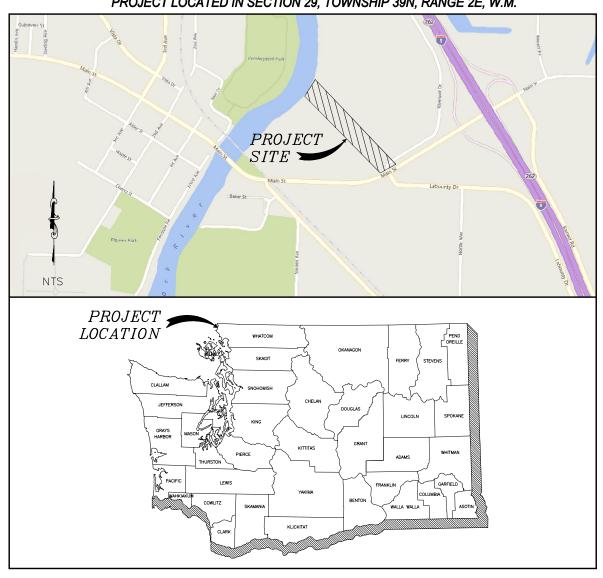
# GATEWAY NORTH STORMWATER PROJECT

FERNDALE, WA

CITY OF FERNDALE PROJECT NO. SW2015-03

## **VICINITY MAP**

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



SHE	ET 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				



DRAWN BY

CHECKED BY

RESERVED.

Reichhardt & Ebe
ENGINEERING INC
P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687
813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

D. DATE DESCRIPTION BY

CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248 GATEWAY NORTH STORMWATER PROJECT COVER S 15021 COVER-GW

DATE
6/15/17

SCALE
15021 H: N/A V: N/A

SHEET 1

#### **LEGEND**

EXISTING	
— — — ТВ — — — ТВ —	= EXISTING TOP OF BANK
— — — BB — — — BB —	
	= EXISTING DITCH ©
	= EXISTING GRADE BREAK
95	= EXISTING MAJOR CONTOUR
	= EXISTING MINOR CONTOUR
	= EXISTING GUARDRAIL
xxxx	= EXISTING FENCE
	= EXISTING GRAVEL
	= EXISTING WALL
777777777777777777777777777777777777777	= 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 FOR BACK OF CORD
— — — — UGP— — — — UGP—	= EXISTING POWER BURIED
— — — — — — — — — — — — — — — — — — —	= EXISTING OVERHEAD POWER
— — — — UGC— — — — UGC—	
	= EXISTING OVERHEAD COMMUNICATIONS
— — — — FO— — — FO—	= EXISTING FIBER OPTICS BURIED
TTTT	= EXISTING TELEPHONE BURIED
ccc-	= EXISTING CONDUIT
GGG-	= EXISTING GAS MAIN
www	= EXISTING WATER MAIN
— — — IRR— — — IRR—	= EXISTING IRRIGATION LINE
FMFM	= EXISTING SANITARY SEWER FORCE MAIN
ssss	= EXISTING SANITARY SEWER
онwонw	= EXISTING ORDINARY HIGH WATER
×	= EXISTING CULVERT
~~~~~~~	= EXISTING TREE LINE
	= EXISTING CONCRETE
	= EXISTING RR TRACKS

PROPOSED	
— — — тв — — тв —	= PROPOSED TOP OF BANK
— — — BB — — — BB —	= PROPOSED TOE OF BANK
	= PROPOSED DITCH &
	= PROPOSED GRADE BREAK
<del>95</del>	= PROPOSED MAJOR CONTOUR
95 —	= PROPOSED MINOR CONTOUR
	= PROPOSED GUARDRAIL
xxx	= PROPOSED FENCE
	= PROPOSED GRAVEL
	= PROPOSED WALL
777777777777777777777777777777777777777	= PROPOSED BUILDING
	= PROPOSED PAVEMENT VALLEY
	= PROPOSED RIGHT OF WAY
	= PROPOSED AUTOTURN
	= PROPOSED CONSTRUCTION EASEMENT
	= PROPOSED ROAD €
	= PROPOSED SAWCUT
	= PROPOSED TRAFFIC STRIPE
	= PROPOSED ROAD EDGE OF PAVEMENT
	= PROPOSED CURB AND GUTTER
	= PROPOSED PATH
	= PROPOSED SIDEWALK
PR	= PROPOSED POWER LINE
	= PROPOSED PARKING STRIPE
	= PROPOSED TRAFFIC SIGNAL CONDUCTOR
F0	= PROPOSED FIBER OPTICS
——×——×——×—	= PROPOSED SILT FENCE
с	= PROPOSED CONDUIT
	= PROPOSED HANDRAIL
	= PROPOSED TEMPORARY CONSTRUCTION EASEMENT
IRR	= PROPOSED IRRIGATION LINE
w	= PROPOSED WATER MAIN
	= PROPOSED SANITARY SEWER FORCE MAIN
ss	= PROPOSED SANITARY SEWER
sp	= PROPOSED STORM DRAIN
*	= PROPOSED CULVERT
~~~~~~~	= PROPOSED TREE LINE
	= PROPOSED CONC. SIDEWALK/DRIVEWAY
	= PROPOSED INFILTRATION TRENCH
	= PROPOSED INFILTRATION FILTER MEDIA
	= PROPOSED GRIND
	= PROPOSED DEMOLITION AREA
	= PROPOSED ASPHALT
	= PROPOSED RIGHT OF WAY TAKE

