

16. METHOD OF SURVEY, SURVEY DATA, AND SURVEY EQUIPMENT UTILIZED TO CREATE THE BASE

MAP/EXISTING CONDITIONS ARE NOTED ON SHEET C2 OF THIS PLAN SET.

CRIM SHOI	RT PLAT		
SHEFT INDEX			ONIY, STATE OF WA
 STEET INDEX COVER SHEET EXISTING CONDITIONS TEMPORARY EROSION AND SEDIMENT CONTROL PLAN TESC DETAILS AND SWPPP DRAINAGE PLAN UTILITY PLAN DRAINAGE DETAILS ROAD DETAILS WATER AND SEWER DETAILS 	PROJECT PROJECT NUMBER PROVINCE STATESCOND AVENUE STATESCOND AVENUE SUBPRESSION WATERSHED SCIENCE & ENGINEERING TO SEAT ELLIOT SOG 2ND AVENUE SUITE 2700 SEATTLE, WA 98104 (206) 521–3000	CONTINUENT CONTI	SURVEYOR SURVEYING JERNEK SURVEYING JERNDALE, VA 98248 JOO) 746-8801 OCONST SERVICES, INC DARCIA, PE YI MARINE DRIVE BELLINGHAM, WA 98225 JOO) 733-7318 BOOD GEOLOGY DAMES STREET BELLINGHAM, WA 98225 JOOJ JELLUM JYZS JAMES STREET BELLINGHAM, WA 98225 JOOJ JELLUM JYZS JAMES STREET BELLINGHAM, WA 98225 JOOJ JOG-6171 BOUND GEOLOGY® BULINGHAM, WA 98225 JOOJ JOG-6171 BULINGHAM, WA 98225 JOOJ JOG-6171 BULINGHAM, WA 98225 JOOJ JOG-6171 BULINGEOLOGY® BULINGHAM, WA 98225 JOOJ JOG-6171 BULINGEOLOGY® BULINGHAM, WA 98225 JOOJ JOG-6171 BUNDAGEOLOGY®
	TAX PARCEL 390229041392 NOTE: POTHOLING ALL EXISTING UTILITIES I DOES NOT GUARANTEE AS BUILT IN RESPONSIBLE IF FIELD MODIFICATION ALL REQUIRED AND APPROVED CIVIL PRIOR TO FINAL PLAT AND/OR BUIL	S REQUIRED PRIOR TO CONSTRUCTION T FORMATION IN THE CITY DATA BASE IS IS ARE REQUIRED BECAUSE POTHOLING . PLAN IMPROVEMENTS MUST BE COMPL DING OCCUPANCY IF ALLOWED BY THE	TO VERIFY DESIGN FEASIBILITY. THE CITY ACCURATE AND WILL NOT BE HELD WAS NOT DONE PRIOR TO DESIGN. ETE AND APPROVED BY PUBLIC WORKS DIRECTOR.
EARTH	WORK		AS-BUILT ONLY INF HAS BEEN

17. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE. CALL 1-800-424-5555 FOR UTILITY LOCATE 48 HOURS PRIOR TO WORK, CONTRACT TO HOLD. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL ADJACENT UTILITIES WHICH INCLUDE BUT ARE NOT LIMITED TO: WATER, SEWER, STORM SEWER, POWER, TELEPHONE, CABLE TV, IRRIGATION, AND STREET LIGHTING. CONTRACTOR

18. A REVOCABLE ENCROACHMENT PERMIT SHALL BE OBTAINED PRIOR TO COMMENCING WORK IN THE PUBLIC

1. GRAVEL BASE AND GRAVEL BALLAST USED FOR TRENCH BACKFILL AND ROAD CONSTRUCTION MUST MEET

2. BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF ITS

THE CONTRACTOR OR PROPONENT SHALL BE RESPONSIBLE FOR ALL COMPACTION TESTING. PRIOR TO IMPORTING OF MATERIAL FOR BASE AND CSTC THE CONTRACTOR SHALL PROVIDE EVIDENCE OF SATISFACTORY PASSING GRADING AND DEGRADATION TEST RESULTS TO THE ENGINEER AND CITY PRIOR TO

WHERE SHOWN ON THE PLANS, PAVEMENT MARKINGS SHALL BE OBLITERATED UNTIL BLEMISHES CAUSED BY THE PAVEMENT MARKING RÉMOVAL CONFORM TO THE COLORATION OF THE ADJACENT PAVEMENT.

