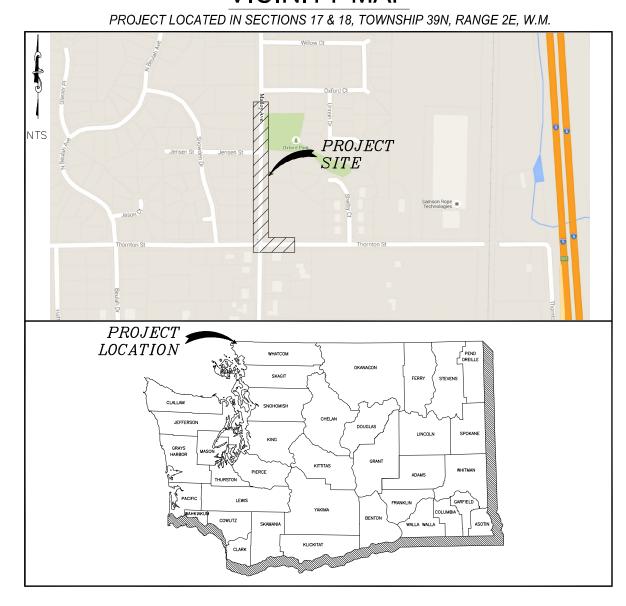
MALLOY AVE. SANITARY SEWER PROJECT

FERNDALE, WA

CITY OF FERNDALE - PROJECT NO. SS2015-02

VICINITY MAP



S	SHEET LIST TABLE				
SHEET NUMBER	SHEET TITLE				
1	COVER				
2	LEGEND AND ABBREVIATIONS				
3	EXISTING CONDITIONS, DEMO AND TESC PLAN				
4	4 EXISTING CONDITIONS, DEMO AND TESC PLAN				
5 TRAFFIC DETOUR PLAN					
6 PLAN AND PROFILE - THORNTON					
7 PLAN AND PROFILE - MALLOY (SOUTH)					
8 PLAN AND PROFILE - MALLOY (NORTH)					
9	CHANNELIZATION AND PAVING PLAN				
10	10 CHANNELIZATION AND PAVING PLAN				
11	DETAILS				
12 DETAILS					



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

ITY OF FERNDALE	
095 MAIN STREET	
FERNDALE, WA 98248	

			- 2 2 2 -	12910
5009 COVE	R		DATE	
			7/2	9/2015
	SCALE		SHEET	1
5009	H: N/A	v: N/A		of 12

ABBREVIATIONS

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

- FIELD WORK PERFORMED BY COMPASS POINT SURVEY GROUP, LYNDEN, WA. TOPOGRAPHIC SURVEY PERFORMED IN APRIL, 2015.
 HORIZONTAL DATUM: WASHINGTON STATE PLANE (NORTH) COORDINATES NAD 83-2011 VERTICAL DATUM: NAVD 88

LEGEND