$\odot$	= EXISTING SIGNAL POLE
<b>□</b>	= EXISTING SIGNAL POLE W/ LUMINARE
$\leftarrow$	= EXISTING STREET LIGHT ASSEMBLY
'¤^	= EXISTING YARD LIGHT
$\leftarrow$	= EXISTING GUY WIRE
	= EXISTING GAS METER
KN	= EXISTING GAS VALVE
Δ	= EXISTING TRANSFORMER PAD
P	= EXISTING POWER VAULT
$\boxtimes$	= EXISTING JBOX
<b>Ø</b>	= EXISTING SOIL BORING LOCATION
MB□	= EXISTING MAIL BOX
ſ	= EXISTING WATER SPIGOT
٩	= EXISTING WATER BLOW OFF
<b>=</b>	= EXISTING WATER METER
M	= EXISTING WATER VALVE
- <b>-</b> -	= EXISTING FIRE HYDRANT
→  □  □  □  □  □  □  □  □  □  □  □  □  □	= EXISTING TRAFFIC SIGNAL VAULT
0	= EXISTING SEWER MANHOLE
	= EXISTING STORM DRAIN CATCH BASIN TYPE
	= EXISTING STORM DRAIN CATCH BASIN TYPE
a	= EXISTING UTILITY POLE
•	= EXISTING MONITORING WELL
0	= EXISTING STORM CLEANOUT
0	= EXISTING SEWER CLEANOUT
Ф	= EXISTING SIGN
	= EXISTING TELEPHONE PEDESTAL
C	= EXISTING COMMUNICATIONS VAULT
<del>+</del>	= EXISTING BENCH MARK
