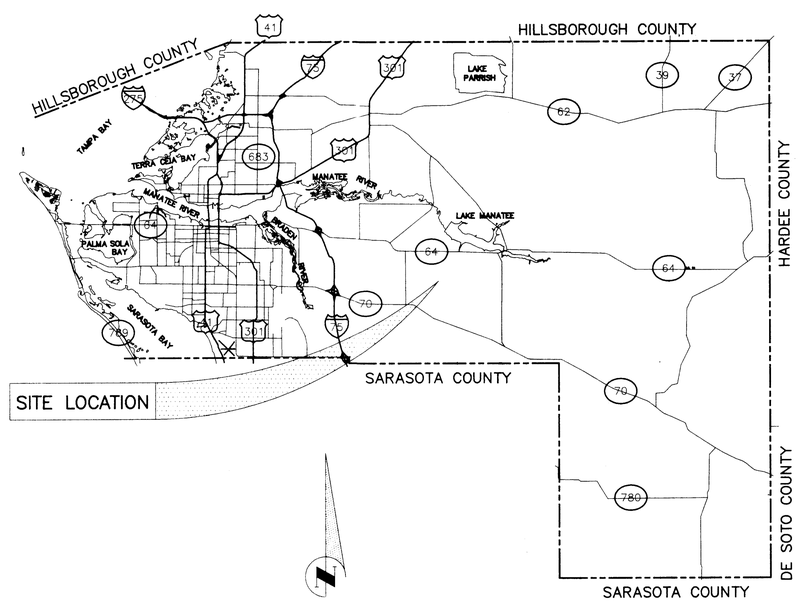
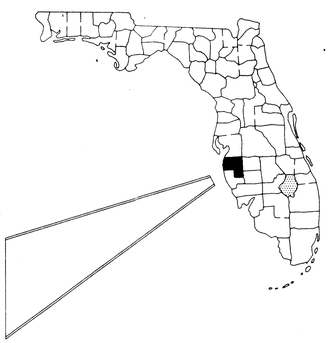
RECEIVED
MAY 21 1990
WASTE MANAGEMENT

MANATEE COUNTY, FLORIDA
LENA ROAD LANDFILL IMPROVEMENTS
STAGE 2-LEACHATE COLLECTION SYSTEM, PUMP STATION AND FORCE MAIN
PROJECT NO. 485-0190-534

JANUARY 1990





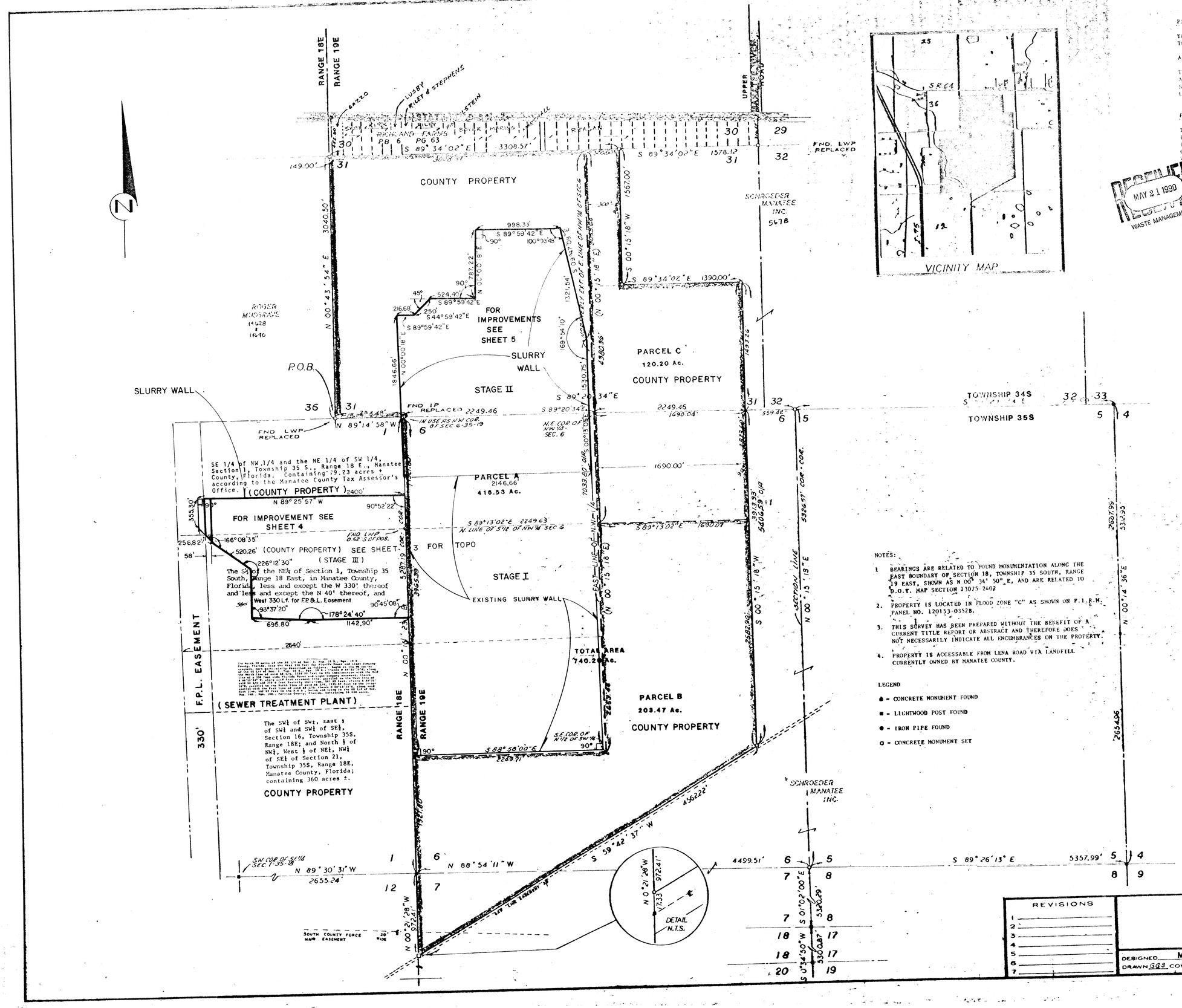
SHT.	DESCRIPTION
1	TITLE SHEET
2.	BOUNDARY SURVEY
3.	EXISTING TOPOGRAPHY (OVERALL PLAN)
4.	PROPOSED LEACHATE COLLECTION SYSTEM PUMP STATION.
5.	DETAILS OF STANDARD PRE-CAST MANHOLE, LEACHATE TRENCH AND WARNING SIGNAL.
6. & 7.	PUMP STATION DETAILS
8-12	PROFILE OF PIPES

APPROVED BY:

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

5/17/90

DATE



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.

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 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" W, 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 5406.39 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; THENCE N 89° 14' 58" W, ALONG 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:

1. 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
2. PROPERTY IS LOCATED IN FLOOD ZONE "C" AS SHOWN ON F.I.R.M. PANEL NO. 120153-0352B.
3. 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.
4. PROPERTY IS ACCESSABLE FROM LENA ROAD VIA LANDFILL CURRENTLY OWNED BY MANATEE COUNTY.

LEGEND

- ◆ - CONCRETE MONUMENT FOUND
- ■ - LIGHTWOOD POST FOUND
- ● - IRON PIPE FOUND
- ○ - CONCRETE MONUMENT SET

RECEIVED MAY 21 1990 WASTE MANAGEMENT

BOUNDARY SURVEY

OF

MANATEE COUNTY LANDFILL

IN

SEC 31 TWP 34 S., RGE 19 E.&

SEC 6&7, TWP 35 S., RGE 19 E.