EXISTING		LEGEND	PROPOSED
— — — ТВ — — — ТВ —	= EXISTING	TOP OF BANK	———— TB ———
	= EXISTING	BOTTOM OF BANK	————BB————
	= EXISTING	-	— ·· — ·
		GRADE BREAK MAJOR CONTOUR	95
		MINOR CONTOUR	95
	= EXISTING	GUARDRAIL	
x x	= EXISTING		x x
	= EXISTING = EXISTING		
			777777777
		PROPERTY BOUNDARY	
		RIGHT OF WAY	
	= EXISTING = EXISTING	RIGHT OF WAY Q	
	= EXISTING		
		WETLANDS BOUNDARY	
		TRAFFIC STRIPING	
	= EXISTING = EXISTING	EDGE OF PAVEMENT	
		TOP BACK OF CURB	
	= EXISTING	SIDEWALK	
— — — — UGP— — — — UGP—		POWER BURIED	PR
— — — — OHP— — — — OHP— — — — — UGC— — — UGC—		OVERHEAD POWER COMMUNICATIONS BURIED	*****************
— — — ОНС— — — ОНС—		OVERHEAD COMMUNICATIONS	ts
— — — F0 — — F0 —	= EXISTING	FIBER OPTICS BURIED	F0
— — — TV — — TV —	= EXISTING		x x
——————————————————————————————————————	= EXISTING = EXISTING	TELEPHONE BURIED	c
—GG-	= EXISTING = EXISTING		
ww		WATER MAIN	w
— — — — IRR— — — — IRR—		IRRIGATION LINE	
— — — FM — — — FM — — — SS — — — — SS —		SANITARY SEWER FORCE MAIN SANITARY SEWER	ss
— — — SD — — — SD —		STORM DRAIN	>======
— — — онw— — — онw—	= EXISTING	ORDINARY HIGH WATER	~~~~~~~
××	= EXISTING		
	= EXISTING		
	= EXISTING	RR TRACKS	
		SIGNAL POLE AND ARM W/ LUMINAIRE	
→		STREET LIGHT ASSEMBLY	
×		YARD LIGHT	
← ⊠	= EXISTING	GUY WIRE GAS METER	
φi		GAS VALVE	
Δ		TRANSFORMER PAD	•
P		POWER VAULT	#
⊠ Ø	= EXISTING = FXISTING	SOIL BORING LOCATION	
MB□	= EXISTING		MX ®
ſ		WATER SPIGOT	ĕ
Ŷ		WATER BLOW OFF	Ě
⊞ ⋈		WATER METER WATER VALVE	<u> </u>
- -		FIRE HYDRANT	- - -
\boxtimes		TRAFFIC SIGNAL VAULT	*
\bigcirc		SEWER MANHOLE STORM DRAIN CATCH BASIN TYPE I	0
		STORM DRAIN CATCH BASIN TYPE II	•
Ď (= EXISTING	UTILITY POLE	<u>.</u>
•		MONITORING WELL	Ō
0		STORM CLEANOUT SEWER CLEANOUT	/-DET.
ф.	= EXISTING		NUM
0		TELEPHONE PEDESTAL	
C 1		COMMUNICATIONS VAULT	SHE
- ∳ - ≭		BENCH MARK NAIL AND SHINER	NOM
	= EXISTING = EXISTING		
\oplus	= EXISTING	MONUMENT (IN CASE)	
a		MONUMENT (SURFACE)	
<u>^</u>		ANGLE POINT TREE STUMP	
Ő.,	= EXISTING		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	= EXISTING	VEGETATION	

FROPOSED	
— — — тв — — — тв —	= PROPOSED TOP OF BANK
— — — BB — — — BB —	
	= PROPOSED DITCH €
	= PROPOSED GRADE BREAK
95	= PROPOSED MAJOR CONTOUR
95.——	= PROPOSED MINOR CONTOUR
	= PROPOSED GUARDRAIL
xx	= PROPOSED FENCE
	= PROPOSED WALL
777777777777777777777777777777777777777	= PROPOSED BUILDING
