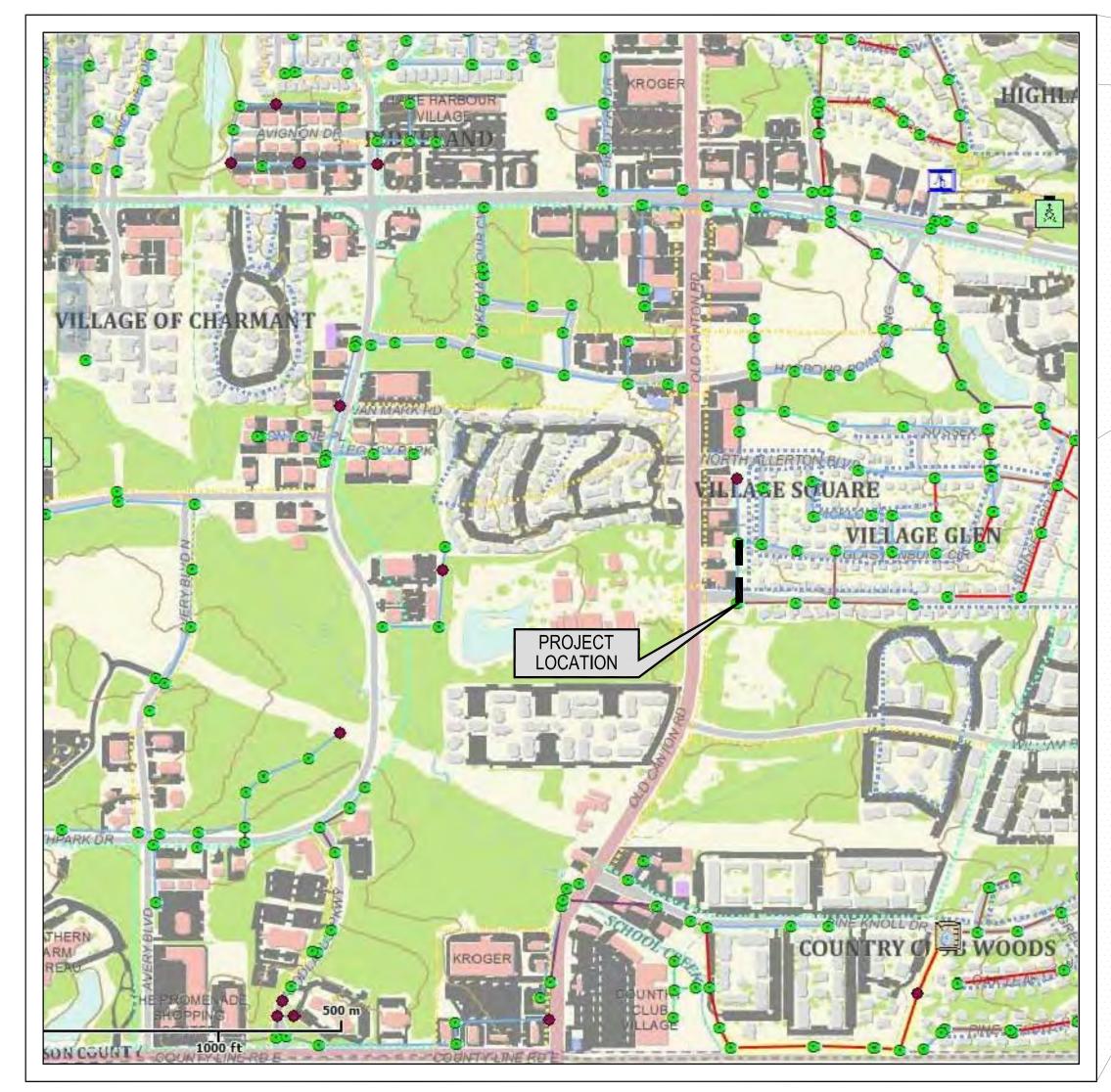
OPTICAL 2000 SEWER REPLACEMENT MH#2479 - MH#2478

CITY OF RIDGELAND, MISSISSIPPI

	INDEX TO DRAWINGS										
SHEET NO.	TITLE										
G1.0	COVER										
PP1.0	SEWER PLAN AND PROFILE (STA. 0+00 THRU STA. 3+64)										
SD1.0	STANDARD SEWER DETAILS										
SD2.0	STANDARD WATER DETAILS										
SD3.0	STANDARD STORM DRAINAGE DETAILS										



VICINITY MAP

AUGUST 2014 400-650-576



CAL 2000 SEWER REPLACEMENT MH#2479 - MH#2478

OF RIDGELAND, MISSISSIPPI

	DRAWING REVISIONS	
NO.	REMARKS	DATE
EAL:		

