

SANITARY SEWER PROJECT (COTTAGE PLACE) CITY OF FERNDALE PROJECT NO. SS2013-03

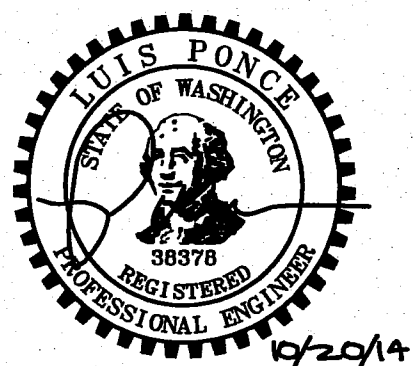
00579.001 1/13/15 SH

VICINITY MAP



SHEET INDEX

- | | |
|---|---|
| 1 | COVER |
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DEMOLITION, AND TC PLAN |
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| 5 | DETAILS |
| 6 | DETAILS |



10/20/14
AS-BUILT

DESIGNED BY
KEC
DRAWN BY
KEC
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LP

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

1	12/03/13	FOR BID	KEC	
NO.	DATE	DESCRIPTION	BY	

CITY OF FERNDALE
2095 MAIN ST
FERNDALE, WA 98248

SANITARY SEWER PROJECT
(COTTAGE PLACE)
FERNDALE, WA

DWG COVER SHEET		DATE
JOB#	SCALE	SHEET
13039	H: N/A V: N/A	1

00579.002 1/13/15 SH

LEGEND

EXISTING

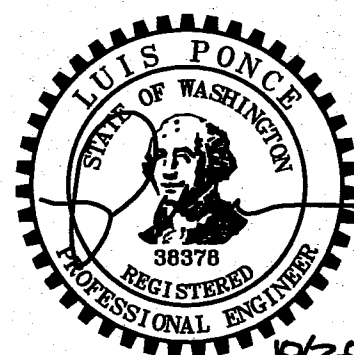
-----OHW-----	OHW	= EXISTING ORDINARY HIGH WATER
-----BB-----	BB	= EXISTING TOE OF BANK
-----OH-----	OH	= EXISTING OVERHEAD POWER
-----		= EXISTING CONCRETE
-----95-----	95	= EXISTING MAJOR CONTOUR
-----95-----	95	= EXISTING MINOR CONTOUR
-----X-----	X	= EXISTING CULVERT
-----X-----	X	= EXISTING DITCH CL
-----X-----	X	= EXISTING FENCE
-----FO-----	FO	= EXISTING FIBER OPTICS LINE
-----G-----	G	= EXISTING GAS MAIN
-----G-----	G	= EXISTING GUARDRAIL
-----G-----	G	= EXISTING GRAVEL
-----PR-----	PR	= EXISTING PROPERTY BOUNDARY
-----PR-----	PR	= EXISTING POWER BURIED
-----PR-----	PR	= EXISTING ROAD CL
-----PR-----	PR	= EXISTING EDGE OF PAVEMENT
-----PR-----	PR	= EXISTING WALL
-----PR-----	PR	= EXISTING RIGHT OF WAY
-----PR-----	PR	= EXISTING TREE LINE
-----SD-----	SD	= EXISTING STORM DRAIN
-----TS-----	TS	= EXISTING TRAFFIC SIGNAL CONDUCTOR
-----SS-----	SS	= EXISTING SANITARY SEWER
-----SS-----	SS	= EXISTING TRAFFIC STRIPING
-----SS-----	SS	= EXISTING PARKING STRIPING
-----TB-----	TB	= EXISTING TOP OF BANK
-----T-----	T	= EXISTING TELEPHONE LINE
-----OT-----	OT	= EXISTING OVERHEAD TELEPHONE
-----TV-----	TV	= EXISTING TV LINE
-----W-----	W	= EXISTING WATER MAIN
-----W-----	W	= EXISTING SIDEWALK
-----W-----	W	= EXISTING WETLANDS BOUNDARY
-----W-----	W	= EXISTING EASEMENT
-----W-----	W	= EXISTING GRADE BREAK
-----FM-----	FM	= EXISTING SANITARY SEWER FORCE MAIN
-----FM-----	FM	= EXISTING FLOWLINE
-----C-----	C	= EXISTING CONDUIT
-----UD-----	UD	= EXISTING UNDERDRAIN
-----UD-----	UD	= EXISTING BUILDING
-----UD-----	UD	= EXISTING CONCRETE
-----UD-----	UD	= EXISTING RR TRACKS
-----UD-----	UD	= EXISTING SIGNAL POLE AND ARM W/ LUMINAIRE
-----UD-----	UD	= EXISTING STREET LIGHT
-----UD-----	UD	= EXISTING GUY WIRE
-----UD-----	UD	= EXISTING GAS METER
-----UD-----	UD	= EXISTING TRANSFORMER PAD
-----UD-----	UD	= EXISTING POWER VAULT
-----UD-----	UD	= EXISTING JBOX
-----UD-----	UD	= EXISTING SOIL BORING LOCATION
-----UD-----	UD	= EXISTING MAIL BOX
-----UD-----	UD	= EXISTING WATER SPIGOT
-----UD-----	UD	= EXISTING WATER METER
-----UD-----	UD	= EXISTING WATER VALVE
-----UD-----	UD	= EXISTING FIRE HYDRANT
-----UD-----	UD	= EXISTING TRAFFIC SIGNAL VAULT
-----UD-----	UD	= EXISTING SEWER MANHOLE
-----UD-----	UD	= EXISTING STORM DRAIN CATCH BASIN TYPE I
-----UD-----	UD	= EXISTING STORM DRAIN CATCH BASIN TYPE II
-----UD-----	UD	= EXISTING UTILITY POLE
-----UD-----	UD	= EXISTING MONITORING WELL
-----UD-----	UD	= EXISTING STORM CLEANOUT
-----UD-----	UD	= EXISTING SEWER CLEANOUT
-----UD-----	UD	= EXISTING SIGN
-----UD-----	UD	= EXISTING TELEPHONE PEDESTAL
-----UD-----	UD	= EXISTING TREE
-----UD-----	UD	= EXISTING VEGETATION

