

CONSTRUCTION DRAWINGS
for
GYPSUM STACK SYSTEM CLOSURE
PHASE I CONSTRUCTION
NEW GYPSUM STACK - NORTH COMPARTMENT
PINEY POINT PHOSPHATES STACK SYSTEM
Manatee County, Florida
for

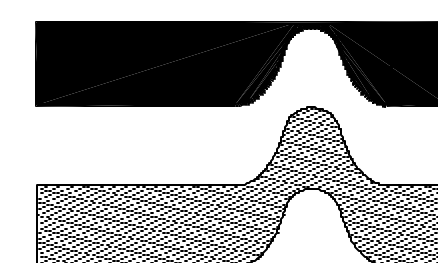


Florida

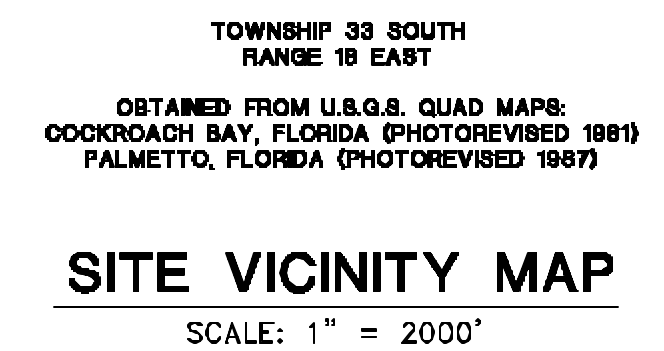
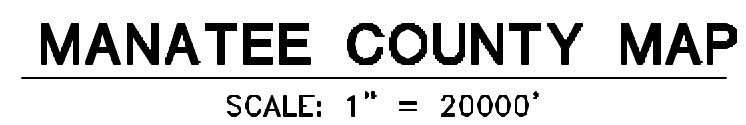
Department of Environmental Protection

and, Louis J. Timchak, Jr. - Receiver

SEPTEMBER 2003



Prepared By
Ardaman & Associates, Inc.
Orlando, Florida



INDEX OF DRAWINGS			
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G-1	COVER SHEET	C-3	CROSS SECTIONS A, B AND C
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				<table><tr><td>0</td><td>11/05/03</td><td>ISSUED FOR CONSTRUCTION</td><td></td><td>NAME</td><td>DATE</td><td></td><td>NAME</td><td>DATE</td></tr><tr><td>P3</td><td>09/15/03</td><td>REISSUED FOR BID</td><td>RJW</td><td>DESIGNED BY</td><td>JFFL 11/05/02</td><td>CHECKED BY</td><td>RJW</td><td>12/06/02</td></tr><tr><td>P2</td><td>12/16/02</td><td>ISSUED FOR BID (POSTPONED)</td><td>RJW</td><td>DRAWN BY</td><td>ADA 11/05/02</td><td>CHECKED BY</td><td>JFFL</td><td>12/06/02</td></tr><tr><td>P1</td><td>12/06/02</td><td>ISSUED FOR REVIEW</td><td>RJW</td><td>FILE NO: 02-100A</td><td colspan="2"></td><td>SCALE: AS SHOWN</td><td></td></tr><tr><td>REVISION</td><td>DATE</td><td>DESCRIPTION</td><td>APPR'D</td><td>REVISION</td><td>DATE</td><td>DESCRIPTION</td><td>APPR'D</td><td>APPROVED BY:</td></tr></table>				0	11/05/03	ISSUED FOR CONSTRUCTION		NAME	DATE		NAME	DATE	P3	09/15/03	REISSUED FOR BID	RJW	DESIGNED BY	JFFL 11/05/02	CHECKED BY	RJW	12/06/02	P2	12/16/02	ISSUED FOR BID (POSTPONED)	RJW	DRAWN BY	ADA 11/05/02	CHECKED BY	JFFL	12/06/02	P1	12/06/02	ISSUED FOR REVIEW	RJW	FILE NO: 02-100A			SCALE: AS SHOWN		REVISION	DATE	DESCRIPTION	APPR'D	REVISION	DATE	DESCRIPTION	APPR'D	APPROVED BY:	 Ardaman & Associates, Inc. Geotechnical, Environmental and Materials Consultants 8008 S. Orange Ave., Orlando, FL 32809 TEL 407/855-3860 FAX 407/859-8121 C.A.N. 5950		 Florida Department of Environmental Protection and, Louis J. Timchak, Jr. - Receiver		GYPSUM STACK SYSTEM CLOSURE PHASE I CONSTRUCTION NEW GYPSUM STACK - NORTH PINEY POINT FACILITY MANATEE COUNTY, FLORIDA		DRAWING NO. G-2	
0	11/05/03	ISSUED FOR CONSTRUCTION		NAME	DATE		NAME	DATE																																																				
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								INDEX OF DRAWINGS AND PROJECT LOCATION MAPS																																																				

A	
A	ANCHOR
AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
ADAPT	ADAPTER
AR'D	AROUND
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS

B	
BOTT	BOTTOM
BF.V.	BUTTERFLY VALVE
B.F.	BLIND FLANGE
B.V.	BALL VALVE

C	
CL	CENTERLINE
CLR	CLEAR
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUATION OR CONTINUOUS
COR	CORNER
CORR	CORRUGATED
CR	COUNTY ROAD

D	
DIA	DIAMETER
DISCH	DISCHARGE
DWG	DRAWING
△	CURVE ANGLE

E	
E	EAST
EA	EACH
ECC	ECCENTRIC
EL	ELEVATION (feet, NGVD)
ELL	ELBOW
EW	EACH WAY
EX	EXISTING
EXP	EXPANSION
EXT	EXTENSION

F	
FAB	FABRICATED
FG	FINISH GRADE
FIN	FINISH
FLG	FLANGE
FLG'D	FLANGED
FT	FOOT

G	
GALV	GALVANIZED
GR	GRADE

H	
H	HIGH
HDPE	HIGH DENSITY POLYETHYLENE
HORIZ	HORIZONTAL
HP	HIGH POINT
HWY	HIGHWAY

ID	INSIDE DIAMETER
INV	INVERT

L	LENGTH OF ARC
LBS	POUNDS
LF	LINEAR FOOT
LG	LENGTH OR LONG
LLV	LONG LEG VERTICAL
LR	LONG RADIUS
LT	LEFT

M	
MAT'L	MATERIAL
MAX	MAXIMUM
MB	MECHANICAL BOLT
MEG	MEET EXISTING GRADE
MIN	MINIMUM

N	
N	NORTH
NGS-N	NEW GYPSUM STACK - NORTH COMPARTMENT
NGVD	NATIONAL GEODETIC VERTICAL DATUM OF 1929
NO.	NUMBER
NTS	NOT TO SCALE

OC	ON CENTERS
O/E	OR EQUAL
OZ	OUNCE

P	
PC	POINT OF CURVATURE
PE	PLAIN END
PERF	PERFORATED
PI	POINT OF INTERSECTION
PL	PLATE
PP	POWER POLE
PPL	POLYPROPYLENE
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECTION
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
P.V.	PLUG VALVE
PVC	POLYVINYL CHLORIDE

R	
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RR	RAILROAD
RT	RIGHT

S	
S	SLOPE OR SOUTH
SCH	SCHEDULE
SCR'D	SCREWED
SDR	STANDARD DIMENSION RATIO
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
STA	STATION
STL	CARBON STEEL
STL RL	RUBBER-LINED CARBON STEEL
S.W.	STORMWATER

T	
T	TANGENT
TEMP	TEMPORARY
TEXT	TEXTURED
THK	THICK
THR'D	THREADED
TOC	TOP OF CONCRETE
TOL	TOP OF LINER
TOS	TOE OF SLOPE
TYP	TYPICAL

U _____
UON UNLESS OTHERWISE NOTED
UNREINF'D UNREINFORCED

V

VAR	VARIABLE
VER	VERIFY
VERT	VERTICAL

W	
W	WEST OR WIDE
W/	WITH
W.S.	WATER STOP
W/S	WATER SURFACE

Y	
YD ²	SQUARE YARD

SECTION IDENTIFICATION LETTER

DRAWING WHERE SECTION IS SHOWN

SECTION IDENTIFICATION LETTER

A

C-1

DRAWING WHERE SECTION WAS TAKEN

SECTION TITLE

SCALE

DETAIL IDENTIFICATION NUMBER

1

DETAIL TITLE

D-1

SCALE

DRAWING WHERE DETAIL WAS TAKEN

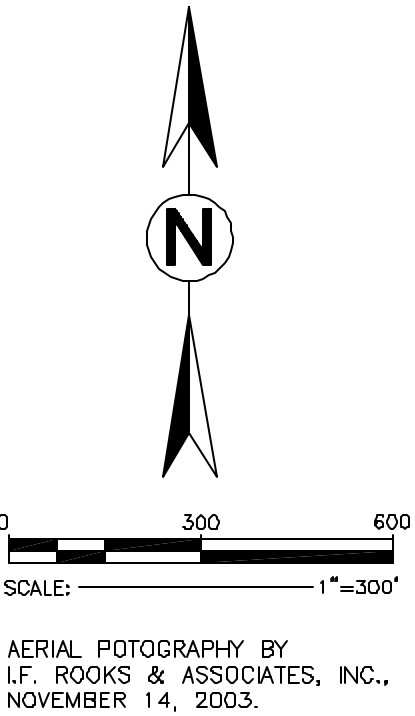
	STREAM, CHANNEL OR DITCH
	EXISTING GROUND SURFACE
	INTERMEDIATE CONTOURS (feet, NGVD)
	INDEX CONTOURS (feet, NGVD)
	PROPOSED CONTOURS (feet, NGVD)
	NORTHING OR EASTING GRID LINE
	EXISTING PIPELINE
	EXISTING ABOVE GROUND PIPE
	EXISTING BURIED PIPE
	PROPOSED ABOVE GROUND OR BURIED PIPE
	POWER POLE
	WATER FLOW DIRECTION
	PROPOSED SIDE SLOPE (3 HORIZ : 1 VERT)
	EXISTING SIDE SLOPE (OR SLOPE TO BE CONSTRUCTED AT A FUTURE STAGE)

	COMPACTED GYPSUM		HDPE LINER
	CONCRETE		GEONET / GEOTEXTILE COMPOSITE
OTHER SYMBOLS AS NOTED ON THE DRAWINGS			FILTER FABRIC (GEOTEXTILE)
			EXISTING OR PROPOSED GROUND SURFACE
			EXISTING PIEZOMETER
			EXISTING BORING
			EXISTING SPILLWAY

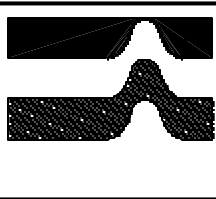
1. Prior to bid submittal, the Contractor shall carefully examine and inspect the site to familiarize himself with the current conditions and to allow him to independently estimate cut and fill quantities.
2. Existing elevations shown on all Drawings are based on information from a topographic survey (2-foot contour map) of the site performed by I.F. Rooks & Associates on Sept. 16, 2002, and a depth sounding survey of ponded areas performed by I.F. Rooks & Associates, in August 2001.
3. Where designated on the Drawings, existing surface elevations have been altered by others to the pre-construction surface elevations shown on the Drawings.