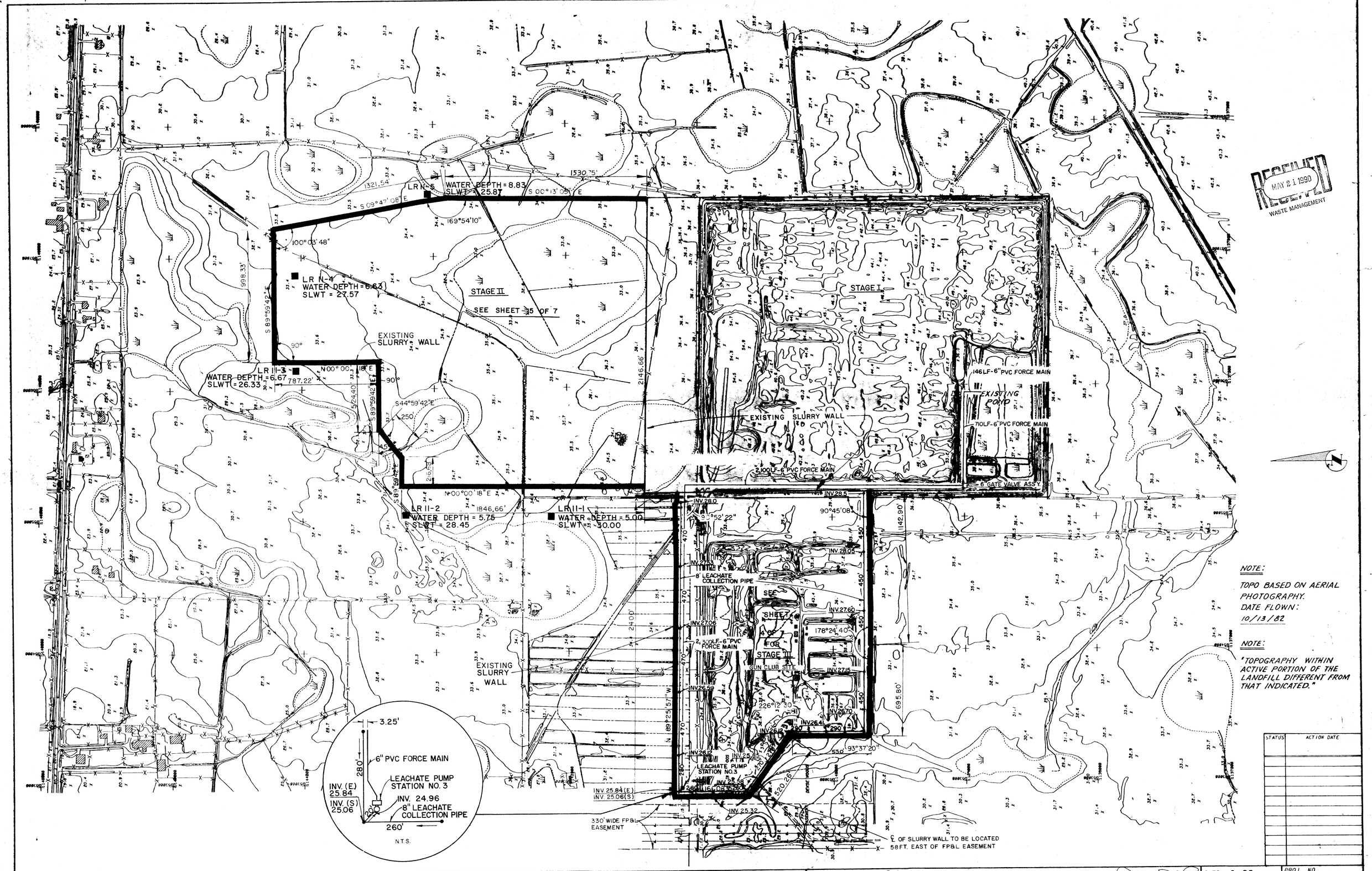
MANATEE COUNTY, FLORIDA

FOR: MANATEE COUNTY

REVISIONS
1
2
3
4
5
6
7

PROJECT 485-0100-334

DESIGNED M.V. CHECKED DATE 1/97 SCALE 1"=500'
DRAWN GGS COMP. JOB NO. FILE NO. SHEET 2 OF 12



RECEIVED
MAY 21 1990
WASTE MANAGEMENT

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

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

STATUS	ACTION DATE

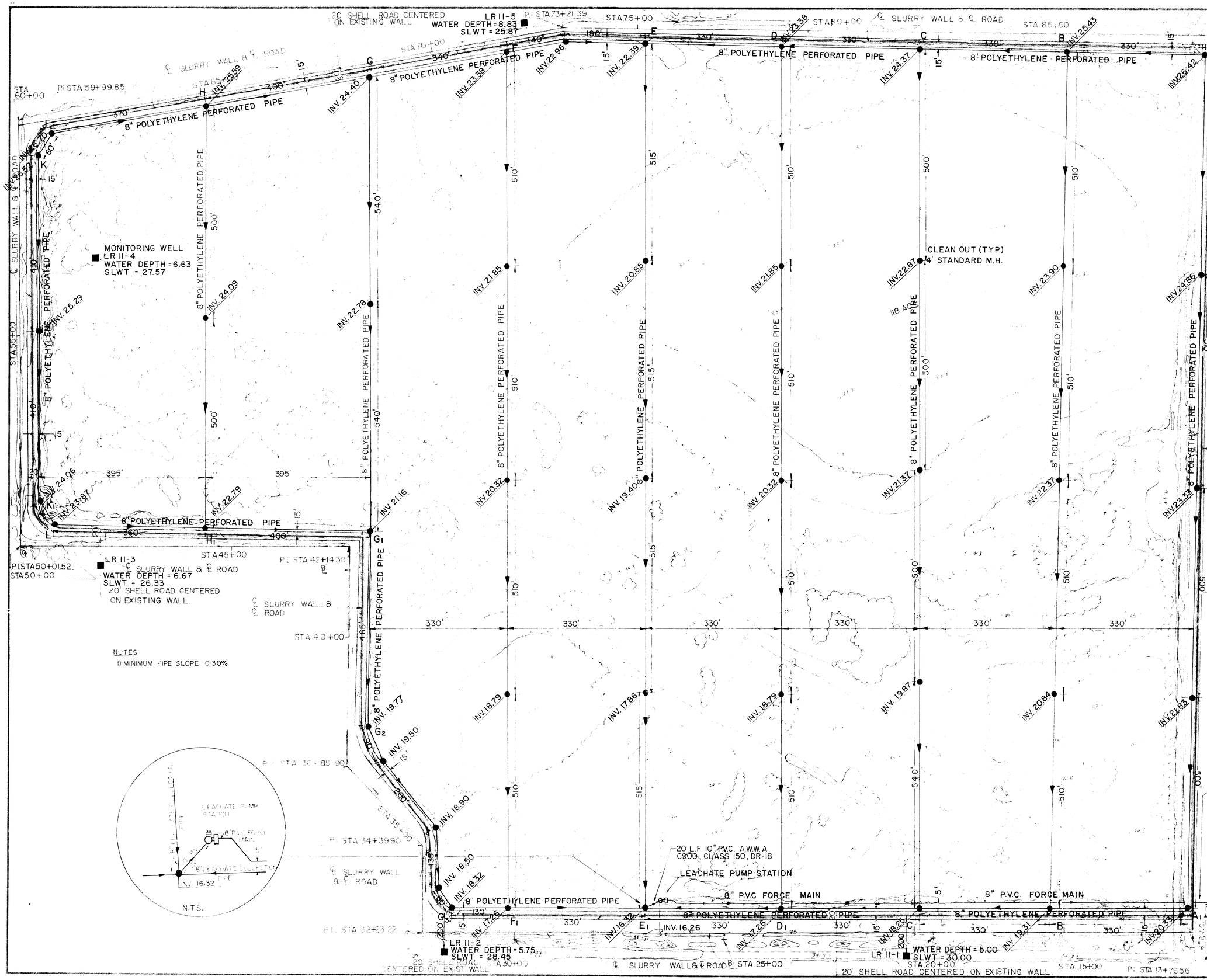
REV. NO.	DATE	REVISION	BY
1	6/16/90	ADDED MONITORING WELLS	JEL

