

MANATEE COUNTY, FLORIDA

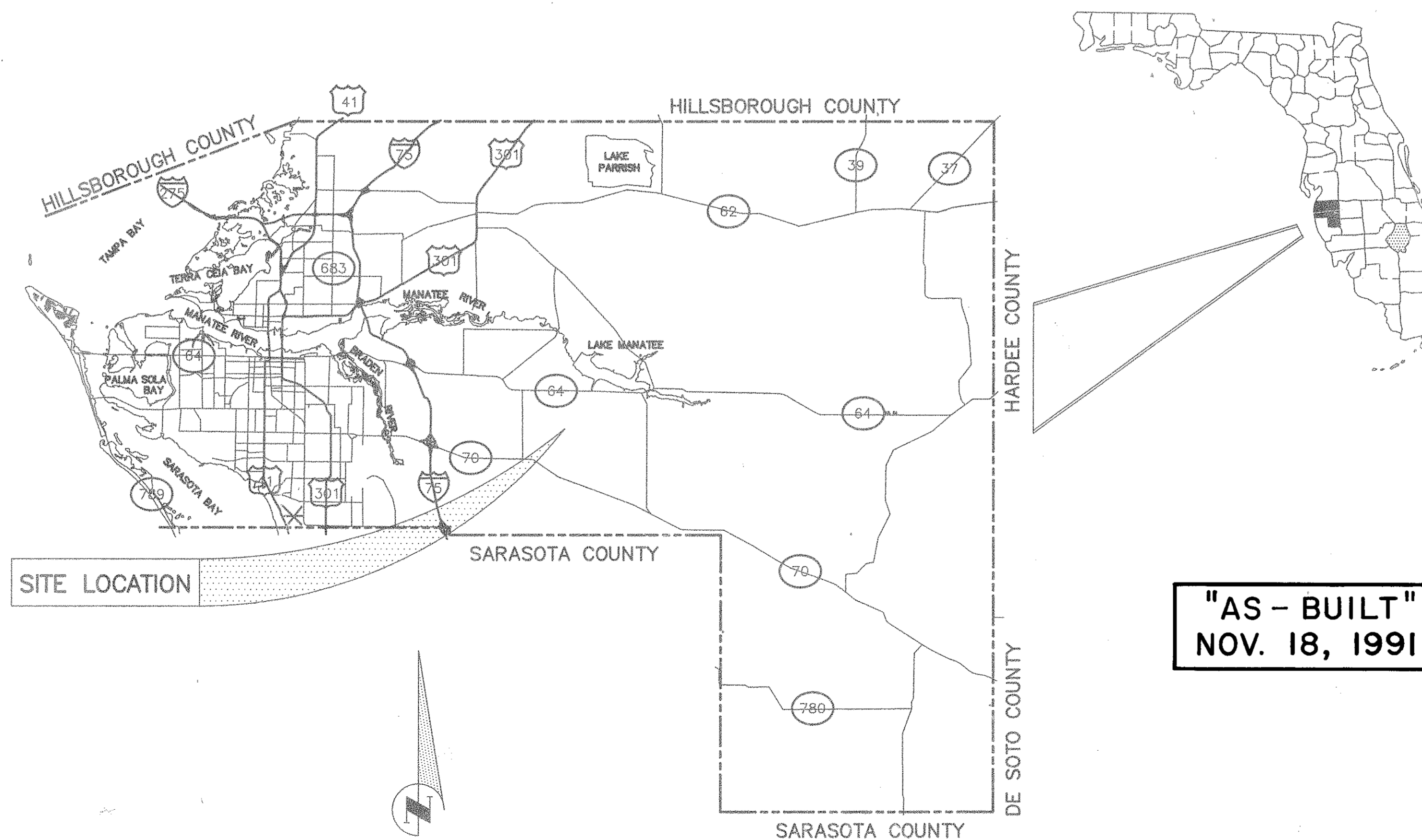
LENA ROAD LANDFILL IMPROVEMENTS

STAGE 2-LEACHATE COLLECTION SYSTEM, PUMP STATION AND FORCE MAIN

PROJECT NO. 485-0190-534

JANUARY 1990

REVISED OCT. 1990



"AS - BUILT"
NOV. 18, 1991

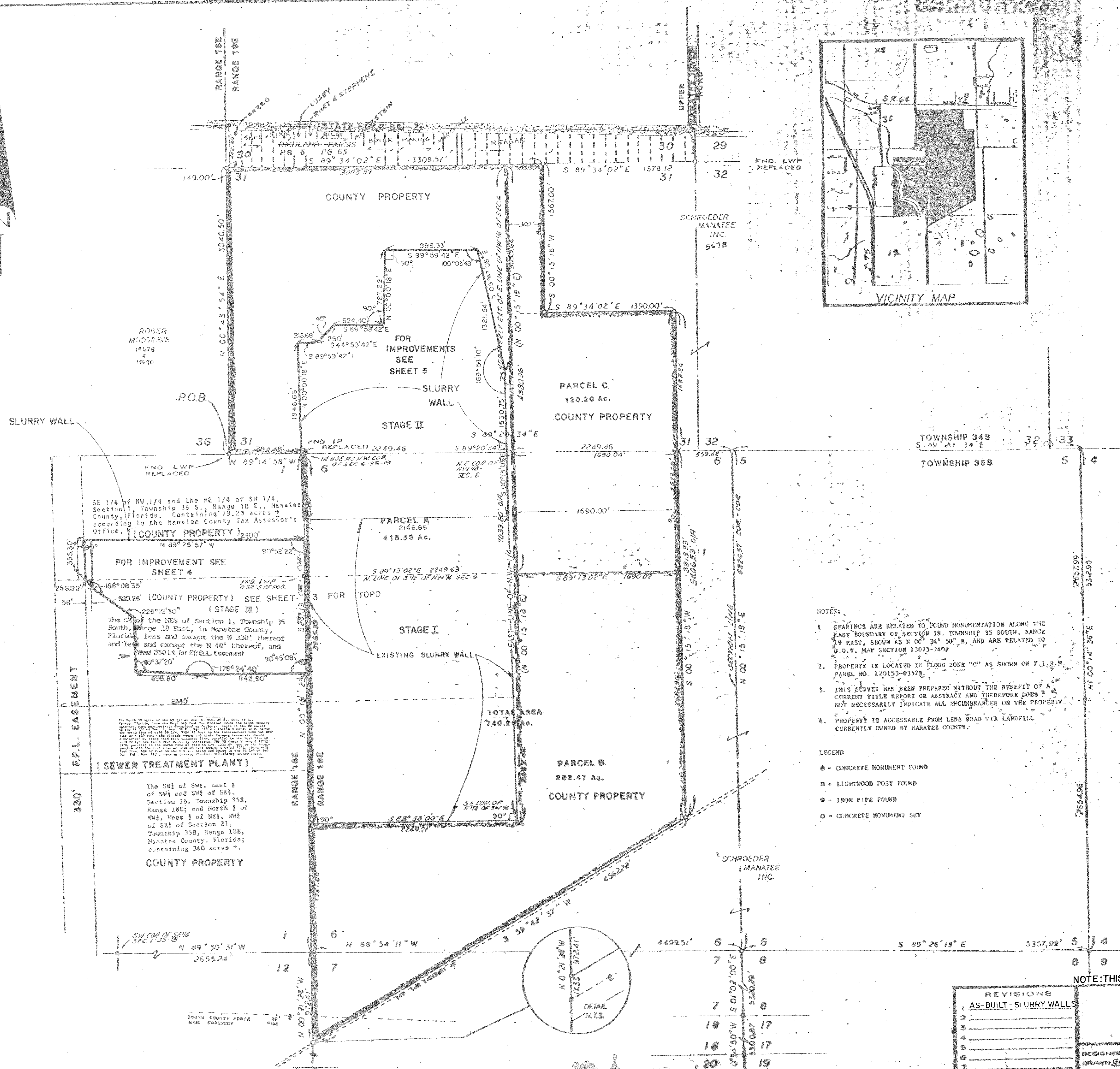
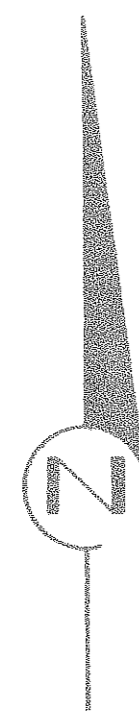
SHT.	DESCRIPTION
1	TITLE SHEET
2	BOUNDARY SURVEY
3	EXISTING TOPOGRAPHY (OVERALL PLAN)
4	PROPOSED LEACHATE COLLECTION SYSTEM PUMP STATION
5	DETAILS OF STANDARD PRE-CAST MANHOLE, LEACHATE TRENCH AND WARNING SIGNAL
6-7A	PUMP STATION DETAILS
8-12	PROFILES OF PIPES

APPROVED BY:

THOMAS J. ZINK, P.E. NO. 36550

DATE

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T-108



PARCEL "A" (FORMERLY PARCEL A AND B) DESCRIPTION: AS FURNISHED

THE SOUTH 1/2 OF THE N.W. 1/4 AND THE NORTH 1/2 OF THE S.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST.

ALSO:

THE NORTH 1/2 OF THE N.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST, AND ALL OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST; LESS THAT PART OF SECTION 31, LYING EAST OF A LINE WHICH IS THE NORTHERLY EXTENSION OF THE EAST LINE OF THE N.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST.

PARCEL "B" DESCRIPTION: AS FURNISHED

THAT PART OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST, LYING NORTHERLY OF THE NORTHERLY LINE OF THAT CERTAIN GAS LINE EASEMENT RUNNING DIAGONALLY THROUGH THE PROPERTY; LESS THE SOUTH 1/2 OF THE N.W. 1/4 AND THE NORTH 1/2 OF THE S.W. 1/4 OF SAID SECTION 6; ALSO LESS THAT PART OF SECTION 6, LYING NORTHERLY OF A LINE WHICH IS THE EASTERLY EXTENSION OF THE NORTH LINE OF THE SOUTH 1/2 OF THE N.W. 1/4 OF SAID SECTION 6; ALSO LESS THAT PART OF SECTION 6 LYING EASTERLY OF A LINE WHICH IS PARALLEL WITH AND 1690 FEET EASTERLY OF THE EAST LINE OF THE N.W. 1/4 OF SAID SECTION 6 AND ANY NORTHERLY OR SOUTHERLY EXTENSION THEREOF.

ALSO:

THAT PART OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 19 EAST LYING NORTHERLY OF THE NORTHERLY LINE OF THAT CERTAIN GAS LINE EASEMENT RUNNING DIAGONALLY THROUGH THE PROPERTY.

PARCEL "C" DESCRIPTION: AS FURNISHED

THAT PART OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST, MORE FULLY DESCRIBED AS BEING BOUNDED ON THE NORTH BY THE NORTH LINE OF SAID SECTION 6, AND BOUNDED ON THE WEST BY THE EAST LINE OF THE N.W. 1/4 OF SAID SECTION 6, AND BOUNDED ON THE SOUTH BY THE EASTERLY EXTENSION OF THE NORTH LINE OF THE SOUTH 1/2 OF THE N.W. 1/4 OF SAID SECTION 6, AND BOUNDED ON THE EAST BY A LINE WHICH LIES 1690 FEET EASTERLY OF AND PARALLEL WITH THE EAST LINE OF THE N.W. 1/4 OF SAID SECTION 6.

ALSO:

THAT PART OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST, MORE FULLY DESCRIBED AS BEING BOUNDED ON THE NORTH BY THE NORTH LINE OF SAID SECTION 31, AND BOUNDED ON THE WEST BY A LINE WHICH IS THE NORTHERLY EXTENSION OF THE EAST LINE OF THE N.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST, AND BOUNDED ON THE SOUTH BY A LINE WHICH LIES 1567 FEET SOUTHERLY OF AND PARALLEL WITH THE NORTH LINE OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST, AND BOUNDED ON THE EAST BY A LINE WHICH LIES 300 FEET EASTERLY OF AND PARALLEL WITH THE NORTHERLY EXTENSION OF THE EAST LINE OF THE N.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST.

ALSO:

THAT PART OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST, MORE FULLY DESCRIBED AS BEING BOUNDED ON THE NORTH BY THE NORTH LINE OF SAID SECTION 31, AND BOUNDED ON THE WEST BY A LINE WHICH IS THE NORTHERLY EXTENSION OF THE EAST LINE OF THE N.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST, AND BOUNDED ON THE SOUTH BY THE SOUTH LINE OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST, (ALSO BEING THE NORTH LINE OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST) AND BOUNDED ON THE EAST BY A LINE WHICH LIES 1690 FEET EAST OF AND PARALLEL WITH THE NORTHERLY EXTENSION OF THE EAST LINE OF THE N.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST.

ALSO:

THAT PART OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST, MORE FULLY DESCRIBED AS BEING BOUNDED ON THE NORTH BY A LINE WHICH LIES 1567 FEET SOUTHERLY OF AND PARALLEL WITH THE NORTH LINE OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST AND BOUNDED ON THE WEST BY THE NORTHERLY EXTENSION OF THE EAST LINE OF THE N.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST, AND BOUNDED ON THE SOUTH BY THE SOUTH LINE OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST, (ALSO BEING THE NORTH LINE OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST) AND BOUNDED ON THE EAST BY A LINE WHICH LIES 1690 FEET EAST OF AND PARALLEL WITH THE NORTHERLY EXTENSION OF THE EAST LINE OF THE N.W. 1/4 OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST.

ALL OF THE ABOVE BEING AND LYING IN MANATEE COUNTY, FLORIDA.

DESCRIPTION:

PARCELS A, B AND C, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE S.W. CORNER OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST; THENCE N 00° 43' 54" E, ALONG WEST BOUNDARY OF SAID SECTION 31, A DISTANCE OF 3040.50 FEET TO THE N.W. CORNER OF SAID SECTION 31; THENCE S 89° 34' 02" E, ALONG NORTH BOUNDARY OF SAID SECTION 31, A DISTANCE OF 3308.57 FEET; THENCE S 00° 15' 18" E, A DISTANCE OF 1567.00 FEET; THENCE S 89° 34' 02" E, A DISTANCE OF 1390.00 FEET; THENCE S 00° 15' 18" W, DISTANCE OF 5406.59 FEET TO THE NORTH RIGHT OF WAY LINE OF A GAS LINE EASEMENT; THENCE S 59° 42' 37" W, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 4562.22 FEET TO THE WEST BOUNDARY OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 19 EAST; THENCE N 00° 21' 28" W, ALONG SAID WEST BOUNDARY LINE OF SAID SECTION 7, TO THE S.W. CORNER OF SECTION 6, TOWNSHIP 35 SOUTH, RANGE 19 EAST; THENCE N 00° 15' 23" E, ALONG WEST BOUNDARY OF SAID SECTION 6, A DISTANCE OF 5287.19 FEET TO THE N.W. CORNER OF SAID SECTION 6; A DISTANCE OF SOUTH BOUNDARY OF SECTION 31, TOWNSHIP 34 SOUTH, RANGE 19 EAST, A DISTANCE OF 784.48 FEET TO THE POINT OF BEGINNING, LYING AND BEING IN MANATEE COUNTY, FLORIDA.

SUBJECT TO PERTINENT EASEMENTS, RIGHTS OF WAY AND RESTRICTIONS OF RECORD.

CONTAINING 740.20 ACRES, MORE OR LESS.

- NOTES:**
- BEARINGS ARE RELATED TO FOUND MONUMENTATION ALONG THE EAST BOUNDARY OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 19 EAST, SHOWN AS N 00° 34' 50" E, AND ARE RELATED TO D.O.T. MAP SECTION 13075-2402.
 - PROPERTY IS LOCATED IN FLOOD ZONE "C" AS SHOWN ON F.I.R.M. PANEL NO. 120153-0352B.
 - THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT OR ABSTRACT AND THEREFORE DOES NOT NECESSARILY INDICATE ALL ENCUMBRANCES ON THE PROPERTY.
 - PROPERTY IS ACCESSIBLE FROM LENA ROAD VIA LANDFILL CURRENTLY OWNED BY MANATEE COUNTY.

