5828 2ND AVENUE

ONSITE CIVIL & EATON AVENUE FRONTAGE IMPROVEMENTS

BEING A PTN. OF THE NE 1/4 OF THE SW 1/4, SEC. 20, TWP. 39N., RGE. 2 E., W.M., CITY OF FERNDALE, WHATCOM COUNTY

LEGEND

- = FOUND ROADWAY MONUMENT

 = FOUND REBAR AND CAP

 THEOREM STORM PRAIN CATCUL BASIN (TXP)
- = EXISTING STORM DRAIN CATCH BASIN (TYPE I)
 = PROPOSED STORM DRAIN MANHOLE (TYPE 2)
- = PROPOSED STORM DRAIN CATCH BASIN
 = EXISTING SANITARY SEWER MANHOLE
- = PROPOSED SEWER CLEANOUT
- = EXISTING WATER BLOW-OFF VALVE
- = EXISTING FIRE HYDRANT
- = EXISTING WATER VALVE

 = PROPOSED WATER METER BOX
- = EXISTING POWER/AND OR UTILITY POLE
 = EXISTING GUY WIRE
- = EXISTING POWER METER/STRUCTURE

 = EXISTING POWER VAULT
- = EXISTING POWER JBOX/HANDHOLD
- = EXISTING UTILITY POLE
 = EXISTING TV BOX
- = EXISTING UNDERGROUND TV OF STATE OF S

= EXISTING OVERHEAD ELECTRIC LINES

= EXISTING OVERHEAD UTILITES (UNKNOWN)

ENGINEER'S CERTIFICATION:
"I HEREBY CERTIFY THAT THE IMPROVEMENTS OF
5828 2ND AVENUE HAVE BEEN INSPECTED BY
FREELAND & ASSOCIATES, INC. AND CONSTRUCTED
IN 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

DATE: 3-8-/8

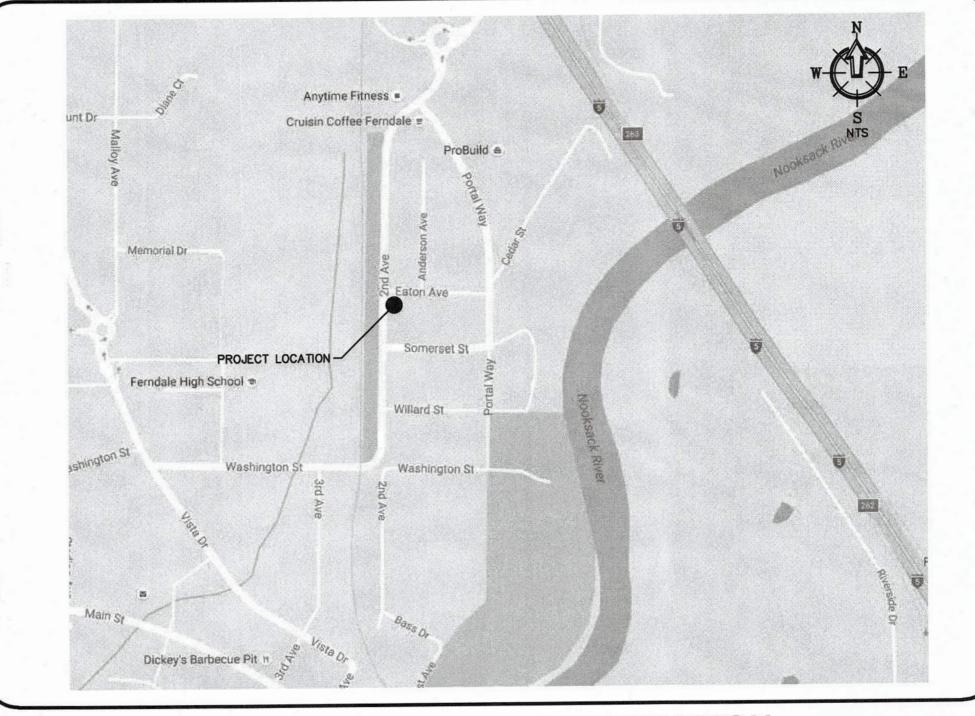
AS-BUILT DRAWING

AS-BUILT STORMWATER AND UTILITY INFORMATION SHOWN PROVIDED BY CHRISTIE & CHRISTIE LAND SURVEYING, INC INFORMATION RECEIVED 12/19/2017

SHEET INDEX

- COVER SHEET
- C2 EXISTING CONDITIONS
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- GRADING, & DRAINAGE PLAN
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- C9 PAVING DETAILS
- C10 STORMWATER DETAILS
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VICINITY MAP



GENERAL NOTES

GENERAL REQUIREMENTS

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, CURRENT EDITION AND THE CITY OF FERNDALE DEVELOPMENT STANDARDS AND SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE. IN THE EVENT OF A CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- 2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWS ALL PLANS AND OTHER CONSTRUCTION DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. THROUGHOUT THE PERIOD OF CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE THE TERMS OF ALL PERMITS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING SUB-SURFACE CONDITIONS AND SOILS
- 4. THE SURVEYOR SHALL LAY OUT AND SET ANY CONSTRUCTION STAKES AND MARKS NEEDED TO ESTABLISH THE LINES, GRADES, SLOPES OR CROSS—SECTIONS AS SHOWN ON THE PLANS OR AS STAKED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.
- 6. WHEN THE CONTRACTOR CONSIDERS THE WORK PHYSICALLY COMPLETE AND READY FOR FINAL INSPECTION, THE CONTRACTOR SHALL REQUEST THAT CITY INSPECTOR SCHEDULE A FINAL INSPECTION. THE INSPECTOR WILL MAKE A FINAL INSPECTION AND NOTIFY THE CONTRACTOR IN WRITING OF ALL PARTICULARS IN WHICH THE FINAL INSPECTION REVEALS THE WORK INCOMPLETE OR UNACCEPTABLE. THE CONTRACTOR SHALL IMMEDIATELY TAKE SUCH CORRECTIVE MEASURES AS ARE NECESSARY TO REMEDY THE LISTED DEFICIENCIES.
- 7. BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE CONTRACTOR, OWNER, CITY ENGINEER AND PROJECT ENGINEER. (MINIMUM 3 DAYS PRIOR TO STARTING WORK)
- 8. A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT—OF—WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1—07.23—PUBLIC CONVENIENCE AND SAFETY. SHALL APPLY.
- 10. PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO THE PRE- CONSTRUCTION MEETING.
- 11. NO WORK SHALL OCCUR BETWEEN 7:00 PM & 7:00 AM.
- 12. 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. ALL REPAIRS SHALL BE ACCORDING TO CITY OF FERNDALE DRAWING R-11.
- 13. ALL WORK MUST BE INSPECTED BY A REPRESENTATIVE OF THE CITY OF FERNDALE ENGINEERING DIVISION, AND 24 HOURS NOTICE MUST BE GIVEN PRIOR TO STARTING WORK OR TO SCHEDULE INSPECTIONS IN ACCORDANCE WITH SECTION 302 OF THE DEVELOPMENT STANDARDS.
- 14. THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF ANY PROPOSED DEVIATION FROM THE APPROVED PLANS PRIOR TO CONSTRUCTION OF THE REVISED IMPROVEMENTS. THE CONTRACTOR SHALL KEEP RECORDS OF ALL DEVIATIONS AND SHALL FORWARD THEM TO THE ENGINEER AND TO THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT.
- 15. AS-BUILT DATA SHALL BE PROVIDED TO THE CITY OF FERNDALE UPON COMPLETION OF CONSTRUCTION AND PROVIDED IN CITY OF FERNDALE DATUM-VERTICAL (NGVD 29) AND HORIZONTAL (NAD 83/91). CONTACT THE CITY FOR MORE INFORMATION ON SUBMITTAL REQUIREMENTS.
- 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.

GENERAL REQUIREMENTS CONTINUED

- 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 SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISTURBED BY THE PROJECT UPON COMPLETION OF THE PROJECT.
- 18. A REVOCABLE ENCROACHMENT PERMIT SHALL BE OBTAINED PRIOR TO COMMENCING WORK IN THE PUBLIC RIGHT-OF-WAY.

BASES

- GRAVEL BASES AND BALLAST MAXIMUM PARTICLE SIZE PASSING THE U.S. NO. 200 SIEVE SHALL NOT EXCEED 5%.
- BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY.
- 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.

PAVEMENTS

- WHERE SHOWN ON THE PLANS, PAVEMENT MARKINGS SHALL BE OBLITERATED UNTIL BLEMISHES CAUSED BY THE PAVEMENT MARKING REMOVAL CONFORM TO THE COLORATION OF THE ADJACENT PAVEMENT.
- 2. SOIL RESIDUAL HERBICIDE SHALL BE PLACED WITHIN 24 HOURS OF PAVING.
- 3. A TACK COAT OF ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF ASPHALT.
- 4. ALL PAVEMENT REPAIR SHALL BE SAW-CUT BEFORE REMOVAL. AR-4000W SHALL BE APPLIED TO ALL EDGES OF EXISTING PAVEMENT.
- 5. ASPHALT CONCRETE PAVEMENT SHALL NOT BE PLACED NOR COMPACTED DURING HOURS OF DARKNESS.
- 6. SUBGRADE SHALL BE CERTIFIED IN WRITTING BY THE ENGINEER PRIOR TO PAVING.

WATER MAINS

- 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.
- 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 STANDARD SPECIFICATIONS.
- 3. ALL BACKFILL SHALL BE IMPORTED GRAVEL AND SHALL CONFORM TO SECTION 2-09 OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.
- 4. ALL PIPE SHALL HAVE A MINIMUM COVER OF 3.0 FEET.

EARTHWORK

- 1. THE CONTRACTOR SHALL CLEAR, GRUB AND CLEAN UP THOSE AREAS SHOWN ON THE PLANS.
- 2. 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 CENTECHNICAL ENGINEERING STUDY
- . MAXIMUM DENSITY AND OPTIMUM MOISTURE FOR GRANULAR MATERIALS WILL BE DETERMINED USING ASTM D-1557 TEST METHOD.

EARTHWORK CONTINUE

4. 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.

- 1. 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.
- 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.
- 3. ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS".
- 4. 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
- 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 SPECIRFICATIONS 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
 OR EQUAL. PIPE JOINTS SHALL BE MADE WITH FLEXIBLE GASKETS CONFOMING 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.
- 5. PIPE LAYING SHALL MEET THE REQUIREMENTS OF SECTION 7-08.3(2)B OF THE STANDARD SPECIFICATIONS.
- 6. ALL SIDE SEWERS SHALL BE CONSTRUCTED ACCORDING TO THE CITY OF FERNDALE STANDARD PLAN SS-6 THROUGH SS-8. CONNECT SIDE SEWERS PER COF DWG SS-12.
- ALL TRENCH BACKFILL UNDER EXISTING OR FUTURE PAVING SHALL BE BANK RUN GRAVEL, CLASS "B" AND SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
- 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 A REPRESENTATIVE OF THE CITY OF FERNDALE.

