

# NORTH LAKE POYGAN SANITARY DISTRICT TOWNS OF BLOOMFIELD AND WOLF RIVER WAUSHARA AND WINNEBAGO COUNTIES, WISCONSIN CONTRACT I

*CTH-H*

## WASTEWATER COLLECTION, TRANSPORT AND RELATED FACILITIES

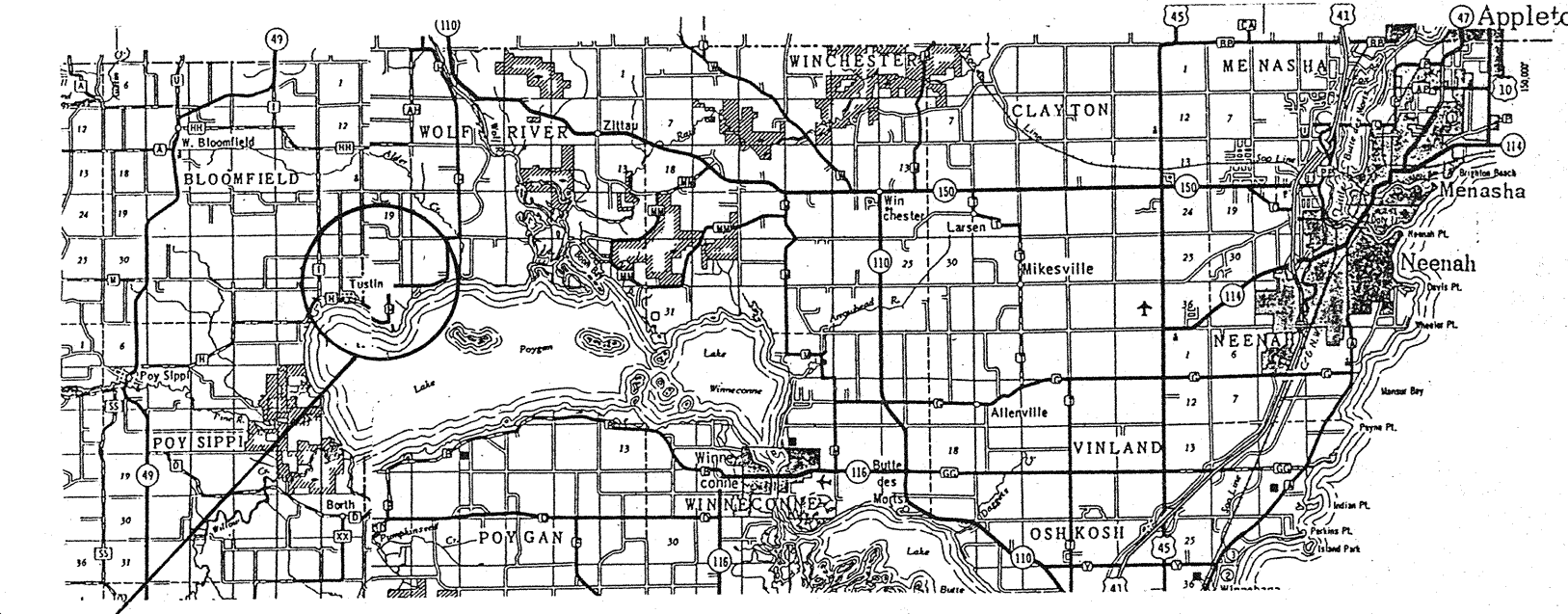
*James W. Schulz*  
Professional Engineer  
Wisconsin

*Kenneth J. Jagan*  
Professional Engineer  
Wisconsin

### OCTOBER, 1986



STATE OF WISCONSIN



PROJECT SITE

AREA MAP

## SANITARY DISTRICT OFFICIALS

**ROGER SIEVERT,**  
**JOAN KAUL,**  
**DAVID BELL,**

**PRESIDENT**  
**SECRETARY**  
**COMMISSIONER**

## ENGINEER

**BECHER-HOPPE**  
ENGINEERS ARCHITECTS PLANNERS  
330 FOURTH STREET • P.O. BOX 8000  
WAUSAU, WISCONSIN 54402-8000  
(715)-845-8000

**SYMBOL LEGEND**

1. NEW SANITARY SEWER/MANHOLE	
2. NEW FORCEMAIN	
3. NEW EFFLUENT PRESSURE SEWER	
4. EXISTING BURIED TELEPHONE CABLE	
5. EXISTING BURIED ELECTRIC CABLE	
6. EXISTING STORM SEWER/MANHOLE	
7. EXISTING CULVERT	
8. TELEPHONE PEDESTAL	
9. POWER POLE	
10. STREET R/W LINE	
11. TREES	
12. TREES	
13. BUSH OR HEDGE	
14. FENCE	
15. SEWER & FORCEMAIN DIMENSION	
16. STREET NAMES	
17. EXISTING STORM DRAINAGE	
18. STUMP	
19. EXISTING SEPTIC VENT	
20. EXISTING WELL	
21. IRON PIPE OR BAR	
22. EDGE OF LAKE OR RIVER	
23. EDGE OF CREEK	
24. DITCH	
25. CONCRETE PAVEMENT	
26. BITUMINOUS PAVEMENT	
27. GRAVEL STREET	
28. VENT TUBE LOCATION	
29. NEW HOLDING TANK INSTALLATION	

PAGE NO.

DESCRIPTION

Page No.

Description

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Tustin: Easement - Influent Forcemain and Effluent Pressure Sewer from South Property Line of the Pond Site to 1,700 Feet South
Norwegian Bay: Influent Forcemain - CTH "H" from 50 Feet East of the Pond Site to 1,800 Feet East
Norwegian Bay: Influent Forcemain - CTH "H": 1,800 to 3,600 Feet East of Pond Site
Norwegian Bay: CTH "H" - 3,600 to 5,250 Feet East of Pond Site
Norwegian Bay: Oak Lane - CTH "H" to South and West Willow Lane - CTH "H" to South and West
Norwegian Bay: CTH "H" - 5,250 Feet East of Pond Site to East End of Spruce Lane Easement
Norwegian Bay: Maple Lane - CTH "H" to East End Pine Lane - Maple Lane to East End of Spruce Lane Easement
Norwegian Bay: Pine Lane - Pine Lane to Bay Lane West
Norwegian Bay: Bay Lane South - Alder Creek to Bay Lane East
Norwegian Bay: Bay Lane West - Bay Lane South to North
Typical Pipeline Installation Details
Typical Pipeline Installation Details
Lift Station and Valve Manhole Details Effluent Sampling/Metering Manhole Details
Lift Station and Duplex Grinder-Pump Lift Station Details
Typical Holding Tank Details
CTH "H" and Town Road Restoration Details

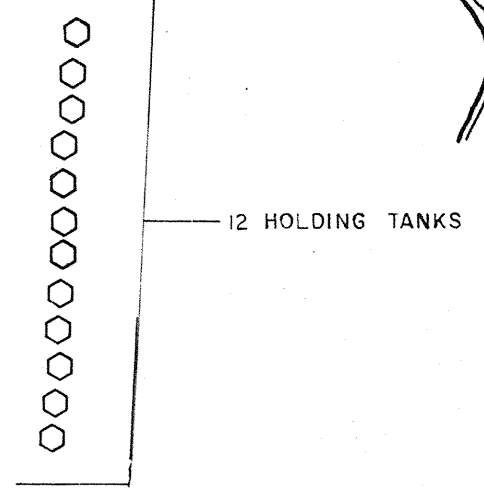
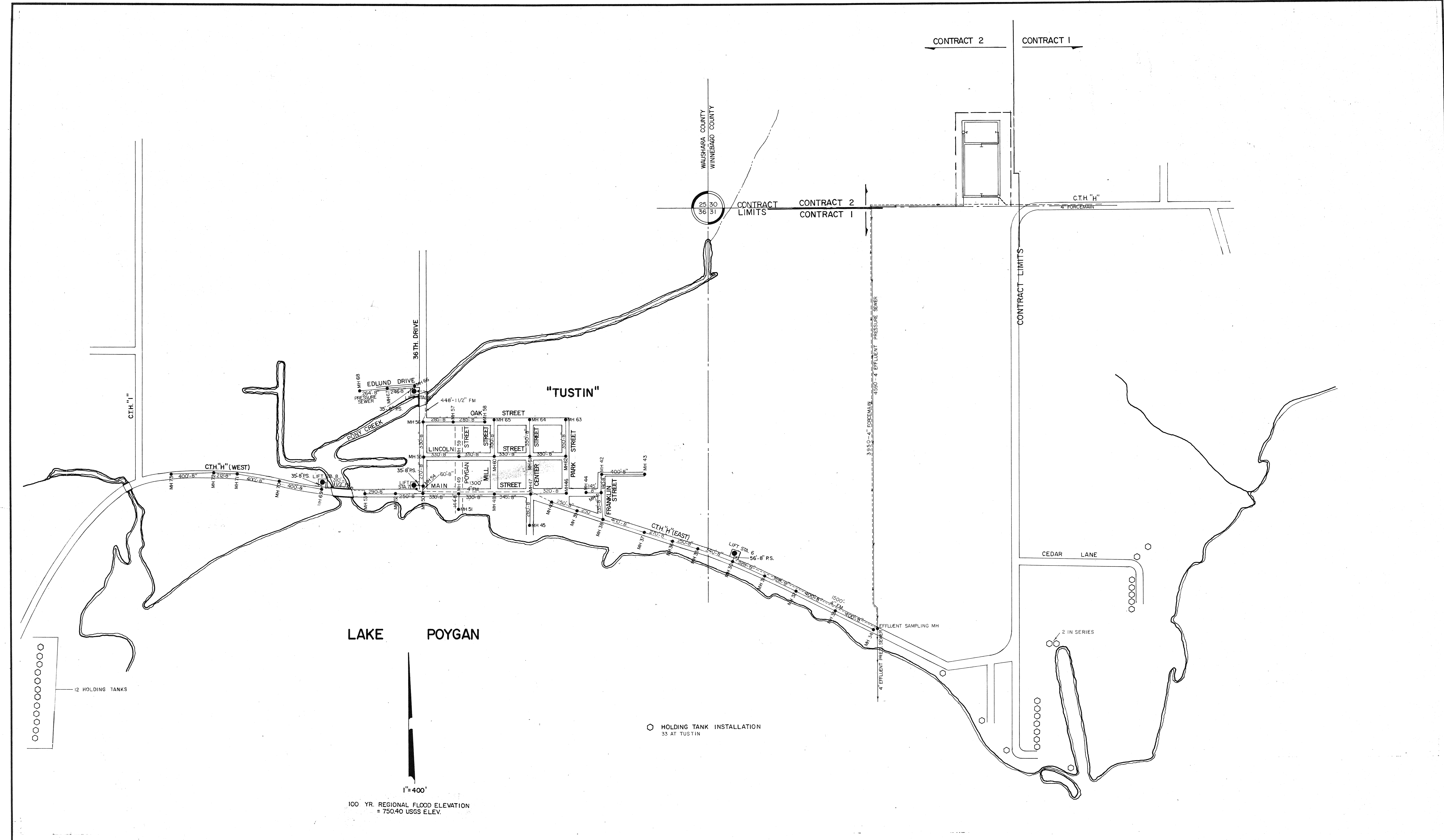
NOTE: FORCEMAINS TO HAVE 5' MIN. COVER

NO.	DATE	REVISIONS

**BECHER-HOPPE**  
 ENGINEERS ARCHITECTS PLANNERS  
 330 FOURTH STREET • P.O. BOX 2000 • WAUSAU, WISCONSIN 54401 • TELEPHONE (715) 848-2000

SCALE	NONE
DATE	10/86
DRAWN BY	RJC
CHK'D BY	JWS

NORTH LAKE POYGAN SANITARY DISTRICT  
 CONTRACT I SANITARY SEWERS  
 SYMBOL LEGEND & PLAN INDEX



○ HOLDING TANK INSTALLATION  
33 AT TUSTIN

1"=400'  
100 YR. REGIONAL FLOOD ELEVATION  
= 750.40 USGS ELEV.