- LEGEND**
- - CONCRETE MONUMENT FOUND
 - - LIGHTWOOD POST FOUND
 - - IRON PIPE FOUND
 - - CONCRETE MONUMENT SET

BOUNDARY SURVEY
OF
MANATEE COUNTY LANDFILL
IN
SEC 31 TWP 34 S., RGE 19 E. &
SEC 6 & 7, TWP 35 S., RGE 19 E.
MANATEE COUNTY, FLORIDA

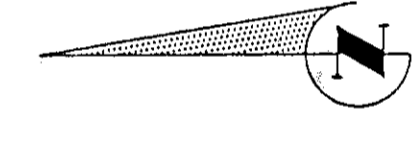
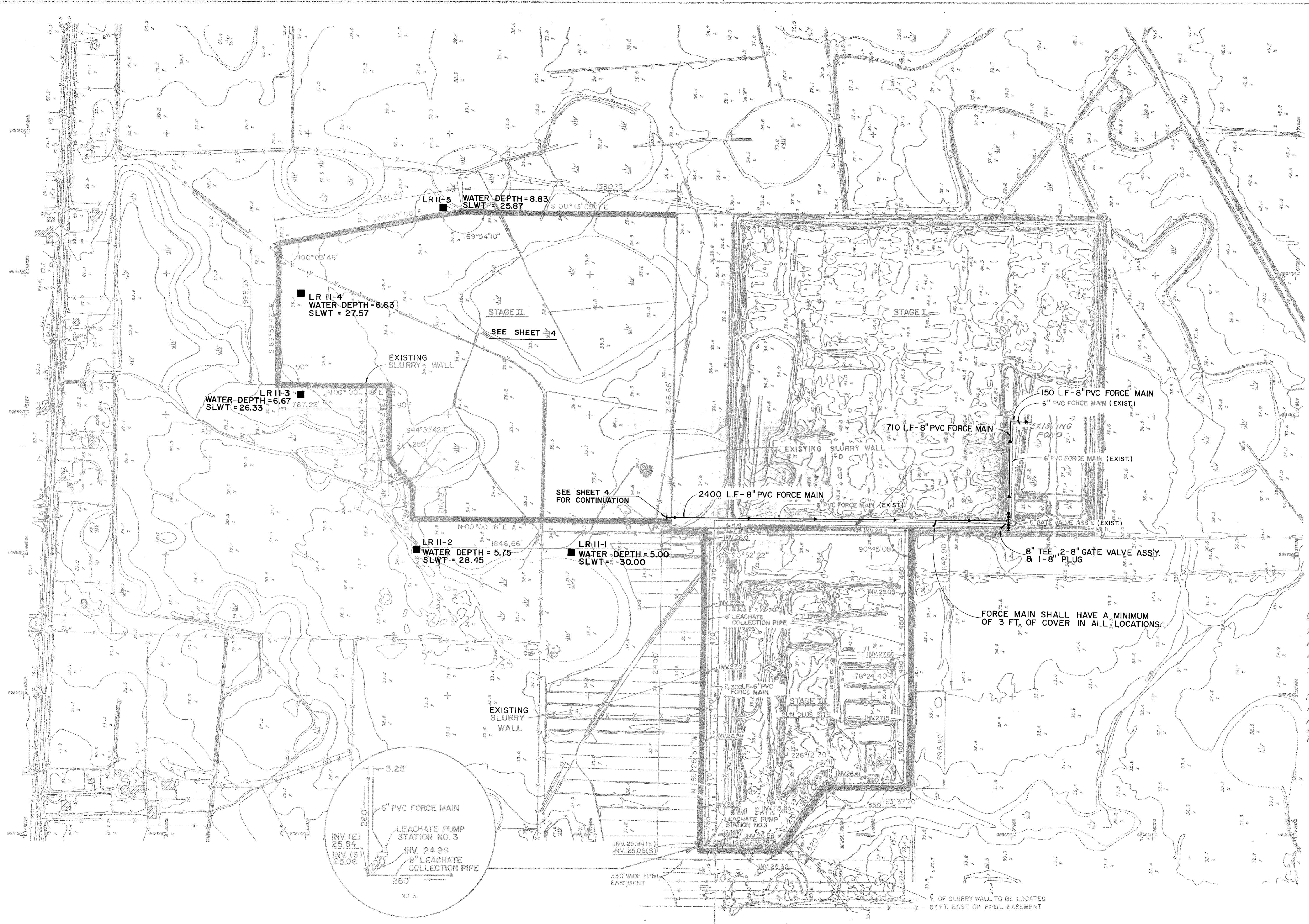
FOR: MANATEE COUNTY

NOTE: THIS DWG. IS A SEPIA OF SHEET 2 FOR PROJECT 485-0190-534

REVISIONS	
1	AS-BUILT - SLURRY WALLS
2	
3	
4	
5	
6	
7	

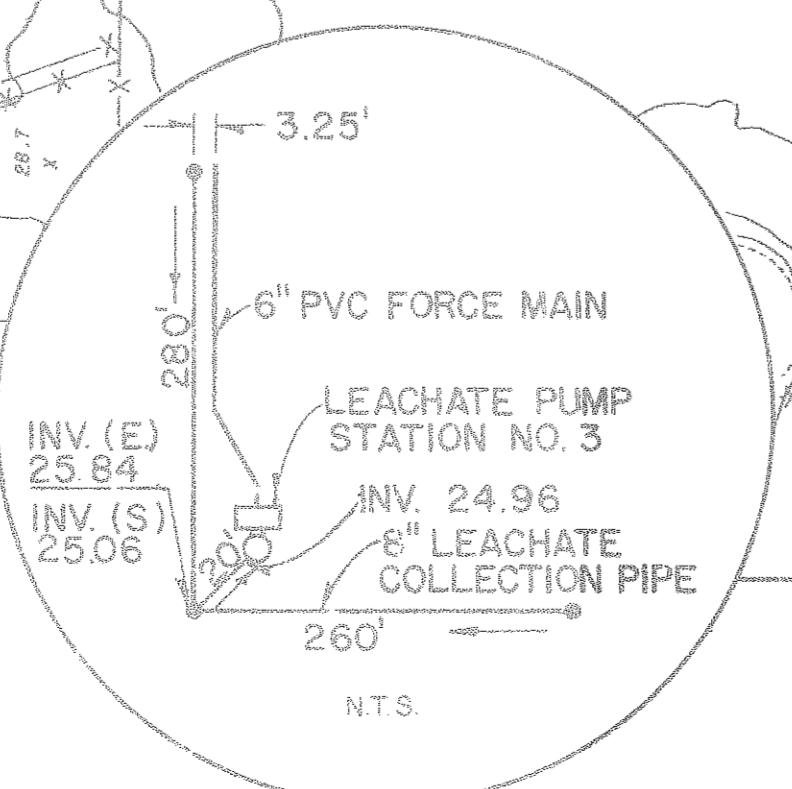
DESIGNED: M.V. CHECKED: GGS/1/90 DATE: 1/3/90 SCALE: 1"=50'
DRAWN: GGS COMP: JOB NO: FILE NO: SHEET 2 OF 12

T-100
111



NOTE:
 TOPO BASED ON AERIAL
 PHOTOGRAPHY.
 DATE FLOWN:
 10/13/82

NOTE:
 *TOPOGRAPHY WITHIN
 ACTIVE PORTION OF THE
 LANDFILL DIFFERENT FROM
 THAT INDICATED.*



FORCE MAIN SHALL HAVE A MINIMUM
 OF 3 FT. OF COVER IN ALL LOCATIONS

STATUS	ACTION DATE
AS-BUILT	Nov. 18, 1991 J.R.

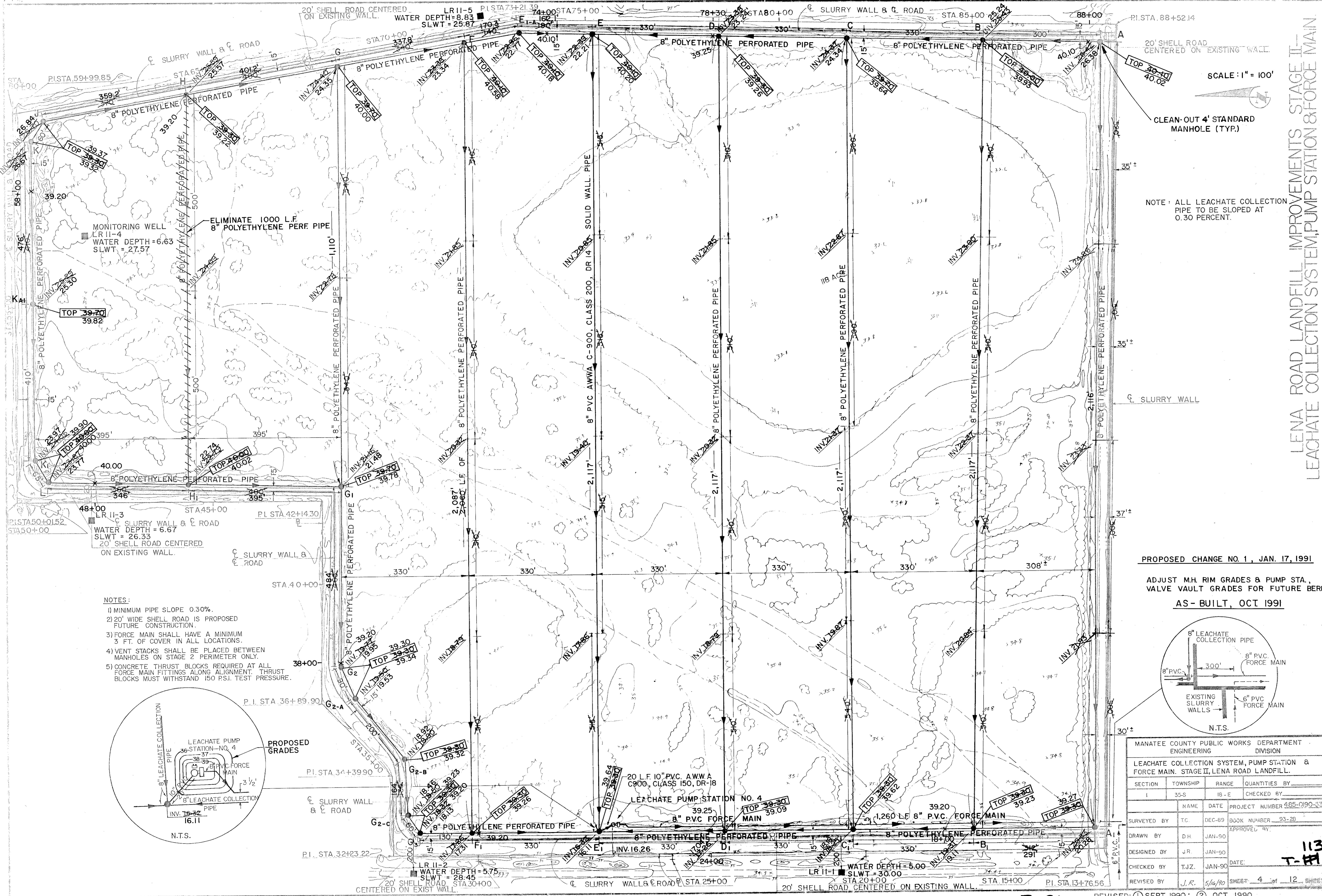
NO.	DATE	REVISION	BY	CHECKED
2	10/90	ADD 8" FORCE MAIN	J.E.L.	T.J.Z.
1	5/84	ADDED MONITORING WELLS	J.E.L.	405

LENA ROAD LANDFILL IMPROVEMENTS - STAGE 2
 EXISTING TOPOGRAPHY - OVERALL PLAN
 MANATEE COUNTY, FLORIDA

DATE: 5-88
 SCALE: 1" = 300'
 SHEET NO. 3 OF 12
 PROJ. NO. 485-0190-534
 FILE NO.

T-112
 7-26

LENA ROAD LANDFILL IMPROVEMENTS STAGE II - LEACHATE COLLECTION SYSTEM, PUMP STATION & FORCE MAIN

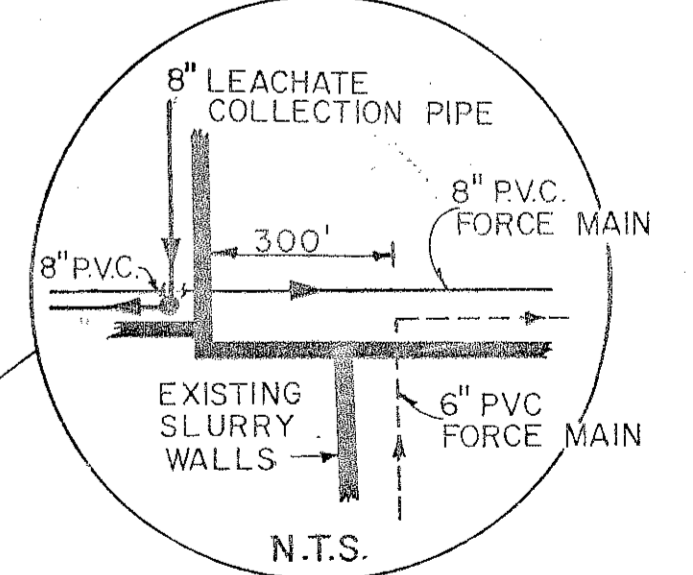
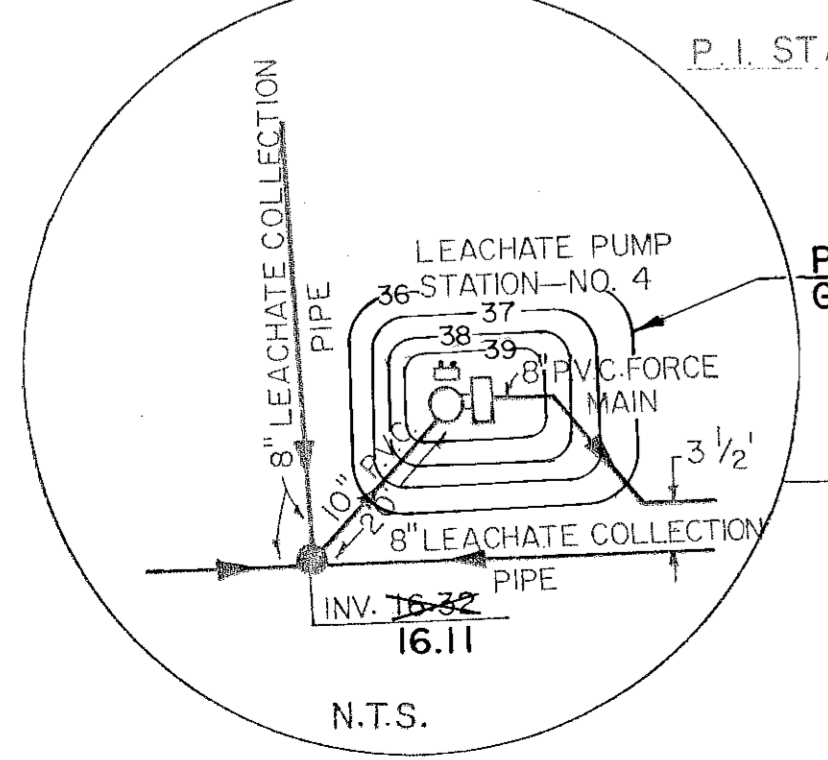


SCALE: 1" = 100'

CLEAN-OUT 4' STANDARD MANHOLE (TYP.)

NOTE: ALL LEACHATE COLLECTION PIPE TO BE SLOPED AT 0.30 PERCENT.

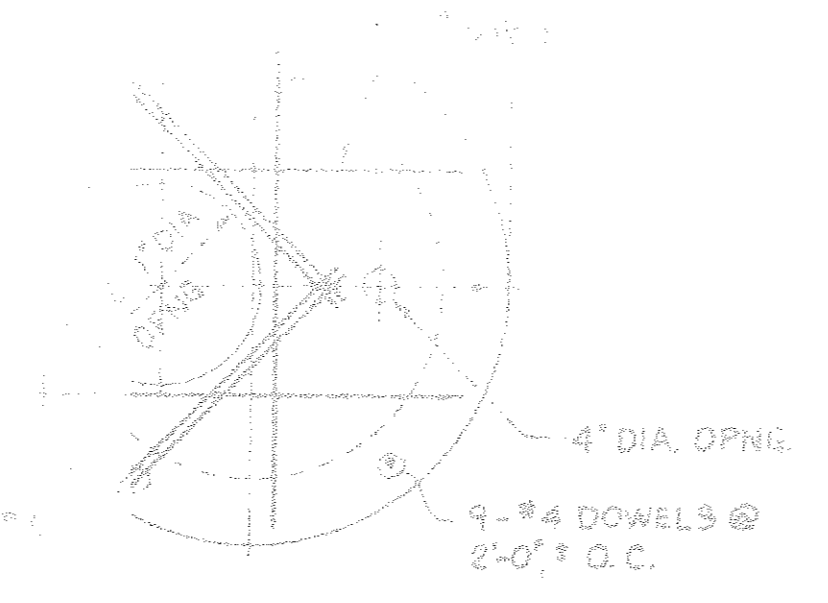
- NOTES:**
- 1) MINIMUM PIPE SLOPE 0.30%.
 - 2) 20' WIDE SHELL ROAD IS PROPOSED FUTURE CONSTRUCTION.
 - 3) FORCE MAIN SHALL HAVE A MINIMUM 3 FT. OF COVER IN ALL LOCATIONS.
 - 4) VENT STACKS SHALL BE PLACED BETWEEN MANHOLES ON STAGE 2 PERIMETER ONLY.
 - 5) CONCRETE THRUST BLOCKS REQUIRED AT ALL FORCE MAIN FITTINGS ALONG ALIGNMENT. THRUST BLOCKS MUST WITHSTAND 150 P.S.I. TEST PRESSURE.