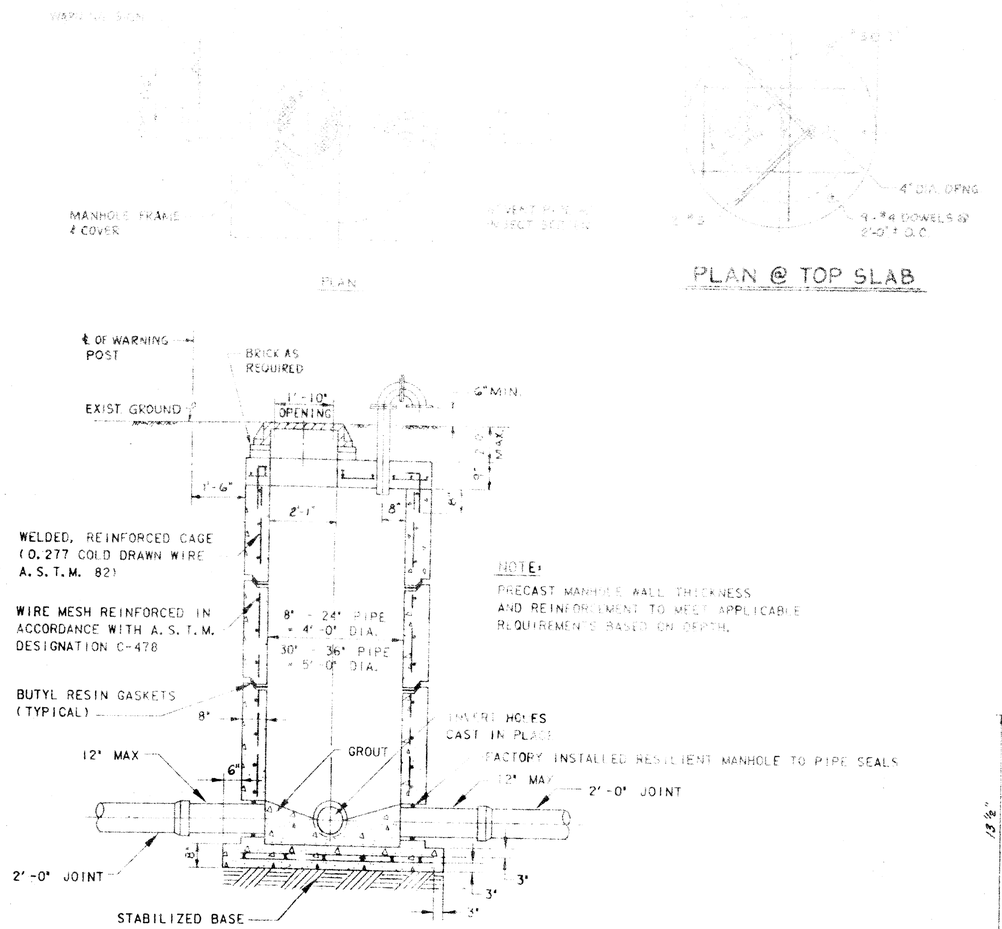
DESIGNED
DRAWN RGS
CHECKED

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.


20 SHELL ROAD CENTERED ON EXISTING WALL
LR11-5
WATER DEPTH=8.83
SLWT = 25.87
PI STA 73+21.39
STA 75+00
STA 80+00
℄ SLURRY WALL & ℄ ROAD
STA 85+00
PI STA 88+52.14
20 SHELL ROAD CENTERED ON EXISTING WALL.
STA 70+00
STA 65+00
STA 60+00
PI STA 59+99.85
8" POLYETHYLENE PERFORATED PIPE
INV. 25.59
INV. 24.40
INV. 23.38
INV. 22.96
INV. 22.39
INV. 23.38
INV. 24.37
INV. 25.43
INV. 26.42
SCALE 1"=100'
NOTE: ALL LEACHATE COLLECTION PIPE TO BE SLOPED AT 0.30 PERCENT.
MONITORING WELL
LR11-4
WATER DEPTH=6.63
SLWT = 27.57
CLEAN OUT (TYP.)
4' STANDARD M.H.
INV. 22.87
INV. 24.09
INV. 22.78
INV. 21.85
INV. 20.85
INV. 21.85
INV. 23.90
INV. 24.86
INV. 25.29
STA 55+00
℄ SLURRY WALL
INV. 24.06
INV. 23.87
INV. 22.79
INV. 21.16
INV. 20.32
INV. 19.40
INV. 20.32
INV. 21.37
INV. 22.37
INV. 23.33
8" POLYETHYLENE PERFORATED PIPE
STA 45+00
PI STA 42+14.30
PI STA 50+01.52
STA 50+00
LR 11-3
WATER DEPTH = 6.67
SLWT = 26.33
20' SHELL ROAD CENTERED ON EXISTING WALL.
℄ SLURRY WALL & ℄ ROAD
STA 40+00
NOTES
1) MINIMUM PIPE SLOPE 0.30%
INV. 18.79
INV. 17.86
INV. 18.79
INV. 19.87
INV. 20.84
INV. 21.82
INV. 19.77
INV. 19.50
INV. 18.90
PI STA 36+85.90
STA 35+00
PI STA 34+39.90
INV. 18.50
INV. 18.32
INV. 17.26
INV. 16.32
INV. 16.26
INV. 17.26
INV. 18.25
INV. 19.31
INV. 20.33
20 L.F. 10" PVC. AWWA C900, CLASS 150, DR-18
LEACHATE PUMP STATION
8" P.V.C. FORCE MAIN
LR 11-2
WATER DEPTH = 5.75
SLWT = 28.45
LR 11-1
WATER DEPTH = 5.00
SLWT = 30.00
STA 20+00
STA 30+00
STA 25+00
STA 15+00
PI STA 13+70.56
20 SHELL ROAD CENTERED ON EXIST. WALL
℄ SLURRY WALL & ℄ ROAD
20' SHELL ROAD CENTERED ON EXISTING WALL.
LEACHATE PUMP STATION
8" P.V.C. FORCE MAIN
INV. 16.32
N.T.S.
VARIABLE
CLEAN BACKFILL
12" MIN.
FILTER AGGREGATE
8" UD PIPE
6"
1'-8" (MIN.)
UNDERDRAIN PIPE DETAILS (N.T.S.)
8" LEACHATE COLLECTOR
8" PVC
300'
6" PVC MAIN
EXISTING SLURRY WALLS
6" TAPPING SLEEVE & VALVE
N.T.S.
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
LEACHATE COLLECTION SYSTEM, PUMP STATION & FORCE MAIN STAGE II, LENA ROAD LANDFILL.
SECTION
TOWNSHIP
RANGE
QUANTITIES BY
CHECKED BY
NAME
DATE
PROJECT NUMBER 485-0190-534
SURVEYED BY
BOOK NUMBER
DRAWN BY
APPROVED BY
DESIGNED BY
CHECKED BY
DATE
REVISED BY
SHEET 4 of 12 SHEETS
LENA ROAD LANDFILL IMPROVEMENTS STAGE II
LEACHATE COLLECTION SYSTEM, PUMP STATION & FORCE MAIN



SECTION

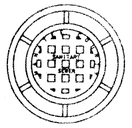
STANDARD PRECAST MANHOLE

NOTE:

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

NOTE:

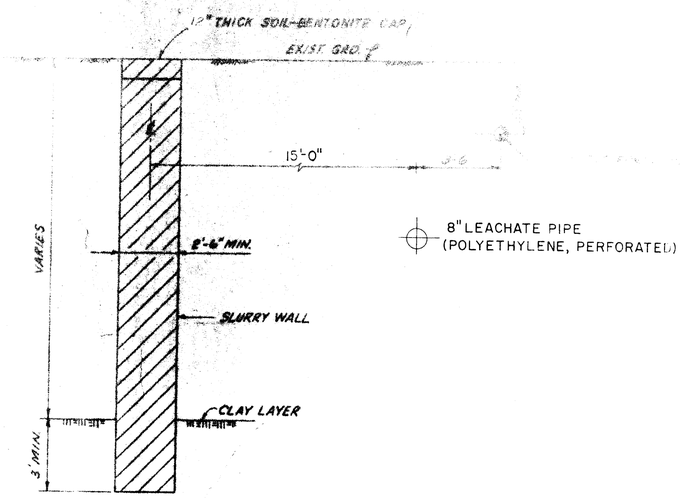
MANHOLE FRAMES AND COVERS SHALL CONFORM TO A.S.T.M. DESIGNATION A 48-(1971) OR FEDERAL SPECIFICATIONS QQ-I-652B. COMBINED WEIGHT SHALL BE NOT LESS THAN 305 POUNDS, COVER = 145 LBS., FRAME = 160 LBS.



