Board of Commissioners
Doug Barnes, *Chair*
John Welch
TerryLynn Stewart
Regina Elmi
Richard Jackson

President/CEO
Robin Walls

INVITATION TO BID

Site Development
at
Rainier View Mobile Home Park, 32631 1st Ave, Black Diamond, WA 98010

September 5, 2024

ADDENDUM NO. 3

This addendum is used to clarify, change, delete, add to or substitute items in the original contract documents.

BID DATE: ~~August 29, 2024 at 2:00 pm~~ September 19, 2024 at 2:00 pm

QUESTIONS DEADLINE: ~~Thursday, August 22, 2024~~ September 12, 2024 at 9:00 am

NUMBER OF PAGES: 31 ATTACHMENT: Rainier View Civil rev.1 - 25 pages
PSE Preliminary Design – 4 pages

CONTRACT NUMBER: DW2402331

NOTICE TO BIDDERS: Bidders are hereby notified of the following changes and/or clarifications to the Contract Documents for this project:

QUESTIONS:

Q1. Are there any details available for the homesite/carport pads? Do they need to be constructed of native material, imported gravel products, or a poured concrete pad?

A1. The development of mobile home pads is not included in this civil contract. Any excavation or poured concrete structures required to set the homes will be part of a separate contract. The building permits for placing the new homes will also be part of a separate contract.

Q2. Are there any other plans for the dry utilities including power, communications, etc. that better delineate the joint trench and the services to each homesite? A detail and a utility easement are all I can find. Will conduit be provided by the utility owners?

A2. See attached Rainier View Civil rev.1 attached. This contract includes running power, water, sewer and storm utilities to each future home site. The termination of utilities at each home site will follow the Rainier View Civil rev.1 plan as shown. All conduits will be installed by the utility providers.

See attached *PSE Rainier View Manufactured Home Park Prelim Design* for all power infrastructure details. The PSE design is in the final round of approvals. If the final design is approved with changes affecting cost these changes will be processed as change orders per the contract documents.

Q3. Are plans and details available for the proposed utility pedestals?

A3. See attached Rainier View Civil rev.1.

Q4. Will the contractor be responsible for purchasing any permits other than the ROW permit for this project?

A4. The owner has secured the civil permit and the building permit for the mailbox kiosk. Building permits for placing the new mobile homes will be by others. The contractor is responsible for coordinating all inspections and permit related communication with the municipality and utility entities.

Q5. Will the contractor be responsible for paying any connection or meter fees for any utilities?

A5. The owner will be responsible for all connection and meter fees.

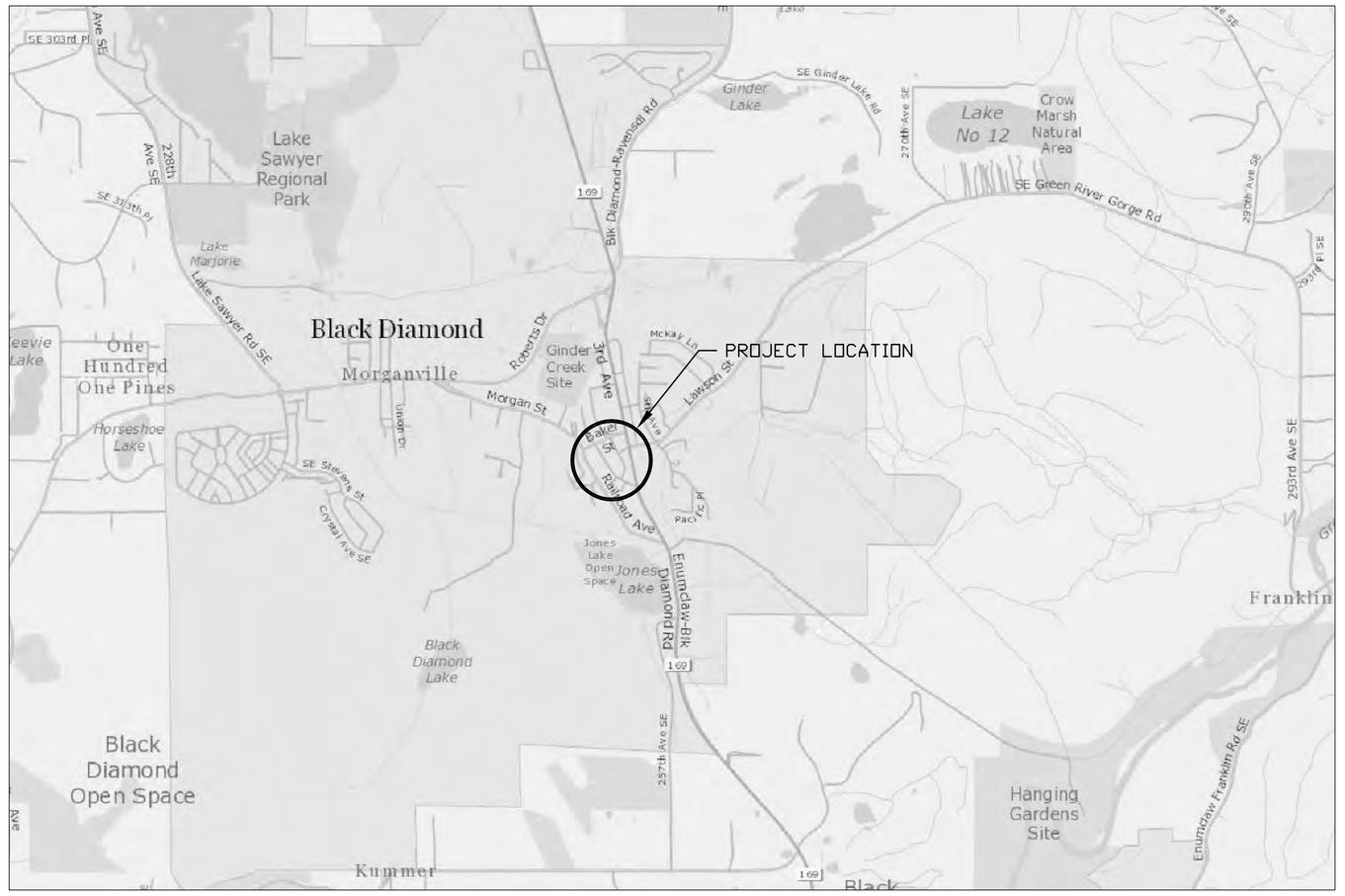
All other provisions of the Contract Documents remain unchanged.

END OF ADDENDUM NO. 3

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK

VICINITY MAP



SITE PLAN

Sheet Index

		Description
1	GE 1 of 2	Cover Sheet
2	GE 2 of 2	General Site Plan
3	RS 1 of 1	Removal Site Plan
4	WS 1 of 1	Water & Sewer Site Plan
5	ST 1 of 2	Street Site Plan
6	SW 1 of 3	Stormwater Site Plan
7	SW 2 of 3	Stormwater Treatment Plan
8	SW 3 of 3	Stormwater Treatment Plan
9	ST 2 of 2	Intersection Site Plan
10	PP 1 of 3	Street, Water, Sewer Plan & Profile
11	PP 2 of 3	Street, Water, Sewer Plan & Profile
12	PP 3 of 3	Street, Water, Sewer Plan & Profile
13	SD 1 of 4	Street General Notes & Details
14	SD 2 of 4	Storm Drainage & Erosion Control General Notes & Details
15	EL 1 of 2	Electrical Site Plan
16	EL 2 of 2	Electrical Site Plan
17	SD 3 of 4	Street & Stormwater Details
18	SD 4 of 4	Street & Stormwater Details
19	SN 1 of 2	Sewer Notes & Details
20	SN 2 of 2	Sewer Notes & Details
21	WD 1 of 2	Water Notes & Details
22	WD 2 of 2	Water Notes & Details
23	GR 1 of 1	Grading & Erosion Control Site Plan
	A1	Mail Box Shelter
	S1.0	Mail Box Notes & Details

APPROVED FOR CONSTRUCTION

_____ DATE: _____
Signed, City Engineer

Approval Expires: _____

LEGEND EXISTING FEATURES

LINE TYPES

- FILL — Areas of Fill
- Brush Line
- Building Foot Print
- Bumper Blocks
- Centerline Rail Road
- Centerline Road
- City County State Boundary
- Contours Major
- Contours Minor
- Culverts
- Curb and Gutter
- Ditch
- Drainage Basin
- Easement Lines
- Edge of Concrete Slab
- Edge of Gravel
- Edge of Pavement
- Edge of Sidewalk
- Erosion Control Fence
- Fence
- OF — Fiber Optic
- G — Gas
- 10+00 — Offsets and Stationing
- Parking Striping
- Pavement Delineation
- OT — Phone – Overhead
- BT — Phone–Buried Phone
- BP — Power – Buried
- OP — Power – Overhead
- Project Boundary
- Property Bearing Lines
- Property Line
- Property Quarter Section Line
- Property Section Line
- Railing
- Retaining Wall
- RW City County Road
- RW Highway
- Set Back Building
- Set Back River
- Set Back Wet Land
- S — Sewer Line – Gravity
- FM — Sewer Line – Pressure
- Sidewalks
- ST — Stormwater Piping
- Stormwater Treatment Area
- Stream
- Tree Line
- TPF — Tree Protection Fence
- W14 — Water Line (W (Size))
- Wetland Buffer
- Wetlands

SYMBOLS

- FIRE HYDRANT
- W — WATER MANHOLE
- WATER VALVE
- SANITARY SEWER MANHOLE
- CATCH BASIN
- POLE ANCHOR
- UTILITY POLE
- GP — GUY POLE
- P — POWER POLE
- T — TELEPHONE PEDESTAL
- J — JUNCTION BOX
- SIGN
- TRAFFIC SIGNAL POLE
- PS — TRAFFIC SIGNAL PEDESTRIAN HEAD
- MAILBOX
- +420 — SPOT ELEVATIONS
- TREE (Conifer)
- TREE (Deciduous)

LEGEND PROPOSED FEATURES

LINE TYPES

- FILL — Areas of Fill
- CUT — Areas of Fill
- Brush Line
- Building Foot Print
- Bumper Blocks
- Centerline Rail Road
- Centerline Road
- Contours Major
- Contours Minor
- Culverts
- Curb and Gutter
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- Edge of Concrete Slab
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- Wetlands

SYMBOLS

- FIRE HYDRANT
- WATER VALVE
- SANITARY SEWER MANHOLE
- CATCH BASIN
- WATER METER
- POST INDICATOR VALVE
- FIRE DEPARTMENT CONNECT
- DOUBLE CHECK VALVE
- STREET LIGHT ASSEMBLY
- SIGN
- +420 — SPOT ELEVATIONS
- TREE (Conifer)
- TREE (Deciduous)

CONTACT INFORMATION

OWNER:	King County Housing Authority
SITE ADDRESS:	1st & 2nd Ave. Black Diamond, WA
ASSESSOR PARCEL NO.:	0841000005
ZONING:	SERVICE COMMERCIAL
TOTAL AREA:	9.35 ACRES
PR. AREA THIS PROJECT:	3.2 ACRES
PR. ROOF & DRIVEWAY AREA:	0.6 ACRES
EX. HOMES:	31
PR. NEW HOMES:	20
SEWER SYSTEM:	City of Black Diamond
WATER:	City of Black Diamond
UTILITIES:	PUGET SOUND ENERGY

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

BENCHMARK
INTERSECTION OF 1ST AND BAKER ST.
MONUMENT IN CASE
NORTHING: 114872.14
EASING: 1349492.01
ELEV.: 650.43

NOT A BOUNDARY SURVEY
All references to property lines, bearing, corners, or any references which indicate property alignment or locations were acquired from

Chehalis Valley Surveying
FOR CONSTRUCTION USE ONLY

NOTE: THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION & PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

DESIGN INFORMATION
PROJECT IDENTIFICATION No.
FILE NAME: BW-COVER SITE PLAN

ACTION	
DESIGNED	9-5-24
DRAWN	9-5-24
CHECKED	9-5-24
PLOTTED DATES	

REVISION BLOCK: 5th Revision

Turner Engineering
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Cover Sheet

WILLIAM R. TURNER — STATE OF WASHINGTON — 33824 — REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
GE 1 of 2

SHEET No.
1 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

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Note:

ALL TREE REMOVAL AND REPLANTING SHALL BE DONE IN ACCORDANCE WITH THE APPROVED PLANS AND CONDITIONS UNDER PLN23-0056 LEVEL 1 TREE REMOVAL PERMIT.

APPROVED FOR CONSTRUCTION

_____ DATE: _____
Signed, City Engineer

Approval Expires: _____

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CHECKED	9-5-24
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REVISION BLOCK: 5th Revision

Turner Engineering Consulting
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
General Site Plan

WILLIAM P. TURNER
STATE OF WASHINGTON
33824
REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
GE 2 of 2

SHEET No.
2 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK

VERTICAL DATUM
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WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

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Turner Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.

Rainier View
Manufactured Home Park
Removal & Relocation Site Plan

WILLIAM E. TURNER — STATE OF WASHINGTON — 33824 — REGISTERED PROFESSIONAL ENGINEER

9-5-24

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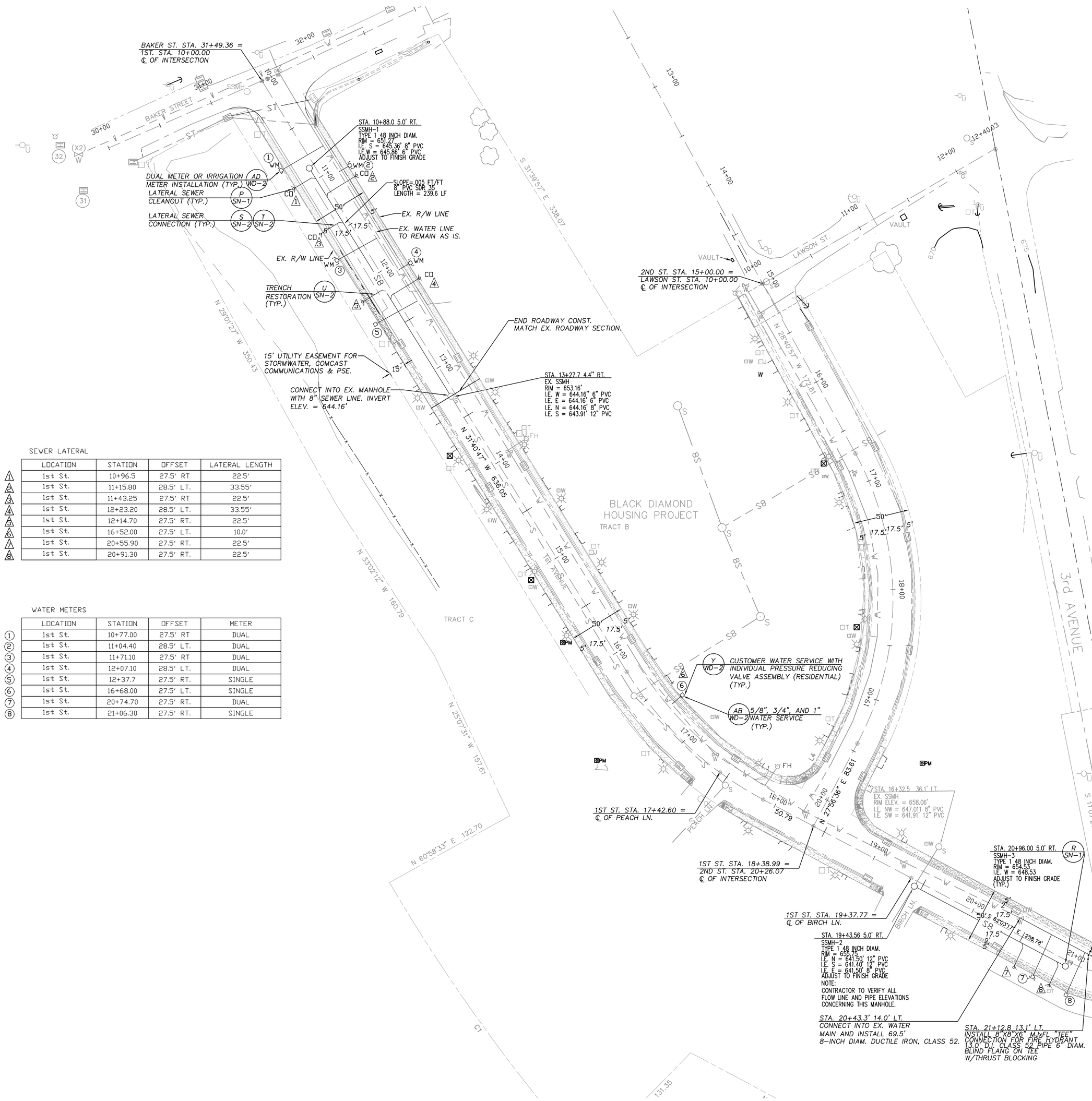
SHEET No.
3 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK

VICINITY MAP



SEWER LATERAL

	LOCATION	STATION	OFFSET	LATERAL LENGTH
1	1st St.	10+96.5	27.5' RT	22.5'
2	1st St.	11+15.80	28.5' LT.	33.55'
3	1st St.	11+43.25	27.5' RT	22.5'
4	1st St.	12+23.20	28.5' LT.	33.55'
5	1st St.	12+14.70	27.5' RT.	22.5'
6	1st St.	16+52.00	27.5' LT.	10.0'
7	1st St.	20+55.90	27.5' RT.	22.5'
8	1st St.	20+91.30	27.5' RT.	22.5'

WATER METERS

	LOCATION	STATION	OFFSET	METER
1	1st St.	10+77.00	27.5' RT	DUAL
2	1st St.	11+04.40	28.5' LT.	DUAL
3	1st St.	11+71.10	27.5' RT	DUAL
4	1st St.	12+07.10	28.5' LT.	DUAL
5	1st St.	12+37.7	27.5' RT.	SINGLE
6	1st St.	16+68.00	27.5' LT.	SINGLE
7	1st St.	20+74.70	27.5' RT.	DUAL
8	1st St.	21+06.30	27.5' RT.	SINGLE

1"=50'
0 25 50 100

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WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

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BY: _____ DATE: _____
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Turner Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Water & Sewer Site Plan

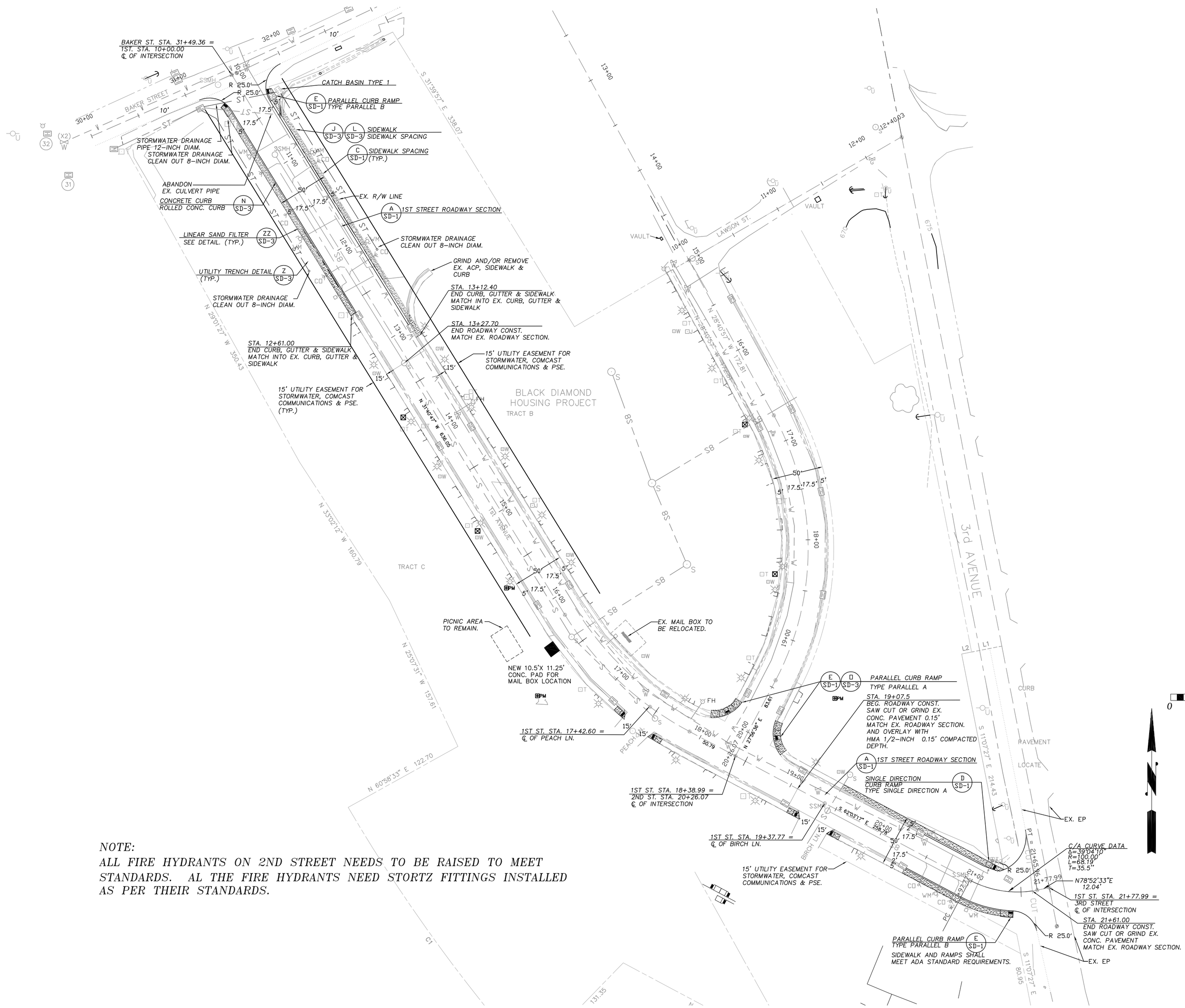
WILLIAM R. TURNER 33824 REGISTERED PROFESSIONAL ENGINEER STATE OF WASHINGTON
9-5-24

SHEET ID CODE
WS 1 of 1

SHEET No.
4 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK



NOTE:
ALL FIRE HYDRANTS ON 2ND STREET NEEDS TO BE RAISED TO MEET STANDARDS. AL THE FIRE HYDRANTS NEED STORTZ FITTINGS INSTALLED AS PER THEIR STANDARDS.

VERTICAL DATUM
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CHECKED	9-5-24
PLOTTED DATES	

REVISION BLOCK:
5th Revision

Turner Engineering
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Street Site Plan

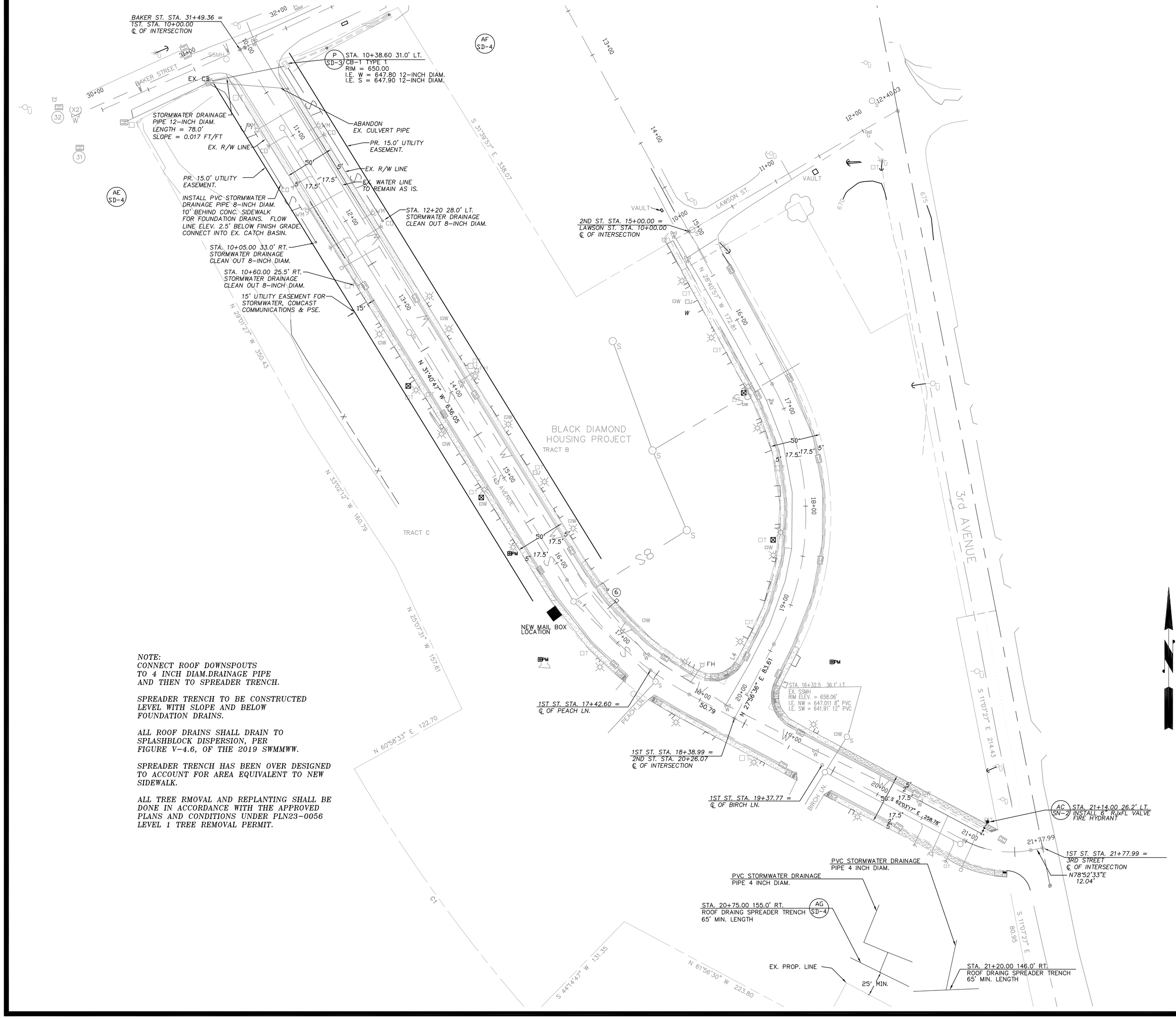
WILLIAM F. TURNER
STATE OF WASHINGTON
33824
REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
ST 1 of 2

SHEET No.
5 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK



NOTE:
CONNECT ROOF DOWNSPOUTS TO 4 INCH DIAM.DRAINAGE PIPE AND THEN TO SPREADER TRENCH.

SPREADER TRENCH TO BE CONSTRUCTED LEVEL WITH SLOPE AND BELOW FOUNDATION DRAINS.

ALL ROOF DRAINS SHALL DRAIN TO SPLASHBLOCK DISPERSION, PER FIGURE V-4.6, OF THE 2019 SWMMWW.

SPREADER TRENCH HAS BEEN OVER DESIGNED TO ACCOUNT FOR AREA EQUIVALENT TO NEW SIDEWALK.

ALL TREE RMOVAL AND REPLANTING SHALL BE DONE IN ACCORDANCE WITH THE APPROVED PLANS AND CONDITIONS UNDER PLN23-0056 LEVEL 1 TREE REMOVAL PERMIT.

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Turner Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Stormwater Site Plan

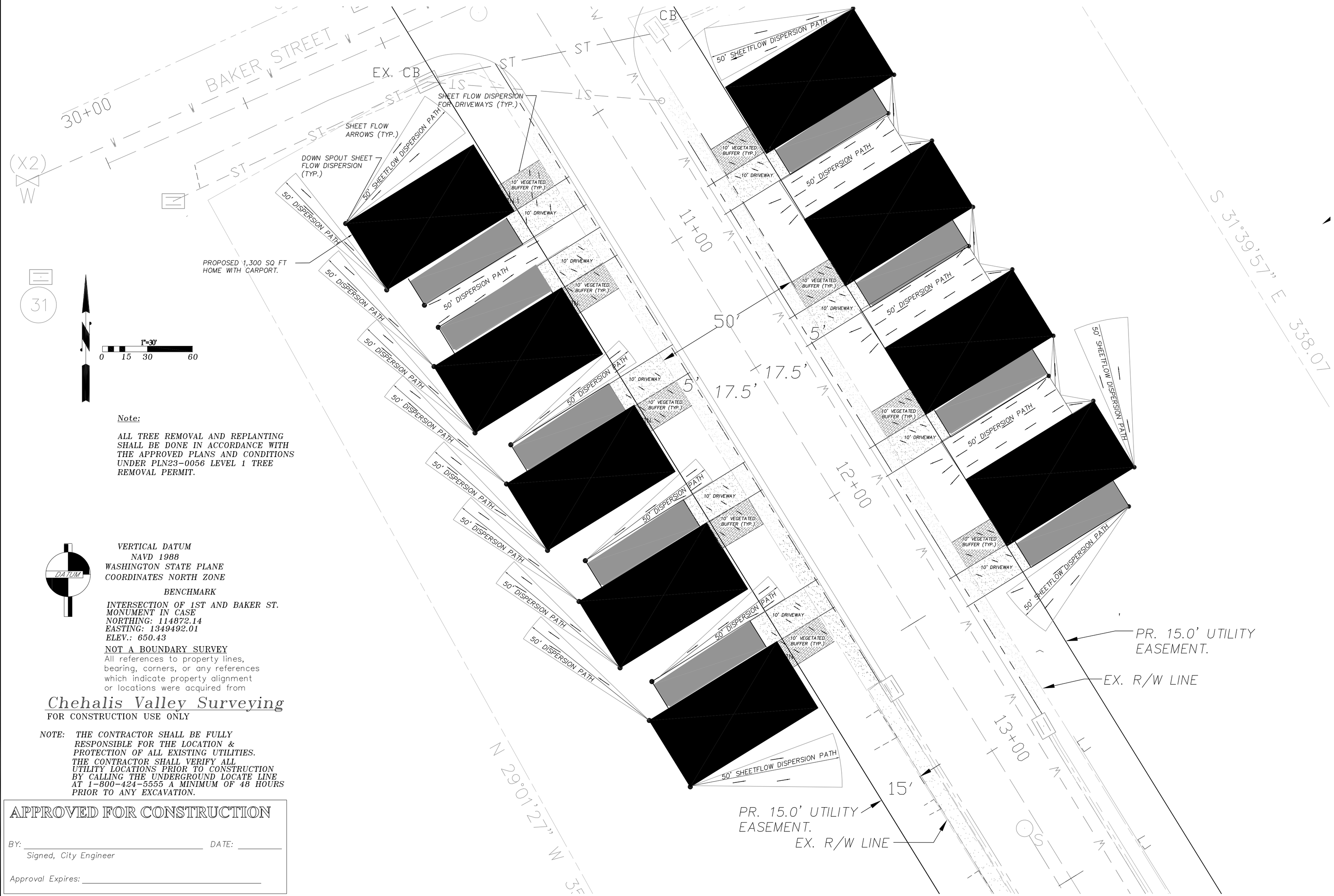
WILLIAM P. TURNER
STATE OF WASHINGTON
33824
REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
SW 1 of 1

SHEET No.
6 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK



Note:

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DATUM

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

BENCHMARK

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REVISION BLOCK:
5th Revision

Turner Engineering Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Stormwater Treatment Plan

WILLIAM P. VANDER
STATE OF WASHINGTON
15822
REGISTERED PROFESSIONAL ENGINEER

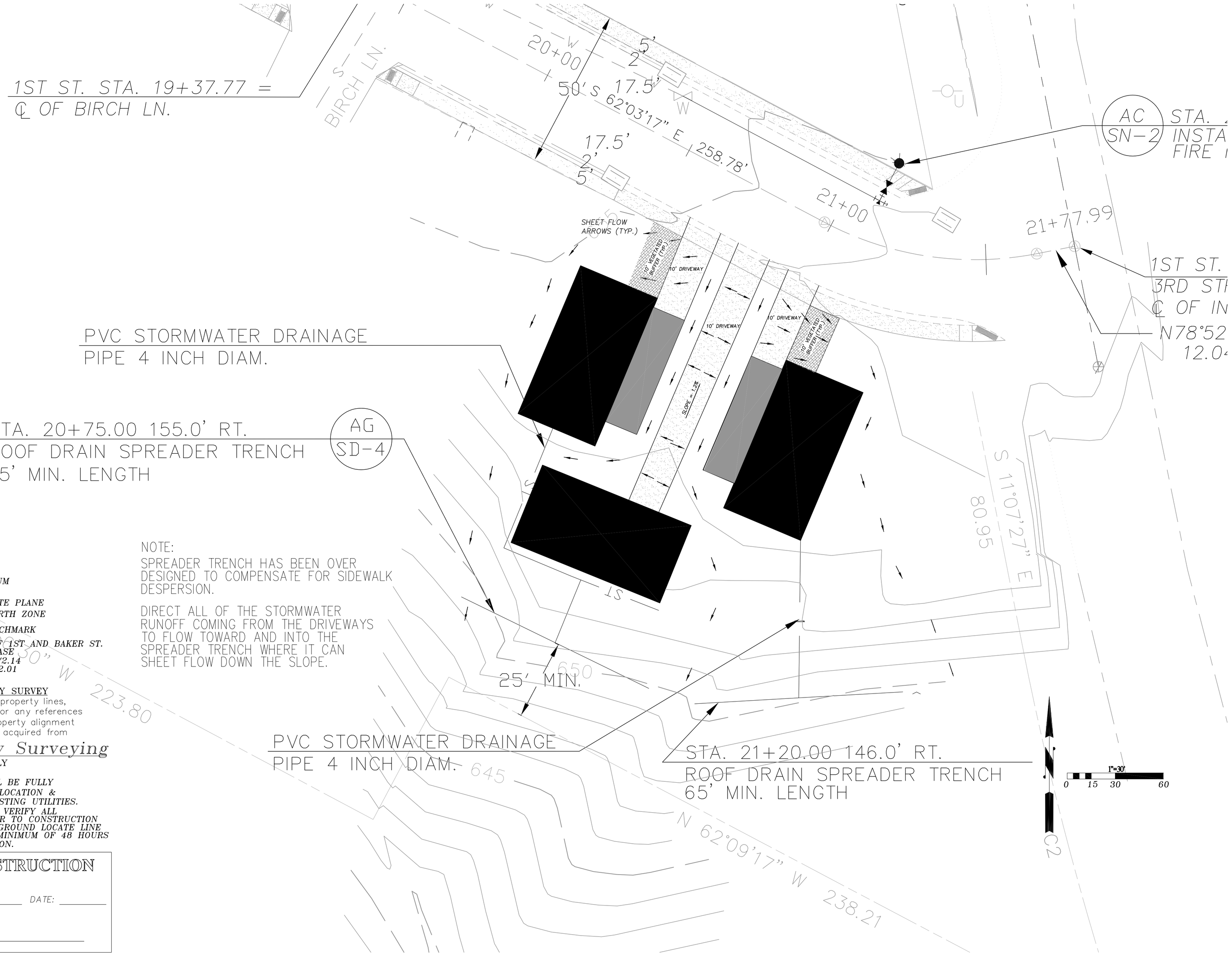
9-5-24

SHEET ID CODE
SW 2 of 3

SHEET No.
7 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK



NOTE:
SPREADER TRENCH HAS BEEN OVER DESIGNED TO COMPENSATE FOR SIDEWALK DESPERSION.

