PUYALLUP DUPLEX - LOT 1

A PORTION OF THE NW 1/4 OF THE NW 1/4 OF SEC. 34, TWP. 20 N., RGE. 4 E., WILLAMETTE MERIDIAN, CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

SITE ADDRESS

433 43RD AVE SW
PUYALLUP, WA 98373

PARCEL NUMBER

0419095003

LEGAL DESCRIPTION

LOT 3 OF SHORT PLAT 79-557
EASE OF RECORD OUT OF 1-900 & 1-053 SEG M-1448

OWNER

HC HOMES INC.
20921 SNAG ISLAND DR.
LAKE TAPPS, WA. 98391

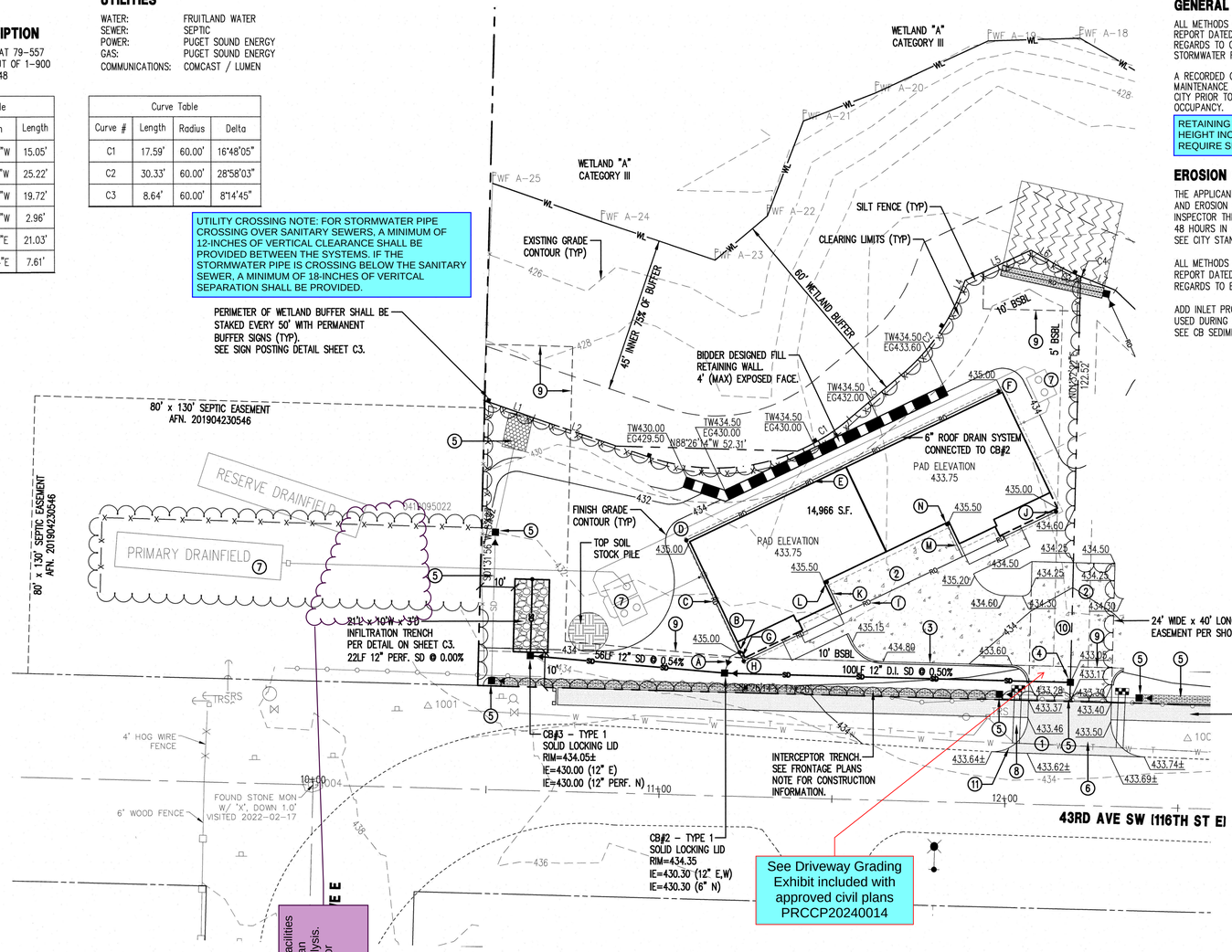
UTILITIES

WATER:	FRUITLAND WATER
SEWER:	SEPTIC
POWER:	PUGET SOUND ENERGY
GAS:	PUGET SOUND ENERGY
COMMUNICATIONS:	COMCAST / LUMEN

Line Table		
Line #	Direction	Length
L1	N70°37'29"W	15.05'
L2	N71°13'24"W	25.22'
L3	S49°52'29"W	19.72'
L4	S20°54'27"W	2.96'
L5	N65°18'51"E	21.03'
L6	S59°44'44"E	7.61'

Curve Table			
Curve #	Length	Radius	Delta
C1	17.59'	60.00'	16°48'05"
C2	30.33'	60.00'	28°58'03"
C3	8.64'	60.00'	8°14'45"

UTILITY CROSSING NOTE: FOR STORMWATER PIPE CROSSING OVER SANITARY SEWERS, A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN THE SYSTEMS. IF THE STORMWATER PIPE IS CROSSING BELOW THE SANITARY SEWER, A MINIMUM OF 18-INCHES OF VERITCAL SEPARATION SHALL BE PROVIDED.



See Driveway Grading Exhibit included with approved civil plans PRCCP20240014

No dispersion trenches, pipes or other storm facilities shall be allowed in the wetland buffer without an approved mitigation plan and hydroperiod analysis. See PMC 21.06.940 (1) (c) for requirements for stormwater facilities in wetland buffers

CONSTRUCTION SEQUENCE

1. THE CONTRACTOR IS TO REQUEST A PRE-CONSTRUCTION MEETING WITH THE CITY'S
2. CLEARLY STAKE, FLAG OR FENCE CLEARING LIMITS/WORK AREA. NO WORK SHALL B OUTSIDE THESE LIMITS WITHOUT PRIOR APPROVAL FROM THE CITY OF PUYALLUP.
3. PRIOR TO STARTING SITE WORK, REQUEST AN INSPECTION FOR EROSION AND SEDIM BY USING THE CITYVIEW ONLINE PERMIT PORTAL FOR SCHEDULING. CONTRACTOR M PORTAL USER TO REQUEST INSPECTIONS.
4. PROVIDE SILT FENCING AS SHOWN ON THE APPROVED PLANS
5. GRADE SITE AS SHOWN ON THE APPROVED PLANS.
6. CONSTRUCT THE DUPLEX FOUNDATION, SEPTIC, AND WATER SERVICE.
7. CONSTRUCT THE DISPERSAL TRENCHES AND CLOSED CONVEYANCE SYSTEM.
8. PAVE THE DRIVEWAY AND AMEND THE LANDSCAPE AND LAWN AREAS WITH SOIL AM
9. AMEND SOILS PER CS 01.02.08A ON SHEET C2.
10. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORD CITY OF PUYALLUP AND DEPARTMENT OF ECOLOGY EROSION AND SEDIMENT CONTRO STANDARDS.
11. COVER ALL AREAS, INCLUDING STOCKPILES, THAT WILL BE UNWORKED FOR MORE TH DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, PLASTIC SHEETING OR EQUIVALENT.
12. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.
13. SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
14. REQUEST FINAL INSPECTIONS ONLINE. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPS IF APPROPRIATE.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

PLAN VIEW CALLOUTS

1. ASPHALT PAVEMENT DRIVEWAY APPROACH PER DETAIL ON SHEET C3
2. CEMENT CONCRETE DRIVEWAY APRON PER DETAIL ON SHEET C3
3. CEMENT CONCRETE VERTICAL CURB PER DETAIL ON SHEET C3
4. CB#1 - TYPE 1 RIM=433.05 IE=430.80 (12" W)
5. SEE FRONTAGE PLANS NOTE FOR CONSTRUCTION INFORMATION
6. SEE RESIDENTIAL TEMPORARY CONSTRUCTION ENTRANCE DETAIL ON SHEET C2. REMOVE CONSTRUCTION ENTRANCE AS NECESSARY TO CONSTRUCT PROPOSED ASPHALT PAVEMENT DRIVEWAY APPROACH
7. SEPTIC SYSTEM UNDER SEPARATE PERMIT
8. WATER SERVICES AND METERS INSTALLED UNDER SEPARATE PERMIT WITH FRUITLAND MUTUAL WATER COMPANY
9. PRIVATE STORM DRAINAGE EASEMENT RECORDED UNDER SHORT PLAT AMENDMENT PLSHP20220104
10. PROPOSED FINISH GRADE SPOT ELEVATIONS CREATES AN INVERTED CROWN FOR THE PROPOSED 24' WIDE x 40' LONG SHARED ACCESS WHICH PROVIDES POSITIVE DRAINAGE FOR CONTRIBUTING DRIVEWAYS AND LANDSCAPE AREAS TO CB#1
11. 10' (TYP)