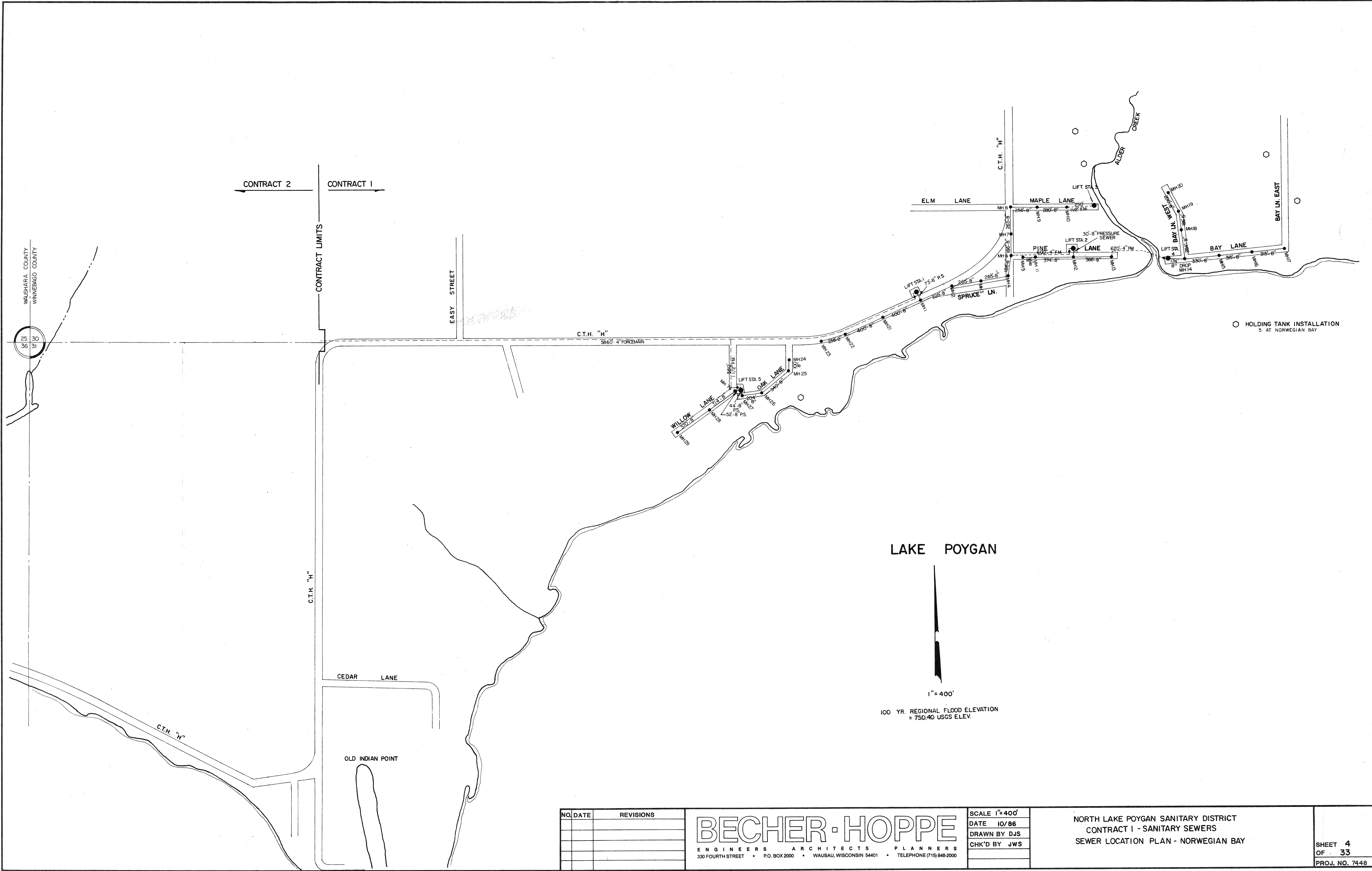
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**BECHER-HOPPE**  
ENGINEERS ARCHITECTS PLANNERS  
330 FOURTH STREET • P.O. BOX 2000 • WAUSAU, WISCONSIN 54401 • TELEPHONE (715) 848-2000

SCALE 1"=400'  
DATE 10/86  
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CHK'D BY JWS

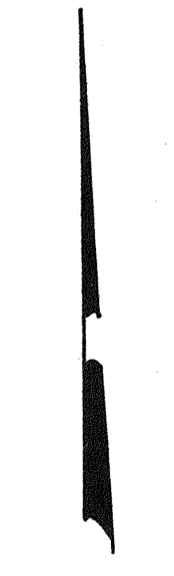
NORTH LAKE POYGAN SANITARY DISTRICT  
CONTRACT I SANITARY SEWERS  
SEWER LOCATION PLAN "TUSTIN"

SHEET 3  
OF 33  
PROJ. NO. 7448



○ HOLDING TANK INSTALLATION  
5 AT NORWEGIAN BAY

LAKE POYGAN



1" = 400'

100 YR. REGIONAL FLOOD ELEVATION  
= 750.40 USGS ELEV.

NO.	DATE	REVISIONS

**BECHER-HOPPE**  
 ENGINEERS ARCHITECTS PLANNERS  
 330 FOURTH STREET • P.O. BOX 2000 • WAUSAU, WISCONSIN 54401 • TELEPHONE (715) 846-2000

SCALE 1" = 400'  
 DATE 10/86  
 DRAWN BY DJS  
 CHK'D BY JWS

NORTH LAKE POYGAN SANITARY DISTRICT  
 CONTRACT I - SANITARY SEWERS  
 SEWER LOCATION PLAN - NORWEGIAN BAY

SHEET 4  
 OF 33  
 PROJ. NO. 7448

WAUSHARA COUNTY  
 WINNEBAGO COUNTY

25 30  
 36 31

CONTRACT 2 ←      → CONTRACT 1

CONTRACT LIMITS

EASY STREET

C.T.H. "H"  
 5860' 4" FORCEMAIN

C.T.H. "H"

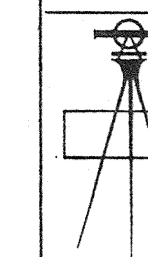
CEDAR LANE

OLD INDIAN POINT

C.T.H. "H"

TELEPHONE POST 14368P

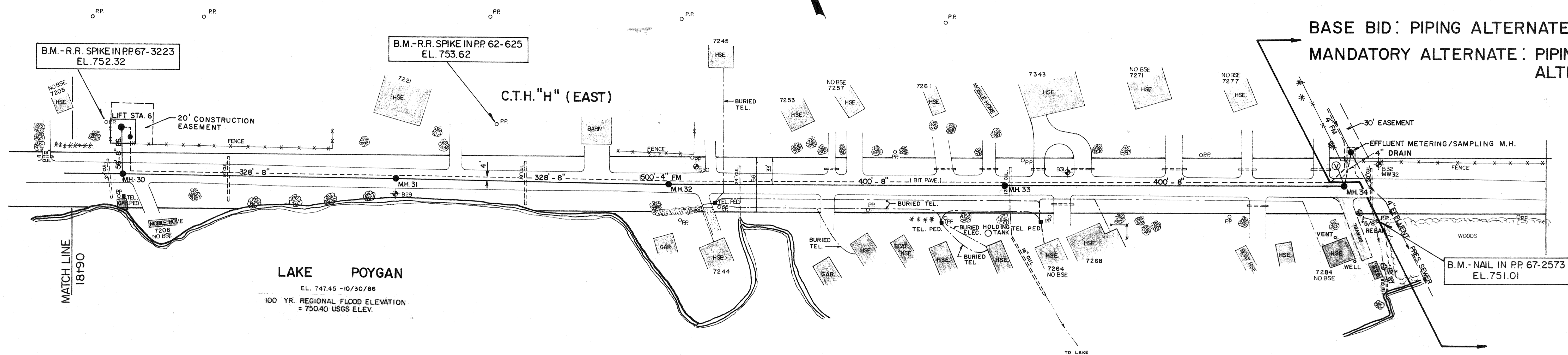
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APPROVED BY	JWS
REVISIONS	11/14/86
ID/86	
SCALE	1"=60' HORIZ 1"=5' VERT.
FILE NUMBER	7448
SHEET NUMBER	9 of 33



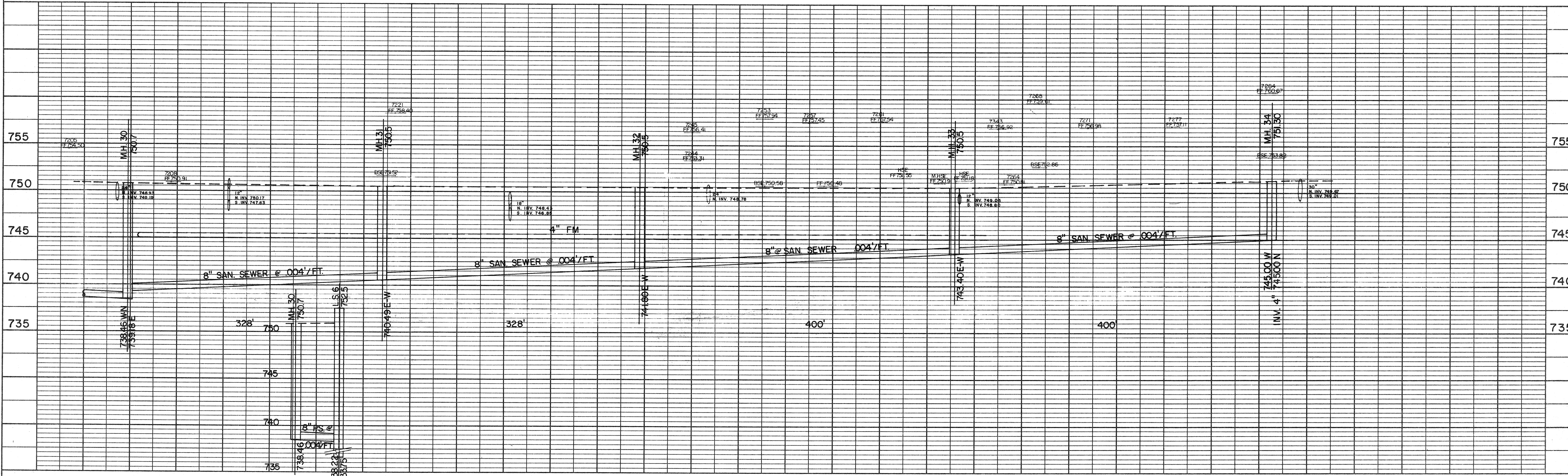
BECHER-HOPPE ENGINEERS, INC.

NOTE: AT CONTRACTORS OPTION, FM MAY BE INSTALLED IN SAME TRENCH AS SEWER, A MINIMUM OF 4 FT FROM SEWER C AND AT 5 FT. COVER TO TOP OF PIPE OR IN DITCH/PARKWAY AREA AT 74600 TOP OF PIPE ELEVATION.

DATE	
BY	
PLAN	
SURVEYED	
NOTE BOOK	
ALIGNED	
GRADES CHECKED	
RT. OF WAY CHECKED	
NO.	



