

<p>ELEMENT 1: PRESERVE VEGETATION/MARK CLEARING LIMITS:</p> <p>a. PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRADING, ALL CLEARING LIMITS, SENSITIVE AREAS AND THEIR BUFFERS, AND TREES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA SHOULD BE CLEARLY MARKED, BOTH IN THE FIELD AND ON THE PLANS, TO PREVENT DAMAGE AND OFF-SITE IMPACTS. PLASTIC, METAL OR STAKE WIRE FENCE MAY BE USED TO MARK THE CLEARING LIMITS. RETAIN THE DUFF LAYER, NATIVE TOP SOIL, AND NATURAL VEGETATION IN AN UNDISTURBED STATE TO THE MAXIMUM DEGREE PRACTICABLE.</p> <p>ELEMENT 2: ESTABLISH CONSTRUCTION ACCESS:</p> <p>a. CONSTRUCTION VEHICLES WILL ACCESS THE SITE FROM 41ST STREET.</p> <p>b. A CONTRACTOR CONSTRUCTION TRACTOR HAS BEEN SPECIFIED BY CONTRACTOR TO UTILIZE EXISTING STREET, IF CONTRACTOR NOTICES SEDIMENT LEAVING THE SITE, CONSTRUCTION ENTRANCE SHALL BE INSTALLED PER COB DETAIL EC-605 OR AN EQUIVALENT LENGTH OF SHAKER PLATES.</p> <p>c. WHEEL WASHES ON TIRE BATHS DO NOT APPEAR TO BE NECESSARY IF A STABILIZED PARKING AREA IS LOCATED ON SITE.</p> <p>d. ANY SEDIMENT THAT IS TRACED OR OTHERWISE DEPOSITED ONTO PAVED SURFACES SHALL BE THOROUGHLY CLEANED AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM PAVED AREAS BY SHOVELING OR VACUUM SWEEPING AND SHALL BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.</p> <p>e. STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THE MANNER DESCRIBED IN PART d) ABOVE.</p> <p>ELEMENT 3: CONTROL FLOW RATES:</p> <p>a. STORMWATER FLOW CONTROL IS NOT REQUIRED FOR THIS PROJECT. THE RISK OF STORMWATER LEAVING THE SITE IS LOW SINCE THE CONSTRUCTION IS MINIMAL. TEMPORARY STORAGE DEPRESSIONS OR SEDIMENT TRAPS MAY BE CONSTRUCTED IF STORMWATER RUNOFF FLOWS ARE OBSERVED DURING CONSTRUCTION. IN ADDITION, MATERIAL FROM ALL EXCAVATED AREAS AND TREES SHALL BE LOCATED ON THE UPSTREAM SIDE OF THE EXCAVATED AREAS AS MUCH AS IS PRACTICABLE. CONTRACTOR OR, IF USED ON SITE, THE AUTHORIZED EROSION AND SEDIMENTATION CONTROL LEAD (CESCL) WILL BE RESPONSIBLE TO DETERMINE IF TEMPORARY STORMWATER STORAGE IS REQUIRED DURING CONSTRUCTION.</p> <p>b. NO CONVEYANCE ISSUES WERE FOUND DOWNSTREAM OF THE PROJECT.</p> <p>ELEMENT 4: INSTALL SEDIMENT CONTROLS:</p> <p>a. CONTRACTOR SHALL STOCKPILE EXISTING TOPSOIL AND REDISTRIBUTE TO LANDSCAPED AREAS AS MUCH AS PRACTICABLE. NATIVE TOPSOIL AND NATURAL VEGETATION SHALL BE PRESERVED TO THE GREATEST EXTENT PRACTICABLE DURING CONSTRUCTION.</p> <p>b. A TEMPORARY SEDIMENT POND DOES NOT APPEAR TO BE NECESSARY DURING CONSTRUCTION. THE RISK OF STORMWATER LEAVING THE SITE IS LOW SINCE MOST OF THE SITE IS FLAT. THE CONTRACTOR MAY USE ANY OTHER PRACTICABLE SEDIMENT CONTROLS, SUCH AS SEDIMENT TRAPS OR POND, AS NECESSARY FOR SITE CONDITIONS DURING CONSTRUCTION.</p> <p>ELEMENT 5: STABILIZE SOILS:</p> <p>a. EXISTING VEGETATION SHALL BE RETAINED AS MUCH AND AS LONG AS POSSIBLE. ALL AREAS OF EXPOSED SOIL WITHIN THE WORK UNITS SHALL BE STABILIZED BY APPLICATION OF BMP (DETAILED BELOW) THAT PROTECTS SOIL FROM THE EROSION FORCES OF RAINDROP IMPACTS, FLOWING WATER, AND WIND EROSION. REFER TO THE TIMING REQUIREMENTS IDENTIFIED BELOW. SOIL PILES SHOULD BE COVERED WITH PLASTIC OR ROLLED EROSION CONTROL PRODUCTS WHEN NOT IN USE.</p> <p>b. BETWEEN OCTOBER 1 AND APRIL 30, NO SOIL SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN TWO DAYS. FROM MAY 1 THROUGH SEPTEMBER 30, NO SOIL SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN SEVEN DAYS.</p> <p>c. APPLICABLE PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY OR PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, SOIL APPLICATION OF POLYACRYLAMIDE (PAM), EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED, AND DUST CONTROL.</p> <p>d. SOIL STABILIZATION MEASURES SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, ESTIMATED DURATION OF USE, AND POTENTIAL WATER QUALITY IMPACTS THAT STABILIZATION AGENTS MAY HAVE ON DOWNSTREAM WATER AND GROUNDWATER.</p> <p>e. SOIL STOCKPILES MUST BE STABILIZED AND PROTECTED WITH SEDIMENT TRAPPING MEASURES. AS RECOMMENDED IN ELEMENT 4, EXCAVATED SOIL MATERIAL SHOULD BE PLACED UPHILL FROM THE EXCAVATED AREAS.</p> <p>f. PROPOSED WORK IS LINEAR AND WILL BE UNDER THE CONTROL OF ONE GENERAL CONTRACTOR.</p> <p>g. THE DISCRETION OF CITY OF BELLINGHAM PUBLIC WORKS DIRECTOR, SITES THAT ARE UNABLE TO MAINTAIN ADEQUATE WATER QUALITY IN THEIR STORMWATER DISCHARGES MAY BE REQUIRED TO PROVIDE SOIL STABILIZATION TO ALL EXPOSED SOIL AREAS REGARDLESS OF THE WORKING STATUS OF THE AREA. UPON WRITTEN NOTIFICATION, THE PROPERTY OWNER SHALL PROVIDE FULL STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 24 HOURS.</p> <p>h. CONTRACTOR TO MINIMIZE SOIL COMPACTION AND TO MAXIMUM EXTENT PRESERVE TOPSOIL.</p> <p>ELEMENT 6: PROTECT SLOPES:</p> <p>CUT AND FILL SLOPES ARE ANTICIPATED AS PART OF THIS PROJECT. THEREFORE, SUBSECTIONS OF ELEMENT 6 (AS IDENTIFIED IN BELLINGHAM MUNICIPAL CODE 15.42.060.F.2.e) HAVE BEEN APPLIED TO THIS PROJECT. SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION.</p> <p>ELEMENT 7: PROTECT DRAIN INLETS:</p> <p>a. ALL EXISTING AND PROPOSED CATCH BASINS THAT MAY RECEIVE RUNOFF FROM THE SITE, EITHER DURING OR AFTER CONSTRUCTION, SHALL BE PROTECTED WITH CATCH BASIN FILTRATION INSERTS. CATCH BASINS THAT REQUIRE PROTECTION ARE IDENTIFIED IN THE TEMPORARY EROSION CONTROL PLAN DRAWING WITHIN THE CIVIL SITE PLANS.</p> <p>b. ALL APPROACH ROADS SHALL BE KEPT CLEAN AND ALL SEDIMENT AND STREET WASH WATER SHALL NOT BE ALLOWED TO ENTER STORM DRAINS WITHOUT PRIOR AND ADEQUATE TREATMENT UNLESS TREATMENT IS PROVIDED BEFORE THE STORM DRAIN DISCHARGES TO WATERS OF THE STATE.</p> <p>ELEMENT 8: STABILIZE CHANNELS AND OUTLETS:</p> <p>a. IF ANY TEMPORARY DRAINAGE CHANNELS ARE USED DURING CONSTRUCTION, THE CHANNELS SHALL BE DESIGNED AND BUILT TO PREVENT EROSION FROM THE EXPECTED VELOCITY FLOW FROM A 2-YEAR, 24-HOUR STORM EVENT FOR THE DEVELOPED CONDITION.</p> <p>b. AN EXISTING STABILIZED STORM DRAIN SYSTEM OPERATED BY THE CITY OF BELLINGHAM IS PRESENT AND SHALL BE PROTECTED FROM ANY CONVEYANCE OF STORMWATER RUNOFF IN CHANNELS. NO ADDITIONAL CHANNEL STABILIZATION IS REQUIRED OR PROPOSED FOR THIS PROJECT.</p> <p>ELEMENT 9: CONTROL POLLUTANTS:</p> <p>a. ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS, THAT OCCUR ON SITE SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT CONTAMINATE STORMWATER.</p> <p>b. COVER OVER ALL EXCAVATED AREAS WITH A STABILIZED SURFACE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND NON-INERT WASTES PRESENT ON THE SITE.</p> <p>c. MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN, SOLVENT AND DE-GREASING CLEANING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER. THESE ACTIVITIES SHALL BE CONDUCTED USING SPILL PREVENTION MEASURES, SUCH AS Drip PANS. CONTAMINATED SURFACES SHALL BE WASHED IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILLAGE. EMERGENCY REPAIRS MAY BE PERFORMED ON-SITE USING TEMPORARY PLASTIC PLACED BEHIND AND, IF RAINING, OVER THE VEHICLE.</p> <p>d. WHEEL WASH, OR TIRE BATH WASTEWATER SHALL BE DISCHARGED TO A SEPARATE ON-SITE TREATMENT SYSTEM ON TO THE SOIL SEVEN FEET.</p> <p>e. AGRICULTURAL CHEMICALS WILL NOT BE APPLIED AT THIS SITE.</p> <p>f. WASHOUT OF CONCRETE TRUCKS WILL ONLY BE ALLOWED WITHIN SPECIALLY CONSTRUCTED WASHOUT AREAS OR FORMED AREAS AWAITING INSTALLATION OF CONCRETE. IF SITE CONDITIONS PREVENT WASHOUT INTO CONTAINED AREAS OR FORMED AREAS, THEN ANY UNUSED CONCRETE IN THE TRUCK SHALL BE RETURNED TO THE BATCH PLANT FOR RECYCLING. HAND TOOLS, INCLUDING SCREEDS, SHOVELS, RAKES, FLOATS, OR TROWELS SHALL BE WASHED OFF ONLY INTO THE CONTAINED AREAS OR FORMED AREAS AWAITING INSTALLATION OF CONCRETE.</p> <p>ELEMENT 10: CONTROL DE-WATERING:</p> <p>a. NO DEWATERING IS PROPOSED AT THIS TIME. IF DEWATERING IS REQUIRED DISCHARGE TO CHANNELS THAT ARE STABILIZED AND SPANNED BY ELEMENT NO. 6.</p> <p>b. CLEAN, UNCONTAMINATED DEWATERING WATER, SUCH AS WELL-POINT GROUND WATER, CAN BE DISCHARGED TO SYSTEMS TRIBUTARY TO STATE SURFACE WATERS, AS SPECIFIED IN ELEMENT NO. 8, PROVIDED THE DEWATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF THE RECEIVING WATERS. THESE CLEAN WATERS SHOULD NOT BE ROUTED THROUGH SEDIMENT PONDS WITH STORMWATER.</p> <p>c. HIGH TURBIDITY, OTHERWISE CONTAMINATED DEWATERING WATER, SUCH AS FROM CONSTRUCTION EQUIPMENT OPERATIONS, CLAMSHHELL DRILLING CONCRETE PUMPING, OR WORK INSIDE A COFFERDAM, SHALL BE HANDLED SEPARATELY FROM STORMWATER AT THE SITE.</p> <p>d. OTHER DISPOSAL OPTIONS, DEPENDING ON SITE CONSTRAINTS, MAY INCLUDE, BY WAY OF EXAMPLE: (1) INFILTRATION, (2) TRANSPORT OFF SITE IN VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS, (3) ON-SITE TREATMENT USING ECOLOGY APPROVED CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES, (4) SANITARY OR COMBINED SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, OR THERE IS NO OTHER OPTION, (5) USE OF A SEDIMENTATION BAG THAT DISCHARGES TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DEWATERING.</p> <p>ELEMENT 11: MAINTAIN BMPs:</p> <p>a. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMPs SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL MAINTENANCE AND REPAIR SHALL BE CONDUCTED IN ACCORDANCE WITH BMP SPECIFICATIONS.</p> <p>b. SEDIMENT CONTROL BMPs SHALL BE INSPECTED WEEKLY AFTER A RUNOFF-PRODUCING STORM EVENT DURING THE DRY SEASON AND DAILY DURING THE WET SEASON.</p> <p>c. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL OF BMPs OR VEGETATION SHALL BE PERMANENTLY STABILIZED.</p> <p>ELEMENT 12: MANAGE THE PROJECT:</p> <p>a. THE PROPOSED IMPROVEMENTS WILL BE BUILT IN A SINGLE PHASE. NO FURTHER DEVELOPMENT IS PROPOSED AT THIS TIME.</p> <p>b. DISTURBED AREAS WILL BE REVEGETATED WITH TREES, SHRUBS, AND GROUND COVER SPECIES.</p> <p>c. LINEAR FEATURES SHALL BE TAKEN INTO ACCOUNT WHEN MODIFYING THE SWPPP.</p> <p>d. ALL BMPs SHALL BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.</p> <p>e. THIS PROJECT WILL NOT DISTURB MORE THAN ONE ACRE OF SOIL. A CERTIFIED EROSION AND SEDIMENTATION CONTROL LEAD (CESCL) NOT REQUIRED TO MONITOR AND INSPECT BMPs THAT WILL NOT BE USED DURING CONSTRUCTION.</p> <p>f. IF MONITORING, INSPECTION AND/OR MONITORING REVEALS THAT THE BMPs IDENTIFIED IN THE CONSTRUCTION SWPPP ARE INADEQUATE, DUE TO ACTUAL DISCHARGE OF OR POTENTIAL TO DISCHARGE A SIGNIFICANT AMOUNT OF ANY POLLUTANT, THE SWPPP SHALL BE MODIFIED AS APPROPRIATE, IN A TIMELY MANNER.</p> <p>g. THIS CONSTRUCTION SWPPP SHALL BE RETAINED ON-SITE. THIS SWPPP SHALL BE MODIFIED WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.</p> <p>ELEMENT 13: LOW IMPACT DEVELOPMENT:</p> <p>a. BMP T513 IS PROPOSED FOR THIS PROJECT. PROTECT COMPLETED LAWN AND LANDSCAPE AREAS FROM COMPACTION DUE TO CONSTRUCTION EQUIPMENT.</p>		 <p>2500 Elm Street, Suite 1 Bellingham, WA 98225 360.653.1408 360.653.1401</p> <p>GREENBRIAR CONSTRUCTION SUITE E BELLINGHAM, WA 98226 APPROVED <i>Henry Bentz</i> <i>1/29/04</i> Date CITY OF BELLINGHAM TEMPORARY CONSTRUCTION EX-1 SINGLE FAMILY DRAWING EC-605</p> <p>CONSTRUCTION ENTRANCE nts</p> <p>NOTES:</p> <ol style="list-style-type: none"> 1. PAD SHALL BE REMOVED AND REPLACED WHEN SOIL IS EVIDENT ON THE SURFACE OF THE PAD OR AS DIRECTED BY THE CITY. 2. PAD SHALL BE INSTALLED IN PLANTING STRIP AS APPROPRIATE. 3. THE THICKNESS SHALL BE INCREASED IF SOIL CONDITIONS DICTATE OR PER THE DIRECTION OF THE CITY. 4. MINIMUM DIMENSIONS MAY BE MODIFIED AS REQUIRED BY SITE CONDITIONS UPON APPROVAL OF THE CITY. <p>CLIENT: PROJECT LOCATION: PFC2024-0003 - 41st ST 650' N/O WILDWOOD 813 41ST STREET BELLINGHAM, WA 98225 DRAWING NO.: 2214-SP3.DWG DESIGNED BY: NSP DRAWN BY: JDP CHECKED BY: NSP FOR BURIED UTILITY LOCATIONS: 1-800-424-5555</p>	
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(A) STORMWATER POLLUTION PROTECTION PLAN