PROPOSED

-----BB-----	BB	= PROPOSED TOE OF BANK
-----BB-----	BB	= PROPOSED SAWCUT
-----SD-----	SD	= PROPOSED FIELD STORM DRAIN
-----95-----	95	= PROPOSED MAJOR CONTOUR
-----95-----	95	= PROPOSED MINOR CONTOUR
-----95-----	95	= PROPOSED PAVEMENT VALLEY
-----X-----	X	= PROPOSED DITCH CL
-----X-----	X	= PROPOSED FENCE
-----FO-----	FO	= PROPOSED FIBER OPTICS
-----FO-----	FO	= PROPOSED HANDRAIL
-----FO-----	FO	= PROPOSED GUARDRAIL
-----FO-----	FO	= PROPOSED GRAVEL
-----FO-----	FO	= PROPOSED PATH
-----FO-----	FO	= PROPOSED AUTOTURN
-----FO-----	FO	= PROPOSED ROAD CL
-----FO-----	FO	= PROPOSED ROAD EDGE OF PAVEMENT
-----FO-----	FO	= PROPOSED ROCK WALL
-----FO-----	FO	= PROPOSED RIGHT OF WAY
-----FO-----	FO	= PROPOSED TREE LINE
-----SD-----	SD	= PROPOSED STORM DRAIN
-----TS-----	TS	= PROPOSED TRAFFIC SIGNAL CONDUCTOR
-----SS-----	SS	= PROPOSED SANITARY SEWER
-----SS-----	SS	= PROPOSED TRAFFIC STRIPE
-----SS-----	SS	= PROPOSED PARKING STRIPE
-----TB-----	TB	= PROPOSED TOP OF BANK
-----TB-----	TB	= PROPOSED BACK OF CURB
-----TB-----	TB	= PROPOSED ROAD FACE OF CURB
-----TB-----	TB	= PROPOSED ROAD LIP OF GUTTER
-----W-----	W	= PROPOSED WATER MAIN
-----W-----	W	= PROPOSED SIDEWALK
-----W-----	W	= PROPOSED SILT FENCE
-----W-----	W	= PROPOSED CONSTRUCTION EASEMENT
-----W-----	W	= PROPOSED GRADE BREAK
-----FM-----	FM	= PROPOSED SANITARY SEWER FORCE MAIN
-----UD-----	UD	= PROPOSED UNDERDRAIN
-----C-----	C	= PROPOSED CONDUIT
-----C-----	C	= PROPOSED BUILDING
-----C-----	C	= PROPOSED BUILDING
-----C-----	C	= PROPOSED CONC. SIDEWALK/DRIVEWAY
-----C-----	C	= PROPOSED INFILTRATION TRENCH
-----C-----	C	= PROPOSED INFILTRATION FILTER MEDIA
-----C-----	C	= PROPOSED ACP REMOVAL
-----C-----	C	= PROPOSED DEMOLITION AREA
-----C-----	C	= PROPOSED ASPHALT
-----C-----	C	= PROPOSED RIGHT OF WAY TAKE
-----C-----	C	= PROPOSED STORM DRAIN INLET
-----C-----	C	= PROPOSED COUPLER
-----C-----	C	= PROPOSED WATER METER
-----C-----	C	= PROPOSED WATER VALVE
-----C-----	C	= PROPOSED HYDRANT
-----C-----	C	= PROPOSED SANITARY SEWER MANHOLE
-----C-----	C	= PROPOSED SANITARY SEWER MANHOLE
-----C-----	C	= PROPOSED STORM DRAIN CATCH BASIN TYPE I
-----C-----	C	= PROPOSED STORM DRAIN CATCH BASIN TYPE II
-----C-----	C	= PROPOSED UTILITY POLE
-----C-----	C	= PROPOSED MONITORING WELL
-----C-----	C	= PROP STORM CLEANOUT
-----C-----	C	= PROPOSED SANITARY SEWER CLEAN OUT
-----C-----	C	= PROPOSED SIGN
-----C-----	C	= FLOW ARROW
-----C-----	C	= PROPOSED TREE

ABBREVIATIONS

AC	= ASBESTOS CEMENT	FL	= FLOW LINE	N	= NORTH	SCH	= SCHEDULE
ASPH	= ASPHALT	FF	= FINISHED FLOOR	OC	= ON CENTER	S	= SOUTH
BLDG	= BUILDING	FG	= FINISHED GRADE	PVMNT	= PAVEMENT	STD	= STANDARD
CATV	= CABLE TELEVISION	FT/FT	= FEET PER FOOT	PED	= PEDESTAL	SP	= STANDARD PLAN
CL	= CLASS, CENTERLINE	F&C	= FRAME AND COVER	PCC	= POINT OF COMPOUND CURVATURE	STA	= STATION
COMP	= COMPACTED	F&G	= FRAME AND GRATE	PC	= POINT OF CURVATURE	SDCB	= STORM DRAIN CATCH BASIN
CONC	= CONCRETE	IW	= INJECTION WELL	PRC	= POINT OF REVERSE CURVE	SDMH	= STORM DRAIN MANHOLE
C & G	= CURB & GUTTER	IE, INV	= INVERT ELEVATION	PT	= POINT OF TANGENCY	TEL	= TELEPHONE
CPDP	= CORRUGATED POLYETHYLENE DRAIN PIPE	L	= LENGTH	POC	= POINT ON CURVE	TL	= TRAFFIC LOOP
#	= DIAMETER	LF	= LINEAR FEET	PVC	= POLYVINYL CHLORIDE	TYP	= TYPICAL
DI	= DUCTILE IRON	LOC	= LOCATION	PCC	= PORTLAND CEMENT CONCRETE	UP	= UTILITY POLE
E	= EAST	MAX	= MAXIMUM	POSS	= POSSIBLE	VL	= VAULT
EOP, EP	= EDGE OF PAVEMENT	MPOC	= MID-POINT ON CURVE	PROP	= PROPOSED	WSDOT	= WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
EX, EXIST	= EXISTING	MIN	= MINIMUM	R	= RADIUS	W	= WEST
IR	= EXISTING IRRIGATION	MOD	= MODIFIED	ROW	= RIGHT OF WAY	WM	= WATER METER
SN	= EXISTING SIGN	MW	= MONITORING WELL	R&C	= RING AND COVER		
FT	= FEET	MON	= MONUMENT	SSMH	= SANITARY SEWER MANHOLE		



10/29/14

SUBMITTED WITH
DESIGN PLAN

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KEC
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Reichhardt & Ebe
ENGINEERING INC

P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687
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1 12/03/13
NO. DATE

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2095 MAIN ST
FERNDAL, WA 98248

