

1565236 (1)

B.M.#2 - TOP I.R.&C. PLS 4502; P.I. STA. 4+70.34
ELEV. 36.69

B.M.#3 - TOP I.R.&C. PLS 4502; P.I. STA. 9+84.05
ELEV. 37.61

B.M.#4 - TOP I.R.&C. PLS 4502; P.I. STA.16+67.04
ELEV. 37.41

LEACHATE PUMP STATION NO.3
CORE-BORE PROP. 8" P.V.C.
PIPE INTO EXIST. WET WELL
PROP. S.E. INV.=27.68

RECORD DRAWING

I HEREBY CERTIFY THAT THE RECORD DRAWING OF THE UTILITIES SHOWN,
BASED UPON THE DESIGN CONSTRUCTION PLANS, IS TO THE BEST OF
MY KNOWLEDGE, INFORMATION, AND BELIEF A TRUE AND CORRECT
REPRESENTATION OF THE IMPROVEMENTS AS SHOWN.

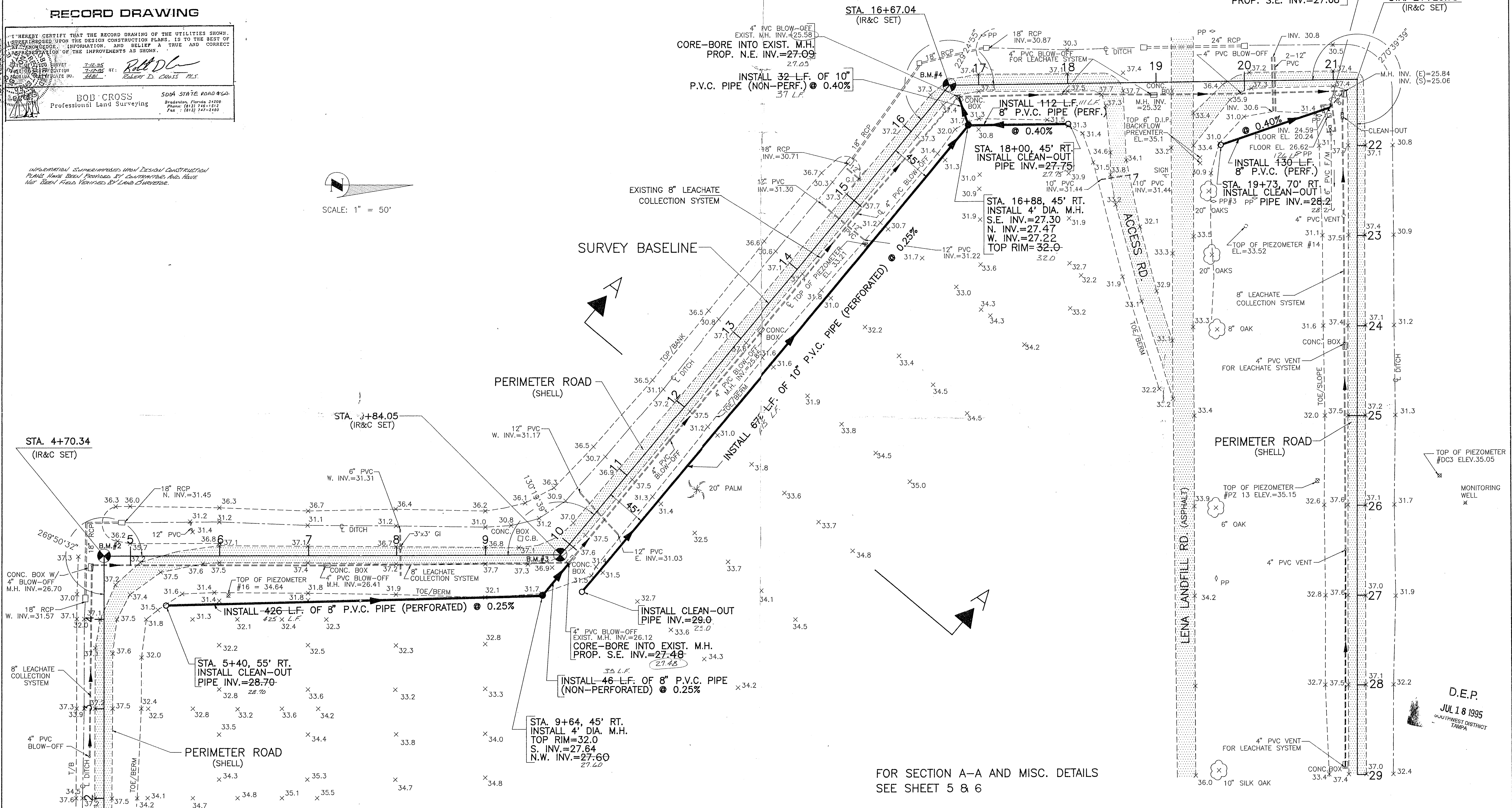
DATE: 7-18-95 BY: *Roll D.C.*
DRAWN: 7-18-95 BY: *Robert D. Cross PLS.*
CHECKED: 7-18-95 BY: *Roll D.C.*

BOD CROSS
Professional Land Surveying
Bradenton, Florida 34209
Phone: (813) 748-1512
Fax: (813) 747-2100

FLORIDA
STATE BOARD OF
LAND SURVEYING

INFORMATION SURVEYED PRIOR TO DESIGN CONSTRUCTION
PLANS HAVE BEEN PROVIDED BY CONTRACTOR AND HAVE
NOT BEEN FIELD VERIFIED BY LAND SURVEYOR.

SCALE: 1" = 50'



FOR SECTION A-A AND MISC. DETAILS
SEE SHEET 5 & 6

PLAN/PROFILE ~ BOOK NOS. 93-80				BY	CHECKED	DATE	ENGINEER	PUBLIC WORKS DEPT.	REVISION DESCRIPTION & DATE	BY	NO.	Proj. No.	485-0199-534	
	By	Checked	Date											
Surveyed	T.CULBREATH		2/94	Designed	R.T. HALL	PC.	7/94					Dwg. Date	JULY 1994	
Plotted				Drawn	J.LAURENT		7/94					Dwg. No.	PLAN1	
Alignment				Quantities	J.LAURENT	PC.	8/94					Sht.	4	of 6
Right of Way														
Scale: 1" = 50'														