4. ALL PAVEMENT REPAIR SHALL BE SAW-CUT BEFORE REMOVAL. AR-4000W SHALL BE APPLIED TO ALL

5. ASPHALT CONCRETE PAVEMENT SHALL NOT BE PLACED NOR COMPACTED DURING HOURS OF DARKNESS.

TEST PRESSURE FOR WATERMAIN ACCEPTANCE SHALL BE 225 p.s.i. AT THE HIGHEST POINT ON THE WATER LINE AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. ALL PURIFICATION ACCEPTANCE TESTING SHALL BE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. THE PIPE WILL NOT PASS UNLESS A ZERO BACTERIA COUNT IS OBTAINED FOR TWO CONSECUTIVE TESTS 24 HOURS APART. SEPARATION MUST BE MAINTAINED BETWEEN THE NEW WATERMAIN AND THE CITY'S WATER UNTIL

ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS, SECTIONS 702 AND 705 AND THE MOST RECENT VERSION OF WSDOT

SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION AND 7-09.3(9). 4. ALL PIPE SHALL HAVE A MINIMUM COVER OF 3.0 FEET AND NOT TO EXCEED 42" COVER WITHOU CITY OF

- THE CONTRACTOR SHALL CLEAR, GRUB AND CLEAN UP THOSE AREAS SHOWN ON THE PLANS 1.
- THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT. GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS OR ESTABLISHED BY THE ENGINEER. IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEERING STUDY.
- MAXIMUM DENSITY AND OPTIMUM MOISTURE FOR GRANULAR MATERIALS WILL BE DETERMINED USING ASTM D-1557 TEST METHOD.
- THE UNSUITABLE MATERIAL NOT FIT FOR A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY THE ENGINEER AND REPLACED WITH A SUITABLE BACKFILL MATERIAL

STORM DRAINAGE

- ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT 7-08. THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL AND ANY REQUIRED PIPE BEDDING, TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.
- 2. ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS AND MANHOLES, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT RETENTION/DETENTION FACILITY SHALL HAVE SOLID LOCKING LIDS.
- ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS"
- ALL DRIVEWAY CULVERTS LOCATED WITHIN THE RIGHT-OF-WAY SHALL BE OF SUFFICIENT LENGTH TO PROVIDE A MINIMUM 3:1 SLOPE FROM THE EDGE OF THE DRIVEWAY TO THE BOTTOM OF THE DITCH. CULVERTS SHALL HAVE BEVELED END SECTIONS PER WSDOT
- 5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS OF ALL STUB-OUT CONVEYANCE LINES WITH RESPECT TO THE UTILITIES (E.G. POWER, GAS, TELEPHONE, TELEVISION).

SANITARY SEWER SPECIFICAITONS

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE. AND MUNICIPAL CONSTRUCITON, CURRENT EDITION AND THE CITY OF FERNDALE DEVELOPMENT STANDARDS SECTON 5 AND SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE.
- FOUR INCH THROUGH TWELVE-INCH PIPE SHALL BE PVC PIPE CONFORMING TO ASTM D-3034, SDR-35 2. OR EQUAL. PIPE JOINTS SHALL BE MADE WITH FLEXIBLE GASKETS CONFORMING TO THE REQUIREMENTS OF SECTION 7-17.3G (2)E OF THE STANDARD SPECIFICATIONS.
- 3. TRENCH EXCAVATION SHALL BE ACCORDING TO SECTION 7-08.3(1) OF THE STANDARD SPECIFICATIONS.
- 4. THE BEDDING SHALL BE PEA GRAVEL PER SS-1.
- PIPE LAYING SHALL MEET THE REQUIREMENTS OF SECTION 7-08.3(2)B OF THE STANDARD SPECIFICATIONS.
- ALL SIDE SEWERS SHALL BE CONSTRUCTED ACCORDING TO THE CITY OF FERNDALE STANDARD PLAN SS-6. CONNECT SIDE SEWERS WITH SANITARY TEE. ALL TRENCH BACKFILL UNDER EXISTING OR FUTURE PAVING SHALL BE BANK RUN GRAVEL, CLASS "B"
- AND SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
- 8. ALL SEWER PIPE WILL BE PRESSURE TESTED AND WILL SCANNED BY MEANS OF A TV CAMERA PRIOR TO ACCEPTANCE BY THE CITY OF FERNDALE. 9. ALL MANHOLES WILL BE ACCORDING TO THE CITY OF FERNDALE STANDARD PLAN NO. SS-2. THROUGH
- SS-4 AND WSDOT MH TYPE 1 STANDARD PLAN B-15.20.01. 10. ALL CLEANOUTS SHALL BE ACCORDING TO CITY OF FERNDALE STANDARD PLAN NO. SS-5.
- 11. ALL HARD SURFACED PAVEMENTS MUST BE REPAIRED AT THE CLOSE OF EACH WORK DAY. THE REPAIRS
- CAN BE TEMPORARY WITH ASPHALT COLD MIX OR PERMANENT WITH HOT MIX ASPHALT OR CONCRETE. 12. ALL WORK MUST BE INSPECTED AND APPROVED BY A REPRESENTATIVE OF THE CITY OF FERNDALE PUBLIC WORKS, AND 24 HOURS NOTICE MUST BE GIVEN PRIOR TO STARTING WORK OR TO SCHEDULE INSPECTIONS. 13. ALL TESTING SHALL BE DONE IN THE PRESENCE AND UNDER THE SUPERVISION OF REPRESENTATIVE OF THE CITY OF FERNDALE.