DIRECT ALL OF THE STORMWATER RUNOFF COMING FROM THE DRIVEWAYS TO FLOW TOWARD AND INTO THE SPREADER TRENCH WHERE IT CAN SHEET FLOW DOWN THE SLOPE.

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

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Turner Consulting Engineer
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Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Stormwater Treatment Plan

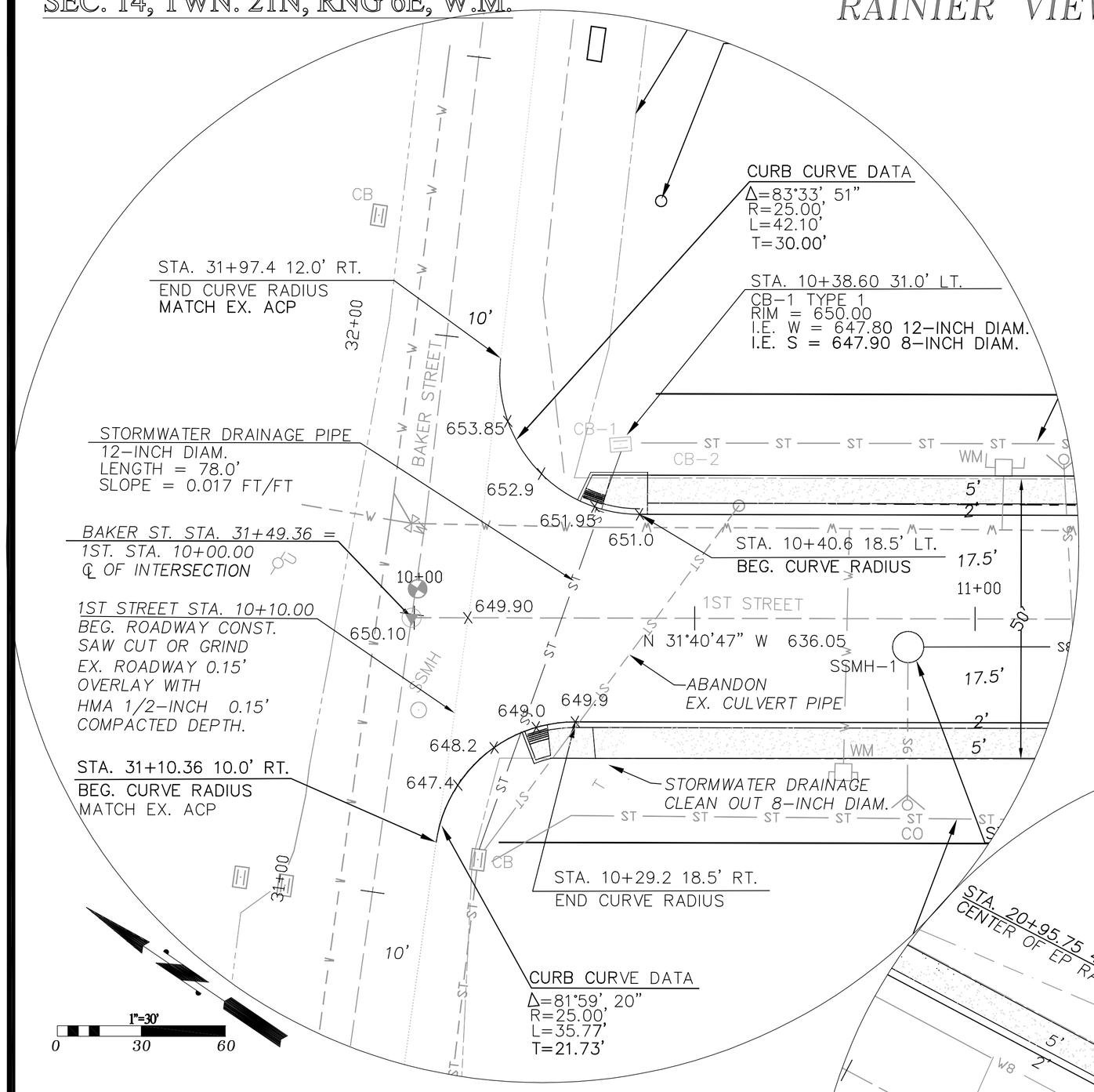
WILLIAM E. TURNER 33824 REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
SW 3 of 3

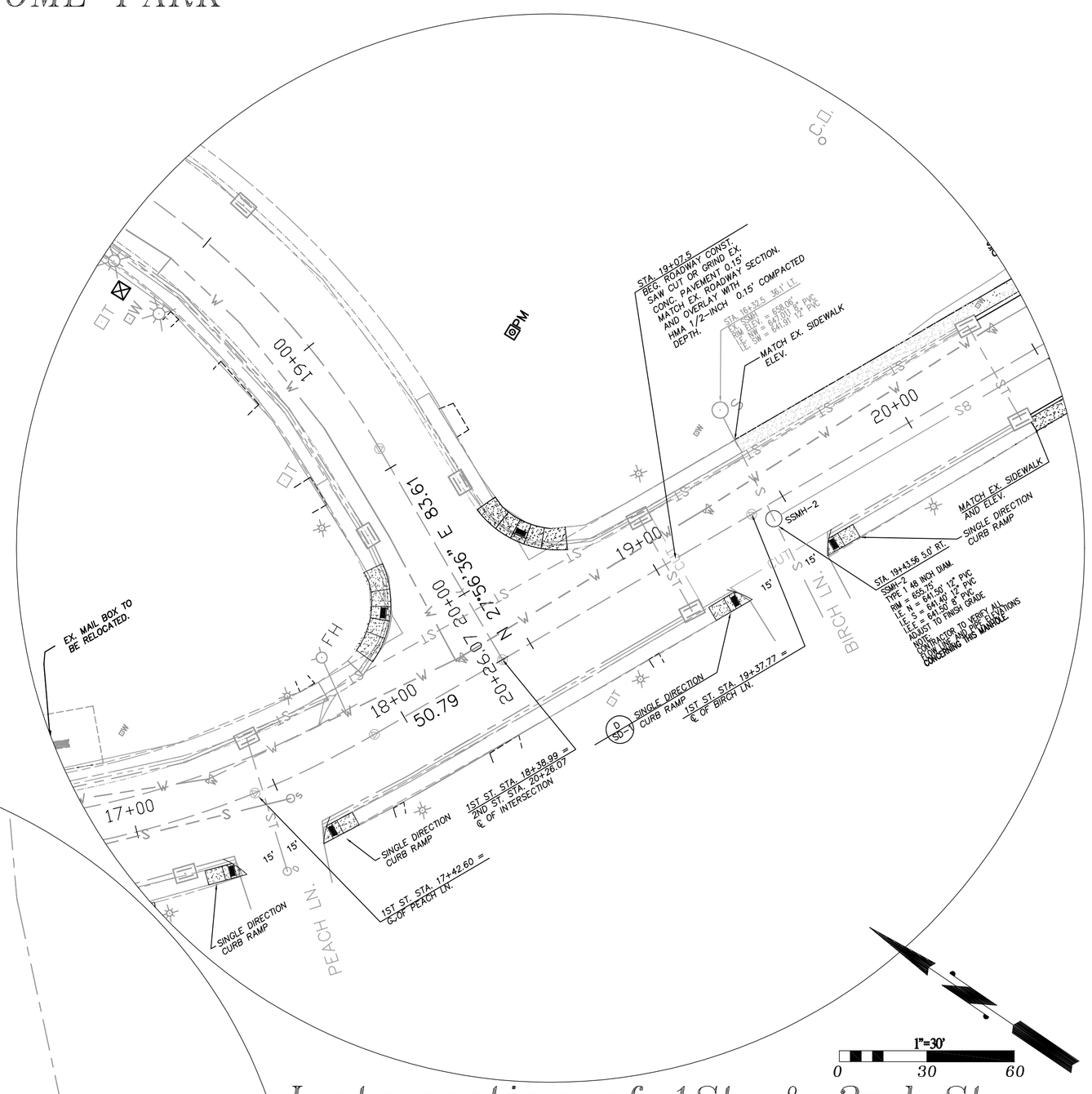
SHEET No.
8 of 23

SEC. 14, TWN. 21N, RNG 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK



Instersection of Baker & 1st St.



Instersection of 1St. & 2nd St.

Instersection of 1st & 3rd Avenue

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

BENCHMARK

INTERSECTION OF 1ST AND BAKER ST.
MONUMENT IN CASE
NORTHING: 114872.14
EASTING: 1349492.01
ELEV.: 650.43

NOT A BOUNDARY SURVEY
All references to property lines, bearing, corners, or any references which indicate property alignment or locations were acquired from

Chehalis Valley Surveying
FOR CONSTRUCTION USE ONLY

NOTE: THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION & PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

DESIGN INFORMATION
PROJECT IDENTIFICATION No.
FILE NAME: BW-COVER SITE PLAN

ACTION	
DESIGNED	9-5-24
DRAWN	9-5-24
CHECKED	9-5-24
PLOTTED DATES	

REVISION BLOCK: 5th Revision

Turner Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Intersection Site Plan

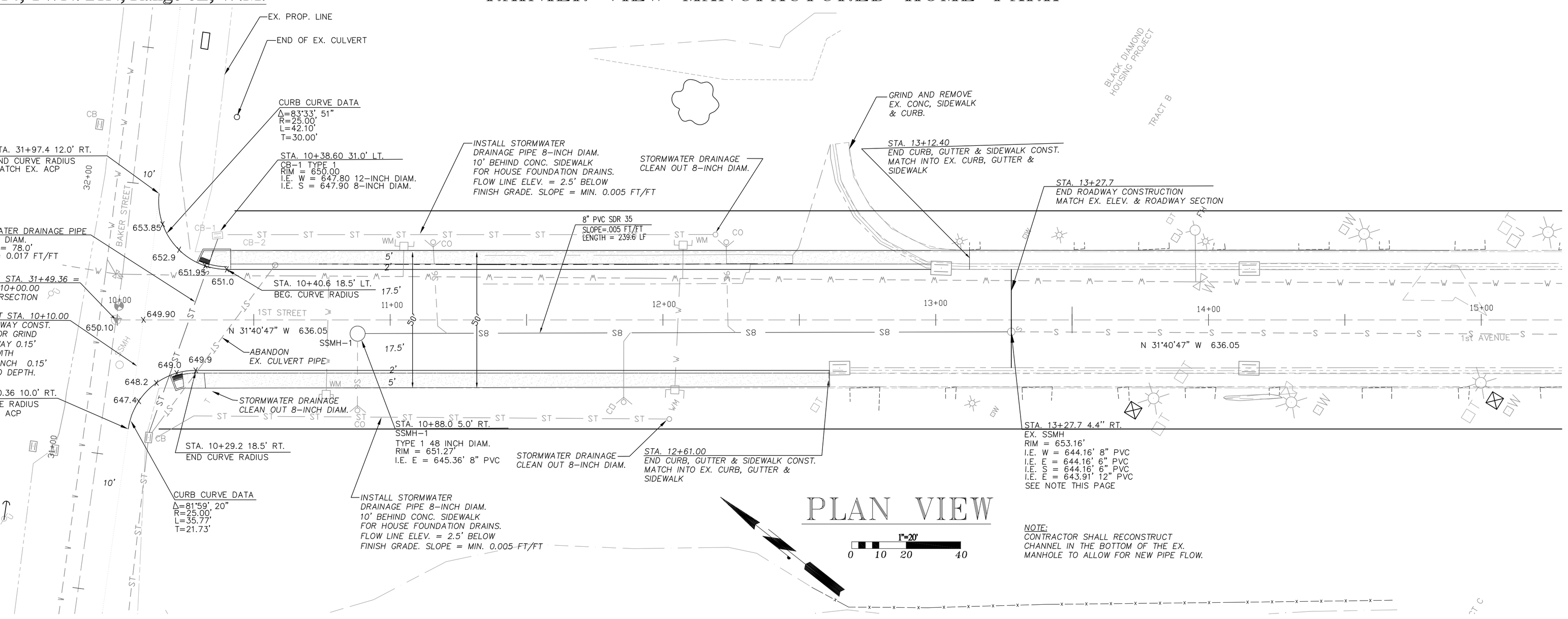
WILLIAM B. TURNER 33824 REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
ST 2 of 2

SHEET No.
9 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

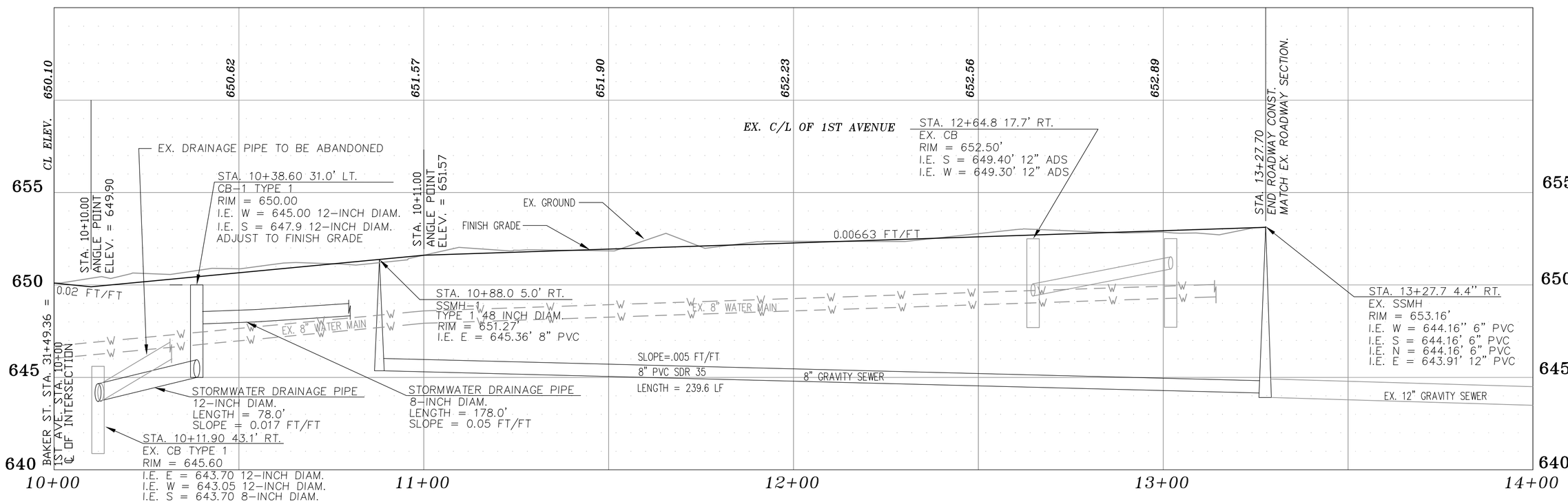
RAINIER VIEW MANUFACTURED HOME PARK



PLAN VIEW

1"=20'
0 10 20 40

NOTE:
CONTRACTOR SHALL RECONSTRUCT CHANNEL IN THE BOTTOM OF THE EX. MANHOLE TO ALLOW FOR NEW PIPE FLOW.



PROFILE VIEW

HORIZONTAL SCALE:
1"=20'
0 10 20 40
SCALE IN FEET

VERTICAL SCALE:
1"=4'
0 2 4 8
SCALE IN FEET

NOTE: ALL STORM DRAIN PIPES FROM THE LOTS SHALL BE PRIVATELY OWNED AND MAINTAINED.

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

BENCHMARK

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REVISION BLOCK:
5th Revision

Turner Engineering Consulting
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Rainier View
Manufactured Home Park
Street, Sewer & Stormwater
Plan & Profile

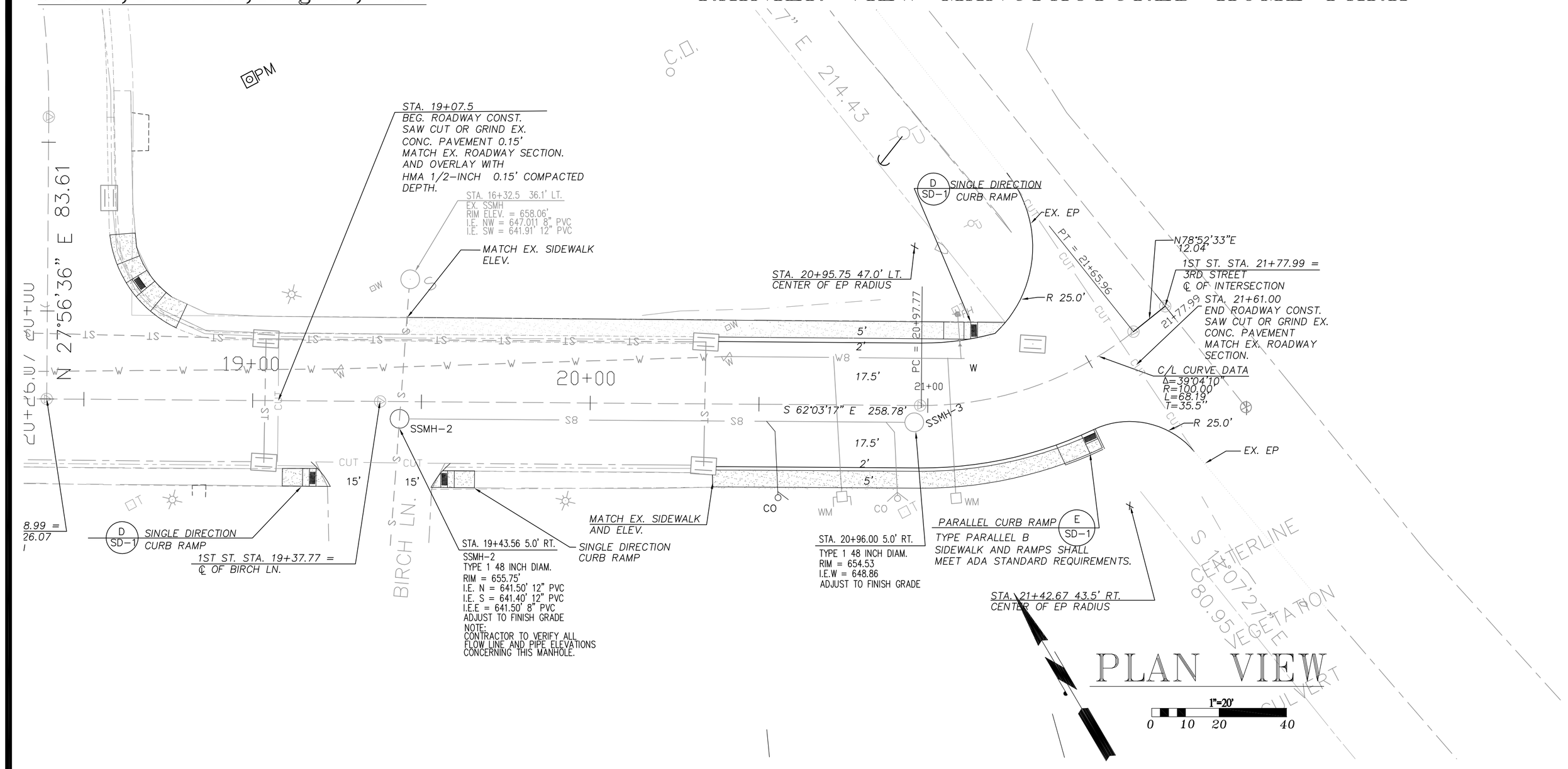
WILLIAM P. TURNER
STATE OF WASHINGTON
33824
REGISTERED PROFESSIONAL ENGINEER
9-5-24

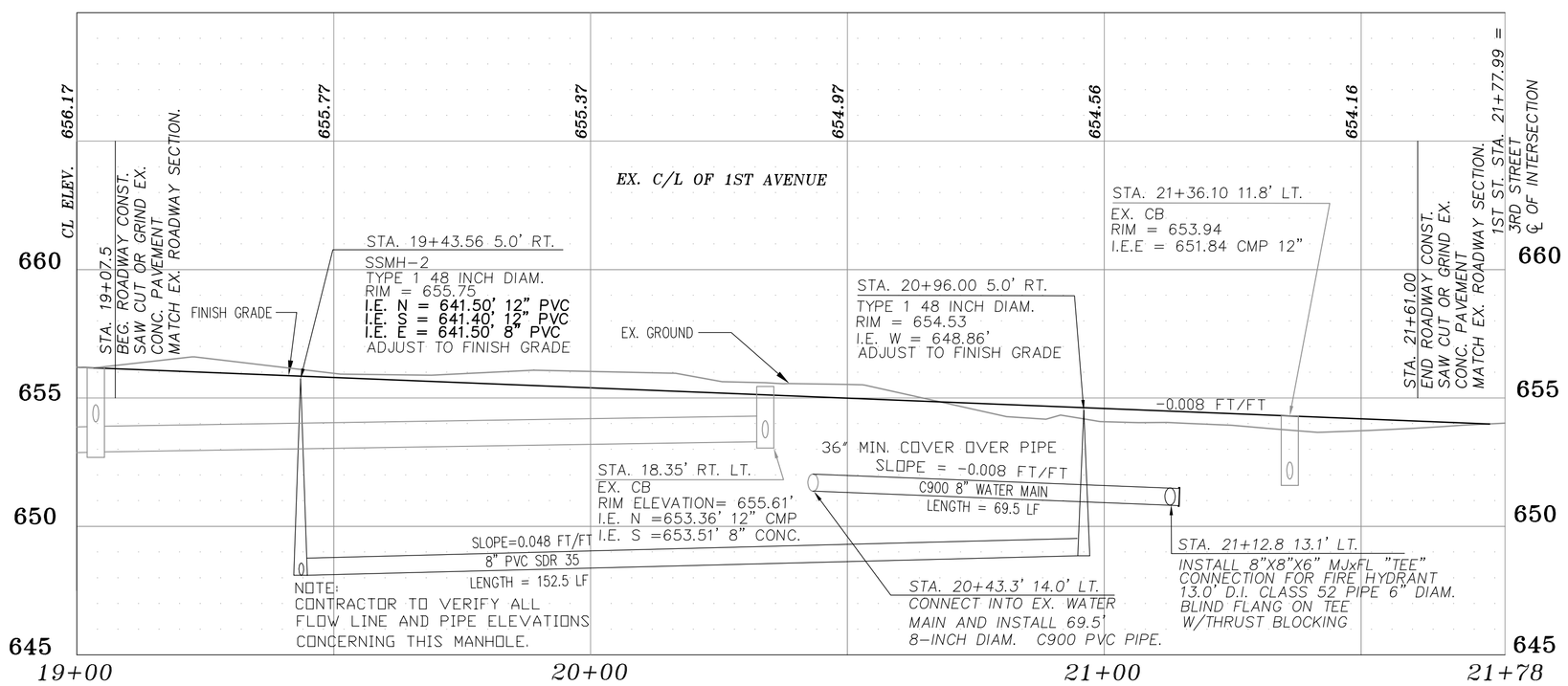
SHEET ID CODE
PP 1 of 3

SHEET No.
10 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK





PROFILE VIEW

HORIZONTAL SCALE: 1"=20' (0 10 20 40) SCALE IN FEET

VERTICAL SCALE: 1"=4' (0 2 4 8) SCALE IN FEET

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4405 7th Ave SE Suite 301
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Rainier View
Manufactured Home Park
Street, Sewer & Stormwater
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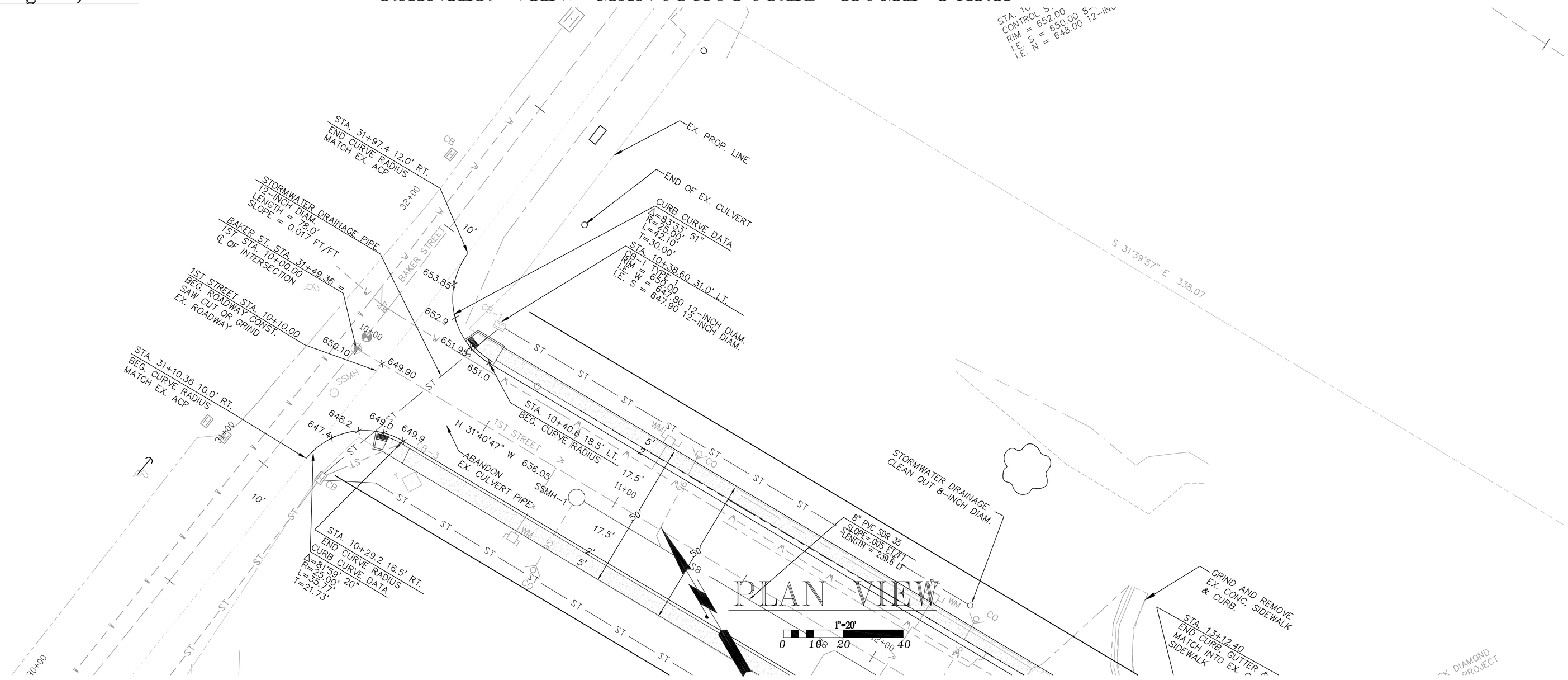
WILLIAM B. TURNER — STATE OF WASHINGTON — 33824 — REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
PP 2 of 3

SHEET No.
11 of 23

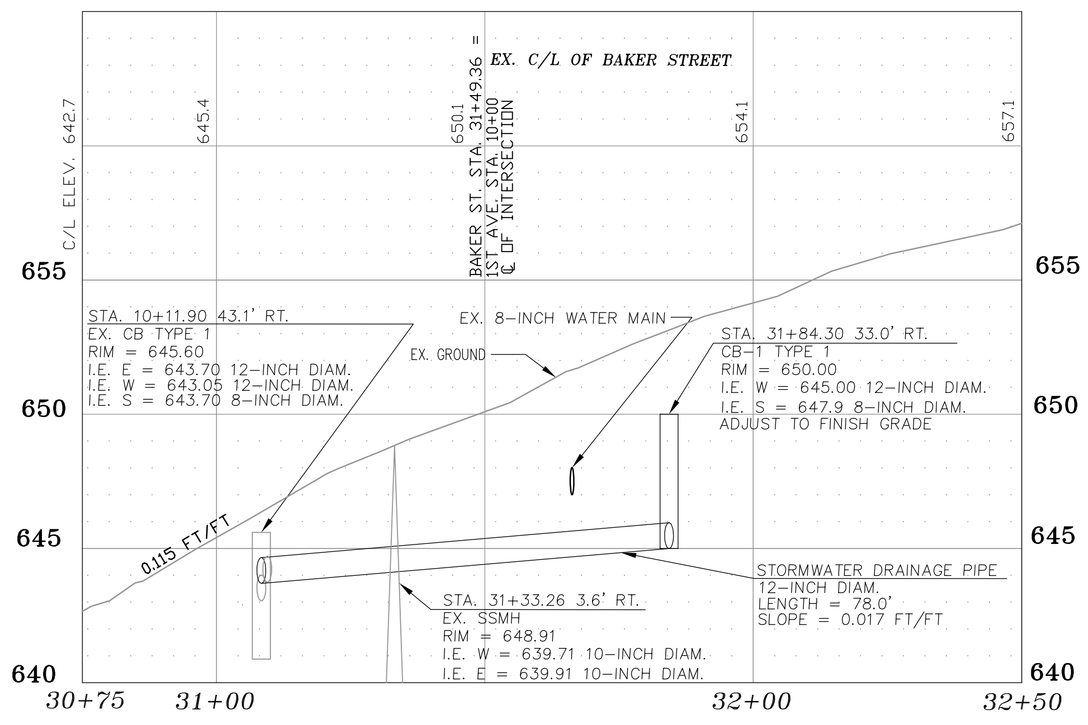
SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK



PLAN VIEW

1"=20'
0 10 20 40



PROFILE VIEW

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DATUM

VERTICAL DATUM
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Lacey, WA 98503
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Rainier View
Manufactured Home Park
Street, Sewer & Stormwater
Plan & Profile

WILLIAM E. TURNER
STATE OF WASHINGTON
33824
REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
PP 3 of 3

SHEET No.
12 of 23

Streets General Notes:

1 All workmanship and materials will be in accordance with the current City of Black Diamond Standards and the most current edition of the State of Washington Standard Specifications for Road, Bridge and Municipal Construction.