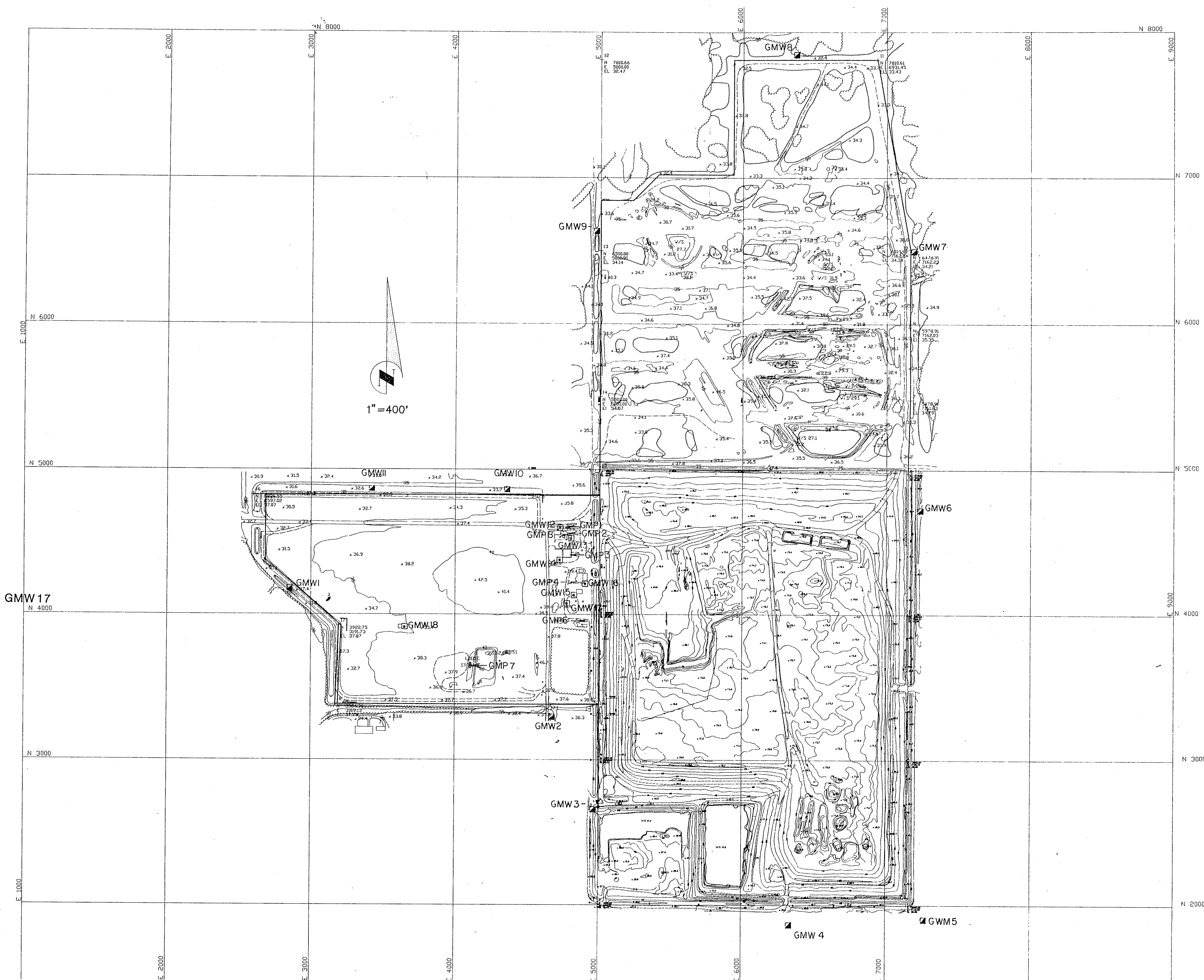
LENA ROAD LANDFILL - STAGE III LEACHATE COLL. SYSTEM MODIFICATION PLAN SHEET

D.E.P.
JUL 18 1995
SOUTHWEST DISTRICT
TAMPA

GMW1
GMW2
GMW3
GMW4
GMW5
GMW6
GMW7
GMW8
GMW9
GMW10
GMW11

BY SCALE HOUSE GMW12
BY STORAGE SHED GMW13
BY ADMINISTRATIVE OFFICE GMW14
BY FUEL PUMPS GMW15
BY MAINTENANCE BUILDING GMW16
BY HHHW WASTE STORAGE BUILDING
BY GUN CLUB SHED GMW18

SCALE HOUSE ELECTRIC BOX GMP1
STORAGE SHED ELECTRIC BOX GMP2
ADMINISTRATIVE OFFICE GMP3
MAINTENANCE BUILDING ELECTRICAL
CONDUITS GMP4
EAST TRAILOR ELECTRIC BOX GMP6
WEST TRAILOR ELECTRIC BOX GMP 7
GENERATOR GMP8



24" x 24" x 6" CONC. PAD

2" PVC FIP CAP

2" PVC S x MIP

2" SCHEDULE 40 FVC W/ 1/8" DIA. HOLE AT 2'

6 1/2" PEA GRAVEL

6 OZ/SY FILTER FABRIC SOCK WRAP

OPEN PIPE END

HIGH WATER TABLE

6"

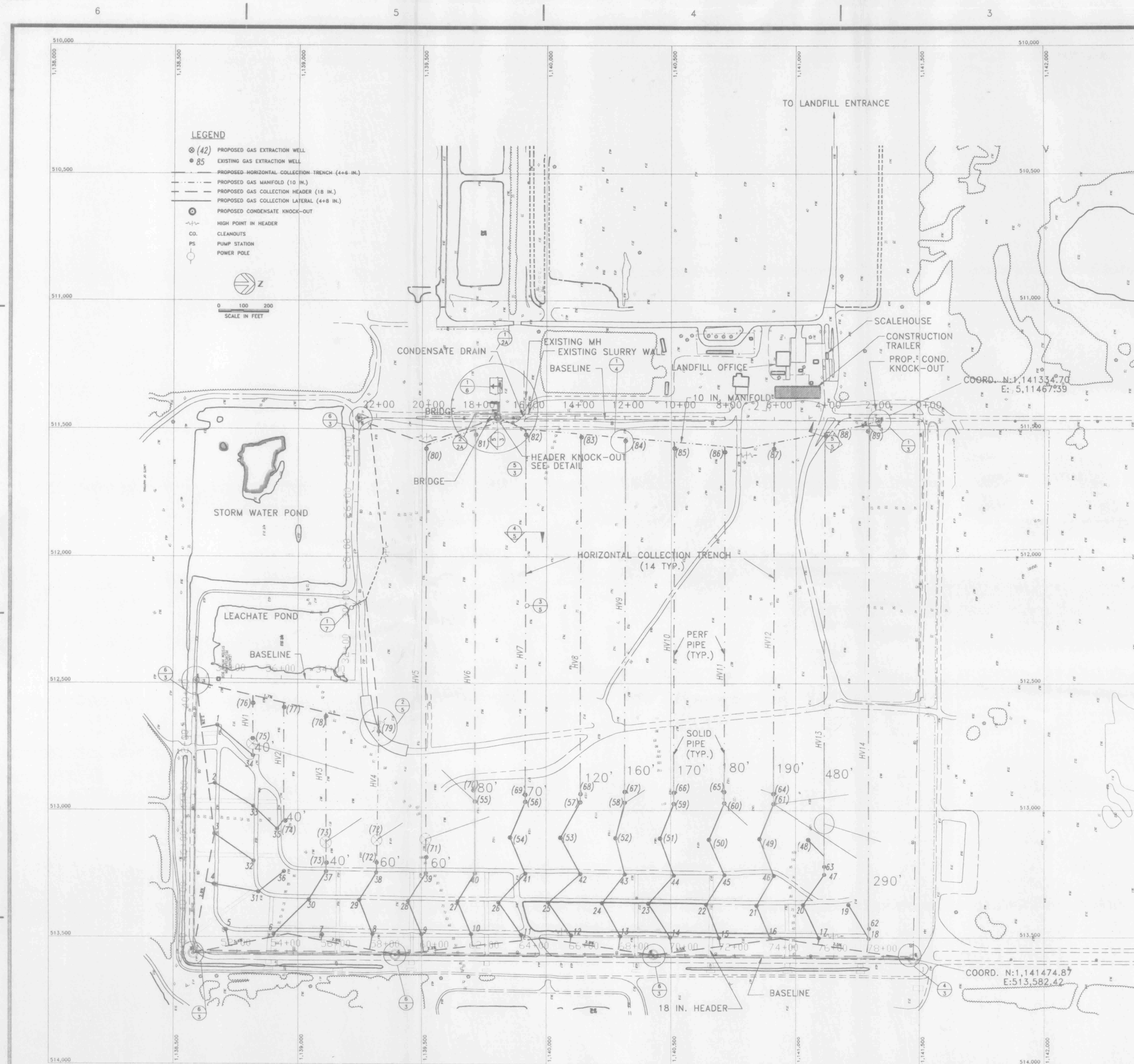
RECEIVED NOV 08 1994
 Department of Environmental Resources
 BY: Southwest District