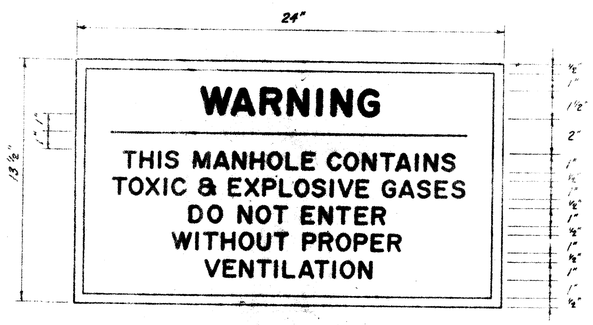
MANHOLE RING & COVER DETAIL

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.



SLURRY WALL DETAIL

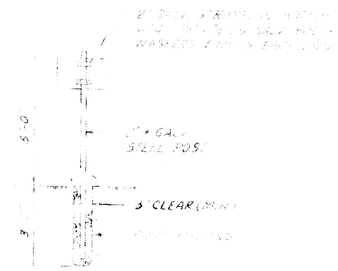


NOTES:

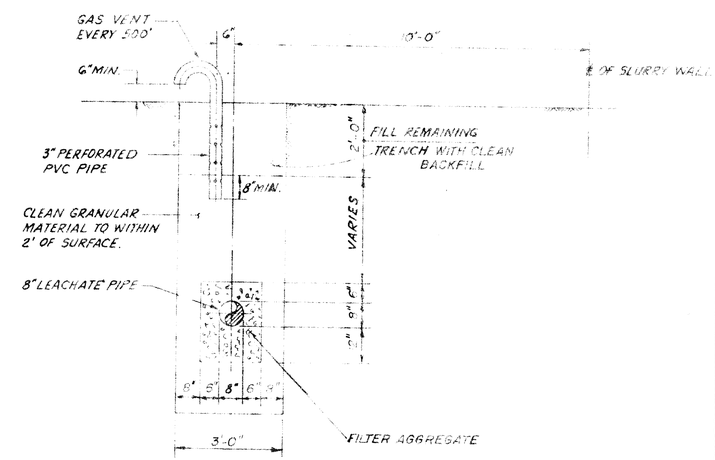
1. THE COLOR OF THE SIGN SHALL BE HIGH INTENSITY SILVER-WHITE REFLECTORIZED BACKGROUND WITH RED OPAQUE BORDER AND LEGEND.
   SIGN PANEL SHALL BE 0.08 IN. MIN. THICK ALUMINUM. PANELS ARE TO BE DEGREASED, ETCHED, NEUTRALIZED AND TREATED WITH ALODINE 1200, IRIDINE 14-2, BONDERITE 721 OR EQUAL. NO STENCILING PERMITTED ON PANELS.
2. PLACE 13 1/2" x 24" SIGNS AS SHOWN ON SIGN PLACEMENT DETAIL THIS SHEET. (16 REQUIRED)

WARNING SIGN DETAIL

SCALE: 3" = 1'-0"



SIGN PLACEMENT DETAIL



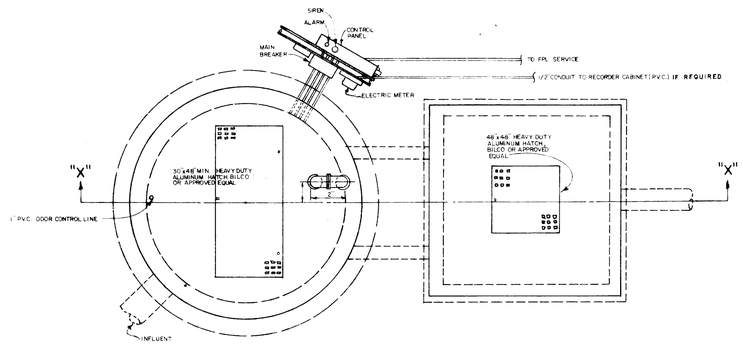
LEACHATE COLLECTION SEWER TRENCH DETAIL

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

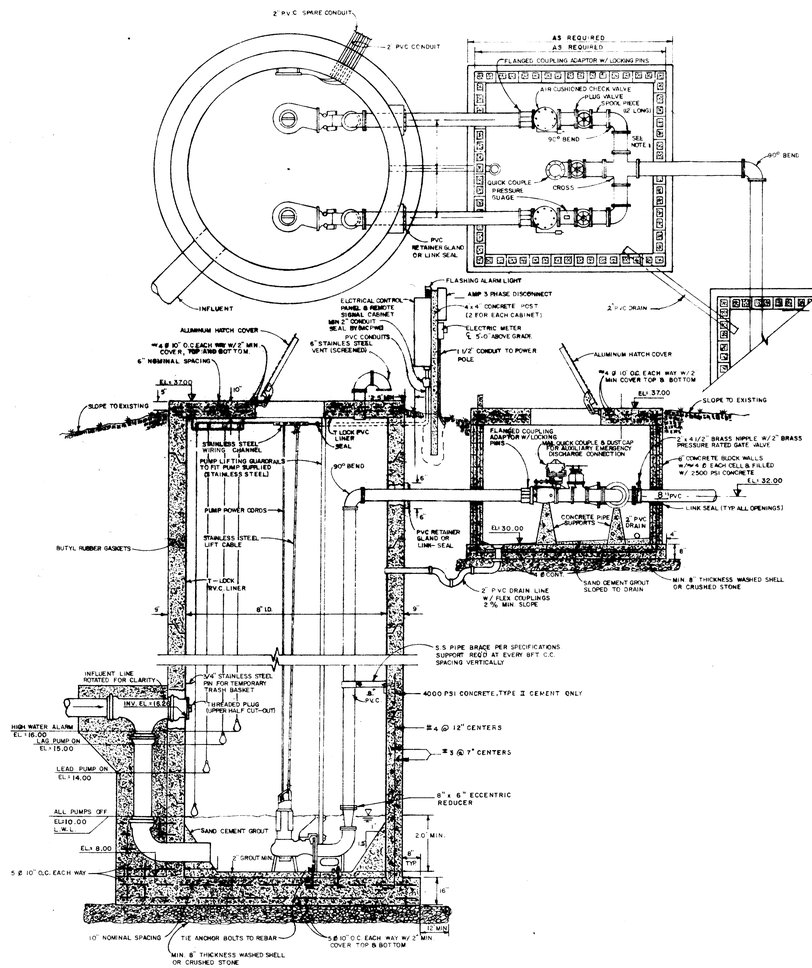
DETAIL		
LEACHATE TRENCH		—
REVISION		DATE
	BY	DATE
SURVEYED		
DESIGNED	T.J.Z.	10/88
DRAWN	H. GENIA	10/88
CHECKED	GTS/	1/90
FILE NO.		
PROJECT NO. 485-0190-534		
VERTICAL SCALE: HORIZONTAL SCALE:	AS NOTED	

SEAL

AF 44943



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 18" MIN. FROM OUTSIDE OF FLANGES TO WALLS.
7. MAGNETIC FLOW METER MAY BE PLACED IN VALVE VAULT (ENLARGE TO MEET MIN. CLEARANCE REQUIREMENTS).

