

SEWER IMPROVEMENT PLANS - AS-BUILT

DISTRICT NO. 22

MANDAN, NORTH DAKOTA

SEWER IMPROVEMENT NO 22 - CITY PROJECT NO. 97-11 (TECo #1136)



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9	TYPICAL SECTIONS & DETAIL SHEET

Contractor - Olander Contracting
 Installed August 1997



TOMAN ENGINEERING COMPANY
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
 908 2ND STREET NW * MANDAN, NORTH DAKOTA 58554
 (701) 663-6483

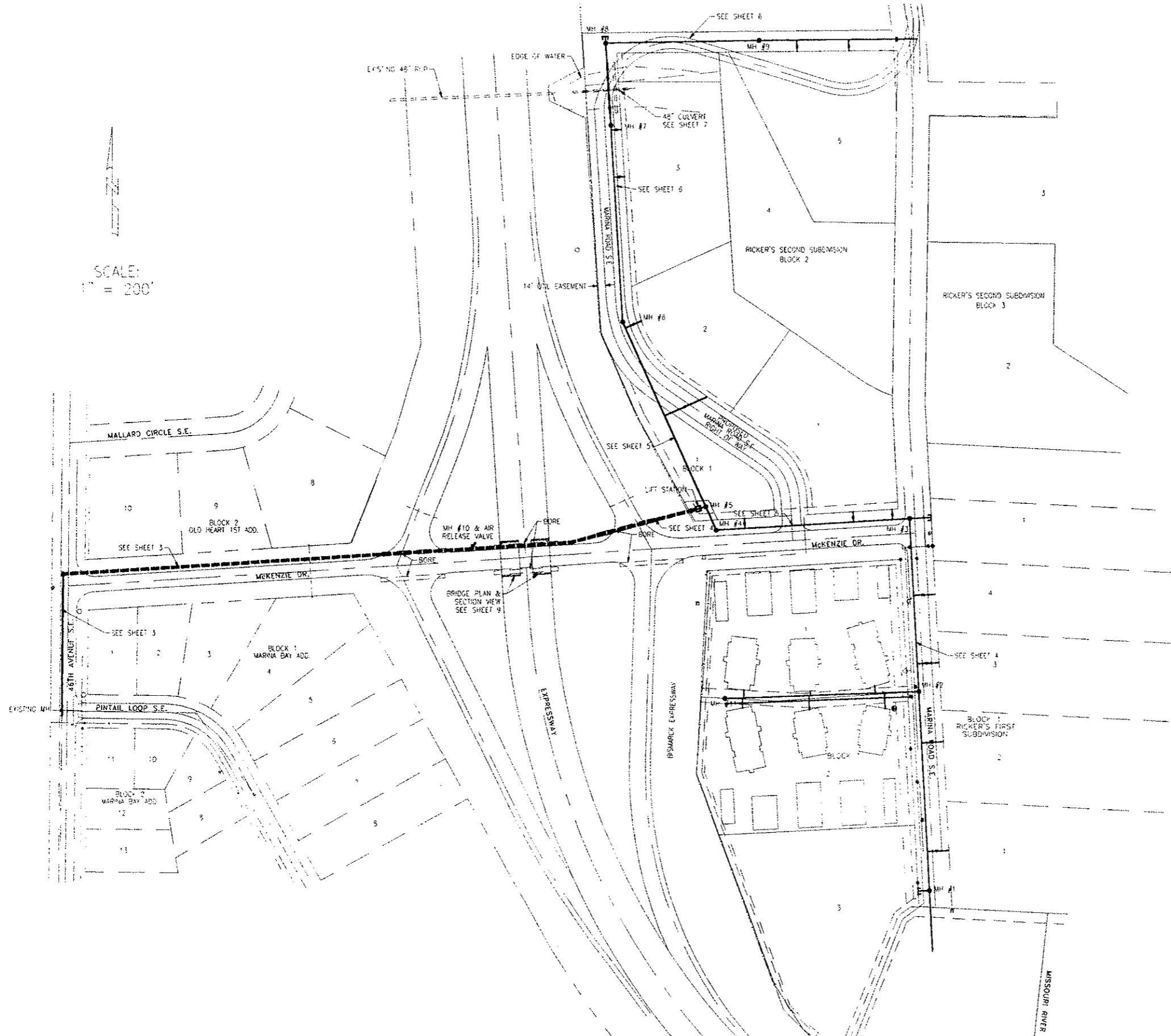
PREPARED BY:
 TOMAN ENGINEERING
 RONALD MANCHESTER R.P.E. 3252
 DATE: JUNE, 1997



PROJECT LOCATION

8

"AS BUILT" SANITARY SEWER PLANS PROJECT LAYOUT



SYMBOL LEGEND

⊙	EXISTING TREE
○	EXISTING FIRE HYDRANT
⊕	EXISTING GATE VALVE
⊗	EXISTING SHUT OFF VALVE
•	FOUND PROPERTY CORNER
□	EXISTING SIGN
⊞	EXISTING UTILITY BOX
---	EXISTING FENCE LINE
○	EXISTING SEWER MANHOLE
---	EXISTING SEWER MAIN
---	EXISTING WATERLINE
⊙	PROPOSED SEWER MANHOLE
■	PROPOSED CATCH BASIN
⚡	PROPOSED AIR RELEASE VALVE
⊞	PROPOSED PLUG
---	PROPOSED SANITARY SERVICE
⊞	PROPOSED WYE
---	PROPOSED 8" SEWERMAIN
---	PROPOSED 6" FORCEMAIN
▭	EMBANKMENT AREA



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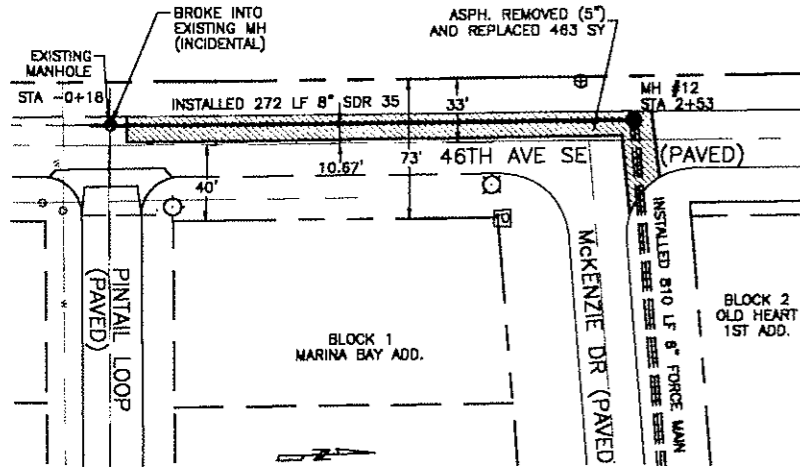
PROJECT LAYOUT
"AS BUILT" SANITARY SEWER PLANS
SEWER DISTRICT NO. 22