In addition, initial excavation of the dewatering ditch network shown on the Drawings was undertaken by others prior to refilling the ponded area in January 2003.
4. Final dike and pond bottom elevations are subject to adjustment prior to and during construction at the discretion of the Engineer, based on reevaluation of actual shrinkage factors and actual settlement as determined by the Engineer.

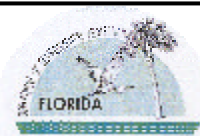
[illegible]



REVISION	DATE	DESCRIPTION	APPR'D	1	12/18/03	REVISED AERIAL PHOTOGRAPH	RJW	DESIGNED BY	JFFL	11/05/02	CHECKED BY	RJW	12/06/02
				0	11/05/03	ISSUED FOR CONSTRUCTION							
				P3	09/15/03	REISSUED FOR BID	RJW	DRAWN BY	ADA	11/05/02	CHECKED BY	JFFL	12/06/02
				P2	12/16/02	ISSUED FOR BID (POSTPONED)							
				P1	12/06/02	ISSUED FOR REVIEW	RJW	FILE NO:	02-100A	SCALE:	1"=300'		
APPR'D				APPROVED BY:									



Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants
8008 S. Orange Ave., Orlando, FL 32809
TEL 407/855-3860 FAX 407/859-8121 C.A.N. 5950

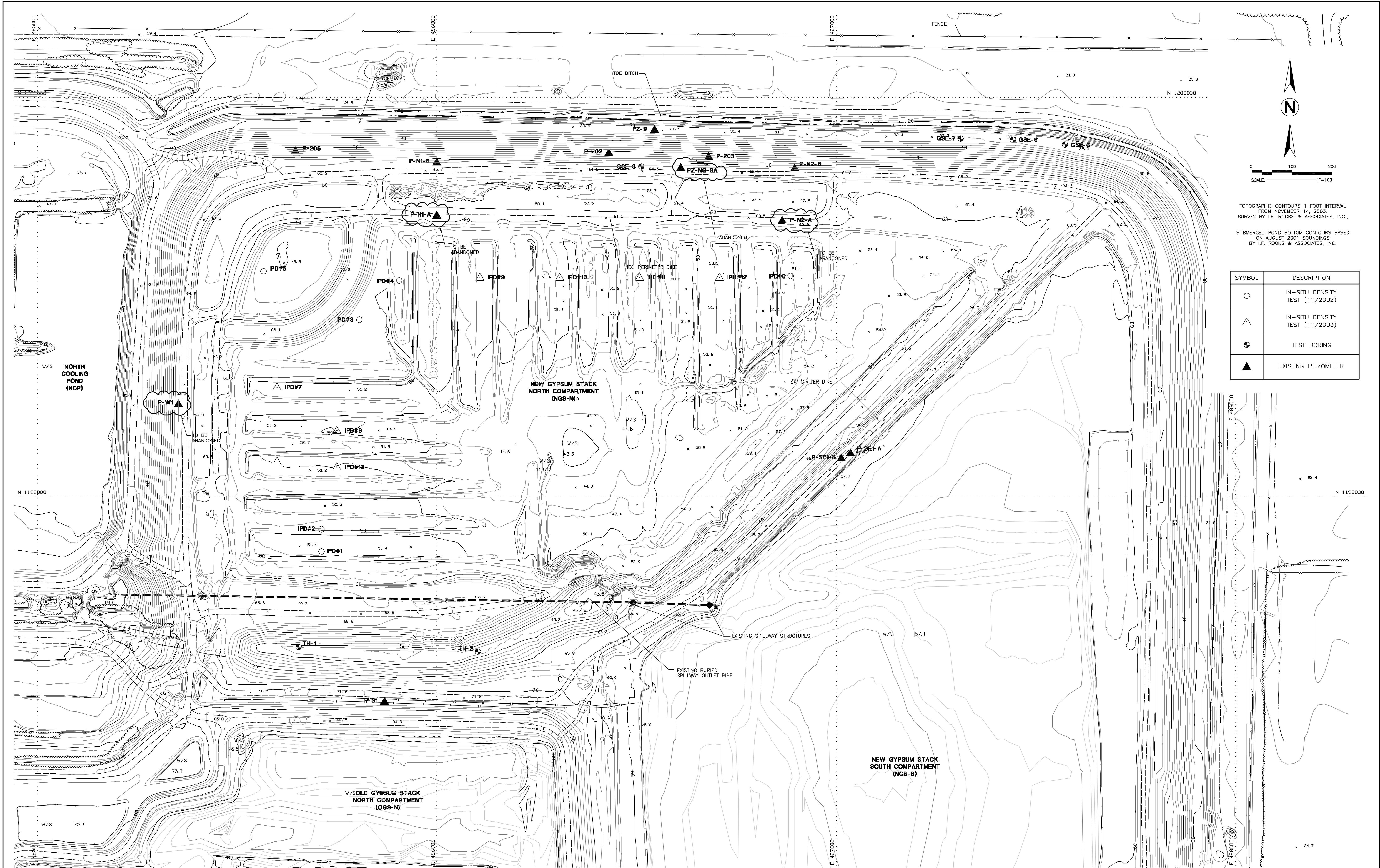


Florida
Department of Environmental Protection
and, Louis J. Timchak, Jr. - Receiver

**GYPSUM STACK SYSTEM CLOSURE
PHASE I CONSTRUCTION
NEW GYPSUM STACK - NORTH
PINEY POINT FACILITY
MANATEE COUNTY, FLORIDA**

AERIAL PHOTOGRAPH OF SITE

DRAWING NO.
G-4



TOPOGRAPHIC CONTOURS 1 FOOT INTERVAL
FROM NOVEMBER 14, 2003.
SURVEY BY I.F. ROOKS & ASSOCIATES, INC.,

SUBMERGED POND BOTTOM CONTOURS BASED
ON AUGUST 2001 SOUNDINGS
BY I.F. ROOKS & ASSOCIATES, INC.

SYMBOL	DESCRIPTION
○	IN-SITU DENSITY TEST (11/2002)
△	IN-SITU DENSITY TEST (11/2003)
⊗	TEST BORING
▲	EXISTING PIEZOMETER

REVISION	DATE	DESCRIPTION	APPR'D	REVISION	DATE	DESCRIPTION	APPR'D
				1	12/18/03	REVISED TOPOGRAPHIC SURVEY	
				0	11/05/03	ISSUED FOR CONSTRUCTION	
				P3	06/15/03	REISSUED FOR BID	
				P2	12/16/02	ISSUED FOR BID (POSTPONED)	
				P1	12/06/02	ISSUED FOR REVIEW	

NAME	DATE	NAME	DATE
RJW	12/06/02	RJW	12/06/02
RJW	12/09/02	JFFL	12/06/02
RJW	12/06/02	JFFL	12/06/02
FILE NO: 02-100A		SCALE: 1"=100'	
APPROVED BY:			