MAR 1 2 2018

APPROVED

PROJECT INFORMATION

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SURVEYOR CHRISTIE & CHRISTIE L

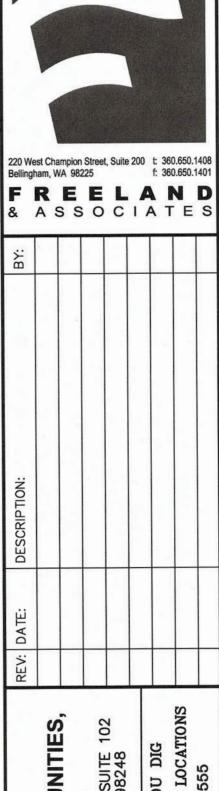
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ARCHITECT

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ABBREVIATIONS

		M	NORTH
1'/1"	ONE FOOT/ONE INCH	N N= /#	
AC	ACRE	No./#	NUMBER
AD	ABSOLUTE VALUE OF THE ALGEBRAIC	O.C.	ON CENTER
	GRADE DIFFERENCE	PC	POINT OF CURVATURE
AF#	AUDITORS FILE NUMBER	PCL	PARCEL
APPROX	APPROXIMATE	PERF	PERFORATED
ASB/AB	AS-BUILT	PI	POINT OF INTERSECTION
ASPH	ASPHALT	PIV	POST INDICATOR VALVE
BLDG	BUILDING	POB	POINT OF BEGINNING
BMP	BEST MANAGEMENT PRACTICE	PP	POWER POLE
BNDRY	BOUNDARY	PROP	PROPERTY
BVCS	BEGINNING OF VERTICAL CURVE STATION	K	LENGTH OF VERTICAL CURVE PE
BVCE	BEGINNING OF VERTICAL CURVE		PERCENT GRADE DIFFERENCE
ELEVATION		PT/POT	POINT OF TANGENCY
C	COMPACT PARKING STALL	PVC	POLYVINYL CHLORIDE
CC	CURB CUT	PVI	POINT OF VERTICAL INFLECTION
CB	CATCH BASIN	PWR	POWER
CL	CENTERLINE	R	RADIUS
CMP	CORRUGATED METAL PIPE	R/C	REBAR WITH CAP
CNTRL	CONTROL	RCP	REINFORCED CONCRETE PIPE
CO	CLEANOUT	RET	RETAINING
COR	CORNER	RIM	RIM
CPP	CORRUGATED POLYETHYLENE PIPE	ROW	RIGHT-OF-WAY
CONC	CONCRETE	RPP	REDUCED PRESSURE PRINCIPAL
CSTC	CRUSHED SURFACING TOP COURSE	RR	RAILROAD
CULV	CULVERT	S	SOUTH
ø	DIAMETER	SAN	SANITARY
DEMO	DEMOLITION	SCH	SCHEDULE
DI	DUCTILE IRON	SD	STORM DRAIN
DWGS	DRAWINGS	SDCB	STORM DRAIN CATCH BASIN
E	EAST	SDCO	STORM DRAIN CLEANOUT
ĒA	EACH	SDMH	STORM DRAIN MAN HOLE
EL/ELEV	ELEVATION	SERV	SERVICE
ENC	REVOCABLE ENCROACHMENT PERMIT	STND/STD	
		SS	SANITARY SEWER
EP/EOP	EDGE OF PAVEMENT	SSCO	SANITARY SEWER CLEANOUT
ESMT	EASEMENT END OF VERTICAL CURVE STATION	SSMH	SANITARY SEWER MANHOLE
EVCS	END OF VERTICAL CURVE ELEVATION	ST	STREET
EVCE		TBM	TEMPORARY BENCH MARK
EX/EXIST	EXISTING	TC	TOP OF CURB
FDC	FIRE DEPARTMENT CONNECTION		
FFE/FF	FINISH FLOOR ELEVATION	TEL/TELE	TEMPORARY EROSION &
FG	FINISH GRADE	TESC	SEDIMENTATION CONTROL
FH	FIRE HYDRANT	TD	
FND	FOUND	TP	TOP OF PAVEMENT TOP OF SIDEWALK
GND	GROUND	TS	
GUTT	GUTTER	TW	TOP OF WALL
HP	HIGH POINT	TYP	TYPICAL
INV	INVERT	UG	UNDERGROUND
IE/I.E.	INVERT ELEVATION	VC	VERTICAL CURVE
IRRIG	IRRIGATION	VEG	VEGETATION
LF	LINEAR FOOT	W	WEST
L.S.	LAND SURVEYOR	WA	WATER
MAX	MAXIMUM	W/IN	WITHIN
MIN	MINIMUM	WSDOT	WASHINGTON STATE DEPARTMENT
MON	MONUMENT		OF TRANSPORTATION
NIC	NOT IN CONTRACT		



5828 2ND AVENUE
FERNDALE, WA 98248

#

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS

CLIENT

BY:

CLIENT

REV: DATE: DESCRIPTION:

DESCRIPTION:

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS

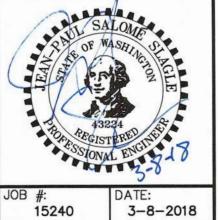
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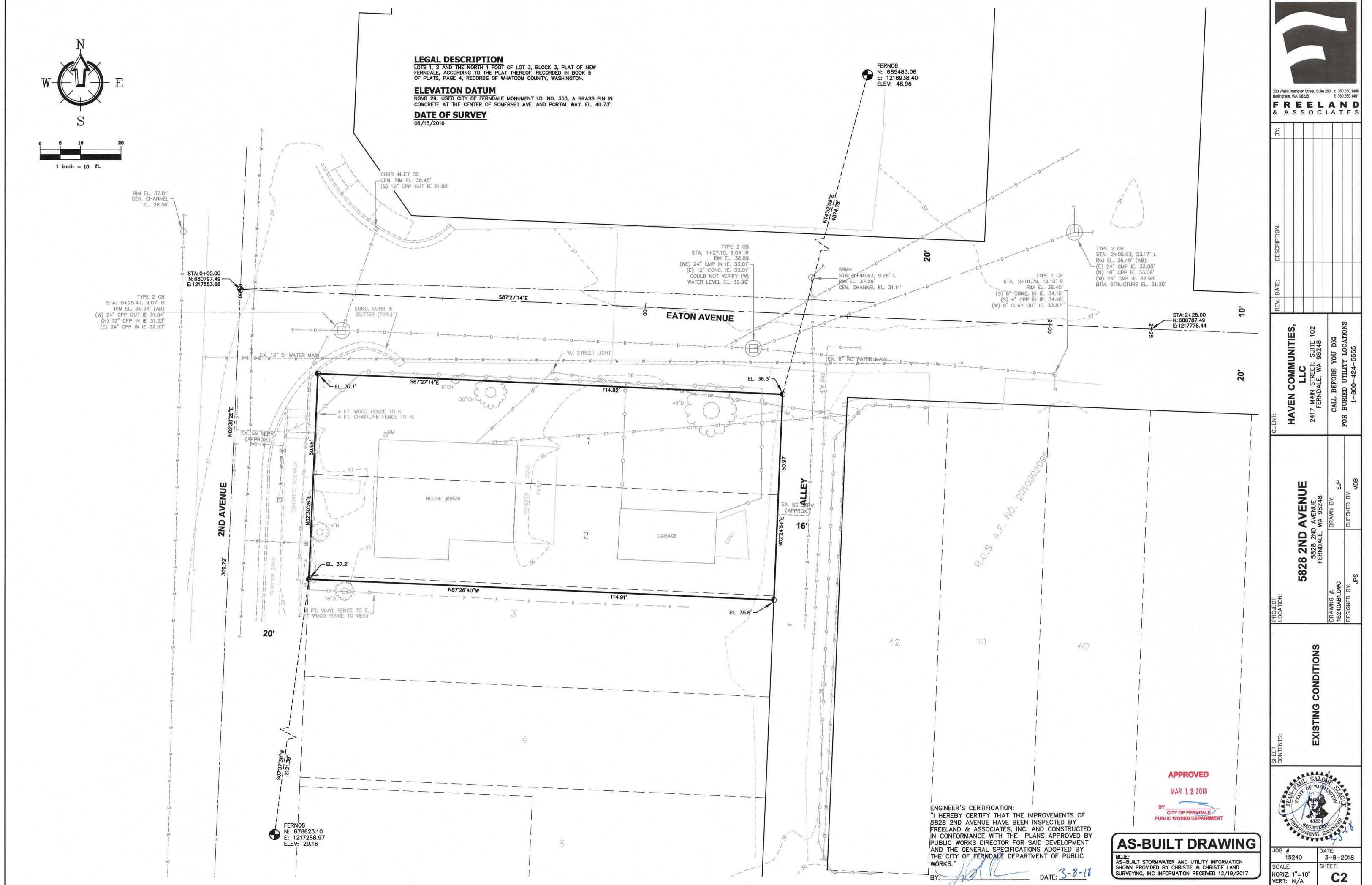
CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS

COVER SHEET

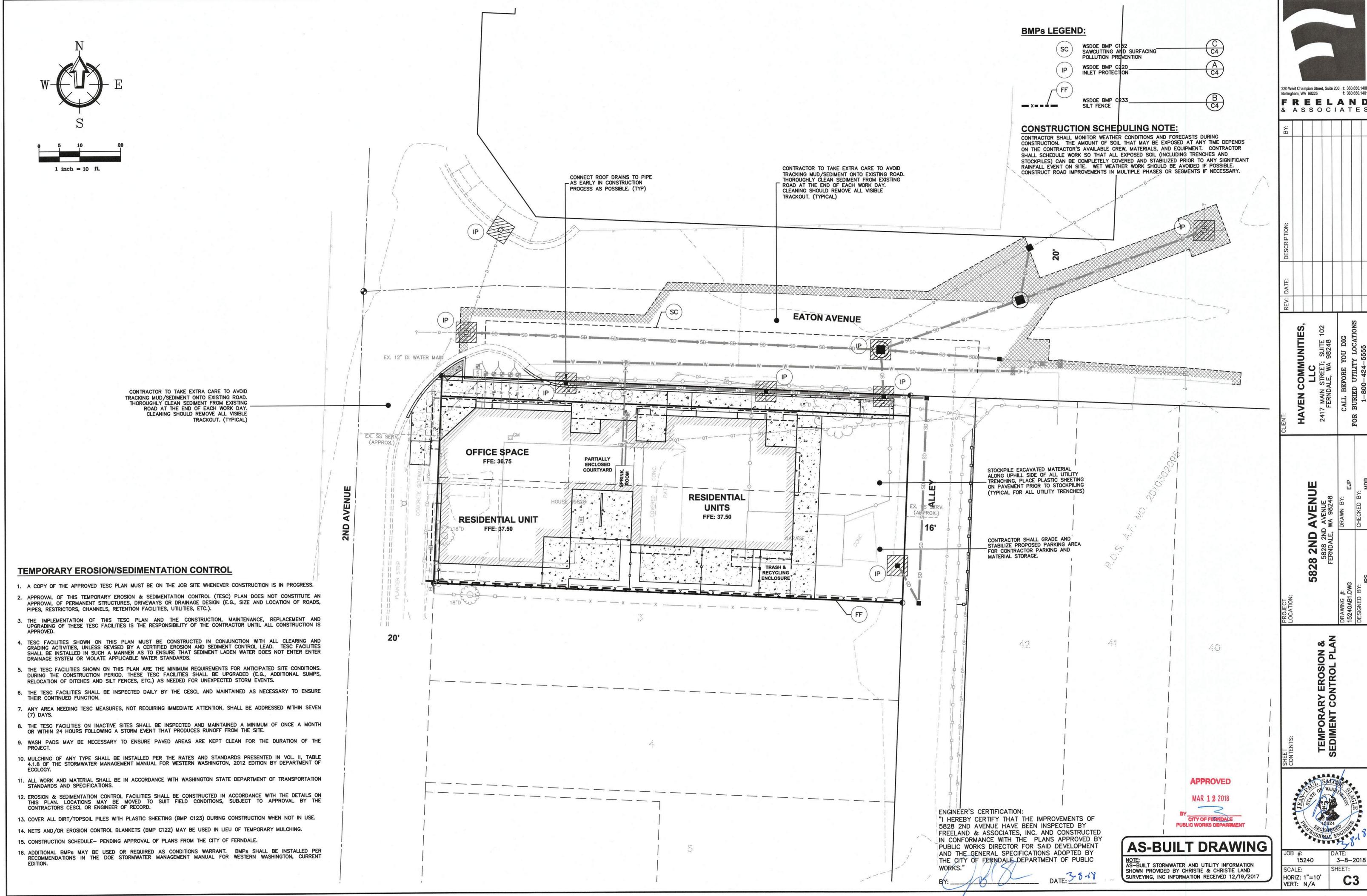
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HORIZ: N/A VERT: N/A





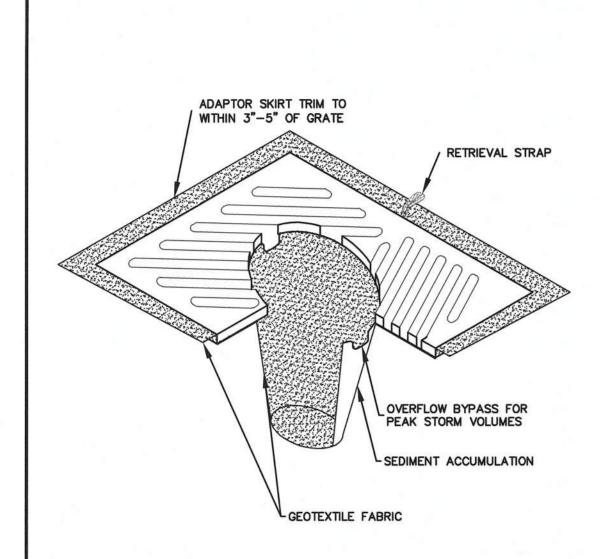


220 West Champion Street, Suite 200 t: 360.650.14

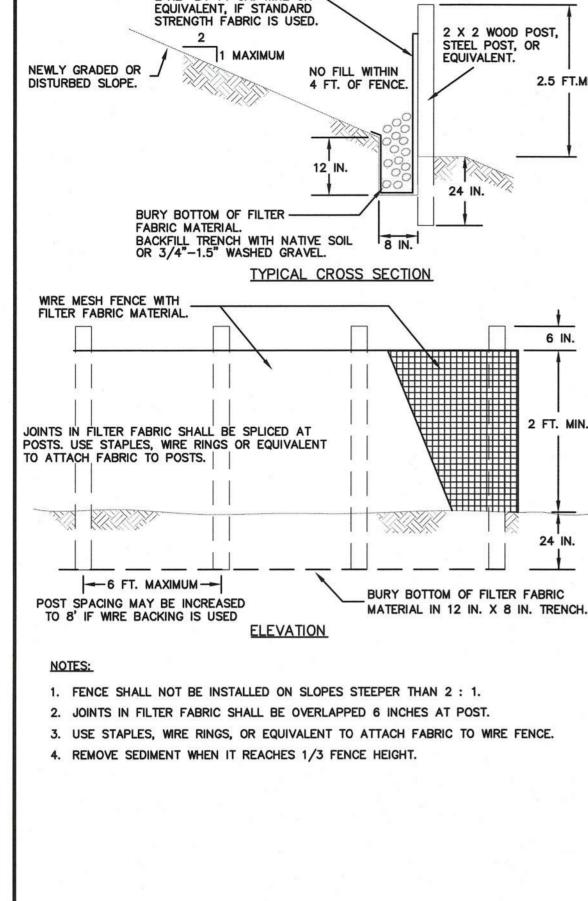
FREELAND

& ASSOCIATES

Bellingham, WA 98225



- 1. INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
- 2. SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF FULL
- 3. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN.