TITLE: OLD HEART PROPERTIES	BY: DATE	BY: DATE
REVISIONS	AS-BUILT	AS-BUILT
NO. 1	12/12/08	12/12/08

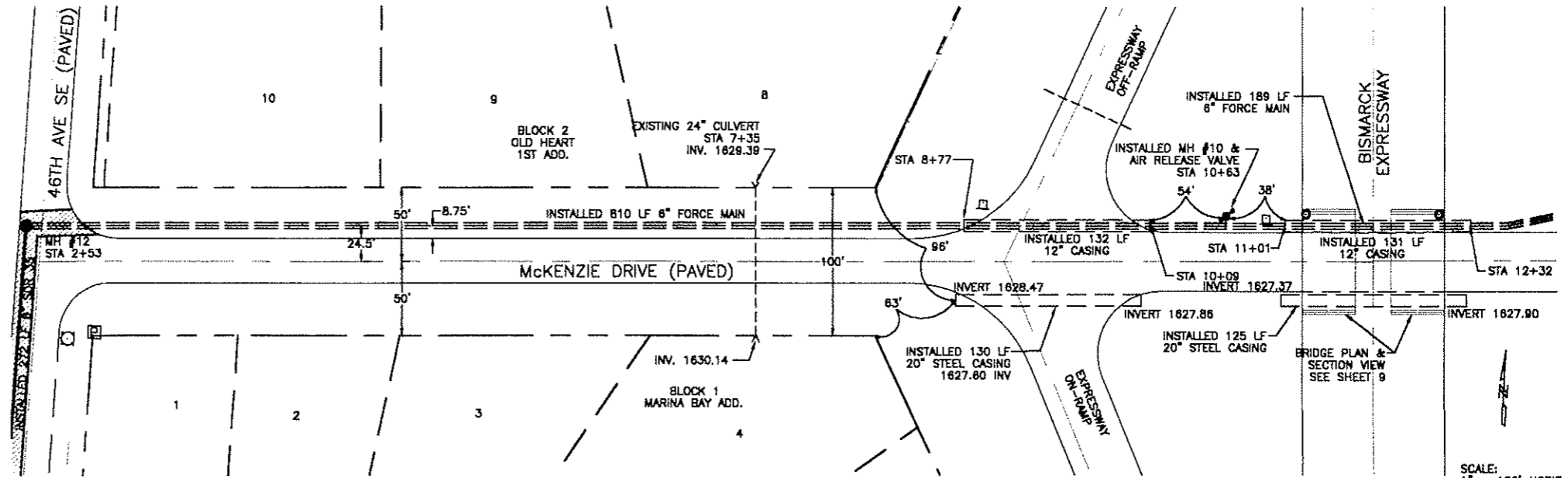
SHEET NUMBER
2
OF 9 SHEETS

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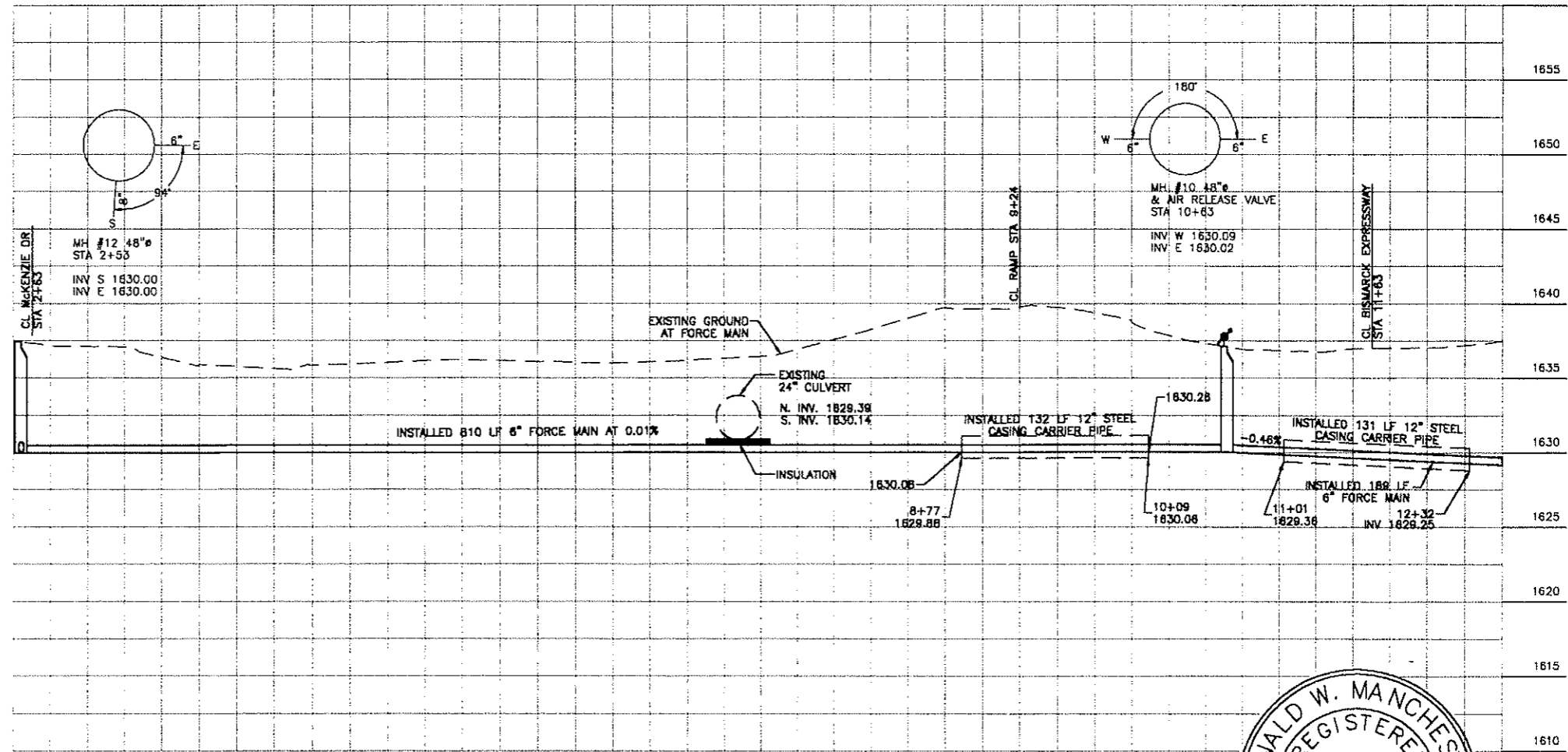
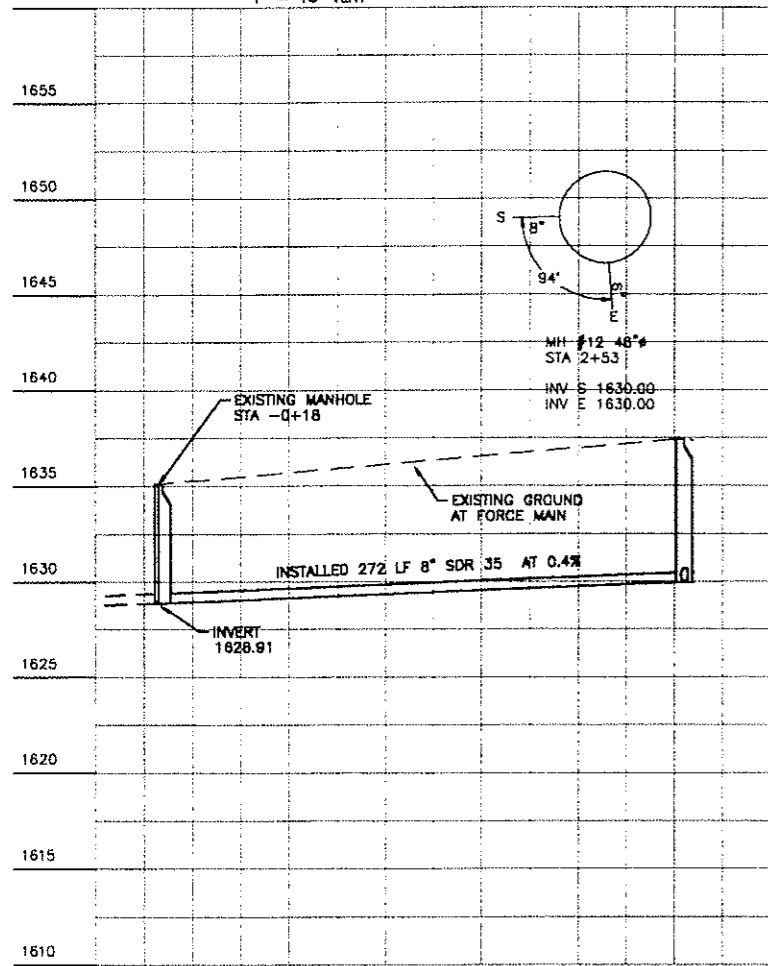
"AS BUILT" SANITARY SEWER PLANS 46TH AVE & MCKENZIE DR



SCALE:
1" = 100' HORIZ
1" = 10' VERT



SCALE:
1" = 100' HORIZ
1" = 10' VERT