PLAN/PROFILE ~ BOOK NOS.				BY			CHECKED			DATE			ENGINEER			PUBLIC WORKS DEPT.			LENA ROAD LANDFILL METHANE GAS MONITORING LOCATION MAP			REVISION DESCRIPTION & DATE			BY	NO.	Proj. No.	480-4632-534		
Surveyed	By	Checked	Date	Designed	LLP	PC	4-94	 	77-41-994 REMOVED SURFICIAL WELLS			1		Dwg. Date	FEB. 1994															
Plotted				Drawn	KE	LLP	4-94							Dwg. No.	DUMPALL															
Alignment				Quantities																										
Right of Way																														
Scale Horz. 1"=400' Scale Vert.														Sht. 2 of 11																

C

B

A



NOTES:

1. ALL ROAD CROSSINGS SHALL BE COMPLETED WHILE THE LANDFILL IS CLOSED TO DISPOSAL OPERATIONS. ROADWAY CUTS SHALL NOT HINDER TRAFFIC.
2. THE LENA ROAD LANDFILL IS AN ACTIVE LANDFILL AND IS IN OPERATION DAILY, MONDAY THROUGH SATURDAY FROM THE HOURS OF 8:00 A.M. TO 5:00 P.M. THE CONTRACTOR'S ACTIVITIES SHALL NOT IMPEDE LANDFILL OPERATIONS.
3. THE CONTRACTOR IS ADVISED THAT THE ELEVATIONS DEPICTED WERE BASED ON SURVEY DATA OBTAINED IN 1997. DUE TO LANDFILL SETTLEMENT AND FILLING OPERATIONS, SOME OR ALL OF THESE ELEVATIONS AND CONTOURS HAVE CHANGED. THE CONTRACTOR SHALL LAYOUT, STAKE AND SURVEY THE PROJECT PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL MAKE AND PROVIDE THE ENGINEER WITH ITS PROPOSED LAYOUT, SHOWING ELEVATIONS AND PIPING FOR APPROVAL.
4. THE CONTRACTOR IS ADVISED THAT A PORTION OF THE PROJECT IS CLOSED WITH A GEOCOMPOSITE DRAINAGE NET AND LLDPE CAP MATERIAL. ALL COSTS ASSOCIATED WITH REPAIR RESULTING FROM DAMAGE TO THIS CAP SYSTEM SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THESE COSTS SHALL INCLUDE, BUT ARE NOT LIMITED TO ENGINEER'S REVIEW, REPAIR OR REPLACEMENT BY A QUALIFIED LLDPE LINER INSTALLER, THIRD PARTY OBSERVATION, AND COUNTY REVIEW.
5. THE CONTRACTOR SHALL PROTECT ALL WELLS OR OTHER EXISTING APPURTENANCES AT THE LANDFILL. ANY DAMAGE BY THE CONTRACTOR TO SUCH APPURTENANCE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
6. ATTENTION IS DIRECTED TO THE FACT THAT THESE DRAWINGS MAY HAVE BEEN REDUCED IN SIZE. THE ORIGINAL WAS 24 X 36 INCHES.
7. ALL BIDS SHALL BE BASED ON A SINGLE SITE ENTRANCE LOCATED AT THE MAIN ENTRANCE TO THE LANDFILL.
8. THE CONTRACTOR'S STAGING AREA(S) SHALL BE ESTABLISHED AT THE MANDATORY PRE-BID CONFERENCE.
9. ANY AND ALL FINES IMPOSED ON THE COUNTY DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE PAID BY THE CONTRACTOR.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 26 2000
SOUTHWEST DISTRICT
TAMPA

BOB CROSS PROFESSIONAL LAND SURVEYING, P.A.
RECORD DRAWING OF AS BUILTS
HEREBY CERTIFY THAT THE RECORD DRAWING OF THE UTILITIES SHOWN
SUPERIMPOSED UPON THE DESIGN CONSTRUCTION PLANS IS TO THE BEST OF
MY KNOWLEDGE, INFORMATION, AND BELIEF A TRUE AND CORRECT REPRESENTATION
OF THE IMPROVEMENTS AS SHOWN

DATE OF FIELD SURVEY 2-7-2008
DATE OF CERTIFICATION 4-23-2008
FIDUCIARY CERTIFICATE NO. 415-7

BY: *Bob Cross*
Bob Cross, Professional Land Surveyor

HDR
HDR Engineering, Inc.
Tampa, Florida

[illegible]

LENA ROAD LANDFILL

LANDFILL GAS COLLECTION SYSTEM

Site Plan

MANATEE COUNTY

FLORIDA

Date	3/00	Project No.	07982-020-096	Drawing No.	1	Issue	H
Scale	AS NOTED						

F	RAI - 1	3/98
E	ISSUED FOR PERMIT	1/98
D	90 PERCENT PLANS	12/97
C	70 PERCENT PLANS	11/97
B	60 PERCENT PLANS	10/97
A	30 PERCENT PLANS	
Issue No.	Description	Date

H	AS-BUILT / RECORD DRAWINGS	3/00
G	FINAL REVIEW	5/98
Issue No.	Description	Date

MR	MR	FS
DP	DP	DP
Issue No.	Description	Date

Project Manager	D. PELHAM
Architect	MEC/Process
Civil	T. HOTCHKISS
Mechanical	S. HILL
Electrical	
Environmental	
Drawn By	M. DEELEY