BMP C152: Sawcutting and Surfacing Pollution Prevention

Purpose
Sawcutting and surfacing operations generate slurry and process water that contains fine particles and high pH (concrete cutting), both of which can violate the water quality standards in the receiving water. Concrete spillage or concrete discharge to surface waters of the State is prohibited. Use this BMP to minimize and eliminate process water and slurry created through sawcutting or surfacing from entering waters of the State.

Conditions of Use
Utilize these management practices anytime sawcutting or surfacing operations take place. Sawcutting and surfacing operations include, but are not limited to, the following:

- Sawing
- Coring
- Grinding
- Roughening
- Hydro-demolition
- Bridge and road surfacing
- Vacuum slurry and cuttings during cutting and surfacing operations.
- Slurry and cuttings shall not remain on permanent concrete or asphalt pavement overnight.
- Slurry and cuttings shall not drain to any natural or constructed drainage conveyance including stormwater systems. This may require temporarily blocking catch basins.
- Dispose of collected slurry and cuttings in a manner that does not violate ground water or surface water quality standards.
- Do not allow process water generated during hydro-demolition, surface roughening or similar operations to drain to any natural or constructed drainage conveyance including stormwater systems. Dispose process water in a manner that does not violate ground water or surface water quality standards.
- Handle and dispose cleaning waste material and demolition debris in a manner that does not cause contamination of water. Dispose of sweeping material from a pick-up sweeper at an appropriate disposal site.

