CITY OF KIRKLAND

NE 85TH ST PED-BIKE CONNECTION
114TH AVE NE TO 6TH ST
JOB NO. 37-24-PW CIP No. STC1070000

ADDENDUM NO. 1
TO THE PLANS, SPECIFICATIONS, PROPOSAL AND CONTRACT

Issued This Date: Friday, January 17, 2025
Bid Opening: **Unchanged – February 5, 2025**
Place of Opening: City Hall, Council Chambers

Notice to All Plan holders:
This Addendum No. 1, containing the following revisions, additions, deletions, and/or clarifications is hereby made part of the Plan and Contract Documents for the above-named project. Bidders shall take this Addendum into consideration when preparing and submitting their bids and it shall be attached to the Contract Documents.

Contractors shall acknowledge receipt of this Addendum in the place provided on Proposal page 7. Failure to do so may disqualify the Bidder from consideration of its bid.

All other requirements of the contract documents remain in effect.

CONTRACT DOCUMENTS:

Item 1:
Location: Bid Schedule
Description: Remove bid proposal pages 8, 9,10, and 11 and replace with revised bid proposal pages 8, 9,10, and 11 that are included as an attachment to this addendum

- The quantity for Item No. 24 has been revised from ~~7,400~~ TON to 7,500 TON
- The quantity for Item No. 26 has been revised from ~~770~~ CY to 760 CY
- Item No. 104 has been replaced with a new bid item. The specification reference, and unit of measure did not change. The quantity has been revised from ~~9~~ CY to 19 CY
- Item Nos. 28 through 116 have been renumbered as 29 through 117
- New Item No. 28 has been added
- The quantity for Item No. 29 has been revised from ~~2,200~~ SF to 2,500 SF
- The quantity for Item No. 60 has been revised from ~~3~~ EA to 8 EA
- The quantity for Item No. 62 has been revised from ~~12~~ EA to 10 EA

Item 2:
Location: Plans
Description: Sheets DR1, DR2, DR3, DP1, DP3, DP4, DD1, DD2, WP1 - Replace in their entirety with the revised sheets, sheets 21-24, 26-29, 66 which are included as an attachment to this addendum

Item 3:
Location: Special Provisions Section 6-19.3(3) Shaft Excavation
Description: Special Provision Section 6-19.3(3) has been supplemented to include "(******) The retaining wall used for the installation of the pier column for Pier 3 shall be temporary. The temporary shoring for the pier column shall be paid as the "Shoring or Extra Excavation Cl. A - Pier" Bid item in Section 2-09."

Item 4:
Location: Special Provisions Section 7-04.3(1) Cleaning and Testing
Description: Special Provision Section 7-04.3(1) Page 128 Line 31 has been revised to remove "sanitary".

Item 5:
Location: Special Provisions Section 7-05.4 Measurement
Description: Special Provision Section 7-05.4 has been supplemented to include "All costs involved with the frames, grates, and solid covers shall be included in the unit Contract prices for the various items of Work."

Item 6:
Location: Special Provisions Section 7-20.3(2) Vaults
Description: Special Provision Section 7-20.3(2) Page 138 Line 33 has been revised to remove "Class" and replaced with "Cl.".

QUESTIONS AND ANSWERS:

This informal section is issued as part of the Invitation to Bid in order to document responses to questions raised during the bidding process received via email. In the event of a conflict between information in the Questions and Answers below and the bidding documents, the terms of the bidding documents shall apply.

A. Is there a pre-bid meeting for the project prior to the bid date?
    a. There is no pre-bid meeting.

B. Are there any DBE requirements on this project?
    a. There are no DBE requirements on the project, but the project has requirements for apprenticeship utilization and has also set other labor utilization goals as referenced in Section 1-07.9(3) of the Special Provisions.

C. What is the expected start date for the project?
    a. Notice to Proceed may be issued after Council Award anticipated on March 4, 2025. The Apprentice Utilization Plan and Preconstruction Conference are required before work begins.

D. What is the expected duration (working days) for the project?
    a. The project has 200 working days until physical completion as referenced in Section 1-08.5 of the Special Provisions.

E. Sheet S13 calls for 7" x 4" x 3/16" angle for the bearing assemblies. Would it be acceptable to provide 3/8" in lieu of 3/16"?

a. There is no issue with using 3/8” in lieu of 3/16” for the specified 7” x 4” x 3/16” angle for the bearing assemblies.

F. Is it possible for the City to post the CAD files for the project?
   a. The City will not provide CAD drawings for the bid phase.

G. I have not been able to locate a post installation detail for the chain link sidewalk safety railing for bid item 101. Will this install be plated side surface mount to the top block as the above project details? Dirt set in concrete? Or possibly top surface mount to the sidewalk?
   a. Please reference the post installation shown on Wall Details and Sections - Sheet WD1 for bid estimating purposes.

Sincerely,

Vincent Wen, P.E., Project Engineer, Perteet

George Minassian, P.E., Capital Projects Manager, City of Kirkland

CITY OF KIRKLAND
BID SCHEDULE

NE 85TH ST PED-BIKE CONNECTION 114TH AVE NE TO 6TH ST
JOB NO. 37-24-PW & CIP NO. STC1070000

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	Unexpected Site Changes	1-04	1	EST	$50,000	$50,000
2	Record Drawings (Minimum Bid $5000)	1-05	1	LS		
3	Structure Surveying	1-05	1	LS		
4	Roadway Surveying	1-05	1	LS		
5	Apprenticeship Incentive	1-07	1	CALC	$5,000	$5,000
6	Apprenticeship Penalty	1-07	1	CALC	-$5	-$5
7	King County Sewer Potholing	1-07	1	LS		
8	Owner-Directed Potholing	1-07	12	EA		
9	Pedestrian Traffic Control	1-07	1	LS		
10	SPCC Plan	1-07	1	LS		
11	Type B Progress Schedule	1-08	1	LS		
12	Mobilization	1-09	1	LS		
13	Project Temporary Traffic Control	1-10	1	LS		
14	Clearing and Grubbing	2-01	1	LS		
15	Removing Cement Conc. Sidewalk	2-02	90	SY		
16	Removing Asphalt Conc. Curb	2-02	1,140	LF		
17	Removing Cement Conc. Curb	2-02	200	LF		
18	Removing Cement Conc. Curb and Gutter	2-02	10	LF		
19	Sawcutting Existing Pavement	2-02	2,100	LF		
20	Removal of Structures and Obstructions	2-02	1	LS		
21	Removing Drainage Structure	2-02	6	EA		
22	Removing Existing Drainage Pipe	2-02	170	LF		
23	Roadway Excavation Incl. Haul	2-03	830	CY		
24	Gravel Borrow Incl. Haul	2-03	~~7400~~ 7500	TON		
25	Structure Excavation Class A Incl. Haul	2-09	10,030	CY		

26	Structure Excavation Class B Incl. Haul	2-09	~~770~~ 760	CY		
27	Shoring or Extra Excavation Cl. A - Detention Vault	2-09	1	LS		
28	Shoring or Extra Excavation Cl. A - Pier	2-09	1	LS		
~~28~~ 29	Shoring or Extra Excavation Class B	2-09	~~2,200~~ 2,500	SF		
~~29~~ 30	Construction Geotextile for Separation	2-12	40	SY		
~~30~~ 31	Crushed Surfacing Top Course	4-04	1,880	TON		
~~31~~ 32	Planing Bituminous Pavement	5-04	4,000	SY		
~~32~~ 33	HMA CL. 1/2 In. PG 58H-22	5-04	840	TON		
~~33~~ 34	Asphalt Cost Price Adjustment	5-04	1	CALC	$2,500	$2,500
~~34~~ 35	Cement Conc. Pavement	5-05	250	SY		
~~35~~ 36	Stamped Cement Conc. Pavement	5-05	650	SY		
~~36~~ 37	Conc. Class 4000 - Abutments	6-02	21	CY		
~~37~~ 38	St. Reinf. Bar - Abutments	6-02	6,700	LB		
~~38~~ 39	Conc. Class 4000 - Piers	6-02	22	CY		
~~39~~ 40	St. Reinf. Bar - Piers	6-02	9,564	LB		
~~40~~ 41	Deck (NE 85th Pedestrian Bridge)	6-02	1	LS		
~~41~~ 42	Voided Slab Girders (Includes Temporary Shoring)	6-02	290	LF		
~~42~~ 43	Elastomeric Bearings	6-02	4	EA		
~~43~~ 44	Pigmented Sealer	6-02	632	SY		
~~44~~ 45	Bridge Railing - Superstr.	6-06	334	LF		
~~45~~ 46	Conc. Class 4000 For Median Retaining Wall	6-11	8	CY		
~~46~~ 47	St. Reinf. Bar For Median Retaining Wall	6-11	3,019	LB		
~~47~~ 48	Gravel Backfill for Wall Incl. Haul	6-11	17	CY		
~~48~~ 49	Structural Earth Wall	6-13	21,500	SF		
~~49~~ 50	Gravel Borrow For Structural Earth Wall Incl. Haul	6-13	8,370	CY		
~~50~~ 51	Constructing 5 Ft. Diam. Shaft	6-19	70	LF		
~~51~~ 52	Constructing 4 Ft. Diam. Shaft	6-19	70	LF		
~~52~~ 53	QA Shaft Test	6-19	4	EA		
~~53~~ 54	Removing Shaft Obstructions	6-19	1	EST	$29,400	$29,400
~~54~~ 55	Drain Pipe 6 In. Diam.	7-01	20	EA		
~~55~~ 56	Cleanout 6 In. Diam.	7-01	23	EA		