Agency Review Legend: Building Review | Engineering Review | Fire Review | Planning Review | Public Works Review | Traffic Review

ROOF DRAIN CALLOUTS

- (A) 8LF 6" SD @ 10.00%
- (B) STORM DRAIN CLEANOUT#1 (SDCO#1) RIM=435.00 IE=431.10
- (C) 36LF 6" SD @ 5.28%
- (D) SDCO#2 RIM=435.00 IE=433.00
- (E) 100LF 6" SD @ 0.50%
- (F) SDCO#3 RIM=435.00 IE=433.50
- (G) 3LF 6" SD @ 5.00%
- (H) SDCO#4 RIM=435.00 IE=431.25
- (I) 100LF 6" SD @ 2.25%
- (J) SDCO#5 RIM=435.00 IE=433.50
- (K) 10LF 6" SD @ 15.40%±
- (L) SDCO#6 RIM=435.00 IE=433.50
- (M) 10LF 6" SD @ 6.70%±
- (N) SDCO#7 RIM=435.00 IE=433.50

20 0 10 20 40
1 inch = 20 feet.

GENERAL APPROVAL NOTES

ALL METHODS OUTLINED IN THE APPROVED STORMWATER REPORT DATED DECEMBER 2023 MUST BE FOLLOWED IN REGARDS TO CONTROL OF DOWNSPOUTS AND STORMWATER RUNOFF.

A RECORDED COPY OF THE APPROVED STORMWATER MAINTENANCE AGREEMENT MUST BE PROVIDED TO THE CITY PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.

RETAINING WALLS GREATER THAN 4 FEET IN HEIGHT INCLUDING BURIED FOOTINGS REQUIRE SEPARATE BUILDING PERMIT.

EROSION CONTROL NOTES

THE APPLICANT SHALL REQUEST A SEDIMENT CONTROL AND EROSION INSPECTION WITH A CITY ENGINEERING INSPECTOR THROUGH THE CITYVIEW PORTAL AT LEAST 48 HOURS IN ADVANCE OF JOB START. SEE CITY STANDARDS 02.03.02 & 05.02.01.

ALL METHODS OUTLINED IN THE APPROVED STORMWATER REPORT DATED DECEMBER 2023 MUST BE FOLLOWED IN REGARDS TO EROSION AND SEDIMENTATION CONTROL.

ADD INLET PROTECTION ON ALL PROPOSED INLETS IF USED DURING CONSTRUCTION.
SEE CB SEDIMENT PROTECTION DETAIL 2 ON SHEET C2.

APPROVED
BY _____
CITY OF PUYALLUP ENGINEERING SERVICES
DATE _____
NOTE:
THIS APPROVAL IS VOID AFTER 1 YEAR FROM APPROVAL DATE.

THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.

FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE CITY ENGINEER.

PERMIT# PRRNSF20230919

PRRNSF20230919

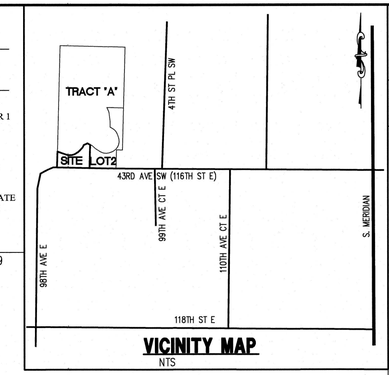
The applicant shall request a sediment control and erosion inspection with a City Engineering Inspector through the CityView portal least 48 hours in advance of job start. See City Standards 02.03.02 & 05.02.01

All methods outlined in the approved stormwater report dated December 2023 must be followed in regards to erosion and sedimentation control.

All methods outlined in the approved stormwater report dated October 2023 must be followed in regards to control of downspouts and stormwater runoff.

A RECORDED COPY OF THE APPROVED STORMWATER MAINTENANCE AGREEMENT MUST BE PROVIDED TO THE CITY PRIOR TO RECIEVING A CERTIFIACTE OF OCCUPANCY

All civil work associated with civil permit PRCCP20240014 must be completed prior to occupancy



VICINITY MAP
NTS

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	CENTER LINE	
	PROPERTY LINE	
	RIGHT OF WAY LINE	
	EASEMENT LINE	
	BUILDING SETBACK LINE	
	CHAIN LINK FENCE	
	WOOD FENCE	
	EDGE OF PAVEMENT	
300	CONTOURS	300
	STREET SIGN	
	STORM DRAIN CATCH BASIN	
	STORM DRAIN CLEANOUT	
	STORM DRAIN LINE	SD
	ROOF DRAIN LINE	RD
	FIRE HYDRANT	
	WATER VALVE	
W	WATER METER	
	THRUST BLOCKING	
W	WATER MAIN	W
	LUMINAIRE	
OP	OVER HEAD POWER	
	POWER/UTILITY POLE	
	GUY WIRE	
P	POWER VAULT	
G	GAS MAIN	
	GAS VALVE	
T	TELEPHONE LINE	
T	TELEPHONE RISER	
	MAIL BOX	
	ASPHALT CONCRETE	
	CEMENT CONCRETE	
	CLEARING LIMITS	
	SILT FENCE	
W	WETLAND	

FREDERICK B. BROWN
STATE OF WASHINGTON
53710
REGISTERED
PROFESSIONAL ENGINEER
12-23-2023

City of Puyallup Development Engineering APPROVED
See permit for additional requirements.
LHollingsworth
05/29/2024
08:30:22

FRONTAGE PLANS NOTE

SEE APPROVED FRONTAGE PLANS OS1-OS2 FOR CONSTRUCTION INFORMATION RELATED TO INTERCEPTOR TRENCH STORM DRAINAGE SYSTEM AND 5' WIDE ASPHALT PAVED SIDEWALK. SIDEWALK SHALL BE INSTALLED AFTER ONSITE IMPROVEMENTS AND UTILITIES HAVE BEEN CONSTRUCTED.

PAD ELEVATION NOTE

PAD ELEVATIONS ARE BASED ON THE FOLLOWING FINISH GRADE ASSUMPTIONS.
EXAMPLE:
PAD ELEVATION = 100.00
FOOTING GRADE = 99.50
TOP OF FOUNDATION = 102.00
GARAGE FINISH GRADE = 101.75
FINISH GRADE BACKFILL = 101.25
PRIOR TO CONSTRUCTION CONTRACTOR SHALL CONFIRM ASSUMPTIONS WITH PROJECT OWNER.

SOIL AMENDMENT NOTE

ALL DISTURBED AREAS THAT WILL BE YARDS OR LANDSCAPING SHALL HAVE THEIR SOILS AMENDED PER CITY STANDARD DETAIL 01.02.08A ON SHEET C2.

FLOODPLAIN NOTE

PER FEMA FIRM MAP 53053C0343E THE PARCELS AND ALL PROPOSED IMPROVEMENTS ARE LOCATED WITHIN ZONE X, WHICH IS THE AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD AND PROTECTED BY LEVEE FROM THE 100-YEAR FLOOD.

LOT STATISTICS

EXISTING ZONING:	RM-CORE
LOT AREA:	14,775 SF
PROP. FOOTPRINT:	3,050 SF
COV'D PORCH/PATIO:	184 SF
DRIVEWAY/CONC.:	2,168 SF
TOTAL ROOF AREA:	3,639 SF
CLEARING LIMIT AREA:	14,200 SF

GRADING QUANTITIES

CUT: 750 CY
FILL: 750 CY
NET: 0 CY
NOTE: CONTRACTOR SHALL INDEPENDENTLY VERIFY THESE QUANTITIES. THEY ARE FOR PLANNING PURPOSES ONLY.

