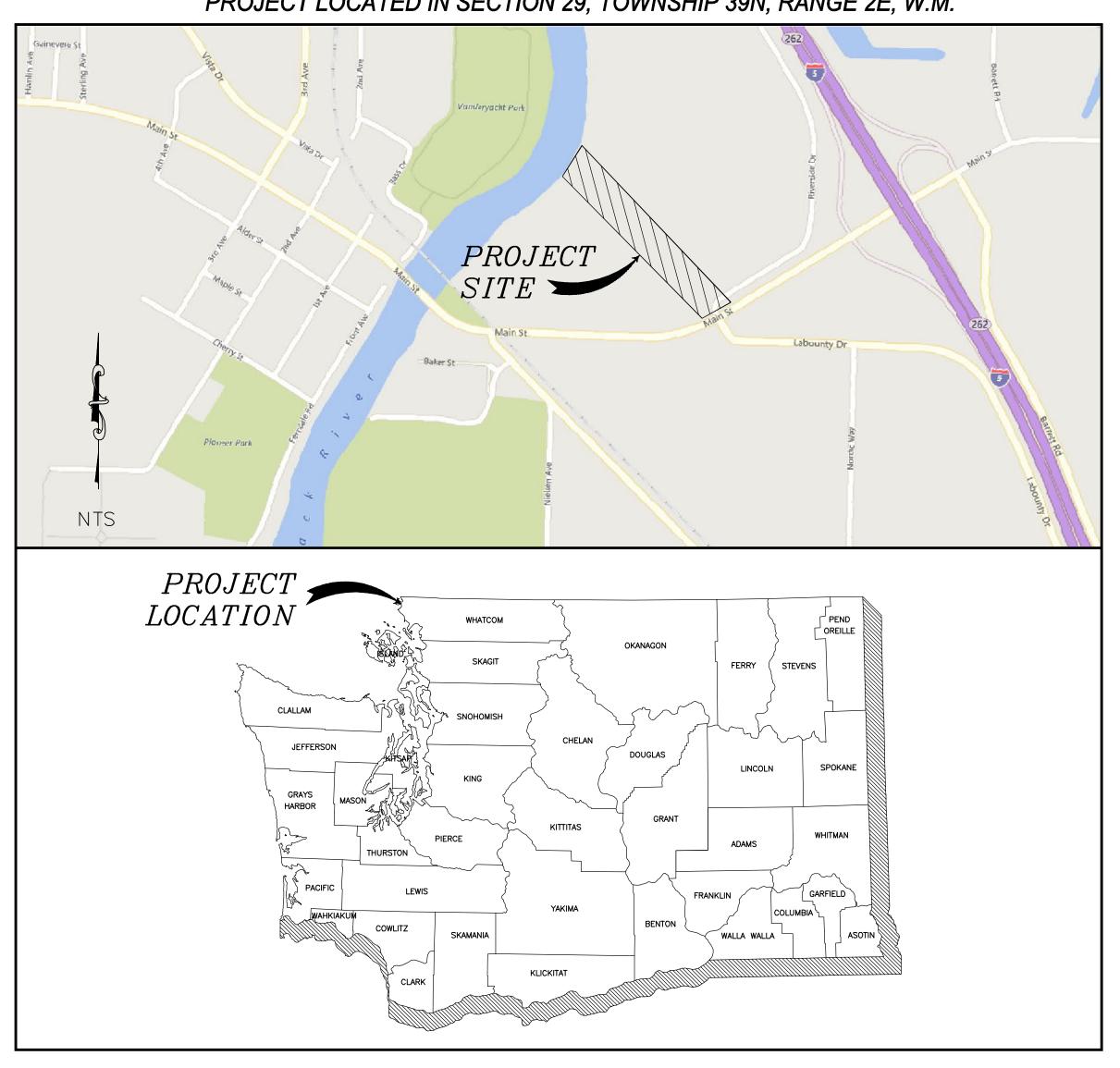
# GATEWAY NORTH STORIWATER PROJECT FERNDALE, WA

CITY OF FERNDALE PROJECT NO. SW2015-03

# **VICINITY MAP**

PROJECT LOCATED IN SECTION 29, TOWNSHIP 39N, RANGE 2E, W.M.



SHEET SERIES INDEX				
SHEET	DESCRIPTION			
1	COVER			
2	LEGEND AND ABBREVIATIONS			
	EXISTING CONDITIONS TESC			
3	STA 0+00 TO 14+50			
	DEMO PLAN			
4	STA 0+00 TO 14+50			
STORM - PLAN AND PROFILE				
5	STA 0+00 TO 5+50			
6	STA 5+50 TO 10+50			
7	STA 10+50 TO 14+50			
LANDSCAPING PLAN				
8	STA 0+00 TO 14+50			
	DETAILS			
9	TESC EROSION CONTROL DETAILS			
10	STORM DETAILS 1			
11	STORM DETAILS 2			
12	REVISION 1 DETAIL			



AS-BUILT

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CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248 DESCRIPTION

DATE

**GATEWAY NORTH** STORMWATER PROJECT COVER

G 15021 COVER-GW 12/17/2018 v: **N/A** 15021

### **LEGEND**

EXISTING

EXISTING	
— — — TB — — — TB —	= EXISTING TOP OF BANK
— — — BB — — — BB —	= EXISTING BOTTOM OF BANK
	= EXISTING DITCH Φ
	= EXISTING GRADE BREAK
95	= EXISTING MAJOR CONTOUR
	= EXISTING MINOR CONTOUR
	= EXISTING GUARDRAIL
xxxx	= EXISTING FENCE
	= EXISTING GRAVEL
	= EXISTING WALL
·/////////////////////////////////////	= EXISTING BUILDING
	= EXISTING PROPERTY BOUNDARY
	= EXISTING RIGHT OF WAY
	= EXISTING RIGHT OF WAY €
	= EXISTING EASEMENT
	= EXISTING ROAD €
	= EXISTING WETLANDS BOUNDARY
	= EXISTING TRAFFIC STRIPING
	= EXISTING EDGE OF PAVEMENT
	= EXISTING FLOWLINE
	= EXISTING TOP BACK OF CURB
	= EXISTING SIDEWALK
— — — — UGP— — — — UGP—	= EXISTING POWER BURIED
	= EXISTING OVERHEAD POWER
— — — — UGC— — — — UGC—	= EXISTING COMMUNICATIONS BURIED
	= EXISTING OVERHEAD COMMUNICATIONS
—— — — FO— — — FO—	= EXISTING FIBER OPTICS BURIED
	= EXISTING TV BURIED
	= EXISTING CONDUIT
——————————————————————————————————————	= EXISTING GAS MAIN
	= EXISTING WATER MAIN
—— — — — IRR— — — — IRR—	= EXISTING IRRIGATION LINE
	= EXISTING SANITARY SEWER FORCE MAIN
——————————————————————————————————————	= EXISTING SANITARY SEWER
——————————————————————————————————————	= EXISTING STORM DRAIN
— — — OHW— — — OHW—	
K	= EXISTING CULVERT
	= EXISTING TREE LINE
Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ	= EXISTING CONCRETE
+ - + -	= EXISTING RR TRACKS

