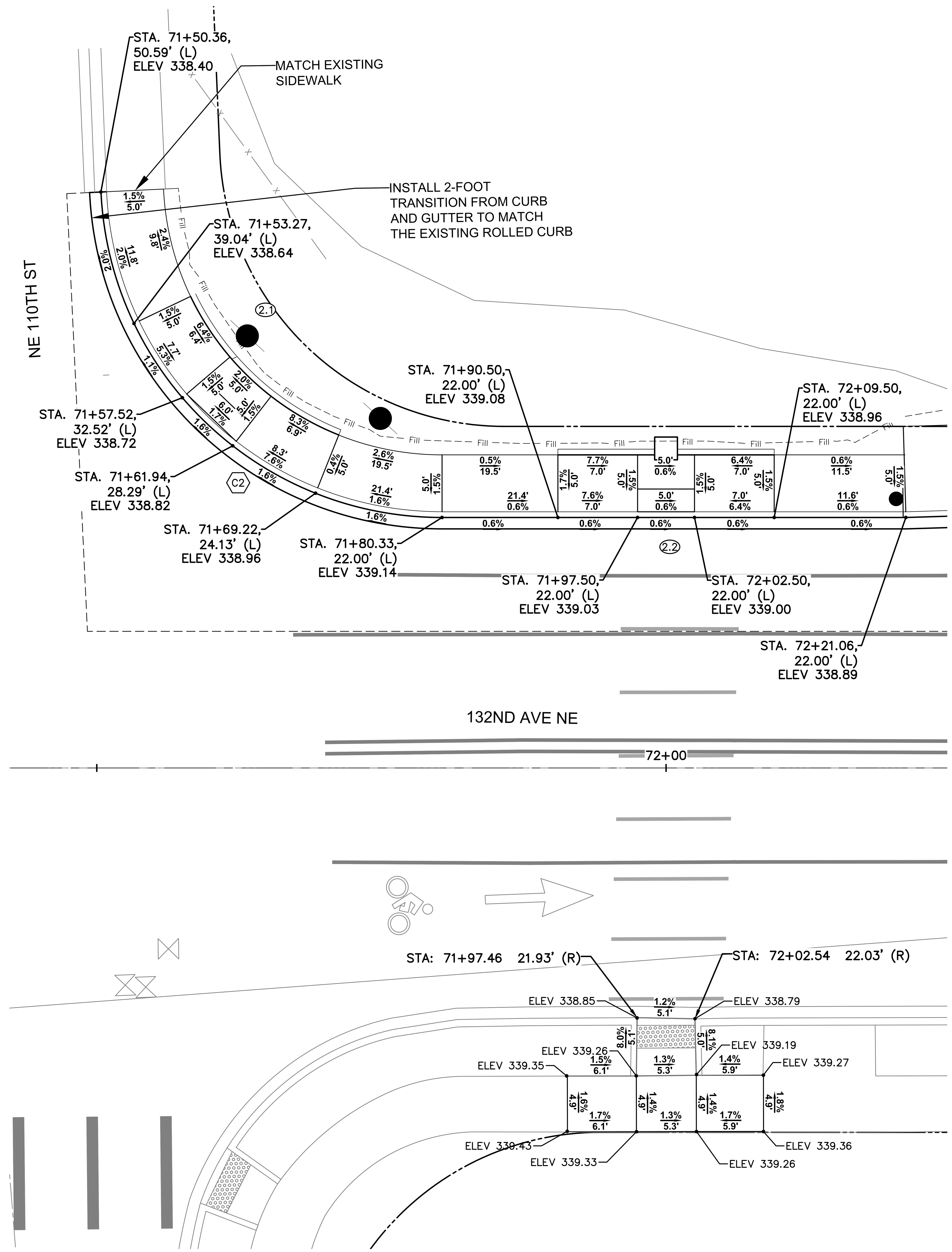
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

ADA CURB RAMP PLAN

SHEET 29 OF 44 SHEETS



CURB RETURN TABLE

CURB RETURN NO.	POINT	STATION / OFFSET	ELEV.	CURVE GEOMETRY
C2	PC STA	STA 71+50.36, 50.59' LT	338.40	Δ=87°17'51" R=30.00 T=28.62 L=45.71
	1/4	STA 71+53.03, 39.55' LT	338.63	
	1/2	STA 71+59.62, 30.29' LT	338.77	
	3/4	STA 71+69.16, 24.15' LT	338.96	
	PT STA	STA 71+80.33, 22.00' LT	339.14	

SCALE IN FEET: 6 0 6 12

CURB RAMP SCHEDULE

RAMP	WSDOT STD PLAN	MEF CODE
2.1	F-40.12-03	N/A
2.2	F-40.12-03	N/A

MEF CODES

*1 RIGHT-OF WAY AVAILABILITY
*2 ROADWAY STRUCTURE CONSTRAINT
*3 ADJACENT DEVELOPED FACILITY
*4 DRAINAGE
*5 HISTORIC FEATURE
*6 EXISTING ROAD/ SIDEWALK SLOPES
*7 EXISTING UTILITY OR UTILITY STRUCTURE
*8 (OTHER), DESCRIBE, ADD ANNOTATION

GENERAL NOTES

1. SEE SITE PREPARATION AND ROADWAY PLAN/PROFILE SHEETS FOR ADDITIONAL INFORMATION OF BELOW AND ABOVE SURFACE FEATURES.

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DRAWN BY: K. EAGLE DATE: 05-2024
CHECKED BY: D. MURATA DATE: 07-2024

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ADA CURB RAMP PLAN

SHEET 30 OF 44 SHEETS

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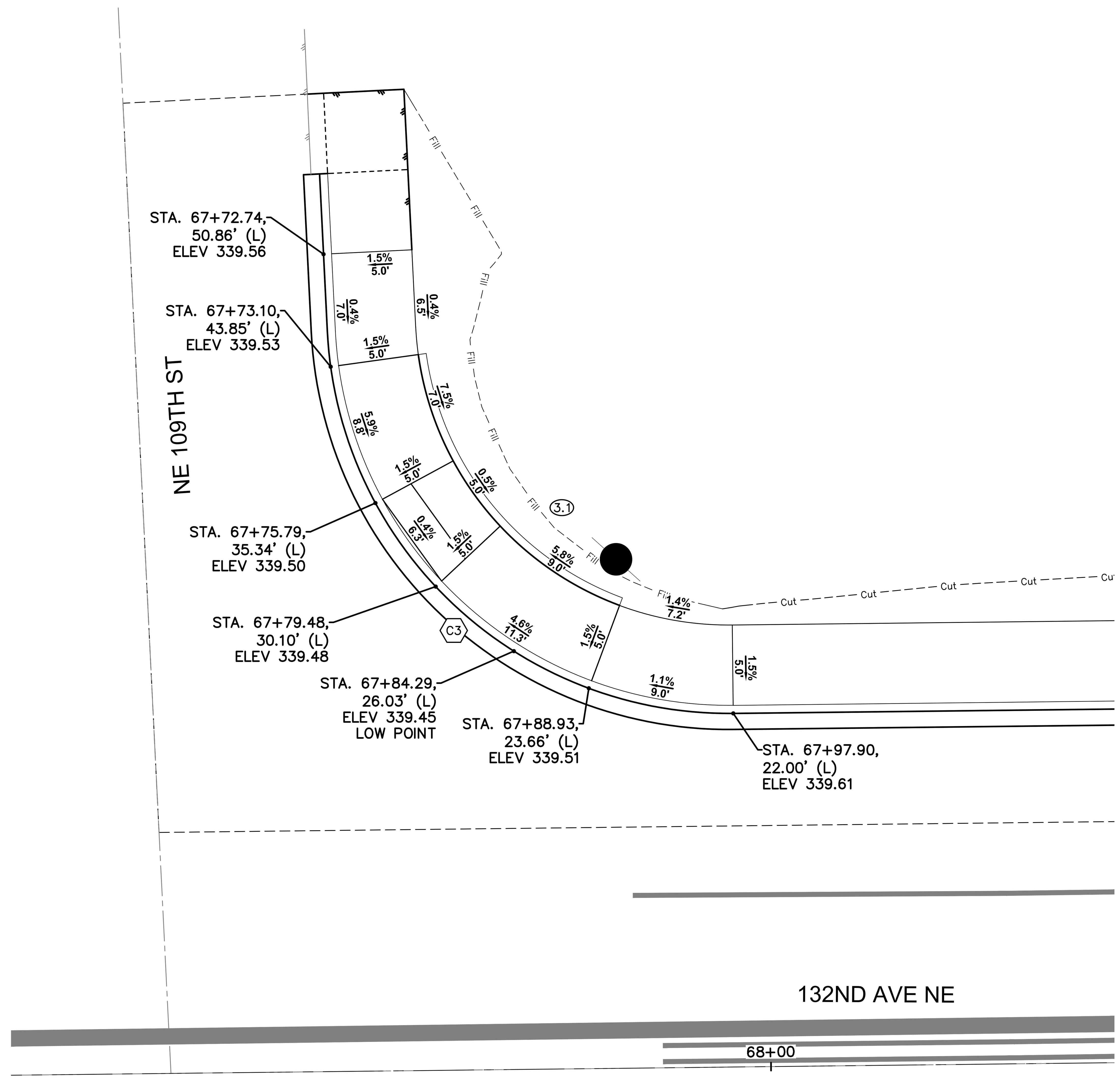

CURB RETURN TABLE

CURB RETURN NO.	POINT	STATION / OFFSET	ELEV.	CURVE GEOMETRY
C3	PC STA	STA 67+72.92, 46.05' LT	339.54	Δ=87°49'01" R=25.00 T=24.07 L=38.32
	1/4	STA 67+75.09, 36.78' LT	339.50	
	1/2	STA 67+80.56, 28.99' LT	339.47	
	3/4	STA 67+88.55, 23.81' LT	339.50	
	PT STA	STA 67+97.90, 22.00' LT	339.61	

N

5 0 5 10
SCALE IN FEET

CURB RAMP SCHEDULE

RAMP	WSDOT STD PLAN	MEF CODE
3.1	F-40.12-03	N/A

MEF CODES

*1 RIGHT-OF WAY AVAILABILITY
*2 ROADWAY STRUCTURE CONSTRAINT
*3 ADJACENT DEVELOPED FACILITY
*4 DRAINAGE
*5 HISTORIC FEATURE
*6 EXISTING ROAD/ SIDEWALK SLOPES
*7 EXISTING UTILITY OR UTILITY STRUCTURE
*8 (OTHER), DESCRIBE, ADD ANNOTATION

GENERAL NOTES

1. SEE SITE PREPARATION AND ROADWAY PLAN/PROFILE SHEETS FOR ADDITIONAL INFORMATION OF BELOW AND ABOVE SURFACE FEATURES.

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ADA CURB RAMP PLAN

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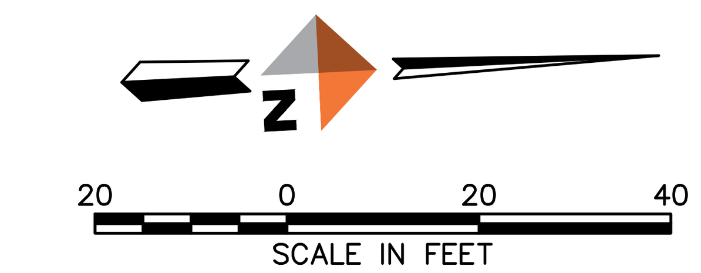

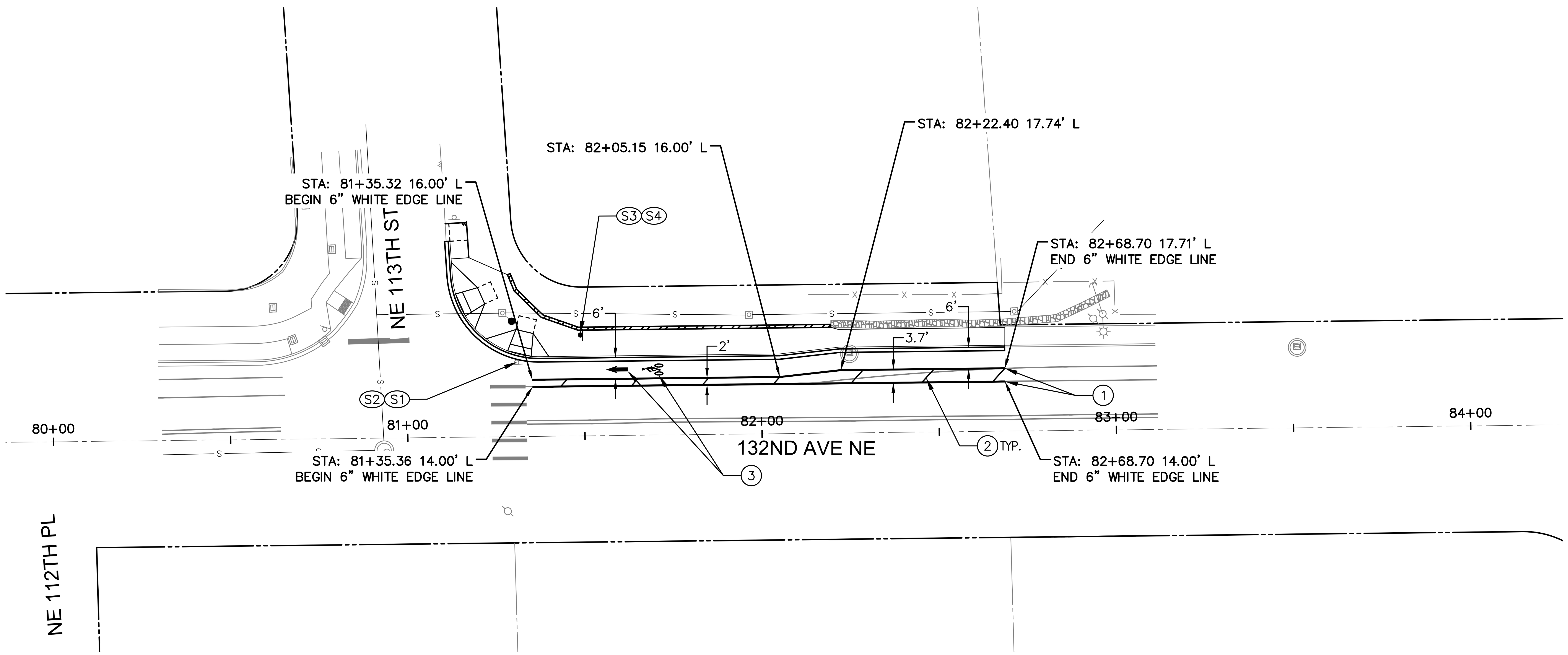

SIGNING NOTES

1. SEE CITY OF KIRKLAND STANDARD DETAIL NO. R.43 FOR SIGN POST DETAILS.
2. ALL NEW SIGNS SHALL BE MOUNTED ON NEW POSTS.

LEGEND

EXIST.	NEW/RELOCATED	DESCRIPTION
		SINGLE POST MOUNTED SIGN
	(#)	SIGNAGE
	(#)	CHANNELIZATION
		BIKE LANE ARROW
		BIKE SYMBOL
		RIGHT–OF–WAY

PAVEMENT MARKING NOTES

1. PAINT 6" WHITE SOLID EDGE LINE
2. PAINT 4" WHITE HATCH LINE
3. INSTALL THERMOPLASTIC BICYCLE LANE MARKINGS PER CITY OF KIRKLAND STD. DETAIL NO. R.34

SIGN SCHEDULE

#	STATION	OFFSET	NEW/ EXIST	SIGN CODE	SHEETING CODE	SIGN SIZE	POST SIZE/ TYPE/NO.	DESCRIPTION	REMARKS
S1	STA 81+30.96	21.00' L	EXIST	R1-6			SEE STD. PLAN NO. CK-R.43	IN-STREET PED CROSSING	REMOVE SIGN
S2	STA 81+30.96	21.00' L	EXIST	W16-7P			SEE STD. PLAN NO. CK-R.43	DIAGONAL DOWNWARD POINTING ARROW	REMOVE SIGN
S3	STA 81+49.04	28.48' L	NEW	R1-6			SEE STD. PLAN NO. CK-R.43	IN-STREET PED CROSSING	INSTALL NEW SIGN
S4	STA 81+49.04	28.48' L	NEW	W16-7P			SEE STD. PLAN NO. CK-R.43	DIAGONAL DOWNWARD POINTING ARROW	INSTALL NEW SIGN

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100% SUBMITTAL

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K. EAGLE	05-2024
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D. MURATA	07-2024
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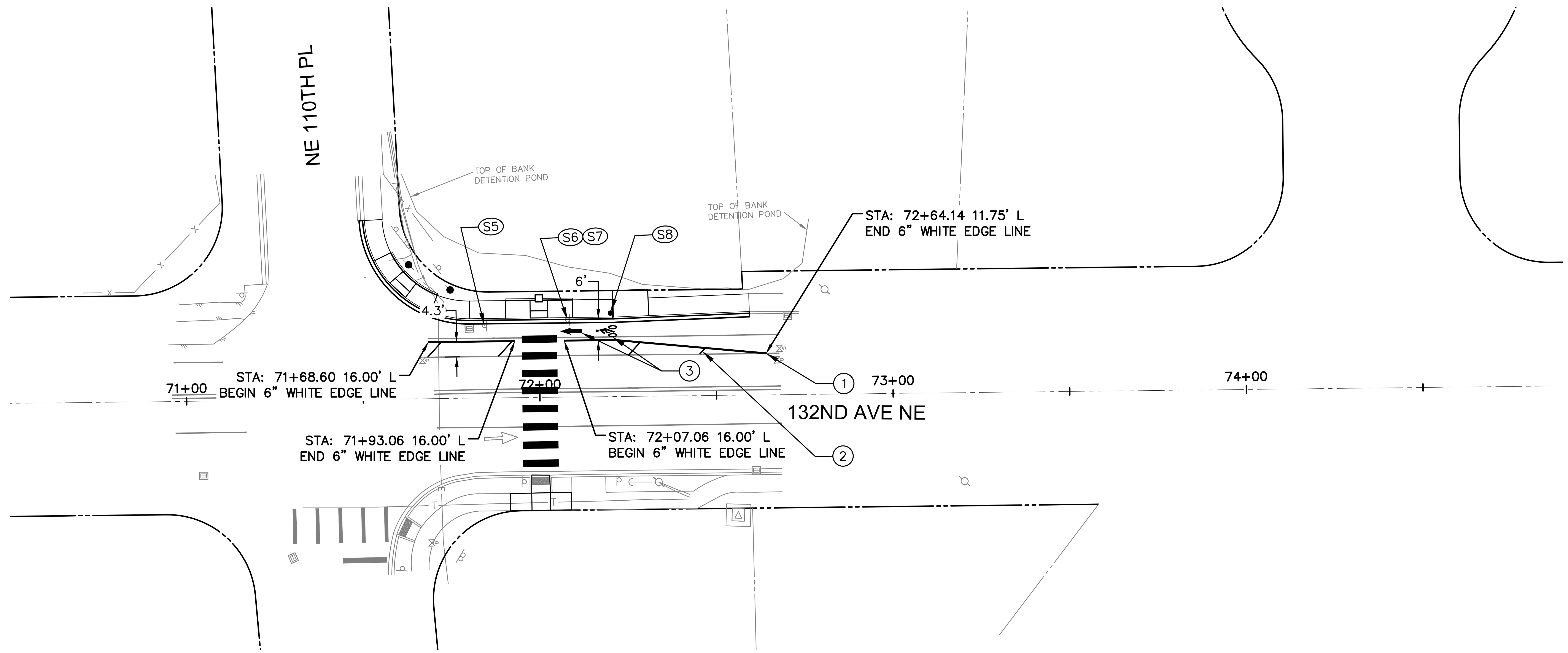
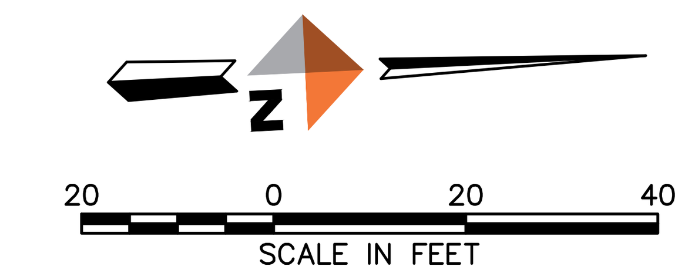
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

CHANNELIZATION AND SIGNING PLAN (SITE #1)

SHEET 32 OF 44 SHEETS





SIGNING NOTES

1. SEE CITY OF KIRKLAND STANDARD DETAIL NO. R.43 FOR SIGN POST DETAILS.
2. ALL NEW SIGNS SHALL BE MOUNTED ON NEW POSTS.

LEGEND

EXIST.	NEW/RELOCATED	DESCRIPTION
		SINGLE POST MOUNTED SIGN
	#	SIGNAGE
	#	CHANNELIZATION
		BIKE LANE ARROW
		BIKE SYMBOL
		RIGHT-OF-WAY

PAVEMENT MARKING NOTES

1. PAINT 6" WHITE SOLID EDGE LINE
2. PAINT 4" WHITE HATCH LINE
3. INSTALL THERMOPLASTIC BICYCLE LANE MARKINGS PER CITY OF KIRKLAND STD. DETAIL NO. R.34

SIGN SCHEDULE

#	STATION	OFFSET	NEW/ EXIST	SIGN CODE	SHEETING CODE	SIGN SIZE	POST SIZE/ TYPE/NO.	DESCRIPTION	REMARKS
S5	STA 71+84.50	20.52' L	EXIST				SEE STD. PLAN NO. CK-R.43	BUS ROUTE INFORMATION	REMOVE SIGN
S6	STA 72+08.04	21.85' L	EXIST	R1-6			SEE STD. PLAN NO. CK-R.43	IN-STREET PED CROSSING	REMOVE SIGN
S7	STA 72+08.04	21.85' L	EXIST	W16-7P			SEE STD. PLAN NO. CK-R.43	DIAGONAL DOWNWARD POINTING ARROW	REMOVE SIGN
S8	STA 71+85.25	23.58' L	NEW				SEE STD. PLAN NO. CK-R.43	BUS ROUTE INFORMATION	INSTALL NEW SIGN
S9	STA 72+04.18	23.37' L	NEW	R1-6			SEE STD. PLAN NO. CK-R.43	IN-STREET PED CROSSING	INSTALL NEW SIGN
S10	STA 72+04.18	23.37' L	NEW	W16-7P			SEE STD. PLAN NO. CK-R.43	DIAGONAL DOWNWARD POINTING ARROW	INSTALL NEW SIGN

NOTE: SEE RRFB PLAN SHEETS FOR NEW CROSSWALK SIGNING

100% SUBMITTAL

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K. EAGLE	05-2024
DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

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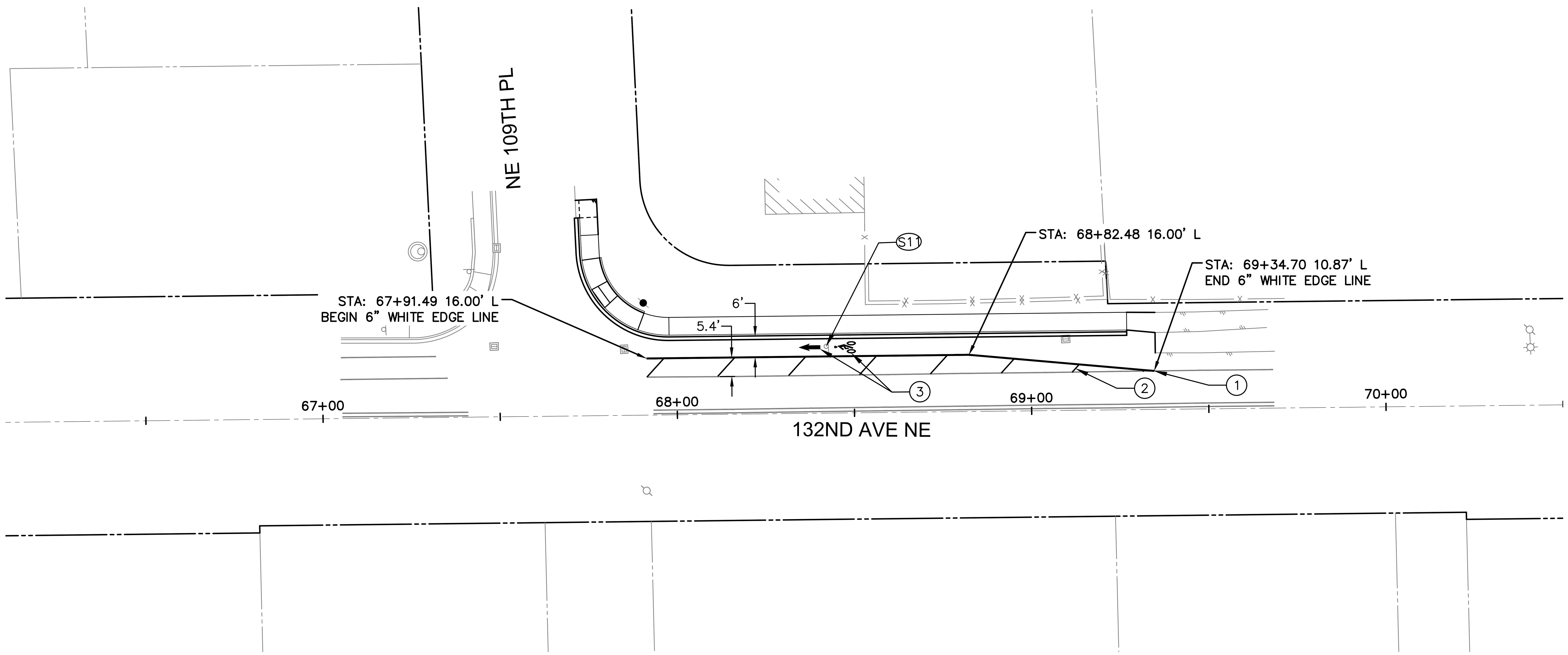
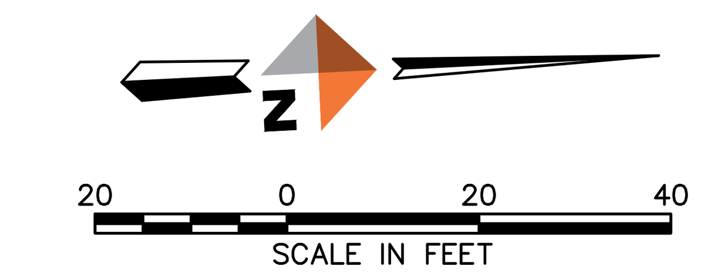
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

CHANNELIZATION AND SIGNING PLAN (SITE #2)