SANITARY SEWER PROJECT
(COTTAGE PLACE)
FERNDAL, WA

DWG LEGEND AND ABBREVIATIONS

JOB#

13039

SCALE

H: N/A

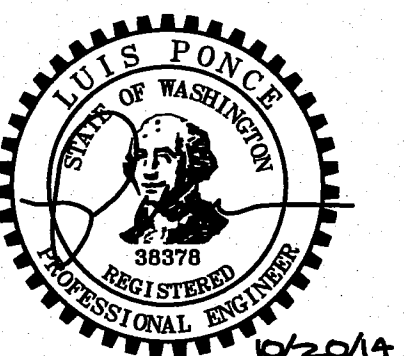
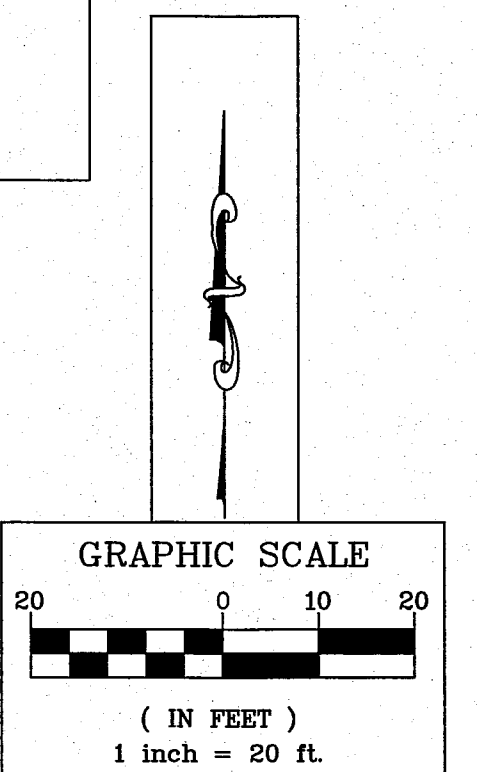
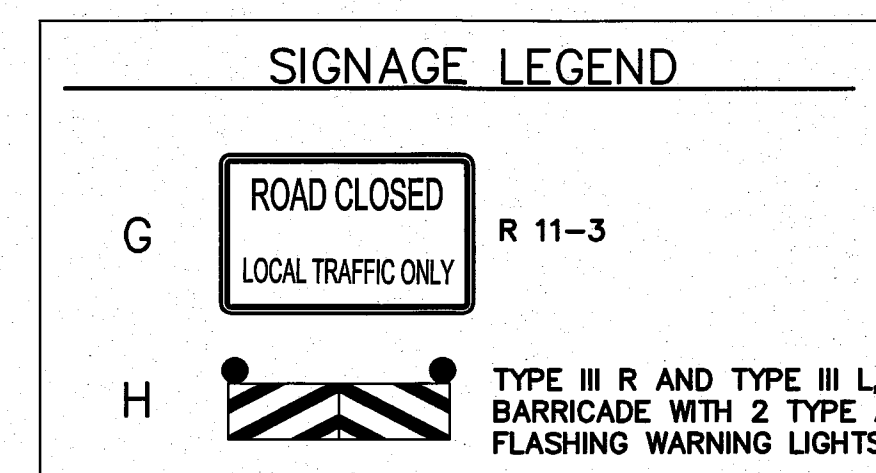
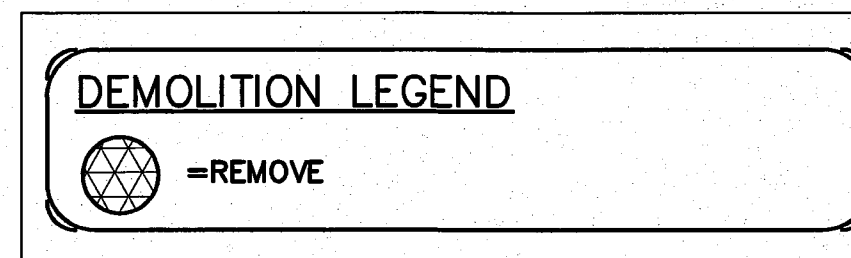
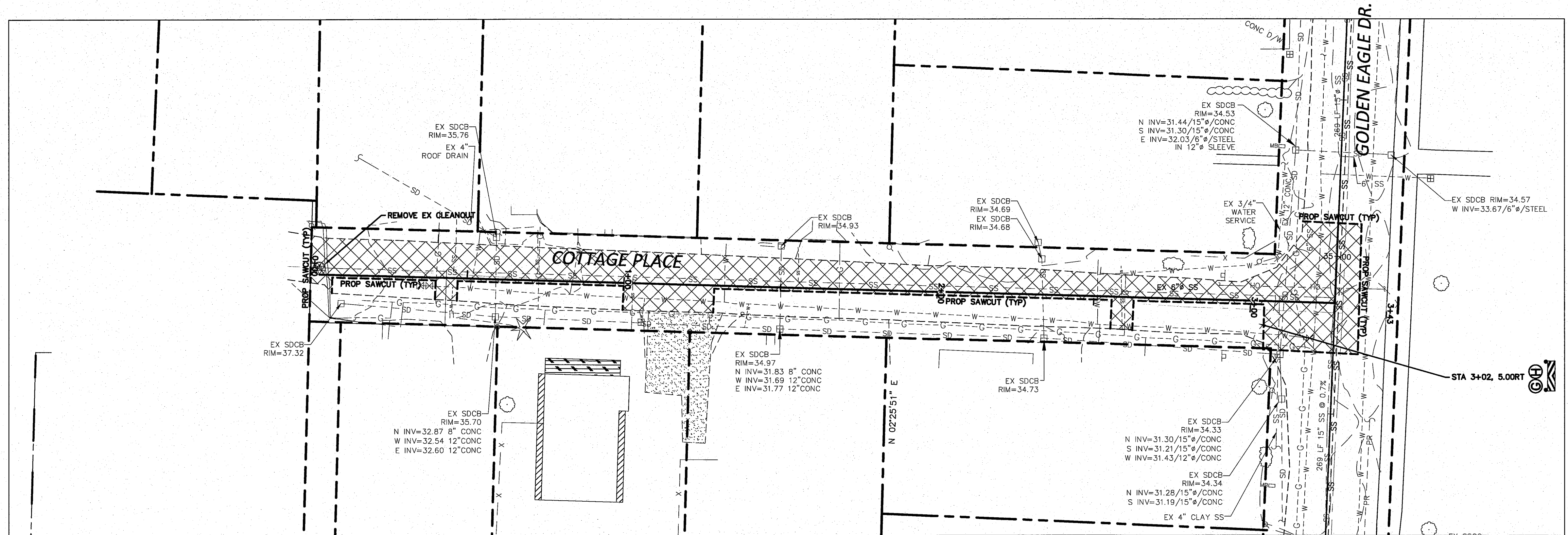
V: N/A