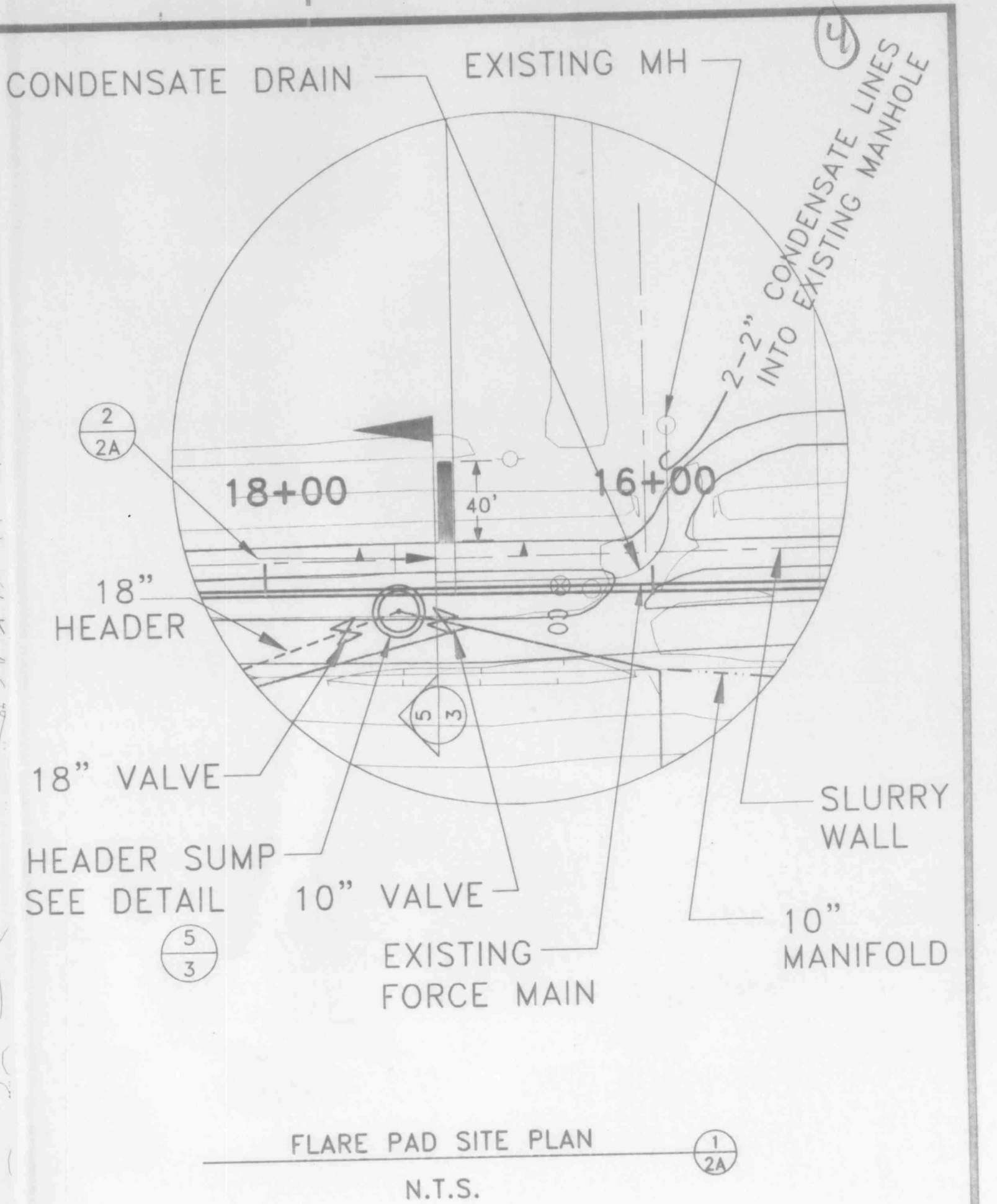
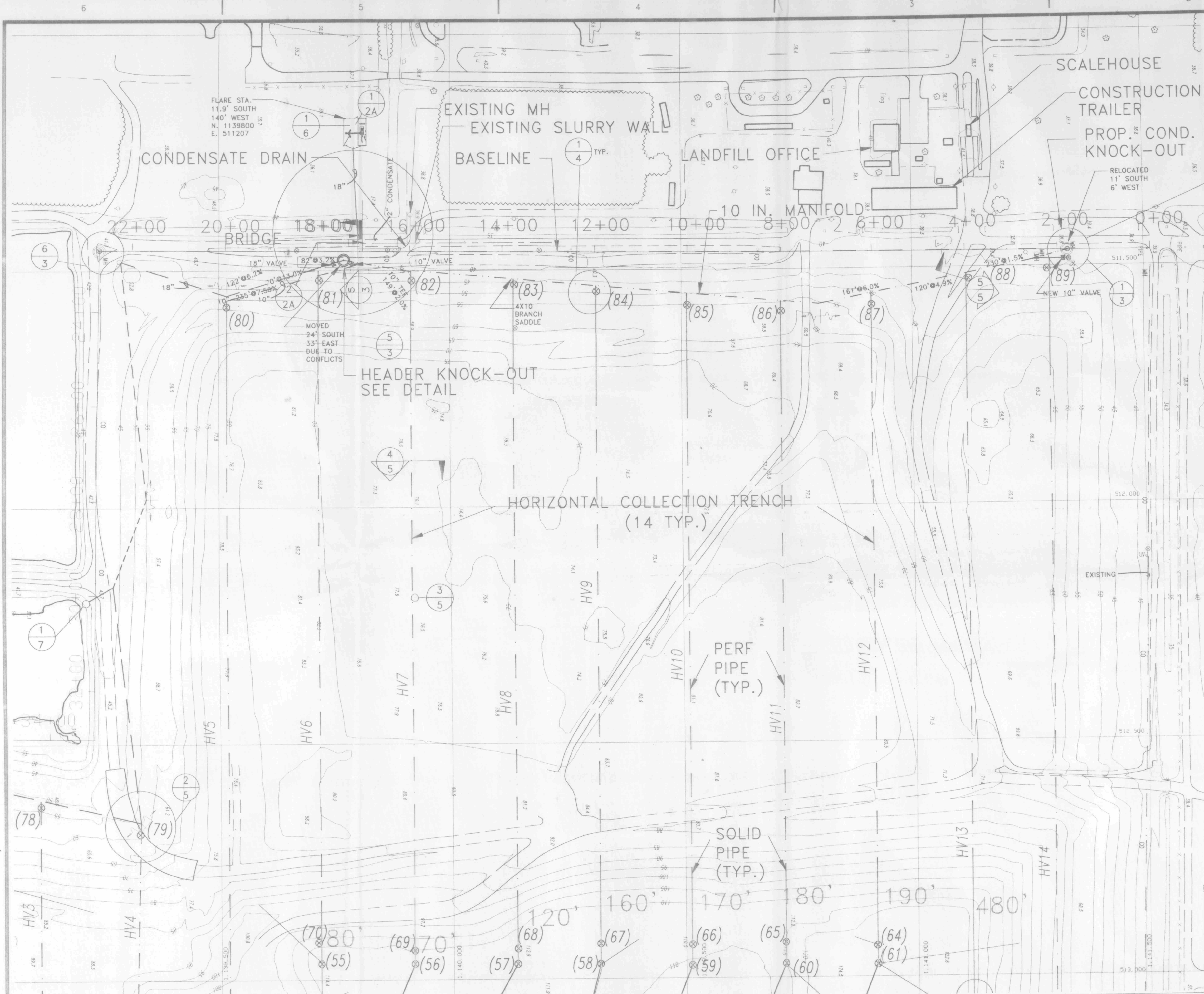
LENA ROAD LANDFILL
LANDFILL GAS COLLECTION SYSTEM