SHEET 33 OF 44 SHEETS





SIGNING NOTES

1. SEE CITY OF KIRKLAND STANDARD DETAIL NO. R.43 FOR SIGN POST DETAILS.
2. ALL NEW SIGNS SHALL BE MOUNTED ON NEW POSTS.

LEGEND

EXIST.	NEW/RELOCATED	DESCRIPTION
		SINGLE POST MOUNTED SIGN
	#	SIGNAGE
	#	CHANNELIZATION
		BIKE LANE ARROW
		BIKE SYMBOL
		RIGHT-OF-WAY

PAVEMENT MARKING NOTES

1. PAINT 6" WHITE SOLID EDGE LINE
2. PAINT 4" WHITE HATCH LINE
3. INSTALL THERMOPLASTIC BICYCLE LANE MARKINGS PER CITY OF KIRKLAND STD. DETAIL NO. R.34

SIGN SCHEDULE

#	STATION	OFFSET	NEW/ EXIST	SIGN CODE	SHEETING CODE	SIGN SIZE	POST SIZE/ TYPE/NO.	DESCRIPTION	REMARKS
S11	STA 68+42.20	18.84' L	EXIST	R7-1			SEE STD. PLAN NO. CK-R.43	NO PARKING ANY TIME	REMOVE SIGN

100% SUBMITTAL

DATE	NO.	REVISION	BY

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K. EAGLE 05-2024 DRAWN BY: DATE
D. MURATA 07-2024 CHECKED BY: DATE

DARREN K. M. MURATA, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER — 100% NOT FOR CONSTRUCTION

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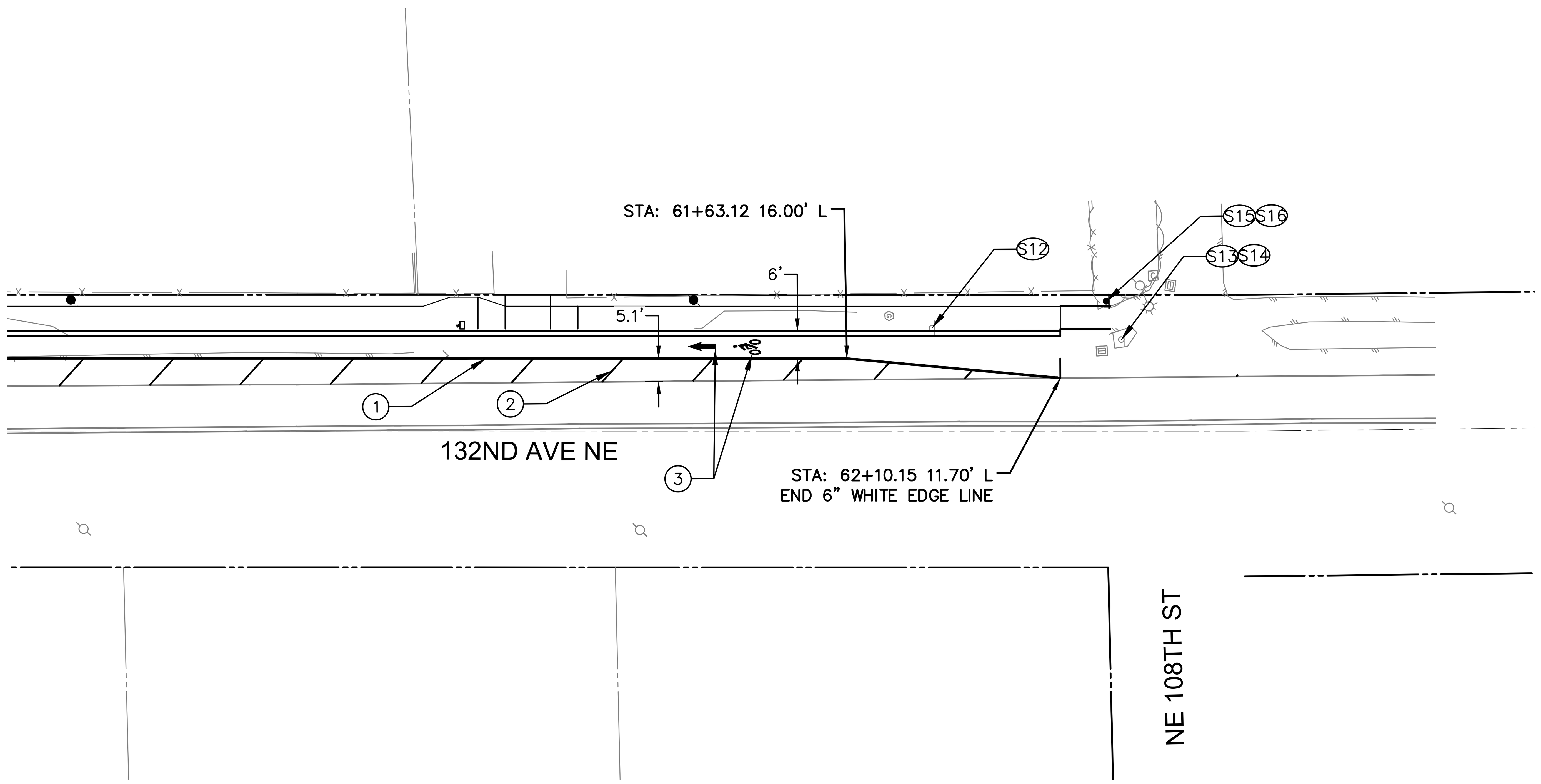
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

CHANNELIZATION AND SIGNING PLAN (SITE #3)

July 11, 2024 - 2:52 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-SG-15223-01.DWG - Layout Name: 34 CHANNELIZATION AND SIGNING PLAN (SITE #3)



SIGNING NOTES

1. SEE CITY OF KIRKLAND STANDARD DETAIL NO. R.43 FOR SIGN POST DETAILS.
2. ALL NEW SIGNS SHALL BE MOUNTED ON NEW POSTS.

LEGEND

EXIST.	NEW/RELOCATED	DESCRIPTION
		SINGLE POST MOUNTED SIGN
	(#)	SIGNAGE
	(#)	CHANNELIZATION
		BIKE LANE ARROW
		BIKE SYMBOL
		RIGHT–OF–WAY

PAVEMENT MARKING NOTES

1. PAINT 6" WHITE SOLID EDGE LINE
2. PAINT 4" WHITE HATCH LINE
3. INSTALL THERMOPLASTIC BICYCLE LANE MARKINGS PER CITY OF KIRKLAND STD. DETAIL NO. R.34

SIGN SCHEDULE

#	STATION	OFFSET	NEW/ EXIST	SIGN CODE	SHEETING CODE	SIGN SIZE	POST SIZE/ TYPE/NO.	DESCRIPTION	REMARKS
S12	STA 61+81.88	22.69' L	EXIST				SEE STD. PLAN NO. CK-R.43	NEIGHBORHOOD WATCH	REMOVE SIGN
S13	STA 62+23.55	20.17' L	EXIST	W14-1a			SEE STD. PLAN NO. CK-R.43	DEAD END	REMOVE SIGN
S14	STA 62+23.55	20.17' L	EXIST				SEE STD. PLAN NO. CK-R.43	PRIVATE DRIVE	REMOVE SIGN
S15	STA 62+20.23	28.61' L	NEW	W14-1a			SEE STD. PLAN NO. CK-R.43	DEAD END	INSTALL NEW SIGN
S16	STA 62+20.23	28.61' L	NEW				SEE STD. PLAN NO. CK-R.43	PRIVATE DRIVE	INSTALL NEW SIGN

100% SUBMITTAL

DATE	NO.	REVISION	BY

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K. EAGLE 05-2024 DRAWN BY: DATE
D. MURATA 07-2024 CHECKED BY: DATE

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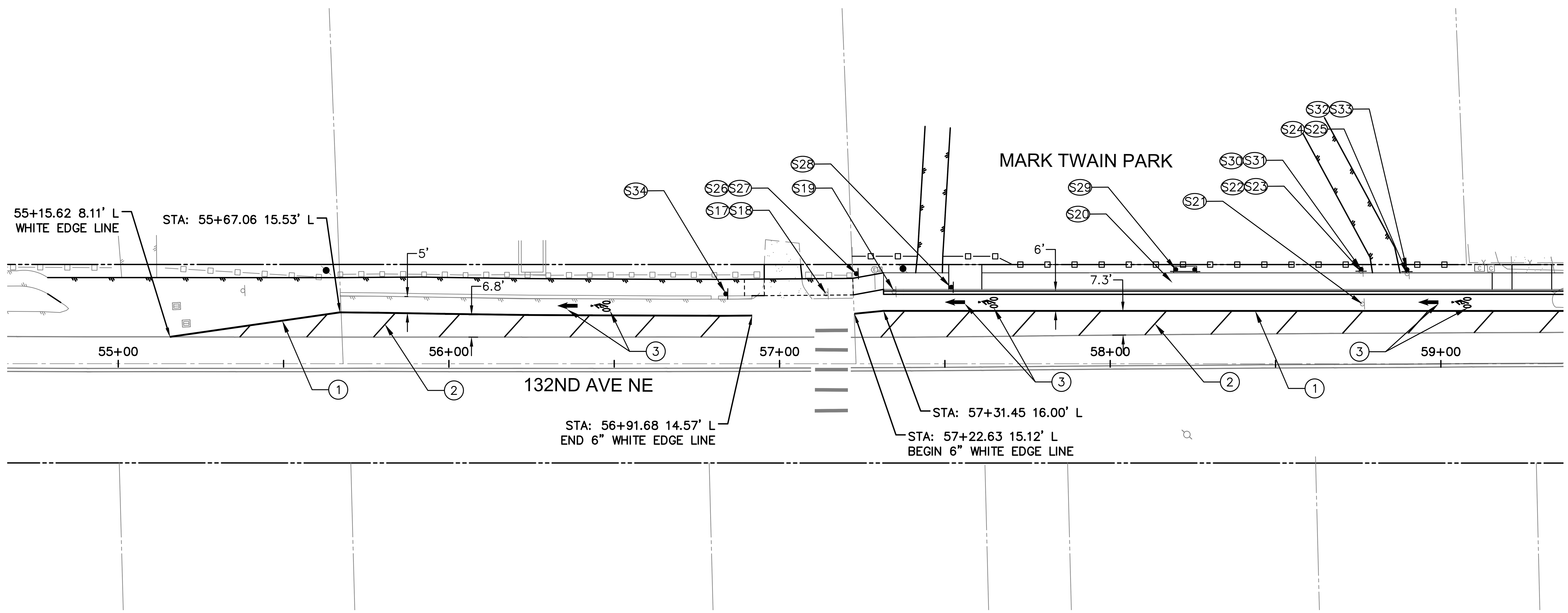
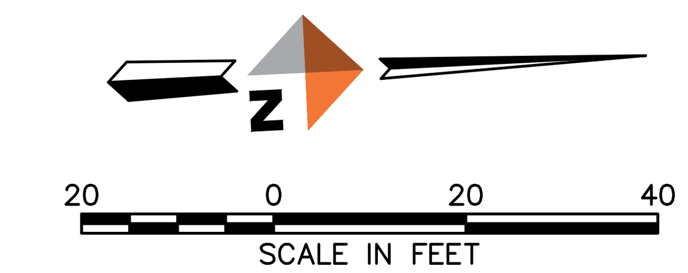
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

CHANNELIZATION AND SIGNING PLAN (SITE #4)

July 11, 2024 - 2:52 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-SG-15223-01.DWG - Layout Name: 35 CHANNELIZATION AND SIGNING PLAN (SITE #4)





SIGNING NOTES

1. SEE CITY OF KIRKLAND STANDARD DETAIL NO. R.43 FOR SIGN POST DETAILS.
2. ALL NEW SIGNS SHALL BE MOUNTED ON NEW POSTS.

LEGEND

EXIST.	NEW/RELOCATED	DESCRIPTION
		SINGLE POST MOUNTED SIGN
		SIGNAGE
		CHANNELIZATION
		BIKE LANE ARROW
		BIKE SYMBOL
		RIGHT–OF–WAY

PAVEMENT MARKING NOTES

1. PAINT 6" WHITE SOLID EDGE LINE
2. PAINT 4" WHITE HATCH LINE
3. INSTALL THERMOPLASTIC BICYCLE LANE MARKINGS PER CITY OF KIRKLAND STD. DETAIL NO. R.34

SIGN SCHEDULE

#	STATION	OFFSET	NEW/ EXIST	SIGN CODE	SHEETING CODE	SIGN SIZE	POST SIZE/ TYPE/NO.	DESCRIPTION	REMARKS
S17	STA 57+14.08	21.11' L	EXIST	R1-6			SEE STD. PLAN NO. CK-R.43	IN-STREET PED CROSSING	REMOVE SIGN
S18	STA 57+14.08	21.11' L	EXIST	W16-7P			SEE STD. PLAN NO. CK-R.43	DIAGONAL DOWNWARD POINTING ARROW	REMOVE SIGN
S19	STA 57+34.62	21.75' L	EXIST				SEE STD. PLAN NO. CK-R.43	BUS ROUTE INFORMATION	REMOVE SIGN
S20	STA 58+23.75	24.61' L	EXIST				SEE STD. PLAN NO. CK-R.43	PARK NAME LABEL	REMOVE SIGN
S21	STA 58+76.26	18.09' L	EXIST	R7-1			SEE STD. PLAN NO. CK-R.43	NO PARKING ANY TIME	REMOVE SIGN
S22	STA 58+75.83	27.99' L	EXIST				SEE STD. PLAN NO. CK-R.43	PARK CLOSED DUSK TO DAWN	REMOVE SIGN
S23	STA 58+75.83	27.99' L	EXIST				SEE STD. PLAN NO. CK-R.43	PRACTICING OR PLAYING GOLF IS PROHIBITED	REMOVE SIGN
S24	STA 58+89.80	27.22' L	EXIST				SEE STD. PLAN NO. CK-R.43	NO PARKING ON WALKWAY	REMOVE SIGN
S25	STA 58+89.80	27.22' L	EXIST				SEE STD. PLAN NO. CK-R.43	DOGS MUST BE ON LEASH	REMOVE SIGN
S26	STA 57+23.19	27.23' L	NEW	R1-6			SEE STD. PLAN NO. CK-R.43	IN-STREET PED CROSSING	INSTALL NEW SIGN
S27	STA 57+23.19	27.23' L	NEW	W16-7P			SEE STD. PLAN NO. CK-R.43	DIAGONAL DOWNWARD POINTING ARROW	INSTALL NEW SIGN
S28	STA 57+38.58	23.19' L	NEW				SEE STD. PLAN NO. CK-R.43	BUS ROUTE INFORMATION	INSTALL NEW SIGN
S29	STA 58+22.66	27.90' L	NEW				SEE STD. PLAN NO. CK-R.43	PARK NAME LABEL	INSTALL NEW SIGN
S30	STA 58+75.86	28.58' L	NEW				SEE STD. PLAN NO. CK-R.43	PARK CLOSED DUSK TO DAWN	INSTALL NEW SIGN
S31	STA 58+75.86	28.58' L	NEW				SEE STD. PLAN NO. CK-R.43	PRACTICING OR PLAYING GOLF IS PROHIBITED	INSTALL NEW SIGN
S32	STA 58+89.74	28.47' L	NEW				SEE STD. PLAN NO. CK-R.43	NO PARKING ON WALKWAY	INSTALL NEW SIGN
S33	STA 58+89.74	28.47' L	NEW				SEE STD. PLAN NO. CK-R.43	DOGS MUST BE ON LEASH	INSTALL NEW SIGN
S34	STA 56+83.72	21.11' L	NEW	R7-1			SEE STD. PLAN NO. CK-R.43	NO PARKING ANY TIME	INSTALL NEW SIGN

100% SUBMITTAL

DATE	NO.	REVISION	BY

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K. EAGLE	05-2024
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D. MURATA	07-2024
CHECKED BY:	DATE

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CHANNELIZATION AND SIGNING PLAN (SITE #5)

SHEET 36 OF 44 SHEETS

July 11, 2024 - 2:52 PM - KEAGLE - \\DOWL.COM\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-SG-15223-01.DWG - Layout Name: 36 CHANNELIZATION AND SIGNING PLAN (SITE #5)

SIGNING NOTES

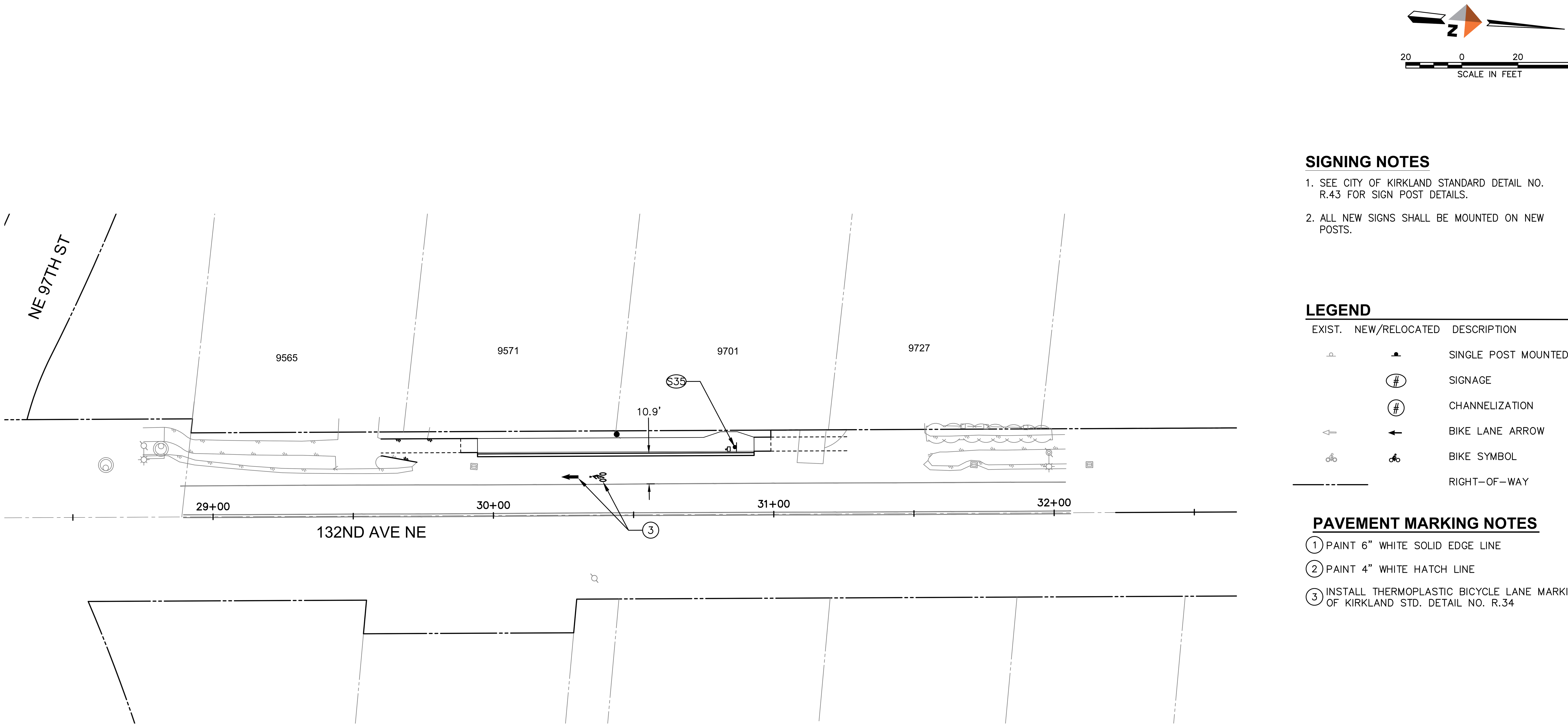
1. SEE CITY OF KIRKLAND STANDARD DETAIL NO. R.43 FOR SIGN POST DETAILS.
2. ALL NEW SIGNS SHALL BE MOUNTED ON NEW POSTS.

LEGEND

EXIST.	NEW/RELOCATED	DESCRIPTION
		SINGLE POST MOUNTED SIGN
		SIGNAGE
		CHANNELIZATION
		BIKE LANE ARROW
		BIKE SYMBOL
		RIGHT-OF-WAY

PAVEMENT MARKING NOTES

1. PAINT 6" WHITE SOLID EDGE LINE
2. PAINT 4" WHITE HATCH LINE
3. INSTALL THERMOPLASTIC BICYCLE LANE MARKINGS PER CITY OF KIRKLAND STD. DETAIL NO. R.34



SIGN SCHEDULE

#	STATION	OFFSET	NEW/ EXIST	SIGN CODE	SHEETING CODE	SIGN SIZE	POST SIZE/ TYPE/NO.	DESCRIPTION	REMARKS
S35	STA 30+86.21	24.00' L	NEW	R7-1			SEE STD. PLAN NO. CK-R.43	NO PARKING ANY TIME	INSTALL NEW SIGN

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July 11, 2024 - 2:52 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-SG-15223-01.DWG - Layout Name: 37 CHANNELIZATION AND SIGNING PLAN (SITE #6)

DATE	NO.	REVISION	BY

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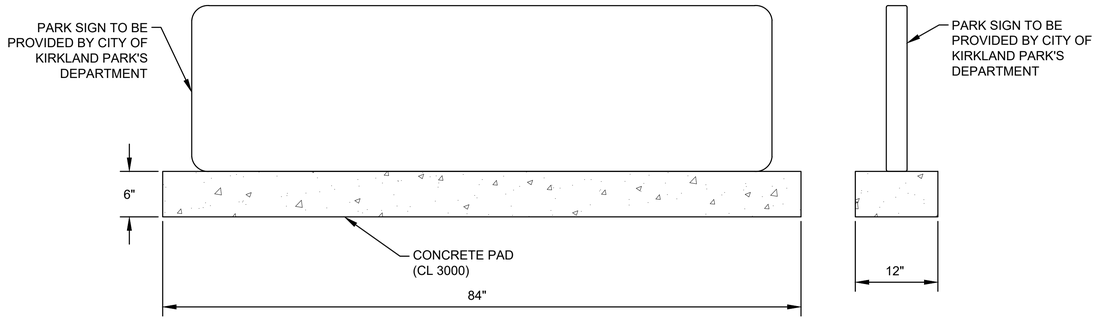
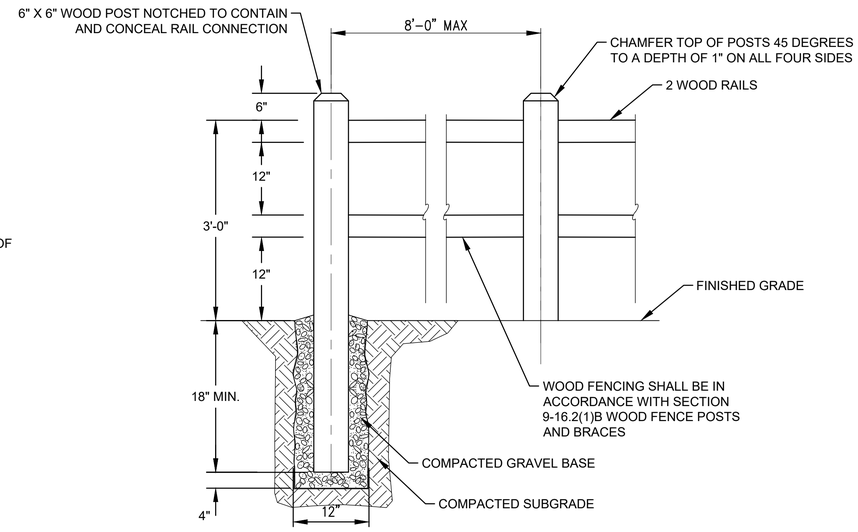
PEDESTRIAN IMPROVEMENTS PROJECT

CHANNELIZATION AND SIGNING PLAN (SITE #6)

SHEET 37 OF 44 SHEETS



PARK SIGN CONCRETE PAD SECTION
NOT TO SCALE



SPLIT RAIL FENCING DETAIL
NOT TO SCALE

100% SUBMITTAL

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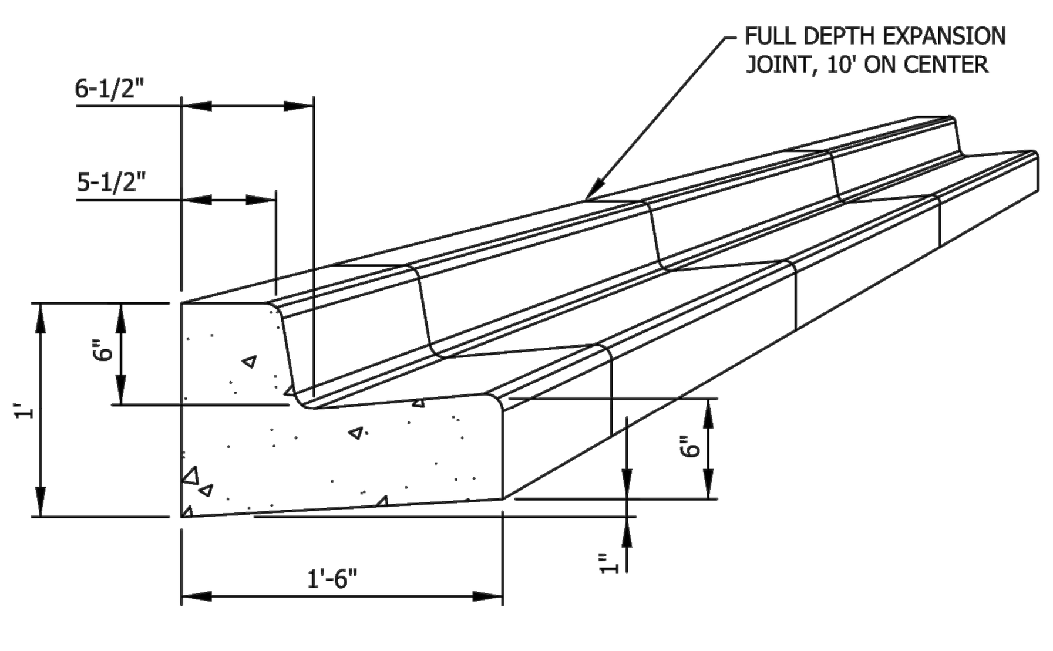
132ND AVENUE NE
PEDESTRIAN IMPROVEMENTS PROJECT