2 The contractor will be responsible for all traffic control in accordance with U.S. Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD). Prior to disruption of any traffic, traffic control plans will be prepared and submitted to the City for approval. No work will commence until all approved traffic control is in place. Work shall cease when traffic control fails to meet minimum requirements.

3 All curb, curb and gutter, street grades, sidewalk grades, and any other vertical and/or horizontal alignment will be staked by a licensed engineering or surveying firm capable of performing such work.

4 Where new asphalt joins existing, the existing aswith the standard specifications. The new asphalt will be feathered back over existing asphalt to provide for a seal at the saw cut location and the joint sealed with Grade AR-4000W paving asphalt. A sand blanket shall be applied to the surface to minimize "tracking" of same.

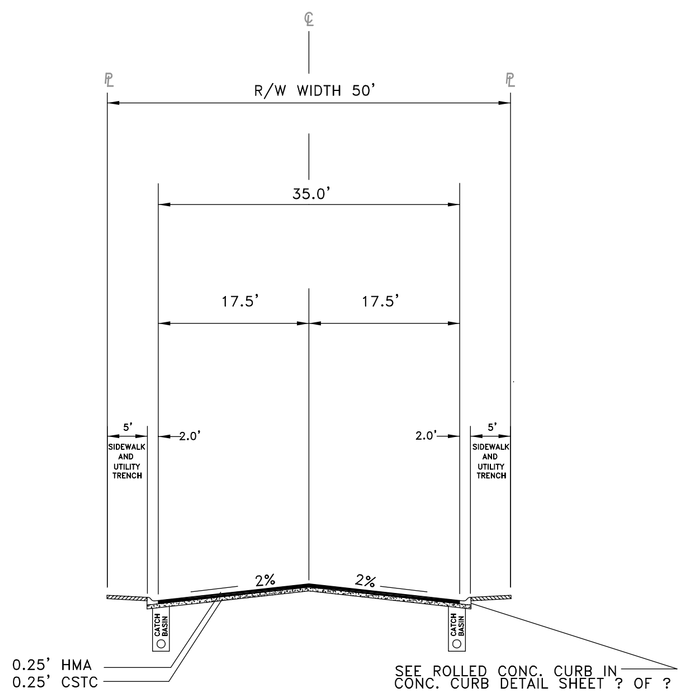
5 All local access streets shall require sawcut and sealing of all joints.

6 All arterials and collectors shall require tapered grinding/inlay for all joints

7 Compaction of subgrade, rock, and asphalt will be in accordance with the WSDOT standard specifications.

8 Form and subgrade inspection by the City is required before pouring concrete. A minimum twenty-four hours notice is required to be provided to the City for form inspection.

9 Testing and sampling frequencies will be as described in Section 3.3.12.

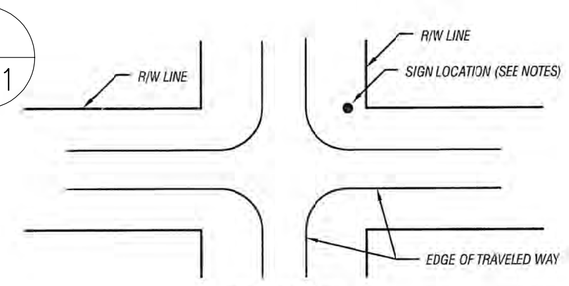


1ST STREET ROADWAY SECTION

STA. 10+10.00 TO STA. 13+27.70
STA. 20+37.70 TO STA. 21+55.30

A / SD-1

C / SD-1



SIGN PLACEMENT

NOTES:

SIGN MATERIAL REQUIREMENTS

1) *SHEET ALUMINUM SIGN SHALL BE CONSTRUCTED OF ALLOY 6061-T6, 5052-H36 OR 5052-H38. THICKNESS SHALL BE 0.080" OR 14 GAGE.*

2) *SIGN FACE MATERIAL SHALL BE MADE OF GREEN REFLECTIVE SHEETING WITH 4" WHITE REFLECTIVE LETTERING, ENGINEER GRADE.*

SIGN POST REQUIREMENTS

1) *SIGN POSTS SHALL BE TREATED POSTS WITH A 4" X 4" NOMINAL DIMENSION FOR ALL SIGNS ALONG ARTERIALS, IN RESIDENTIAL AND ALONG COLLECTOR STREETS. IN COMMERCIAL AREAS THE SIGN POSTS SHLL BE ENAMAL PAINTED STEEL POSTS.*

HARDWARE PUBLIC ROAD SIGNS

1) *SIGN BRACKET SHALL BE A 2 WAY DIE CAST HIGH STRENGTH ALUMINUM ALLOY BRACKET DESIGNED FOR MOUNTING ON TOP OF THE POST. SLOTS FOR SIGNS SHALL HAVE A NOMINAL LENGTH OF 3" WITH TWO 5/16" ZINC PLATED STANDARD ALLEN WRENCH SET SCREWS.*

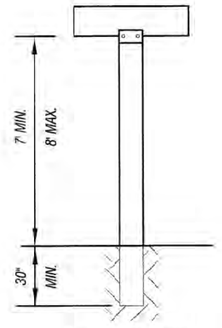
2) *ALL OTHER HARDWARE AND FASTENERS SHALL BE GALVANIZED STEEL.*

SIGN LOCATION

1) *ALL SIGNS SHALL BE LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION.*

2) *SIGNS SHALL BE PLACED WITHIN THE RIGHT OF WAY IN A LOCATION WHICH DOES NOT PRESENT CONFLICTS WITH VEHICULAR OR PEDESTRIAN MOVEMENTS.*

CENTER SIGN ON POST



SIGN INSTALLATION

CITY OF BLACK DIAMOND	STREET SIGNS		
	STANDARD DWG TR-28	NOT TO SCALE	04/01/05

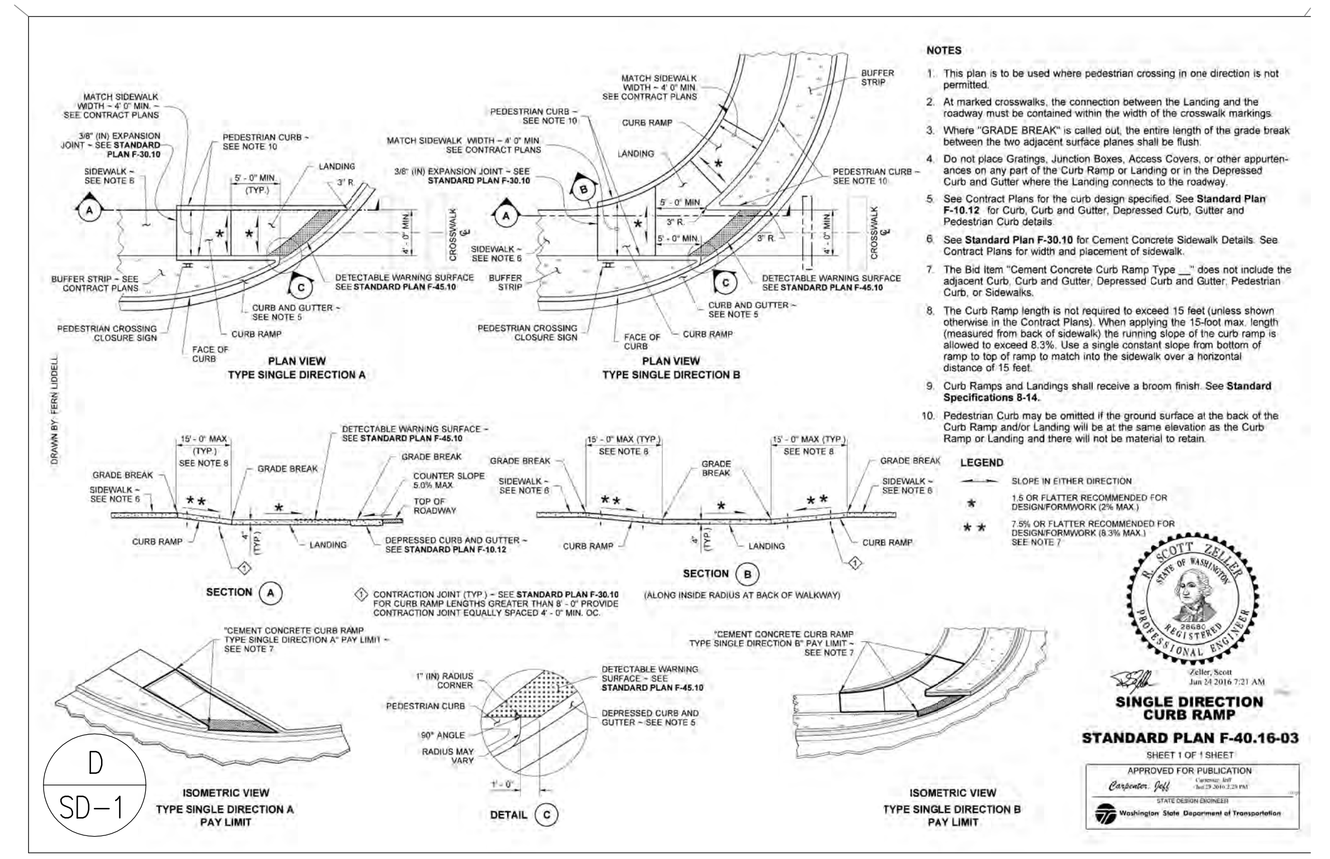
PacWest Engineering Fife, Washington

Special Provisions:

Removal of Structures and Obstructions:
The Contractor shall remove or abandon existing stormwater culvert pipe located at STA.10+44.00, near the intersection of Baker and 1st Street. If Contractor chooses to abandon existing culvert pipe, pipe will be back filled with lean concrete or as approved by the Engineer.

Grinding Bituminous Pavement:
Contractor shall remove or grind 0.15' of bituminous pavement as shown in the plans or as directed by the Engineer.

Remove and Relocate Exiting Mailbox Stand
The Contractor shall remove existing mailbox stand and concrete pad and dispose of off site. Contractor shall contact US Postal Service to determine exact location for the new mailbox stand along with construction requirements.



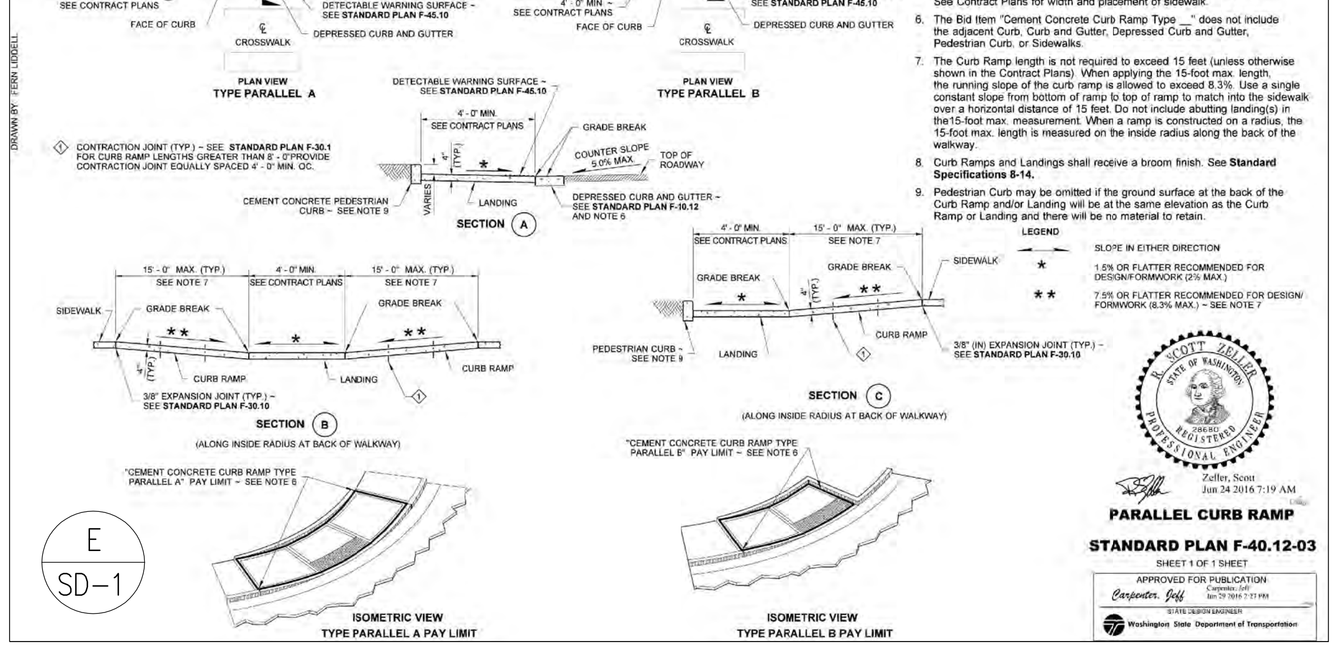
Zeller, Scott Jun 24 2016 7:21 AM

SINGLE DIRECTION CURB RAMP

STANDARD PLAN F-40.16-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff Jun 29 2016 2:29 PM
STATE LOCAL PROGRAMS ENGINEER
Washington State Department of Transportation



Zeller, Scott Jun 24 2016 7:19 AM

PARALLEL CURB RAMP

STANDARD PLAN F-40.12-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff Jun 29 2016 2:17 PM
STATE LOCAL PROGRAMS ENGINEER
Washington State Department of Transportation

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

DESIGN INFORMATION		
PROJECT IDENTIFICATION No.		
FILE NAME: BW-COVER SITE PLAN		
ACTION		9-5-24
DESIGNED		9-5-24
DRAWN		9-5-24
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PLOTTED DATES		

REVISION BLOCK: 5th Revision

Corner Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Street General Notes & Details

WILLIAM F. KRAMER – STATE OF WASHINGTON – 13824 – REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
SD 1 of 4

SHEET No.
13 of 23

Storm Drainage General Notes:

1. All work shall conform to City of Black Diamond Standards, the Stormwater Management Manual for Western Washington by the Department of Ecology, and the WSDOT Standard Specifications.

2. Temporary erosion / water pollution measures shall be required in accordance with the Stormwater Management Manual for Western Washington by the Department of Ecology and as follows:
   a. Soil erosion and water pollution/flood control plans shall be submitted to the City, approved by the City, and implemented by the contractor prior to disturbing any soil on the site. Submittal and approval of these plans shall preclude any construction activity on the site.
   b. All permanent storage and retention/detention areas used as part of the temporary erosion control and water pollution / flood activities and conveyance system shall be cleaned of all silts, sand, and other materials following completion of construction and the permanent facilities shall then be completed including permanent infiltration areas. If an infiltration pond is to be used on a temporary basis for a sediment control pond, a protective layer of fine soil as determined by an engineer shall be installed in order to protect the infiltrative capacity of the ultimate underlying soil

3 Compliance with all other permits and other requirements by the City of Black Diamond and/or other governing authorities shall be required.

4 A preconstruction meeting shall be held with the City prior to the start of construction.

5 All storm mains and retention/detention areas shall be staked for grade and alignment by an engineering or surveying firm capable of performing such work, and currently licensed in the State of Washington to do so.

6 Storm drain pipe shall meet the following requirements:

   a. Polyvinyl Chloride: PVC pipe shall conform to ASTM D 3034, SDR 35 or ASTM F 789 with joints and rubber gaskets conforming to ASTM D3212 and ASTM F4777.
   b. Plain Concrete: Plain concrete pipe per WSDOT Standard Specifications.
   c. Reinforced Concrete: Reinforced concrete pipe per WSDOT Standard Specifications.
   d. Ductile Iron: Ductile iron pipe shall conform to AWWA C151 Class 50 and have a cement mortar lining conforming to AWWA C104. All pipes shall be joined using non-restrained joints which shall be rubber gaskets, push on type or mechanical joint, conforming to AWWA.
   e. Polyethylene: PE smooth wall pipe per Advanced Drainage Systems (ADS) N-12 (bell and spigot), or City approved equal, constructed per WSDOT Standard Specifications.

7. Special structures, oil/water separators and outlet controls shall be installed per plans and manufacturers recommendations.

8. All disturbed areas shall receive permanent erosion control in the form of vegetation establishment such as grass seeding or hydroseeding. A means shall be established to protect the permanent storm drain system prior to establishment of the permanent erosion control measures. This method shall be included in the soil erosion and water pollution/flood control plans.

9. Provide traffic control plan(s) as required in accordance with MUTCD.

10. Call underground locate line 1-800-424-5555 a minimum of 48 hours prior to any excavations.

11. Storm drain pipelines shall be installed to the far property line(s) to serve adjacent tributary areas as may be warranted. They shall be appropriately sized to accommodate flows as further identified herein. Pipes shall be designed to facilitate a minimum 2.5 feet/second flow unless otherwise approved by the City Engineer.

12. All storm water pipes shall be pressure tested between catch basins and TV inspected.

13. Natural surface water shall bypass all retention and detention storm systems.

Erosion Control General Notes:

1. Approval of this erosion/sedimentation control (ESC) plan does not constitute an approval of permanent road or drainage design (e.g. size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).

2. The implementation of these ESC plans and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the applicant/contractor until all construction is completed and approved and vegetation/landscaping is established.

3. The boundaries of the clearing limits shown on this plan shall be clearly marked in the field prior to construction. During the construction period, no disturbance beyond the marked clearing limits shall be permitted. The marking shall be maintained by the applicant/contractor for the duration of the construction.

4. The ESC facilities shown on this plan must be constructed in conjunction with all clearing and grading activities, and in such a manner as to ensure that sediment and sediment laden water do not enter the drainage system, roadways or violate applicable water & utility standards.

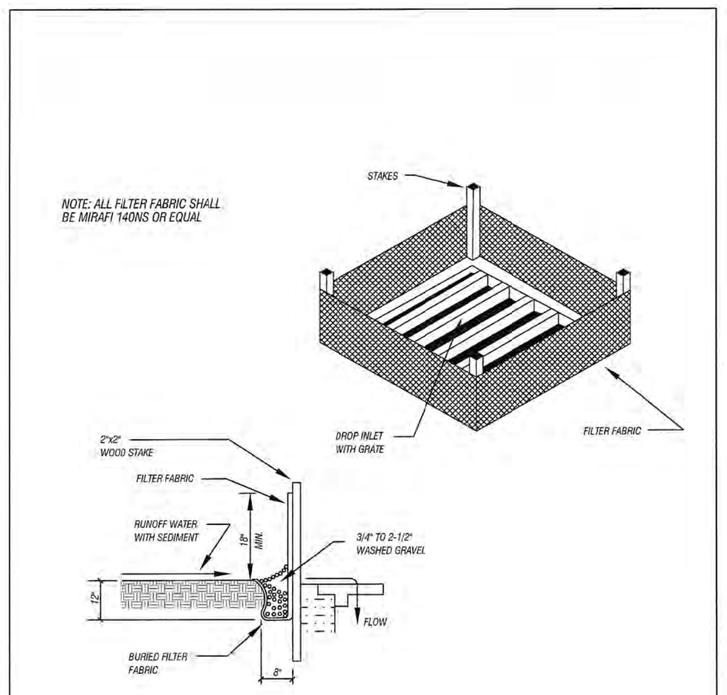
5. The ESC facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESC facilities shall be upgraded as needed for unexpected storm events and to ensure that sediment and sediment-laden water do not leave the site.

6. The ESC facilities shall be inspected daily by the applicant/contractor and maintained as necessary to ensure their continued functioning.

7. The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a month or within the 48 hours following a major storm event.

8. At no time shall more than 1' of sediment be allowed to accumulate within a the sump of a trapped catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.

9. Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to ensure that all paved areas are kept clean for the duration of the project.



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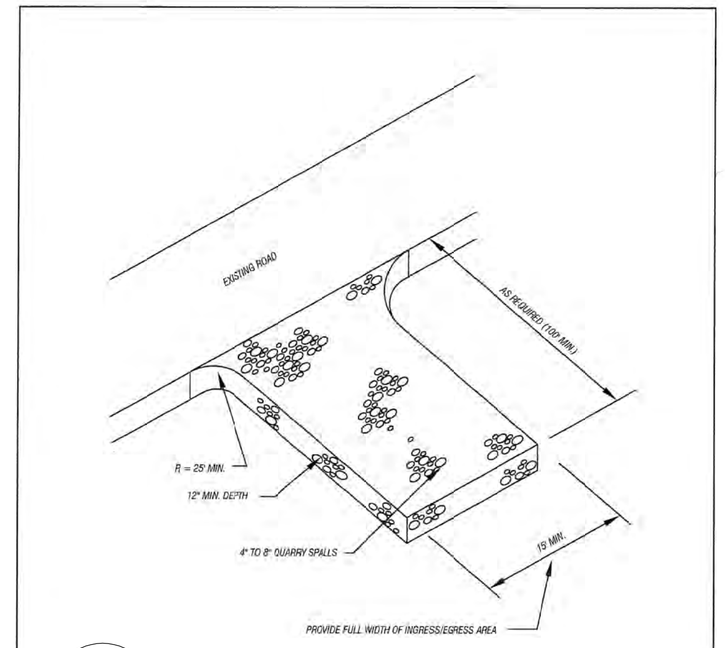
SD-2

6-04-07

CITY OF BLACK DIAMOND | INLET PROTECTION - FILTER FABRIC FENCE | STANDARD DWG EC-3 | NOT TO SCALE | 01/01/08 | PacWest Engineering Fife, Washington

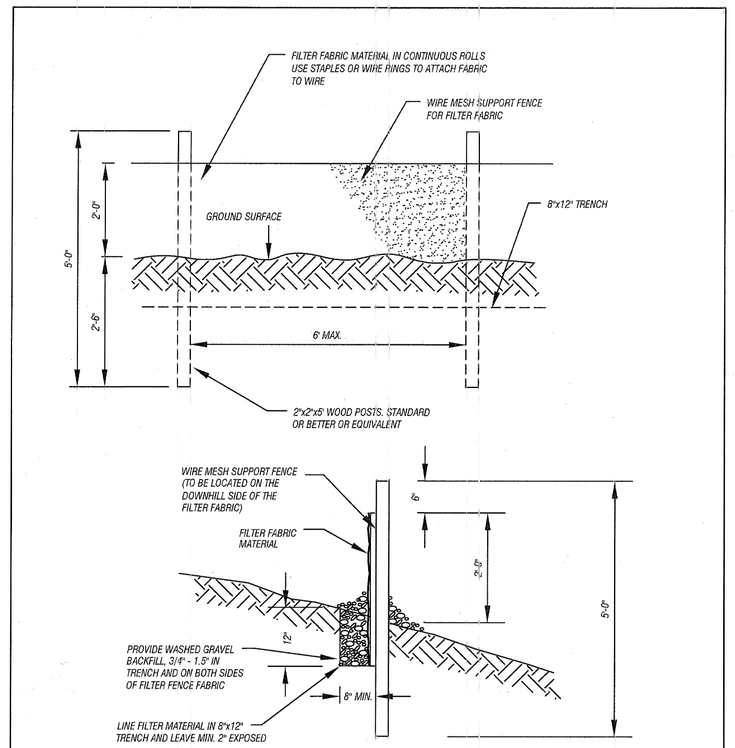


G
SD-2

NOTE:
INSTALL DRIVEWAY CULVERT IF THERE IS A ROADSIDE DITCH PRESENT.

6-04-07

CITY OF BLACK DIAMOND | CONSTRUCTION ENTRANCE | STANDARD DWG EC-1 | NOT TO SCALE | 01/01/08 | PacWest Engineering Fife, Washington



H
SD-2

6-04-07

CITY OF BLACK DIAMOND | SILT FENCE | STANDARD DWG EC-2 | NOT TO SCALE | 01/01/08 | PacWest Engineering Fife, Washington

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

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360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Street Drainage & Erosion Control
General Notes & Details

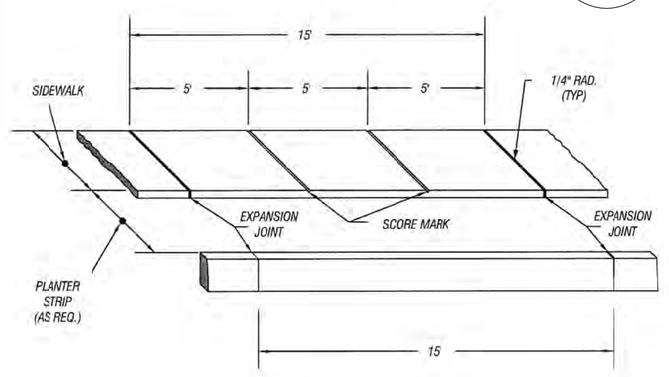
WILLIAM E. TURNER — STATE OF WASHINGTON — 33824 — REGISTERED PROFESSIONAL ENGINEER

9-5-24

SHEET ID CODE
SD 2 of 4

SHEET No.
14 of 23

J
SD-3



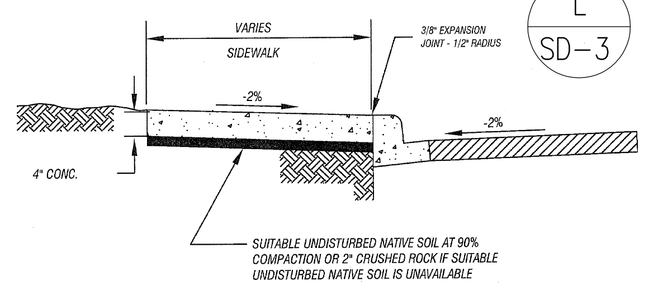
GENERAL NOTES:

1. EXPANSION JOINT MATERIAL TO BE 3/8" THICK PREMOLDED JOINT FILLER FULL THICKNESS OF CONCRETE.
2. FORM AND SUBGRADE INSPECTION REQUIRED BEFORE POURING CONCRETE.
3. SCORE MARKS SHALL BE ±1/8" WIDE BY ±1/4" DEEP. FOR SIDEWALKS OVER 8' IN WIDTH, A LONGITUDINAL SCORE MARK SHALL BE MADE ALONG CENTER OF WALK.
4. EXPANSION JOINTS SHALL BE INSTALLED IN CURB AND GUTTER AND IN SIDEWALK AT PC AND PT AT ALL CURB RETURNS. EXPANSION JOINTS SHALL BE PLACED IN SIDEWALK AT SAME LOCATIONS AS THOSE IN CURB AND GUTTER WHEN SIDEWALK IS ADJACENT TO CURB AND GUTTER, UNLESS OTHERWISE DIRECTED BY ENGINEER.

6-03-09 LEONARD L. SMITH STATE OF WASHINGTON 19491 PROFESSIONAL ENGINEER

CITY OF BLACK DIAMOND | SIDEWALK SPACING | STANDARD DWG TR-15 | NOT TO SCALE | 04/01/09 | PacWest Engineering Fife, Washington

L
SD-3



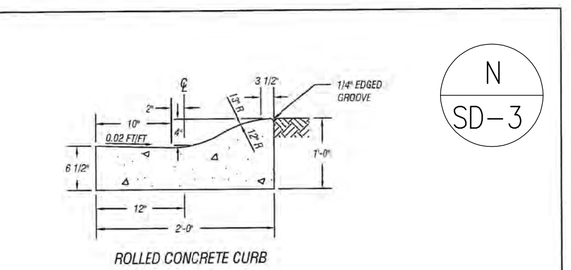
GENERAL NOTES:

1. CONCRETE DRIVEWAYS REQUIRE A MINIMUM DEPTH OF 6".
2. WHEN CHECKED WITH A 10 FOOT STRAIGHTEDGE, GRADE SHALL NOT DEVIATE MORE THAN 1/8 INCH, AND ALIGNMENT SHALL NOT VARY MORE THAN 1/4 INCH.