SHEET INDEX

C1 GRADING, STORM, & TESC PLAN
C2 TESC - NOTES & DETAILS
C3 NOTES & DETAILS

No.	Revision:	Int.	Date:

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 - 29TH ST. NE, SUITE D
PUYALLUP, WA 98372
PH: (253) 848-4282
ceservices@cesnwinc.com

Project: PUYALLUP DUPLEX - LOT 1
GRADING, STORM, & TESC PLAN

Client: HC HOMES INC.
P.O. BOX 7707, BONNEY LAKE, WA 98391

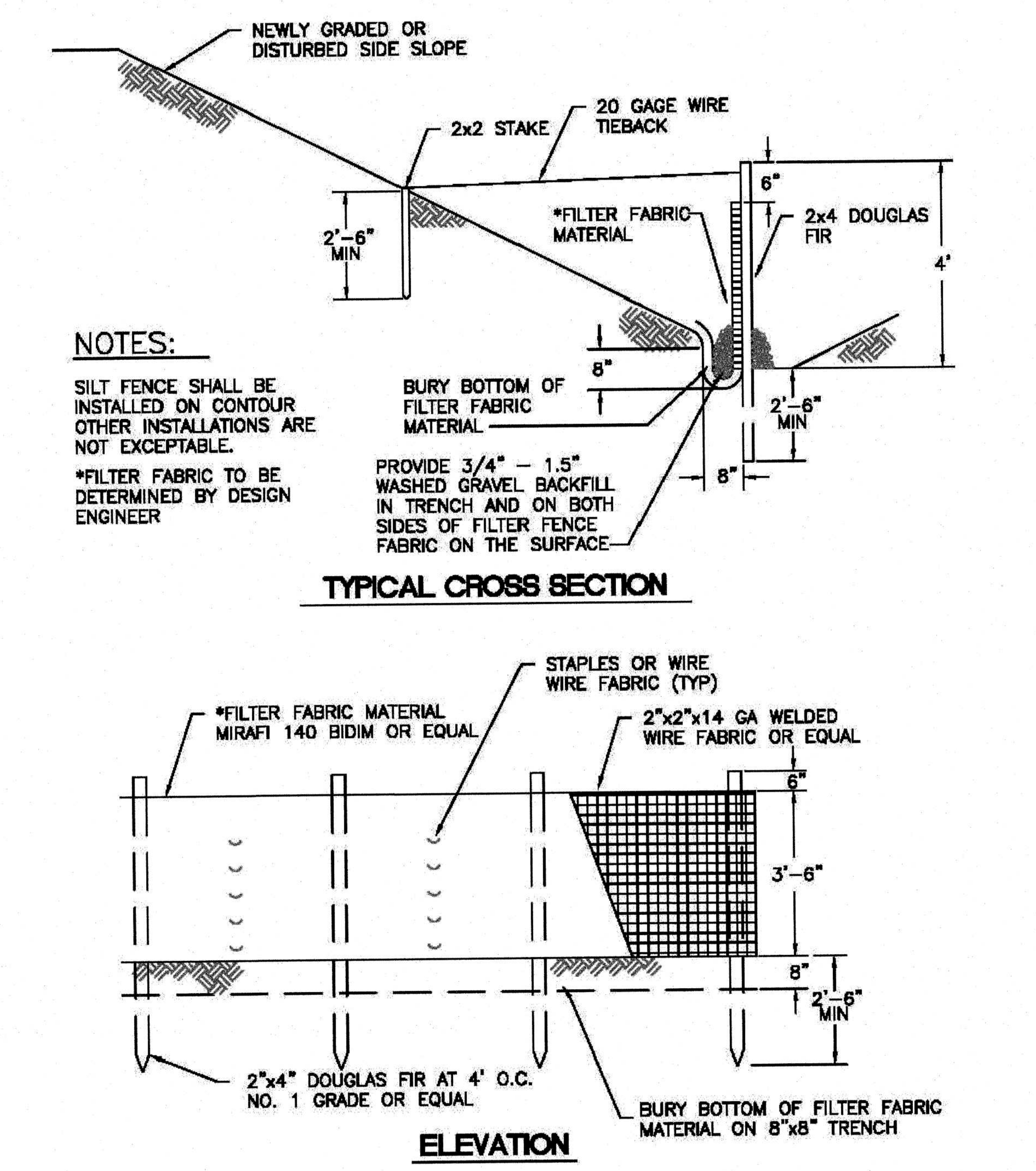
Designed: ENO
Drawn: MRL
Checked: ENO

Scale: 1"=20'
Date: 10/31/2023
Job No.: 20069

Sheet No.: C1
1 of 3 Sheets

PUYALLUP DUPLEX - LOT 1

A PORTION OF THE NW 1/4 OF THE NW 1/4 OF SEC. 34, TWP. 20 N., RGE. 4 E., WILLAMETTE MERIDIAN, CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON



NOTES:

SILT FENCE SHALL BE INSTALLED ON CONTOUR OTHER INSTALLATIONS ARE NOT EXCEPTABLE.

*FILTER FABRIC TO BE DETERMINED BY DESIGN ENGINEER

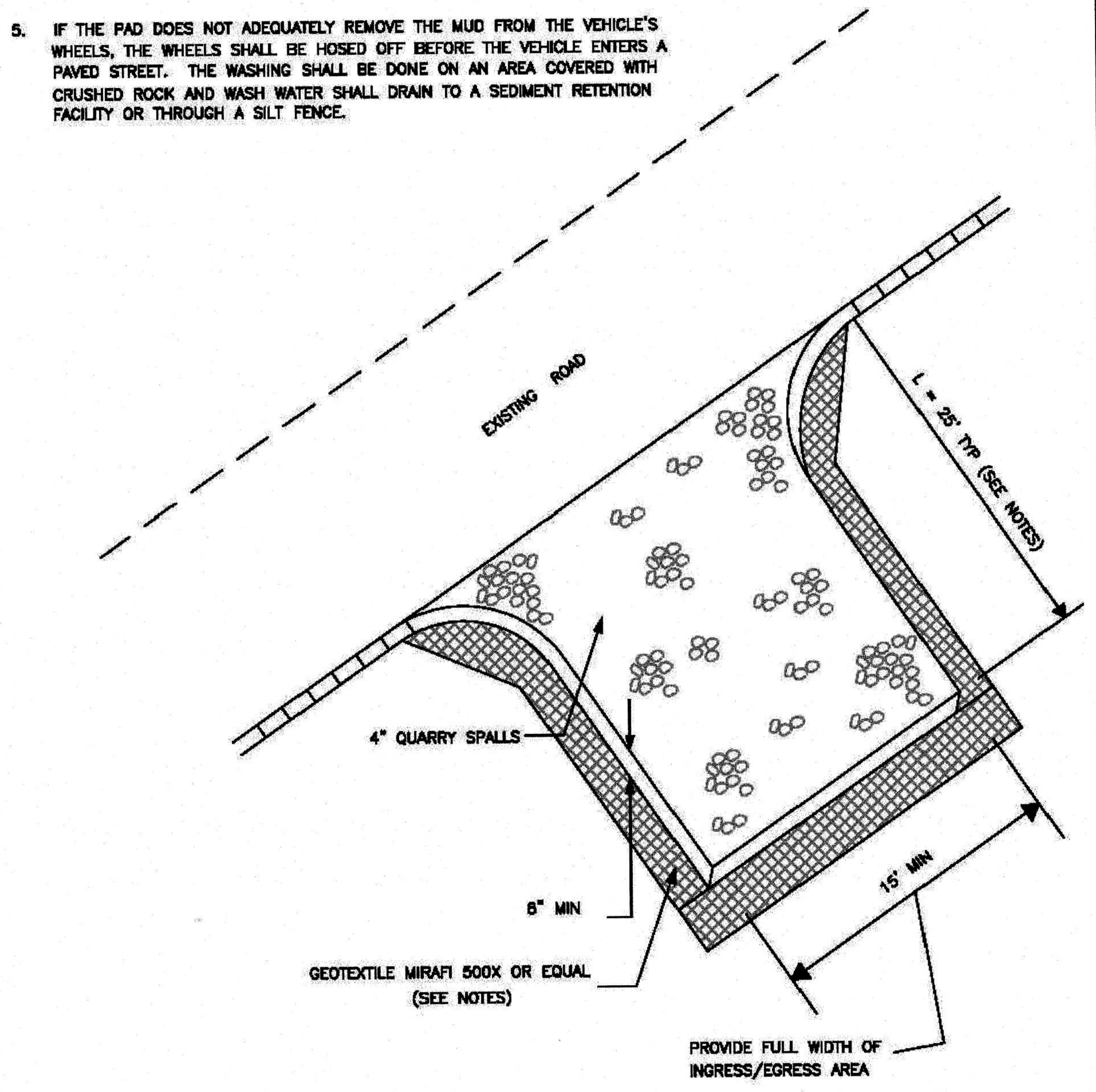
CITY OF PUYALLUP — DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