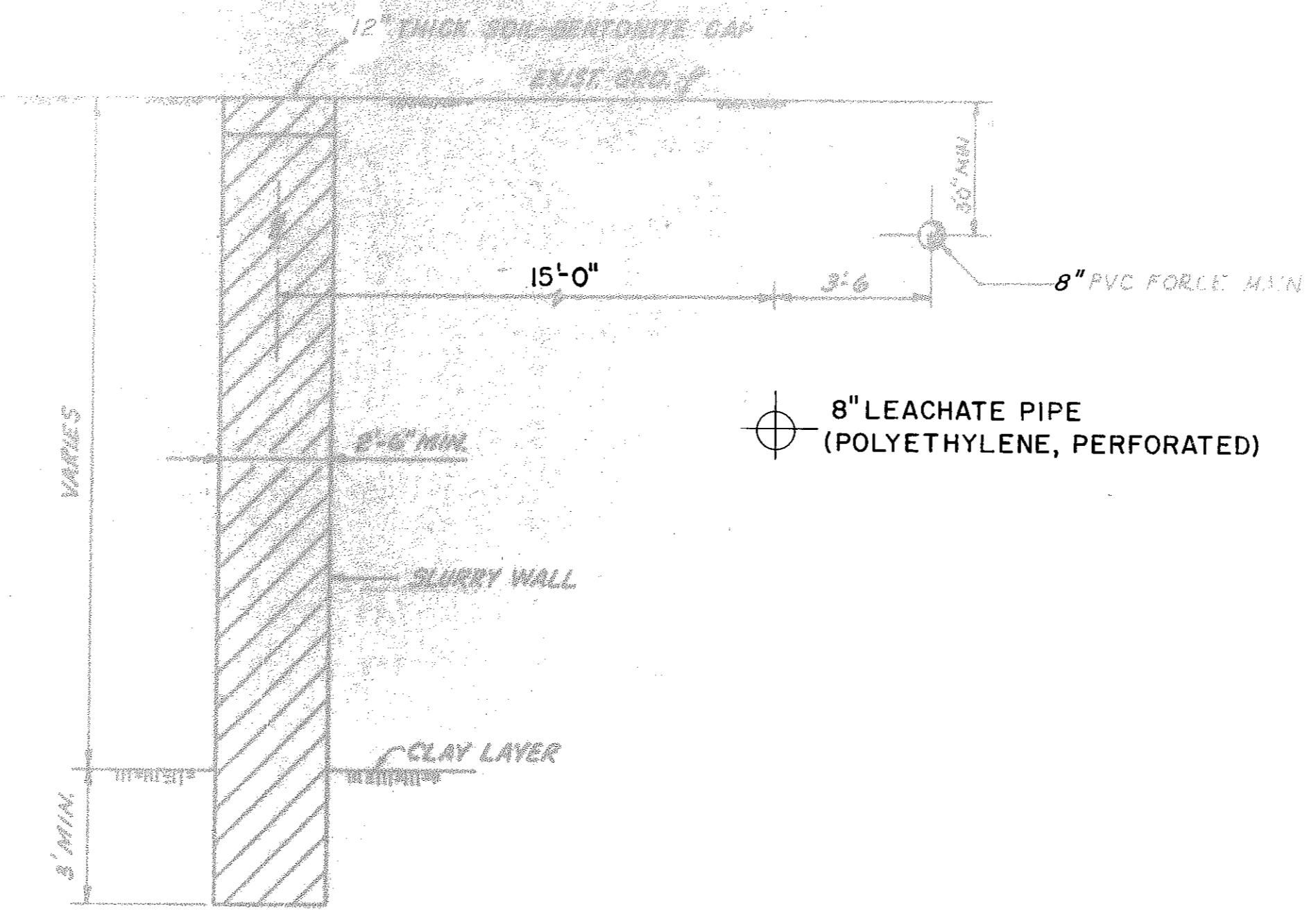
PROPOSED CHANGE NO. 1, JAN. 17, 1991
 ADJUST M.H. RIM GRADES & PUMP STA., VALVE VAULT GRADES FOR FUTURE BERM
 AS - BUILT, OCT. 1991

MANATEE COUNTY PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION			
LEACHATE COLLECTION SYSTEM, PUMP STATION & FORCE MAIN, STAGE II, LENA ROAD LANDFILL.			
SECTION	TOWNSHIP	RANGE	QUANTITIES BY
I	35-S	18-E	CHECKED BY
SURVEYED BY		NAME	DATE
DRAWN BY		PROJECT NUMBER	985-0190-334
DESIGNED BY		BOOK NUMBER	93-28
CHECKED BY		APPROVED BY	
REVISED BY		DATE	
		SHEET	4 OF 12 SHEETS

**DETAILS OF STANDARD
PRECAST MANHOLE,
LEACHATE TRENCH,
AND
WARNING SIGNAL**

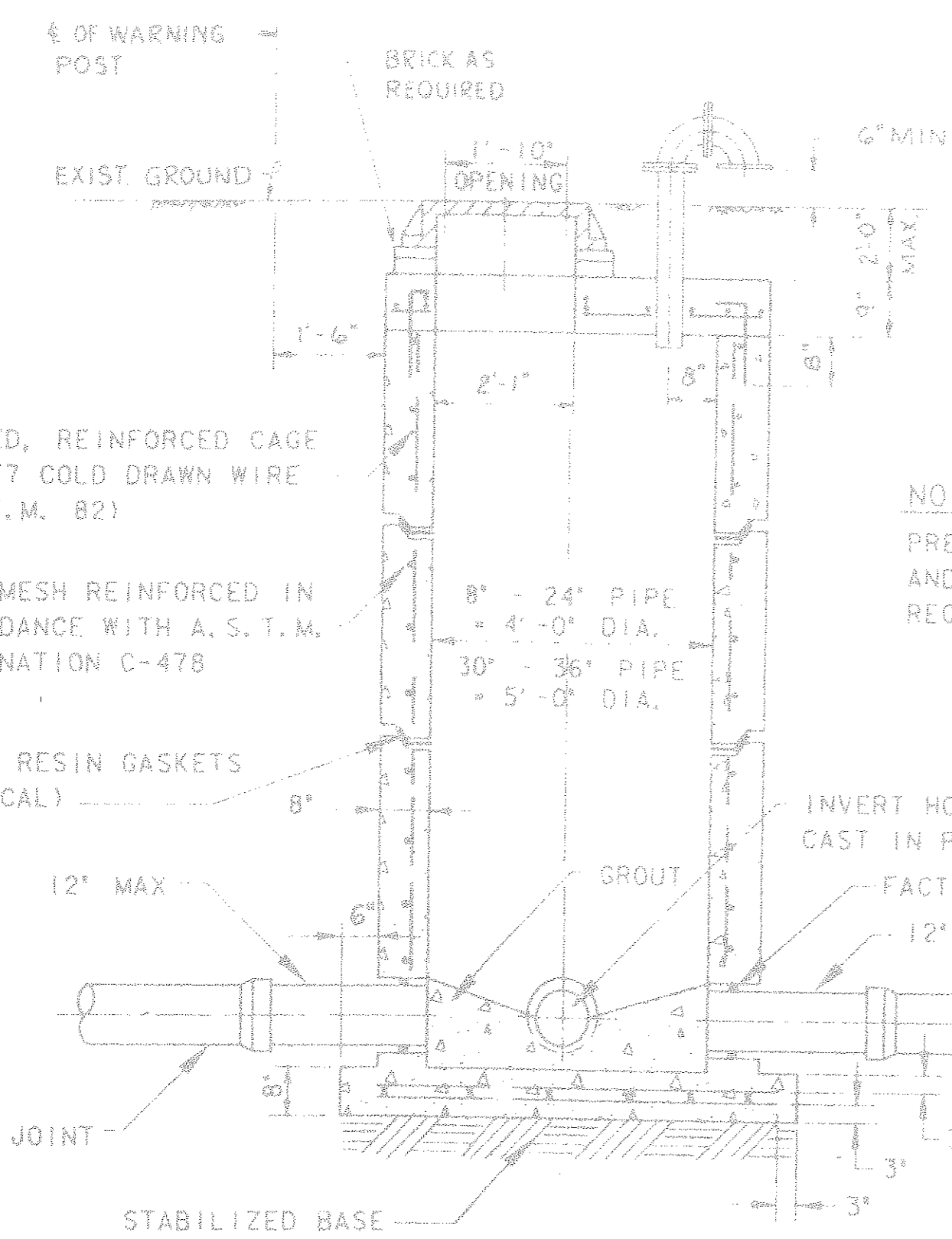


PLAN @ TOP SLAB



SLURRY WALL DETAIL

MANHOLE FRAME & COVER

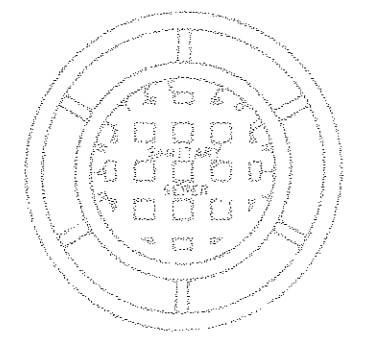


SECTION

STANDARD PRECAST MANHOLE

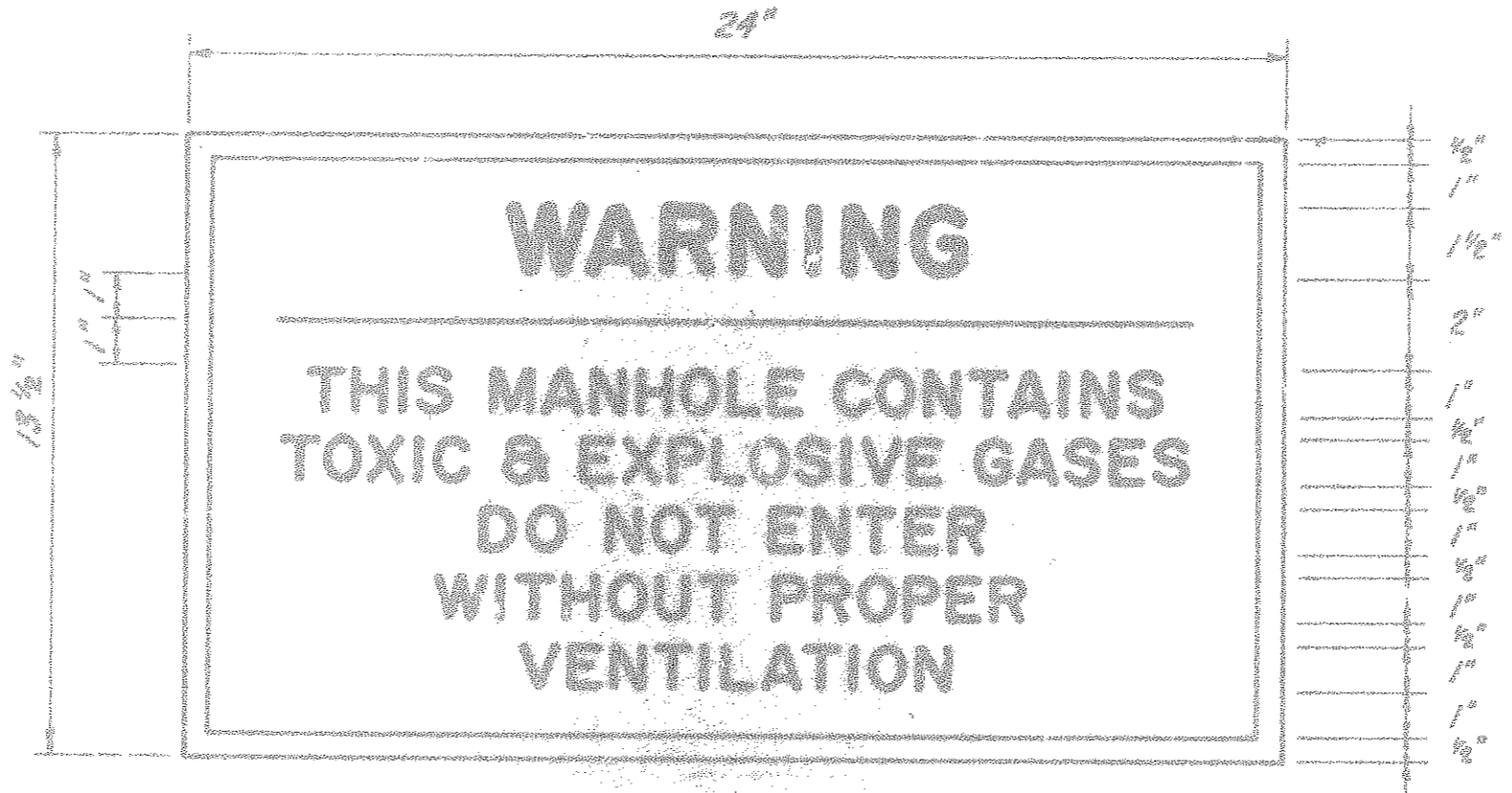
NOTE:
PRECAST MANHOLE WALL THICKNESS AND REINFORCEMENT TO MEET APPLICABLE REQUIREMENTS BASED ON DEPTH.

NOTE:
MANHOLE FRAMES AND COVERS SHALL CONFORM TO A.S.T.M. DESIGNATION A 48-1 (1971) OR FEDERAL SPECIFICATIONS QQ-1-652B. COMBINED WEIGHT SHALL BE NOT LESS THAN 305 POUNDS, COVER = 145 LBS., FRAME = 160 LBS.



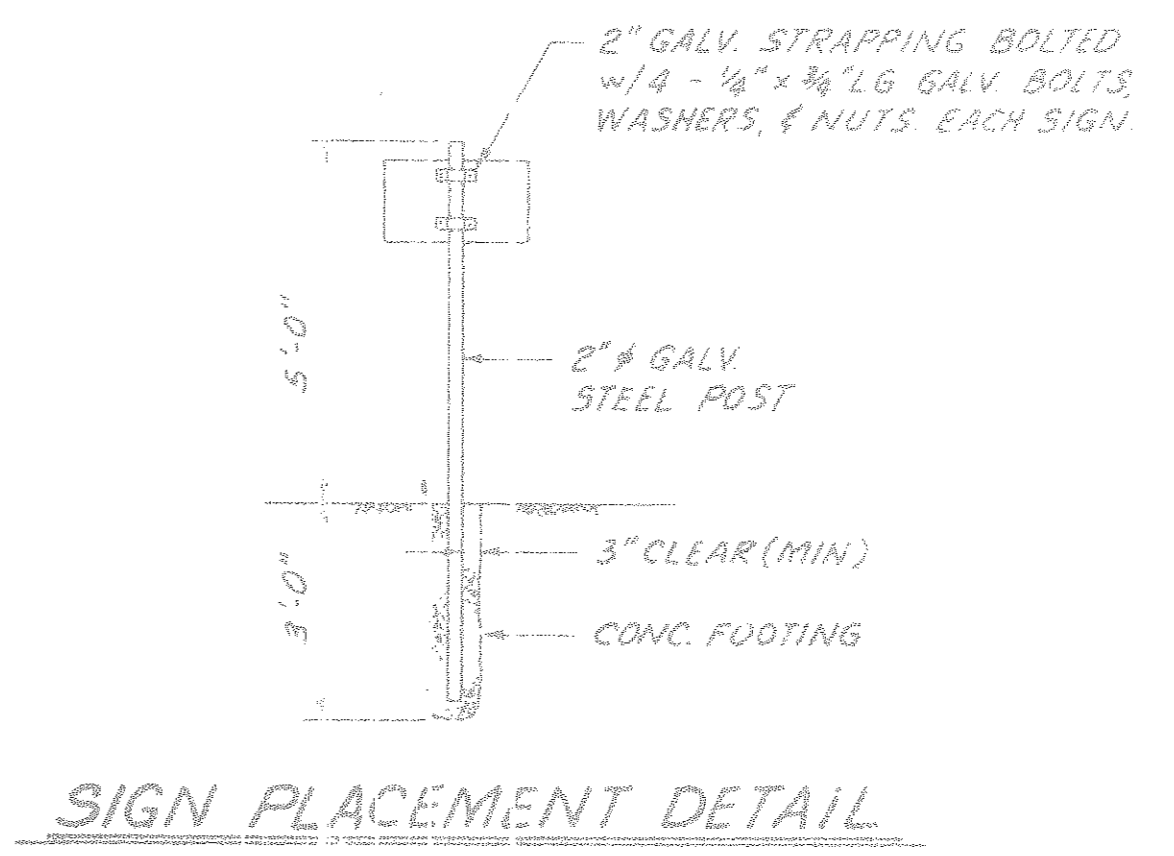
MANHOLE RING & COVER DETAIL

- NOTES:**
1. INVERT HOLES TO BE CAST IN PLACE & 2" LARGER THAN PIPE O.D.
 2. ALL CONCRETE USED SHALL BE CLASS III & CONFORM TO OR EXCEED REQUIREMENTS OF A.S.T.M. DESIGNATION C-478 FOR PRECAST CONCRETE MANHOLES.
 3. MANHOLE FRAME & SOLID COVER TO BE MANATEE COUNTY UTILITY SYSTEM STANDARD FRAME & COVER.
 4. SEWER GUARD WATERTIGHT MANHOLE INSERTS (AS MANUFACTURED BY PRECO INDUSTRIES, LTD., PLAINVIEW, NEW YORK, OR EQUAL) SHALL BE INSTALLED IN ALL PROPOSED SANITARY SEWER MANHOLES.

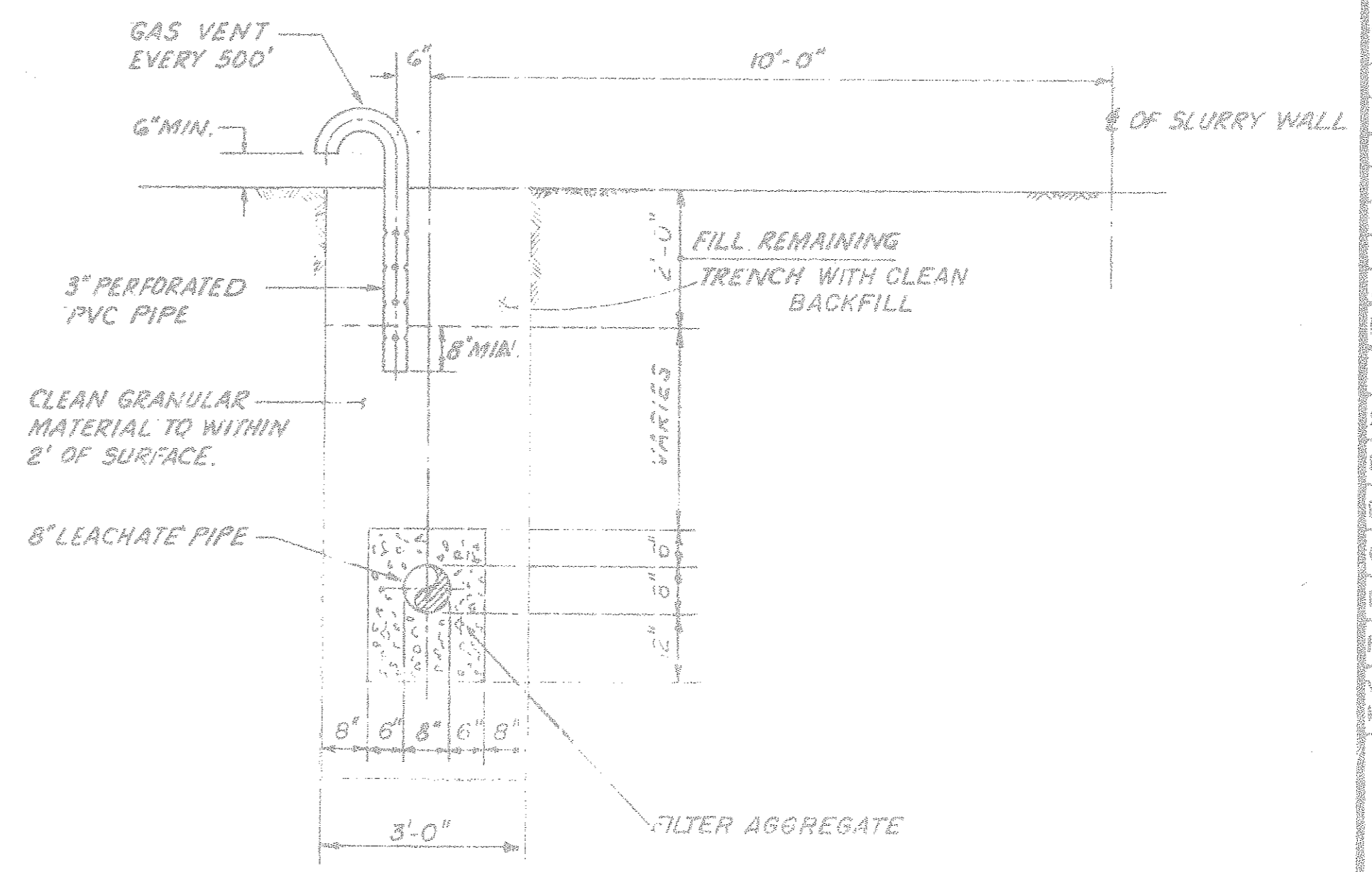


WARNING SIGN DETAIL
SCALE: 3" = 1'-0"

- NOTES:**
1. THE COLOR OF THE SIGN SHALL BE HIGH INTENSITY SILVER-WHITE REFLECTORIZED BACKGROUND WITH RED OPAQUE BORDER AND LEGEND. SIGN PANEL SHALL BE 0.08 IN. MIN. THICK ALUMINUM. PANELS ARE TO BE DEGREASED, ETCHED, NEUTRALIZED AND TREATED WITH ALODINE 1200, IRIDINE 14-2, BONDRETE T21 OR EQUAL. NO STENCILING PERMITTED ON PANELS.
 2. PLACE 13 1/2" x 24" SIGNS AS SHOWN ON SIGN PLACEMENT L&T TAIL THIS SHEET.