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906 2ND ST. N.W. GRAND FORK, NORTH DAKOTA 58004
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PROJECT:
"AS BUILT" PLAN & PROFILES
46TH AVE & MCKENZIE DR
DISTRICT NO. 22

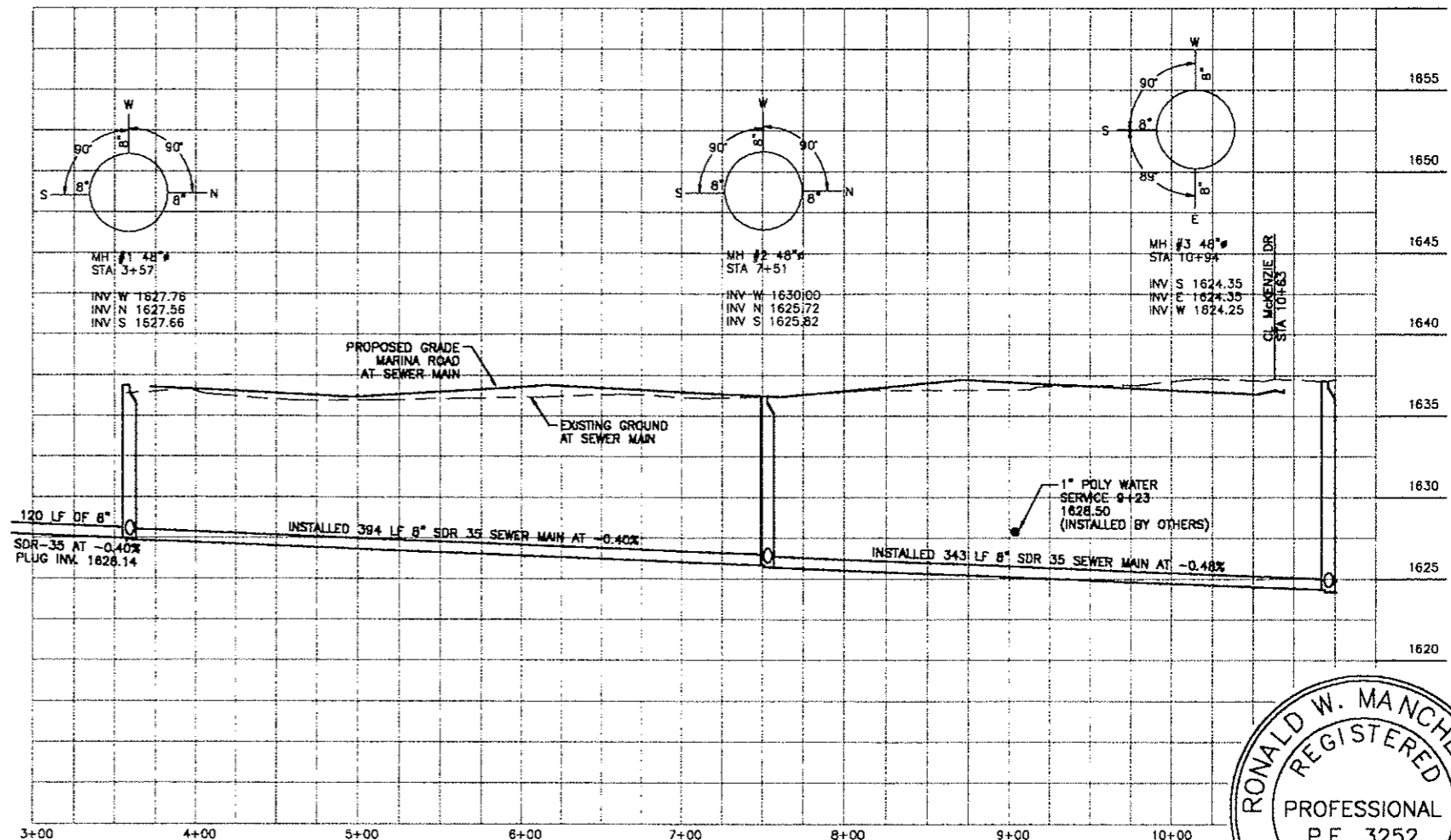
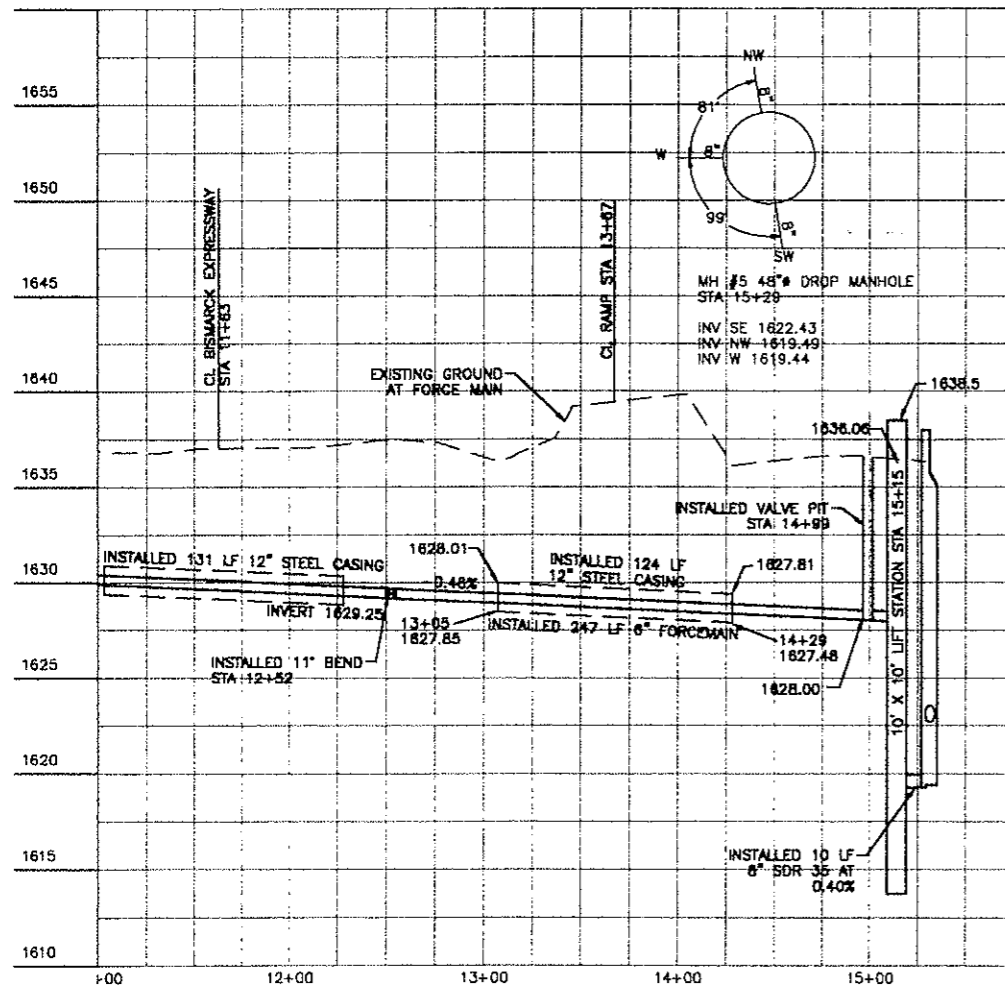
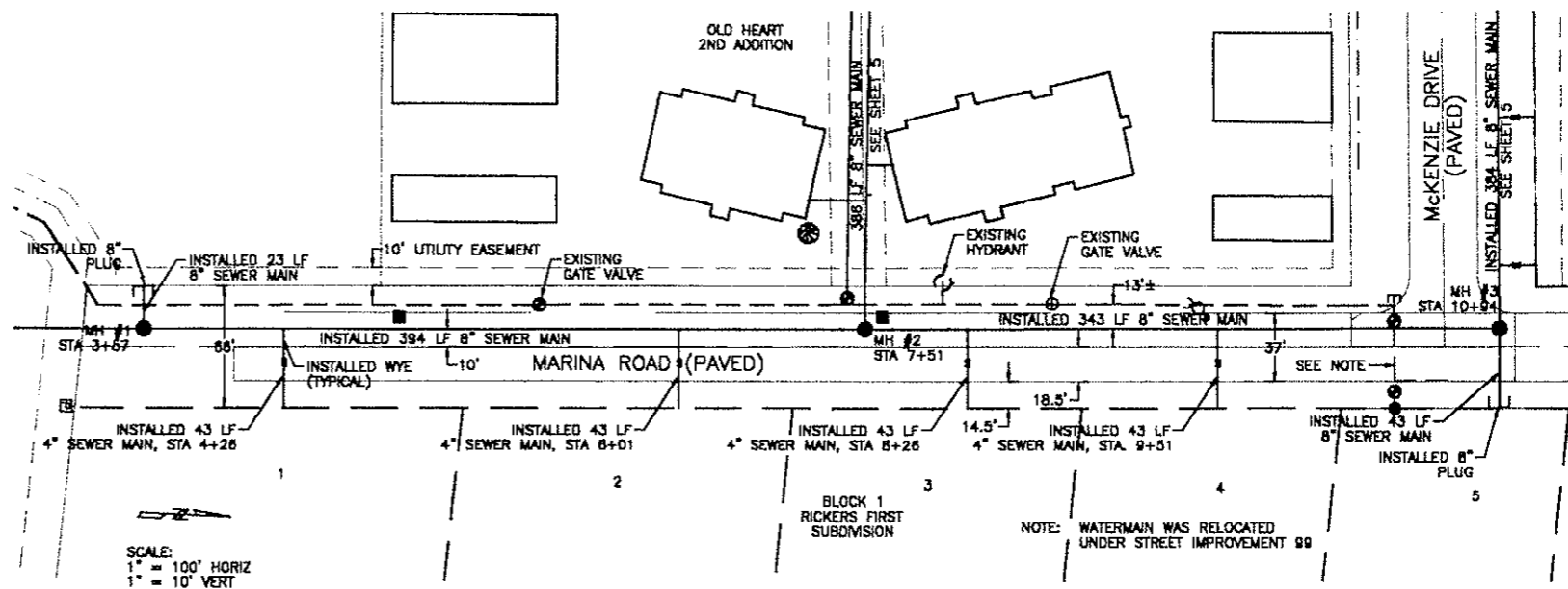
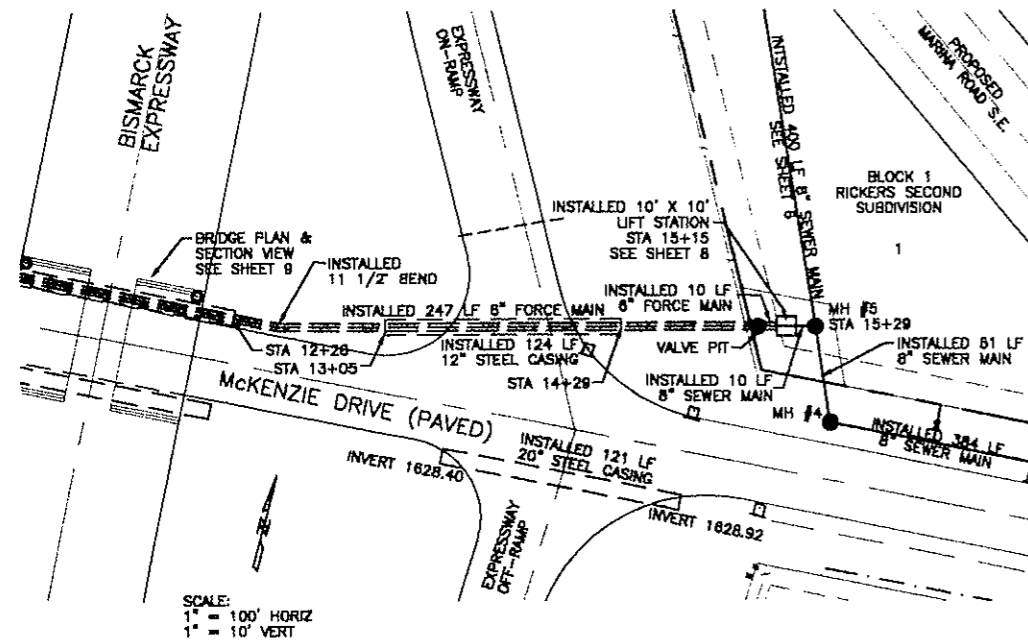
NO.	DATE	BY	REVISIONS
1	8/87	AM	REDO FORCE MAIN
2	8/28/97	AM	RECORD DRAWINGS