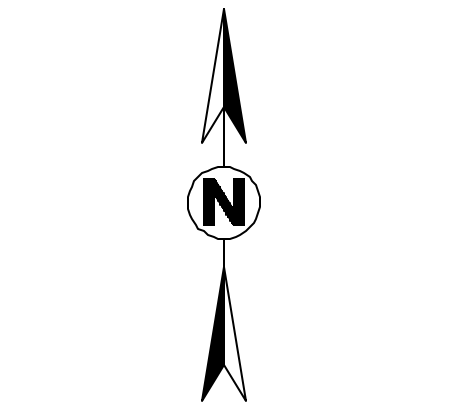
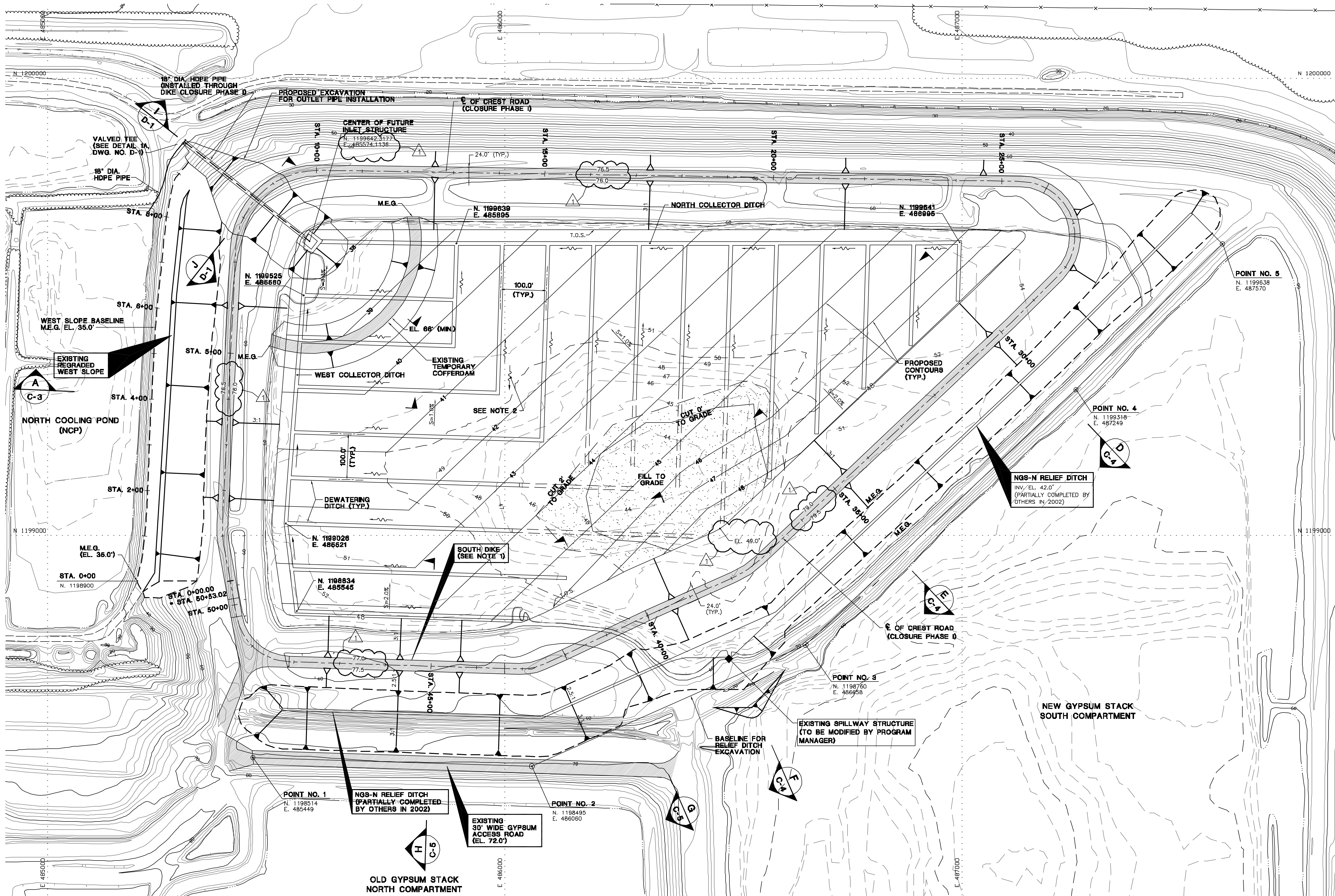
Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants
8008 S. Orange Ave., Orlando, FL 32809
TEL 407/855-3860 FAX 407/859-8121 C.A.N. 5950

Florida
Department of Environmental Protection
and, Louis J. Timchak, Jr. - Receiver

**GYPSUM STACK SYSTEM CLOSURE
PHASE I CONSTRUCTION
NEW GYPSUM STACK - NORTH
PINEY POINT FACILITY
MANATEE COUNTY, FLORIDA**

**TOPOGRAPHIC MAP OF
CONSTRUCTION AREA**

**DRAWING NO.
G-6**



0 100 200
SCALE: 1"=100'

TOPOGRAPHIC SURVEY PERFORMED
BY I.F. ROOKS & ASSOCIATES, INC.,
(FLIGHT DATE: SEPTEMBER 14, 2003)
SUBMERGED POND BOTTOM CONTOURS
BASED ON AUGUST 2001 SOUNDINGS
BY I.F. ROOKS & ASSOCIATES, INC.

- NOTE**
- APPROXIMATELY 30,000 CUBIC YARDS OF GYPSUM FILL WERE PLACED AND COMPACTED ON THE SOUTH DIKE IN CONJUNCTION WITH PRE-CONSTRUCTION WORK BY OTHERS IN 2002.
 - FLOW ROUTING DIRECTIONS IN DEWATERING DITCH NETWORK WERE MODIFIED TO CONVEY SEEPAGE AND RAINFALL RUNOFF AROUND TEMPORARY COFFERDAM.

REVISION	DATE	DESCRIPTION	APPR'D	REVISION	DATE	DESCRIPTION	APPR'D
				1	01/23/04	REVISED GRADING PLAN	
				0	11/05/03	ISSUED FOR CONSTRUCTION	
				P3	06/15/03	REISSUED FOR BID	RJW
				P2	12/16/02	ISSUED FOR BID (POSTPONED)	RJW
				P1	12/06/02	ISSUED FOR REVIEW	RJW
						FILE NO: 02-100A	
						SCALE: 1"=100'	
						APPROVED BY:	

Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants
8008 S. Orange Ave., Orlando, FL 32809
TEL 407/855-3860 FAX 407/859-8121 C.A.N. 5950

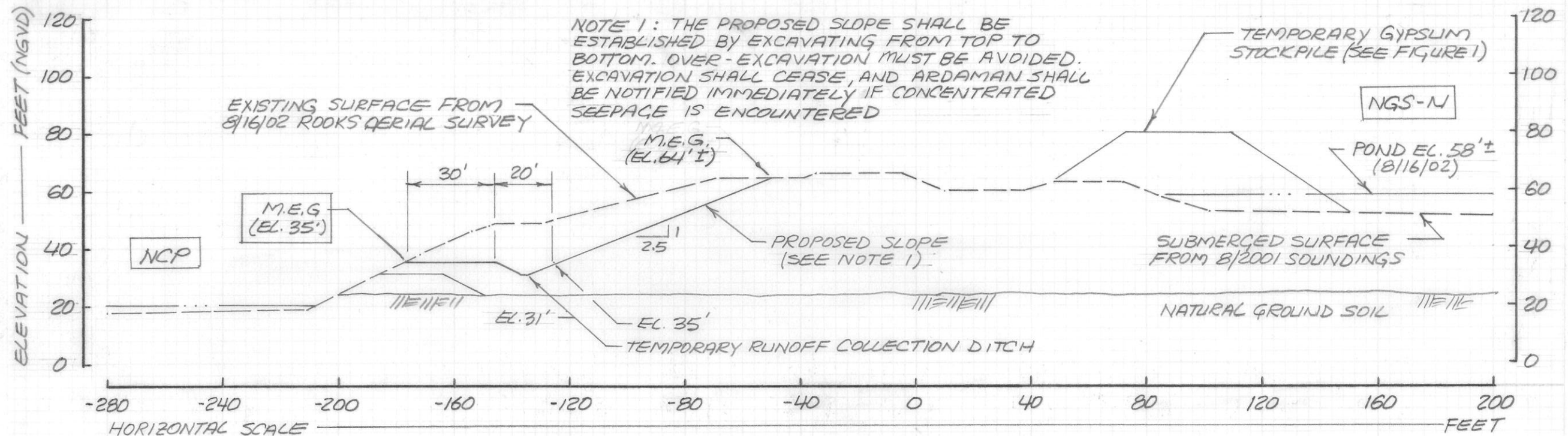


Florida
Department of Environmental Protection
and, Louis J. Timchak, Jr. - Receiver

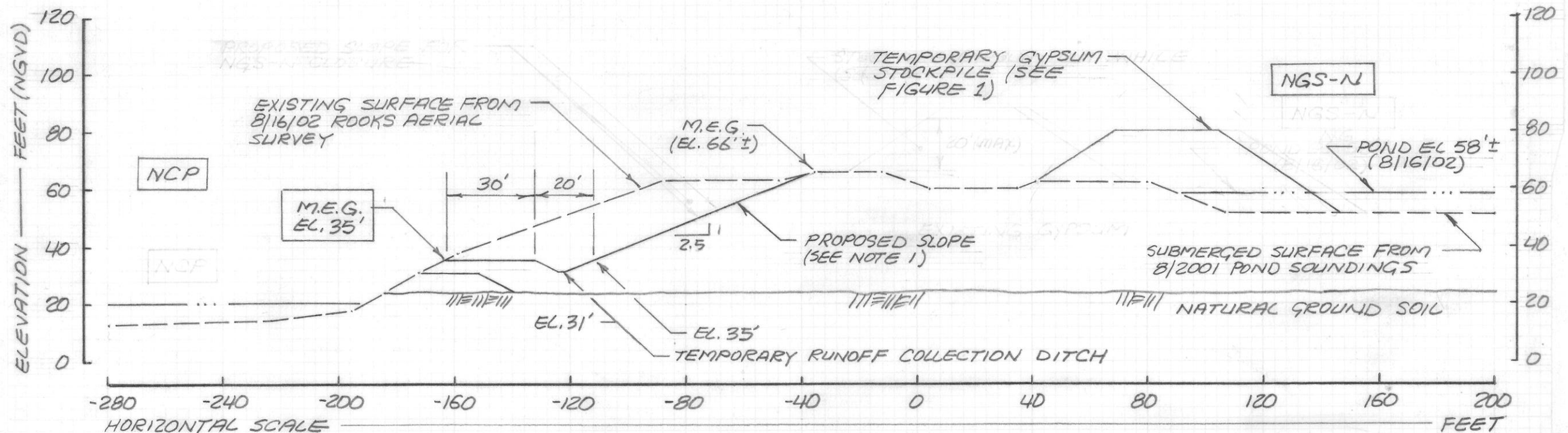
**GYPSUM STACK SYSTEM CLOSURE
PHASE I CONSTRUCTION
NEW GYPSUM STACK - NORTH
PINEY POINT FACILITY
MANATEE COUNTY, FLORIDA**

**DEWATERING AND
PRE-CONSTRUCTION WORK PLAN**

DRAWING NO.
C-1



SECTION A - WEST SLOPE AT EXISTING RAMP ROAD
SCALE: 1" = 40'



SECTION B - TYPICAL WEST SLOPE
(NORTH OF GRID LINE 1,199,150)
SCALE: 1" = 40'

CROSS SECTIONS



NGS-N WEST SLOPE GRADING FOR
GYPSUM STACK CLOSURE - PHASE 1
FDEP-PINEY POINT PHOSPHATES FACILITY
MANATEE COUNTY, FLORIDA

**SITE PLAN AND CROSS SECTIONS
FOR WEST SLOPE EXCAVATION
(COMPLETED BY OTHERS IN 2002)**

DRAWING NO.
C-1A

AWN BY: RW	CHECKED BY: [Signature]	DATE: 10-24-02
E NO. 2-157	APPROVED BY: [Signature]	FIG. NO. 2