	2500 E Bellingi	Im Stree ham, WA	et, Suite 1 A 98225		t: 36 f: 36	0.650.1408 0.650.1401
	8 Βλ:					ES
	TE: DESCRIPTION:					
	REV: DA			IN 98248) DIG	55 LOCATIONS
	CLIENT:		HUNTER CR	FERNDALE, WASHINGTO	CALL BEFORE YOU	FOR BURIED UTILITY I 1-800-424-55
			RT PLAT	4D AVENUE HINGTON 98248	DRAWN BY: TF	снескер ву: тғ
	PROJECT LOCATION:		CRIM SHO	55/3 SECO FERNDALE, WAS	DRAWING #: 21060AB2.DWG	DESIGNED BY: TF
APPROVED 07/19/2024	SHEET CONTENTS:			EXISTING CONDITIONS		
CITY OF FERNDALE PUBLIC WORKS DEPARTMENT AS-BUILT NOTE: ONLY INFORMATION NOTED AS AS-BUILT "(AB)" HAS BEEN PROVIDED BY CONTRACTOR	JOB	HI PROT	III A.	FRE WASH	ELLANDIN BUTTE:	2.2024
	SCA HOR	2100 LE: I Z: 1' T: N	60 '=20' A	0 S⊦	7–12– IEET: C	-2024 2

ENGINEER'S CERTIFICATION: "I HEREBY CERTIFY THAT THE IMPROVEMENTS OF CRIM SHORT PLAT HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND CONSTRUCTED IN GENERAL CONFORMANCE WITH THE PLANS APPROVED BY PUBLIC WORKS DIRECTOR FOR SAID DEVELOPMENT AND THE GENERAL SPECIFICATIONS ADOPTED BY THE CITY OF FERNDALE DEPARTMENT OF PUBLIC WORKS."







STORMWATER POLLUTION PREVENTION PLAN

Waste materials generated on site will be handled and disposed of in a manner that does not cause contamination of stormwater; including covering soil stockpiles. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. On-site fueling tanks must include secondary containment. Routine inspections of the waste material storage areas will be conducted to make sure that leaks or spills do not occur. Any leakage or spills will be cleaned up immediately.

Maintenance of heavy equipment involving oil changes, hydraulic system drain down, solvent and de-greasing cleaning and/or other activities that may result in discharge or spillage of pollutants to the ground or into stormwater runoff will be conducted with spill prevention measures in place, including conducting maintenance on a temporary pad that can be used to capture large spills and the use of drip pans. In the event that emergency repairs need to be performed and climatic conditions may result in a precipitation event prior to the repair being completed, the repair area, which includes the vehicle, will be covered with tarps or other plastic sheeting. Discharges, spills, or leaks will be cleaned immediately. The notification procedure outlined in the permanent site SWPPP is as follows:

All spills will be reported to the Department of Ecology, Spill Response Program:

BMPs considered for Element #9 include: Spill Cleanup and Response Practices

No de-watering is proposed as part of this project. If necessary, clean, non-turbid de-watering water, such as well-point ground water, can be discharged to systems tributary to State surface waters, provided the de-watering flow does not cause erosion or flooding of receiving waters. These clean waters should not be routed through a stormwater sediment pond.