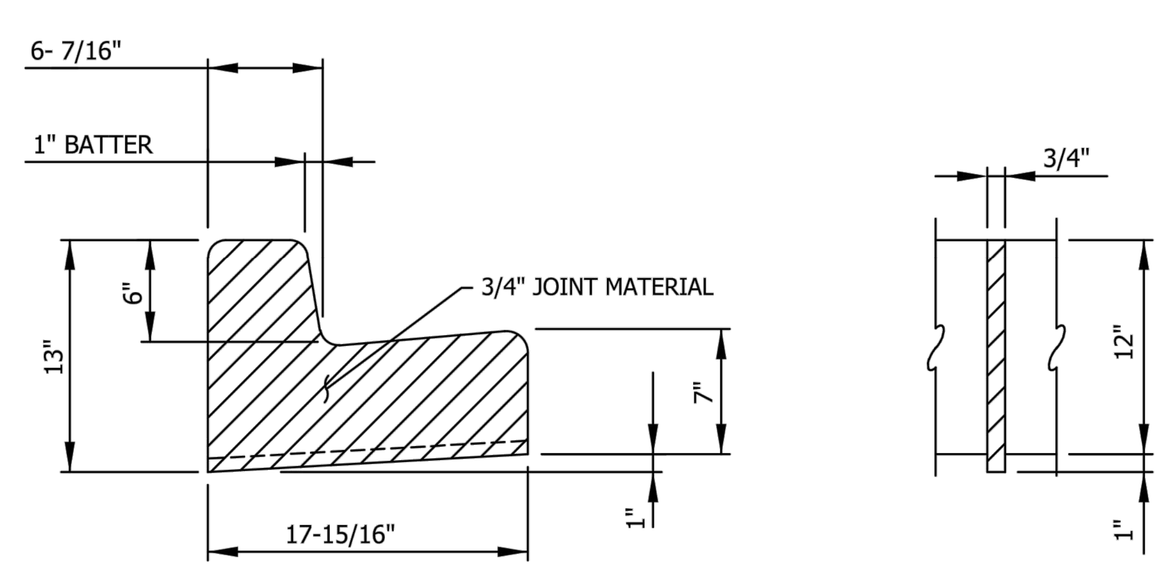
ROADWAY DETAILS

SHEET 38 OF 44 SHEETS

LAST REVISED: 01/2023



TYPICAL SECTION FOR CURB & GUTTER, TYPE A



JOINT DETAIL

NOTES:

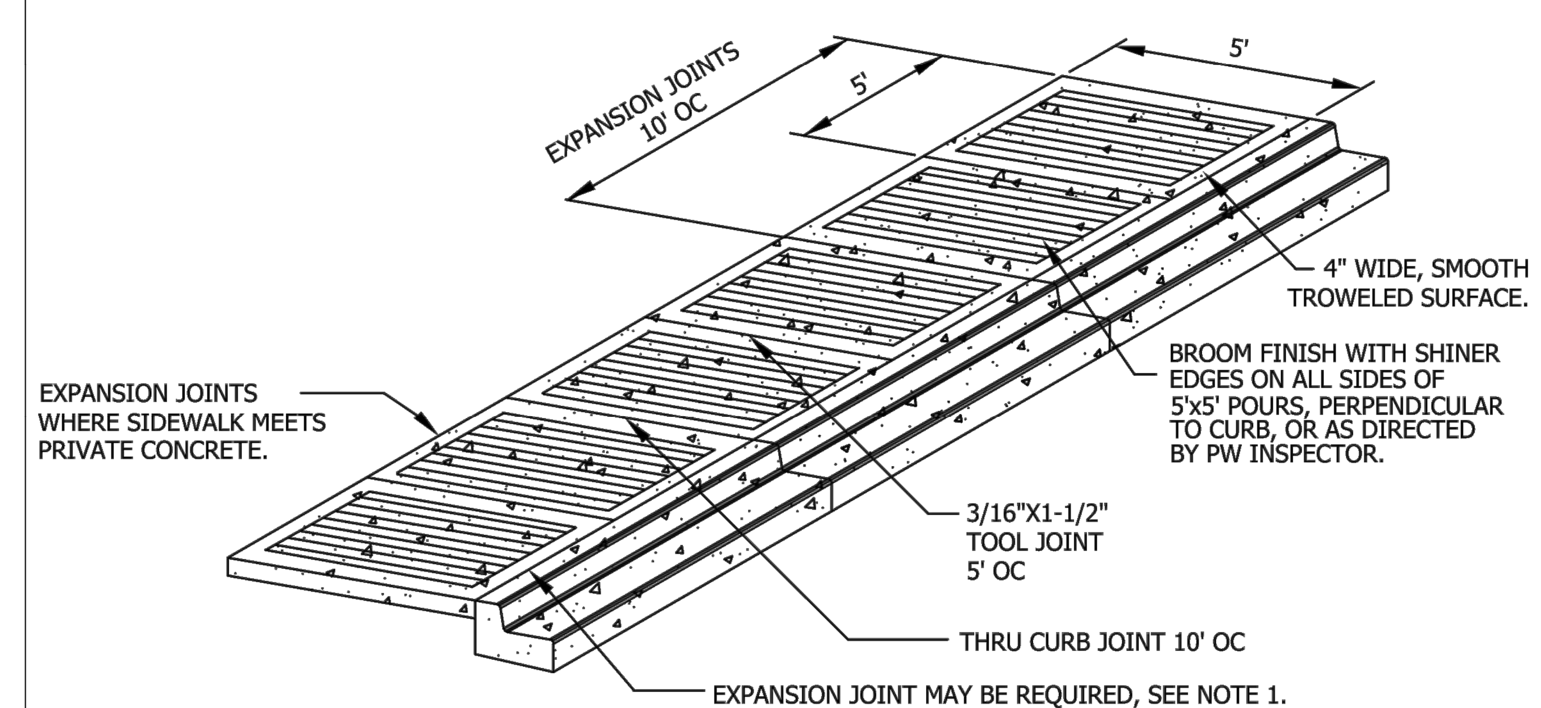
1. FORMS SHALL BE STEEL AND SET TRUE TO LINE AND GRADE (INSPECTION IS REQUIRED PRIOR TO PLACEMENT OF CONCRETE) UNLESS SPECIFIED DIFFERENTLY BY CITY PROJECT ENGINEER.
2. CONCRETE SHALL BE CEMENT CONCRETE CLASS 4000.
3. BASE COURSE SHALL BE 4" OF 5/8" MINUS CRUSHED ROCK.
4. SURVEY REQUIRED FOR CURB ALIGNMENT.

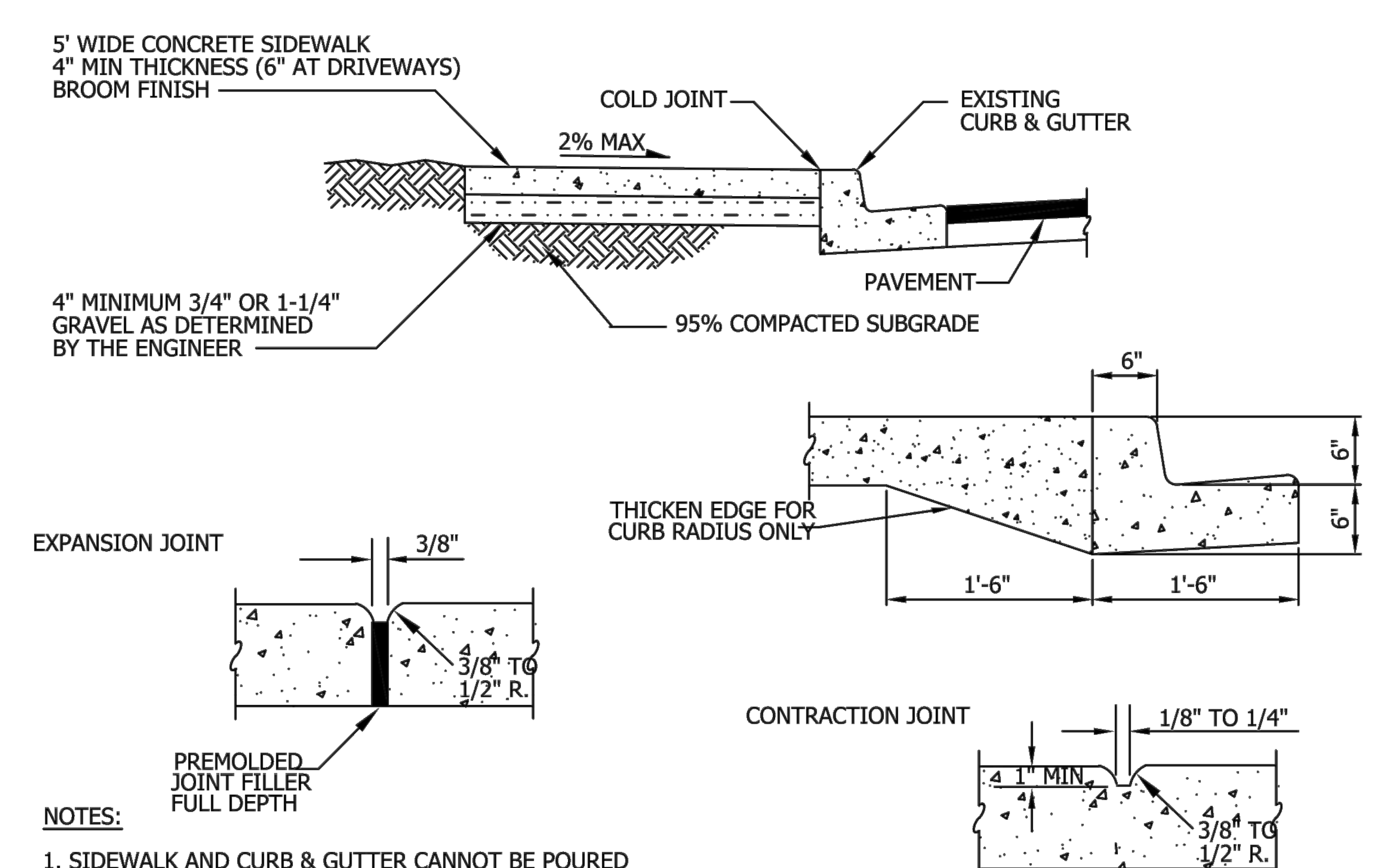
CITY OF KIRKLAND

PLAN NO. CK-R.17

CONCRETE CURB AND GUTTER, TYPE "A"

LAST REVISED: 1/1/18





NOTES:

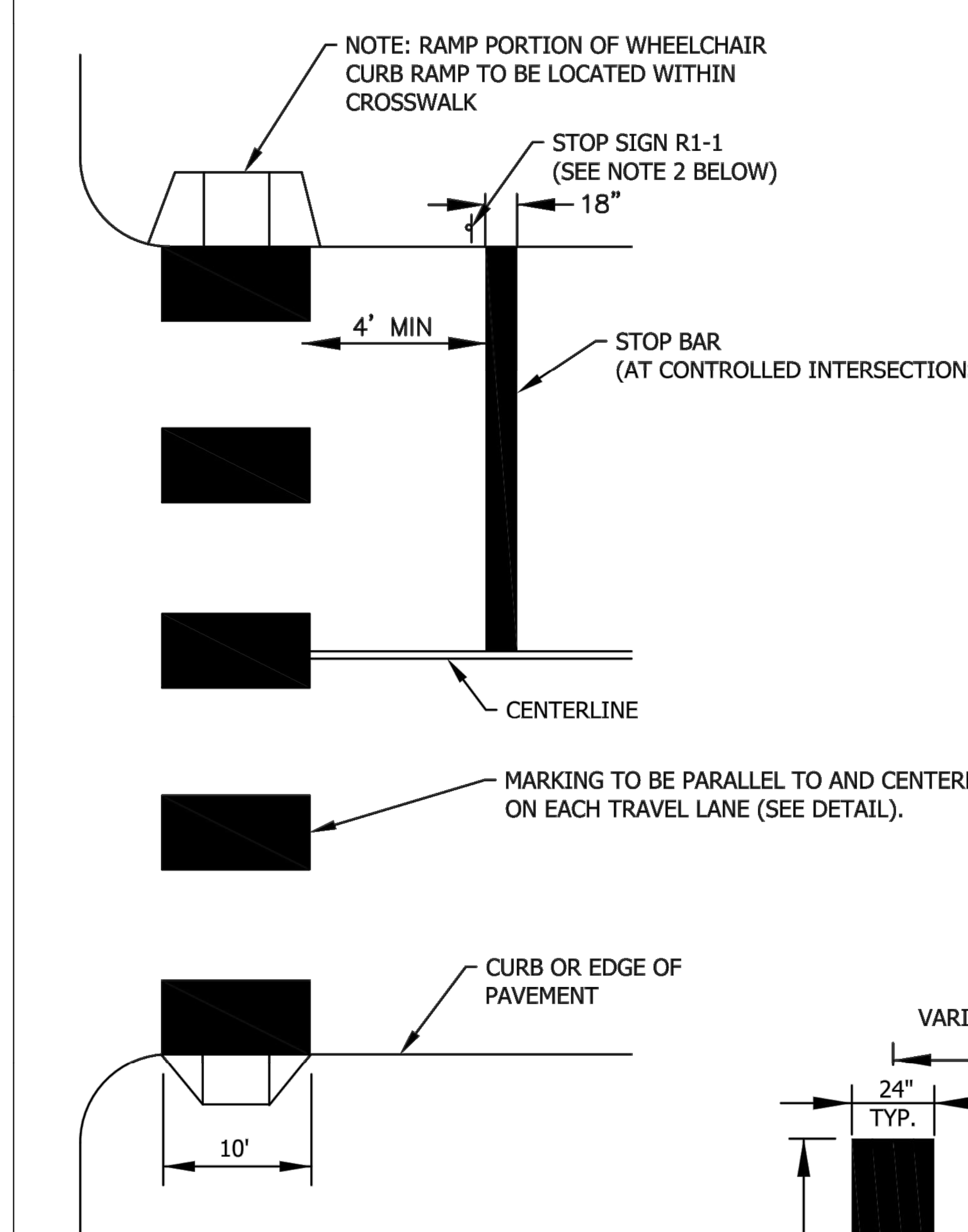
1. SIDEWALK AND CURB & GUTTER CANNOT BE POURED MONOLITHICALLY. EXPANSION JOINT WILL BE REQUIRED WHEN CONCRETE SIDEWALK IS SURROUNDED BY OTHER HARD SURFACES (E.G., DRIVEWAY); OR AS DIRECTED BY PW INSPECTOR.
2. CONCRETE SHALL BE CEMENT CONCRETE CLASS 4000 PSI MINIMUM, WITH AIR ENTRAINMENT. NO COLOR OR TINT SHALL BE ADDED.
3. FORMS SHALL BE SET TRUE TO LINE AND GRADE AND SHALL BE STEEL UNLESS OTHERWISE APPROVED BY INSPECTOR.
4. SIDEWALK SHALL NOT BE POURED IN THE RAIN. SEE POLICY R-8, PLACING CONCRETE OR ASPHALT IN ADVERSE WEATHER CONDITIONS.

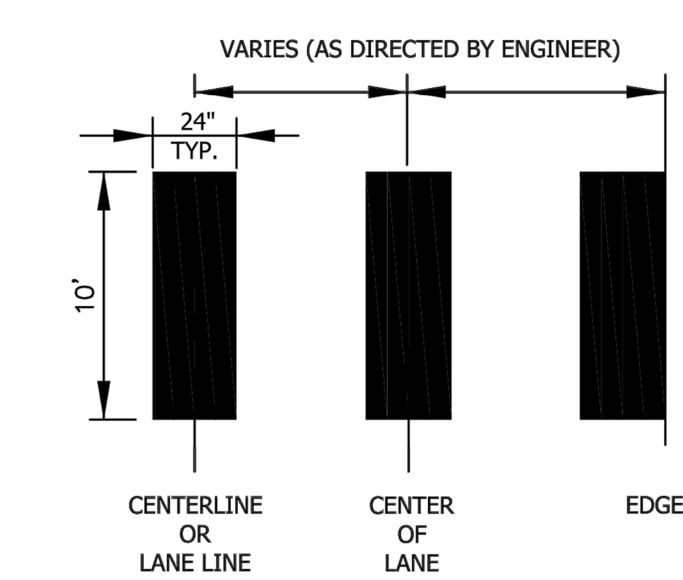
CITY OF KIRKLAND

PLAN NO. CK- R.23

SIDEWALK SECTION

LAST REVISED: 01/2020





DETAIL

NOTES:

1. MARKINGS SHALL BE THERMOPLASTIC.
2. STOP SIGN LOCATION ADJACENT TO STOP BAR, OR AS DIRECTED BY ENGINEER

CITY OF KIRKLAND

PLAN NO. CK-R.28

CROSSWALK AND STOP BAR DETAIL

100% SUBMITTAL

DATE	NO.	REVISION	BY

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D. MURATA	07-2024
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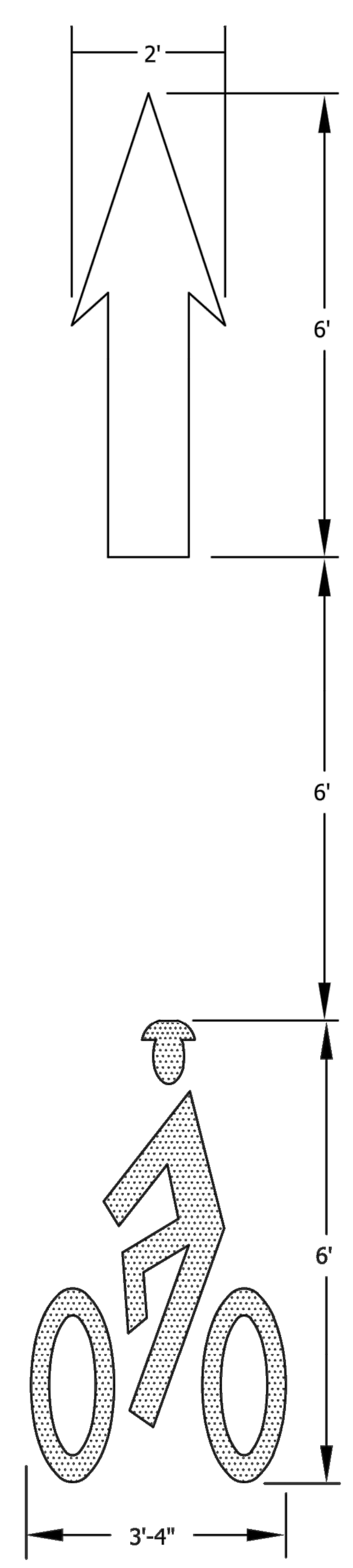
132ND AVENUE NE
PEDESTRIAN IMPROVEMENTS PROJECT

KIRKLAND PRE-APPROVED PLANS - ROADWAY

SHEET 39 OF 44 SHEETS

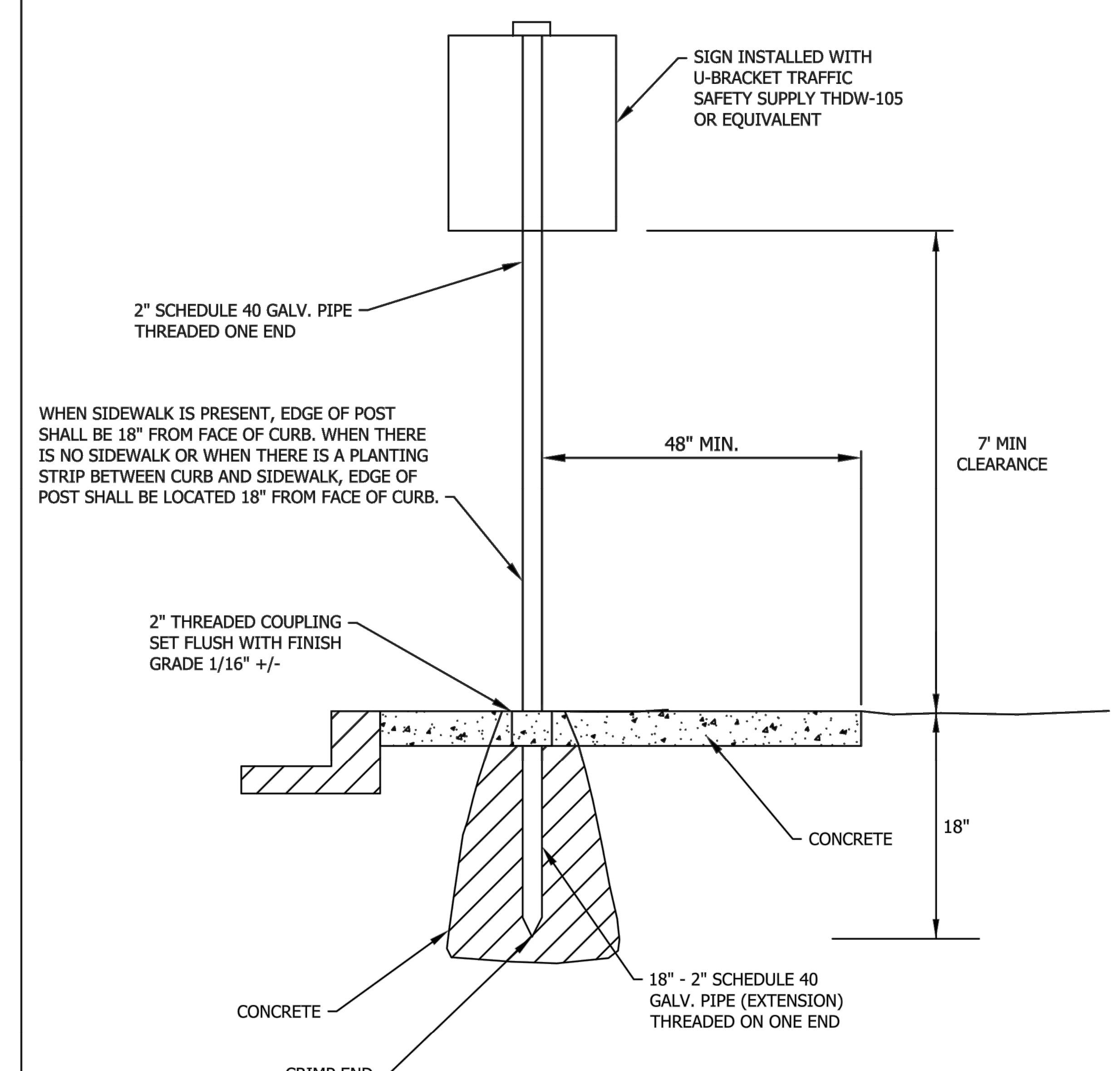
LAST REVISED:2/3/2017



NOTES:
1. BIKE LANE SYMBOLS AND ARROW MATERIAL SHALL BE 90 MILL, PREFORMED, SKID RESISTANT THERMOPLASTIC.
2. BICYCLE SYMBOL FACES ROADWAY CENTERLINE.

CITY OF KIRKLAND
PLAN NO. CK–R.34
BICYCLE LANE MARKINGS

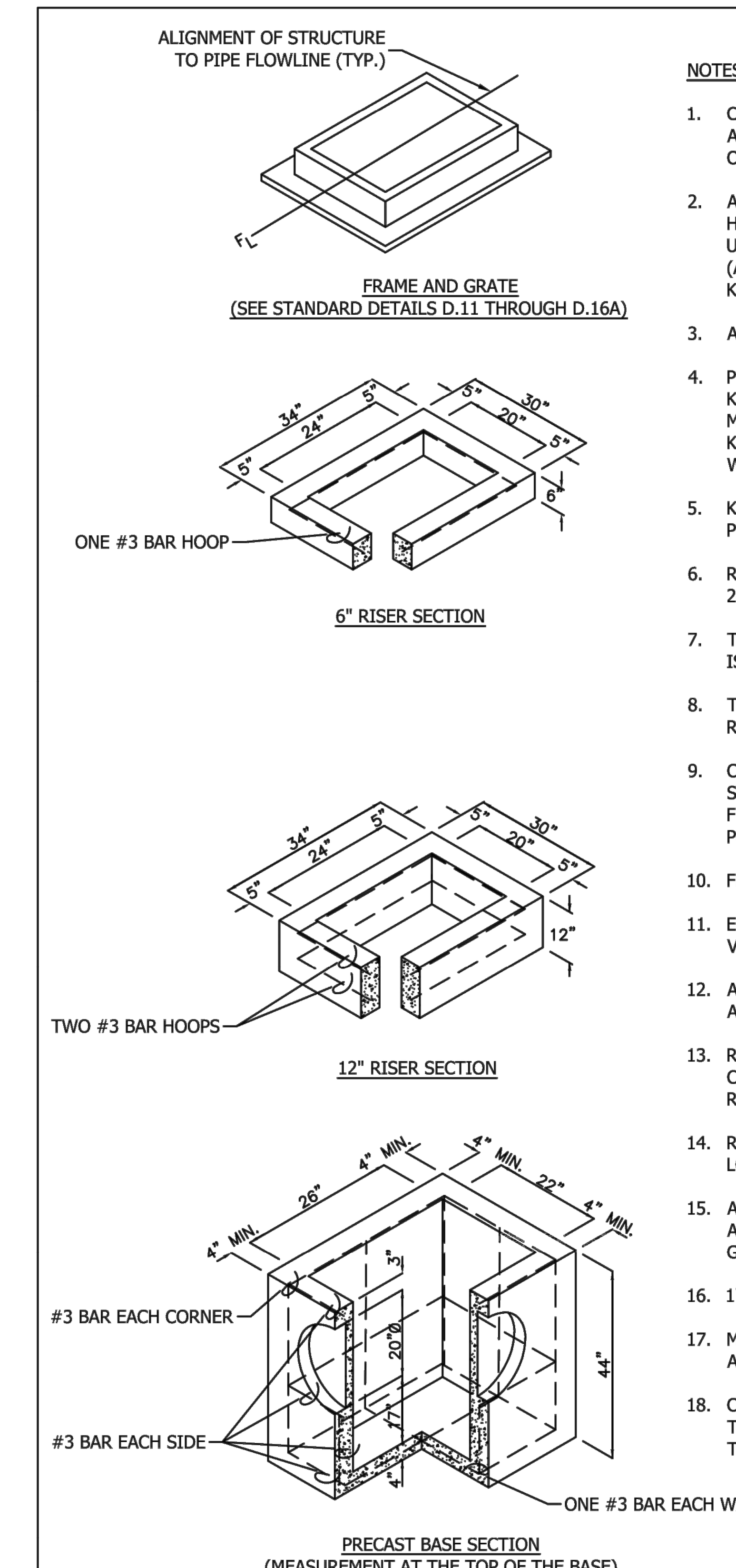
LAST REVISED:01/2022



NOTES:
1. IF SIGN MUST BE PLACED IN EXISTING CONCRETE, CORE HOLE SHALL BE 8" DIAMETER.
2. S1-1 SIGNS SHALL BE BLACK ON FLUORESCENT GREEN.
3. W11-2 SIGNS SHALL BE BLACK ON YELLOW.