RELIEF DITCH BASELINE		
POINT#	NORTHING	EASTING
1	1,198,514	485,449
2	1,198,495	486,060
3	1,198,760	486,658
4	1,199,318	487,249
5	1,199,638	487,570

POINT NOS. 1 & 2 ON & PROPOSED 30' WIDE ACCESS ROAD (FIG. 2)
POINT NOS. 3, 4 & 5 APPROX. ON & EXIST. DIVIDER DIKE

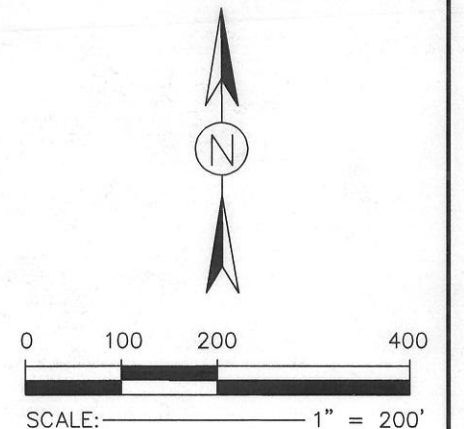
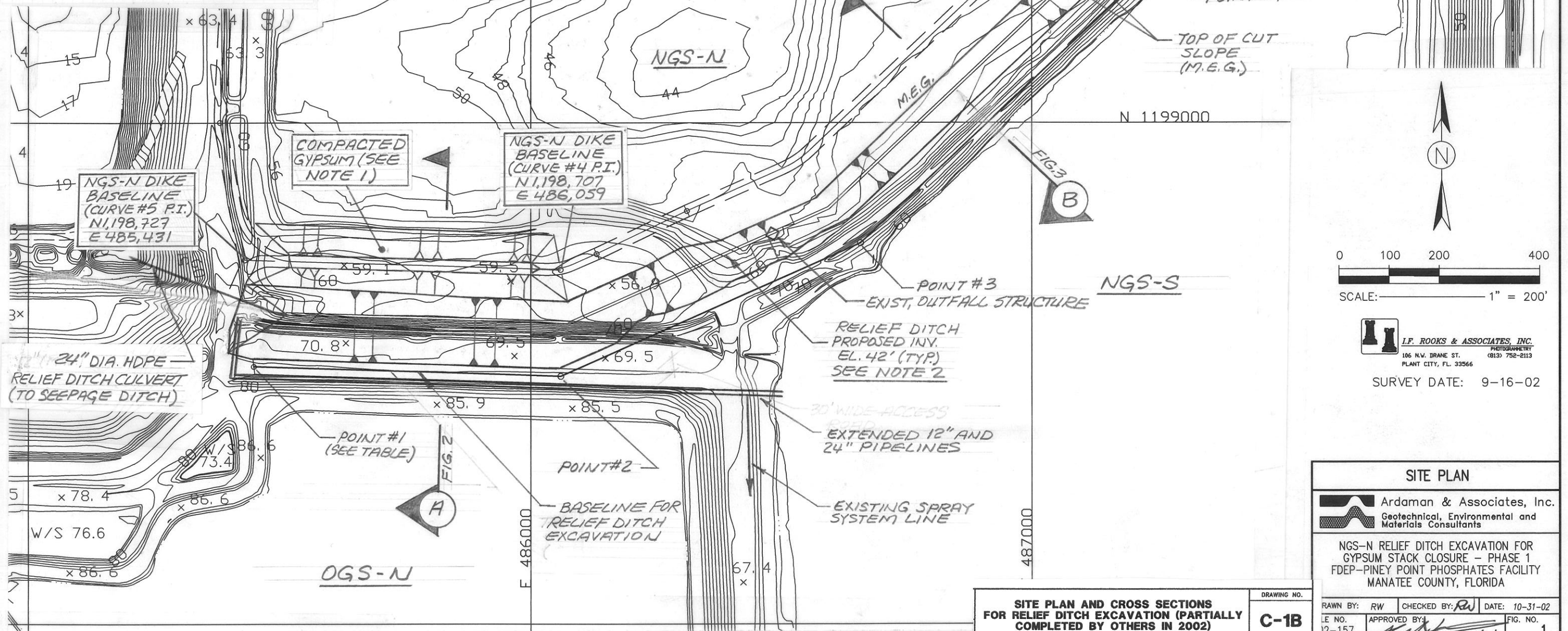
NOTE 1

PLACE AND COMPACT EXCAVATED GYPSUM FOR INITIAL RAISING OF NGS-N DIKE (PER ARDAMAN SPECIFICATIONS)

NOTE 2

PROPOSED RELIEF DITCH SHALL BE EXCAVATED GRADUALLY AS SHOWN ON FIGS. 2 & 3. EXCAVATION SHALL CEASE AND ARDAMAN SHALL BE NOTIFIED IMMEDIATELY IF CONCENTRATED SEEPAGE IS ENCOUNTERED

PROPOSED GYPSUM DIKE (FUTURE CONSTRUCTION)



L.F. ROOKS & ASSOCIATES, INC.
PHOTOGRAMMETRY
106 N.W. DRANE ST.
PLANT CITY, FL 33566
SURVEY DATE: 9-16-02

SITE PLAN

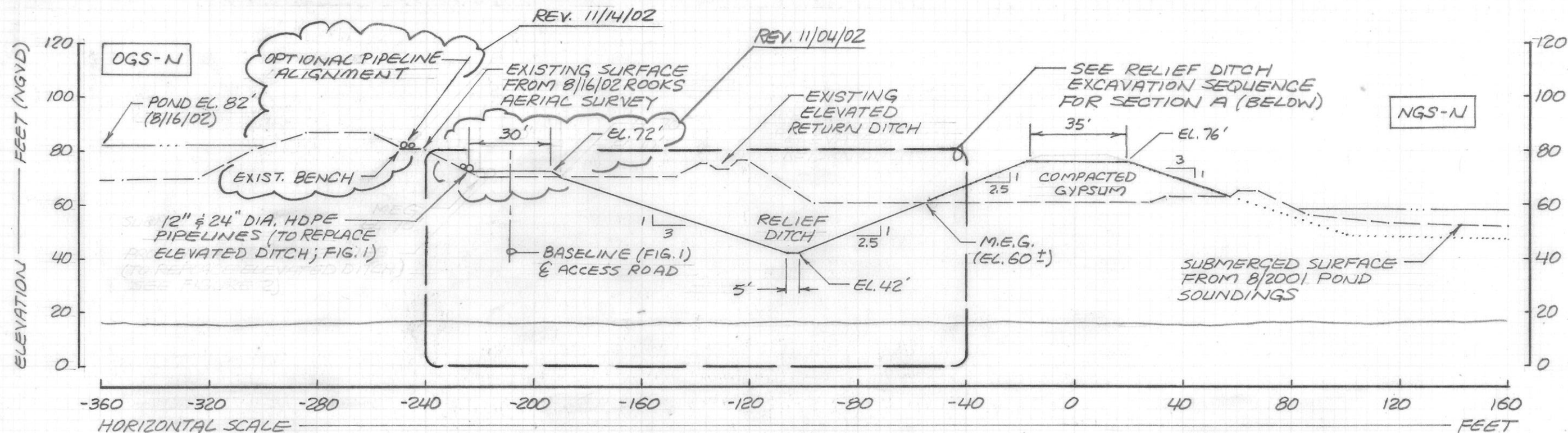
Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants

NGS-N RELIEF DITCH EXCAVATION FOR GYPSUM STACK CLOSURE - PHASE 1
FDEP-PINEY POINT PHOSPHATES FACILITY
MANATEE COUNTY, FLORIDA

SITE PLAN AND CROSS SECTIONS FOR RELIEF DITCH EXCAVATION (PARTIALLY COMPLETED BY OTHERS IN 2002)

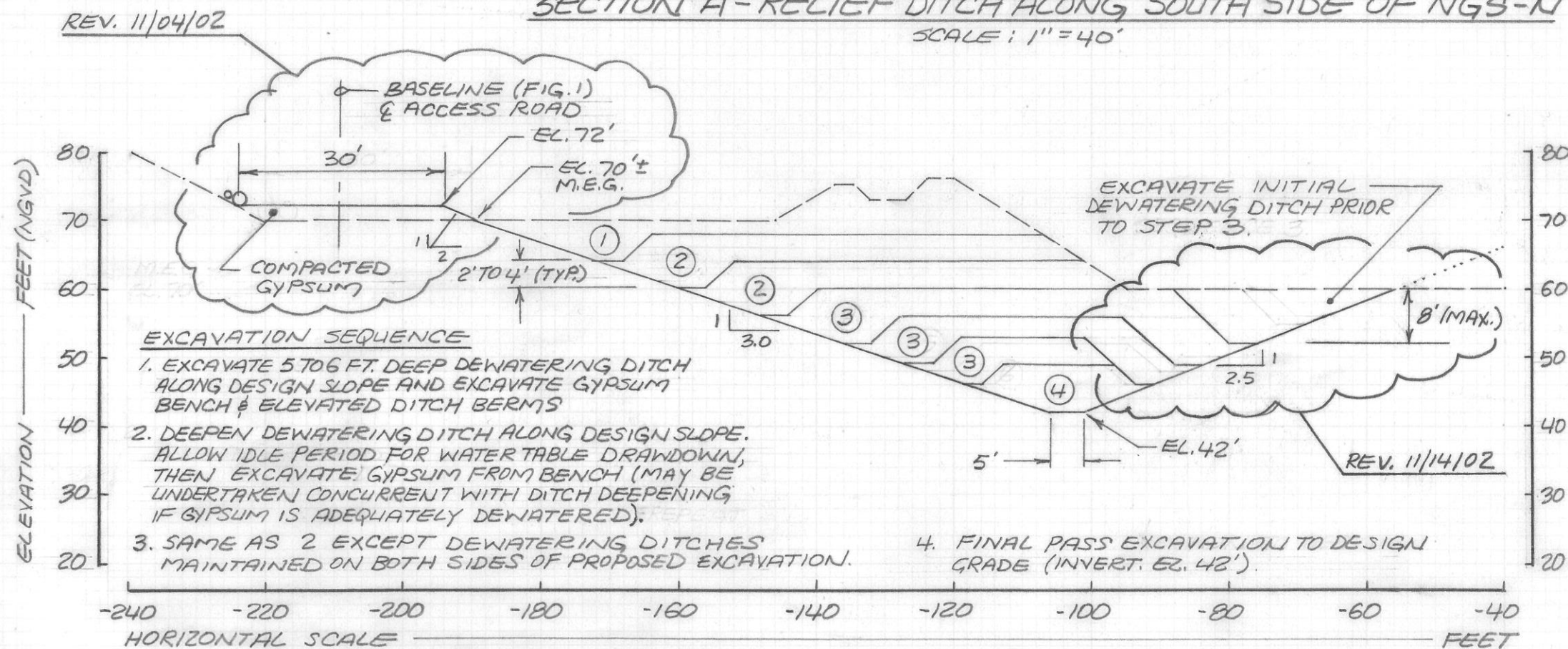
DRAWING NO.
C-1B

RAWN BY: RW CHECKED BY: RW DATE: 10-31-02
FIG. NO. 12-157 APPROVED BY: *[Signature]* DATE: 11/4/02



SECTION A - RELIEF DITCH ALONG SOUTH SIDE OF NGS-N

SCALE: 1" = 40'