PROPOSED	
— — — TR — — — TR -	— = PROPOSED TOP OF BANK
	- = PROPOSED TOE OF BANK
	— = PROPOSED DITCH €
	- = PROPOSED GRADE BREAK
95	- = PROPOSED MAJOR CONTOUR
95	- = PROPOSED MINOR CONTOUR
<u> </u>	- = PROPOSED GUARDRAIL
xxx_	- = PROPOSED FENCE
	- = PROPOSED GRAVEL
	- = PROPOSED WALL
7//////////////////////////////////////	= PROPOSED BUILDING
	= PROPOSED PAVEMENT VALLEY
	= PROPOSED RIGHT OF WAY
	— = PROPOSED AUTOTURN
· ·	- = PROPOSED STORM DRAIN EASEMENT
	─ = PROPOSED ROAD €
	<pre>— = PROPOSED SAWCUT</pre>
	— = PROPOSED TRAFFIC STRIPE
	— = PROPOSED ROAD EDGE OF PAVEMENT
	- = PROPOSED CURB AND GUTTER
	- = PROPOSED PATH
	- = PROPOSED SIDEWALK
PR	- = PROPOSED POWER LINE
·	> = PROPOSED ROCK WALL
	= PROPOSED PARKING STRIPE
T\$	- = PROPOSED TRAFFIC SIGNAL CONDUCTOR
	- = PROPOSED FIBER OPTICS
——×——×——×—	
с	
	— = PROPOSED HANDRAIL
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	= PROPOSED IRRIGATION LINE
••	= PROPOSED WATER MAIN
	= PROPOSED SANITARY SEWER FORCE MAIN
	= PROPOSED SANITARY SEWER
	— = PROPOSED STORM DRAIN
××	
	- 1101 03ED 11/EE EI14E
	= PROPOSED CONC. SIDEWALK/DRIVEWAY
	= PROPOSED INFILTRATION TRENCH
	= PROPOSED INFILTRATION FILTER MEDIA
	= PROPOSED GRIND
	= PROPOSED DEMOLITION AREA
	= PROPOSED ASPHALT
<u> </u>	= PROPOSED RIGHT OF WAY TAKE

	= EXISTING	SIGNAL POLE
	= EXISTING	SIGNAL POLE W/ LUMINARE
$\leftarrow$	= EXISTING	STREET LIGHT ASSEMBLY
X	= EXISTING	YARD LIGHT
$\leftarrow$	= EXISTING	GUY WIRE
	= EXISTING	GAS METER
$\bowtie$	= EXISTING	GAS VALVE
Δ	= EXISTING	TRANSFORMER PAD
P	= EXISTING	POWER VAULT
$\boxtimes$	= EXISTING	JBOX
	= EXISTING	SOIL BORING LOCATION
МВ□	= EXISTING	MAIL BOX
ſ	= EXISTING	WATER SPIGOT
9	= EXISTING	WATER BLOW OFF
$\boxplus$	= EXISTING	WATER METER
$\bowtie$	= EXISTING	WATER VALVE
	= EXISTING	FIRE HYDRANT
	= EXISTING	TRAFFIC SIGNAL VAULT
	= EXISTING	SEWER MANHOLE
	= EXISTING	STORM DRAIN CATCH BASIN TYPE
	= EXISTING	STORM DRAIN CATCH BASIN TYPE
à	= EXISTING	UTILITY POLE
<b>�</b>	= EXISTING	MONITORING WELL
0	= EXISTING	STORM CLEANOUT
0	= EXISTING	SEWER CLEANOUT
Д	= EXISTING	SIGN
	= EXISTING	TELEPHONE PEDESTAL
С	= EXISTING	COMMUNICATIONS VAULT
<del>-</del>	= EXISTING	BENCH MARK
×	= EXISTING	NAIL AND SHINER
•	= EXISTING	IRON PIPE
$\oplus$	= EXISTING	MONUMENT (IN CASE)
		MONUMENT (SURFACE)
$\triangle$		ANGLE POINT
	= EXISTING	TREE STUMP
	= EXISTING	TREE
	= EXISTING	VEGETATION

	<u>=D</u>
	= PROPOSED STORM DRAIN INLET
¥	= PROPOSED COUPLER
•	= PROPOSED WATER METER
MX	= PROPOSED WATER VALVE
OR D	= PROPOSED STORM DRAIN CATCH BASIN TYPE II
	= PROPOSED SANITARY SEWER MANHOLE
	= PROPOSED STORM DRAIN CATCH BASIN TYPE I
+	= PROPOSED HYDRANT
<b>*</b>	= PROPOSED UTILITY POLE
	= PROPOSED JBOX (TYPE I, II, III)
•	= PROPOSED MONITORING WELL
•	= PROP STORM CLEANOUT
•	= PROPOSED SANITARY SEWER CLEAN OUT
_	= PROPOSED SIGN
<b>=</b>	= FLOW ARROW
0	= PROPOSED TREE
DETAIL NUMBER	
SHI	= SECTION MARK
SHEET NUMBER	
	EXISTING ELEVATION @ REFERENCED ALIGNMENT 
10+00	—STATION

### **ABBREVIATIONS**

ø	= DIAMETER	EVLS	= END VERTICAL CURVE STATION	MOD	= MODIFIED	S	= SOUTH
AC	= ASBESTOS CEMENT	EX, EXIST	= EXISTING	MON	= MONUMENT	SCH	= SCHEDULE
AD	= ALGEBRAIC DIFFERENCE	IR	= EXISTING IRRIGATION	MPOC	= MID-POINT ON CURVE	SD	= STORM DRAIN
ASPH	= ASPHALT	F&C	= FRAME AND COVER	MTR	= METER	SDCB	= STORM DRAIN CATCH BASIN
BLDG	= BUILDING	F&G	= FRAME AND GRATE	MW	= MONITORING WELL	SDMH	= STORM DRAIN MANHOLE
BVCE	= BEGIN VERTICAL CURVE ELEVATION	FF	= FINISHED FLOOR	N	= NORTH	SE	= SOUTHEAST
BVCE	= BEGIN VERTICAL CURVE STATION	FG	= FINISHED GRADE	NE	= NORTHEAST	SN	= EXISTING SIGN
C&G	= CURB & GUTTER	FL	= FLOW LINE	NW	= NORTHWEST	SP	= STANDARD PLAN
CATV	= CABLE TELEVISION	FT	= FEET	OC	= ON CENTER	SSMH	= SANITARY SEWER MANHOLE
CDF	= CONTROLLED DENSITY FILL	FT/FT	= FEET PER FOOT	PVMNT	= PAVEMENT	STA	= STATION
Ę	= CLASS, CENTERLINE	GALV	= GALVANIZED	PC	= POINT OF CURVATURE	STD	= STANDARD
CMP	= CORRUGATED METAL PIPE	GRVL	= GRAVEL	PCC	= POINT OF COMPOUND CURVATURE,	SW	= SOUTHWEST
CMU	= CONCRETE MASONRY UNIT	GV	= GATE VALVE		PORTLAND CEMENT CONCRETE	TEL	= TELEPHONE
COMP	= COMPACTED	HDPE	= HIGH DENSITY POLYETHYLENE	PED	= PEDESTAL	TL	= TRAFFIC LOOP
CON	= CONIFER	HMA	= HOT MIX ASPHALT	POC	= POINT ON CURVE	TYP	= TYPICAL
CONC	= CONCRETE	HP	= HIGH POINT	POSS	= POSSIBLE	UP	= UTILITY POLE
CONT	= CONTOUR	HYD	= HYDRANT	PRC	= POINT OF REVERSE CURVE	UTIL	= UTILITY
CPSSP	= CORRUGATED POLYETHYLENE	IE, INV	= INVERT ELEVATION	PROP	= PROPOSED	VC	= VERTICAL CURVE
	STORM SEWER PIPE	IW	= INJECTION WELL	PT	= POINT OF TANGENCY	VLT	= VAULT
CULV	= CULVERT	L	= LENGTH	PVC	= POLYVINYL CHLORIDE	VPC	= VERTICAL POINT OF CURVATURE
D/W	= DRIVEWAY	LDCS	= LANDSCAPING	PVI	= POINT OF VERTICAL INTERSECTION	VPI	= VERTICAL POINT OF INTERSECTION
DEC	= DECIDUOUS	LF	= LINEAR FEET	PWR	= POWER	VPT	= VERTICAL POINT OF TANGENCY
DI	= DUCTILE IRON	LOC	= LOCATION	R	= RADIUS	W	= WEST
Ε	= EAST	LP	= LOW POINT	R&C	= RING AND COVER	WM	= WATER METER
EOP, EP	= EDGE OF PAVEMENT	LT	= LEFT	RET	= RETAINING	WSDOT	= WASHINGTON STATE DEPARTMENT
EQUIV	= EQUIVALENT	MAX	= MAXIMUM	ROW	= RIGHT OF WAY		OF TRANSPORTATION
EVCE	= END VERTICAL CURVE ELEVATION	MIN	= MINIMUM	RT	= RIGHT	XEOA	= EXISTING EDGE OF ASPHALT