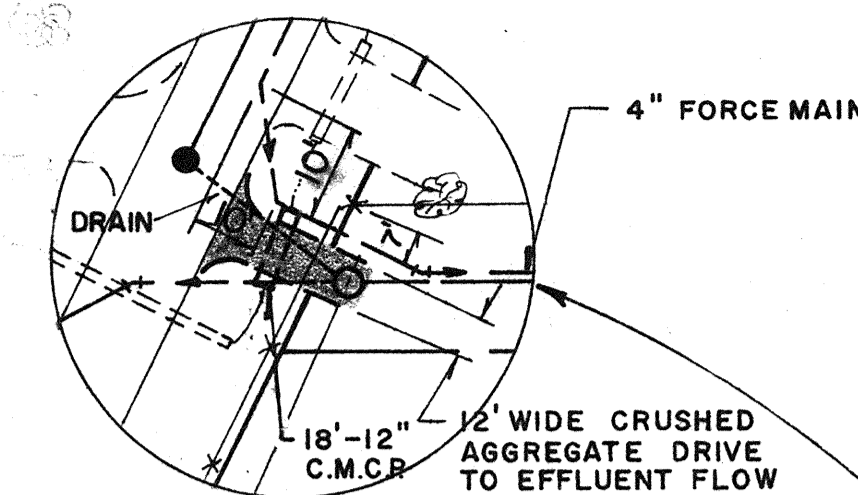
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PROFILE	
SURVEYED	
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GRADES CHECKED	
B.M.'S NOTED	
STRUCTURE NOTATIONS CHECKED	
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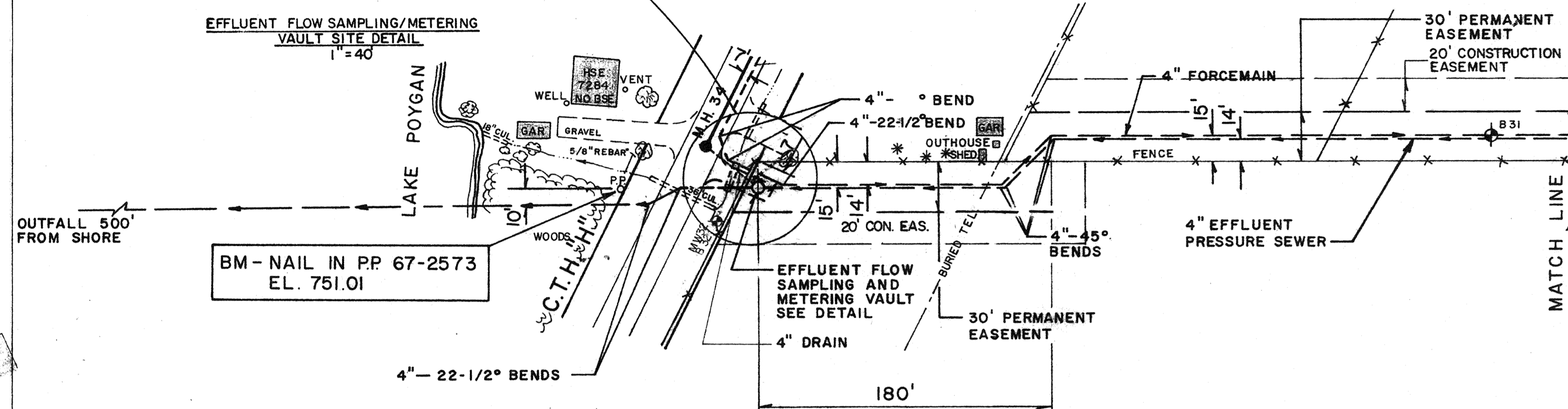
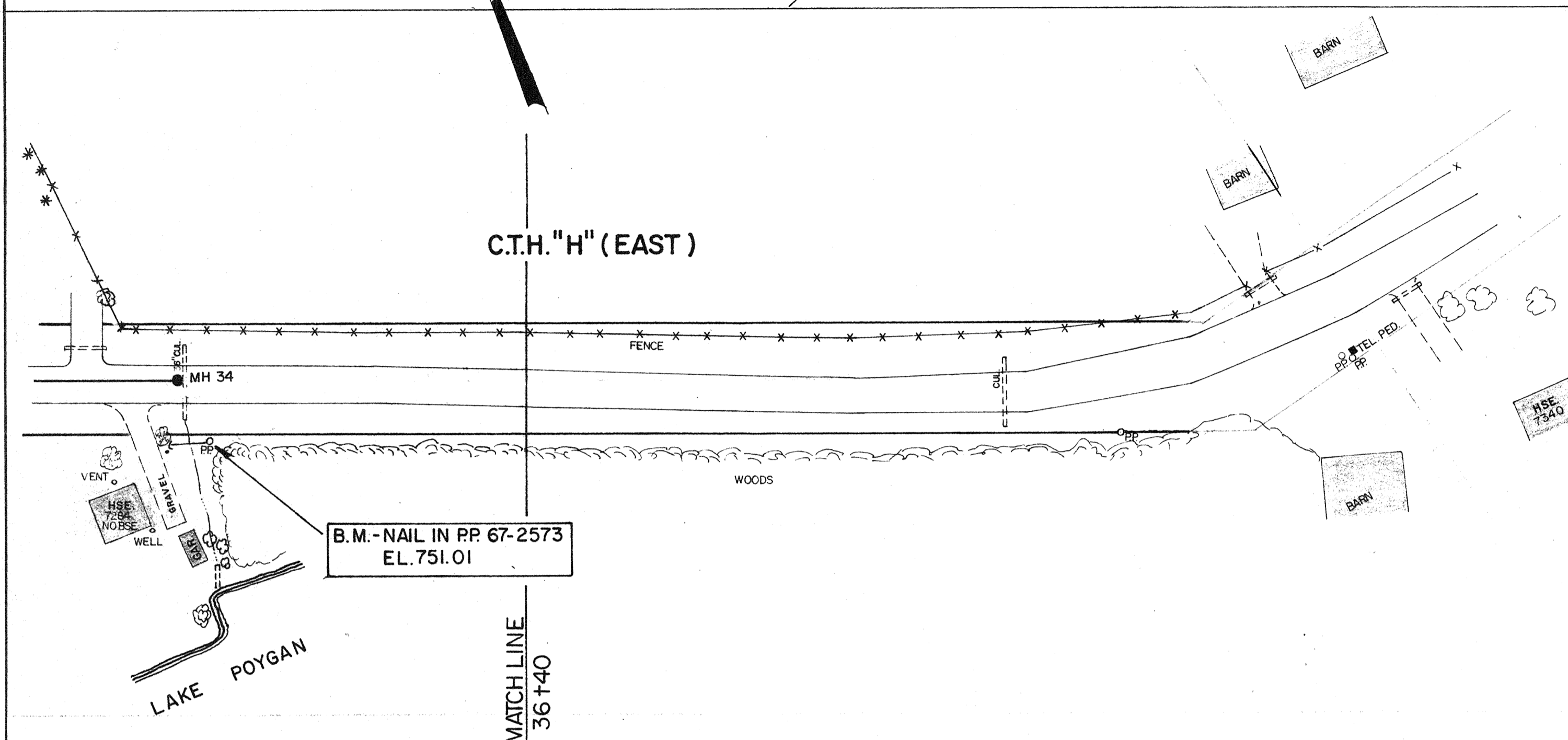
BECHER-HOPPE ENGINEERS, INC.

DRAWN BY	DJS
APPROVED BY	JWS, RJC
REVISIONS	11/14/86
DATE	10/86
SCALE	1"=60' HORZ. 1"=5' VERT.
FILE NUMBER	7448
SHEET NUMBER	16 of 33

NOT PART OF THIS PROJECT



EFFLUENT FLOW SAMPLING/METERING VAULT SITE DETAIL 1"=40'



NOTE: AT CONTRACTORS OPTION, FM MAY BE INSTALLED IN SAME TRENCH AS SEWER, A MINIMUM OF 4 FT. FROM SEWER & AND AT 5 FT. COVER TO TOP OF PIPE OR IN DITCH/PARKWAY AREA AT 746.00 TOP OF PIPE ELEVATION.

NOTE: 4" F.M. & 4" EFF. PRES. SEWER TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE. MAINTAIN POSITIVE GRADIENT IN NORTH DIRECTION.

100 YR. REGIONAL FLOOD ELEVATION = 750.40 USGS ELEV.

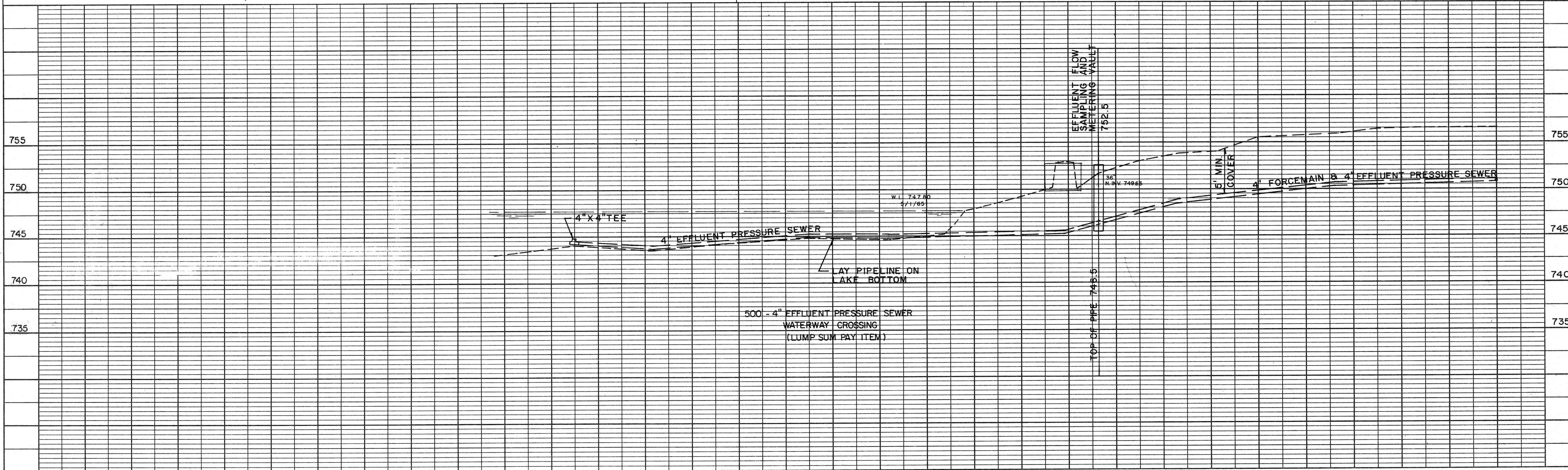
**PIPING ALTERNATE A**

PLAN

DATE	
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SURVEYED	
NOTED	
GRADES CHECKED	
ALIGNED	
RT. OF WAY CHECKED	
NO.	