TITLE: OLD HEART PROPERTIES
SHEET NUMBER
3
OF 9 SHEETS

DATE: 11/26/97 BY: PLOJ DATE: 07/13/98 TIME: 11:45:50 DRAWN: #3

"AS BUILT" SANITARY SEWER PLANS

6" FORCE MAIN TO LIFT STATION & 8" SEWER MAIN ON MARINA RD



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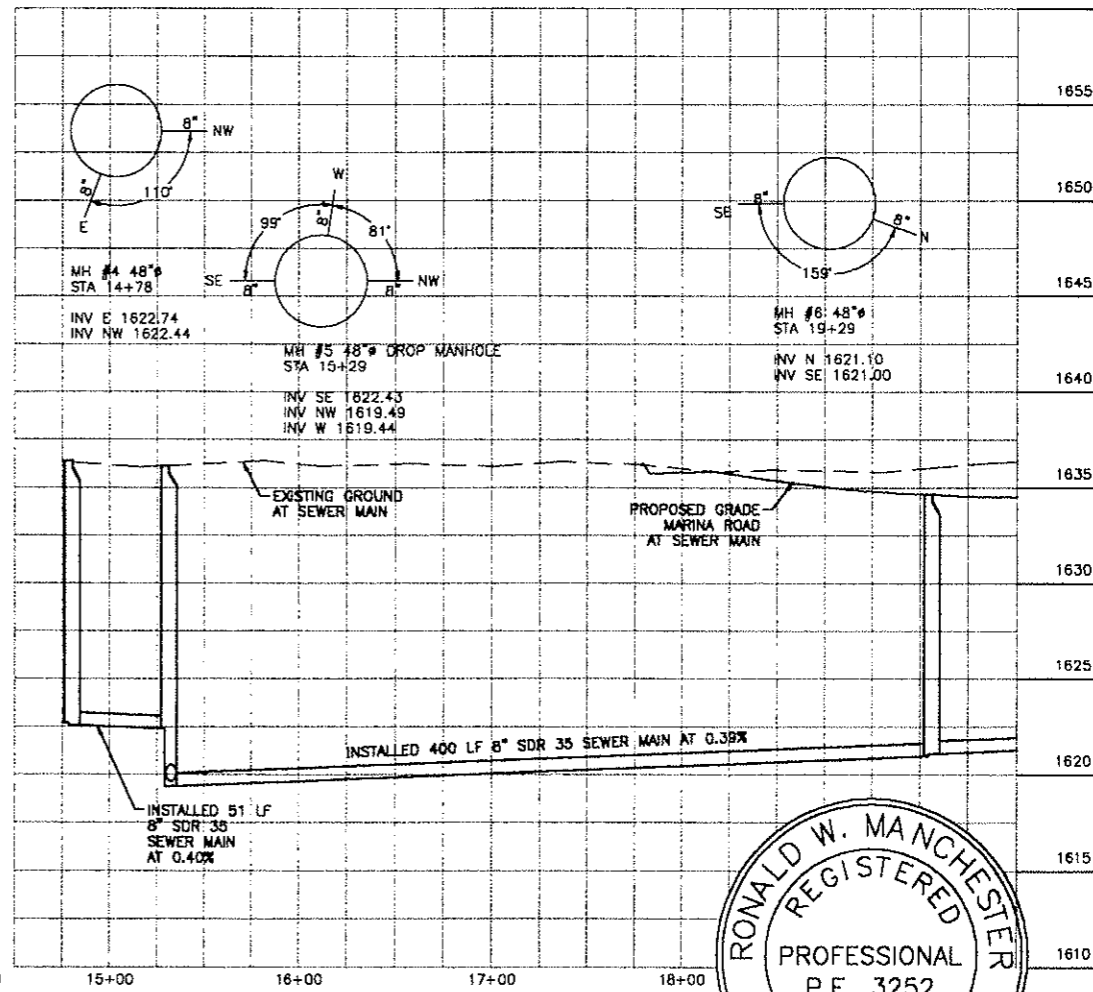
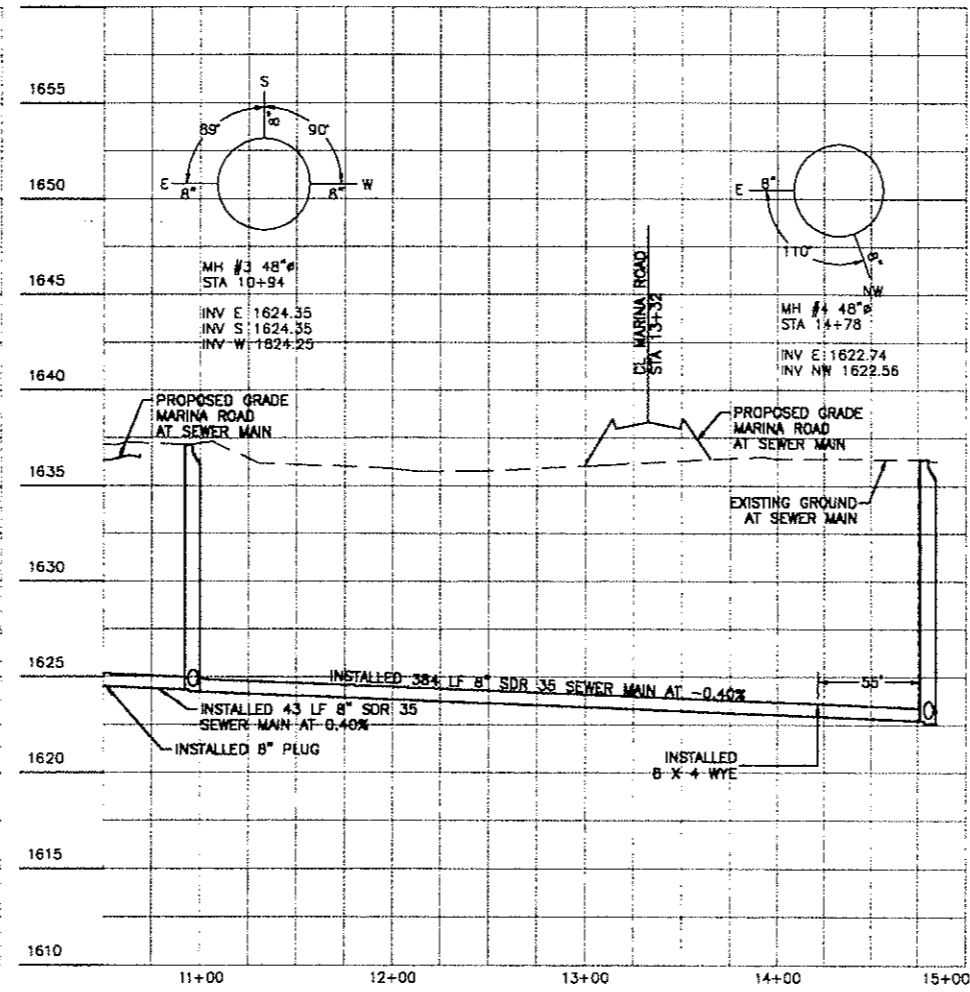
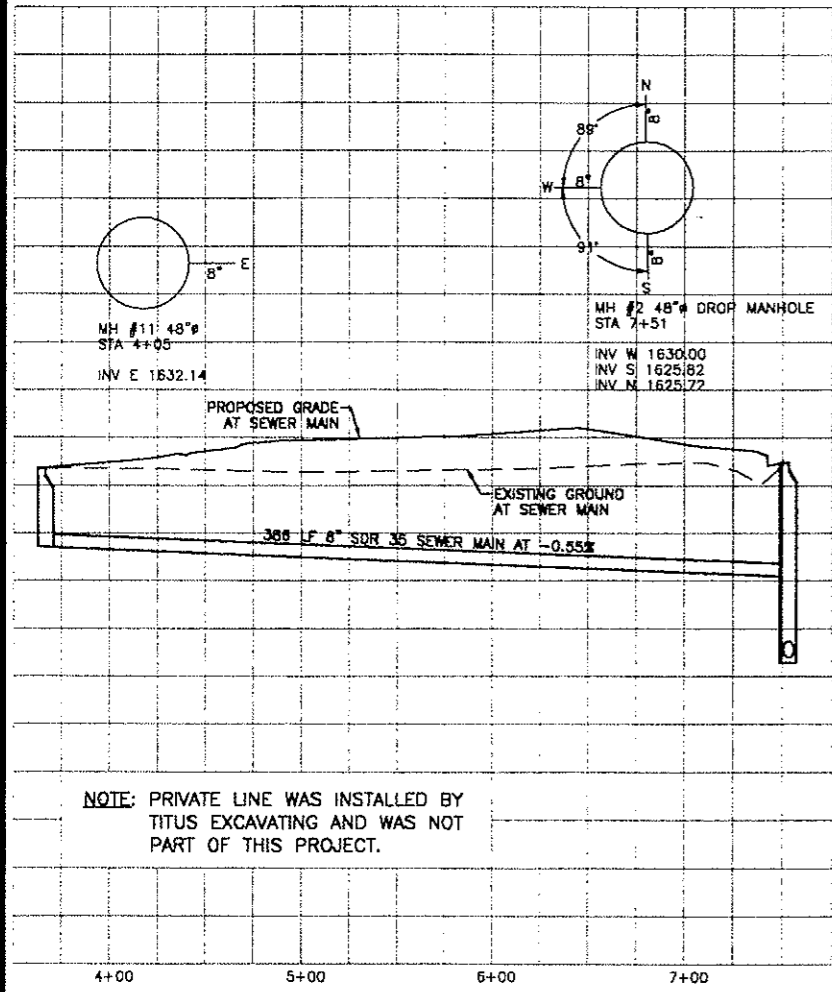
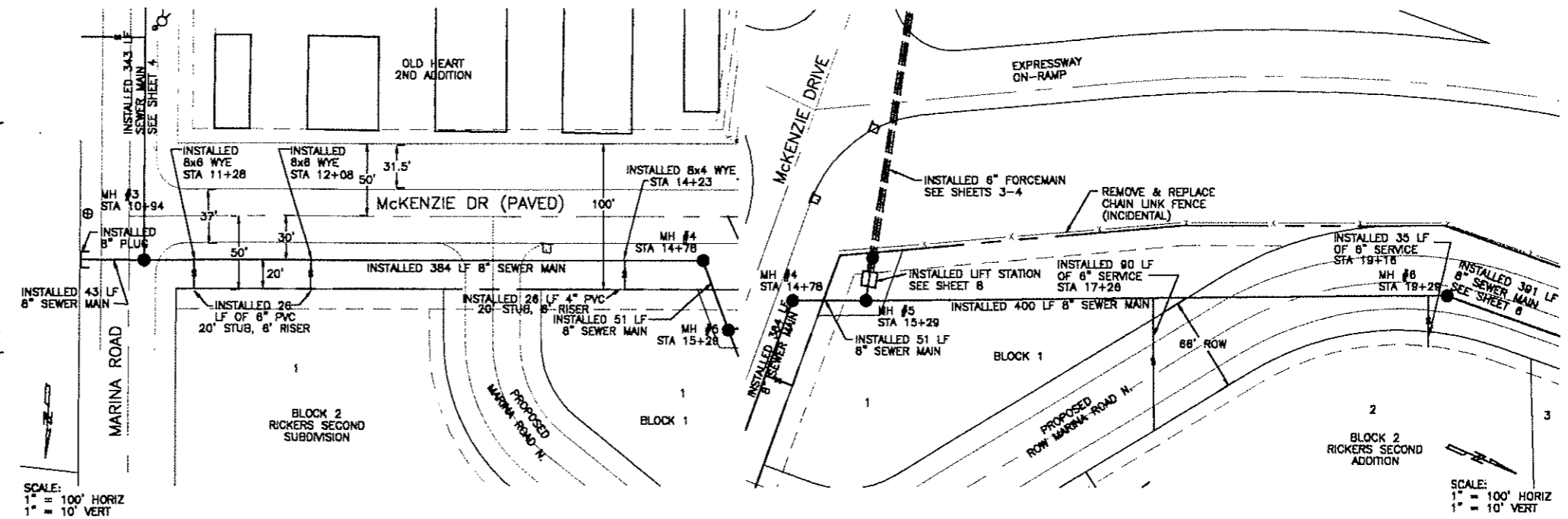
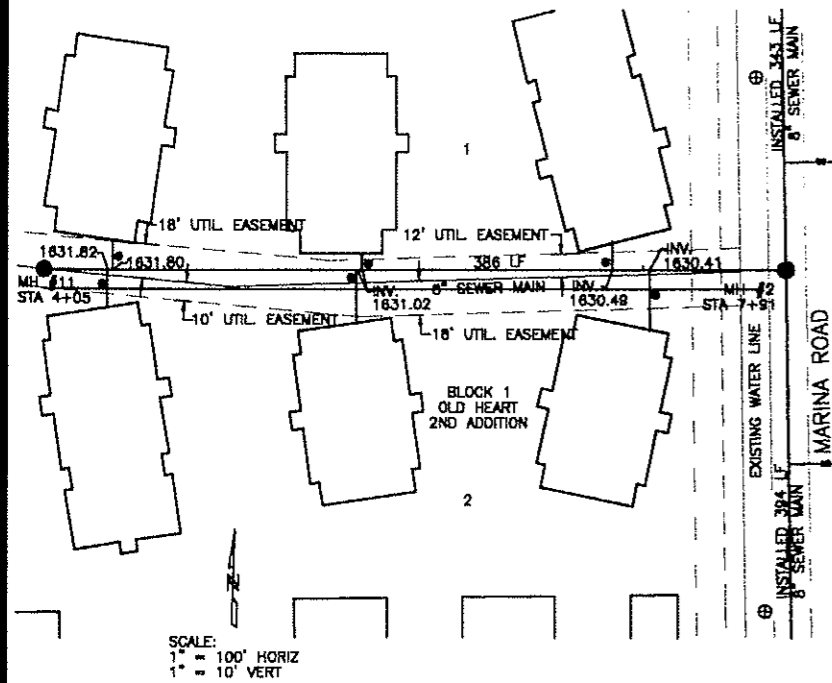