	= PROPOSED PAVEMENT VALLEY
	= PROPOSED RIGHT OF WAY
	= PROPOSED AUTOTURN
	= PROPOSED CONSTRUCTION EASEMENT
	= PROPOSED ROAD €
	- I HOI COED HOND E
	= PROPOSED SAWCUT
	= PROPOSED TRAFFIC STRIPE
	= PROPOSED ROAD EDGE OF PAVEMENT
	= PROPOSED CURB AND GUTTER
	= PROPOSED PATH
	= PROPOSED SIDEWALK
PR	= PROPOSED POWER LINE
.000000000000	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	= PROPOSED PARKING STRIPE
ts	= PROPOSED TRAFFIC SIGNAL CONDUCTOR
F0	= PROPOSED FIBER OPTICS
x x	= PROPOSED SILT FENCE
c	
	= PROPOSED CONDUIT
-	= PROPOSED HANDRAIL
IRR	= PROPOSED IRRIGATION LINE
w	= PROPOSED WATER MAIN
FM	= PROPOSED SANITARY SEWER FORCE MAIN
ss	= PROPOSED SANITARY SEWER
SD	= PROPOSED STORM DRAIN
××	
~~~~~~	= PROPOSED TREE LINE
	= PROPOSED CONC. SIDEWALK/DRIVEWAY
	•
	= PROPOSED INFILTRATION TRENCH
	= PROPOSED INFILTRATION FILTER MEDIA
LXXXXXXX	= PROPOSED GRIND
	= PROPOSED DEMOLITION AREA
	= PROPOSED DEMOLITION AREA
	= PROPOSED ASPHALT
	- THO COLD ASITIALI
	= PROPOSED RIGHT OF WAY TAKE
<u>v////////////////////////////////////</u>	
•	= PROPOSED STORM DRAIN INLET
¥	= PROPOSED COUPLER
• • • • • • • • • • • • • • • • • • • •	
2	= PROPOSED WATER METER
MX	= PROPOSED WATER VALVE
	= PROPOSED STORM DRAIN CATCH BASIN TYPE II
ă	= PROPOSED SANITARY SEWER MANHOLE
<u> </u>	= PROPOSED STORM DRAIN CATCH BASIN TYPE I
_	
+	= PROPOSED HYDRANT
<b>◆</b>	= PROPOSED UTILITY POLE
20	= PROPOSED JBOX (TYPE I, II, III)
<b>**</b>	= PROPOSED MONITORING WELL
•	
0	= PROP STORM CLEANOUT
•	= PROPOSED SANITARY SEWER CLEAN OUT
_	= PROPOSED SIGN
<del>-</del>	= FLOW ARROW
<b>_</b>	
$\odot$	= PROPOSED TREE
/-DETAIL	
NUMBER	
<b>Ø</b> ĒN ▲	
SHI	= SECTION MARK
-	
SHEET NUMBER	
HOMBEN	





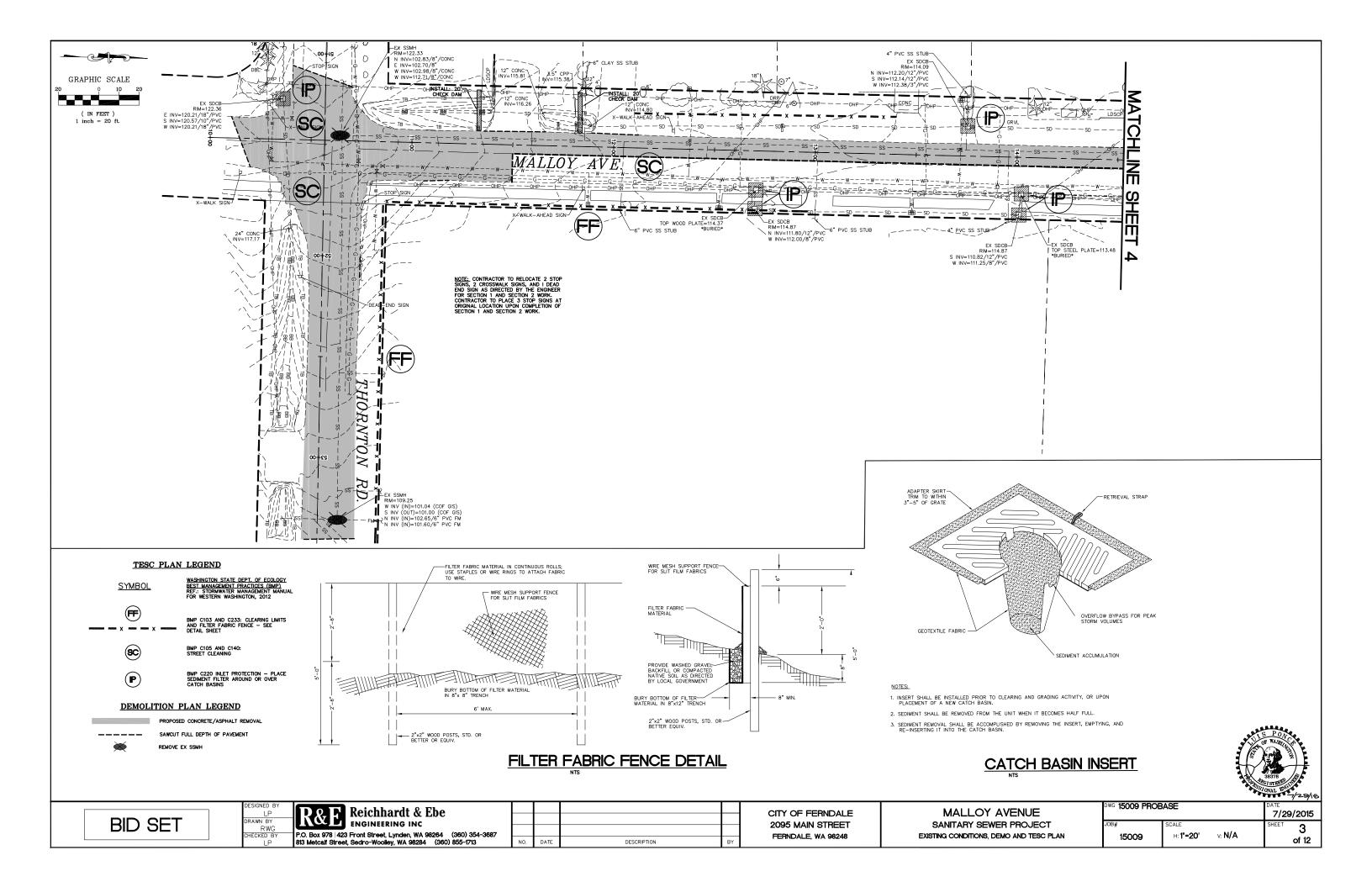


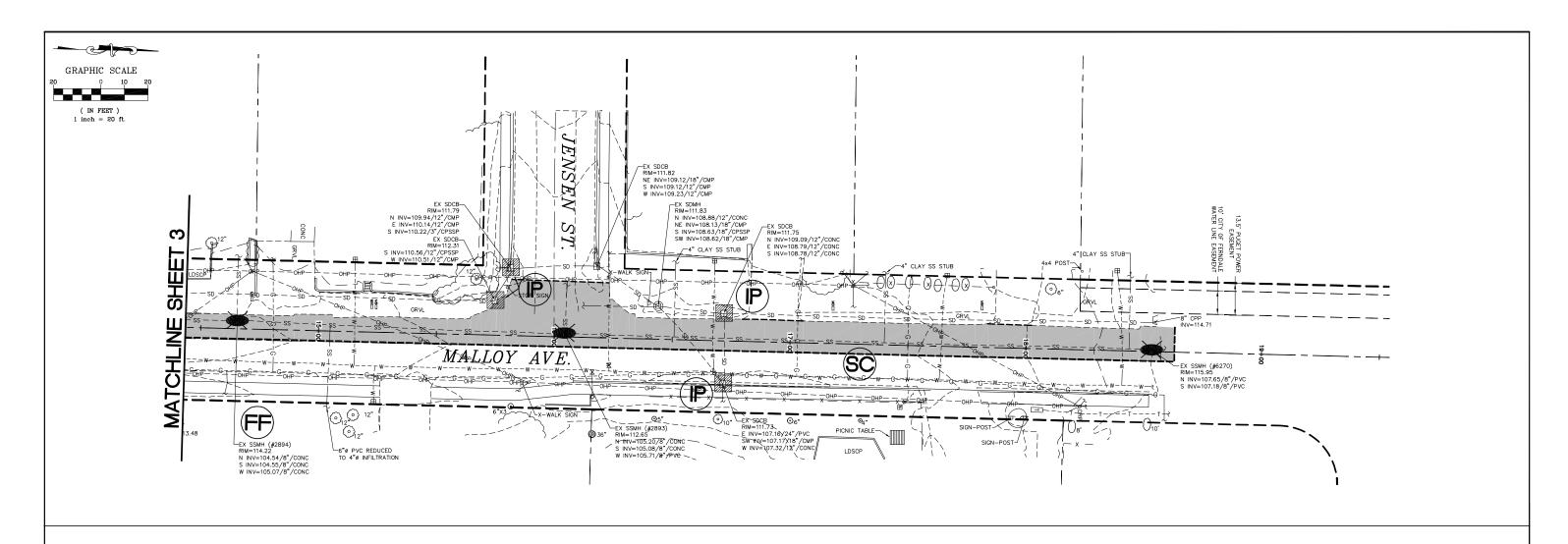
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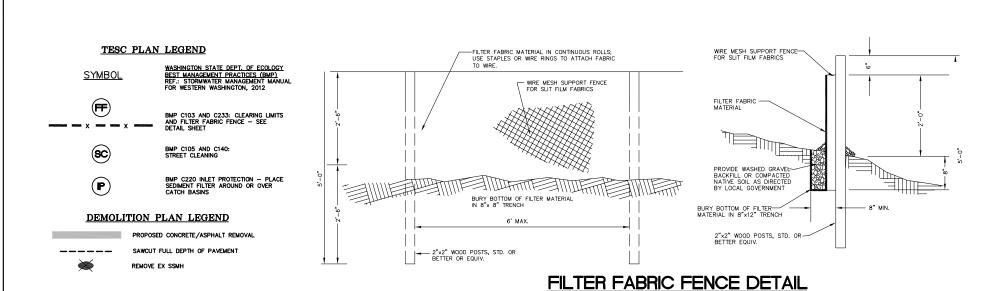
CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

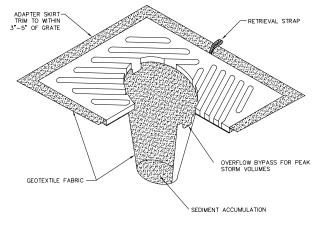
MALLOY AVENUE SANITARY SEWER PROJECT LEGEND AND ABBREVIATIONS

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DWG 15009 COVE	R		DATE	
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JOB#	SCALE		SHEET	2
15009	H: <b>N/A</b>	∨: <b>N/A</b>		∠ of 12









- 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.
- SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN.