CITY OF KIRKLAND
PLAN NO. CK–R.43
STANDARD SIGN INSTALLATION

LAST REVISED: 01/2023



NOTES:
1. CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 (AASHTO M 199) & C890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.
2. AS AN ACCEPTABLE ALTERNATIVE TO REBAR, WELDED WIRE FABRIC HAVING A MIN. AREA OF 0.12 SQUARE INCHES PER FOOT MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A497 (AASHTO M 221). WIRE FABRIC SHALL NOT BE PLACED IN KNOCKOUTS.
3. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.
4. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
5. KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAM. PLUS CATCH BASIN WALL THICKNESS.
6. ROUND KNOCKOUTS MAY BE ON ALL 4 SIDES, WITH MAX. DIAM. OF 20". KNOCKOUTS MAY BE EITHER ROUND OR "D" SHAPE.
7. THE MAX. DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
8. THE TAPER ON THE SIDES OF THE PRECAST BASE SECTION AND RISER SECTION SHALL NOT EXCEED 1/2" PER FOOT.
9. CATCH BASIN FRAME AND GRATE SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
10. FRAME AND GRATE SHALL BE INSTALLED WITH FLANGE DOWN.
11. EDGE OF RISER OR BRICK SHALL NOT BE MORE THAN 2" FROM VERTICAL EDGE OF CATCH BASIN WALL.
12. ACCEPTABLE PIPE SIZES ARE 8", 12" OR 15". 6" PIPE IS ONLY ACCEPTABLE ON PRIVATE SYSTEMS.
13. ROUND SOLID LIDS REQUIRED WHENEVER CATCH BASIN DOES NOT COLLECT SURFACE WATER. SEE CK-D.18 AND CK-D.18A FOR REFERENCE.
14. ROUND CONCRETE RISERS ARE REQUIRED FOR ROUND SOLID LOCKING LIDS.
15. ALL NEW PVC PIPES SHALL BE INSTALLED WITH SAND COLLARS AND A NON-SHRINK GROUT. JETSET OR SPEED CRETE RED LINE GROUT NOT ALLOWED.
16. 1", 2", AND 4" RISERS ACCEPTED AS NEEDED.
17. MINIMUM 10' FROM ADJACENT TREES, UNLESS OTHERWISE APPROVED.
18. CLEAN SURFACE AND BOTTOM AREA. PROVIDE UNIFORM CONTACT. THE SURFACE AREA OF THE BASE SECTION MUST BE MORTARED TO THE BOTTOM AREA OF THE RISER SECTION.

CITY OF KIRKLAND
PLAN NO. CK - D.07
CATCH BASIN TYPE 1

100% SUBMITTAL

DATE	NO.	REVISION	BY

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DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

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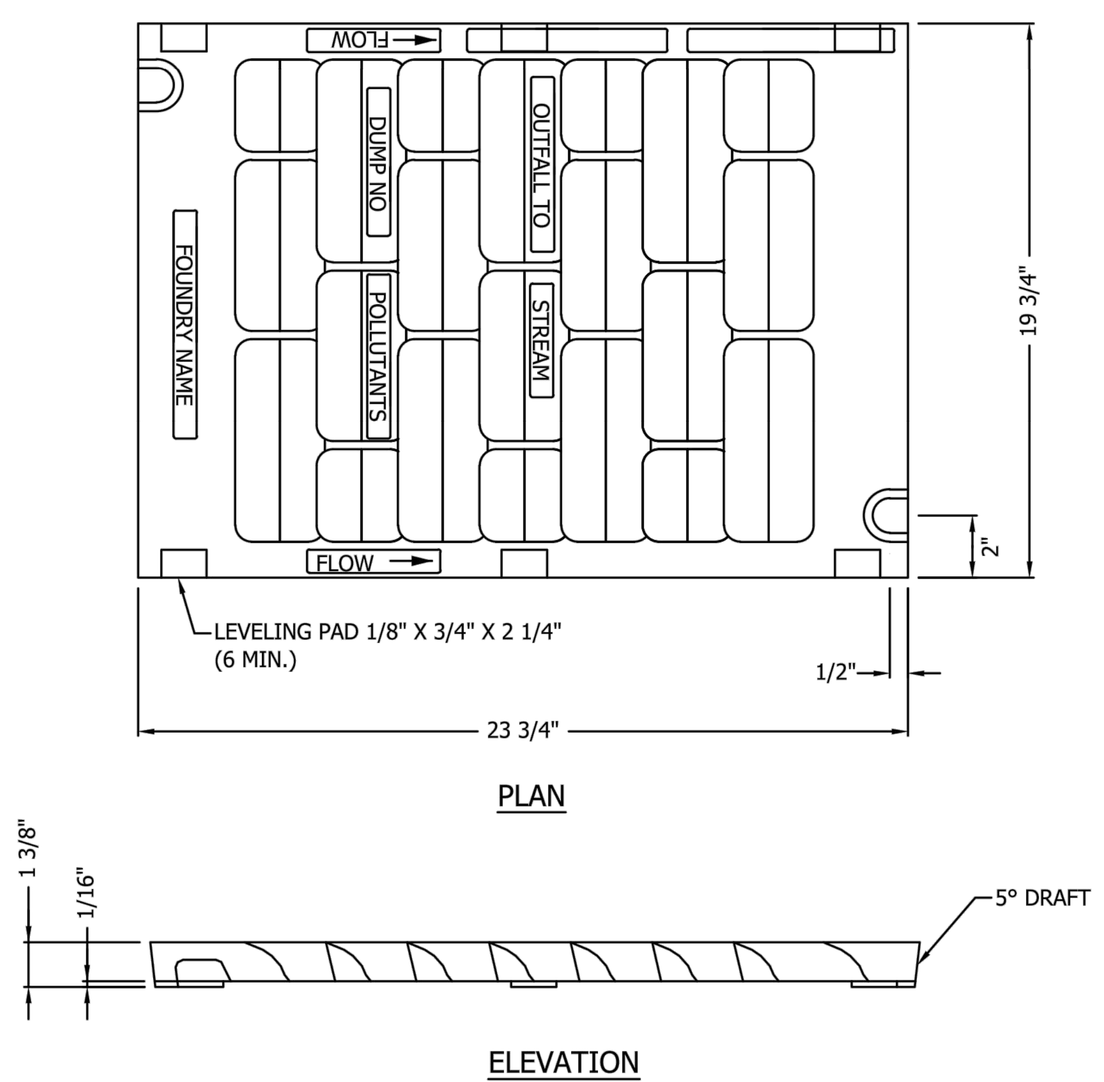
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

KIRKLAND PRE-APPROVED PLANS - ROADWAY

SHEET 40 OF 44 SHEETS

LAST REVISED: 01/2023

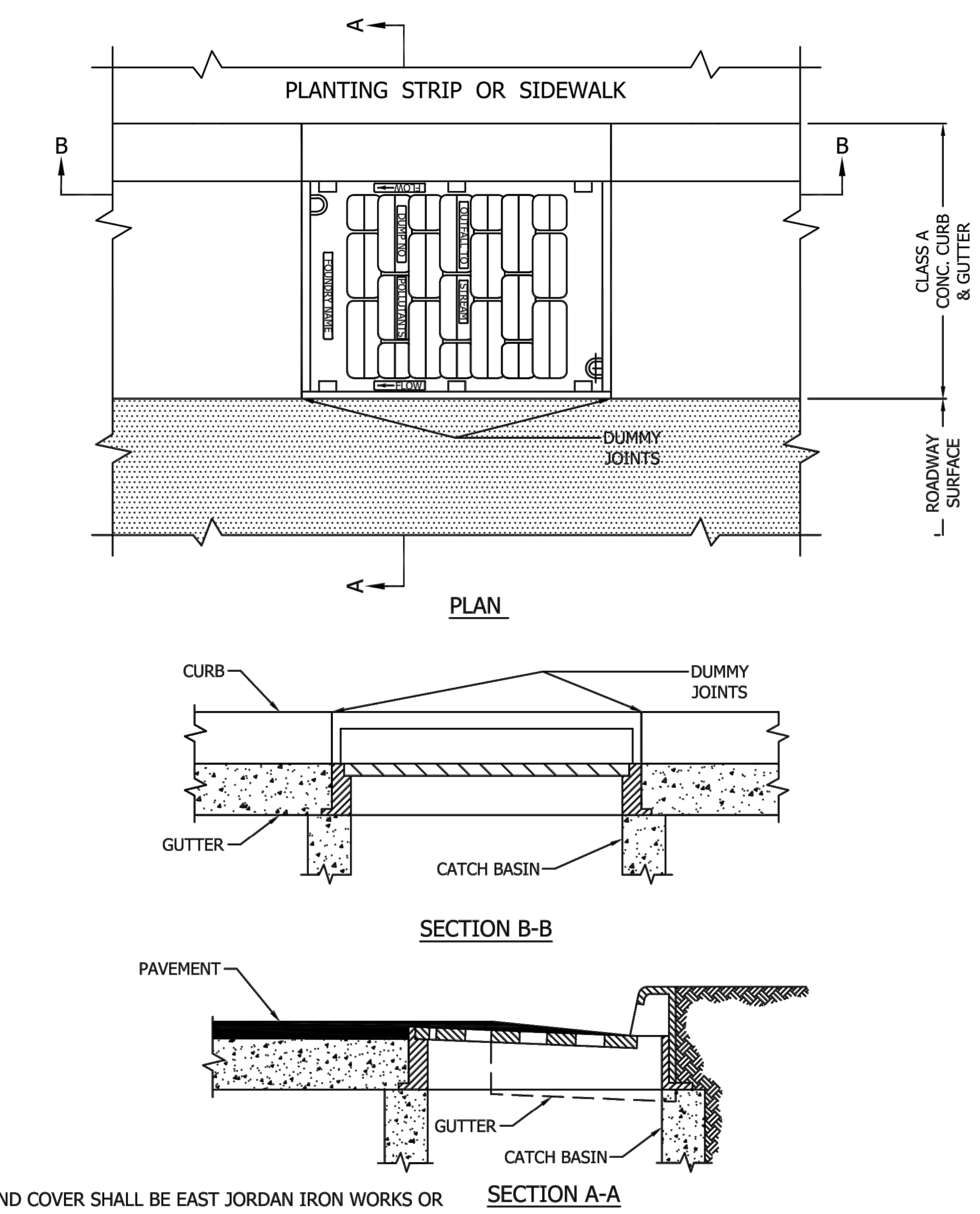


NOTES:

1. USE EAST JORDAN IRON WORKS OR EQUAL TWO BOLT LOCK CAPABILITY THAT MEETS WSDOT SPEC. MANUFACTURER SUBJECT TO APPROVAL BY CITY.
2. USE WITH TWO LOCKING BOLTS 5/8"-11 NC STAINLESS TYPE 304 STEEL SOCKET HEAD (ALLEN HEAD) BOLTS, 2" LONG. FRAMES SHALL INCLUDE THREADS AS DROP-OUT REPLACEABLE NUTS.
3. MATERIAL IS DUCTILE IRON ASTM A536 GRADE 80-55-06.
4. "OUTFALL TO STREAM DUMP NO POLLUTANTS" MAY BE LOCATED ON BORDER AREA.
5. SHALL CONFORM TO SEC. 7.05 OF THE STANDARD SPECIFICATIONS.
6. WELDING IS NOT PERMITTED.
7. EDGES SHALL HAVE 0.125" RADIUS, 0.125" CHAMBER OR COMPLETE DEBURRING.
8. USE A BI-DIRECTIONAL VANED GRATE AT ANY LOW POINT OR WHEN FLOWS COME FROM MULTIPLE DIRECTIONS.
9. NO EXPANSION MATERIAL IN THE FLOW LINE, WHERE CONCRETE COMES TO FRAME.
10. FRAME AND COVER SHALL BE H-20 LOADING RATED IF INSTALLED IN ROADWAY.
11. MUST BE MADE IN USA.

CITY OF KIRKLAND
PLAN NO. CK - D.14
VANED GRATE FOR CATCH BASIN AND INLET

LAST REVISED: 07/2021

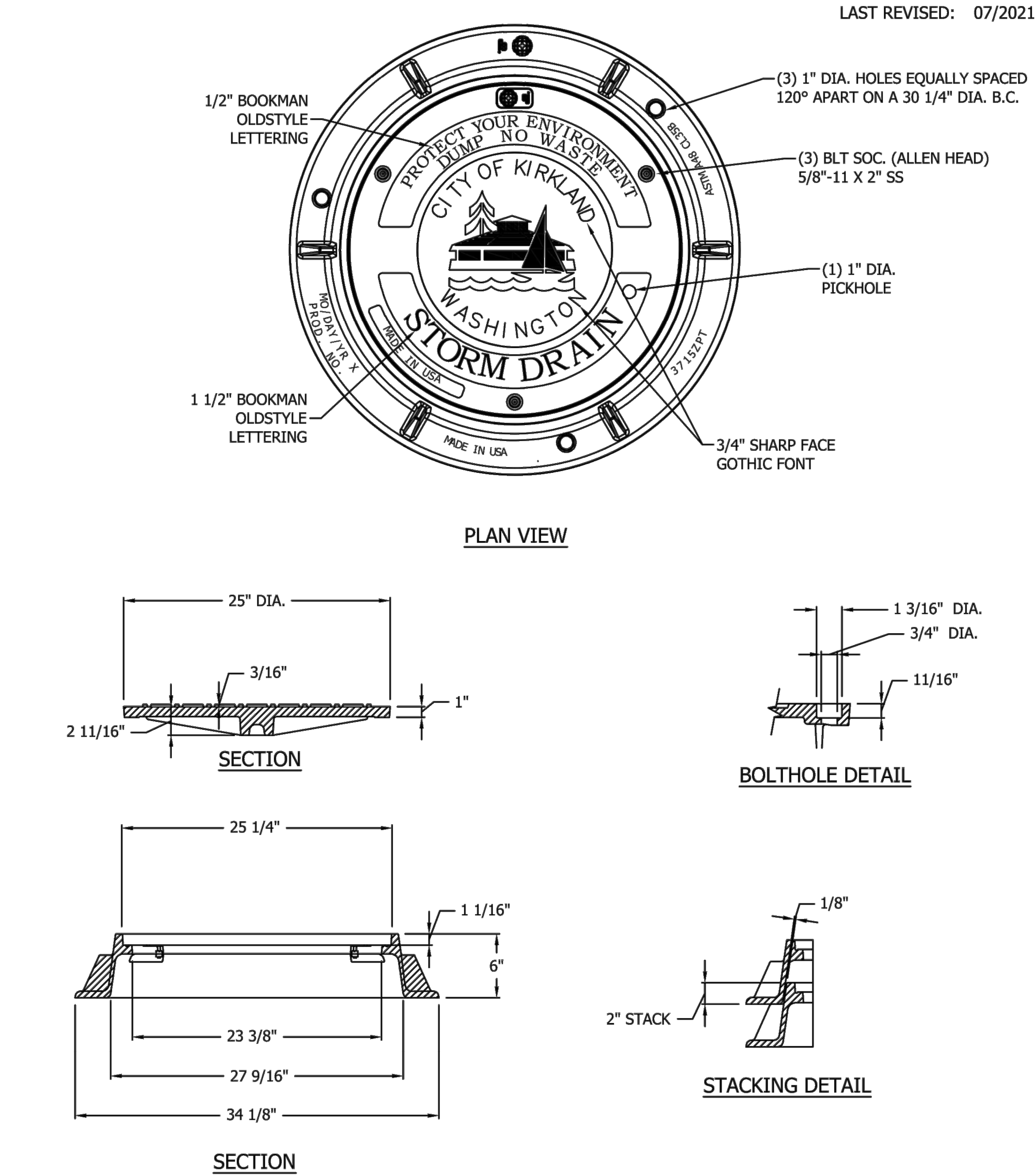


NOTES:

1. FRAME AND COVER SHALL BE EAST JORDAN IRON WORKS OR EQUAL, SUBJECT TO APPROVAL BY CITY. SEE CK-D.15.
2. PATTERN ON TOP SHALL SPECIFY FISH LOGO AND DUMP NO POLLUTANTS (NO DIAMOND PATTERN).
3. CASTING MUST BE SET 0.5" BELOW FINAL ROAD/GUTTER GRADE.
4. HOOD SHALL MATCH TOP OF CURB ELEVATION.
5. NO HORIZONTAL CROSS BAR IN THE OPENING.
6. TROWELED EDGE MUST BE IN CONTACT WITH FRAME (RATHER THAN EXPANSION JOINT).
7. MUST BE MADE IN THE USA.

CITY OF KIRKLAND
PLAN NO. CK - D.16
THROUGH-CURB INLET FRAME AND GRATE WITH VERTICAL CURB INSTALLATION

LAST REVISED: 07/2021



NOTES:

1. COVERS SHALL BE GRAY IRON, LOCKING, WITH A MINIMUM WEIGHT OF 141 LBS.
2. MINIMUM WEIGHT OF FRAME SHALL BE 134 LBS.
3. PRODUCT SUPPLIED BY EJ GROUP, INC., APPROVED EQUAL.
4. CITY OF KIRKLAND LOGO REQUIRED
5. THIS SPEC SHOULD NOT BE USED IN THE ROADWAY.
6. MUST BE MADE IN THE USA.

CITY OF KIRKLAND
PLAN NO. CK - D.18
24" MANHOLE FRAME W/LOCKING COVER AND LOGO

100% SUBMITTAL

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K. EAGLE	05-2024
DRAWN BY:	DATE
D. MURATA	07-2024
CHECKED BY:	DATE

DARREN K. M. MURATA — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 100% NOT FOR CONSTRUCTION

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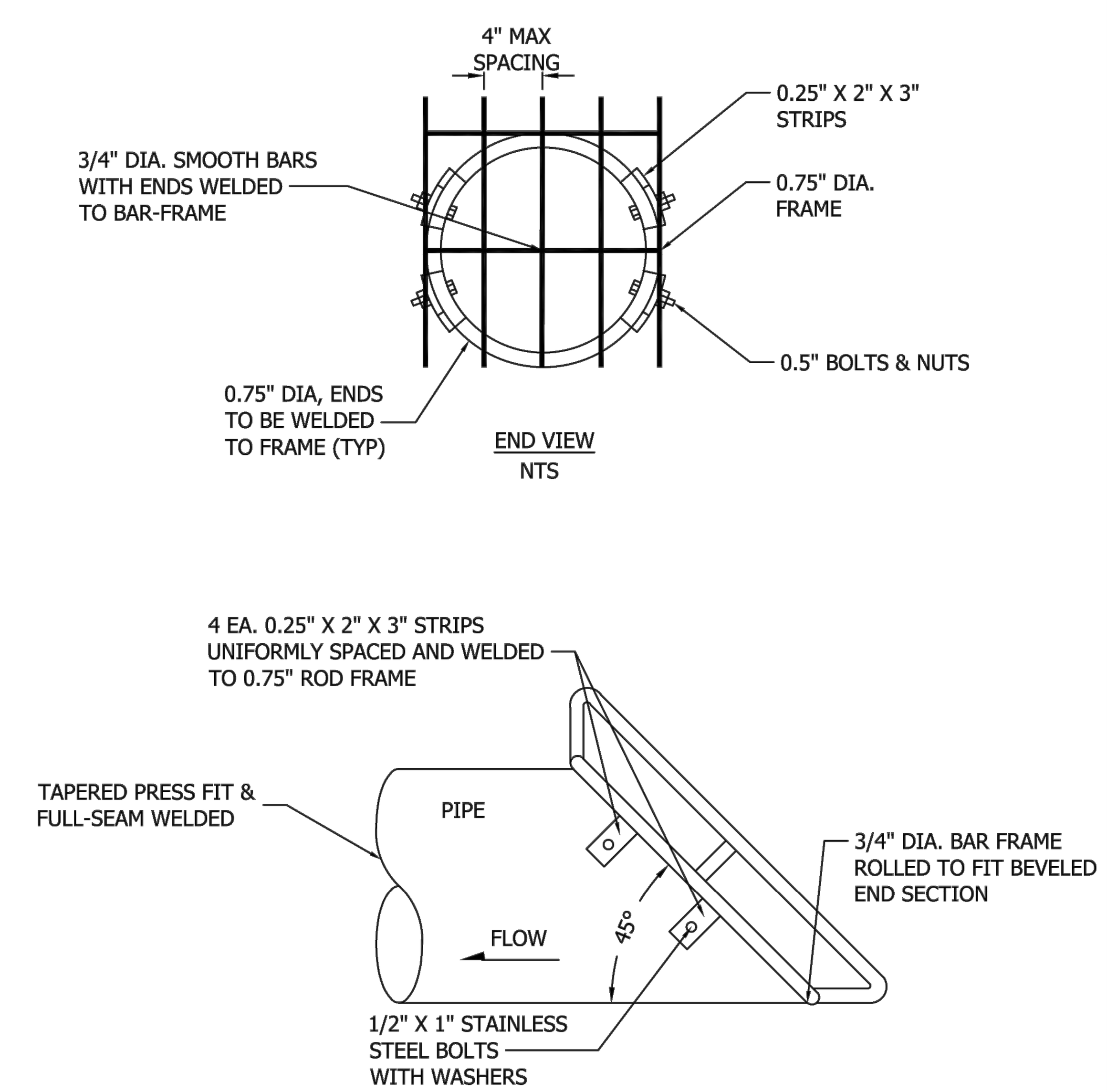
132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

KIRKLAND PRE-APPROVED PLANS - ROADWAY

July 11, 2024 - 2:52 PM - KEAGLE - \\DOWL.COM\J\PROJECTS\22\15223-01\65CAD\CIVIL\SC-CT-SP-15223-01.DWG - Layout Name: 42 KIRKLAND PRE-APPROVED PLANS - ROADWAY

LAST REVISED: 07/2021

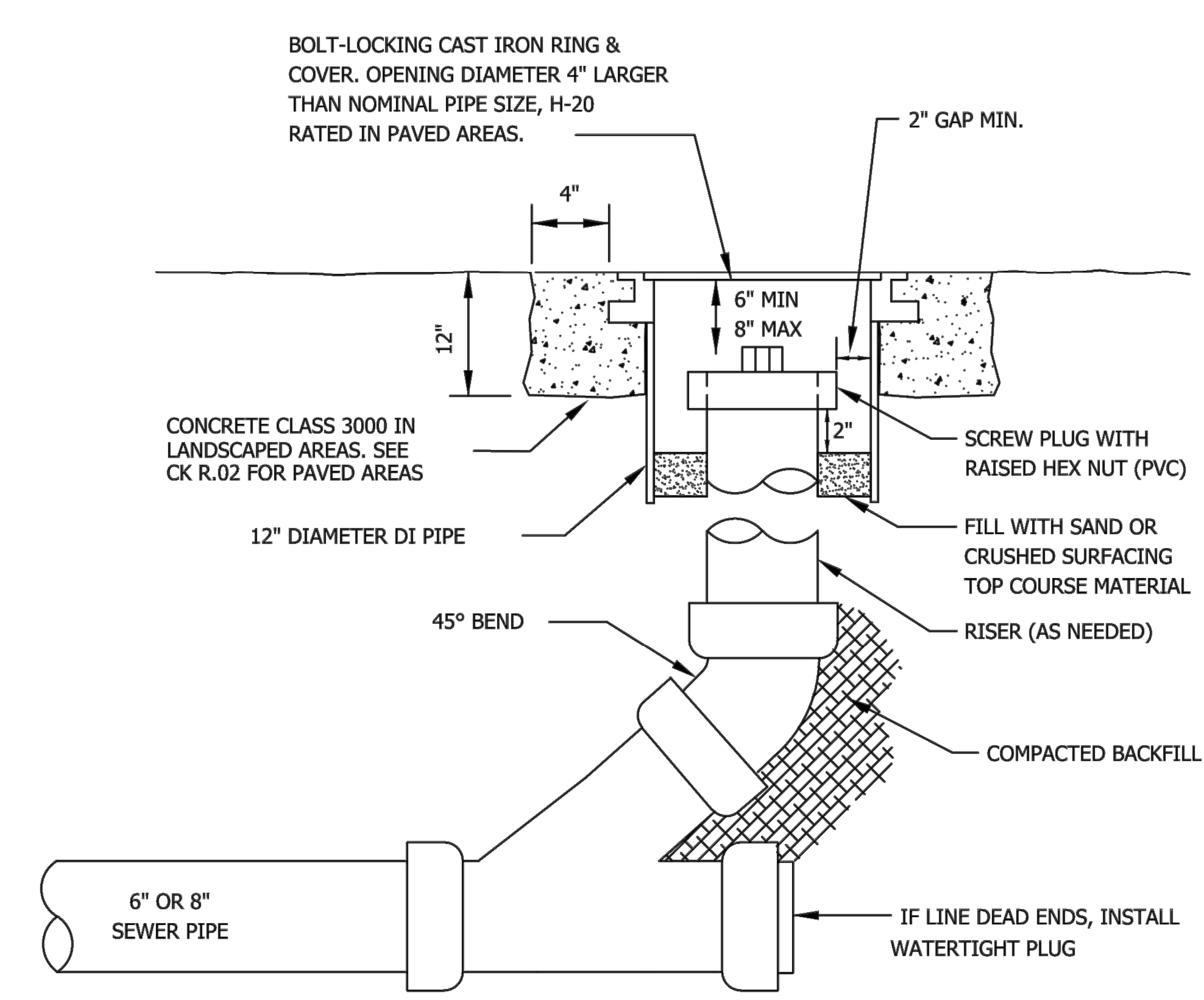


NOTES:

1. ATWOOD FABRICATION OR APPROVED EQUAL.
2. REQUIRED FOR ANY PIPE 8" OR LARGER.
3. DEBRIS BARRIER MUST BE ALL ALUMINUM.
4. DEBRIS BARRIER NOT ALLOWED ON OUTLET END.
5. ALL BOLT HARDWARE SHALL BE STAINLESS STEEL.