MAYOR

GENE McGEE

D.I. SMITH

KEN HEARD

CHUCK GAUTIER

KEVIN HOLDER

BRIAN RAMSEY

WESLEY HAMLIN

MIKE McCOLLUM

PUBLIC WORKS DIRECTOR

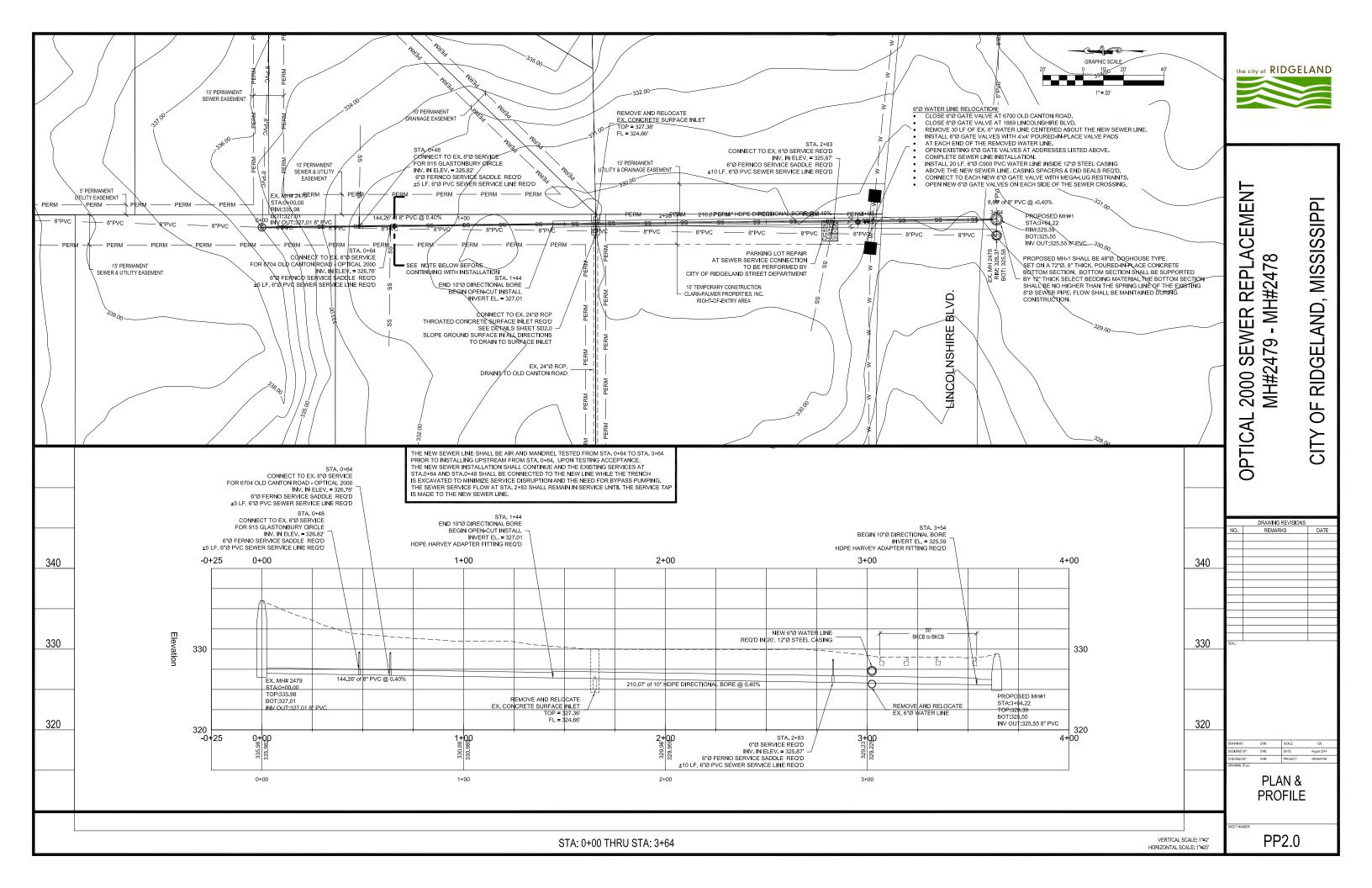