### **NOTES**

- FIELD WORK AND TOPOGRAPHIC SURVEY PERFORMED BY COMPASS POINT SURVEY, LLC, 523 FRONT ST., LYNDEN, WA.
   HORIZONTAL DATUM: WASHINGTON STATE PLANE (NORTH) COORDINATES NAD 83—2011, VERTICAL DATUM: NGVD 29
   HERRINGBONE GRATES SHALL BE USED ON ALL STORM DRAIN STRUCTURE UNLESS OTHERWISE NOTED.
   CATCH BASINS & MANHOLE CENTER OF STRUCTURE ORIENTATION RELATIVE TO FRAME & GRATE OR RING & COVER SHALL BE AS SHOWN ON THE PLANS.





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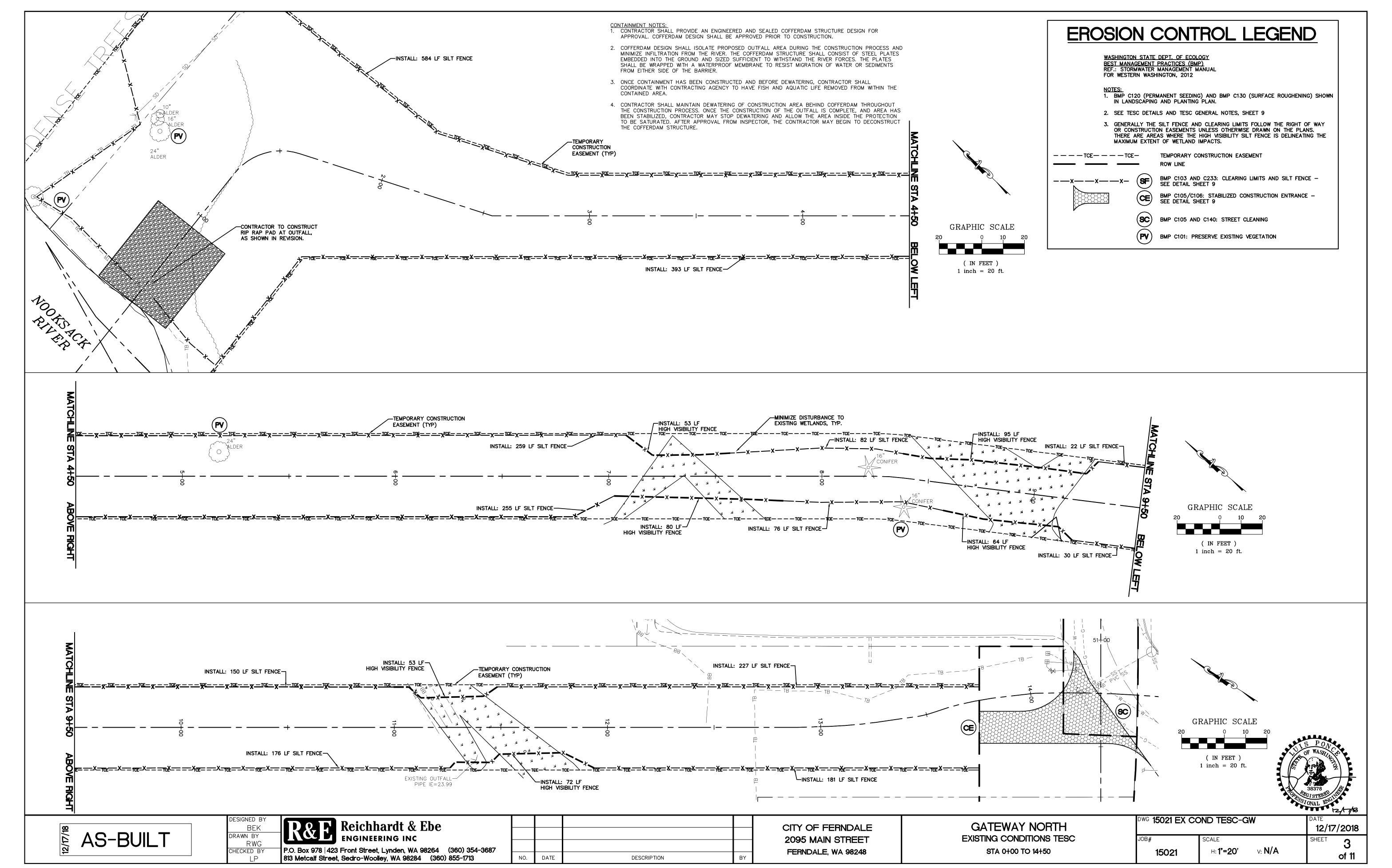
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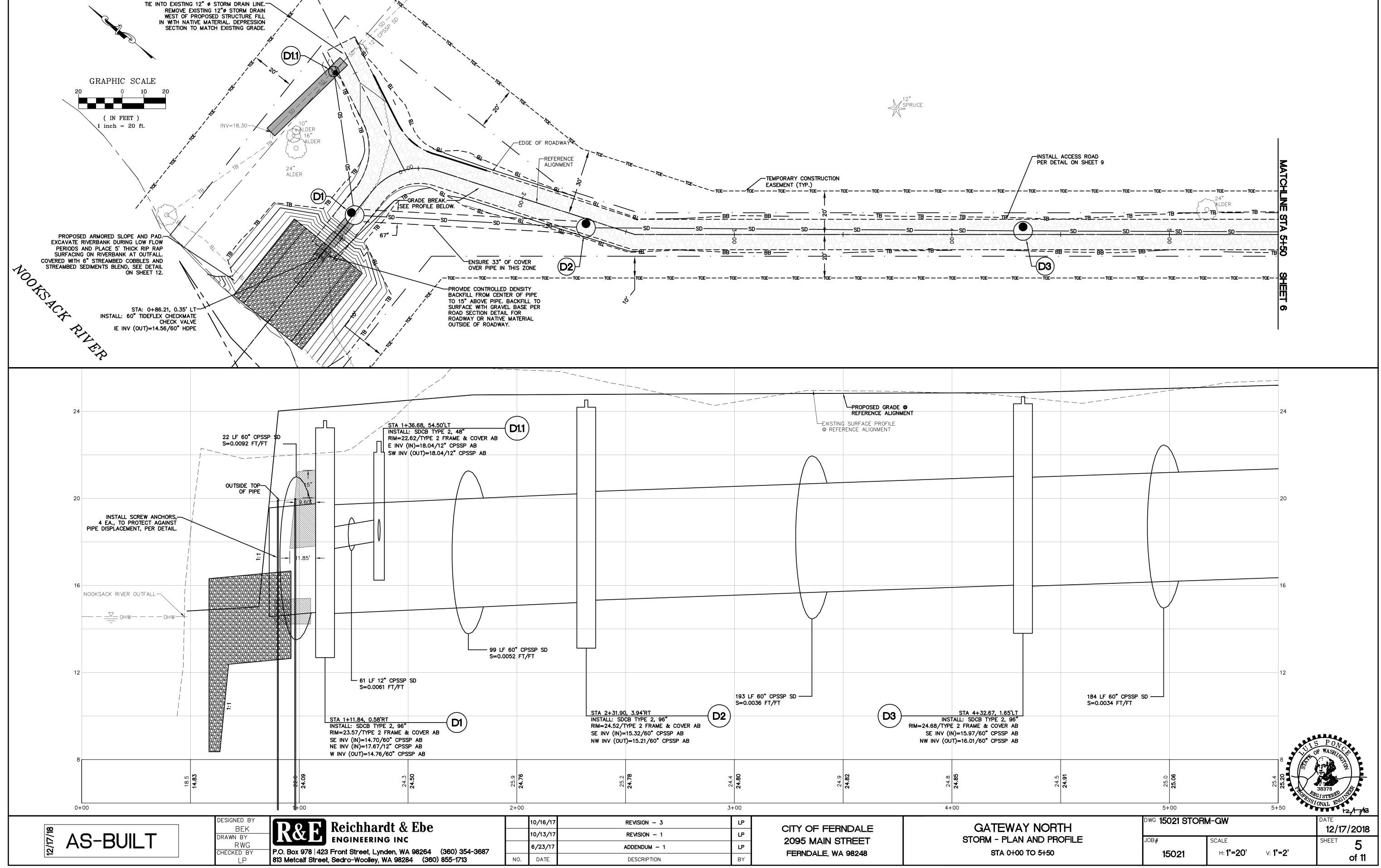
DATE DESCRIPTION CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