Maintenance Standards
Continually monitor operations to determine whether slurry, cuttings, or process water could enter waters of the state. If inspections show that a violation of water quality standards could occur, stop operations and immediately implement preventive measures such as berms, barriers, secondary containment, and vacuum trucks.

(C) SAWCUTTING & SURFACE POLLUTION
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ELEMENT 6: PROTECT SLOPES:
CUT AND FILL SLOPES ARE ANTICIPATED AS PART OF THIS PROJECT. THEREFORE, SUBSECTIONS OF ELEMENT 6 (AS IDENTIFIED IN BELLINGHAM MUNICIPAL CODE 15.42.060.F.2.e) HAVE BEEN APPLIED TO THIS PROJECT. SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION.

ELEMENT 7: PROTECT DRAIN INLETS:

a. ALL EXISTING AND PROPOSED CATCH BASINS THAT MAY RECEIVE RUNOFF FROM THE SITE, EITHER DURING OR AFTER CONSTRUCTION, SHALL BE PROTECTED WITH CATCH BASIN FILTRATION INSERTS. CATCH BASINS THAT REQUIRE PROTECTION ARE IDENTIFIED IN THE TEMPORARY EROSION CONTROL PLAN DRAWING WITHIN THE CIVIL SITE PLANS.

b. ALL APPROACH ROADS SHALL BE KEPT CLEAN AND ALL SEDIMENT AND STREET WASH WATER SHALL NOT BE ALLOWED TO ENTER STORM DRAINS WITHOUT PRIOR AND ADEQUATE TREATMENT UNLESS TREATMENT IS PROVIDED BEFORE THE STORM DRAIN DISCHARGES TO WATERS OF THE STATE.

ELEMENT 8: STABILIZE CHANNELS AND OUTLETS:

a. IF ANY TEMPORARY DRAINAGE CHANNELS ARE USED DURING CONSTRUCTION, THE CHANNELS SHALL BE DESIGNED AND BUILT TO PREVENT EROSION FROM THE EXPECTED VELOCITY FLOW FROM A 2-YEAR, 24-HOUR STORM EVENT FOR THE DEVELOPED CONDITION.

b. AN EXISTING STABILIZED STORM DRAIN SYSTEM OPERATED BY THE CITY OF BELLINGHAM IS PRESENT AND SHALL BE PROTECTED FROM ANY CONVEYANCE OF STORMWATER RUNOFF IN CHANNELS. NO ADDITIONAL CHANNEL STABILIZATION IS REQUIRED OR PROPOSED FOR THIS PROJECT.

ELEMENT 9: CONTROL POLLUTANTS:

a. ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS, THAT OCCUR ON SITE SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT CONTAMINATE STORMWATER.

b. COVER OVER ALL EXCAVATED AREAS WITH A STABILIZED SURFACE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND NON-INERT WASTES PRESENT ON THE SITE.

c. MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN, SOLVENT AND DE-GREASING CLEANING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER. THESE ACTIVITIES SHALL BE CONDUCTED USING SPILL PREVENTION MEASURES, SUCH AS Drip PANS. CONTAMINATED SURFACES SHALL BE WASHED IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILLAGE. EMERGENCY REPAIRS MAY BE PERFORMED ON-SITE USING TEMPORARY PLASTIC PLACED BEHIND AND, IF RAINING, OVER THE VEHICLE.

d. WHEEL WASH, OR TIRE BATH WASTEWATER SHALL BE DISCHARGED TO A SEPARATE ON-SITE TREATMENT SYSTEM ON TO THE SOIL SEVEN FEET.

e. AGRICULTURAL CHEMICALS WILL NOT BE APPLIED AT THIS SITE.

f. WASHOUT OF CONCRETE TRUCKS WILL ONLY BE ALLOWED WITHIN SPECIALLY CONSTRUCTED WASHOUT AREAS OR FORMED AREAS AWAITING INSTALLATION OF CONCRETE. IF SITE CONDITIONS PREVENT WASHOUT INTO CONTAINED AREAS OR FORMED AREAS, THEN ANY UNUSED CONCRETE IN THE TRUCK SHALL BE RETURNED TO THE BATCH PLANT FOR RECYCLING. HAND TOOLS, INCLUDING SCREEDS, SHOVELS, RAKES, FLOATS, OR TROWELS SHALL BE WASHED OFF ONLY INTO THE CONTAINED AREAS OR FORMED AREAS AWAITING INSTALLATION OF CONCRETE.

ELEMENT 10: CONTROL DE-WATERING:

a. NO DEWATERING IS PROPOSED AT THIS TIME. IF DEWATERING IS REQUIRED DISCHARGE TO CHANNELS THAT ARE STABILIZED AND SPANNED BY ELEMENT NO. 6.

b. CLEAN, UNCONTAMINATED DEWATERING WATER, SUCH AS WELL-POINT GROUND WATER, CAN BE DISCHARGED TO SYSTEMS TRIBUTARY TO STATE SURFACE WATERS, AS SPECIFIED IN ELEMENT NO. 8, PROVIDED THE DEWATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF THE RECEIVING WATERS. THESE CLEAN WATERS SHOULD NOT BE ROUTED THROUGH SEDIMENT PONDS WITH STORMWATER.

c. HIGH TURBIDITY, OTHERWISE CONTAMINATED DEWATERING WATER, SUCH AS FROM CONSTRUCTION EQUIPMENT OPERATIONS, CLAMSHELL DRILLING CONCRETE PUMPING, OR WORK INSIDE A COFFERDAM, SHALL BE HANDLED SEPARATELY FROM STORMWATER AT THE SITE.

d. OTHER DISPOSAL OPTIONS, DEPENDING ON SITE CONSTRAINTS, MAY INCLUDE, BY WAY OF EXAMPLE: (1) INFILTRATION, (2) TRANSPORT OFF SITE IN VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS, (3) ON-SITE TREATMENT USING ECOLOGY APPROVED CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES, (4) SANITARY OR COMBINED SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, OR THERE IS NO OTHER OPTION, (5) USE OF A SEDIMENTATION BAG THAT DISCHARGES TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DEWATERING.

ELEMENT 11: MAINTAIN BMPs:

a. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMPs SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL MAINTENANCE AND REPAIR SHALL BE CONDUCTED IN ACCORDANCE WITH BMP SPECIFICATIONS.

b. SEDIMENT CONTROL BMPs SHALL BE INSPECTED WEEKLY AFTER A RUNOFF-PRODUCING STORM EVENT DURING THE DRY SEASON AND DAILY DURING THE WET SEASON.

c. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL OF BMPs OR VEGETATION SHALL BE PERMANENTLY STABILIZED.

ELEMENT 12: MANAGE THE PROJECT:

a. THE PROPOSED IMPROVEMENTS WILL BE BUILT IN A SINGLE PHASE. NO FURTHER DEVELOPMENT IS PROPOSED AT THIS TIME.

b. DISTURBED AREAS WILL BE REVEGETATED WITH TREES, SHRUBS, AND GROUND COVER SPECIES.

c. LINEAR FEATURES SHALL BE TAKEN INTO ACCOUNT WHEN MODIFYING THE SWPPP.

