



# UNITED STATES PIPE AND FOUNDRY COMPANY

## CONCRETE PIPE DIVISION

POST OFFICE BOX 3033  
RIVERSIDE, CALIFORNIA 92509  
685-5251

CITY OF RIVERSIDE  
BID NO. 3326  
MAGNOLIA AVENUE FORCE MAIN  
JOB TITLE

CITY OF RIVERSIDE

ORIGINATOR

CITY OF RIVERSIDE PUBLIC WORKS DEPT.  
ENGINEERS

MIKE MASANOVICH CONSTRUCTION CO.

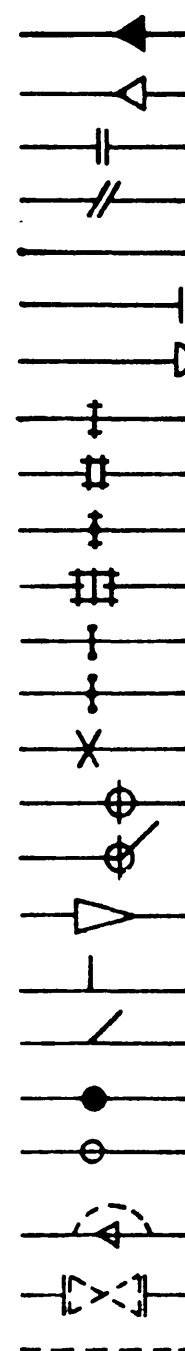
CUSTOMER

78-R1-6272

JOB NUMBER

### ABBREVIATIONS

A.R. AIR RELEASE ASSEMBLY  
A.V. AIR VALVE ASSEMBLY  
B.C. BEGIN CURVE  
B.F. BLIND FLANGE  
B.O. BLOW OFF ASSEMBLY  
B.S. BUTT STRAP  
C.I. CAST IRON  
CL. CENTERLINE  
CONC. RED. CONCENTRIC REDUCER  
ECC. RED. ECCENTRIC REDUCER  
CPLG COUPLING  
C.T.F. CUT TO FIT - IN FIELD  
DN. DOWN  
E.C. END CURVE  
ELL ELBOW  
F.C.A. FLANGED COUPLING ADAPTOR  
FLG. FLANGE  
GA. GAGE  
HORIZ. HORIZONTAL  
H.P.I. HORIZONTAL POINT OF INTERSECTION  
LAT. LATERAL  
I.D. INSIDE DIAMETER  
O.D. OUTSIDE DIAMETER  
INV. INVERT  
JT. JOINT  
LT. LEFT  
M.H. MANHOLE  
No. NUMBER  
RAD. RADIUS  
RT. RIGHT  
SECT. SECTION  
STD. STANDARD  
STL. STEEL  
PL. PLATE  
T.O.P. TOP OF PIPE  
TYP. TYPICAL  
VERT. VERTICAL  
V.P.I. VERTICAL POINT OF INTERSECTION  
W.S.P. WELDED STEEL PIPE  
S/O SLIP-ON  
W/O WELDED ON



RING-SEAL JOINT  
BELLED JOINT for FIELD WELDING  
FLANGED JOINT  
INSULATED FLANGE JOINT  
FLANGED END  
FLANGED END with BLIND FLANGE  
DISHED HEAD  
FLEXIBLE TYPE COUPLING  
FLEXIBLE TYPE INSULATING COUPLING  
FLEXIBLE TYPE COUPLING with HARNESS  
FLEXIBLE TYPE EXPANSION COUPLING  
"VICTAULIC" TYPE COUPLING  
"VICTAULIC" TYPE COUPLING with HARNESS  
FIELD WELD JOINT (BS, BE, or PE)  
ELBOWS - DEGREE and TYPE NOTED  
REDUCER - CONCENTRIC or ECCENTRIC  
TEE OUTLET - SIZE NOTED  
WYE OUTLET - SIZE and DEGREE NOTED  
SPECIAL OUTLET - TOP OF PIPE  
SIZE and TYPE NOTED  
SPECIAL OUTLET - BOTTOM OF PIPE  
SIZE and TYPE NOTED  
CATHODIC PROTECTION  
VALVE - BY OTHERS  
MATERIAL BY OTHERS OR EXISTING  
CONDITIONS

### SPECIFICATIONS

MAT'L: ASTM A570 GR-33  
MF'G: AWWA C-200 (PER STANDARD SPECIFICATIONS  
FOR PUBLIC WORKS CONST. 73 EDITION, SECT. 20110)  
FITTINGS: AWWA C-208  
FLANGES: AWWA C207  
FINISH  
INTERIOR: ASTM C150 TYPE V  
EXTERIOR: ASTM C150 TYPE II

### NOTES

- PIPE FINISH:  
INTERIOR 25 3/4" O.D. ~ 1/2" CML  
21 25/32" O.D. ~ 1/2" CML  
EXTERIOR 25 3/4" O.D. ~ 3/4" CMC  
21 25/32" O.D. ~ 3/4" CMC
- LENGTHS SHOWN ARE NET LAYING LENGTHS  

DIAMETER	JT. TYPE	JT. LOSS
25 3/4" O.D.	W/B	1'-1/2"
25 3/4" O.D.	R/S	4'-1/4"
25 3/4" O.D.	CARNEGIE	3'-1/4"
21 25/32" O.D.	W/B	1'-1/2"
21 25/32" O.D.	R/S	4'-1/4"
- MAXIMUM DEFLECTION PER JOINT.  

DIAMETER	DEGREES	FT. - (IN./40' JT.)
25 3/4" O.D.	2° 13'	1'-6 3/8"
25 3/4" O.D.	5° 00'	3'-5 5/8"
21 25/32" O.D.	2° 15'	1'-6 5/8"
- ELEVATIONS SHOWN ARE TO THE FLOW LINE OF THE PIPE
- FOR FABRICATION DETAILS SEE SHEETS  
S<sub>A</sub> THRU 12<sub>A</sub>

### WSP END CONDITIONS

R-S RING SEAL JOINT  
MRS MALE RING SEAL END  
FRS FEMALE RING SEAL END  
WB BELLED END for FIELD WELDING  
WS SPIGOT END for FIELD WELDING  
BE BEVELED END for FIELD WELDING  
DE END PREPARED for FLEXIBLE COUPLING  
FE FLANGED END  
PE PLAIN END  
VE END PREPARED for VICTAULIC COUPLING

Approved  
*[Signature]*  
Proj. Engr.  
1/11/82  
INDEXED OLD  
5-1188A

BY	DATE	NOTE
A.N.	11/20/81	REV. P/B/G/S. CHECK PRINTS

PIPE CLASS	MARK NO.	NO. OF PCS.	FAB. SHEET NO.	GROSS LENGTHS	NET LAYING LENGTHS	DESCRIPTION	PIPELINE DISTANCE	HORIZ STATIONS	PLAN LAYING DIRECTION	NOTES	ELEV	ANGLE	TANGENT	COSINE
	27	1	9	40.00	39.65	STD. SECT. R/S		48+27.66	▼	PULL 0° 18' 53" RT.	685.19			
	26	1		40.00	39.65	STD. SECT. R/S		47+87.61	▼	PULL 0° 38' 00" RT.				
	25	1		40.00	39.65	STD. SECT. R/S		47+47.96	▼		684.76	+0° 12'	.00361	1.00000
	24	1		40.00	39.65	STD. SECT. R/S		47+08.31	▼	PULL 0° 04' DN.	684.76	+0° 16'	.00454	1.00000
	23	1		40.00	39.65	STD. SECT. R/S		46+68.66	▼	PULL 0° 00' 00" DN.	684.58			
	22	1		40.00	39.65	STD. SECT. R/S		46+25.01	▼					
	21	1		40.00	39.65	STD. SECT. R/S		45+83.36	▼	PULL 0° 41' 51" RT @ EA JT THRU HORIZ. CURVE				
	20	1		40.00	39.65	STD. SECT. R/S		45+49.71	▼	PULL 0° 27' 40" RT.				
	19	10		40.00	39.65	STD. SECT. R/S		45+10.06	▼	PULL 0° 53' 00" RT.				
	10	10		40.00	39.65	STD. SECT. R/S		41+13.56	▼	PULL 0° 54' 22" RT @ EA JT THRU HORIZ. CURVE		+0° 16'	.00479	1.00000
	9	1		40.00	39.88	JT. WS X FR5		40+73.69	▼	PULL 0° 54' 31" RT @ 1° 06' DN	681.92	+1° 22'	.02371	.99972
	8	1		25.63	25.51	5 PC. BEND WS X WB	▲	40+69.87 40+67.13 BK 40+46.05	▼	PULL 0° 17' 45" RT. & 0° 53' DN. HPI Δ = 6° 03' 03" LT.	680.98			
	7	1		40.00	39.65	JT. MRS X WB		40+06.42	▼			+1° 55'	.03344	.99944
	6	1		40.00	39.88	JT. WS X FR5		39+66.55	▼	PULL 0° 38' UP	678.72	+1° 17'	.02232	.99975
	5	1		37.97	37.62	3 PC. BEND MRS X WB	▲	39+64.43 39+28.94 ▲	▼	PULL 0° 08' UP HPI Δ = 45° 00' RT	677.83			
	4	1		20.00	19.65	SHORT JT. R/S		39+09.29 ▲	▼					
	3	1		20.00	19.65	SHORT JT. R/S		38+89.64 ▲	▼					
	2	1		39.76	39.64	JT. WS X FR5 ▲		38+50.00 ▲	▼	PULL 0° 54' UP	675.50	+1° 09'	.02000	.99980
	1	1	9	12.71	12.71	SHORT JT. FLG. (LOOSE) X WB (1' 00" CUT TO FIT) COMP PART MK. NO. 1-B		38+38.29 ▲	▼		675.45	+0° 15'	.00431	1.00000
										FIELD NOTE: BEVEL FLG 0° 35' UP 1' 00" C.T.F. ADDED				
										(BEGIN CONSTRUCTION) CONNECT TO EXIST. 20" TECHITE FORCE MAIN. JT. @ STA. 38+38.29 ▲				
										(END CONSTRUCTION) CONNECT TO EXIST. 20" TECHITE FORCE MAIN. 1' 00" C.T.F. ADDED	76.16			
	5A	1	11	17.09	16.74	SHORT JT. MRS X FLG. (LOOSE) (1' 00" CUT TO FIT) W/ COMP PART MK. #5B		00+80.92	▼					
	4A	1		20.00	19.65	SHORT JT. R/S		00+65.18	▼					
	3A	1		20.00	19.65	SHORT JT. R/S		00+45.53	▼					
	2A	1		20.00	19.88	SHORT JT. WS X FR5		00+25.88	▼					
	1A	1	11	7.00	7.00	3 PC. BEND FLG. (LOOSE) X WB (W/ 1' 00" CUT TO FIT) W/ COMP PART MK. #1-C		00+06.00 00+03.32 00+00.00	▼	HPI Δ = 45° 00' RT.	76.11	LEVEL		
										(BEGIN CONSTRUCTION) CONNECT TO EXIST. 20" MAIN.				

Approved  
Mike Masanovich  
Proj. Engr.  
11/18

INDEXED BLD

MARK NO. 1 THEL-27

CONTRACT DWG NO \_\_\_\_\_ PIECE MARK NO \_\_\_\_\_

**U.S. PIPE** UNITED STATES PIPE AND FOUNDRY COMPANY  
CONCRETE PIPE DIVISION

CITY OF RIVERSIDE  
BID NO. 3326  
MAGNOLIA AVENUE FORCE MAIN  
CUSTOMER MIKE MASANOVICH CONSTRUCTION CO.