**GATEWAY NORTH** ROADWAY AND UTILITIES IMPROVEMENT PROJECT LEGEND AND ABBREVIATIONS

DWG 15021 COVER-GW				
JOB#	SCALE			
15021	H: <b>N/A</b>			

12/17/2018





DESCRIPTION

813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

DESCRIPTION

813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

STA 0+00 TO 14+50

15021

FERNDALE, WA 98248

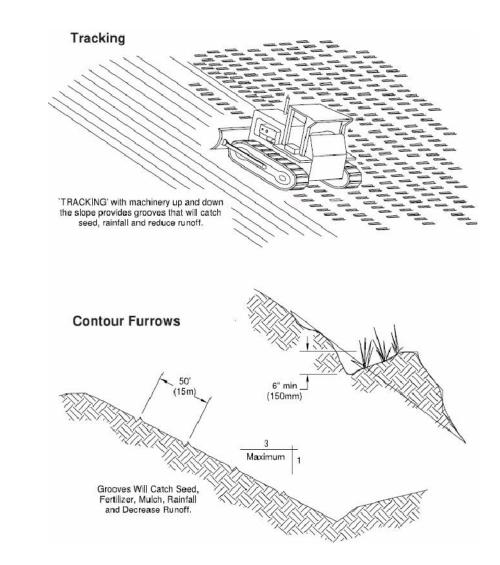
### TESC GENERAL NOTES

- 1. THIS PLAN REPRESENTS THE MINIMUM REQUIREMENTS FOR THIS PROJECT. ADDITIONAL EROSION CONTROL MAY BE REQUIRED BY THE ENGINEER AS ARE FOUND NECESSARY.
- THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE INSTALLED PRIOR TO ALL OTHER SITE CONSTRUCTION. ALL CLEARING LIMITS SHALL BE VISIBLY MARKED PRIOR TO CLEARING.
- 4. ANY VEGETATION NOT IN THE CONSTRUCTION AREA SHALL BE LEFT UNDISTURBED. 5. CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE ENGINEER OF ANY PROPOSED CHANGES IN PLAN PRIOR TO CONSTRUCTION OF THAT CHANGE. CONTRACTOR SHALL KEEP RECORD OF
- DEVIATIONS AND FORWARD TO THE ENGINEER. 6. MAINTENANCE AND OPERATION OF THE EROSION CONTROL AND SEDIMENTATION SYSTEM SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE
- SEDIMENTATION AND EROSION CONTROL MEASURES, AS SHOWN AND AS INSTALLED ON AN AS NEEDED BASIS. 7. THE CONSTRUCTED EROSION CONTROL AND SEDIMENTATION PLAN SHALL BE APPROVED BY THE ENGINEER PRIOR TO PERFORMING ANY SITE GRADING OR CLEARING.
- 8. CONTRACTOR WILL HAVE A WATER TRUCK AVAILABLE ON SITE AT ALL TIMES. CONTRACTOR WILL WATER SURFACES OFTEN ENOUGH TO ABATE DUST AS APPROVED BY THE ENGINEER. WATERING WILL INCLUDE WEEKENDS 9. THE CONTRACTOR SHALL PERFORM ALL STREET CLEANING BY HAND OR WITH A SELF-PROPELLED PICKUP
- STREET SWEEPER. A STANDARD SELF-PROPELLED STREET SWEEPER WILL NOT BE ALLOWED.