DATE

09/13/13

SHEET

2



SUBMITTED WITH
DESIGN PLAN

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ENGINEERING INC
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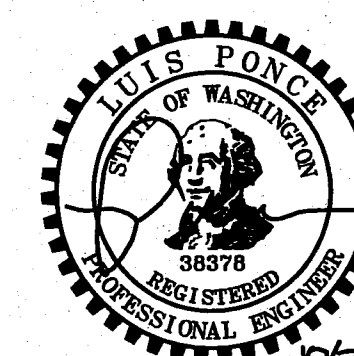
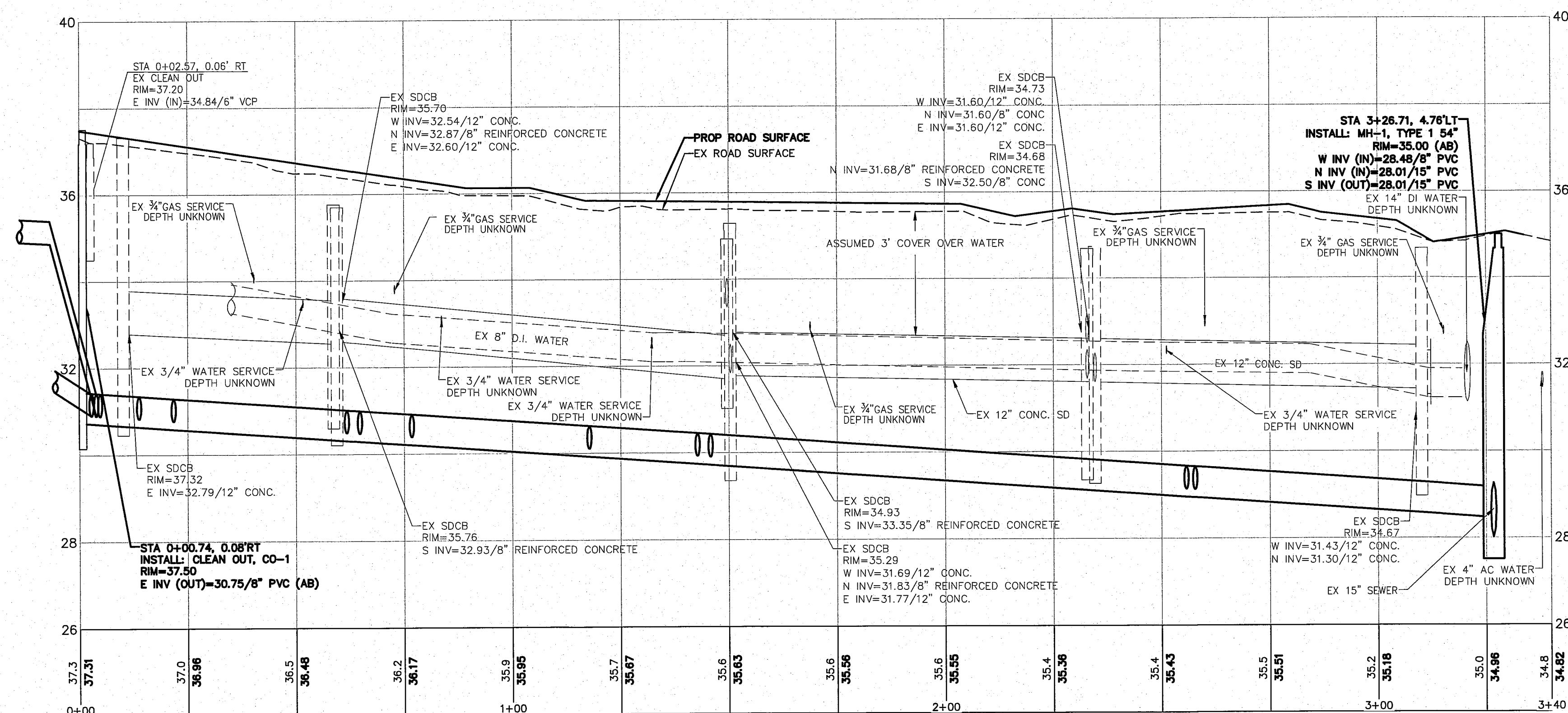
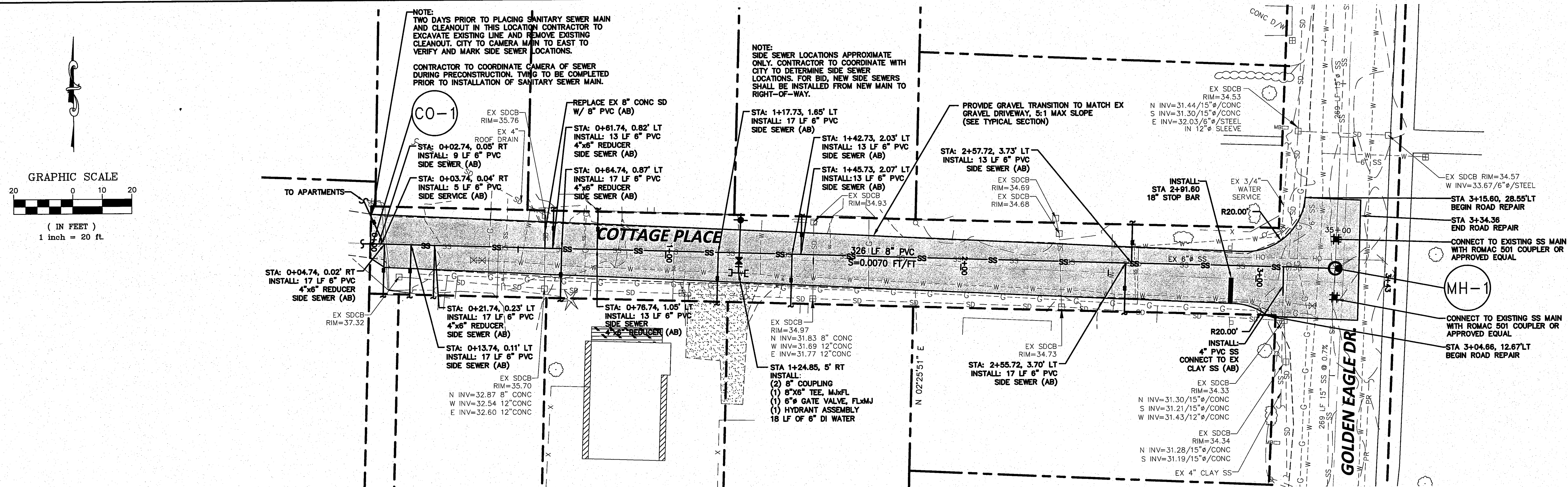
NO.	DATE	DESCRIPTION	BY
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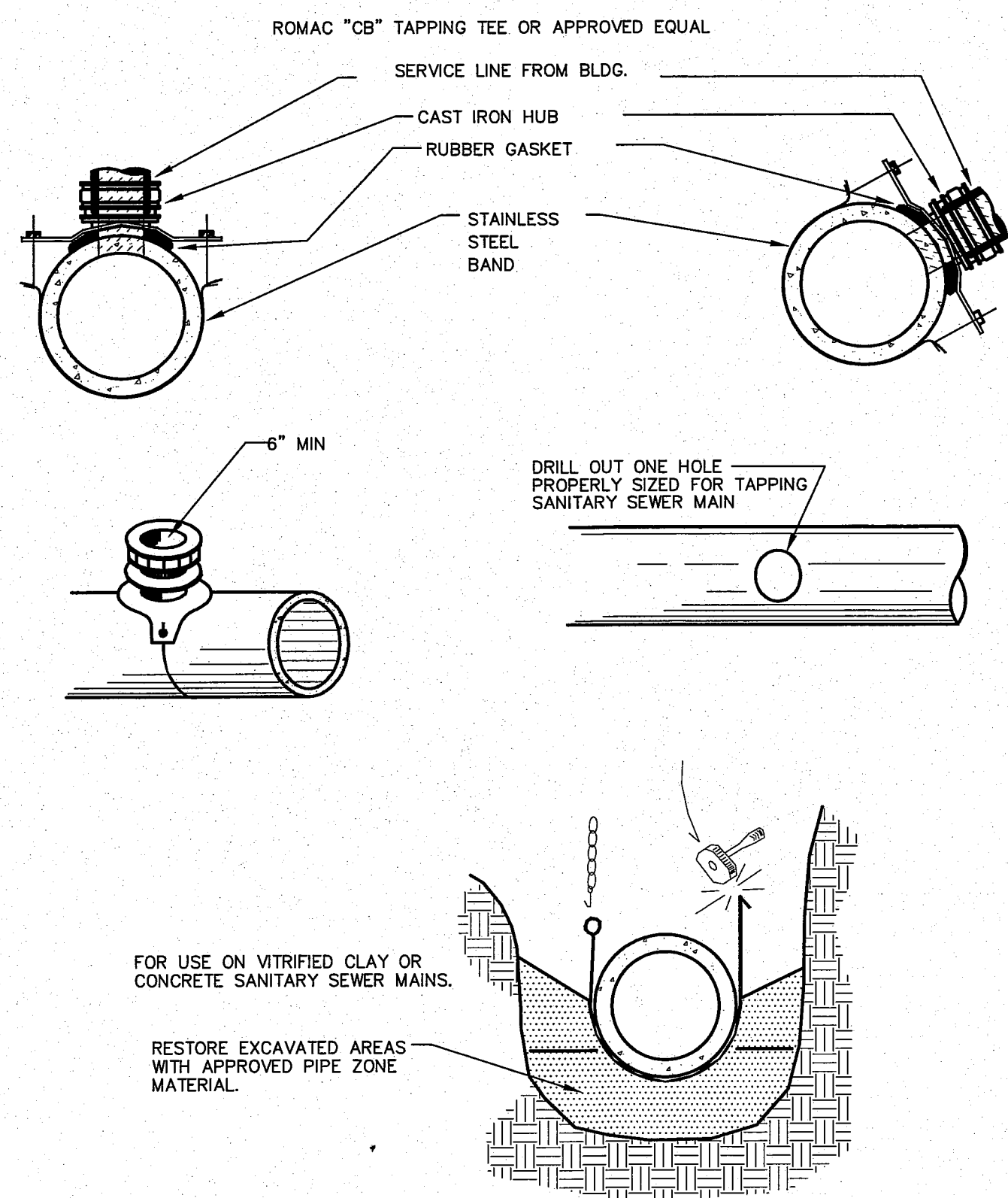
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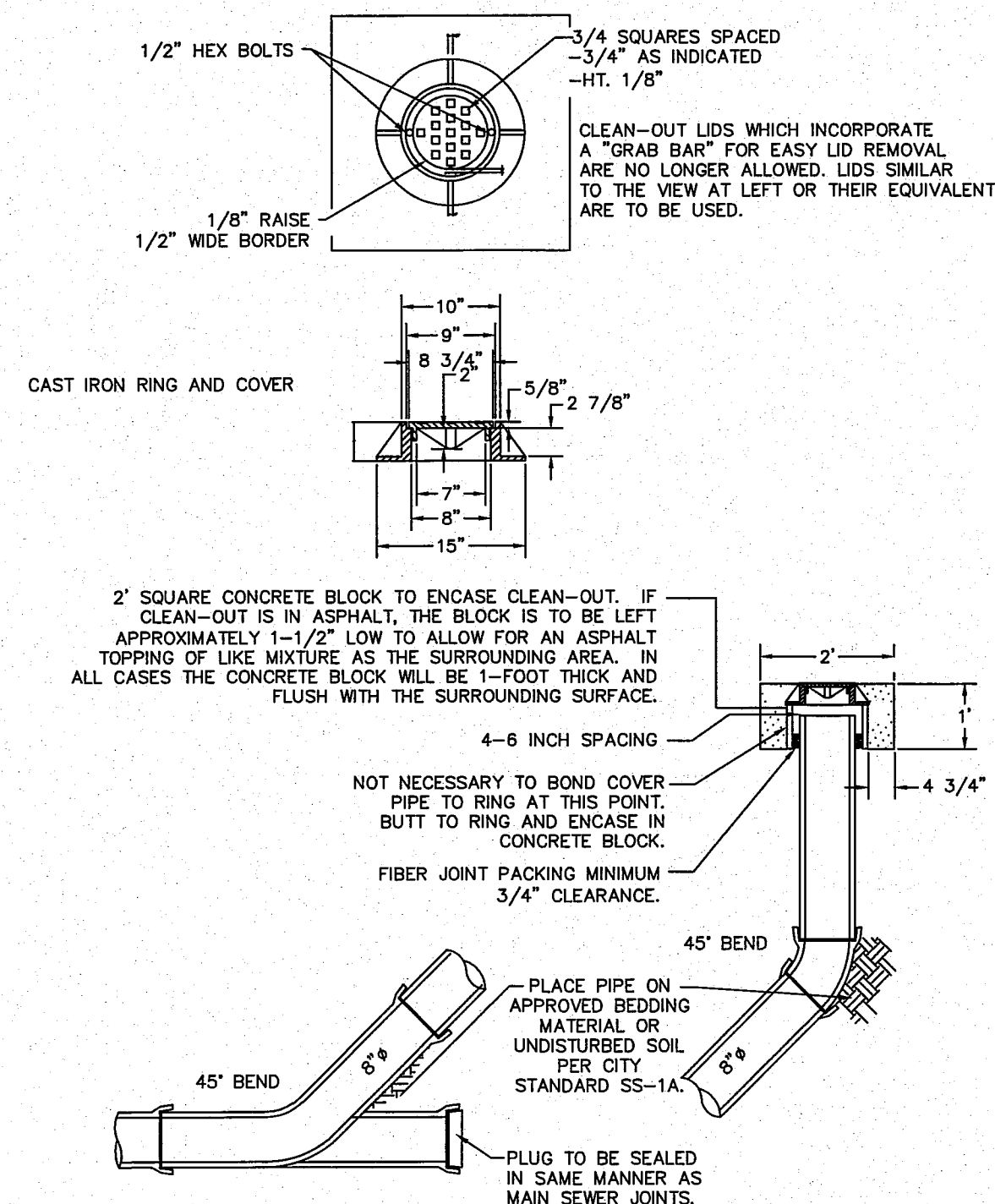
DWG	EXISTING CONDITIONS, TRAFFIC, AND DEMO PLAN	DATE
JOB#	SCALE	SHEET
13039	H: 1"=20' V: N/A	3