×	= EXISTING NAIL AND SHINER
٥	= EXISTING IRON PIPE
<b>⊕</b>	= EXISTING MONUMENT (IN CASE)
<b>△</b>	= EXISTING MONUMENT (SURFACE)
Δ	= EXISTING ANGLE POINT
<b>©</b>	= EXISTING TREE STUMP
(i)	= EXISTING TREE
~~~\#\	= EXISTING VEGETATION
~ · ·	

EXISTING

-	= PROPOSED STORM DRAIN INLET
¥	= PROPOSED COUPLER
	= PROPOSED WATER METER
MX	= PROPOSED WATER VALVE
OR D	= PROPOSED STORM DRAIN CATCH BASIN TYPE
<b>(</b>	= PROPOSED SANITARY SEWER MANHOLE
Ĭ	= PROPOSED STORM DRAIN CATCH BASIN TYPE
<b>+</b>	= PROPOSED HYDRANT
<u> </u>	= PROPOSED UTILITY POLE
<b>3</b> 20	= PROPOSED JBOX (TYPE I, II, III)
•	= PROPOSED MONITORING WELL
•	= PROP STORM CLEANOUT
•	= PROPOSED SANITARY SEWER CLEAN OUT
_	= PROPOSED SIGN
←	= FLOW ARROW
$\odot$	= PROPOSED TREE
DETAIL NUMBER	
SHT	= SECTION MARK
SHEET NUMBER	
×IX	EXISTING ELEVATION © REFERENCED ALIGNMENT 
10+00	—STATION

PROPOSED

### **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
Œ.	= CLASS, CENTERLINE	GALV	= GALVANIZED	PC	= POINT OF CURVATURE	STD	= STANDARD