SCOTT JONES

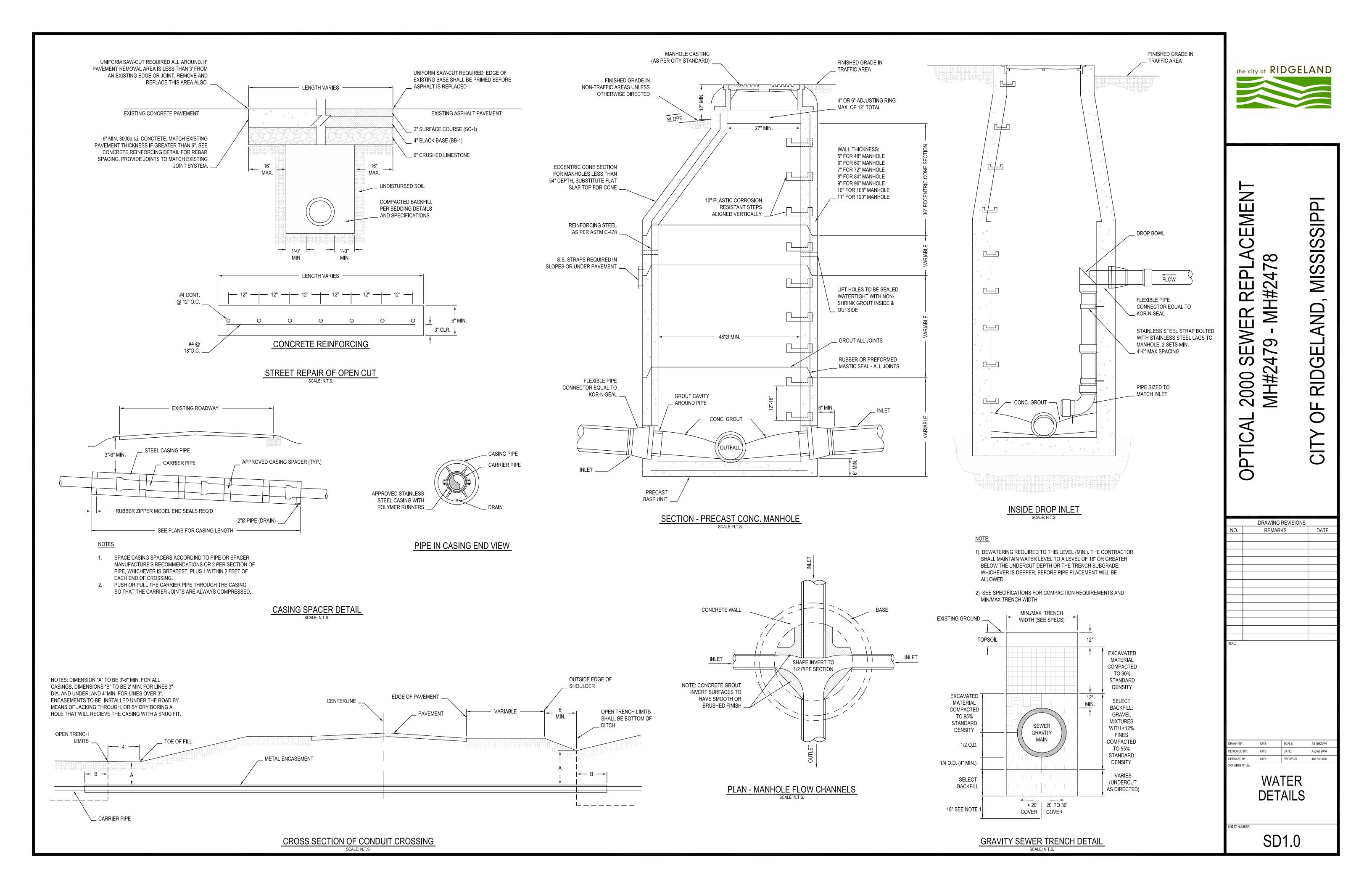
BOARD OF ALDERMAN

DRAWN BY: CWB SCALE: As Shown
DESIGNED BY: CWB DATE: August 2014
CHECKED BY: CWB PROJECT: 400-650-576
DRAWNG TITLE:

COVER

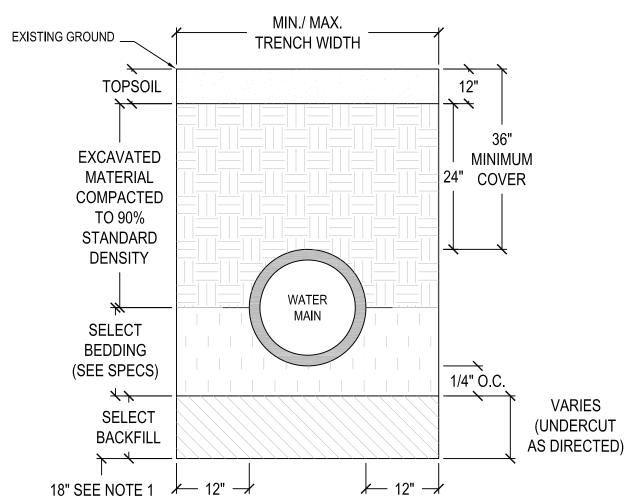
G1.0



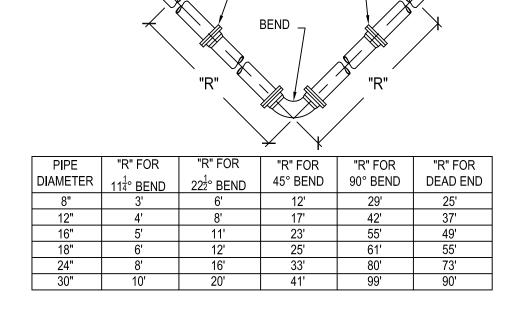


1) DEWATERING REQUIRED TO THIS LEVEL (MIN.). THE CONTRACTOR SHALL MAINTAIN WATER LEVEL TO A LEVEL OF 18" OR GREATER BELOW THE UNDERCUT DEPTH OR THE TRENCH SUBGRADE, WHICHEVER IS DEEPER, BEFORE PIPE PLACEMENT WILL BE ALLOWED.

2) SEE SPECIFICATIONS FOR COMPACTION REQUIREMENTS



TRENCH DETAIL



RESTRAINED

JOINT (TYP.)

NOTES:

- RESTRAINED JOINT PIPE SHALL BE USED AT ALL BENDS.
- THE LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND SHALL BE NOT LESS THAN THE "R" DISTANCES.
- ALL JOINTS WITHIN THE DISTANCE "R" ESTABLISHED ABOVE SHALL BE RESTRAINED.
- ALL PIPE IN CASINGS SHALL BE RESTRAINED, BUT PIPE LENGTHS IN CASING SHALL NOT APPLY TOWARD REQUIRED RESTRAINED LENGTHS FOR ADJACENT BENDS.

RESTRAINED JOINT LENGHTS WERE CALCULATED BASED ON DIPRA THRUST RESTRAINT GUIDELINES UNDER THE FOLLOWING CONDITIONS:

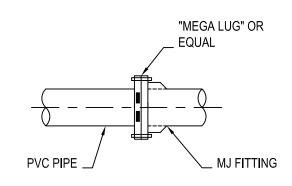
LAYING CONDITION - TYPE 3 SOIL DESIGNATION - CLAY 2

DEPTH OF COVER - 3.5' DESIGN PRESSURE - 150 PSI SAFETY FACTOR - 1.5

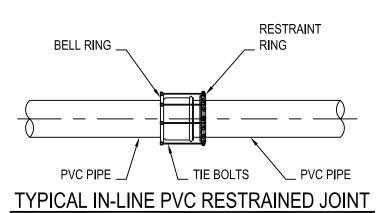
IF ANY OF THESE ASSUMPTIONS SIGNFICANTLY DIFFER FROM THE LAYING CONDITIONS, NEW THRUST RESTRAINT CALCULATIONS SHOULD BE PERFORMED.

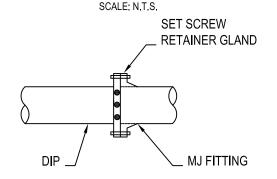
6. FOR BENDS IN THE VERTICAL PLANE INCREASE THE "R" DISTANCE BY A FACTOR OF 1.75.

RESTRAINED JOINT DETAL

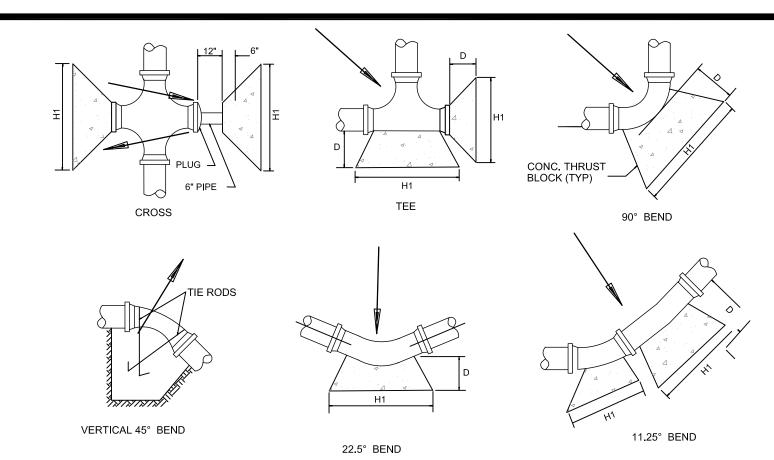


TYPICAL PVC RESTRAINED JOINT AT MJ FITTING





TYPICAL DI RESTRAINED JOINT AT MJ FITTING



NOTI	ES:
1.	ARROWS INDICATE DIRECTION OF THRUST.
2.	THRUST BLOCKS TO BEAR AGAINST UNDISTURBED EARTH.
3.	THRUST BLOCKS TO BE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