SILTATION FENCE

DRAWN BY	CHECKED BY	APPROVED BY	REVISED BY	CITY STANDARD
LINDA LANSING	LINDA LIAN	COLLEEN HARRIS	XXXX	02.03.02
FILE NAME: F:\DWG\COMMON\STDS\CITY2009\02_SD\02.03.02		DATE APPROVED 09/01/1992	DATE REVISED 06/01/2003	SCALE NTS

NOTES:

1. ENTRANCE LENGTH AND WIDTH MAY VARY DEPENDING ON THE SITE.
2. CONTRACTOR SHALL PROVIDE SUFFICIENT ENTRANCE AREA FOR A MINIMUM OF TWO VEHICLES.
3. GEOTEXTILE MIRAFI 500 X OR APPROVED EQUAL SHALL BE PLACED UNDER THE ENTIRETY OF THE TEMPORARY ENTRANCE.
4. ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION OF THE PAD.
5. IF THE PAD DOES NOT ADEQUATELY REMOVE THE MUD FROM THE VEHICLE'S WHEELS, THE WHEELS SHALL BE HOSED OFF BEFORE THE VEHICLE ENTERS A PAVED STREET. THE WASHING SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK AND WASH WATER SHALL DRAIN TO A SEDIMENT RETENTION FACILITY OR THROUGH A SILT FENCE.



CITY OF PUYALLUP — DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

TEMPORARY CONSTRUCTION ENTRANCE (RESIDENTIAL ONLY)

CITY STANDARD 05.01.02

1. ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.

2. ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR CONSTRUCTION. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY, UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITEE.

3. THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.

4. APPROVAL OF THESE PLANS IS FOR GRADING, TEMPORARY DRAINAGE, EROSION AND SEDIMENTATION CONTROL ONLY. IT DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT STORM DRAINAGE DESIGN, SIZE OR LOCATION OF PIPES, RESTRICTORS, CHANNELS, OR RETENTION FACILITIES.

5. ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 30 DAYS OR MORE, MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH SEPTEMBER INCLUSVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITEE BUT MUST BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.

6. IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE, AND THE OWNER/CONTRACTOR WILL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.

7. NO TEMPORARY OR PERMANENT STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN CRITICAL AREAS OR ASSOCIATED BUFFERS, OR THE CRITICAL ROOT ZONE FOR VEGETATION PROPOSED FOR RETENTION.

CITY OF PUYALLUP — DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

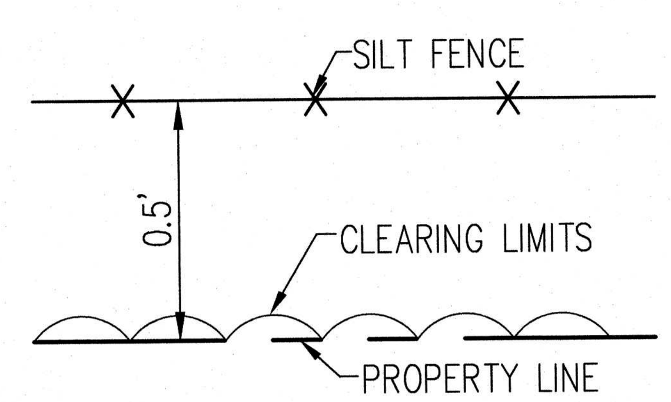
GRADING, EROSION, AND SEDIMENTATION CONTROL NOTES

CITY STANDARD 05.02.01

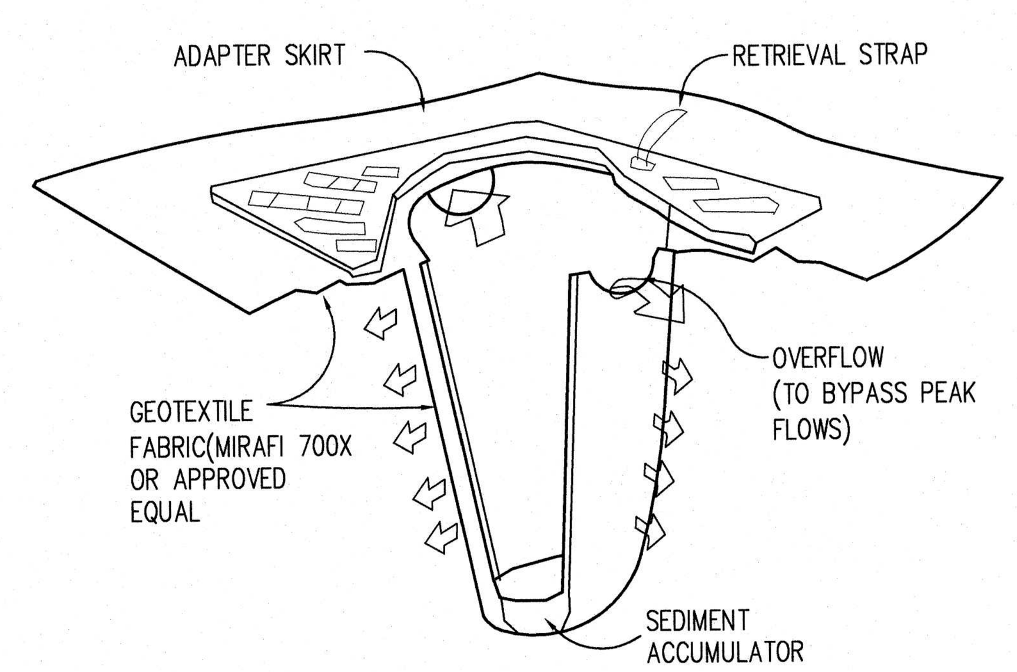
Table 4.7
Mulch Standards and Guidelines

Mulch Material	Quality Standards	Application Rates	Remarks
Straw	Air-dried; free from undesirable seed and coarse material.	2"-3" thick; 5 bales per 1000 sf or 2-3 tons per acre	Cost-effective protection when applied with adequate thickness. Hand-application generally requires greater thickness than blown straw. The thickness of straw may be reduced by half when used in conjunction with seeding. In windy areas straw must be held in place by crimping, using a tackifier, or covering with netting. Blown straw always has to be held in place with a tackifier as even light winds will blow it away. Straw, however, has several deficiencies that should be considered when selecting mulch materials. It often introduces and/or encourages the propagation of weed species and it has no significant long-term benefits. Straw should be used only if mulches with long-term benefits are unavailable locally. It should also not be used within the ordinary high-water elevation of surface waters (due to flotation).
Hydromulch	No growth inhibiting factors.	Approx. 25-30 lbs per 1000 sf or 1500 - 2000 lbs per acre	Shall be applied with hydromulcher. Shall not be used without seed and tackifier unless the application rate is at least doubled. Fibers longer than about ¾-1 inch clog hydromulch equipment. Fibers should be kept to less than ¾ inch.
Composted Mulch and Compost	No visible water or dust during handling. Must be purchased from supplier with Solid Waste Handling Permit (unless exempt).	2" thick min.; approx. 100 tons per acre (approx. 800 lbs per yard)	More effective control can be obtained by increasing thickness to 3". Excellent mulch for protecting final grades until landscaping because it can be directly seeded or tilled into soil as an amendment. Composted mulch has a coarser size gradation than compost. It is more stable and practical to use in wet areas and during rainy weather conditions.
Chipped Site Vegetation	Average size shall be several inches. Gradations from fines to 6 inches in length for texture, variation, and interlocking properties.	2" minimum thickness	This is a cost-effective way to dispose of debris from clearing and grubbing, and it eliminates the problems associated with burning. Generally, it should not be used on slopes above approx. 10% because of its tendency to be transported by runoff. It is not recommended within 200 feet of surface waters. If seeding is expected shortly after mulch, the decomposition of the chipped vegetation may tie up nutrients important to grass establishment.
Wood-based Mulch	No visible water or dust during handling. Must be purchased from a supplier with a Solid Waste Handling Permit or one exempt from solid waste regulations.	2" thick; approx. 100 tons per acre (approx. 800 lbs. per cubic yard)	This material is often called "hog or hogged fuel." It is usable as a material for Stabilized Construction Entrances (BMP C105) and as a mulch. The use of mulch ultimately improves the organic matter in the soil. Special caution is advised regarding the source and composition of wood-based mulches. Its preparation typically does not provide any weed seed control, so evidence of residual vegetation in its composition or known inclusion of weed plants or seeds should be monitored and prevented (or minimized).