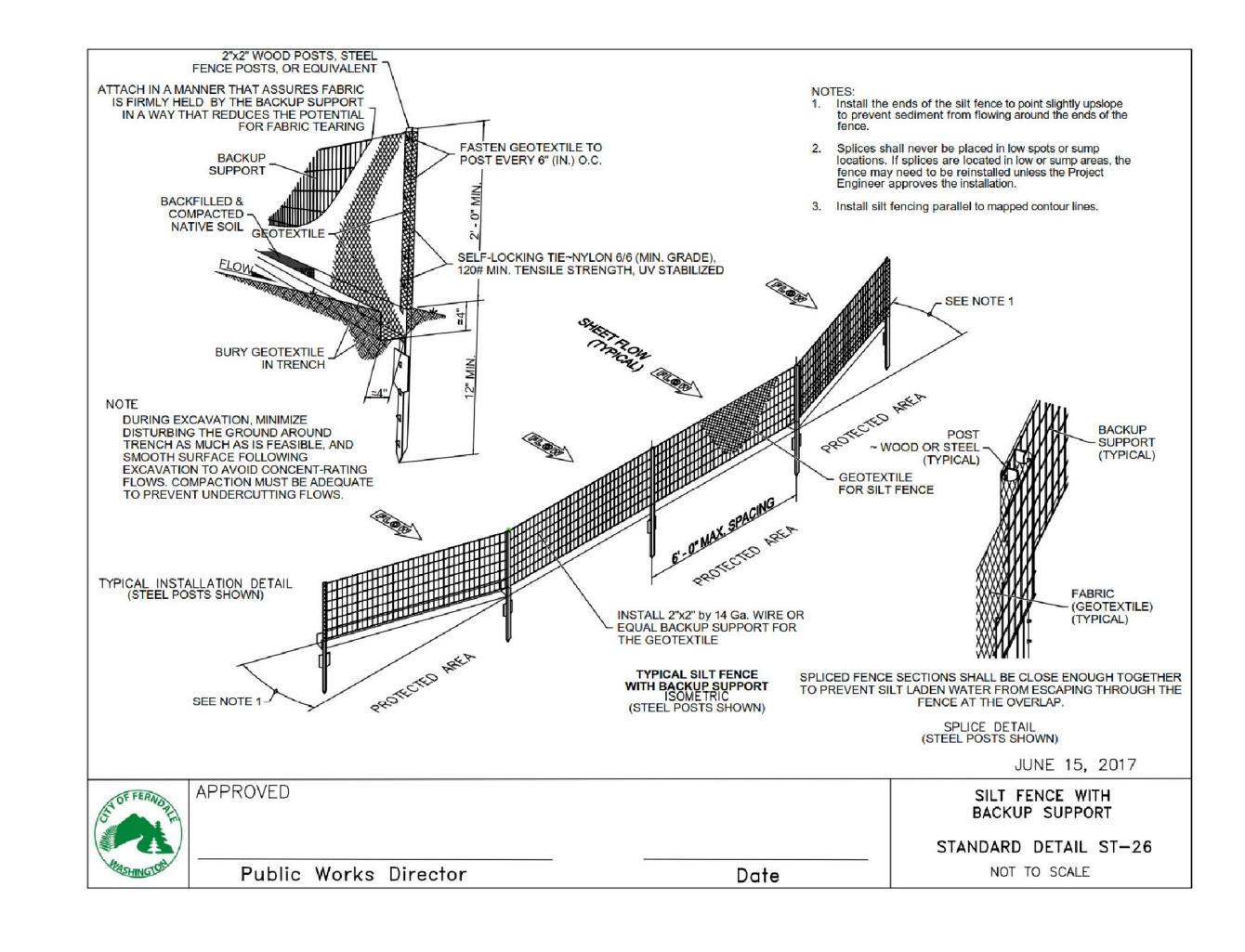
  10. ALL DISTURBED AREAS SHALL BE HYDROSEEDED. GRASS SEEDING SHALL BE BROADCAST IN ACCORDANCE WITH
- THE CONTRACT DOCUMENTS. 11. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND FERTILIZED FOR EROSION CONTROL. CONTRACTOR SHALL BE RESPONSIBLE FOR SLOPE EROSION UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- 12. ALL STORM DRAIN FACILITIES WITHIN THE PROJECT BOUNDARY, OR WHICH ARE IMPACTED BY THE PROJECT ARE
- TO BE CLEARED OF SEDIMENT AND DEBRIS PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. 13. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

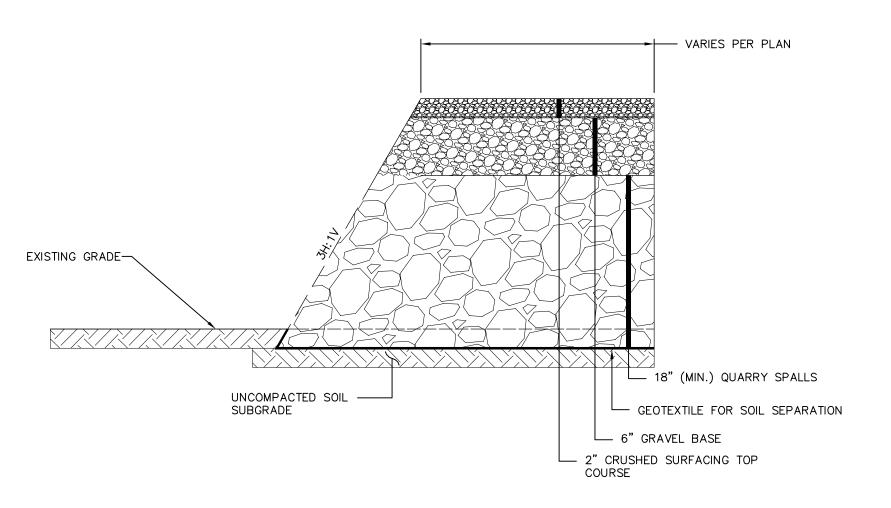
DUST CONTROL:
CONTRACTOR SHALL LIMIT DUST GENERATION BY CLEARING ONLY THOSE AREAS WHERE IMMEDIATE EXCAVATION AND GRADING SHALL TAKE PLACE MAINTAINING THE ORIGINAL GROUND COVER AS LONG AS PRACTICAL. DUST CONTROL METHODS SHALL BE PERFORMED BY METHODS LISTED IN NOTE NUMBER EIGHT OF THE TESC GENERAL NOTES. SURFACES SHALL BE SPRAYED WITH WATER AS NEEDED IN ORDER TO ABATE DUST AS APPROVED BY THE ENGINEER.

STREET CLEANING:
CONTRACTOR SHALL PERFORM ALL STREET CLEANING AT A MINIMUM OF AT LEAST ONCE AT THE END OF EVERY
DAY WORKED AND ON AN AS NEEDED BASIS BASED ON VEHICLE TRACK OUT. STREET CLEANING SHALL BE
PERFORMED BY THE METHODS LISTED IN NOTE NUMBER 10 OF THE TESC GENERAL NOTES AND SHALL NOT ALLOW
SEDIMENT INTO STORMWATER CONVEYANCE DITCHES OR STRUCTURES. STREET CLEANING METHODS SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE BEGINNING OF CONSTRUCTION.