CMP	= CORRUGATED METAL PIPE	GRVL	= GRAVEL	PCC	<ul> <li>POINT OF COMPOUND CURVATURE,</li> </ul>	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
E	= 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

## <u>NOTES</u>

- 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 & WANHOLE CENTER OF STRUCTURE ORIENTATION RELATIVE TO FRAME & GRATE OR RING & COVER SHALL BE AS SHOWN ON THE PLANS.



	\ CET
HII	) SE I
	<i>,</i> ОL I

DRAWN BY CHECKED BY

R&E Reichhardt & Ebe

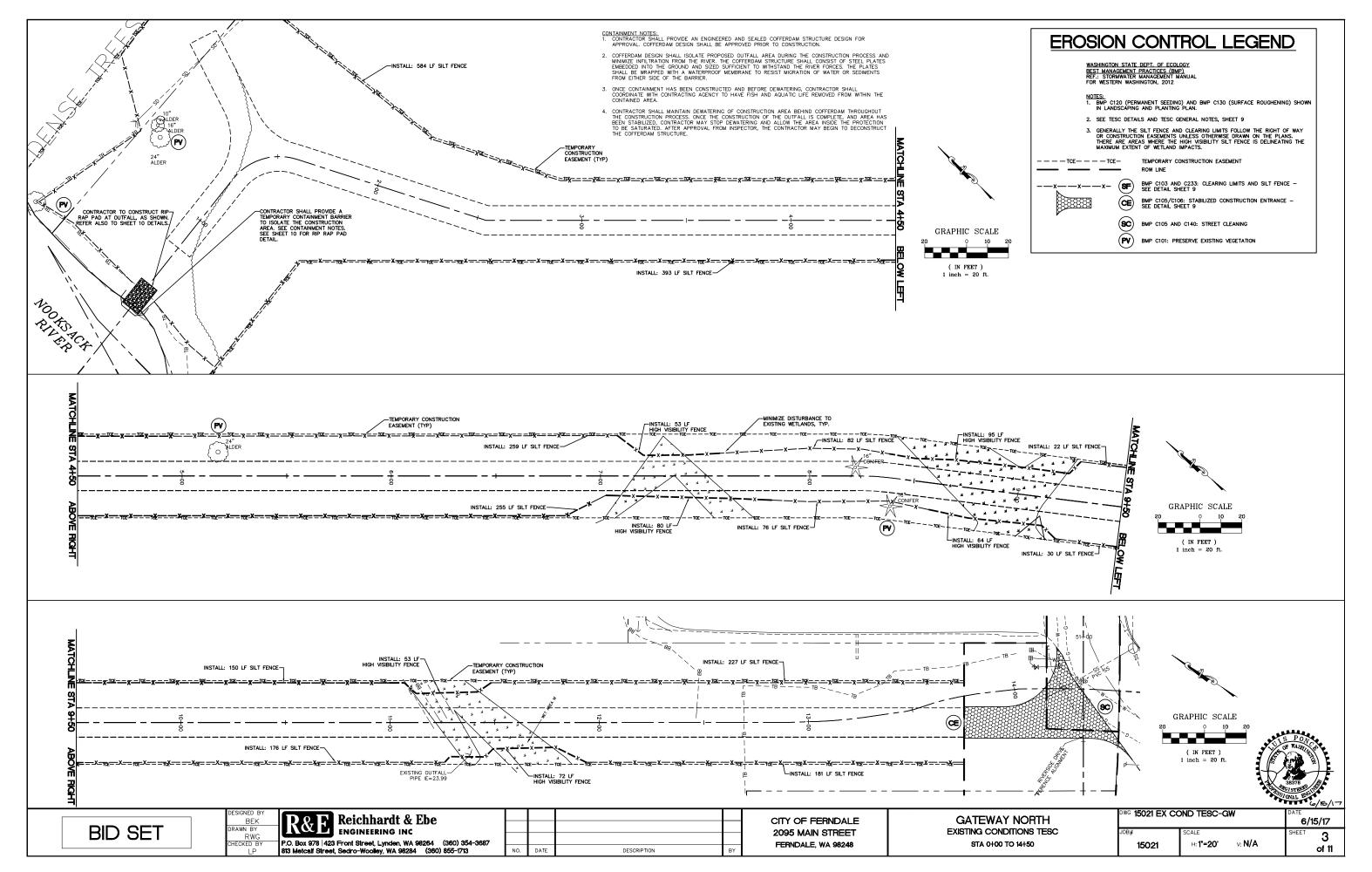
P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687 8t3 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-17t3

0.	DATE	DESCRIPTION	BY	

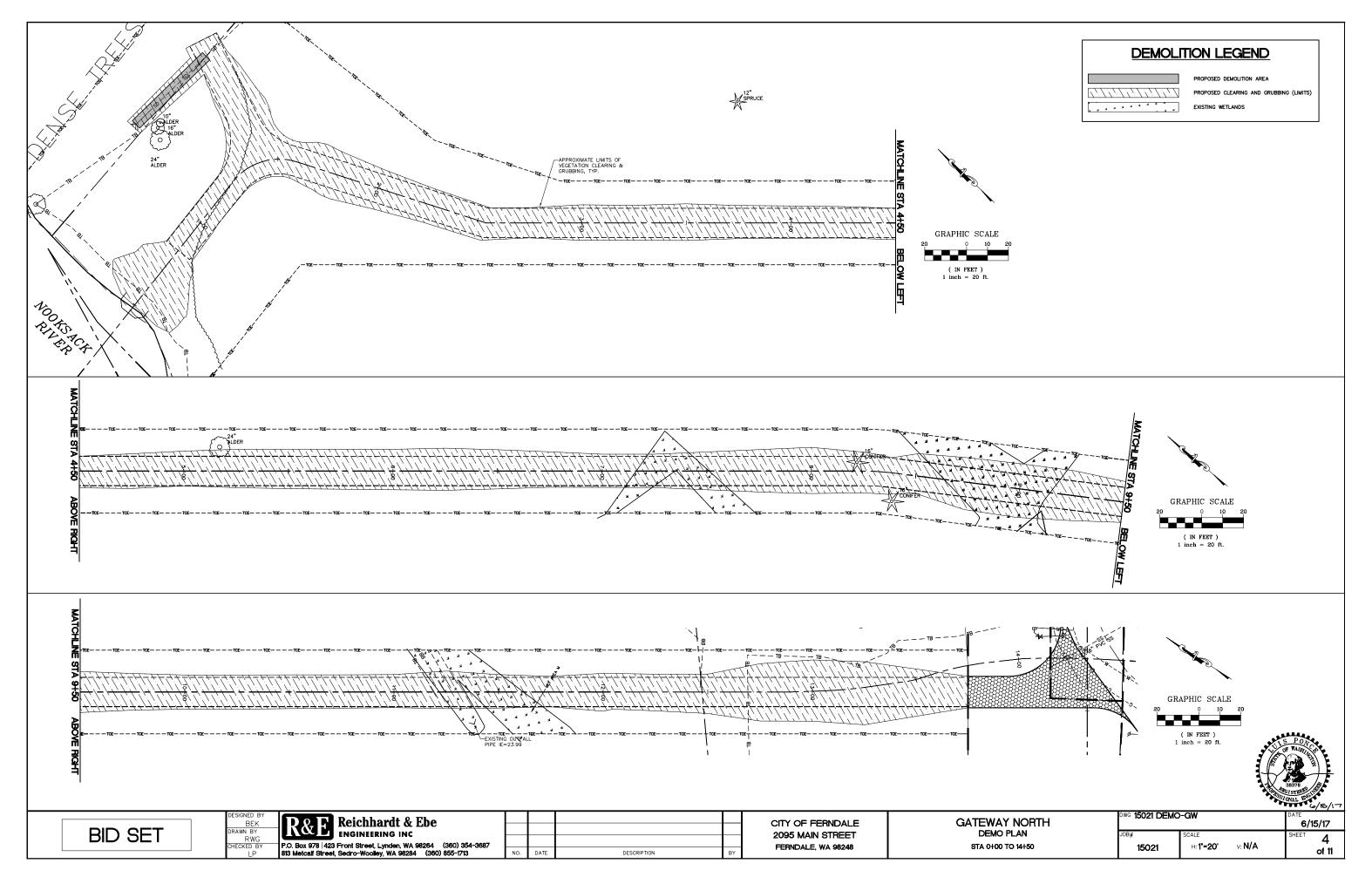
CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

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

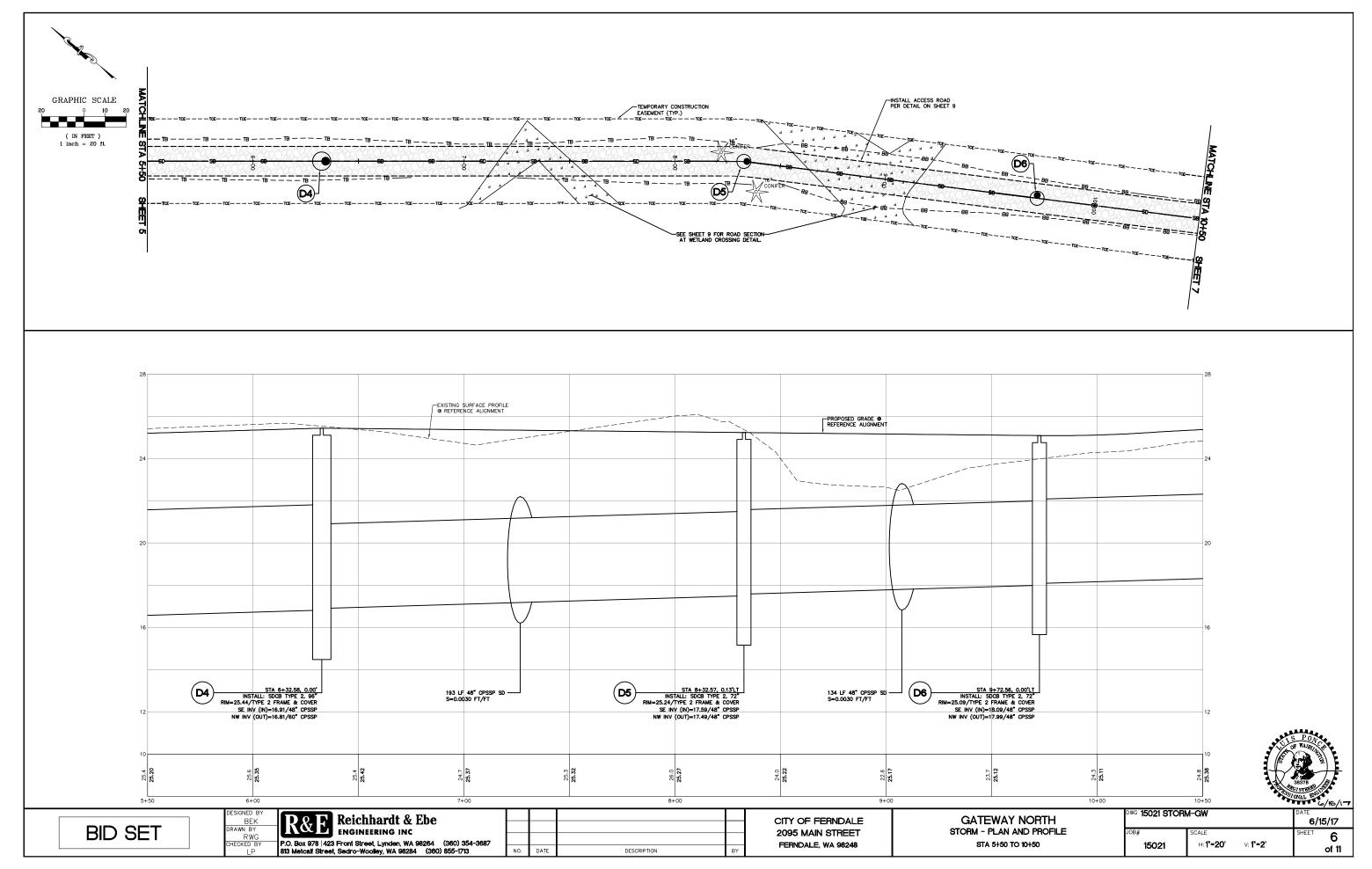
			6/15/