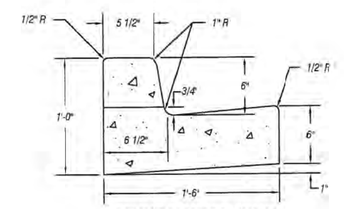
6-03-09 LEONARD L. SMITH STATE OF WASHINGTON 19491 PROFESSIONAL ENGINEER

CITY OF BLACK DIAMOND | SIDEWALK | STANDARD DWG TR-14 | NOT TO SCALE | 04/01/09 | PacWest Engineering Fife, Washington

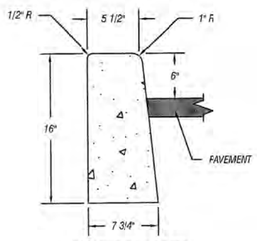
N
SD-3



ROLLED CONCRETE CURB



CEMENT CONCRETE TRAFFIC CURB & GUTTER

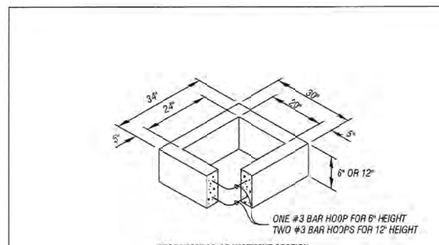


CEMENT CONCRETE TRAFFIC CURB

6-03-09 LEONARD L. SMITH STATE OF WASHINGTON 19491 PROFESSIONAL ENGINEER

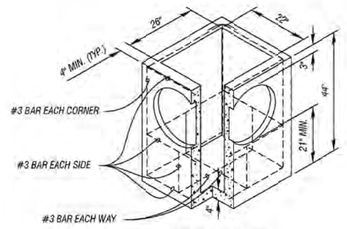
CITY OF BLACK DIAMOND | CONCRETE CURBS | STANDARD DWG TR-13 | NOT TO SCALE | 04/01/09 | PacWest Engineering Fife, Washington

P
SD-3

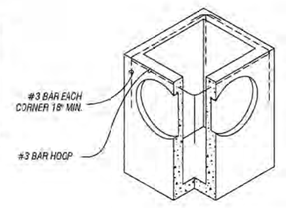


RECTANGULAR ADJUSTMENT SECTION

FRAME AND HERRINGBONE GRATE



PRECAST BASE SECTION



ALTERNATIVE PRECAST BASE SECTION

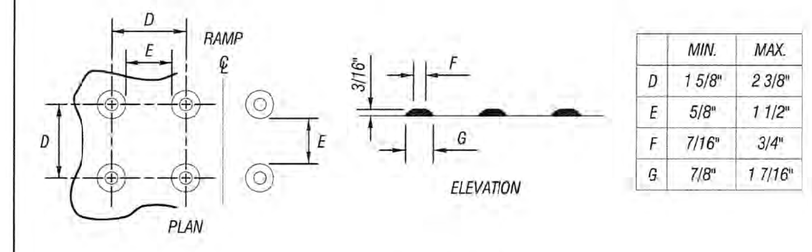
NOTES:

1. AS ACCEPTABLE ALTERNATIVES TO THE REBAR SHOWN IN THE PRECAST BASS SECTION, FIBERS (PLACED ACCORDING TO WSDOT STANDARD SPECIFICATIONS), OR WIRE MESH HAVING A MINIMUM AREA OF 0.12 SQUARE INCHES PER FOOT SHALL BE USED WITH THE MINIMUM REQUIRED REBAR SHOWN IN THE ALTERNATIVE PRECAST BASE SECTION. WIRE MESH SHALL NOT BE PLACED IN THE KNOCKOUTS.
2. THE KNOCKOUT DIAMETER SHALL NOT BE GREATER THAN 20". KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM TO 2.5" MAXIMUM. PROVIDE A 1.5" MINIMUM GAP BETWEEN THE KNOCKOUT WALL AND THE OUTSIDE OF THE PIPE. AFTER THE PIPE IS INSTALLED, FILL THE GAP WITH JOINT MORTAR IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION.
3. THE MAXIMUM DEPTH FROM THE FINISHED GRADE TO THE LOWEST PIPE INVERT SHALL BE 5'.
4. THE FRAME AND GRATE MAY BE INSTALLED WITH THE FLANGE UP OR DOWN. THE FRAME MAY BE CAST INTO THE ADJUSTMENT SECTION.
5. THE PRECAST BASE SECTION MAY HAVE A ROUNDED FLOOR, AND THE WALLS MAY BE SLOPED AT A RATE OF 1:24 OR STEEPER.
6. THE OPENING SHALL BE MEASURED AT THE TOP OF THE PRECAST BASE SECTION.
7. ALL PICKUP HOLES SHALL BE GROUTED FULL AFTER THE BASIN HAS BEEN PLACED.

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
PVC	15"
HDPE	12"

6-03-09 LEONARD L. SMITH STATE OF WASHINGTON 19491 PROFESSIONAL ENGINEER

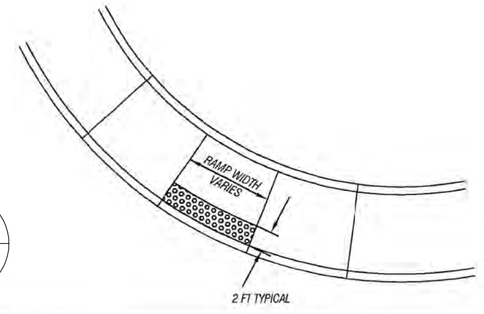
CITY OF BLACK DIAMOND | CATCH BASIN, TYPE 1 | STANDARD DWG SD-1 | NOT TO SCALE | 01/01/08 | PacWest Engineering Fife, Washington



	MIN.	MAX.
D	1 5/8"	2 3/8"
E	5/8"	1 1/2"
F	7/16"	3/4"
G	7/8"	1 7/16"

TRUNCATED DOMES
DETECTABLE WARNING
PATTERN DETAIL

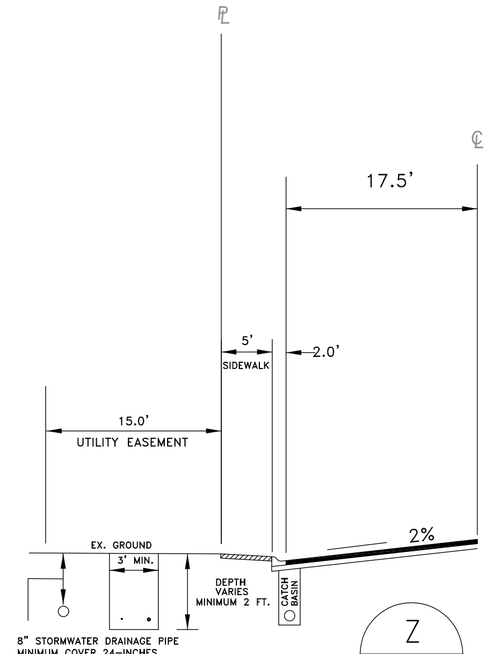
NOTES:
1. DETECTABLE WARNING PATTERNS MAY BE CREATED BY ANY METHOD THAT WILL ACHIEVE THE TRUNCATED DOME DIMENSIONS AND SPACING SHOWN. THE DETECTABLE WARNING PATTERN AREA SHALL BE YELLOW, IN COMPLIANCE WITH WSDOT STANDARD SPECIFICATION 8-14.3(3).
2. THE COLOR CONTRAST SHALL MEET THE FEDERAL REQUIREMENTS AS DEFINED BY THE FOLLOWING: DETECTABLE WARNINGS ON WALKING SURFACES. THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70%. CONTRAST IN PERCENT IS DETERMINED BY: CONTRAST = ((A-B)/A)*100
A= LIGHT REFLECTANCE VALUE OF THE LIGHTER AREA AND B=LIGHT REFLECTANCE VALUE OF THE DARKER AREA.



O
SD-3

6-03-09 LEONARD L. SMITH STATE OF WASHINGTON 19491 PROFESSIONAL ENGINEER

CITY OF BLACK DIAMOND | SIDEWALK ACCESS RAMP DETECTABLE WARNING PATTERN | STANDARD DWG TR-17 | NOT TO SCALE | 04/01/09 | PacWest Engineering Fife, Washington



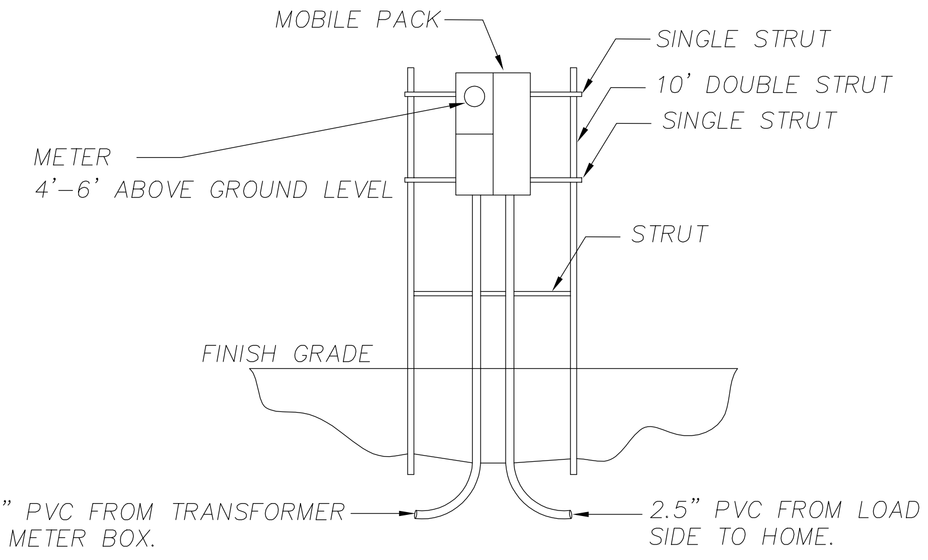
Z
SD-3

UTILITY TRENCH DETAIL
STORMWATER, COMCAST
COMMUNICATIONS, AND PSE

MOBILE HOME PACK

N.T.S

UA
SD-3



METER BASE DETAIL

NOTE:

MOBILE HOME PANEL/PEDESTAL, 200A MAIN BREAKER, AND 8 SPACES, 8 CIRCUITS, 10kAIC, UG FEED. METER SOCKET SHALL BE ACCEPTABLE TO AND MEET ALL REQUIREMENTS OF PSE AND SET FORTH IN THEIR ELECTRICAL SERVICE HANDBOOK AND METER SOCKET CATALOG.

FEEDER WIRE SIZE CAN ALL BE 3/0 BASED ON MEASUREMENTS OF FEEDER LENGTH BETWEEN TRANSFORMER VAULT AND METER BASE. ALL HOUSES SHALL HAVE SEPARATE FEEDERS FROM TRANSFORMER.

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

DESIGN INFORMATION
PROJECT IDENTIFICATION No.
FILE NAME: BW-COVER SITE PLAN

ACTION	
DESIGNED	9-5-24
DRAWN	9-5-24
CHECKED	9-5-24
PLOTTED DATES	

REVISION BLOCK:
5th Revision

Turner Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

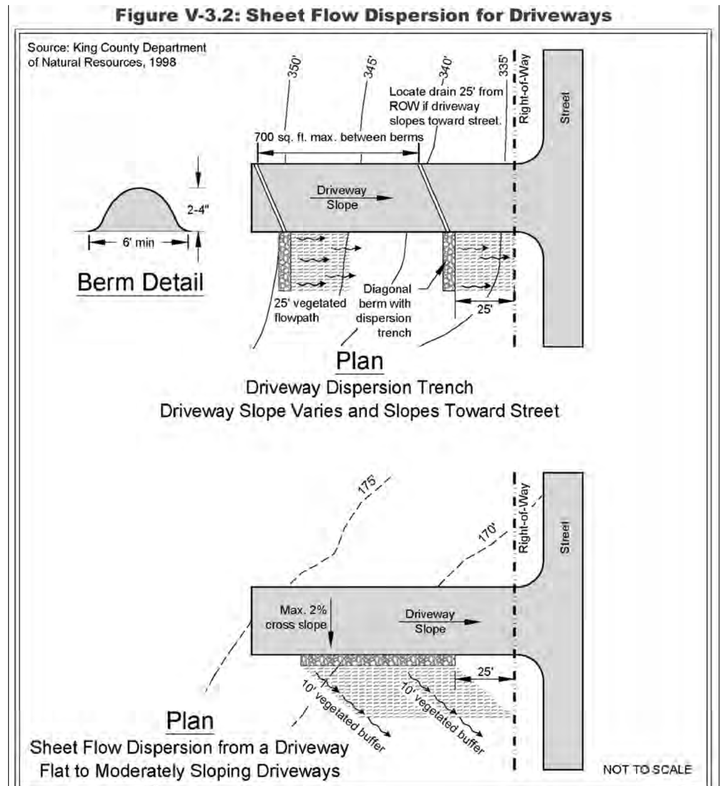
Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Street & Stormwater Details

WILLIAM R. TURNER STATE OF WASHINGTON 33824 REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
SD 3 of 4

SHEET No.
15 of 23

Figure V-3.2: Sheet Flow Dispersion for Driveways



DEPARTMENT OF ECOLOGY State of Washington

Sheet Flow Dispersion for Driveways

Revised December 2016

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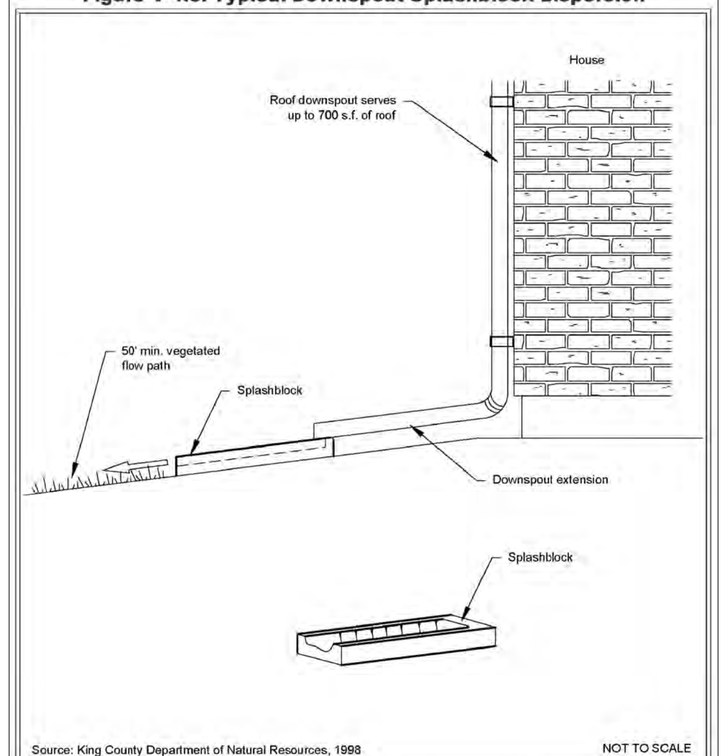
AE
SD–4

Figure V-4.6: Typical Downspout Splashblock Dispersion



DEPARTMENT OF ECOLOGY State of Washington

Typical Downspout Splashblock Dispersion

Revised December 2016

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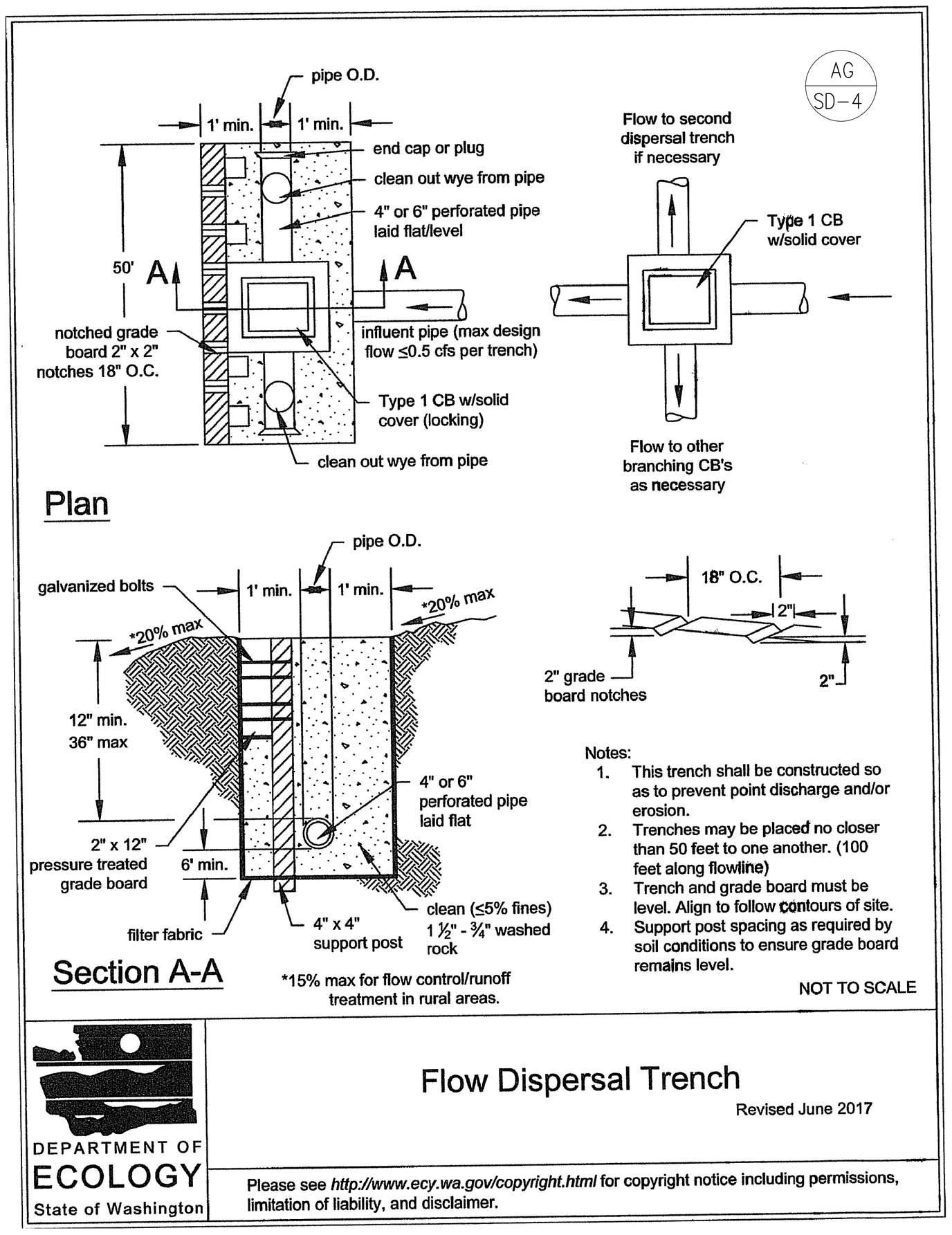

AG
SD–4

DEPARTMENT OF ECOLOGY State of Washington

Flow Dispersal Trench

Revised June 2017

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BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

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FILE NAME: BW-COVER SITE PLAN

ACTION	
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CHECKED	9-5-24
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REVISION BLOCK:
5th Revision

Turner Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Street & Stormwater Details

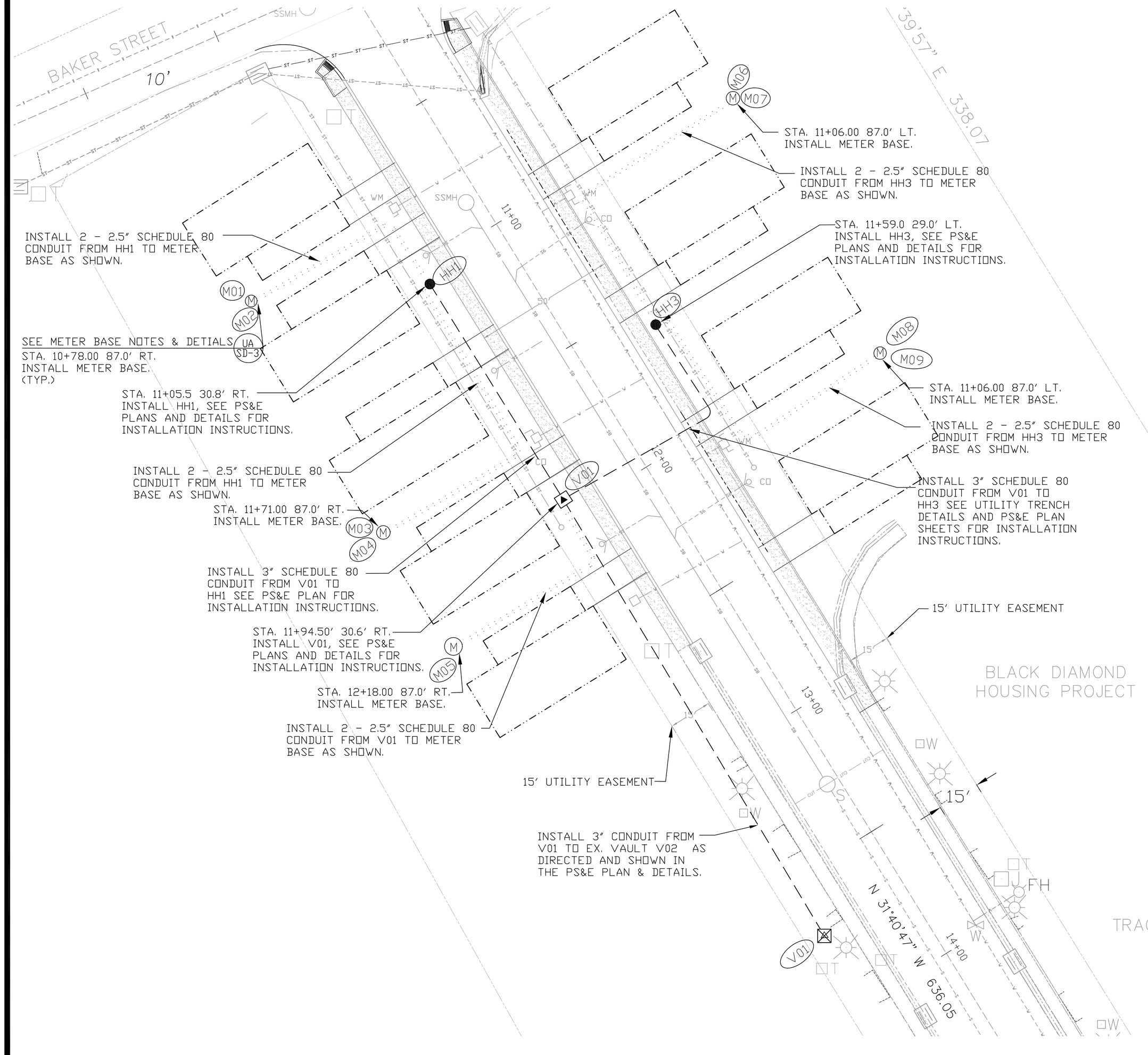
WILLIAM P. TURNER — STATE OF WASHINGTON — 31824 — REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
SD 4 of 4

SHEET No.
16 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK



DATUM

1"=20'
0 5 10 20

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

BENCHMARK

INTERSECTION OF 1ST AND BAKER ST.
MONUMENT IN CASE
NORTHING: 114872.14
EASTING: 1349492.01
ELEV.: 650.43

NOT A BOUNDARY SURVEY
All references to property lines, bearing, corners, or any references which indicate property alignment or locations were acquired from

Chehalis Valley Surveying
FOR CONSTRUCTION USE ONLY

NOTE: THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION & PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

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5th Revision

Turner Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.

Rainier View
Manufactured Home Park
Electrical Site Plan

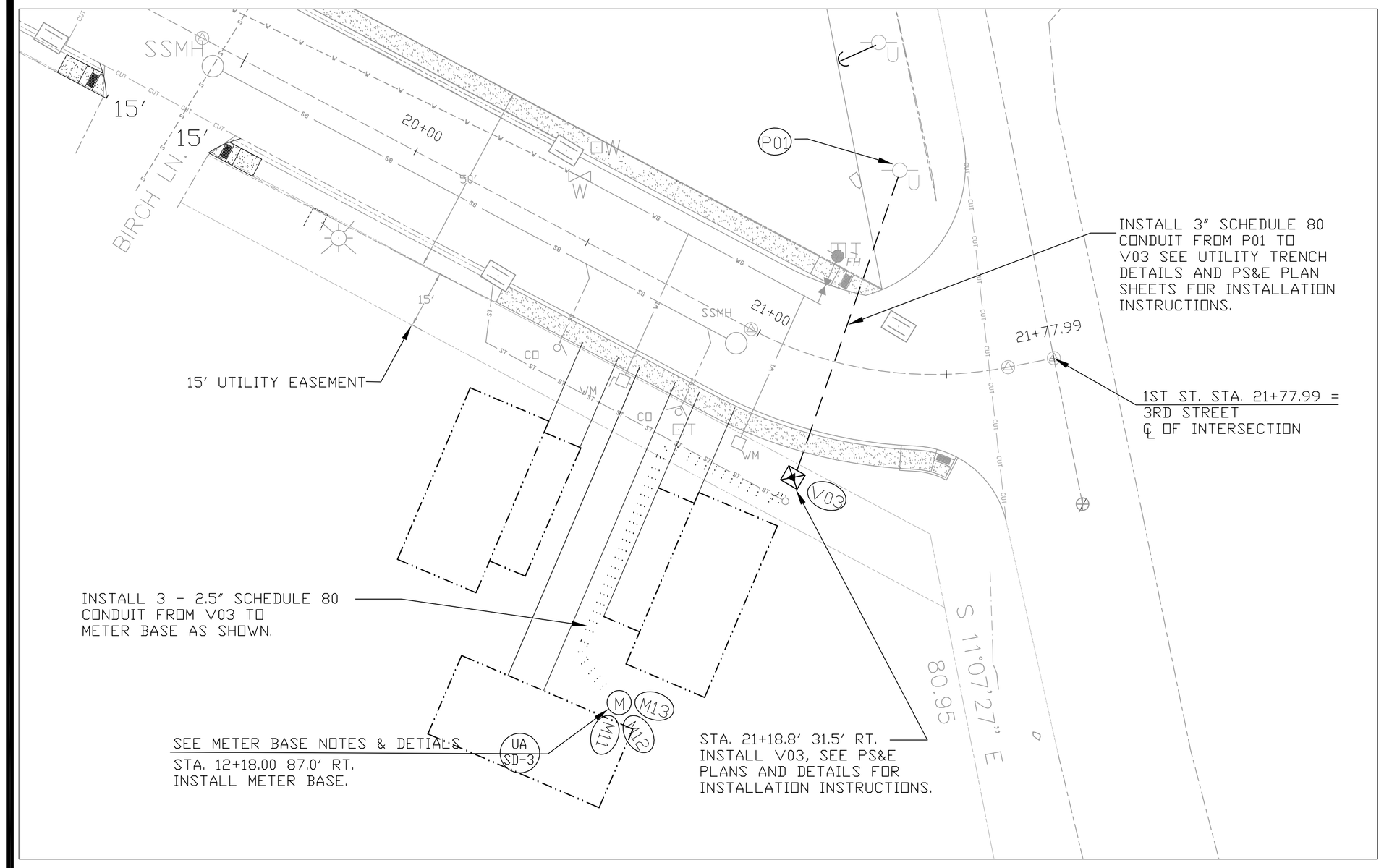
WILLIAM B. TURNER
STATE OF WASHINGTON
33824
REGISTERED PROFESSIONAL ENGINEER
9-5-24

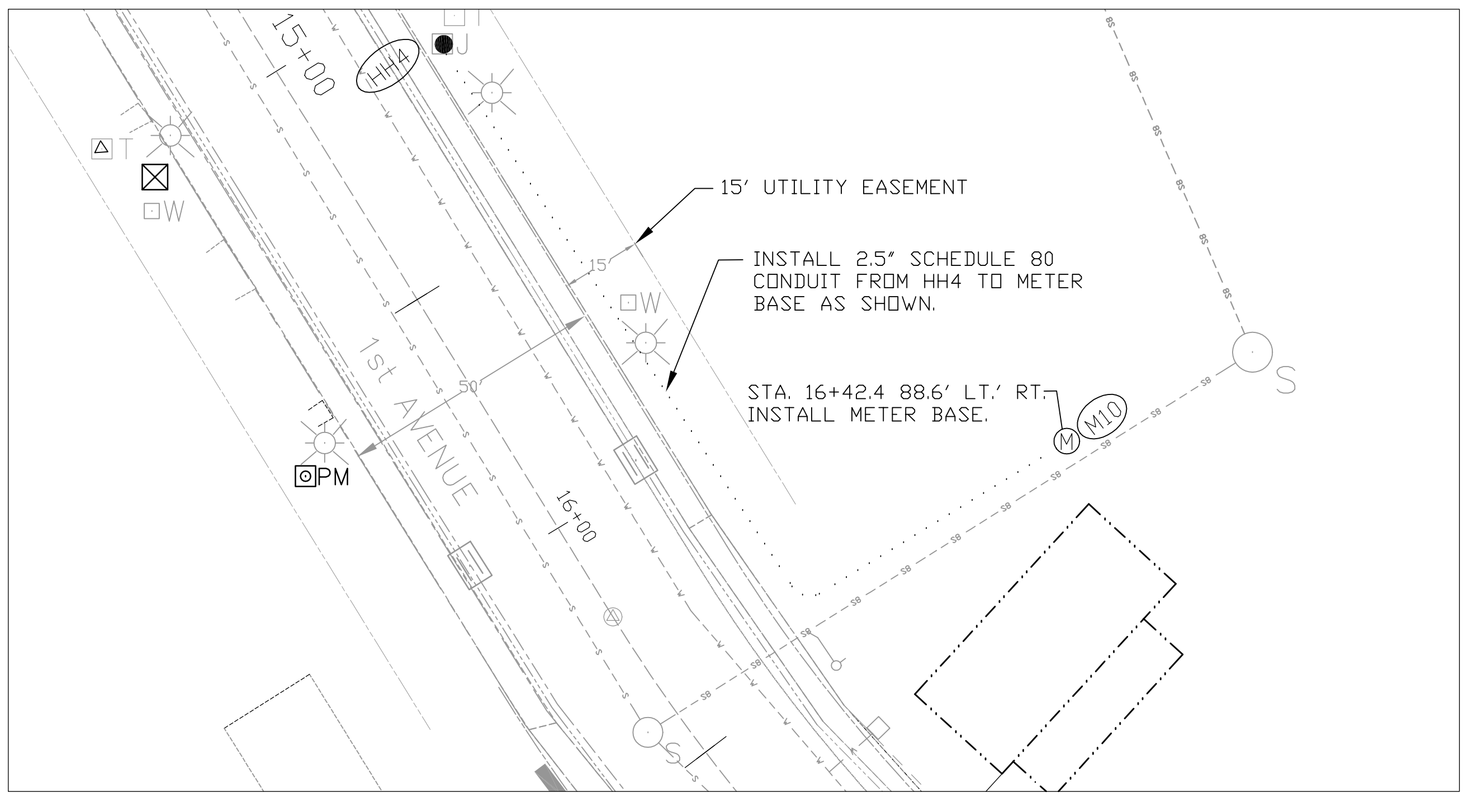
SHEET ID CODE
EL 1 of 2

SHEET No.
17 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK





Note:
Specification for Meter Pedestal:
Mobil home panel/pedistal, 200A main breaker, and 8 spaces, 8 circuites, 10 kAIC, UG feed. Meter socket acceptable to meet ALL requirements of PSE as set forth in their Electrical Service Handbook and Meter Scocket Handbook.

DATUM

1"=20'
0 5 10 20

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

BENCHMARK
INTERSECTION OF 1ST AND BAKER ST.
MONUMENT IN CASE
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EASTING: 1349492.01
ELEV.: 650.43

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Chehalis Valley Surveying
FOR CONSTRUCTION USE ONLY

NOTE: THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION & PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

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BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

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Turner Engineering Consulting
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Electrical Site Plan

WILLIAM P. TURNER
STATE OF WASHINGTON
33824
REGISTERED
PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
EL 2 of 2

SHEET No.
18 of 23

Sanitary Sewer General Notes:

1. All work shall conform to City of Black Diamond Sanitary Sewer Standards and the Developer Extension Agreement.

2. All new manholes shall have a minimum inside diameter of 48" and shall conform to the Standard Details.

3. Sanitary sewer pipe shall be PVC conforming to ASTM-D3034 SDR 35 or Ductile Iron pipe (class 52), provided the ductile iron pipe is lined with epoxy, polyurethane, or SewperCoat, where required by the City Engineer. Bedding and backfill shall be as shown in the Standard Details.