BMP C152: Sawcutting and Surfacing Pollution Prevention

2 X 2 WOOD POST, STEEL POST, OR

2.5 FT.MIN.

6 IN.

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.

Design and

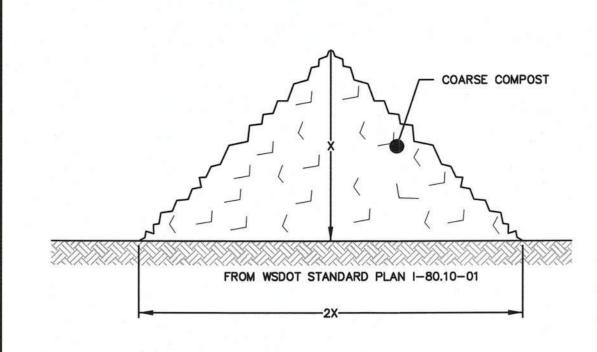
Specifications

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

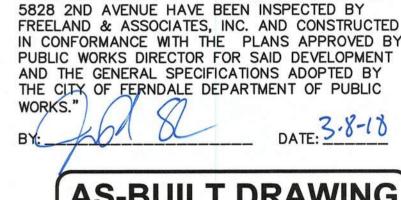
Continually monitor operations to determine whether slurry, cuttings, or process water could enter waters of the state. If inspections show that a violation of water quality standards could occur, stop operations and immediately implement preventive measures such as berms, barriers, secondary containment,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

Volume II - Construction Stormwater Pollution Prevention - August 2012



X = 1.0' FOR SLOPES 4H: 1V OR FLATTER X = 1.6' FOR SLOPES STEEPER THAN 4H:1V

COARSE COMPOST CONSISTS OF ORGANIC MATTER (PEAT FREE). PARTICLE SIZE SHALL BE GRADED FROM 1" TO 4" (SHREDDED HOG-FUEL OR SIMILAR).



"I HEREBY CERTIFY THAT THE IMPROVEMENTS OF

ENGINEER'S CERTIFICATION:

AS-BUILT DRAWING

AS-BUILT STORMWATER AND UTILITY INFORMATION SHOWN PROVIDED BY CHRISTIE & CHRISTIE LAND SURVEYING, INC INFORMATION RECEIVED 12/19/2017









STORMWATER POLLUTION PREVENTION PLAN

ELEMENT #1: MARK CLEARING LIMITS

CLEARING LIMITS AND NEARBY SENSITIVE AREAS AND THEIR BUFFERS, WILL BE CLEARLY MARKED PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES, WHICH INCLUDES CLEARING AND GRADING. THESE AREAS WILL BE CLEARLY MARKED N THE FIELD TO PREVENT DAMAGE AND OFFSITE IMPACTS.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMP'S CONSIDERED FOR ELEMENT #1 INCLUDE:

BMP C101: PRESERVING NATURAL VEGETATION BMP C103: HIGH VISIBILITY PLASTIC OR METAL FENCE

BMP C104: STAKE AND WIRE FENCE

ELEMENT #2: ESTABLISH CONSTRUCTION ACCESS IT IS RECOMMENDED THAT THE PROPOSED PARKING AREA BE ESTABLISHED AS THE SITE ACCESS POINT, CONTRACTOR PARKING, AND MATERIAL STORAGE. THIS AREA SHALL BE STABILIZED, MONITORED FOR SEDIMENT, AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS. EARTHWORK EQUIPMENT WILL REMAIN WITHIN THE DISTURBED AREA TO THE MAXIMUM EXTENT PRACTICABLE. CONSTRUCTION TRAFFIC THAT WILL ROUTINELY LEAVE THE SITE (E.G. WORK TRUCKS, PERSONAL VEHICLES) SHALL REMAIN ON PAVED SURFACES TO THE MAXIMUM EXTENT PRACTICABLE. PAVED ROADS & PARKING AREAS SHALL BE CLEANED AT THE END OF EACH DAY. SEDIMENT TRANSPORTED TO ROADS FROM THE SITE SHALL BE SWEPT AND DISPOSED OF AT A CONTROLLED SEDIMENT DISPOSAL AREA ON SITE OR REMOVED OFF SITE AND DISPOSED AT AN APPROVED FILL SITE. IF STREET WASHING IS NEEDED, IT WILL ONLY OCCUR AFTER SEDIMENT HAS BEEN REMOVED AS DESCRIBED. THE RESULTING WASH WASTEWATER WOULD THEN BE CONTROLLED BY PUMPING IT BACK ON SITE. ALL CONSTRUCTION ACCESS POINTS WILL BE RESTORED TO PRE-CONSTRUCTION OR PROPOSED CONDITIONS.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #2 INCLUDE: BMP C105: STABILIZED CONSTRUCTION ENTRANCE HOUSEKEEPING/MAINTENANCE BMP: DAILY STREET SWEEPING

HOUSEKEEPING/MAINTENANCE BMP: BMP C140 DUST CONTROL **ELEMENT #3: CONTROL FLOW RATES**

FLOW RATES SHALL BE CONTROLLED TO THE MAXIMUM EXTENT PRACTICAL. CONTRACTOR SHALL PRESERVE VEGETATED AREAS ON OR NEAR THE SITE AS ALLOWABLE THROUGHOUT THE CONSTRUCTION PROCESS. TEMPORARY SEDIMENT TRAPS OR PONDS MAY BE DESIGNED. LOCATED. AND INSTALLED IF THE CONTRACTOR, PROJECT ENGINEER, OR CESCL DEEMS NECESSARY.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #3 INCLUDE: BMP C241: TEMPORARY SEDIMENT POND

ELEMENT #4: INSTALL SEDIMENT CONTROLS

THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL AND EXISTING VEGETATION WILL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT PRACTICABLE. ELEMENT #1 OF THIS PLAN, INCLUDING IMPLEMENTING PRESERVING NATURAL VEGETATION, WILL HELP RETAIN SOME AREAS IN AN UNDISTURBED STATE. SILT FENCING WILL BE INSTALLED DOWNHILL FROM DISTURBED AREAS TO TRAP AND RETAIN SEDIMENT ON SITE. OTHER SEDIMENT CONTROLS, SUCH AS TEMPORARY SEDIMENT TRAPS, SUMPS, GRAVEL FILER BERMS, STRAW WATTLES, ETC. MAY BE INSTALLED IF WARRANTED AS CONDITIONS CHANGE ON SITE DURING CONSTRUCTION.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #4 INCLUDE: BMP C233: SILT FENCE

BMP C208: TRIANGULAR SILT DIKE

ELEMENT #5: STABILIZE SOILS

IF CONSTRUCTION OCCURS IN THE DRY SEASON, (5/1 THROUGH 9/30) SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 7 DAYS. IF CONSTRUCTION OCCURS IN THE WET SEASON (10/1 THROUGH 4/30) SOILS WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 2 DAYS. WHEN ACTIVE GRADING IS IN PROGRESS, THE DEADLINE FOR SOIL STABILIZATION MAY BE EXTENDED UPON DETERMINING THAT THE LIKELIHOOD OF EROSION IMPACTS IS LOW BASED ON THE TYPE AND AMOUNT OF SOIL EXPOSED, SITE TOPOGRAPHY, POTENTIAL FOR DISCHARGE TO CRITICAL AREAS AND LAKES, AND OTHER FACTORS. IN ADDITION, WEATHER CONDITIONS WILL CONTINUALLY BE MONITORED, INCLUDING BEFORE HOLIDAYS AND WEEKENDS, FOR PURPOSES OF PREPARING THE SITE FOR PREDICTED WEATHER CONDITIONS. BMPS THAT ARE EFFECTIVE IN STABILIZING SOILS AND PROTECTING THEM FROM EXPOSURE TO RAIN AND WIND OR OTHER CLIMATIC CONDITIONS WILL BE IMPLEMENTED THROUGHOUT THE PROJECT. EVALUATION AND MONITORING OF BMP EFFECTIVENESS WILL OCCUR ON A DAILY BASIS. IN ADDITION, IN THE EVENT OF FORECASTED PRECIPITATION EVENTS, ADDITIONAL MEASURES TO STABILIZE SOILS WILL BE TAKEN.

BMPS THAT WILL BE CONSIDERED THROUGHOUT CONSTRUCTION INCLUDE BUT ARE NOT LIMITED TO TEMPORARY AND PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, EROSION CONTROL FABRICS AND MATTING, THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED. AND DUST CONTROL.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #5 INCLUDE:

- BMP C120: TEMPORARY AND PERMANENT SEEDING
- BMP C121: MULCHING
- BMP C122: NETS AND BLANKETS
- BMP C123: PLASTIC COVERING BMP C124: SODDING
- BMP C125: TOPSOILING
- BMP C140: DUST CONTROL

ELEMENT #6: PROTECT SLOPES SIGNIFICANT CUT OR FILL SLOPES ARE NOT PROPOSED AS PART OF THIS PROJECT.

ELEMENT #7: PROTECT DRAIN INLETS

STORM DRAIN INLETS ARE PROPOSED AS PART OF THIS PROJECT. OPERABLE STORM DRAIN INLETS ON THE SITE AND WITHIN 500 FEET DOWNSTREAM OF THE CONSTRUCTION AREA ROADS WILL BE PROTECTED SO THAT STORMWATER RUNOFF DOES NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FILTRATION OR OTHER TREATMENT FOR SEDIMENT. STORM DRAIN INLET PROTECTION WILL BE USED TO DETERMINE THE MOST APPROPRIATE INLET PROTECTION DESIGN FOR THE SITE AND THE DOWNSTREAM AREA.

INLETS WILL BE INSPECTED WEEKLY AT A MINIMUM AND DAILY DURING STORM EVENTS. INLET PROTECTION DEVICES SHALL BE CLEANED OR REMOVED AND REPLACED BEFORE SIX INCHES OF SEDIMENT CAN ACCUMULATE. CONSTRUCTION ACCESS POINTS AND APPROACHES WILL BE MONITORED AND SWEPT TO MINIMIZE THE POTENTIAL OF SEDIMENT TRANSPORT. IF STREET WASHING OCCURS, THE WASH WASTEWATER WILL BE PUMPED BACK ON SITE.

WASHINGTON STATE DEPARTMENT OF ECOLOGY BMPS CONSIDERED FOR ELEMENT #7 INCLUDE: BMP C220: STORM DRAIN INLET PROTECTION

ELEMENT #8: STABILIZE CHANNELS AND OUTLETS NO NEW MANMADE CHANNELS OR OUTLETS ARE PROPOSED AS PART OF THIS PROJECT.

ELEMENT #9: CONTROL POLLUTANTS 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. 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

ELEMENT #10: CONTROL DE-WATERING

EXCEPT FOR THE SANITARY SEWER TAP, 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:

- INFILTRATION TRANSPORT OFF SITE IN VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS.
- 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.

ELEMENT #11: MAINTAIN BMPS

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 WITHIN SEVEN (7) DAYS 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 STABILIZED.