MANATEE COUNTY

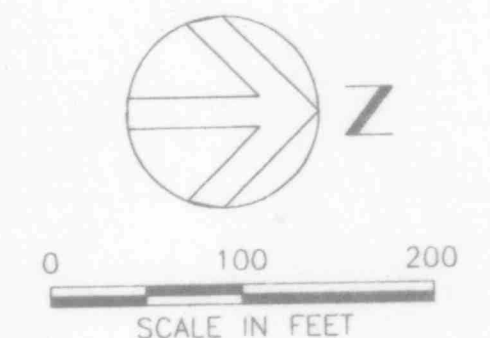
FLORIDA

West Side System Layout

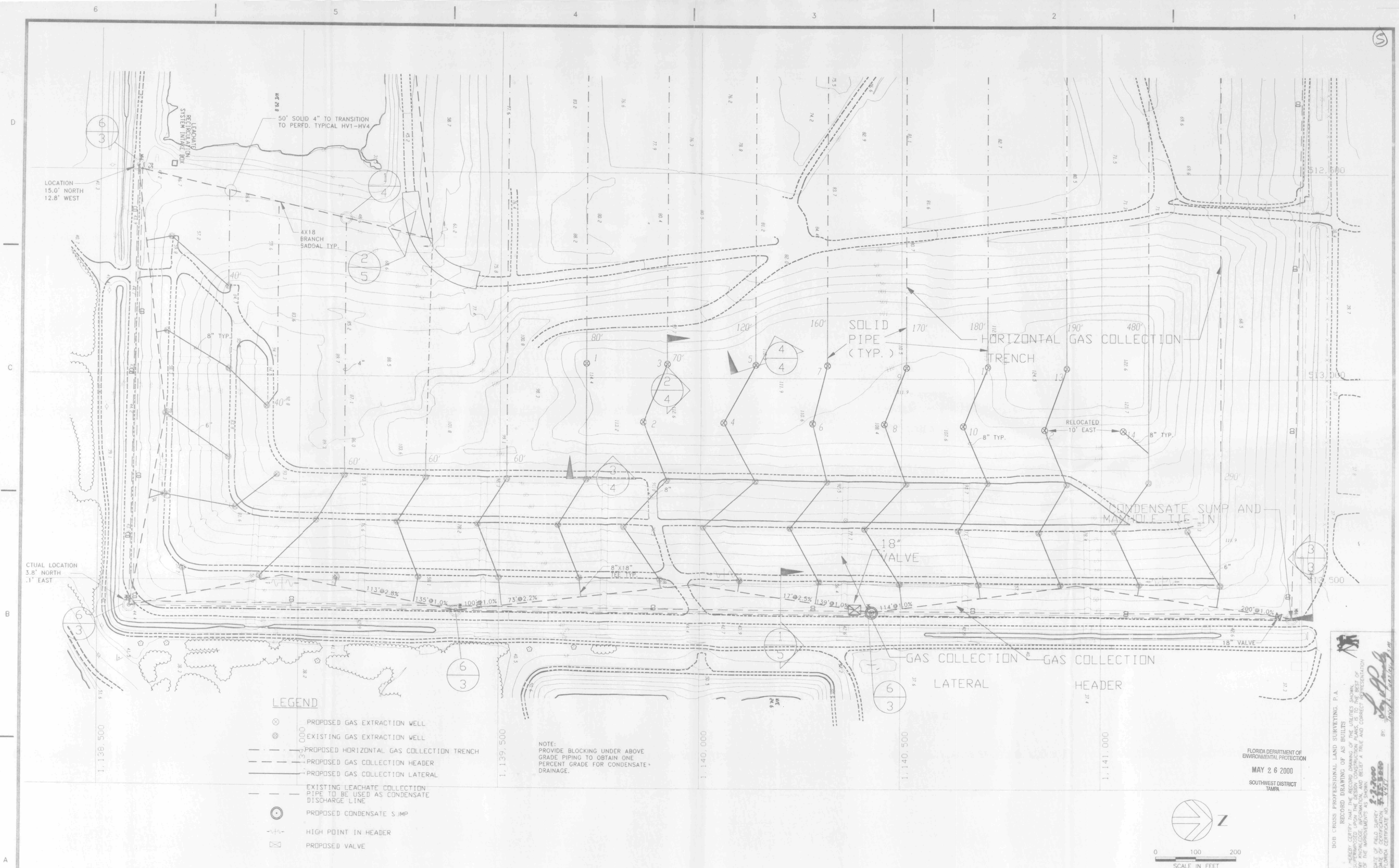
Date	3/00	Project No.	07982-020-096	Drawing No.	2A	Issue	H
Scale	AS NOTED						



FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 26 2000
SOUTHWEST DISTRICT
TAMPA



BOB CROSS PROFESSIONAL LAND SURVEYING, P.A.
RECORD DRAWING OF AS BUILT
I HEREBY CERTIFY THAT THE RECORD DRAWING OF THE UTILITIES SHOWN
SUPERIMPOSED UPON THE DESIGN CONSTRUCTION PLANS, IS TO THE BEST OF
MY KNOWLEDGE, INFORMATION, AND BELIEF A TRUE AND CORRECT REPRESENTATION
OF THE IMPROVEMENTS AS SHOWN.
DATE OF FIELD SURVEY 2-2-00
BY: [Signature]
FLORIDA CERTIFICATE NO. 53427



LEGEND

- ⊗ PROPOSED GAS EXTRACTION WELL
- ⊙ EXISTING GAS EXTRACTION WELL
- - - - - PROPOSED HORIZONTAL GAS COLLECTION TRENCH
- - - - - PROPOSED GAS COLLECTION HEADER
- - - - - PROPOSED GAS COLLECTION LATERAL
- - - - - EXISTING LEACHATE COLLECTION PIPE TO BE USED AS CONDENSATE DISCHARGE LINE
- ⊙ PROPOSED CONDENSATE SUMP
- - - - - HIGH POINT IN HEADER
- ⊗ PROPOSED VALVE

NOTE:
PROVIDE BLOCKING UNDER ABOVE
GRADE PIPING TO OBTAIN ONE
PERCENT GRADE FOR CONDENSATE
DRAINAGE.



F	RAI - 1	3/98
E	ISSUED FOR PERMIT	1/98
D	90 PERCENT PLANS	12/97
C	70 PERCENT PLANS	11/97
B	60 PERCENT PLANS	10/97
A	30 PERCENT PLANS	

H	AS-BUILT / RECORD DRAWINGS	3/00
G	RAI - 1	5/98

MR	MR	FS
DP	DP	DP

Project Manager		D. PELHAM
Architect	IBC/Process	
Civil	T. HOTCHKISS	S. HILL
Mechanical		
Electrical		
Structural		
Environmental		
Drawn By	M. DEELEY	