February 2005 Volume II – Construction Stormwater Pollution Prevention 4-21



1 **CLEARING LIMITS/SILT FENCE LOCATION**
NTS



PROVIDE CB INSERT "STREAMGUARD FOR SEDIMENT" OR APPROVED EQUAL
MANUFACTURER'S NAME: FOSS ENVIRONMENTAL
ADDRESS: 200 SW MICHIGAN STREET SEATTLE, WA 98106
TELEPHONE: FOR INFORMATION: (800) 909-3677

2 **CB SEDIMENT PROTECTION**
NTS

STORMWATER NOTES

1. ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.

2. AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.

3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").

4. A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.

5. ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE ENGINEERING SERVICES STAFF PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.

6. THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.

7. ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRE REMOVAL OR RELOCATION RELATING TO THIS PROJECT, SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.

8. DURING CONSTRUCTION, ALL EXISTING AND NEWLY INSTALLED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM SEDIMENTS.

9. ALL STORM MANHOLES SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.01. FLOW CONTROL MANHOLE/OIL WATER SEPARATOR SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.06 AND 02.01.07.

10. MANHOLE RING AND COVER SHALL CONFORM TO CITY STANDARD DETAIL NO. 06.01.02.

11. CATCH BASINS TYPE I SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.02 AND 02.01.03 AND SHALL BE USED ONLY FOR DEPTHS LESS THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.

12. CATCH BASINS TYPE II SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.04 AND SHALL BE USED FOR DEPTHS GREATER THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.

13. CAST IRON OR DUCTILE IRON FRAME AND GRATE SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.05. GRATE SHALL BE MARKED WITH "DRAINS TO STREAM". SOLID CATCH BASIN LIDS (SQUARE UNLESS NOTED AS ROUND) SHALL CONFORM TO WSDOT STANDARD PLAN B-30.20-04 (OLYMPIC FOUNDRY NO. SM60 OR EQUAL). VANED GRATES SHALL CONFORM TO WSDOT STANDARD PLAN B-30.30-03 (OLYMPIC FOUNDRY NO. SM60V OR EQUAL).

14. STORMWATER PIPE SHALL BE ONLY PVC, CONCRETE, DUCTILE IRON, OR DUAL WALLED POLYPROPYLENE PIPE.
   A. THE USE OF ANY OTHER TYPE SHALL BE REVIEWED AND APPROVED BY THE ENGINEERING SERVICES STAFF PRIOR TO INSTALLATION.
   B. PVC PIPE SHALL BE PER ASTM D3034, SDR 35 FOR PIPE SIZE 15-INCH AND SMALLER AND F679 FOR PIPE SIZES 18 TO 27 INCH. MINIMUM COVER ON PVC PIPE SHALL BE 3.0 FEET.
   C. CONCRETE PIPE SHALL CONFORM TO THE WSDOT STANDARD SPECIFICATIONS FOR CONCRETE UNDERDRAIN PIPE. MINIMUM COVER ON CONCRETE PIPE SHALL NOT LESS THAN 3.0 FEET.
   D. DUCTILE IRON PIPE SHALL BE CLASS 50, CONFORMING TO AWWA C151. MINIMUM COVER ON DUCTILE IRON PIPE SHALL BE 1.0 FOOT.
   E. POLYPROPYLENE PIPE (PP) SHALL BE DUAL WALLED, HAVE A SMOOTH INTERIOR AND EXTERIOR CORRUGATIONS AND MEET WSDOT 9-05.24(1). 12-INCH THROUGH 30-INCH PIPE SHALL MEET OR EXCEED ASTM F2736 AND AASHTO M330, TYPE S, TYPE D. 36-INCH THROUGH 60-INCH PIPE SHALL MEET OR EXCEED ASTM F2881 AND AASHTO M330, TYPE S, OR TYPE D. TESTING SHALL BE PER ASTM F1417. MINIMUM COVER OVER POLYPROPYLENE PIPE SHALL BE 3-FEET.

15. TRENCHING, BEDDING, AND BACKFILL FOR PIPE SHALL CONFORM TO CITY STANDARD DETAIL NO. 06.01.01.

16. STORM PIPE SHALL BE A MINIMUM OF 10 FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.

17. ALL STORM DRAIN MAINS SHALL BE TESTED AND INSPECTED FOR ACCEPTANCE AS OUTLINED IN SECTION 406 OF THE CITY OF PUYALLUP SANITARY SEWER SYSTEM STANDARDS.

18. ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES, AND PROTECTIVE MEASURES FOR CRITICAL AREAS AND SIGNIFICANT TREES SHALL BE INSTALLED PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

APPROVED

BY ____________
CITY OF PUYALLUP ENGINEERING SERVICES

DATE ____________

NOTE:
THIS APPROVAL IS VOID AFTER 1 YEAR FROM APPROVAL DATE.

THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.

FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE CITY ENGINEER.

No.	Revision:	Int.	Date:

FREDERICK B. BROWN — STATE OF WASHINGTON — 33710 — REGISTERED PROFESSIONAL ENGINEER — 12-23-2023

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 - 29TH ST. NE, SUITE D
PUYALLUP, WA 98372
PH: (253) 848-4282
ceservices@cesnwinc.com

Project: PUYALLUP DUPLEX - LOT 1
TESC - NOTES & DETAILS

Client: HC HOMES INC.
P.O. BOX 7707, BONNEY LAKE, WA 98391

Designed: ENO
Drawn: MRL
Checked: ENO

Scale: N.T.S.
Date: 10/31/2023
Job No.: 20069

Sheet No.: **C2**

PUYALLUP DUPLEX - LOT 1

A PORTION OF THE NW 1/4 OF THE NW 1/4 OF SEC. 34, TWP. 20 N., RGE. 4 E., WILLAMETTE MERIDIAN, CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

APPROVED

BY ____ CITY OF PUYALLUP ENGINEERING SERVICES

DATE ____

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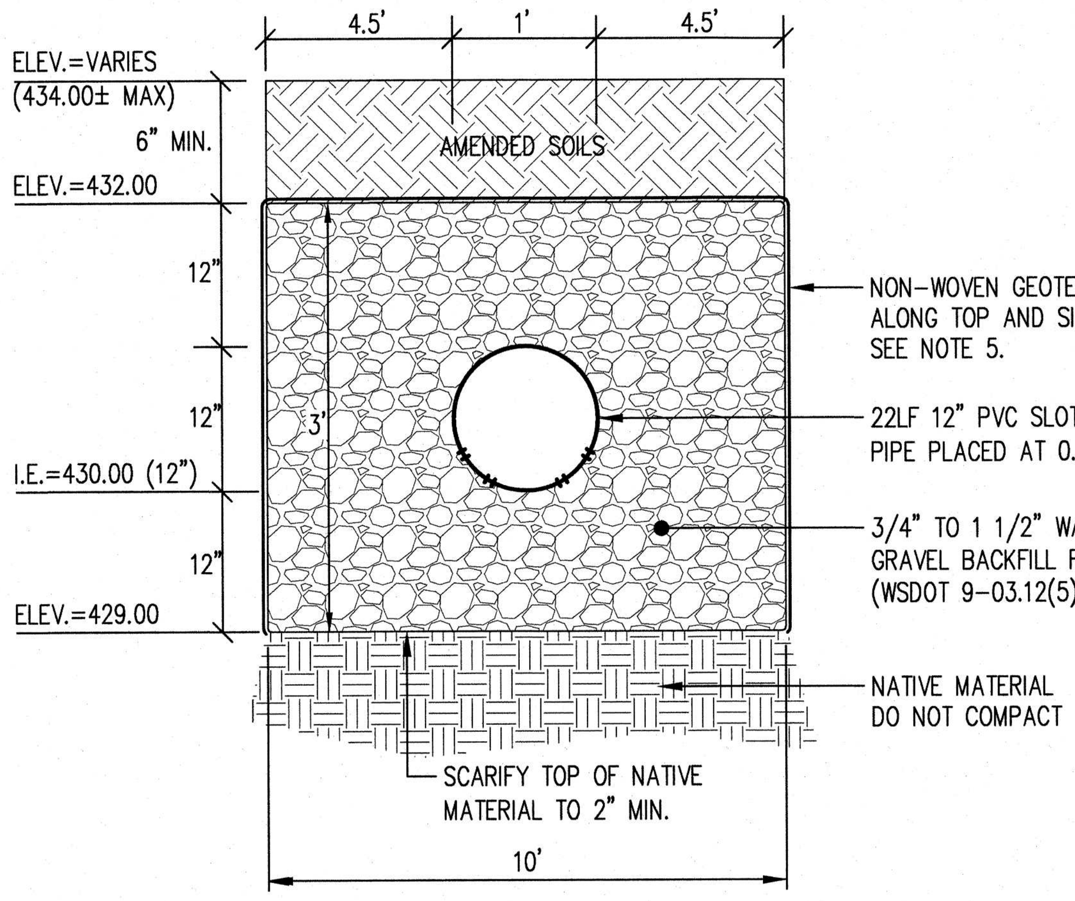
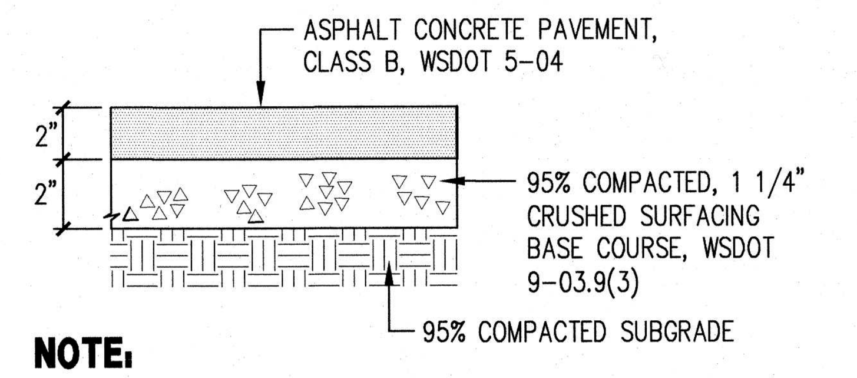