#### **CATCH BASIN INSERT**



RAWN BY

RWG

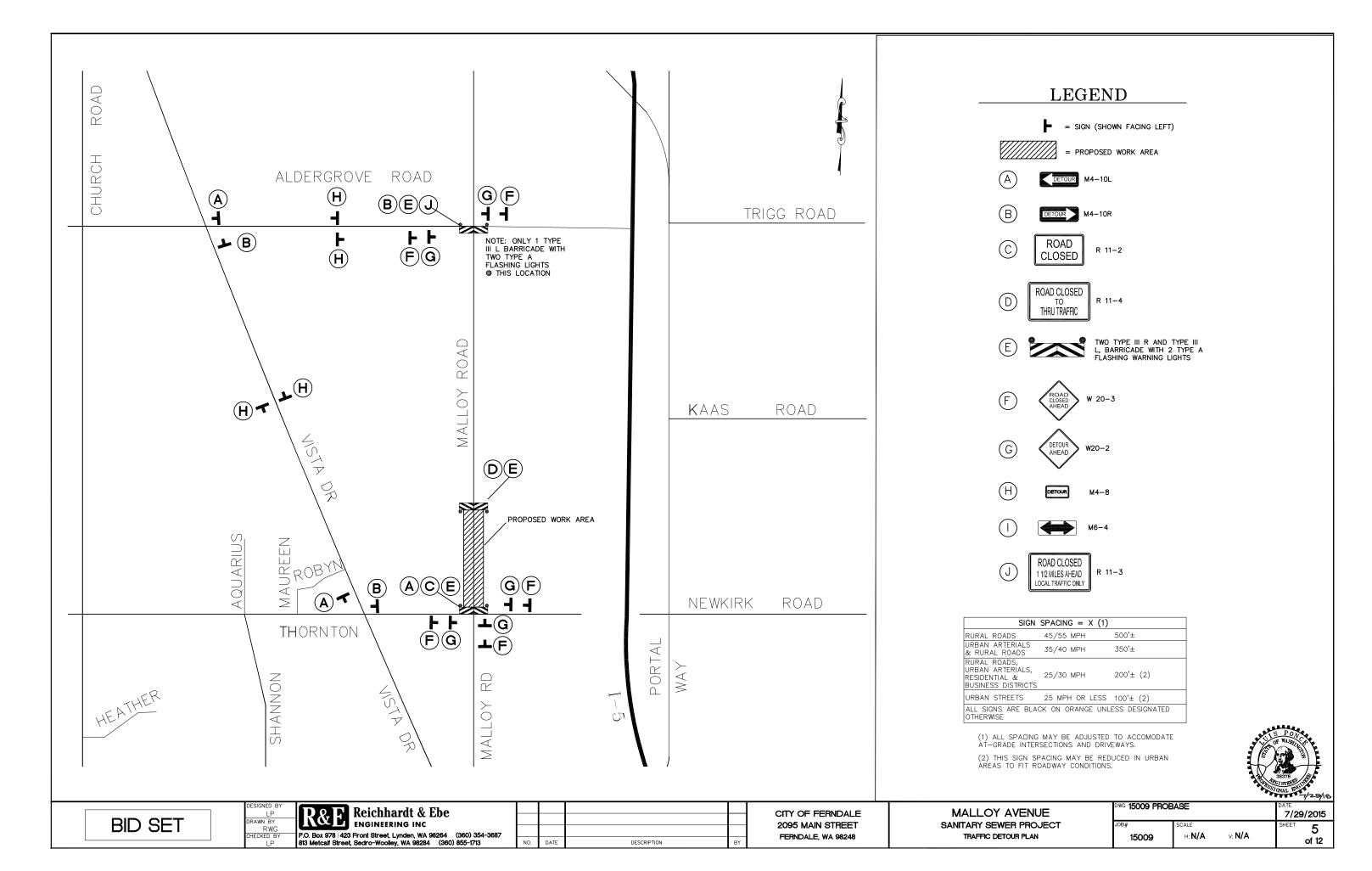
R&E Reichhardt & Ebe ENGINEERING INC P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

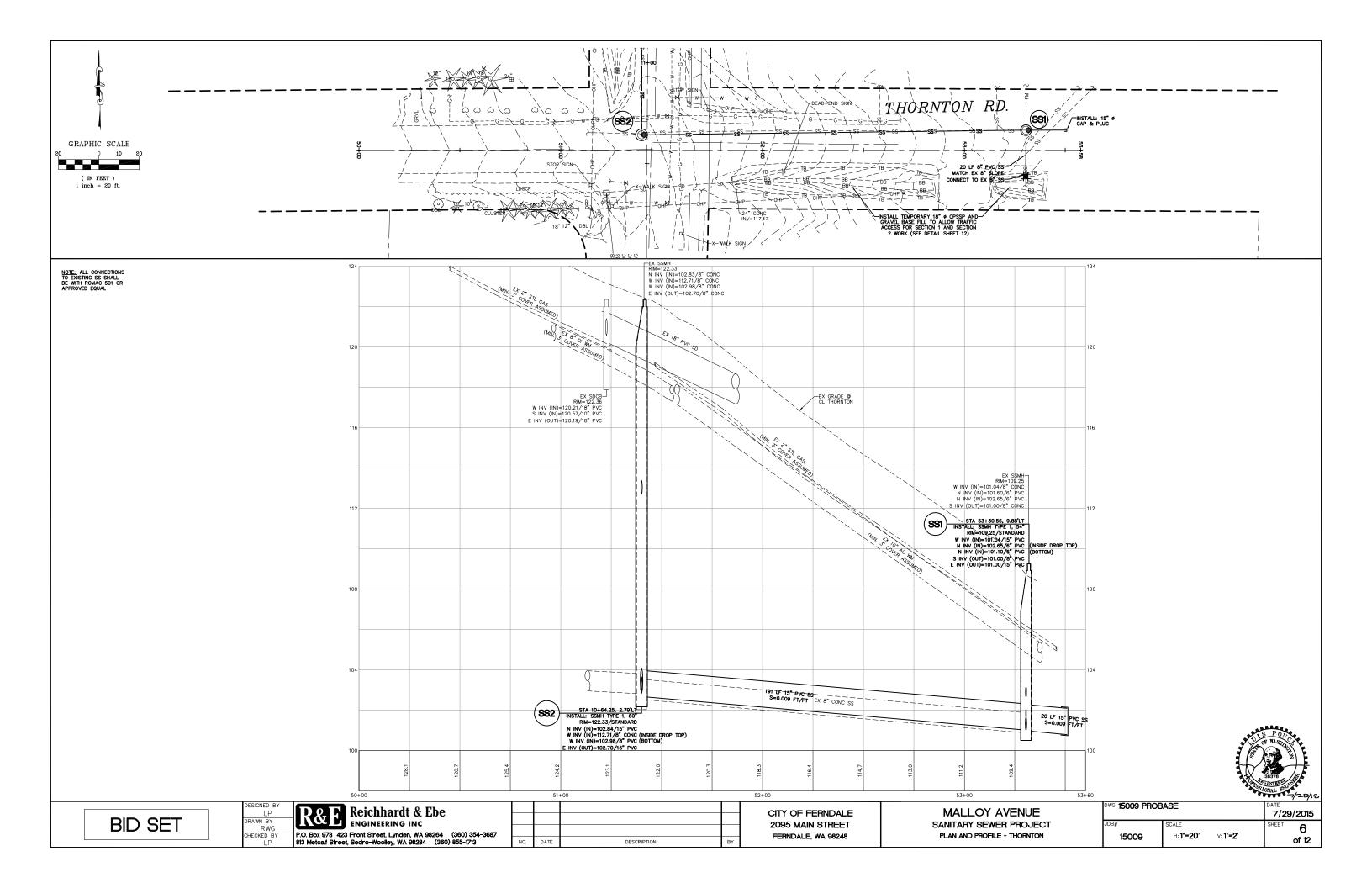
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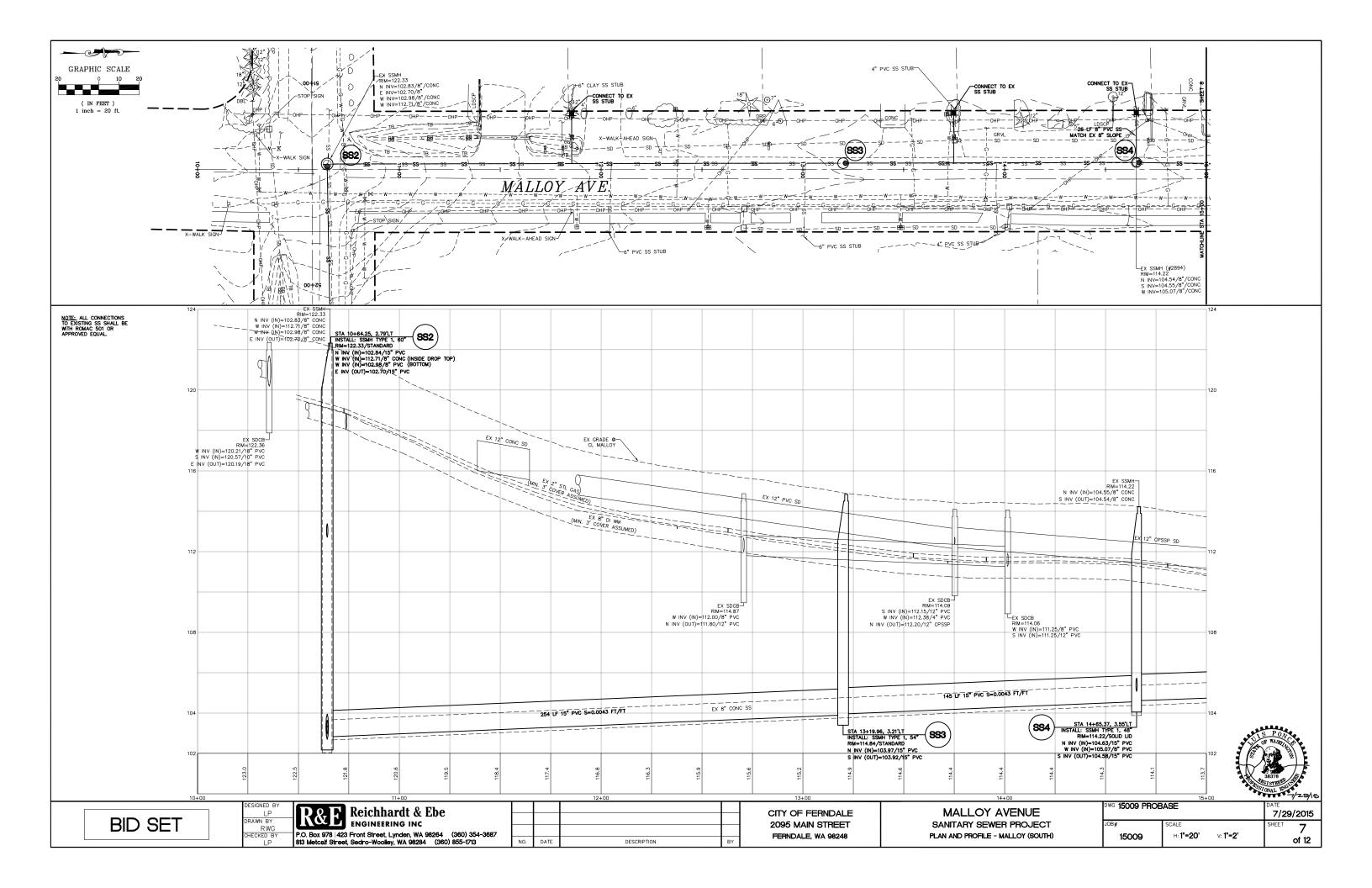
CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

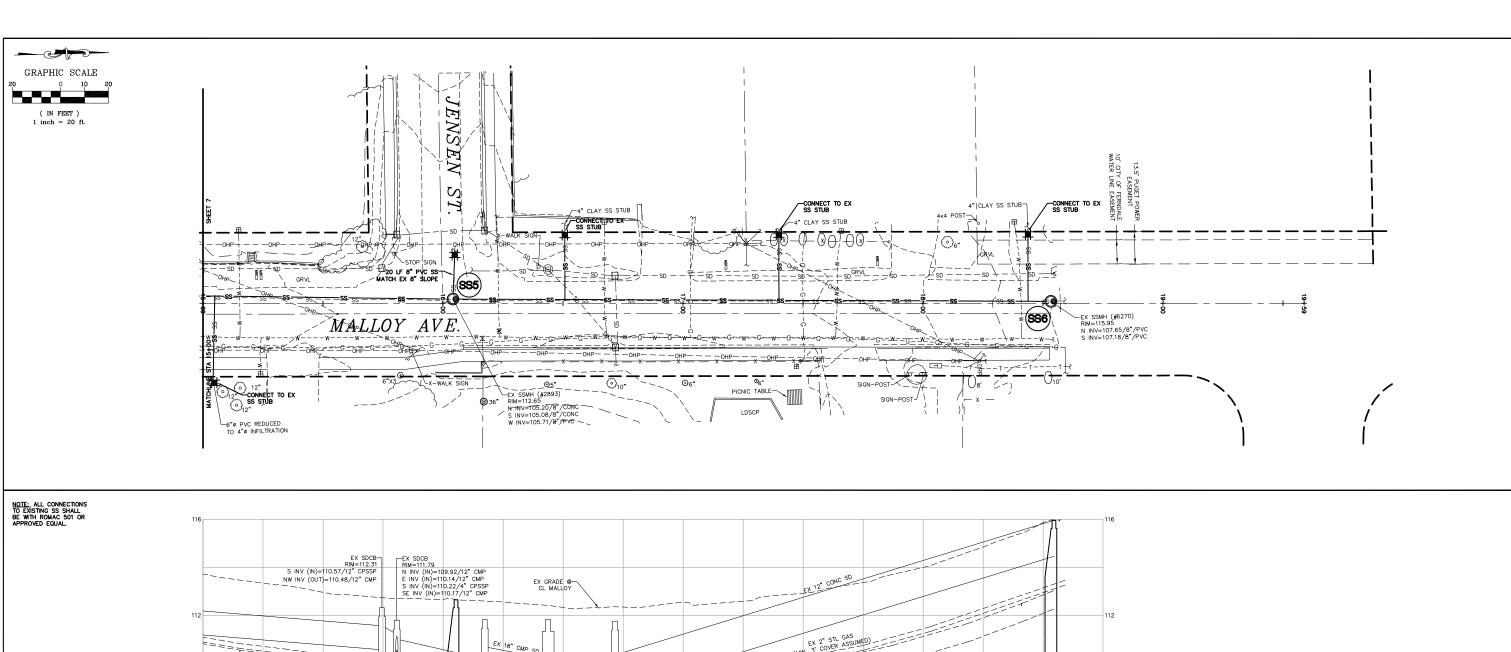
MALLOY AVENUE SANITARY SEWER PROJECT EXISTING CONDITIONS, DEMO AND TESC PLAN

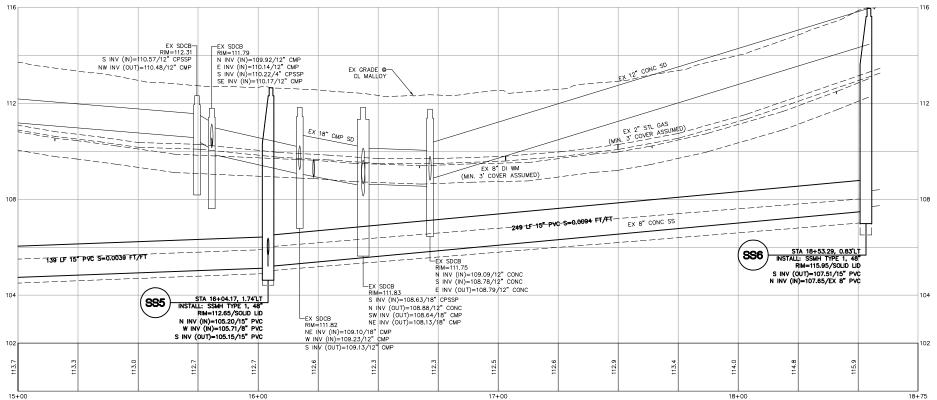
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			7/29	9/2015
JOB#	SCALE		SHEET	$\overline{}$
15009	H: 1"=20'	v: <b>N/A</b>		of 12