PROJECT: "AS BUILT" PLAN & PROFILES
 LIFT STATION & MARINA ROAD
 DISTRICT NO. 22

NO.	REVISIONS	DATE	BY
1	MOVE WATER & SEWER LINES	9/27	AM
2	RECORD DRAWINGS	11/28	RY/SSE/1/BE

SHEET NUMBER
4
 OF 9 SHEETS

"AS BUILT" SANITARY SEWER PLANS PRIVATE LINE, MCKENZIE DRIVE & MARINA ROAD



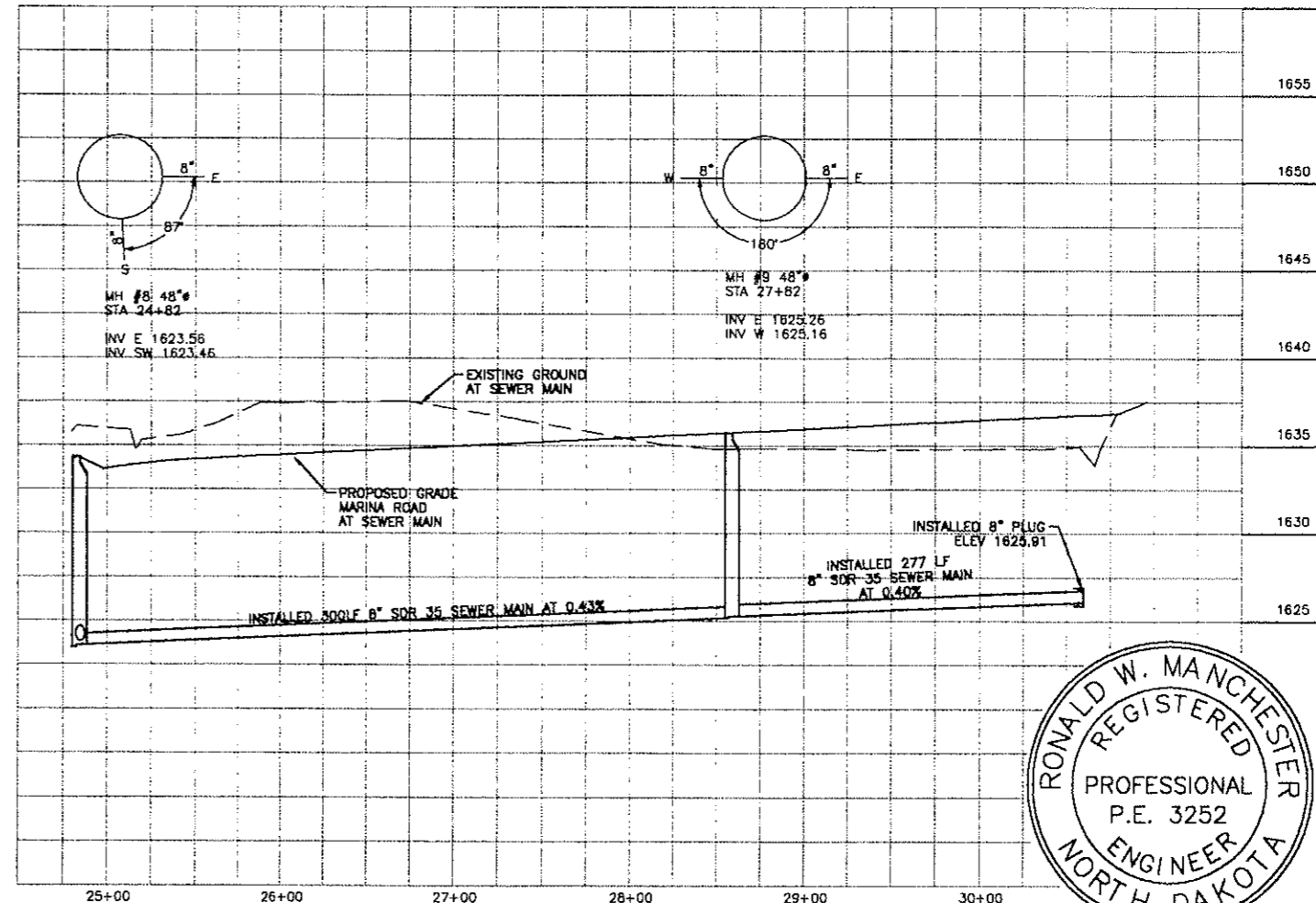
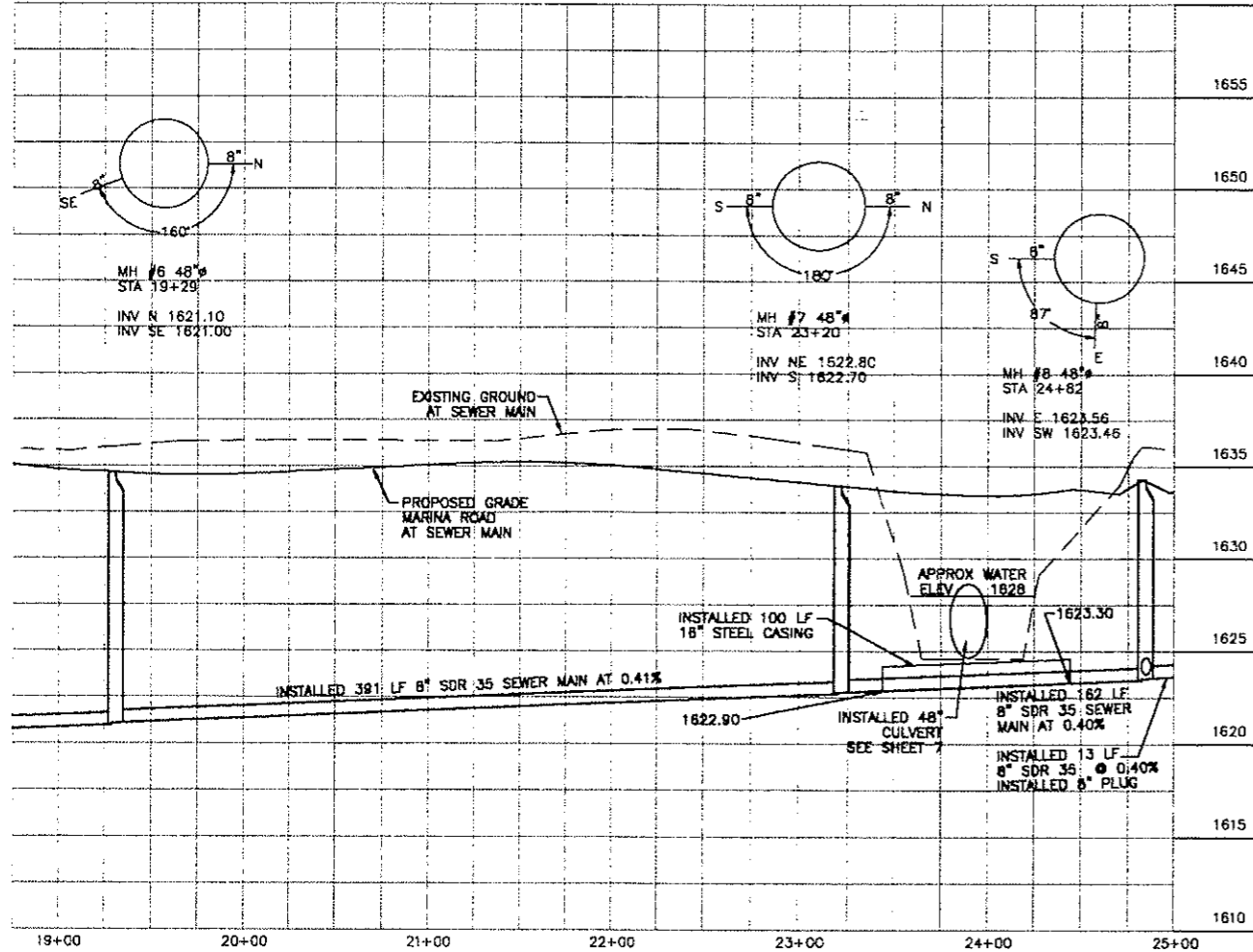
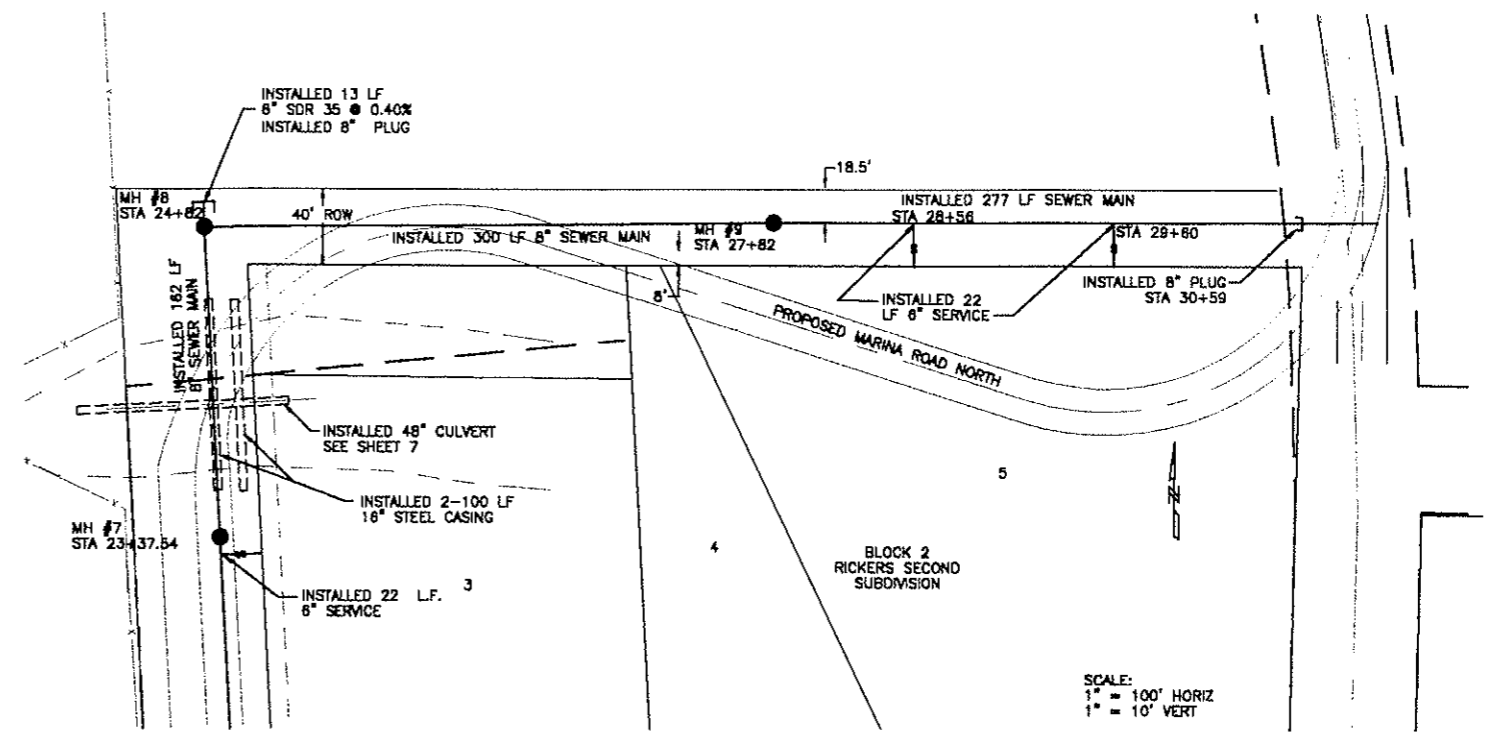
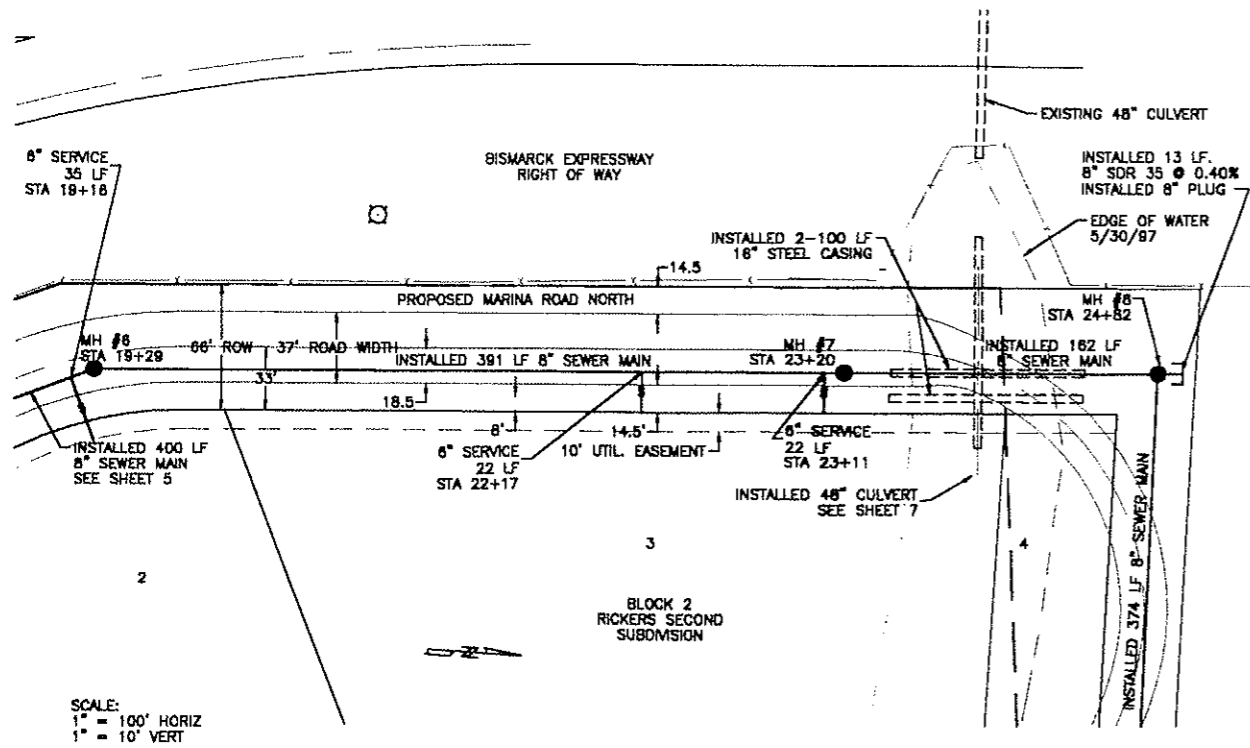
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CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
908 2ND ST. N.W. • WANDAN, NORTH DAKOTA 58554
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PROJECT: "AS BUILT" PLAN & PROFILES
PRIVATE LINE, MCKENZIE DR & MARINA ROAD
DISTRICT NO. 22

NO.	REVISIONS	BY	DATE
1	ADD PRIVATE SAN. LINE	AM/JLR/87	01/11/87
2	REDO MARINA ROAD & W. & S.	AM/JLR/87	02/24/87
3	RECORD DRAWINGS	RY/SEB/88	04/01/88

TITLE: OLD HEART PROPERTIES
SHEET NUMBER 5 OF 9 SHEETS

"AS BUILT" SANITARY SEWER PLANS MARINA ROAD NORTH



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CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
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(701) 863-6443