CITY OF KIRKLAND
PLAN NO. CK - D.27
TYPICAL DEBRIS BARRIER

LAST REVISED: 1/1/18

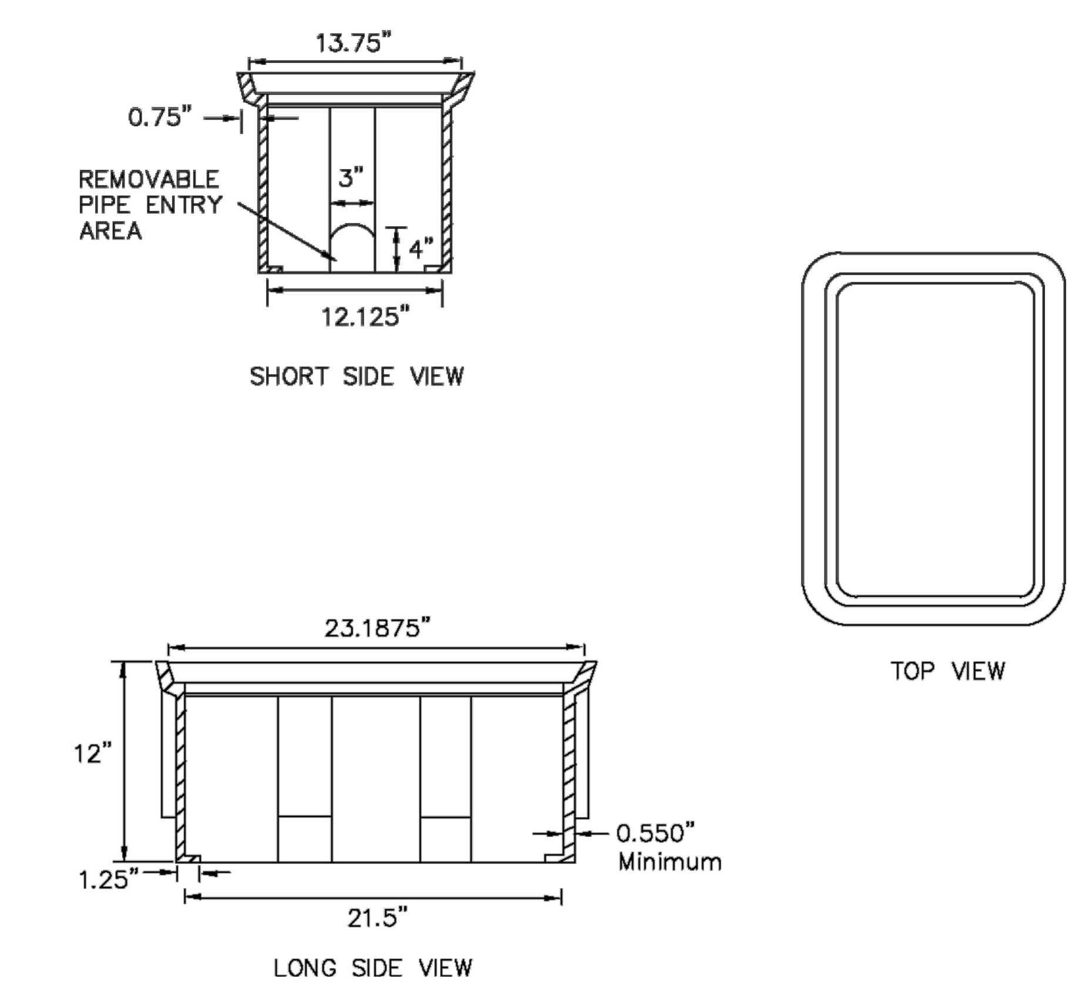


NOTES:

1. CAST IRON COVER SHALL READ "SEWER".
2. LOCKING BOLTS FOR COVER SHALL BE 5/8" -11 NC STAINLESS STEEL TYPE 304 SOCKET (ALLEN) HEAD BOLTS, 2 INCHES LONG.
3. TRANSITIONAL COUPLINGS SHALL BE FERNCO STRONG BACK RC SERIES OR APPROVED EQUAL.

CITY OF KIRKLAND
PLAN NO. CK- S.17
CLEANOUT

LAST REVISED: 02/01/10



NOTE:

MID-STATES PLASTICS, INC. PART NUMBER MSBCF 1324-12 (or equal).

The Meter Box shall be high-density polyethylene of one-piece molded construction for durability and impact strength, and with a ductile iron cover (with flip-up meter reading window) installed shall be able to bear a 20,000lb load in a wheel load; and shall have a wall thickness of no less than 0.550". The Meter Box shall be black on the exterior to prevent UV degredation, and bright white on the interior to reflect light and ease meter reading service.

CITY OF KIRKLAND
PLAN NO. CK- W.23
3/4" AND 1" WATER METER TRAVEL BOX

100% SUBMITTAL

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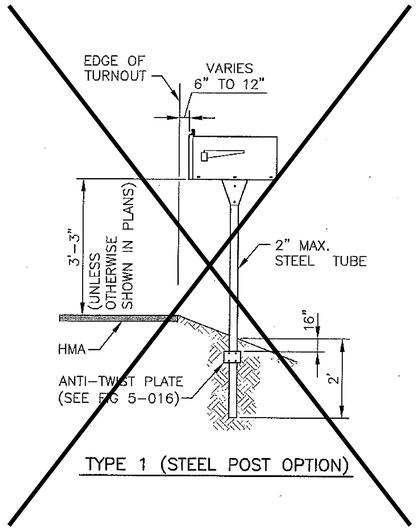
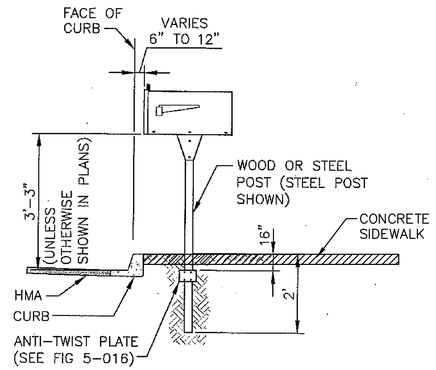
132ND AVENUE NE
PEDESTRIAN IMPROVEMENTS PROJECT

KIRKLAND PRE-APPROVED PLANS - ROADWAY

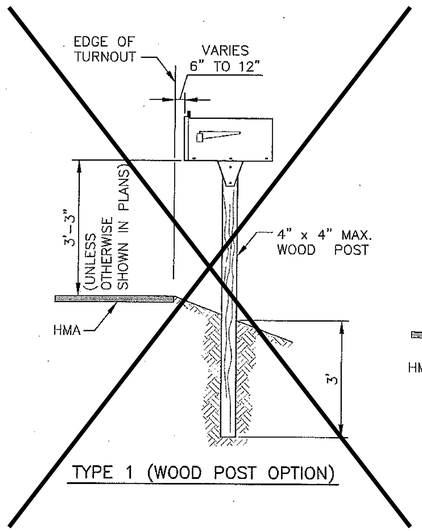
SHEET 42 OF 44 SHEETS



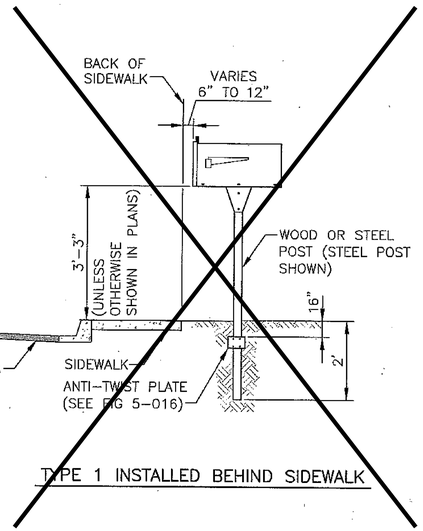
TYPE 1 (STEEL POST OPTION)



TYPE 1 INSTALLED BEHIND CURB



TYPE 1 (WOOD POST OPTION)



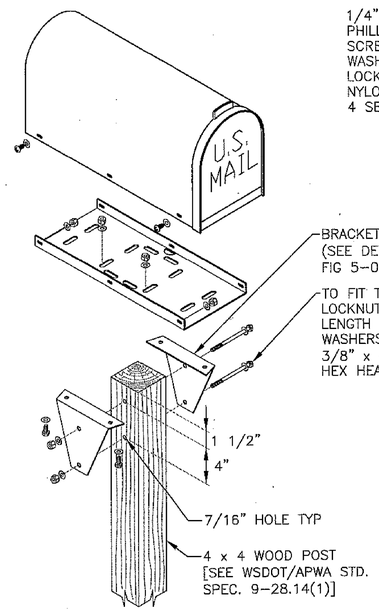
TYPE 1 INSTALLED BEHIND SIDEWALK

King County Department of Transportation
Road Services Division
2016 Design and Construction Standards

MAILBOX INSTALLATION
TYPE 1 AND 2 (1 OF 3)

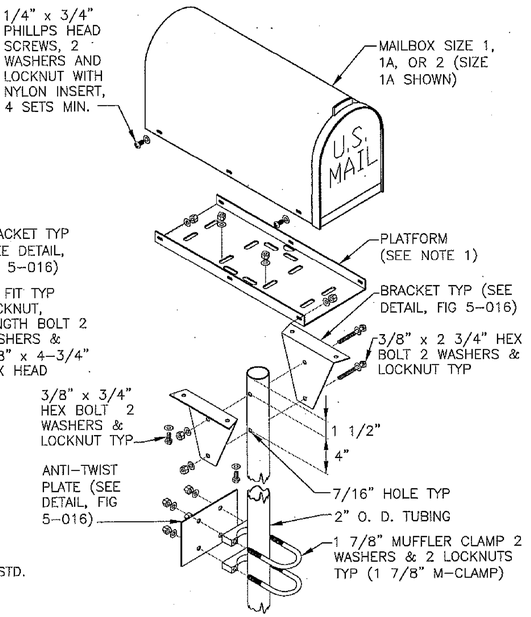
FIG. 5-014

5-28



WOOD POST ASSEMBLY DETAIL

(SEE STEEL POST ASSEMBLY DETAIL FOR DETAILS NOT SHOWN)



STEEL POST ASSEMBLY DETAIL

NOTES:

1. AN ALTERNATE PLATFORM MAY BE INSTALLED, PROVIDED THAT IT IS COMPATIBLE WITH THE BRACKET SHOWN.
2. A TYPE 2 SUPPORT IS REQUIRED FOR INSTALLING MULTIPLE MAIL BOXES ON ONE SUPPORT. NO MORE THAN 5 MAILBOXES ARE ALLOWED ON A TYPE 2 SUPPORT.
3. ATTACH A NEWSPAPER BOX TO A STEEL POST WITH TWO 1 7/8" MUFFLER CLAMPS SPACED 4" APART. FIELD DRILL 7/16 IN. HOLES IN THE NEWSPAPER BOX TO FIT. USE 2 1/2" X 1/4" LAG BOLTS TO ATTACH NEWSPAPER BOXES TO WOOD POSTS. NEWSPAPER BOXES MUST NOT EXTEND BEYOND THE FRONT OF THE MAILBOX WHEN THE MAILBOX DOOR IS CLOSED.
4. SPACING OF MAILBOX MOUNTING HOLES VARIES AMONG MANUFACTURERS. ATTACHMENT OF THE MAILBOX TO THE PLATFORM MAY REQUIRE DRILLING ADDITIONAL HOLES THROUGH THE MAILBOX TO FIT THE PLATFORM.
5. CENTER THE MAILBOX ON THE PLATFORM TO ENSURE SPACE FOR THE MAILBOX DOOR TO OPEN AND TO ALLOW SPACE FOR INSTALLING THE FASTENERS.

MAILBOX & PLATFORM DIMENSIONS

SIZE	MAILBOX DIM.			PLATFORM DIM.		
	L	W	H	L	W	H
1	19"	6 1/2"	8 1/2"	17"	6 3/8"	1"
1A	21"	8"	10 1/2"	19"	7 7/8"	1"
2	24"	11 1/2"	13 1/2"	21"	11 3/8"	1"

STEEL POST FASTENERS

BOLT SIZE	QUANTITY	WASHERS	LOCKNUTS
3/8" DIA x 2 3/4"	2	4	2
3/8" DIA x 3/4"	4	8	4
1/4" DIA x 3/4"	4	8	4
1 7/8" M-CLAMP	2	4	4

WOOD POST FASTENERS

BOLT SIZE	QUANTITY	WASHERS	LOCKNUTS
3/8" DIA x 4-3/4"	2	4	2
3/8" DIA x 3/4"	4	8	4
1/4" DIA x 3/4"	4	8	4

King County Department of Transportation
Road Services Division
2016 Design and Construction Standards

MAILBOX INSTALLATION
TYPE 1 AND 2 (2 OF 3)

FIG. 5-015

5-29

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132ND AVENUE NE
PEDESTRIAN IMPROVEMENTS PROJECT

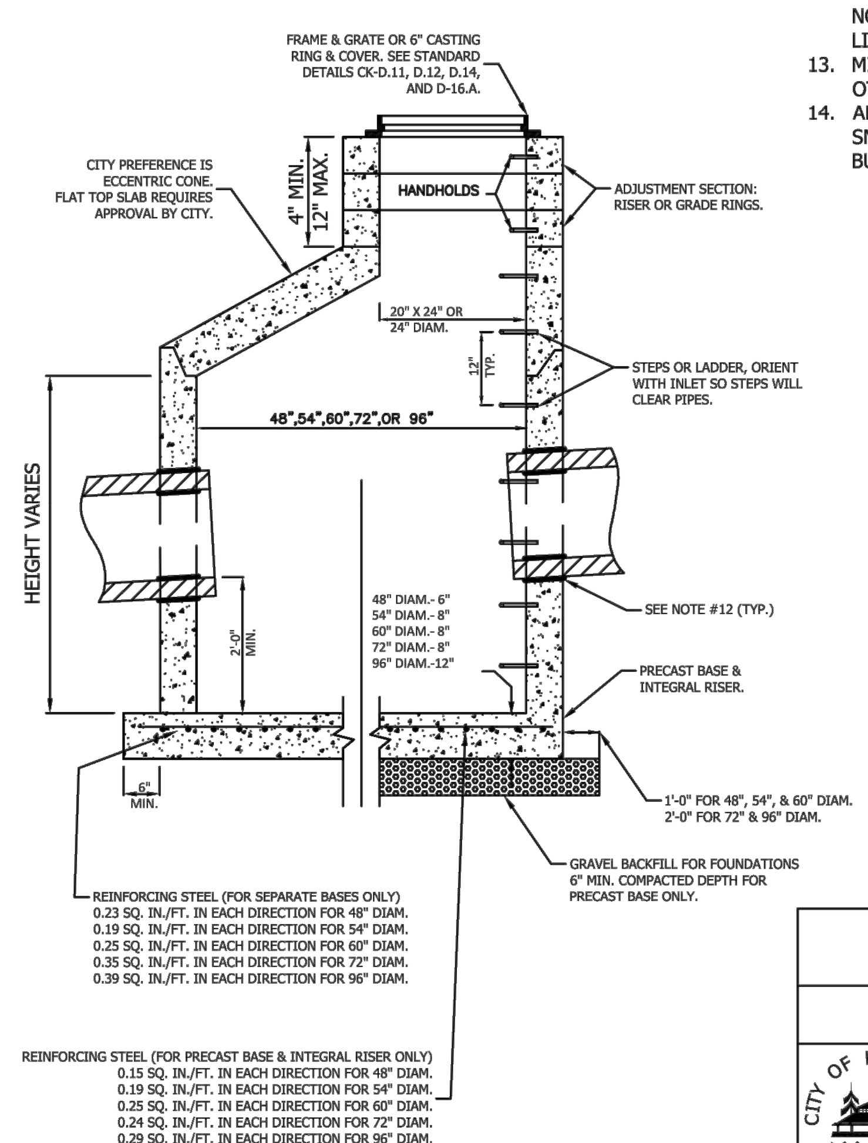
KING COUNTY STANDARD PLANS

SHEET 43 OF 44 SHEETS

LAST REVISED: 01/2023

NOTES:

1. CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 (AASHTO M199) AND ASTM C890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.
2. HANDHOLDS IN ADJUSTMENT SECTION SHALL HAVE 3" MIN. CLEARANCE. STEPS IN CATCH BASIN SHALL HAVE 6" MIN. CLEARANCE. SEE STD. DTL. NO. CK-D.12, CATCH BASIN DETAILS. HANDHOLDS SHALL BE PLACED IN ALTERNATING GRADE RINGS OR LEVELING BRICK COURSE WITH A MIN. OF ONE HANDHOLD BETWEEN THE LAST STEP AND TOP OF THE FINISHED GRADE.
3. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000. ALL PRECAST CONCRETE SHALL BE CLASS 4000.
4. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE WALL THICKNESS OF 2" MIN. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT. PIPES SHALL BE INSTALLED ONLY IN FACTORY KNOCKOUTS UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. CATCH BASIN FRAMES AND GRATES OR COVERS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
6. ALL BASE REINFORCING STEEL SHALL HAVE A MIN. YIELD STRENGTH OF 60,000 PSI AND BE PLACED IN THE UPPER HALF OF THE BASE WITH 1" MIN. CLEARANCE.
7. MIN. SOIL BEARING VALUE SHALL EQUAL 3,300 POUNDS PER SQUARE FOOT.
8. FOR DETAILS SHOWING LADDER, STEPS, HANDRAILS AND TOP SLABS, SEE STD. DTLS. NO. CK-D.12 AND CK-S.14.
9. ALL MANHOLE JOINTS SHALL USE A CONFINED RUBBER GASKET AND GROUTED (INSIDE AND OUT) TO MEET ASTM C-443 SPECIFICATIONS.
10. ROUND SOLID LOCKING LIDS REQUIRED WHENEVER CATCH BASIN DOES NOT COLLECT SURFACE WATER, OR WHEN LOCATED IN SIDEWALK AND PLANTER AREAS. SEE CK-D.18, CK-D.18A, AND CK-D.18B FOR REFERENCE.
11. ROUND CONCRETE RISERS ARE REQUIRED FOR ROUND SOLID LOCKING LIDS.
12. ALL NEW PIPES SHALL BE INSTALLED WITH EITHER A KOR-N-SEAL BOOT, OR SAND COLLARS AND A NON-SHRINK GROUT. JETSET OR SPEED CRETE RED LINE GROUT NOT ALLOWED.
13. MINIMUM 10' FROM ADJACENT TREES, UNLESS OTHERWISE APPROVED.
14. ALL RISERS WILL BE WET SET IN GROUT, AND SMOOTHED INSIDE AND OUT PRIOR TO BEING BURIED.



ACCEPTABLE PIPE SIZES:

Basin Type	6"	8"	12"	15"	18"	24"	30"	36"	48"
Type II-48" CB	X	X	X	X	X	X	X		
Type II-54" CB	X	X	X	X	X	X	X	X	
Type II-60" CB	X	X	X	X	X	X	X	X	
Type II-72" CB	X	X	X	X	X	X	X	X	X
Type II-96" CB	X	X	X	X	X	X	X	X	X

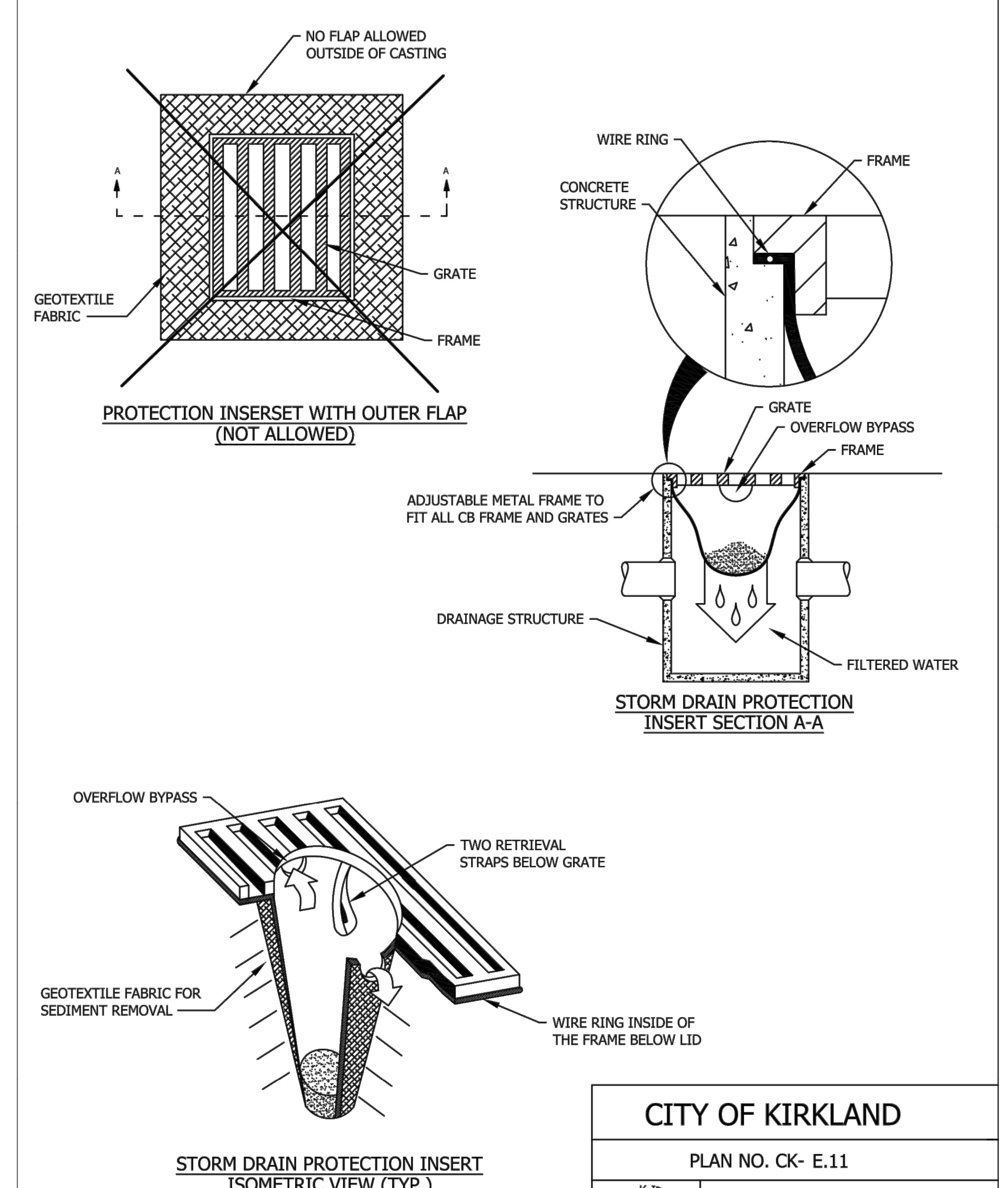
(Column group heading: Pipe Size)

CITY OF KIRKLAND

PLAN NO. CK - D.09

CATCH BASIN TYPE 2 48",54",60",72",96"

LAST REVISED: 01/2020



CITY OF KIRKLAND

PLAN NO. CK- E.11

STORM DRAIN PROTECTION INSERT

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132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

KIRKLAND PRE-APPROVED PLANS - ROADWAY

SHEET 44 OF 44 SHEETS

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APPENDIX B: PERMITS

City of Kirkland

APPENDIX C:
GEOTECHNICAL REPORT

City of Kirkland

HWA GeoSciences Inc.
DBE/MWBE

March 7, 2024
HWA Project No. 2023-034-21

DOWL, Inc.
8410 154th Avenue NE
Suite 120
Redmond, Washington 98052

Attention: Jason Shrope, P.E.

Subject: **Geotechnical Engineering Letter Report**
132nd Ave NE Pedestrian Improvements Project
Kirkland, Washington

Mr. Shrope,

This letter report summarizes the results of the geotechnical engineering investigation performed by HWA GeoSciences Inc. (HWA) for the proposed 132nd Avenue NE Pedestrian Improvements Project. As requested, our investigation was focused on improvements near the intersection of NE 113th Street and 132nd Avenue NE in Kirkland, Washington. In this area a retaining wall will be required to accommodate grade changes for the proposed pedestrian improvements.

The approximate location of the project site is shown on the Site and Vicinity Map, Figure 1, and on the Site and Exploration Plan, Figure 2. Our field work included logging the drilling of two boreholes to evaluate the soil and groundwater conditions and conducting laboratory tests on select soil samples to determine relevant engineering properties of the subsurface soils.

PROJECT DESCRIPTION

It is our understanding that the proposed pedestrian improvements will include constructing about 165 lineal feet of new sidewalk on the west side of 132nd Avenue NE just to the north of the intersection with NE 113th Street. In this area there is an existing slope extending to the roadway shoulder, and a retaining wall will be required to accommodate the proposed grade changes to be able to construct the sidewalk.

The existing slope is about 8 feet high, generally vegetated with thick grass, and is standing at an inclination of about 1.3Horizontal (H):1Vertical (V). During our site visit to complete the subsurface explorations in July of 2023 we did not observe signs of slope instability such as surface sloughing or tension cracks. To the north of the slope and proposed improvements there is an existing rockery wall that was likely constructed to facilitate sidewalk construction in this

area. The existing rockery extends to about 8 feet in height and we understand there is a desire to leave the existing rockery in place. Generally, the exposed rock faces appear to be in fair condition with a limited amount of fracturing and the boulders appear to generally be appropriately sized for the rockery height.

FIELD AND LABORATORY TESTING

GEOTECHNICAL BORINGS

HWA logged the drilling of two machine-drilled borings, designated BH-1 and BH-2, to assess subsurface conditions. The borings were drilled on the top of the slope and the approximate locations are shown on the Site and Exploration Plan, Figure 2. The borings were drilled by Geologic Drill Partners, Inc. of Fall City, Washington on July 14, 2023, under subcontract to HWA, using a Bobcat-mounted, limited access, track drill rig equipped with hollow-stem augers. Borehole depths varied from approximately 20.5 to 26.5 feet below ground surface.

In each boring, Standard Penetration Test (SPT) sampling was performed using a 2-inch outside diameter split-spoon sampler driven by a 140-pound hammer raised using a rope and cathead system. During the SPT, samples were obtained by driving the sampler 18 inches into the soil with the hammer free-falling 30 inches. The numbers of blows required for each 6 inches of penetration were recorded. The Standard Penetration Resistance ("N-value") of the soil is calculated as the number of blows required for the final 12 inches of penetration. This resistance, or N-value, provides an indication of relative density of granular soils and relative consistency of cohesive soils; both indicators of soil strength.

A geotechnical engineer from HWA logged the explorations and recorded all pertinent information. Soil samples obtained from the boreholes were classified in the field and representative portions were sealed in plastic bags. Pertinent information including soil sample depths, stratigraphy, soil engineering characteristics, and groundwater occurrence was recorded. These soil samples were then taken to our Bothell, Washington, laboratory for further examination and testing.

The stratigraphic contacts shown on the individual exploration logs represent the approximate boundaries between soil types; actual transitions may be more gradual. The soil and groundwater conditions depicted are only for the specific date and location reported and, therefore, are not necessarily representative of other locations and times. A legend of the terms and symbols used on the exploration logs is presented in Appendix A, Figure A-1. Summary logs of the borehole explorations are presented in Figures A-2 and A-3.

GEOTECHNICAL LABORATORY TESTING

Laboratory tests were conducted on selected samples obtained from our explorations to characterize relevant engineering and index parameters of the soils encountered at the site. The

tests included visual classifications, determination of natural moisture contents and grain size distribution analysis. All tests were conducted in the HWA laboratory in general accordance with appropriate American Society for Testing and Materials (ASTM) standards. A brief description of laboratory test methodology is presented in Appendix B. The test results are presented in Appendix B and displayed on the boring logs in Appendix A, as appropriate.

SITE CONDITIONS

General Geologic Conditions

The project alignment is located within the Puget Lowland. The Puget Lowland has repeatedly been occupied by a portion of the continental glaciers that developed during the ice ages of the Quaternary period. During at least four periods, portions of the ice sheet advanced south from British Columbia into the lowlands of Western Washington. The southern extent of these glacial advances was near Olympia, Washington. Each major advance included numerous local advances and retreats, and each advance and retreat resulted in its own sequence of erosion and deposition of glacial lacustrine, outwash, till, and drift deposits. Between and following these glacial advances, sediments from the Olympic and Cascade Mountains accumulated in the Puget Lowland. As the most recent glacier retreated, it uncovered a sculpted landscape of elongated, north-south trending hills and valleys between the Cascade and Olympic Mountain ranges, composed of a complex sequence of glacial and interglacial deposits.