00579-003 1/3/15 SH

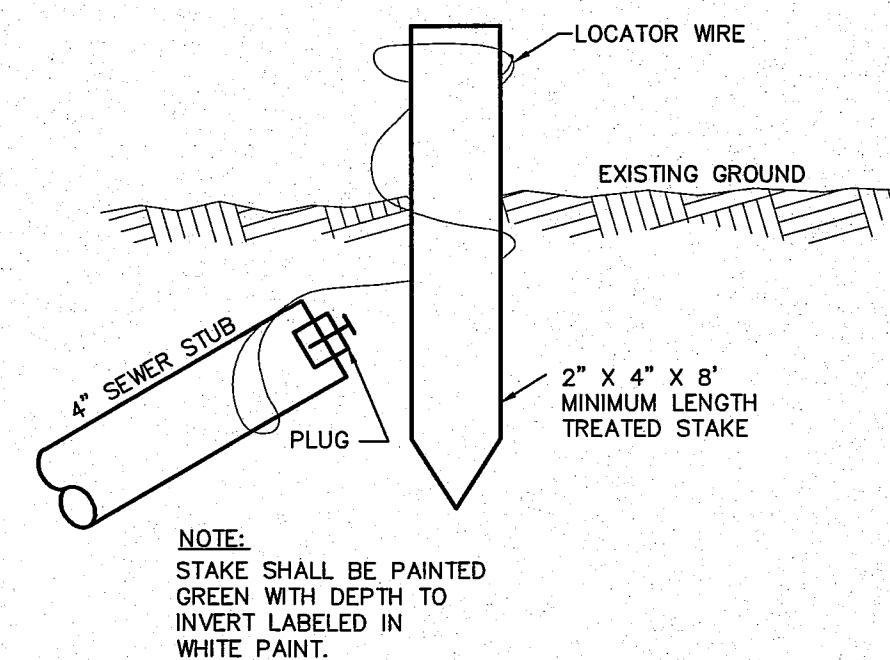




APPROVED	CITY OF FERNDALE SANITARY SEWER BANDED TAPPING TEE	DRAWING SS-12
Public Works Director	Date	