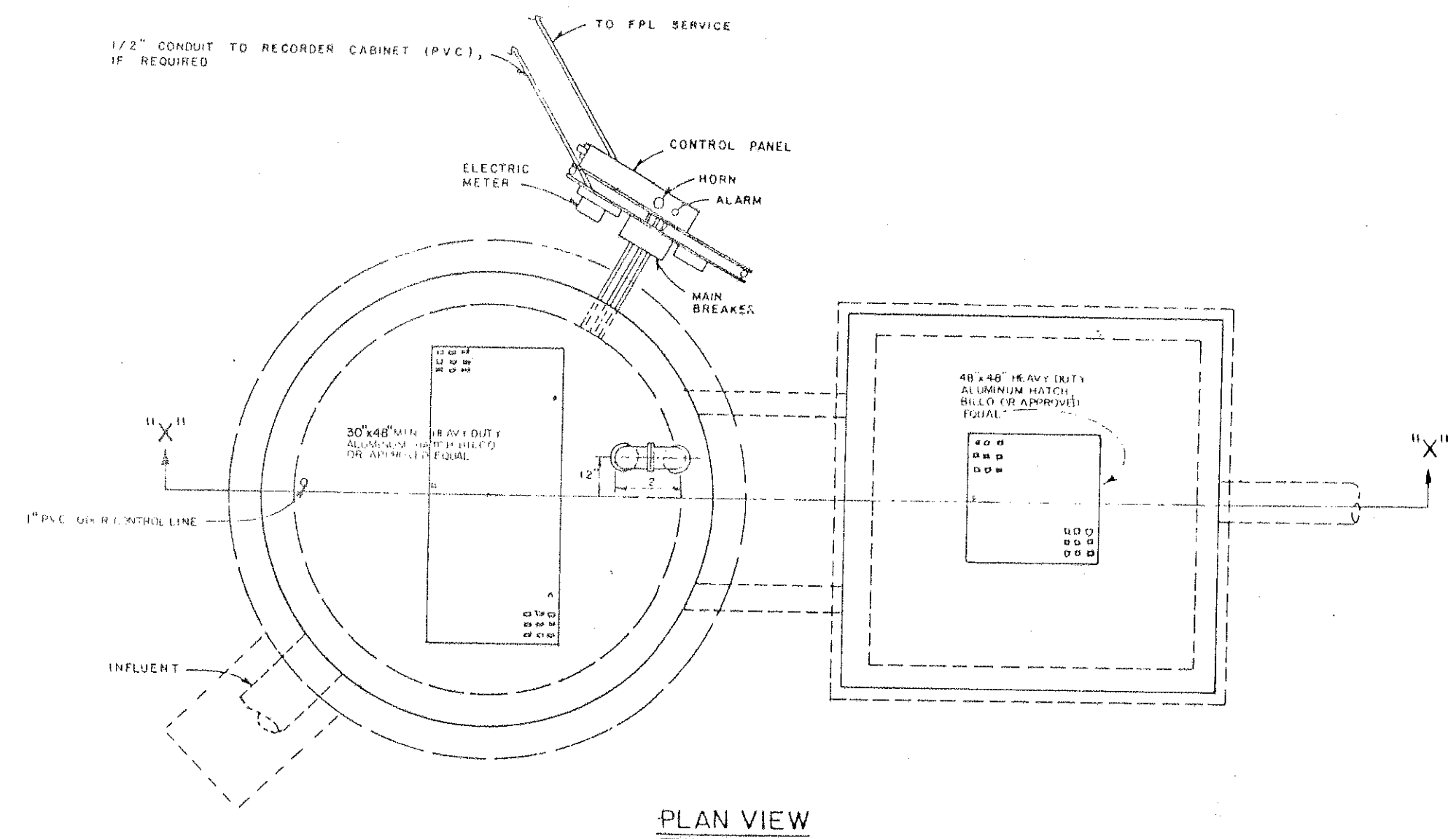
SIGN PLACEMENT DETAIL



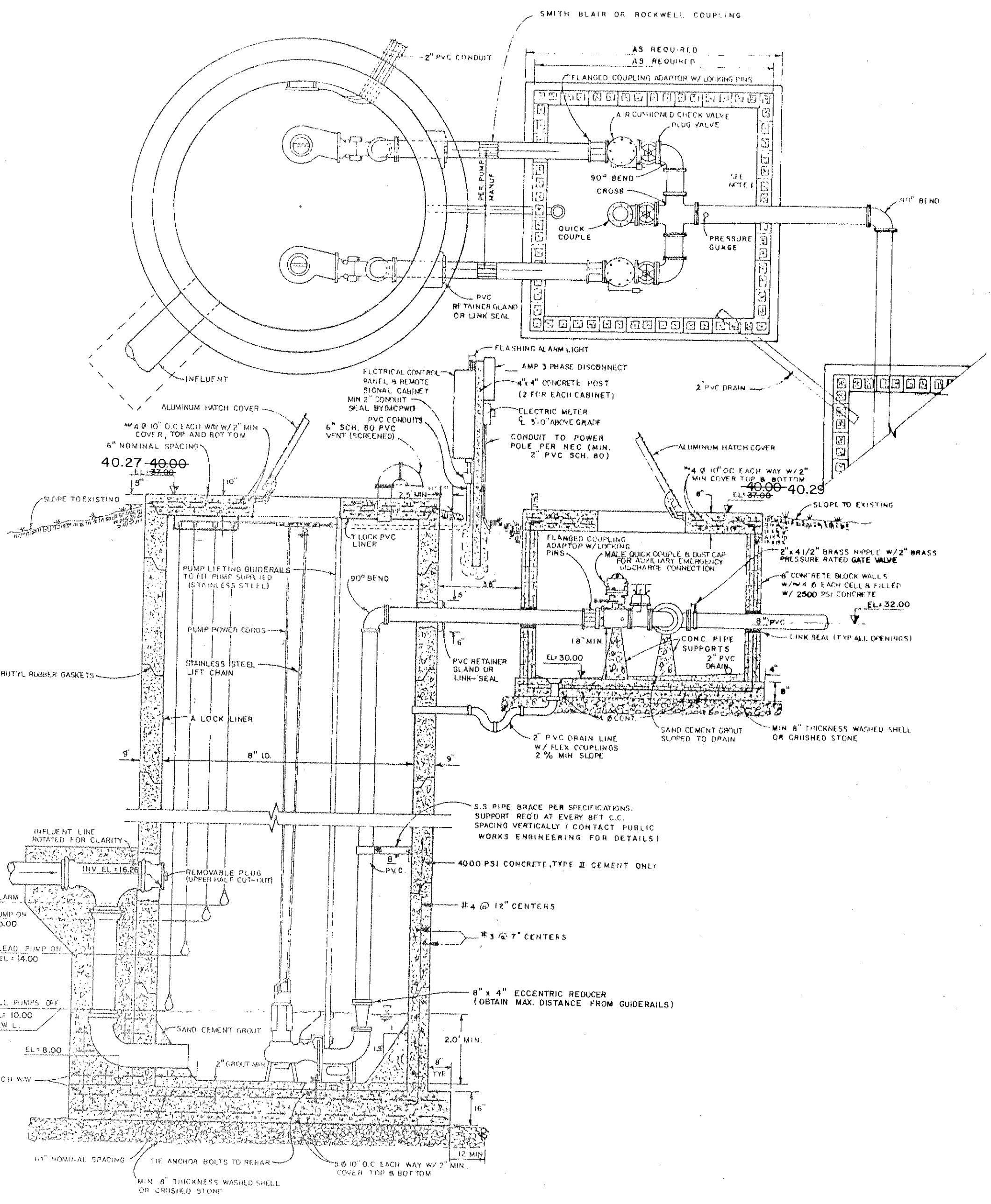
LEACHATE COLLECTION SEWER TRENCH DETAIL

AS-BUILT	J.R.	11/18/91
FORCE MAIN & 8"		10/90
DETAIL		
LEACHATE TRENCH		
REVISION	BY	DATE
SURVEYED		
DESIGNED	TJZ	10/88
DRAWN	H GENIA	10/88
CHECKED	GGG/	1/90
FILE NO.:		
PROJECT NO.:	485 0190-534	
VERTICAL SCALE:	AS NOTED	
HORIZONTAL SCALE:	AS NOTED	
SEAL		

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T-#2



PLAN VIEW



SECTION X-X

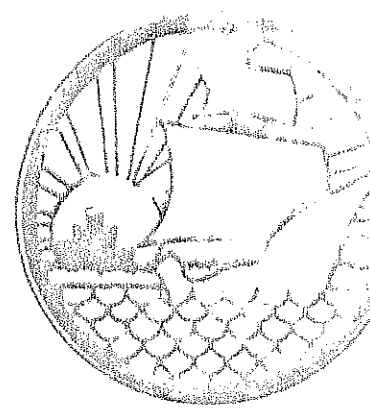
NOTES:

1. THIS LENGTH OF PIPE MAY NOT BE REQUIRED.
2. ALL PLUG VALVES SHALL BE RESILIENT SEAT.
3. SEE PLAN SHEET FOR PROPER ORIENTATION.
4. ALL FITTINGS WITHIN WET WELL, VALVE VAULT AND METER VAULT SHALL BE RESTRAINED JOINT.
5. METER PIT MAY BE IN LINE DEPENDING ON SITE CONFIGURATION.
6. VAULT DIMENSION SHALL BE SET TO ALLOW 12" MIN. FROM OUTSIDE OF FLANGES TO WALLS.
7. MAGNETIC FLOW METER MAY BE PLACED IN VALVE VAULT (ENLARGED TO MEET MIN. CLEARANCE REQUIREMENTS).

GENERAL NOTES:

1. ACCESS COVERS SHALL BE EQUIPPED WITH LOCKING DEVICE SUITABLE FOR PADLOCKS IN COMPLIANCE WITH MCTWD STANDARDS. PADLOCKS SHALL BE FURNISHED BY MANATEE COUNTY PUBLIC WORKS DEPT.
2. GROUND SHALL BE SLOPED AWAY FROM SLAB TO NATURAL GROUND ELEVATION IN ALL DIRECTIONS. RESTORATION SHALL INCLUDE SODDING TO 20 FEET BEYOND CONCRETE STRUCTURES.
3. INSIDE OF VALVE VAULT AND FLOW METER VAULT SHALL BE COATED WITH 8 MIL. MIN. COAL-TAR EPOXY.
4. ALL PIPING IN WET WELL, VALVE AND METER VAULTS SHALL BE RESTRAINED. BURIED FITTINGS SHALL BE RESTRAINED JOINT.
5. ALL PIPING SHALL BE COLOR CODED IN ACCORDANCE WITH MANATEE COUNTY PUBLIC WORKS DEPARTMENT STANDARDS: GREEN - RAW SEWAGE; BROWN - EFFLUENT; BLUE - POTABLE WATER.
6. ALL ANCHORS AND BOLTS PROTRUDING THROUGH PVC WET WELL LINER SHALL BE THOROUGHLY SEALED WITH EPOXY.
7. OUTSIDE SURFACES OF WET WELL, VALVE AND METER VAULTS SHALL BE COATED WITH 2 COATS, 8 MIL. MIN. DFT. COAL-TAR EPOXY.
8. ALL METAL APPURTENANCES INCLUDING BOLTS, NUTS AND WASHERS INSIDE WET WELL SHALL BE STAINLESS STEEL UNLESS OTHERWISE NOTED (TYPE 304).
9. ALL PIPING AND FITTINGS IN THE WET WELL SHALL BE AIAA C-900 (CLASS 200, DR 14 FOR PIPE, CLASS 150 FOR FITTINGS) AND SHALL HAVE RESTRAINED JOINTS.
10. VALVE AND METER VAULTS MAY BE PRECAST AT CONTRACTOR'S OPTION. SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION.
11. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT FLOTATION DURING CONSTRUCTION. ENGINEER SHALL SUBMIT FLOTATION CALCULATIONS TO MCTWD. ENGINEERING DIVISION AT PLAN REVIEW SUBMITTAL.
12. BASE AND FIRST WALL SECTION SHALL BE MONOLITHIC.
13. PVC RESTRAINTS SHALL BE AS MANUFACTURED BY EBA IRON INC. UNI-FLANGE DIVISION OF NAPCO, INC. OR APPROVED EQUAL.
14. THE PUMP STATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH MANATEE COUNTY PUBLIC WORKS DEPARTMENT STANDARDS.
15. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL HAVE 2 COATS BISMALIC EPOXY. TOTAL 16 MILS DFT.
16. ELECTRICAL SERVICE SHALL BE 240 VOLT, 3 PHASE MINIMUM.
17. MAGNETIC FLOWMETER IS REQUIRED FOR ALL PUMP STATIONS WITH A CAPACITY OF 200 GPM & GREATER.

PUMP DATA AND DESIGN CHARACTERISTICS	
PUMP STATION NUMBER	LEACHATE #4
NUMBER OF PUMPS	2
TYPE OF DRIVE	ELECTRIC MOTOR
DESIGN CAPACITY PER PUMP, G.P.M.	610
TOTAL DYNAMIC HEAD, FT.	73
MIN. EFF. AT DESIGN CAPACITY, %	65
DESIGN SPEED, MAX. R.P.M.	1750
MAX. HORSEPOWER PER PUMP, H.P.	25
MIN. SHUT-OFF HEAD, FT.	115
MIN. SIZE SOLIDS, IN.	3 1/4
MIN. DISCHARGE SIZE, IN.	4
SECONDARY CAPACITY PER PUMP, G.P.M.	400
SECONDARY HEAD, FT.	89
PUMP MANUF. & MODEL NUMBER	HYDRAMATIC S4L
IMPELLER DIAMETER	10 5/16
PUMP R.P.M.	1750
ELECT. SVC. - VOLTAGE & PHASE	480 V. 3 Ø
FORCE MAIN - LENGTH, DIAMETER & MATERIAL	4520' OF 8"
FORCE MAIN DISCHARGE ELEV. & HIGHEST EL.	ELEV. 45.0'



MANATEE COUNTY
PUBLIC WORKS
DEPARTMENT

SEWAGE PUMP STATION
DETAILS
WET WELL & VALVE VAULT
DETAILS

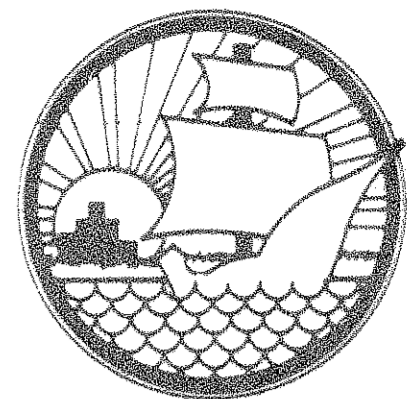
"AS-BUILT"	J.R.	11/18/9
PROPOSED CHANGE NO. 1		11/17/9
PUMP TDH, MOTOR HP		10/90
GEN'L. REVISION		4-90
GENERAL PER BAYSHORE		2-21-90
CONSTRUCTION		
J.F.B.		2-90
REVISION	DATE	
	BY	DATE

FILE NO.:
PROJECT NO.:
VERTICAL SCALE: N.T.S.
HORIZONTAL SCALE: N.T.S.