~~56~~ 57	Underdrain Pipe 6 In. Diam.	7-01	1,840	LF		
~~57~~ 58	Schedule A Storm Sewer Pipe 12 In. Diam	7-04	1,350	LF		
~~58~~ 59	Ductile Iron Storm Sewer Pipe 12 In. Diam.	7-04	120	LF		
~~59~~ 60	Pipe Anchor	7-04	~~3~~ 8	EA		
~~60~~ 61	Manhole 48 In. Diam. Type 3	7-05	1	EA		
~~61~~ 62	Catch Basin Type 1	7-05	~~12~~ 10	EA		
~~62~~ 63	Catch Basin Type 2 48 In. Diam.	7-05	3	EA		
~~63~~ 64	Adjust Catch Basin	7-05	2	EA		
~~64~~ 65	Connection to Drainage Structure	7-05	2	EA		
~~65~~ 66	Catch Basin Type 2 72 In. Diam. With Flow Restrictors	7-05	1	EA		
~~66~~ 67	Plugging Existing Pipe	7-08	8	EA		
~~67~~ 68	Water Connection to Irrigation	7-09	1	LS		
~~68~~ 69	Service Connection 1 In. Diam.	7-15	1	EA		
~~69~~ 70	Detention Vault	7-20	1	LS		
~~70~~ 71	Erosion/Water Pollution Control	8-01	1	LS		
~~71~~ 72	ESC Lead	8-01	120	DAY		
~~72~~ 73	Inlet Protection	8-01	22	EA		
~~73~~ 74	High Visibility Silt Fence	8-01	2,400	LF		
~~74~~ 75	PSIPE Tilia cordata/Little leaf linden (3" Caliper)	8-02	4	EA		
~~75~~ 76	PSIPE Acer rubrum 'Karpick'/ Karpick Maple (3" Caliper)	8-02	2	EA		
~~76~~ 77	PSIPE Ulmus 'Frontier'/ Frontier Elm (3" Caliper)	8-02	3	EA		
~~77~~ 78	PSIPE Acer saccharum 'Green Mountain'/ Green Mountain Sugar Maple (3" Caliper)	8-02	4	EA		
~~78~~ 79	PSIPE Nyssa sylvatical Black Tupelo (3" Caliper)	8-02	4	EA		
~~79~~ 80	PSIPE Cornus 'Eddies White Wonder'/ Eddies White Wonder Dogwood (3" Caliper)	8-02	4	EA		
~~80~~ 81	PSIPE Psuedotsuga menziesii/ Douglas fir (6' Height)	8-02	40	EA		
~~81~~ 82	PSIPE Pachysandra terminalis 'Green sheen'/ Japanese Pachysandra Green Sheen (#1 Cont)	8-02	380	EA		
~~82~~ 83	PSIPE Mahonia aquifolium/ Oregon Grape (#2 Cont)	8-02	550	EA		
~~83~~ 84	PSIPE Symphoricarpos alba/ Snowberry (#2 Cont)	8-02	1,020	EA		

~~84~~ 85	Medium Compost	8-02	211	CY		
~~85~~ 86	Wood Chip Mulch	8-02	211	CY		
~~86~~ 87	Topsoil Type A	8-02	201	CY		
~~87~~ 88	12" Depth Root Barrier	8-02	266	LF		
~~88~~ 89	18" Depth Root Barrier	8-02	154	LF		
~~89~~ 90	Sod Installation	8-02	235	SY		
~~90~~ 91	Property Restoration	8-02	1	LS		
~~91~~ 92	Irrigation System	8-03	1	LS		
~~92~~ 93	Type 410C Cement Conc. Curb	8-04	190	LF		
~~93~~ 94	Extruded Curb	8-04	100	LF		
~~94~~ 95	Cement Conc. Curb and Gutter	8-04	1,570	LF		
~~95~~ 96	Raised Pavement Marker Type 2	8-09	2	HUND		
~~96~~ 97	Removing Guardrail	8-11	1,810	LF		
~~97~~ 98	Beam Guardrail Type 31	8-11	25	LF		
~~98~~ 99	Beam Guardrail Type 31 Non-Flared Terminal	8-11	1	EA		
~~99~~ 100	Beam Guardrail Anchor Type 11	8-11	1	EA		
~~100~~ 101	Chain Link Fence Type 4	8-12	50	LF		
~~101~~ 102	Chain Link Sidewalk Safety Rail	8-12	1,820	LF		
~~102~~ 103	Cement Conc. Sidewalk	8-14	3,090	SY		
~~103~~ 104	Cement Conc. Curb Ramp Type Perpendicular A	8-14	11	SY		
~~104~~ 105	~~Heavy Loose Riprap~~ Quarry Spalls	8-15	~~9~~ 19	CY		
~~105~~ 106	Illumination System Complete	8-20	1	LS		
~~106~~ 107	Temporary Illumination System	8-20	1	LS		
~~107~~ 108	Traffic Signal System	8-20	1	LS		
~~108~~ 109	Temporary Traffic Signal System	8-20	1	LS		
~~109~~ 110	Adjusting Existing Junction Box	8-20	5	EA		
~~110~~ 111	Preformed Detector Loop Type 3	8-20	2	EA		
~~111~~ 112	ITS - City Fiber	8-20	1	LS		
~~112~~ 113	Permanent Signing	8-21	1	LS		
~~113~~ 114	Paint Line	8-22	5,600	LF		
~~114~~ 115	Plastic Crosswalk Line	8-22	60	SF		
~~115~~ 116	Temporary Pavement Marking - Long Duration	8-23	140	LF		

~~116~~ 117	Soil Cell	8-35	209	EA		

TOTAL COMPUTED BID PRICE: $_____

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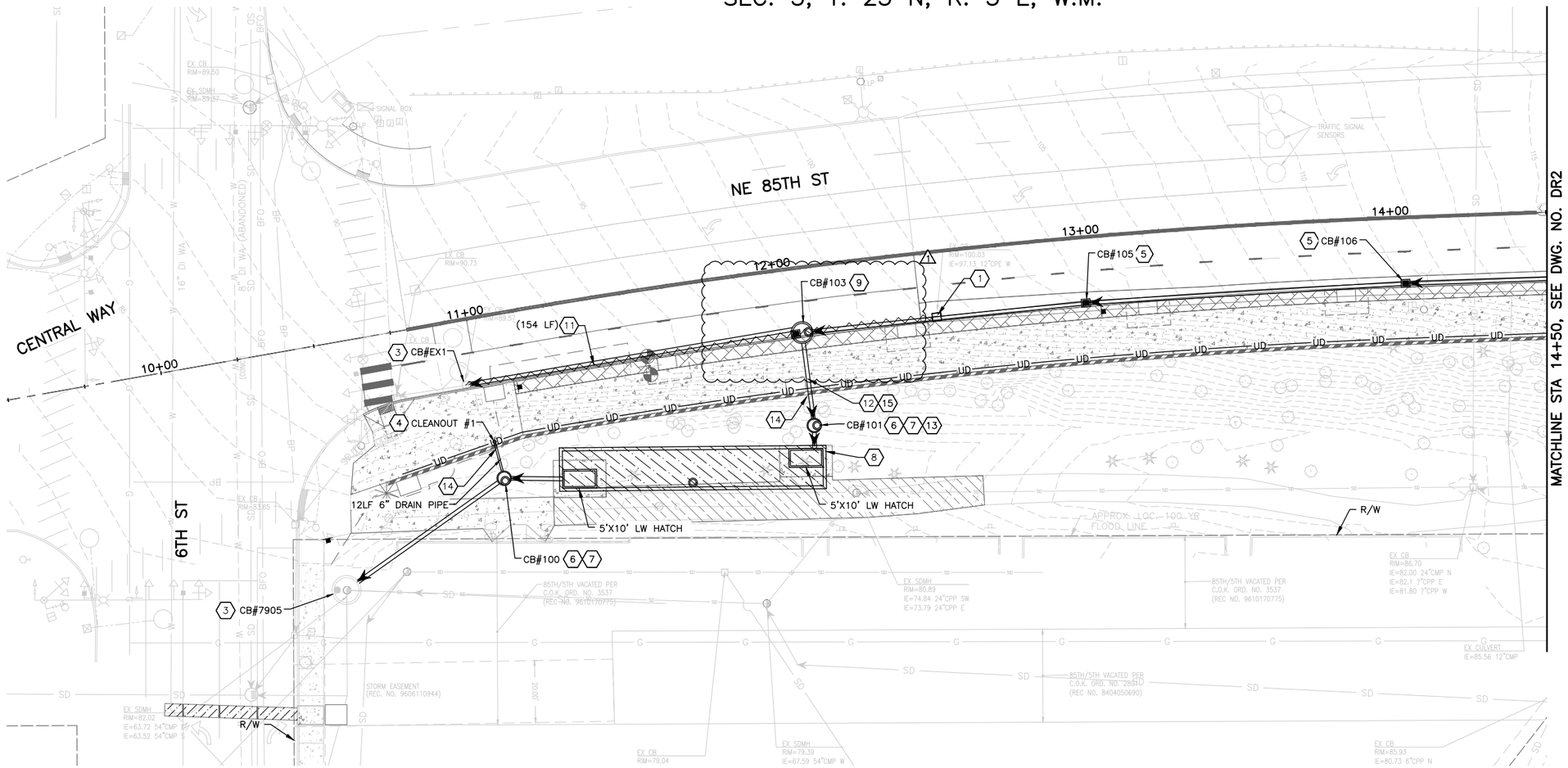

CONSTRUCTION NOTES:

1. REMOVE EXISTING CATCH BASIN.
2. FOR CORRUGATED METAL PIPE (CMP) – CONTRACTOR SHALL INSPECT AND CCTV EXISTING PIPE TO DETERMINE PIPE CONDITION. FOR CMP IN GOOD CONDITION, PIPE SHALL BE FILLED WITH CDF AND PIPE ENDS SHALL BE PLUGGED WITH COMMERCIAL CEMENT CONCRETE. FOR ALL EXISTING PIPE IN BAD CONDITION, DISCUSS WITH THE CITY STORMWATER DIVISION FOR FURTHER ACTION.
   FOR CONCRETE PIPE AND DUCTILE IRON PIPE – CONTRACTOR SHALL FILL PIPE WITH CDF AND BRICK, AND PIPE ENDS SHALL BE PLUGGED WITH CEMENT–BASE GROUT.
3. CONNECT NEW PIPE TO EXISTING CATCH BASIN.
4. INSTALL 6" CLEANOUT PER DETAIL ON DWG. NO. DD1.
5. INSTALL CATCH BASIN TYPE 1 PER COK STD PLAN CK–D.07.
6. INSTALL CATCH BASIN TYPE 2–48" PER COK STD PLAN CK–D.09.
7. INSTALL SOLID LOCKING LID WITH COK STORM DRAIN LOGO PER COK STD PLAN CK–D.18.
8. INSTALL DETENTION VAULT FACILITY PER DETAIL ON DWG. NO. DD1.
9. INSTALL FLOW SPLITTER STRUCTURE PER DETAIL ON DWG. NO. DD2. (1)
10. NOT USED.
11. REMOVE EXISTING PIPE.
12. INSTALL CL. 50 DUCTILE IRON STORM SEWER PIPE 12 IN. DIAM. WITH RESTRAINED MECHANICAL JOINTS.
13. INSIDE OF CATCH BASIN TO BE EPOXY COATED FOR SCOUR PROTECTION.
14. INSTALL PIPE THROUGH WALL PER DETAIL ON DWG. NO. WD1.
15. INSTALL PIPE ANCHOR AT EVERY PIPE JOINT PER DETAIL ON DWG. NO. DD1.
16. INSTALL MANHOLE TYPE 3–48" PER WSDOT STD PLAN B–15.60.
17. INSTALL SOLID LOCKING LID WITH COK STORM DRAIN LOGO PER COK STD PLAN CK–D.18A.