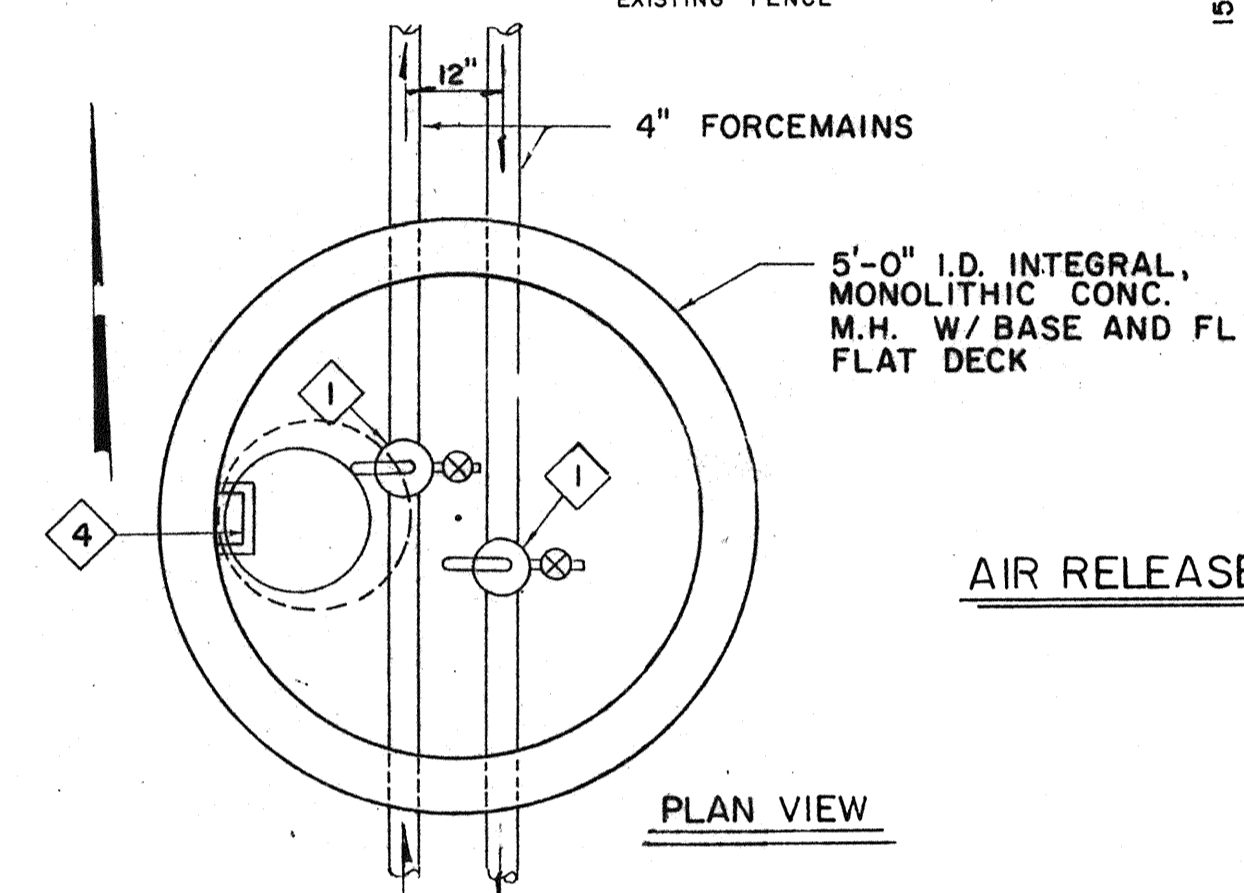
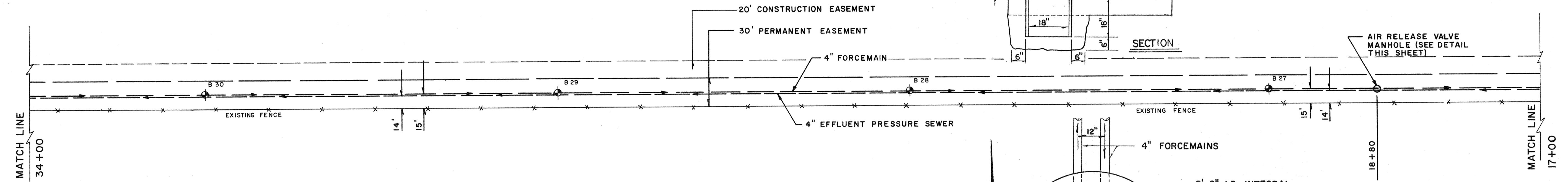
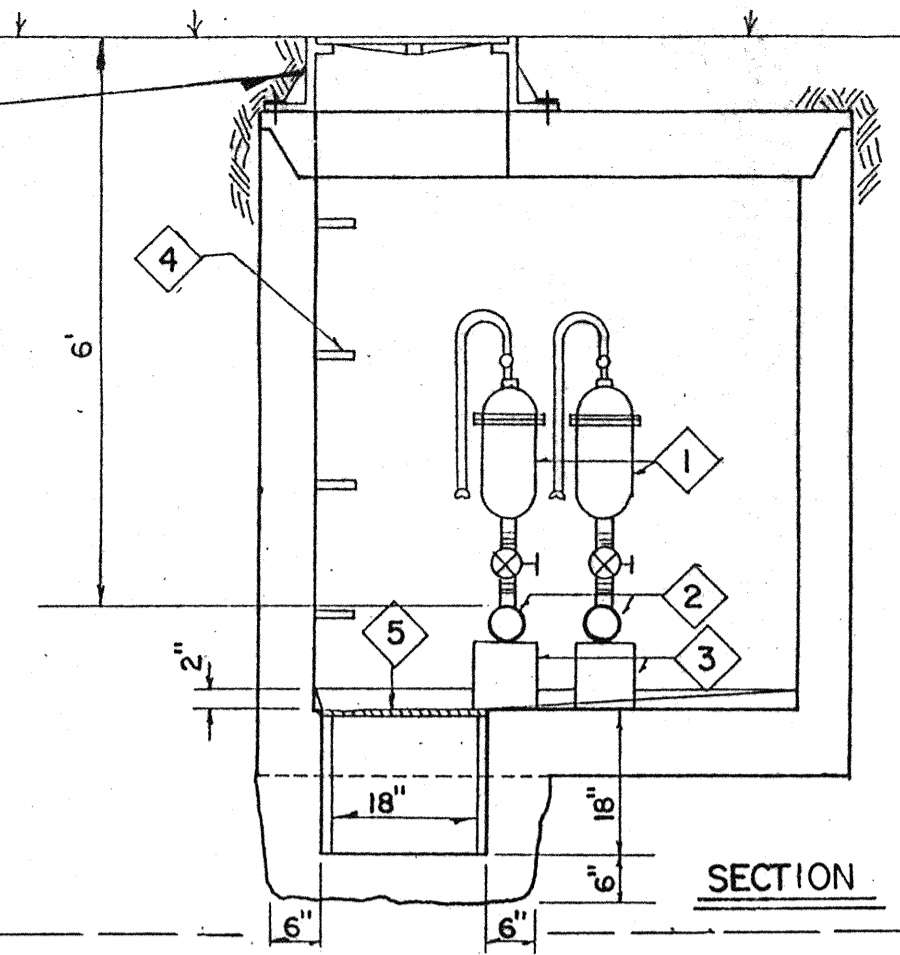
PROFILE

DATE	
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SURVEYED	
NOTED	
GRADES CHECKED	
B.M. & NOTED	
STRUCTURE NOTATIONS CHECKED	
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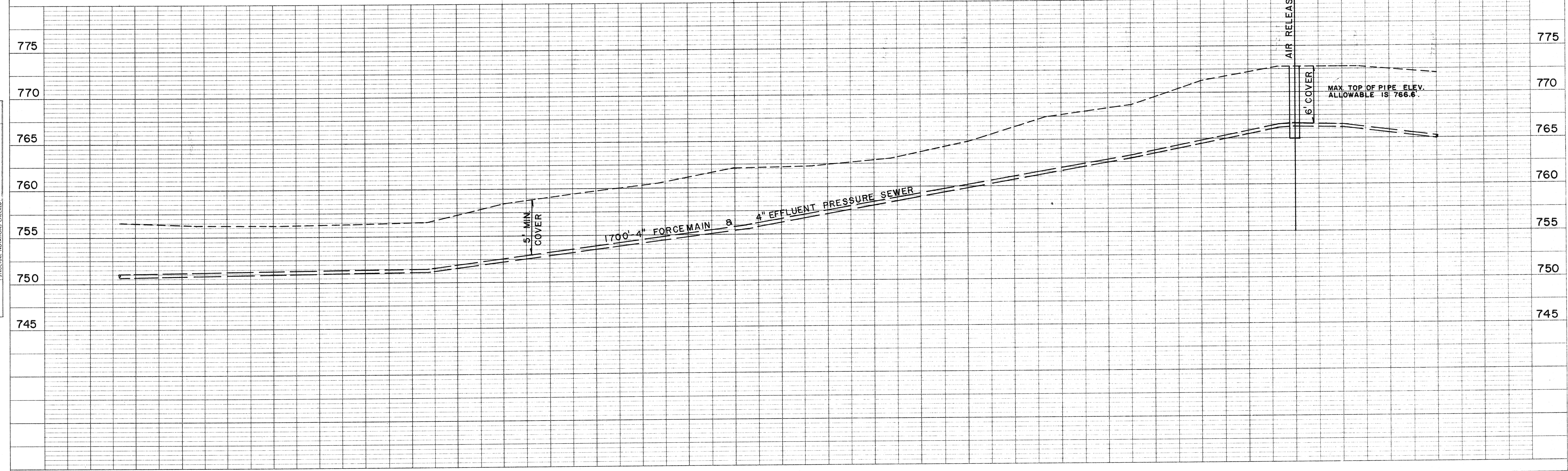
- 1 SEWAGE AIR RELEASE VALVE
- 2 4" x 2" TEE
- 3 8" x 8" x 12" CONC. BLOCK
- 4 MANHOLE STEPS @ 16" O/C
- 5 1" ALUM. GRATING - 20" DIA.

M.H. FRAME & COVER  
 NEENAH R-1667



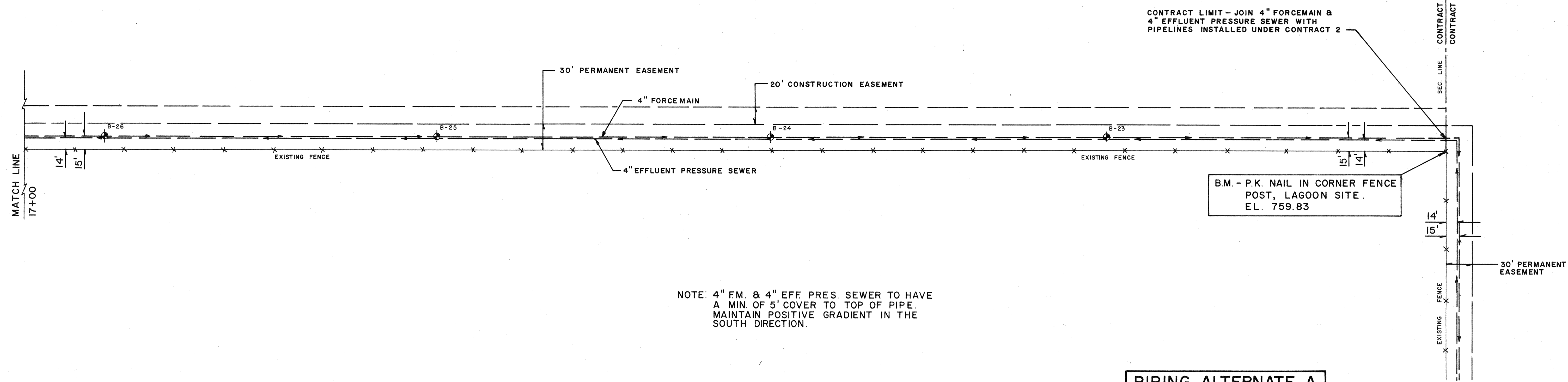
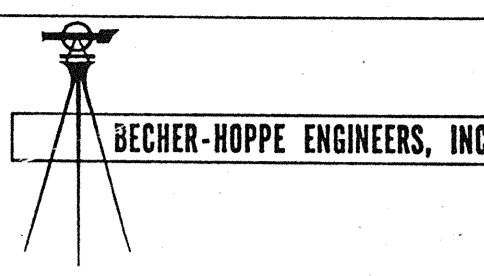
NOTE: 4" F.M. & 4" EFF. PRES. SEWER TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE. MAINTAIN POSITIVE GRADIENT TOWARDS THE AIR RELEASE VALVE MANHOLE.

PIPING ALTERNATE A



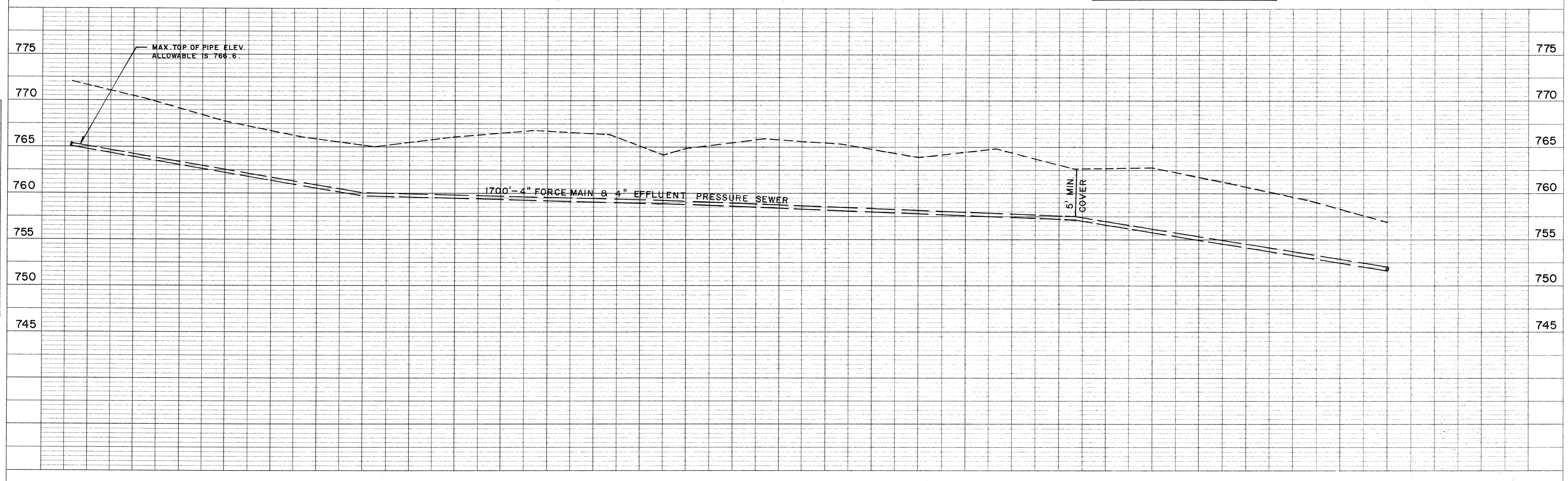
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 No. \_\_\_\_\_



NOTE: 4" FM. & 4" EFF PRES SEWER TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE. MAINTAIN POSITIVE GRADIENT IN THE SOUTH DIRECTION.