	TABLE OF DIMENSIONS FOR CONCRETE THRUST BLOCKS																								
SIZE OF			PING SLE S AND PI					90° BEN	NDS				45° BEN	IDS			2:	2.5° BE	NDS				11.25° E	ENDS	
PIPE	H1	H2	٧	D	CU FT	H1	H2	V	D	CU FT	H1	H2	V	D	CU FT	H1	H2	V	D	CU FT	H1	H2	٧	D	CU FT
2" & 2 1/4" 3" & 4" 6" 8" 10" 12" 16" 18" 20" 24" 30" 36"	18" 24" 24" 36" 40" 54" 66"	10" 12" 16" 18" 24" 30" 34" 36" 38" 42" 52"	12" 12" 18" 18" 18" 24" 36"	12" 12" 18" 18" 18" 24" 36"	1.90 2.25 3.50 5.05 7.15 13.40 22.50	18" 24" 30" 39" 54" 54" 69"	10" 12" 16" 18" 32" 32" 48" 48" 48" 60' 72' 96"	12" 12" 18" 24" 24" 36" 48"	18" 18" 18" 18" 24" 24" 24" 24" 24" 24"	1.90 2.25 4.05 7.30 10.25 18.15 2.90	18" 18" 24" 30" 24" 42" 48"	6" 8" 10" 11" 18" 30" 30" 40" 48" 72"	12" 12" 16" 18" 21" 24" 36'	18" 18" 18" 18" 24" 24" 24" 24" 24" 24" 24"	1.50 1.60 3.20 3.95 4.60 9.60 17.0	18" 18" 24" 24" 24" 24" 36"	6" 8' 10" 11" 18" 30' 30" 42' 48" 72"	12" 12" 16' 18" 21" 24" 27"	18" 18" 18" 18" 24" 24" 24" 24" 24' 24' 24'	1.50 1.60 3.20 3.40 4.60 6.60 11.8	18' 18" 24" 24" 24" 24" 27"	6" 8" 10" 11" 18" 24" 30" 40" 42" 48" 48"		18' 18" 18" 18" 18" 24" 24"	1.50 1.60 3.20 3.40 4.60 6.10 9.10