NOTES

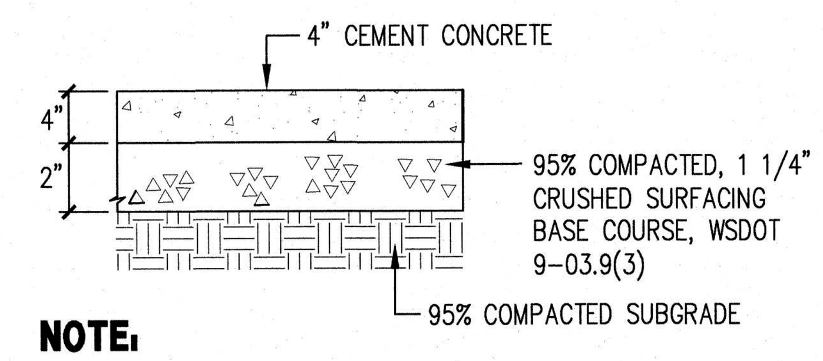
1. TRENCH BOTTOM SHALL BE A MINIMUM OF 1' ABOVE SEASONAL HIGH GROUNDWATER OR IMPERMEABLE SOIL LAYER.
2. TRENCH SHALL BE DESIGNED IN ACCORDANCE WITH SECTION 210.2.
3. INFILTRATION TRENCH SHOULD NOT BE INSTALLED UNDER IMPERVIOUS SURFACES.
4. CLEANOUT(S) SHALL BE INSTALLED IN ACCORDANCE WITH STD. DETAIL 02.01.09.
5. NON-WOVEN GEOTEXTILE TO CONFORM TO WSDOT 9-33.2(1), TABLE 1 AND 2.

STORM INFILTRATION TRENCH
N.T.S.



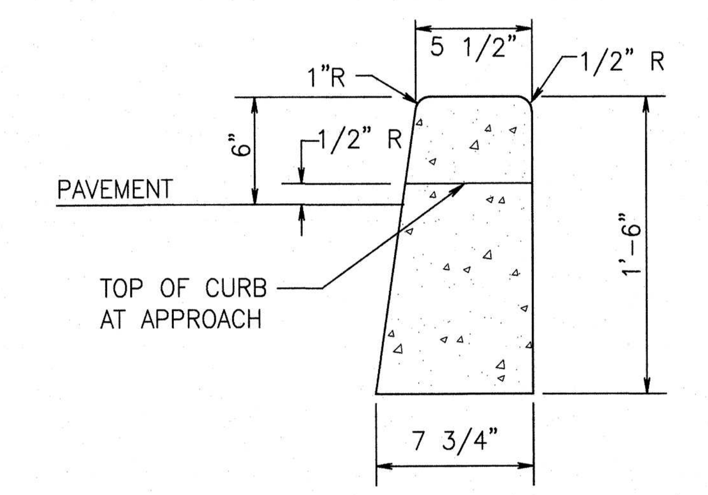
NOTE:
1. DEPTHS ARE COMPACTED THICKNESS.

DRIVEWAY APPROACH SECTION
N.T.S.

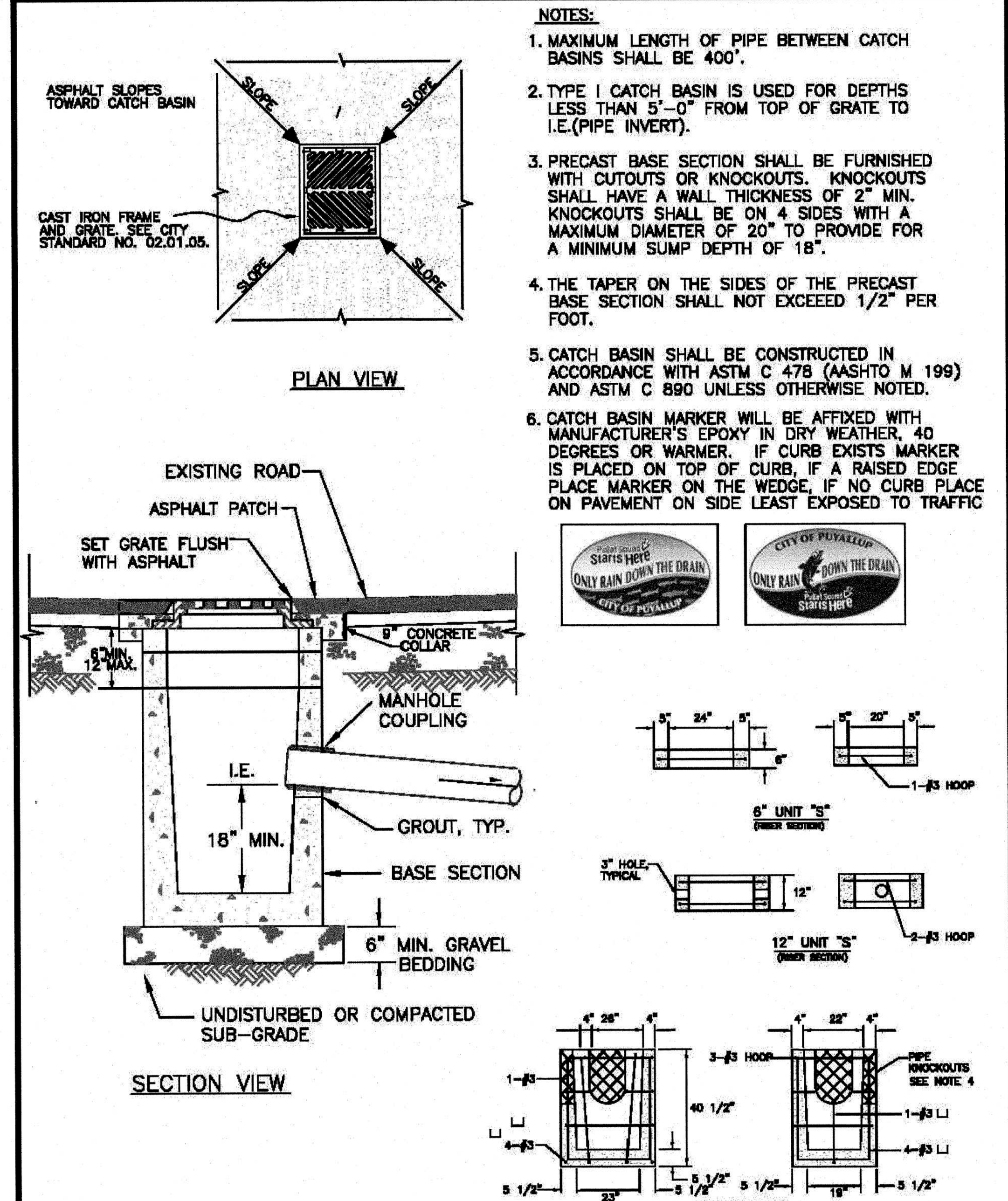


NOTE:
1. DEPTHS ARE COMPACTED THICKNESS.

DRIVEWAY APRON SECTION
N.T.S.



CEMENT CONCRETE VERTICAL CURB
N.T.S.