EXCAVATION SEQUENCE FOR RELIEF DITCH SECTION A

SCALE: 1" = 20'

TYPICAL SECTION A

Ardaman & Associates, Inc.
Geotechnical, Environmental and
Materials Consultants

NGS-N RELIEF DITCH EXCAVATION FOR
GYPSUM STACK CLOSURE - PHASE 1
FDEP-PINEY POINT PHOSPHATES FACILITY
MANATEE COUNTY, FLORIDA

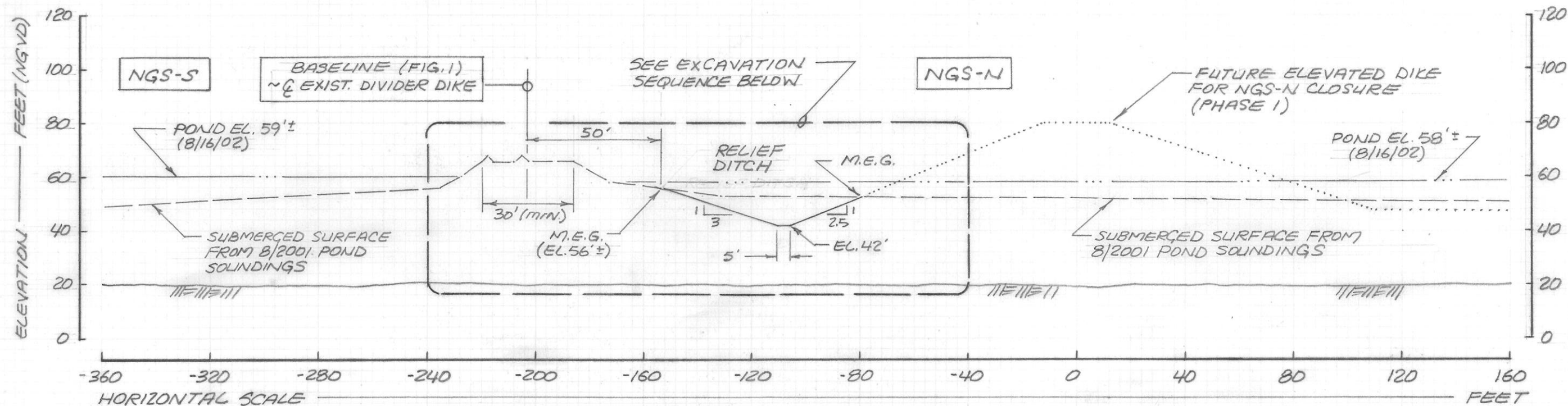
AWN BY: RW CHECKED BY: RW DATE: 10-31-02

NO. -157 APPROVED BY: *[Signature]* FIG. NO. 2

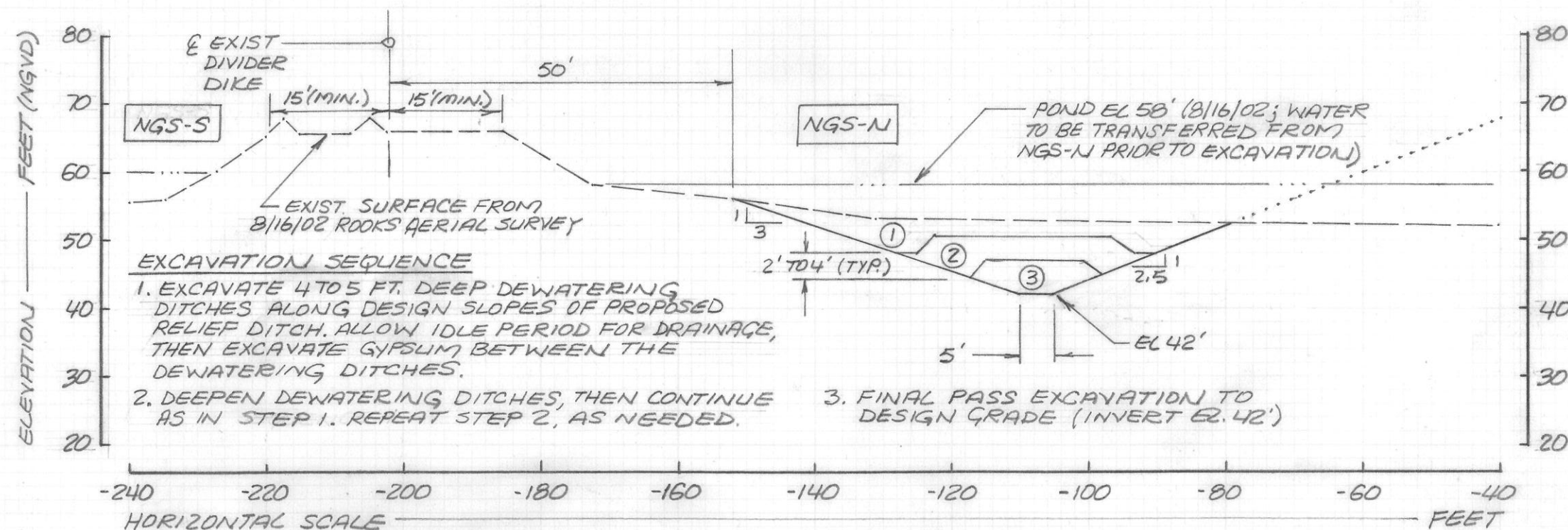
SITE PLAN AND CROSS SECTIONS
FOR RELIEF DITCH EXCAVATION (PARTIALLY
COMPLETED BY OTHERS IN 2002)

DRAWING NO.

C-1B



SECTION B - RELIEF DITCH ALONG NGS DIVIDER DIKE
SCALE: 1" = 40'



EXCAVATION SEQUENCE FOR RELIEF DITCH SECTION B
SCALE: 1" = 20'

TYPICAL SECTION B

Ardaman & Associates, Inc.
Geotechnical, Environmental and
Materials Consultants

NGS-N RELIEF DITCH EXCAVATION FOR
GYPSUM STACK CLOSURE - PHASE 1
FDEP-PINEY POINT PHOSPHATES FACILITY
MANATEE COUNTY, FLORIDA

AWN BY: RW CHECKED BY: RW DATE: 10-31-02

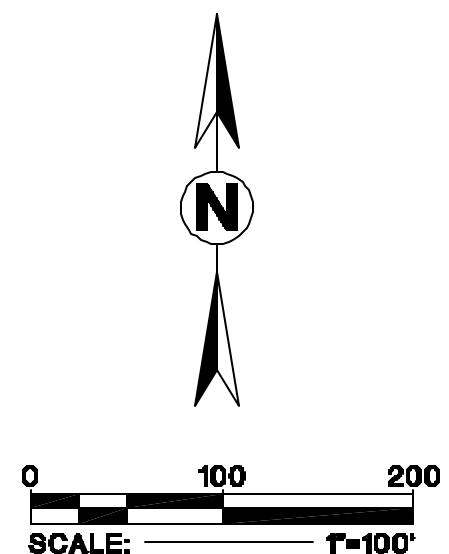
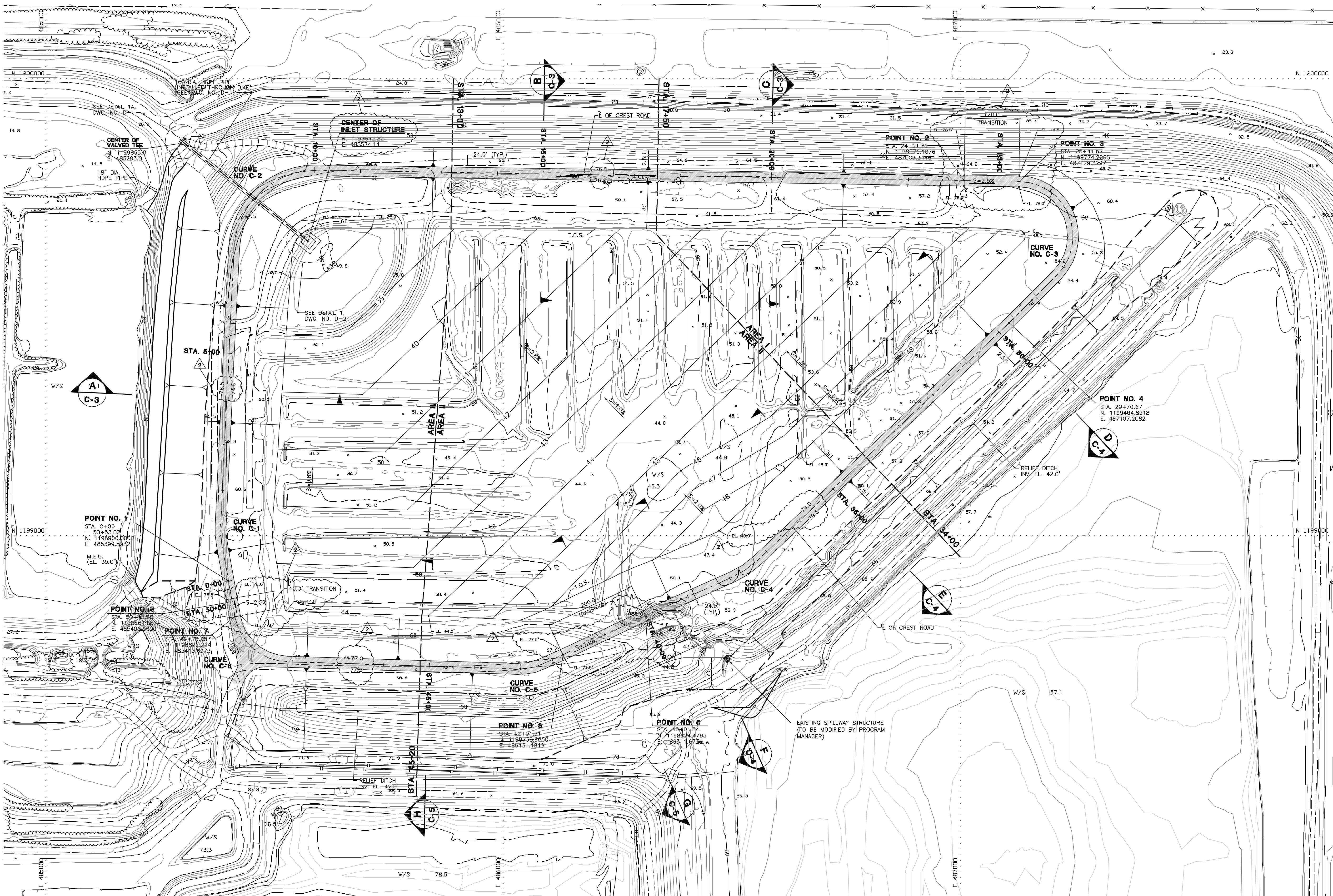
NO. APPROVED BY: FIG. NO.