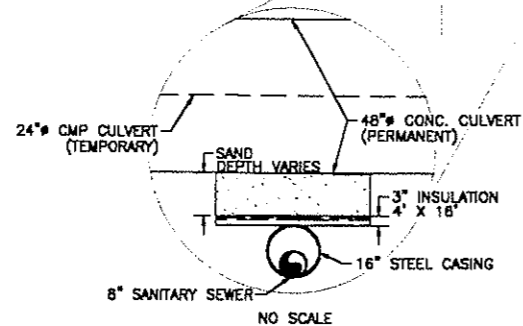
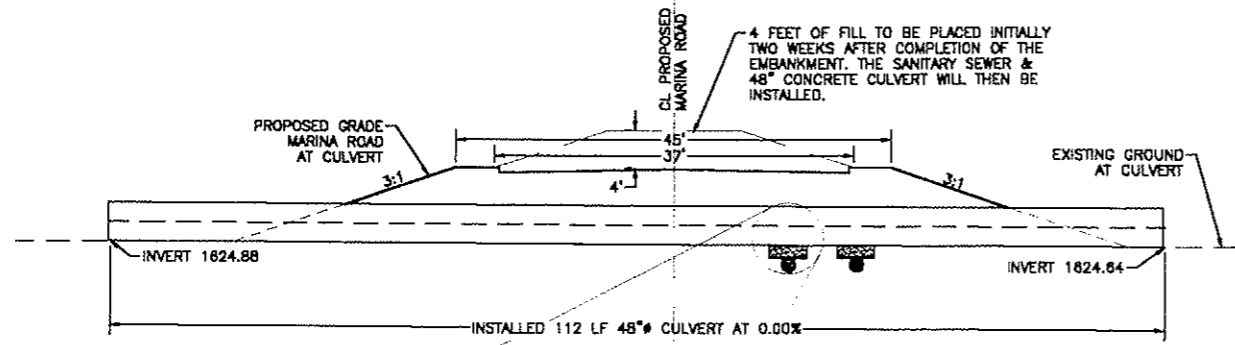
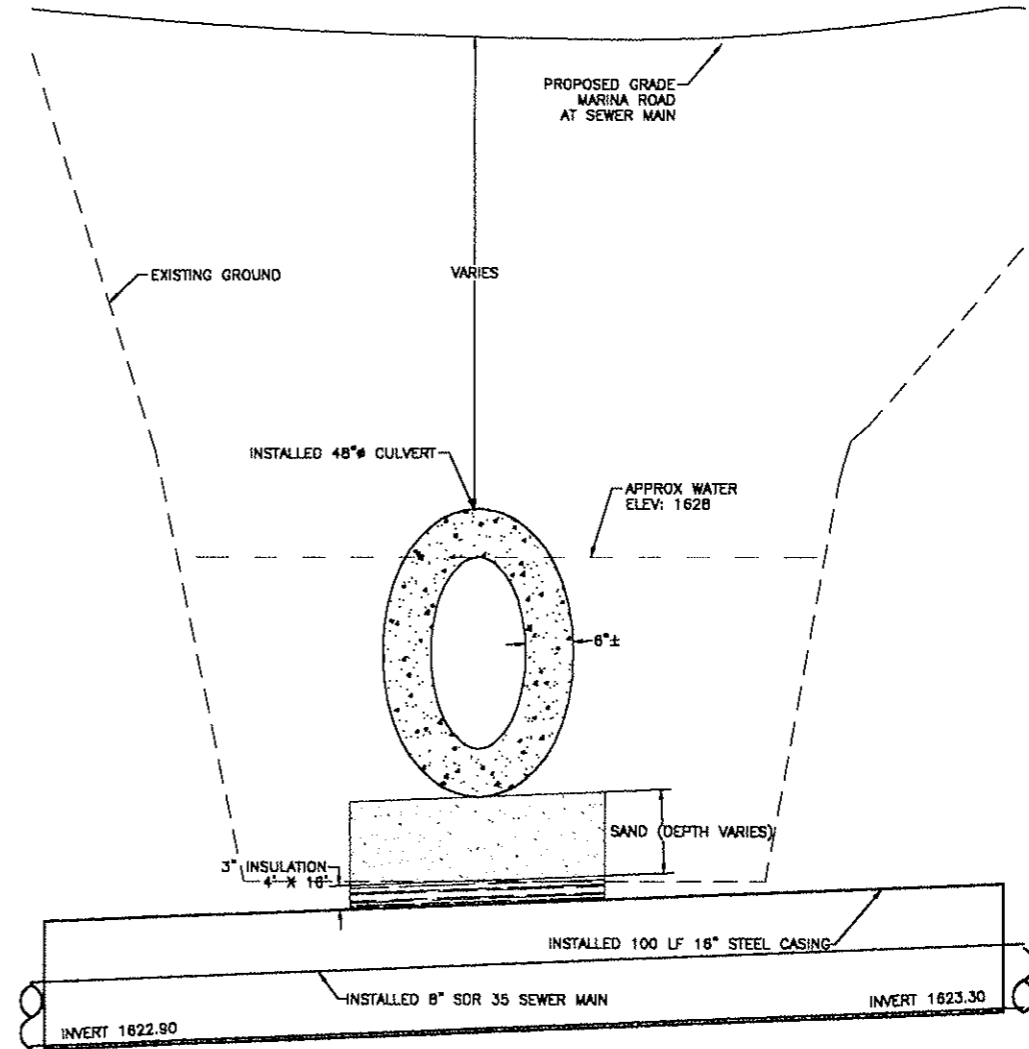
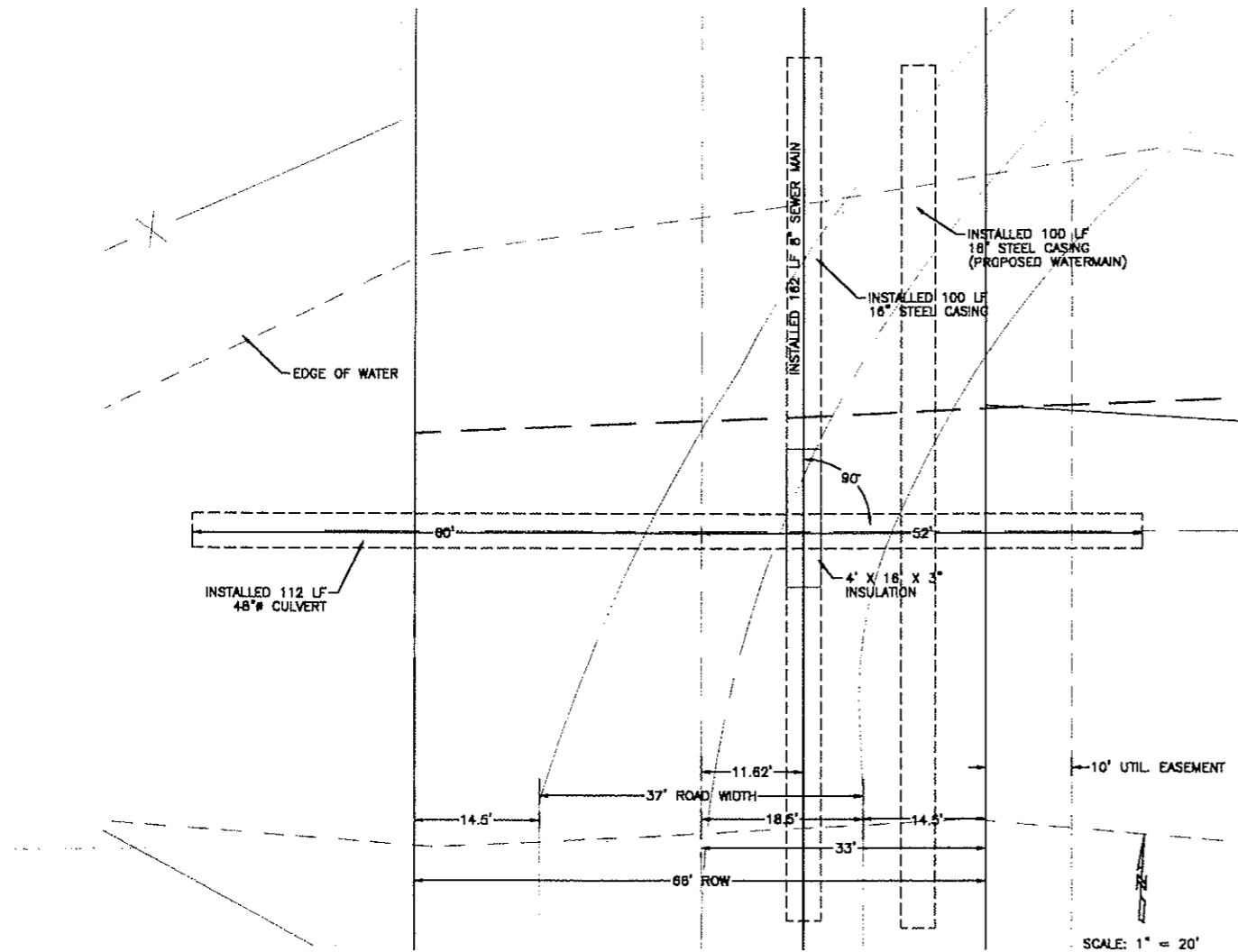
TITLE: "AS BUILT" PLAN & PROFILES
PROPOSED MARINA ROAD
DISTRICT NO. 22

PROJECT:

NO.	REVISIONS	BY	DATE	SCALE	DATE
1	MOVE MARINA ROAD & W & S	AM	9/97	AS SHOWN	8/24/02
2	RECORD DRAWINGS	NR/SB	1/98	AS SHOWN	

SHEET NUMBER
6
OF 9 SHEETS

"AS BUILT" PLAN, PROFILE & SECTION CULVERT EXTENSION



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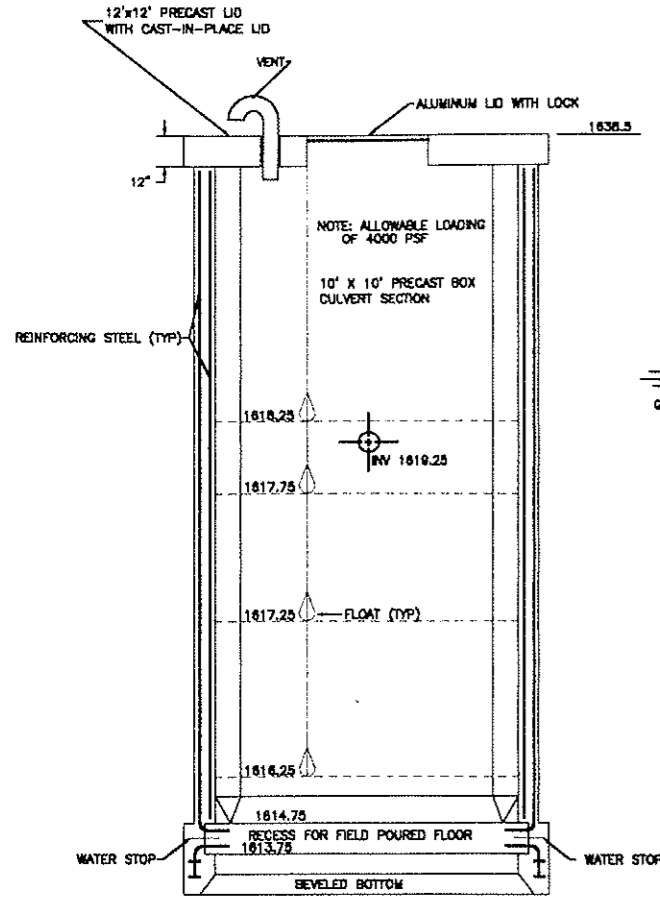


PROJECT: "AS BUILT" PLAN, PROFILE & SECTION
CULVERT EXTENSION
DISTRICT NO. 22

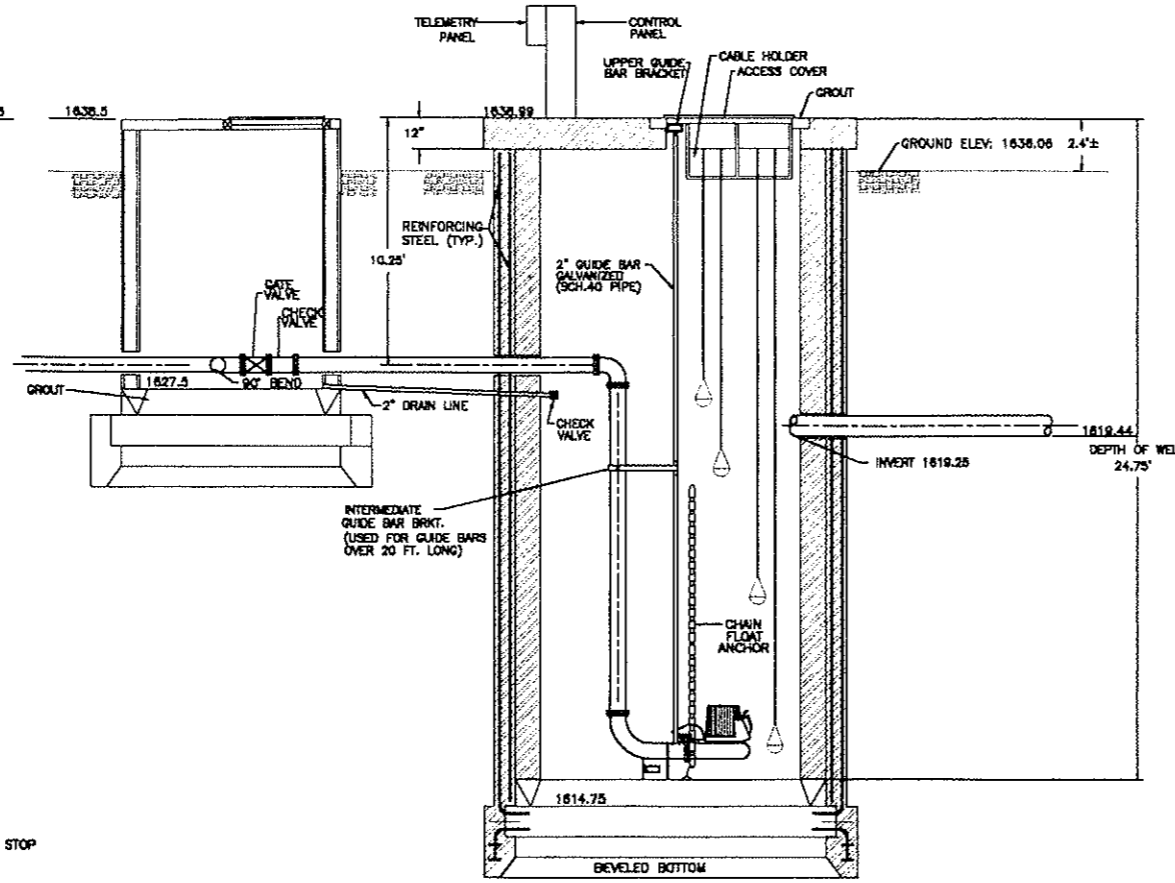
NO.	REVISIONS	BY	DATE	SCALE
1	MOVE MARINA ROAD & W & S	AM	10/19/87	AS SHOWN
2				
3				
4				
5				