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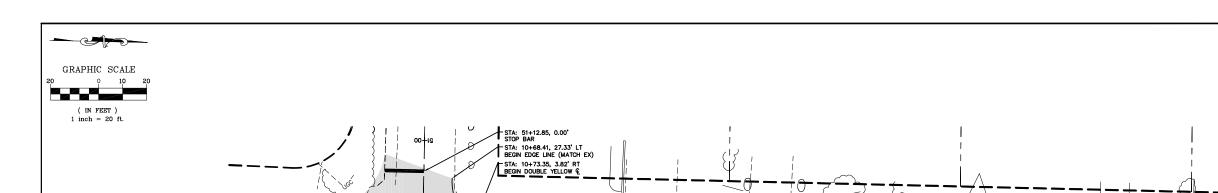
DESIGNED BY LP DRAWN BY	Reichhardt & Ebe
	P.O. Box 978   423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

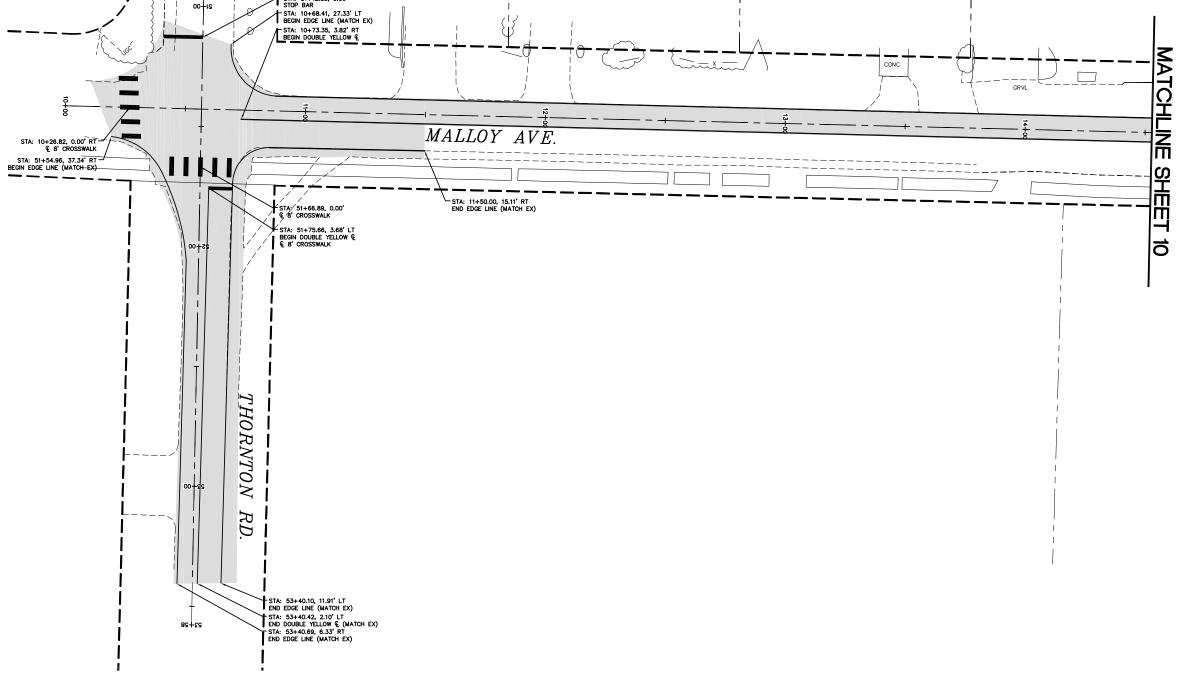
	CITY OF FERNDALE
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	2095 MAIN STREET
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DV	FERNDALE, WA 98248

MALLOY AVENUE
SANITARY SEWER PROJECT
LAN AND PROFILE - MALLOY (NORTH)

5009 PROB	7/29	7/29/2015		
5009	SCALE H: <b>1"=20'</b>	v: <b>1"=2'</b>	SHEET	8 of 12

JOB#





DESCRIPTION

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Reichhardt & Ebe			CITY OF FERNDALE	MALLOY AVENUE	DWG 15009 PROBASE	DATE <b>7/29/2015</b>