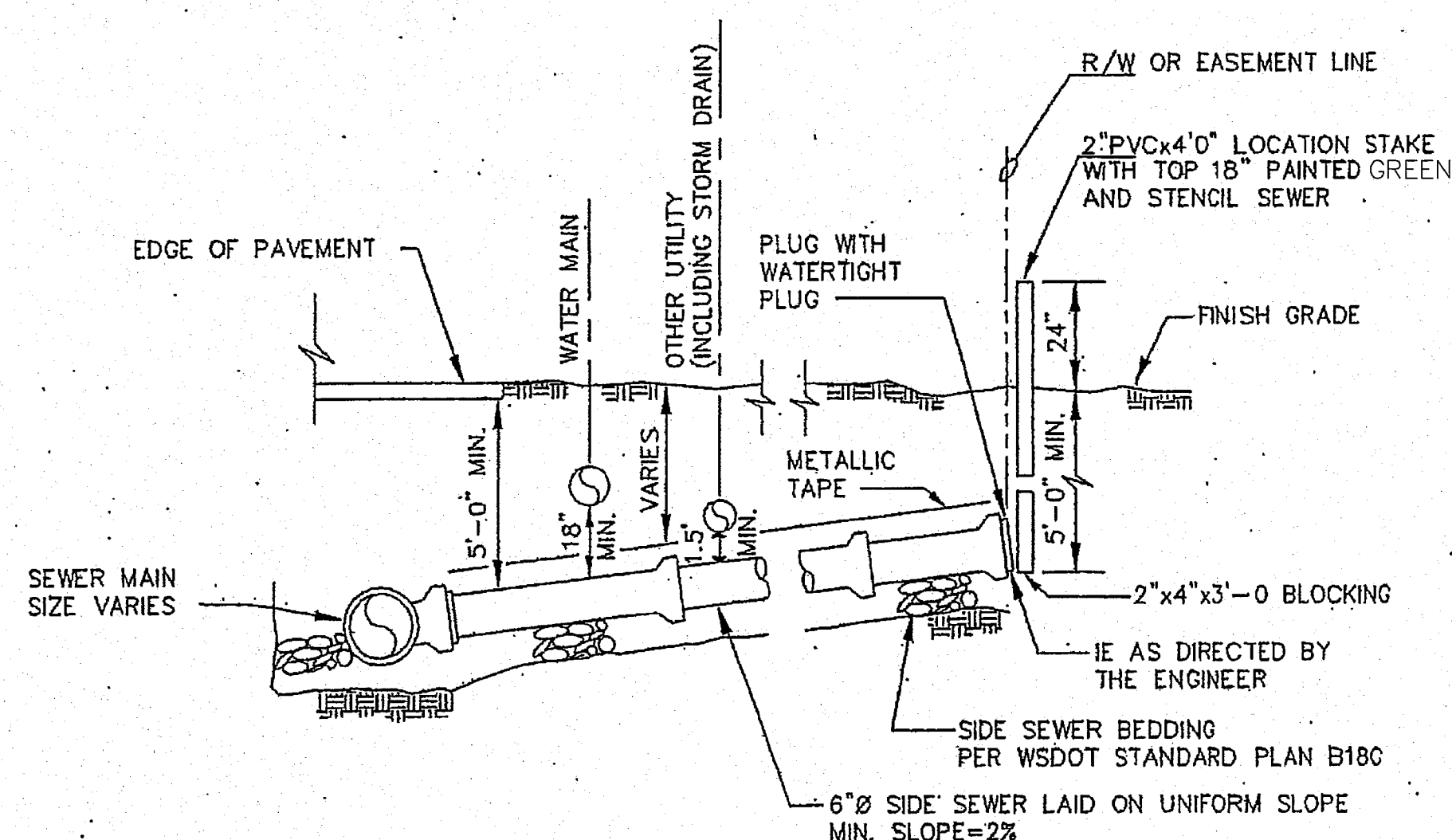


	APPROVED	8" CLEAN OUT
	Public Works Director	Date



SEWER SERVICE STAKE

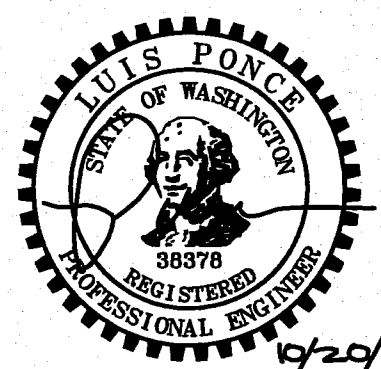
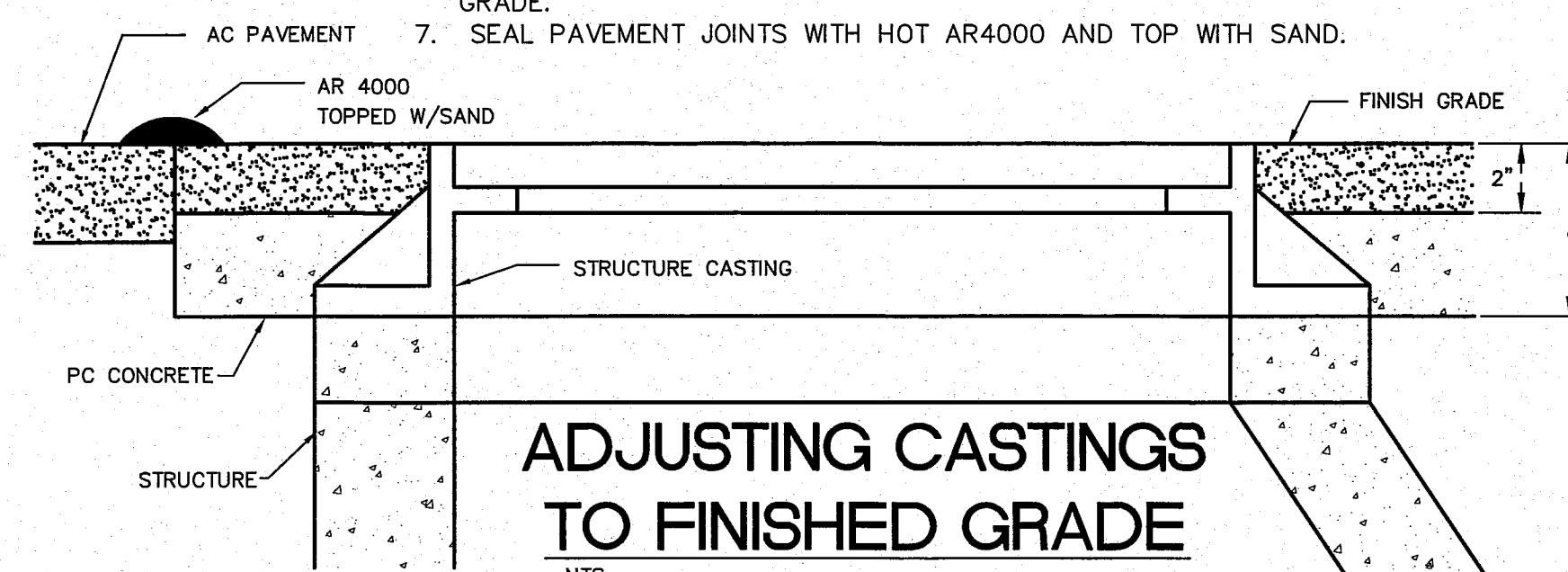
NTS



- NOTES:

ALL FRAMES, COVERS AND 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 AN EVEN CIRCLE 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, AND PC CONCRETE.
6. PLACE AND COMPACT 2 INCHES OF HMA TO FINISH GRADE.
7. SEAL PAVEMENT JOINTS WITH HOT AR4000 AND TOP WITH SAND.



SUBMITTED WITH
DESIGN PLAN

DESIGNED BY	KEC
DRAWN BY	KEC
CHECKED BY	LP

R&E **Reichhardt & Ebe**
ENGINEERING INC

P.O. Box 978 | 423 Front Street, Lynden, WA 98264 (360) 354-3687
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1	12/03/13	FOR BID	KE
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CITY OF FERNDALE
2095 MAIN ST
FERNDALE, WA 98248