d. ALL BMPs SHALL BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

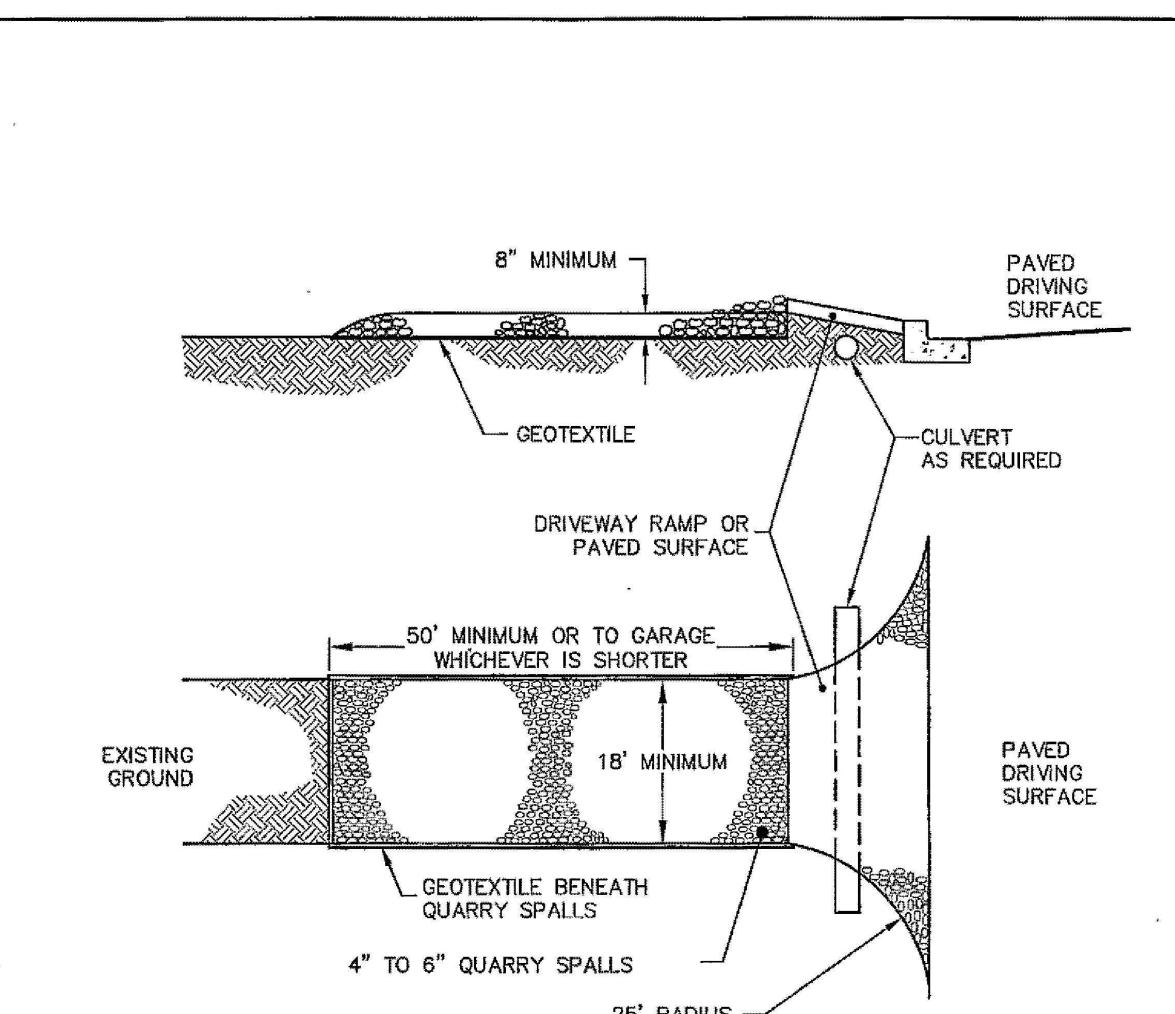
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f. IF MONITORING, INSPECTION AND/OR MONITORING REVEALS THAT THE BMPs IDENTIFIED IN THE CONSTRUCTION SWPPP ARE INADEQUATE, DUE TO ACTUAL DISCHARGE OF OR POTENTIAL TO DISCHARGE A SIGNIFICANT AMOUNT OF ANY POLLUTANT, THE SWPPP SHALL BE MODIFIED AS APPROPRIATE, IN A TIMELY MANNER.

g. THIS CONSTRUCTION SWPPP SHALL BE RETAINED ON-SITE. THIS SWPPP SHALL BE MODIFIED WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.

ELEMENT 13: LOW IMPACT DEVELOPMENT:

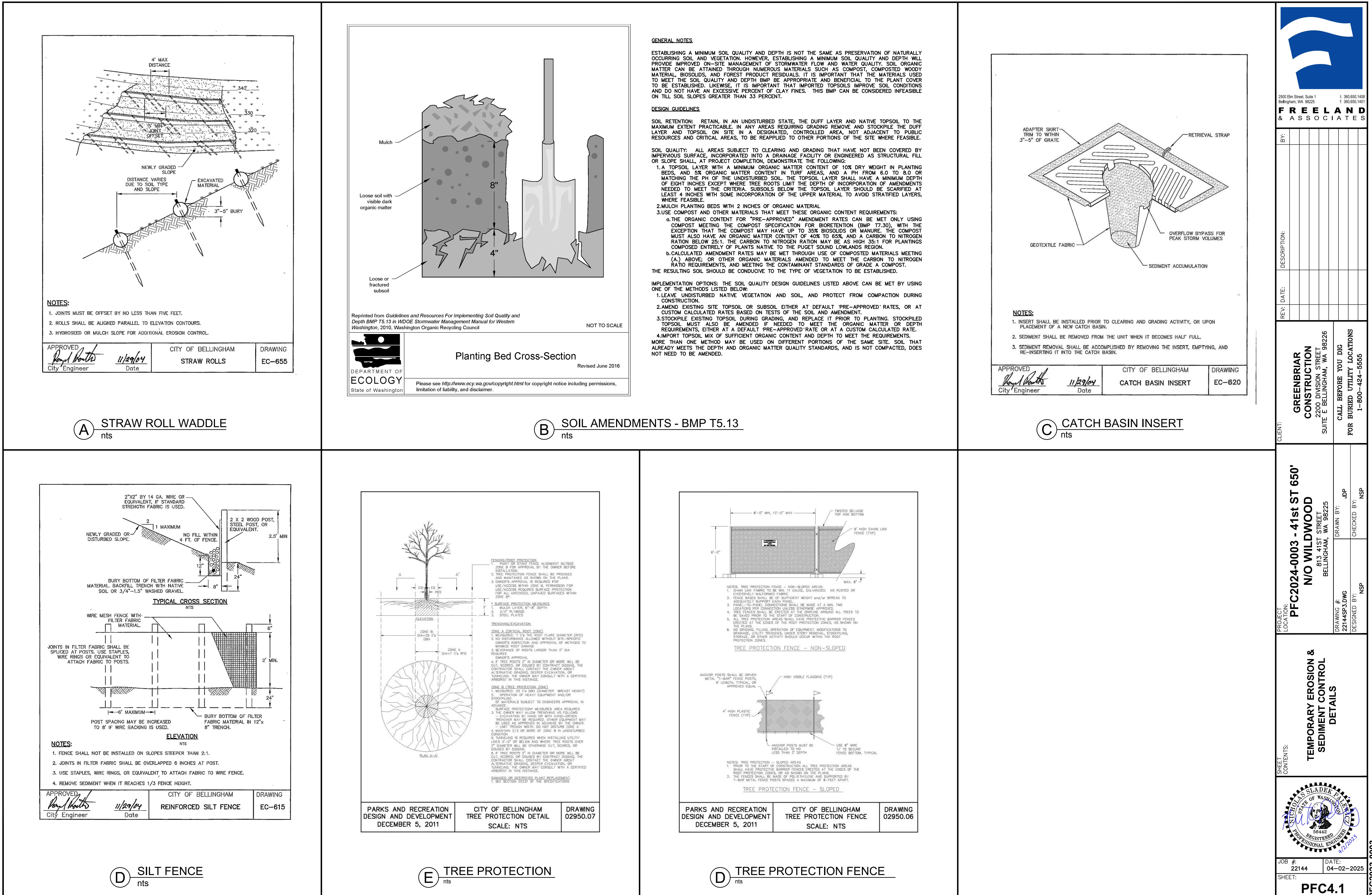
a. BMP T513 IS PROPOSED FOR THIS PROJECT. PROTECT COMPLETED LAWN AND LANDSCAPE AREAS FROM COMPACTION DUE TO CONSTRUCTION EQUIPMENT.