LENA ROAD LANDFILL
LANDFILL GAS COLLECTION SYSTEM

East Side
System Layout

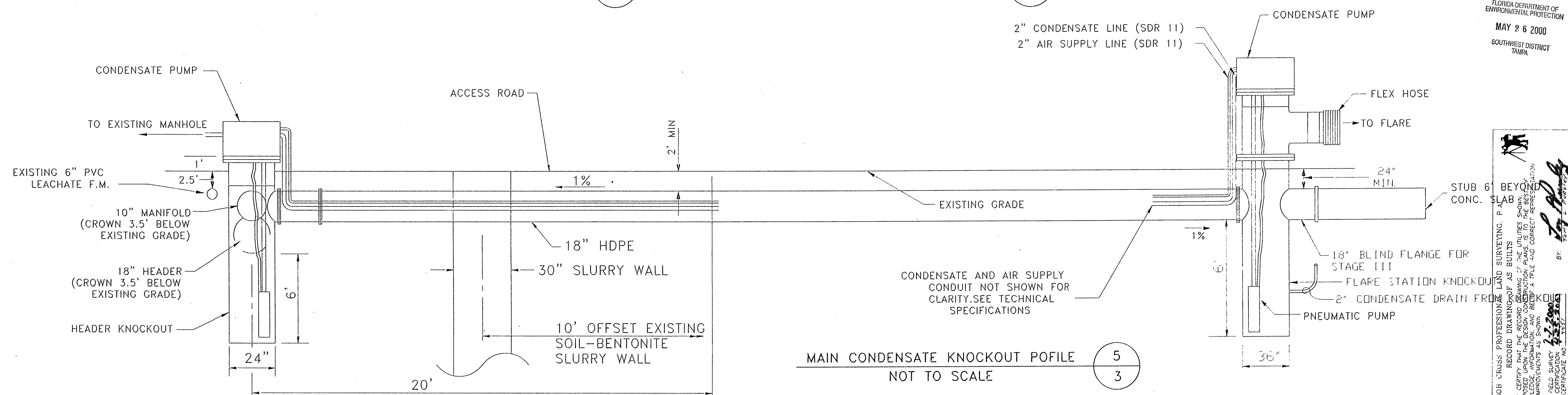
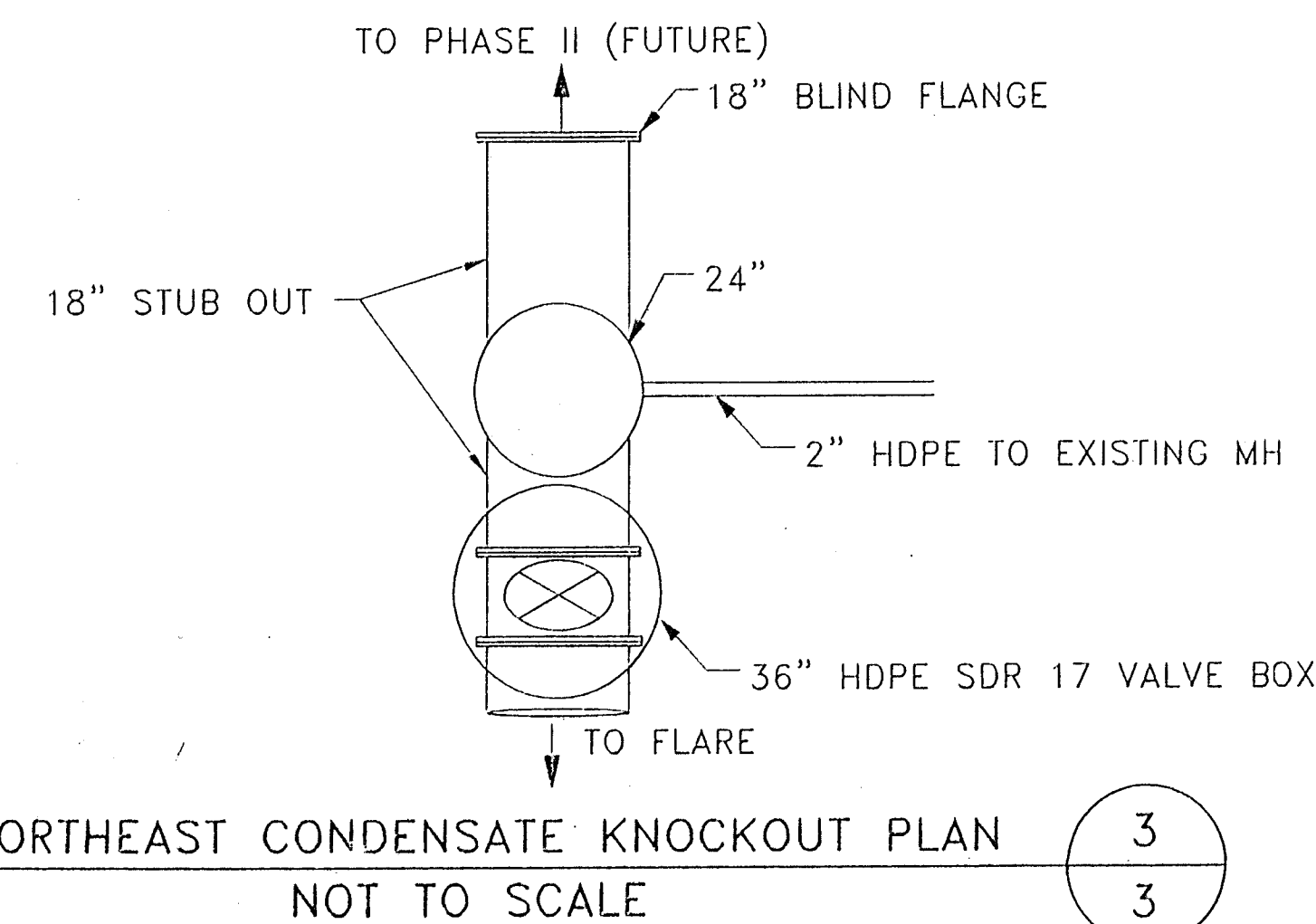
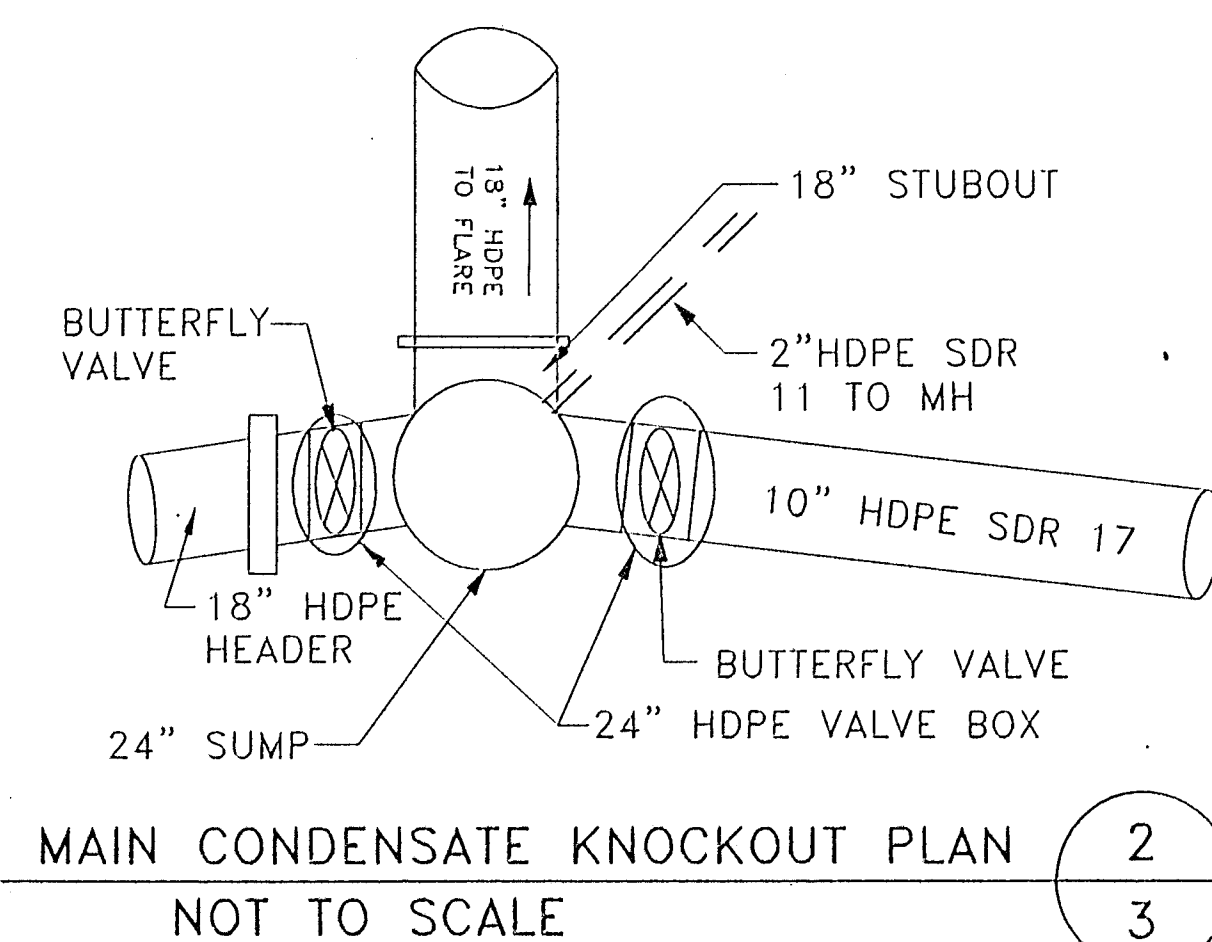
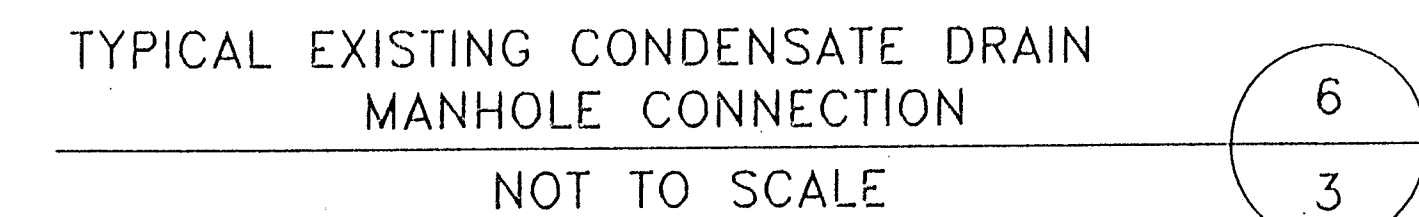
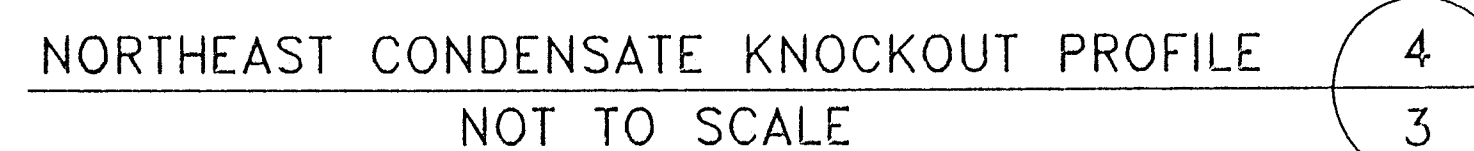
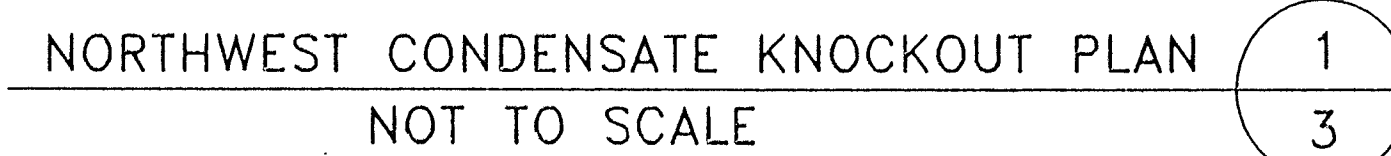
MANATEE COUNTY