Specific geologic information for the project area was obtained from the *Geologic Map of the Kirkland Quadrangle* (Minard, 1983). The geologic map indicates that the project area is mapped as glacial till from the Fraser Glaciation. The till is characterized as an unsorted mixture of clay, silt, sand, pebbles, cobbles, and boulders. The material was deposited directly by the ice as it advanced over and eroded older formations and sediments. Glacial till is typically over consolidated due to compaction from the overlying ice sheet. The hard lodgment till is often referred to locally as “hardpan”.

Subsurface Conditions

We completed two borings on the existing slope above the proposed sidewalk. The borings we drilled about 8 feet above the existing road grade. The following soil units were observed in the explorations. Each major soil unit is described below, with materials interpreted as being youngest in origin and nearest to the surface described first.

Fill/Disturbed Native Soils – The upper approximately 7 feet of soils in both borings consisted of medium dense, silty sand with trace organics/rootlets. The geometry of the slopes on both sides of 132nd Avenue NE appears to be consistent with a cut made to facilitate road construction/grade and development of the area.

Weathered Glacial Till – Weathered glacial till was encountered below the fill/disturbed native soils in both borings. The weathered till consists of about 2.5 feet of very stiff, sandy silt with trace amounts of gravel, transiting to medium dense to dense, silty sand with variable amounts of gravel. The deposit is derived from the underlying non-weathered till soils but has undergone some material softening and chemical decomposition due to weathering.

Glacial Till – Glacial till soils were encountered in both borings below the weathered glacial till. The glacial till generally consists of dense to very dense, silty sand with gravel. A layer of hard, very sandy silt was encountered within the glacial till starting at a depth of about 24 feet in boring BH-2. Glacial till extended to the maximum depth explored in both borings. Although not observed in our explorations, cobbles and boulders are common in glacial till deposits and should be anticipated to be encountered during construction.

GROUNDWATER

Groundwater seepage was observed during drilling in boring BH-2 at a depth of about 25 feet. No groundwater seepage was encountered in boring BH-1 to the maximum depth explored of about 20.5 feet.

Our explorations were completed during the dry summer months. Due to the low permeability of the underlying glacial till soils, it is common for seasonal perched groundwater to accumulate above the contact of the weathered and non-weathered glacial till deposits. In addition, perched water is often encountered within sand lenses within the glacial till material, especially during periods of extended wet weather.

Prospective contractors should be prepared to encounter and manage water intrusion emanating from perched zones above the glacial till, and potentially from water-bearing sand lenses within the glacial till material. We expect localized pump and sump systems will likely be the most effective dewatering method.

CONCLUSIONS AND RECOMMENDATIONS

GENERAL

The subsurface soil conditions along slope consist of locally derived fill/disturbed native soils over very stiff/medium dense weathered glacial till, over dense to very dense glacial till. These soils are conducive to construction of the proposed improvements. The soils encountered will provide adequate support for the proposed improvements including a retaining wall and sidewalk.

The high fines content of the glacial till and fill/disturbed native soils is such that earthwork activities should be completed during the dry summer months, when feasible. In periods of wet weather, the fill/disturbed native and glacial till soils will deteriorate quickly when exposed to water and will likely become unworkable and could potentially slough.

Based on the subsurface conditions encountered and existing slope geometry, a gravity block retaining wall up to about 8 feet in height will likely be the most economical wall type. Temporary cut slopes during wall construction should be protected from erosion, and the size of earthwork equipment may need to be limited due to the overhead powerlines. Specific recommendations related to seismic considerations, retaining wall design, and earthwork are provided below.

SEISMIC DESIGN CONSIDERATIONS

Seismic Design Parameters

Earthquake loading for the project was developed in accordance with the General Procedure provided in Section 3.4 of the *AASHTO Guide Specifications for LRFD Seismic Bridge Design*, 2nd Edition, 2011, and the Washington State Department of Transportation (WSDOT) amendments to the AASHTO *Guide Specifications* provided in the Bridge Design Manual (WSDOT, 2023). For seismic analysis, the Site Class is required to be established and is determined based on the average soil properties in the upper 100 feet below the ground surface. Based on the subsurface conditions and our understanding of site geology, it is our opinion that the site is underlain by soils that are consistent with Site Class C.

The design parameters for the design level event (equal to a return period of 975 years) were obtained from the USGS Uniform Hazard Tool website using the U.S. 2014 Dynamic Conterminous edition (v4.2.0), which provides the probabilistic seismic hazard parameters from the *2014 Updates to the National Hazard Maps* (Peterson, et al., 2014). Site coefficients were developed following the WSDOT Bridge Design Manual that adopts the site coefficients provided in ASCE 7-16. Table 1 presents the design coefficients to use assuming Site Class C for the site.

Table 1. AASHTO Guide Specifications calculated by USGS Seismic Hazard Map

Site Class	Peak Horizontal Bedrock Acceleration PBA, (g)	Spectral Bedrock Acceleration at 0.2 sec S_S, (g)	Spectral Bedrock Acceleration at 1.0 sec S_1, (g)	Site Coefficients			Peak Horizontal Acceleration PGA (A_S), (g)
				F_{pga}	F_a	F_v	
C	0.398	0.919	0.246	1.200	1.200	1.500	0.478

Liquefaction Considerations

Liquefaction is a temporary loss of soil shear strength due to earthquake shaking. Loose, saturated cohesionless soils are highly susceptible to earthquake-induced liquefaction. However, research has shown that certain silts and low-plasticity clays are also susceptible. Primary factors controlling the development of liquefaction include the intensity and duration of strong ground motions, the characteristics of subsurface soils, in-situ stress conditions and the depth to groundwater.

Groundwater seepage was only observed in boring BH-2 at about 25 feet within glacially consolidated soils. Based on mapped geology and results of our subsurface explorations, soil liquefaction is not anticipated during a seismic event and is not considered a design consideration.

RETAINING WALL STRUCTURES

We understand that a retaining wall will be required to incorporate grade changes for the proposed sidewalk along the northwest side of 132nd Avenue NE between NE 113th Street and the existing sidewalk. Based on existing topography we anticipate that the required wall height will be about 8 feet tall, and that grades above the wall will be relatively level.

We anticipate that a gravity block wall constructed with large blocks (such as Lock Blocks) will be the economical wall type and have the least amount of construction impacts on the adjacent private property. A structural earth wall (SEW) is also feasible, however temporary excavation to install the geogrid reinforcement will require a larger temporary excavation that would likely extend further outside of the City of Kirkland Right-of-Way. For estimating and wall feasibility considerations, we recommend assuming a SEW will require grid enforcement lengths on the order 0.8H to 1H extending beyond the wall face, where H is the wall height. Wall design recommendations and parameters for a gravity block or SEW wall are discussed below.

Wall Design Parameters

We assume that a gravity block or SEW wall will consist of a proprietary wall system that the wall supplier will design for internal stability. The wall should be designed in accordance with the most current version of the *AASHTO LRFD Bridge Design Manual* and Section 6.13 of the WSDOT *Standard Specifications* (WSDOT, 2024). We recommend that the wall be designed using the parameters presented in Table 2. We understand that the design for the wall will be performed using LRFD methods. Appropriate AASHTO resistance factors should be used for design of the retaining wall.

For the Extreme Event I Limit State, the wall should be designed for a horizontal seismic acceleration coefficient K_h of one-half the peak ground acceleration, or 0.239g, and vertical seismic coefficient Kv of 0.0g (assuming the wall is free to move during a seismic event). Extreme Event I Limit State is defined in the AASHTO Standard Specifications as a safety check involving an extreme load event resulting from an earthquake in combination with the dead load and a fraction of the live loads.

Table 2. Recommended Gravity Block/SEW Wall Design Parameters

Soil Properties	Reinforced soil	Retained Soil	Foundation Soil
Unit Weight (pcf)	135	135	135
Friction Angle (deg)	36	34	36
Cohesion (psf)	0	0	0
		Strength Limit State (EP+LL)	**Extreme Limit State (EP+EQ)**
Ultimate Bearing Resistance (ksf)		5.0	5.0
Horizontal Seismic Acceleration Coefficient (k_h) (g)		N/A	0.239

To satisfy global wall stability requirements we recommend that the wall be embedded at least 1 foot below existing grades. This minimum embedment depth assumes the finish grade in front of the wall is relatively flat, up to about 4H:1V. It is important that the wall be designed per specific toe- and back-slope geometry. An unfactored coefficient of friction of 0.5 times the effective stress at the base of the wall can be used for sliding resistance.

Subgrade Preparation

Subgrade preparation is important to limit differential settlement of walls and maintain stability. All organic material should be removed from beneath the entire footprint of walls. Based on our geotechnical borings we anticipate that the base of the wall will be founded on the weathered or non-disturbed glacial till soils. We anticipate that these native soils, where not saturated or disturbed, will provide adequate bearing and sliding resistance for the proposed wall.

For subgrade preparation, the soils should be excavated a minimum of 6 inches below the base of the wall foundation using a smooth (toothless) bucket. The exposed subgrade should be inspected by the geotechnical engineer, or their representative, and any loose or unsuitable soils should be over-excavated. Over-excavation should extend outside of the footprint of the wall foundation a distance equal to the depth of the excavation.

Once the subgrade has been approved, the wall should be founded on a leveling pad consisting of a minimum of 6 inches of properly compacted Crushed Surfacing Top Course (CSTC) meeting the requirements of Section 9-03.9(3) of the WSDOT *Standard Specifications* (WSDOT, 2024) and compacted to at least 95% of the laboratory maximum dry density as determined by ASTM D 1557 (modified Proctor). The leveling pad should be graded to establish a proper wall batter.

Wall Backfill

Wall backfill materials should consist of Gravel Backfill for Walls, as described in Section 9-03.12(2) of the WSDOT *Standard Specifications* (WSDOT, 2024) and should be compacted to at least 95% of the maximum dry density as determined by ASTM D 1557 (modified Proctor). The wall backfill should be placed and compacted in layers as each row of blocks and geogrid, if applicable, is placed.

The Contractor should consider the weight of construction equipment operating within the fill zone behind the wall. For compaction, materials within about 3 feet of the wall face should be compacted with lighter equipment to limit the loading on the back of the wall.

Wall Drainage

Drainage should be provided behind the wall and should consist of a 4- to 6-inch diameter, perforated, rigid plastic pipe, bedded and backfilled with Gravel Backfill for Drains, as specified in Section 9-03.12(4) of the WSDOT *Standard Specifications* (WSDOT, 2024). The drain rock should surround the drainpipe by at least 12 inches. The pipes should slope to drain to a suitable outlet.

Wall Settlement

If the wall subgrade is prepared as recommended above, the total wall settlement is not expected to exceed 1 inch. For the Service Limit State, the wall should be designed to accommodate differential settlement of up to ¾ inch per 100 feet of wall length.

TEMPORARY EXCAVATIONS

Temporary excavation of the existing slope will be required to install a gravity block or SEW wall. Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. In accordance with Part N of Washington Administrative Code (WAC) 296-155, latest revisions, all temporary cuts more than 4 feet in height must be either sloped or shored.

Based on the WAC guidelines and our geotechnical explorations, the on-site existing fill/disturbed native and weathered native soils classify as Type B soils. These materials should be sloped no steeper than 1.H:1V. The underlying undisturbed glacially consolidated soils are classified as Type A soils. Temporary unsupported excavations within these soils may be sloped no steeper than 3/4H:1V.

Shallow groundwater seepage was not observed during our explorations; however, it is possible that seepage could be encountered at shallow depths particularly during periods of wet weather. These recommended maximum slopes are applicable to temporary excavations above the water table only; flatter side slopes would be required for excavations where groundwater seepage is encountered.

The contractor should monitor the stability of temporary cut slopes and adjust the construction schedule and slope inclination accordingly. The contractor should be responsible for control of ground and surface water and should employ sloping, slope protection, ditching, sumps, dewatering, and other measures, as necessary, to prevent sloughing of soils.

CONDITIONS AND LIMITATIONS

We have prepared this report for DOWL and the City of Kirkland for use in design of this project. The conclusions and interpretations presented in this report should not be construed as our warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances.

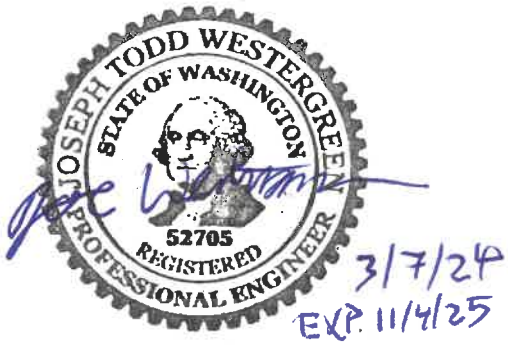
Inconsistent conditions can occur between explorations and may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, HWA should be notified for review of the recommendations of this report, and revision of such if necessary.

Within the limitations of scope, schedule and budget, HWA attempted to execute these services in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology in the area at the time the report was prepared. No warranty, express or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous substances in the soil, surface water, or groundwater at this site.

We appreciate the opportunity to provide geotechnical engineering services on this project. If you have any questions regarding this report or require additional information or services, please contact the undersigned at your convenience.

Sincerely,

HWA GEOSCIENCES INC.



Joe Westergreen, P.E.
Geotechnical Engineer

Bryan Hawkins, P.E.
Senior Geotechnical Engineer

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Figure 2	Site and Exploration Plan

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Figures A-2 & A-3	Logs of Borings BH-1 and BH-2
Appendix B:	**Laboratory Testing**
Figure B-1	Summary of Material Properties
Figures B-2 & B-3	Particle-Size Analysis of Soils

REFERENCES

American Association of State Highway and Transportation Officials (AASHTO), 2011, *Guide Specifications for LRFD Seismic Bridge Design*, 2nd Edition, Washington D.C.

American Associate of State Highway and Transportation Officials (AASHTO), 2020, *LRFD Bridge Design Specifications*, Ninth Edition, Washington D.C.

Minard, J.P., 1983, *Geologic Map of the Kirkland Quadrangle, Washington*, U.S. Geological Survey Misc. Field Studies Map MF-1543.

Petersen, Mark D.; Moschetti, Morgan P.; Powers, Peter M.; Mueller, Charles S., Haller, Kathleen M.; Frankel, Arthur D., Zeng, Yuehua; Rezaeian, Sanaz; Harmsen, Stephen C.; Boyd, Oliver S.; Field, Ned; Chen, Rui, Rukstales, Kenneth S.; Luco, Nico; Wheeler, Russell L.; Williams, Robert A. and Olsen, Anna H., *Documentation for the 2014 Update of the United States National Seismic Hazard Maps*, Open-File Report 2014-1091.

WSDOT, 2023, *Bridge Design Manual LRFD*, Washington State Department of Transportation, dated September 2023.

WSDOT, 2024, *Standard Specifications for Road, Bridge, and Municipal Construction,* 2024 Washington State Department of Transportation. M 41-10.

APPENDIX A

FIELD EXPLORATIONS

RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N-VALUE

COHESIONLESS SOILS			COHESIVE SOILS		
Density	N (blows/ft)	Approximate Relative Density(%)	Consistency	N (blows/ft)	Approximate Undrained Shear Strength (psf)
Very Loose	0 to 4	0 - 15	Very Soft	0 to 2	<250
Loose	4 to 10	15 - 35	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	35 - 65	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	65 - 85	Stiff	8 to 15	1000 - 2000
Very Dense	over 50	85 - 100	Very Stiff	15 to 30	2000 - 4000
			Hard	over 30	>4000

USCS SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP DESCRIPTIONS	
Coarse Grained Soils	Gravel and Gravelly Soils	Clean Gravel (little or no fines)	GW	Well-graded GRAVEL
			GP	Poorly-graded GRAVEL
	More than 50% of Coarse Fraction Retained on No. 4 Sieve	Gravel with Fines (appreciable amount of fines)	GM	Silty GRAVEL
			GC	Clayey GRAVEL
More than 50% Retained on No. 200 Sieve Size	Sand and Sandy Soils	Clean Sand (little or no fines)	SW	Well-graded SAND
			SP	Poorly-graded SAND
	50% or More of Coarse Fraction Passing No. 4 Sieve	Sand with Fines (appreciable amount of fines)	SM	Silty SAND
			SC	Clayey SAND
Fine Grained Soils	Silt and Clay	Liquid Limit Less than 50%	ML	SILT
			CL	Lean CLAY
			OL	Organic SILT/Organic CLAY
50% or More Passing No. 200 Sieve Size	Silt and Clay	Liquid Limit 50% or More	MH	Elastic SILT
			CH	Fat CLAY
			OH	Organic SILT/Organic CLAY
Highly Organic Soils			PT	PEAT

TEST SYMBOLS

%F	Percent Fines
AL	Atterberg Limits: PL = Plastic Limit, LL = Liquid Limit
CBR	California Bearing Ratio
CN	Consolidation
DD	Dry Density (pcf)
DS	Direct Shear
GS	Grain Size Distribution
K	Permeability
MD	Moisture/Density Relationship (Proctor)
MR	Resilient Modulus
OC	Organic Content
pH	pH of Soils
PID	Photoionization Device Reading
PP	Pocket Penetrometer (Approx. Comp. Strength, tsf)
Res.	Resistivity
SG	Specific Gravity
CD	Consolidated Drained Triaxial
CU	Consolidated Undrained Triaxial
UU	Unconsolidated Undrained Triaxial
TV	Torvane (Approx. Shear Strength, tsf)
UC	Unconfined Compression

SAMPLE TYPE SYMBOLS

- 2.0" OD Split Spoon (SPT) (140 lb. hammer with 30 in. drop)
- Shelby Tube
- Non-standard Penetration Test (3.0" OD Split Spoon with Brass Rings)
- Small Bag Sample
- Large Bag (Bulk) Sample
- Core Run
- 3-1/4" OD Split Spoon

GROUNDWATER SYMBOLS

- Groundwater Level (measured at time of drilling)
- Groundwater Level (measured in well or open hole after water level stabilized)

COMPONENT DEFINITIONS

COMPONENT	SIZE RANGE
Boulders	Larger than 12 in
Cobbles	3 in to 12 in
Gravel	3 in to No 4 (4.5mm)
Coarse gravel	3 in to 3/4 in
Fine gravel	3/4 in to No 4 (4.5mm)
Sand	No. 4 (4.5 mm) to No. 200 (0.074 mm)
Coarse sand	No. 4 (4.5 mm) to No. 10 (2.0 mm)
Medium sand	No. 10 (2.0 mm) to No. 40 (0.42 mm)
Fine sand	No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and Clay	Smaller than No. 200 (0.074mm)

COMPONENT PROPORTIONS

PROPORTION RANGE	DESCRIPTIVE TERMS
< 5%	Clean
5 - 12%	Slightly (Clayey, Silty, Sandy)
12 - 30%	Clayey, Silty, Sandy, Gravelly
30 - 50%	Very (Clayey, Silty, Sandy, Gravelly)
Components are arranged in order of increasing quantities.	

NOTES: Soil classifications presented on exploration logs are based on visual and laboratory observation.
Soil descriptions are presented in the following general order:

Density/consistency, color, modifier (if any) GROUP NAME, additions to group name (if any), moisture content. Proportion, gradation, and angularity of constituents, additional comments. (GEOLOGIC INTERPRETATION)

Please refer to the discussion in the report text as well as the exploration logs for a more complete description of subsurface conditions.

MOISTURE CONTENT

DRY	Absence of moisture, dusty, dry to the touch.
MOIST	Damp but no visible water.
WET	Visible free water, usually soil is below water table.

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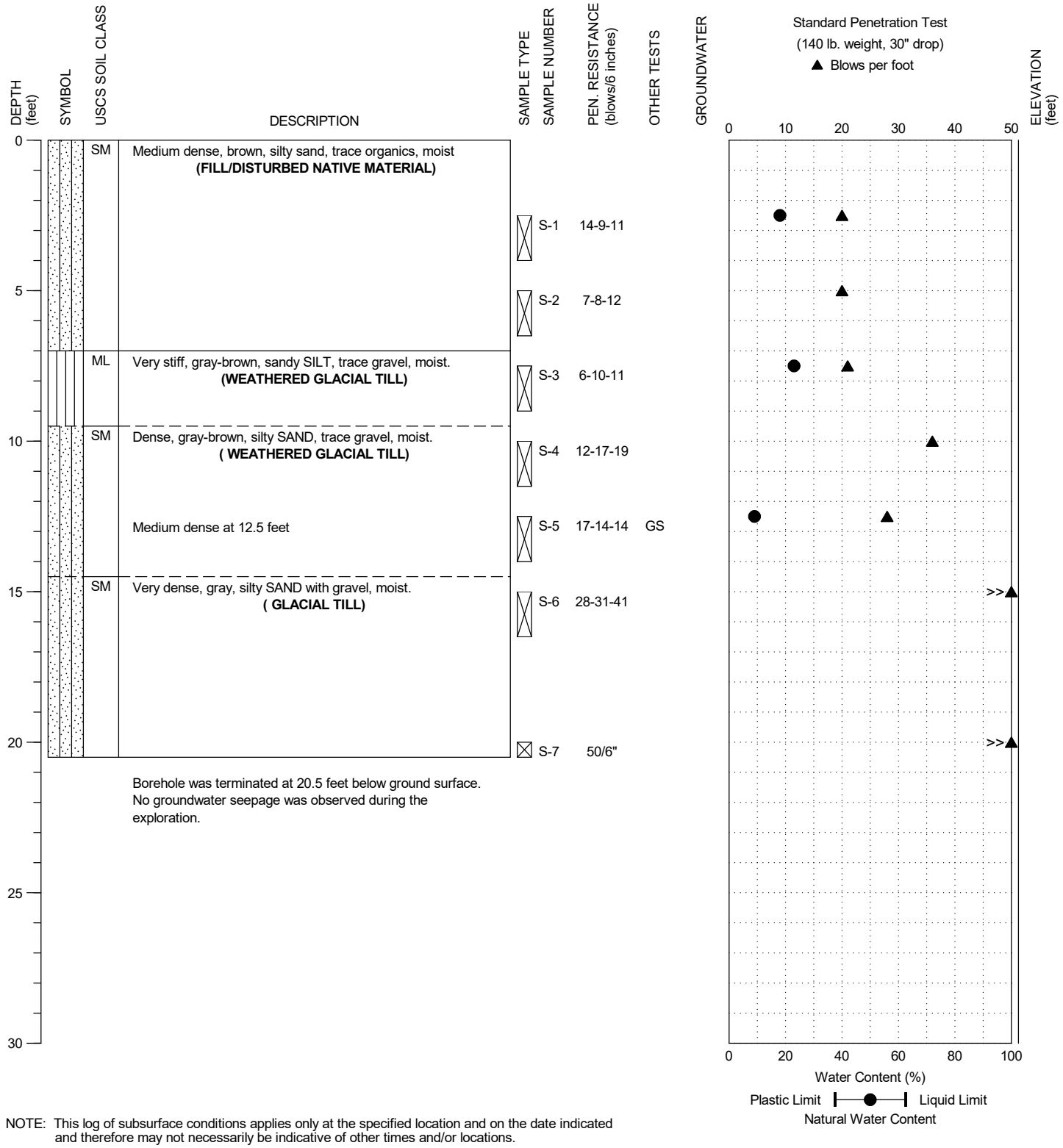
LEGEND OF TERMS AND SYMBOLS USED ON EXPLORATION LOGS

PROJECT NO.: 2023-034 FIGURE: A-1

DRILLING COMPANY: Geologic Drill, Inc.
DRILLING METHOD: Hollow Stem Auger w/ Mini Bobcat Track Rig
SAMPLING METHOD: SPT w/Cathead Pulley
LOCATION: See Figure 2

DATE STARTED: 7/14/2023
DATE COMPLETED: 7/14/2023
LOGGED BY: J. Westergreen



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

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BORING:
BH-1

PAGE: 1 of 1

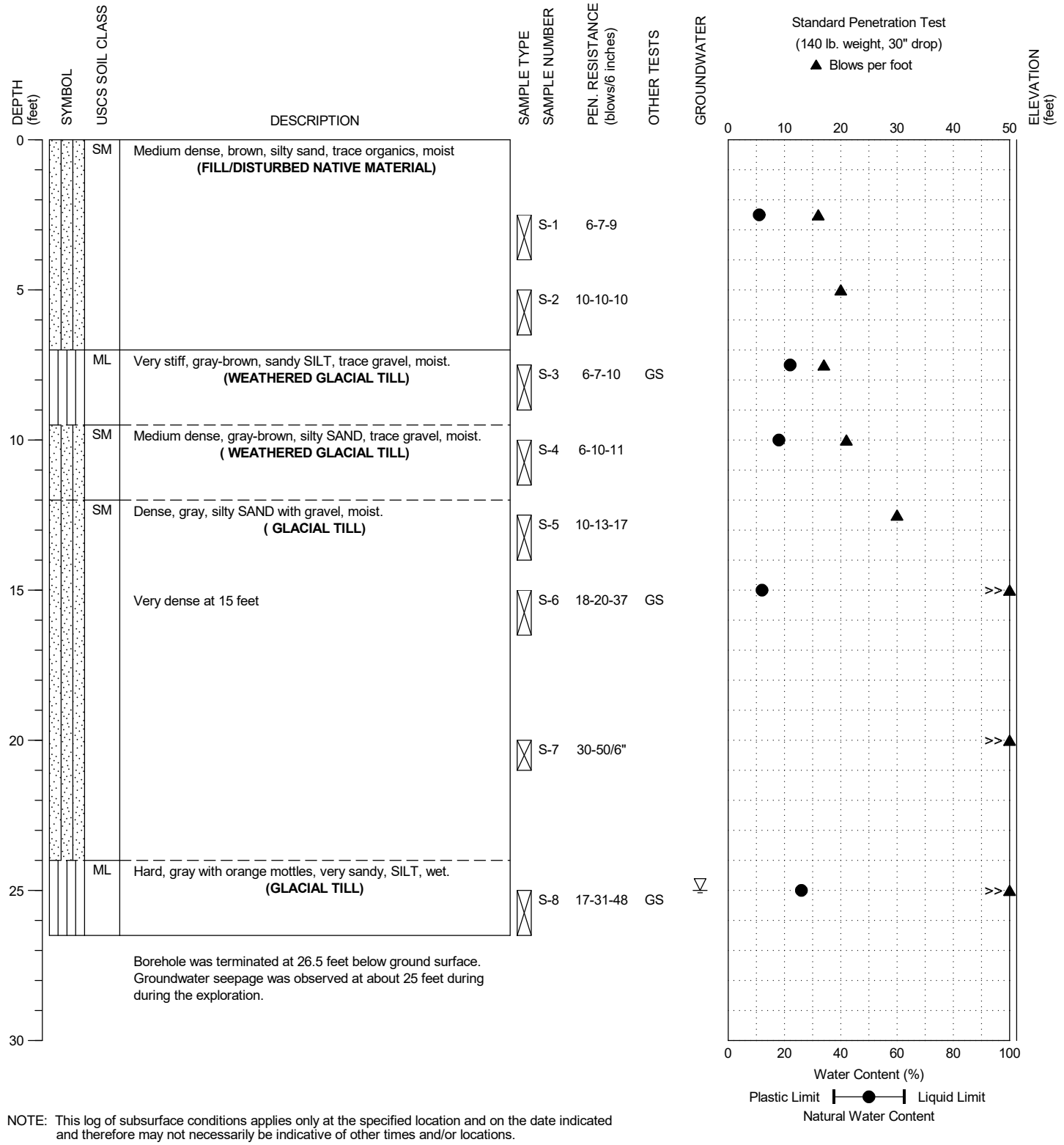
PROJECT NO.: 2023-034

FIGURE: A-2

BORING-DSM 2023-034.GPJ 12/11/23

DRILLING COMPANY: Geologic Drill, Inc.
DRILLING METHOD: Hollow Stem Auger w/ Mini Bobcat Track Rig
SAMPLING METHOD: SPT w/Cathead Pulley
LOCATION: See Figure 2

DATE STARTED: 7/14/2023
DATE COMPLETED: 7/14/2023
LOGGED BY: J. Westergreen



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

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BORING:
BH-2

PAGE: 1 of 1

PROJECT NO.: 2023-034 FIGURE: A-3

BORING-DSM 2023-034.GPJ 12/11/23

APPENDIX B

LABORATORY TESTING

APPENDIX B

LABORATORY TESTING

Representative soil samples obtained from the explorations were placed in plastic bags to prevent loss of moisture and transported to our Bothell, Washington, laboratory for further examination and testing. Laboratory tests were conducted on selected soil samples to characterize relevant engineering and index properties of the site soils.