THRUST BLOCKS



CEMENT

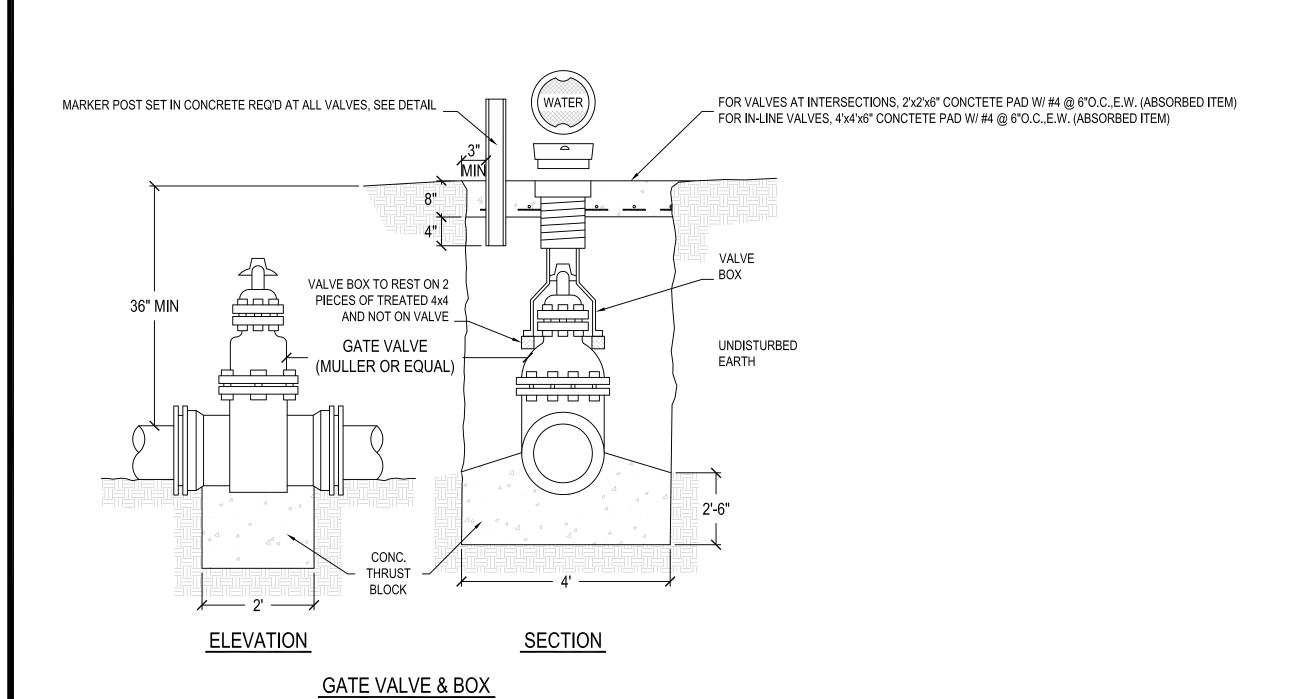
2000

OPTICAL

MISSISSIPPI MH#2478 AND SEWEF 2479 - N 岀 $\overline{\mathbb{Q}}$ MH#2 RD

	DRAWING REVI	SIONS
10.	REMARKS	DATE
AL:		
AWN BY	: CWB SCALI	E: AS SHOWN
SIGNED		·
ECKED I		ECT: 400-650-576
WING I	IILL.	
	WATE	:R
	DETAI	IS I