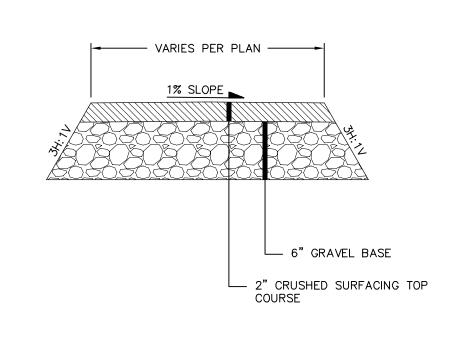








ROAD SECTION AT WETLAND CROSSING



**ACCESS ROAD SECTION** 



18	4 O DI III T
<u>                                      </u>	AS-BUILT
1	AO DOIL I
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RAWN BY LMH CHECKED BY

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·	6/23/17	ADDENDUM — 1	LP
۷0.	DATE	DESCRIPTION	BY

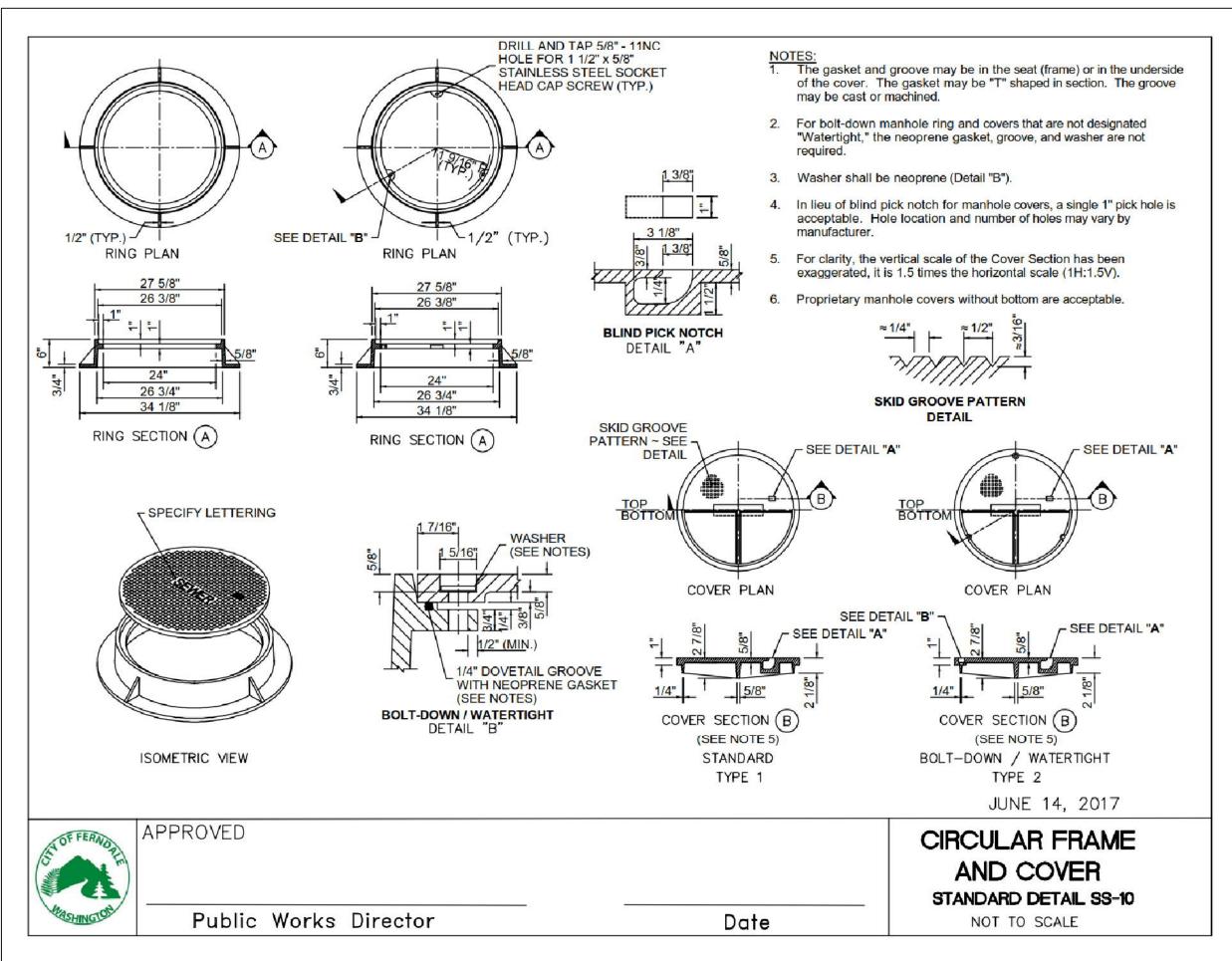
CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

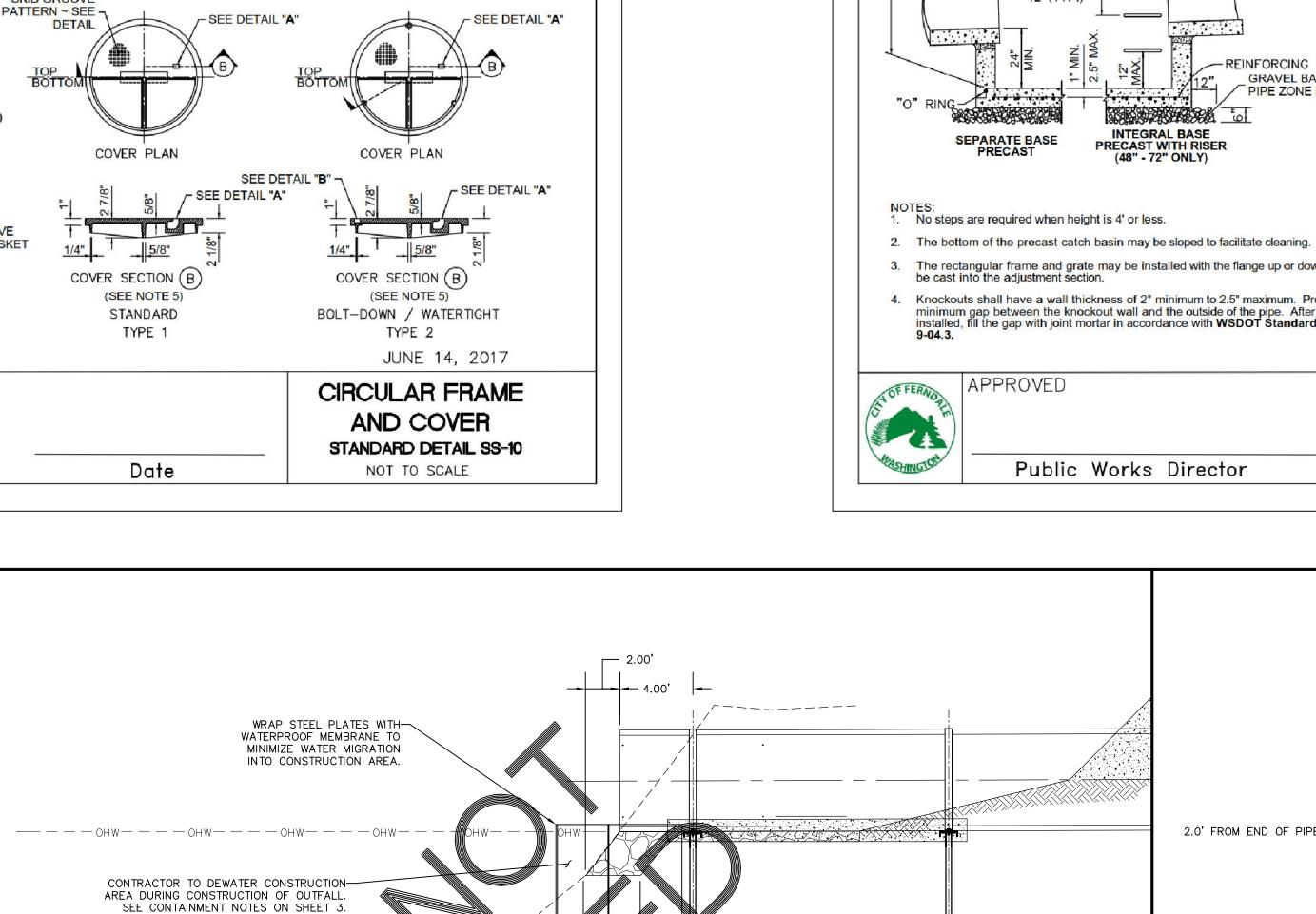
**GATEWAY NORTH DETAILS** TESC EROSION CONTROL DETAILS 15021

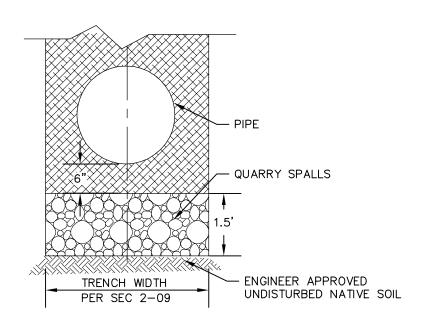
G 15021 DETAILS-GW 12/17/2018 9 V: **N/A** 