-157 11/4/02 3

SITE PLAN AND CROSS SECTIONS
FOR RELIEF DITCH EXCAVATION (PARTIALLY
COMPLETED BY OTHERS IN 2002)

DRAWING NO.

C-1B



TOPOGRAPHIC SURVEY PERFORMED
BY I.F. ROOKS & ASSOCIATES, INC.
(FLIGHT DATE: NOV. 14, 2003)
WATER DEPTH SOUNDINGS PERFORMED
BY I.F. ROOKS & ASSOCIATES, INC.
(AUGUST 2001)

CREST ROAD CENTERLINE CURVE DATA		
	CURVE NO. C-1	CURVE NO. C-2
PI N	1199000.7912	1199801.2897
PI E	485381.3155	485419.9960
Δ	13°02'41"	88°08'29"
R	200.00'	180.00'
T	22.87'	174.25'
L	45.34'	276.90'
PC STA	0+79.57	7+29.42
PT STA	1+25.10	10+06.32

CREST ROAD CENTERLINE CURVE DATA		
	CURVE NO. C-3	CURVE NO. C-4
PI N	1199769.7017	1198922.4148
PI E	487413.6431	486532.4959
Δ	134°14'20"	19°25'36"
R	120.00'	200.00'
T	284.35'	34.23'
L	281.15'	67.81'
PC STA	25+41.62	37+26.70
PT STA	28+22.76	37+94.51

CREST ROAD CENTERLINE CURVE DATA		
	CURVE NO. C-5	CURVE NO. C-6
PI N	1198707.0722	1198726.7300
PI E	486059.2850	485431.0144
Δ	25°42'50"	77°55'46"
R	120.00'	120.00'
T	27.39'	97.05'
L	53.85'	163.22'
PC STA	42+52.77	48+10.76
PT STA	43+06.62	49+73.98

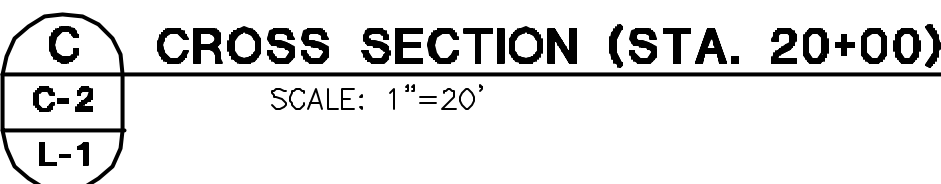
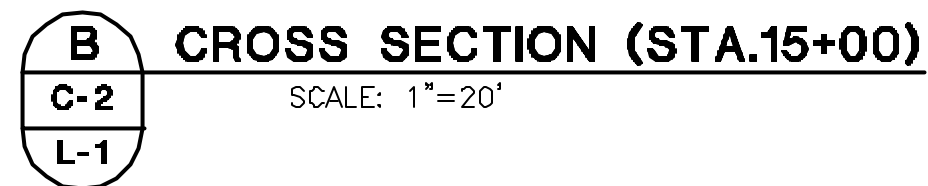
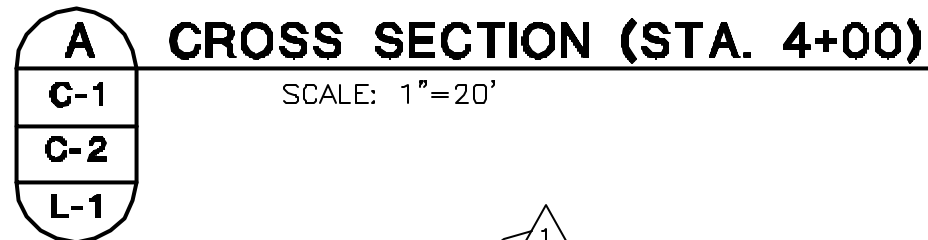
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1	12/18/03	REVISED TOPOGRAPHIC SURVEY	RJW	1	12/18/03	REVISED TOPOGRAPHIC SURVEY	RJW
2	01/23/04	REVISED DIKE AND BASE GRADES	RJW	2	01/23/04	REVISED DIKE AND BASE GRADES	RJW
3	06/15/03	ISSUED FOR CONSTRUCTION	RJW	3	06/15/03	ISSUED FOR CONSTRUCTION	RJW
4	12/16/02	ISSUED FOR BID (POSTPONED)	RJW	4	12/16/02	ISSUED FOR BID (POSTPONED)	RJW
5	12/06/02	ISSUED FOR REVIEW	RJW	5	12/06/02	ISSUED FOR REVIEW	RJW

**Ardaman & Associates, Inc.**
Geotechnical, Environmental and Materials Consultants
8008 S. Orange Ave., Orlando, FL 32809
TEL 407/855-3860 FAX 407/859-8121 C.A.N. 5950

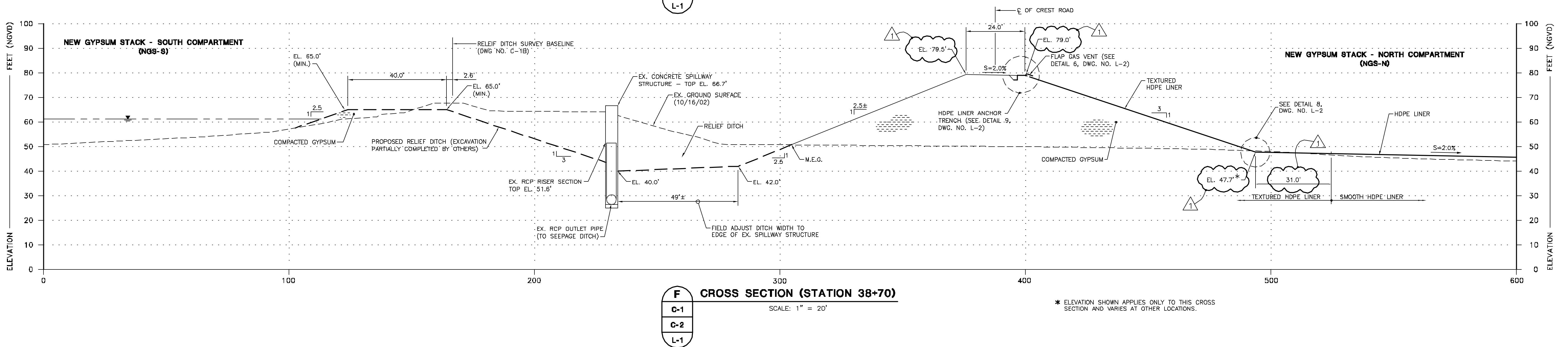
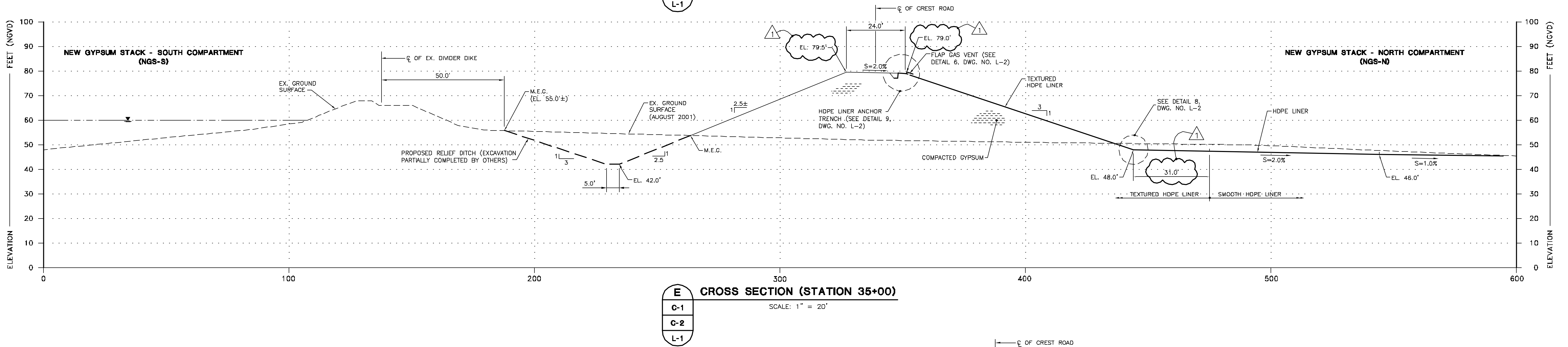
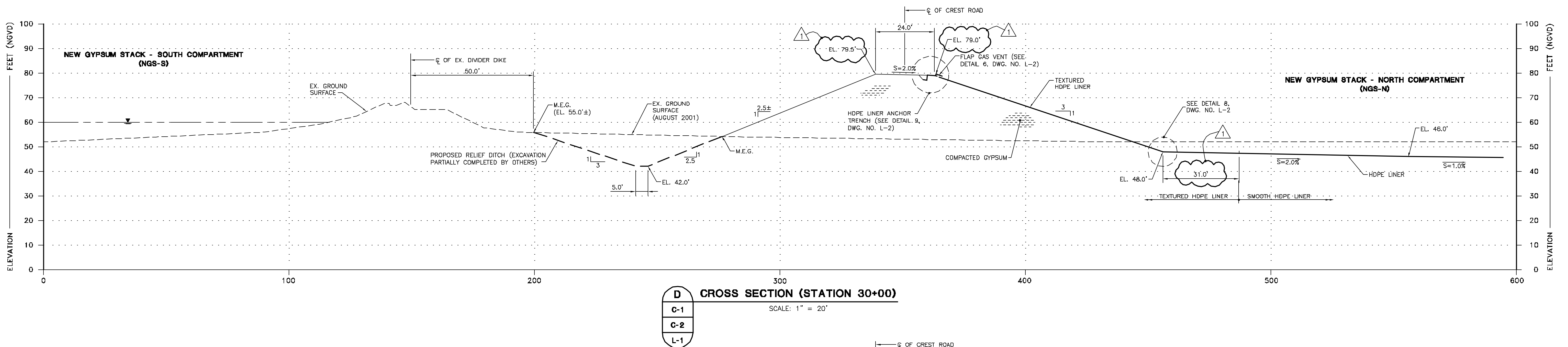
NAME	DATE	NAME	DATE
DESIGNED BY	JFFL 11/06/02	CHECKED BY	RJW 12/06/02
DRAWN BY	BTW 11/07/02	CHECKED BY	JFFL 12/06/02
FILE NO.	02-100A	SCALE	1"=100'