ELEMENT #12: MANAGE THE PROJECT

CONSTRUCTION

EXPOSED AREAS DURING THE CLEARING AND GRADING PROCESS WILL BE MULCHED AS PART OF THE CLEARING AND GRADING ACTIVITIES. CLEARING AND GRADING ACTIVITIES WILL OCCUR AFTER THE APPLICABLE PERMITS HAVE BEEN OBTAINED. REVEGETATION OF EXPOSED AREAS AND MAINTENANCE OF THAT VEGETATION WILL OCCUR AS PART OF THE PLANTING PHASE OF THE PROJECT TO BE INSTALLED AFTER SUB-GRADE ROAD BASE MATERIAL HAS BEEN INSTALLED AND PRIOR TO FINAL GRAVEL SURFACING.

SEASONAL WORK LIMITATIONS

FROM MAY 1 THROUGH SEPTEMBER 30, SOIL WILL NOT BE EXPOSED/UNWORKED FOR 7 DAYS. FROM OCTOBER 1 THROUGH APRIL 30, SOIL WILL NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN 2 DAYS. IN ADDITION, WEATHER CONDITIONS WILL CONTINUALLY BE MONITORED INCLUDING BEFORE HOLIDAYS AND WEEKENDS FOR PURPOSES OF PREPARING THE SITE FOR PREDICTED WEATHER CONDITIONS. BMPS THAT ARE EFFECTIVE IN STABILIZING SOILS AND PROTECTING THEM FROM EXPOSURE TO RAIN AND WIND OR OTHER CLIMATIC CONDITIONS WILL BE IMPLEMENTED THROUGHOUT THE PROJECT. INSPECTION AND EVALUATION OF THE EFFECTIVENESS OF THE BMPS WILL OCCUR ON A DAILY BASIS. IN ADDITION, IN THE EVENT OF FORECASTED PRECIPITATION EVENTS, ADDITIONAL MEASURES TO STABILIZE SOILS WILL BE

COORDINATION WITH UTILITIES AND OTHER CONTRACTORS

THE STORMWATER MANAGEMENT REQUIREMENTS FOR ALL ASPECTS OF THE CONSTRUCTION PROJECT, INCLUDING UTILITIES, WERE CONSIDERED IN PREPARING THE CONSTRUCTION SWPPP.

INSPECTION AND MONITORING

AS PREVIOUSLY MENTIONED, ALL BMPS WILL BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. IN THE EVENT THAT INSPECTION AND/OR MONITORING REVEALS THAT THE BMPS IDENTIFIED IN THIS CONSTRUCTION SWPPP ARE INADEQUATE, DUE TO THE ACTUAL DISCHARGE OF OR POTENTIAL TO DISCHARGE A SIGNIFICANT AMOUNT OF ANY POLLUTANT, THIS SWPPP SHALL BE MODIFIED, AS APPROPRIATE, IN A TIMELY MANNER.

MAINTENANCE OF THE CONSTRUCTION SWPPP

THE CONSTRUCTION SWPPP WILL BE RETAINED ON-SITE AND WILL BE UPDATED ON A REGULAR BASIS. MODIFICATIONS TO THE CONSTRUCTION SWPPP WILL BE MADE WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY

MAR 1 2 2018

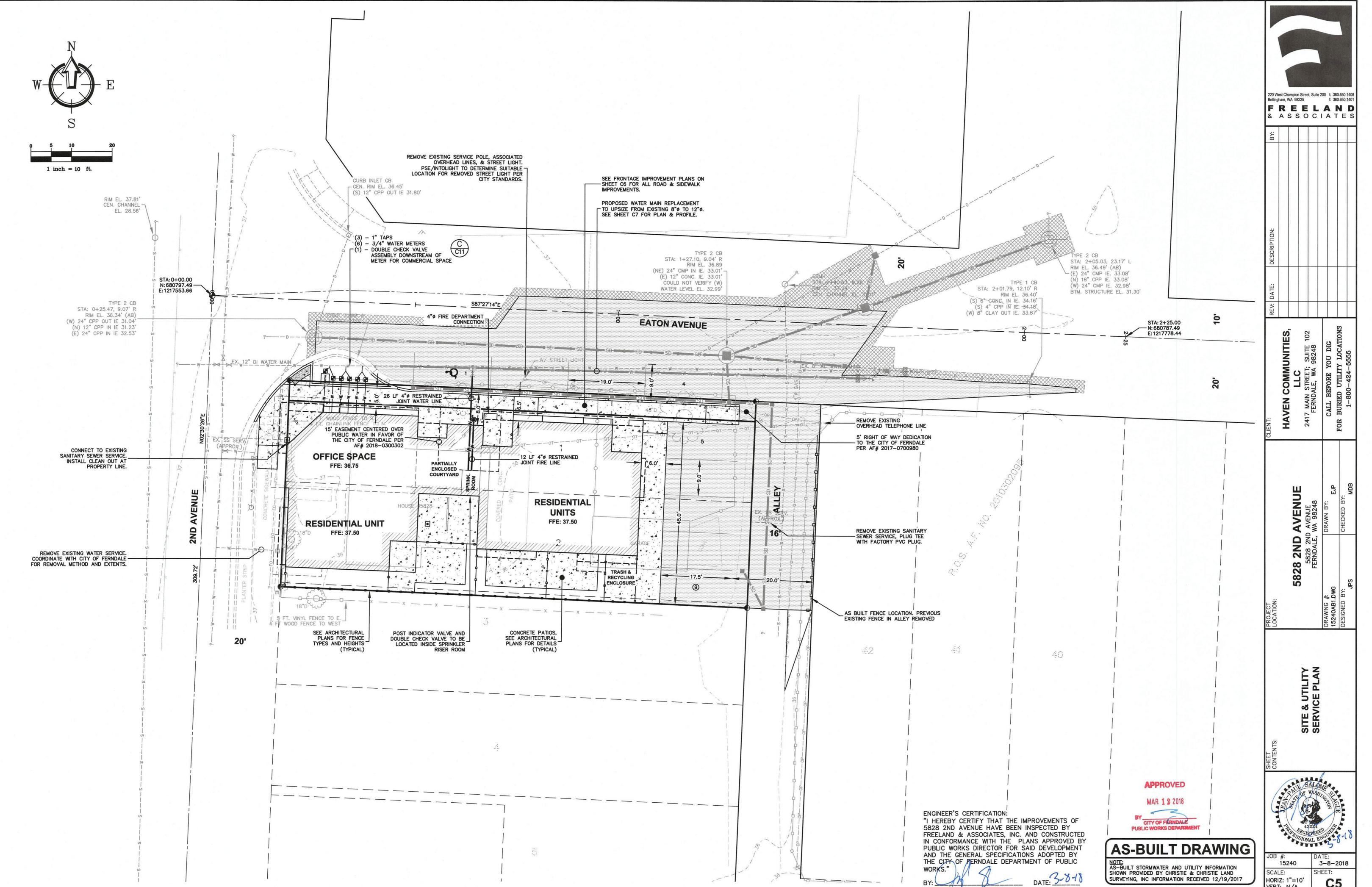
CITY OF FERNDALE

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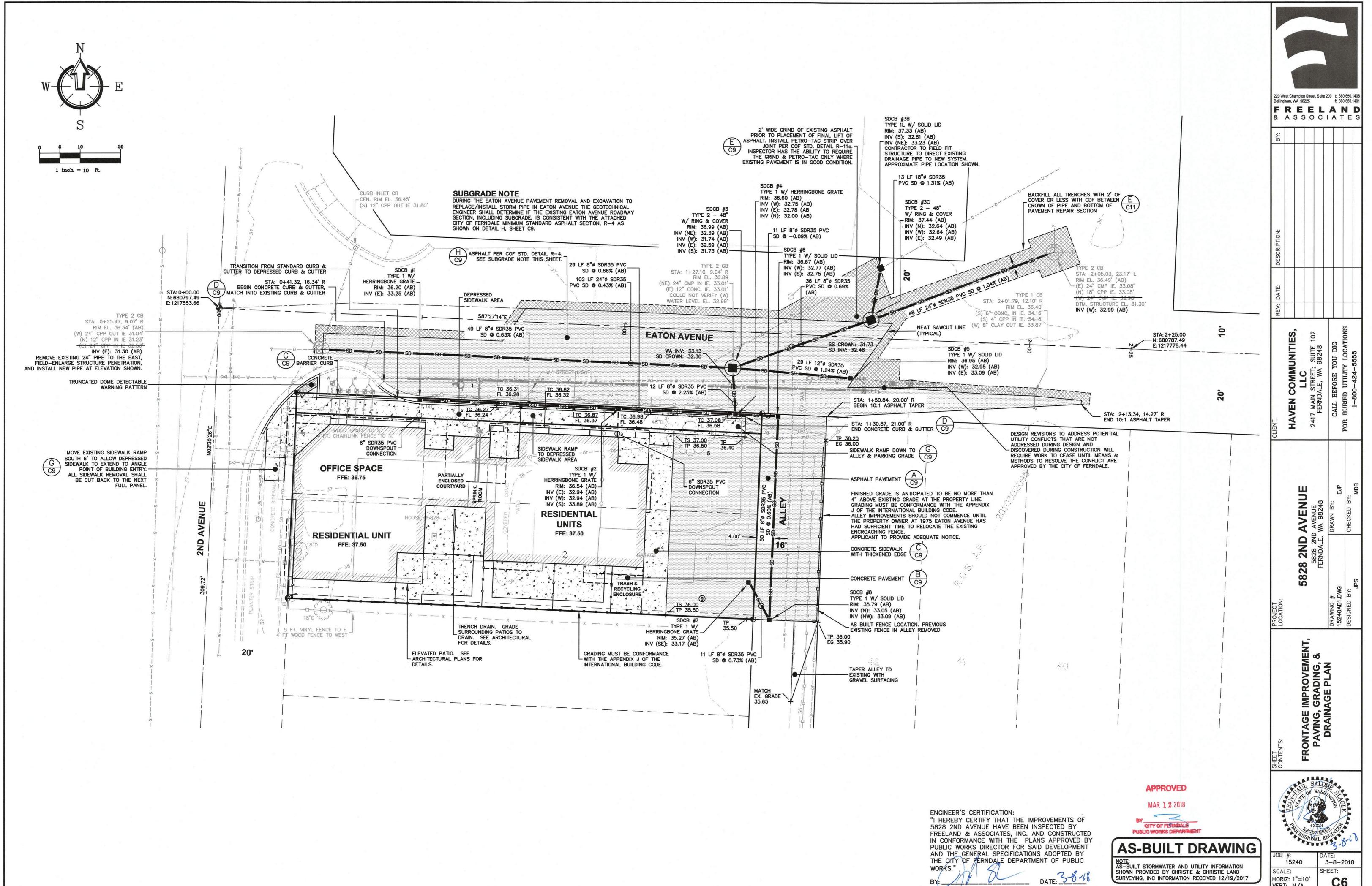
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15240 3-8-2018 SCALE: SHEET: HORIZ: N/A VERT: N/A



VERT: N/A



SURVEYING, INC INFORMATION RECEIVED 12/19/2017

HORIZ: 1"=10" VERT: N/A

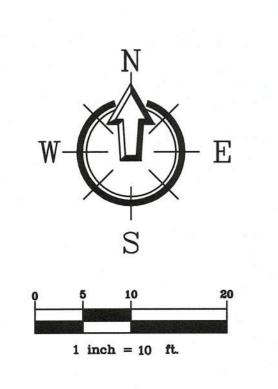
220 West Champion Street, Suite 200 t. 360.650.1408 Bellingham, WA 98225 f. 360.650.1401