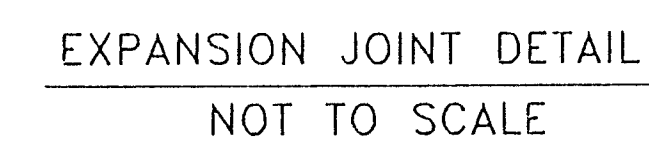
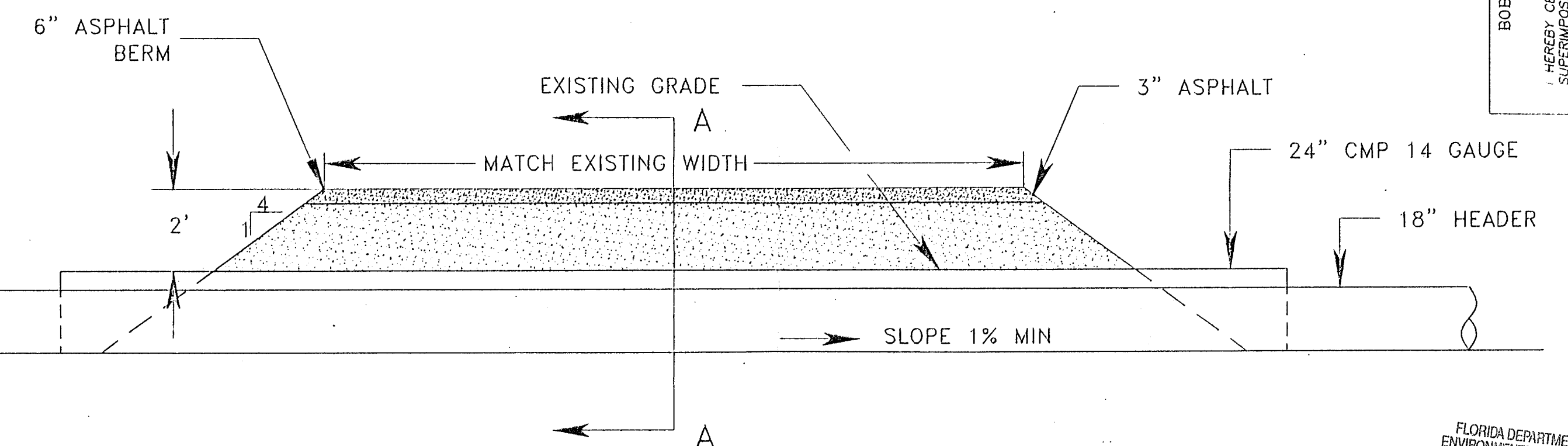
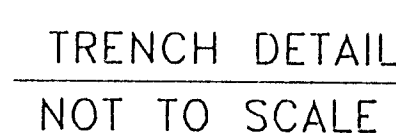
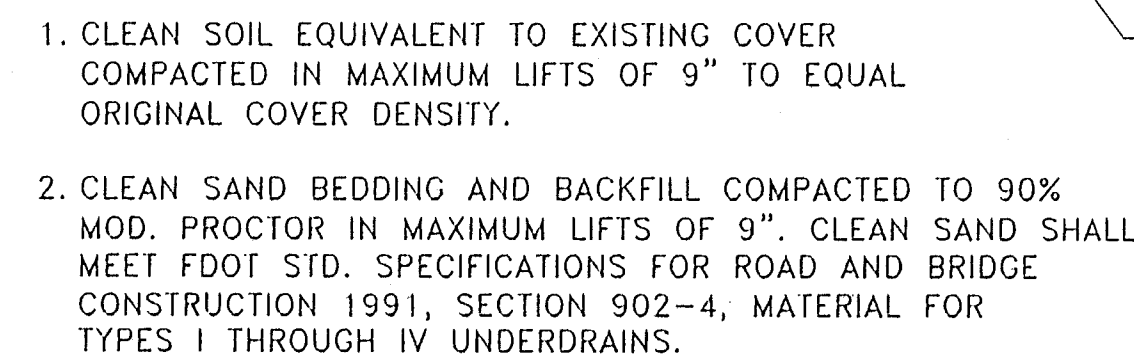
FLORIDA