SD2.0





BLURTON, BANKS & ASSOC., INC. ENGINEERS - SURVEYORS - CONSTRUCTORS

P.O. BOX 12448 • 6055 RIDGEWOOD ROAD, STE D JACKSON, MISSISSIPPI 39211 PH. 601-957-2055 Fax 601-977-0442

September 29, 2014

Mr. Ben Mays The City of Ridgeland P.O. Box 217 Ridgeland, MS 39158

INVOICE

054-633

FOR: Your P.O. # 14-48118

Remove and replace sanitary sewer line up to Optical 2000......\$42,398.00

Total this Invoice

\$42,398.00

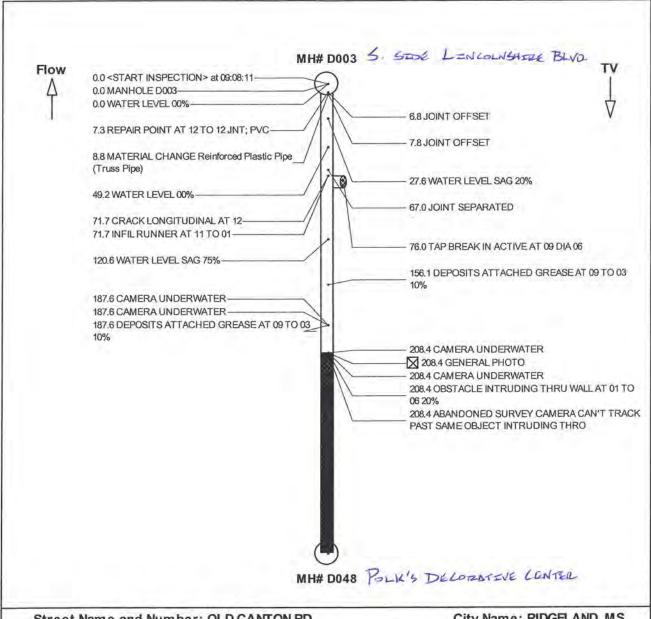
FINAL LABOR COST STATEMENT

CITY OF RIDGELAND, MISSISSIPPI

OPTICAL 2000 SEWER REPLACEMENT TERM BID SEPTEMBER 2014

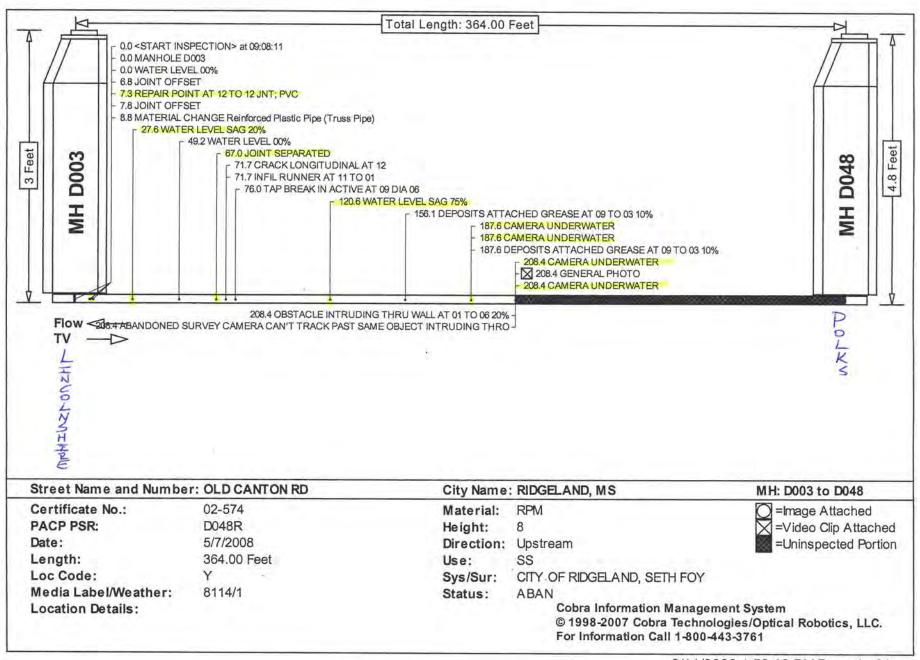
DESCRIPTION	UNIT	QUANTITY	UNIT COST	T	OTAL COST			
LABOR - BLURTON, BANKS & ASSOCIATES								
Class "B" Structural Concrete, Minor Structures	CY	1.6						
Reinforcing Steel	Daymont in Equipme	ant an	d Labor bolow					
Removal of Existing Surface Inlet	EA	1.0	Payment in Equipment and Labor be					
Removal of Existing 24" RCP	LF	10.0						
			Sub	total	Storm Drainag			
6" C900 PVC Water Main (0' - 5' Cut)	LF	20.0	\$8.50	\$	170.00			
6" C900 PVC Water Main, Installed in Casing	LF	10.0	\$30.00	\$	300.00			
12" Steel Casing, Open-Cut, 0' - 3' Deep	LF	10.0	\$15.00	\$	150.00			
6" Gate Valve & Box	EA	2.0	\$140.00	\$	280.00			
Connection to Existing 6" Main for Caps and Valves	EA	4.00	\$1,800.00	\$	7,200.00			
Ductile Iron Fittings	LB	186.0	\$1.50	\$	279.00			
	-		Subtotal Water	\$	8,379.00			
Seed & Fertilize	AC	0.15	\$1,500.00	\$	225.00			
Supply & Install Select Bedding	CY	60.0	\$ 16.00	\$	960.00			
Supply & Install Select Backfill	CY	60.00	\$ 11.00	\$	660.00			
8" Sanitary Sewer (6' - 8' Cut, PVC)	LF	160.0	\$ 15.00	\$	2,400.00			
10" HDPE Pipe, DR 11, Directional Bored	LF	210.0	\$ 60.00	\$	12,600.00			
6" Sanitary Sewer Service Line	LF	40.0	\$ 12.50	\$	500.00			
Service Connection w/ Wye	EA	5.0	\$ 75.00	\$	375.00			
Supply and Install 8" Plug	EA	4.0	\$ 10.00	\$	40.00			
48" Diameter Standard Manholes (0'-6')	EA	1.0	\$ 1,800.00	\$	1,800.00			
Connection to Existing Sewer Manhole	EA	1.0	\$ 900.00	\$	900.00			
Removal of Existing Sewer Manhole	EA	1.00	\$ 700.00	\$	700.00			
	-		Subtotal Sewer	\$	21,160.00			
Backhoe & Operator	HR	72.0	\$45.00	\$	3,240.00			
Trackhoe & Operator	HR	72.0	\$90.00	\$	6,480.00			
Foreman	HR	72.0	\$26.00	\$	1,872.00			
Laborer	HR	72.0	\$18.00	\$	1,296.00			
	•	Subtota	al Equipment & Labor	\$	12,888.00			
LABOR SUBTOTAL - BLURTON, BANKS & ASSOCIATES				\$	42,427.00			
·								
MATERIALS - CITY OF RIDGELAND								
6" C900 PVC Water Main (0' – 5' Cut)	LF	30.0	\$4.20	\$	126.00			
6" Gate Valve & Box	EA	2.0	\$370.00	Ė	740.00			
6" Mega-Lug Restrained Joint Fittings, Star PVC 4006	EA	4.00	\$20.00	\$	80.00			
8" SDR 26 PVC Sanitary Sewer Pipe	LF.	168.0	\$ 4.53	\$	761.04			
MATERIALS SUBTOTAL - CITY OF RIDGELAND				۲.	1,707.04			