SHEET NUMBER
7
OF 9 SHEETS

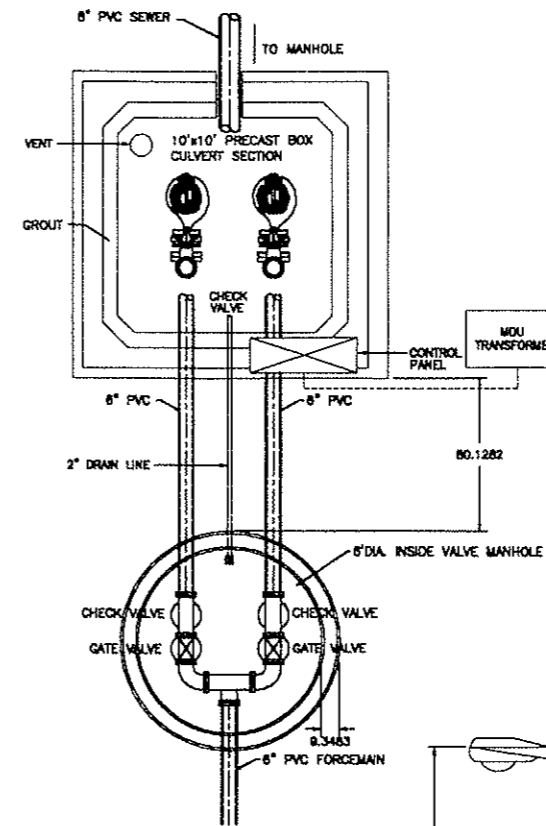
"AS BUILT" LIFT STATION DETAIL SHEET



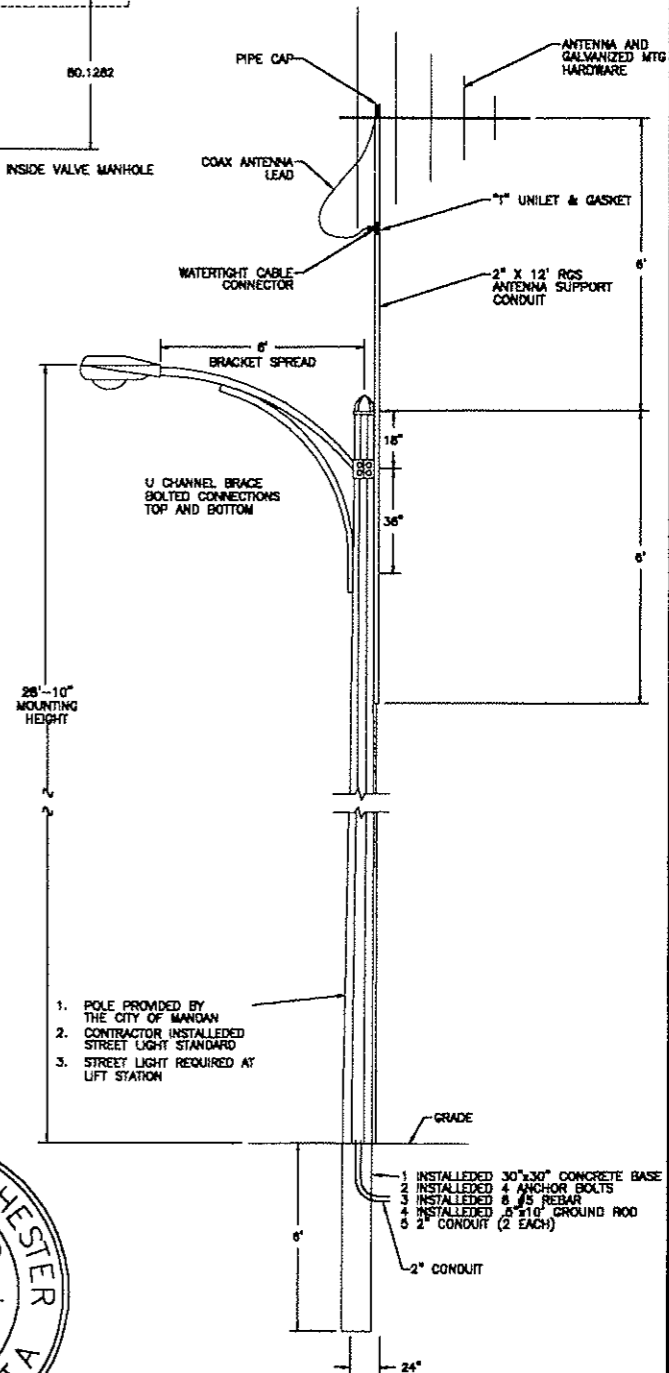
LIFT STATION ELEVATIONS
NO SCALE



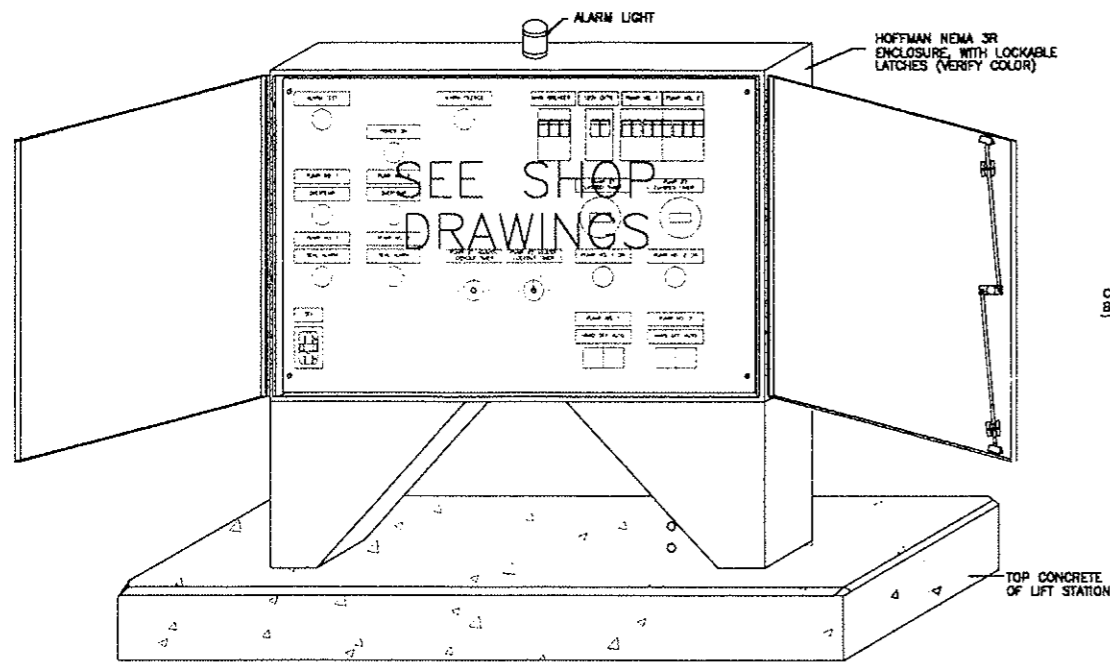
LIFT STATION (ELEVATION VIEW)
NO SCALE



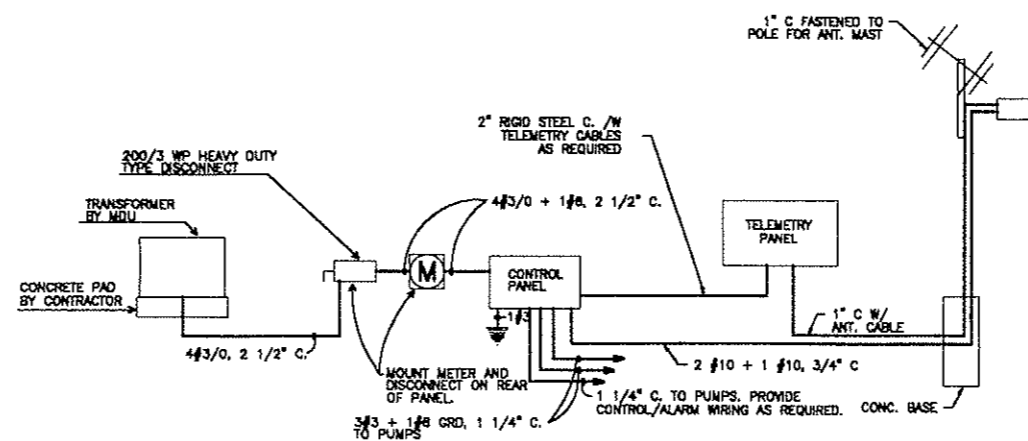
LIFT STATION (PLAN VIEW)
NO SCALE



LIGHT POLE DETAIL
NO SCALE



PUMP CONTROL PANEL DETAIL
NO SCALE



WIRING RISER DIAGRAM
NO SCALE



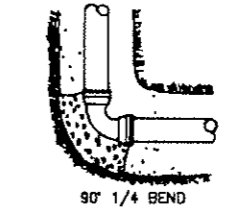
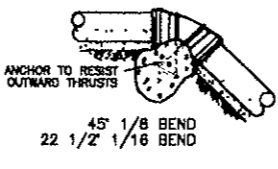
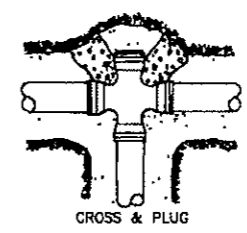
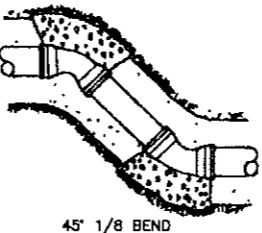
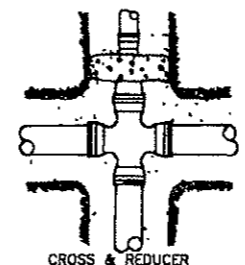
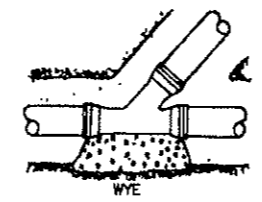
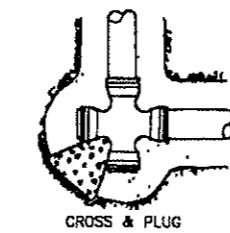
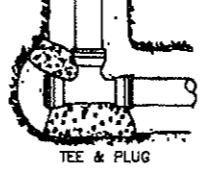
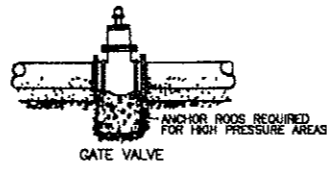
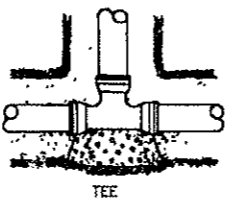
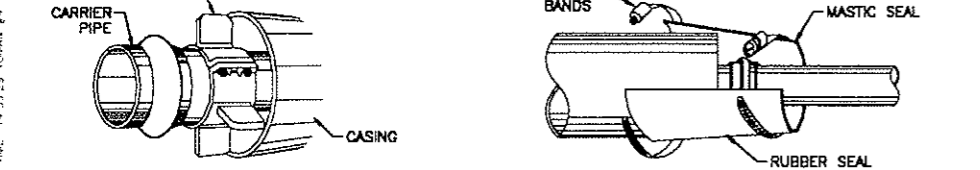
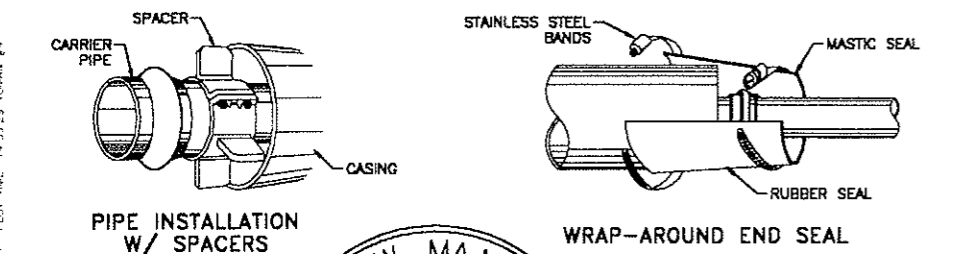
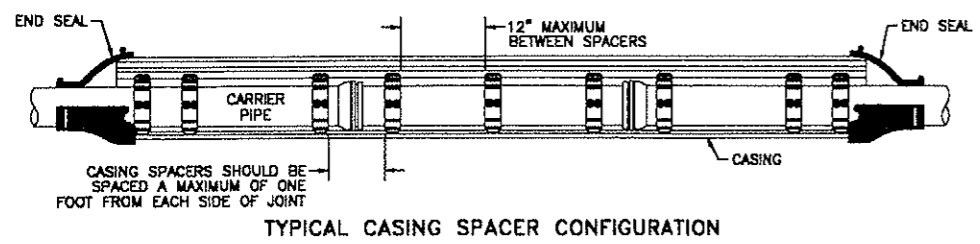
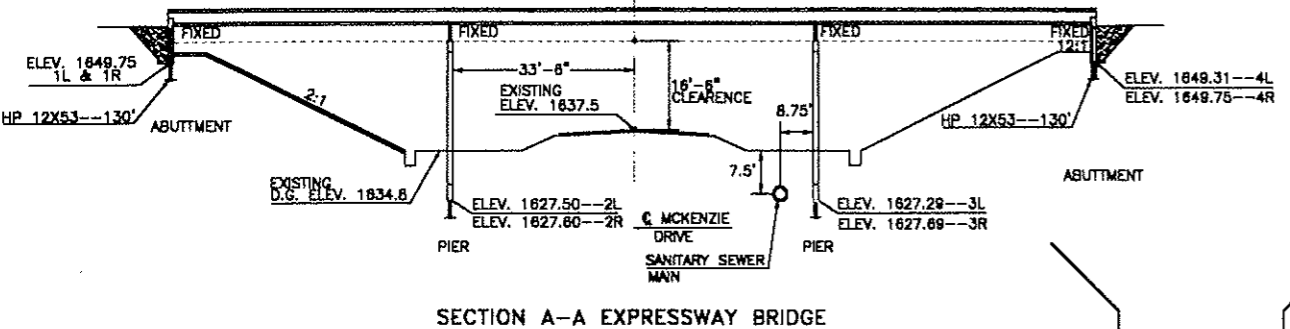