DWG 15021 COV	DATE 6/15/17		
JOB#	SCALE		SHEET 2
15021	H: <b>N/A</b>	v: <b>N/A</b>	of 11



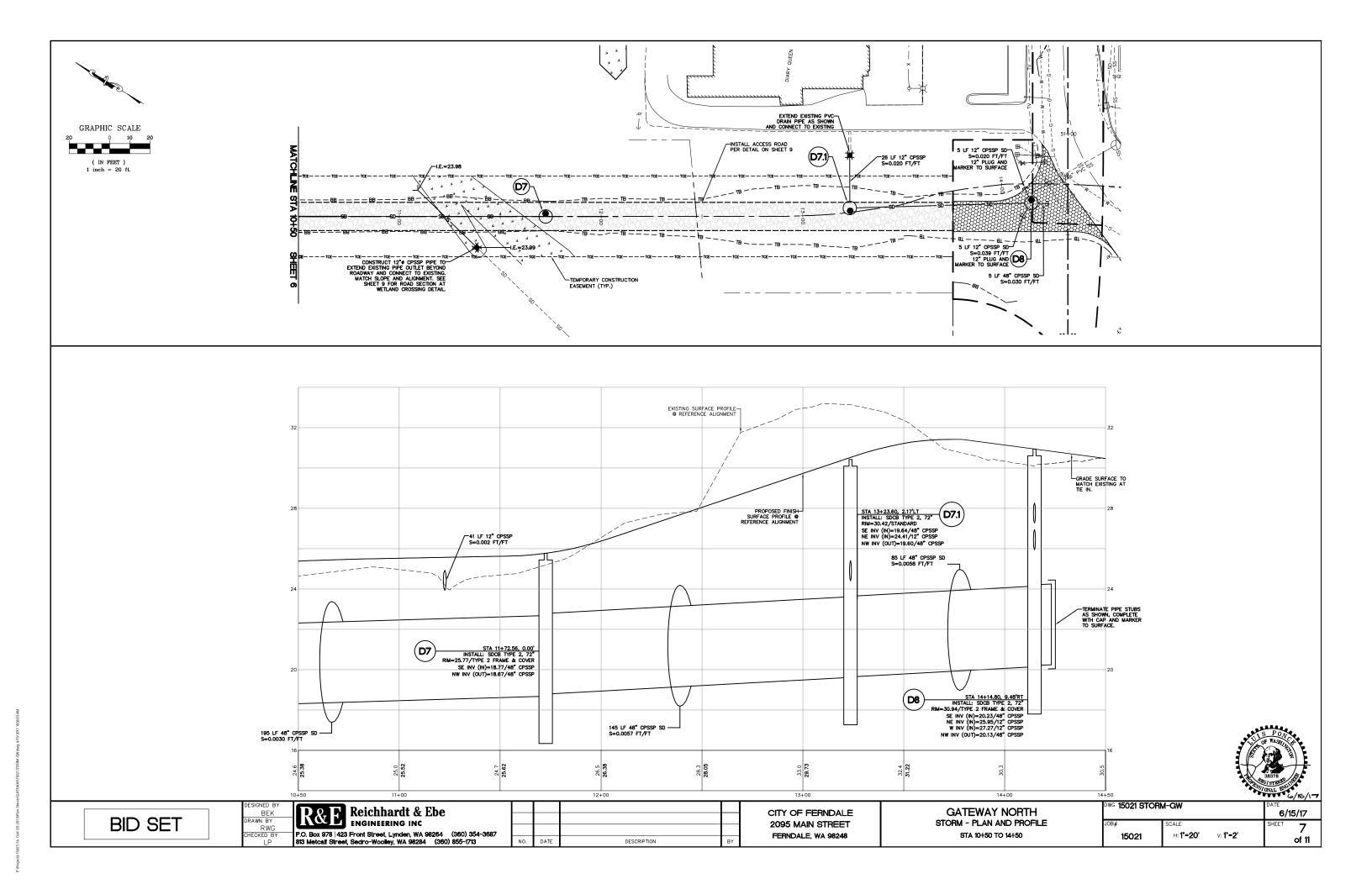
rojects/15021/16. Chill 3D 2013/Plan Sheets/GATEWAY\15021 EX COND TESC-GW.dwg. 6/15/2017 10.2547 AM

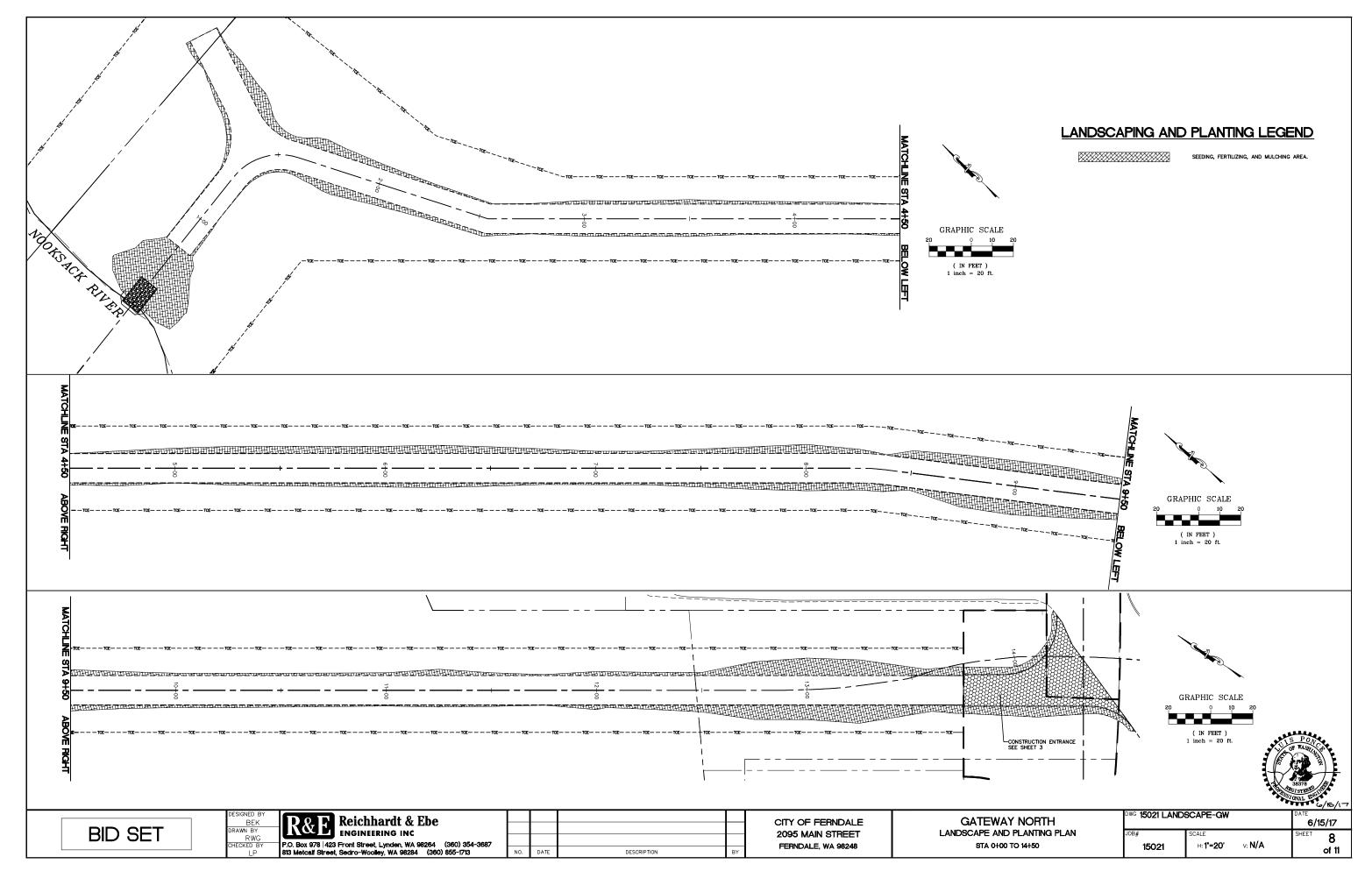


ects/15021/16, Chill 3D 2013/Plan Sheets/GATEWAY15021 DEMO-GWdwg, 6/15/2017 102936 AM



P-\Pm\_jects115021114. Chill 3D 2013/Plan Sheets1GATEWAY19021STORM-GWdwg, dr1s/2017 1035.08 AM





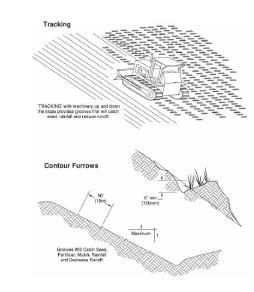
: VProjects\15021\16. Chill 3D 2G13Pilan Sheets\GATEWAY\16021 LANDSCAPE-GW.dwg,6/15/2017 10:400



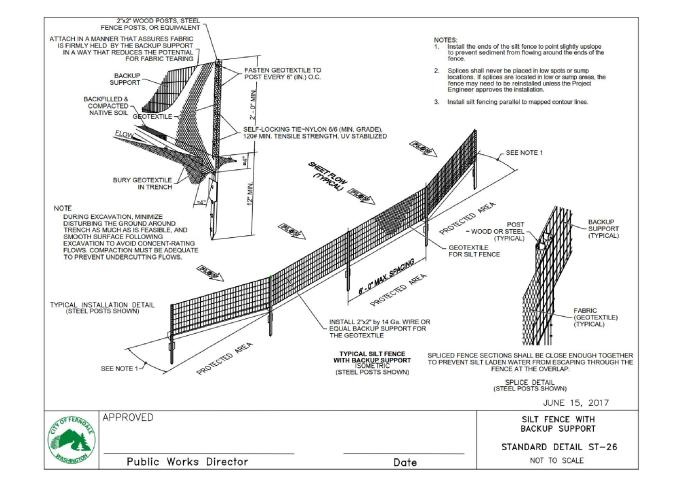
- THIS PLAN REPRESENTS THE MINIMUM REQUIREMENTS FOR THIS PROJECT. ADDITIONAL EROSION CONTROL MAY BE REQUIRED BY THE ENGINEER AS ARE FOUND NECESSARY. THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE INSTALLED PRIOR TO ALL OTHER SITE CONSTRUCTION. ALL CLEARING LIMITS SHALL BE VISIBLY MARKED