**SANITARY SEWER PROJECT
(COTTAGE PLACE)
FERNDALE, WA**

DWG **DETAIL SHEET**

JOB#

13039

SCALE

H: **N/A**

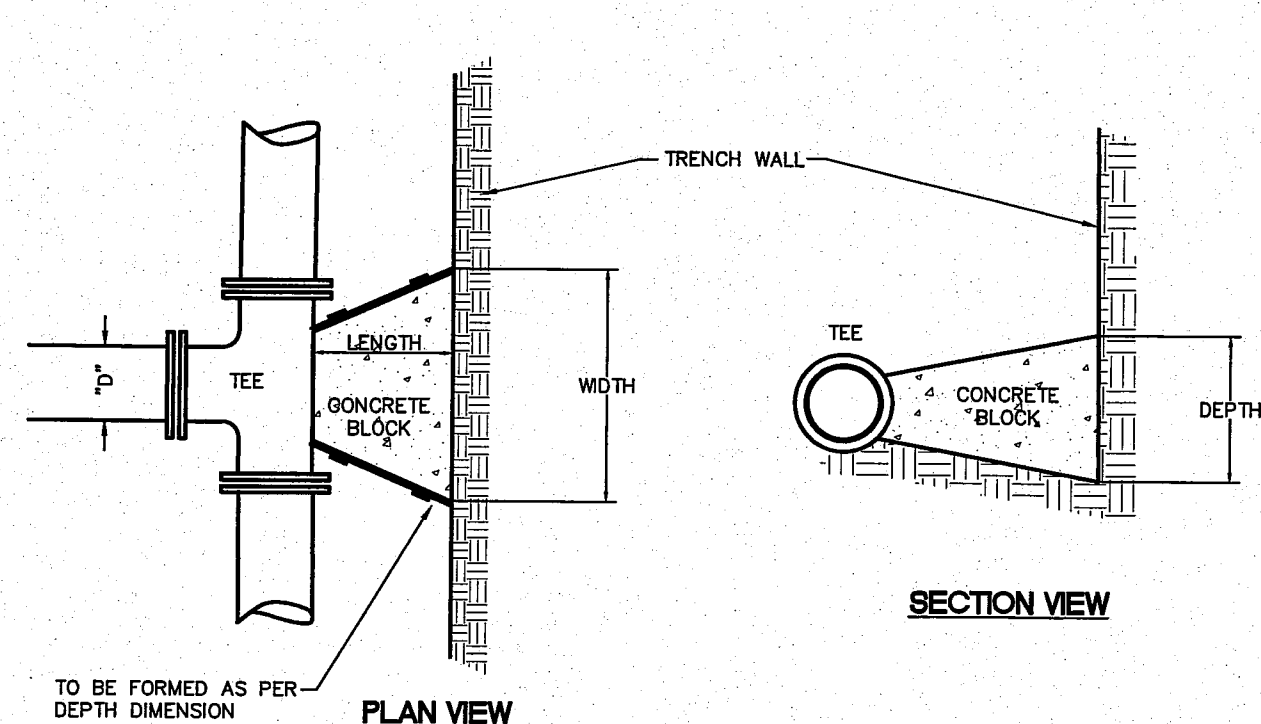
v: N/A

DATE _____

09/13/13

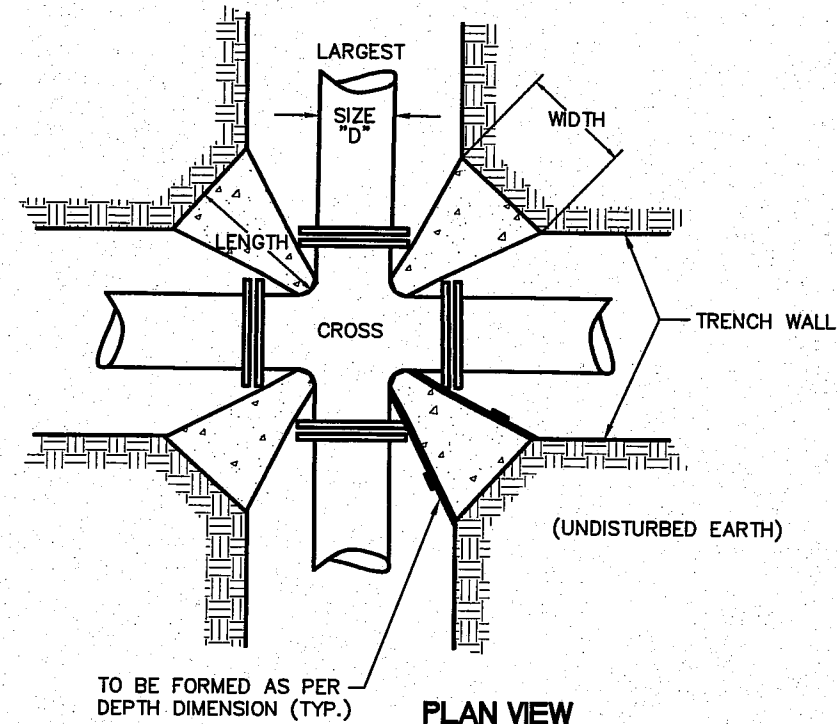
SHEET

5



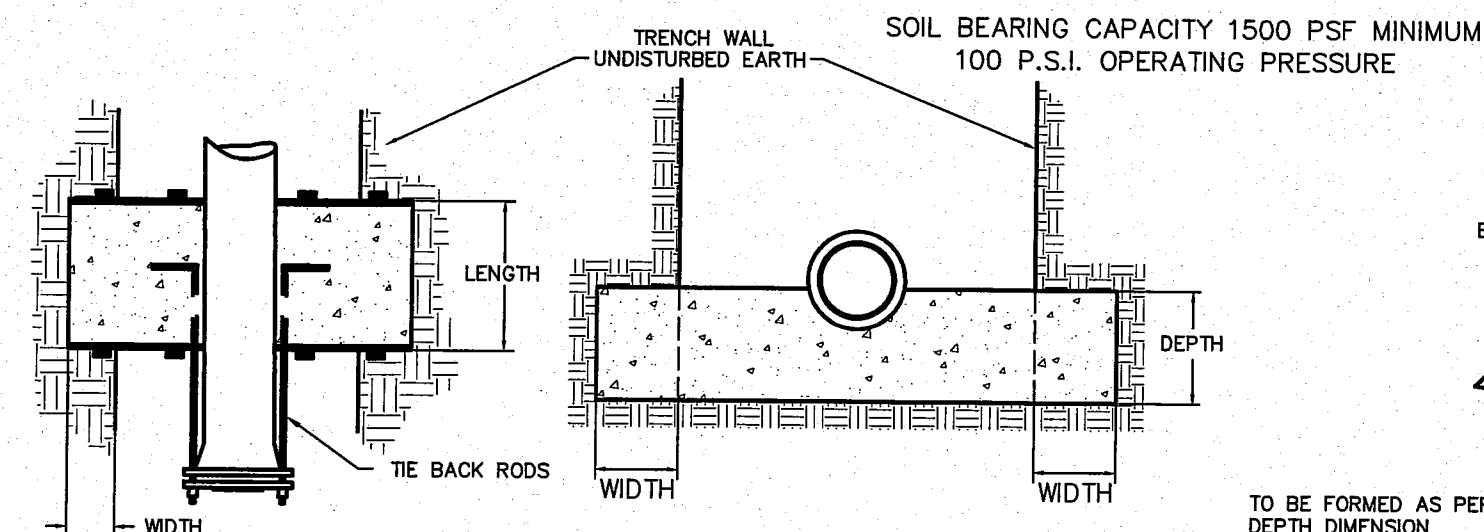
"D"	WIDTH	DEPTH	LENGTH	VOL.
6"	1'-6"	1'-6"	12"	3.0
8"	2'-0"	2'-0"	12"	4.5
10"	2'-6"	2'-6"	12"	7.0
12"	3'-0"	3'-0"	18"	14.0

VOL. = Approx. Volume of Blocking Material Required in cu. ft.



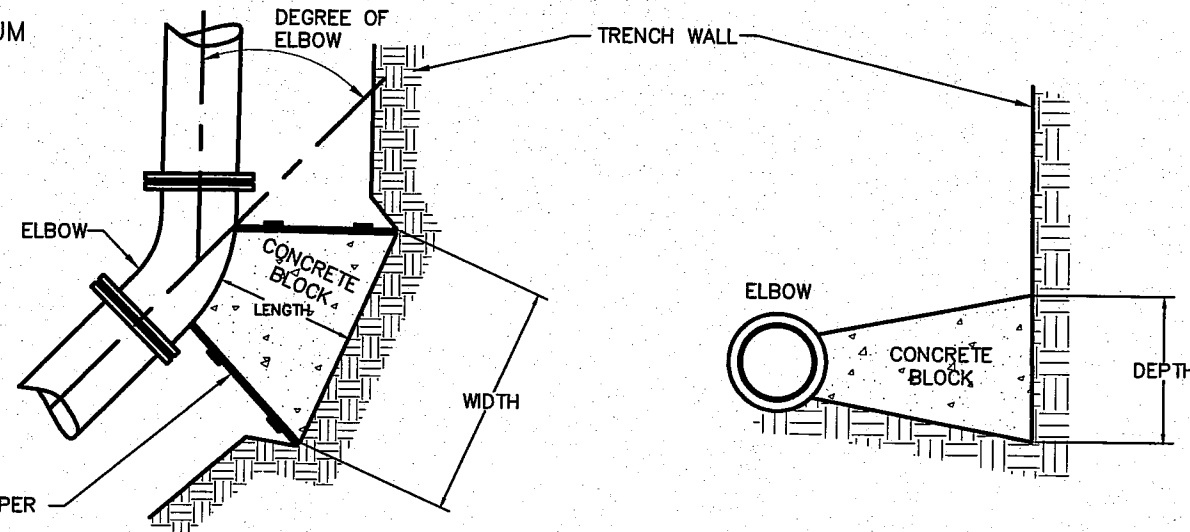
"D"	WIDTH	DEPTH	LENGTH	VOL.	X4 blocks/joint
6"	1'-0"	1'-0"	12"	0.63	2.50 cu ft
8"	1'-3"	1'-3"	12"	1.00	4.01 cu ft
10"	1'-6"	1'-6"	12"	1.63	6.50 cu ft
12"	1'-9"	1'-9"	18"	3.05	12.19 cu ft

VOL. = Approx. Volume of Blocking Material Required in cu. ft.