DRAWN S.N. 10/18/81	CHECKED D.H. 10/81	APPROVED M.G. 10/81	SCALE NONE	JOB NUMBER 78-R1-6272
REV BY A.N.	DATE 11/23/81	NOTES REV P/ENGINEER VERBAL		
A.N.	11/23/81	REV P/INTERNAL CK. PRINTS		
A.N.	11-20-81	REV P/ENG'S CHECK PRINTS		
A.N.	10/23/81	REV P/INTERNAL CK. PRINTS		

SHEET 2 OF 12  
DRAWING NO R-81-40

80.92' BID ITEM # 35  
12" O.D. X 18" I.D. WALL 1/2" GALV. X 3/4" CMC

2467.61' BID ITEM NO. 31  
12" O.D. X 18" I.D. WALL 1/2" GALV. X 3/4" CMC

12,000.00  
 BID ITEM NO. 32

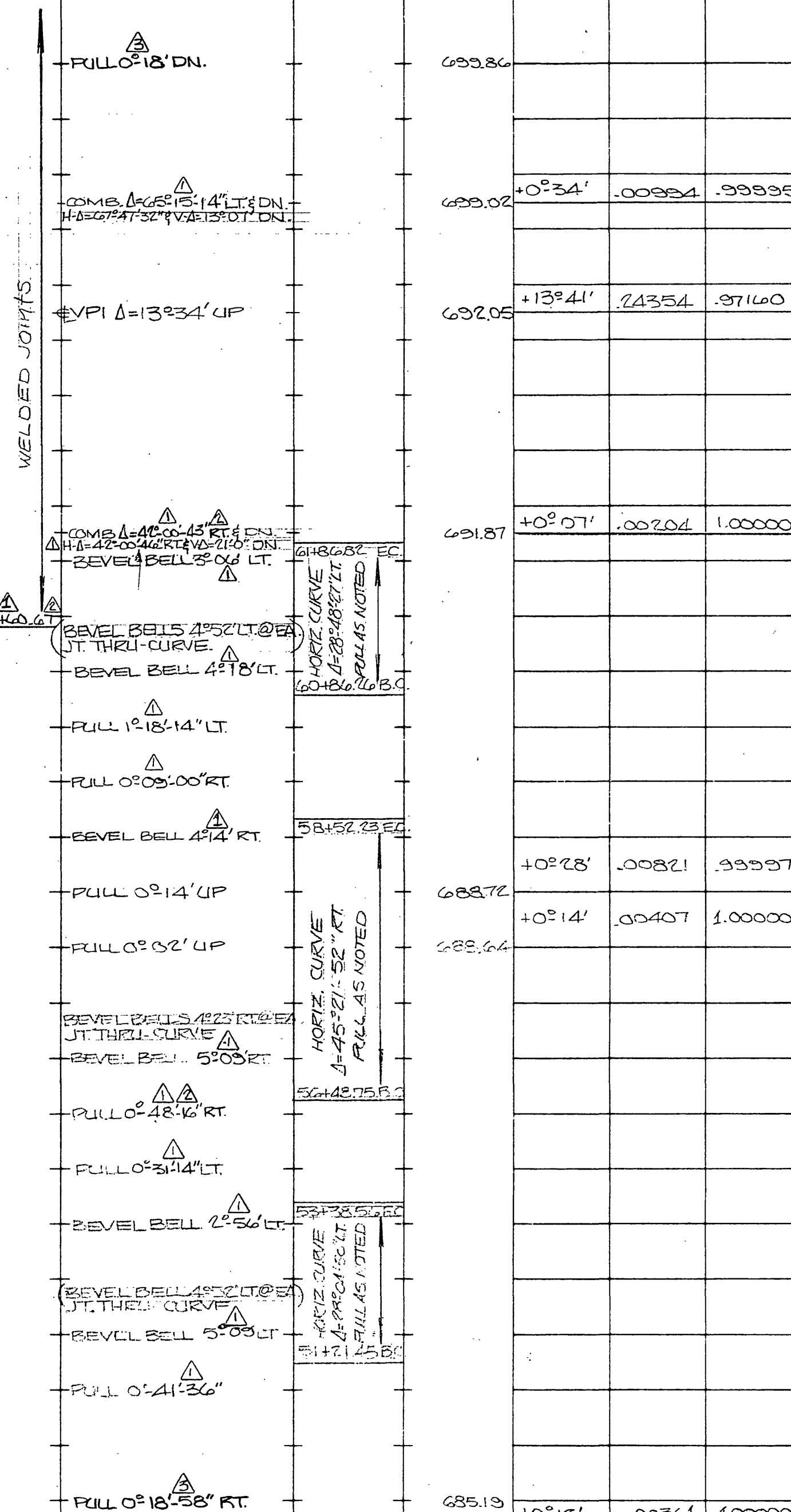
2,461.61  
 BID ITEM NO. 31

25 3/4" O.D. x .1196" WALL W.S.P. - 1/2" CML x 3/4" CMC

PIPE CLASS	MARK NO.	NO. OF PCS	FAB SHEET NO.	GROSS LENGTHS	NET LAYING LENGTHS	DESCRIPTION	PIPELINE	HORIZ	STATIONS	PLAN LAYING DIRECTION	NOTES	ELEV	ANGLE	TANGENT	COSINE	
							DISTANCE									
									63+86.08							
						JT. WS x WB			39.88 39.88							
						JT. WS x WB			38.83 38.83							
						5 PC. BEND WSxWB			6.00 6.00 6.00 5.83							
						SHORT JT. WSxWB			20.81 20.22							
						2 PC. BEND WSxWB			2.64 2.57 10.24 10.24							
						SHORT JT. WSxWB			14.88 14.88							
						SHORT JT. WSxWB			9.88 9.88							
						SHORT JT. WSxWB			9.88 9.88							
						JT. WS x WB			39.83 39.83							
						3 PC. BEND CSxWB			13.30 13.30 4.44 4.44							
						JT. CSxCB (W/WELD HOOP) (BEVEL BELL)			17.01 17.01							
						(MK. #13-W/WELD HOOP) JT. CSx CB (BEVEL)			68.04 68.04							
						JT. MRS x CB (BEVEL)			17.01 17.01							
						STD SECT R/S			198.25 198.24							
						JT. CS x FR5			39.63 39.63							
						JT. CS x CB (BEVEL)			39.28 39.28							
						JT. CS x CB (BEVEL)			19.64 19.64							
						JT. CS x CB (BEVEL)			19.64 19.64							
						JT. CS x CB (BEVEL)			38.20 38.20							
						JT. MRS x CB (BEVEL)			19.64 19.64							
						STD SECT R/S			277.53 277.53							
						JT. CS x FR5			37.70 37.70							
						JT. CS x CB (BEVEL)			150.56 150.56							
						JT. CS x CB (BEVEL)			37.64 37.64							
						JT. MRS x CB (BEVEL)			37.64 37.64							
						STD SECT R/S			39.65 39.65							
						STD SECT R/S			237.90 237.90							
									48+27.26							

\* NOTE: MK. NO'S 55 THRU 58 HAVE BEEN DELETED.

151.07 ✓



CONTRACT DWG NO		PIECE MARK NO	
<b>U.S. UNITED STATES PIPE AND FOUNDRY COMPANY</b> CONCRETE PIPE DIVISION			
25 3/4" O.D. x .1196" WALL W.S.P. - 1/2" CML, 3/4" CMC <b>CITY OF RIVERSIDE</b> BID NO. 3326 <b>MAGNOLIA AVENUE FORCE MAIN</b> CUSTOMER MIKE MASANOVICH CONSTRUCTION CO.			
DRAWN	CHECKED	APPROVED	SCALE
D.H.	D.H.	M.G.	NONE
10/16/81	10/81	10/81	
REV BY	DATE	NOTES	
4			
A.N.	12-14-81	REV. P/ENG'S. VERBAL	
A.N.	12-3-81	REV. P/ENG'S. VERBAL	
A.N.	11-10-81	REV. P/ENG'S. CHECK PRINTS	
JOB NUMBER			
78-KI-6272			
SHEET 3 OF 12			
DRAWING NO			
R-81-40			

Approved  
 W. L. [Signature]  
 Proj. Engr.  
 1/1/82

INDEXED BLD

2,871.01' B.O. ITEM NO. 34

2,000.00' B.O. ITEM NO. 32

PIPE CLASS	MARK NO.	NO. OF PCS.	FAB. SHEET NO.	GROSS LENGTHS	NET LAYING LENGTHS	DESCRIPTION	PIPELINE	HORIZ	STATIONS	PLAN LAYING DIRECTION	NOTES	ELEV	ANGLE	TANGENT	COSINE
	209	2	10	40.00	39.65	STD. SECT. R/S	△		79.30	79.30					
	208	1		30.00	29.65	SHORT JT. R/S	△		29.65	29.65					
	206	29		40.00	39.65	STD. SECT. R/S	△		1,149.85	1,149.85					
	178	1		30.00	29.65	SHORT JT. R/S	△		29.65	29.65					
	177	1		30.00	29.65	SHORT JT. R/S	△		29.65	29.65					
	176	1		30.00	29.65	SHORT JT. R/S	△		29.65	29.65					
	175	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	174	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	173	10		40.00	39.65	STD. SECT. R/S	△		396.50	396.50					
	164	1		10.35	10.00	SHORT JT. R/S	△		10.00	10.00					
	163	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	162	1		30.00	29.65	SHORT JT. R/S	△		29.65	29.65					
	161	1		40.00	39.65	STD. SECT. R/S	△		118.95	118.95					
	160	3		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	158	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	157	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	156	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	155	1		21.00	20.65	SHORT JT. R/S	△		20.65	20.65					
	154	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	153	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	152	1		21.00	20.65	SHORT JT. R/S	△		20.65	20.65					
	151	2		40.00	39.65	STD. SECT. R/S	△		79.30	79.23					
	150	1		35.54	35.19	SHORT JT. R/S	△		35.19	35.19					
	149	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	148	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	145	33	10	40.00	39.65	STD. SECT. R/S	△		308.45	308.45					
	144	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	112	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	111	7		40.00	39.65	STD. SECT. R/S	△		277.55	277.54					
	105	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	104	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	103	1		20.00	19.65	SHORT JT. R/S	△		19.65	19.65					
	102	8		40.00	39.65	STD. SECT. R/S	△		317.20	317.20					
	95	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	94	1		40.00	39.65	STD. SECT. R/S	△		39.65	39.65					
	86	8		40.00	39.65	STD. SECT. R/S	△		317.20	317.20					
	85	1		40.00	39.88	JT. WS x FR	△		39.88	39.88					
	84	1		40.00	39.88	JT. WS x WB	△		39.88	39.88					

△ \*NOTE: MK NOS. 146 & 147 HAVE BEEN DELETED.