4. Where shown as C900-PVC, the sewer pipe shall be pressure class 150 (DR 18) conforming to AWWA C900.

5. All lateral sewers shall be 6" diameter pipe at a minimum 2% slope.

6. Lateral sewer stations are referenced from nearest downstream manhole.

7. At a minimum, temporary lot corners must be set and side sewer locations verified in the field prior to construction.

8. All lateral sewer stubs shall be capped with a watertight plug. Plug location shall be marked with a 2" x 4" pressure treated wood stake, minimum 12' long, with one end buried at depth of the plug invert and extending at least 3' vertically out of the ground. The portion of stake above ground shall be painted white and marked with the word "SEWER" and the depth from pipe invert to ground surface. Connect pipe to stake with a 14-gauge wire at or above finished ground level.

9. The locations of all existing utilities shown hereon have been established by field survey or obtained from available records and should therefore be considered approximate only and not necessarily complete. It is the sole responsibility of the contractor to independently verify the accuracy of all utility locations shown, and to further discover and avoid any other utilities not shown hereon which may be affected by the implementation of this plan.

10. All testing and connections to existing mains shall be done in the presence of a representative of the City of Black Diamond. Side sewer pipelines shall be inspected by the City and the test witnessed by the City prior to backfilling the trench. If any work is backfilled or covered without approval or consent of the City, it must be uncovered for inspection.

11. All trenches shall be compacted and pavement installed prior to final testing and TV & video inspection of sewer lines for acceptance.

12. Lateral sewers shall be tested for acceptance at the same time the main sewer is tested.

13. Tops of manholes within public rights-of-way shall not be adjusted to final grade until just after paving.

14. All manholes in unpaved areas shall include a concrete seal around adjusting rings and shall be equipped with locking covers per the Standard Details. In paved areas the material around the manhole shall match the surrounding paving material

15. Manhole elevation shall be above the 100 year flood plain.

16. Contractor shall adjust all manhole rims to flush with final finished grades, unless otherwise shown.

17. All sewer main extensions must be "staked" by survey for "line and grade" and cut sheets provided to the Engineer, prior to starting construction.

18. All sewer mains in plats or developments must be located within public right-of-way or tracts.

19. Contractor shall install, at all connections to existing down stream manholes, plugs to prevent foreign materials from entering existing sanitary sewer system. Plugs shall remain in place throughout the duration of construction and shall be removed along with collected debris at the time of final inspection and in the presence of a representative of the Ci?????8??ty of Black Diamond.

20. Surface restoration of existing asphalt pavement shall be as required by these Standards or the Developers Extension Agreement.

21. Contractor shall maintain a minimum of 10' horizontal separation between all water and sewer lines. Any conflicts shall be reported to the City and the Engineer prior to construction.

22. It shall be the contractor's responsibility to ensure that no conflicts exist between sanitary sewer lines and proposed or existing utilities prior to construction.

23. Minimum cover over sewer mainline pipe shall be 4', unless otherwise approved by the City Engineer.

24. The Contractor shall use a vacuum street sweeper to remove dust and debris from pavement areas as directed by the Engineer. Care shall be taken to control fugitive dust. Flushing of streets shall not be permitted.

25. Before commencement of trenching, the Contractor shall provide erosion control measures in accordance with these standards and the Department of Ecology requirements.

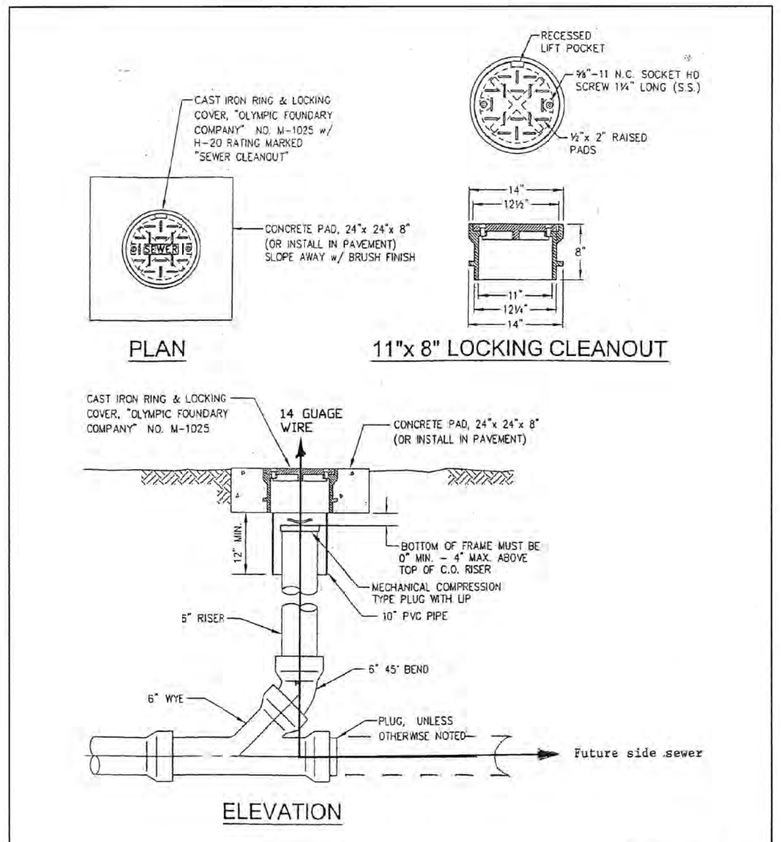
26. Side sewer demolition shall be performed prior to removal of building foundation. The side sewer for each building shall be excavated and removed from the house connection to the edge of the public right-of-way, or main as directed by the City. The Contractor shall cap the end of the lateral sewer to remain in place as applicable. Side sewer demolition shall be performed in t he presence of an authorized representative of the City of Black Diamond.

27. Avoid crossing water or sewer mains at highly acute angles. The measured acute angle between utilities should be 45 to 90 degrees.

28. At points where existing thrust blocking is found, minimum clearance between the concrete blocking and other buried utilities or structures shall be 5'.

29. Where new utility line crosses below an existing AC main, the AC pipe shall be replaced with DI pipe to 3' past each side of the trench as shown on the City Standard Details. Alternatively, where directed by the Engineer, the trench shall be backfilled with controlled density fill (CDF, aka flowable fill) from bottom of trench to bottom of the AC main.

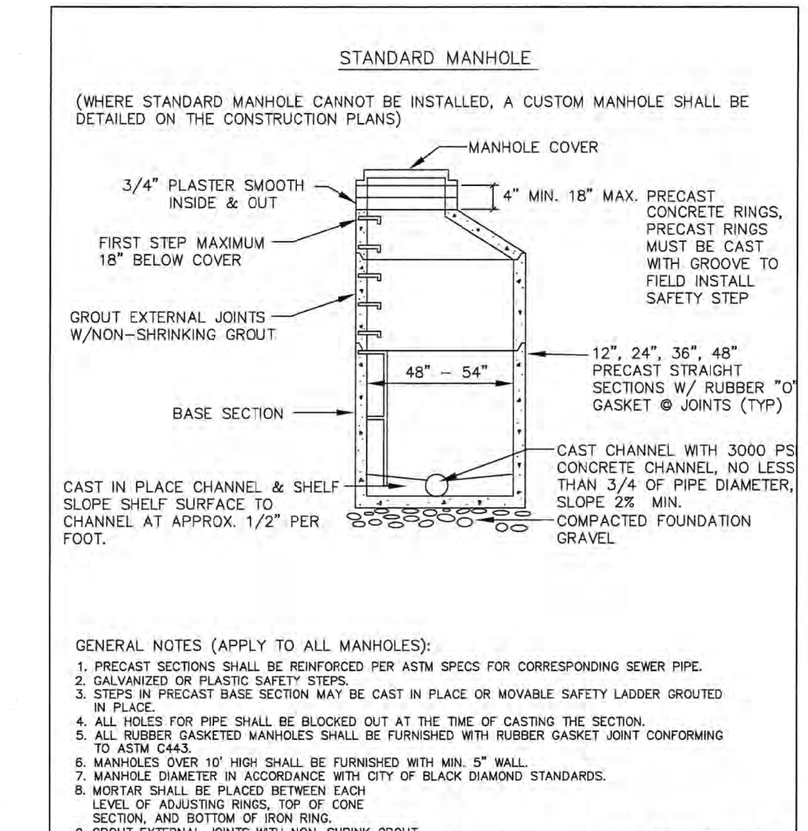
30. Call 1-800-424-5555 48 hours before construction for utility locations.



P
SN-1

CITY OF BLACK DIAMOND	CLEANOUT		
	STANDARD DWG S-8	NOT TO SCALE	04/01/09

PacWest Engineering Fife, Washington



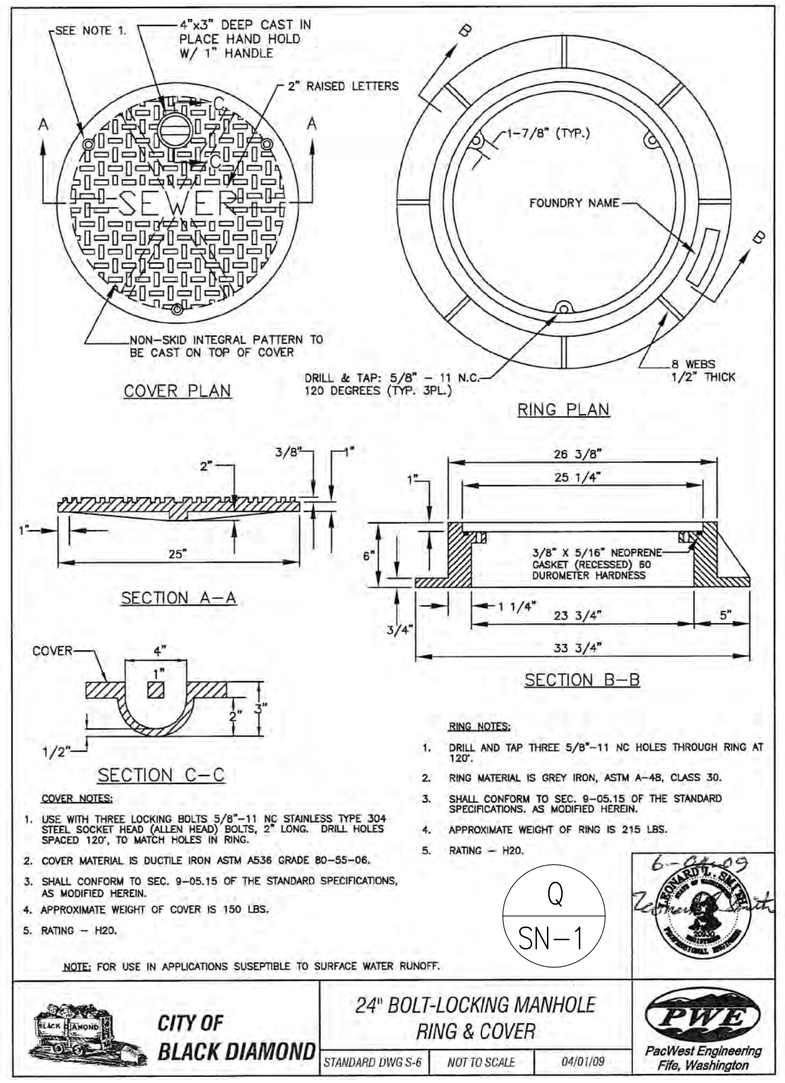
GENERAL NOTES (APPLY TO ALL MANHOLES):

1. PRECAST SECTIONS SHALL BE REINFORCED PER ASTM SPECS FOR CORRESPONDING SEWER PIPE.
2. GALVANIZED OR PLASTIC SAFETY STEPS.
3. STEPS IN PRECAST BASE SECTION MAY BE CAST IN PLACE OR MOVABLE SAFETY LADDER GROUTED IN PLACE.
4. ALL HOLES FOR PIPE SHALL BE BLOCKED OUT AT THE TIME OF CASTING THE SECTION.
5. ALL RUBBER GASKETED MANHOLES SHALL BE FURNISHED WITH RUBBER GASKET JOINT CONFORMING TO ASTM C443.
6. MANHOLES OVER 10' HIGH SHALL BE FURNISHED WITH MIN. 5" WALL.
7. MANHOLE DIAMETER IN ACCORDANCE WITH CITY OF BLACK DIAMOND STANDARDS.
8. MORTAR SHALL BE PLACED BETWEEN EACH LEVEL OF ADJUSTING RINGS, TOP OF CONE SECTION, AND BOTTOM OF IRON RING.
9. GROUT EXTERNAL JOINTS WITH NON-SHRINK GROUT.
10. PROVIDE EPOXY COATING OR HEAT SHRINK WRAP AROUND THE OUTSIDE OF MANHOLE.
11. PROVIDE KOR-N-SEAL BOOTS AT CONNECTIONS TO MANHOLES.

R
SN-1

CITY OF BLACK DIAMOND	STANDARD MANHOLE		
	STANDARD DWG S-1	NOT TO SCALE	04/01/09

PacWest Engineering Fife, Washington



COVER NOTES:

1. USE WITH THREE LOCKING BOLTS 5/8"-11 NC STAINLESS TYPE 304 STEEL SOCKET HEAD (ALLEN HEAD) BOLTS, 5" LONG. DRILL HOLES SPACED 120°, TO MATCH HOLES IN RING.
2. COVER MATERIAL IS DUCTILE IRON ASTM A536 GRADE 80-55-06.
3. SHALL CONFORM TO SEC. 9-05.15 OF THE STANDARD SPECIFICATIONS, AS MODIFIED HEREIN.
4. APPROXIMATE WEIGHT OF COVER IS 150 LBS.
5. RATING – H20.

NOTE: FOR USE IN APPLICATIONS SUSEPTIBLE TO SURFACE WATER RUNOFF.

RING NOTES:

1. DRILL AND TAP THREE 5/8"-11 NC HOLES THROUGH RING AT 120°.
2. RING MATERIAL IS GREY IRON, ASTM A-48, CLASS 30.
3. SHALL CONFORM TO SEC. 9-05.15 OF THE STANDARD SPECIFICATIONS. AS MODIFIED HEREIN.
4. APPROXIMATE WEIGHT OF RING IS 215 LBS.
5. RATING – H20.

Q
SN-1

CITY OF BLACK DIAMOND	24" BOLT-LOCKING MANHOLE RING & COVER		
	STANDARD DWG S-6	NOT TO SCALE	04/01/09

PacWest Engineering Fife, Washington

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____

Signed, City Engineer

Approval Expires: _____

DESIGN INFORMATION
PROJECT IDENTIFICATION No.
FILE NAME: BW-COVER SITE PLAN

ACTION	
DESIGNED	9-5-24
DRAWN	9-5-24
CHECKED	9-5-24
PLOTTED DATES	

REVISION BLOCK:
5th Revision

Turner Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

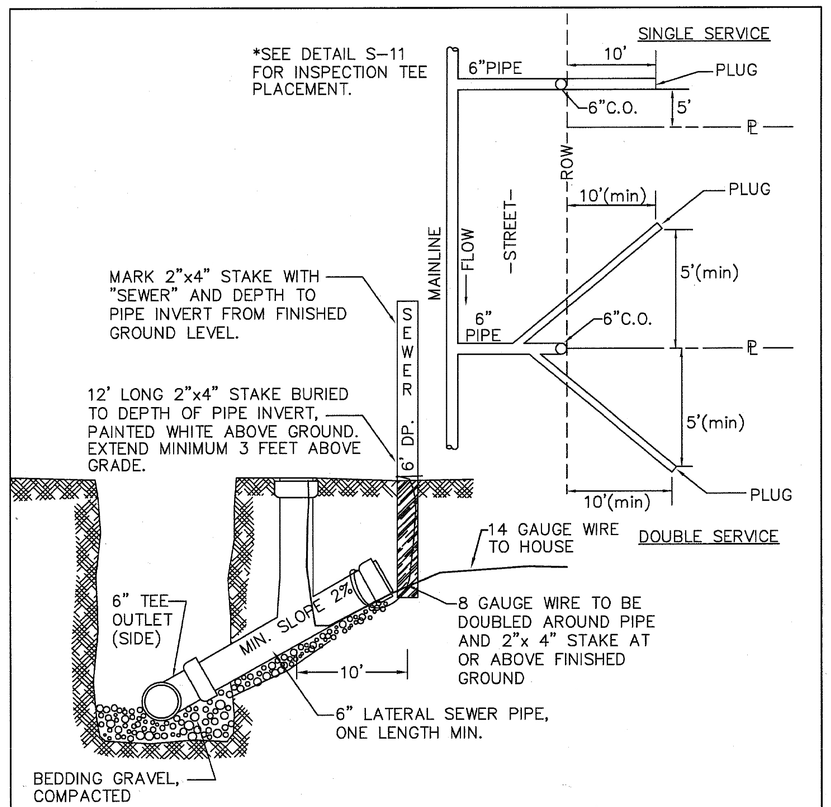
Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Sewer Notes & Details

WILLIAM R. TURNER — STATE OF WASHINGTON — 33824 — REGISTERED PROFESSIONAL ENGINEER

9-5-24

SHEET ID CODE
SN 1 of 2

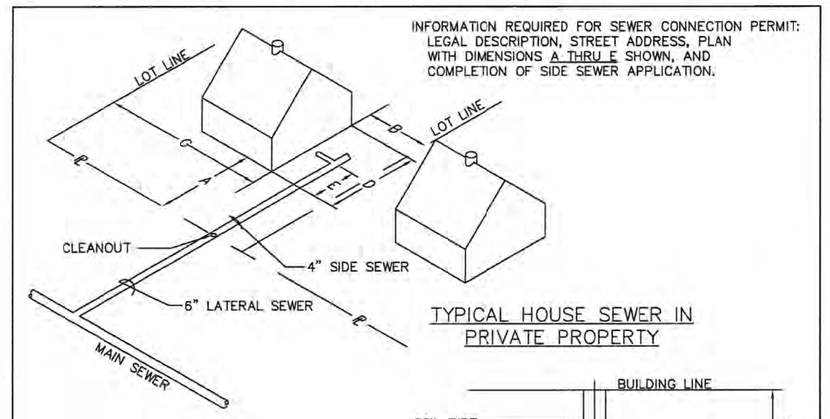
SHEET No.
19 of 23



GENERAL NOTES:

1. WHERE LATERAL SEWER CONNECTS TO MANHOLE: INVERT TO SIDE SEWER SHALL BE EQUAL TO OR ABOVE MAIN SEWER CROWN, BUT NOT TO EXCEED 18" ABOVE INVERT OF MAIN SEWER.
2. UNLESS OTHERWISE INDICATED ON PLAN, LATERAL SEWER SHALL BE MIN. OF 5' DEEP AT PROPERTY LINE, OR 5' LOWER THAN THE LOWEST ELEVATION, WHICHEVER IS LOWER.
3. PIPE CAN BE REDUCED TO 4" DIAMETER ON PRIVATE PROPERTY FOR RESIDENTIAL SERVICES. COMMERCIAL SERVICES SHALL BE 6" DIAMETER. (SEE ENGINEERING STANDARDS FOR EXCEPTIONS).

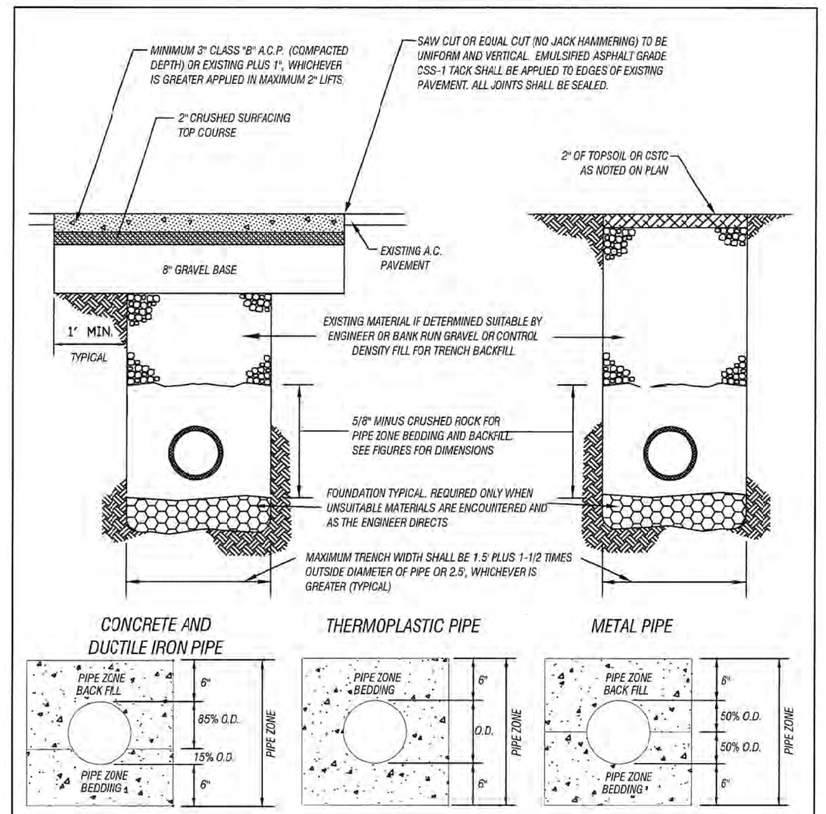
CITY OF BLACK DIAMOND	LATERAL SEWER			PacWest Engineering Fife, Washington
	STANDARD DWG S-9	NOT TO SCALE	04/01/09	



NOTES:

1. ELBOWS SHALL NOT BE GREATER THAN 45°.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'
3. RIGHT OF WAY RESTORATION SHALL MATCH OR EXCEED THE ORIGINAL CONDITION
4. BACKFILL FOR PAVED AREA SHALL BE 5/8" MINUS CRUSHED SURFACING TOP COURSE, COMPACTED IN 12" LIFTS.
5. ALL PLUMBING OUTLETS SHALL BE CONNECTED TO THE SEWER. NO DOWNSPOUTS OR STORM DRAINAGE MAY BE CONNECTED TO THE SEWER SYSTEM.
6. 18" MINIMUM COVERAGE OF PIPE.
7. 6' MINIMUM COVERAGE AT PROPERTY LINE.
8. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH AN ELBOW OR WYE. 90° CHANGE WITH AN ELBOW AND WYE.
9. 6" SEWER PIPE MINIMUM SIZE IN RIGHT OF WAY. 2% MINIMUM GRADE, 45% MAXIMUM.
10. 4" SEWER PIPE MINIMUM SIZE ON PRIVATE RESIDENTIAL PROPERTY. 6" SEWER PIPE MIN. SIZE ON COMMERCIAL PROPERTIES. 2% MINIMUM GRADE, 45° MAXIMUM
11. CONSTRUCTION IN RIGHT OF WAY SHALL BE PERFORMED BY A REGISTERED LICENSED CONTRACTOR.
12. ALL CONSTRUCTION REQUIRES A PERMIT AND PAYMENT OF FEE. COMPLETE LEGAL DESCRIPTION OF PROPERTY AND DIMENSIONS.
13. AS-BUILT DRAWING SHOWING LOCATION OF SIDE SEWER IN RELATION TO THE HOUSE IS REQUIRED AFTER INSTALLATION
14. BEDDING 5/8" CRUSHED ROCK OR PEA GRAVEL.
15. IN NO CASE SHALL THE DISTANCE BETWEEN CLEAN OUTS EXCEED 100'.
16. 14 GAUGE LACOATING WIRE SHALL BE INSTALLED.
17. PIPE BEDDING SHLL BE MIN. 6" OF BEDDING GRAVEL BELOW THE BARREL OF PIPE & FILLED AROUND PIPE.

CITY OF BLACK DIAMOND	SIDE SEWERS			PacWest Engineering Fife, Washington
	STANDARD DWG S-10	NOT TO SCALE	04/01/09	



NOTES:

1. ALL MATERIALS EXCEPT A.C.P. AND BEDDING MATERIAL SHALL BE COMPACTED IN 8-INCH MAXIMUM LIFTS TO 95% DENSITY.
2. COMPACTION: BEDDING AND BACKFILL WITHIN THE PIPE ZONE SHALL BE COMPACTED TO 95% MAX. AS DETERMINED BY ASTM D1557. BACKFILL ABOVE THE PIPE ZONE SHALL BE COMPACTED TO 90% IN UNPAVED AREA, AND 95% IN PAVED OR SHOULDER AREAS AS DETERMINED BY ASTM D1557.

CITY OF BLACK DIAMOND	TRENCH RESTORATION			PacWest Engineering Fife, Washington
	STANDARD DWG S-23	NOT TO SCALE	04/01/09	

DESIGN INFORMATION

PROJECT IDENTIFICATION No.

FILE NAME: BW-COVER SITE PLAN

ACTION	
DESIGNED	
DRAWN	
CHECKED	
PLOTTED DATES	

REVISION BLOCK:

Turner Engineering Consulting
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.

Rainier View

Sewer Notes & Details

Water General Notes:

1 All work shall conform to City of Black Diamond City Engineering Design and Construction Standards and the Developer Extension Agreement.

2 All pipes shall be cement lined, ductile iron class 52 unless otherwise shown. Minimum size water line is 8".

3 All pipe and fittings not to be disinfected in place shall be swabbed with 1% available chlorine solution prior to installation.

4 The new watermain shall be connected to the existing system only after new main is pressure tested, flushed, disinfected, and satisfactory bacteriological sample results are obtained.

5 After disinfecting the watermain, chlorinated water shall be disposed of in a manner that does no physical or environmental damage to property, streams, storm sewers or any waterways.

6 Watermain shut-off shall be coordinated with the City's Utilities Superintendent for preferred timing during flow control conditions. Watermain shut-offs shall not be scheduled to take place on Fridays, or on the day before a City holiday, unless otherwise approved by the City.

7 The locations of all existing utilities shown hereon have been established by field survey or obtained from available records and should therefore be considered approximate only and not necessarily complete. It is the sole responsibility of the contractor to independently verify the accuracy of all utility locations shown, and to further discover and avoid any other utilities not shown hereon which may be affected by the implementation of this plan.

8 Deflect the watermain above or below existing utilities as required to maintain 3' minimum cover and 12" minimum vertical clearance between utilities unless otherwise specified.

9 The watermain shall be installed only after the roadway subgrade is backfilled, graded and compacted in cut and fill areas.

10 Trench backfill of 5/8" minus gravel and surface restoration of existing asphalt pavement shall be as required by these standards (see Trench Restoration detail).

11 All fittings shall be blocked per Standard Detail unless otherwise specified.

12. All water meters shall be 5/8" x 3/4" unless otherwise specified.

13 When working with asbestos cement pipe, the Contractor is required to maintain workers' exposure to asbestos material as prescribed in WAC 296-62-07705. All asbestos cement pipe from cut ins or tie-ins shall be removed and disposed of in accordance with WAC's.

14 Call 1-800-424-5555 a minimum of 48 hours before construction for utility locations.

15 Uniform plumbing code requires the installation of privately owned and operated pressure reducing valves where the operating pressure exceeds 80 psi.

16 The Contractor shall use a vacuum street sweeper to remove dust and debris from pavement areas. Care shall be taken to control fugitive dust in conformance with State standards. Flushing of streets shall not be permitted.

17 Before commencement of trenching, the Contractor shall provide erosion control measures in accordance with these standards and the Department of Ecology requirements.

18. Abandonment of existing water services shall be accomplished as follows:

a. If no corporation is available, remove existing service saddle from water main and replace with new stainless steel repair band, Romac SS2, Romac Service Saddle 101S, or approved equal (will not be required when water main is to be abandoned prior to service demolition).

b. Remove and return existing meter, setter and meter box to the City of Black Diamond Water Department.

c Cap or crimp (if copper) existing service line to be abandoned in place, each end.

r ?????(??????)????(????19 Where new utility line crosses below an existing AC main, the trench shall be back?)????(????filled with controlled density fill (CDF, ala flowable fill) from bottom of trench to bottom of the AC main. If the AC main appears to be damaged or at risk of failure, the City will require section replacement according to the Standard Details for "Typical AC Watermain Crossing Replacement Detail".

20 Avoid crossing water or sewer mains at highly acute angles. The smallest angle measure between utilities should be 45 to 90-degrees.

21 Where watermain crosses above or below sanitary sewer, one full length of water pipe shall be centered for maximum joint separation. Encasement may be required at the discretion of the City Engineer.

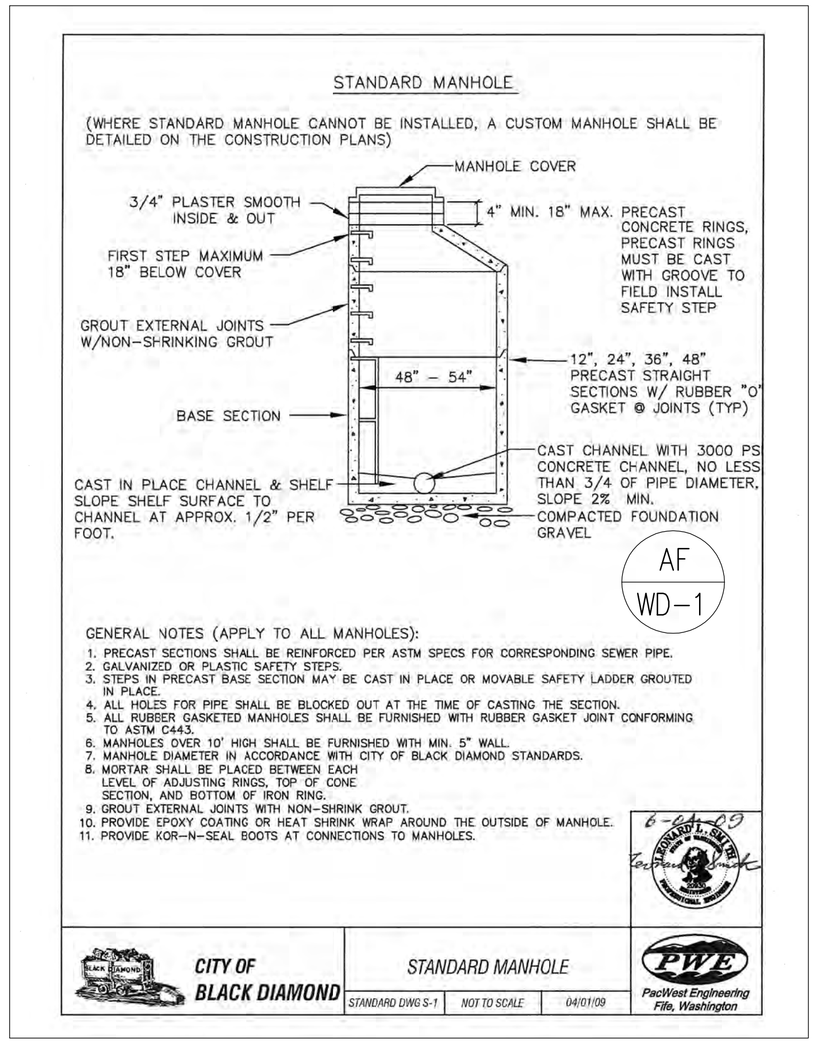
22 At points where existing thrust blocking is found, minimum clearance between the concrete blocking and other buried utilities or structures shall be 5'.

23 All new buildings and residences shall include in their water service a suitable shut off check valve and pressure reducing valve. Shut off shall be accessibly located on the customer side of the meter setter. See customer service detail.