GENERAL NOTES:

1. ACCESS COVERS SHALL BE EQUIPPED WITH LOCKING DEVICE SUITABLE FOR PADLOCKS IN COMPLIANCE WITH MCPWD STANDARDS. PADLOCKS SHALL BE FURNISHED BY MANATEE COUNTY PUBLIC WORKS DEPT.
2. A TEMPORARY TRASH BASKET WILL BE PROVIDED BY MANATEE COUNTY PUBLIC WORKS DEPARTMENT FOR INITIAL TESTING AND OPERATION.
3. GROUND SHALL BE SLOPED AWAY FROM SLAB TO NATURAL GROUND ELEVATION IN ALL DIRECTIONS. RESTORATION SHALL INCLUDE SODDING TO 20 FEET BEYOND CONCRETE STRUCTURES.
4. INSIDE OF VALVE VAULT AND FLOW METER VAULT SHALL BE COATED WITH 8 MIL MIN. COAL-TAR EPOXY.
5. ALL PIPING IN WET WELL, VALVE AND METER VAULTS SHALL BE RESTRAINED. BURIED FITTINGS SHALL BE RESTRAINED JOINT.
6. ALL PIPING SHALL BE COLOR CODED IN ACCORDANCE WITH MANATEE COUNTY PUBLIC WORKS DEPARTMENT STANDARDS. GREEN - RAW SEWAGE; BROWN - EFFLUENT; BLUE - POTABLE WATER.
7. ALL ANCHORS AND HOLES PROTRUDING THROUGH PVC WET WELL LINER SHALL BE THOROUGHLY SEALED WITH EPOXY.
8. OUTSIDE SURFACES OF WET WELL, VALVE AND METER VAULTS SHALL BE COATED WITH 2 COATS, 4 MIL MIN. DFT COAL-TAR EPOXY.
9. ALL METAL APPURTENANCES INCLUDING BOLTS, NUTS AND WASHERS INSIDE WET WELL SHALL BE STAINLESS STEEL UNLESS OTHERWISE NOTED (TYPE 304).
10. ALL PIPING AND FITTINGS IN THE WET WELL SHALL BE AWWA C-900 (CLASS 250, DR 14 FOR PIPE, CLASS 150 FOR FITTINGS) AND SHALL HAVE RESTRAINED JOINTS.
11. VALVE AND METER VAULTS MAY BE PRECAST AT CONTRACTOR'S OPTION. SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION.
12. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT FLOTATION DURING CONSTRUCTION. ENGINEER SHALL SUBMIT FLOTATION CALCULATIONS TO MCPWD, ENGINEERING DIVISION AT PLAN REVIEW SUBMITTAL.
13. BASE AND FIRST WALL SECTION SHALL BE MONOLITHIC.
14. PVC RESTRAINTS SHALL BE AS MANUFACTURED BY EBBA IRON INC, UNI-FLANGE DIVISION OF NAPPCO, INC. OR APPROVED EQUAL.
15. THE PUMP STATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH MANATEE COUNTY PUBLIC WORKS DEPARTMENT STANDARDS.
16. PROVIDE POTABLE WATER SERVICE CONNECTION, 3/4" BRASS LOCKSHIELD AND LOOSE KEY HOSE BIB. PROVIDE WATTS 909 HWQT BACKFLOW PREVENTOR (OR APPROVED EQUAL). ALL SERVICE WATER PIPING TO BE TYPE "L" COPPER OR BRASS, 3/4" MIM. DIAMETER.
17. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL HAVE 2 COATS BITUMASTIC EPOXY. TOTAL 16 MILS DFT.
18. ELECTRICAL SERVICE SHALL BE 240 VOLT, 3 PHASE MINIMUM.
19. MAGNETIC FLOWMETER IS REQUIRED FOR ALL PUMP STATIONS WITH A CAPACITY OF 200 GPM & GREATER.
20. A WATER METER ASSEMBLY TO BE INSTALLED BY CONTRACTOR AS PART OF WATER SERVICE CONNECTION.

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.	153
MIN. EFF. AT DESIGN CAPACITY, %	44
DESIGN SPEED, MAX. R.P.M.	1750
MAX. HORSEPOWER PER PUMP, H.P.	75
MIN. SHUT-OFF HEAD, FT.	175
MIN. SIZE SOLIDS, IN.	4
MIN. DISCHARGE SIZE, IN.	6
SECONDARY CAPACITY PER PUMP, G.P.M.	375
SECONDARY HEAD, FT.	159
PUMP MANUF. & MODEL NUMBER	ABS, AF-550-4WT
IMPELLER DIAMETER	321 mm
PUMP R.P.M.	1750
ELECT. SVC.-VOLTAGE & PHASE	230/460 V. 3Ø
FORCE MAIN - LENGTH, DIAMETER & MATERIAL	2956' OF 6", 1610' 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

REVISION		DATE
CHANGED ELEV'S	J.E.L.	5/17/90

	BY	DATE
SURVEYED		
DESIGNED	T.J.Z	11/89
DRAWN	K.E.	11/89
CHECKED		

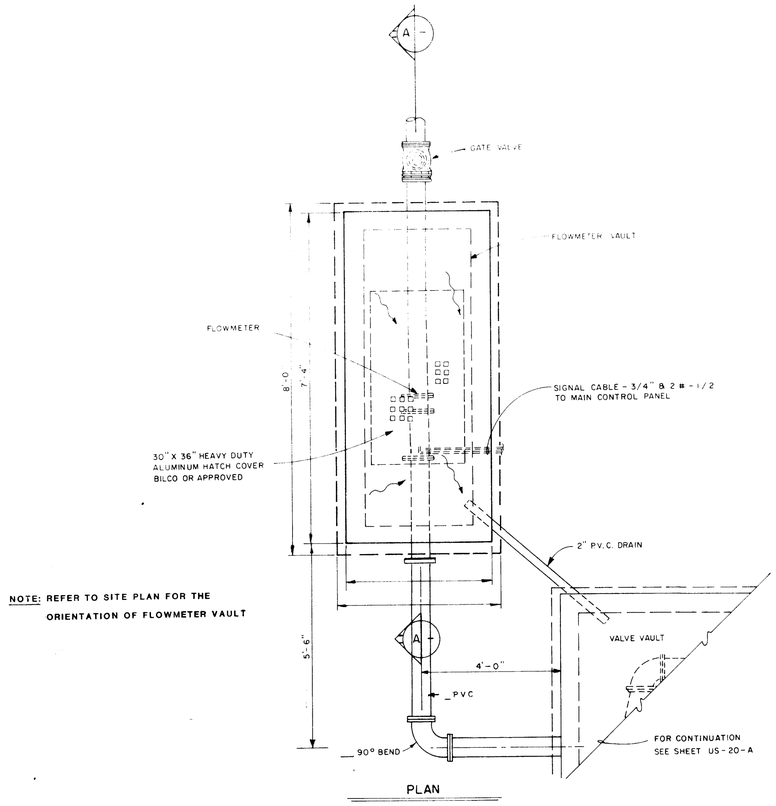
FILE NO.:

PROJECT NO.: 485-0190-534

VERTICAL SCALE: N.T.S.
HORIZONTAL SCALE: N.T.S.

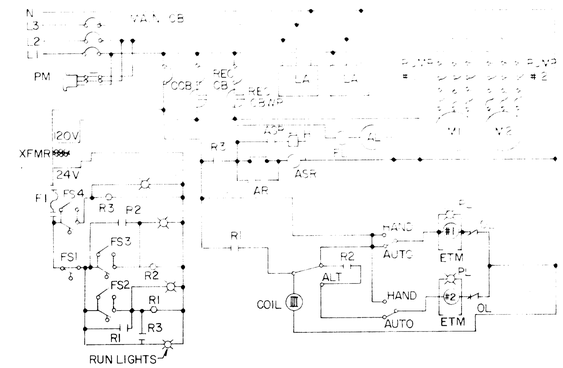
SEAL

US 20-A



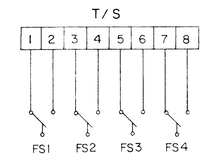
NOTE: REFER TO SITE PLAN FOR THE ORIENTATION OF FLOWMETER VAULT

PLAN



CONTROL PANEL

ELECTRICAL SCHEMATIC

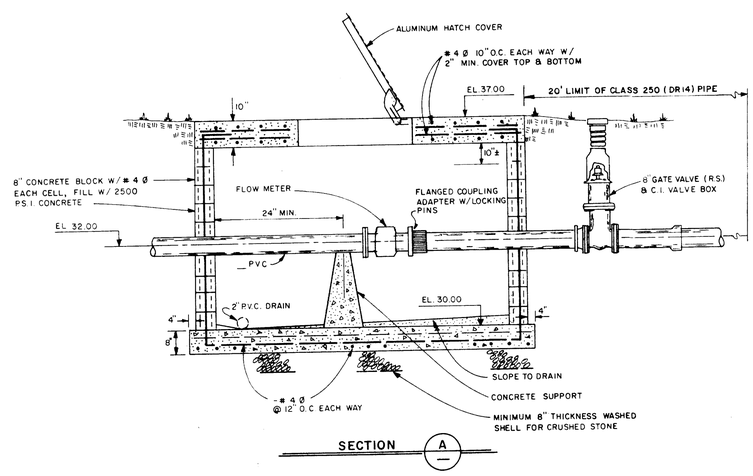


LEGEND

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	FLOAT SWITCH
H	HORN
ASR	ALARM SILENCER
FL	FLASHER
AL	ALARM LIGHT
ALT	ALTERNATOR
ETM	ELAPSE TIME METER
OL	THERMAL OVERLOAD
T/S	TERMINAL STRIP
G/R	GENERATOR RECEPTACLE
REC CBWP	WEATHERPROOF RECEPTACLE CIRCUIT BREAKER