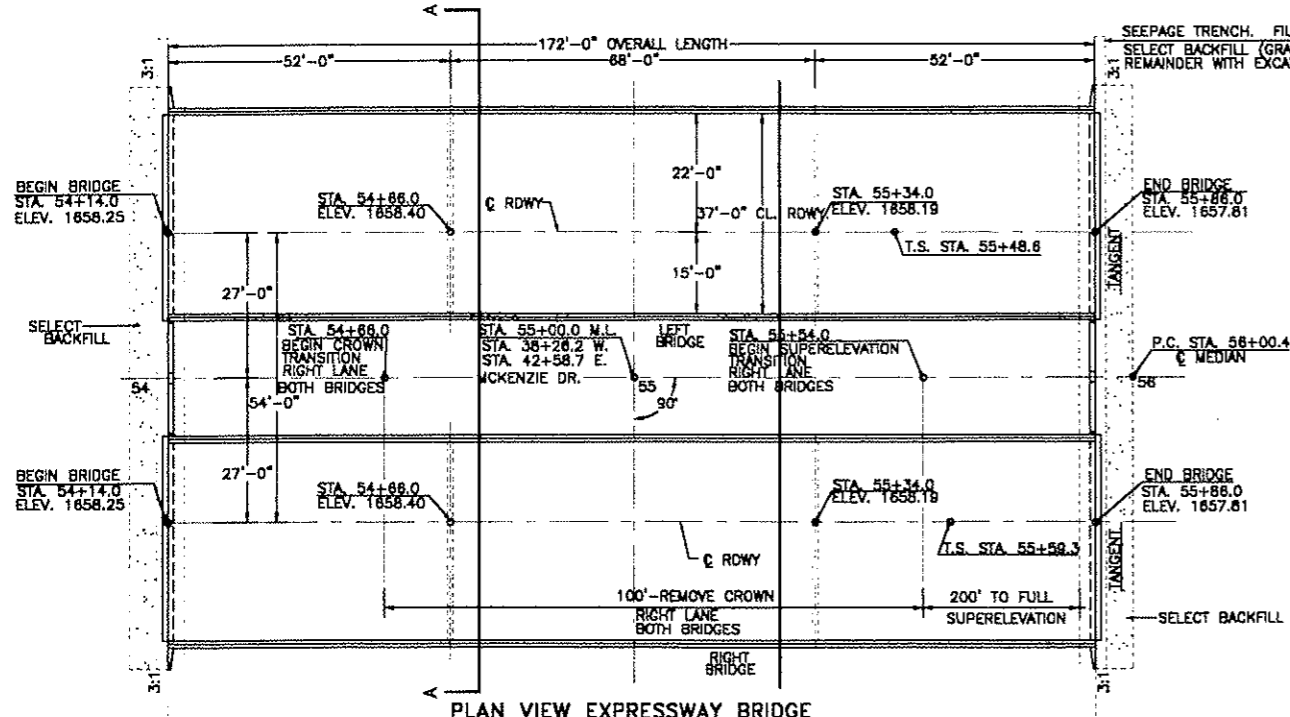
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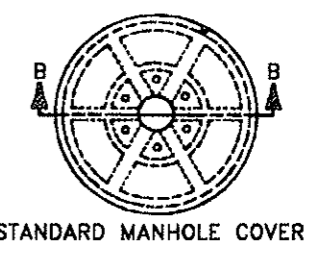
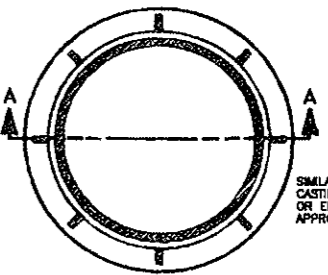
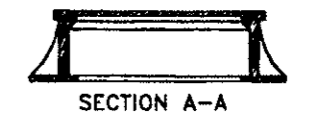
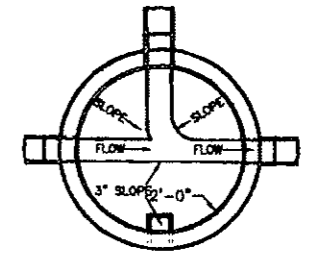
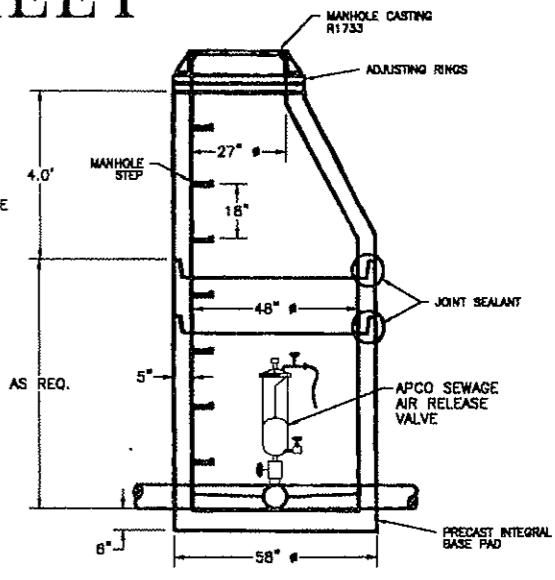
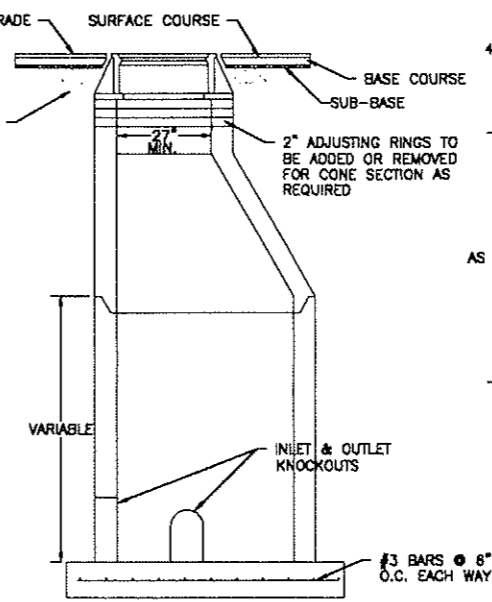
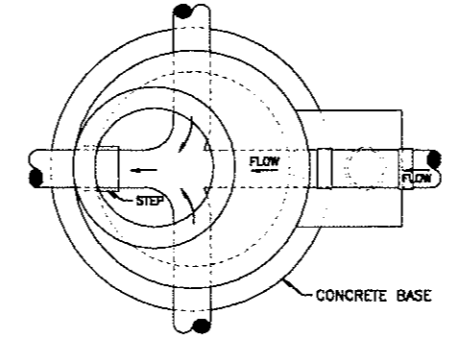
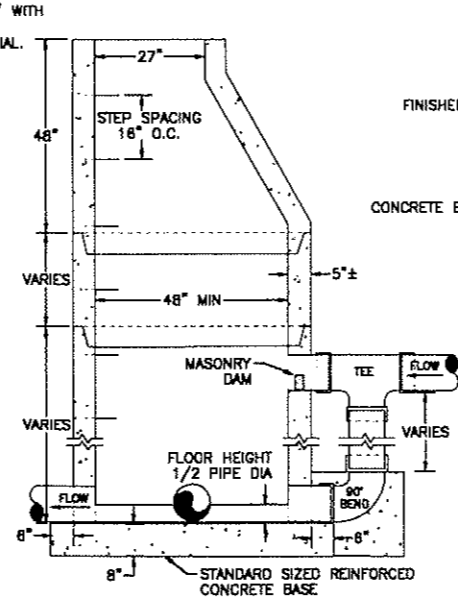
PROJECT: "AS BUILT" PLAN & PROFILES
 PRIVATE LINE, MCKENZIE DR & MARINA ROAD
 DISTRICT NO. 22

NO.	REVISIONS	DATE	BY	DATE	REVISIONS
1	RECORD DRAWINGS	10/24/88	AR/SB	1/89	PROJECT AM
					DATE: 9/24/87
					PROJECT NO.
					DRAWING NO.

"AS BUILT" TYPICAL SECTIONS & DETAIL SHEET



THRUST BLOCK DETAILS



SECTION B-B

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CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
906 2ND ST. N.W. WARDIAN, NORTH DAKOTA 58554
(701) 883-6483

"AS BUILT" TYPICAL SECTIONS &
DETAIL SHEET
DISTRICT NO. 22

PROJECT:

NO.	REVISIONS	BY	DATE

SHEET NUMBER
9
OF 8 SHEETS