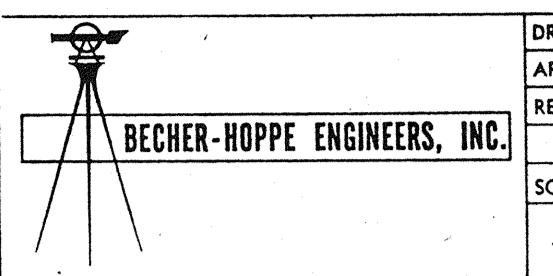
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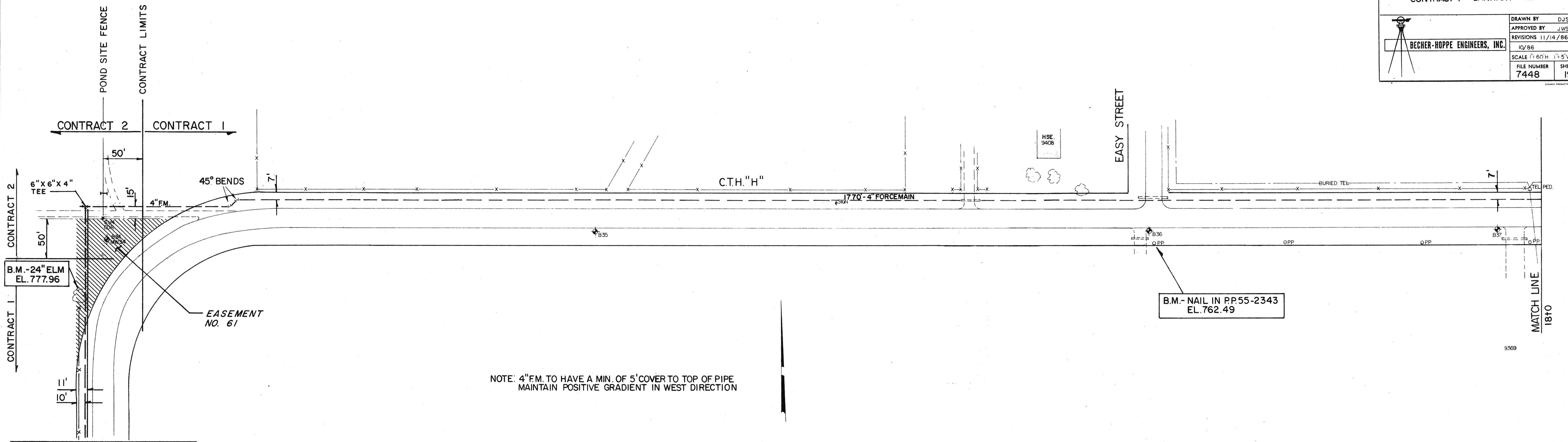
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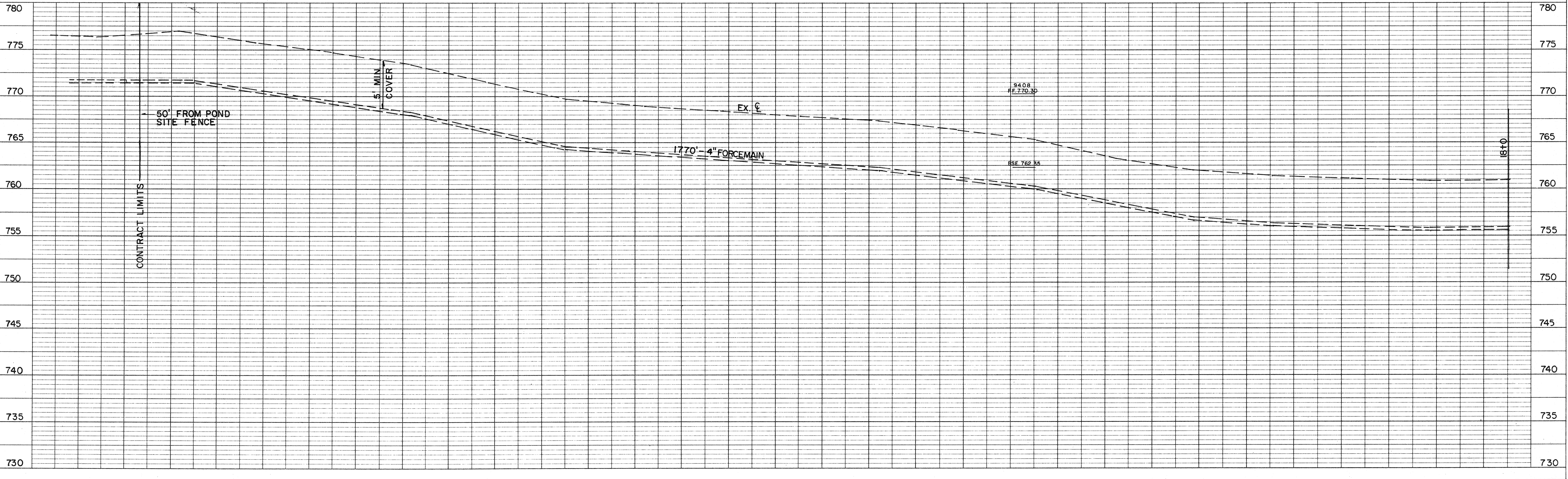
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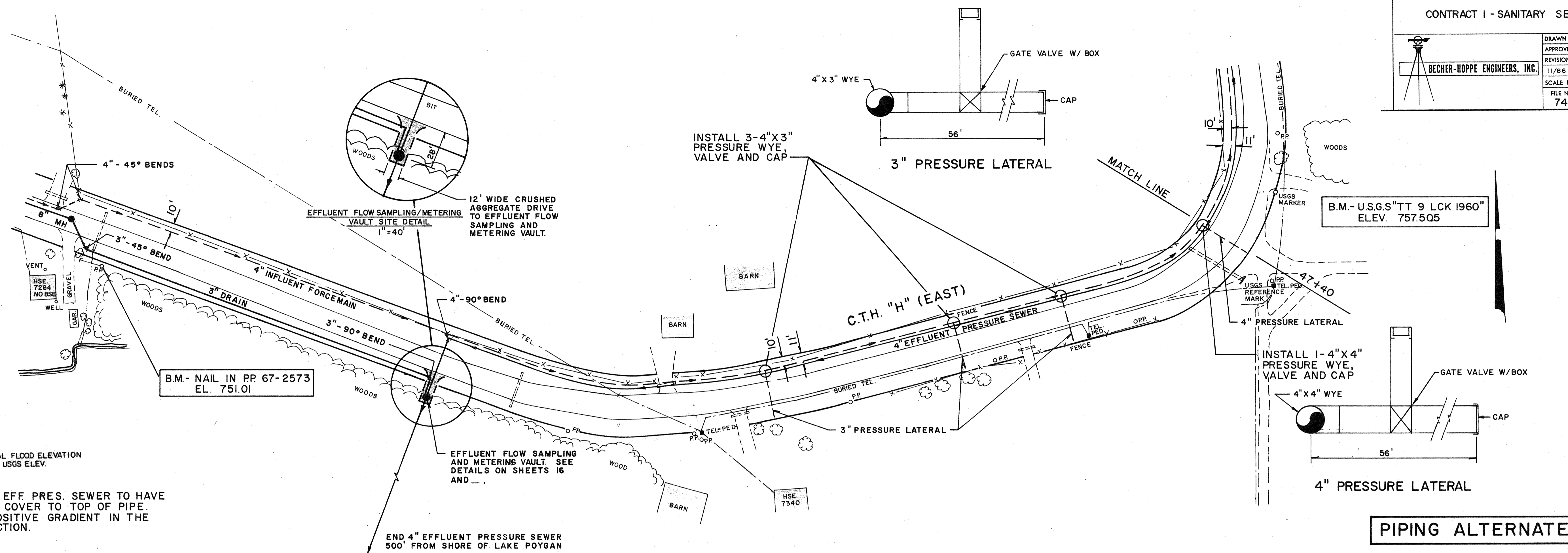
NOTE: 4" F.M. TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE  
 MAINTAIN POSITIVE GRADIENT IN WEST DIRECTION

**PIPING ALTERNATE B**



BECHER-HOPPE ENGINEERS, INC.

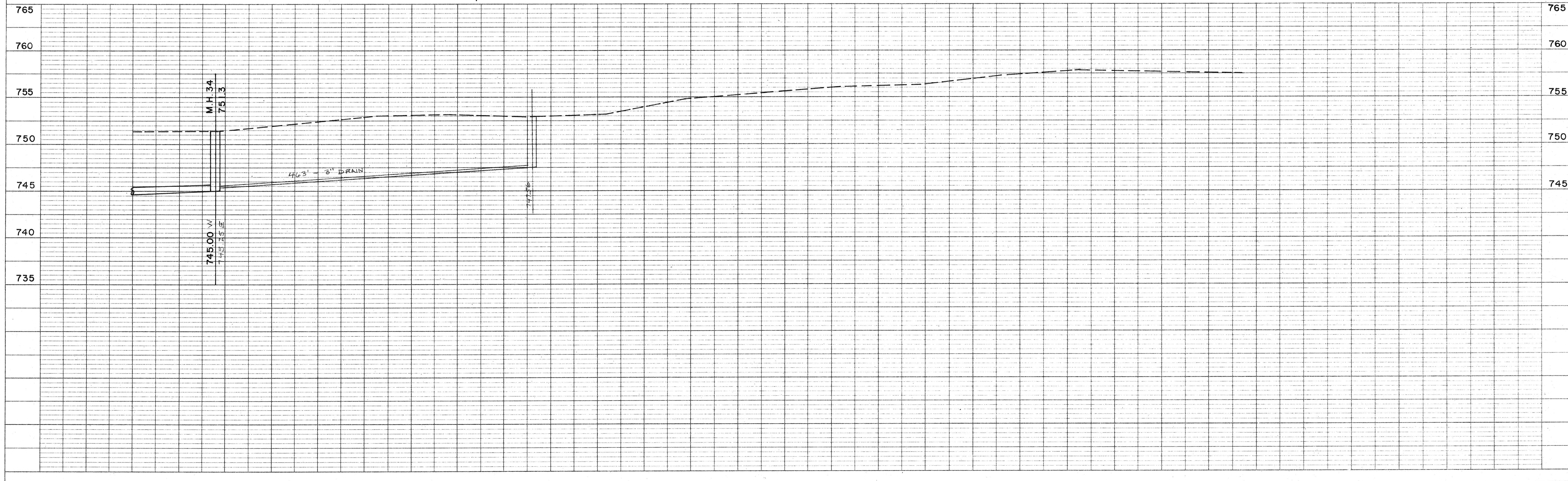
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APPROVED BY	JWS
REVISIONS	11/14/86
DATE	11/86
SCALE	1"=60' HORIZ. 1"=5' VERT.
FILE NUMBER	7475
SHEET NUMBER	OF



100 YR. REGIONAL FLOOD ELEVATION = 750.00 USGS ELEV.


NOTE: 4" FM. & 4" EFF. PRES. SEWER TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE. MAINTAIN POSITIVE GRADIENT IN THE NORTH DIRECTION.

**PIPING ALTERNATE B**

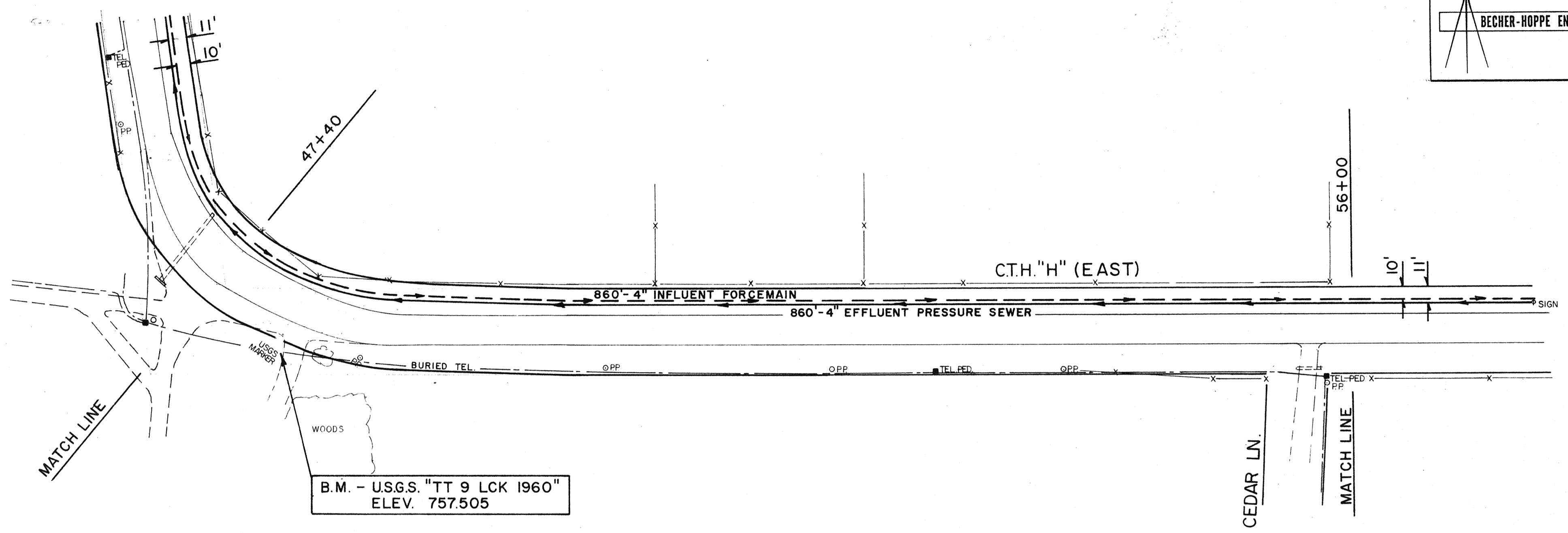


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NOTED BY  
NOTE BOOK No.  
DATE