WELDED JOINTS



STATIONS	PLAN LAYING DIRECTION	NOTES	ELEV	ANGLE	TANGENT	COSINE
111+71.01	△	PULL 0°01' UP	703.47			
110+91.71	△					
110+62.02	△					
99+12.21	△					
98+82.56	△					
98+52.91	△					
98+13.26	△					
97+73.61	△					
93+77.11	△					
93+67.11	△					
93+27.46	△					
92+37.81	△					
91+78.86	△					
91+39.21	△					
90+99.56	△	PULL 0°04' DN.	707.40	+0°03'	.00100	1.00000
90+78.91	△					
90+39.26	△					
89+99.61	△	PULL 0°48' DN.	707.19	+0°07'	.00209	1.00000
89+78.96	△					
88+99.67	△	PULL 0°52' UP	705.60	+0°55'	.01595	.99987
88+64.45	△					
88+24.83	△					
75+16.38	△	PULL 0°11' DN	704.72	+0°03'	.00100	1.00000
74+76.73	△	PULL 0°07' DN	704.06	+0°14'	.00394	.99959
71+99.19	△	PULL 0°07' UP	702.39	+0°21'	.00600	.99988
71+59.54	△					
71+39.89	△					
68+22.69	△	PULL 0°04' UP	700.89	+0°14'	.00410	1.00000
67+83.04	△	PULL 0°03' UP	700.77	+0°10'	.00303	1.00000
64+65.84	△					
64+25.96	△	PULL 0°09' DN.	700.05	+0°07'	.00200	1.00000
63+86.08	△	PULL 0°18' DN.	699.86	+0°16'	.00476	.99999
				+0°34'	.00994	.99995

Approved  
W. C. [Signature]  
1/1/82

MARK NO. 84 THRU 209	
CONTRACT DWG NO	PIECE MARK NO.
<b>U.S. PIPE</b> UNITED STATES PIPE AND FOUNDRY COMPANY CONCRETE PIPE DIVISION	
25 3/4" O.D. x 1186" WALL x 25 3/4" O.D. x 12 GA. W.S.P. x 1/2" O.M.L. x 3/4" C.M.C.	
CITY OF RIVERSIDE BID NO. 3326 MAGNOLIA AVENUE FORCE MAIN CUSTOMER MIKE MASANOVICH CONSTRUCTION CO.	
DRAWN E.H. 10/19/81	CHECKED D.H. 10/19/81
APPROVED M.G. 10/19/81	SCALE NONE
JOB NUMBER 78-KI-6272	
REV. BY 4 A.N.	DATE 12-14-81 12-3-81 11-23-81
NOTES REV. PIENG'S CHECK PRINTS REV. PIENG'S VERBAL REV. PIENG'S CHECK PRINTS	
SHEET 4 OF 12	
DRAWING NO R-81-40	



1687.52' BID ITEM NO. 34

25 3/4" O.D. x 12 GAGE W.S.P. ~ 1/2" CML x 3/4" CMC

PIPE CLASS	MARK NO.	NO. OF PCS.	FAB SHEET NO.	GROSS LENGTHS	NET LAYING LENGTHS	DESCRIPTION	PIPELINE DISTANCE	HORIZ DISTANCE	STATIONS	PLAN LAYING DIRECTION	NOTES	ELEV	ANGLE	TANGENT	COSINE
	261	1	10	20.00	19.65	SHORT JT. R/S			128+58.53		PULL 0° 48' LT.	716.27			
	260	1		20.00	19.65	SHORT JT. R/S			128+38.88						
	259	1		20.00	20.00	SHORT JT. FLG. x FR3			128+19.23						
	258	1		20.00	19.65	SHORT JT. MRS x FLG. W/ COMP. PART MK. 258A			127+99.23		BEVEL FLG. 1° 38' LT.				
	257	1		20.00	19.65	SHORT JT. R/S			127+79.58		(PULL 1° 37' LT. @ EA. JT. THRU HORIZ. CURVE)				
	256	1		20.00	19.88	SHORT JT. WS x FR3			127+59.93		PULL 1° 16' LT. -127+50.00				
	255	1		20.00	19.88	SHORT JT. WS x WB			127+40.05		PULL 1° 10' RT.				
	254	1		20.00	19.88	SHORT JT. WS x WB			127+20.17		PULL 1° 38' RT.				
	253	1		26.00	25.88	SHORT JT. WS x WB			127+00.29		PULL 1° 52' RT. PULL 0° 35' UP				
	252	1		20.00	19.88	SHORT JT. WS x WB			126+74.41		PULL 1° 54' RT.				
	251	1		20.00	19.88	SHORT JT. WS x WB			126+54.53		PULL 1° 33' RT.				
	250	1		20.00	19.88	SHORT JT. WS x WB			126+34.65		PULL 0° 26' RT.				
	249	1		20.00	19.88	SHORT JT. WS x WB			126+14.77						
	248	1		20.00	19.88	SHORT JT. WS x WB			125+94.89						
	247	1		27.00	26.88	SHORT JT. WS x WB			125+75.01		PULL 0° 30' DN.				
	246	1		10.77	10.42	SHORT JT. MRS x WB			125+48.13		-125+50.00 PULL 0° 01' RT.				
	245	1		20.00	19.65	SHORT JT. R/S			125+37.71		PULL 0° 59' RT.				
	244	1		20.00	19.65	SHORT JT. R/S			125+18.06		PULL 0° 01' UP (PULL 1° 37' RT. @ EA. JT. THRU HORIZ. CURVE)				
	243A	1		20.00	19.65	SHORT JT. R/S			124+98.41		PULL 1° 36' RT. @ 0° 15' UP				
	243	1		20.00	19.65	SHORT JT. R/S			124+78.76		PULL 0° 02' LT.				
	242	1		20.00	19.65	SHORT JT. R/S			124+59.11						
	241B	1		20.00	19.65	SHORT JT. R/S			124+39.46		(PULL 1° 37' LT. @ EA. JT. THRU HORIZ. CURVE)				
	241A	1		20.00	19.65	SHORT JT. R/S			124+19.81		PULL 0° 58' LT.				
	241	22		40.00	39.65	STD. SECT. R/S			124+00.16		PULL 0° 01' LT.				
	240	1		40.00	39.65	STD. SECT. R/S			115+27.86		PULL 0° 03' UP				
	239	1		40.00	39.65	STD. SECT. R/S			114+88.21		PULL 0° 04' UP				
	238	6		40.00	39.65	STD. SECT. R/S			112+50.31						
	212	1		26.66	26.31	SHORT JT. R/S			112+24.00						
	211	1		13.69	13.34	SHORT JT. R/S			112+10.66		PULL 0° 03' UP				
	210	1	10	40.00	39.65	STD. SECT. R/S			111+71.01		PULL 0° 01' UP				

ENCASEMENT BY OTHERS

HORIZ. CURVE  
R=700'  
Δ=8° 56' 17" RT.  
PULL AS NOTED

HORIZ. CURVE  
R=700'  
Δ=5° 00' 33" RT.  
PULL AS NOTED

HORIZ. CURVE  
R=700'  
Δ=5° 00' 33" RT.  
PULL AS NOTED

Approved  
W.L. Kinniry  
Proj. Engr.  
4/1/82

INDEXED BLD

CONTRACT DWG NO. MARK NO. 5 210 THRU 261  
PIECE MARK NO.

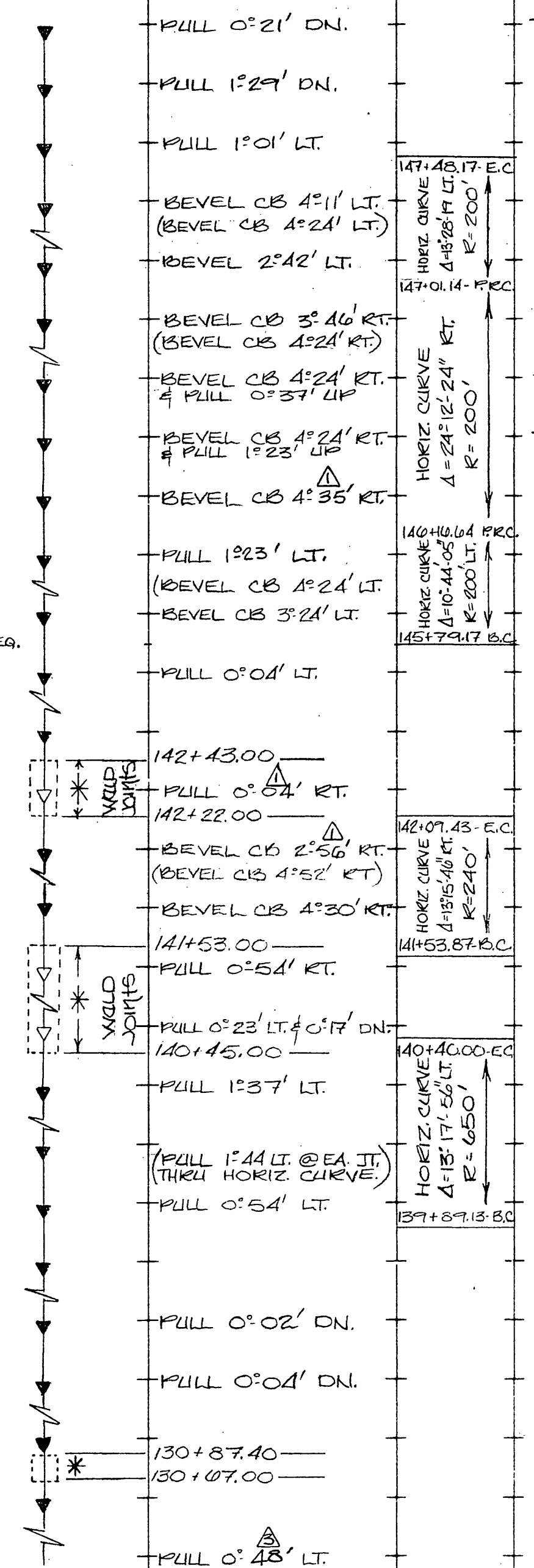
**U.S. PIPE** UNITED STATES PIPE AND FOUNDRY COMPANY  
CONCRETE PIPE DIVISION

25 3/4" O.D. x 12 GAGE W.S.P. ~ 1/2" CML x 3/4" CMC  
CITY OF RIVERSIDE  
BID NO. 3326  
MAGNOLIA AVENUE FORCE MAIN  
CUSTOMER MIKE MASANOVICH CONSTRUCTION CO.

DRAWN E.L. 10/20/81	CHECKED D.H. 10/81	APPROVED M.G. 10/81	SCALE NONE	JOB NUMBER 78-R16272
REV. BY	DATE	NOTES		
4	A.N. 12-14-81	REV. PIENG'S CHECK PRINTS	SHEET 5 OF 12	
5	A.N. 12-3-81	REV. PIENG'S VERBAL	DRAWING NO. R-81-40	
6	A.N. 11/23/81	REV. PIENG'S CHECK PRINTS		

5702 B.I.#34  
 147+75  
 675' BID ITEM NO. 33  
 25-34" O.D. 12 GA. (MIN) W.S.P. - 1/2" CML, 3/4" CMC  
 141+00  
 124147' BID ITEM NO. 34

PIPE CLASS	MARK NO.	NO. OF PCS.	FAB. SHEET NO.	GROSS LENGTHS	NET LAYING LENGTHS	DESCRIPTION	PIPELINE DISTANCE	HORIZ	STATIONS	PLAN LAYING DIRECTION	NOTES	ELEV	ANGLE	TANGENT	COSINE
	320	1	10	40.00	39.05	STD. SECT. R/S	39.05		148+32.02		PULL 0°21' DN.	730.83	+0°14'	.00399	.99999
	325	1	10	40.00	39.05	STD. SECT. R/S	39.05		147+92.37		PULL 1°29' DN.	730.43	+0°35'	.01009	.99995
	324	1	11	15.30	15.03	SHORT JT. CS x FRS	15.03		147+52.75		PULL 1°01' LT.				
	323	2		15.00	15.39	SHORT JT. CS x CB(BVL'D)	30.78		147+37.73		BEVEL CB 4°11' LT. (BEVEL CB 4°24' LT.)				
	322	2		15.00	15.39	SHORT JT. CS x CB(BVL'D)	30.78		147+04.97		BEVEL 2°42' LT.				
	321	1		15.00	15.39	SHORT JT. CS x CB(BVL'D)	15.39		140+91.57		BEVEL CB 3°16' RT. (BEVEL CB 4°24' RT.)				
	320	2		15.00	15.39	SHORT JT. CS x CB(BVL'D)	30.78		140+60.83		BEVEL CB 4°24' RT. # PULL 0°37' UP	725.09	+2°04'	.03403	.99935
	318	1		15.00	15.39	SHORT JT. CS x CB(BVL'D)	15.39		140+45.44		BEVEL CB 4°24' RT. # PULL 1°23' UP	725.30	+1°27'	.02534	.99908
	317	1		15.00	15.39	SHORT JT. CS x CB(BVL'D)	15.39		140+30.05		BEVEL CB 4°35' RT.				
	316	1		15.00	15.39	SHORT JT. CS x CB(BVL'D)	15.39		140+14.00		PULL 1°23' LT. (BEVEL CB 4°24' LT.)				
	315	2		15.00	15.39	SHORT JT. CS x CB(BVL'D)	30.78		145+83.88		BEVEL CB 3°24' LT.				
	314	2		15.00	15.39	SHORT JT. CS x CB(BVL'D)	30.78		145+79.17 AHD. 145+79.72 BK. 145+44.48	EA.	PULL 0°04' LT.				
	313	1	11	40.30	39.95	JOINT MRS x CB(BVL'D)	39.95		142+00.93						
	312	7	10	40.00	39.05	STD. SECT. R/S	277.55		142+27.05		PULL 0°54' RT.				
	305	1	10	40.00	39.88	JOINT WS x FRS	39.88		142+22.00		BEVEL CB 2°56' RT. (BEVEL CB 4°52' RT.)				
	304	1	11	20.30	20.03	SHORT JT. CS x WB	20.03		142+07.02		BEVEL CB 4°30' RT.				
	303	2		20.00	20.39	SHORT JT. CS x CB(BVL'D)	40.78		141+00.24		PULL 0°54' RT.				
	302	2		20.00	20.39	SHORT JT. CS x CB(BVL'D)	40.78		141+53.00		PULL 0°23' LT. & 0°17' DN.	721.08	+0°04'	.00103	1.0000
	301	1	11	20.36	20.24	SHORT JT. WS x CB(BVL'D)	20.24		140+40.00		PULL 1°37' LT.				
	300	5	10	20.00	19.88	SHORT JOINT WS x WB	99.40		140+20.95		(PULL 1°44' LT. @ EA. JT. THRU HORIZ CURVE.)				
	296	5	10	20.00	19.88	SHORT JOINT WS x WB	99.40		139+09.05		PULL 0°54' LT.				
	295	1		20.00	19.05	SHORT JOINT MRS x WB	19.05		138+89.40						
	294	0		20.00	19.05	SHORT JOINT R/S	117.90		138+49.75						
	289	0		20.00	19.05	SHORT JOINT R/S	117.90		135+32.50		PULL 0°02' DN.	721.00	+0°21'	.00599	.99998
	288	1		20.00	19.05	SHORT JOINT R/S	19.05		134+92.91		PULL 0°04' DN.	721.34	+0°23'	.00050	.99998
	287	1		40.00	39.05	STD. SECT. R/S	39.05		130+90.42						
	286	8		40.00	39.05	STD. SECT. R/S	317.20		130+87.40						
	279	8		40.00	39.05	STD. SECT. R/S	317.20		130+07.00						
	278	1		40.00	39.05	STD. SECT. R/S	39.05		130+50.77						
	277	10		40.00	39.05	STD. SECT. R/S	390.50		128+58.53		PULL 0°48' LT.	710.27	+0°27'	.00800	.99997
	268	10		40.00	39.05	STD. SECT. R/S	390.49								
	207	1		40.00	39.05	STD. SECT. R/S	39.05								
	200	5	10	40.00	39.05	STD. SECT. R/S	198.25								