GENERAL NOTES:

1. THE OFFSETS OF ALL CATCH BASINS ARE MEASURED TO THE CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
2. ALL EXISTING STORM DRAIN PIPE, EXISTING CATCH BASINS AND STORM MANHOLES SHOWN IN THESE PLANS ARE TO BE PROTECTED, UNLESS OTHERWISE NOTED.
3. ALL DRAINAGE STRUCTURES ARE PER COK STANDARD PLANS UNLESS NOTED OTHERWISE.
4. WALL UNDERDRAIN INVERTS AND SLOPES ARE APPROXIMATE AND PROFILES ARE NOT SHOWN ON THE PLANS. CONTRACTOR TO ADJUST WALL UNDERDRAIN SLOPES AND INVERTS AS NECESSARY TO AVOID UTILITY CONFLICTS. MINIMUM PIPE SLOPE IS 0.5%. CLEANOUTS SHALL BE SPACED EVERY 100 FEET ALONG THE LENGTH OF THE WALL. CLEANOUTS SHALL BE INSTALLED PER COK STD PLAN CK–D.05B.
5. ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT SPECIFICATIONS. THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL, AND ANY REQUIRED PIPE BEDDING, TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.
6. ALL STORM SEWER PIPE SHALL BE SCHEDULE A SMOOTH INTERIOR WALL HIGH–PERFORMANCE POLYPROPYLENE STORM SEWER PIPE UNLESS OTHERWISE NOTED.
7. ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT DETENTION FACILITY SHALL HAVE SOLID LOCKING LIDS.
8. ALL PROPOSED CATCH BASINS SHALL HAVE VANED GRATES PER COK STD PLAN CK–D.15 AND CK–D.16 UNLESS NOTED OTHERWISE.

LEGEND:

- SD — EXISTING STORM DRAIN PIPE
- PROPOSED STORM DRAIN PIPE
- REMOVE PIPE
- UD — UD — WALL UNDERDRAIN
- CATCH BASIN, TYPE 1
- CATCH BASIN, TYPE 2
- CONCRETE DETENTION VAULT

0 20 40
1" = 20'
HORIZONTAL SCALE:

0 5 10
1" = 5'
VERTICAL SCALE:

DWG. NO. DR1

PERTEET
2707 COLBY AVENUE, SUITE 900
EVERETT, WA 98201
425.252.7700 | 800.615.9900

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

THOMAS WAIMAN CHEONG STATE OF WASHINGTON 23035307 REGISTERED PROFESSIONAL ENGINEER

FILE	ENGR.	REVIEW	SCALE	DATE
DR1	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	DRAINAGE PLAN LAYOUT UPDATE	TWC	VWW	1/17/2025

CITY OF KIRKLAND
PUBLIC WORKS DEPARTMENT
123 FIFTH AVENUE – KIRKLAND, WA 98033–6189 – (425)587–3800

NE 85TH ST PED–BIKE CONNECTION

DRAINAGE PLAN

SHEET 21 / 100

Jan 16, 2025 - 1:33pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 DR.dwg Layout Name: DR1

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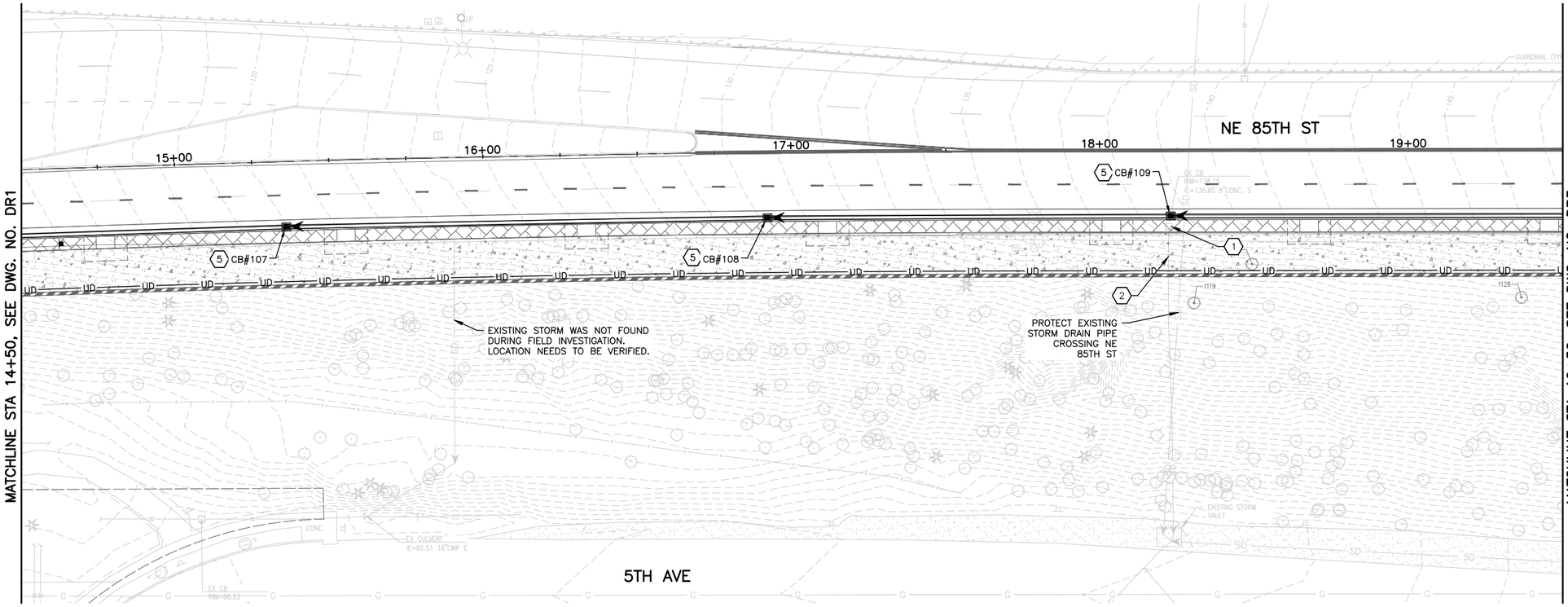

CONSTRUCTION NOTES:

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8. INSTALL DETENTION VAULT FACILITY PER DETAIL ON DWG. NO. DD1.
9. INSTALL FLOW SPLITTER STRUCTURE PER DETAIL ON DWG. NO. DD2. (1)
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13. INSIDE OF CATCH BASIN TO BE EPOXY COATED FOR SCOUR PROTECTION.
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- PROPOSED STORM DRAIN PIPE
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- CATCH BASIN, TYPE 1
- CATCH BASIN, TYPE 2
- CONCRETE DETENTION VAULT

0 20 40
1" = 20'
HORIZONTAL SCALE:

0 5 10
1" = 5'
VERTICAL SCALE:

DWG. NO. DR2

PERTEET
2707 COLBY AVENUE, SUITE 900
EVERETT, WA 98201
425.252.7700 | 800.615.9900

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THOMAS WAIMAN CHEONG STATE OF WASHINGTON 23035307 REGISTERED PROFESSIONAL ENGINEER

FILE	ENGR.	REVIEW	SCALE	DATE
DR2	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	DRAINAGE PLAN LAYOUT UPDATE	TWC	VWW	1/17/2025

CITY OF KIRKLAND WASHINGTON

CITY OF KIRKLAND
PUBLIC WORKS DEPARTMENT
123 FIFTH AVENUE – KIRKLAND, WA 98033–6189 – (425)587–3800

NE 85TH ST PED–BIKE CONNECTION

DRAINAGE PLAN

SHEET 22 / 100

Jan 16, 2025 - 1:33pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 DR.dwg Layout Name: DR2

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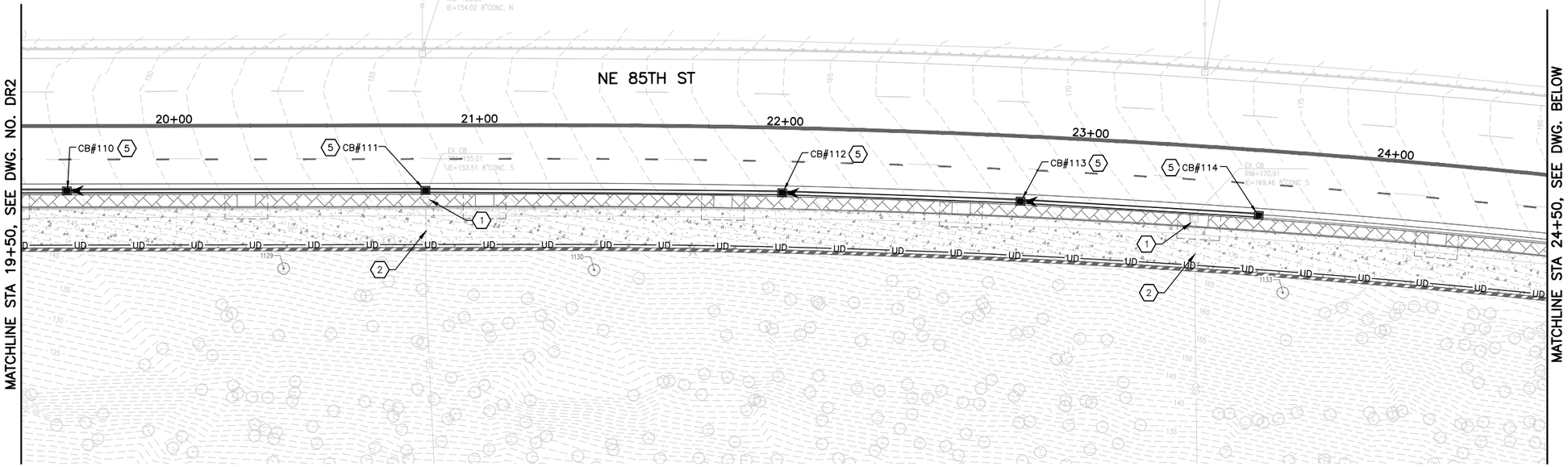