**Florida**
Department of Environmental Protection
and, Louis J. Timchak, Jr. - Receiver

GYPSUM STACK SYSTEM CLOSURE
PHASE I CONSTRUCTION
NEW GYPSUM STACK - NORTH
PINEY POINT FACILITY
MANATEE COUNTY, FLORIDA



					1	01/23/04	REVISED GRADING PLAN & LINER DETAILS			NAME	DATE		NAME	DATE	 Ardaman & Associates, Inc. Geotechnical, Environmental and Materials Consultants 8008 S. Orange Ave., Orlando, FL 32809 TEL 407/855-3860 FAX 407/859-8121 C.A.N. 5950	 Florida Department of Environmental Protection and, Louis J. Timchak, Jr. - Receiver	GYPSUM STACK SYSTEM CLOSURE PHASE I CONSTRUCTION NEW GYPSUM STACK - NORTH PINEY POINT FACILITY MANATEE COUNTY, FLORIDA	CROSS SECTIONS A, B AND C	C-3	DRAWING NO.
		0	11/05/03	ISSUED FOR CONSTRUCTION	RJW	DESIGNED BY	JFLL	11/05/02	CHECKED BY	RJW	12/06/02									
		P3	09/15/03	ISSUED FOR BID	RJW	DRAWN BY	ADA	11/05/02	CHECKED BY	JFLL	12/06/02									
		P2	12/16/02	ISSUED FOR BID (POSTPONED)	RJW															
		P1	12/06/02	ISSUED FOR REVIEW	RJW	FILE NO.: Q2-100A			SCALE: 1"=20'											
REVISION	DATE		DESCRIPTION	APPR'D	REVISION	DATE	DESCRIPTION	APPR'D	APPROVED BY:											



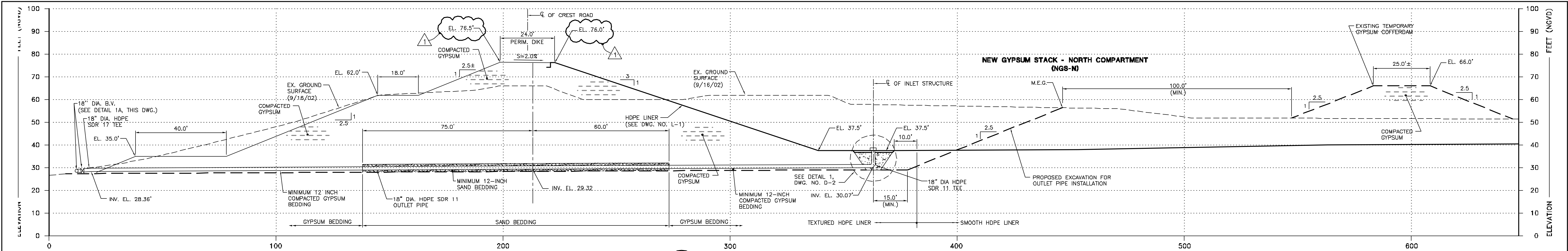
REVISION	DATE	DESCRIPTION	APPR'D	REVISION	DATE	DESCRIPTION	APPR'D
				1	01/23/04	REVISED GRADING PLAN & LINER DETAILS	
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				P3	09/15/03	REISSUED FOR BID	RJW
				P2	12/16/02	ISSUED FOR BID (POSTPONED)	RJW
				P1	12/06/02	ISSUED FOR REVIEW	RJW

NAME	DATE	NAME	DATE
DESIGNED BY: JFLL	11/05/02	CHECKED BY: RJW	12/06/02
DRAWN BY: ADA	11/05/02	CHECKED BY: JFLL	12/06/02
FILE NO: 02-100A		SCALE: 1"=20'	
APPROVED BY:			

Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants
8008 S. Orange Ave., Orlando, FL 32809
TEL 407/855-3860 FAX 407/859-8121 C.A.N. 5950

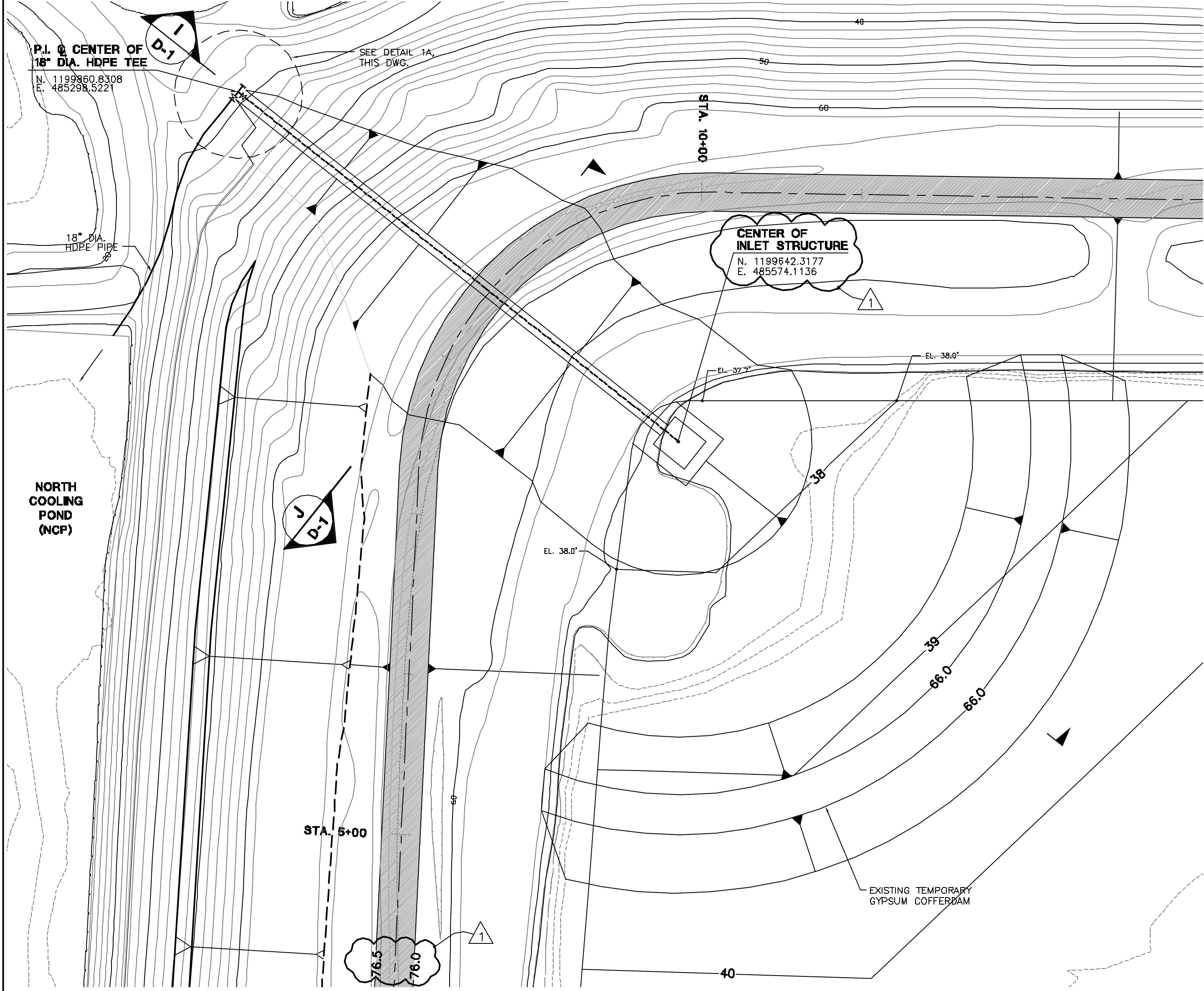
Florida
Department of Environmental Protection
and, Louis J. Timchak, Jr. - Receiver