Approved  
 W.L. Krasinsky  
 Proj. Engr.  
 1/11/82

\* ENCASUREMENT BY OTHERS.

INDEXED BLD

MARK NOS. 202 THRU 320

CONTRACT DWG NO. \_\_\_\_\_ PIECE MARK NO. \_\_\_\_\_

**U.S. UNITED STATES PIPE AND FOUNDRY COMPANY**  
 CONCRETE PIPE DIVISION

25-34" O.D. 12 GA. (MIN) W.S.P. - 1/2" CML, 3/4" CMC  
 CITY OF RIVERSIDE  
 BID NO. 3320  
 MAGNOLIA AVENUE FORCE MAIN

CUSTOMER MIKE MASANOVICH CONSTRUCTION CO

DRAWN B.K. 11-3-81	CHECKED D.H. 11/81	APPROVED MAX 11/8	SCALE NONE	JOB NUMBER 78-R1-0272
REV BY	DATE	NOTES		
4				
3				
2				

SHEET 6 OF 12

DRAWING NO. R-81-40

U.S. 12/14/81 REV. PENDING CHECK PRINTS

PIPE CLASS	MARK NO.	NO. OF PCS.	FAB SHEET NO.	GROSS LENGTHS	NET LAYING LENGTHS	DESCRIPTION	PIPELINE DISTANCE	HORIZ STATIONS	PLAN LAYING DIRECTION	NOTES	ELEV	ANGLE	TANGENT	COSINE
	383	1	10	29.00	28.88	3 PC. BEND WSxWB (1'-00" CUT TO FIT ADDED)	3.21	3.21	168+80.45		744.05			
							25.67	24.67	168+77.24	4PI Δ=45°00'-LT.				
									168+52.57	1'-00" C.T.F. ADDED				
	382	1		40.00	39.65	JT. MRSxWB	39.65	39.65	168+12.92					
	381	1		40.00	39.65	STD. SECT. R/S	39.65	39.65	167+73.27					
	380	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	167+53.62					
	379	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	167+33.97					
	378	1		40.00	39.65	STD. SECT. R/S	39.65	39.65	166+94.32					
	377	1		30.00	29.65	SHORT JT. R/S	29.65	29.65	166+64.67					
	376	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	166+45.02					
	375	1		40.00	39.65	STD. SECT. R/S	39.65	39.65	166+05.37					
	374	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	165+85.72					
	373	12		40.00	39.65	STD. SECT. R/S	475.80	475.80	161+09.92	PULL 0°52' DN.	743.28	+0°03'	.00100	.99999
	361	1		40.00	39.65	STD. SECT. R/S	39.65	39.64	160+70.28	PULL 0°18' DN.	742.64	+0°55'	.01614	.99987
	360	3		40.00	39.65	STD. SECT. R/S	118.95	118.92	159+51.36					
	358	1		40.00	39.65	STD. SECT. R/S	39.65	39.64	159+11.72	PULL 0°23' UP	739.25	+1°13'	.02135	.99977
	356	1		40.00	39.88	JT. WSxFRS	39.88	39.88	158+71.84	PULL 0°09' UP	738.67	+0°50'	.01454	.99989
	355	1		40.00	39.65	JT. MRSxWB	39.65	39.65	158+32.19					
	354	10		40.00	39.65	STD. SECT. R/S	396.50	396.47	154+35.72	PULL 0°03' UP	733.52	+0°41'	.01180	.99993
	344	1		40.00	39.65	STD. SECT. R/S	39.65	39.65	153+36.07	PULL 0°24' UP	733.08	+0°38'	.01110	.99994
	343	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	153+76.42					
	342	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	153+56.77					
	341	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	153+37.12					
	340	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	153+17.47					
	339	1		20.00	19.65	SHORT JT. R/S	19.65	19.65	152+97.82					
	338	1		30.00	29.65	SHORT JT. R/S	29.65	29.65	152+68.17					
	337	1	10	40.00	39.65	STD. SECT. R/S	39.65	39.65	152+28.52					
	336	10	10	40.00	39.65	STD. SECT. R/S	396.50	396.50	148+32.02	PULL 0°21' DN.	730.85	+0°14'	.00399	.99999

1,860.45' B.I.D. ITEM 19.33  
 25 3/4" O.D. X 12 GA (MIN) W.S.P. 1/2" O.M.L. X 3/4" C.M.C.  
 150' B.I.D. ITEM 19.34

2008.03 ✓

Approved  
 W.L. K...  
 Proj. Eng.  
 1/11/02

INDEXED BLD

MARK NO. 327-THRU-383

CONTRACT DWG NO.      PIECE MARK NO.

**U.S. PIPE**      **UNITED STATES PIPE AND FOUNDRY COMPANY**  
 CONCRETE PIPE DIVISION

25 3/4" O.D. X 12 GA. (MIN) W.S.P. 1/2" O.M.L. X 3/4" C.M.C.  
**CITY OF RIVERSIDE**  
 BID NO. 3326  
 MAGNOLIA AVENUE FORCE MAIN  
 CUSTOMER: MIKE MASANOVICH CONSTRUCTION CO.

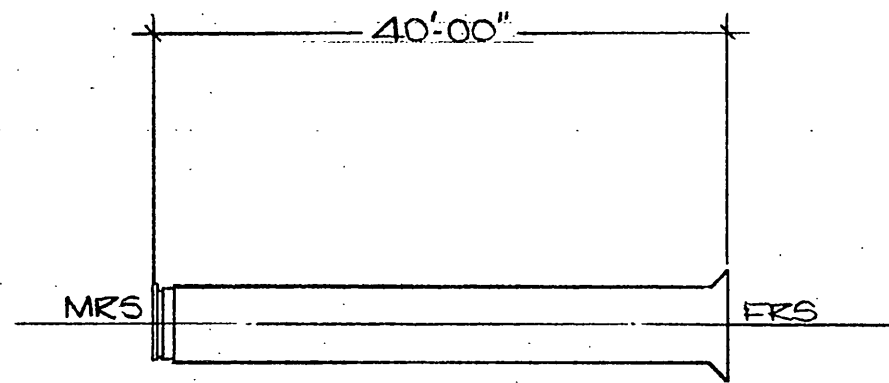
DRAWN	CHECKED	APPROVED	SCALE	JOB NUMBER
A.N.	D.H.	MAX	NONE	78-R1-627C
11/10/81	11/81	11/81		
REV. BY	DATE	NOTES		
4				
3				
2				
A.N.	12/14/81	REV. PIENG'S. CHECK PRINTS		

SHEET 7 OF 12  
 DRAWING NO. K-81-40

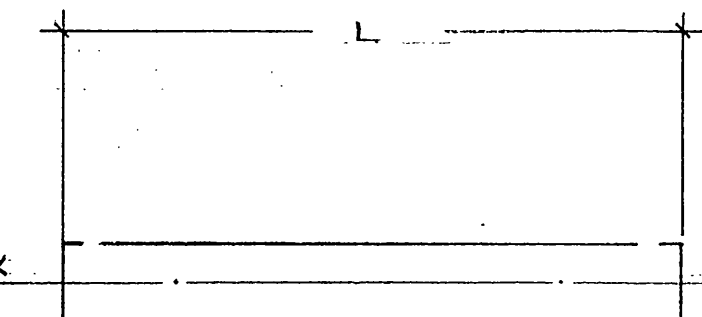








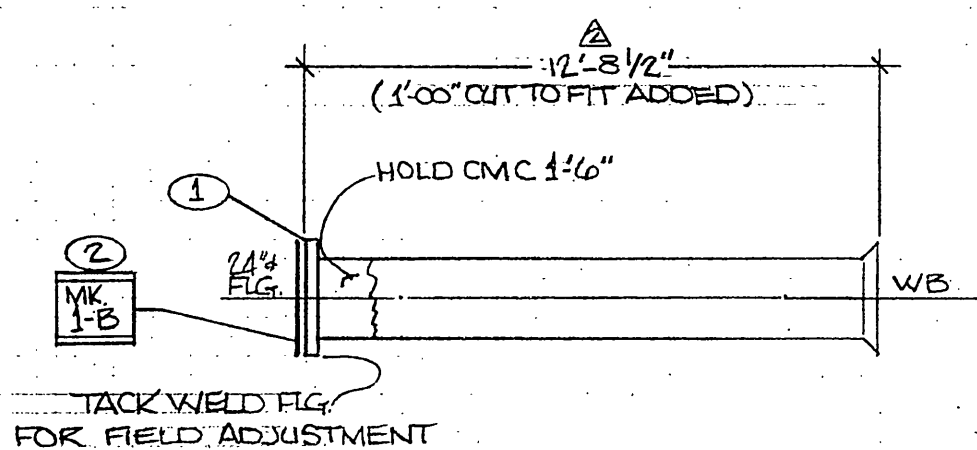
MARK NO.	QTY.	MARK NO.	QTY.
△	△		
10-34	25		
47-48	7		
64-68	5		
△ 86-102	17		
△ 104-132	29		



MARK NO.	L	X	Y	QTY.	MARK NO.	L	X	Y	QTY.
3-4	20'-00"	MRS	FRS	2	80	20'-11 1/8"	WS	WB	1
6	40'-00"	WS	FRS	1	82	38'-11 3/8"	WS	WB	1
7	40'-00"	MRS	WB	1	83	40'-00"	WS	WB	1
9	40'-00"	WS	FRS	1	2 △	33'-3 1/8"	WS	FRS	1
76	40'-00"	WS	WB	1	84 △	40'-00"	WS	WB	1
77	10'-00"	WS	WB	1	85 △	40'-00"	WS	FRS	1
78	15'-00"	WS	WB	1	103 △	20'-00"	MRS	FRS	1