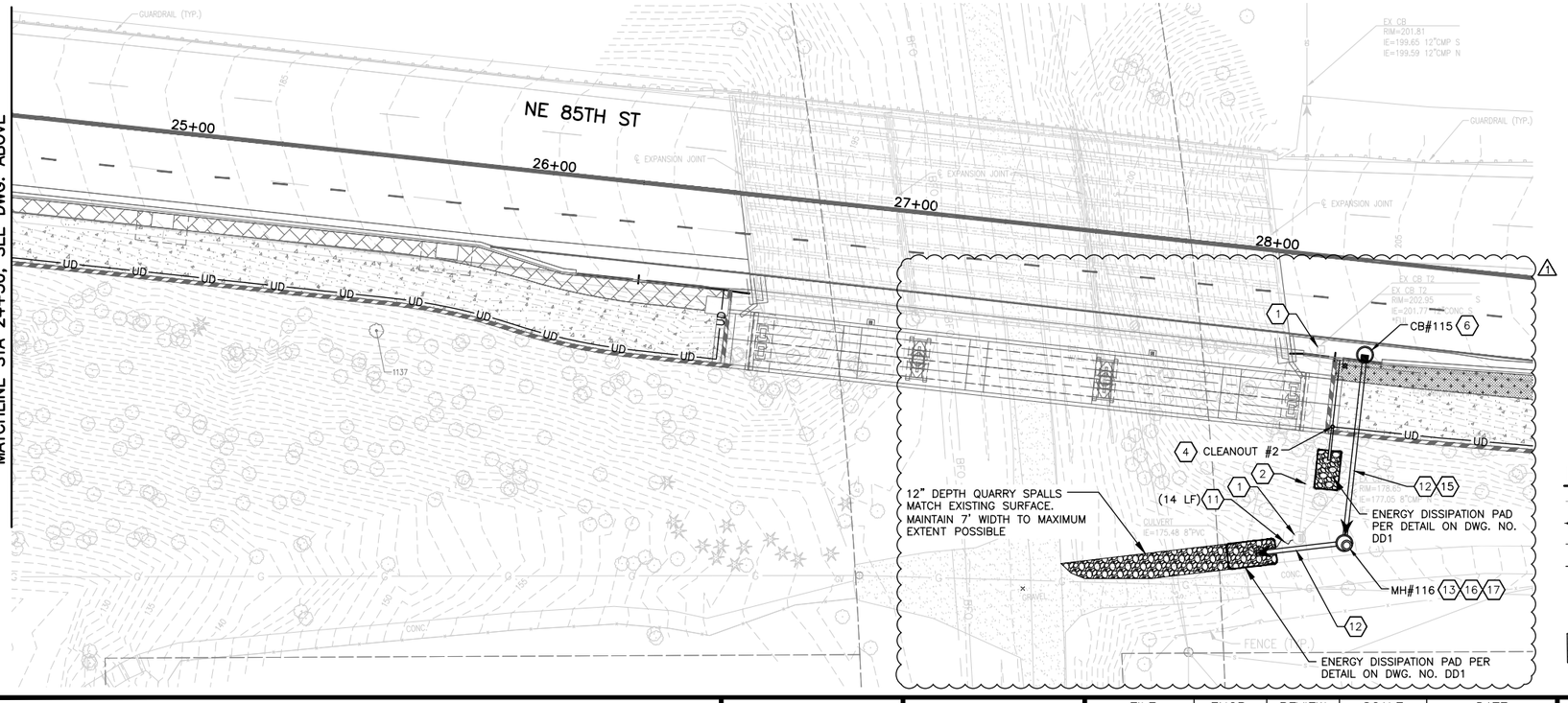

CONSTRUCTION NOTES:

1. REMOVE EXISTING CATCH BASIN.
2. FOR CORRUGATED METAL PIPE (CMP) – CONTRACTOR SHALL INSPECT AND CCTV EXISTING PIPE TO DETERMINE PIPE CONDITION. FOR CMP IN GOOD CONDITION, PIPE SHALL BE FILLED WITH CDF AND PIPE ENDS SHALL BE PLUGGED WITH COMMERCIAL CEMENT CONCRETE. FOR ALL EXISTING PIPE IN BAD CONDITION, DISCUSS WITH THE CITY STORMWATER DIVISION FOR FURTHER ACTION.
   FOR CONCRETE PIPE AND DUCTILE IRON PIPE – CONTRACTOR SHALL FILL PIPE WITH CDF AND BRICK, AND PIPE ENDS SHALL BE PLUGGED WITH CEMENT–BASE GROUT.
3. CONNECT NEW PIPE TO EXISTING CATCH BASIN.
4. INSTALL 6" CLEANOUT PER DETAIL ON DWG. NO. DD1.
5. INSTALL CATCH BASIN TYPE 1 PER COK STD PLAN CK–D.07.
6. INSTALL CATCH BASIN TYPE 2–48" PER COK STD PLAN CK–D.09.
7. INSTALL SOLID LOCKING LID WITH COK STORM DRAIN LOGO PER COK STD PLAN CK–D.18.
8. INSTALL DETENTION VAULT FACILITY PER DETAIL ON DWG. NO. DD1.
9. INSTALL FLOW SPLITTER STRUCTURE PER DETAIL ON DWG. NO. DD2. (1)
10. NOT USED.
11. REMOVE EXISTING PIPE.
12. INSTALL CL. 50 DUCTILE IRON STORM SEWER PIPE 12 IN. DIAM. WITH RESTRAINED MECHANICAL JOINTS.
13. INSIDE OF CATCH BASIN TO BE EPOXY COATED FOR SCOUR PROTECTION.
14. INSTALL PIPE THROUGH WALL PER DETAIL ON DWG. NO. WD1.
15. INSTALL PIPE ANCHOR AT EVERY PIPE JOINT PER DETAIL ON DWG. NO. DD1.
16. INSTALL MANHOLE TYPE 3–48" PER WSDOT STD PLAN B–15.60.
17. INSTALL SOLID LOCKING LID WITH COK STORM DRAIN LOGO PER COK STD PLAN CK–D.18A.

GENERAL NOTES:

1. THE OFFSETS OF ALL CATCH BASINS ARE MEASURED TO THE CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
2. ALL EXISTING STORM DRAIN PIPE, EXISTING CATCH BASINS AND STORM MANHOLES SHOWN IN THESE PLANS ARE TO BE PROTECTED, UNLESS OTHERWISE NOTED.
3. ALL DRAINAGE STRUCTURES ARE PER COK STANDARD PLANS UNLESS NOTED OTHERWISE.
4. WALL UNDERDRAIN INVERTS AND SLOPES ARE APPROXIMATE AND PROFILES ARE NOT SHOWN ON THE PLANS. CONTRACTOR TO ADJUST WALL UNDERDRAIN SLOPES AND INVERTS AS NECESSARY TO AVOID UTILITY CONFLICTS. MINIMUM PIPE SLOPE IS 0.5%. CLEANOUTS SHALL BE SPACED EVERY 100 FEET ALONG THE LENGTH OF THE WALL. CLEANOUTS SHALL BE INSTALLED PER COK STD PLAN CK–D.05B.
5. ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT SPECIFICATIONS. THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL, AND ANY REQUIRED PIPE BEDDING, TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.
6. ALL STORM SEWER PIPE SHALL BE SCHEDULE A SMOOTH INTERIOR WALL HIGH–PERFORMANCE POLYPROPYLENE STORM SEWER PIPE UNLESS OTHERWISE NOTED.
7. ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT DETENTION FACILITY SHALL HAVE SOLID LOCKING LIDS.
8. ALL PROPOSED CATCH BASINS SHALL HAVE VANED GRATES PER COK STD PLAN CK–D.15 AND CK–D.16 UNLESS NOTED OTHERWISE.

LEGEND:

- SD — EXISTING STORM DRAIN PIPE
- PROPOSED STORM DRAIN PIPE
- REMOVE PIPE
- UD — UD — WALL UNDERDRAIN
- CATCH BASIN, TYPE 1
- CATCH BASIN, TYPE 2
- CONCRETE DETENTION VAULT

0 20 40
1" = 20'
HORIZONTAL SCALE:

0 5 10
1" = 5'
VERTICAL SCALE:

DWG. NO. DR3

PERTEET
2707 COLBY AVENUE, SUITE 900
EVERETT, WA 98201
425.252.7700 | 800.615.9900

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THOMAS WAIMAN CHEONG STATE OF WASHINGTON 23035307 REGISTERED PROFESSIONAL ENGINEER

FILE	ENGR.	REVIEW	SCALE	DATE
DR3	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	DRAINAGE PLAN LAYOUT UPDATE	TWC	VWW	1/17/2025

CITY OF KIRKLAND WASHINGTON

CITY OF KIRKLAND
PUBLIC WORKS DEPARTMENT
123 FIFTH AVENUE – KIRKLAND, WA 98033–6189 – (425)587–3800

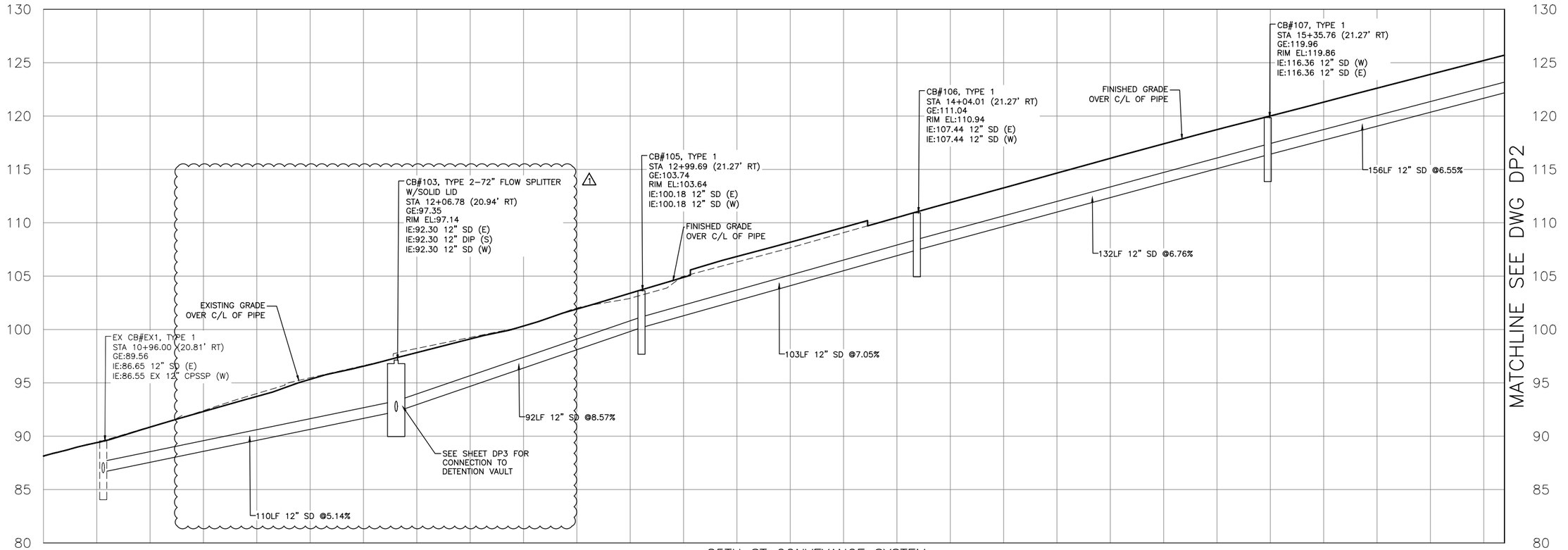
NE 85TH ST PED–BIKE CONNECTION

DRAINAGE PLAN

SHEET 23 / 100

Jan 16, 2025 - 1:33pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 DR.dwg Layout Name: DR3

SEC. 5, T. 25 N, R. 5 E, W.M.