GYPSUM STACK SYSTEM CLOSURE PHASE I CONSTRUCTION NEW GYPSUM STACK - NORTH PINEY POINT FACILITY MANATEE COUNTY, FLORIDA	CROSS SECTIONS D, E AND F	DRAWING NO. C-4
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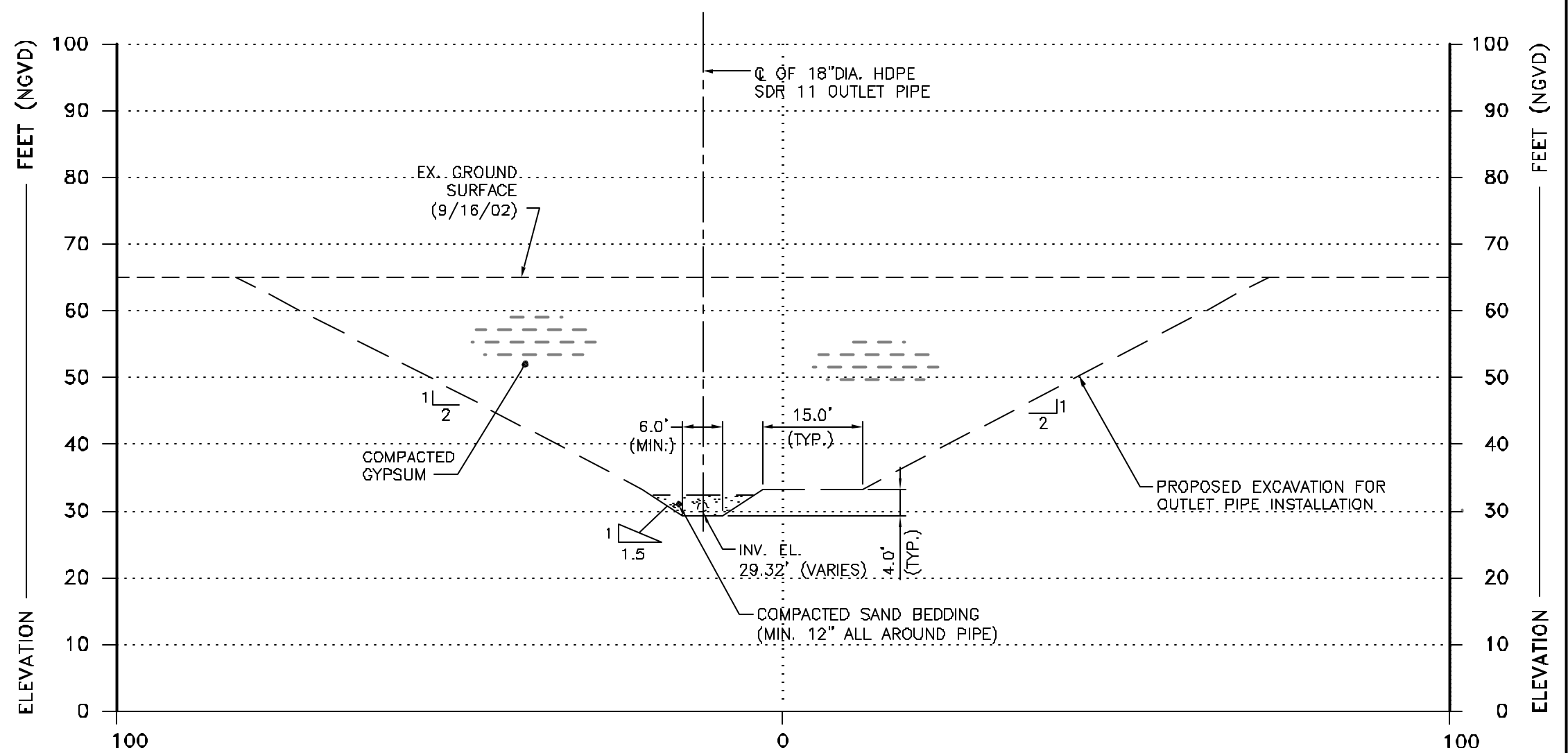


I
C-1
L-1
-

OUTLET PIPE PROFILE
SCALE: 1" = 20'

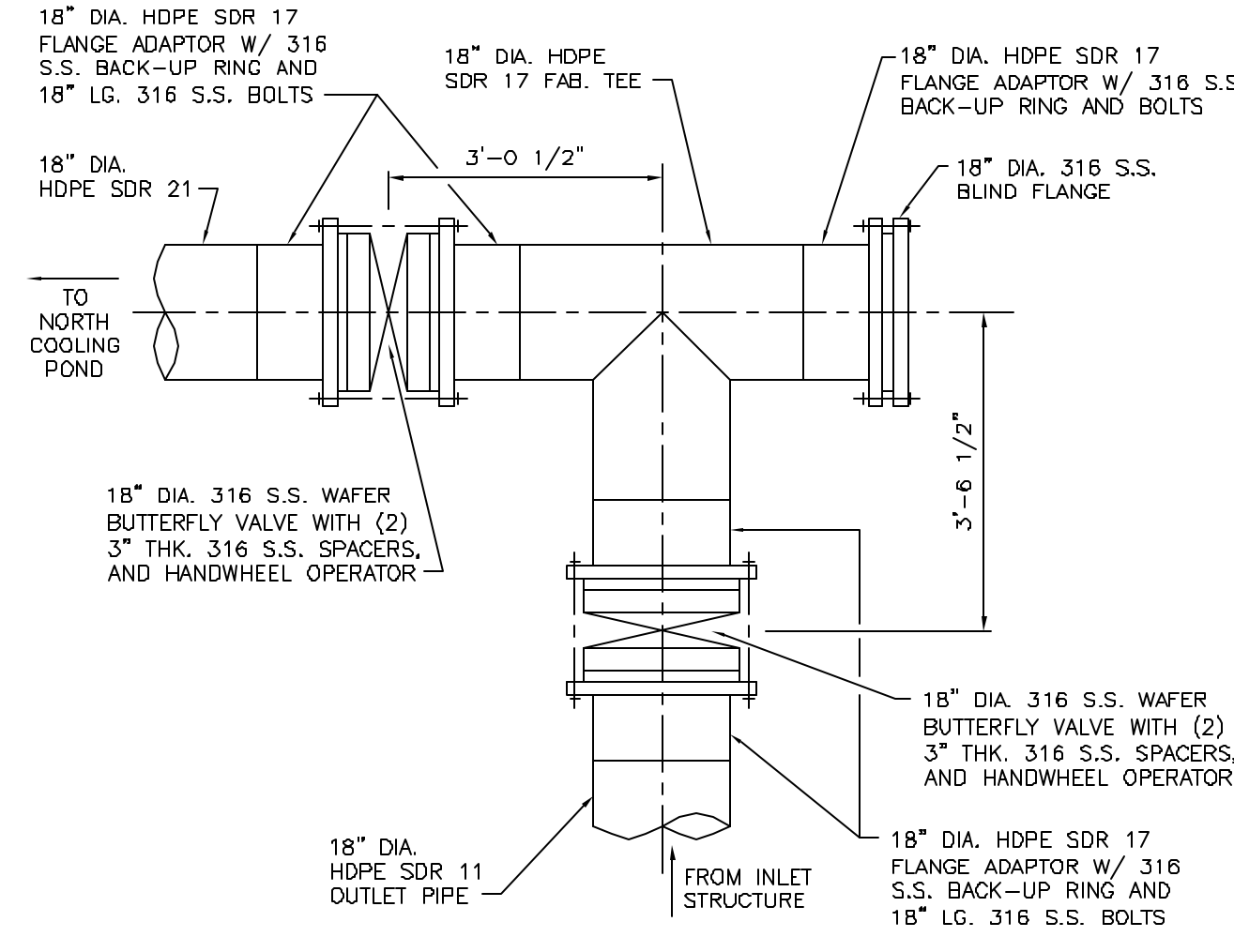


OUTLET PIPE PLAN
SCALE: 1" = 50'



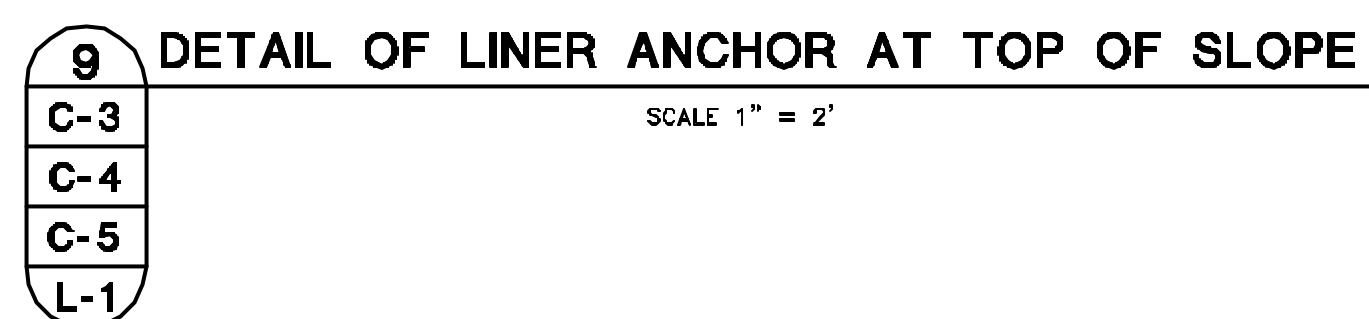
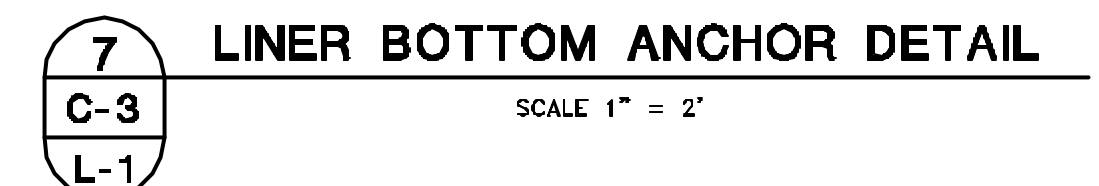
J
C-1
L-1
-

OUTLET PIPE TRENCH CROSS SECTION
SCALE: 1" = 20'



1A
C-1
C-2
-

PIPING DETAIL
SCALE: 1" = 2'



-2