**BID SET** 

LP
DRAWN BY
RWG
CHECKED BY

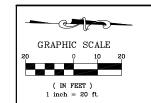
Reichnardt & E.De Engineering Inc
P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687
813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

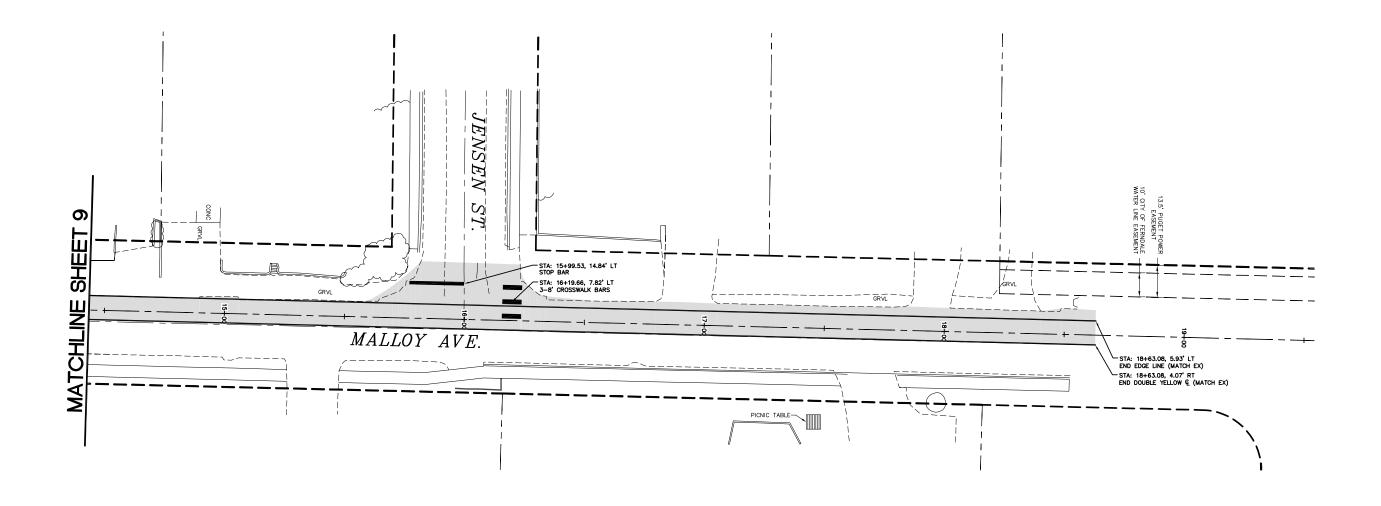
NO. DATE

2095 MAIN STREET FERNDALE, WA 98248 MALLOY AVENUE
SANITARY SEWER PROJECT
CHANNELIZATION AND PAVING PLAN

15009 PROBASE 7/29/2015

SCALE SCALE
15009 H: 1'=20' V: N/A Of 12





DESCRIPTION



DESIGNED BY LP DRAWN BY RWG	R&E Reichhardt & Ebe
CHECKED BY LP	P.O. Box 978   423 Front Street, Lynden, WA 98264 (360) 354- 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