24 Contractor shall allow for postal delivery access to all residences during project construction. Contractor shall provide and maintain mail boxes and paper boxes during construction.

25. Contractor shall allow and provide for emergency vehicle access to all properties during construction.

26. Between the time that a fire hydrant is installed and the completed facility is placed in operation, the fire hydrant shall at all times be wrapped in burlap, or covered in some other suitable manner to clearly indicate that the fire hydrant is not in service.



APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____

Signed, City Engineer

Approval Expires: _____

DESIGN INFORMATION
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FILE NAME: BW-COVER SITE PLAN

ACTION	
DESIGNED	9-5-24
DRAWN	9-5-24
CHECKED	9-5-24
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REVISION BLOCK:
5th Revision

Turner Engineering
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Water Notes & Details

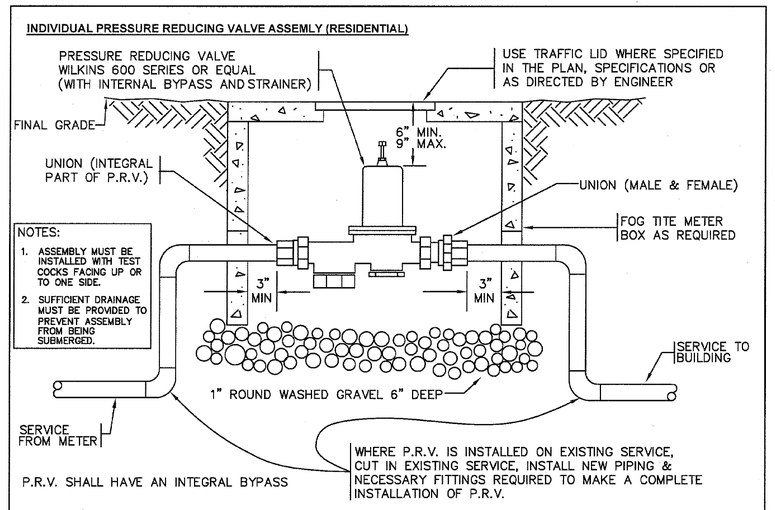
WILLIAM R. TURNER — STATE OF WASHINGTON — 33824 — REGISTERED PROFESSIONAL ENGINEER

9-5-24

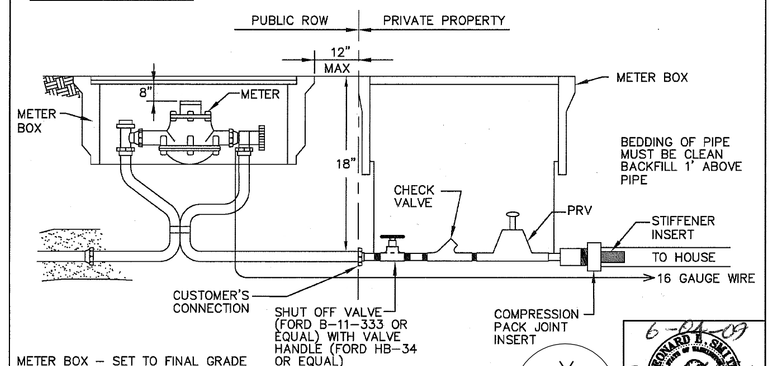
SHEET ID CODE
WD 1 of 2

SHEET No.
21 of 23

INDIVIDUAL PRESSURE REDUCING VALVE ASSEMLY (RESIDENTIAL)



CUSTOMER WATER SERVICE



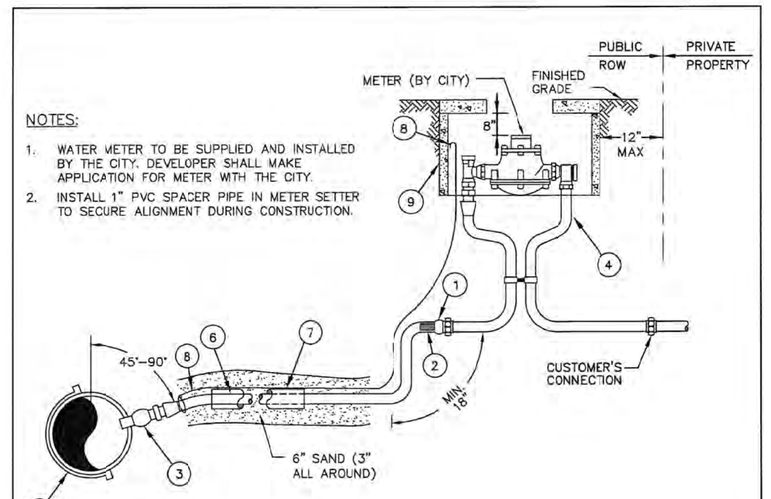
METER BOX – SET TO FINAL GRADE
SHUT OFF VALVE – B-11-333 OR EQUAL
VALVE HANDLE – HB-34
SINGLE CHECK VALVE
PRV TO CONTROL LINE PRESSURE UP TO 180 PSI (WILKINS 600 SERIES OR EQUAL)

16 GAUGE LOCATING WIRE
200 PSI POLY PIPE SIDR 3408
ALL FITTINGS MUST BE BRASS

Y
WD-2

CITY OF BLACK DIAMOND | CUSTOMER WATER SERVICE WITH INDIVIDUAL PRESSURE REDUCING VALVE ASSEMBLY (RESIDENTIAL) | STANDARD DWG W-01 | NOT TO SCALE | 04/01/09

PacWest Engineering Fife, Washington



NOTES:

1. WATER METER TO BE SUPPLIED AND INSTALLED BY THE CITY. DEVELOPER SHALL MAKE APPLICATION FOR METER WITH THE CITY.
2. INSTALL 1" PVC SPACER PIPE IN METER SETTER TO SECURE ALIGNMENT DURING CONSTRUCTION.

MATERIALS:

1. BRASS BALL VALVE CORP STOP WITH COMPRESSION ADAPTER.
2. 1" POLY INSERT STIFFENERS.
3. 1" CC BALL VALVE CORP STOP WITH COMPRESSION ADAPTER FOR POLY PIPE EQUAL TO MUELLER OR FORD. INSTALL WITH KEY FACING UP.
4. 12" COPPER SETTER EQUAL TO FORD 90 SERIES VBH 92-12W-11-33-A EQUIPPED AS FOLLOWS:
   - PADLOCK WINGS ON ANGLE BALL VALVE
   - ANGLE CHECK ON METER OUTLET
   - DUAL PURPOSE CONNECTIONS ON SETTER INLET & OUTLET
   - COMPRESSION ADAPTER ON SETTER INLET
   - 15" EXTENDED OUTLET TUBE
   - INSTALL STREET ELL ON INLET AS NEEDED

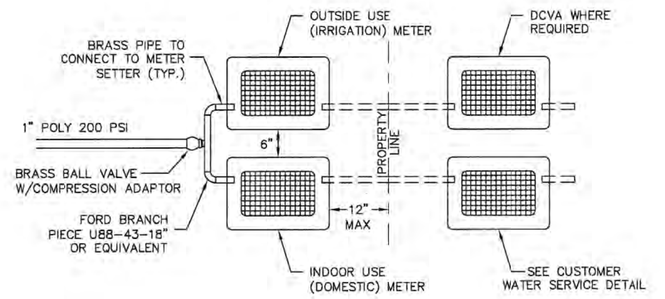
   COPPER SETTER SHALL BE SET LEVEL AND CENTERED IN THE METER BOX.
5. ROMAC SADDLE SINGLE STRAP FOR PIPE DIAMETERS LESS THAN 10" AND DOUBLE STRAP FOR PIPE DIAMETERS 10" AND LARGER. DOUBLE STAINLESS STEEL ON AC & PVC PIPE.
6. 1" "POLY" PIPE-200 PSI (LENGTH AS REQUIRED). (1" MINIMUM DIAMETER)
7. INSTALL SERVCE LINE IN 2" PVC GUARD PIPE (SCH-80) WHEN CROSSING ROADWAY (BENEATH PAVEMENT SECTION).
8. 14 GAUGE WIRE FROM MAINLINE TAP TO METER BOX AND EXPOSE 6" MINIMUM IN BOX.
9. MID-STATE PLASTICS METER BOX MODEL MSBCF1324-18XL WITH DUCTILE IRON LID MANUFACTURED BY CARSON INDUSTRIES.

AB
WD-2

CITY OF BLACK DIAMOND | 5/8", 3/4", AND 1" WATER SERVICE | STANDARD DWG W-03 | NOT TO SCALE | 04/01/09

PacWest Engineering Fife, Washington

AD
WD-2

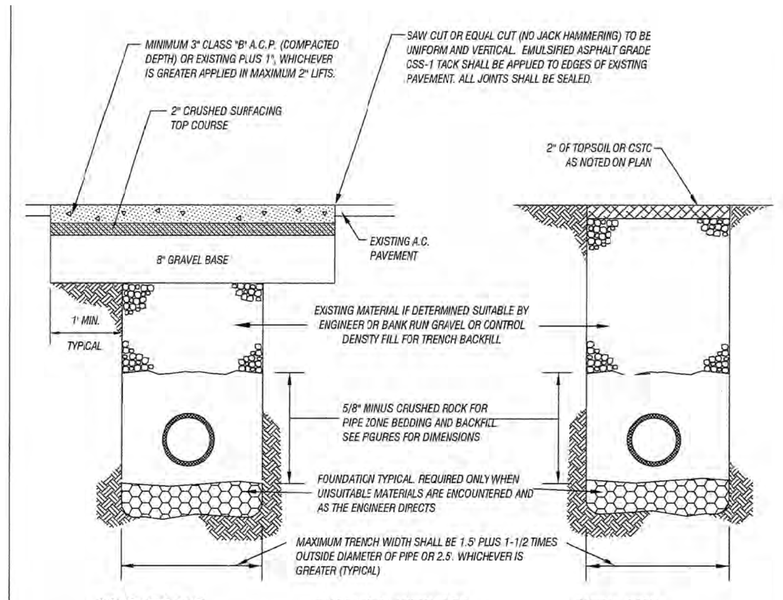


NOTES:

1. ON EXISTING WATER SERVICES, THE CITY WILL INSTALL DUAL SERVICE AT APPLICANTS EXPENSE. BOTH SERVICES WILL REQUIRE A 12" SETTER EQUAL TO FORD 90 SERIES VBH 92-12W-11-33-A.
2. A PRV SHALL BE INSTALLED ON INDOOR USE SERVICE (AND OUTDOOR USE IF REQUIRED BY UPC) WHERE PRESSURE EXCEEDS 80 PSI.
3. D.O.H. APPROVED DOUBLE CHECK VALVE ASSEMBLY (DCVA) IS REQUIRED FOR IRRIGATION USE.

CITY OF BLACK DIAMOND | DUAL METER OR IRRIGATION METER INSTALLATION | STANDARD DWG W-02 | NOT TO SCALE | 04/01/09

PacWest Engineering Fife, Washington



NOTES:

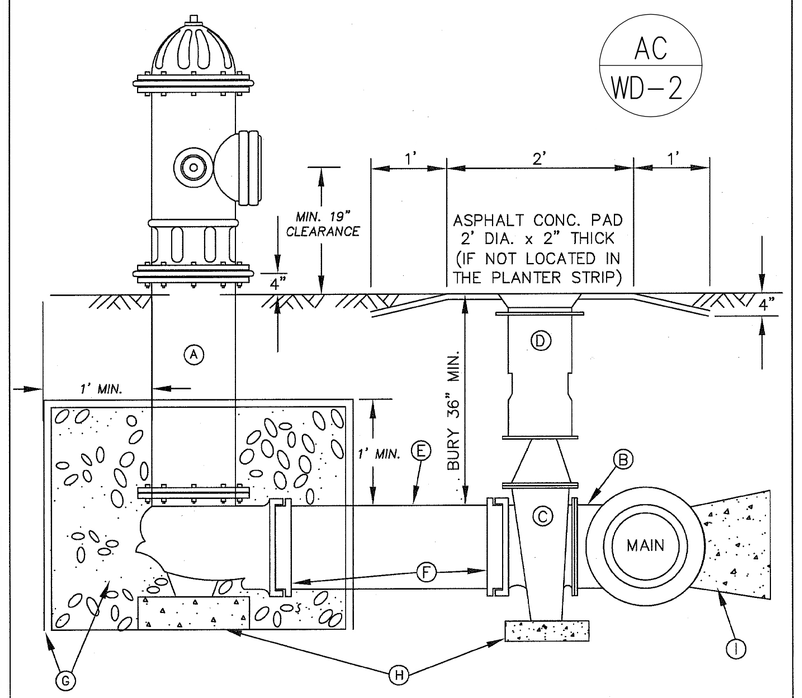
1. ALL MATERIALS EXCEPT A.C.P. AND BEDDING MATERIAL SHALL BE COMPACTED IN 6-INCH MAXIMUM LIFTS TO 95% DENSITY.
2. COMPACTION: BEDDING AND BACKFILL WITHIN THE PIPE ZONE SHALL BE COMPACTED TO 95% MAX. AS DETERMINED BY ASTM D1557. BACKFILL ABOVE THE PIPE ZONE SHALL BE COMPACTED TO 90% IN UNPAVED AREA, AND 95% IN PAVED OR SHOULDER AREAS AS DETERMINED BY ASTM D1557.

Z
WD-2

CITY OF BLACK DIAMOND | TRENCH RESTORATION | STANDARD DWG SD-25 | NOT TO SCALE | 04/01/09

PacWest Engineering Fife, Washington

AC
WD-2



A. 1-5 1/4" M.V.O. HYDRANT WITH 2-2 1/2" (N.S.T.) AND 1-4" PUMPER PORT (N.S.T.), WITH PERMANENT 4" STORZ HYDRANT ADAPTOR AND STORZ BLIND CAP. FIRE HYDRANT TO BE PAINTED WITH PRESERVATIVE BRAND CATERPILLAR OR INTERNATIONAL YELLOW PAINT. PUMPER PORT TO FACE STREET, OR AS DIRECTED BY THE FIRE DEPARTMENT.
B. 6" FLANGE OUTLET ON CAST OR DUCTILE IRON TEE.
C. 1-AUXILIARY GATE VALVE: 6" AWWA C509, RESILIENT SEAT, M.J.xFL. WITH LUGS.
D. 1-TWO-PIECE CAST IRON VALVE BOX EQUAL TO RICH TYPE #045 WITH RECESSED HANDLE LID.
E. 1-6" DUCTILE IRON CLASS 52 CEMENT-LINED PIPE, LENGTH TO FIT. WHERE MORE THAN ONE LENGTH OF PIPE IS REQUIRED, CONNECT PIPES WITH MECHANICAL JOINT SLEEVE, RESTRAIN PIPE AND SLEEVE WITH MEGALUG RESTRAINERS, OR RESTRAIN PIPES WITH UNI-FLANGE SERIES 1300 & 1390 JOINT RESTRAINERS.
F. RESTRAIN MECHANICAL JOINTS WITH MEGALUG RESTRAINERS.
G. 1/2 YARD WASHED DRAIN ROCK (3" TO 3/8"), MIN. 1' ABOVE BOOT FLANGE PLACE FILTER FABRIC ENCASEMENT AROUND GRAVEL.
H. 16"X8"X4" MIN. SIZE CONCRETE BLOCK UNDER HYDRANT AND VALVE.
I. CONC. BLOCKING.
J. INSTALL BLUE LANE REFLECTOR IN PAVEMENT.

CITY OF BLACK DIAMOND | FIRE HYDRANT ASSEMBLY | STANDARD DWG W-18 | NOT TO SCALE | 04/01/09

PacWest Engineering Fife, Washington

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

DESIGN INFORMATION
PROJECT IDENTIFICATION No.
FILE NAME: BW-COVER SITE PLAN

ACTION	
DESIGNED	9-5-24
DRAWN	9-5-24
CHECKED	9-5-24
PLOTTED DATES	

REVISION BLOCK: 5th Revision

Turner Engineering
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Water Notes & Details

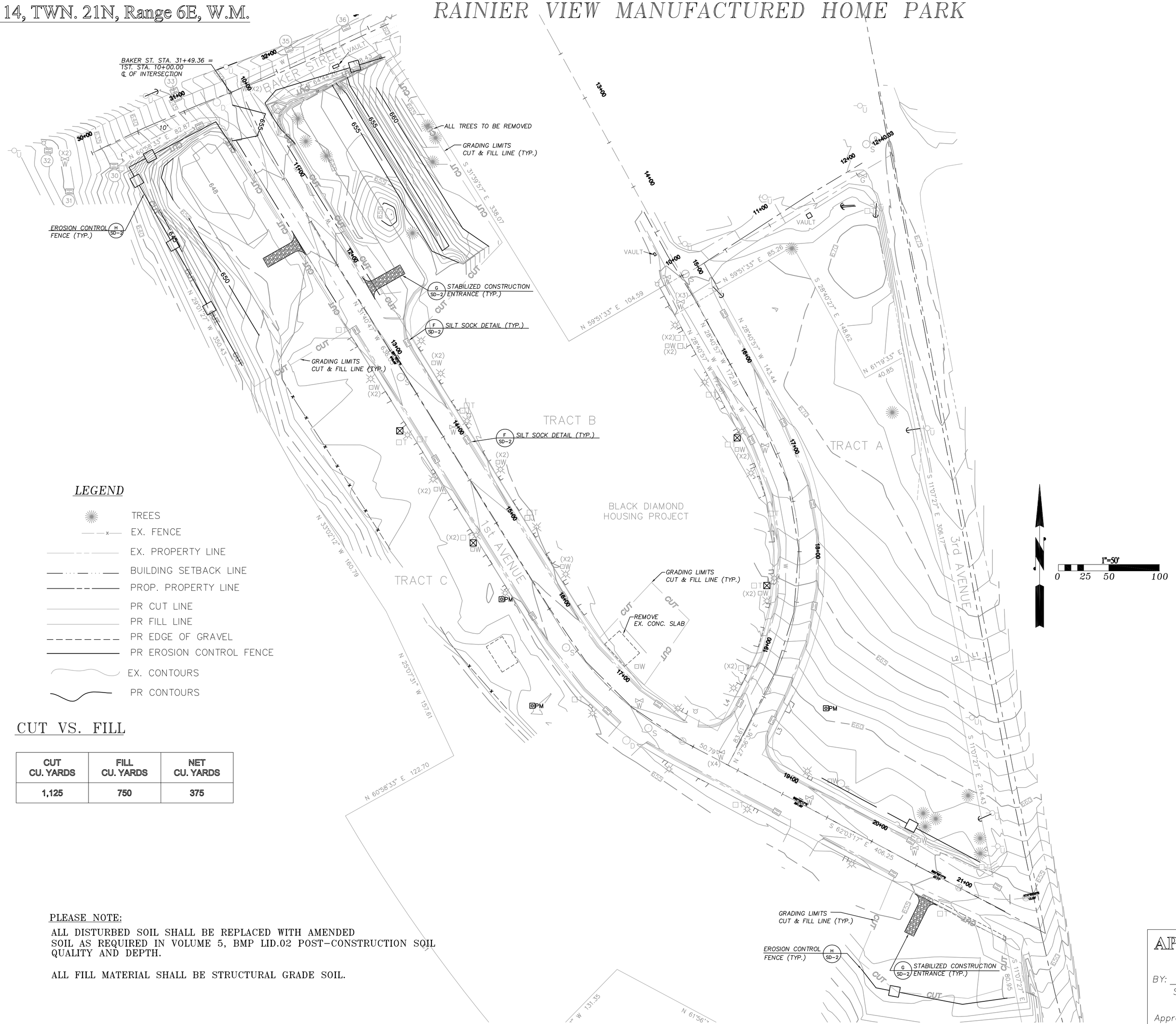
WILLIAM P. KNUDSEN
STATE OF WASHINGTON
33824
REGISTERED PROFESSIONAL ENGINEER
9-5-24

SHEET ID CODE
WD 2 of 2

SHEET No.
22 of 23

SEC. 14, TWN. 21N, Range 6E, W.M.

RAINIER VIEW MANUFACTURED HOME PARK



LEGEND

- TREES
- EX. FENCE
- EX. PROPERTY LINE
- BUILDING SETBACK LINE
- PROP. PROPERTY LINE
- PR CUT LINE
- PR FILL LINE
- PR EDGE OF GRAVEL
- PR EROSION CONTROL FENCE
- EX. CONTOURS
- PR CONTOURS

CUT VS. FILL

CUT CU. YARDS	FILL CU. YARDS	NET CU. YARDS
1,125	750	375

PLEASE NOTE:

ALL DISTURBED SOIL SHALL BE REPLACED WITH AMENDED SOIL AS REQUIRED IN VOLUME 5, BMP LID.02 POST-CONSTRUCTION SOIL QUALITY AND DEPTH.

ALL FILL MATERIAL SHALL BE STRUCTURAL GRADE SOIL.

VERTICAL DATUM
NAVD 1988
WASHINGTON STATE PLANE
COORDINATES NORTH ZONE

BENCHMARK

INTERSECTION OF 1ST AND BAKER ST.
MONUMENT IN CASE
NORTHING: 114872.14
EASTING: 1349492.01
ELEV.: 650.43

NOT A BOUNDARY SURVEY
All references to property lines, bearing, corners, or any references which indicate property alignment or locations were acquired from

Chehalis Valley Surveying
FOR CONSTRUCTION USE ONLY

NOTE: THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION & PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____
Signed, City Engineer

Approval Expires: _____

DESIGN INFORMATION

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5th Revision

Turner Engineering Consulting Engineer
4405 7th Ave SE Suite 301
Lacey, WA 98503
360-491-6900

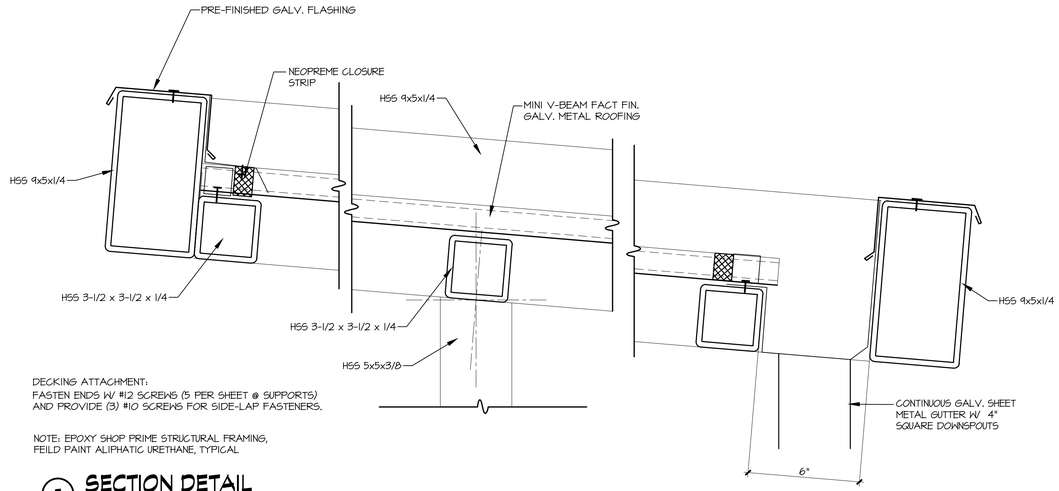
Sec. 14, TWN. 21N, Range 6E, W.M.
Rainier View
Manufactured Home Park
Erosion Control & Grading Site Plan

WILLIAM P. TURNER — STATE OF WASHINGTON — 35824 — REGISTERED PROFESSIONAL ENGINEER

9-5-24

GR 1 OF 1

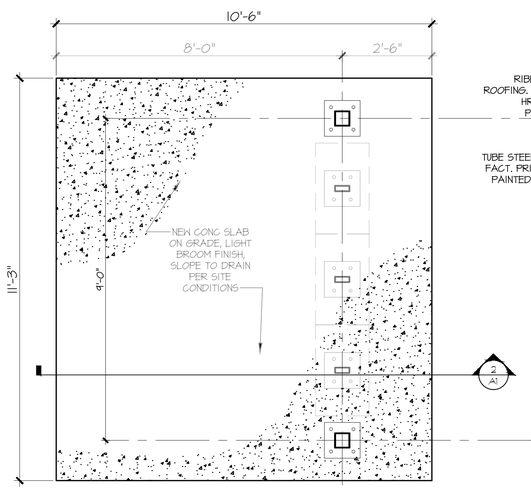
23 of 23



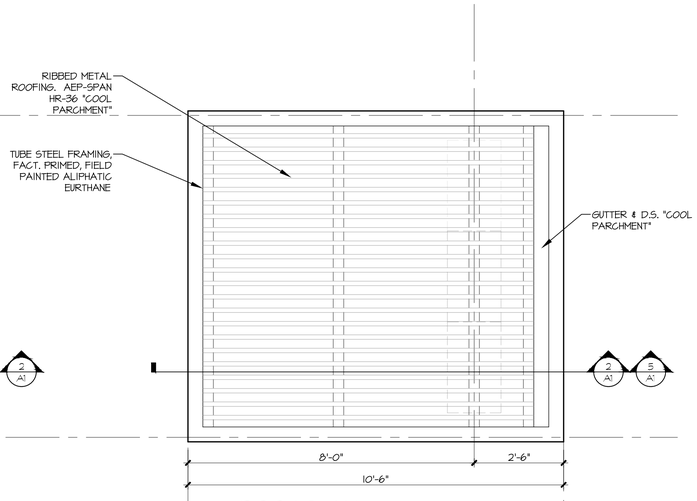
DECKING ATTACHMENT:
FASTEN ENDS W/ #12 SCREWS (5 PER SHEET @ SUPPORTS) AND PROVIDE (3) #10 SCREWS FOR SIDE-LAP FASTENERS.

NOTE: EPOXY SHOP PRIME STRUCTURAL FRAMING, FEILD PAINT ALIPHATIC URETHANE, TYPICAL

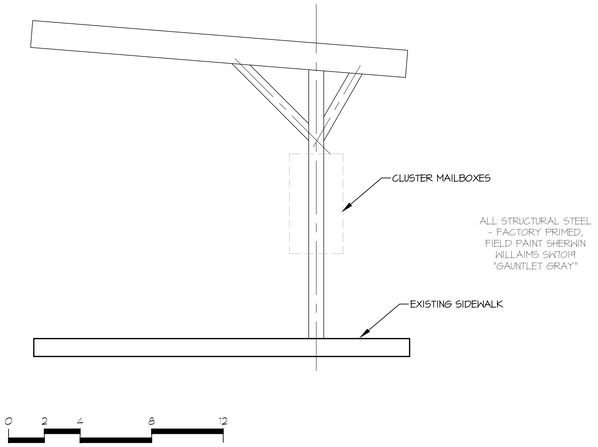
5 **SECTION DETAIL**
SCALE: 3" = 1'-0"



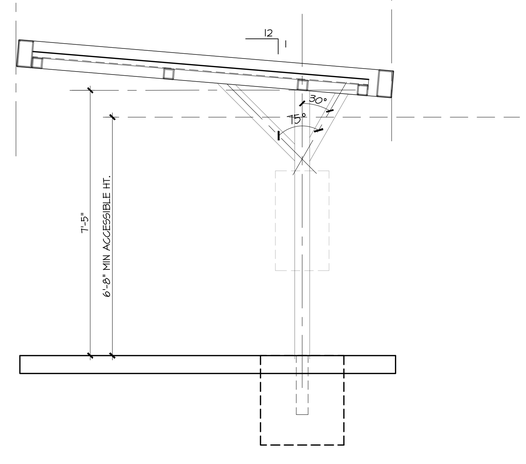
3 **PLAN**
SCALE: 1/4" = 1'-0"



4 **ROOF PLAN**
SCALE: 1/4" = 1'-0"



1 **SIDE ELEVATION**
SCALE: 1/4" = 1'-0"



2 **SECTION**
SCALE: 1/4" = 1'-0"

PROJECT NOTES

DESCRIPTION: SHELTER FOR MAILBOX UNITS, 118 S.F. CONCRETE SLAB WITH STRUCTURAL STEEL AND METAL ROOF.

OCCUPANCY: U - UTILITY AND MISCELLANEOUS

PROJECT CONTACTS

APPLICANT
THE KIRKBRIDE GROUP
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SHUTLER ENGINEERING
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johnh@shutler.com

DRAWING INDEX

A1 ARCHITECTURAL PLANS, ELEVATIONS, SECTIONS
S1.0 GENERAL NOTES, SPECIAL INSPECTIONS, PLANS & SECTIONS

no.	revision	date
	PERMIT SUBMITTAL	9/26/23

23-041 job no.
KS drawn
- checked
9/26/23 date

REGISTERED ARCHITECT
LANCE P. MUELLER
STATE OF WASHINGTON
2396

THE KIRKBRIDE GRUOUP
MAIL BOX SHELTER
BLACK DIAMOND, WA

LANCE MUELLER & ASSOCIATES
ARCHITECTS AIA
130 LAKESIDE • SUITE 250 • SEATTLE, WA 98122 • (206) 325-2553

PLAN & SECTIONS

sheet
A1

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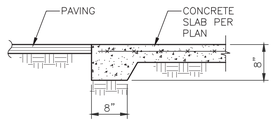
9/26/2023



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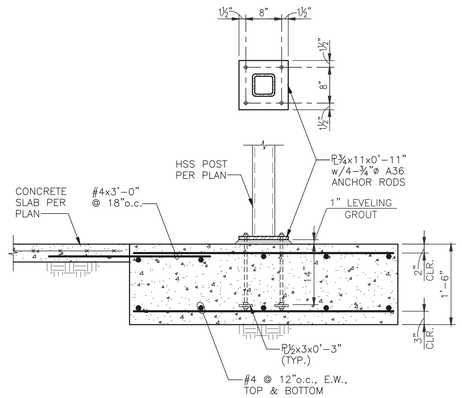

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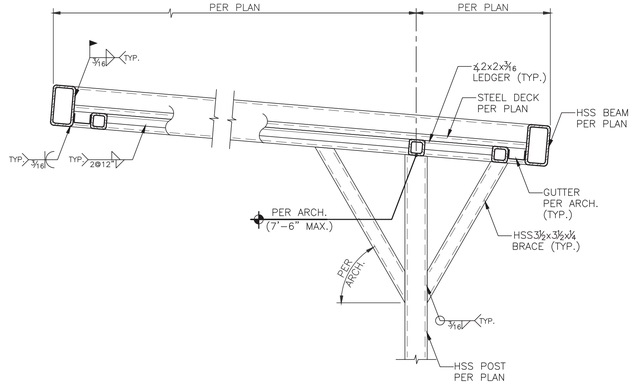

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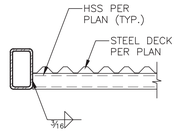

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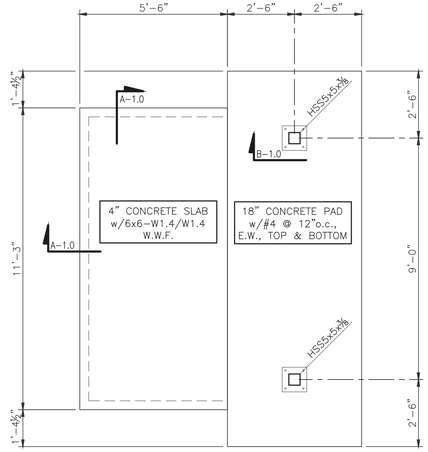
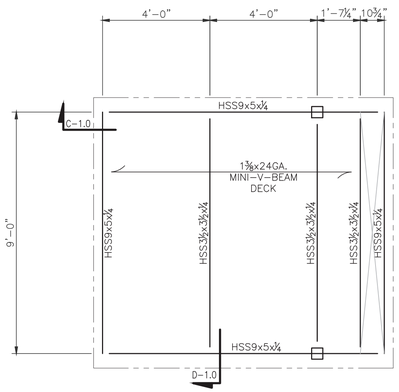
SCALE: ¾"=1'–0"



FOUNDATION PLAN
SCALE: ⅜"=1'–0"

NOTES: 1) VERIFY EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD. NOTIFY ARCHITECT AND ENGINEER OF DIFFERENCES.

2) COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS.



ROOF FRAMING PLAN
SCALE: ⅜"=1'–0"

NOTES: 1) VERIFY EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD. NOTIFY ARCHITECT AND ENGINEER OF DIFFERENCES.

2) COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

3) ATTACH DECK TO SUPPORTS w/#12 SCREWS EACH FLUTE w/#12 SIDE LAP SCREWS @ 12"o.c.

(STEEL ROOF DECKING: CONTINUED)
THE DECK AND ACCESSORIES SHALL BE FORMED FROM SHEETS CONFORMING TO ASTM A1008, GRADE 50. THE DECK SHALL BE PLACED ON THE SUPPORTING FRAMEWORK WITH MINIMUM END LAP OF 2" CENTERED OVER THE SUPPORTS. THE DECK SHALL BE ATTACHED TO ALL SUPPORTS AS INDICATED IN THE ROOF DIAPHRAGM ATTACHMENT SCHEDULE. THE DECK SHALL PROVIDE THE MINIMUM DIAPHRAGM SHEAR CAPACITIES IN ACCORDANCE WITH IAMPO-ES REPORT ER-0550 OR APPROVED ALTERNATE.

SPECIAL INSPECTIONS:
SPECIAL INSPECTIONS PER IBC SECTION 1705. A COPY OF ALL INSPECTION REPORTS AND TEST RESULTS FOR ALL REQUIRED INSPECTIONS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT, SHUTLER CONSULTING ENGINEERS, THE OWNER AND THE ARCHITECT BY THE TESTING AGENCY FOR REVIEW. THE TESTING AGENCY SHALL BE AN INDEPENDENT TESTING AGENCY APPROVED BY THE BUILDING DEPARTMENT. THE FOLLOWING INSPECTIONS SHALL BE PROVIDED AS A MINIMUM; ADDITIONAL INSPECTIONS AS REQUIRED BY THE BUILDING DEPARTMENT SHALL ALSO BE PERFORMED. JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION.

SEE SPECIAL INSPECTION FREQUENCY TABLE ON THIS SHEET FOR BOTH ON SITE CONSTRUCTION AND OFF SITE FABRICATION .

SHOP DRAWINGS:
SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS CONSISTING OF REPRODUCTIONS OR COPIES OF ANY PORTIONS OF THE STRUCTURAL DRAWINGS WILL NOT BE ACCEPTED AS SHOP DRAWINGS NOR REVIEWED BY THE STRUCTURAL ENGINEER AS SUCH.

1) REINFORCING STEEL
   a)structural concrete elements i.e. beams, walls, col, ftgs, etc.
2) STRUCTURAL STEEL ITEMS

THE ENGINEER OF RECORD WILL REVIEW SHOP DRAWINGS FOR DESIGN INTENT ONLY. VERIFICATION OF DIMENSIONS AND QUANTITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT GUARANTEED BY THE ENGINEER OF RECORD. DRAWINGS FOR COMPONENTS DESIGNED PRIMARILY BY THE MANUFACTURER SHALL BEAR THE STAMP OF A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER AND BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR A CURSORY REVIEW FOR COMPLIANCE WITH THE INTENT OF THE STRUCTURAL DRAWINGS AND FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. SUBMISSIONS SHALL INCLUDE A REPRODUCIBLE AND TWO COPIES; REPRODUCIBLE WILL BE REVIEWED AND RETURNED. SHOP DRAWINGS MUST BE REVIEWED AND STAMPED BY THE CONTRACTOR PRIOR TO REVIEW BY THE ENGINEER.

SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.

SPECIAL CONDITIONS:
THE DRAWINGS INDICATE THE STRUCTURE IN ITS FINAL CONDITION. DURING CONSTRUCTION THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING, AND GUYING IN ACCORDANCE WITH SOUND PRACTICE AND ALL NATIONAL, STATE, AND LOCAL CODES. CONTRACTOR TO COORDINATE ALL TRADES AND VERIFY DIMENSIONS IN FIELD. OBTAIN ARCHITECT'S APPROVAL PRIOR TO ALL FIELD CHANGES. SEE ARCHITECTURAL DRAWINGS FOR ALL FLOOR AND WALL OPENING DIMENSIONS AND LOCATIONS, FLOOR AND WALL FINISHES, ETC.

SPECIAL INSPECTION PROGRAM

VERIFICATION AND INSPECTION	INSPECTION FREQUENCY CONTINUOUS	INSPECTION FREQUENCY PERIODIC	REFERENCED STANDARD	IBC REFERENCE
STRUCTURAL STEEL				
Special inspections and non-distructive testing of structural steel elements in buildings, structures and portions thereof shall be in accordance with the quality assurance inspection requirements of AISC 360.				
REQUIRED SPECIAL INSPECTIONS AND TEST OF CONCRETE CONSTRUCTION				
TYPE	**CONTINUOUS INSPECTIONS**	**PERIODIC INSPECTIONS**	**REFERENCED STANDARD**	**IBC REFERENCE**
1. Inspection of reinforcing steel, including prestressing tendons, and placement.	---	X	ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2. Reinforcing bar welding:				
a. Verify weladability of reinforcing bars other than ASTM A706		X	AWS D1.4	---
b. Inspect single-pass fillet welds, maximum 5/16"; and		X	ACI 318:26.6.4	
c. Inspect all other welds.	X			
3. Inspection of anchors cast in concrete.	---	X	ACI 318: 17.8.2	---
4. Inspect anchors post-installed in hardened concrete members.				
a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads	X		ACI 318: 17.8.2.4	---
b. Mechanical anchors and adhesive anchors not defineed in 4.a.		X	ACI 318: 17.8.2	
5. Verifying use of required design mix.	---	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. Prior to concrete placement, fabricate specimens for strength test perfom slump and air content test, and determin the temperature of the concrete.	X	---	ASTM C172, ASTM C31, ACI 318: 26.5, 26.12	1908.10
7. Inspection of concrete and shotcrete placement for proper application techniques.	X	---	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. Verify maintenance of specified curing temperature and techniques.	---	X	ACI 318: 26.5.3-26.5.5	1908.9
9. Inspect prestressed concrete for:				
a. Application of prestressing forces; and	X	---	ACI 318: 26.10	---
b. Grouting of bonded prestressing tendons.	X	---		
10. Inspect erection of precast concrete members.	---	X	ACI 318: 26.9	---
11. Verification in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	---	X	ACI 318: 26.11.2	---
12. Inspect formwork for shape, location and dimensions of the concrete member being fomed.	---	X	ACI 318: 26.11.1.2(b)	---

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS		
TYPE	**CONTINUOUS INSPECTIONS**	**PERIODIC INSPECTIONS**
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	---	X
2. Verify excavations are extended to proper depth and have reached proper material.	---	X
3. Perfom classification and testing of compacted fill materials.	---	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	---
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	---	X

Special Inspection/Testing Progrmm Notes:
1. The special inspector shall be a qualified person who shall demonstrate competence to the satisfaction of the Building Official for the type of inspections listed.
2. If necessary, the contractor shall arrange a pre-construction meeting with the Architect, Engineer, Building Official, Testing Agency to review the special inspection progrmm.
3. Duties of the Special Inspector include, but are not limited to:
   a. Observe the work for conformance with the approved permit plans and specifications. Discrepencies shall be brought to the attention of the Contractor for correction, if uncorrected, then to the attention of the Architect, Engineer, and Building Official.
   b. Issue Inspection Reports for each inspection to the Contractor, Architect, Engineer, and Building Official as a minimum. The reports shall be issued in a timely manner.
   c. The Special Inspector shall submit a final report stating whether the work requiring special inspection was inspected, whether the work was completed in conformance with the approved plans and specifications, and whether the work was in conformance with any applicable workmanship provisions of the applicable code or standard.
4. Special inspections and testing requirements apply equally to all bidder designed components.
5. Fabricators shall submit a certificate of compliance to the Building Official stating that work was completed in accordance with the approved construction documents.

GENERAL NOTES

CODE: INTERNATIONAL BUILDING CODE, 2018 EDITION

BUILDING RISK CATEGORY = II

LIVE LOADS:
UNIFORM LOADS:

LOCATION	LIVE LOAD	REDUCIBLE
ROOF	25 PSF (SNOW)	NO

WIND DESIGN INFORMATION:
WIND LOADS ON THE MAIN WIND-FORCE RESISTING SYSTEM (MWFRS) WAS DETERMINED USING THE ENVELOPE PROCEDURE.

WIND SPEED V_{ult} = 110 MPH V_{asd} = 85 MPH
EXPOSURE "B" λ= 1.00 K_{zt}=1.00

SEISMIC DESIGN INFORMATION:
SEISMIC FORCE RESISTING SYSTEM IS A STEEL ORDINARY CANTILEVER COLUMN SYSTEM. THE STRUCTURE WAS ANALYZED USING THE EQUIVALENT LATERAL FORCE PROCEDURE.
R = 1.25 Ω_0 = 1.25
S_s = 116.6% S_{DS} = 0.933
S_1 = 40.0% S_{D1} = 0.507
C_s = 0.80
I_E = 1.0
SITE SOIL CLASS = D-default
SEISMIC DESIGN CATEGORY = D
BASE SHEAR, V = 660 LBS

FOUNDATIONS:
SOIL BEARING CAPACITY ASSUMED TO BE 1500 PSF. SOILS ENGINEER TO VERIFY IN FIELD. ALL FOOTINGS SHALL BEAR ON UNDISTURBED EARTH OR SOIL COMPACTED TO 95% MODIFIED PROCTOR PER ASTM D-1557. ALL EXTERIOR FOOTINGS SHALL BE 18 INCHES MINIMUM BELOW LOWEST ADJACENT GRADE.

SLABS ON GRADE:
THE SLAB ON GRADE FOR THIS PROJECT IS TYPICAL OF OTHER BUILDINGS WITH SIMILAR FLOOR LOADING AND SOIL CONDITIONS CONSTRUCTED IN THIS AREA. THE SLAB HAS NOT BEEN DESIGNED FOR ANY SPECIFIC LIVE LOAD AND HAS BEEN DETAILED TO MEET LOCAL INDUSTRY STANDARDS FOR SIMILAR BUILDINGS. NO CONSTRUCTION LOADS HAVE BEEN INCLUDED IN THE DESIGN OF THE SLAB.

CONCRETE:
ALL CONCRETE SHALL BE STONE-AGGREGATE CONCRETE HAVING A UNIT WEIGHT OF APPROXIMATELY 145 POUNDS PER CUBIC FOOT. 28 DAY COMPRESSIVE STRENGTH SHALL BE AS FOLLOWS:

CONSTRUCTION	F'c	EXPOSURE CLASS	MAX W/C RATIO	AIR CONTENT
ALL CONCRETE	3,500 PSI	F1, S0, W0, C1	0.55	5%

CONCRETE IN ALL EXTERIOR SLABS TO BE AIR ENTRAINED 6% PLUS OR MINUS 1%.

CONCRETE SUBMITTALS SHALL CONFORM TO ACI 318 CHAPTER 26. MIXING AND PLACING OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE IBC AND ACI CODE 318. PROPORTION OF AGGREGATE TO CEMENT SHALL BE AS SUCH TO PRODUCE A DENSE, WORKABLE MIX, WITH A MAXIMUM SLUMP OF 5 INCHES, WHICH CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER. 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES UNLESS INDICATED OTHERWISE ON ARCHITECTURAL DRAWINGS. GROUT FOR COLUMN BASES SHALL BE "HI-FLOW GROUT" AS MANUFACTURED BY THE EUCLID CHEMICAL CO. OR APPROVED EQUAL.

ANCHORAGE TO CONCRETE:
EXPANSION BOLTS INTO CONCRETE SHALL BE SIMPSON STRONG-BOLT **2** AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. SPECIAL INSPECTION AND INSTALLATION PER ICC-ES REPORT ESR-3037.

EPOXY FOR FASTENING ANCHOR BOLTS AND REBAR INTO EXISTING CONCRETE TO BE SIMPSON SET-3G EPOXY ADHESIVE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. SPECIAL INSPECTION AND INSTALLATION PER ICC-ES REPORT ESR-4057.

ANCHOR RODS INTO CONCRETE SHALL BE GRADE 36 MANUFACTURED AND INSTALLED PER ASTM F1554. ALL ANCHOR RODS/BOLTS ATTACHING PRESSURE TREATED WOOD PLATES TO CONCRETE SHALL BE HOT DIPPED GALVANIZED. ALL ANCHOR BOLTS FOR SILL PLATES SHALL BE PROVIDED WITH 3" X 3" X 0.229" THICK (MIN) PLATE WASHERS.

ANCHORAGE SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER. ANCHORAGE SUBSTITUTION REQUESTS REQUIRE ADDITIONAL ENGINEERING SERVICES.

REINFORCING STEEL:
ALL REINFORCEMENT SHALL CONFORM TO ASTM A615. (SEE BELOW FOR WELDED REBAR). ALL REINFORCING SHALL BE GRADE 60 (Fy = 60,000 psi; Fs = 32,000 psi). LAP CONTINUOUS REINFORCING BARS IN CONCRETE AS INDICATED BELOW. CORNER BARS (1'-7" BEND) WILL BE PROVIDED FOR ALL HORIZONTAL REINFORCEMENT. DETAIL STEEL IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE OF DETAILING REINFORCED CONCRETE STRUCTURES. WELDED WIRE FABRIC TO CONFORM TO ASTM A82 AND A185.

MINIMUM LAP SPLICE LENGTHS FOR CONCRETE

BAR SIZE	f'c=3500
#4	26"
#5	33"
#6	40"
#7	58"

THE FOLLOWING MINIMUM COVER SHALL BE PROVIDED FOR REINFORCEMENT (UNLESS INDICATED OTHERWISE ON DRAWINGS):

A) CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO EARTH.....3" EARTH FACE
B) CONCRETE EXPOSED TO EARTH OR WEATHER (CAST IN FORMS)
   #6 THROUGH #18 BARS.....2"
   #5 BARS & SMALLER.....1-1/2"
C) CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND
   SLABS, WALLS & JOIST - #11 BAR & SMALLER.....3/4"
   BEAMS & COLUMNS.....1-1/2"

STRUCTURAL STEEL:
RECTANGULAR AND SQUARE HSS SECTIONS SHALL CONFORM TO ASTM A500, GRADE C (Fy = 50,000 psi). STRUCTURAL STEEL FOR WIDE FLANGE BEAMS SECTIONS SHALL CONFORM TO ASTM A992, GRADE 50 (Fy = 50,000 psi). ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 (Fy = 36,000 psi) OR ASTM A992 GRADE 50 (Fy = 50,000 psi). APPLY PRIMER COATS PER ARCHITECTURAL SPECIFICATIONS.

WELDS NOT SPECIFIED SHALL BE 3/16" CONTINUOUS FILLET MINIMUM. ALL WELDS TO BE IN ACCORDANCE WITH AWS D1.1 AND D1.8, AND BY WABO CERTIFIED WELDERS. USE FRESH E70XX LOW HYDROGEN ELECTRODES. ALL STRUCTURAL WELDS SHOULD BE CONSIDERED PART OF THE SEISMIC FORCE RESISTING SYSTEM AND SHALL BE MADE WITH FILLER METAL PRODUCING WELDS WITH A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT 0 DEGREES-F AS DETERMINED BY THE APPLICABLE AWS AS CLASSIFICATION TEST METHOD. DEMAND CRITICAL WELDS, AS SHOWN ON THE STRUCTURAL DRAWINGS, SHALL MEET THE REQUIREMENTS OF D1.8. THE CONTRACTOR SHALL SUBMIT TO THE BUILDING OFFICIAL A WELDING PROCEEDURE SPECIFICATION THAT VERIFIES THESE REQUIREMENTS.

HIGH STRENGTH BOLTS FOR STEEL TO STEEL CONNECTIONS SHALL BE ASTM A325N OR ASTM A490, INSTALLATION AND SPECIAL INSPECTION PER AISC SPECIFICATIONS. ALL A325N OR A490 BOLTS SHALL BE PRETENSIONED IN STANDARD BOLT HOLES UNLESS NOTED OTHERWISE ON PLANS. MINIMUM BOLT PRETENSION PER AISC 16.1 TABLE J3.1 UNLESS NOTED OTHERWISE. ACCEPTABLE PRETENSIONING METHODS ARE TURN-OF-NUT, CALIBRATED WRENCH, TWIST-OFF-TYPE (ASTM F3125), OR DIRECT-TENSION INDICATOR (ASTM F959) PER AISC SPECIFICATIONS.

STEEL ROOF DECKING:
ROOF DECKING SHALL BE 24 GAGE, MINI-V-BEAM DECK AS MANUFACTURED BY AEP OR ALTERNATE AS APPROVED BY THE ARCHITECT AND ENGINEER OF RECORD. DECKING TO HAVE THE FOLLOWING MINIMUM SECTION PROPERTIES:

	I	Sp	Sn	MINIMUM SHEAR CAPACITY
24 GA.	.0956 IN4	.1307 IN3	.1286 IN3	200#/FOOT

(STEEL ROOF DECKING CONTINUED ABOVE LEFT)

Digitally signed by John Headland
Date: 2023.09.26 08:49:06 -07'00'

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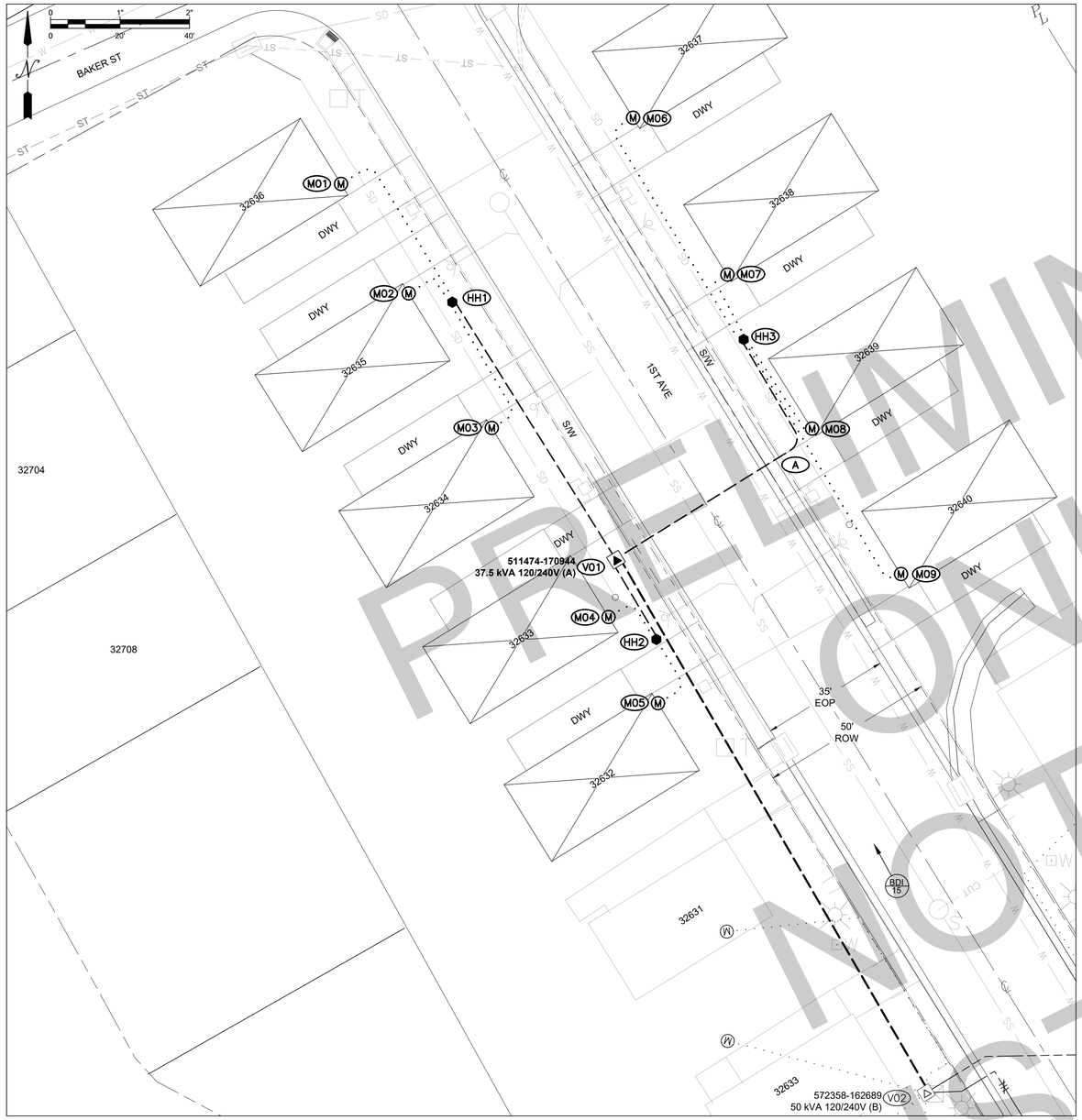
DESCRIPTION	DATE
PERMIT SET	9-25-2023

KIRKBRIDE MAILBOX SHELTER
BLACK DIAMOND, WASHINGTON 98010
GENERAL NOTE, SPECIAL INSPECTION, PLAN & SECTIONS

ENGINEER:	JH
CHECKED BY:	JH
DATE:	9-20-2023
JOB No.:	23-01.60

SHEET No.:
S1.0
1 OF 1

X:\23\23-01 Miscellaneous\99 Kirkbride - mailbox structure\00WG\S01-01-GSHT-S1-0.dwg, Model, 9/26/2023 8:46:18 AM



SITE PLAN 1
SCALE: 1" = 20'

CUSTOMER APPROVAL

I approve the location of the trench, including road crossings, and all electrical equipment as shown on print.

Darrell Westlake KCHA

Customer's Signature

Darrell Westlake KCHA

Print Name/Date

SITE SPECIFIC NOTES

AT V01: 511474-170944 (NEW)
-INSTALL (1) 36" X 42" X 38" MINI-PAD UNISTRUT HH W/ GROUNDS 6045.1010 (MINU1SR)
-INSTALL (1) 25kVA 120/240V PADMOUNT TRF (MID: 6247000)
-INSTALL (1) 12kV ELBOW KIT PER STD 6041.1000 (ELB10J)
-INSTALL (1) DUST CAP (MID: 7630600)
-INSTALL (3) 6-POS #6-350 KCMIL SECONDARY CONNECTION BLOCKS (MID: 4842001)
-INSTALL CABLE TAG
-INSTALL GRID NUMBER

AT V02: 572358-162689 (EXISTING)
-EXISTING VAULT & 50kVA 120/240V TRF TO REMAIN
-INSTALL (1) 12kV ELBOW KIT 6041.1000 (ELB10J)

AT HH1 (NEW)
-INSTALL (1) 13" X 24" #10-350 4-POS SECONDARY HH 6050.2000 (HH14350)
-INSTALL (3) 4-POSITION CONNECTION BARS (MID: 7651005)
-CONNECT 3-RUNS OF CUSTOMER OWNED, INSTALLED & MAINTAINED XX SVC

AT HH2 (NEW)
-INSTALL (1) 13" X 24" #10-350 3-POS SECONDARY HH 6050.2000 (HH13350)
-INSTALL (3) 3-POSITION CONNECTION BARS (MID: 7651004)
-CONNECT 2-RUNS OF CUSTOMER OWNED, INSTALLED & MAINTAINED XX SVC

AT HH3 (NEW)
-INSTALL (1) 17" X 30" #10-350 6-POS SECONDARY HH 6050.2000 (HH16350)
-INSTALL (3) 6-POSITION CONNECTION BARS (MID: 7651006)
-CONNECT 4-RUNS OF CUSTOMER OWNED, INSTALLED & MAINTAINED XX SVC

AT M01-M09
-INSTALL 200A METERS

SITE SPECIFIC NOTES

-SEE SITE PLAN, ONE DRAWING & TABLES FOR INSTALLS

TRANSFORMER INSTALLATION (PM)

Installed at site: V01
Grid Number: 511474-170944
kVA Rating: _____
Material ID#: _____

Foreman to redline the following information
Company ID#: _____
Primary phase connected to: _____
Tested Secondary Voltage _____ / _____

CUSTOMER DEVELOPMENT NOTES:

A PRE CONSTRUCTION MEETING IS REQUIRED WITH YOUR PROJECT MANAGER PRIOR TO STARTING ANY SITE WORK.
CUSTOMER IS RESPONSIBLE FOR ALL TRENCHING, SELECT BACKFILL, COMPACTION & RESTORATION PER **PUGET SOUND ENERGY STANDARDS & LOCAL MUNICIPALITY.**

****DEVELOPER NEEDS TO FOLLOW ALL TRENCH DETAILS ON SELECT BACKFILL****

CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING:

CROSSING/BORING.
-OPEN TRENCH OR BORING FOR CROSSINGS ARE ALLOWED PER LOCAL MUNICIPALITY PERMIT REQUIREMENTS.
-CROSSINGS IN RIGHT OF WAY MUST BE SCHEDULED WITH PROJECT MANAGER PRIOR TO CONSTRUCTION.
-PROJECT MANAGER OR DESIGNATED REPRESENTATIVE MUST BE ON SITE DURING CONSTRUCTION WORK IN RIGHT OF WAY.
-EXCAVATION CONTRACTOR MUST BE LICENSED AND BONDED TO PERFORM WORK IN RIGHT OF WAY.

VAULTS & WORK PITS.
-REQUIRED TO PROVIDE 6' X 7' WORK PITS & 6" BEDDING OF 5/8" CRUSHED ROCK AT V01 & V03.
-REQUIRED TO PROVIDE 4' X 4' WORK PIT AT V02.
-REQUIRED TO PROVIDE 5' X 6' WORK PITS AT HH1, HH2 & HH3.
-REQUIRED TO PROVIDE 4' X 4' WORK PIT AT P01.

TRENCHING & CONDUIT.
-REQUIRED TO PROVIDE ± 190' TRENCH FROM V01 TO V02.
-REQUIRED TO PROVIDE ± 90' TRENCH FROM V01 TO HH1.
-REQUIRED TO PROVIDE ± 30' TRENCH FROM V01 TO HH2.
-REQUIRED TO PROVIDE ± 100' TRENCH FROM V01 TO HH3.
-REQUIRED TO PROVIDE ± 85' TRENCH FROM P01 TO V03.

JOB SITE READINESS.
-JOB SITE NEEDS TO BE 100% READY FOR INSPECTION 5 BUSINESS DAYS PRIOR TO CONSTRUCTION DATE.
-ALL WORK IN RIGHT OF WAY MUST BE COORDINATED WITH PROJECT MANAGER AND LOCAL MUNICIPALITY.
-ALL TRENCH, AND LOCAL ELECTRICAL MUNICIPALITIES AKA "L&I, CITY", INSPECTIONS MUST BE COMPLETED 5 BUSINESS DAYS PRIOR TO SCHEDULED CONSTRUCTION DATE.
-REQUIRED TO OPERATE AND PROVIDE EQUIPMENT TO PUMP OUT WATER FOR WORK PITS, VAULTS & TRENCH AT ALL TIMES.
-REQUIRED TO HAVE EXCAVATION EQUIPMENT AND BE ON SITE THE DAY OF CONSTRUCTION TO COMPLETE BACKFILLING.
-IF A SECOND INSPECTION IS REQUIRED, ADDITIONAL FEES WILL BE APPLIED.
-PLEASE REVIEW THE CITY OR KING COUNTY TRENCHING REQUIREMENTS UNDER THE PERMIT.
-IF A PRE-CON IS REQUIRED BY THE CITY, COUNTY OR W.S. DOT A PSE PROJECT MANAGER WILL SET-UP AND SCHEDULE A MEETING WITH THE MUNICIPALITY BEFORE ANY EXCAVATION OR INSTALLATION BEGINS .

POWER GENERAL NOTES - MULTIFAMILY PROJECT

1. All materials to be installed in accordance with Puget Sound Energy's (PSE) standards. Any deviation from this work sketch must be AUTHORIZED by PSE's Project Manager and NOTED on the Foremans' Copy.
2. All switching arrangements and/or outage arrangements are to be made with the Project Manager at least three (3) working days in advance.
3. Contact the Utilities Underground Location Center (1-800-424-5555) at least 48 hours prior to commencing work to get the underground facilities located.
4. STAKING: The customer will provide all staking (transformer, handhole, trench, grade, lot, pole, sidewalk, etc.). See sketch and details for locations. Equipment locations must be approved by the Project Manager.
5. SITE PREPARATION: The work area will be at or near finished grade, clear of trench spoils or construction materials which would restrict construction and/or equipment access, before work can begin.
6. Roads shall be paved or have a compacted , crushed rock base in place.
7. CLEARANCES: Transformers require a minimum of 6 feet from fire fighting equipment, 10 feet from combustible walls, overhangs, doors, and windows, and a minimum of 5 feet from the back of curb (or guard posts will be required per PSE standards). All conduits and vaults are to be at least 5 feet away from water, storm and sewer lines when paralleling them in the right of way, and at least 1 foot when crossing them.
8. All work is to be done in accordance with local municipal and county permit requirements as applicable.
9. Customer/Developer is responsible to provide, install and maintain all secondary service cables, conduits and crossings from the individual unit's meter base to the designated connection point.
10. Inclement weather conditions may cause delays in construction times and dates.
11. EXCAVATION: The customer is to provide all trenching, backfill, vault excavations, compaction and restoration per this sketch and per PSE standards. A minimum protective cover of 36" is required over PSE's primary voltage equipment and 24" is required of PSE's secondary voltage equipment. The customer will provide any and all shoring or they will side slope the trench to 1:1.

CIRCUIT LOADING TABLE

CIRCUIT: BDI-15
AS OF 10/18/22

	A PHASE	B PHASE	C PHASE
EXIST. PEAK LOAD	79	154	168
EST. NEW LOAD	NEW_A	NEW_B	NEW_C
TOTAL	TTL_A	TTL_B	TTL_C

EROSION & SEDIMENT CONTROL REQUIREMENTS

EROSION & SEDIMENT CONTROL SHALL BE PER PSE STANDARD PRACTICE 0150.3200 TECHNIQUES FOR TEMPORARY EROSION & SEDIMENT CONTROL & ANY ADDITIONAL LOCAL JURISDICTION REQUIREMENTS.
(LOCAL JURISDICTIONS MAY HAVE ADDITIONAL REQUIREMENTS INCLUDING NOTES DETAILING WHERE EROSION OR SEDIMENT CONTROL STRUCTURES ARE TO BE INSTALLED, CROSS SECTION DETAILS OF THE TYPICAL EROSION STRUCTURES, & SPECIAL REQUIREMENTS FOR WORK IN SENSITIVE AREAS.)