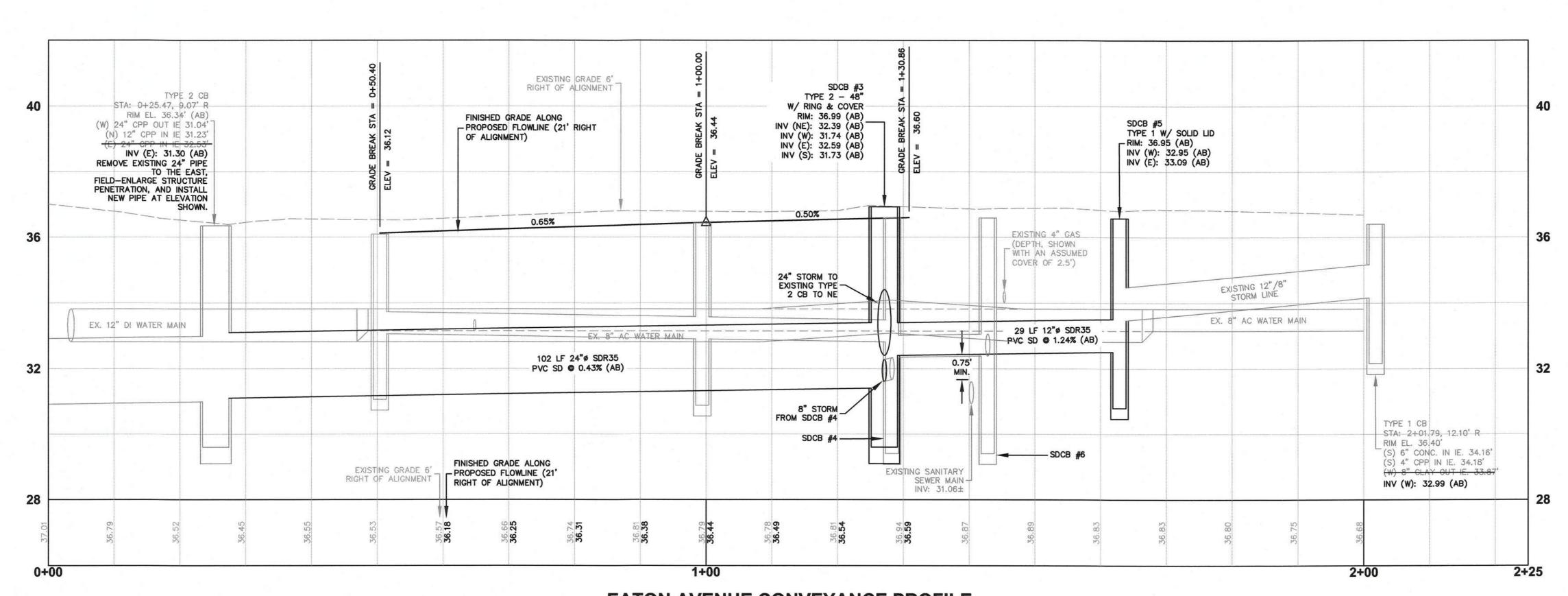
FREELAND & ASSOCIATES

HAVEN COMMUNITIES,
LLC
2417 MAIN STREET; SUITE 102
FERNDALE, WA 98248

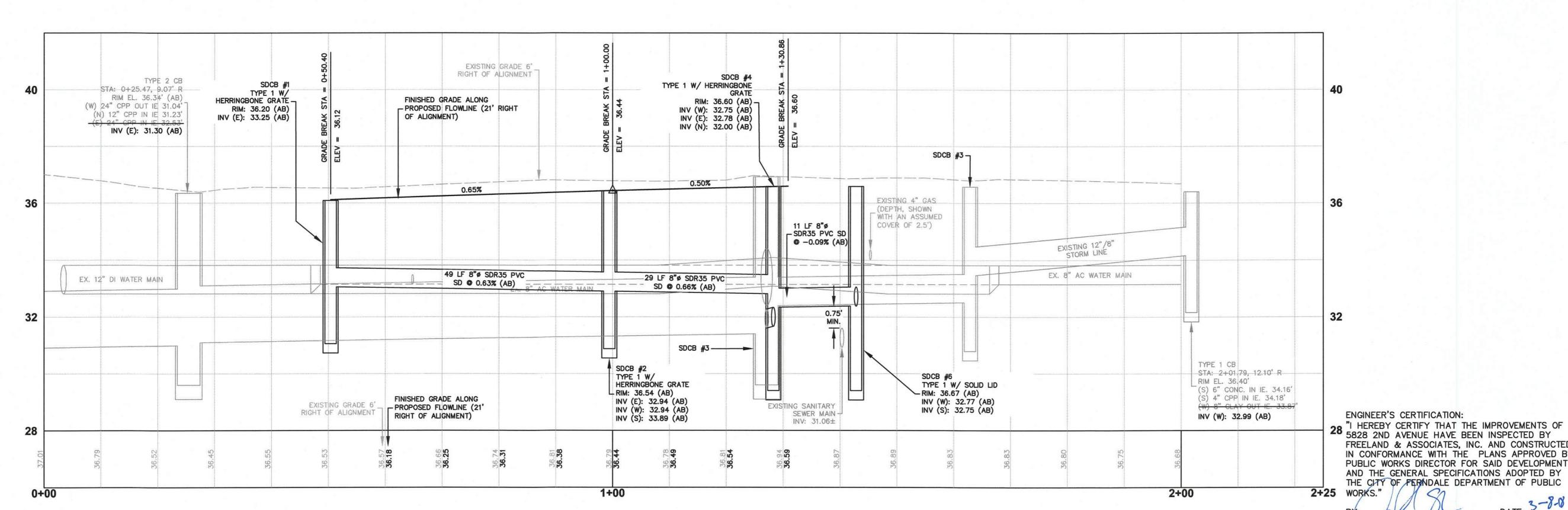
28 2ND AVENUE
5828 2ND AVENUE
FERNDALE, WA 98248
DRAWN BY:

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EATON AVENUE FRONTAGE IMPROVEMENT PROFILE H: 1" = 10', V: 1" = 2'

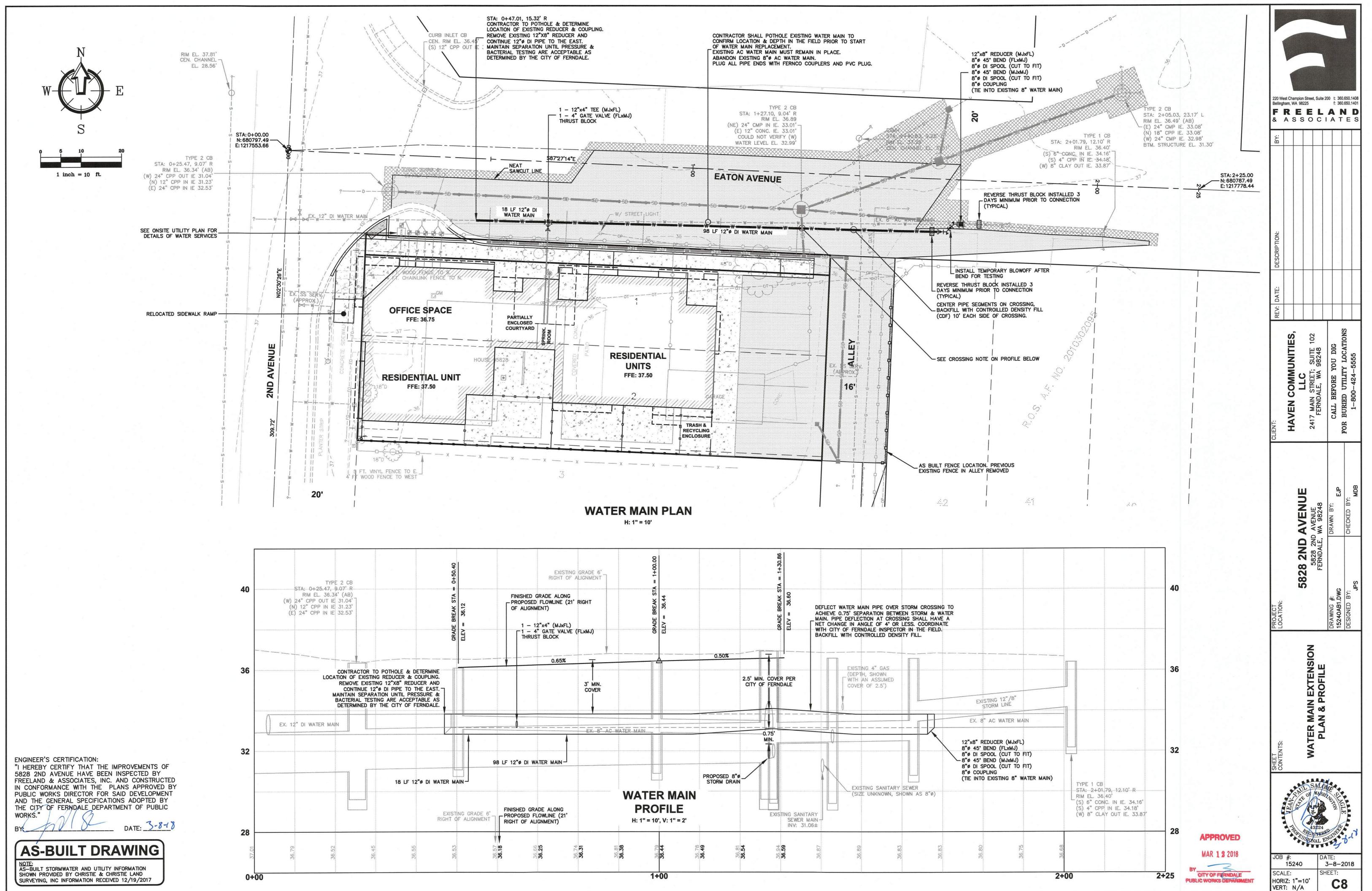
MAR 1 2 2018 BY CITY OF FERNDALE PUBLIC WORKS DEPARTMENT

APPROVED

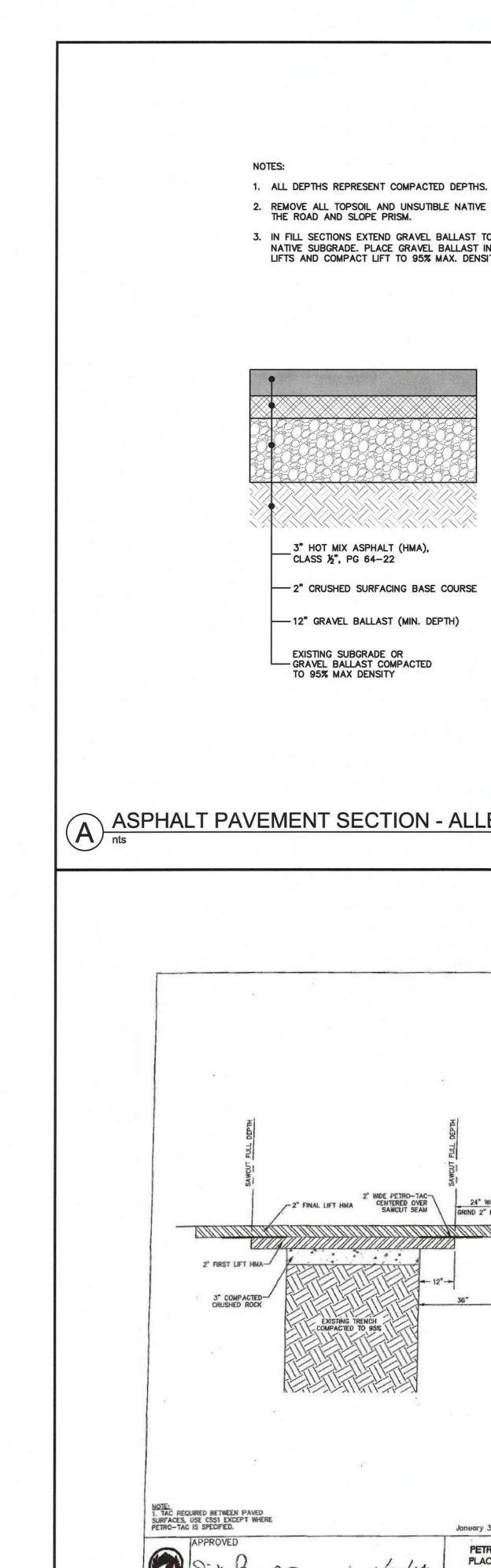
AS-BUILT DRAWIN NOTE:
AS-BUILT STORMWATER AND UTILITY INFORMATION
SHOWN PROVIDED BY CHRISTIE & CHRISTIE LAND SURVEYING, INC INFORMATION RECEIVED 12/19/20