85TH ST CONVEYANCE SYSTEM

HORIZONTAL SCALE
20 0 20 40
FEET

VERTICAL SCALE
5 0 5 10
FEET

DWG. NO. DP1

PERTEET
2707 COLBY AVENUE, SUITE 900
EVERETT, WA 98201
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FILE	ENGR.	REVIEW	SCALE	DATE
DP1	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	DRAINAGE PROFILE UPDATE	TWC	VWW	1/17/2025

CITY OF KIRKLAND WASHINGTON

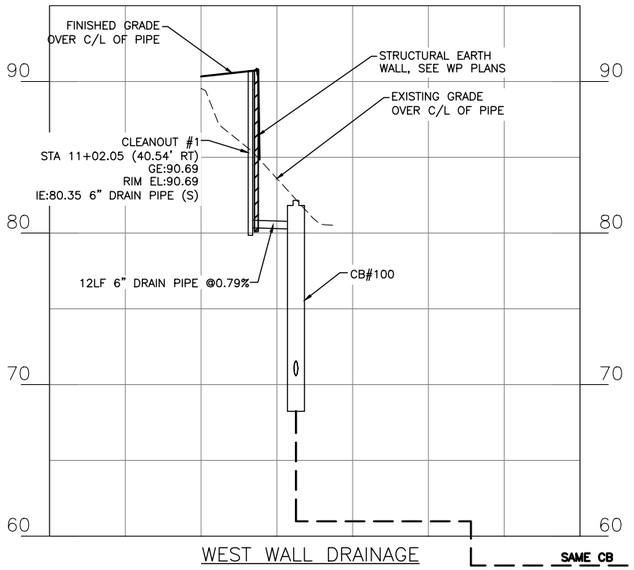
CITY OF KIRKLAND
PUBLIC WORKS DEPARTMENT
123 FIFTH AVENUE – KIRKLAND, WA 98033–6189 – (425)587–3800

NE 85TH ST PED–BIKE CONNECTION

DRAINAGE PROFILES

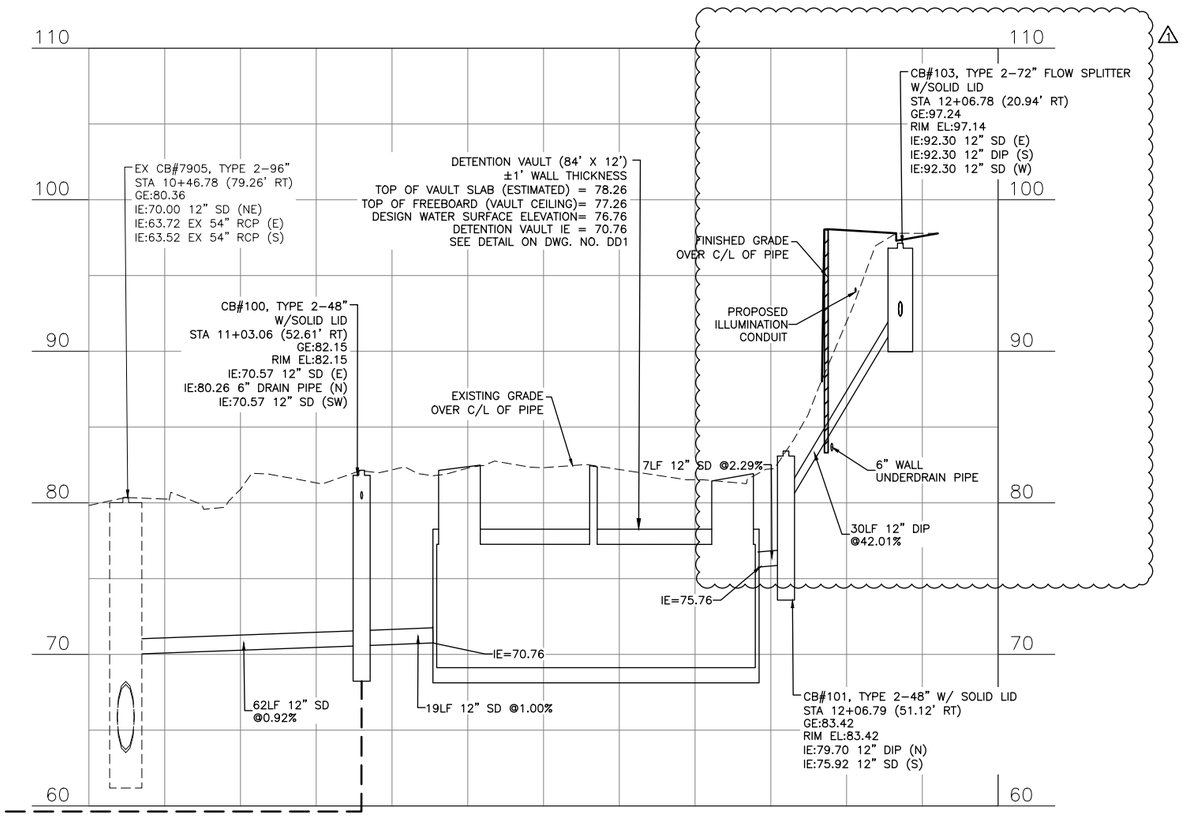
SHEET 24 / 100

Jan 16, 2025 - 1:33pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 DP.dwg Layout Name: DP1



WEST WALL DRAINAGE

SAME CB



FLOW SPLITTER TO DETENTION VAULT

HORIZONTAL SCALE
20 0 20 40
FEET

VERTICAL SCALE
5 0 5 10
FEET

DWG. NO. DP3

PERTEET
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FILE	ENGR.	REVIEW	SCALE	DATE
DP3	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	DRAINAGE PROFILE UPDATE	TWC	VWW	1/17/2025

CITY OF KIRKLAND WASHINGTON

CITY OF KIRKLAND
PUBLIC WORKS DEPARTMENT
123 FIFTH AVENUE – KIRKLAND, WA 98033-6189 – (425)587-3800

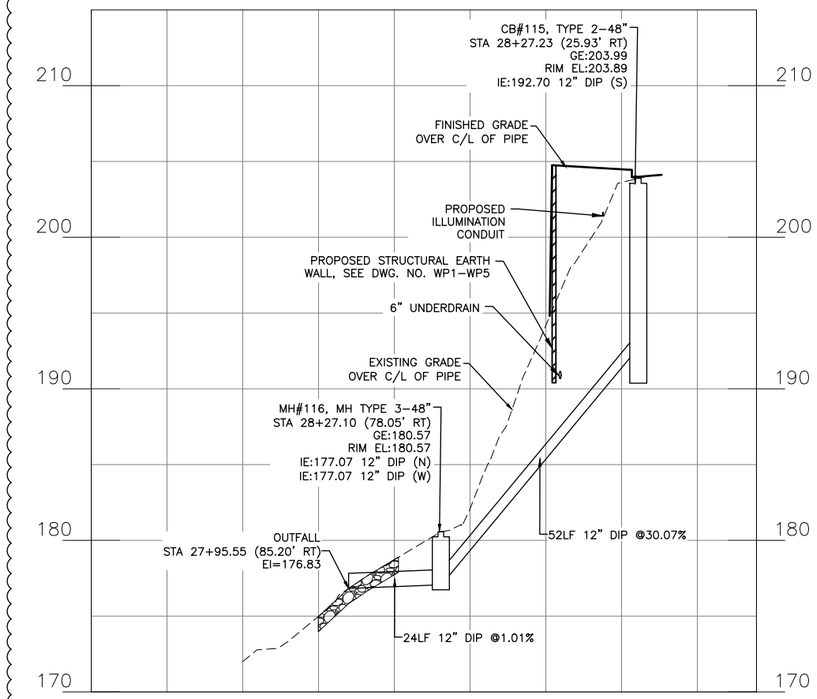
NE 85TH ST PED-BIKE CONNECTION

DRAINAGE PROFILES

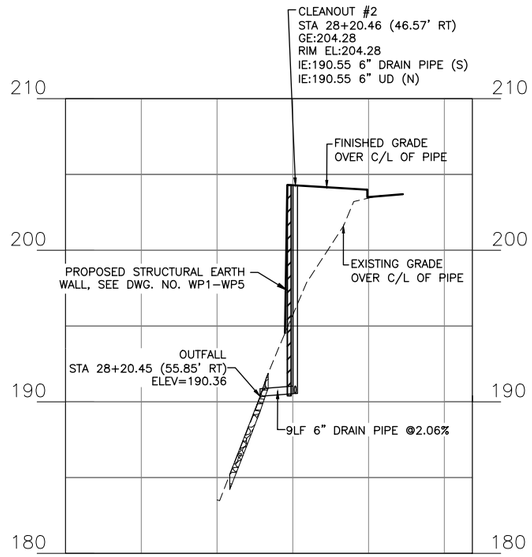
SHEET 26 / 100

Jan 16, 2025 - 1:34pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 DP.dwg Layout Name: DP3

SEC. 5, T. 25 N, R. 5 E, W.M.



CB#115 TO OUTFALL



EAST WALL DRAINAGE

HORIZONTAL SCALE
20 0 20 40
FEET

VERTICAL SCALE
5 0 5 10
FEET

DWG. NO. DP4

PERTEET
2707 COLBY AVENUE, SUITE 900
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FILE	ENGR.	REVIEW	SCALE	DATE
DP4	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	DRAINAGE PROFILE UPDATE	TWC	VWW	1/17/2025

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PUBLIC WORKS DEPARTMENT
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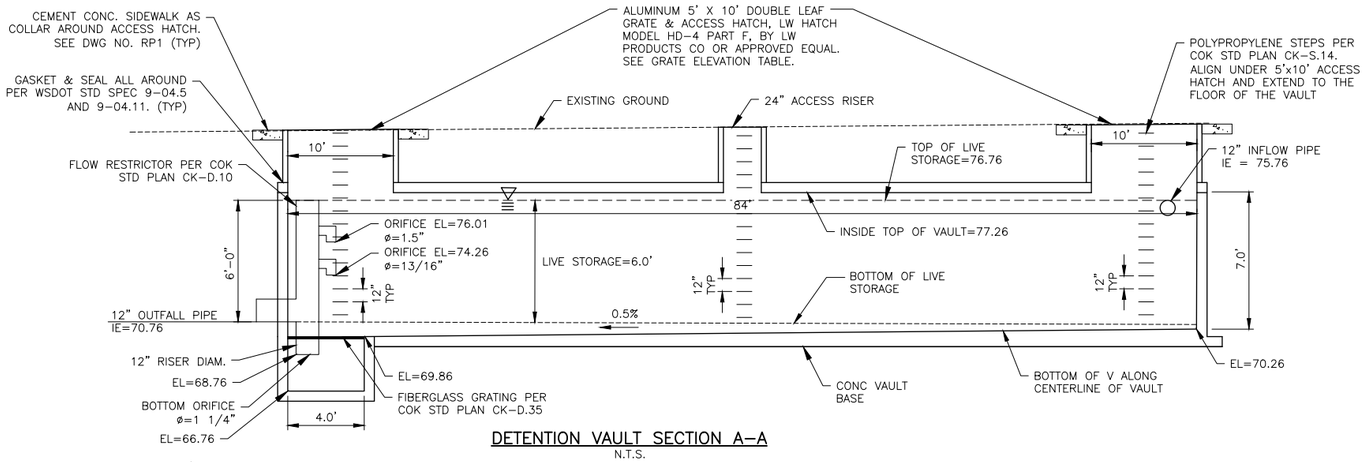
NE 85TH ST PED-BIKE CONNECTION