MOISTURE CONTENT OF SOIL: The moisture content of selected soil samples (percent by dry mass) was determined in general accordance with ASTM D 2216. The results are shown at the sampled intervals on the appropriate summary logs in Appendix A and on the Summary of Material Properties, Figure B-1 in Appendix B.

PARTICLE SIZE ANALYSIS OF SOILS: Selected samples were tested to determine the particle (grain) size distribution of material in general accordance with ASTM D 6913. The results are summarized on the attached Summary of Material Properties, Figure B-1, and Particle Size Analysis of Soils reports, Figures B-2 and B-3 (Appendix B) which also provide information regarding the classification of the samples.

EXPLORATION DESIGNATION	TOP DEPTH (feet)	BOTTOM DEPTH (feet)	MOISTURE CONTENT (%)	ORGANIC CONTENT (%)	SPECIFIC GRAVITY	ATTERBERG LIMITS (%)			% GRAVEL	% SAND	% FINES	ASTM SOIL CLASSIFICATION	SAMPLE DESCRIPTION
						LL	PL	PI					
BH-1,S-1	2.5	4.0	18.1									SM	Olive-brown, silty SAND with organics
BH-1,S-3	7.5	9.0	23.4									ML	Light olive-brown, SILT
BH-1,S-5	12.5	14.0	8.5						9.4	59.7	30.9	SM	Olive-brown, silty SAND
BH-2,S-1	2.5	4.0	11.2									SM	Light olive-brown, silty SAND with organics
BH-2,S-3	7.5	9.0	21.7						1.0	28.8	70.2	ML	Light olive-brown, SILT with sand
BH-2,S-4	10.0	11.5	17.6									SM	Light olive-brown, silty SAND
BH-2,S-6	15.0	16.5	12.5						8.1	55.1	36.8	SM	Light olive brown, silty SAND
BH-2,S-8	25.0	26.5	26.2							44.8	55.2	ML	Olive-brown, sandy SILT

Notes: 1. This table summarizes information presented elsewhere in the report and should be used in conjunction with the report test, other graphs and tables, and the exploration logs.
2. The soil classifications in this table are based on ASTM D2487 and D2488 as applicable.

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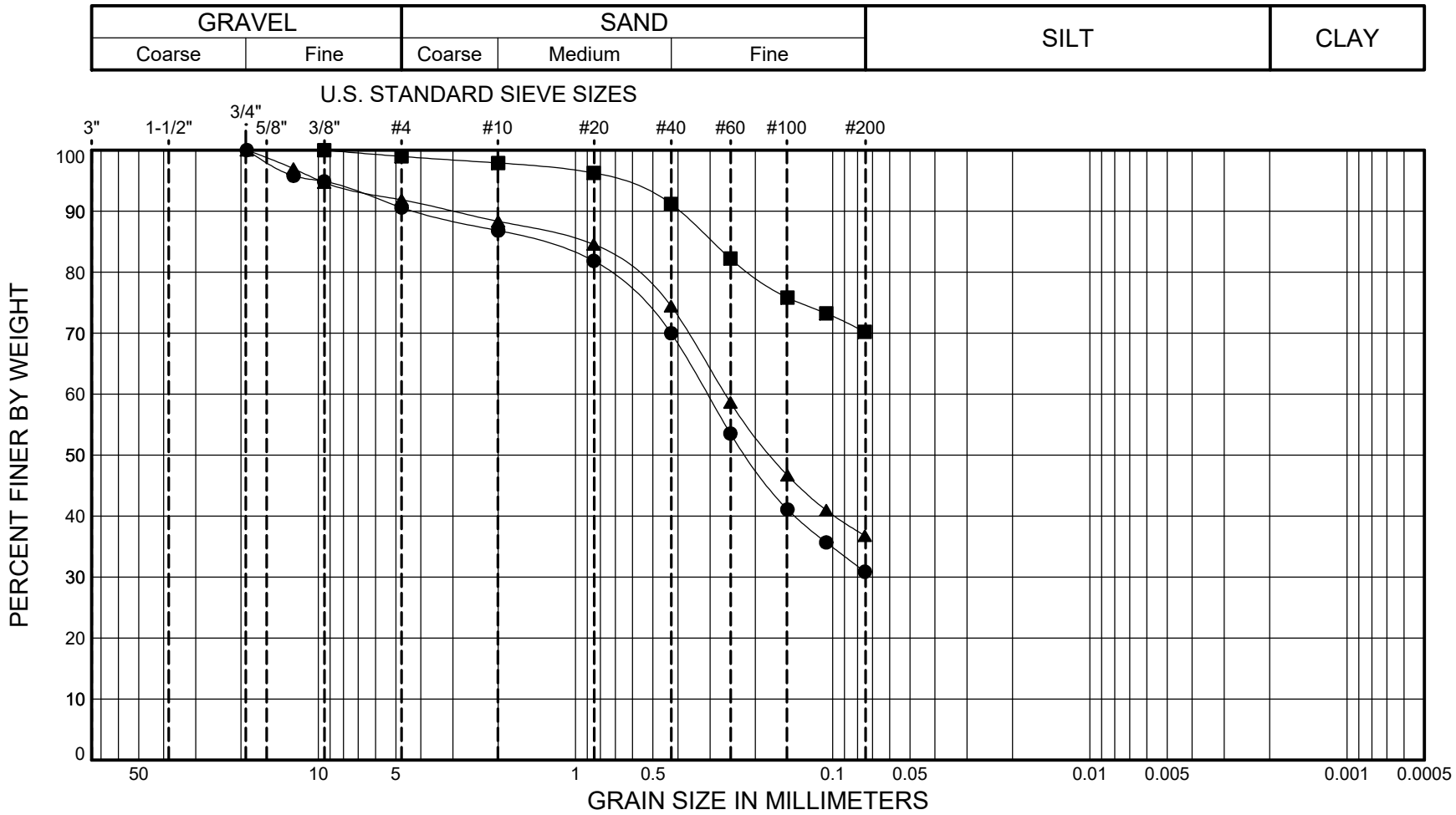
SUMMARY OF
MATERIAL PROPERTIES

PROJECT NO.: 2023-034 FIGURE: B-1



SYMBOL	SAMPLE		DEPTH (ft.)	CLASSIFICATION OF SOIL- ASTM D2487 Group Symbol and Name	% MC	LL	PL	PI	Gravel %	Sand %	Fines %
●	BH-1	S-5	12.5 - 14.0	(SM) Olive-brown, silty SAND	9				9.4	59.7	30.9
■	BH-2	S-3	7.5 - 9.0	(ML) Light olive-brown, SILT with sand	22				1.0	28.8	70.2
▲	BH-2	S-6	15.0 - 16.5	(SM) Light olive brown, silty SAND	12				8.1	55.1	36.8

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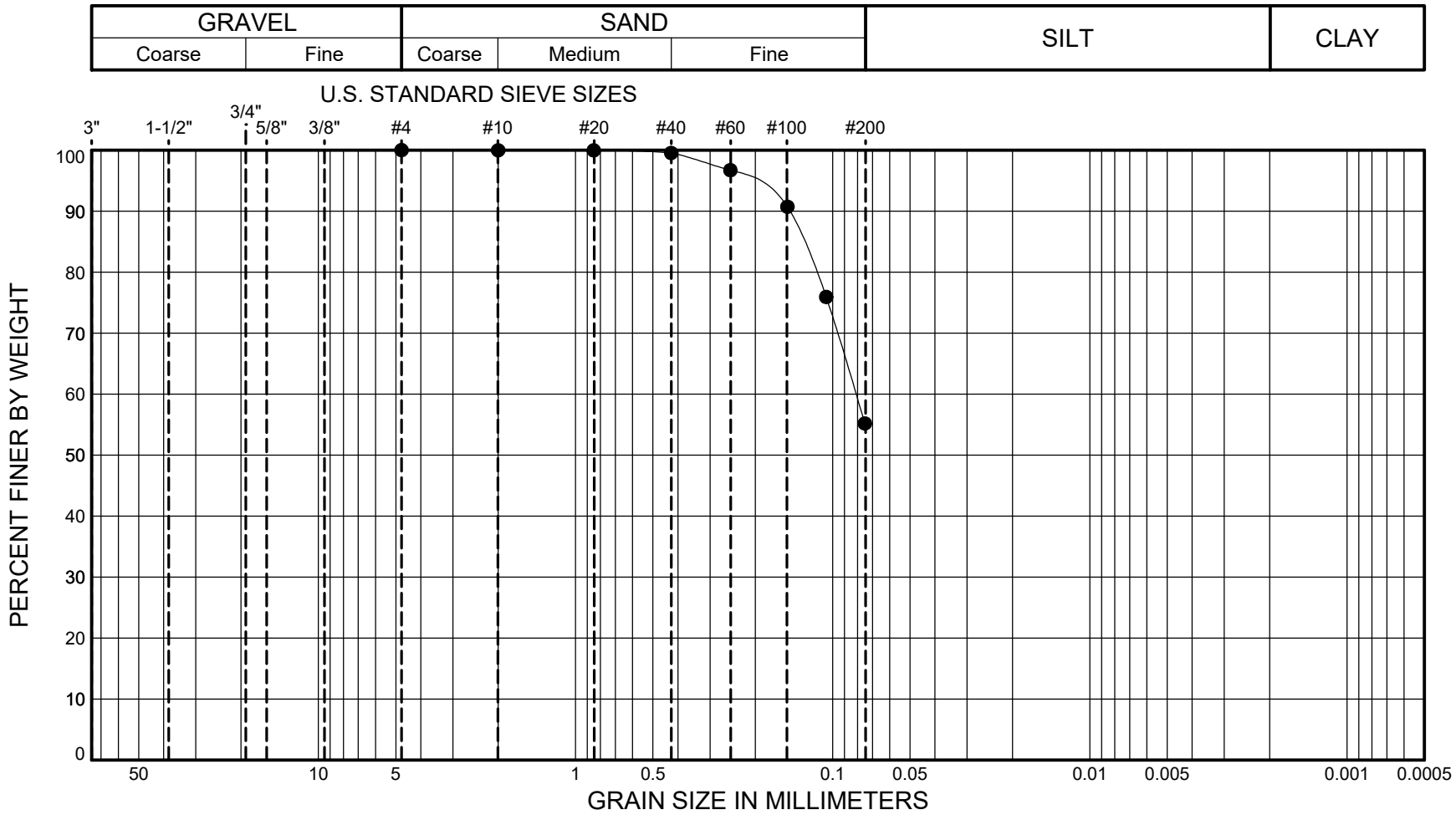
PARTICLE-SIZE ANALYSIS
OF SOILS
METHOD ASTM D6913

PROJECT NO.: 2023-034 FIGURE: B-2

HWAGRSZ 2023-034.GPJ 7/24/23



SYMBOL	SAMPLE		DEPTH (ft.)	CLASSIFICATION OF SOIL- ASTM D2487 Group Symbol and Name	% MC	LL	PL	PI	Gravel %	Sand %	Fines %
●	BH-2	S-8	25.0 - 26.5	(ML) Olive-brown, sandy SILT	26					44.8	55.2

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Geotechnical Services
Kirkland, Washington

PARTICLE-SIZE ANALYSIS
OF SOILS
METHOD ASTM D6913

PROJECT NO.: 2023-034 FIGURE: B-3

APPENDIX D:
STORMWATER TIR

City of Kirkland

APPENDIX E:
ARBORIST REPORT

City of Kirkland

Tree Solutions Inc
Consulting Arborists

Project No. TS - 9009

Arborist Report

To:	DOWL c/o Jason Shrope
Site:	NW Corner of the Intersection of 132nd Ave NE and NE 109th Pl, Kirkland, WA
Re:	Assessment of Trees for Sidewalk Construction
Date:	November 17, 2023
Project Arborist:	Tyler Bunton ISA Certified Arborist PN-8715A ISA Qualified Tree Risk Assessor
Reviewed By:	George White, ISA Certified Arborist #PN-8908A ISA Qualified Tree Risk Assessor
Referenced Documents:	Site Preparation-TESC Plan Sheet 7 of 34 (DOWL, 8/2023)
Attached:	Table of Trees Tree Site Map

Summary

I assessed 20 trees at the above addressed site, none of which are landmark trees. Based on the reviewed plans, 12 trees are proposed for removal due to the location of proposed site construction. None of the trees designated to remain will be negatively impacted by the removal of trees on-site.

Assignment and Scope of Work

This report outlines the site inspection by Tyler Bunton, of Tree Solutions Inc. on November 7, 2023. I was asked to evaluate the regulated trees on-site with reference to proposed development plans provided by Jason Shrope of DOWL. I was asked to document the species, size, health condition, and viability of each tree, as well as produce an Arborist Report addressing tree retention possibilities for the site. Jason Shrope, of DOWL, requested these services to acquire information for project planning in accordance with requirements set by the City of Kirkland.

Observations

Site

The site is located within the right-of-way (ROW) at the northwest corner of the Intersection of 132nd Ave NE and NE 109th Pl. The site currently has a portion of a ditch and a wide shoulder on the road for pedestrians along 132nd Ave NE. According to Kirkland Maps there are no critical areas on-site. The extent of the site can be seen on the attached Tree Site Map.

The understory is primarily invasive English ivy (*Hedera helix*) with some Himalayan blackberry (*Rubus bifrons*).

Proposed Plans
The reviewed plans (Site Preparation-TESC Plan Sheet 7 of 34, DOWL, 8/2023) propose construction of a new sidewalk and curb along 132nd Ave NE which will tie in to a pedestrian path to the north which is separated from the road.

Trees
I assessed 20 regulated trees on-site which may be impacted by site work. All regulated trees on-site were in viable condition. There were no landmark trees on-site. Since the site is within the ROW there are no required side yards and therefore no tree groves. I estimated no trees to be high retention value. None of the site trees presented a high level of risk to surrounding targets at the time of assessment.

The trees in the work area primarily consisted of Douglas-fir (*Pseudotsuga menziesii*) trees planted below utility lines. Trees 205 through 214 have all been consistently topped for utility clearance in the past, and trees 217 and 218 have been side pruned for utility clearance.

I have attached an annotated site plan (Site Preparation-TESC Plan Sheet 7 of 34, DOWL, 8/2023) to serve as the tree site map and a table of trees that has detailed information about each tree.

Discussion

Tree Density Credits and Tree Planting
Since the site is located within the ROW tree density credits do not apply to this project.

If any new tree plantings are planned, they should be small maturing trees to minimize future utility line clearance. New tree plantings must follow the requirements outlined in KZC 95.50, 95.51, and 95.52.

Tree Protection
All on- and off-site trees proposed for retention must be protected during development. For the purposes of this report, we have identified the tree protection zone (TPZ) as 8 times trunk diameter.

In some cases, the TPZ may be reduced with arborist coordination and may require alternative excavation and construction methods, measures to mitigate impacts to trees, and arborist monitoring.

Tree protection fencing should be placed at the edges of the TPZ as identified in the attached table of trees and may be relocated only when required work within that area is occurring in coordination with the project arborist.

Tree protection specifications located in Appendix F should be followed throughout construction in addition to the requirements located in KZC 95.32. Tree protection specifications provided in Appendix F should also be included on all plan pages that show work around trees.

Discussion—Construction Impacts

Trees 205 through 216 are proposed for removal due to being in close proximity to the proposed sidewalk or being within the sidewalk footprint. All trees proposed for removal have been kept relatively

short for line clearance or are small maturing trees and their removals will not negatively impact adjacent trees.

Excavation for sidewalk installation adjacent to tree A will likely encroach approximately 9 inches into the TPZ for form installation. No additional excavation should occur any closer to tree A for retention to remain feasible. Tree protection fencing for tree A should be placed at the edge of excavation for the sidewalk to the east and at the TPZ to the north and south.

The proposed sidewalk is located within the TPZs of trees 217 and 218. Construction of the sidewalk in this location will require addition of fill to raise the grade and should not result in root cuts. The area of the TPZ to have fill added and the sidewalk constructed should not negatively impact the trees. Tree protection fencing for these trees should be installed at the limits of work for sidewalk installation to the south of the trees and at the edge of the TPZ to the east of the trees.

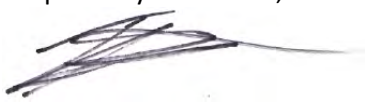
Excavation for the proposed sidewalk will occur approximately 12.5 feet to the east of tree F which is within the TPZ. Excavation at this location should not negatively impact the health and structure of the tree. Tree protection fencing should be placed at the edge of excavation for the sidewalk to the east and at the TPZ to the north and south.

Recommended tree protection fencing locations are included in the attached annotated site plan.

Recommendations

- Obtain city approval to remove trees 205 through 216.
- Place tree protection fencing at the limits of work and the edge of the TPZ for trees A, F, 217, and 218.
- Follow all tree protection requirements described in KZC 95.32 and the tree protection specifications outlined in Appendix F throughout construction.
- Any proposed replacement trees should be small-maturing species and must be planted in accordance with the requirements outlined in KZC 95.50, 95.51, and 95.52.

Respectfully submitted,



Tyler Bunton,
Senior Arborist

Appendix A **Glossary**

ANSI A300: American National Standards Institute (ANSI) standards for tree care

DBH or DSH: The diameter or thickness of a tree trunk measured at 4.5 feet above average grade. For trees with multiple trunks at 4.5 feet height, only trunks 3" DBH or greater shall be included. Where a tree splits into several trunks close to ground level, the DBH for the tree is the square root of the sum of the DBH for each individual stem squared (example with 3 trunks: DBH = square root $[(stem1)^2 + (stem2)^2 + (stem3)^2]$). If a tree has been removed and only the stump remains that is below 4.5 feet tall, the size of the tree shall be the diameter of the top of the stump (KZC 95.10.5)

Grove: A group of three or more viable regulated trees with overlapping or touching crowns that are located on a proposed development site; one of which is located in a required yard. (KZC 95.10.17.a)

ISA: International Society of Arboriculture

Landmark tree: a regulated tree with a minimum 26-inch DBH (KZC 95.10.17.d)

Regulated tree: A tree that is at least six inches DBH that is not listed on the Prohibited Plant List. (KZC 5.10.17.g)

Viable Tree: A regulated tree on proposed development sites that fits the viable criteria in Table 95.30.2 based on the tree condition ratings pursuant to KZC 95.30. A tree that is not viable is also a tree in an area where removal is unavoidable due to the anticipated development activity after having applied the provisions of Chapter 95 (KZC 95.10.17.j)

Visual Tree Assessment (VTA): method of evaluating structural defects and stability in trees by noting the pattern of growth (Mattheck & Breloer 1994)

Appendix B **References**

Accredited Standards Committee A300 (ASC 300). ANSI A300 (Part 1) Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). Londonderry: Tree Care Industry Association, 2017.

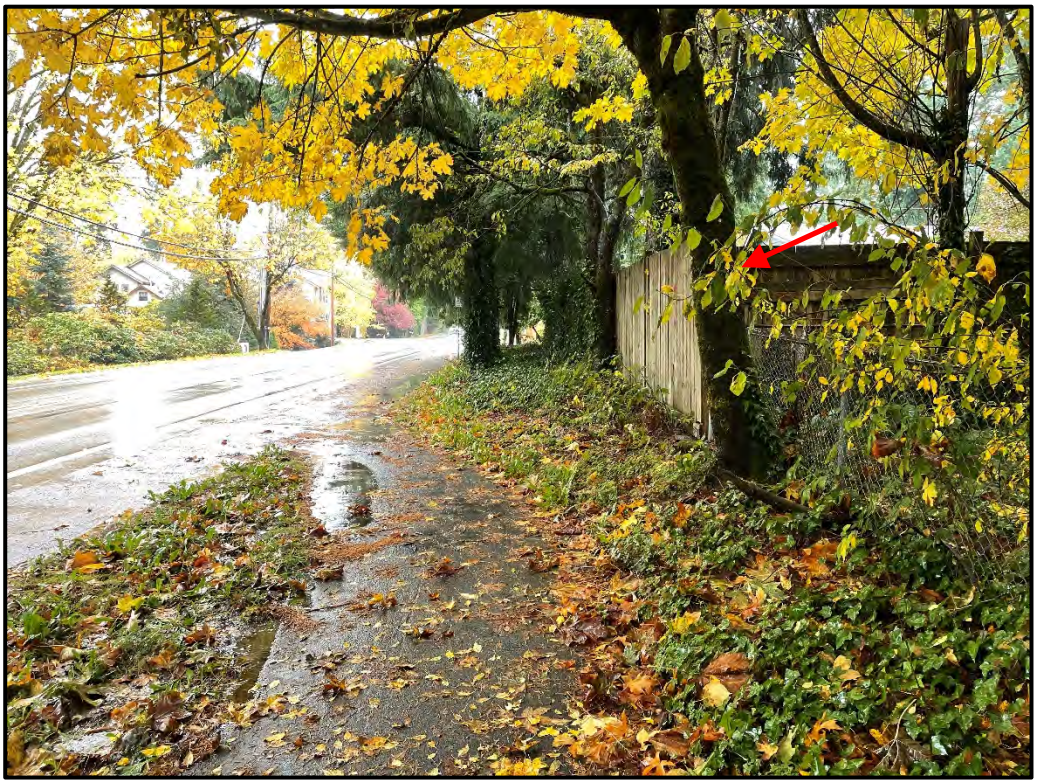
Council of Tree and Landscape Appraisers, Guide for Plant Appraisal, 10th Edition Second Printing. Atlanta, GA: The International Society of Arboriculture (ISA), 2019.

Kirkland Zoning Code (KZC) Chapter 5. Definitions.

Kirkland Zoning Code (KZC) Chapter 95. Tree Management and Required Landscaping.

Mattheck, Claus and Helge Breloer, The Body Language of Trees.: A Handbook for Failure Analysis. London: HMSO, 1994.

Appendix C **Photographs**



Photograph 1. View of the site from the north. Tree 205 is indicated by the red arrow.

Photograph 2. The bases of trees 217 (right) and 218 (left).

Photograph 3. Overhead utility lines above the trees along 132nd Ave NE. Tree 216 indicated by the red arrow. Photo taken looking north.

Photograph 4. The site from the intersection of 132nd Ave NE and NE 109th Pl looking north.

Appendix D **Assumptions & Limiting Conditions**

1 Consultant assumes that the site and its use do not violate, and is in compliance with, all applicable codes, ordinances, statutes, or regulations.

2 The consultant may provide a report or recommendation based on published municipal regulations. The consultant assumes that the municipal regulations published on the date of the report are current municipal regulations and assumes no obligation related to unpublished city regulation information.

3 Any report by the consultant and any values expressed therein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, or upon any finding to be reported.

4 All photographs included in this report were taken by Tree Solutions, Inc. during the documented site visit, unless otherwise noted. Sketches, drawings, and photographs (included in, and attached to, this report) are intended as visual aids and are not necessarily to scale. They should not be construed as engineering drawings, architectural reports, or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.

5 Unless otherwise agreed, (1) information contained in any report by consultant covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring.

6 These findings are based on the observations and opinions of the authoring arborist, and do not provide guarantees regarding the future performance, health, vigor, structural stability, or safety of the plants described and assessed.

7 Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.

8 Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.

9 Our assessments are made in conformity with acceptable evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.

Appendix E **Methods**

Measuring

I measured the diameter of each tree at 54 inches above grade, diameter at standard height (DSH). If a tree had multiple stems, I measured each stem individually at standard height and determined a single-stem equivalent diameter by using the method outlined in Kirkland Municipal Code 95.10.5. A tree is regulated based on this single-stem equivalent diameter value.

Tagging

I tagged each tree with a circular aluminum tag at eye level. I assigned each tree a numerical identifier on our map and in our tree table, corresponding to this tree tag. I used alphabetical identifiers for trees off-site or trees inaccessible due to fences.

Evaluating

I evaluated tree health and structure utilizing visual tree assessment (VTA) methods. The basis behind VTA is the identification of symptoms, which the tree produces in reaction to a weak spot or area of mechanical stress. A tree reacts to mechanical and physiological stresses by growing more vigorously to re-enforce weak areas, while depriving less stressed parts. An understanding of the uniform stress allows the arborist to make informed judgments about the condition of a tree.

Rating

When rating tree health, I took into consideration crown indicators such as foliar density, size, color, stem and shoot extensions. When rating tree structure, I evaluated the tree for form and structural defects, including past damage and decay. Tree Solutions has adapted our ratings based on the Purdue University Extension formula values for health condition (*Purdue University Extension bulletin FNR-473-W - Tree Appraisal*). These values are a general representation used to assist arborists in assigning ratings.

Health

Excellent - Perfect specimen with excellent form and vigor, well-balanced crown. Normal to exceeding shoot length on new growth. Leaf size and color normal. Trunk is sound and solid. Root zone undisturbed. No apparent pest problems. Long safe useful life expectancy for the species.

Good - Imperfect canopy density in few parts of the tree, up to 10% of the canopy. Normal to less than ¾ typical growth rate of shoots and minor deficiency in typical leaf development. Few pest issues or damage, and if they exist, they are controllable, or tree is reacting appropriately. Normal branch and stem development with healthy growth. Safe useful life expectancy typical for the species.

Fair - Crown decline and dieback up to 30% of the canopy. Leaf color is somewhat chlorotic/necrotic with smaller leaves and “off” coloration. Shoot extensions indicate some stunting and stressed growing conditions. Stress cone crop clearly visible. Obvious signs of pest problems contributing to lesser condition, control might be possible. Some decay areas found in main stem and branches. Below average safe useful life expectancy

Poor - Lacking full crown, more than 50% decline and dieback, especially affecting larger branches. Stunting of shoots is obvious with little evidence of growth on smaller stems. Leaf size and color reveals overall stress in the plant. Insect or disease infestation may be severe and uncontrollable. Extensive decay or hollows in branches and trunk. Short safe useful life expectancy.