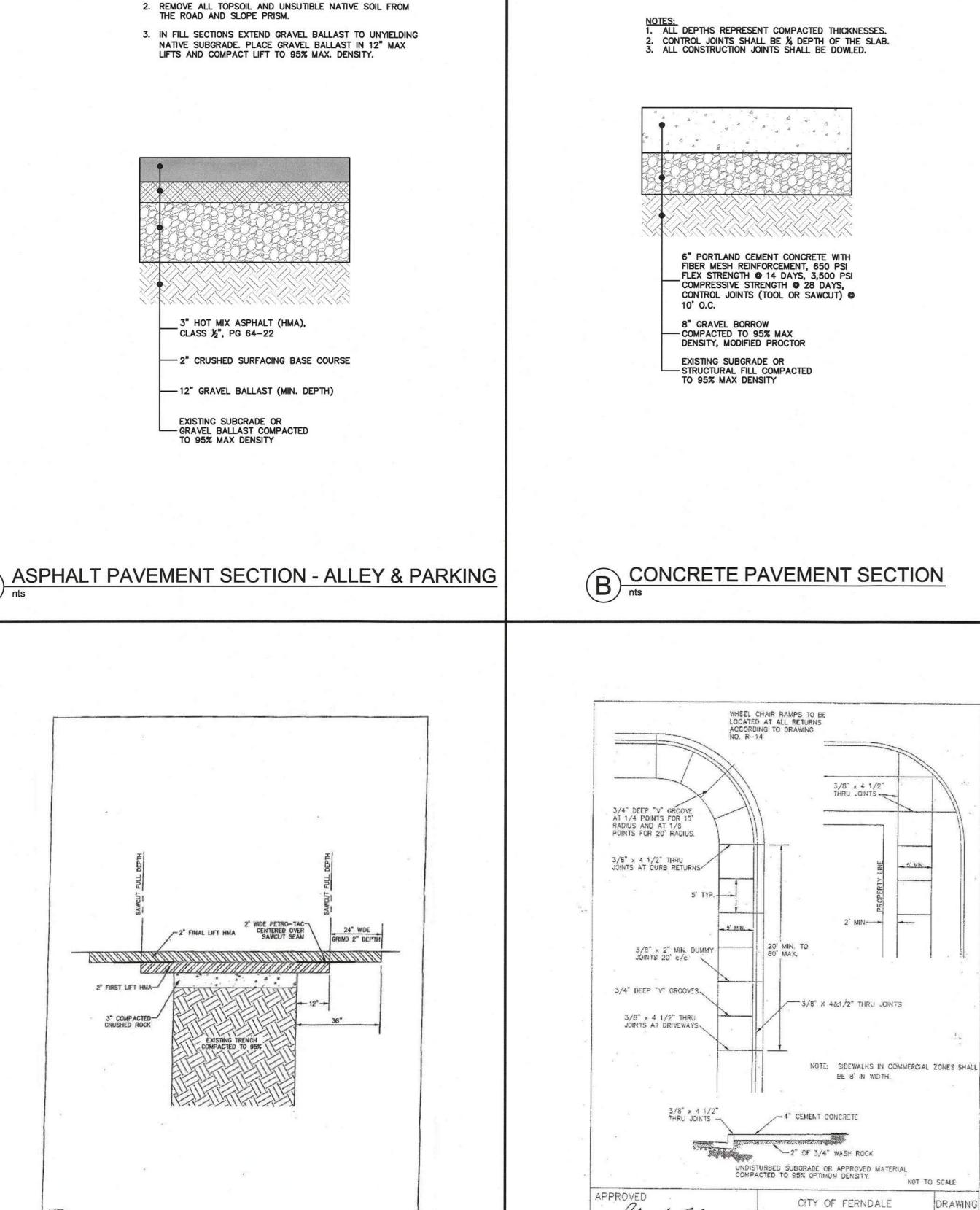
SHEET CONTENTS:	FRONTAGE IMPROVEMENT	PROFILES	
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NG)	REGISTERIO NEL SONO LA				
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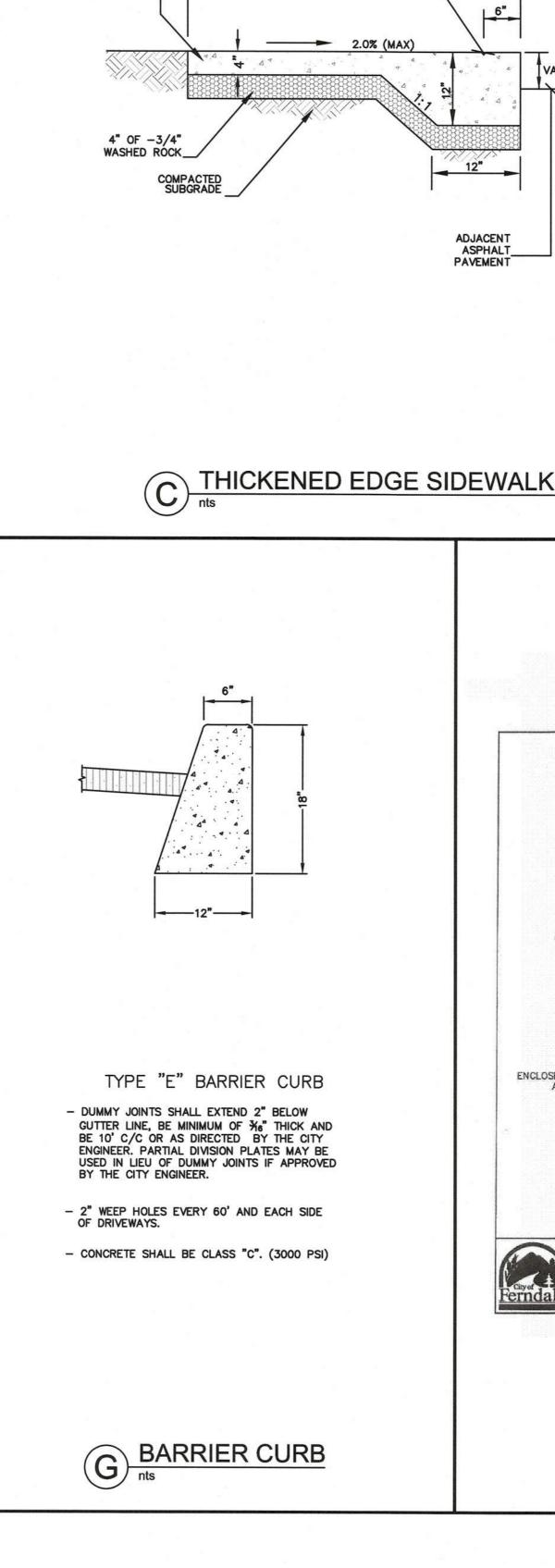


January 30, 2014

PETRO-TAC PLACEMENT

STANDARD DETAIL R-11a NOT TO SCALE

E PETRO-TAC PLACEMENT



TYPICAL SIDEWALK PLAN

AND CROSS SECTION

F SIDEWALK DETAILS

Public Works Director U Date

JUNE 1995

R-12

2091RD2A/R-12

ENGINEER'S CERTIFICATION:

1. EDGE DOES NOT NEED TO BE THICKEND IN AREAS WHERE ADJACENT TO

2. TOOLED JOINTS SPACED TO MATCH SIDEWALK WIDTH - EXPANSION JOINTS SPACED 100' MAX. & WHERE WALK JOINS DRIVEWAY OR CURB.

(VARIES)

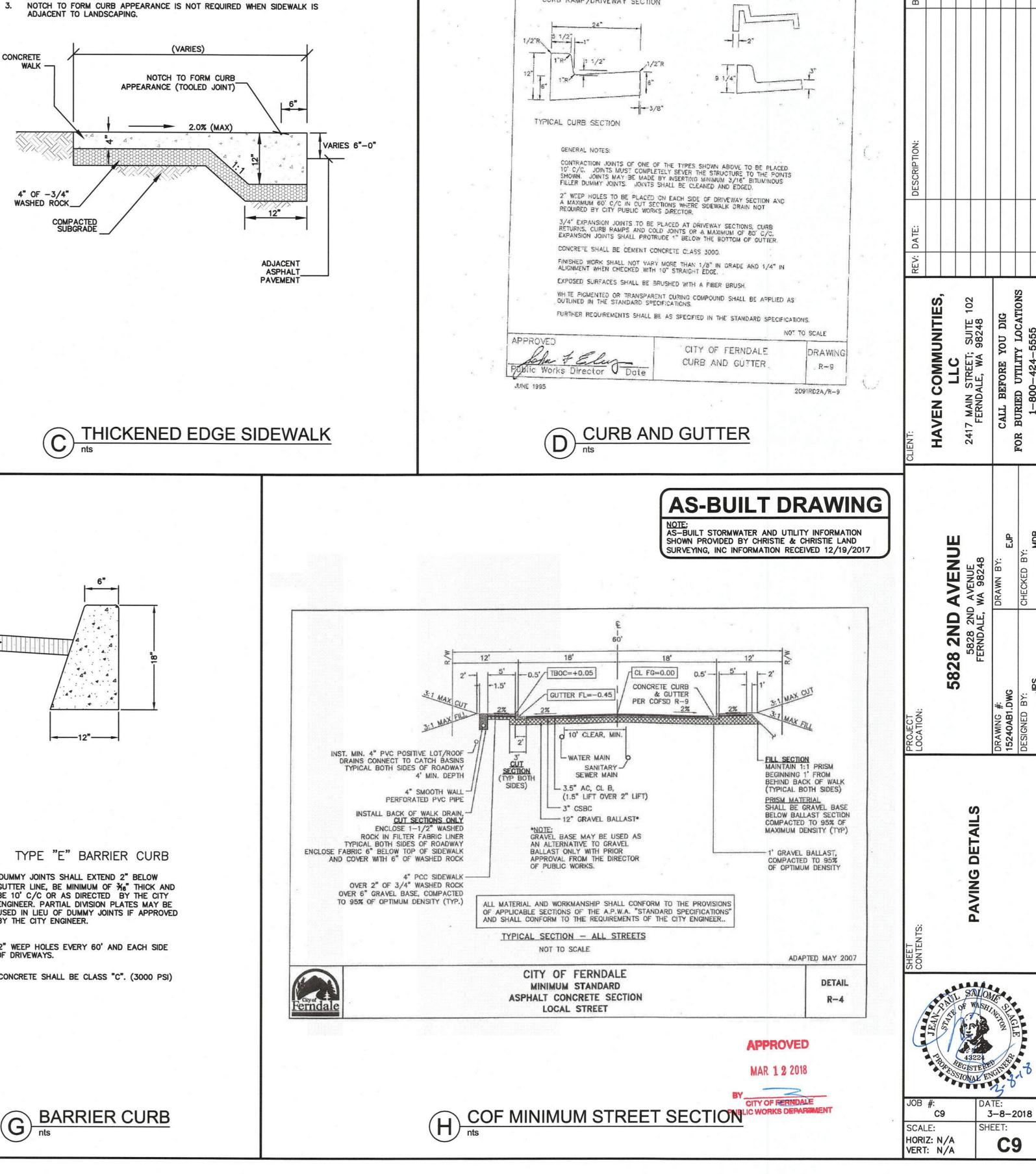
NOTCH TO FORM CURB APPEARANCE (TOOLED JOINT)

PLANTING/LANDSCAPE AREAS OR BUILDING FOUNDATION.

4" CONCRETE

WALK -

"I HEREBY CERTIFY THAT THE IMPROVEMENTS OF 5828 2ND AVENUE HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND CONSTRUCTED IN 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



CURB RAMP/DRIVEWAY SECTION

CONTRACTION JOINTS

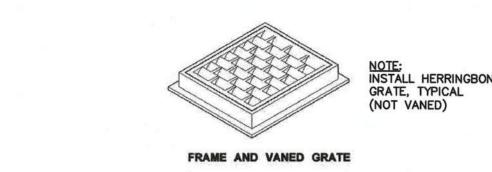
220 West Champion Street, Suite 200 t: 360.650.140

FREELAND

& ASSOCIATE

f: 360.650.140

Bellingham, WA 98225



RECTANGULAR ADJUSTMENT SECTION

PRECAST BASE SECTION

#3 BAR HOOP EACH SIDE

#3 BAR EACH WAY -

PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP * (STD. SPEC. 9-05.20)	12"
SOLID WALL PVC (STD, SPEC. 9-05,12(1))	15"
PROFILE WALL PVC (STD. SPEC. 9-05.12(2))	15"

PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP * (STD. SPEC. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. 9-05.12(1))	15*
PROFILE WALL DVC	

- 1. As acceptable alternatives to the rebar shown in the PRECAST BASE SECTION, fibers (placed according to the 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
- 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 Standard Specification 9-04.3.
- 3. The maximum depth from the finished grade to the lowest pipe invert
- 4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
- 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.