SEE NOTE BELOW

SEE NOTE BELOW

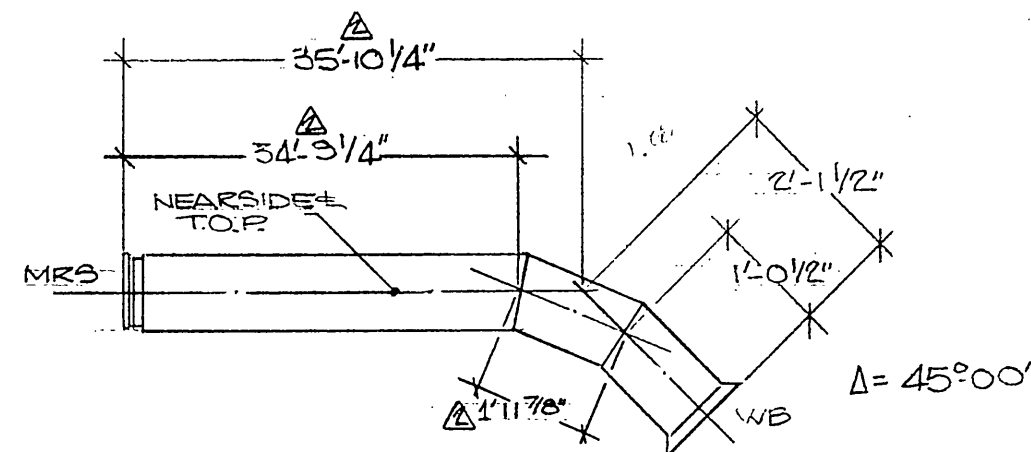


MARK NO. 1

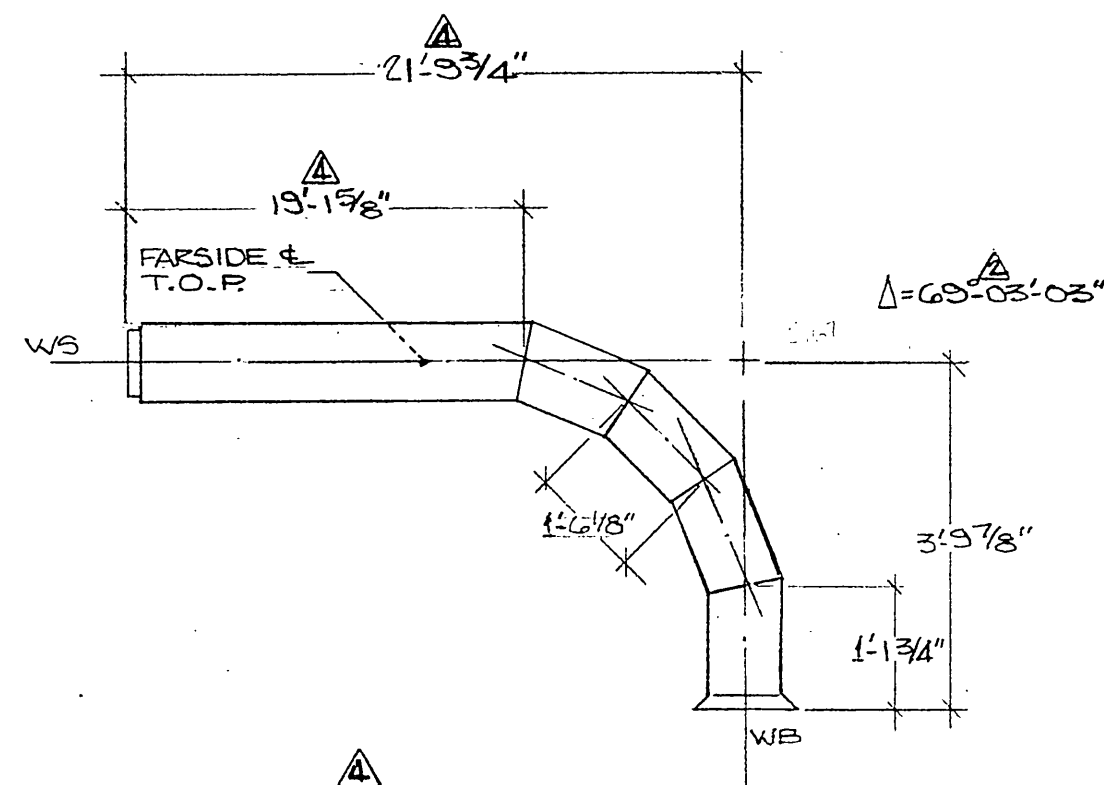
△ 25 3/4" O.D. x .1196" WALL W.S.P. ~ 1/2" CML x 7/8" CMC

NOTE: MARK NOS. 1 THRU 8 ONLY ~

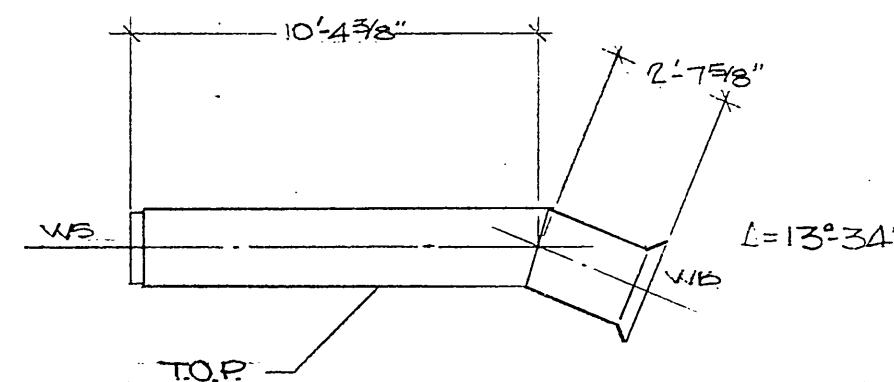
● 25 3/4" O.D. x .1196" WALL W.S.P. ~ 1/2" CML x 7/8" CMC.



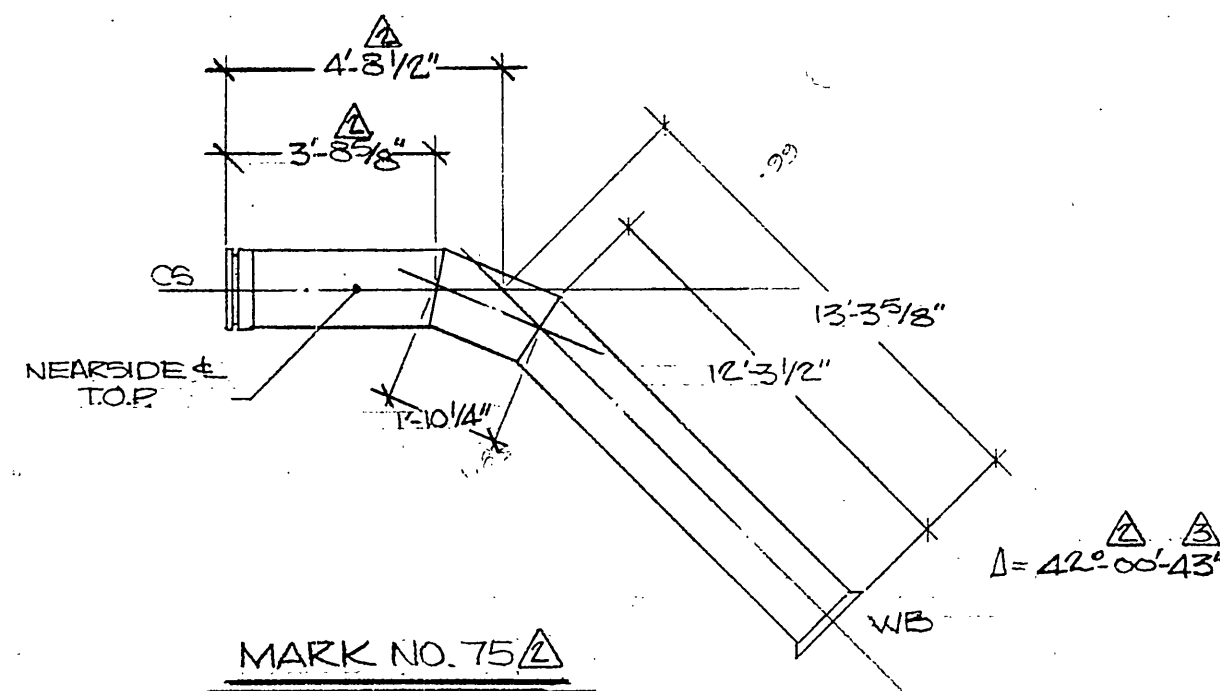
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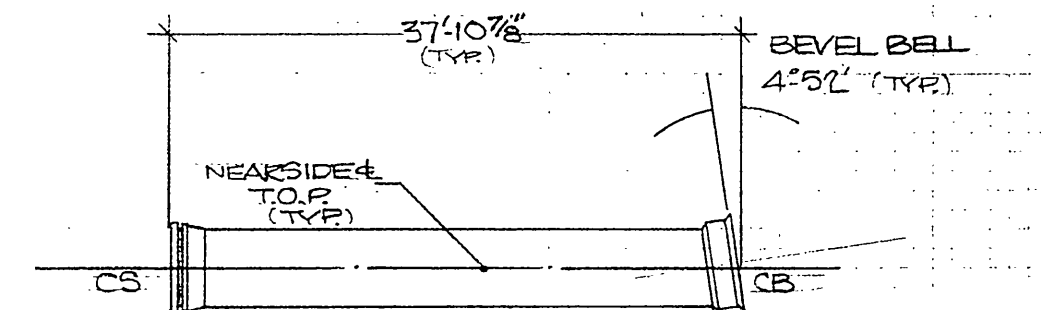
MARK NO. 8  
25 3/4" O.D. x .1196" WALL W.S.P. ~ 1/2" CML x 7/8" CMC



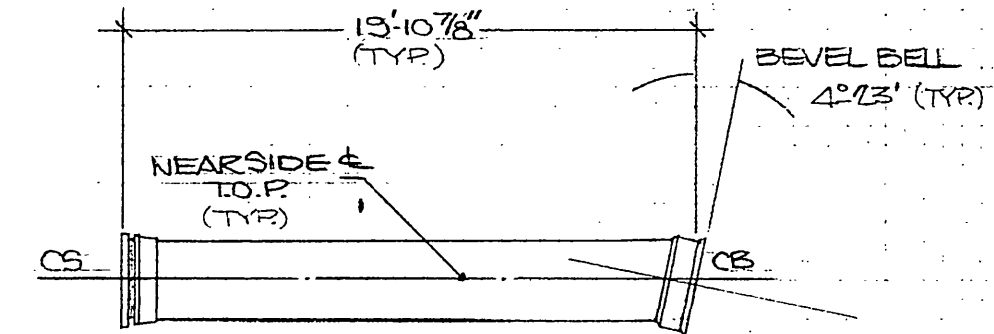
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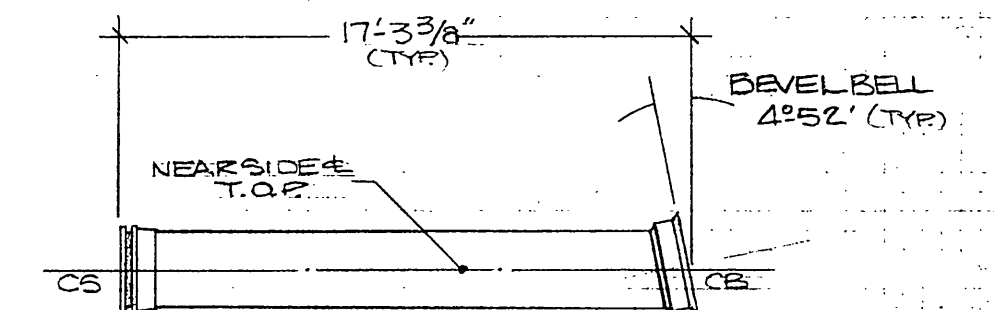
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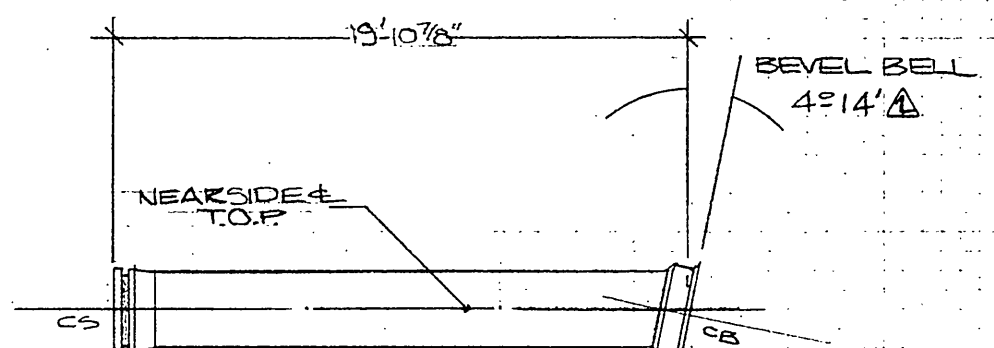
MARK NO.	QTY.
36-38	4