140 340

Street Name and Numbe MH:	r: OLD CANTON RD D048 to D003	City Name: RIDGELAND, MS						
Certificate No.: PACP PSR: Date: Length: Direction: Use: Insp/Oper: Loc Code: Media Label/Weather:	02-574 D048R 5/7/2008 364.00 Feet Upstream SS CITY OF RIDGELAND, SETH FOY Y 8114/1	Material: RPM Height: 8 Status: ABAN =Image Attached =Video Clip Attached =Uninspected Portion						
Location Details:		Management System a Technologies/Optical Robotics, LLC all 1-800-443-3761						



TV Inspection Report

MH D003 to MH D048

Total Length

364.00

Televised Wednesday, May 7, 2008

Length Insp.

208.40

Flow Ctrl

 PACP PSR
 Date
 Time
 PO Number
 Status
 PreCln
 Clean Date

 D048R
 5/7/2008
 09:08:12
 1010
 ABAN
 J

Street Name and Number
OLD CANTON RD
Drainage Area

 City Name
 Loc Code
 Weather
 IsImperial

 RIDGELAND, MS
 Y
 1
 True

 System Owner
 Surveyed By
 Certificate No.
 Survey Customer

CITY OF RIDGELAND

SETH FOY

02-574

Height Width Material Shape JT Lgth Lining Mthd Use SS Upstream

0 RPM C 0 Upstream

USMH
D048 Police Delogative Center 4.8

Dwn Dp
0
US Grd/Inv
0
US Rim/Grd
0

Yr Constructed
0

Year Renewed
0

DWNMH Up Dp DS Grd/Inv DS Rim/Grd Purpose Sewer Catagory

D003 5. 5306 LENCOLNEWISE 3 0 0 B

Media Label BLVO. Video Volume Sheet Number Reverse Setup

0

Video File

V:\Video\1010 Ridgeland MS\D048R_5_7_2008.mpg

Location Details

Additional Information

Custom Field One Custom Field Two

Custom Field Three Custom Field Four

Custom Field Five Custom Field Six

Custom Field Seven Custom Field Eight

Custom Field Nine Custom Field Ten

Footage	CD	Code	Condition	Remarks	JPEG	At	To	Val 1	Val 2	%	Gals	Str	OM
0.0		ST	<start inspection=""></start>	09:08:11									
0.0		AMH	MANHOLE	D003						Ы			
0.0	10	MWL	WATER LEVEL 00%							0			
6.8		JOM	JOINT OFFSET									1	
7.3		RPR	REPAIR POINT AT 12 TO 12	JNT; PVC		12	12						
7.8		JOM	JOINT OFFSET		- 1	7		11	n 1			1	
8.8		MMC	MATERIAL CHANGE	Reinforced Plastic Pipe (Truss	F)								
27.6		MWLS	WATER LEVEL SAG 20%	1						20			2
49.2		MWL	WATER LEVEL 00%			l Y			V 1	0			
67.0		JSM	JOINT SEPARATED									1	
71.7		CL	CRACK LONGITUDINAL AT 12			12						2	
71.7		IR	INFIL RUNNER AT 11 TO 01			11	1						4
76.0		TBA	TAP BREAK IN ACTIVE AT 09 DIA 06		1 7	9		6					
120.6		MWLS	WATER LEVEL SAG 75%							75			4
156.1	S01	DAGS	DEPOSITS ATTACHED GREASE AT 09			9	3			10			2
187.6	S02	MCU	CAMERA UNDERWATER			1							4
187.6	S03	MCU	CAMERA UNDERWATER										4
187.6	F01	DAGS	DEPOSITS ATTACHED GREASE AT 09			9	3			10			2
208.4	F02	MCU	CAMERA UNDERWATER										4
208.4		MGP	GENERAL PHOTO								1		
208.4	F03	MCU	CAMERA UNDERWATER							- 11			4
208.4	(3)	ОВІ	OBSTACLE INTRUDING THRU WALL AT	7		1	6			20	- 1		3

Report prepared using Cobra Information Management System
Seamless Field-To-Office Data Transfer Completed using the CobraTouch CDL9000 Series Data Logger
© 1998-2007 Cobra Technologies/Optical Robotics, LLC. For Information Call 1-800-443-3761

Page 1 of 2 6/11/2008 1:59:41 PM

TV Inspection Report

MH D003 to MH D048

Televised Wednesday, May 7, 2008

208.4 208.4	GO MSA	TOTAL LINE LENGTH 364 FT	Remarks 09:23:00	JPEG	At	То	Dia	Sec	%	Gal	Str	ON
					Total I	Lengti	n of Li	ne			3	64.0