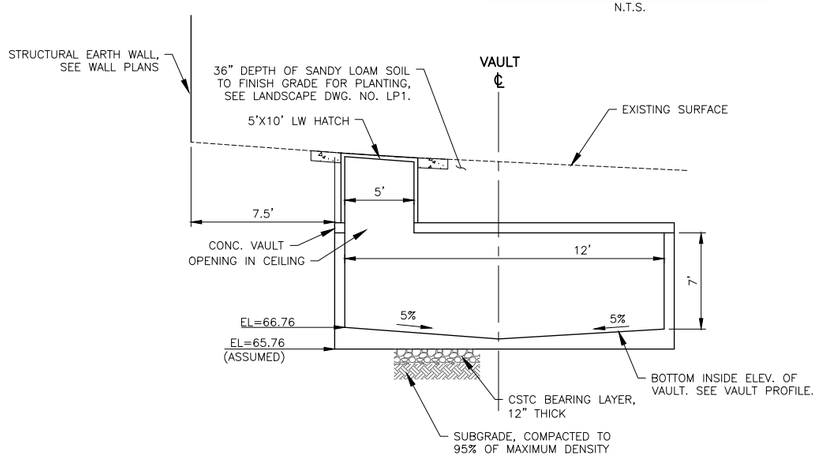
DRAINAGE PROFILES

SHEET 27 / 100

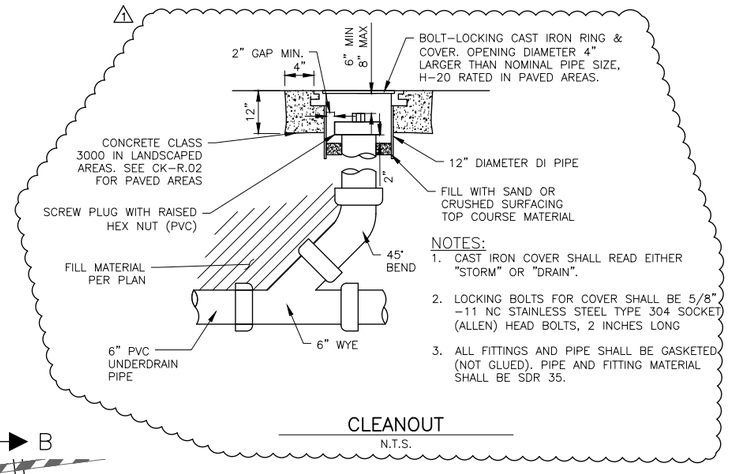
Jan 16, 2025 - 1:34pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 DP.dwg Layout Name: DP4



DETENTION VAULT SECTION A–A
N.T.S.

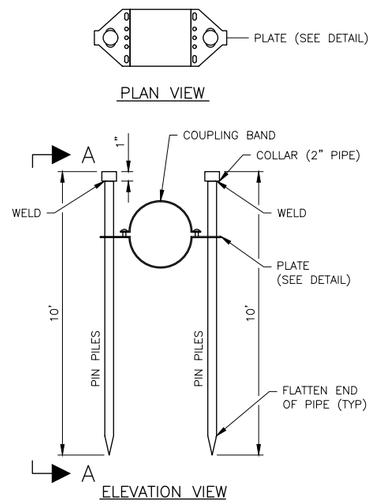


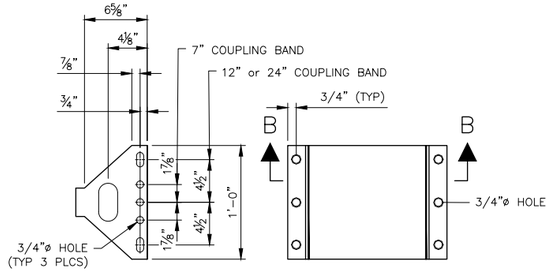
DETENTION VAULT SECTION B–B
N.T.S.

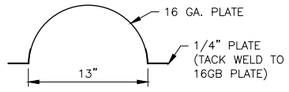


NOTES:
1. CAST IRON COVER SHALL READ EITHER "STORM" OR "DRAIN".
2. LOCKING BOLTS FOR COVER SHALL BE 5/8"–11 NC STAINLESS STEEL TYPE 304 SOCKET (ALLEN) HEAD BOLTS, 2 INCHES LONG
3. ALL FITTINGS AND PIPE SHALL BE GASKETED (NOT GLUED). PIPE AND FITTING MATERIAL SHALL BE SDR 35.

CLEANOUT
N.T.S.

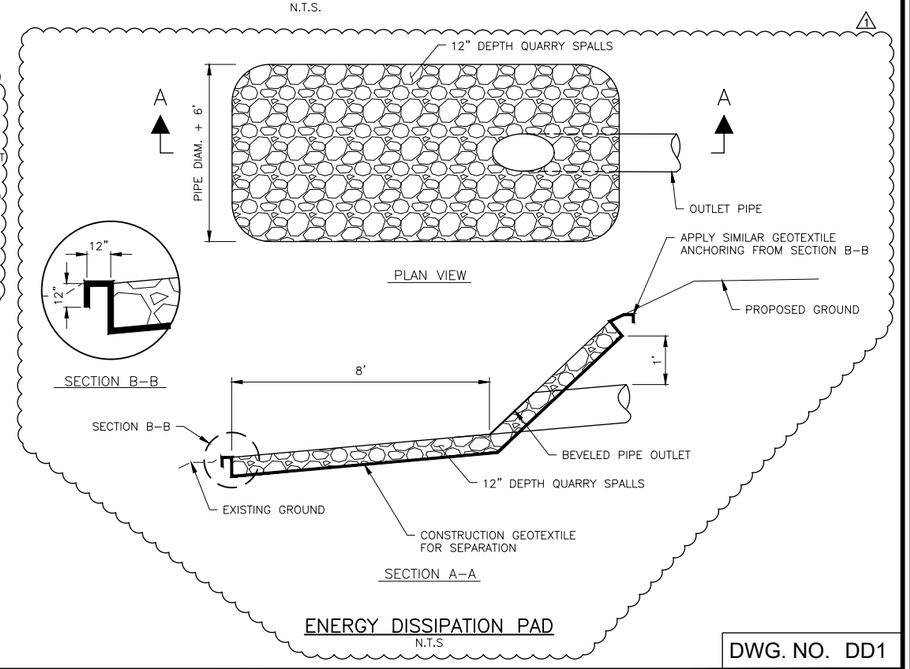




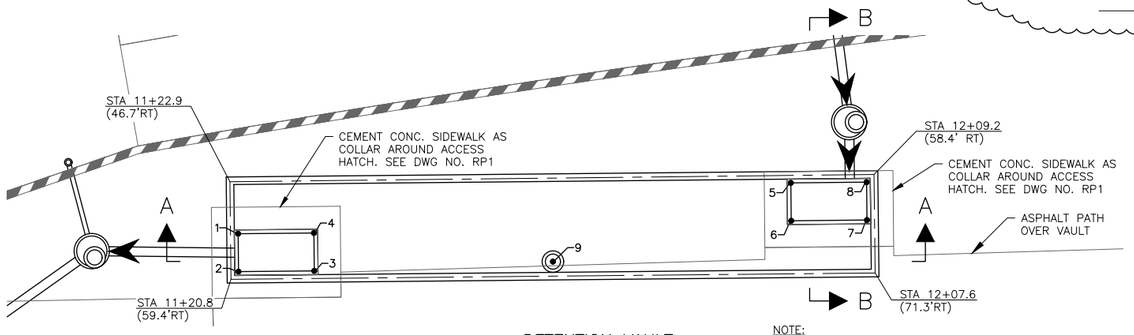


NOTE:
1. THE FIRST ANCHOR SHALL BE INSTALLED ON THE FIRST SECTION OF THE LOWER END OF THE PIPE AND THE REMAINING ANCHORS EVENLY SPACED THROUGHOUT THE INSTALLATION.
2. IF THE PIPE BEING INSTALLED HAS A CATCH BASIN ON THE LOWER END OF THE PIPE, THE FIRST PIPE ANCHOR MAY BE ELIMINATED.
3. WHEN CMP IS USED, THE ANCHORS MAY BE ATTACHED TO THE COUPLING BANDS USED TO JOIN THE PIPE, AS LONG AS THE SPECIFIED SPACING IS NOT EXCEEDED.
4. ALL PIPE ANCHORS SHALL BE SECURELY INSTALLED BEFORE BACKFILLING AROUND THE PIPE.
5. PLATE AND PIN PILE MATERIAL SHALL CONFORM TO ASTM A36 GALVANIZED AFTER FABRICATION PER ASTM A123.

PIPE ANCHORING DETAIL
N.T.S.



ENERGY DISSIPATION PAD
N.T.S



DETENTION VAULT
N.T.S.

ACCESS HATCH ELEVATION TABLE				
POINT NO	STATION	OFFSET		ELEV
1	11+22.77	53.68'	RT	82.07
2	11+21.95	58.61'	RT	81.55
3	11+32.11	60.18'	RT	82.02
4	11+32.91	55.24'	RT	82.26
5	11+97.88	58.06'	RT	81.87
6	11+97.24	63.02'	RT	81.34
7	12+07.47	64.24'	RT	81.39
8	12+08.09	59.27'	RT	81.86
9	11+64.36	63.91'	RT	82.34

NOTE:
1. SEE COK STD PLAN NO. CK D.35 FOR MORE INFORMATION.
2. STATION CALLOUT IS AT THE CENTERLINE OF THE DETENTION VAULT WALL.