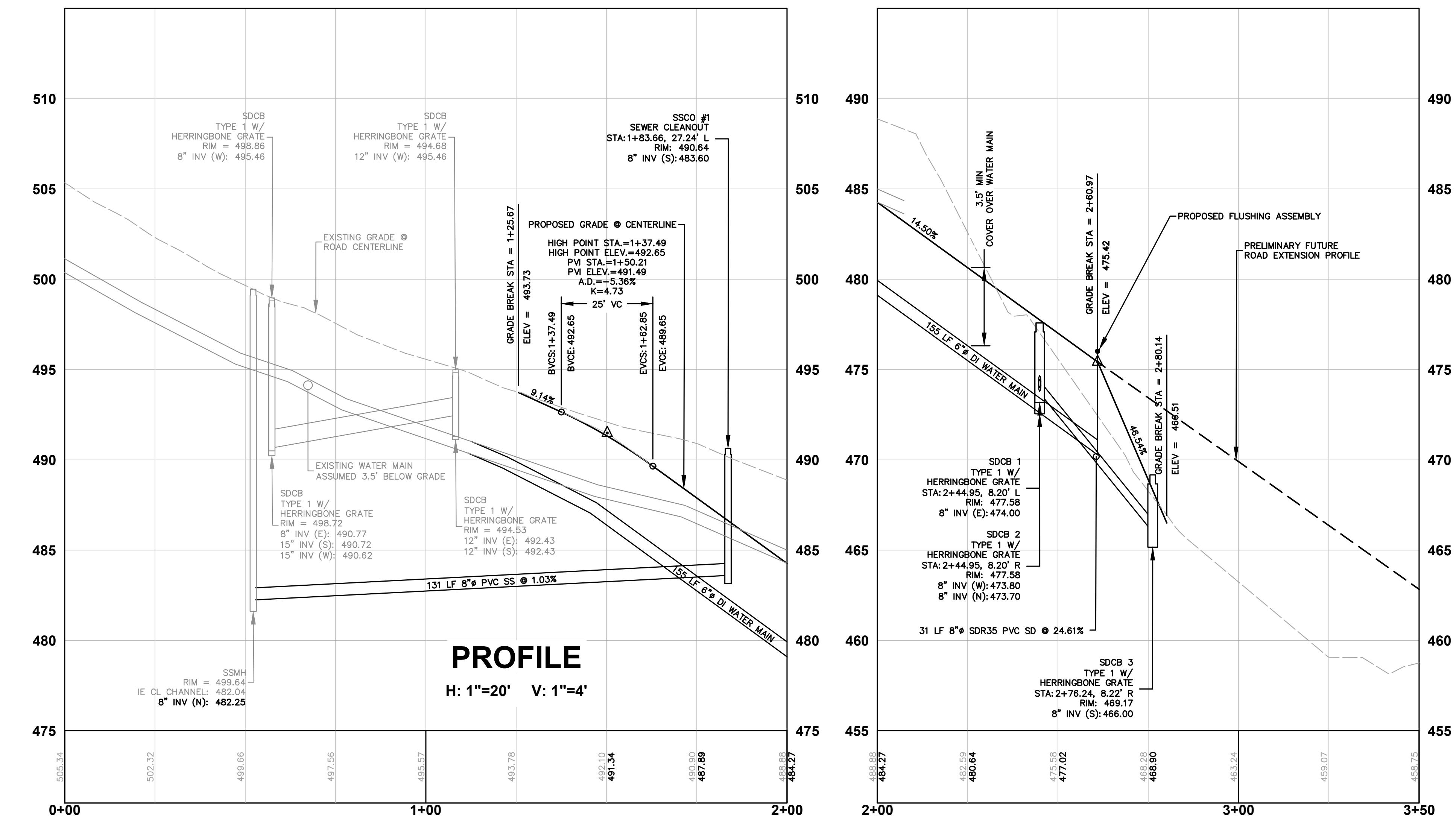
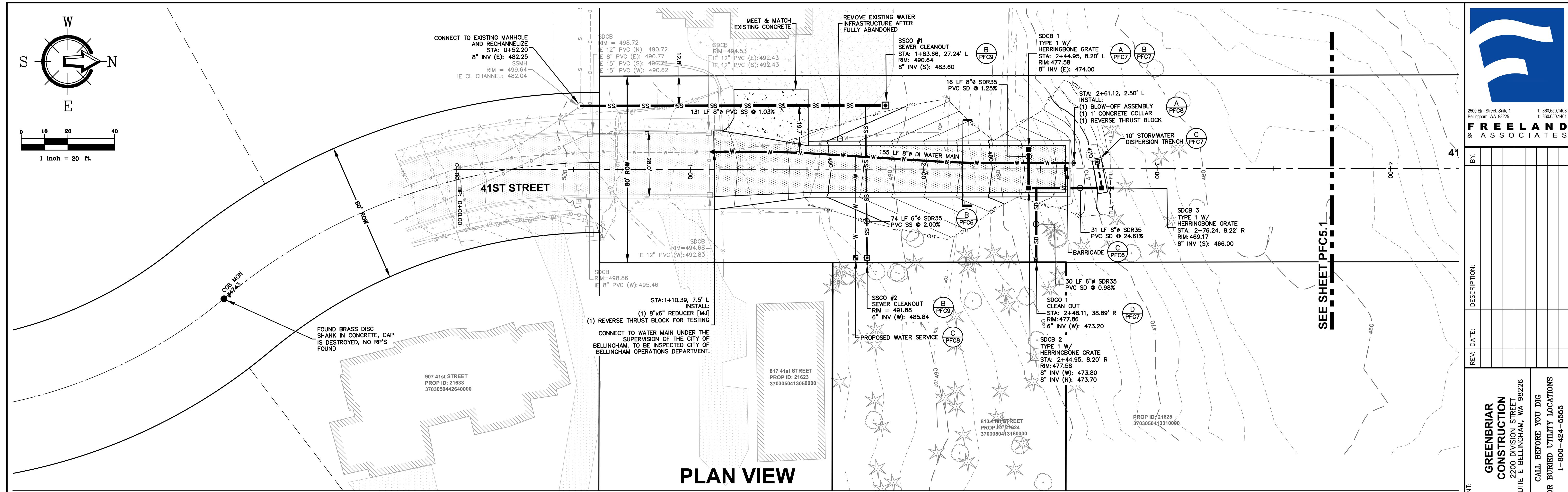


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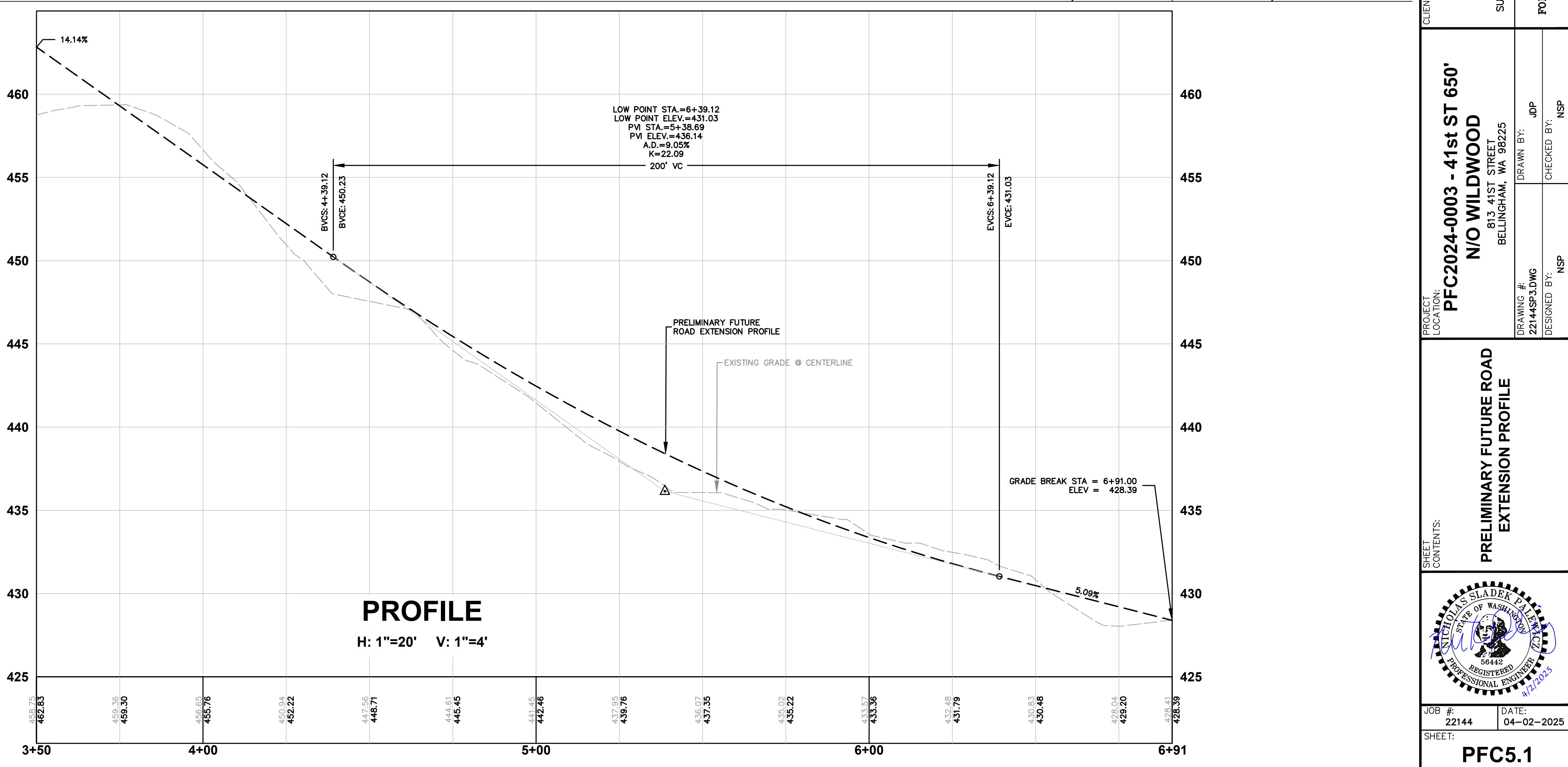
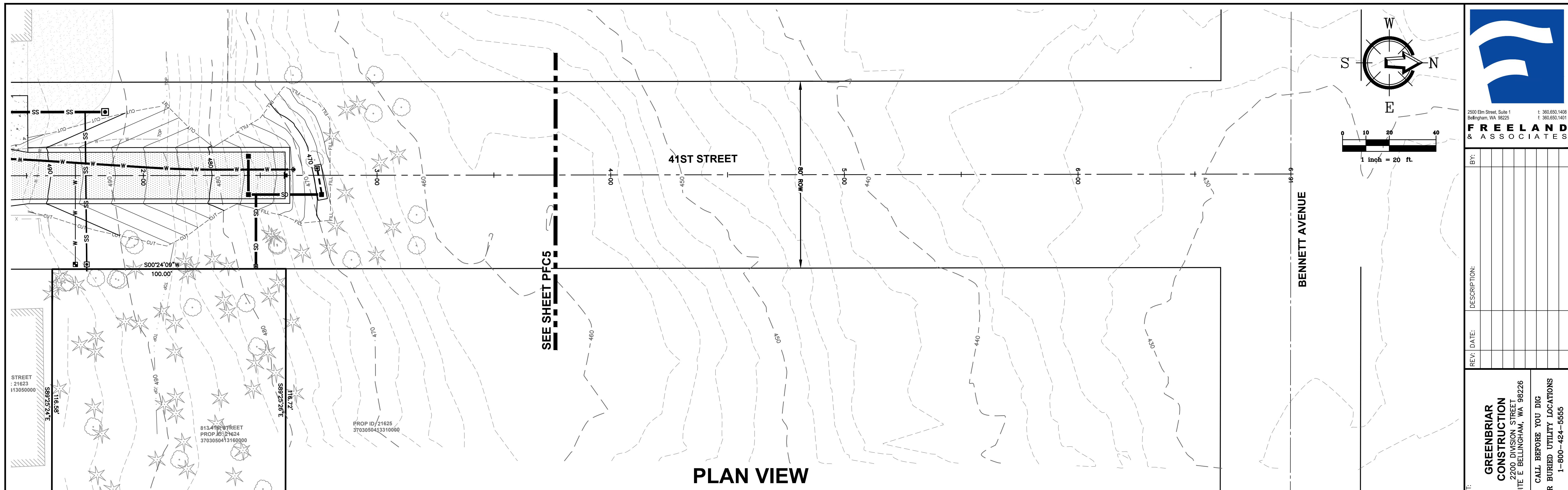
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2. PAD SHALL BE INSTALLED IN PLANTING STRIP AS APPROPRIATE.
3. THE THICKNESS SHALL BE INCREASED IF SOIL CONDITIONS DICTATE OR PER THE DIRECTION OF THE CITY.
4. MINIMUM DIMENSIONS MAY BE MODIFIED AS REQUIRED BY SITE CONDITIONS UPON APPROVAL OF THE CITY.