PRIOR TO CLEARING. ANY VEGETATION NOT IN THE CONSTRUCTION AREA SHALL BE LEFT UNDISTURBED. CONTRACTOR SHALL INFORM THE ENGINEER AND DBTAIN APPROVAL FROM THE ENGINEER AND DBTAIN APPROVAL FROM THE ENGINEER AND DBTAIN APPROVAL FROM THE MINISTER AND DBTAIN APPROVAL FROM THE MINISTER AND DBTAIN APPROVAL AND FORWARD TO THE TRIGINEER. MAINTENANCE AND OPERATION OF THE EROSION CONTRACTOR SHALL KEEP RECORD OF DEVATIONS AND FORWARD TO THE EROSION CONTROL AND SEDIMENTATION AND SET MELENTATION AND EROSION CONTROL MEASURES, AS SHOWN AND AS INSTALLED ON AN AS NEEDED BASIS. THE CONTRACTOR THE CONTRACTOR THAT THE CONTRACTOR THAT TO THE SEDIMENTATION AND EROSION CONTROL MEASURES, AS SHOWN AND AS INSTALLED ON AN AS NEEDED BASIS. THE CONTRACTOR AND SEDIMENTATION PLAN SHALL BE APPROVED BY THE ENGINEER PRIOR TO PERFORMING ANY SITE GRADING OR CLEARING.

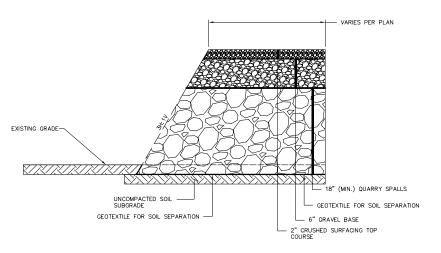
<u>DUST CONTROL</u>:
CONTRACTOR SHALL LIMIT DUST GENERATION BY CLEARING ONLY THOSE AREAS WHERE IMMEDIATE EXCAVATION AND GRADING SHALL TAKE PLACE MAINTAINING THE ORIGINAL GROUND COVER AS LONG AS PRACTICAL. DUST CONTROL METHODS SHALL BE PERFORMED BY METHODS USTED IN NOTE NUMBER EIGHT OF THE TESC GENERAL NOTES. SUPFACES SHALL BE SPRAYED WITH METHOD SHALL BE PRAYED WITH METHOD TO ABOTE 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

- VARIES PER PLAN -6" GRAVEL BASE 2" CRUSHED SURFACING TOP

ACCESS ROAD SECTION

**BID SET** 

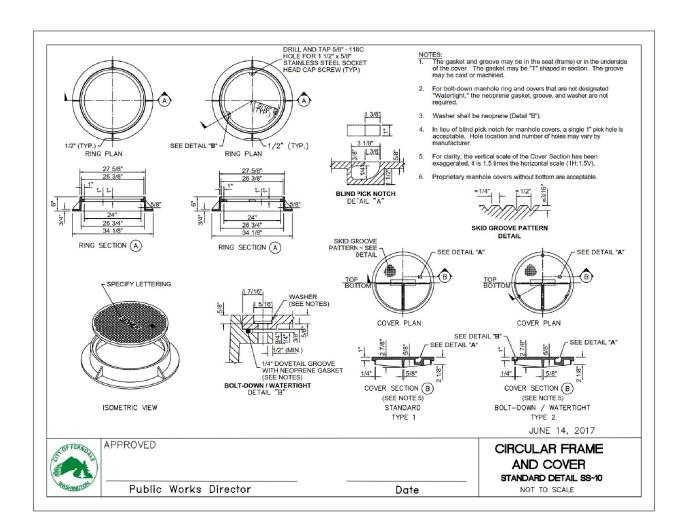
Reichhardt & Ebe ENGINEERING INC

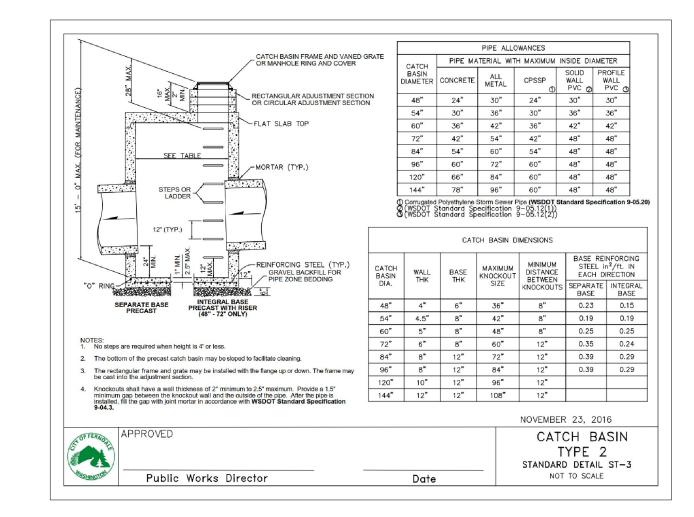
O. Box 978 423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

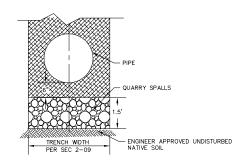
DATE DESCRIPTION CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

**GATEWAY NORTH** DETAILS TESC EROSION CONTROL DETAILS 5 15021 DETAILS-GW н: **N/A** 15021

6/15/17 9 v: N/A of 11

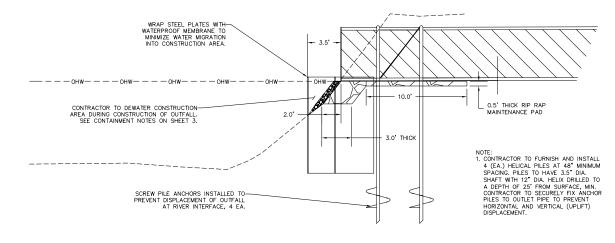