MARK NO.	QTY.
50-54	5
59-61	3



MARK NO.	QTY.
70-73	4



MARK NO. 62

Approved  
W. L. Krasinsky  
Proj. Engr.  
1/11/5

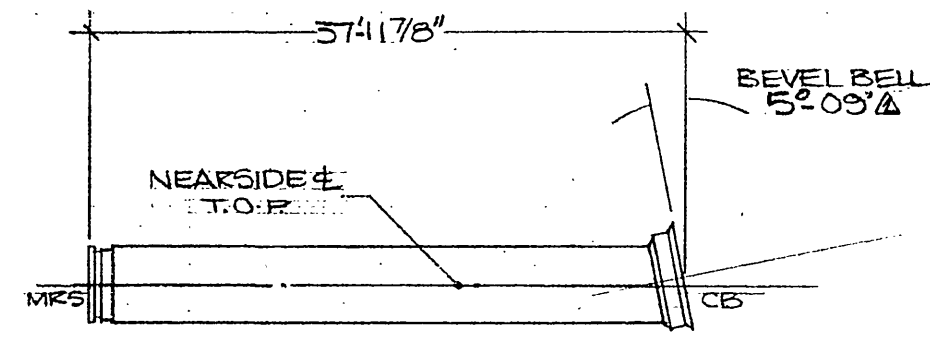
**U.S. PIPE** UNITED STATES PIPE AND FOUNDRY COMPANY  
CONCRETE PIPE DIVISION

CITY OF RIVERSIDE  
BID NO. 3326  
MAGNOLIA AVENUE FORCE MAIN  
CUSTOMER: MIKE MASANOVICH CONSTRUCTION CO.

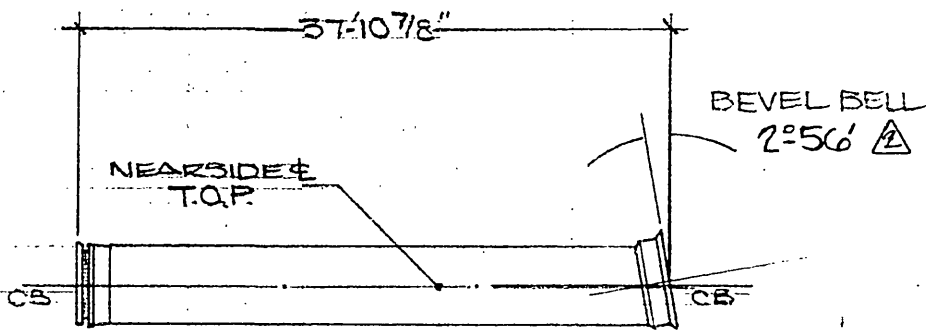
DRAWN D.H. 10/21/81	CHECKED D.H. 10/81	APPROVED M.G. 10/81	SCALE NONE	JOB NUMBER 78-R1-6272
REV. BY	DATE	NOTES		
△ A.N.	12-28-81	REV. P/ENGR'S. VERBAL		
△ A.N.	12-3-81	REV. P/ENGR'S. VERBAL		
△ A.N.	11-20-81	REV. P/ENGR'S. CHECK PRINTS		
△ A.N.	10/23/81	REV. P/INTERNAL OK PRINTS		

SHEET 9 OF 12  
DRAWING NO. R-81-40

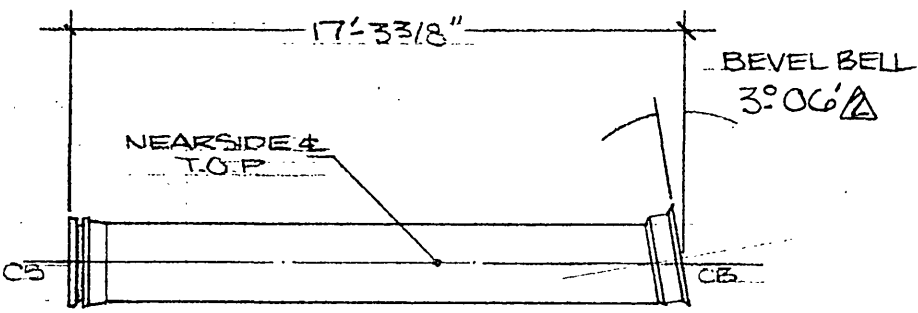
25 3/4" O.D. x .1196" WALL W.S.P. ~ 1/2" CML x 3/4" CMC



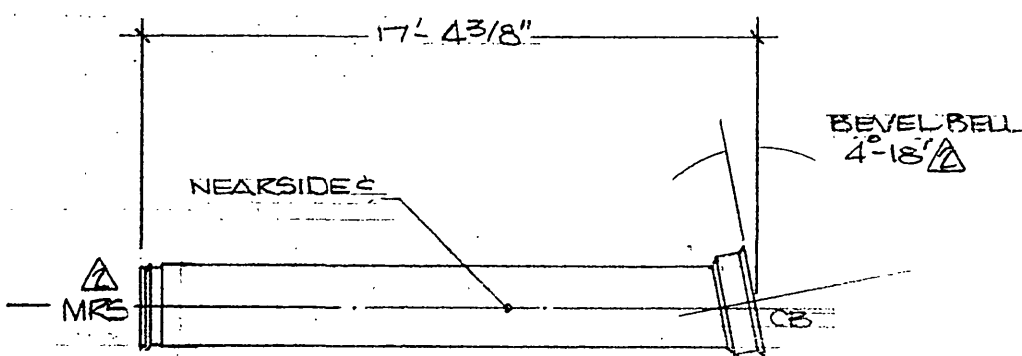
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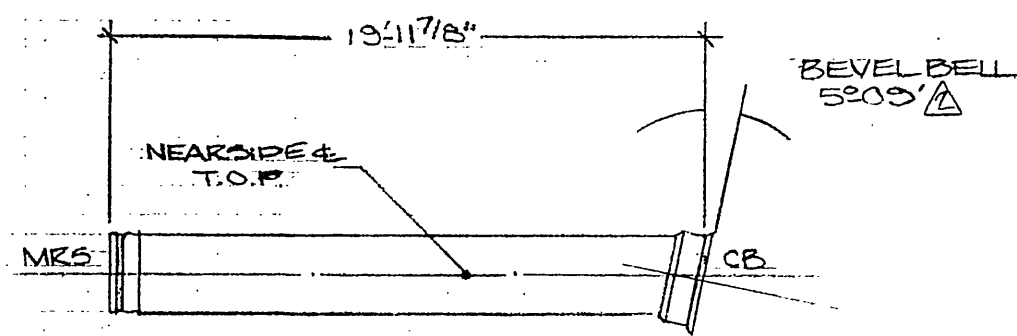
MARK NO. 40



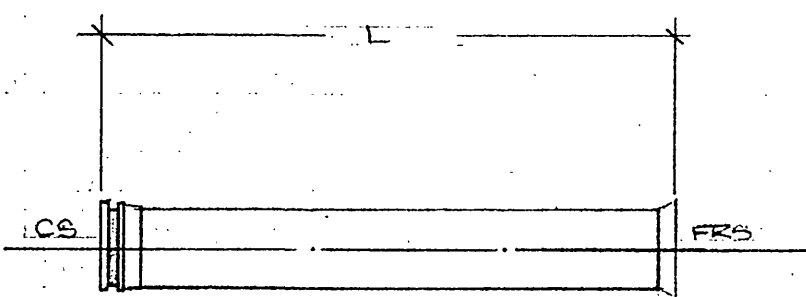
MARK NO. 74



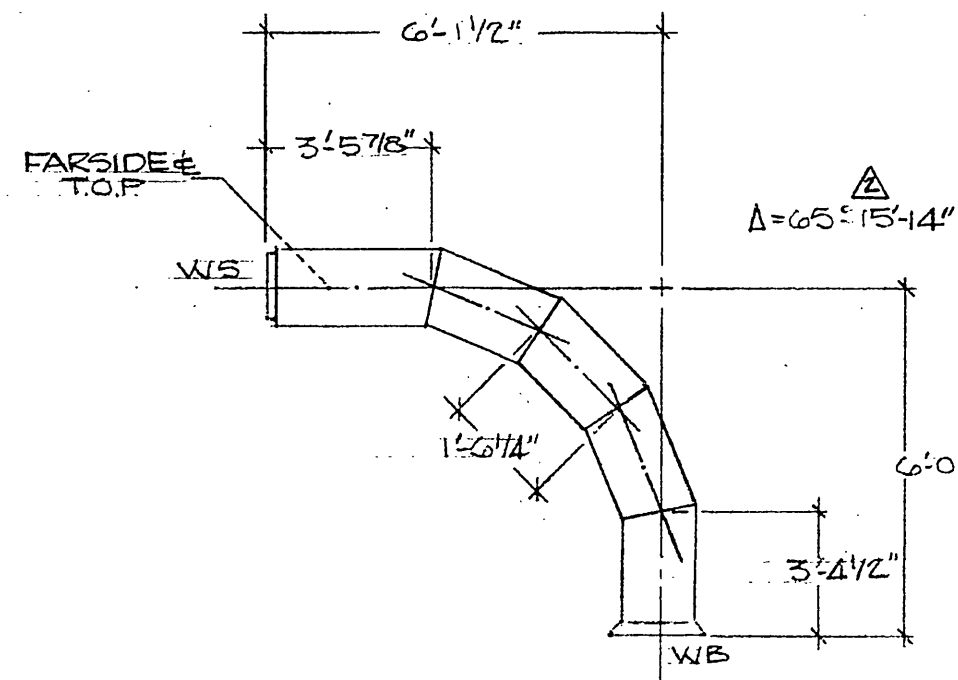
MARK NO. 69



MARK NO. 49



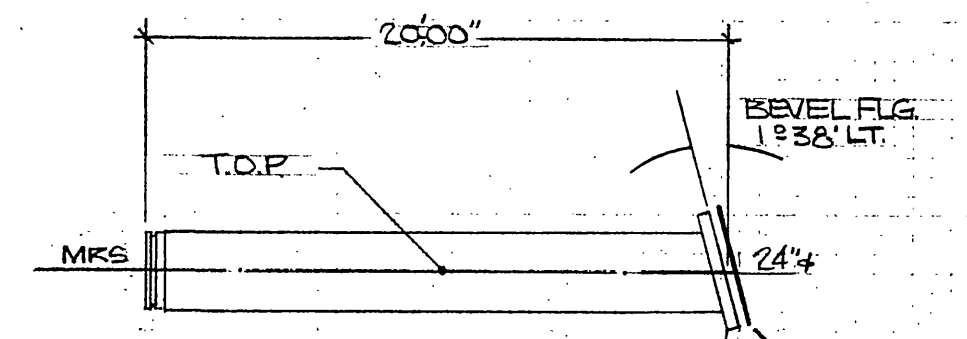
MARK NO.	L
41	37'-11 5/8"
63	39'-10 3/4"