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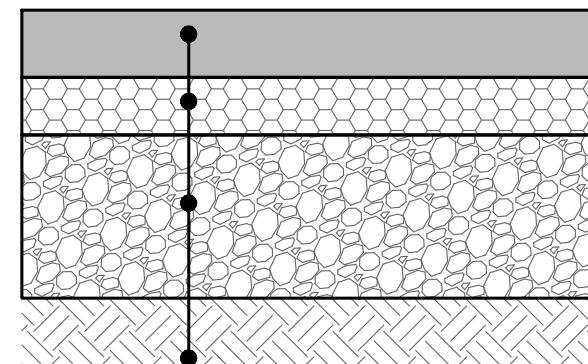


PROJECT LOCATION: PFC2024-0003 - 41st ST 650'		SHEET: N/O WILDWOOD 813 41ST STREET BELLINGHAM, WA 98225	
SHEET: CONTENTS: ROAD, DRAINAGE, & UTILITY PLAN & PROFILE		DRAWN BY: 22144SP3.DWG	CHECKED BY: NSP
		DESIGNED BY: NSP	FOR NSP
			
JOB #: 22144	DATE: 04-02-2025	PFC2023-0003	
SHEET: PFC5			

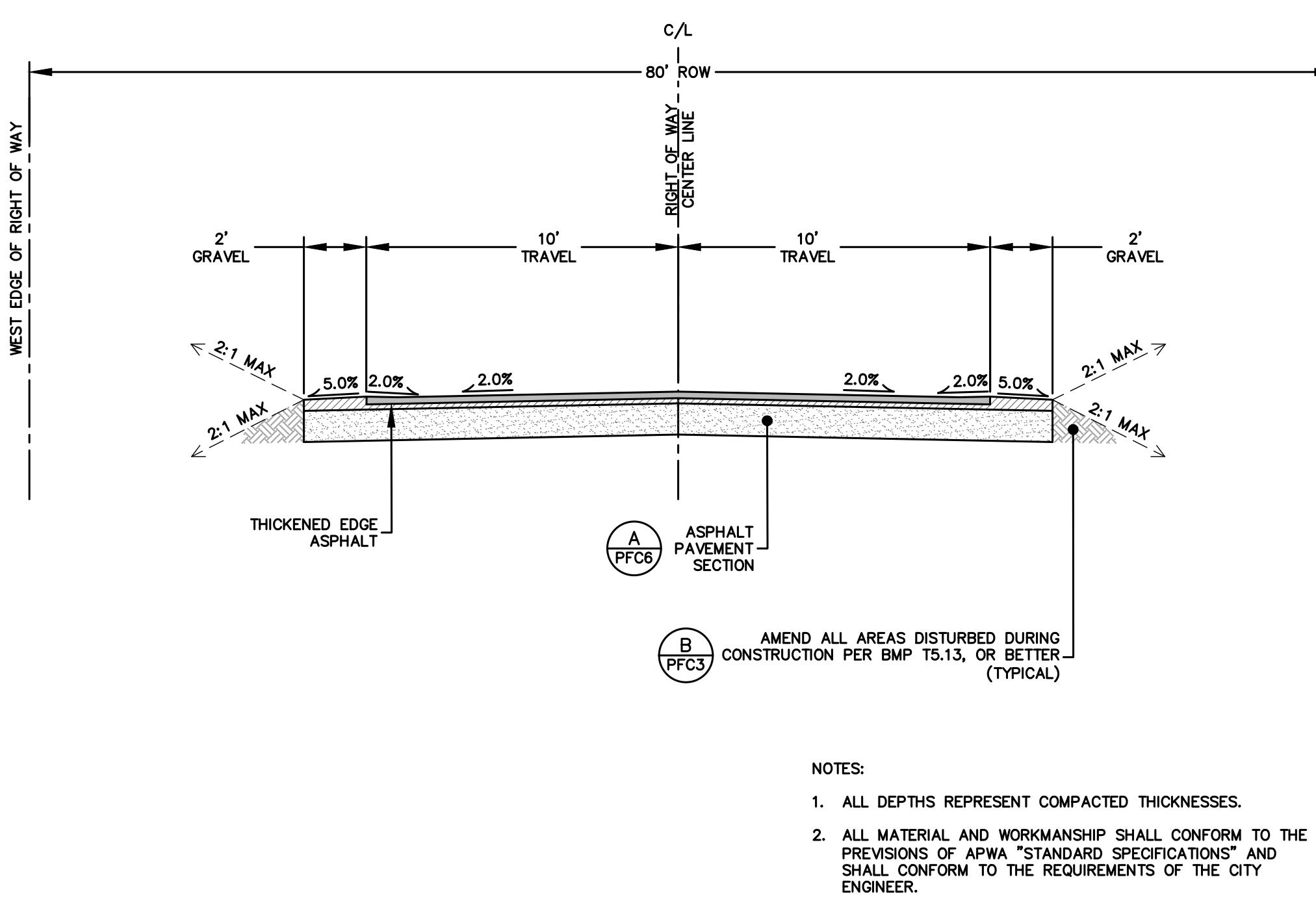


NOTES:

1. ALL DEPTHS REPRESENT COMPAKTED THICKNESSES.
2. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE PROVISIONS OF APIA "STANDARD SPECIFICATIONS" AND SHALL CONFORM TO THE REQUIREMENTS OF THE CITY ENGINEER.
3. AN EQUIVALENT ASPHALT TREATED BASE MAY BE SUBSTITUTED FOR THE GRAVEL BASE AND CRUSHED ROCK UPON APPROVAL OF THE CITY ENGINEER.
4. ENGINEER OF RECORD SHALL CERTIFY SUBGRADE PRIOR TO PAVING.