Date	3/00	Project No.	07982-020-096	Drawing No.	2B	Issue	H
Scale	AS NOTED						

BOB CROSS PROFESSIONAL LAND SURVEYING, P.A.
RECORD DRAWING OF AS BUILT
I HEREBY CERTIFY THAT THE SECOND DRAWING OF THE UTILITIES SHOWN
SUPERIMPOSED UPON THE FIRST DRAWING IS A TRUE AND CORRECT REPRESENTATION
OF THE UTILITIES SHOWN.
DATE OF FIELD SURVEY: 11/97
BY: [Signature]
FLORIDA CERTIFICATE NO. 11157

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 26 2000
SOUTHWEST DISTRICT
TAMPA





Project Manager	
D. PELHAM	
Architect	I&C/Process
-	-
Civil	Mechanical
T. HOTCHKISS	S. HILL
Electrical	Structural
-	-
Environmental	Drawn By
-	M. DEFFEY

MANATEE COUNTY

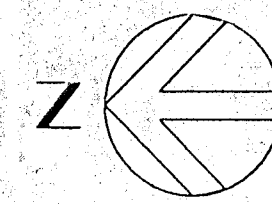
Date	3/00	Project No.	07982-020-096	Drawing No.	5	Issue	H
Scale	AS NOTED						

HDR
HDR Engineering, Inc.
Tampa, Florida

BOB CROSS PROFESSIONAL LAND SURVEYING, P.A.
RECORD DRAWING OF AS BUILTS
HEREBY CERTIFY THAT THE RECORD DRAWING OF THE UTILITIES SHOWN,
SUPERIMPOSED UPON THE DESIGN CONSTRUCTION PLANS, IS TO THE BEST OF
MY KNOWLEDGE AND BELIEF A TRUE AND CORRECT REPRESENTATION
OF THE IMPROVEMENTS AS SHOWN.
DATE OF FIELD SURVEY _____
FLORIDA CERTIFICATE NO. 4457
BY: Tommy L. Pearsley P.L.S.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 26 2000
SOUTHWEST DISTRICT
TAMPA

505 CROSS BELLEVUE AVE. S.W.
RECORD DRAWING OF AS BUILT
DATE: 12-1-77
BY: *[Signature]* 12-1-77
DATE OF FIELD SURVEY: 12-1-77
FLORIDA CERTIFICATE NO. 1257



PLAN VIEW

6' HIGH SECURITY FENCE WITH 3 STRANDS OF BARBED WIRE

FLARE RELIGHT FUEL SUPPLY

ROOF (ALLUMINUM STANDING SEAM) 12'X50'

ELECTRICAL CONTROL PANEL

SERVICE LIGHT

FLARE CONTROL PANEL

MOTOR/BLOWER ASSEMBLY

MONITORING PORTS

HDPE PIPE

FLAME ARRESTER

FLARE ASSEMBLY

12"

38.5 TOR

GRADE

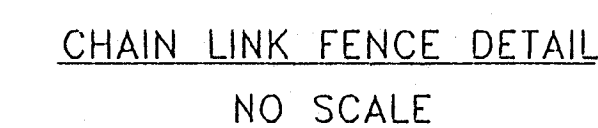
BLOWER PAD

PIPE SUPPORTS

SLOPE

SLOPE

TYP

 $\frac{1}{6}$ 

- 1) CLEAN SOIL COVER SHALL BE EQUIVALENT TO EXISTING COVER AND DENSITY COMPACTED IN MAXIMUM LIFTS OF 9".
- 2) CLEAN SAND BEDDING AND BACKFILL COMPACTED IN MAXIMUM LIFTS OF 9" AS PER PIPE MANUFACTURER'S RECOMMENDATIONS.
- 3) GENERAL BACKFILL MATERIAL COMPACTED IN MAXIMUM LIFTS OF 9" TO MOISTURE AND DENSITY REQUIREMENTS AS NOTED IN SPECIFICATIONS.
- 4) ANY ACCESS ROAD DISTURBED DURING HEADER INSTALLATION SHALL BE RECONSTRUCTED TO ORIGINAL CONDITION.
- 5) THE MINIMUM ACCEPTABLE COLLECTION HEADER OR LATERAL SLOPE IS 3.0% WHEN INSTALLED WITHIN THE LIMITS OF REFUSE, 0.5% OUTSIDE THE LIMITS OF REFUSE.
- 6) SEE APPROVED SHOP DRAWINGS FOR SLAB AND EQUIPMENT FOUNDATION CONCRETE, WELDED WIRE MESH AND REBAR.
- 7) FLARE ASSEMBLY SHOWN IS CONCEPTUAL. THE FLARE FOUNDATION PADS WILL BE DESIGNED BY THE FLARE MANUFACTURER AT TIME OF ORDERING.
- 8) WARNING SIGN LANGUAGE: EXPLOSIVE GASES PRESENT
- 9) SEE TECHNICAL SPECIFICATIONS FOR FLARE STATION REQUIREMENTS.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 26 2000
SOUTHWEST DISTRICT
TAMPA

BOB CROSS PROFESSIONAL LAND SURVEYING, P.A.
RECORD DRAWING OF AS BUILT
HEREBY CERTIFY THAT THE RECORD DRAWING OF THE UTILITIES SHOWN,
ON THE ABOVE RECORDED PLAT, WAS PREPARED BY ME OR UNDER MY SUPERVISION,
AND THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR. I HAVE THE BEST OF MY
KNOWLEDGE AND BELIEVE THE INFORMATION AND DATA TO BE TRUE AND CORRECT REPRESENTATION
OF THE IMPROVEMENTS AS SHOWN.
DATE OF FIELD SURVEY 12-15-2006
DATE OF CERTIFICATION 12-15-2006
BY: Bob Cross

204

DATE OF FIELD SURVEY 6-3-2000
DATE OF CERTIFICATION 6-15-2000
FLORIDA CERTIFICATE NO. 4451

HDR
HDR Engineering, Inc.
Tampa, Florida

[illegible]

LENA ROAD LANDFILL
LANDFILL GAS COLLECTION SYSTEM

MANATEE COUNTY

FLORIDA

Collection System Details

Date	3/00	Project No.	07982-020-096	Drawing No.	6	Issue	H
Scale	AS NOTED						

(11)

DER.
MAY 26 2000
Southwest District, Tampa