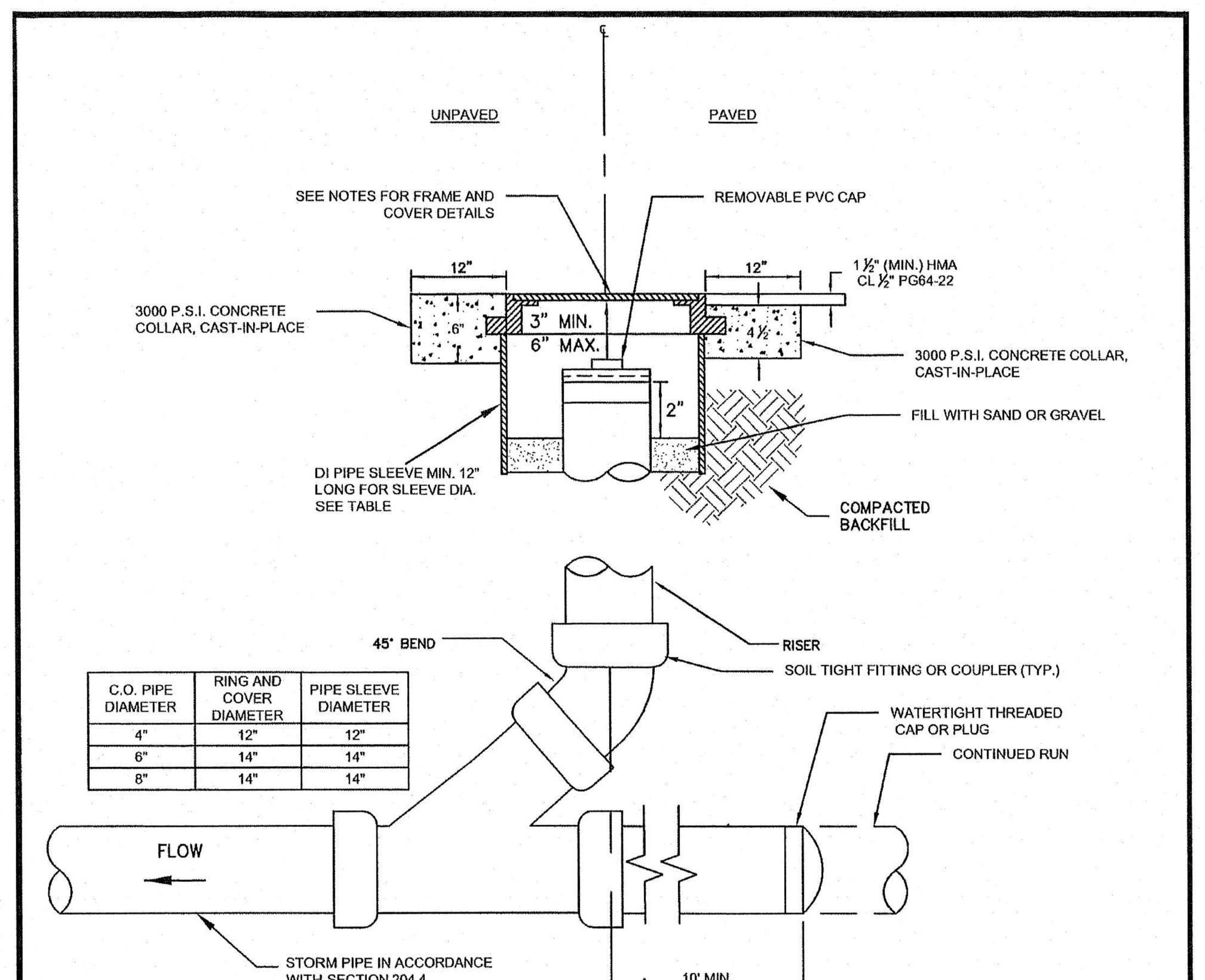
NOTES:

1. MAXIMUM LENGTH OF PIPE BETWEEN CATCH BASINS SHALL BE 400'.
2. TYPE I CATCH BASIN IS USED FOR DEPTHS LESS THAN 5'-0" FROM TOP OF GRATE TO I.E.(PIPE INVERT).
3. PRECAST BASE SECTION SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. KNOCKOUTS SHALL BE ON 4 SIDES WITH A MAXIMUM DIAMETER OF 20" TO PROVIDE FOR A MINIMUM SUMP DEPTH OF 18".
4. THE TAPER ON THE SIDES OF THE PRECAST BASE SECTION SHALL NOT EXCEEED 1/2" PER FOOT.
5. CATCH BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 478 (AASHTO M 199) AND ASTM C 890 UNLESS OTHERWISE NOTED.
6. CATCH BASIN MARKER WILL BE AFFIXED WITH MANUFACTURER'S EPOXY IN DRY WEATHER, 40 DEGREES OR WARMER. IF CURB EXISTS MARKER IS PLACED ON TOP OF CURB, IF A RAISED EDGE PLACE MARKER ON THE WEDGE, IF NO CURB PLACE ON PAVEMENT ON SIDE LEAST EXPOSED TO TRAFFIC

CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

CATCH BASIN TYPE 1 (AREA DRAIN)

02.01.02



NOTES:

1. CAST IRON COVER MARKED "FDCO" FOR FOOTING DRAINS OR "SDCO" FOR STORM LINES.
2. CAST IRON FRAME AND COVER SHALL BE DRILLED AND TAPPED WITH ⅝"-11 NC STAINLESS STEEL TYPE 304 ALLEN HEAD BOLTS, 2" LONG.
3. BOLT-LOCKING CAST IRON FRAME AND COVER SHALL BE HS-20 RATED IF USED IN RIGHT-OF-WAY OR EASEMENTS.
4. 14" BOLT-LOCKING CAST IRON FRAME AND COVER SHALL BE EQUAL TO OLYMPIC FOUNDRY PART # M1060.
5. CAST IRON FRAME AND COVER SHALL BE FLUSH WITH FINISHED GRADE.
6. CLEANOUTS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90 DEGREE BEND.
7. STORM PIPE BEDDING AND BACKFILL SHALL CONFORM TO STD DETAIL 06.01.01.
8. FINAL JOINTS SHALL BE SAW CUT, FACE OF CUT TACKED AND ALL JOINTS SEALED WITH SEALANT (AR4000W).
9. STORM DRAIN STUB SHALL EXTEND 10' BEYOND THE PROPERTY LINE OR EASEMENT LINE TO PREVENT DAMAGE AND MINIMIZE CONFLICT WITH FUTURE UTILITIES.
10. EACH CLEANOUT ASSEMBLY SHALL CONSIST OF: ONE CLEANOUT ADAPTOR, (HUB x FEMALE INSIDE PIPE THREAD, PVC SLIP IN), AND ONE CLEANOUT PLUG (MALE OUTSIDE THREAD WITH RAISED NUT, PVC).
11. FOR LANDSCAPED AREAS (OUTSIDE OF CITY ROW, EASEMENTS AND FACILITIES) A GREEN "CARSON" MODEL 910 YARD BOX MAY BE USED FOR C.O. PIPE DIA. LESS THAN OR EQUAL TO 6". YARD BOX SHALL BE FASTENED WITH ⅜" HEX BOLTS, THE COVER MARKED "STORM" AND FLUSH WITH FINISHED GRADE.