CATCH BASIN FRAME AND VANED GRATE

OR MANHOLE RING AND COVER







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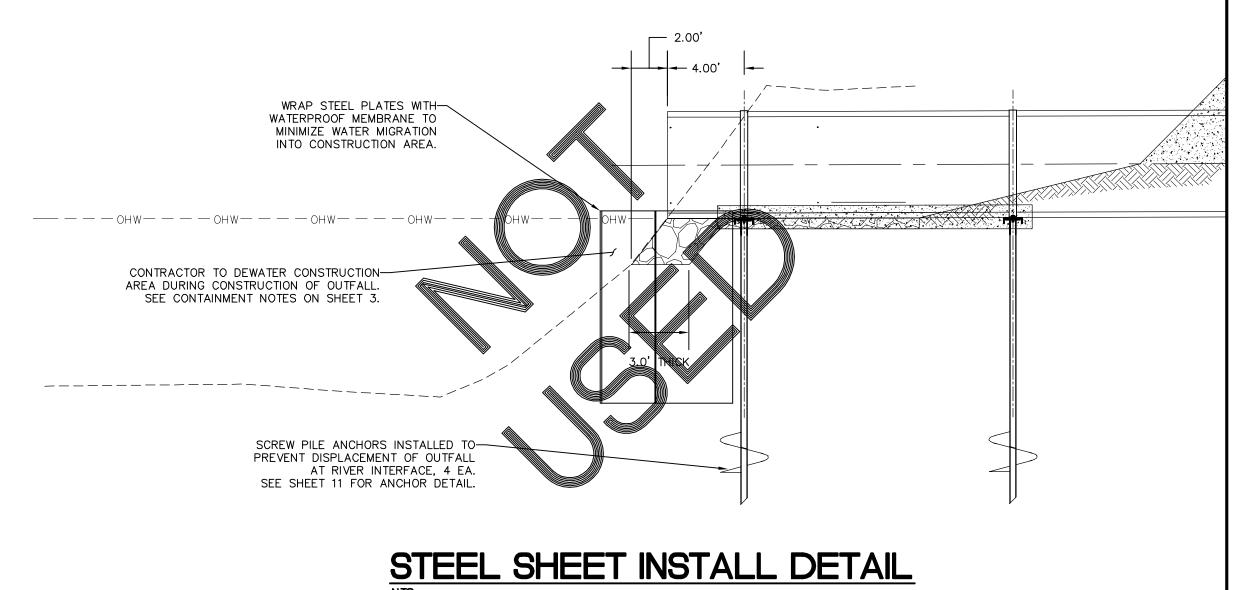
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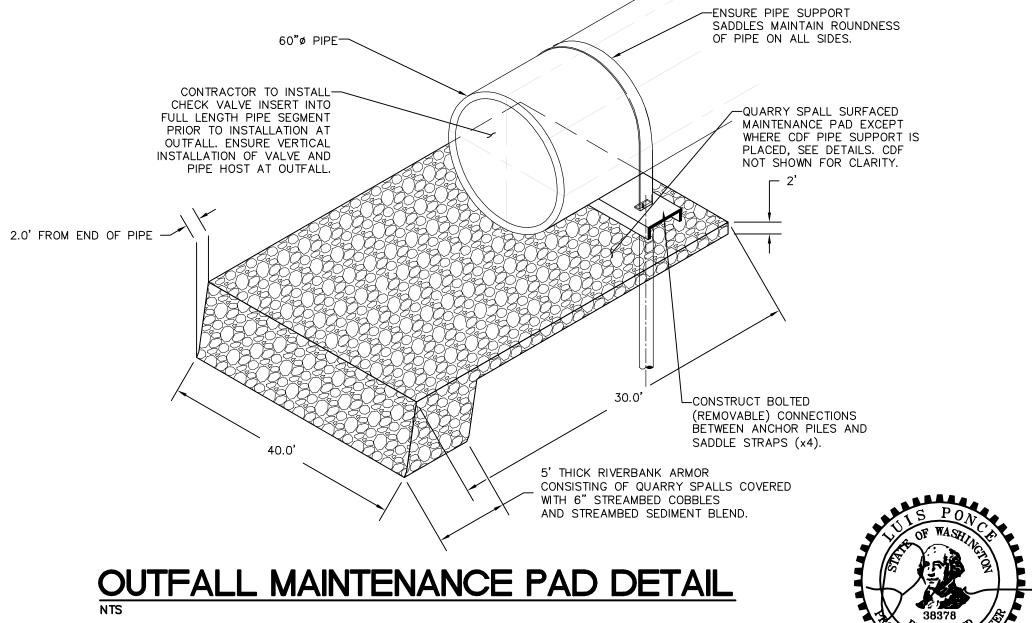
LP

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REMOVAL OF UNSUITABLE MATERIAL INCLUDING HAUL, TYPICAL SECTION





PIPE ALLOWANCES

PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER

AS-BUILT
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6/23/17 ADDENDUM - 1 DESCRIPTION