Structure

Excellent - Root plate undisturbed and clear of any obstructions. Trunk flare has normal development. No visible trunk defects or cavities. Branch spacing/structure and attachments are free of any defects.

Good - Root plate appears normal, with only minor damage. Possible signs of root dysfunction around trunk flare. Minor trunk defects from previous injury, with good closure and less than 25% of bark section missing. Good branch habit; minor dieback with some signs of previous pruning. Codominant stem formation may be present, requiring minor corrections.

Fair - Root plate reveals previous damage or disturbance. Dysfunctional roots may be visible around the main stem. Evidence of trunk damage or cavities, with decay or defects present and less than 30% of bark sections missing on trunk. Co-dominant stems are present. Branching habit and attachments indicate poor pruning or damage, which requires moderate corrections.

Poor - Root plate disturbance and defects indicate major damage, with girdling roots around the trunk flare. Trunk reveals more than 50% of bark section missing. Branch structure has poor attachments, with several structurally important branches dead or broken. Canopy reveals signs of damage or previous topping or lion-tailing, with major corrective action required.

Appendix F **Tree Protection Specifications**

The following is a list of protection measures that must be employed before, during and after construction to ensure the long-term viability of retained trees.

1. **Project Arborist:** The project arborists shall at minimum have an International Society of Arboriculture (ISA) Certification and ISA Tree Risk Assessment Qualification.
2. **Tree Protection Zone (TPZ):** The city of Kirkland requires the tree protection zone (TPZ) be set at a distance from the tree defined by a qualified professional (KZC 95.10.15). In some cases, the TPZ may extend outside tree protection fencing. Work within the TPZ must be approved and monitored by the project arborist.
3. **Tree Protection Fencing:** Tree protection shall consist of 6-foot-tall chain-link fencing installed at the TPZ as approved by the project arborist. Fence posts shall be anchored into the ground or bolted to existing hardscape surfaces.
    a. Where trees are being retained as a group the fencing shall encompass the entire area including all landscape beds or lawn areas associated with the grove.
    b. Where trees are protected at the edge of the project boundary, construction limits fencing shall be incorporated as the boundary of tree protection fencing.
4. **Access Beyond Tree Protection Fencing:** The project manager or project arborist shall be present when tree protection areas are accessed.
5. **Tree Protection Signage:** Tree protection signage shall be affixed to fencing every 15 feet. Signage shall be fluorescent, at least 2’ x 2’ in size. Signage will note: “Tree and Soil Protection Area, Entrance Prohibited. Entry into the tree protection area is prohibited unless authorized by the project manager.” Signage shall include the contact information for the project manager, instructions for gaining access to the area, and the City phone number for code enforcement to report violations.
6. **Filter / Silt Fencing:** Filter / silt fencing within the TPZ of retained trees shall be installed in a manner that does not sever roots. Install so that filter / silt fencing sits on the ground and is weighed in place by sandbags or gravel. Do not trench to insert filter / silt fencing into the ground.
7. **Monitoring:** The project arborist shall monitor all ground disturbance within the TPZ, including where the TPZ extends beyond the tree protection fencing.
8. **Soil Protection:** No parking, foot traffic, materials storage, or dumping (including excavated soils) are allowed within the TPZ. Heavy machinery shall remain outside of the TPZ. Access to the tree protection area will be granted under the supervision of the project arborist. If project arborist allows, heavy machinery can enter the area if soils are protected from the load. Acceptable methods of soil protection include applying 3/4-inch plywood over 6 inches of wood chip mulch or use of AlturnaMats® (or equivalent product approved by the project arborist). Retain existing paved surfaces within or at the edge of the TPZ for as long as possible.
9. **Soil Remediation:** Soil compacted within the TPZ of retained trees shall be remediated using pneumatic air excavation according to a specification produced by the project arborist.
10. **Canopy Protection**: Where fencing is installed at the limits of disturbance within the TPZ, canopy management (pruning or tying back) shall be conducted to ensure that vehicular traffic does not damage canopy parts. Exhaust from machinery shall be located 5 feet outside the dripline of retained trees. No exhaust shall come in contact with foliage for prolonged periods of time.
11. **Duff/Mulch:** Apply 6 inches of arborist wood chip mulch or hog fuel over bare soil within the TPZ to prevent compaction and evaporation. TPZ shall be free of invasive weeds to facilitate mulch application. Keep mulch 1 foot away from the base of trees and 6 inches from retained understory vegetation. Retain and protect as much of the existing duff and understory vegetation as possible.

12. **Excavation:** Excavation done at the edge of or within the TPZ shall use alternative methods such as pneumatic air excavation or hand digging. With project arborist approval machinery may be used with flat front buckets and the project arborist spotting for roots. When roots are encountered, stop excavation, and cleanly sever roots. The project arborist shall monitor all excavation done within the TPZ.
13. **Root Pruning:** Limit root pruning to the extent possible. All roots shall be pruned with a sharp saw making clean cuts. Do not fracture or break roots with excavation equipment.
14. **Root Moisture:** Root cuts and exposed roots shall be immediately covered with soil, mulch, or clear polyethylene sheeting and kept moist. Water to maintain moist condition until the area is back filled. Do not allow exposed roots to dry out before replacing permanent back fill.
15. **Hardscape Removal:** Retain hardscape surfaces for as long as practical. Remove hardscape in a manner that does not require machinery to traverse newly exposed soil within the TPZ. Where equipment must traverse the newly exposed soil, apply soil protection as described in section 8. Replace fencing at edge of TPZ if soil exposed by hardscape removal will remain exposed longer than four hours.
16. **Tree Removal:** All trees to be removed that are located within the TPZ of retained trees shall not be ripped, pulled, or pushed over. The tree should be cut to the base and the stump either left in place or ground out. A flat front bucket can also be used to sever roots around all sides of the stump, or the roots can be exposed using hydro or air excavation and then cut before removing the stump.
17. **Irrigation:** Retained trees with soil disturbance within the TPZ will require supplemental water from June through September. Acceptable methods of irrigation include drip, sprinkler, or watering truck. Trees shall be watered three times per month during this time.
18. **Pruning:** Pruning required for construction and safety clearance shall be done with a pruning specification provided by the project arborist in accordance with American National Standards Institute ANSI-A300 2017 Standard Practices for Pruning. Pruning shall be conducted or monitored by an arborist with an ISA Certification.
19. **Plan Updates:** All plan updates or field modifications that result in impacts within the TPZ or change the retained status of trees shall be reviewed by the senior project manager and project arborist prior to conducting the work.
20. **Materials:** Contractor shall have the following materials onsite and available for use during work in the TPZ:
    - **Sharp and clean bypass hand pruners**
    - **Sharp and clean bypass loppers**
    - **Sharp hand-held root saw**
    - **Reciprocating saw with new blades**
    - **Shovels**
    - **Trowels**
    - **Clear polyethylene sheeting**
    - **Burlap**
    - **Water**

Tree Solutions Inc
Consulting Arborists

Table of Trees

132nd Ave NE NE 109th Pl
Kirkland, WA

Arborist: TB
Date of Inventory: 11/7/2023
Table Prepared: 11/17/2023

DSH (Diameter at Standard Height) is measured 4.5 feet above grade, or as specified in the Guide for Plant Appraisal, 10th Edition , published by the Council of Tree and Landscape Appraisers.
DSH for multi-stem trees are noted as a single stem equivalent, which is calculated using the method defined in Kirkland Zoning Code (KZC) 95.10.5.
Letters are used to identify trees on neighboring property or which were inaccessible due to fencelines.
Dripline is measured from the center of the tree to the outermost extent of the canopy.

Tree ID	Scientific Name	Common Name	DSH (in)	Multistem DSH	Health Condition	Structural Condition	Dripline Radius (ft)	Viability	Landmark	Grove	Tree Protection Zone	Proposed Action	Notes
205	*Acer macrophyllum*	Bigleaf maple	12.0		Good	Fair	27.5	Viable	-	-	8.0	Remove	Topped for utilities at 15 feet, likely shared tree
206	*Prunus avium*	Bird cherry	13.9		Good	Fair	18.6	Viable	-	-	9.3	Remove	Topped for utilities at 15 feet; growing next to fence; grade cut
207	*Pseudotsuga menziesii*	Douglas-fir	13.1		Good	Fair	18.5	Viable	-	-	8.7	Remove	Topped at 15 feet for utilities; ivy to 12 feet
208	*Pseudotsuga menziesii*	Douglas-fir	16.7		Good	Fair	15.7	Viable	-	-	11.1	Remove	Topped at 15 feet for utilities; ivy to topping point
209	*Pseudotsuga menziesii*	Douglas-fir	21.6	18.1, 11.8	Good	Fair	19.0	Viable	-	-	14.4	Remove	Topped at 15 feet for utilities; ivy to topping point
210	*Pseudotsuga menziesii*	Douglas-fir	11.0		Good	Fair	15.5	Viable	-	-	7.3	Remove	Topped at 15 feet for utilities; ivy to topping point
211	*Pseudotsuga menziesii*	Douglas-fir	23.0		Good	Fair	21.0	Viable	-	-	15.3	Remove	Topped at 15 feet for utilities; ivy to topping point; one approximately 8 inch reiteration growing to west
212	*Pseudotsuga menziesii*	Douglas-fir	14.7		Good	Fair	23.6	Viable	-	-	9.8	Remove	Topped at 15 feet for utilities; ivy to topping point; one 10 inch reiteration growing to west
213	*Pseudotsuga menziesii*	Douglas-fir	23.0		Good	Fair	22.0	Viable	-	-	15.3	Remove	Topped at 15 feet for utilities; ivy to topping point; one 10 inch reiteration growing to west and one to east which has been topped at 20 feet
214	*Pseudotsuga menziesii*	Douglas-fir	15.1		Good	Fair	21.6	Viable	-	-	10.1	Remove	Topped at 15 feet for utilities; ivy to topping point
215	*Thuja occidentalis*	Arborvitae	10.8	8.5, 6.6	Good	Fair	8.0	Viable	-	-	7.2	Remove	
216	*Thuja occidentalis*	Arborvitae	11.8	8, 8.7	Good	Good	5.0	Viable	-	-	7.9	Remove	
217	*Pseudotsuga menziesii*	Douglas-fir	21.6		Good	Fair	22.9	Viable	-	-	14.4	Retain	Topped for utilities at 15 feet with reiterations side pruned for utilities
218	*Pseudotsuga menziesii*	Douglas-fir	23.0	19, 13	Good	Fair	28.0	Viable	-	-	15.3	Retain	Side pruned for utilities
A	*Prunus avium*	Bird cherry	9.2	6, 7	Good	Fair	21.0	Viable	-	-	6.1	Retain	Both stems previously topped for utilities at 15 feet each with one large reiteration; crown primarily to west
B	*Pseudotsuga menziesii*	Douglas-fir	12.0		Good	Good	15.5	Viable	-	-	8.0	Retain	DSH estimated no access
C	*Pseudotsuga menziesii*	Douglas-fir	14.0		Good	Good	15.6	Viable	-	-	9.3	Retain	DSH estimated no access
D	*Pseudotsuga menziesii*	Douglas-fir	14.0		Good	Good	18.6	Viable	-	-	9.3	Retain	DSH estimated no access

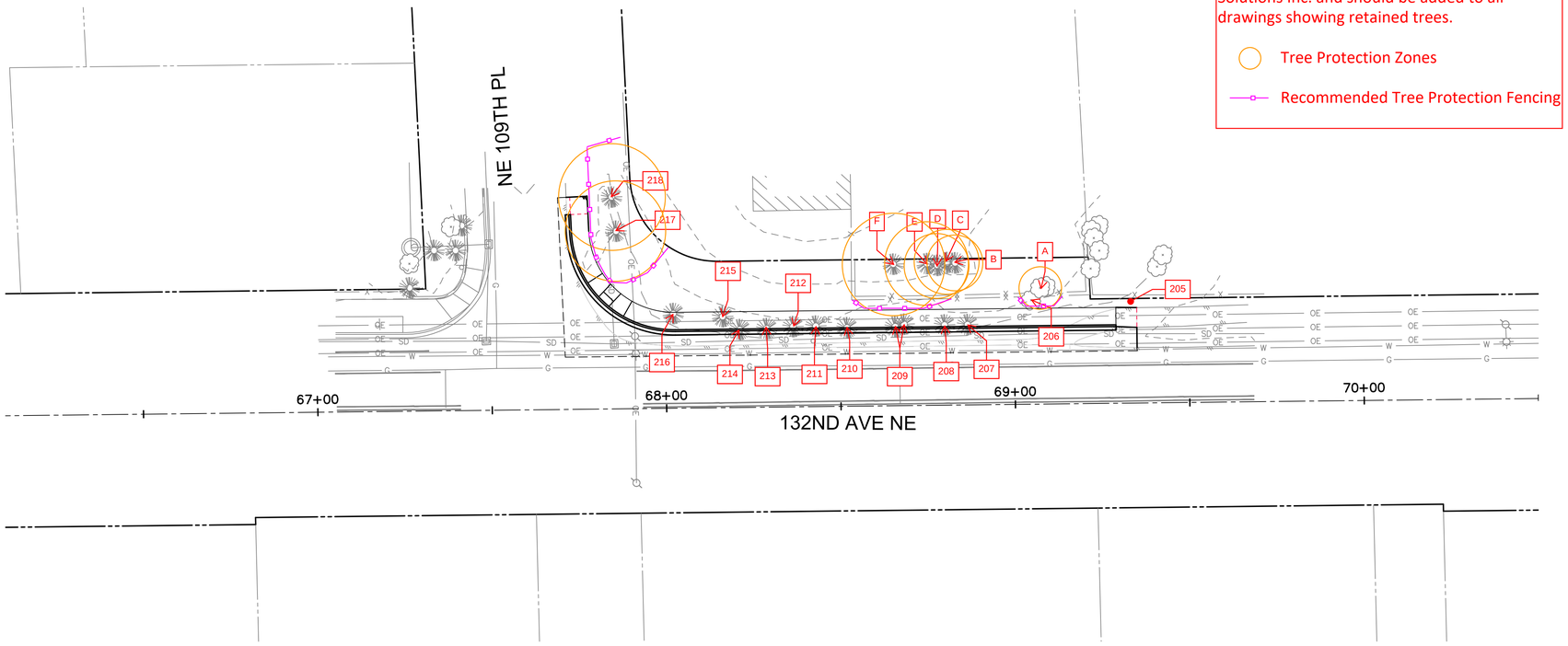
Tree Solutions Inc
Consulting Arborists

Table of Trees

132nd Ave NE NE 109th Pl
Kirkland, WA

Arborist: TB
Date of Inventory: 11/7/2023
Table Prepared: 11/17/2023

Tree ID	Scientific Name	Common Name	DSH (in)	Multistem DSH	Health Condition	Structural Condition	Dripline Radius (ft)	Viability	Landmark	Grove	Tree Protection Zone	Proposed Action	Notes
E	*Pseudotsuga menziesii*	Douglas-fir	18.0		Good	Good	21.8	Viable	-	-	12.0	Retain	DSH estimated no access
F	*Pseudotsuga menziesii*	Douglas-fir	22.0		Good	Good	21.9	Viable	-	-	14.7	Retain	DSH estimated no access



Tree Solutions Inc.
Arborist: Tyler Bunton
206-528-4670

Tree Inventory
November 17, 2023

Tree inventory took place on November 7, 2023 and included all regulated trees within or adjacent to the project area which may be impacted by site work. Tree protection zones are listed in the tree table produced by Tree Solutions Inc. and should be added to all drawings showing retained trees.

Tree Protection Zones

Recommended Tree Protection Fencing

N

20 0 20 40
SCALE IN FEET

GENERAL NOTES

1. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE.
2. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES.

SITE PREPARATION/ EROSION CONTROL NOTES

1. INSTALL SILT FENCE PER WSDOT STD PLAN I–30.15–02.
2. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STD PLAN I–40.20–00.
3. SAWCUT AND REMOVE EXISTING ASPHALT CONC. PAVEMENT.
4. REMOVE EXISTING CEMENT CONC. SIDEWALK.
5. REMOVE EXISTING PIPE.
6. REMOVE EXISTING DRAINAGE STRUCTURE.
7. RELOCATE EXISTING SIGN
8. PROTECT EXISTING TREE.
9. PROTECT EXISTING WALL.
10. PROTECT EXISTING FENCE.
11. REMOVE HEDGE (CLEARING AND GRUBBING).
12. UTILITY POLE TO BE RELOCATED BY OTHERS.
13. UTILITY VAULT/FACILITY TO BE RELOCATED BY OTHERS.
14. RELOCATE EXISTING LIGHT POLE.
15. REMOVE EXISTING TREE.
16. REMOVE EXISTING FENCE.
17. REMOVE EXISTING BOLLARDS.
18. RELOCATE MAILBOX.
19. PLUG EXISTING PIPE.

LEGEND

- STORM DRAIN INLET PROTECTION
- SILT FENCE
- PROPERTY LINE
- RIGHT–OF–WAY
- SAWCUT
- REMOVE EXISTING PIPE
- REMOVE EXISTING ASPHALT CONC. PAVEMENT
- REMOVE EXISTING CEMENT CONC. SIDEWALK
- CLEARING AND GRUBBING

60% SUBMITTAL

DATE	NO.	REVISION	BY

811 Know what's below. Call 811 before you dig.

K. EAGLE 08-2023 DESIGNED BY: DATE
R. TEMPLADO 08-2023 DRAWN BY: DATE
J. SHROPE 08-2023 CHECKED BY: DATE

JASON STITES — STATE OF WASHINGTON — 39408 — REGISTERED PROFESSIONAL ENGINEER

DOWL
WWW.DOWL.COM
Eastgate Office Park Building 1
15325 SE 30th Pl., Ste. 300
Bellevue, Washington 98007
425-869-2670

CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS
123 FIFTH AVENUE KIRKLAND, WA 98033
(425) 587–3800 www.kirklandwa.gov

132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

SITE PREPARATION-TESC PLAN (SITE #3)

SHEET 7 OF 34 SHEETS

Tree Solutions Inc
Consulting Arborists

Project No. TS - 9009

Memorandum

To:	DOWL c/o Jason Shrope
Site:	13062 NE 113th St, Kirkland, WA 98033
Re:	Assessment of One Tree on Private Property
Date:	February 16, 2024
Project Arborist:	Tyler Bunton ISA Certified Arborist PN-8715A ISA Qualified Tree Risk Assessor
Reviewed Plans:	Retaining Wall Plan and Details Sheet 27 of 44 (DOWL, 8/2023)
Attached:	Annotated Retaining Wall Plan and Details Sheet 27 of 44 (DOWL, 8/2023)

This memorandum documents the visit by Tyler Bunton of Tree Solutions Inc. to the above referenced site to assess one Douglas-fir (*Pseudotsuga menziesii*) tree (G) on private property adjacent to the project area. Jason Shrope of DOWL requested this site visit due to the expected location of excavation for a retaining wall along 132nd Ave NE.

Tree G is a landmark Douglas-fir tree with a diameter at standard height (DSH) of 30.7 inches and a dripline of 21 feet. This tree is in good health and structural condition and is growing at the top of a slope at the southeast corner of the private property at 13062 NE 113th St with roots extending into the right-of-way to the south and east.

The reviewed plans (Retaining Wall Plan and Details Sheet 27 of 44, DOWL, 8/2023) propose construction of a new sidewalk and retaining wall along the west side of 132nd Ave NE. The current plan is to install a cantilever wall which will require excavation to a depth approximately 3 feet below the existing road elevation. Excavation to this depth would require laying back the slope to within approximately 5.5 feet east of the base of tree G.

Based on the DSH of tree G I recommend excavation occur no closer than 12.8 feet (5x DSH) from the tree base to maintain tree stability. To maintain tree health, I recommend no excavation occur within 20.4 feet (8x DSH) of the tree base. The above recommended areas are indicated on the attached annotated Retaining Wall Plan and Details Sheet 27 of 44 (DOWL, 8/2023).

I recommend a soldier pile wall be installed at the location indicated on the attached plans to retain tree G. I also recommend that a trench be dug to a depth of 3 feet with hydrovac at the back of excavation for installation of lagging to allow existing roots to be cut cleanly. The location of the recommended hydrovac trench is also located on the attached plans.

Installation of a soldier pile wall to the southeast of tree G would likely encroach within 12.8 feet of the tree base, but the amount of encroachment will be negligible compared to the area surrounding the tree to the north and west which will remain undisturbed. At the time of hydrovac excavation the project arborist should be on-site to observe any root cuts and determine if tree stability will be compromised.

If installation of the retaining wall cannot be completed without encroaching within 12.8 feet of the tree base, except what would be allowable for a soldier pile wall, removal of tree G will likely be required.

Appendix A **Photographs**

Photograph 1. The base of tree G with the approximate location of layback excavation indicated by the red line.

Photograph 2. Tree G (red arrow) in relation to the approximate location of layback excavation indicated by the red outlined area.

Appendix B **Assumptions & Limiting Conditions**

1 Consultant assumes that the site and its use do not violate, and is in compliance with, all applicable codes, ordinances, statutes or regulations.

2 The consultant may provide a report or recommendation based on published municipal regulations. The consultant assumes that the municipal regulations published on the date of the report are current municipal regulations and assumes no obligation related to unpublished city regulation information.

3 Any report by the consultant and any values expressed therein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, or upon any finding to be reported.

4 All photographs included in this report were taken by Tree Solutions, Inc. during the documented site visit, unless otherwise noted. Sketches, drawings and photographs (included in, and attached to, this report) are intended as visual aids and are not necessarily to scale. They should not be construed as engineering drawings, architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.

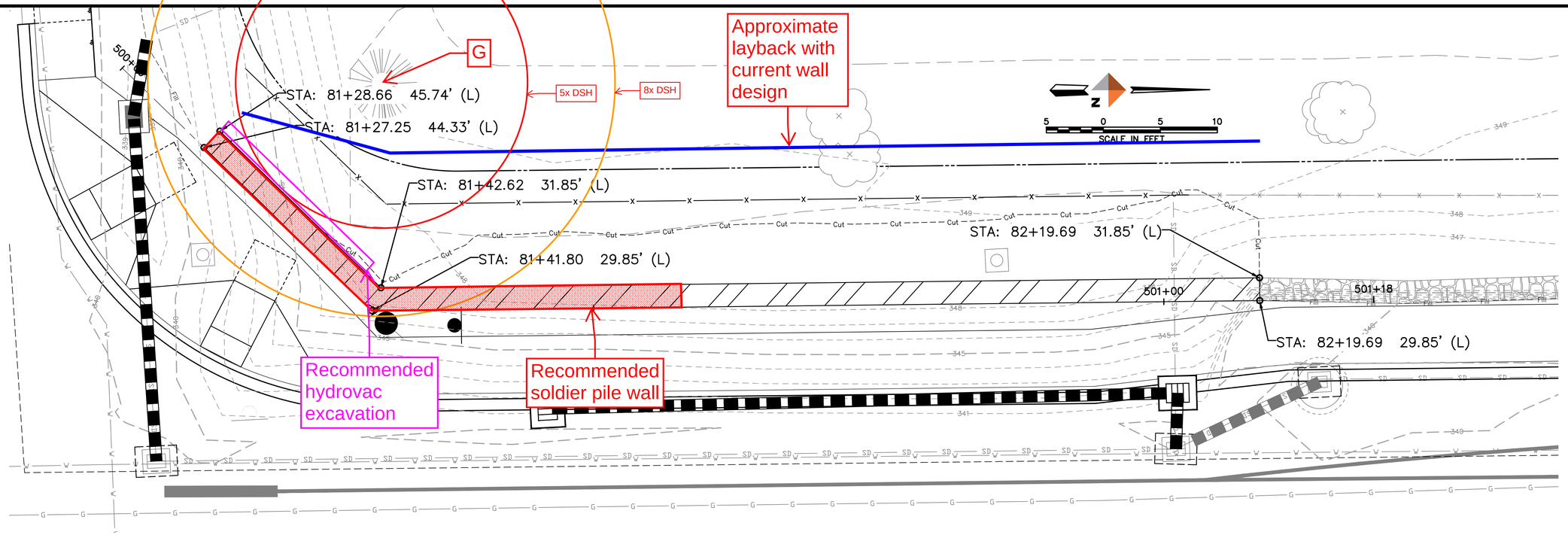
5 Unless otherwise agreed, (1) information contained in any report by consultant covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring.

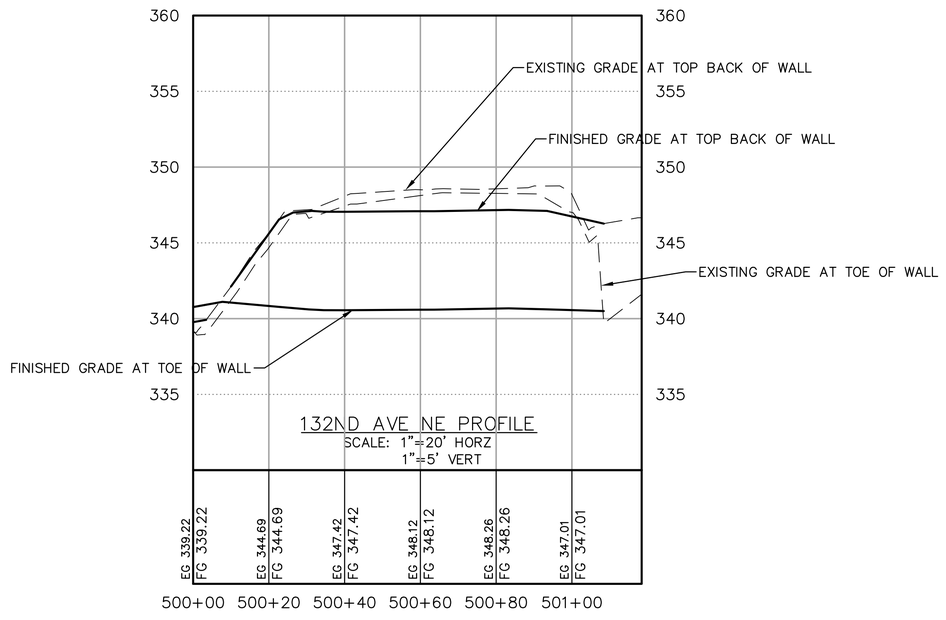
6 These findings are based on the observations and opinions of the authoring arborist, and do not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described and assessed.

7 Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.

8 Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.

9 Our assessments are made in conformity with acceptable evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.





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132ND AVENUE NE PEDESTRIAN IMPROVEMENTS PROJECT

RETAINING WALL PLAN AND DETAILS

SHEET 27 OF 44 SHEETS

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