CITY OF PUYALLUP
PUBLIC WORKS AND DEVELOPMENT ENGINEERING

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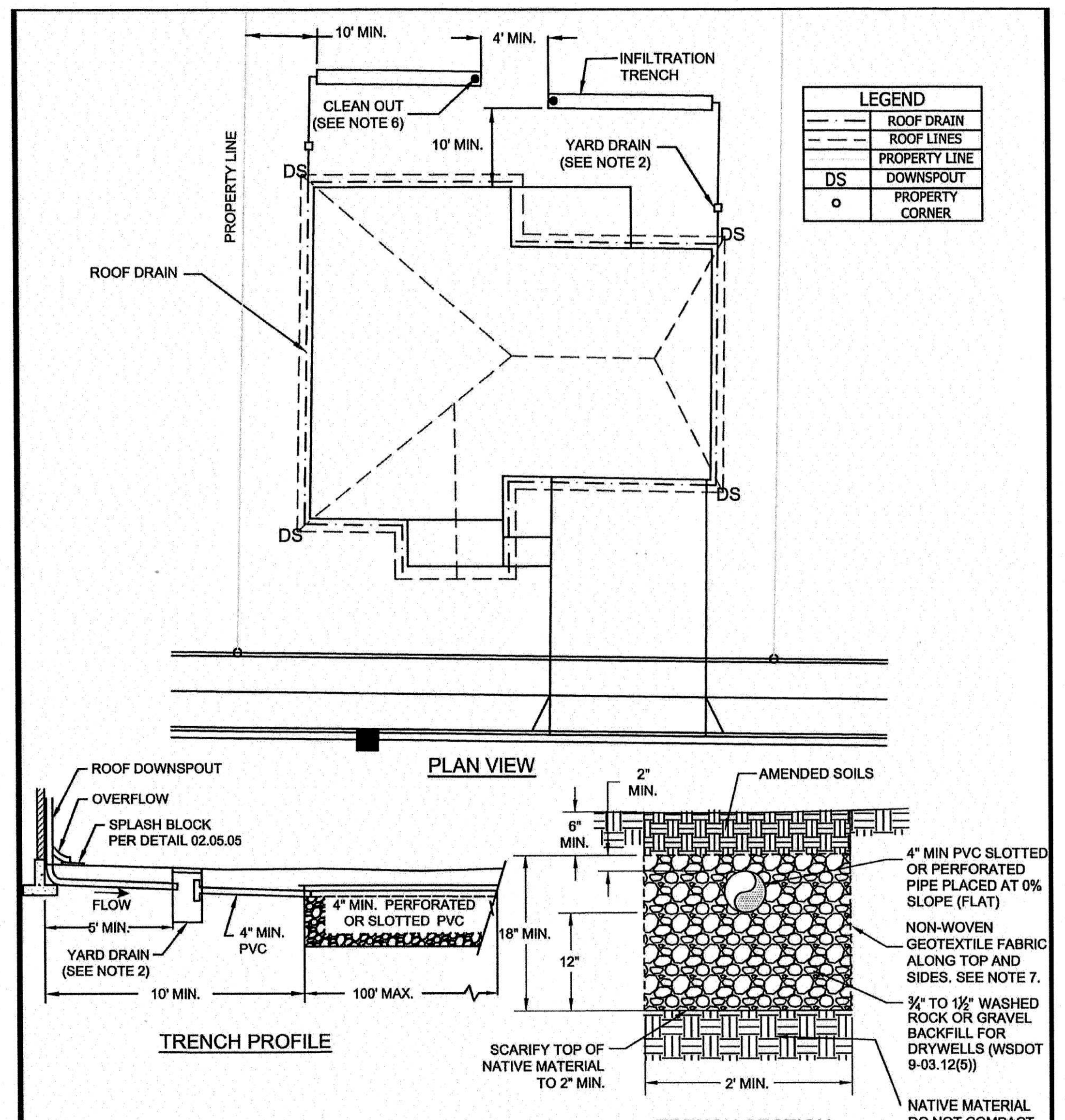
STORM DRAIN CLEANOUT

SCALE: NTS | DATE REVISED: 01/06/2023 | CITY STANDARD 02.01.09



NOTES:

1. ROOF DRAIN SHALL PROVIDE POSITIVE FLOW FROM DOWNSPOUTS (DS) TO YARD DRAINS.
2. YARD DRAINS SHALL BE INSTALLED UPSTREAM OF EACH DOWNSPOUT INFILTRATION TRENCH IN ACCORDANCE WITH STD DETAIL 02.05.02.
3. TRENCH BOTTOM SHALL BE A MINIMUM OF 1' ABOVE SEASONAL HIGH GROUNDWATER OR IMPERMEABLE SOIL LAYER.
4. TRENCH SHALL BE DESIGNED IN ACCORDANCE WITH SECTION 210.2.
5. INFILTRATION TRENCH SHOULD NOT BE INSTALLED UNDER IMPERVIOUS SURFACES.
6. CLEANOUT(S) SHALL BE INSTALLED IN ACCORDANCE WITH STD DETAIL 02.01.09.
7. NON-WOVEN GEOTEXTILE TO CONFORM TO WSDOT 9-33.2(1), TABLE 1 AND 2.

CITY OF PUYALLUP
PUBLIC WORKS AND DEVELOPMENT ENGINEERING

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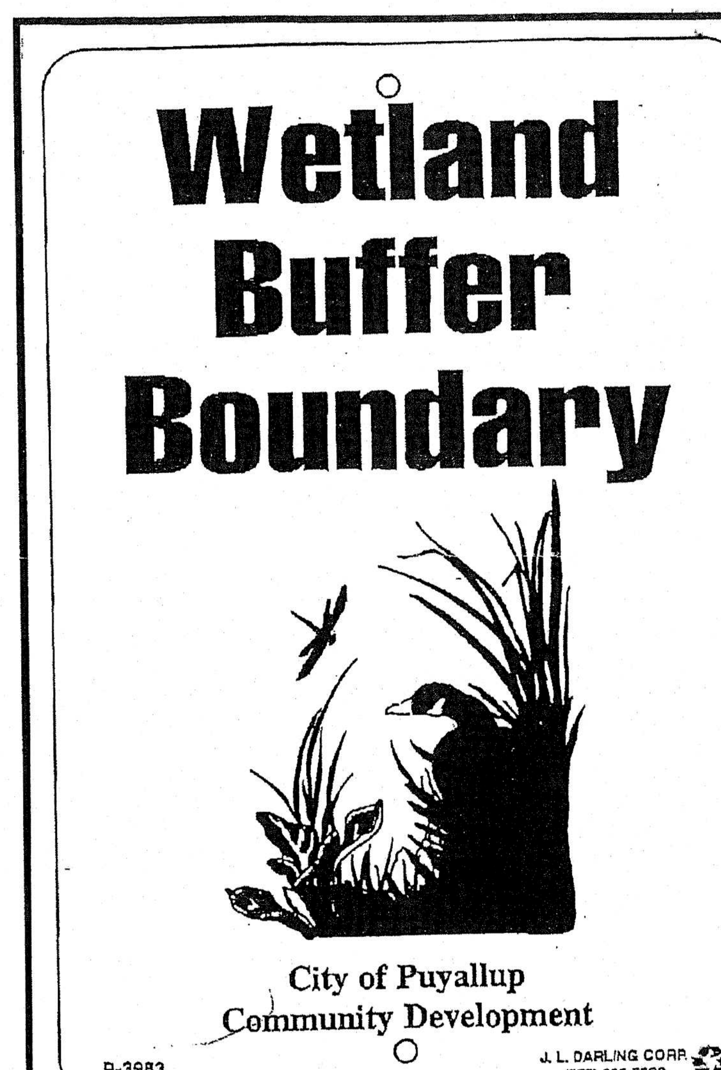
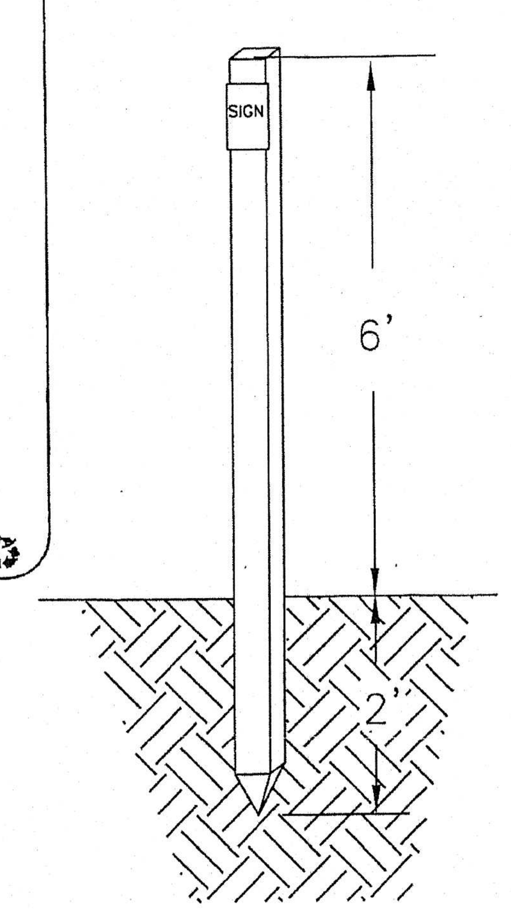
DOWNSPOUT INFILTRATION TRENCH

SCALE NTS | DATE REVISED: 05/19/2023 | CITY STANDARD 02.05.01



Max Sign Posting Distance
1 sign every 50'



4"x4" TREATED POST
WITH BUFFER SIGN

CITY OF PUYALLUP
COMMUNITY DEVELOPMENT DEPARTMENT

SIGN POSTING DETAIL

DRAWN BY JENNIFER RAY | SCALE NTS/1=1 | DATE APPROVED 9-02 | CHECKED BY S. PILCHER | SIGN POSTING DETAIL

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