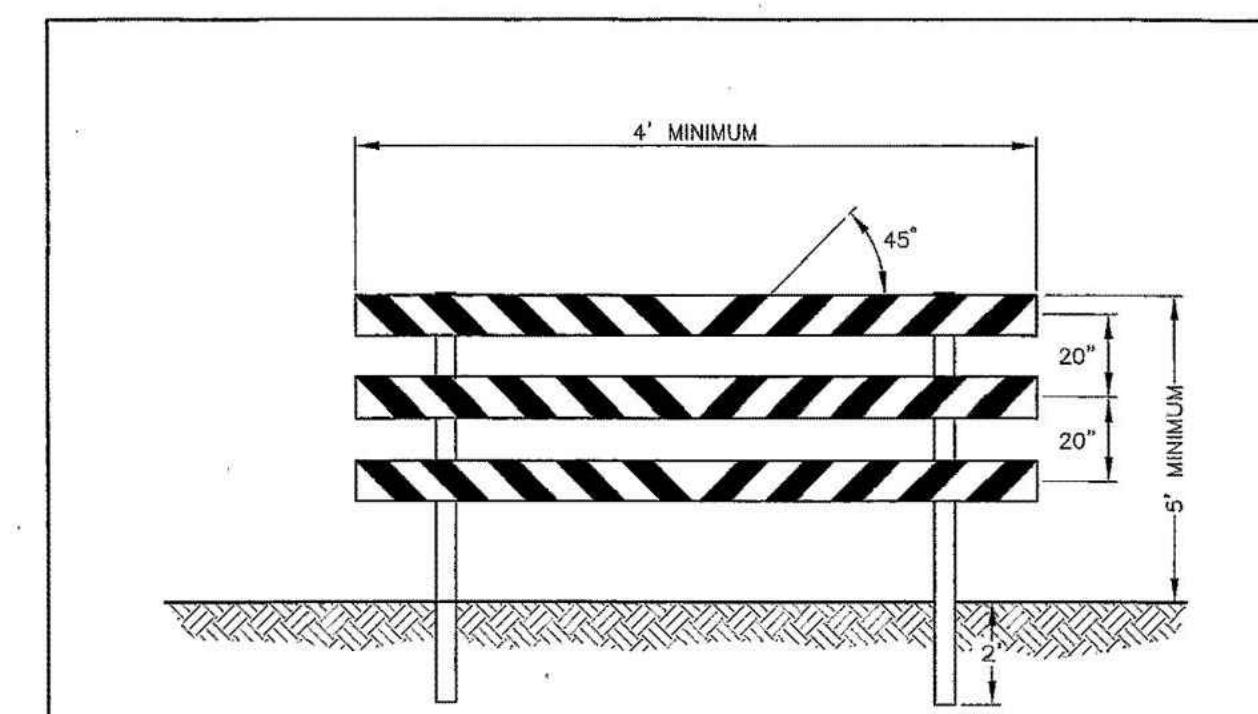


2.5" HOT MIX ASPHALT (HMA),
CLASS 2, PG 58H-22
2" CRUSHED SURFACING TOP
COURSE PER WSDOT 9-03.9(3)
12" GRAVEL BASE
COMPACTED TO 95% MAX
DENSITY, MODIFIED PROCTOR
EXISTING SUBGRADE OR
STRUCTURAL FILL COMPAKTED
TO 95% MAX DENSITY



A ASPHALT PAVEMENT SECTION
nts

B 41st STREET EXTENSION SECTION
nts



NOTES:

WIDTH OF RAIL = 8" TO 12"
LENGTH OF RAIL = 4' MIN. TO 8' MAX.
WIDTH OF STRIPES = 6"
HEIGHT = 5' MIN.
TYPE OF FRAME = 4"x4" POST BURIED 2' DEEP
COLOR = RED ON WHITE, FULLY REFLECTORIZED

APPROVED
By [Signature]
City Engineer
Date
1/20/24

CITY OF BELLINGHAM
TYPE 3 BARRICADE
TC-325

C BARRICADE
nts



2500 Elm Street, Suite 1
Bellingham, WA 98225
360.653.1468

FREELAND
& ASSOCIATES

CLIENT: **GREENBRIAR CONSTRUCTION**
PROJECT LOCATION: 2200 DIVISION STREET
SUITE E BELLINGHAM, WA 98226
DRAFTER: **N/O WILDWOOD**
813 41ST STREET
BELLINGHAM, WA 98225
DRAWN BY: **1/20/24**
CHECKED BY: **1/20/24**
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

PROJECT:
PFC2024-0003 - 41st ST 650'
ROAD DETAILS
DRAWING #: **2214-SP3.DWG**
DESIGNED BY: **NSP**

ROAD DETAILS
SHEET: **PFC6**
PROJECT:
PFC2023-0003

PROFESSIONAL ENGINEER
REGISTRATION
NO. 56443
STATE OF WASHINGTON
1/20/2025

JOB #: **22144** DATE: **04-02-2025**

SHEET: **PFC6**



2500 Elm Street, Suite 1
Bellingham, WA 98225
1-866-653-1468
564-1429
FREELAND
& ASSOCIATES

CLIENT:	GREENBRIAR CONSTRUCTION		
PROJECT LOCATION:	2200 DIVISION STREET SUITE E BELLINGHAM, WA 98226		
DRAWING #:		PFC2024-0003 - 41st ST 650' N/O WILDWOOD	
DRAWN BY:		813 41ST STREET BELLINGHAM, WA 98225	
CHECKED BY:		CALL BEFORE YOU DIG 1-800-424-5656	

SHEET DETAILS		SEWER DETAILS	
SHEET NUMBER:		PROJECT NUMBER:	
SHEET DATE:		DRAWING DATE:	
SHEET SIGNATURE:		PROJECT SIGNATURE:	

JOHN J. SLADEK, P.E.
PROFESSIONAL ENGINEER
REGISTRATION NO. 564-1429
EXPIRED 12/2025

JOB #: 22144 DATE: 04-02-2025

SHEET: PFC9

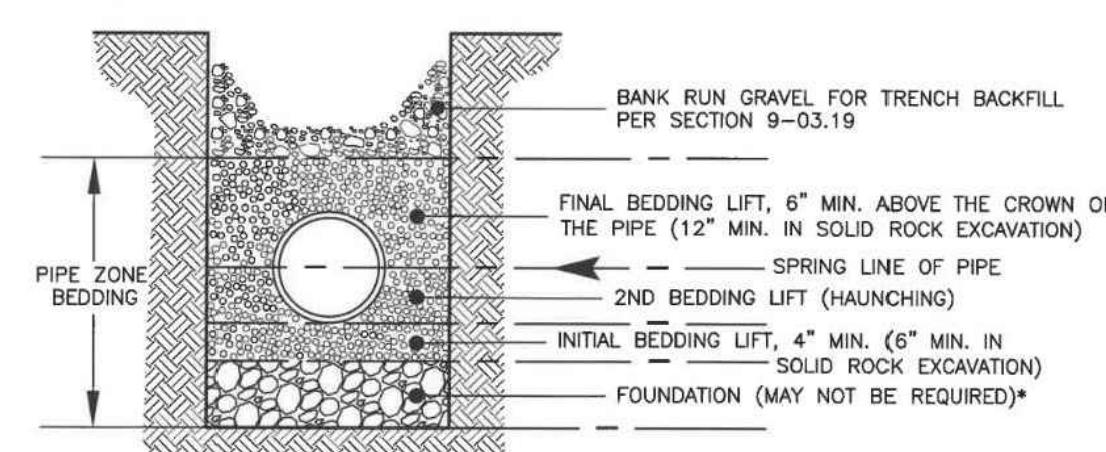
PFC2023-0003

THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS ARE TO BE USED IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, CURRENT EDITION:
BEDDING FOR SEWERS, DRAINS AND CULVERTS FOR THERMOPLASTIC PIPE—
BEDDING MATERIAL FOR THERMOPLASTIC PIPE SHALL BE PEA GRAVEL CONFORMING TO THE FOLLOWING SPECIFICATIONS.

PEA GRAVEL—PEA GRAVEL BEDDING SHALL BE A CLEAN MIXTURE FREE FROM ORGANIC MATTER AND CONFORMING TO THE FOLLOWING GRADATION WHEN TESTED IN ACCORDANCE WITH ASTM D422:

SIEVE SIZE	PERCENT FINER
1/2	100
3/8	95
#4	10-20
#10	0-5
#20	0-2

BACKFILL—ALL TRENCHES IN THE RIGHT-OF-WAY, UNDER PAVEMENT, OR OTHER AREAS WHERE SETTLEMENT WILL BE DETERMINANT SHALL BE BACKFILLED WITH IMPORTED TRENCH BACKFILL PER WSDOT STANDARD SPECIFICATION SECTION 9-03.19 AND COMPACTED TO 95% DENSITY AS SPECIFIED IN SECTION 2-03.3(14D). TRENCHES IN UNIMPROVED ROW MAY BE BACKFILLED WITH NATIVE MATERIAL WHEN APPROVED BY THE CITY ENGINEER.