SEAL

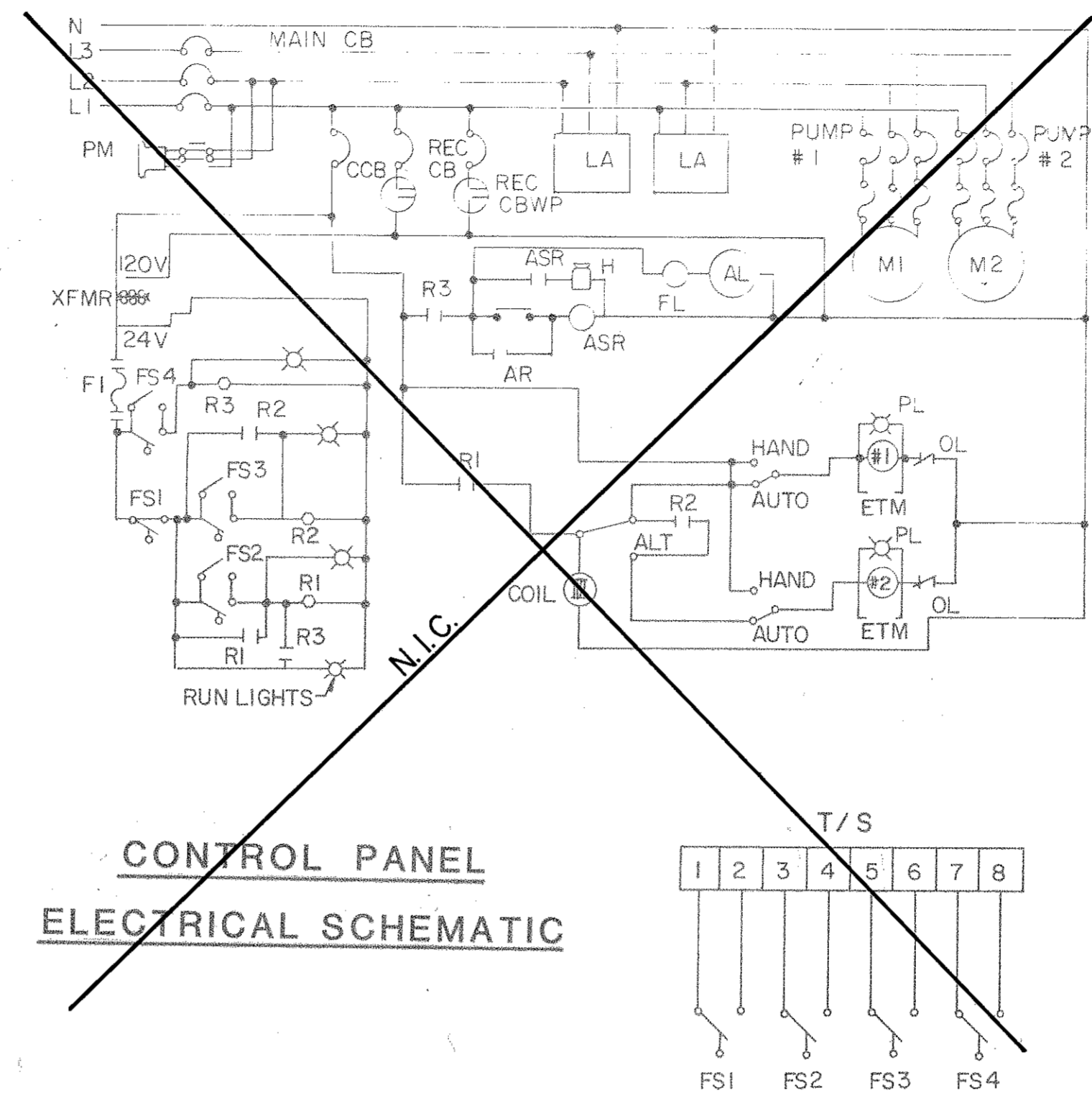
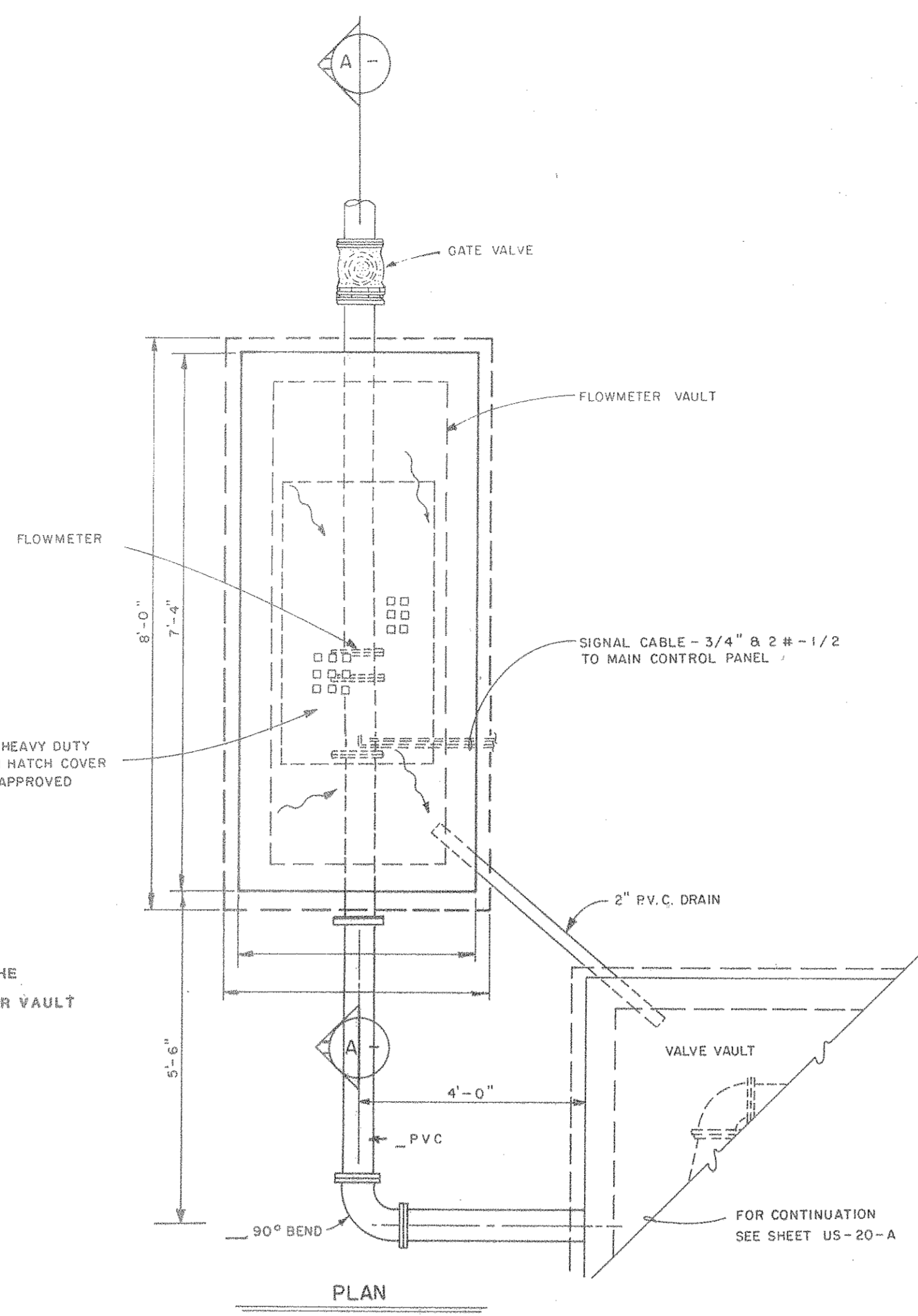
115
THB

US 20-A

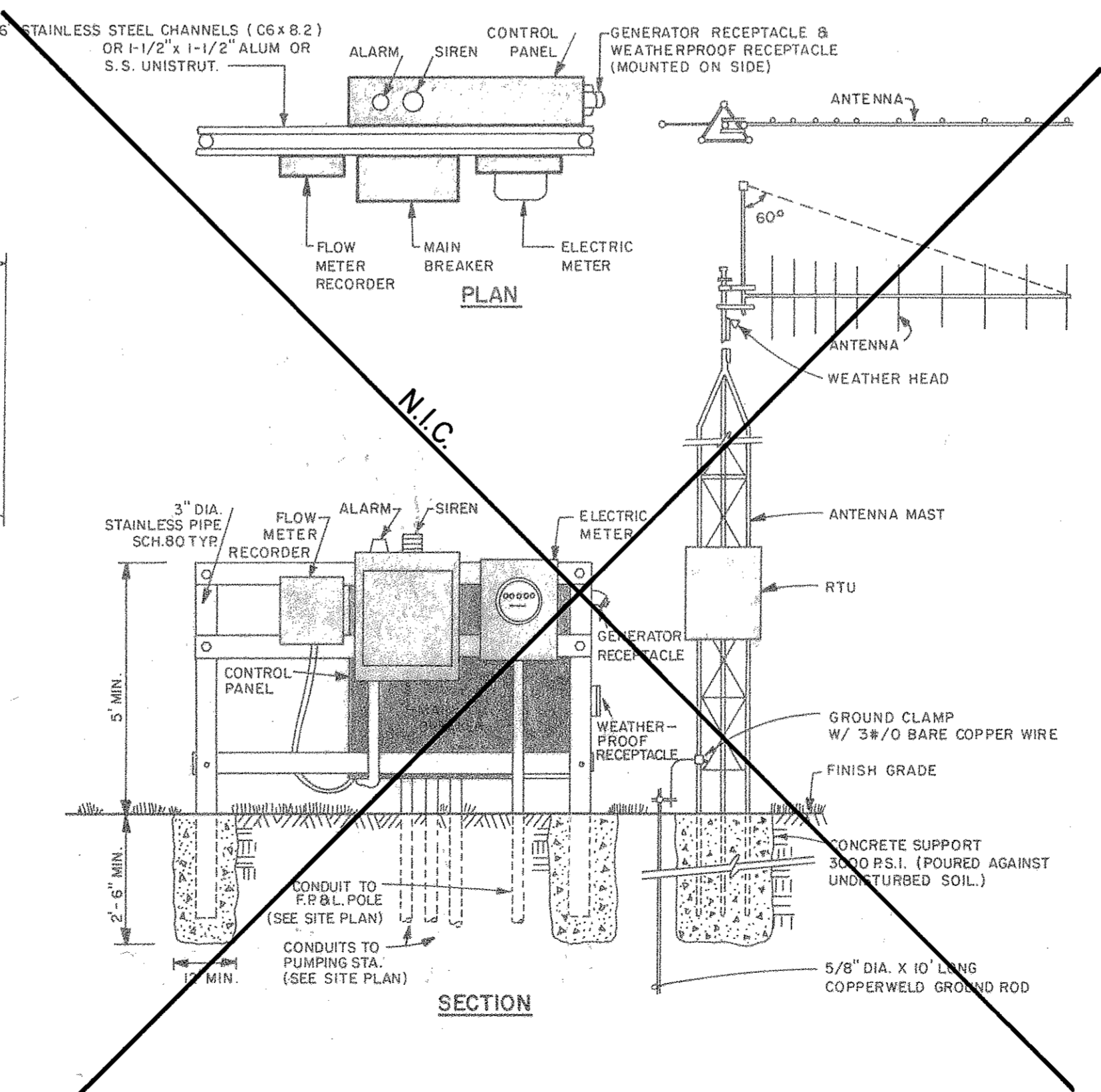
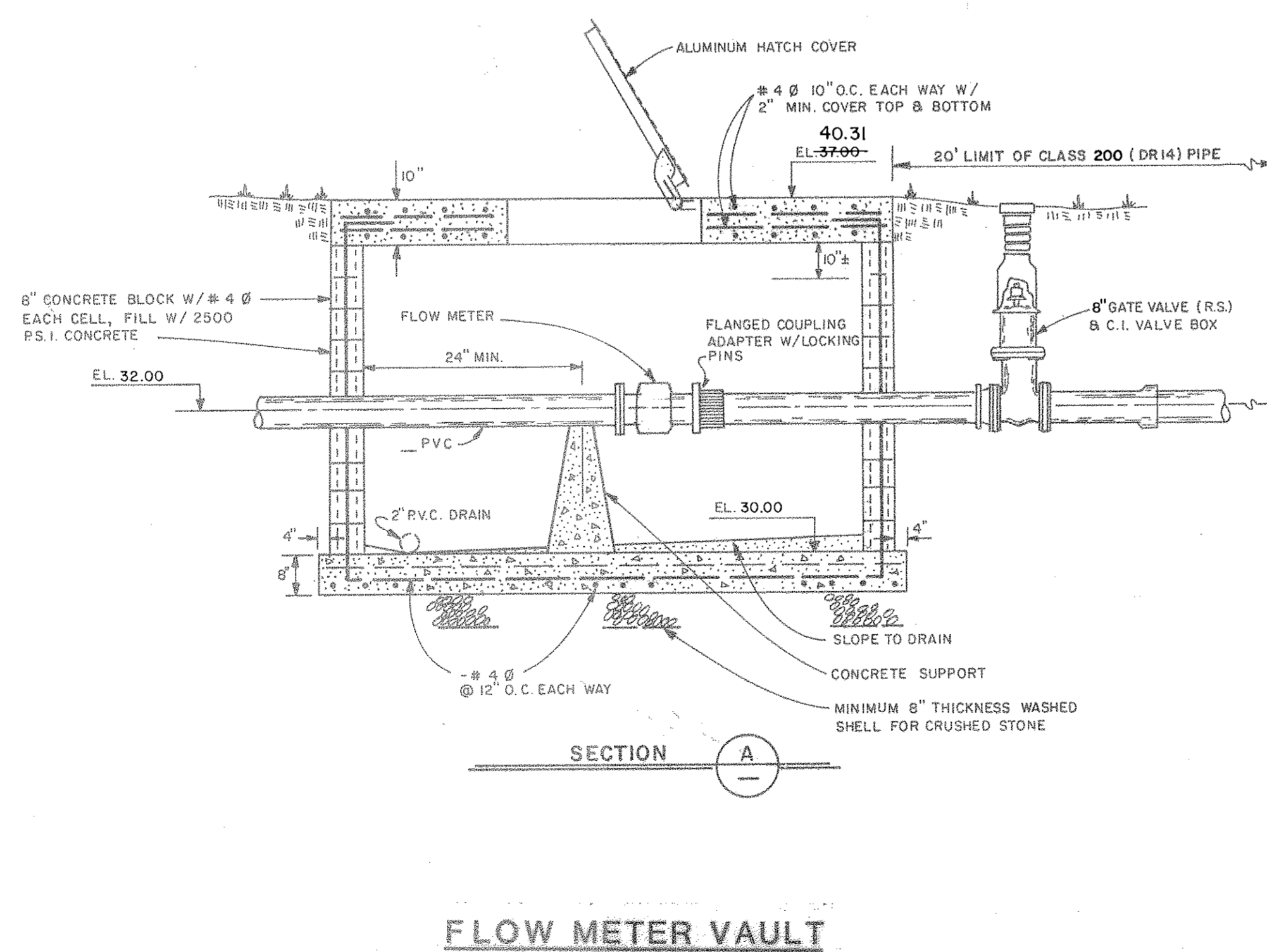


MANATEE COUNTY
PUBLIC WORKS
DEPARTMENT

SEWAGE PUMP STATION
DETAILS
METER VAULT & ELECTRICAL
DETAILS



- LEGEND**
- MAIN CB MAIN CIRCUIT BREAKER
 - CCB CONTROL CIRCUIT BREAKER
 - REC CB RECEPTACLE CIRCUIT BREAKER
 - PM PHASE MONITOR
 - LA LIGHTNING ARRESTOR
 - XFMR TRANSFORMER
 - F FUSE
 - FS FLOW SWITCH
 - H HORN
 - ASR ALARM SILENCER
 - FL FLASHER
 - AL ALARM LIGHT
 - ALT ALTERNATOR
 - ETM ELAPSE TIME METER
 - OL THERMAL OVERLOAD
 - T/S THERMAL STRIP
 - G/R GENERATOR RECEPTACLE
 - REC CBWP WEATHERPROOF RECEPTACLE CIRCUIT BREAKER
- NOTE:**
- ALL EQUIPMENT FURNISHED FOR THE PUMP STATION SHALL CONFORM TO MANATEE COUNTY PUBLIC WORKS DEPT. STANDARDS



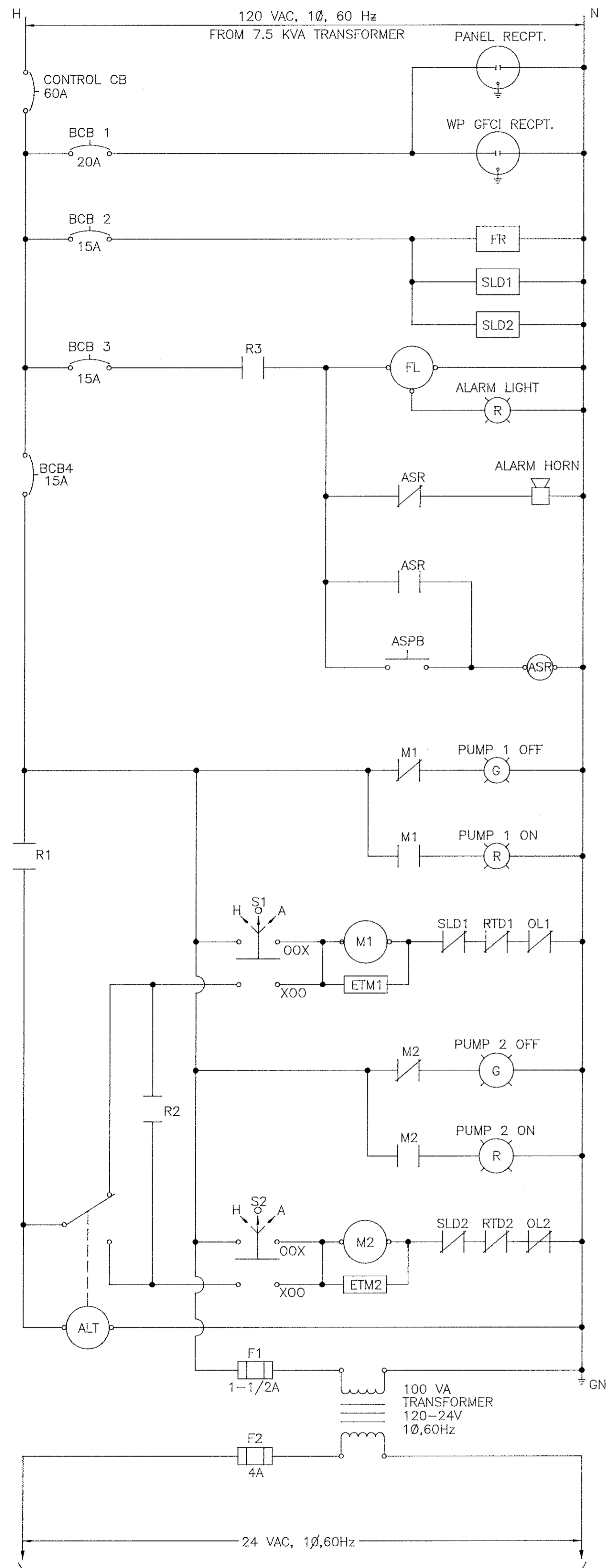
- NOTE:**
- SEE THIS SHEET FOR ELECTRICAL DETAILS.
 - POWER TO BE SUPPLIED AS DIRECTED BY THE F. P. & L. COMPANY INCORPORATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH PROVIDING TEMPORARY AND PERMANENT ELECTRICAL SERVICE.
 - ALL CONDUIT ENTERING THE CONTROL PANEL SHALL HAVE SEALING LOCKNUTS.
 - ALL PVC CONDUIT SHALL BE SCHEDULE 80.
 - CONTROL AND FLOW METER ENCLOSURE TO BE NEMA 4X WITH RAIN SHIELD.