"D"	WIDTH	DEPTH	LENGTH	*VOL.	# OF RODS	ROD DIA.
6"	1'-6"	1'-6"	12"	7.5	2	1/2"
8"	2'-0"	2'-0"	18"	20.0	2	5/8"
10"	2'-6"	2'-6"	24"	37.5	2	3/4"
12"	2'-9"	2'-9"	24"	44.0	4	3/4"

*VOL. = Approx. Volume of Blocking Material Required in cu. ft.
RODS: A36 STEEL MINIMUM

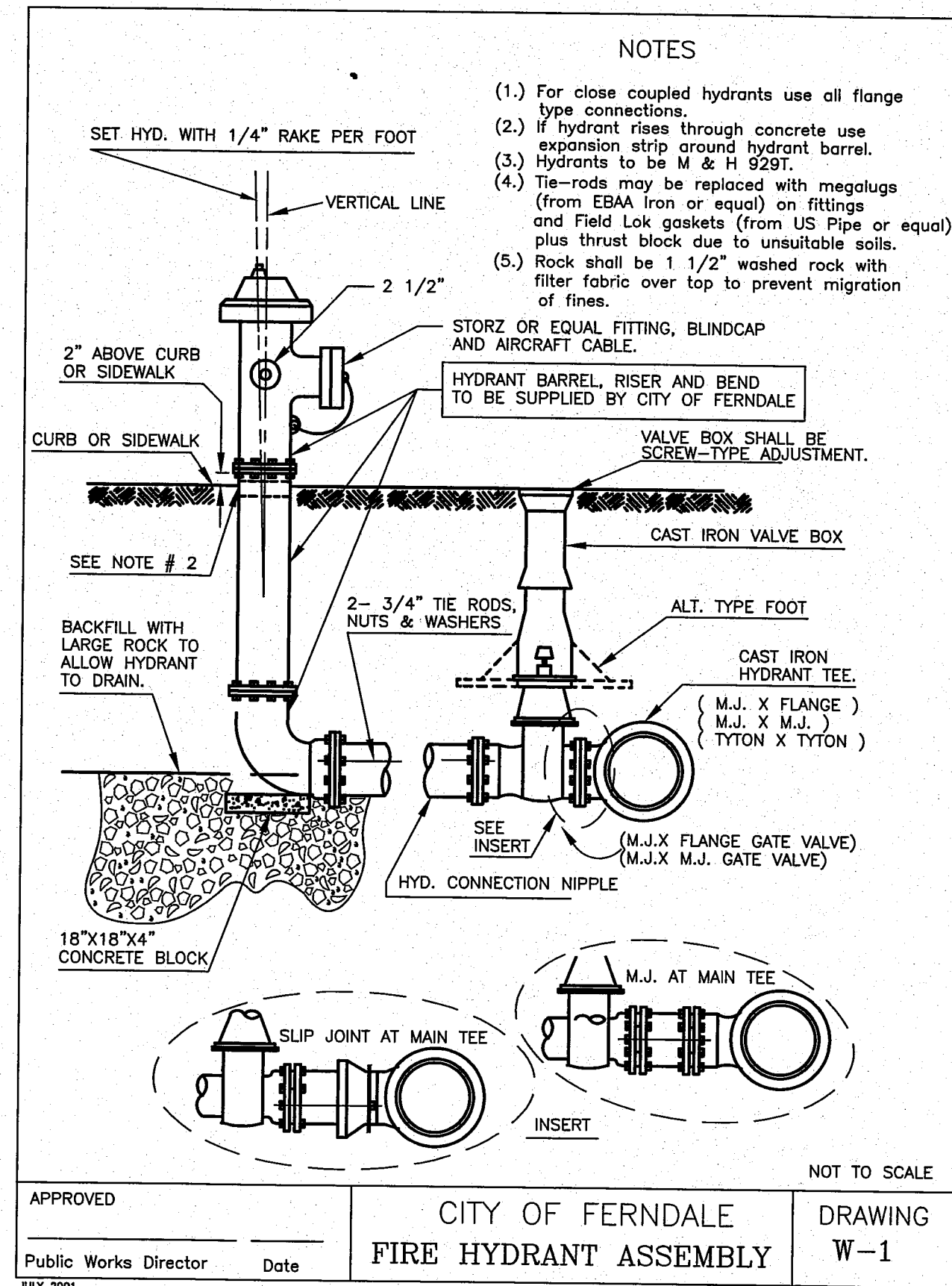


SIZE	LENGTH	11 1/4"	22 1/2"	45"	90"
6"	12"	1'-0"	1'-0"	1'-0"	1'-0"
8"	12"	1'-3"	1'-3"	1'-3"	1'-3"
10"	12"	1'-6"	1'-6"	1'-6"	1'-6"
12"	18"	2'-0"	2'-0"	2'-0"	2'-0"

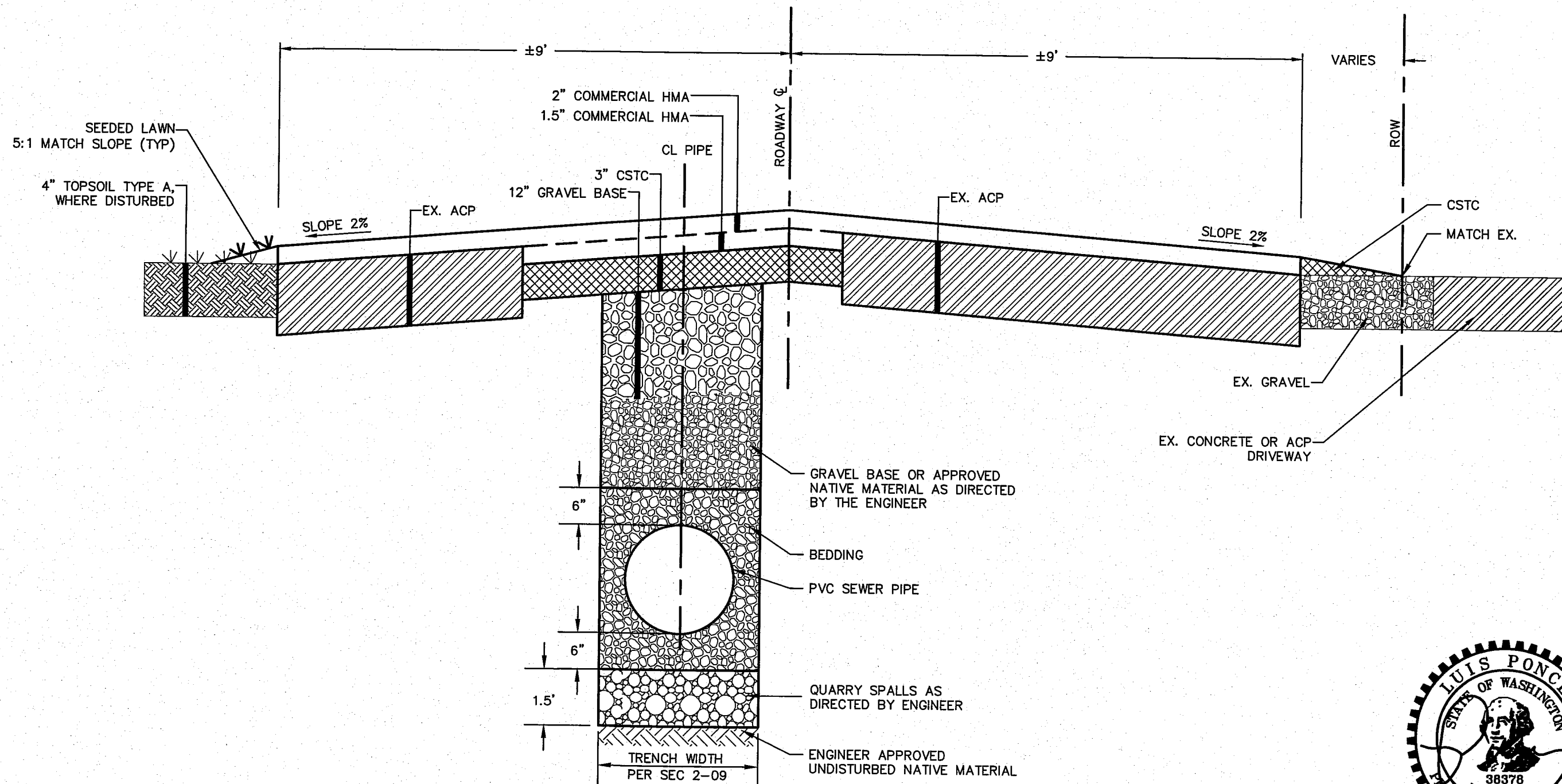
VOL. = Approx. Volume of Blocking Material Required in cu. ft.

THRUST BLOCKING

NTS



APPROVED	CITY OF FERNDAL	DRAWING
Public Works Director	FIRE HYDRANT ASSEMBLY	W-1



SUBMITTED WITH
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6