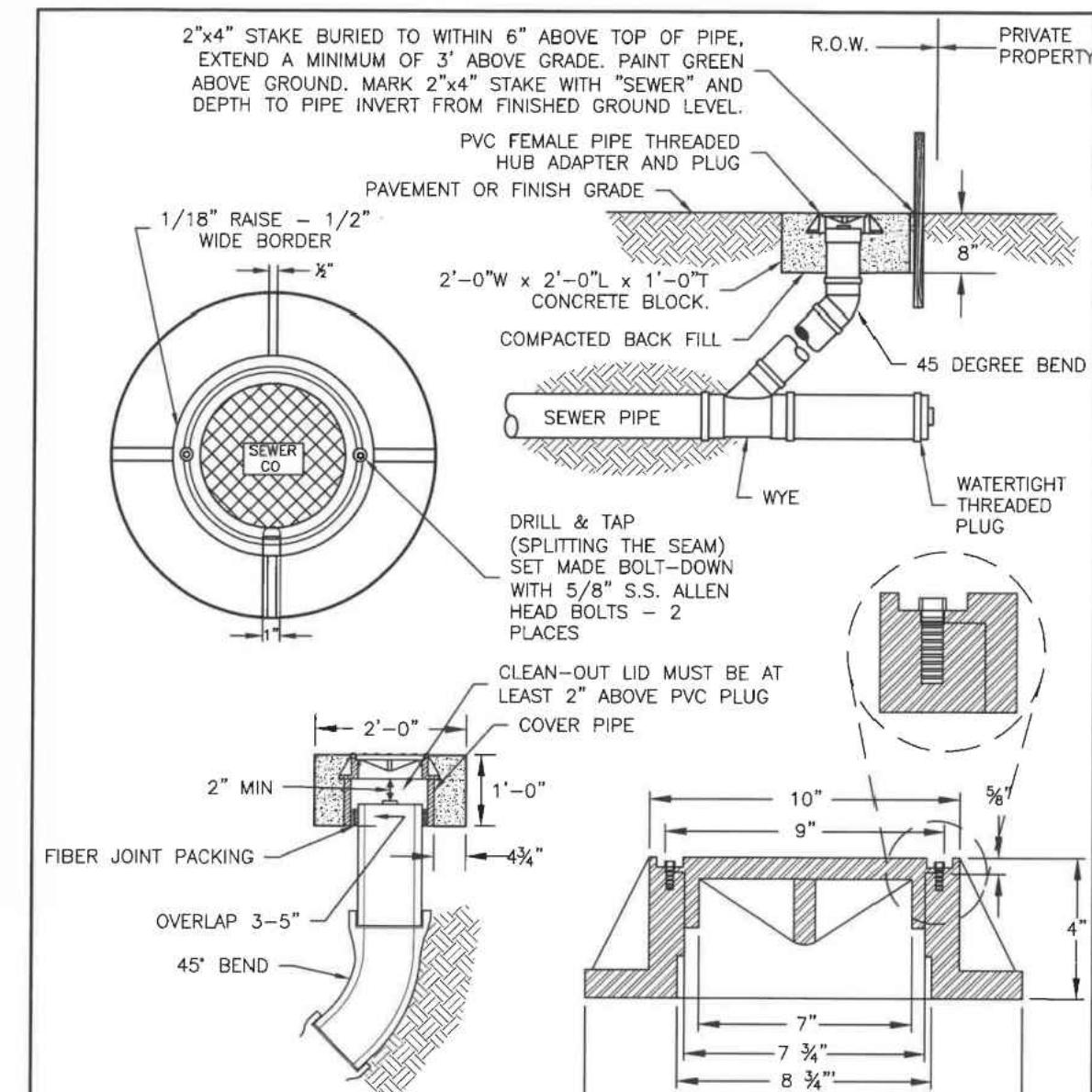


*UNUSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED AND REPLACED WITH GRAVEL BACKFILL FOR FOUNDATIONS, CLASS B PER WSDOT STANDARD SPECIFICATIONS SECTIONS 7-06.3(1A) AND 9-03.12(1B).

APPROVED
22 May 2023
City Engineer

NOT TO SCALE

CITY OF BELLINGHAM
THERMOPLASTIC PIPE TRENCH
SECTION DETAIL
SS-750

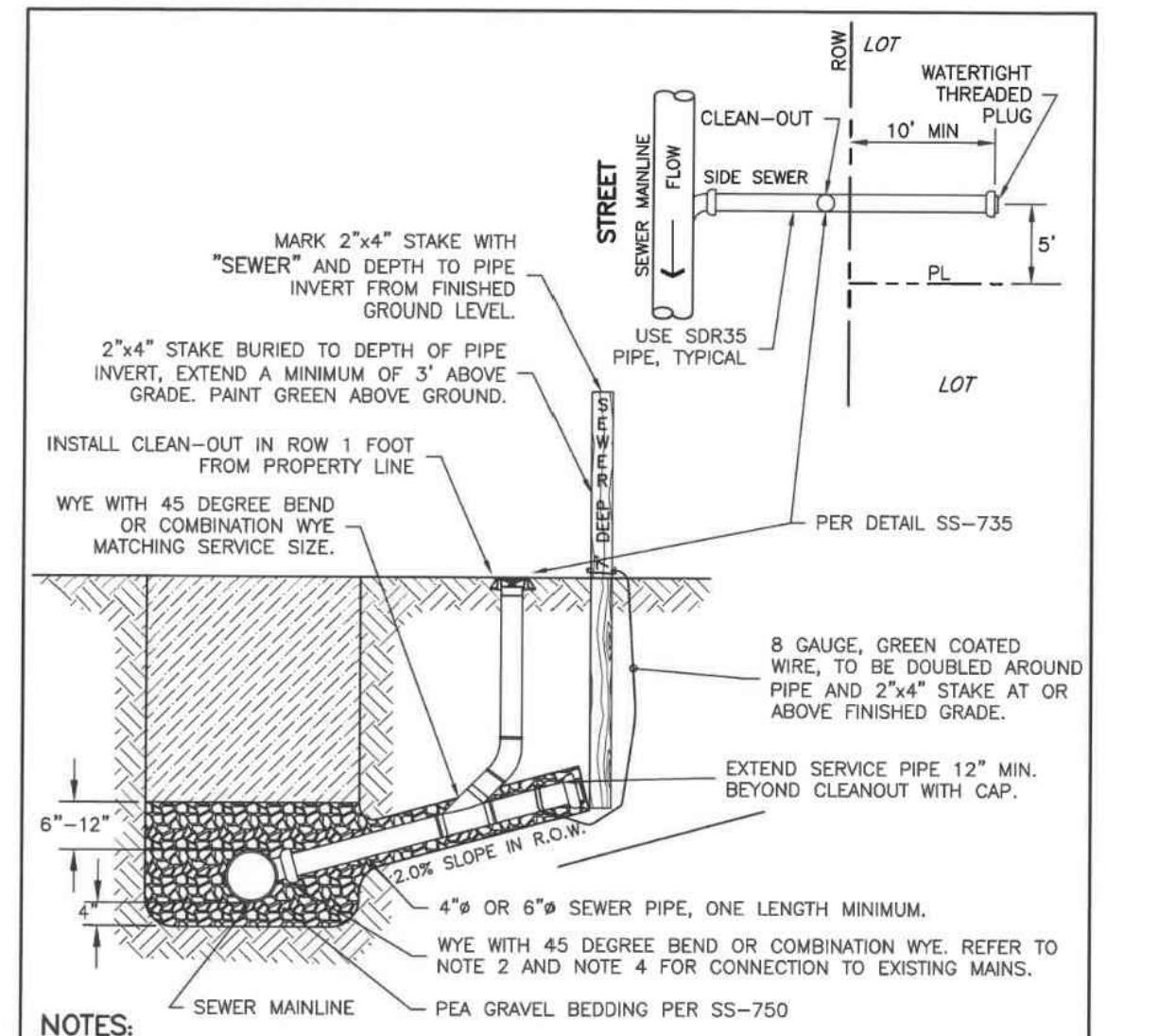


NOTES:
1. FOR 6" AND LARGER SEWER MAINS THE VERTICAL PORTION OF THE MAIN IS TO BE REDUCED TO 6" BETWEEN THE WYE AND CAST IRON RING AND COVER.
2. IF CLEANOUT IS LOCATED IN ASPHALT, THE CONCRETE BLOCK IS TO BE LEFT APPROXIMATELY 1-1/2" LOW TO ALLOW FOR AN ASPHALT TOPPING OR LIKE MIXTURE AS THE SURROUNDING AREA. IN ALL CASES THE CONCRETE BLOCK WILL BE 12" THICK.

APPROVED
22 May 2023
City Engineer

NOT TO SCALE

CITY OF BELLINGHAM
SEWER MAIN AND SIDE SEWER
CLEANOUT
SS-735



NOTES:
1. UNLESS OTHERWISE INDICATED ON PLAN, SIDE SEWER SHALL BE A MIN. OF 6' DEEP AT PROPERTY LINE, OR 5' LOWER THAN THE LOWEST LOT ELEVATION, WHICHEVER IS LOWER.
2. WHEN REPLACING EXISTING SIDE SEWER, CONTRACTOR SHALL VERIFY AND CORRECT EXISTING DEFICIENCIES SUCH AS POSITIVE FALL, OTHER EXISTING CONNECTIONS, SAGS, OR DEFLECTIONS IN THE EXISTING SEWER.
3. INSTALL CLEANOUT AFTER 3 BENDS, AT MAX 100' INTERVALS, AT END OF LINE, AND WITHIN 2' OF HOUSE.
4. EXISTING PIPE CONNECTIONS SHALL BE CUT IN WYE, INSERTA TEE MAY BE USED ON 12" DIAMETER.
5. IF CONNECTING TO A NEW SEWER MAIN, NEW LATERAL CONNECTIONS TO EXISTING MAIN SHALL BE PER SS-740.
6. WYES OR TEES CONNECTED TO THE SEWER MAIN SHALL BE ROTATED TO A 2 OR 10 O'CLOCK ORIENTATION.

APPROVED
22 May 2023
City Engineer

NOT TO SCALE

CITY OF BELLINGHAM
SANITARY SIDE SEWER
SS-730

(A) PVC PIPE BEDDING
nts

(B) SEWER CLEANOUT
nts

(C) SANITARY SIDE SEWER
nts