**PROFILE**  
SURVEYED BY  
NOTED BY  
NOTE BOOK No.  
DATE

 <p>BECHER-HOPPE ENGINEERS, INC.</p>	DRAWN BY	DJS/RJC
	APPROVED BY	JWS
	REVISIONS	11/14/86
DATE	11/86	
SCALE	1" = 60' HORIZ. 1" = 5' VERT.	
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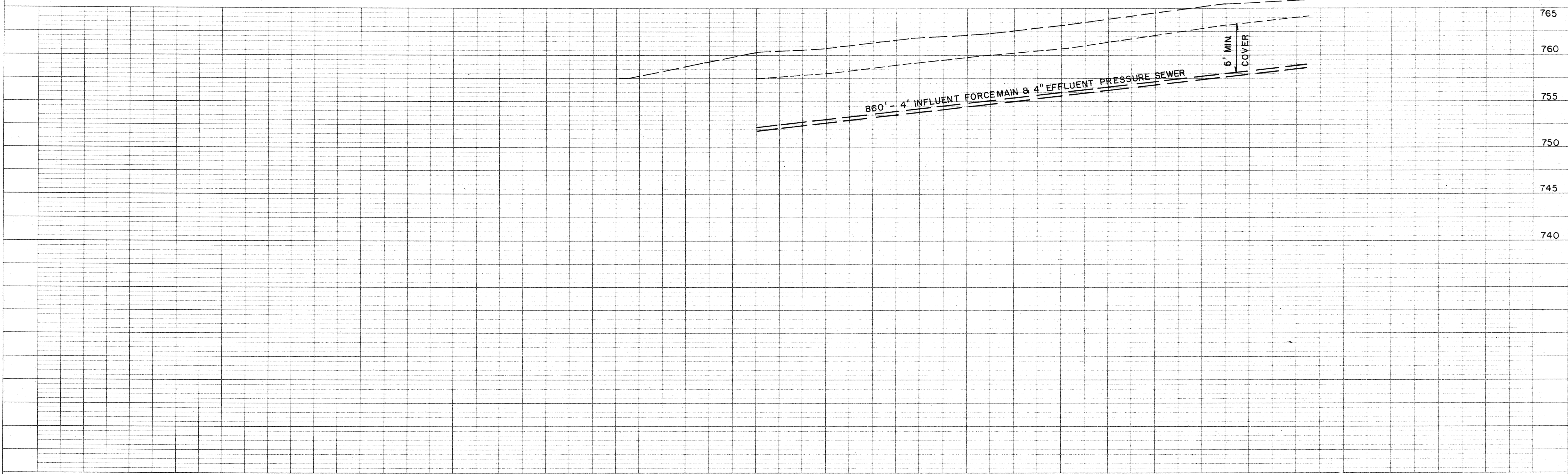
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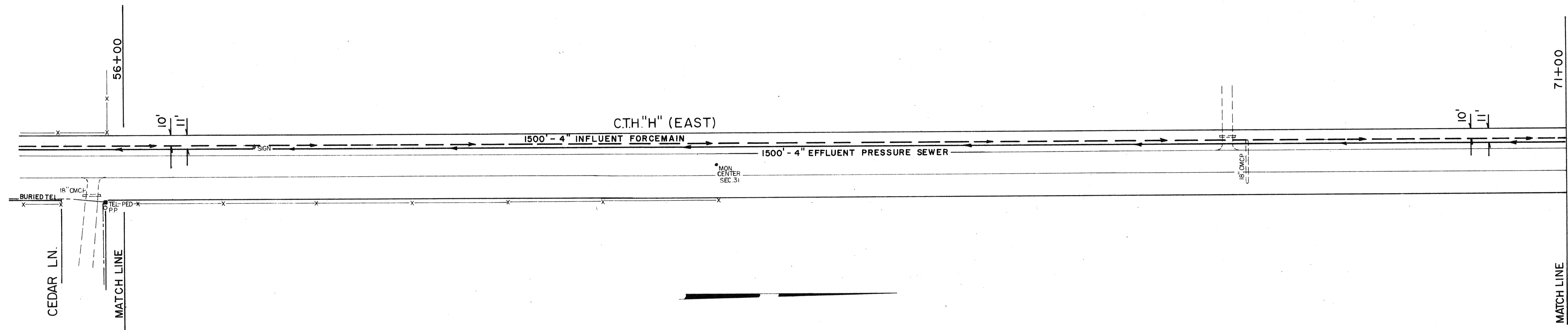
NOTE: 4" FM. & 4" EFF. PRES. SEWER TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE. MAINTAIN POSITIVE GRADIENT IN THE NORTH DIRECTION.

**PIPING ALTERNATE B**

**PROFILE**  
 SURVEYED BY DATE  
 NOTE BOOK NO. GRADES CHECKED BY  
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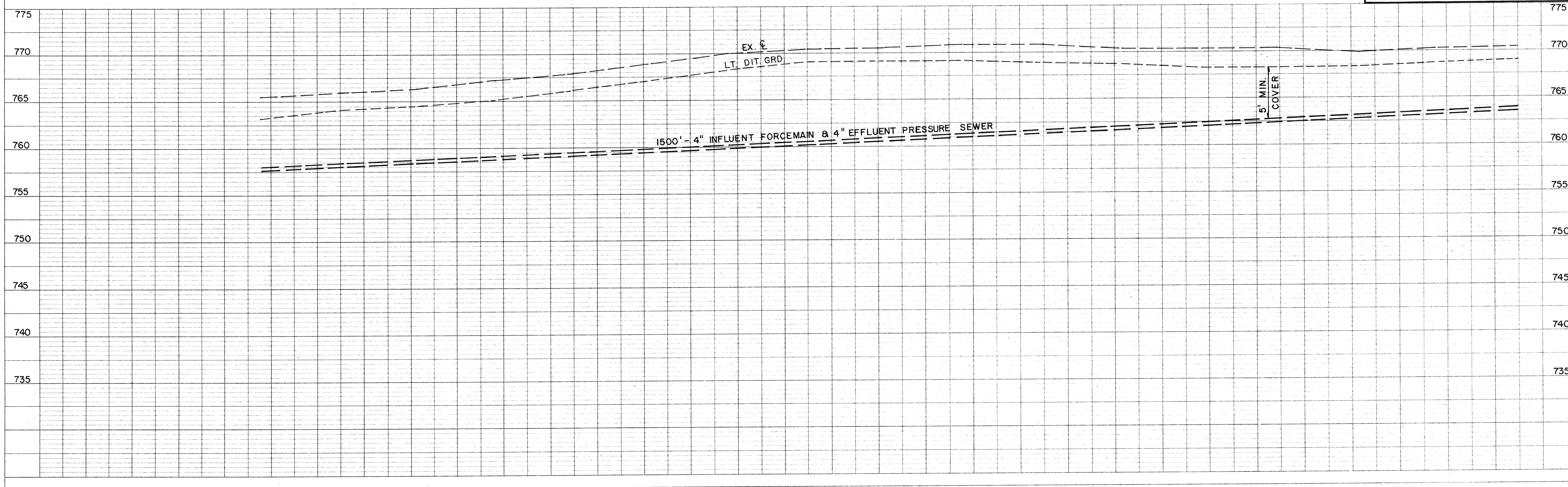


	DRAWN BY	DJS/RJC
	APPROVED BY	JWS
	REVISIONS	11/14/86
	DATE	11/86
BECHER-HOPPE ENGINEERS, INC. SCHOFIELD, WISCONSIN		SCALE 1" = 60' HORZ. 1" = 5' VERT. FILE NUMBER 7475 SHEET NUMBER of



NOTE: 4" FM. & 4" EFF. PRES. SEWER TO HAVE  
 A MIN. OF 5' COVER TO TOP OF PIPE.  
 MAINTAIN POSITIVE GRADIENT IN THE  
 NORTH DIRECTION.

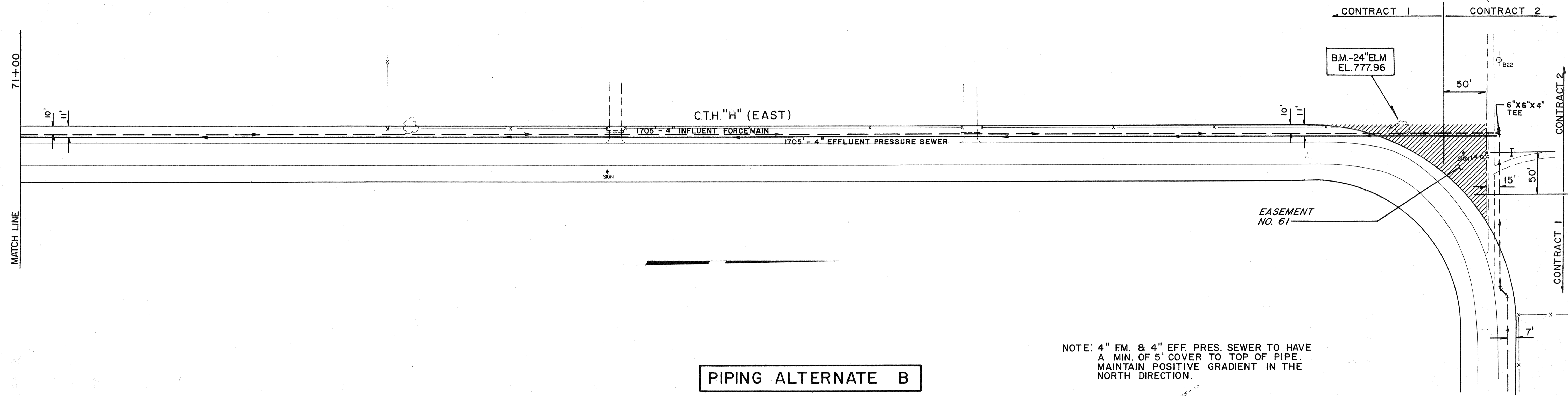
**PIPING ALTERNATE B**



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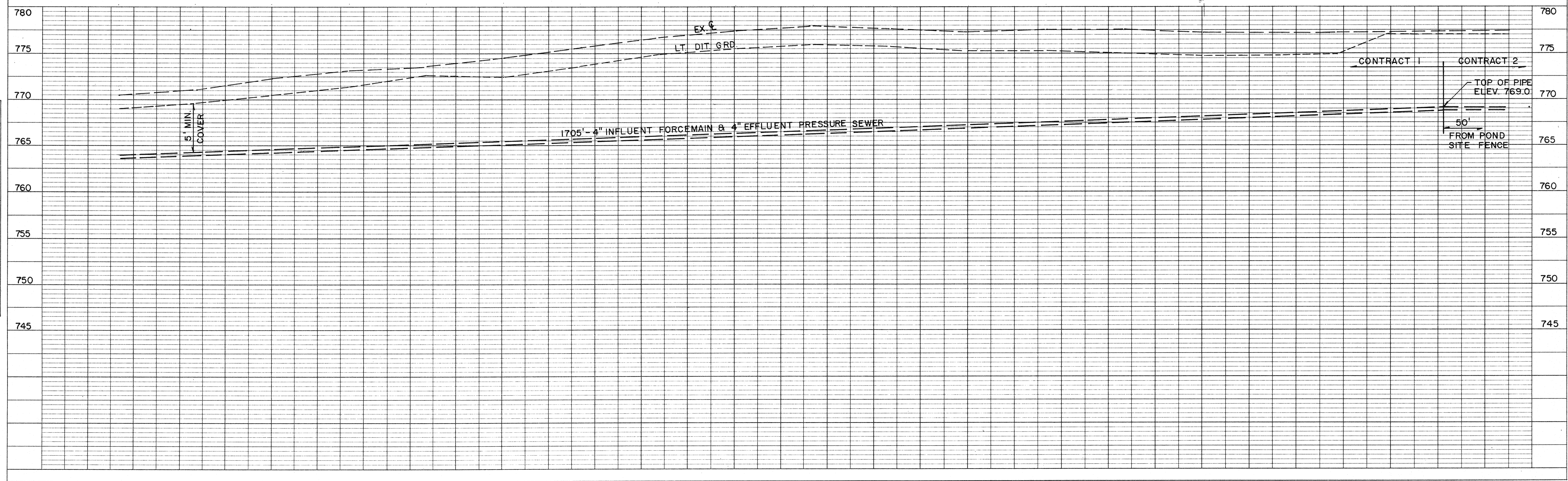
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 STRUCTURE NOTATIONS CHECKED: \_\_\_\_\_

	DRAWN BY	DJS/RJC
	APPROVED BY	JWS
	REVISIONS	11/14/86
	DATE	11/86
SCALE 1" = 60' HORIZ. 1" = 5' VERT.		FILE NUMBER
		7475
SCHOFIELD, WISCONSIN		SHEET NUMBER
		OF




**PIPING ALTERNATE B**

NOTE: 4" FM. & 4" EFF. PRES. SEWER TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE. MAINTAIN POSITIVE GRADIENT IN THE NORTH DIRECTION.