DWG. NO. DD1

PERTEET
2707 COLBY AVENUE, SUITE 900
EVERETT, WA 98201
425.252.7700 | 800.615.9900

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THOMAS WAIMAN CHEONG STATE OF WASHINGTON 23035307 REGISTERED PROFESSIONAL ENGINEER

FILE	ENGR.	REVIEW	SCALE	DATE
DD1	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	ENERGY DISSIPATION PAD DETAIL FLOW SPLITTER DETAIL UPDATE	TWC	VWW	1/17/2025

CITY OF KIRKLAND WASHINGTON

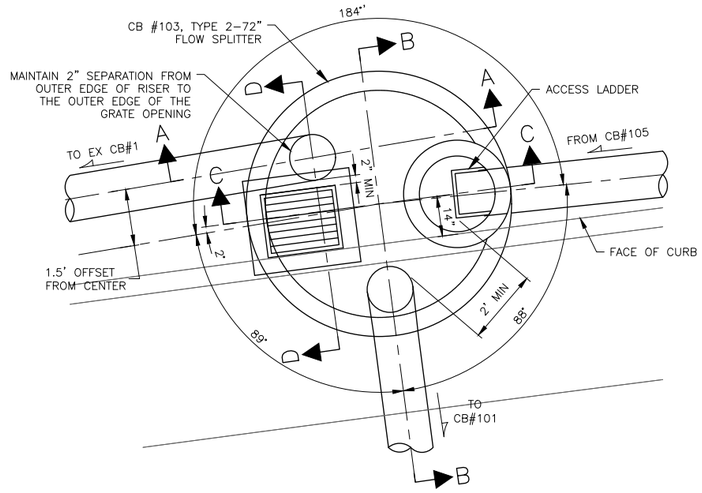
CITY OF KIRKLAND
PUBLIC WORKS DEPARTMENT
123 FIFTH AVENUE – KIRKLAND, WA 98033–6189 – (425)587–3800

NE 85TH ST PED–BIKE CONNECTION

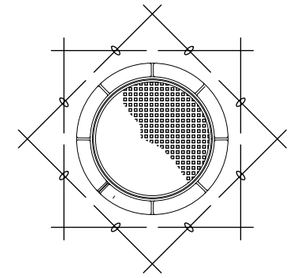
DRAINAGE DETAILS

SHEET 28 / 100

Jan 16, 2025 - 1:34pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 DD.dwg Layout Name: DD1



PLAN

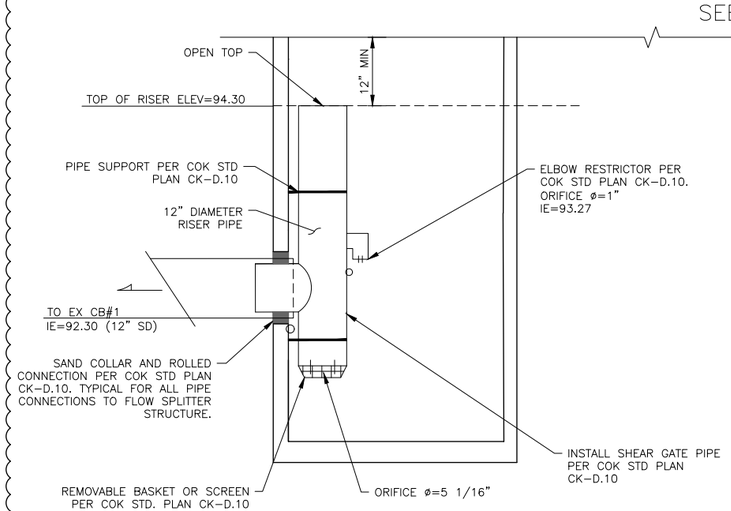


NOTES:
1. PLACE REBAR AT 1/2" DEPTH OF CEMENT CONCRETE.
2. NO REINFORCING STEEL MUST BE WITHIN 2 1/2" (3 INCHES DESIRED) OF ANY CEMENT CONCRETE SURFACE OR JOINT.

FRAME AND COVER REINFORCEMENT

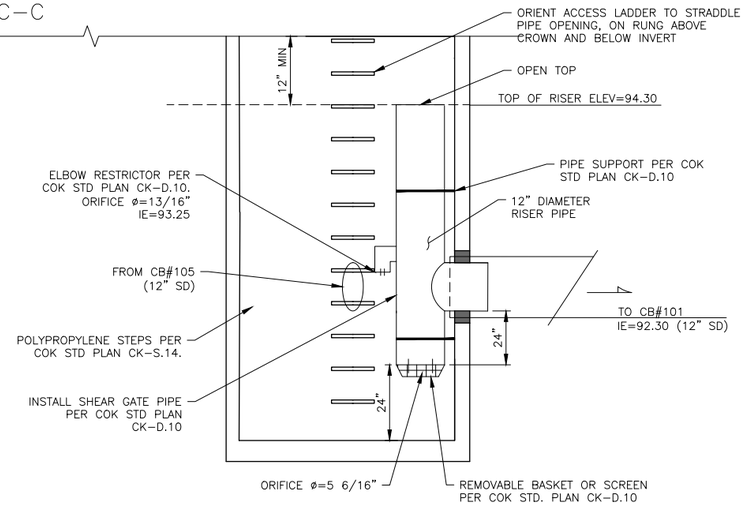
N.T.S.

SEE SECTION C–C



ELEVATION

SECTION A–A



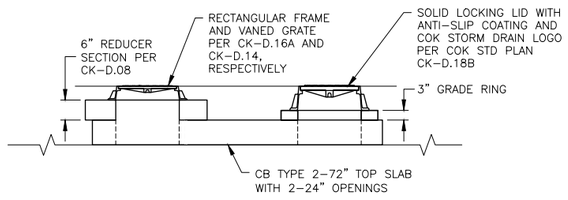
ELEVATION

SECTION B–B

NOTES:
1. MATERIALS OF COMPONENTS SHOWN SHALL MATCH THOSE SPECIFIED IN CITY OF KIRKLAND PRE–APPROVED PLAN CK–D.10.

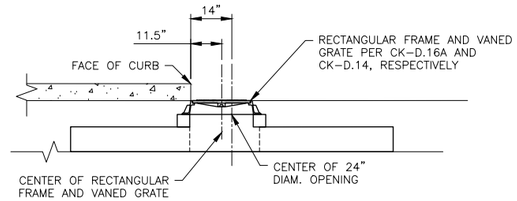
FLOW SPLITTER STRUCTURE

N.T.S.



SECTION C–C

N.T.S.



SECTION D–D

N.T.S.

DWG. NO. DD2

PERTEET
2707 COLBY AVENUE, SUITE 900
EVERETT, WA 98201
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FILE	ENGR.	REVIEW	SCALE	DATE
DD2	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	~~ENERGY DISSIPATION PAD DETAIL~~ FLOW SPLITTER DETAIL UPDATE	TWC	VWW	1/17/2025

CITY OF KIRKLAND WASHINGTON

CITY OF KIRKLAND
PUBLIC WORKS DEPARTMENT
123 FIFTH AVENUE – KIRKLAND, WA 98033–6189 – (425)587–3800

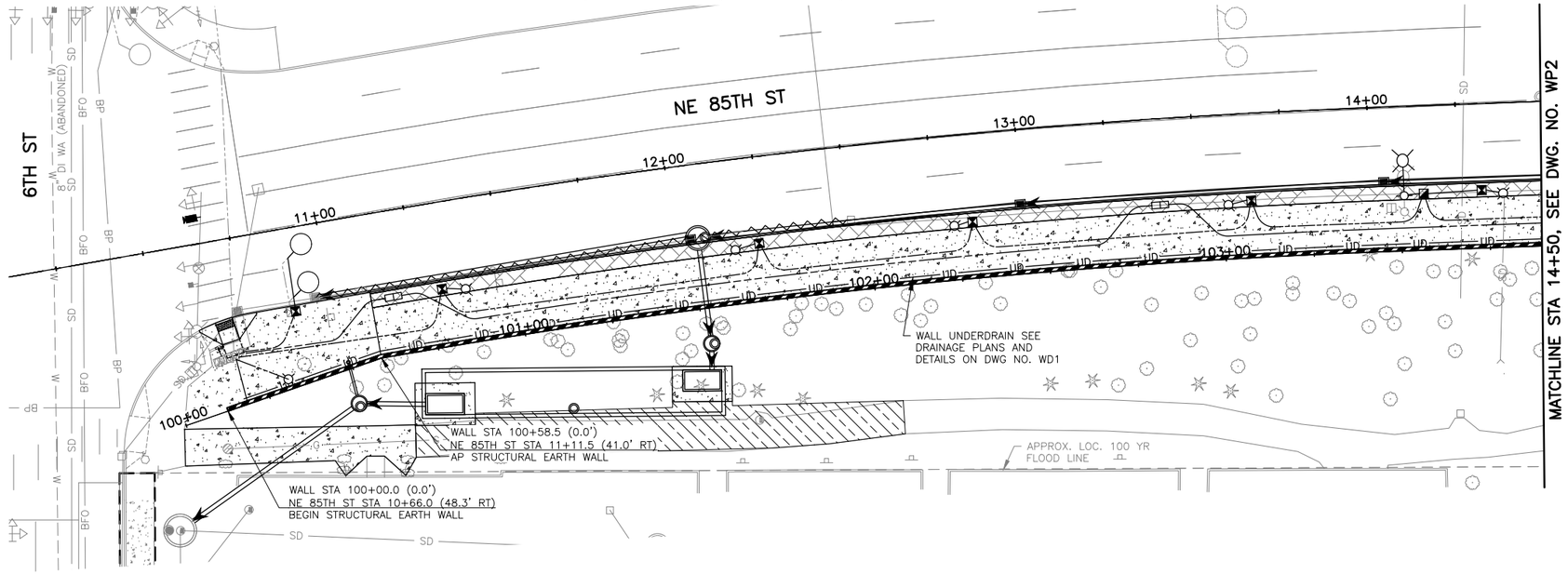
NE 85TH ST PED–BIKE CONNECTION

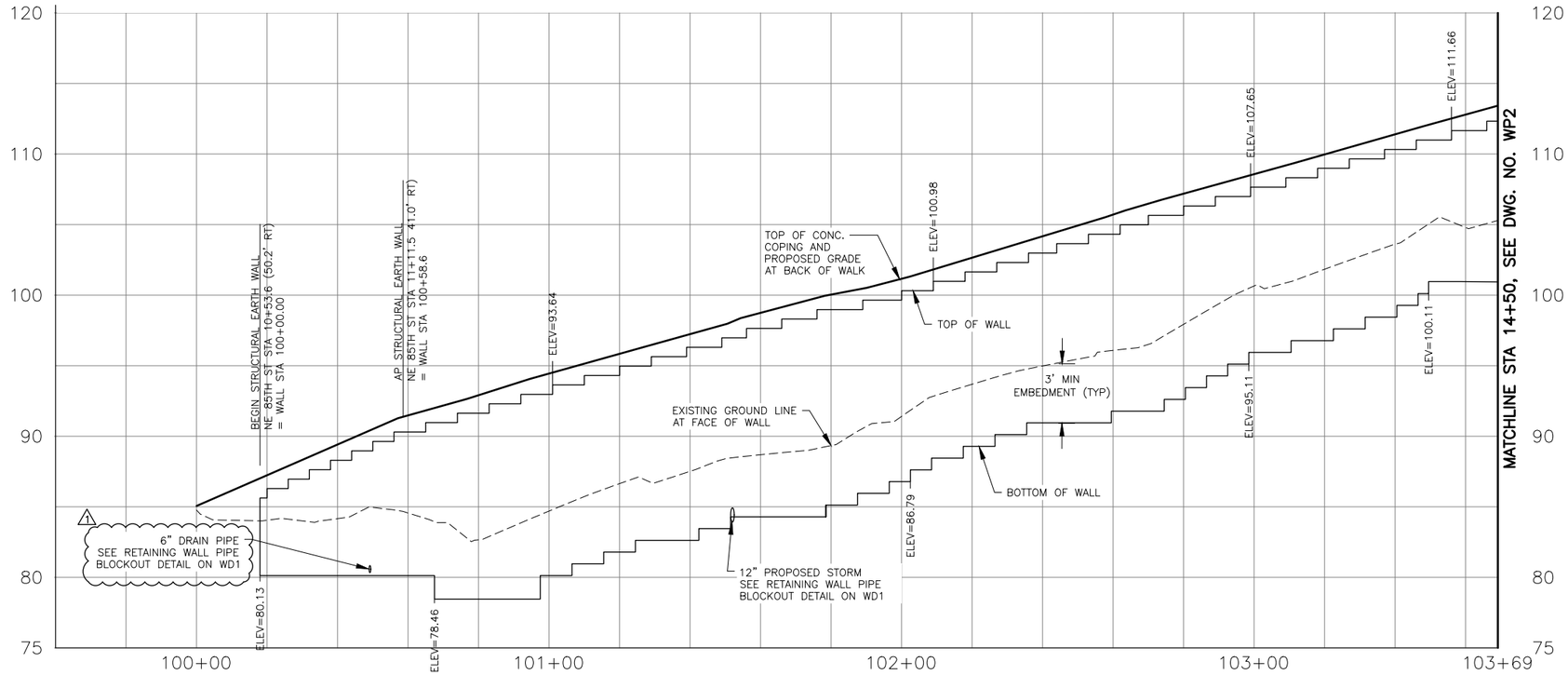
DRAINAGE DETAILS

SHEET 29 / 100

Jan 16, 2025 - 1:34pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 DD.dwg Layout Name: DD2

SEC. 5, T. 25 N, R. 5 E, W.M.