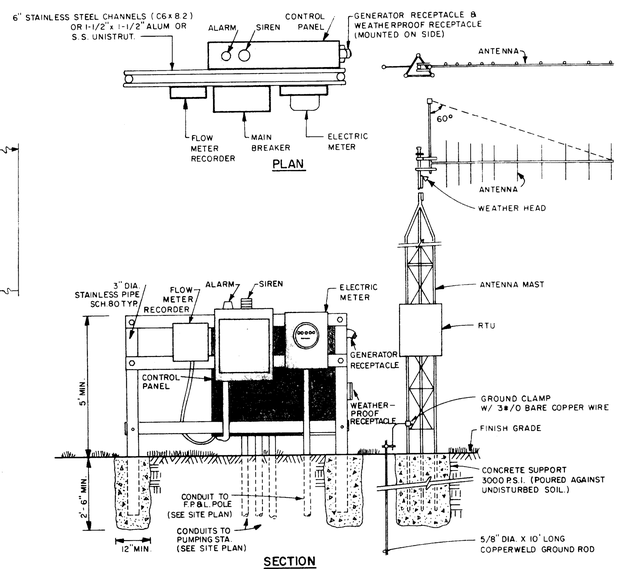
NOTE:

ALL EQUIPMENT FURNISHED FOR THE PUMP STATION SHALL CONFORM TO MANATEE COUNTY PUBLIC WORKS DEPT. STANDARDS



SECTION A

FLOW METER VAULT



SECTION

TYPICAL SERVICE ENTRANCE STRUCTURE

NOTE:

1. SEE THIS SHEET FOR ELECTRICAL DETAILS.
2. 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.
3. ALL CONDUIT ENTERING THE CONTROL PANEL SHALL HAVE SEALING LOCKNUTS.
4. ALL PVC CONDUIT SHALL BE SCHEDULE 80.
5. CONTROL AND FLOW METER ENCLOSURE TO BE NEMA 4X WITH RAIN SHIELD.

NOTE: ALL FASTENERS AND OTHER HARDWARE SHALL BE TYPE 304 STAINLESS STEEL

MANATEE COUNTY PUBLIC WORKS DEPARTMENT

SEWAGE PUMP STATION DETAILS

METER VAULT & ELECTRICAL DETAILS

REVISION		DATE
	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.		

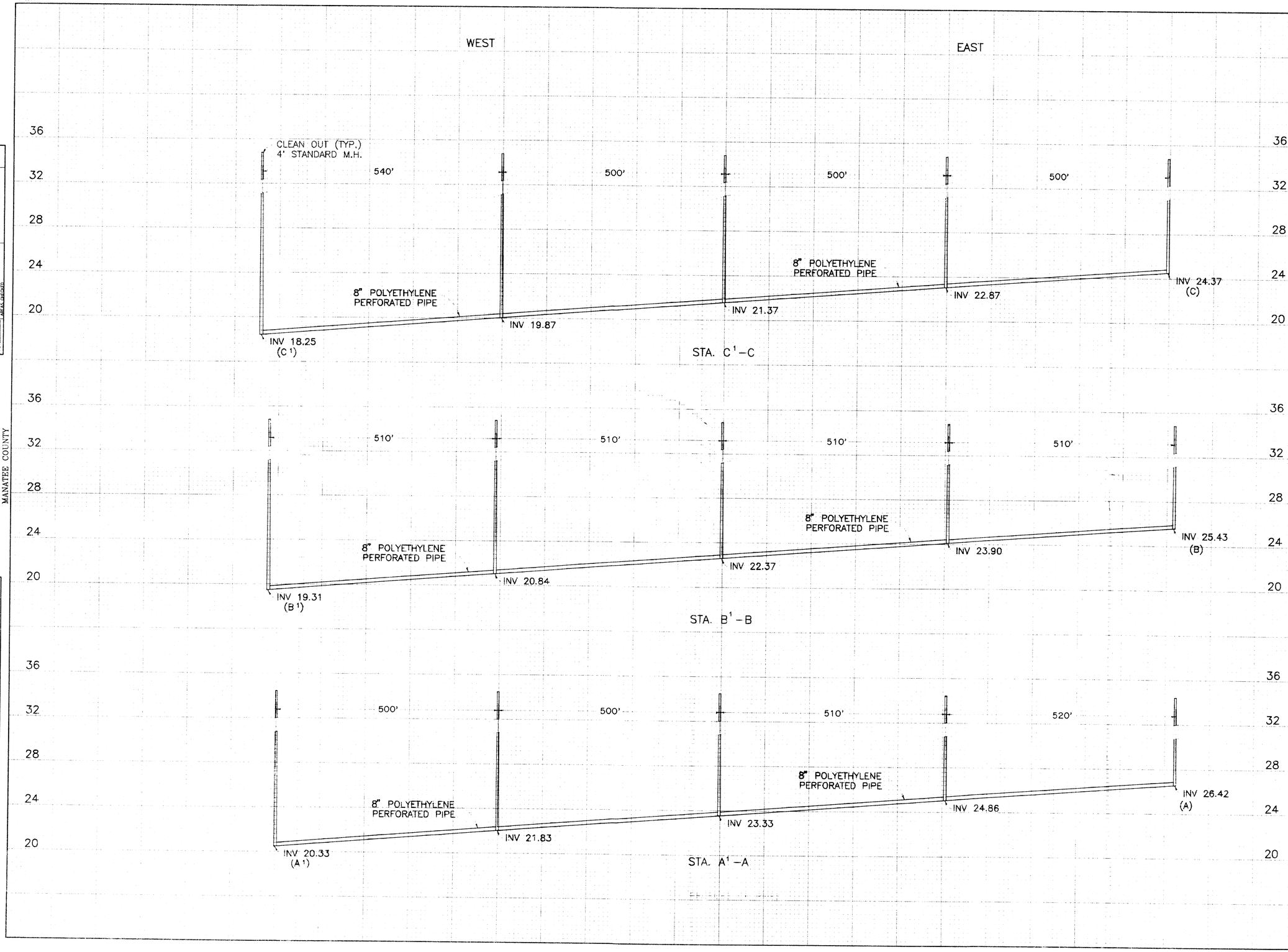
SEAL

US 20-B

AF 52004

LENA ROAD LANDFILL STAGE II MANATEE COUNTY	
0190	SCALE: HORZ. 1"=100' VERT. 1"=4'