CATCH BASIN TYPE 1

STANDARD PLAN B-5.20-01

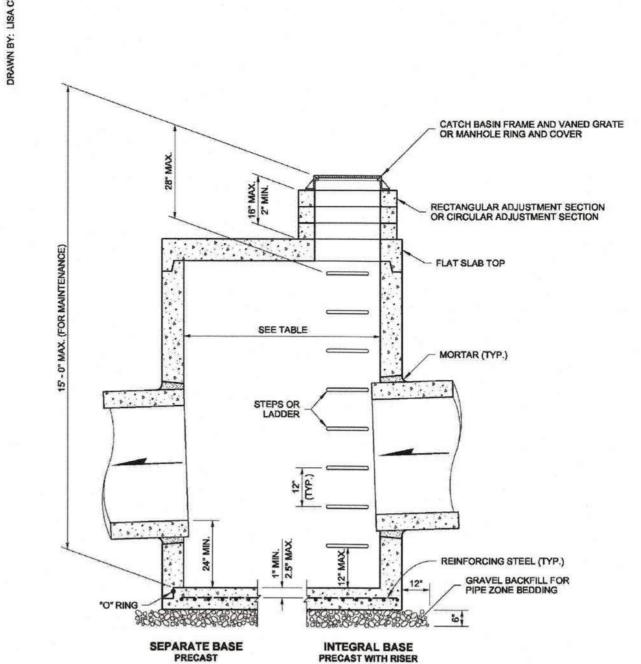
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III 06-16-11

Washington State Department of Transportation





(48" - 72" ONLY)

CATCH BASIN DIMENSIONS MIN. WALL MIN. BASE MAXIMUM MINIMUM DISTANCE KNOCKOUT BASIN DIAMETER THICKNESS THICKNESS BETWEEN SIZE KNOCKOUTS 36" 8" 42 8" 4.5" 48" 8" 72" 60" 12" 8" 12" 12" 72" 12" 84" 12"

12"

12"

120"

10"

② (Standard Specification 9-05.12(1))

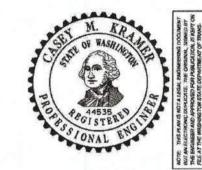
(Standard Specification 9-05.12(2))

B CATCH BASIN TYPE 2

PIPE ALLOWANCES					
CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER				
	CONCRETE	ALL METAL	CPSSP ①	SOLID WALL PVC ²	PROFILE WALL PVC 3
48"	24"	30"	24"	30"	30"
54"	30"	36"	30"	36"	36"
60"	36"	42"	36"	42"	42"
72"	42"	54"	42"	48"	48"
84"	54"	60"	54"	48"	48"
96"	60"	72°	60"	48"	48"
120"	66"	84"	60"	48"	48"
144"	78"	96"	60"	48"	48"

AS-BUILT DRAWING

AS-BUILT STORMWATER AND UTILITY INFORMATION SHOWN PROVIDED BY CHRISTIE & CHRISTIE LAND SURVEYING, INC INFORMATION RECEIVED 12/19/2017



CATCH BASIN TYPE 2

SHEET 1 OF 1 SHEET APPROVED FOR PUBLICATION Pasco Bakotich III 02-07-12 Washington State Department of Transportation



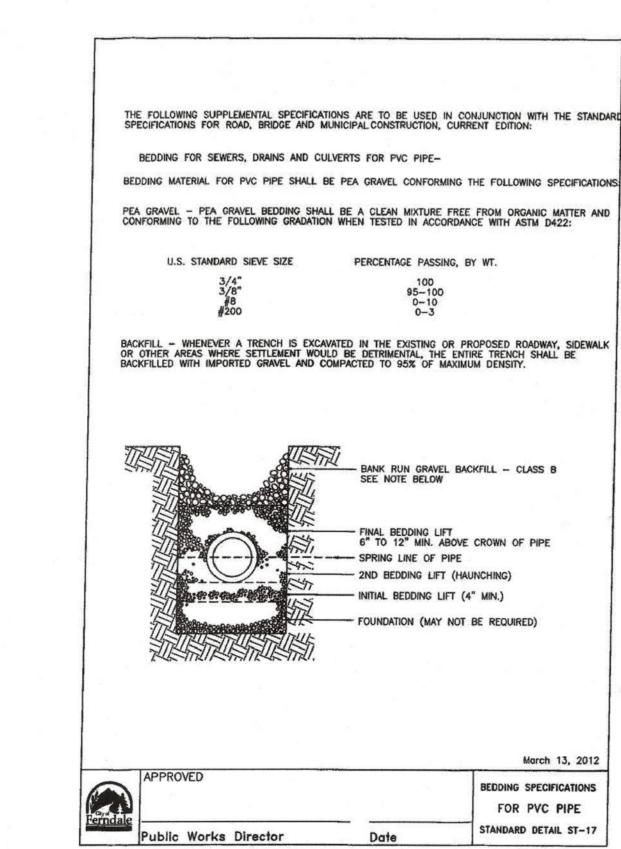
STANDARD PLAN B-10.20-01

CATCH BASIN TYPE 1

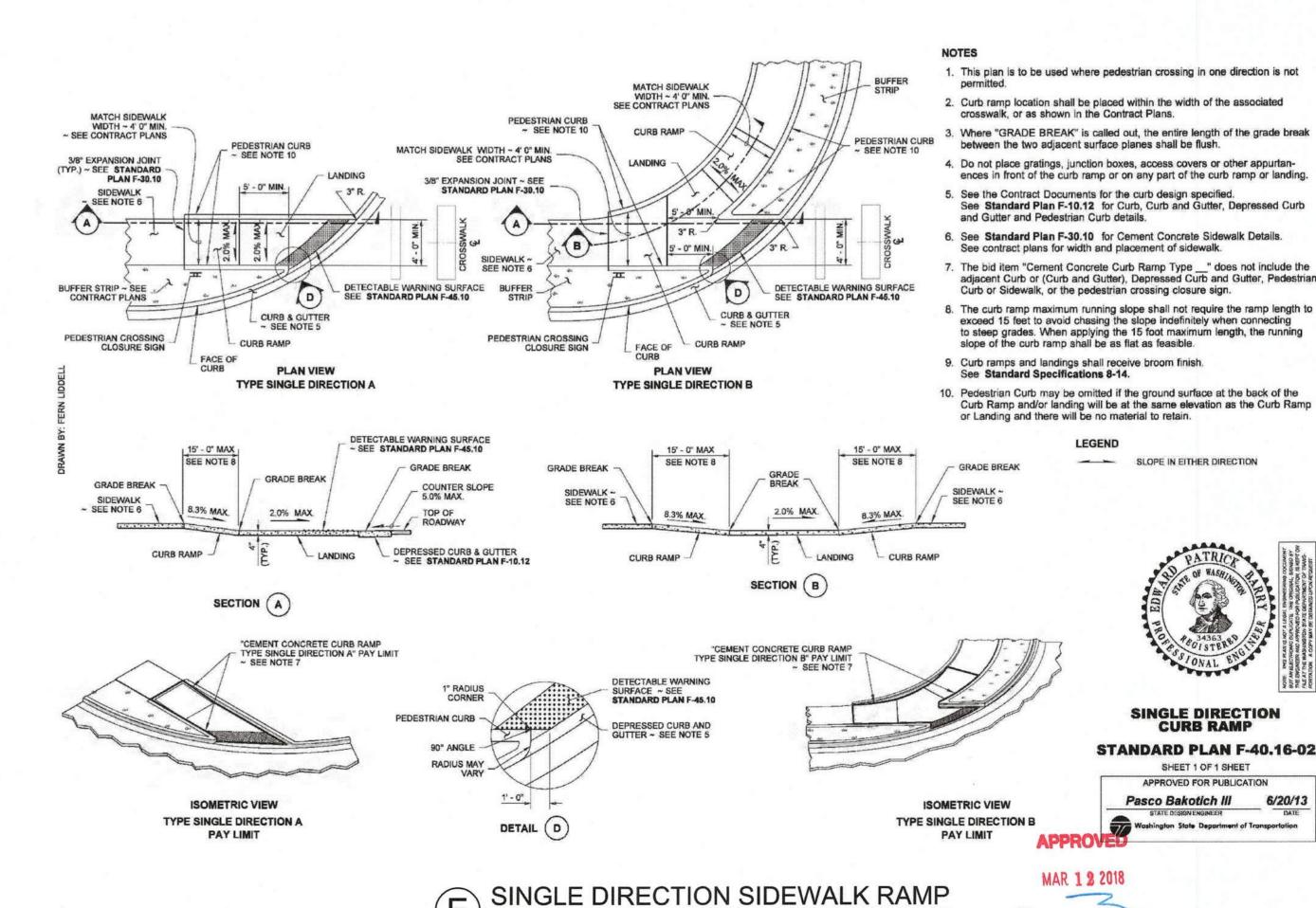
(SEE NOTE 1)

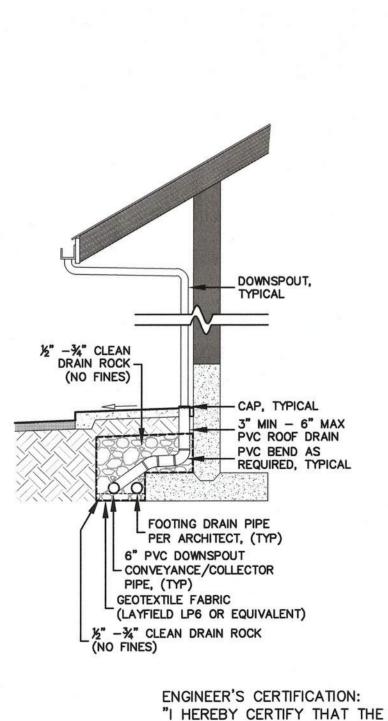
ALTERNATIVE PRECAST BASE SECTION

#3 BAR HOOP









"I HEREBY CERTIFY THAT THE IMPROVEMENTS OF 5828 2ND AVENUE HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND CONSTRUCTED IN CONFORMANCE WITH THE PLANS APPROVED BY PUBLIC WORKS DIRECTOR FOR SAID DEVELOPMENT AND THE GENERAL SPECIFICATIONS ADOPTED BY THE CLTY OF FERNDALE DEPARTMENT OF PUBLIC WORKS."

ROOF DOWNSPOUT CONNECTION



12"

12"

96"

108"

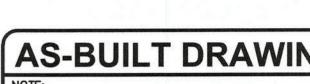
No steps are required when height is 4' or less.

The frame may be cast into the adjustment section.

The bottom of the precast catch basin may be sloped to facilitate cleaning.

3. The rectangular frame and grate may be installed with the flange up or down.

4. 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 **Standard Specification 9-04.3**.





1. This plan is to be used where pedestrian crossing in one direction is not

2. Curb ramp location shall be placed within the width of the associated crosswalk, or as shown in the Contract Plans.

4. Do not place gratings, junction boxes, access covers or other appurtanences in front of the curb ramp or on any part of the curb ramp or landing.

See the Contract Documents for the curb design specified.
 See Standard Plan F-10.12 for Curb, Curb and Gutter, Depressed Curb

6. See Standard Plan F-30.10 for Cement Concrete Sidewalk Details. See contract plans for width and placement of sidewalk.

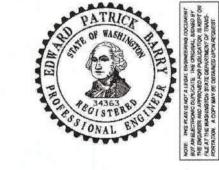
The bid item "Cernent Concrete Curb Ramp Type __" does not include the adjacent Curb or (Curb and Gutter), Depressed Curb and Gutter, Pedestrian Curb or Sidewalk, or the pedestrian crossing closure sign.

8. The curb ramp maximum running slope shall not require the ramp length to exceed 15 feet to avoid chasing the slope indefinitely when connecting to steep grades. When applying the 15 foot maximum length, the running slope of the curb ramp shall be as flat as feasible.

Curb ramps and landings shall receive broom finish. See Standard Specifications 8-14.