GENERAL NOTES:

1. SEE SPECIAL PROVISIONS FOR WALL DESIGN REQUIREMENTS.
2. ALL CONSTRUCTION MUST CONFORM TO WALL MANUFACTURER SPECIFICATIONS AND REQUIREMENTS.
3. REINFORCING ZONE SHOWN IN PLANS ARE APPROXIMATE AND ARE CONTINGENT UPON THE APPROVED WALL PLANS BY THE CONTRACTOR. GEOGRID SPACING AND LENGTH SHALL MEET ALL MANUFACTURER REQUIREMENTS.
4. ALL STATIONS AND OFFSETS ARE MEASURED TO THE FACE OF WALL.
5. REFERENCE DETAILS, DWG NO. WD1.
6. CONNECT UNDERDRAIN PIPE TO DRAINAGE STRUCTURE AS SHOWN IN PLAN. PROVIDE POSITIVE FLOW FROM WALL TO DRAINAGE STRUCTURE.
7. ELEVATIONS SHOWN ARE INFORMATIONAL ONLY. THE CONTRACTOR SHALL SUBMIT WALL PLANS THAT MEET THE REQUIREMENTS OF THE PLANS, SPECS AND MANUFACTURER.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY AND LOCATE ALL UTILITY CROSSINGS THROUGH, UNDER AND AROUND WALLS.
9. CONSTRUCTION SHALL BE PHASED SUCH THAT GEOGRID IS NOT DAMAGED DURING UTILITY INSTALLATION.
10. CONTRACTOR SHALL COORDINATE WITH WALL MANUFACTURER TO ENSURE THAT ALL FOUNDATIONS AND STORM DRAINAGE FACILITIES SHALL BE ACCOMMODATED BY WALL GEOGRIDS.

0 20 40
1" = 20'
HORIZONTAL SCALE

0 20 40
1" = 20'
VERTICAL SCALE

DWG. NO. WP1

PERTEET
2707 COLBY AVENUE, SUITE 900
EVERETT, WA 98201
425.252.7700 | 800.615.9900

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VINCENT WING WEN STATE OF WASHINGTON 54968 REGISTERED PROFESSIONAL ENGINEER

FILE	ENGR.	REVIEW	SCALE	DATE
WP1	##	##	AS SHOWN	JANUARY 2025

NO.	REVISION	BY	REVIEW	DATE
1	UPDATE TO PIPE CALLOUT	TWC	VWW	1/17/2025

CITY OF KIRKLAND
PUBLIC WORKS DEPARTMENT
123 FIFTH AVENUE – KIRKLAND, WA 98033–6189 – (425)587–3800

NE 85TH ST PED–BIKE CONNECTION

WALL PLAN AND ELEVATION

SHEET 66 / 100

Jan 16, 2025 - 1:35pm nancy.eaton X:\kirkland, city of\Projects\20210013 - ne 85th st ped-bike\CADD\02 - plan sheets\20210013 WP.dwg Layout Name: WP1

The unit Contract price per square foot for "Structural Earth Wall" shall also include all costs to perform the Work for the crushed surfacing leveling pad, geogrid reinforcing, construction geotextile for underground drainage, gravel backfill for drains, wall finishing, compaction, wall pipe blockouts, and Working Drawing submittals.

6-19 SHAFTS

6-19.3 Construction Requirements

Section 6-19.3 is supplemented with the following:

(******)

Contractor shall verify the location of all utilities to confirm no conflicts are present between utility locations and proposed site work. The Contractor shall be responsible for any repair and/or replacement to damaged utility lines during construction.

6-19.3(3) Shaft Excavation

Section 6-19.3(3) is supplemented with the following:

(******)

The retaining wall used for the installation of the pier column for Pier 3 shall be temporary. The temporary shoring for the pier column shall be paid as the "Shoring or Extra Excavation Cl. A - Pier" Bid item in Section 2-09.

6-19.3(3)B Temporary and Permanent Shaft Casing

Section 6-19.3(3)B is supplemented with the following:

(******)

The Contractor shall furnish and install casings as prescribed in the Plans.

When installing required permanent casings between the upper and lower elevation limits specified above, the casing shall be advanced prior to or concurrently with the excavation. In no case shall shaft excavation and/or casing placement extend below the bottom of shaft elevation prescribed in the Plans.

Shaft casing shall be equipped with cutting teeth or a cutting shoe and installed by oscillating the casing. Installing the casing by vibratory means will not be allowed.

To offset the effects of artesian groundwater conditions, the water level in the shaft excavation must be always maintained at 10ft above the existing ground surface during construction of the shafts and curing of the shaft concrete.

END DIVISION 6

7-04 STORM SEWERS

7-04.1 Description

Section 7-04.1 is supplemented with the following:

This work includes furnishing and installing pipe anchors and connections to secure pipes the slope as shown in the Plans.

7-04.2 Materials

Section 7-04.2 is supplemented with the following:

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

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

Solid Wall PVC Storm Sewer Pipe	9-05.12(1)
PVC Pressure Pipe	9-30.1(5)
Ductile Iron Pipe	9-30.1(1)
Restrained Joints	9-30.2(6)

Pipe Anchor materials shall be used as identified on the Plans.

7-04.3 Construction Requirements

7-04.3(1) Cleaning and Testing

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

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

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

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

"Adjust Catch Basin" shall be constructed in accordance with the Plans.

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

(COK GSP)
Contractor shall install Agency supplied storm drain markers and adhesive on any new or altered catch basins that have a vaned grate and/or inlet. To install, follow the "Storm Drain Marking" instruction sheet supplied with the storm drain markers. Any Work associated with installation of storm drain markers is incidental to other Bid items.

7-05.3(5) Connections to Existing Structures

Section 7-05.3(5) is added as follows:

(******)
Where shown in the Plans, the Contractor shall connect new drainage pipe to existing drainage Structures such as catch basins, manholes, and inlets, or shall connect new drainage Structures such as catch basins, manholes, and inlets to existing drainage pipe.

7-05.4 Measurement

The sixth paragraph of Section 7-05.4 is deleted and replaced with the following:

(******)
Connections to existing drainage Structures will be measured per each Structure, regardless of the number of pipes requiring connection.

Section 7-05.4 is supplemented with the following:

(******)
Frames, grates, and solid covers installed on new drainage Structures will not be measured. All costs involved with the frames, grates, and solid covers shall be included in the unit Contract prices for the various items of Work.

7-05.5 Payment

Section 7-05.5 is supplemented with the following:

(COK GSP)
Precast adjusting rings/risers, bricks, grout, HMA Class 1/2-inch PG 58H-22 for pavement patching, and AR4000W asphalt shall be considered **incidental** and included in the unit Contract price for other Bid items in this section.

(******)
The unit Contract price per each for manholes, inlets and catch basins of the kind and size specified shall be full pay for all Work to complete the installation, including excavation, bedding material, native or imported backfill, compaction, epoxy coating for scour protection, and disposal of native excavated materials not used for backfill.

"Catch Basin Type 2 72 In. Diam. with Flow Restrictors", per each.

Concrete Placement: Place concrete in a continuous operation to prevent seams or planes of weakness from forming in precast units. Comply with requirements of ACI 304R for measuring, mixing, transporting, and placing concrete. Thoroughly consolidate placed concrete by internal and external vibration without dislocating or damaging reinforcement and built-in items. Use equipment and procedures complying with ACI 309R

Identify pickup points of precast concrete units and orientation in Structure with permanent markings, complying with markings indicated on final Shop Drawings. Imprint casting date on each precast unit on a surface that will not show in the finished Structure.

Finish formed surfaces of precast concrete as indicated for each type of unit, and as follows:

Standard Finish: Normal plant-run finish produced in forms that impart a smooth finish to concrete. Small surface holes caused by air bubbles, normal color variations, and form joint marks, and minor chips and spalls will be tolerated. Major or unsightly imperfections, honeycombs, irregular surfaces, or structural defects are not permitted.

Examination

Prior to installation of the precast concrete vault, the Contractor shall examine the vault for compliance with dimensional and size requirements, including installation tolerances, true and level bearing surfaces, and other conditions affecting performance of precast concrete units. Any dimensional sizes and finishes not in accordance with the requirements shall be corrected by the Contractor prior to installation.

Excavation for Vault and Installation

The excavated area for the vault shall be dug with a minimum of 3 feet clearance around all walls to avoid obstructions when setting the vault. Temporary shoring or extra excavation shall be provided by the Contractor in accordance with Section 7-08.3(1)B of the Standard Specifications. All shoring used for the installation of the vault shall be paid as the "Shoring or Extra Excavation ~~Class~~Cl. A – Detention Vault" Bid item in Section 2-09. Extra care shall be taken to protect the nearby water main from damage or disturbance.

The vault shall be placed upon 12 inches minimum compacted thickness of crushed surfacing top course, or if water is present, on clean 2-inch minus railroad ballast, as a gravel foundation. Install precast units level, plumb, square, and true. Shore and brace precast concrete units to maintain location, stability, and alignment until permanent connections are installed. The correct placement of the storm vault is important in order to form a smooth surface.

Backfill around vaults should consist of pea gravel. In no case shall the material be saturated soil, or contain rocks in excess of 1-1/2" size, or organic materials. No voids should remain between the vault walls and backfill material.

Backfilling should be done after vault is completely assembled making certain to compact the backfill progressively from the bottom to the top surface. Compaction of backfill shall be in accordance with Section 2-03.3(14)C, Method C, of the Standard Specifications.