CUT		FILL	
A	V	A	V



MANATEE COUNTY

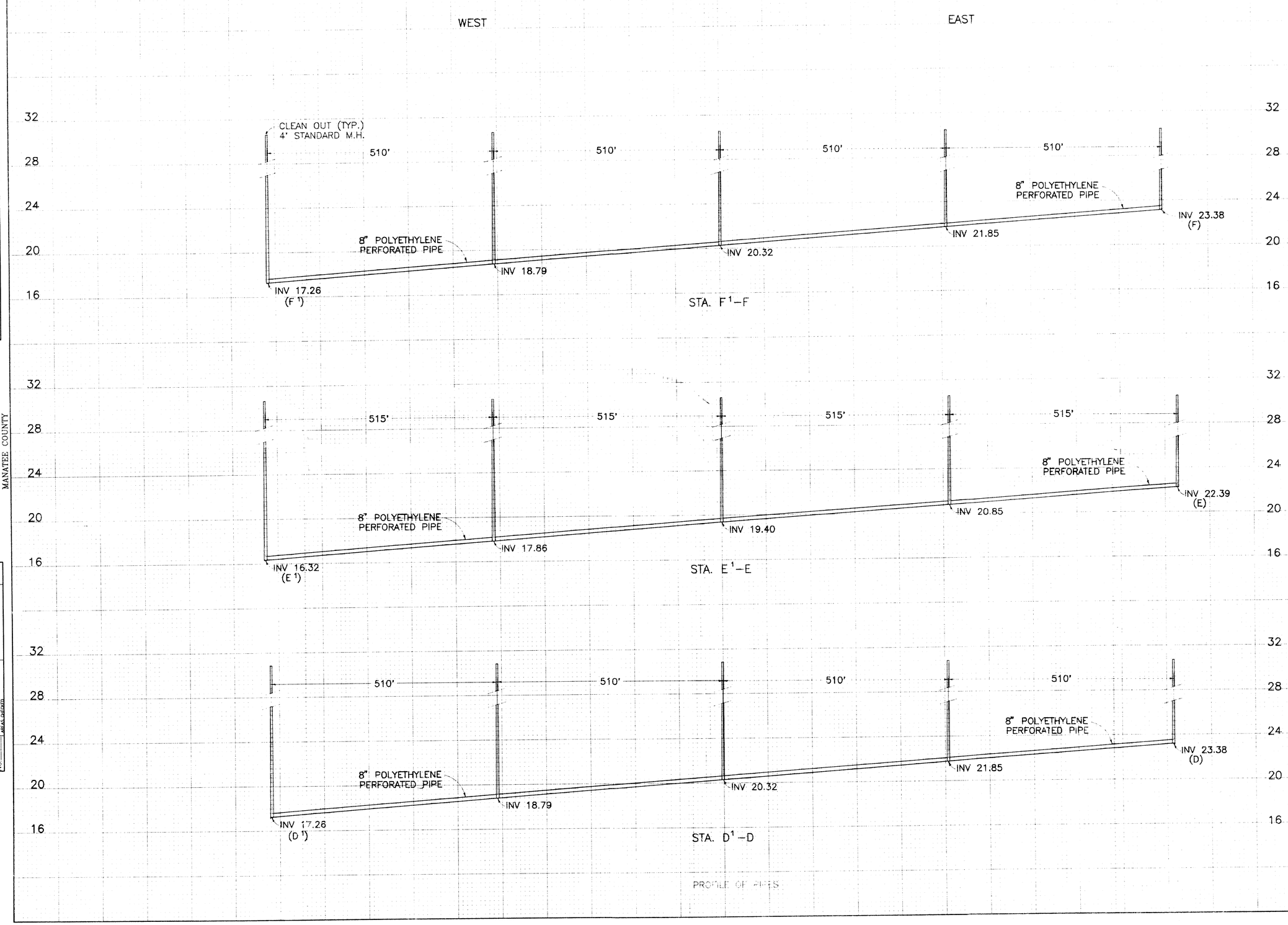
FINAL SURVEY
NOTEBOOK No.
SURVEYED
PLOTTED
DUPLICATE
AREAS
AREAS CHECKED
BY:
DATE:

ORIGINAL SURVEY
NOTEBOOK No.
SURVEYED
PLOTTED
DUPLICATE
AREAS
AREAS CHECKED
BY:
DATE:

LENA ROAD LANDFILL STAGE II
MANATEE COUNTY

0190 | SCALE: HORZ. 1" =100' VERT. 1" =4'

CUT		FILL	
A	V	A	V



PROFILE OF PIPES

MANATEE COUNTY

FINAL SURVEY
SURVEYED
PLOTTED
DRAWN
AREAS CHECKED
NOTEBOOK
No.
DATE
BY

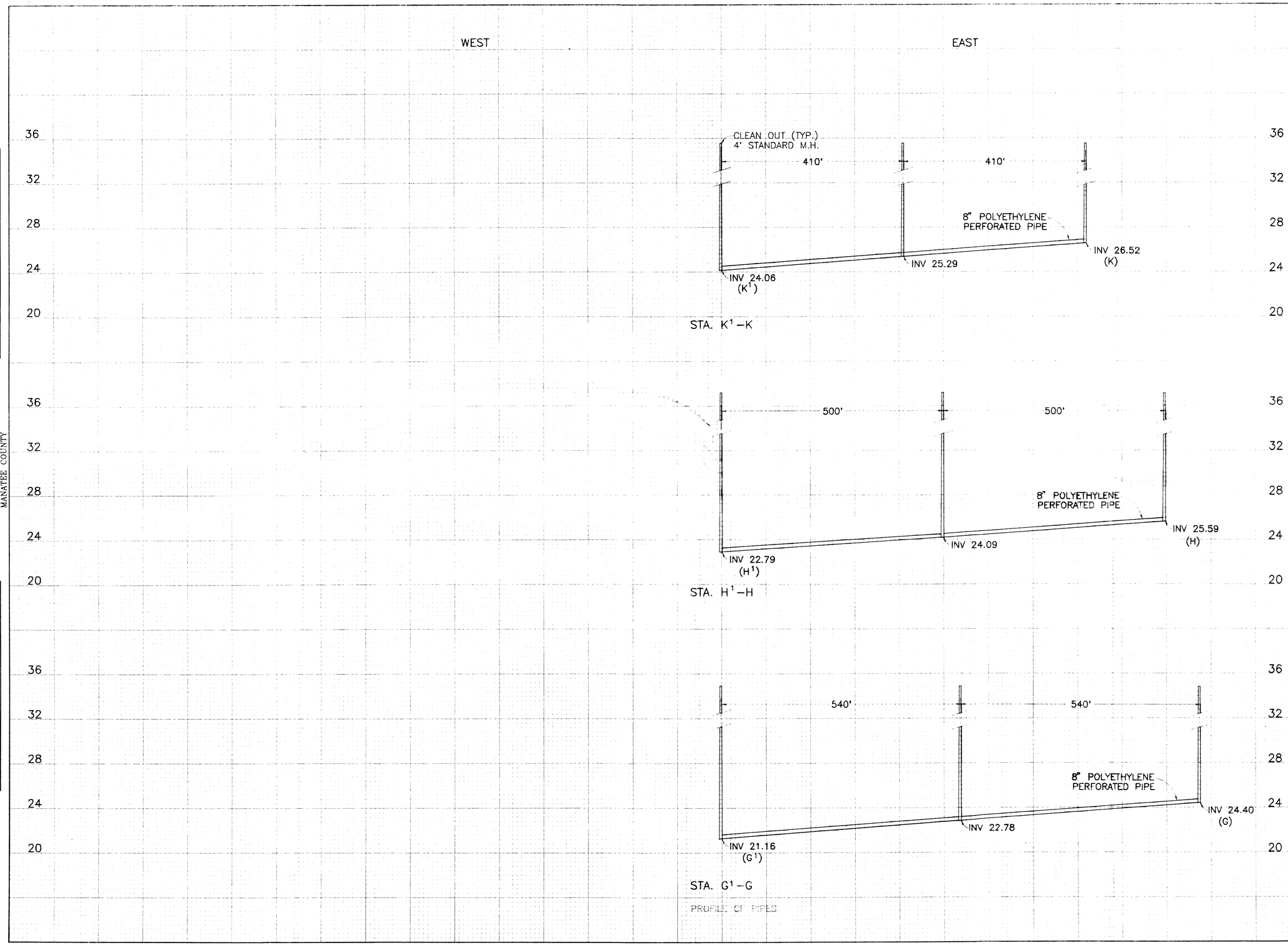
ORIGINAL SURVEY
SURVEYED
PLOTTED
DRAWN
AREAS CHECKED
NOTEBOOK
No.
DATE 5-7-97
BY THOMPSON