CITY OF FERNDALE

Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or landing will be at the same elevation as the Curb Ramp



SINGLE DIRECTION **CURB RAMP** STANDARD PLAN F-40.16-02 SHEET 1 OF 1 SHEET APPROVED FOR PUBLICATION

Pasco Bakotich III 6/20/13 Washington State Department of Transportation

PUBLIC WORKS DEPARTMENT

STONAL 15240 3-8-2018

SHEET:

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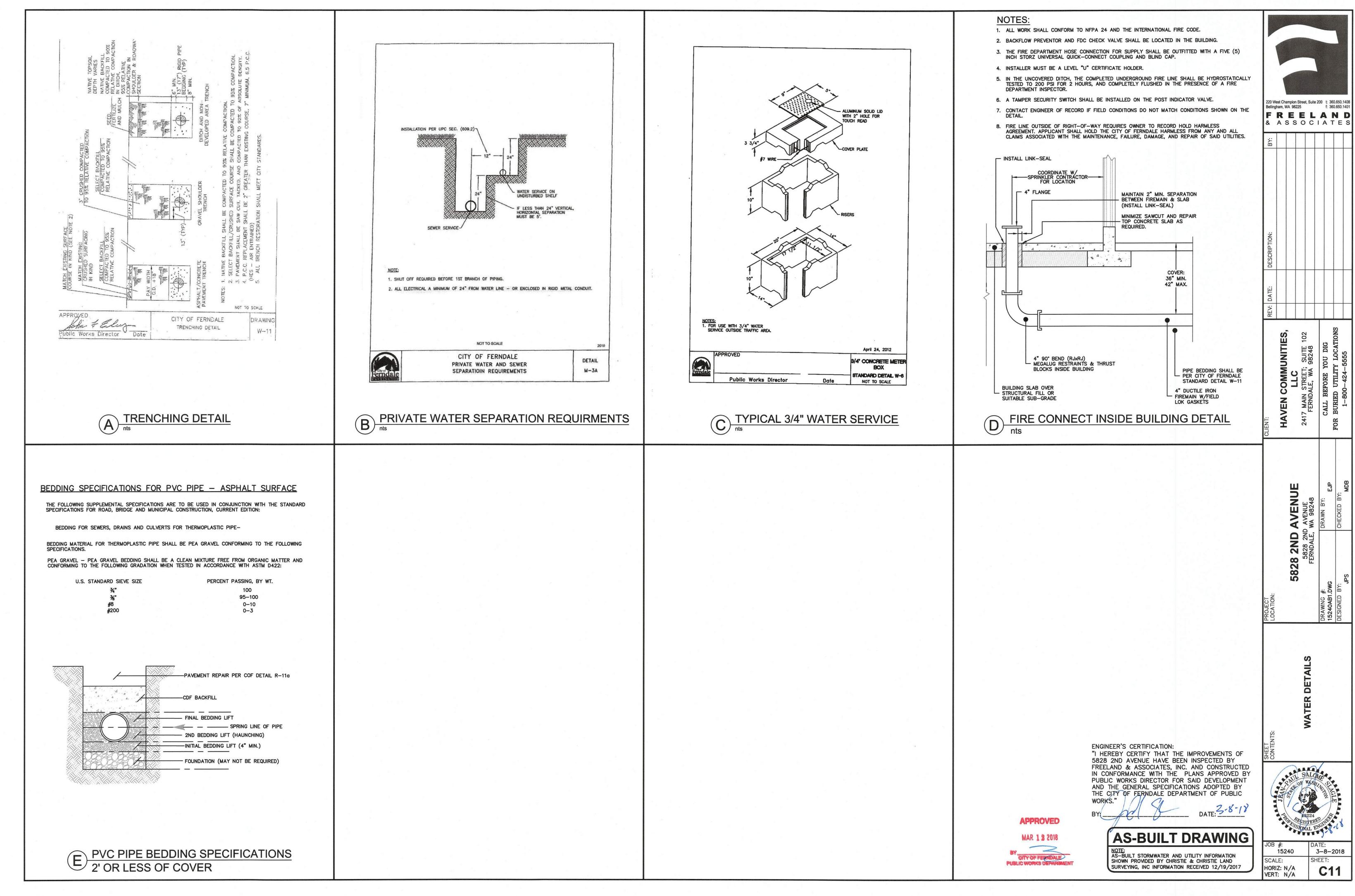
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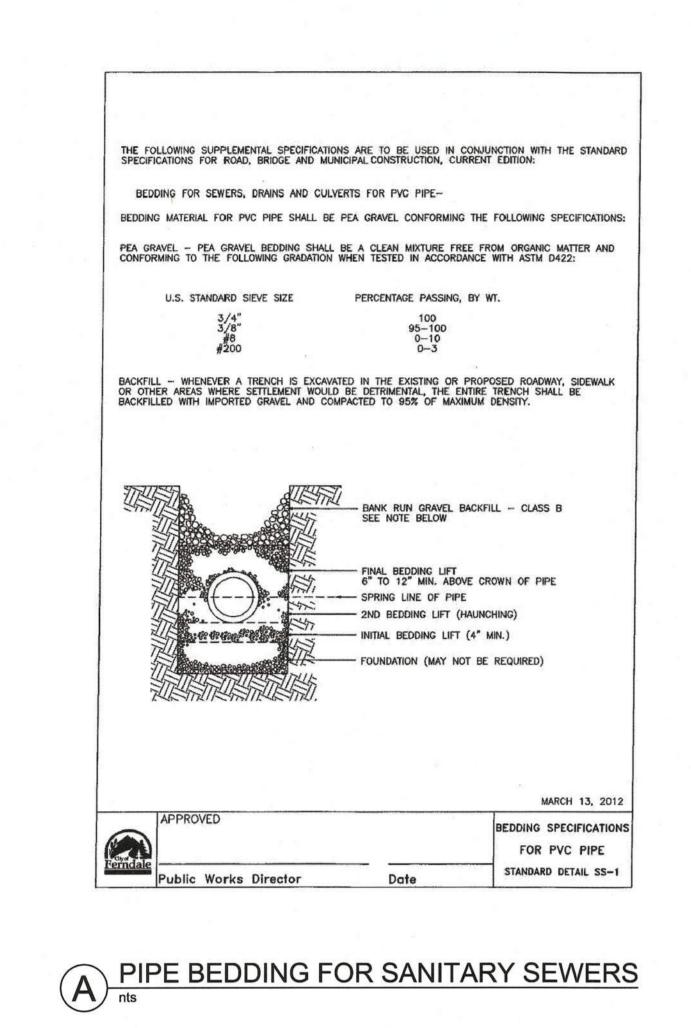
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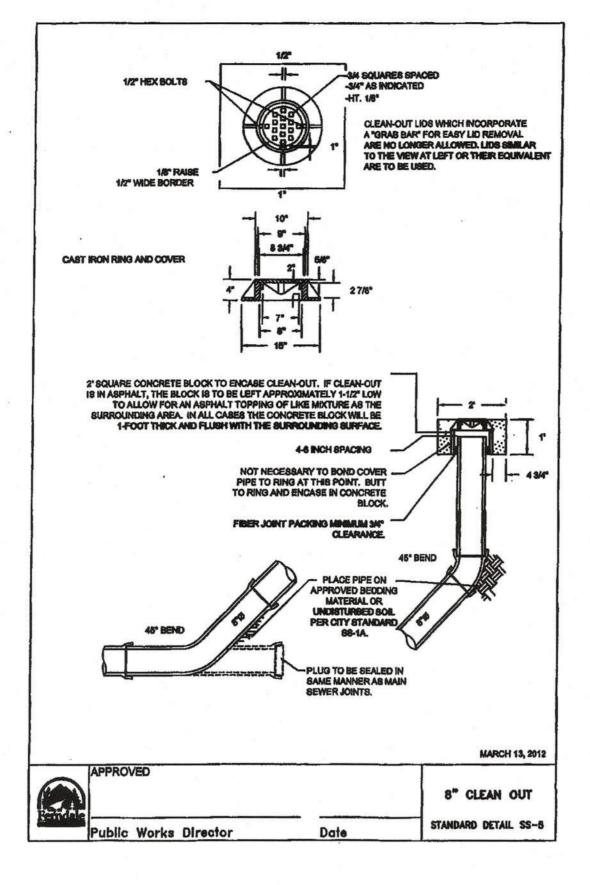
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2ND 828 2NE

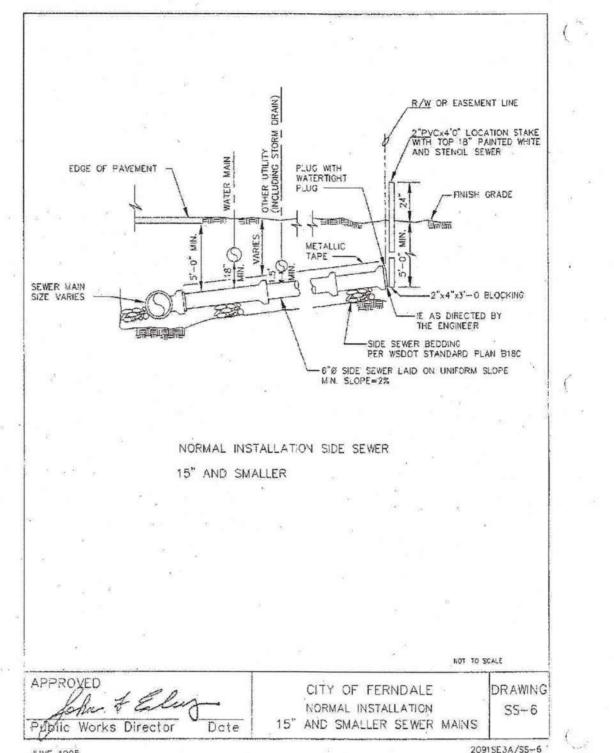
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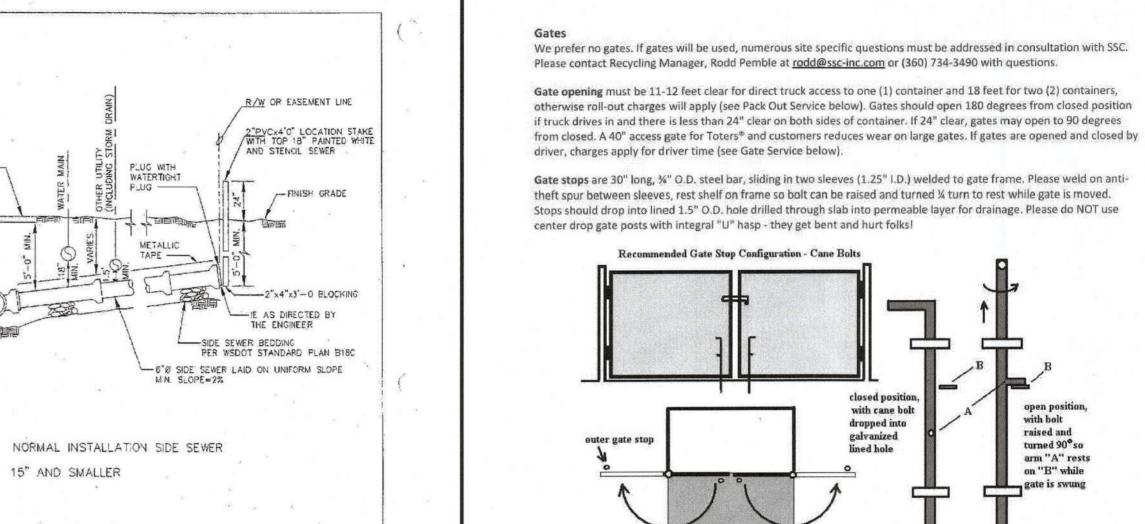












Gate Service (Option) — Available for a small charge. If locked, customer must unlock or supply a standard SSC dumpster lock. Purchase lock from Accurate Lock & Security, Inc. or Security Solutions (formerly Bellingham Lock & Safe).

NOTE: Please do NOT use center locking post on your gates!

Pack Out Service (Option)—Available for customers whose containers must be moved more than 5 feet to reach collection truck. SSC driver takes container to truck, empties it and returns it to designated storage location. Small charge per pick-up on containers 4-yd and smaller (note: there are no wheels on 6-yd and up). Due to weight, most restaurants cannot have Pack Out Service over 2-yd. Contact us for rates or more info.

> ssc@ssc-inc.com 360.734.3490 24 Hour Dispatch 360.734.2051

raised and

turned 90°so arm "A" rests on "B" while

D GARBAGE ENCLOSURE GATE STOP

220 West Champion Street, Suite 200 t: 360.650.1408 Bellingham, WA 98225 f: 360.650.1401 f: 360.650.1401 FREELAND & ASSOCIATE 5828

ENGINEER'S CERTIFICATION: "I HEREBY CERTIFY THAT THE IMPROVEMENTS OF 5828 2ND AVENUE HAVE BEEN INSPECTED BY FREELAND & ASSOCIATES, INC. AND CONSTRUCTED IN 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

> SHOWN PROVIDED BY CHRISTIE & CHRISTIE LAND SURVEYING, INC INFORMATION RECEIVED 12/19/2017

15240 3-8-2018 SHEET: SCALE: HORIZ: N/A VERT: N/A

AS-BUILT DRAWING NOTE; AS-BUILT STORMWATER AND UTILITY INFORMATION

CITY OF FERNDALE
PUBLIC WORKS DEPARTMENT

[-	SEWEF	VARIES SOLUTION	THE THE	-2"x4"x3"0 BLOCKING AS DIRECTED BY E ENGINEER BEDDING TANDARD PLAN BISC N UNIFORM SLOPE	
4 3/4"			TALLATION SIDE SEWER		
2012		ROYED Softer of Elector Date 1995	CITY OF FERNDALI NORMAL INSTALLATION 15" AND SMALLER SEWER	V SS-6	
S-5	C	SANITARY SE	WER SIDE SEI	RVICE COF SS-6	