Highly turbid or contaminated dewatering water from construction equipment operation, concrete tremie pour, or work inside a cofferdam shall be handled separately from stormwater.

Other disposal options, depending on site constraints, may include:

- Transport off site in vehicle, such as a vacuum flush truck, for legal disposal in a manner that does
- On-site treatment using chemical treatment or other suitable treatment technologies,
- Sanitary sewer discharge with local sewer district approval, or • Use of a sedimentation bag with outfall to a ditch or swale for small volumes of localized dewatering

All temporary and permanent erosion and sediment control BMPs will be inspected by the CESCL, and shall be maintained, and repaired by the contractor to assure continued performance of their intended function. Maintenance and repair shall be conducted in accordance with the relevant BMP identified in Elements #1 through #10. Temporary erosion and sediment controls identified above will be inspected daily during the wet season. Needed repairs and maintenance will occur as soon as practicable or, in the event of a forecast of inclement weather, repairs and maintenance will occur immediately.

Temporary erosion and sediment control BMPs will be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment will be removed or stabilized on site. Disturbed soil resulting from removal of BMPs or vegetation shall be permanently



SSMH#1050 RIM=19.63 NE IE=14.74, 8"CONC SW IE=14.81, 8"CONC	
Stoon At	2500 Elm Street, Suite 1 Bellingham, WA 98225 F R E E L A N D & A S S O C I A T E S ☆
1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8	ESCRIPTION:
A B B B B B B B B B B B B B B B B B B B	CLIENT: REV: HUNTER CRIM 5573 SECOND AVENUE 5573 SECOND AVENUE FERNDALE, WASHINGTON 98248 CALL BEFORE YOU DIG FOR BURIED UTILITY LOCATIONS 1-800-424-5555
ROPOSED CURB TYPICAL	CT ION: CRIM SHORT PLAT 5573 SECOND AVENUE 5573 SECOND AVENUE 5573 SECOND AVENUE FERNDALE, WASHINGTON 98248 NG # AB2.DWG TF AB2.DWG TF CHECKED BY: TF
E GRINDS	E PLAN DRAW 21060 DESIG
incomposed driveway curb Image: CB incomposed driveway curb Image: CB <td< td=""><td>SHEEL CONTENTS: SHEEL CONTENTS</td></td<>	SHEEL CONTENTS: SHEEL CONTENTS
FROM FACE OF GUTTER UT ASPHALT LINE, WITH FULL R4 SECTION VEL AND ASPHALT AS ON THE R-4 CITY DETAIL. BY: Hamping Icovin ECB O7/19/2024 BY: Hamping Icovin ECD CITY OF FERNDALE PUBLIC WORKS DEPARTMENT	JOB #: DATE: 21060 07-12-2024 SCALE: SHEET: HORIZ: 1"=10' C5

RH 00754.005 07/19/24



00754.006 07/19/24 RH		
1408 1401 D S	1-800-424-000	F
650. 650. 1	FUR DUNIEU UIIIII LUVAIIVUS	CHECKED BY:
360. 360. 360. T		
A		DRAWN BY:

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	
Design and	• Vacuum slurry and cuttings during cutting and surfacing operations.	20"
Installation Specifications	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. 	N 1.
	 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. 	2.
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.	ST OF FEI
Volun	ne II – Construction Stormwater Pollution Prevention - August 2012 4-44	Marannes
B	SAWCUTTING nts	

REQUIREMENTS: a. THE ORGANIC CONTENT FOR

d. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP T7.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATION BELOW 25:1. THE CARBON TO NITROGEN RATION MAY BE AS HIGH 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS

REGION. b. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIALS MEETING (A.) ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND MEETING THE CONTAMINANT STANDARDS OF GRADE A COMPOST.

THE RESULTING SOIL SHOULD BE CONDUCIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.

IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:

1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION. 2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND

AMENDMENT. 3. STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT 'PRE-APPROVED' RATE OR AT A CUSTOM CALCULATED RATE.

4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND

ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

E PVC PIPE BEDDING SPECIFICATIONS

00754.008 07/19/24 RH