FOREMAN (CHECK BOX WHEN COMPLETED)

- ☐ PSE Equipment LOCKED/SECURED & Work Area left in CLEAN/SAFE Condition.
- ☐ Grid, Cable, and Switch numbers INSTALLED & VERIFIED.
- ☐ Field Changes RED-LINED on As-built.
- ☐ Material VERIFIED and CHANGES noted on Paperwork.
- ☐ Total PRIMARY Cable noted on As-built.
- ☐ Company ID#'s RECORDED in correct location on As-built.
- ☐ Indicate correct FUSE SIZE on As-built & VERIFY proper PHASE.
- ☐ Deviations noted on the As-built and their reason.

☐ I certify that the work performed meets PSE's standards and procedures and that all quality requirements are met.

Foreman's Signature _____

Print Name _____ Date _____

PROJECT PHASE		NOTIF#	ORDER#
PWR	Superior	5138666046	N/A
	Perm. Service	N/A	N/A
	Relocation	N/A	N/A
	Removal	N/A	N/A
	Temporary	N/A	N/A
	Job Order	N/A	N/A
GAS	Distribution	N/A	N/A
	Service Stubs	N/A	N/A
	HP Svc/MSA	N/A	N/A
CABLE TV			
PHONE			

Project Manager Contact Information:
Manager: JONATHAN PETERS
Cell Phone: 206-573-0763
E-Mail: JONATHAN.PETERS@PSE.COM

Vicinity Map
47.3076812,-122.0068218

N/A

Owner / Developer Contact Info
KING COUNTY HOUSING AUTHORITY
600 ANDOVER PARK WEST
SEATTLE, WA 98188
ATTN: DARRELL WESTLAKE KCHA 206-293-6415 office

For contacts below dial 1-888-CALL PSE (225-5773)

CALL 811 TWO BUSINESS DAYS BEFORE YOU DIG

THIS SKETCH NOT TO BE RELIED UPON FOR EXACT LOCATION OF EXISTING FACILITIES

	Developer	PSE
"Locates Required"	(Yes)	Yes
	No	(No)
"Outages Required"	(Yes)	No
"Flagging Required"	(Yes)	No

REAL ESTATE/EASEMENT NEEDED				PERMIT BLACK DIAMOND			
3	N/A	N/A	N/A	**FUNCTION**	**CONTACT**	**PHONE NO**	**DATE**
2	N/A	N/A	N/A	PROJECT MGR	J. PETERS	206-573-0763	4/10/23
1	N/A	N/A	N/A	ENGR - POWER	C. FURIA	253-778-9190	4/10/23
REV#	**DATE**	**BY**	**DESCRIPTION**	ENGR - GAS	N/A	N/A	N/A
COUNTY KING		Emer Sect N/A	Gas Wk Ctr N/A	POWER WK CTR CSPSKEPM	DRAWN BY	C. FURIA	253-778-9190	4/10/23
					CHECKED BY			
1/4 SEC NE 14-21N-06E		OP MAP N/A		PLAT MAP N/A	APPROVED BY			
					FOREMAN #1			
U-MAP NO (POWER) 2106E053/56		OH CKT MAP 2107E072	UG CKT MAP 2106E053/56	CIRCUIT NO BDI-15	FOREMAN #2			
					MAPPING			

JOINT FACILITIES ARRANGEMENTS				
UTILITIES	N/A	N/A	N/A	N/A
CONTACT	N/A	N/A	N/A	N/A
PHONE#	N/A	N/A	N/A	N/A

PUGET SOUND ENERGY

RAINIER VIEW MANUFACTURED HOME PARK

1PH PRI & SEC L/E FOR NEW UG SVC
32800 FIRST AVENUE, BLACK DIAMOND, WA 98010

INCIDENT N/A	MAOP N/A
Gas Order N/A	Elect Order N/A
SCALE AS NOTED	PAGE 1/4

PRELIMINARY NOT FOR CONSTRUCTION ONLY

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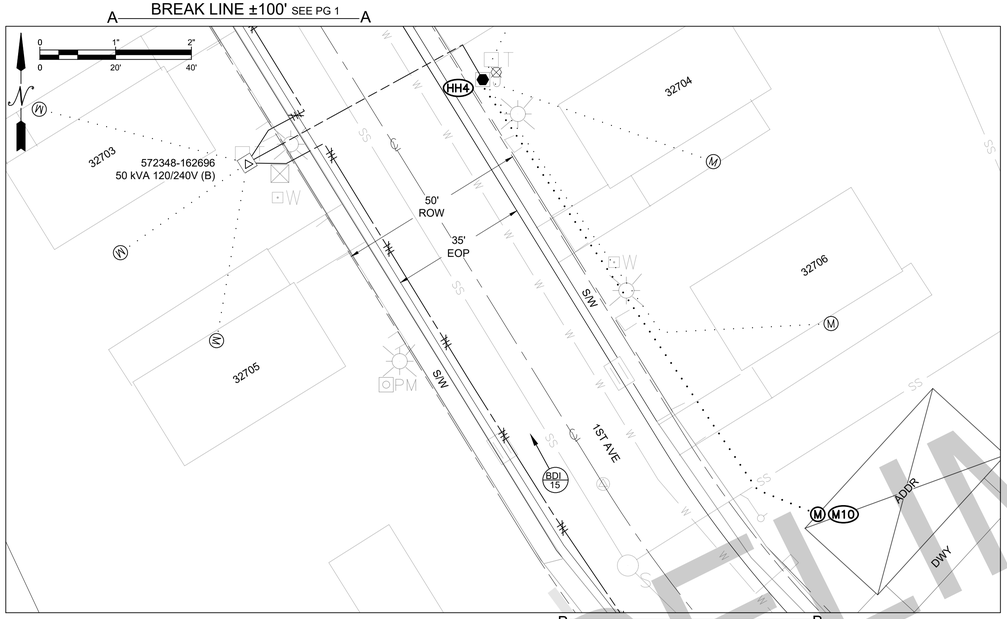
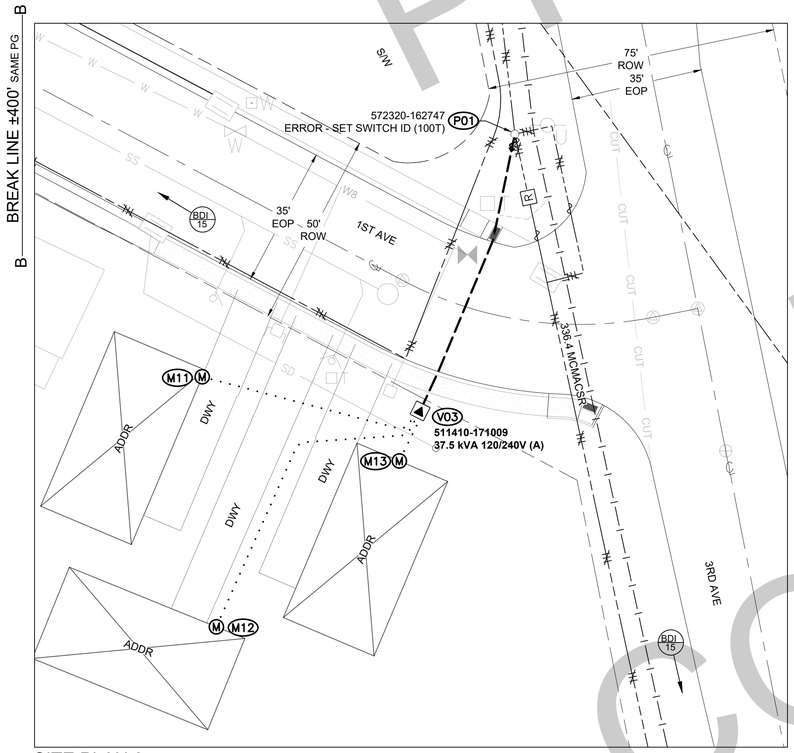


SITE PLAN 2
SCALE: 1" = 20'



SITE PLAN 3
SCALE: 1" = 20'

SITE SPECIFIC NOTES

AT V03: 511409-171010 (NEW)

-INSTALL (1) 36" X 42" X 38" MINI-PAD UNISTRUT HH W/ GROUNDS 6045.1010 (MINU1SR)
-INSTALL (1) 25kVA 120/240V PADMOUNT TRF (MID: 6247000)
-INSTALL (1) 12kV ELBOW KIT PER STD 6041.1000 (ELB10J)
-INSTALL (1) DUST CAP (MID: 7630600)
-INSTALL (3) 6-POS #6-350 KCMIL SECONDARY CONNECTION BLOCKS (MID: 4842001)
-INSTALL CABLE TAG
-INSTALL GRID NUMBER

AT P01: 572320-162747 (EXISTING)

-EXISTING 2012 45' CL-3 DISTRIBUTION POLE TO REMAIN
-INSTALL (1) 12kV 200AMP OH/UG TERMINATION LI 6043.1000 (TSU1L1)
-INSTALL (1) LI C/O ON NEW FG ARM, FUSE @ 25T (MID: 3412400)
-INSTALL (1) STIRRUP, BOLTED & HOT CLAMP #4-4/0 & TAP BØ (MID: 2254100 & 2153100)
-INSTALL (1) 2" PRIMARY RISER ON NEW STANDOFF BRACKETS 6042.1000 (RIS3CSS)
-INSTALL SWITCH #TXXXX
-INSTALL CABLE TAG

AT HH4 (NEW)

-REMOVE EXISTING 4-POS HH & RETURN TO PSE YARD
-INSTALL (1) 17" X 30" #10-350 6-POS SECONDARY HH 6050.2000 (HH16350)
-INSTALL (3) 6-POSITION CONNECTION BARS (MID: 7651006)
-RECONNECT EXISTING SERVICES
-CONNECT 1-RUN OF CUSTOMER OWNED, INSTALLED & MAINTAINED XX SVC
-POTELCO TO EXCAVATE AROUND EXISTING HH

AT M10-M13

-INSTALL 200A METERS

SITE SPECIFIC NOTES

-SEE SITE PLAN, ONE DRAWING & TABLES FOR INSTALLS & REMOVALS

TRANSFORMER INSTALLATION (PM)

Installed at site: V03
Grid Number: 511409-171010
kVA Rating: _____
Material ID#: _____

Foreman to redline the following information

Company ID#: _____
Primary phase connected to: _____
Tested Secondary Voltage _____ /

Secondary Cable & Conduit Table

Work Location		Cable		Conduit						Voltage Drop	Voltage Flicker	As Built Information
		Cable Size	Length Design (ft)	Size (in)	Length Design (ft)	Bends						Foreman - Complete
From	To					90°	45°	22°	11°	(Percent)	(Percent)	Actual Amount Installed (Conduit & Cable)
V01	HH1	350 UG TPX	110'	3"	90'	0	0	0	0	1.7%	3.6%	
V01	HH2	350 UG TPX	50'	3"	30'	0	0	0	0			
V01	HH3	350 UG TPX	120'	3"	100'	1	0	0	0			

TOTAL 350 UG TPX = 280'
TOTAL 3" DB120 CONDUIT = 120'
TOTAL 3" SCH 80 CONDUIT = 100'

Primary Cable & Conduit Table (Foreman to Complete)

LOCATION		CONDUIT				TYPE			BENDS				PULL (lbs)	PULL Rev (lbs)	PRIMARY CABLE			CABLE NUMBERS			MANUFACTURING INFORMATION			QTY OF LUBE (gal.)		AS BUILT INFORMATION
From	To	Size (in)	Qty	Design Length (ft)	Actual Length (ft)	DB120	HDPE	SCH 80	90°	45°	22°	11°			Cable Size	Design Length (ft)	Actual Length (ft)	A	B	C	Manufacturer	Compound	Year	Design	As Built	Actual Amount Installed (Conduit & Cable)
V01	V02	2"	1	190'		X			0	0	0	0	64.8	74.4	PRI 12KV 1/0 UG	210'								1		
P01	V03	2"	1	85'				X	0	0	0	1	114.3	111.8	PRI 12KV 1/0 UG	125'								1		

TOTAL PRI 1/0 AL UG TPX = 335'
TOTAL 2" DB120 CONDUIT = 190'
TOTAL 2" SCH 80 CONDUIT = 85'

SECONDARY HH/PEDESTAL TABLE

Work Location	Pedestal or Handhole	Number of Positions Required	Remarks
HH1	HANDHOLE: HH14350	4	
HH2	HANDHOLE: HH13350	3	
HH3	HANDHOLE: HH16350	5	
HH4	HANDHOLE: HH16350	5	

BORING TABLE

LOCATION		POWER			Length	Remarks (type of crossing)
		SIZE	Type	Qty		(Primary, Feeder, Secondary, St.
FROM	TO	(in)	sched	each	(ft)	Light, Gas Only, etc.)
P01	A	3	HDPE	1	50'	SECONDARY

N/A

				REAL ESTATE/EASEMENT NEEDED		PERMIT BLACK DIAMOND	
3	N/A	N/A	N/A	FUNCTION	CONTACT	PHONE NO	DATE
2	N/A	N/A	N/A	PROJECT MGR	J. PETERS	206-573-0763	4/10/23
1	N/A	N/A	N/A	ENGR - POWER	C. FURIA	253-778-9190	4/10/23
REV#	DATE	BY	DESCRIPTION	ENGR - GAS	N/A	N/A	N/A
COUNTY: KING		Emer Sect: N/A	Gas Wk Ctr: N/A	POWER WK CTR: CSPSKEPM		DRAWN BY	C. FURIA	253-778-9190	4/10/23
						CHECKED BY			
1/4 SEC: NE 14-21N-06E		OP MAP: N/A		PLAT MAP: N/A		APPROVED BY			
						FOREMAN #1			
U-MAP NO (POWER): 2106E053/56		OH CKT MAP: 2107E072		UG CKT MAP: 2106E053/56	CIRCUIT NO: BDI-15	FOREMAN #2			
						MAPPING			
JOINT FACILITIES ARRANGEMENTS									
UTILITIES	N/A	N/A	N/A	N/A					
CONTACT	N/A	N/A	N/A	N/A					
PHONE#	N/A	N/A	N/A	N/A					

PUGET SOUND ENERGY

RAINIER VIEW MANUFACTURED HOME PARK
1PH PRI & SEC L/E FOR NEW UG SVC
32800 FIRST AVENUE, BLACK DIAMOND, WA 98010

INCIDENT N/A	MAOP N/A
Gas Order N/A	Elect Order N/A
SCALE AS NOTED	PAGE 2/4

PRELIMINARY
NOT FOR CONSTRUCTION

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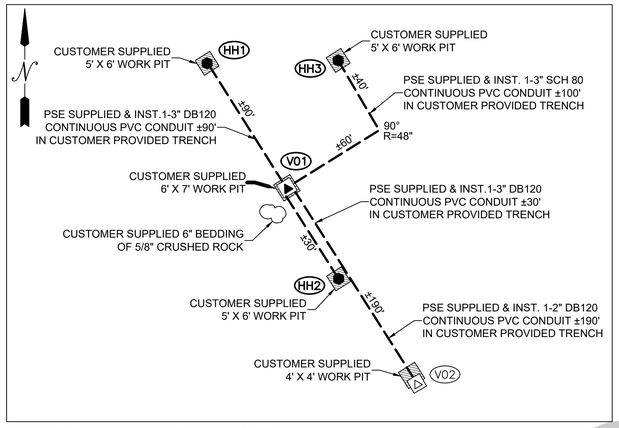
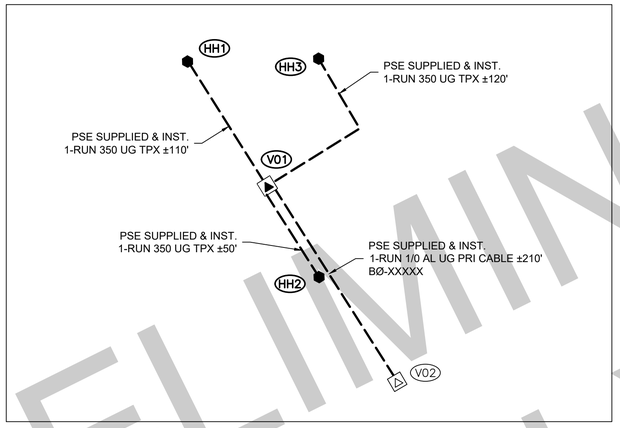


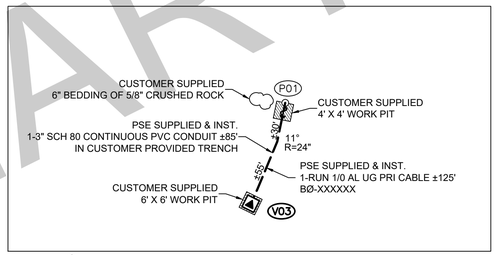
NEW CONDUIT DIAGRAM @ SITE PLAN 1

SCALE: NONE



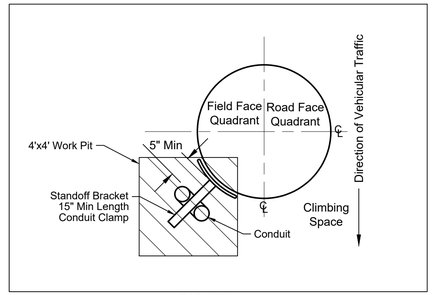
NEW CABLE DIAGRAM @ SITE PLAN 1

SCALE: NONE



NEW CABLE & CONDUIT DIAGRAM @ SITE PLAN 3

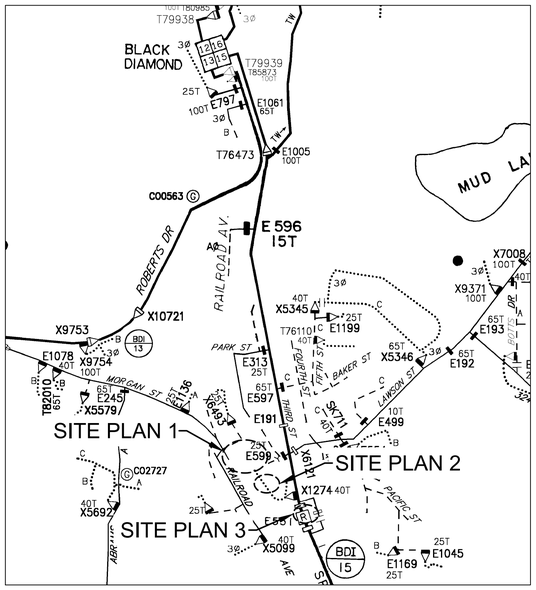
SCALE: NONE



TOP VIEW

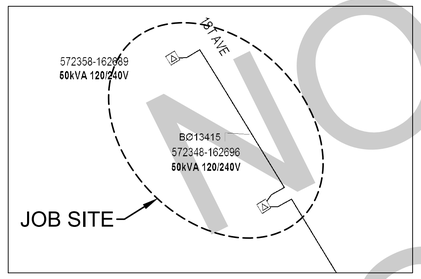
CONDUIT RISER PLACEMENT DETAIL (P01)

SCALE: NONE



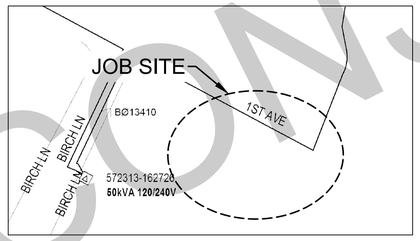
OVERHEAD CIRCUIT MAP 2107E072

SCALE: 6" = 1 MILE



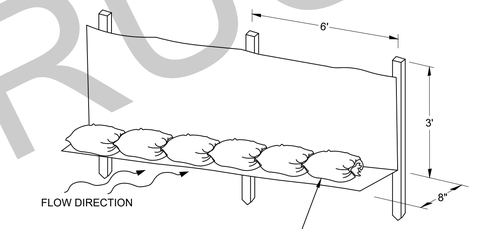
UG CIRCUIT MAP 2106E053 @ SITE PLAN 1 & 2

SCALE: NONE



UG CIRCUIT MAP 2106E056 @ SITE PLAN 3

SCALE: NONE



LAY 8" BOTTOM SKIRT ON TOP OF NATIVE SOIL,
SECURE WITH PEA GRAVEL BAGS (MID 9995692).

TECHNIQUES FOR EROSION AND SEDIMENT CONTROL

SILT FENCE DETAIL

Not to Scale 0150.3200

				REAL ESTATE/EASEMENT NEEDED		PERMIT BLACK DIAMOND	
3	N/A	N/A	N/A	**FUNCTION**	**CONTACT**	**PHONE NO**	**DATE**
2	N/A	N/A	N/A	PROJECT MGR	J. PETERS	206-573-0763	4/10/23
1	N/A	N/A	N/A	ENGR - POWER	C. FURIA	253-778-9190	4/10/23
REV#	**DATE**	**BY**	**DESCRIPTION**	ENGR - GAS	N/A	N/A	N/A
COUNTY		Emer Sect	Gas Wk Ctr / POWER WK CTR	DRAWN BY	C. FURIA	253-778-9190	4/10/23
KING		N/A	N/A / CSPSKEPM	CHECKED BY			
1/4 SEC		OP MAP	PLAT MAP	APPROVED BY			
NE 14-21N-06E		N/A	N/A	FOREMAN #1			
U-MAP NO (POWER)		OH CKT MAP	UG CKT MAP / CIRCUIT NO	FOREMAN #2			
2106E053/56		2107E072	2106E053/56 / BDI-15	MAPPING			
JOINT FACILITIES ARRANGEMENTS							
UTILITIES	N/A	N/A	N/A	N/A			
CONTACT	N/A	N/A	N/A	N/A			
PHONE#	N/A	N/A	N/A	N/A			

PUGET SOUND ENERGY

RAINIER VIEW MANUFACTURED HOME PARK

1PH PRI & SEC L/E FOR NEW UG SVC

32800 FIRST AVENUE, BLACK DIAMOND, WA 98010

INCIDENT N/A	MAOP N/A
Gas Order N/A	Elect Order N/A
SCALE AS NOTED	PAGE 3/4

N/A

PRELIMINARY ONLY NOT FOR CONSTRUCTION

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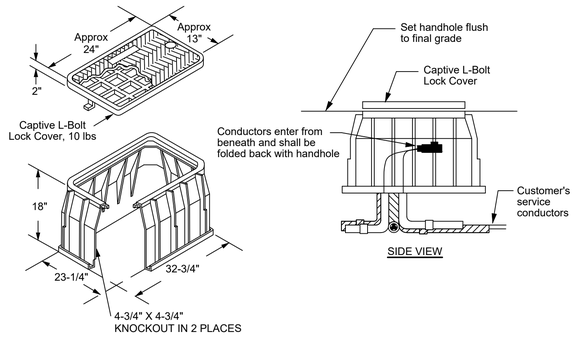
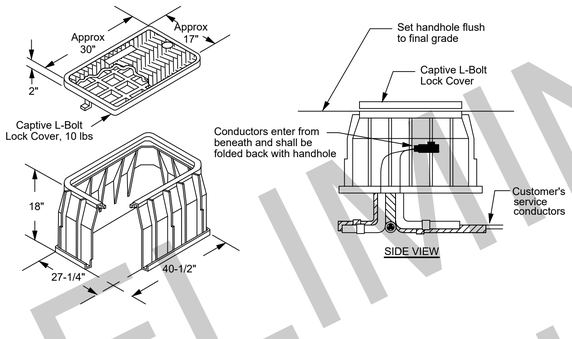


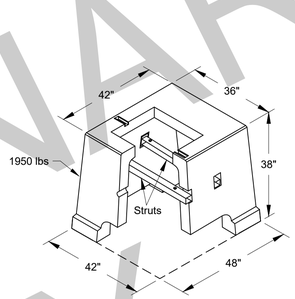
SINGLE PHASE SECONDARY HANDHOLE @ HH1 & HH2

Not to scale 6050.2000



SINGLE PHASE SECONDARY HANDHOLE @ HH3 & HH4

Not to scale 6050.2000



VAULT & EXCAVATION DETAIL

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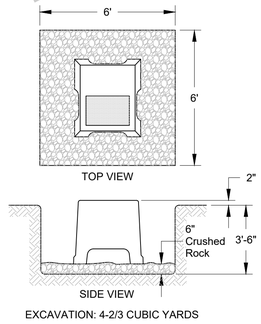
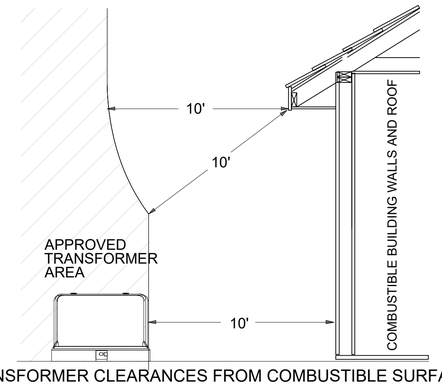
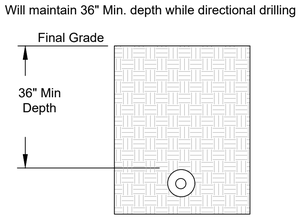




TRANSFORMER CLEARANCES FROM COMBUSTIBLE SURFACES



TYPICAL BORE COVER

CALL (800) 424-5555 UTILITY NOTIFICATION CENTER A MINIMUM OF 2 BUSINESS DAYS BEFORE BEGINNING ANY EXCAVATION TO PREVENT DAMAGE TO UNDERGROUND FACILITIES & AVOID BODILY INJURY.

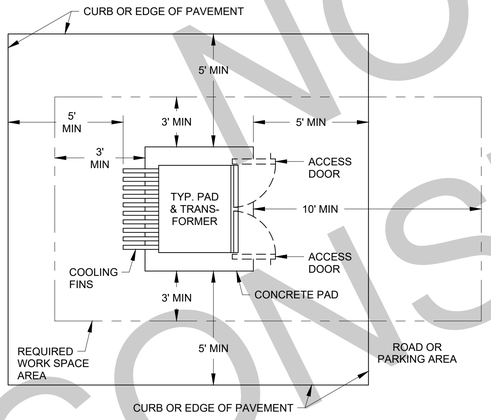
PSE/POTELCO REPRESENTIVE MUST BE ONSITE FOR DURATION OF BORE

POTHOLING IS REQUIRED PRIOR TO BORE. ALL OTHER UTILITIES SHALL HAVE THEIR ALIGNMENTS AND PROFILES MAPPED. BORING CONTRACTOR SHALL PREPARE A PROPOSED BORING ALIGNMENT AND PROFILE ON SITE AND PROVIDE IT TO THE PSE/POTELCO REPRESENTATIVE FOR APPROVAL BEFORE COMMENCING ANY WORK

BORING CONTRACTOR SHALL USE CONDUIT AND MATERIALS PROVIDED OR APPROVED BY PSE/POTELCO WHEN OPERATING IN PUBLIC RIGHT OF WAY

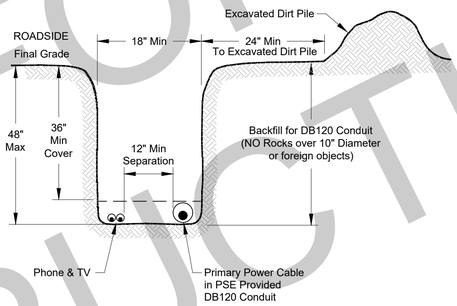
NEW CONDUIT SHALL BE INSTALLED PER PSE STANDARDS AND ADHERE TO ALL JURISCITION REQUIREMENTS. NEW CONDUIT SHALL BE INSTALLED AT 36" MINIMUM COVERAGE. LOCAL JURISIDICTIONS MAY HAVE DIFFERENT REQUIREMENTS FOR MINIMUM COVERAGE IN PUBLIC RIGHT OF WAY.

NEW CONDUIT SHALL MAINTAIN MINIMUM 1-FOOT VERTICAL CLEARANCE BETWEEN OUTER SURFACES OF EXISTING UTILITIES AND STRUCTRES. IT SHALL ALSO MAINTAIN A MINIMUM 5-FOOT HORIZONTAL SEPARATION OF WATER MAIN, STORM DRAIN AND 5-FOOT OF SEWER STRUCTURE. LOCAL JURSIDICTION MAY REQUIRE A DIFFERENT MINIMUM SEPARATION.



MINIMUM CLEARANCES FOR PSE EQUIPMENT

Not to scale 6775.0035

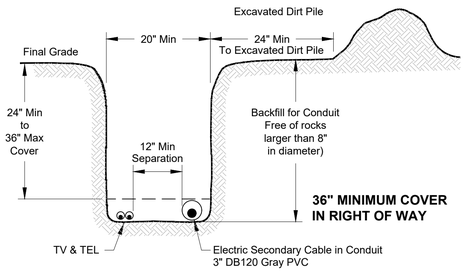


JOINT TRENCH DETAIL

Primary-DB120 (NTS)

CUSTOMER-SUPPLIED TRENCH FOR PRIMARY CABLE

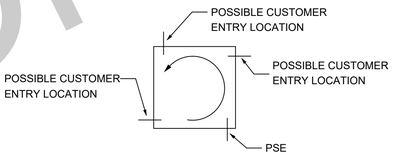
Backfill for In Conduit - The backfill layer shall be soil that is free from construction debris, glass, sharp rocks, frozen clods, and rocks larger than 8" in diameter.



JOINT TRENCH DETAIL

Electric Secondary Cable in Conduit (NTS)

CUSTOMER-SUPPLIED SECONDARY TRENCH



CABLE INSTALLATION DIAGRAM L

Not to scale

N/A

				REAL ESTATE/EASEMENT NEEDED		PERMIT BLACK DIAMOND	
3	N/A	N/A	N/A	**FUNCTION**	**CONTACT**	**PHONE NO**	**DATE**
2	N/A	N/A	N/A	PROJECT MGR	J. PETERS	206-573-0763	4/10/23
1	N/A	N/A	N/A	ENGR - POWER	C. FURIA	253-778-9190	4/10/23
REV#	**DATE**	**BY**	**DESCRIPTION**	ENGR - GAS	N/A	N/A	N/A
COUNTY		Emer Sect	Gas Wk Ctr / POWER WK CTR	DRAWN BY	C. FURIA	253-778-9190	4/10/23
KING		N/A	N/A / CSPSKEPM	CHECKED BY			
1/4 SEC		OP MAP	PLAT MAP	APPROVED BY			
NE 14-21N-06E		N/A	N/A	FOREMAN #1			
U-MAP NO (POWER)		OH CKT MAP	UG CKT MAP / CIRCUIT NO	FOREMAN #2			
2106E053/56		2107E072	2106E053/56 / BDI-15	MAPPING			

JOINT FACILITIES ARRANGEMENTS				
UTILITIES	N/A	N/A	N/A	N/A
CONTACT	N/A	N/A	N/A	N/A
PHONE#	N/A	N/A	N/A	N/A

PUGET SOUND ENERGY

RAINIER VIEW MANUFACTURED HOME PARK

1PH PRI & SEC L/E FOR NEW UG SVC

32800 FIRST AVENUE, BLACK DIAMOND, WA 98010

INCIDENT N/A	MAOP N/A
Gas Order N/A	Elect Order N/A
SCALE AS NOTED	PAGE 4/4

PRELIMINARY ONLY NOT FOR CONSTRUCTION

Apr 13, 2023 - 1:15pm C:\Users\p06754\appdata\local\temp\AcPublish_15760\ 51386046_Rainier View Manufactured Home Park.dwg