"AS-BUILT"	J.R.	11/18/91
ELECTRICAL REV.		10/90
REVISION	BY	DATE
SURVEYED		
DESIGNED	T. J. Z.	11-1-89
DRAWN	V. M.	11-1-89
CHECKED		
FILE NO.:		
PROJECT NO.:	485-0190-534	
VERTICAL SCALE:	N.T.S.	
HORIZONTAL SCALE:	N.T.S.	

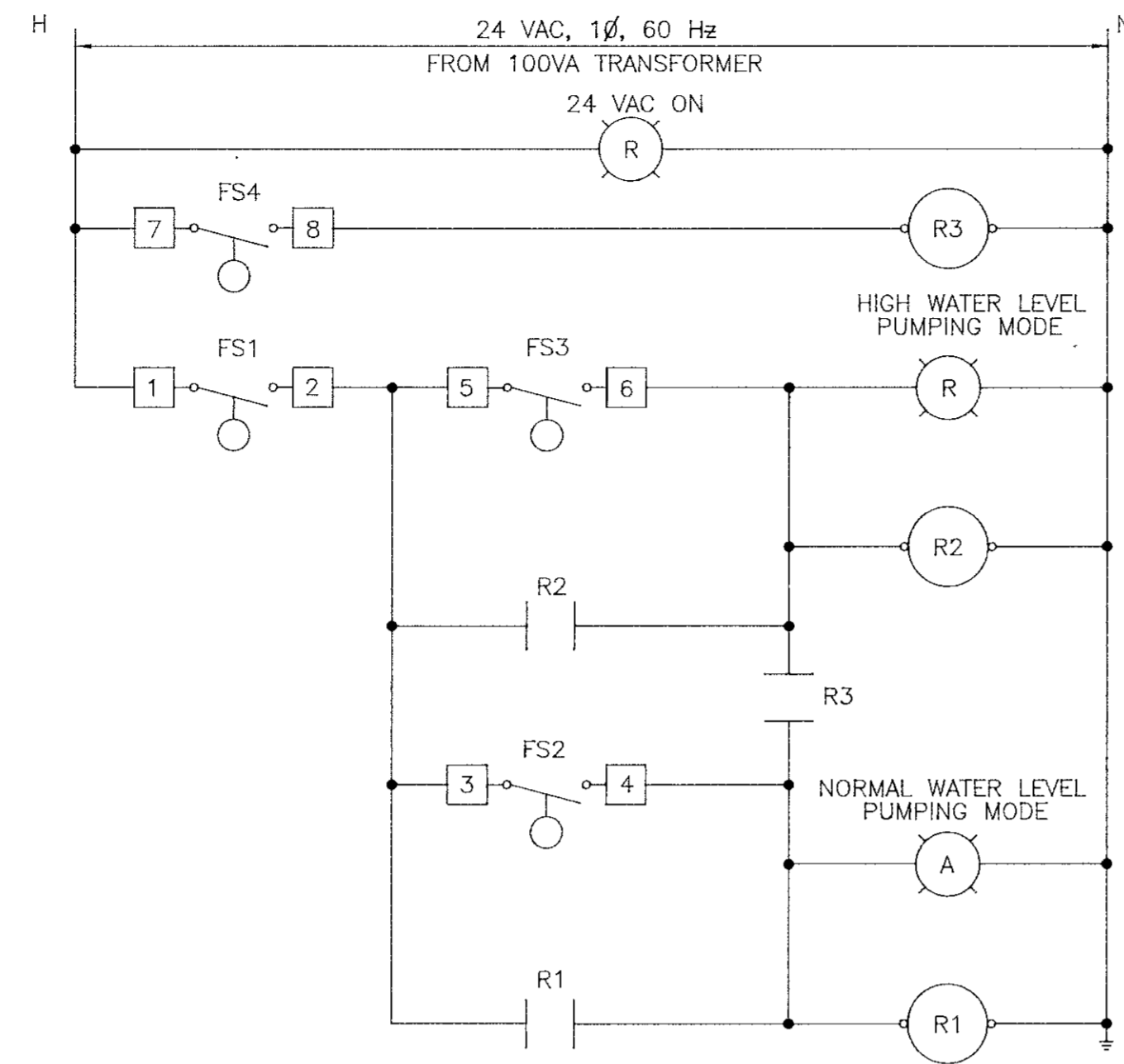
SEAL

116
T-H

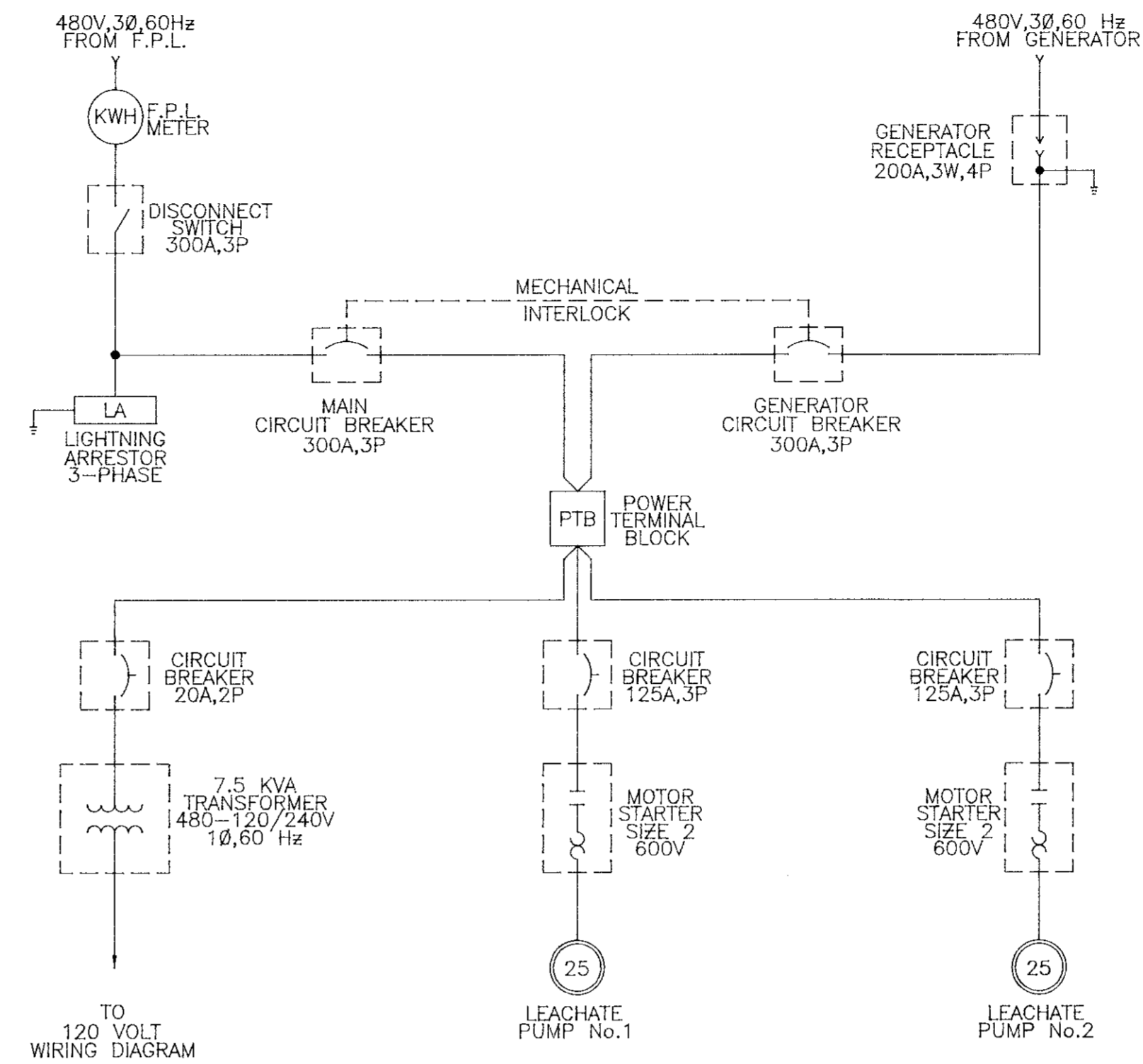
US 20-B



TO 24 VOLT WIRING DIAGRAM
120 VOLT WIRING DIAGRAM

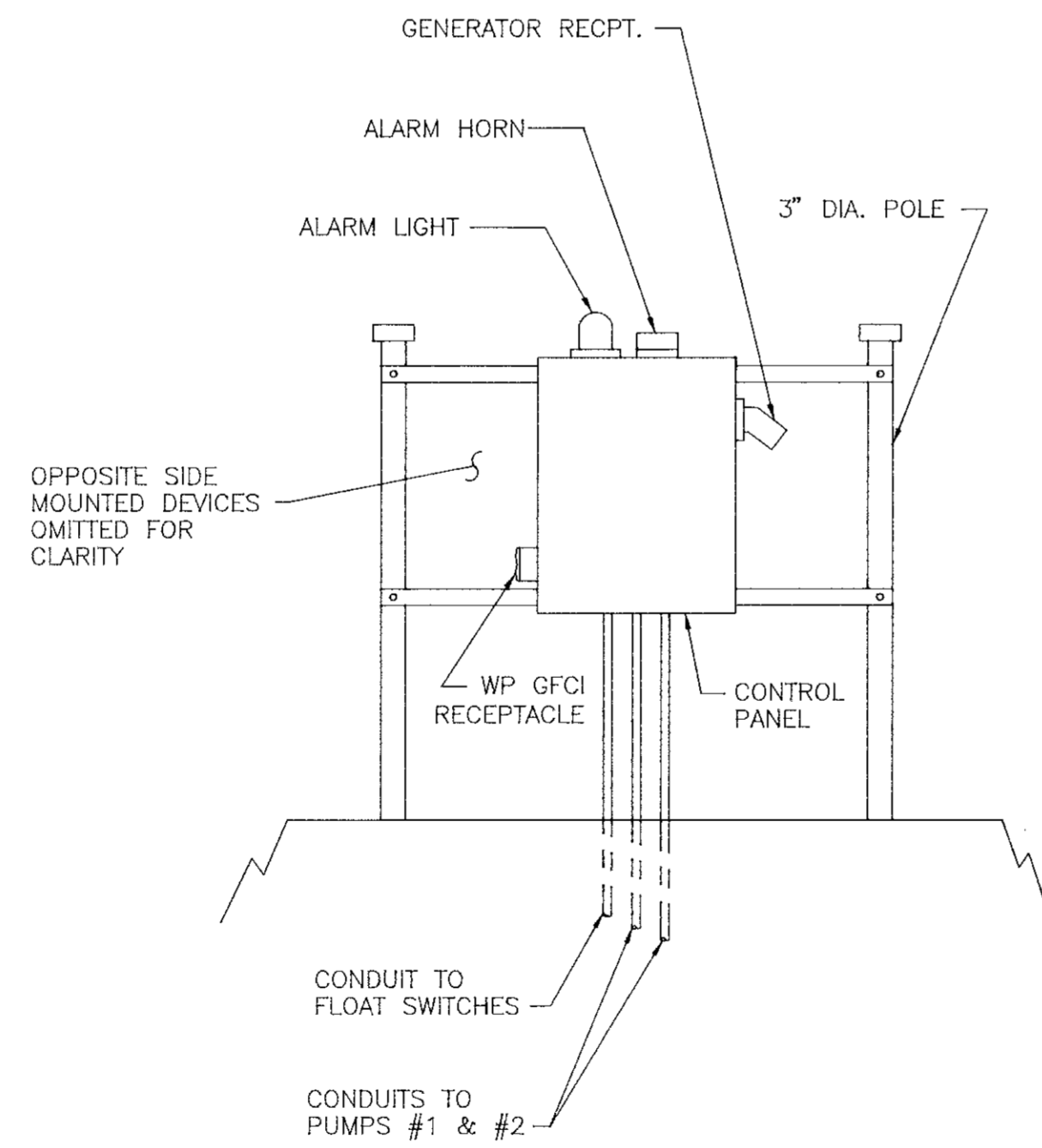


24 VOLT WIRING DIAGRAM

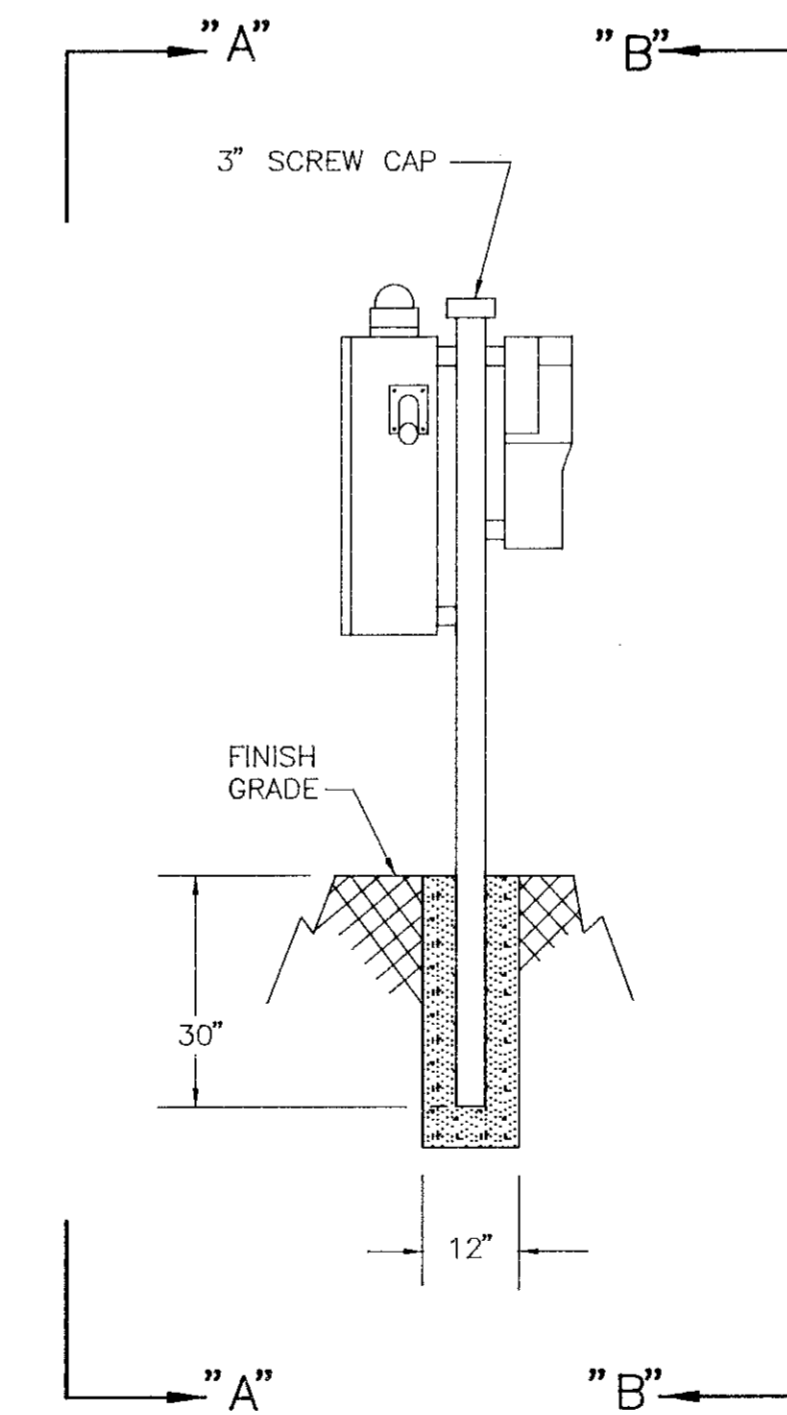


480 VOLT ELECTRICAL SYSTEM ONE-LINE DIAGRAM

LEGEND	
BCB	BRANCH CIRCUIT BREAKER
FR	FLOW RECORDER
SLD1 & SLD2	SEAL LEAK DETECTOR WITH INDICATING LAMPS
FL	FLASHER
ASR	ALARM SILENCE RELAY
ASPB	ALARM SILENCE PUSH BUTTON
M1 & M2	MOTOR STARTER CONTROL COIL
RTD1 & RTD2	MOTOR WINDING HEAT SENSOR
OL1 & OL2	MOTOR OVERLOAD
S1 & S2	SELECTOR SWITCH, 3-POSITION, HAND-OFF-AUTO
ETM1 & ETM2	ELAPSED TIME METER
ALT	ALTERNATOR
F1 & F2	FUSE
FS	FLOAT SWITCH
R	CONTROL RELAY
[]	TERMINAL STRIP—ASSIGNED TERMINAL NUMBER
RECTPT.	RECEPTACLE
TRANSMIT.	TRANSMITTER