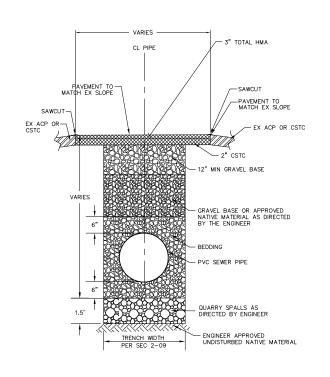
CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248 MALLOY AVENUE SANITARY SEWER PROJECT CHANNELIZATION AND PAVING PLAN WG 15009 PROBASE

DATE
7/29/2015

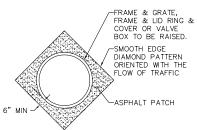
DB#

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15009
H: 1"=20' V: N/A

of 12

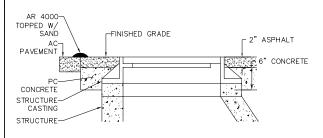


### TYPICAL TRENCH SECTION ASPHALT CONCRETE PAVEMENT SECTION

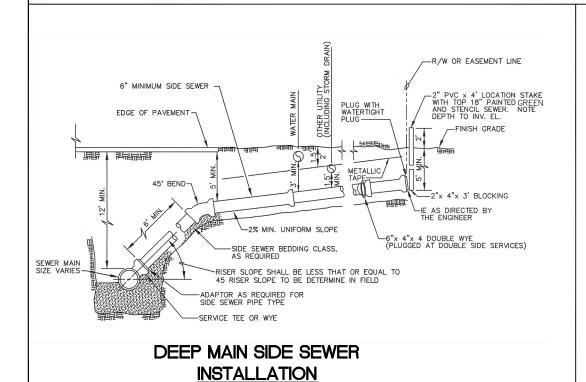


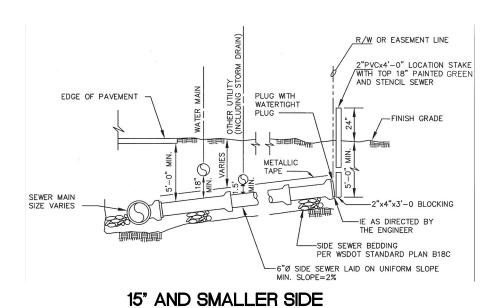
NOTES:
ALL FRAMES, COVERS & VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADE AFTER THE FINAL LIFT OF PAVING HAS BEEN COMPLETED. THE FOLLOWING PROCEDURE SHALL BE USED:

1. CUT THE ASPHALT IN A DIAMOND AROUND THE STRUCTURE CASTING TO BE ADJUSTED.
2. REMOVE THE FILL MATERIAL WITHIN THE CUT PAVEMENT AREA TO 8 INCHES MIN. BELOW FINISH GRADE.
3. PLACE THE CASTING AT FINISH GRADE.
4. PLACE PORTLAND CEMENT CONCRETE TO WITHIN THE TOP 2 INCHES OF FINISH GRADE.
5. APPLY TACK TO THE STRUCTURE CASTING, CUT PAVEMENT, & PC CONCRETE.
6. PLACE & COMPACT 2 INCHES OF COMMERCIAL HMA TO FINISH GRADE.
7. SEAL PAVEMENT JOINTS W/ HOT AR4000 & TOP W/ SAND.

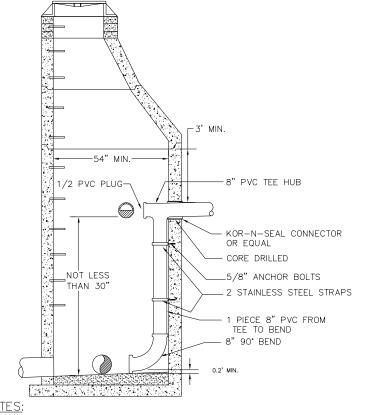


#### ADJUSTING CASINGS TO FINISHED GRADE





**SEWER INSTALLATION** 



- 1. DROP TEE TO BE INSTALLED MINIMUM OF 3' BELOW CONE SECTION. 2. INSIDE DROP MANHOLE SHALL BE INSTALLED ONLY WHERE APPROVED BY THE CITY.
- 3. SIZE OF MANHOLE WILL INCREASE WITH LARGER DIAMETER PIPE AND SHALL BE APPROVED BY THE ENGINEER.
- 4. CHANNEL TO OUTLET.

### INSIDE DROP SEWER MANHOLE CONNECTION



BID	SET
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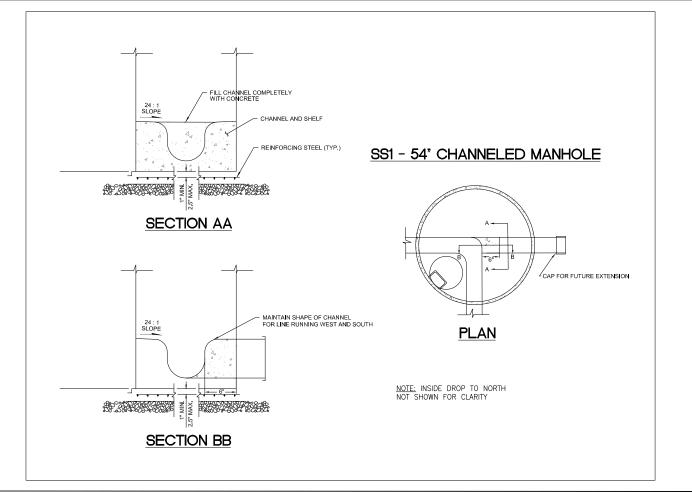
RAWN BY RWG

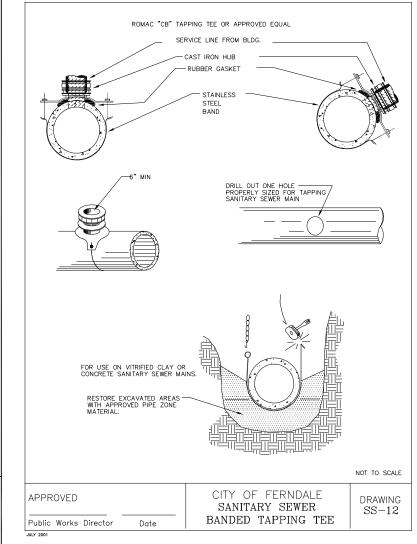
Reichhardt & Ebe ENGINEERING INC P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687 813 Metcalf Street, Sedro-Woolley, WA 98284 (360) 855-1713

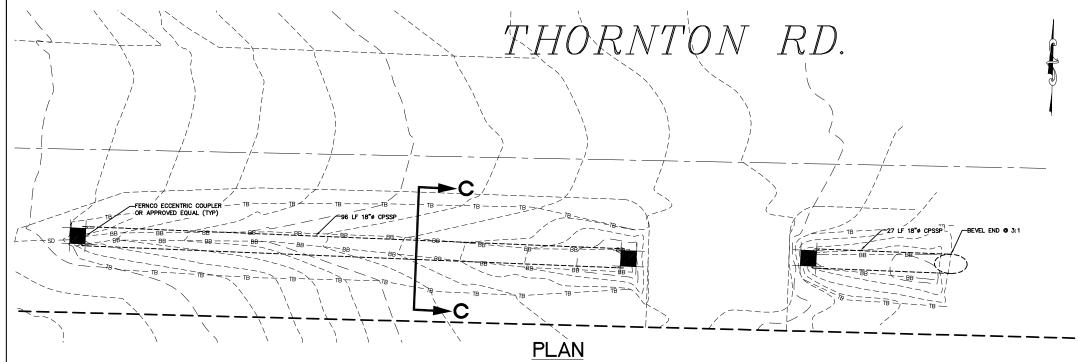
DATE DESCRIPTION CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

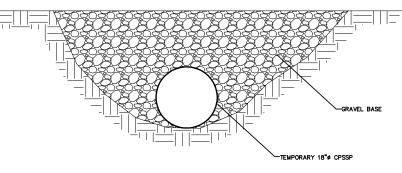
MALLOY AVENUE SANITARY SEWER PROJECT DETAILS

			7-9
DWG <b>15009 PROE</b>	7/29/2015		
ЈОВ# <b>15009</b>	SCALE H: <b>N/A</b>	v: <b>N/A</b>	SHEET 11 of 12









SECTION CC



## TEMPORARY DITCH FILL

**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

NO.	DATE	DESCRIPTION	BY	

CITY OF FERNDALE 2095 MAIN STREET FERNDALE, WA 98248

MALLOY AVENUE SANITARY SEWER PROJECT DETAILS

DWG 15009 PROBASE					
JOB#	SCALE				
15009	н: <b>N/A</b>	v: <b>N/A</b>			

7/29/2015