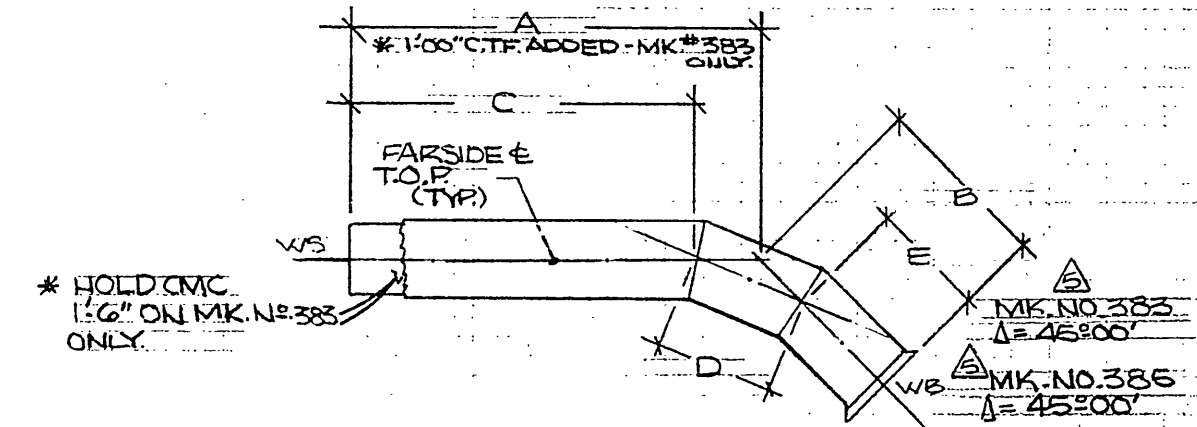
MARK NO. 81

NOTE: MK# 81 SHALL HAVE AN ANTI-CORROSION & AL RAGIVE IMPACT RESISTANT COATING SUCH AS ZEBRON SHOP APPLIED TO THE CEMENT MORTAR LINING FOR THE ENTIRE LENGTH OF THE FITTING. THIS APPLICATION IS TO BE DONE BY OUTSIDE FORCES AFTER FITTING IS COMPLETED.

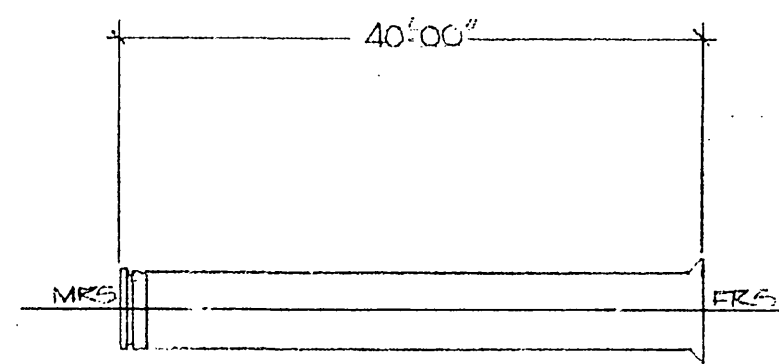
25 3/4" O.D. x 1196" WALL W.S.P. ~ 1/2" CML x 3/4" CMC



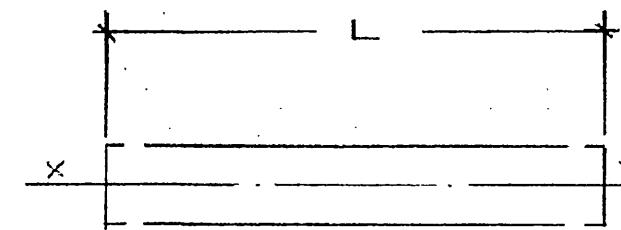
MARK NO. 258



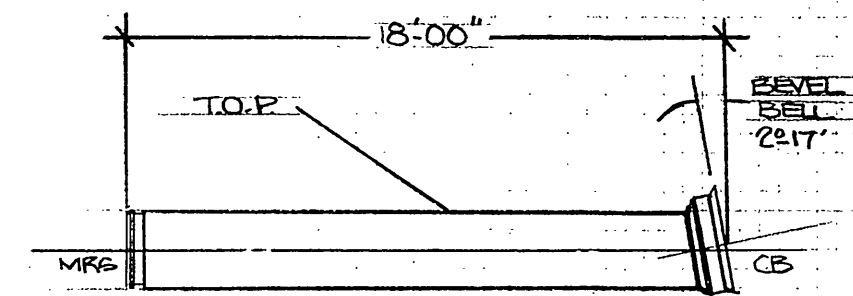
MARK NO.	A	B	C	D	E
* 383	25'-9 1/2"	3'-2 1/2"	14'-8 5/8"	1'-11 7/8"	2'-15 1/8"
385	5'-6 1/2"	4'-5 1/2"	4'-5 5/8"	1'-11 7/8"	2'-15 1/8"



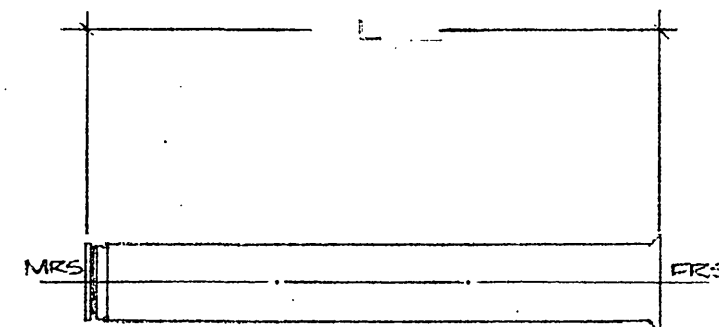
MARK NO.	QTY	MARK NO.	QTY	MARK NO.	QTY
133-145	13	150-151	2	148	1
153-154	2	156-160	5	162	1
178-206	29	208-210	3	164-175	12
262-287	26	306-312	7	213-241	29
325-337	13	344-354	11		
357-373	17	375	1		
378	1	381	1		



MARK NO.	L	X	Y	QTY
246	10'-9 1/4"	MRS	WB	1
247	27'-00"	WS	WB	1
248-252	20'-00"	WS	WB	5
256	20'-00"	WS	FRS	1
259	20'-00"	①	FRS	1
295	20'-00"	MRS	WB	1
296-300	20'-00"	WS	WB	5
305	40'-00"	WS	FRS	1
338	30'-00"	MRS	FRS	1
355	40'-00"	MRS	WB	1
356	40'-00"	WS	FRS	1
377	30'-00"	MRS	FRS	1
382	40'-00"	MRS	WB	1
384	40'-00"	WS	WB	1
386	20'-00"	WS	FRS	1
397	13'-4 3/4"	MRS	FRS	1
419	21'-1 1/2"	MRS	PE	1
253	26'-00"	WS	WB	1



MARK NO. 417



MARK NO.	L	MARK NO.	L	MARK NO.	L
149	35'-6 1/2"	152	21'-00"	161	30'-00"
155	21'-00"	176	30'-00"	163	10'-4 1/2"
177	30'-00"	207	30'-00"	211	13'-8 1/4"
241A-243	20'-00"	243A	20'-00"	212	26'-8"
244-245	20'-00"	257	20'-00"		
260	20'-00"	261	20'-00"		
288-294	20'-00"	339-343	20'-00"		
374	20'-00"	376	20'-00"		
379-380	20'-00"	387-396	20'-00"		
398-416	20'-00"				

254-255	20'-00"	WS	WB	2
418	13'-11"	CS	FRS	1

U.S. PIPE UNITED STATES PIPE AND FOUNDRY COMPANY CONCRETE PIPE DIVISION

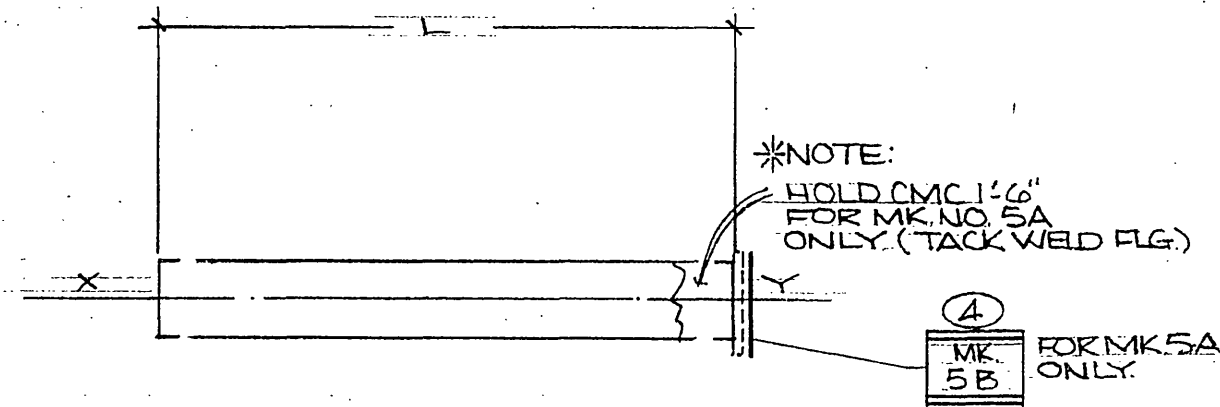
CITY OF RIVERSIDE BID NO. 3326 MAGNOLIA AVENUE FORCE MAIN CUSTOMER MIKE MASANOVICH CONSTRUCTION CO.

DRAWN	CHECKED	APPROVED	SCALE	JOB NUMBER	
S.M.	D.H.	M.G.	NONE	78-R1-6272	
10/2/81	10/81	10/81			
REV. BY	DATE	NOTES	REV. BY	DATE	NOTES
Δ B.N.	12-14-81	REV. PER ENCL. CHECK PRINTS	Δ B.N.	11-24-81	REV. PER VERBAL CONSTRUCTOR
Δ B.N.	11-20-81	REV. PER ENCL. CHECK PRINTS	Δ A.N.	11/12/81	REV. PER ENCLOSURE REV.

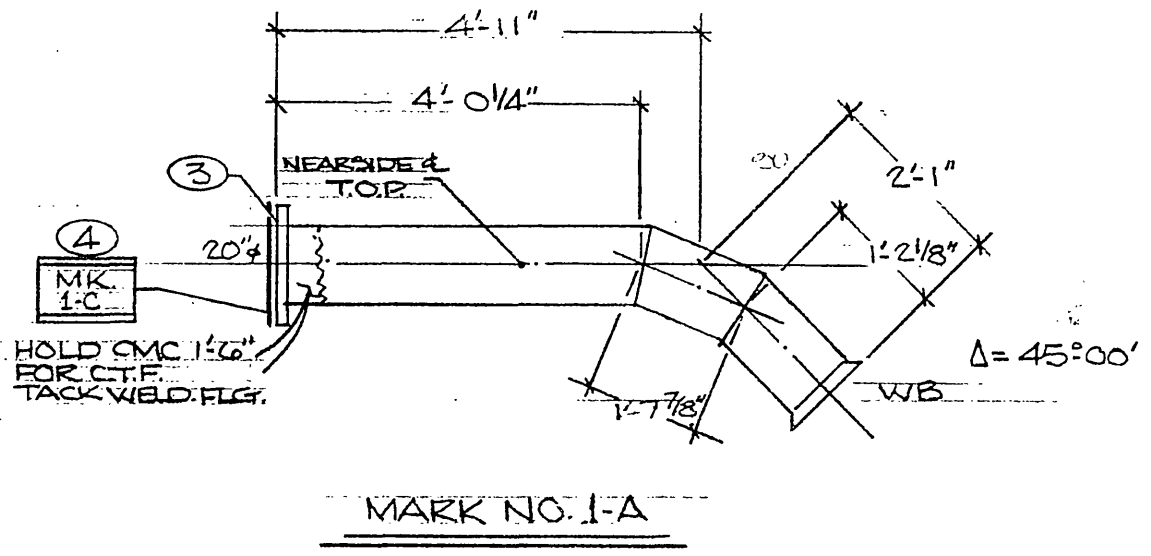
25 3/4" O.D. x 12 GA. W.S.P. ~ 1/2" CML x 3/4" CMC