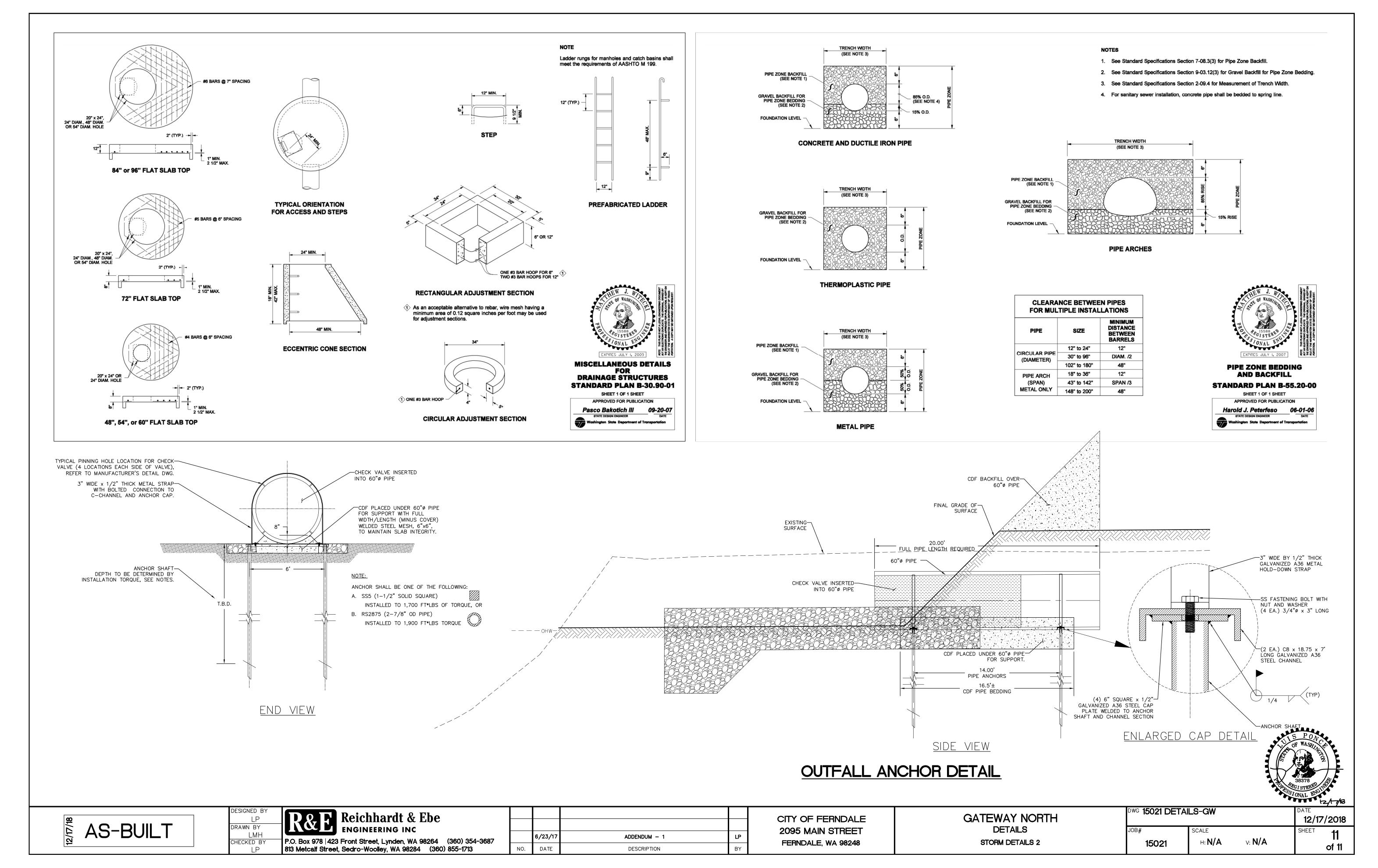
CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

**GATEWAY NORTH DETAILS** STORM DETAILS 1

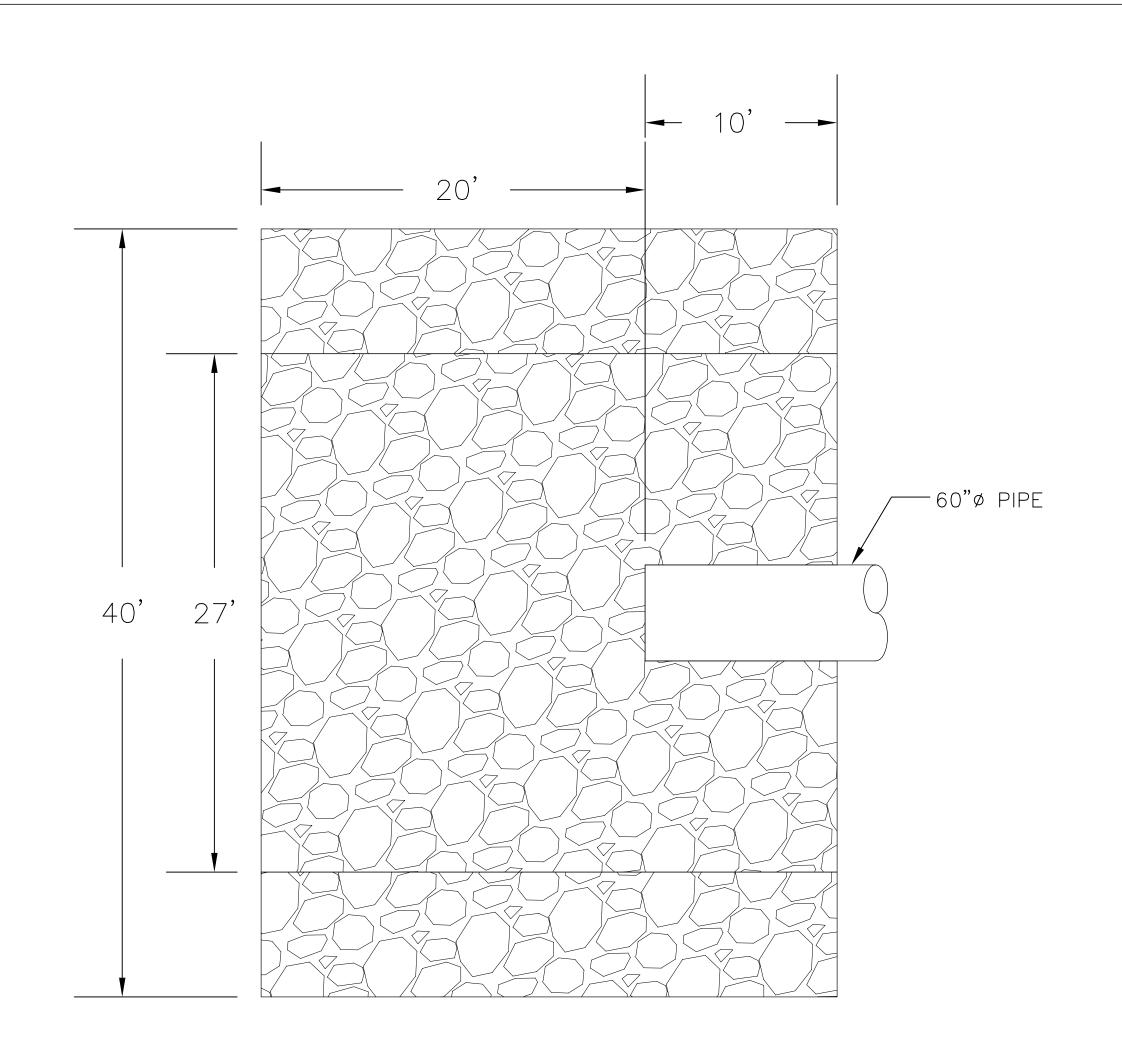
WG 15021 DETAILS-GW ∨: **N/A** 15021

12/17/2018





## TYPICAL CROSS SECTION



# OUTFALL DISPERSION SWALE

# PLAN VIEW

NTS

EL=14.82 -

EL=8.75 —



AS-BUILT

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BEK
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 10/13/17
 REVISION - 1
 LP

 6/23/17
 ADDENDUM - 1
 LP

 NO.
 DATE
 DESCRIPTION
 BY

CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248 GATEWAY NORTH STORM DETAIL

60"ø PIPE

PROFILE VIEW

SCREW ANCHORS NOT

SHOWN FOR CLARITY

021 DETAILS-GW			DATE <b>12/17</b>	DATE 12/17/2018		
	SCALE		SHEET	12		
5021	H:	V:		of 11		