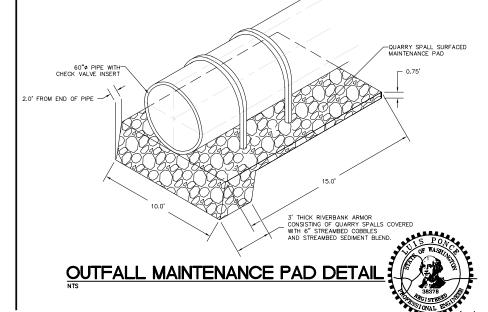




DRAWN CHECKED BY

REMOVAL OF UNSUITABLE MATERIAL INCLUDING HAUL, TYPICAL SECTION





BID SET

Reichhardt & Ebe
ENGINEERING INC

P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687
813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

. DATE DESCRIPTION BY

STEEL SHEET INSTALL DETAIL

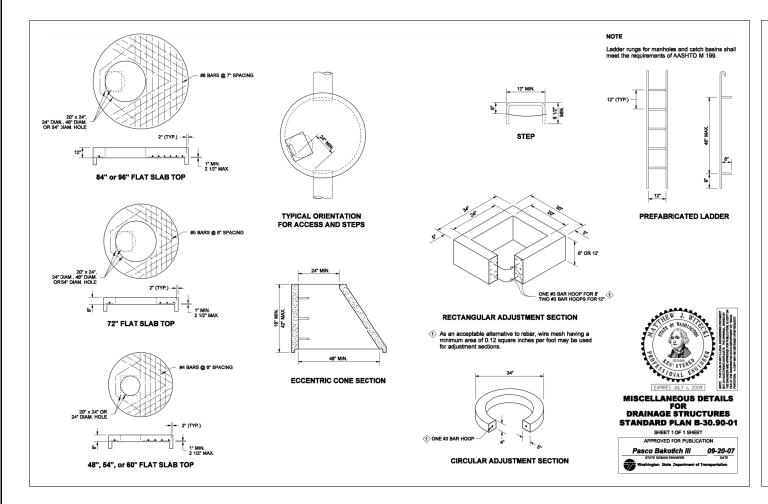
CITY OF FERNDALE
2095 MAIN STREET
FERNDALE, WA 98248

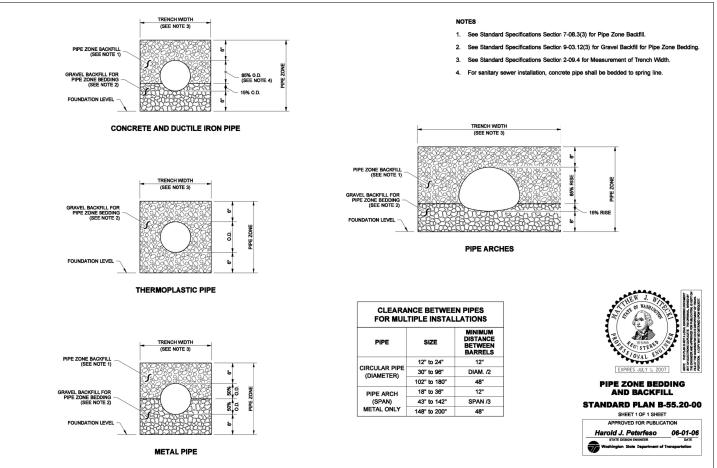
GATEWAY NORTH DETAILS STORM DETAILS 1 WG 15021 DETAILS-GW

DATE
6/15/17

DB#
SCALE
15021
H: N/A
V: N/A
Of 11

Projects/15021/14. Covil 3D 2013/Plan Sheets/GATEWAY\15021 DETAILS-GWdwg, 6/15/2017 11:10









Reichhardt & Ebe ENGINEERING INC P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

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

**GATEWAY NORTH** DETAILS STORM DETAILS 2

VG 15021 DETAILS-GW 6/15/17 11 v: **N/A** H: **N/A** 15021 of 11