Approved: W.L. Krawinkel Proj. Engr. 1/11/82

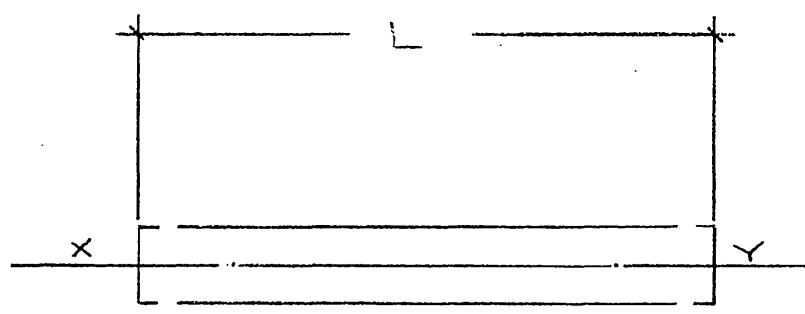
INDEXED BLD



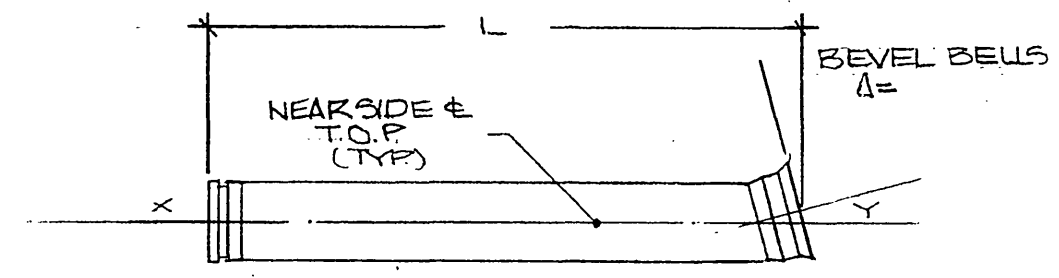
MARK NO.	L	X	Y	QTY.
2-A	20'-00"	WS	FRS	1
3A-4A	20'-00"	MRS	FRS	2
* 5A	17'-1 1/8"	MRS	③	1



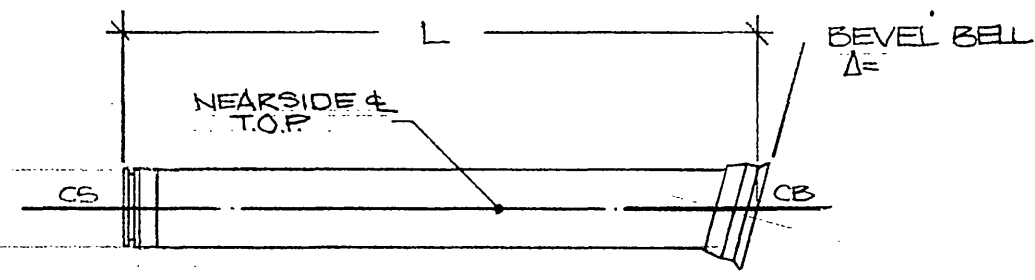
2 1/2" O.D. x 12 GA. W.S.P. ~ 1/2" CML x 7/8" CMC



MARK NO.	L	X	Y
304	20'-3 5/8"	CS	WB
324	15'-3 5/8"	CS	FRS
315	15'-7 7/8"	CS	CB



MARK NO.	L	X	Y	Δ =	QTY.
313	40'-3 5/8"	MRS	CB	3° 24'	1
314	15'-7 7/8"	CS	CB	4° 24'	1
321	15'-7 7/8"	CS	CB	2° 42'	1
322	15'-7 7/8"	CS	CB	4° 24'	1
323	15'-7 7/8"	CS	CB	4° 11'	1



MARK NO.	L	X	Y	Δ =	QTY.
301	20'-4 3/8"	WS	CB	4° 30'	1
302	20'-7 7/8"	CS	CB	4° 32'	1
303	20'-7 7/8"	CS	CB	2° 54' Δ	1
316	15'-7 7/8"	CS	CB	4° 35' Δ	1
317	15'-7 7/8"	CS	CB	4° 24'	1
318	15'-7 7/8"	CS	CB	4° 24'	1
319	15'-7 7/8"	CS	CB	4° 24'	1
320	15'-7 7/8"	CS	CB	3° 46'	1

2 3/4" O.D. x 12 GA. (MIN.) W.S.P. ~ 1/2" CML x 3/4" CMC

Approved  
 W.L. Kinnally  
 Proj. Engineer  
 1/11/82

**U.S. UNITED STATES PIPE AND FOUNDRY COMPANY**  
 CONCRETE PIPE DIVISION

CITY OF RIVERSIDE  
 BID NO. 3326  
 MAGNOLIA AVENUE FORCE MAIN  
 CUSTOMER MIKE MASANOVICH CONSTRUCTION CO.

DRAWN D.N. 10/21/81	CHECKED D.H. 10/81	APPROVED M.G. 10/81	SCALE NONE	JOB NUMBER 78-RF-6272
REV. BY	DATE	NOTES		
4				
3				
Δ D.N.	12-14-81	REV. P/ENGS. CHECK PRINTS		SHEET 11 OF 12
Δ A.N.	11-20-81	REV. P/ENGS. CHECK PRINTS		DRAWING NO. R-81-40

S-1188A

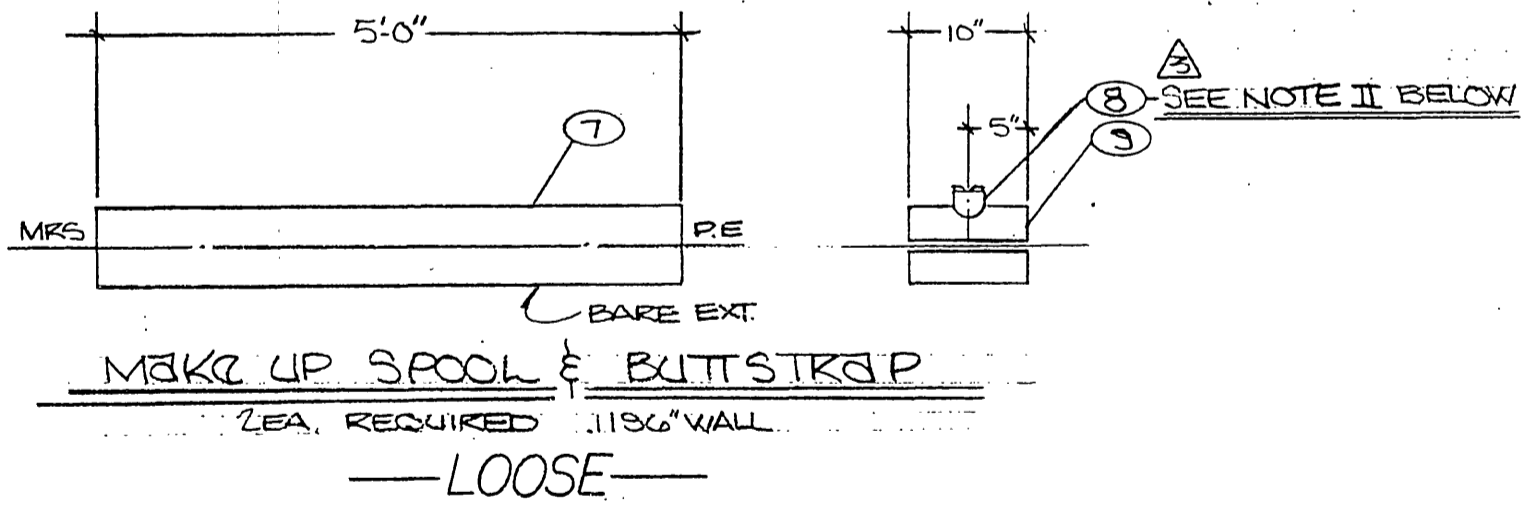


QTY	QUAN.	UNIT	MATERIAL DESCRIPTION	MATERIAL SPECIFICATION	DATE REQ'D	SOURCE OF MATERIAL				PO. NO.
						Stk	Whse	Buy	Sub-C	
1	3	EA	24" CL'D FLG TO FIT 25 3/4" O.D PIPE	A283 C						
2	1	SETS	HEX HEAD BOLTS W/HEX NUTS & 1/16" THK CRANITE GASKET FOR 24" CL'D FLG	A307 B FULL FACE						
3	2	EA	20" CL'D FLG TO FIT 21 25/32" O.D PIPE	A283 C						
4	2	SETS	HEX HEAD BOLTS W/HEX NUTS & 1/16" THK CRANITE GASKET FOR 20" CL'D FLG	A307 B FULL FACE						
5	1	EA	24" CL'D FLG INSULATING KIT	P.S.I. PRODUCTS						
6	1	SET	HEX HEAD BOLTS W/HEX NUTS FOR 24" CL'D FLG	A307-B						
7	10'	ft	25 3/4" O.D x .1196" WALL WSP ~ 1/2" CML, BARE EXT	A570 GR 33						
8	2	EA	5" THD STL CRIG & PLUG	A.P.I.						
9	2	EA	10" WIDEX 81 1/2" LG x 3/16" FL BUTTSTRAP ROLL TO 25 3/4" I.D	A283 C						
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21	37	SETS	24" CARNEGIE BELLS & SPIGOTS TO FIT 25 3/4" O.D. BELLS (M3516)	M3516						

PREPARED BY: M. G. DATE: 10/81 APPROVED: M. G. DATE: 10/81 CUSTOMER OR JOB TITLE: CITY OF RIVERSIDE - BID NO. 3326 WORKING AVENUE FORCE MAIN REVISION: 1 SHEET: 1 WORK ORDER NO.: 78-R1-6272

LOOSE MATERIAL

- 38 EA. ~ CARNEGIE GASKETS (M3516) FOR 25 3/4" O.D PIPE
- 39 EA. ~ CARNEGIE DIAPERS W/CLIPS FOR 25 3/4" O.D PIPE
- 430 EA. ~ DIAPERS FOR 25 3/4" O.D PIPE
- 351 EA. ~ RIS GASKETS FOR 25 3/4" O.D PIPE
- 4 EA. ~ RIS GASKETS FOR 21 25/32" O.D PIPE
- 4 EA. ~ DIAPERS FOR 21 25/32" O.D PIPE
- 97 lbs. ~ FLAXOAP
- 2 EA. ~ MAKE UP SPOOL & BUTTSTRAP 24"
- 3 EA. ~ SPLIT WELDING HOOP TO FIT 24" PIPE



**NOTE TO CONTRACTOR:**  
 I. IF MAKE-UP SPOOLS AND BUTTSTRAPS ARE USED THEY SHALL BE COATED WITH BEST GRADE OF ASPHALT MASTIC.  
 II. IF BUTTSTRAPS ARE USED THE INTERIOR OF THE COUPLING END PLUG SHALL BE COATED WITH ANTI-CORROSIVE SURFACE TREATMENT.

Approved:  
 W. K. K...  
 Proj. Eng.  
 1/11/82

**U.S. PIPE UNITED STATES PIPE AND FOUNDRY COMPANY CONCRETE PIPE DIVISION**

CITY OF RIVERSIDE  
 BID NO. 3326  
 MAGNOLIA AVENUE FORCE MAIN  
 CUSTOMER MIKE MASANOVICH CONSTRUCTION CO.

DRAWN D.N. 10/22/81	CHECKED D.H. 10/81	APPROVED M.G. 10/81	SCALE NONE	JOB NUMBER 78-R1-6272
REV. BY 4	DATE A.N. 12/14/81	NOTES REV. P/ENGRS CHECK PRINTS	SHEET 17 OF 17	
	DATE A.N. 11/23/81	NOTES REV. P/ENGRS CHECK PRINTS	DRAWING NO. R-81-40	
	DATE A.N. 11/13/81	NOTES REV. P/INTERNAL CK. PRINTS	S-1188A	