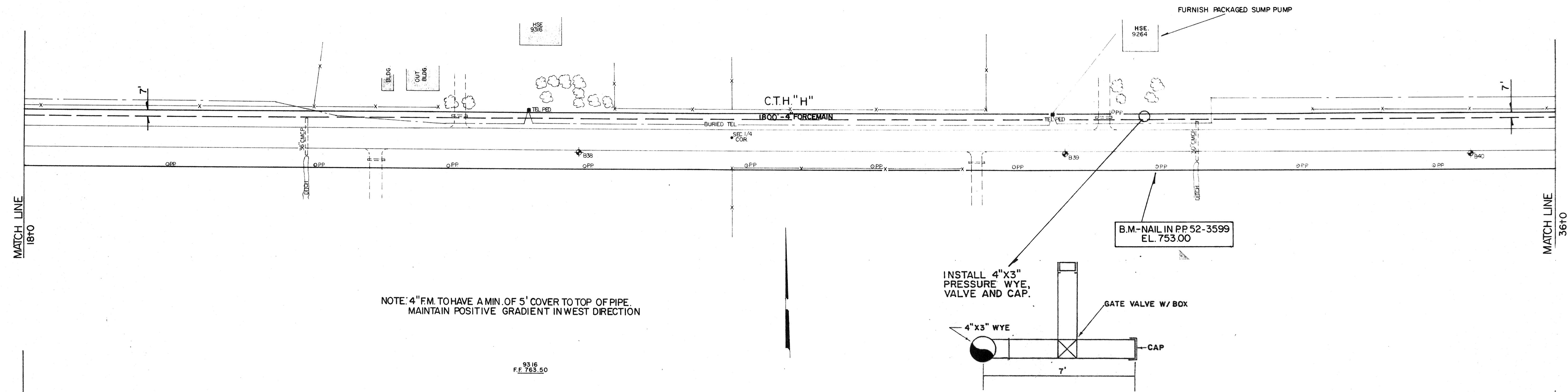
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BY...  
DATE...

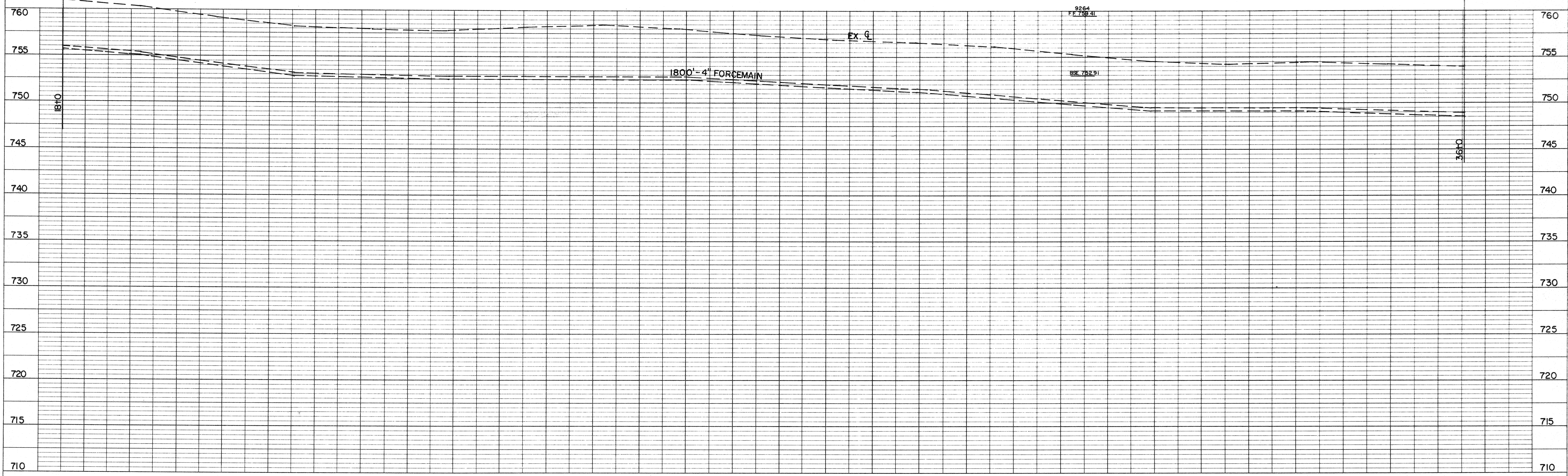
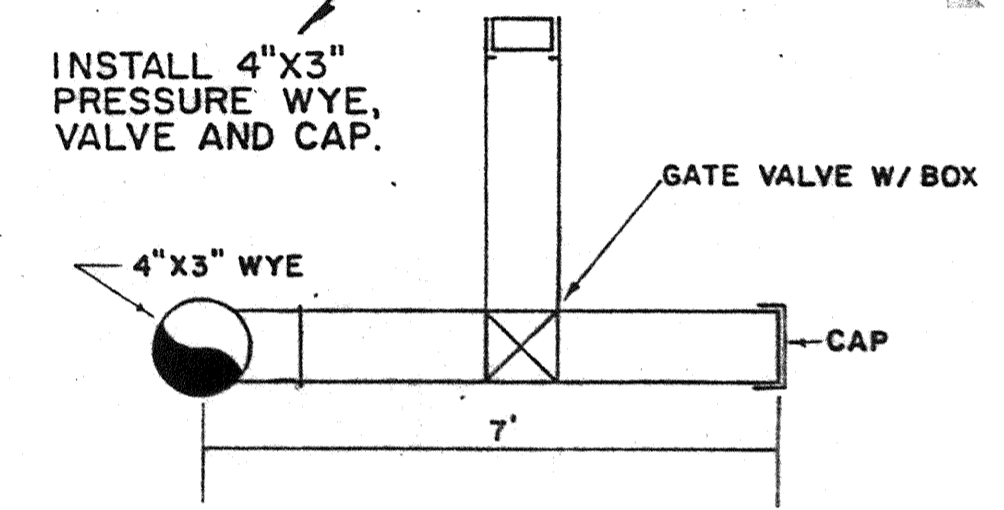
 BECHER-HOPPE ENGINEERS, INC.	DRAWN BY	DJS
	APPROVED BY	JWS
REVISIONS		
10/86		
SCALE 1"=60'H. 1"=5' V.		
FILE NUMBER	7448	SHEET NUMBER
		20 OF 33

PLAN  
 SUPPLIED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NOTED BY: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 RT. OF WAY CHECKED BY: \_\_\_\_\_  
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PROFILE  
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 NOTED BY: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 GRADES CHECKED BY: \_\_\_\_\_  
 B. M. & NOTES BY: \_\_\_\_\_  
 STRUCTURE NOTATIONS CHECKED BY: \_\_\_\_\_  
 No. \_\_\_\_\_



NOTE: 4" FM TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE.  
 MAINTAIN POSITIVE GRADIENT IN WEST DIRECTION

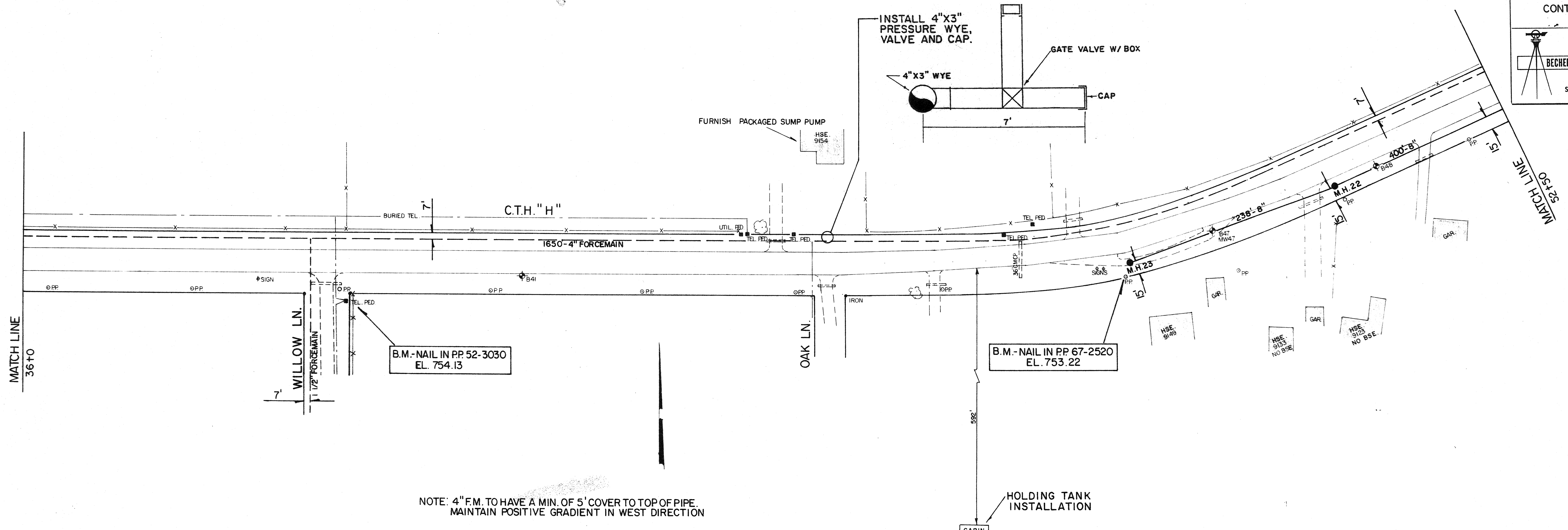


DRAWN BY	DJS
APPROVED BY	JWS
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SHEET NUMBER	21 OF 33

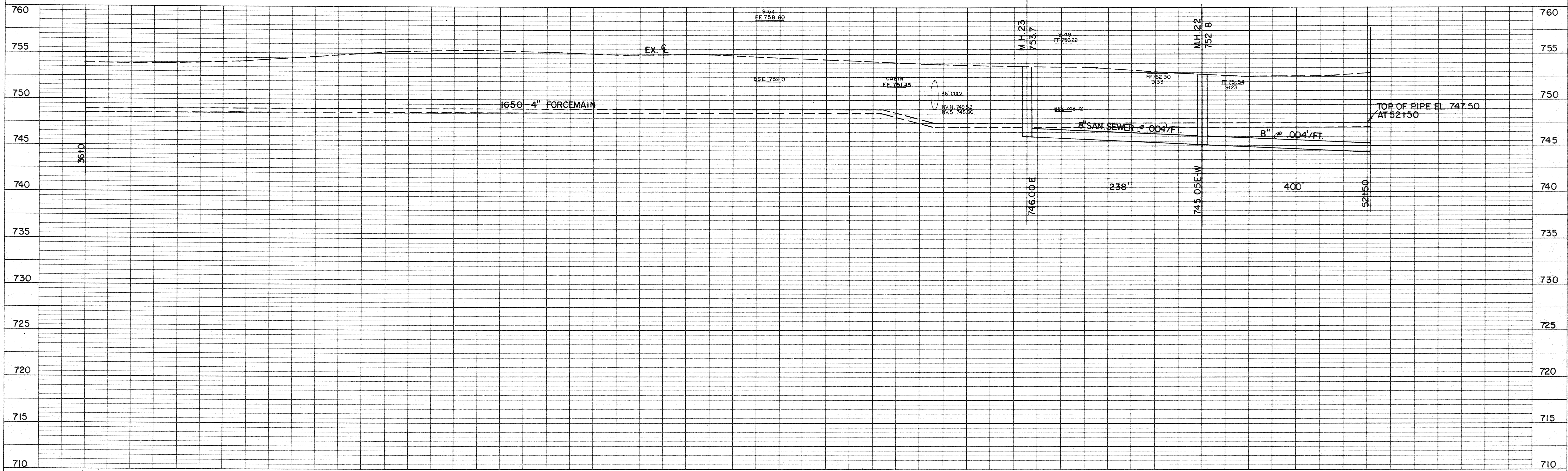
BECHER-HOPPE ENGINEERS, INC.  
 SCHOFIELD, WISCONSIN

BY	DATE
PLAN	
SUPERVISED NOTED CHECKED PT. OF WAY CHECKED No.	