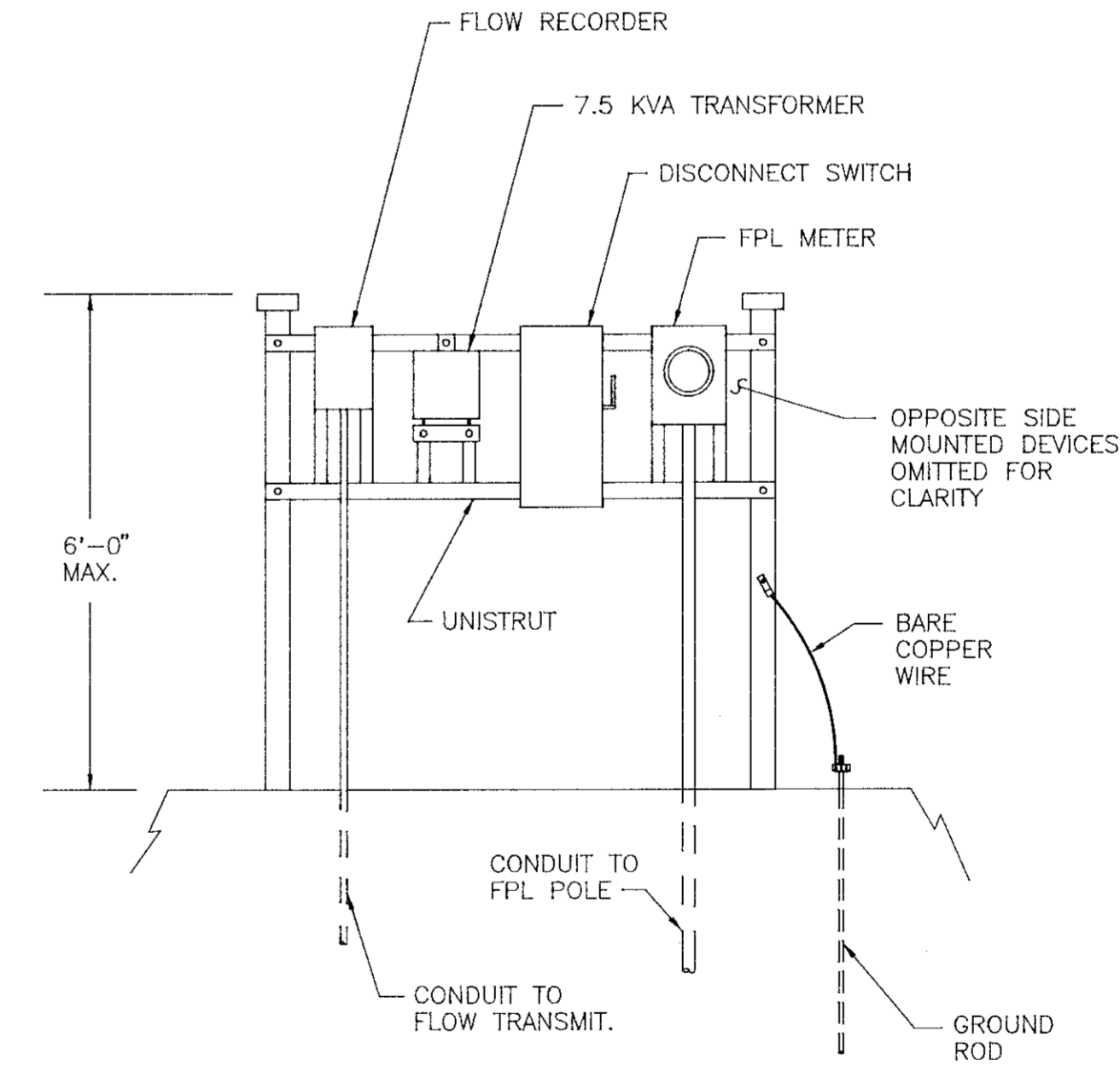
VIEW "A" - "A"



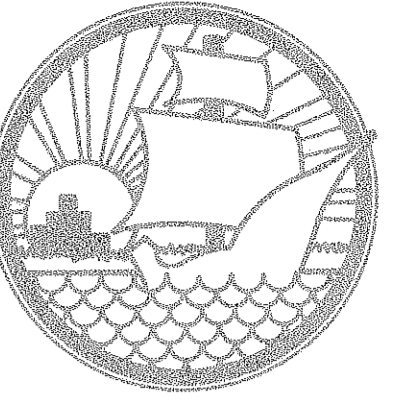
END VIEW

MOUNTING FRAMEWORK

N.T.S.



VIEW "B" - "B"



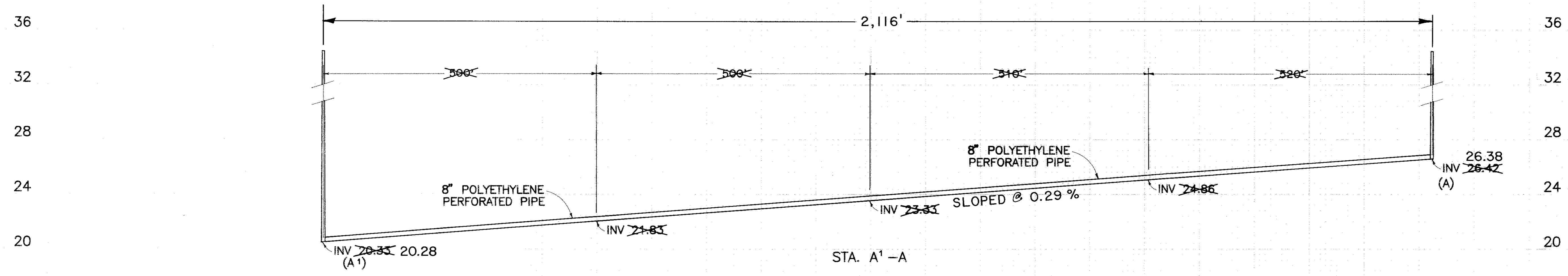
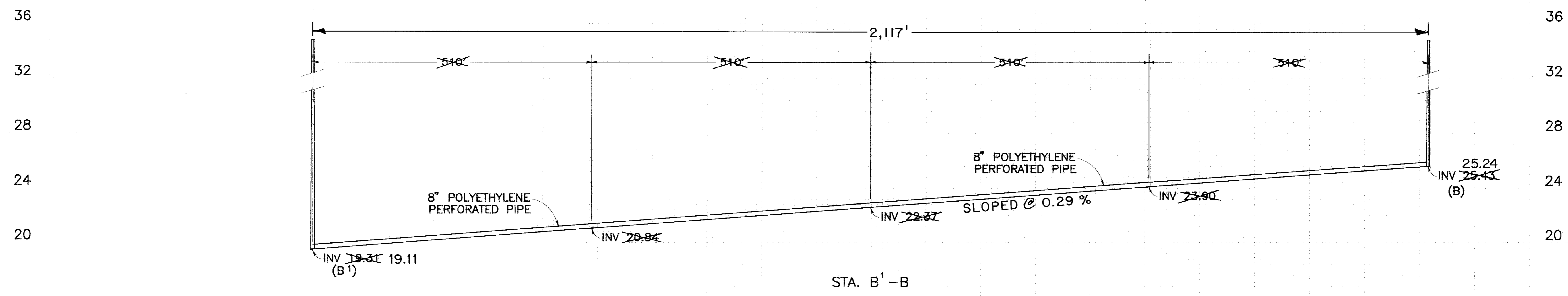
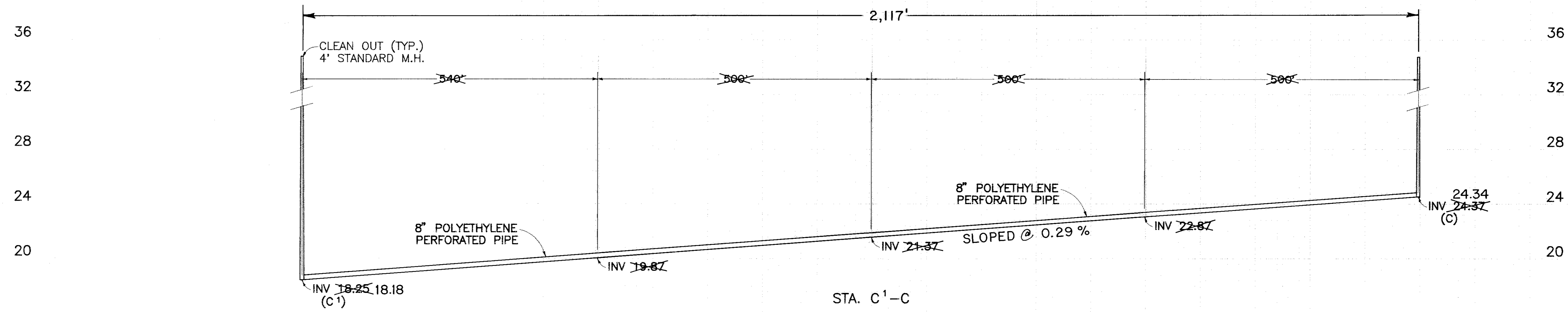
MANATEE COUNTY
PUBLIC WORKS
DEPARTMENT

**LEACHATE PUMP STA. No.4
ELECTRICAL DETAIL**

"AS-BUILT" J.R. 11/18/91		
REVISION	BY	DATE
SURVEYED		
DESIGNED	J.M.	10/90
DRAWN	M.H. J.E.L.	10/90
CHECKED		
FILE NO.:		
PROJECT NO.:	485-0190-534	
VERTICAL SCALE:	N.T.S.	
HORIZONTAL SCALE:	N.T.S.	
SEAL		

117
TMS

CUT		FILL	
A	V	A	V



PROFILES OF PIPES

NOTE: PROFILES ARE FOR INVERT ELEVATIONS ONLY. FOR GROUND ELEVATIONS SEE SHEET NO. 4.

ORIGINAL DATE: 12/89
 DRAWN BY: J. L. L.
 CHECKED BY: V. J. L.
 83-28

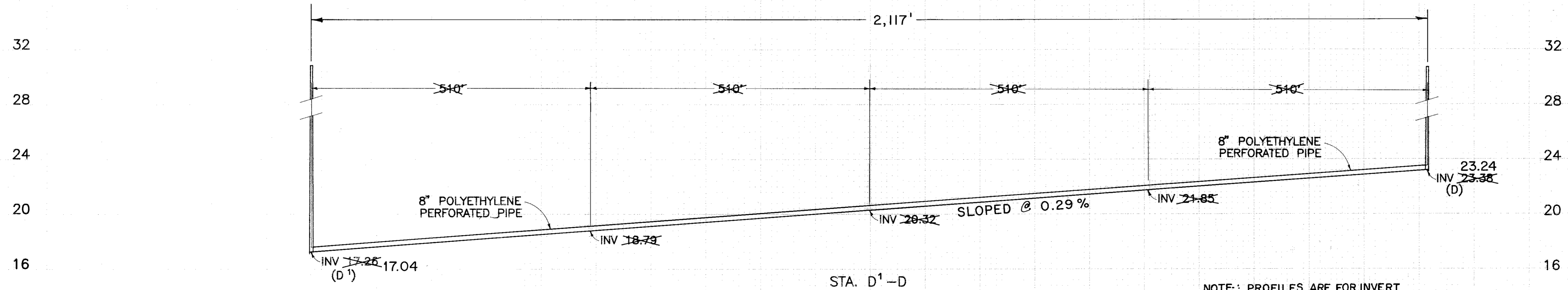
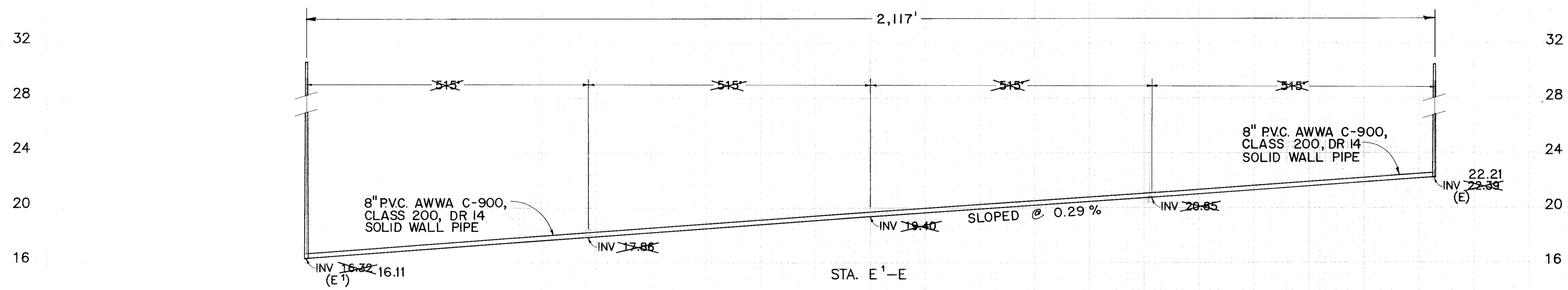
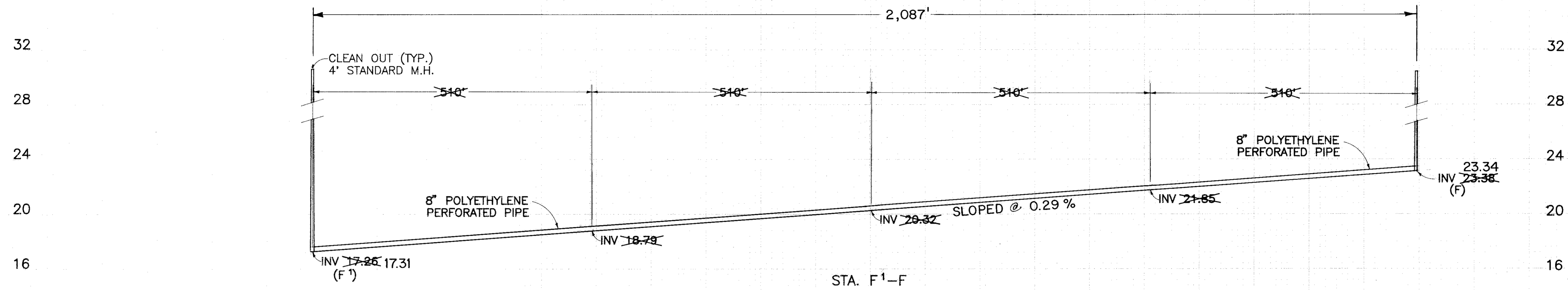


ORIGINAL DATE: 12/89
 DRAWN BY: J. L. L.
 CHECKED BY: V. J. L.
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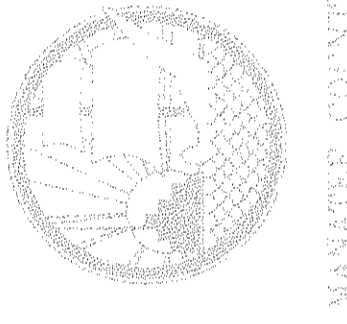
CUT		FILL	
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PROFILES OF PIPES