SHEET 9 OF 12

LENA ROAD LANDFILL STAGE II
MANATEE COUNTY

0190 SCALE: HORZ. 1"=100' VERT. 1"=4'

CUT		FILL	
A	V	A	V



PROFILE OF PIPES

FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTEBOOK
No.
BY:
DATE:

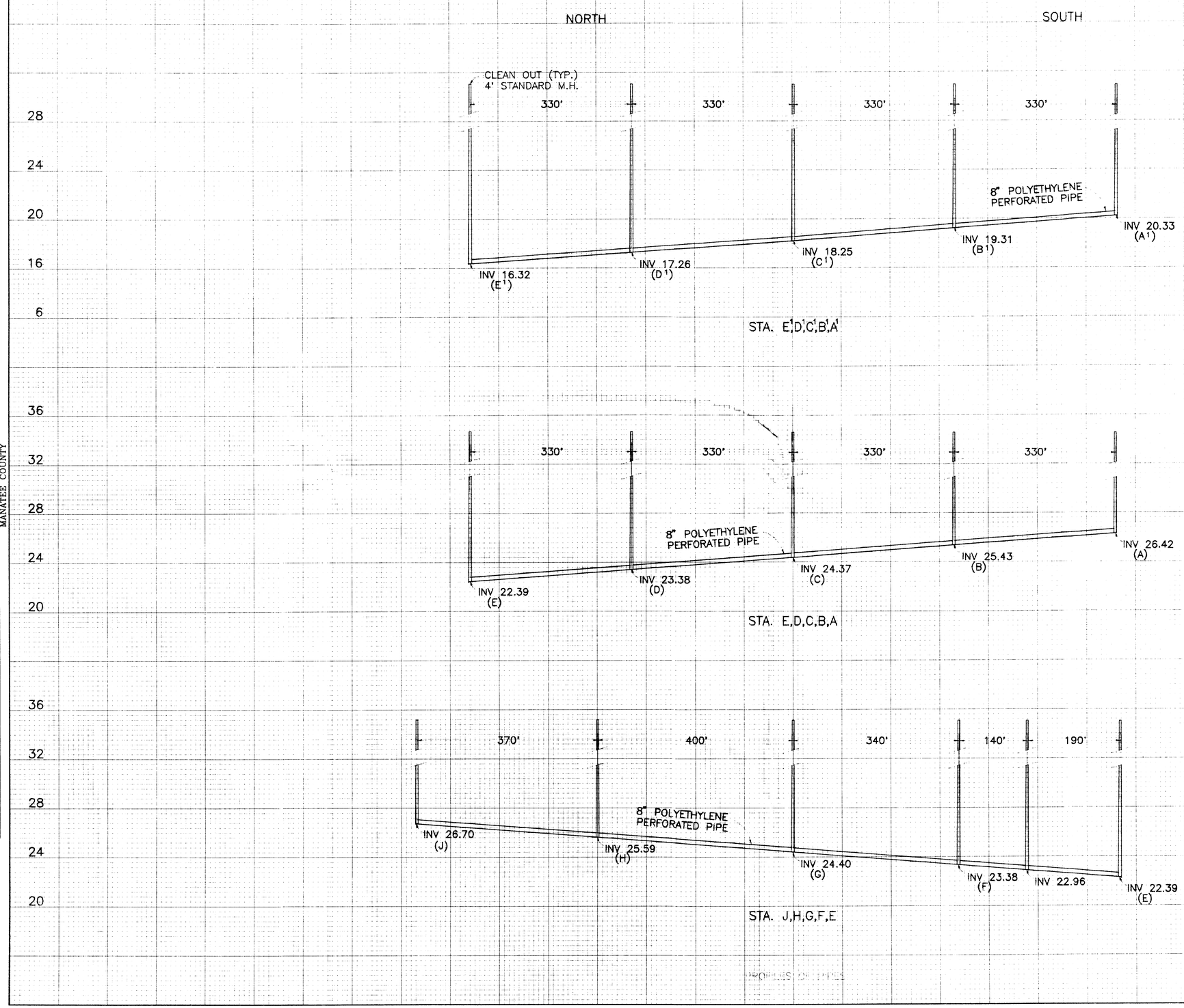
ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTEBOOK
No. 91-4
BY:
DATE: 5-95

MANATEE COUNTY

LENA ROAD LANDFILL STAGE II
MANATEE COUNTY

0190 | SCALE: HORZ. 1" =100' VERT. 1" =4'

CUT		FILL	
A	V	A	V



FINAL SURVEY
SURVEYED
PLOTTED
NOTEBOOK: TEMPLATE
AREAS
No. AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTEBOOK: TEMPLATE
AREAS
No. AREAS CHECKED
BY
DATE

MANATEE COUNTY

LENA ROAD LANDFILL STAGE II
MANATEE COUNTY

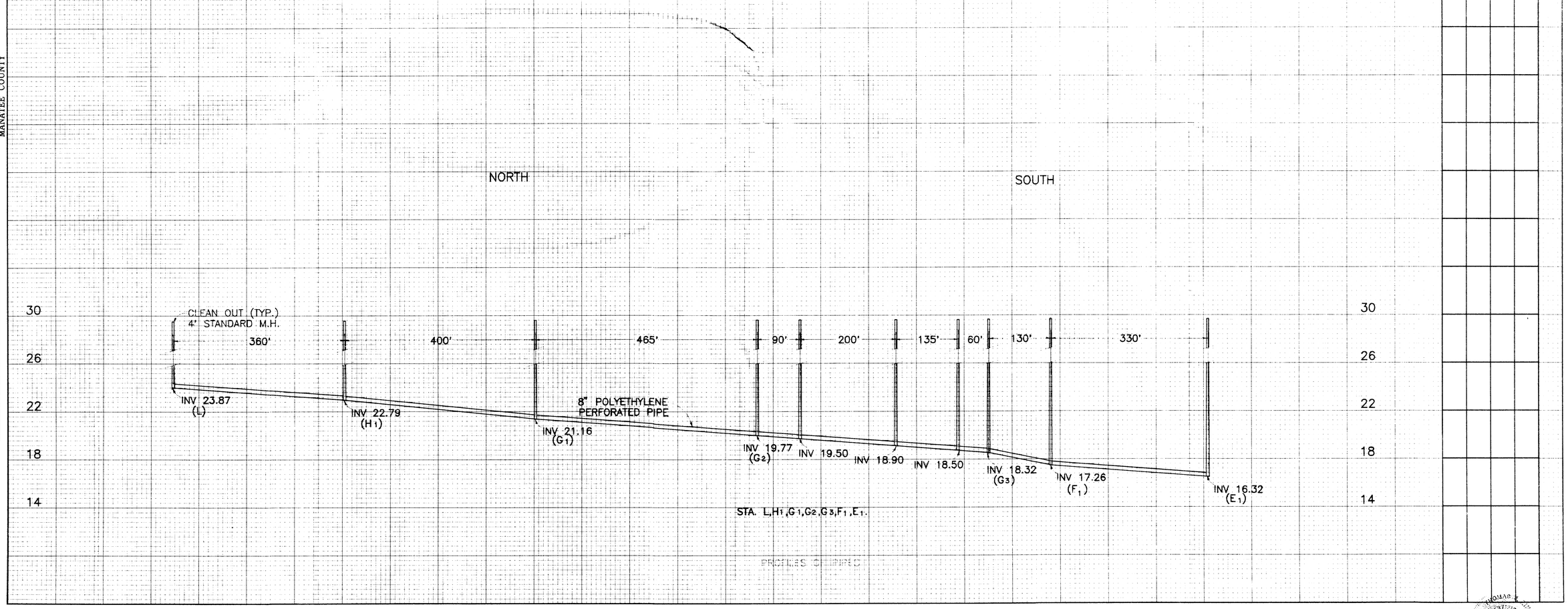
0190 SCALE: HORZ. 1"=100 VERT. 1"=4'

CUT		FILL	
A	V	A	V

FINAL SURVEY
NOTEBOOK No.
SURVEYED
PLOTTED
DRAWN
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTEBOOK No.
SURVEYED
PLOTTED
DRAWN
AREAS
AREAS CHECKED
BY
DATE

MANATEE COUNTY



SHEET 12 OF 12