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SUPERVISED CHECKED B.M.'S NOTED STRUCTURE NOTATIONS CHECKED No.	

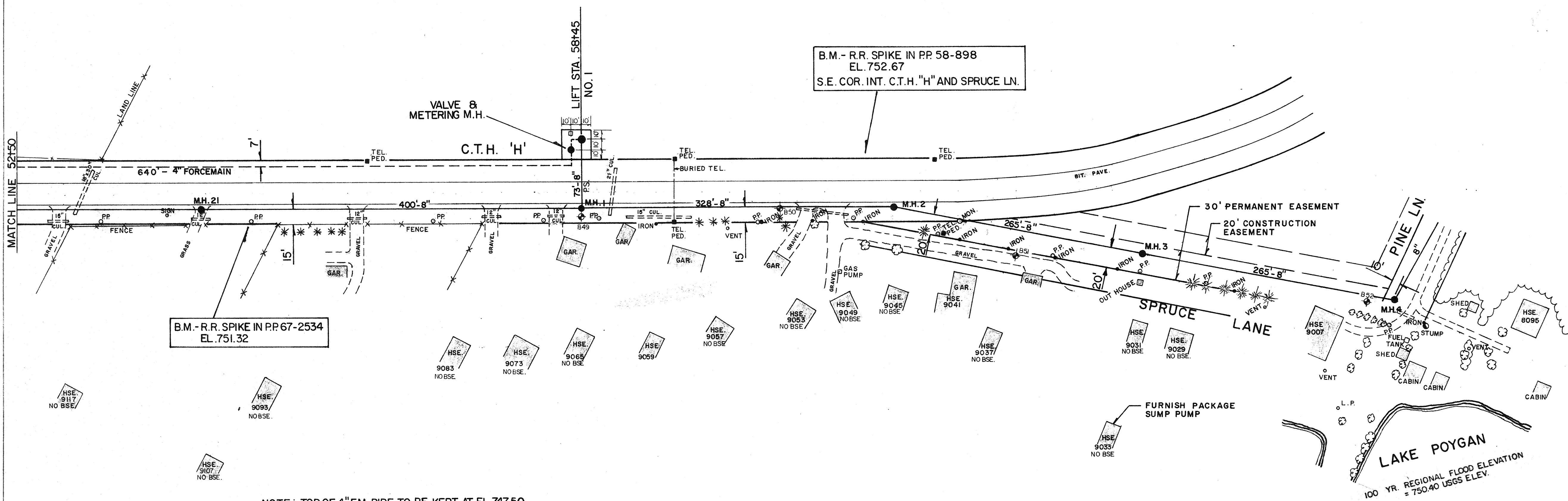


NOTE: 4" F.M. TO HAVE A MIN. OF 5' COVER TO TOP OF PIPE.  
 MAINTAIN POSITIVE GRADIENT IN WEST DIRECTION

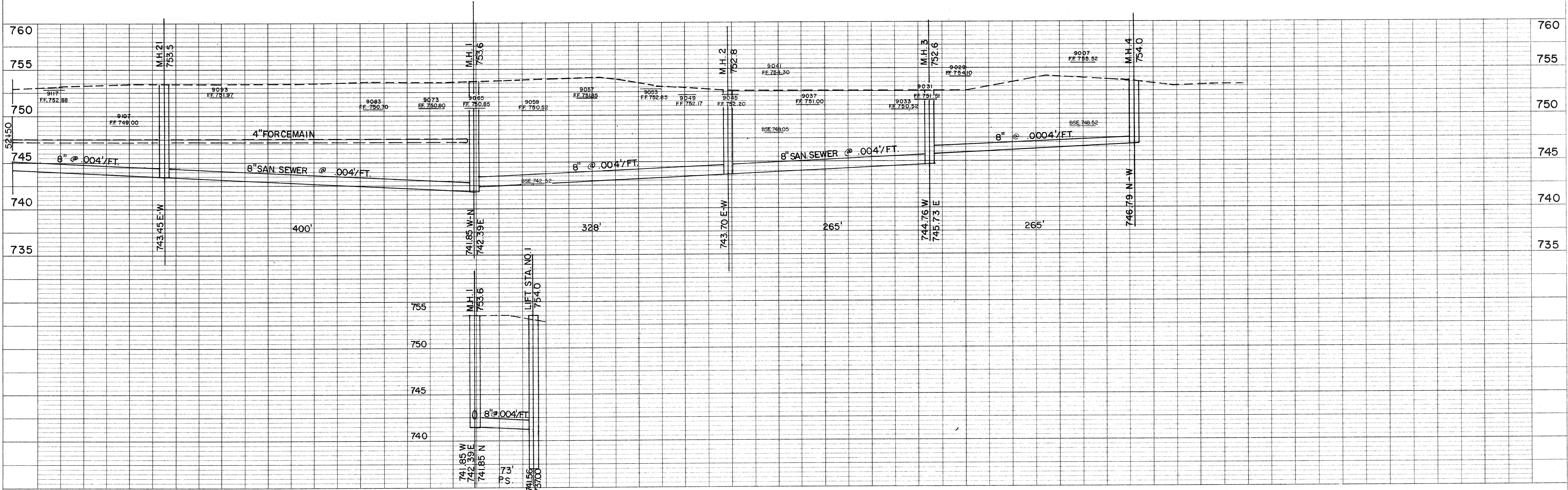


BECHER-HOPPE ENGINEERS, INC.

DRAWN BY	RJC
APPROVED BY	JWS
REVISIONS	
SCALE	1" = 60' HORIZ. 1" = 5' VERT.
FILE NUMBER	7448
SHEET NUMBER	23 of 33

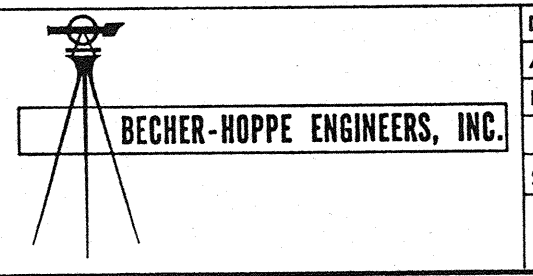


NOTE: TOP OF 4" F.M. PIPE TO BE KEPT AT EL. 747.50 FROM STA. 52+50 TO VALVE M.H.





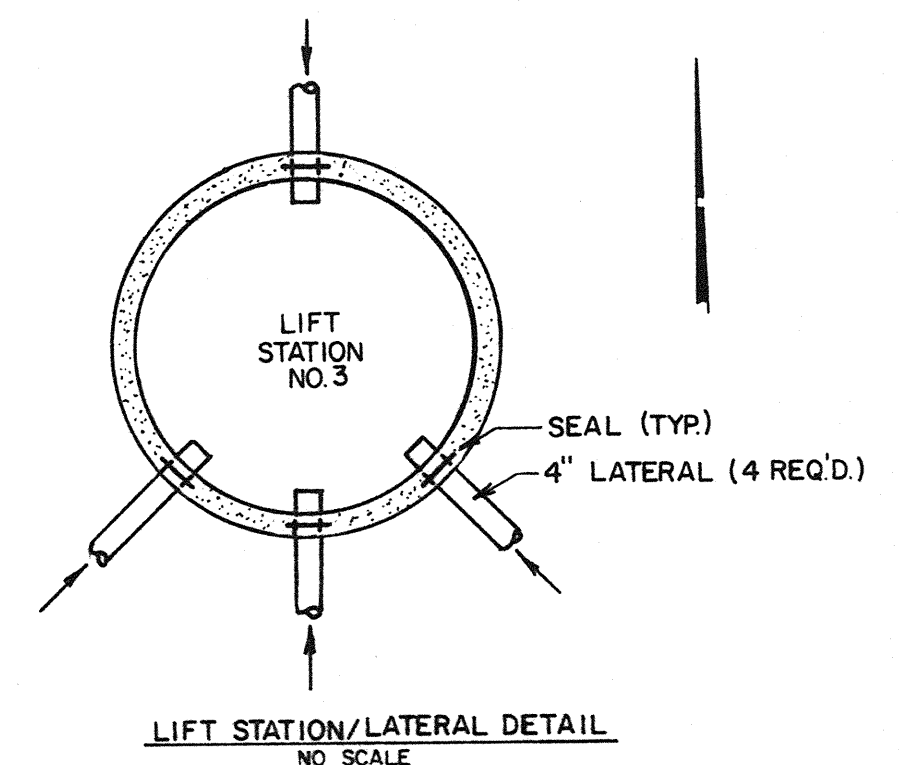
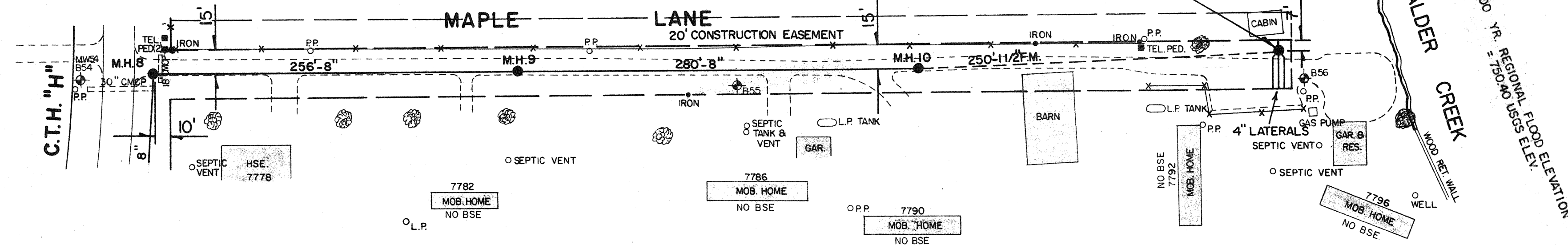
DRAWN BY	DH
APPROVED BY	JWS
REVISIONS	
10/86	
SCALE	1"=60' HORIZ. 1"=5' VERT.
FILE NUMBER	7448
SHEET NUMBER	24 of 33



NOTE: 1 1/2' FM TO HAVE 5' MIN. COVER TO TOP OF PIPE.

BM - NAIL IN P.P. SOUTH SIDE MAPLE LA. AT RES. 7796 EL. 753.41

LIFT STATION NO. 3 (SEE DETAIL)



PLAN

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

NO. \_\_\_\_\_

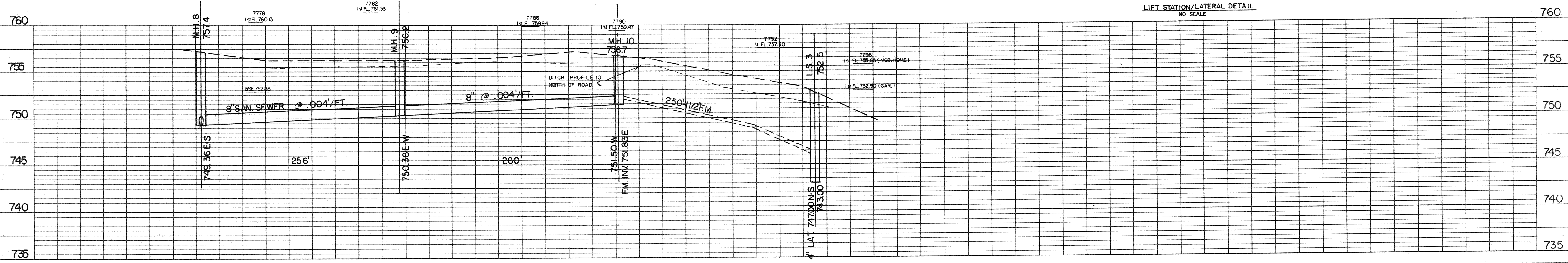
REVISIONS:

1. SURVEYED

2. PLOTTED

3. GRADES CHECKED

4. STRUCTURE NOTATIONS CHECKED



PROFILE

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

NO. \_\_\_\_\_

REVISIONS:

1. SURVEYED

2. PLOTTED

3. GRADES CHECKED

4. STRUCTURE NOTATIONS CHECKED