NOTE: PROFILES ARE FOR INVERT ELEVATIONS ONLY.
FOR GROUND ELEV. SEE SHEET NO. 4

MANATEE COUNTY
SURVEY
12/89
5/90



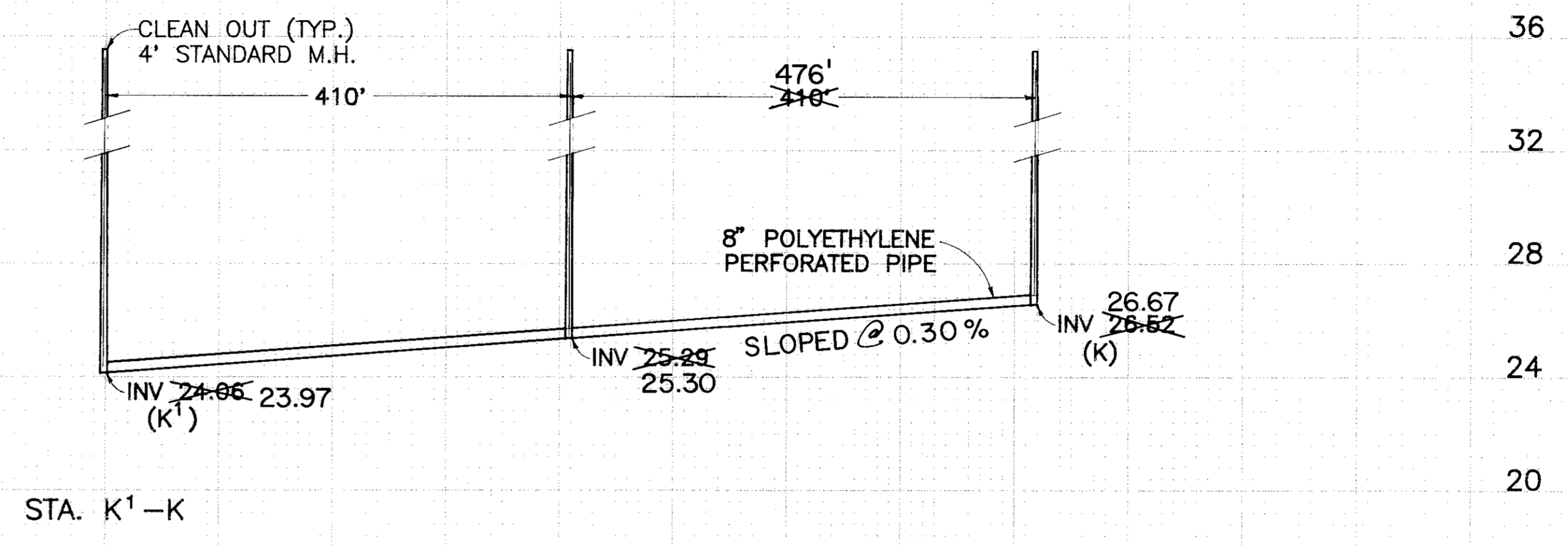
MANATEE COUNTY
SURVEY
12/89
5/90

CUT		FILL	
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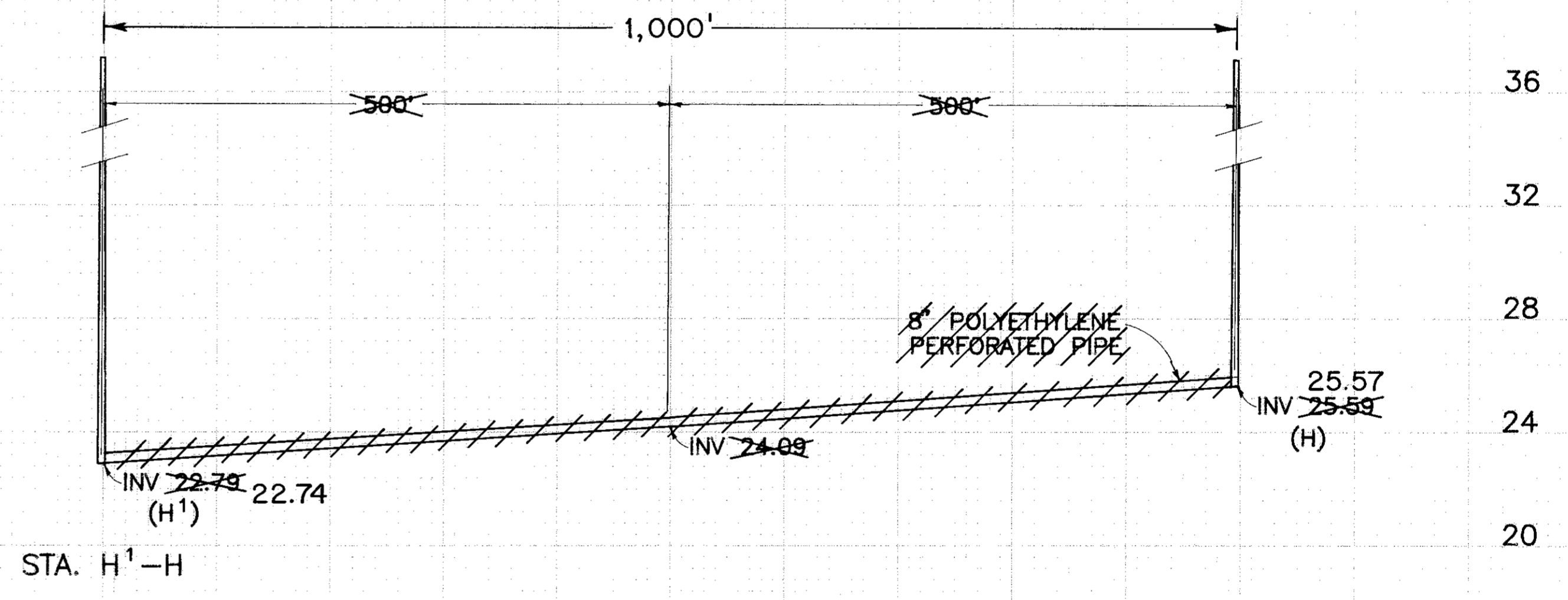
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WEST

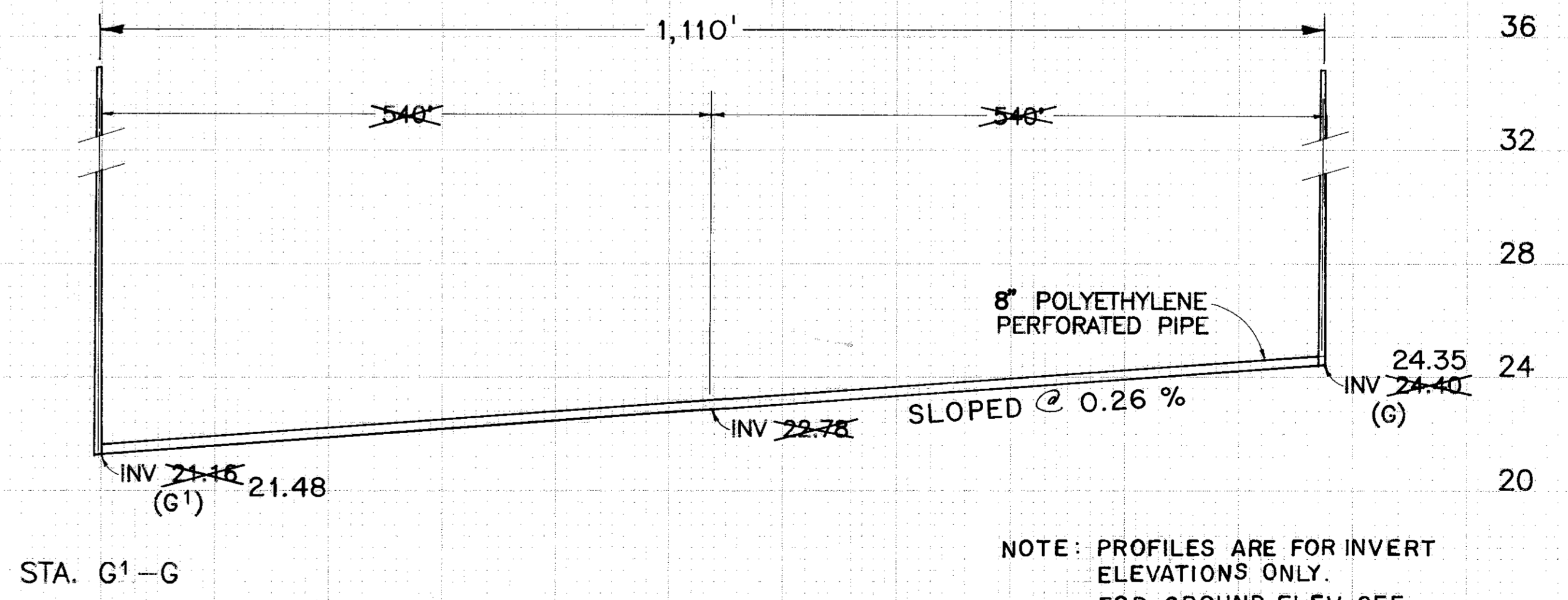
EAST



STA. K¹-K



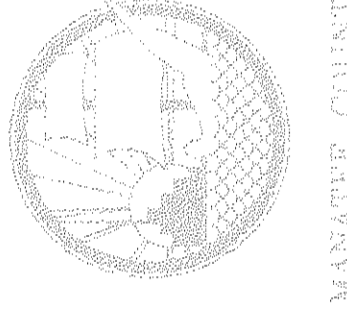
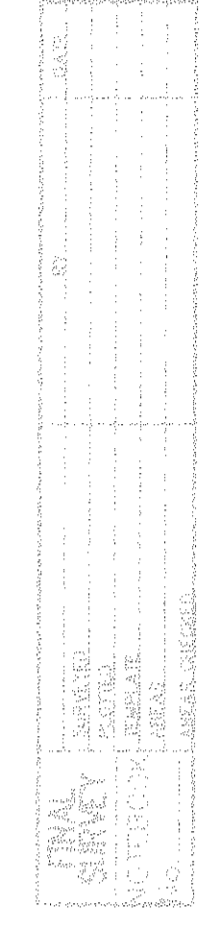
STA. H¹-H



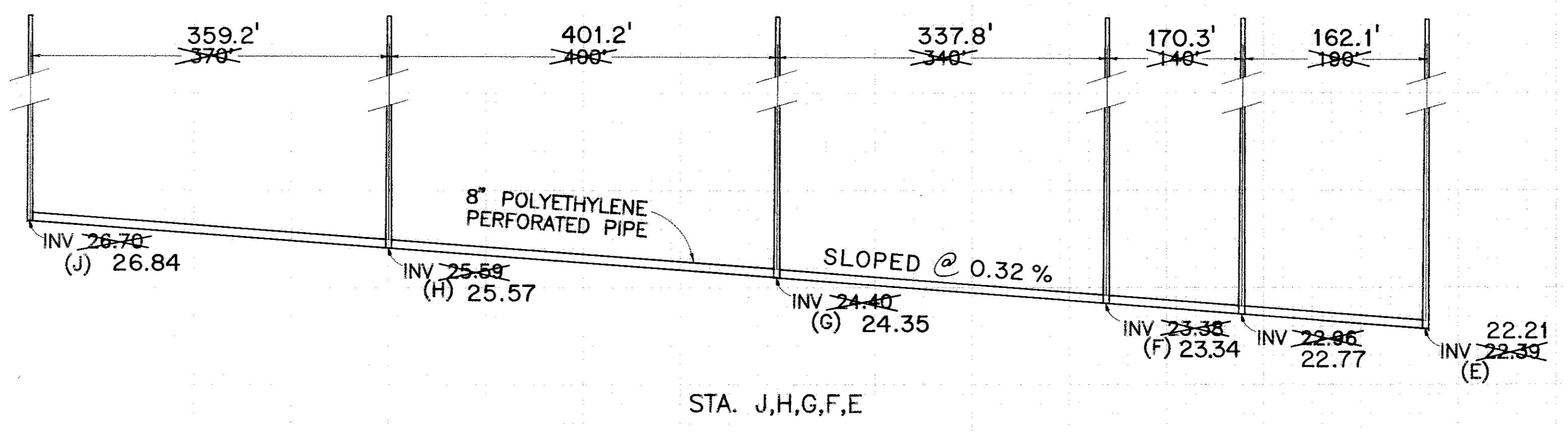
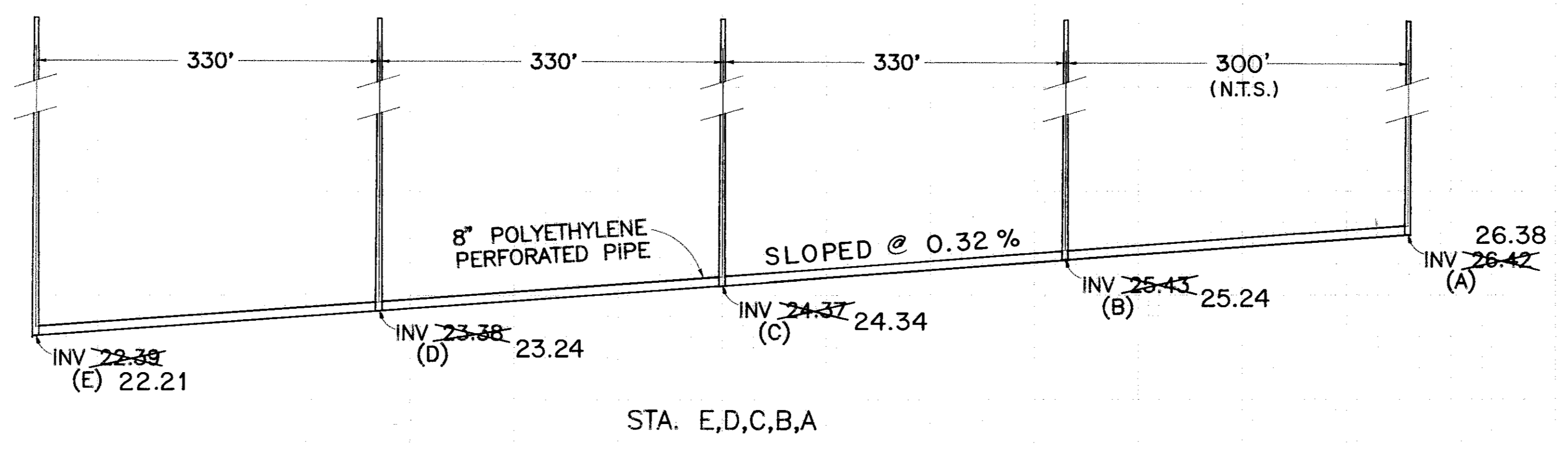
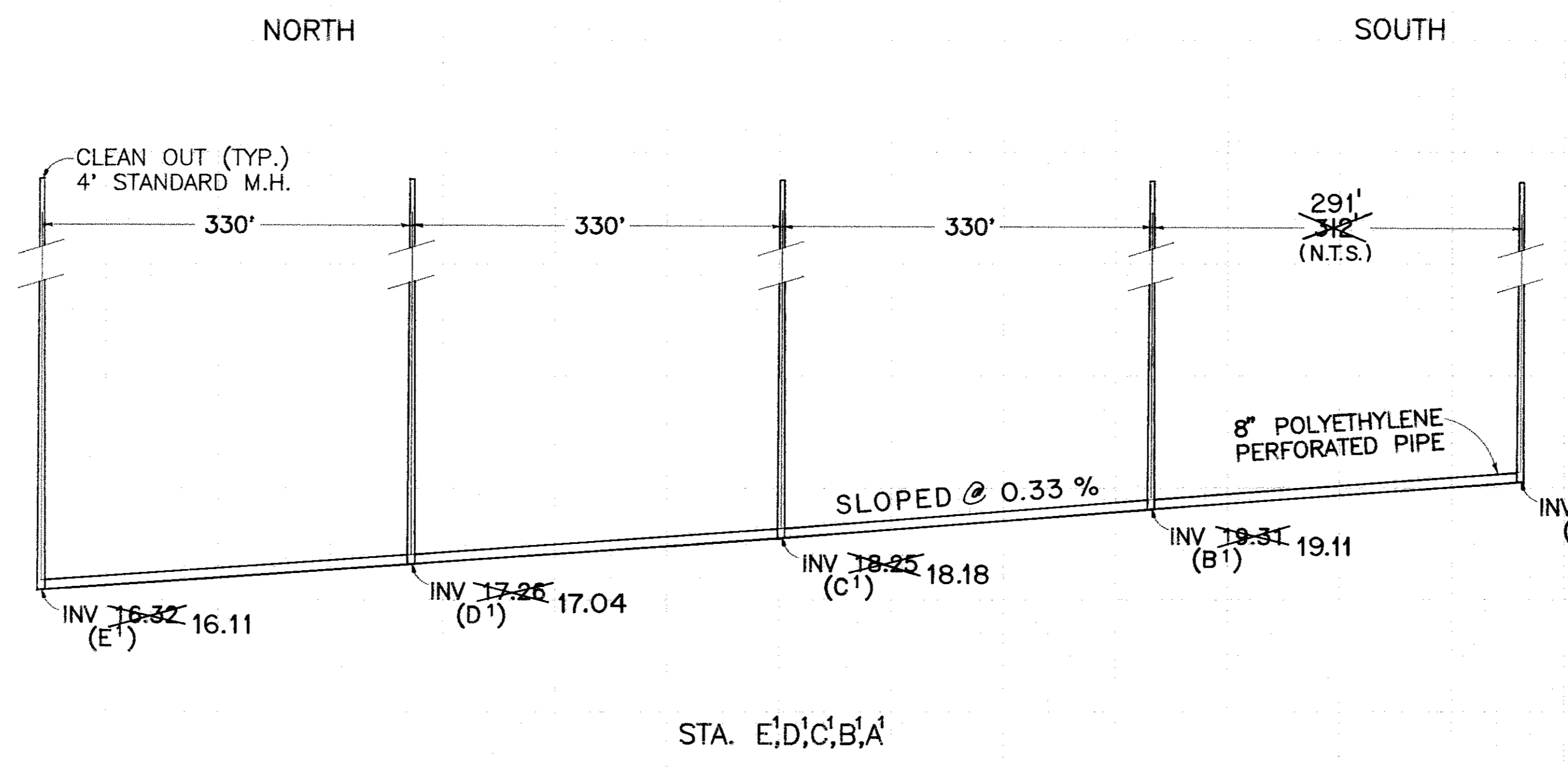
STA. G¹-G

PROFILES OF PIPES

NOTE: PROFILES ARE FOR INVERT
 ELEVATIONS ONLY.
 FOR GROUND ELEV. SEE
 SHEET NO. 4



CUT	FILL
A V	A V



PROFILES OF PIPES

NOTE: PROFILES ARE FOR INVERT ELEVATIONS ONLY. FOR GROUND ELEV. SEE SHEET NO. 4

ORIGINAL SURVEY
 93-28
 J.C. BIRROU
 5/90

ORIGINAL SURVEY
 93-28
 J.C. BIRROU
 5/90

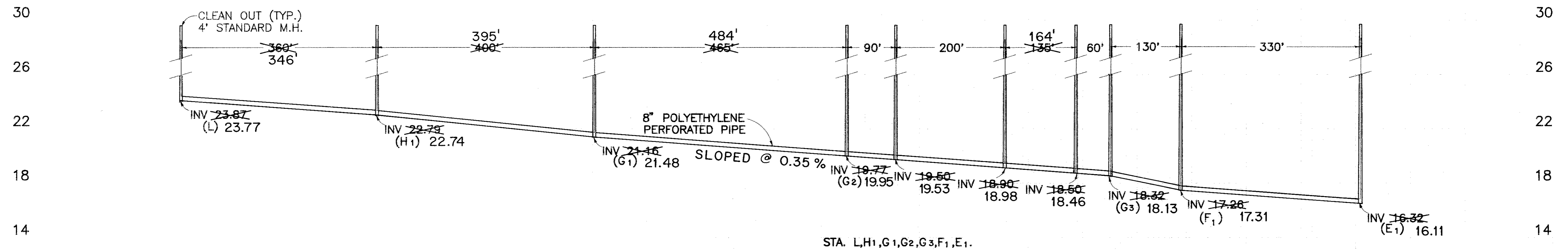


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NORTH

SOUTH



STA. L,H₁,G₁,G₂,G₃,F₁,E₁.

PROFILES OF PIPES

NOTE: PROFILES ARE FOR INVERT
 ELEVATIONS ONLY.
 FOR GROUND ELEV. SEE
 SHEET NO. 4.

12/89
 5/90
 I.C.
 D.ROOPE
 ✓ J.E.L.
 83-28

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