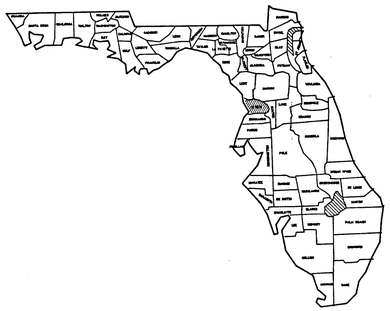
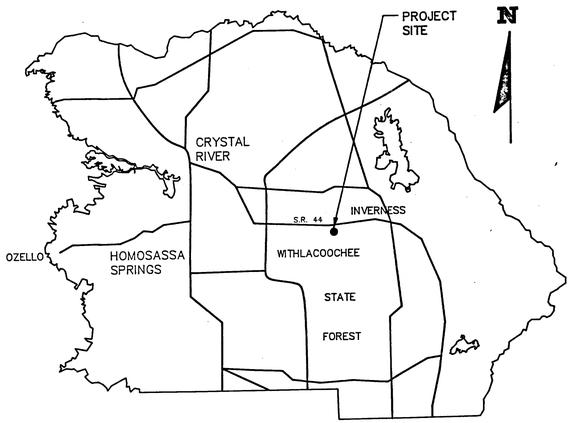
40090 00086
39859
SO&T-187229

CITRUS COUNTY CENTRAL LANDFILL
STORMWATER DRAINAGE AND LEACHATE SEPARATION
CONSTRUCTION PLANS FOR 80 ACRE SITE PHASE 1





LOCATION MAP

COUNTY COMMISSIONERS

GARY BARTELL, CHAIRMAN
FRANK SCHIRALDI, 1ST VICE CHAIRMAN
VICKI PHILLIPS, 2nd VICE CHAIRMAN
BRAD THORPE, COMMISSIONER
CHESTER J. WHITE SR., COMMISSIONER

COUNTY ADMINISTRATOR

ANTHONY L. SHOEMAKER

COUNTY ENGINEER

JAMES W. PINKERTON, P.E.

PREPARED BY

CITRUS COUNTY
DEPARTMENT OF TECHNICAL SERVICES
ENGINEERING DIVISION

INDEX OF SHEETS

SHEET NO	DESCRIPTION
1	COVER
2	SITE PLAN
3	PLAN & PROFILE
4	LEACHATE PIPING SCHEMATIC
5	LEACHATE RECIRCULATION PLAN
6	SEQUENCING, OPERATIONAL & TRAFFIC PLAN
7	TYPICAL DETAILS

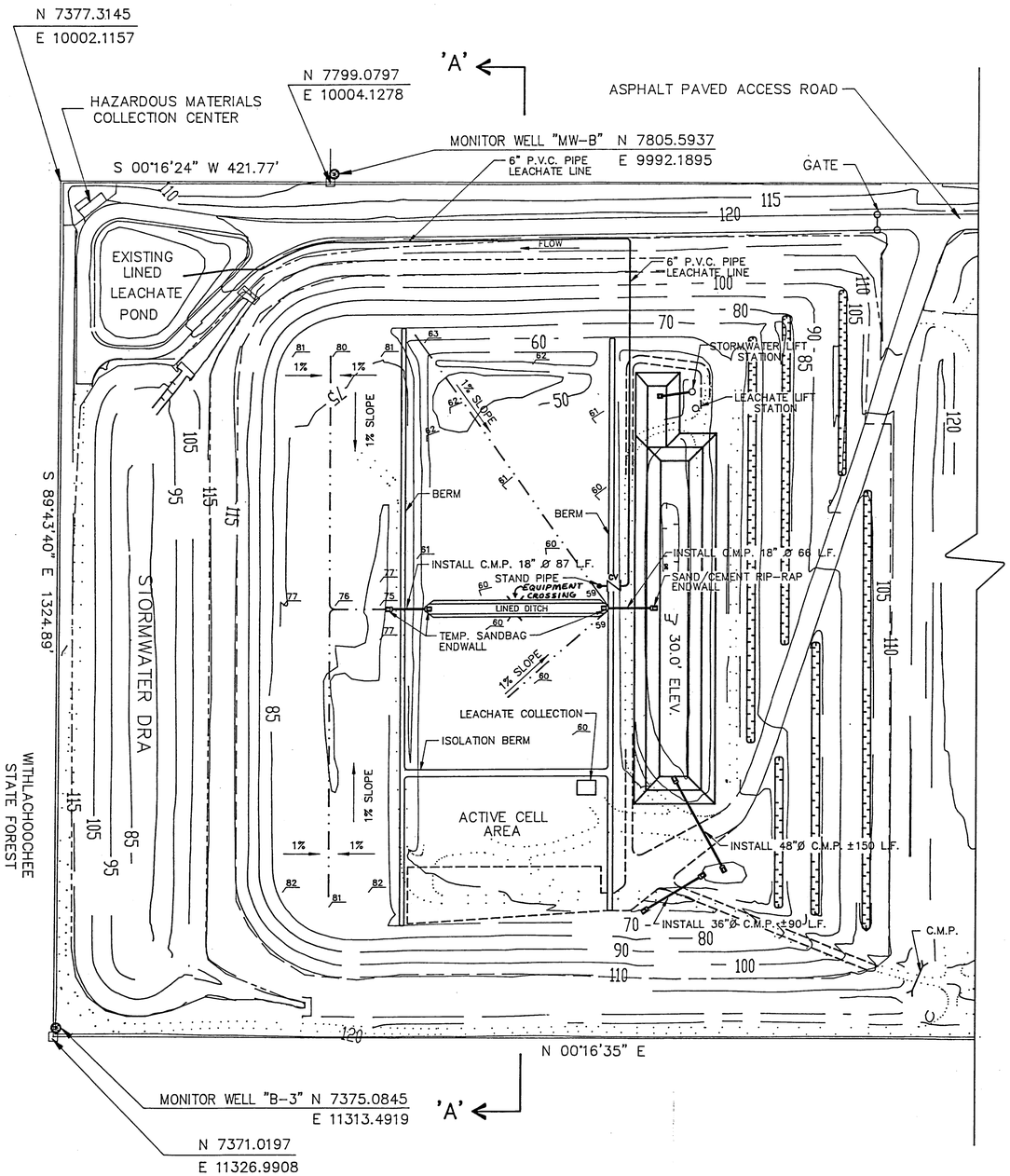
D. E. R.
FEB - 5 1993
SOUTHWEST DISTR
TAMPA

(1) location of well
(2) permeability ?
(3) 17-522 - inject.
(4) Request well log.
(5) 17-28 - well design (injection wells) info to Mike. - Single GW Recovery well, w/ excavations
(6)

COPY

Michael D Moore
2-1-93

CLOSED 60 ACRE SITE



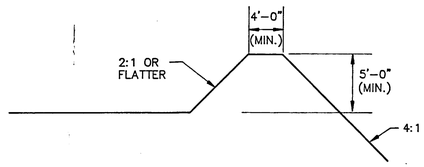
GRAPHIC SCALE

100 0 50 100 200 400

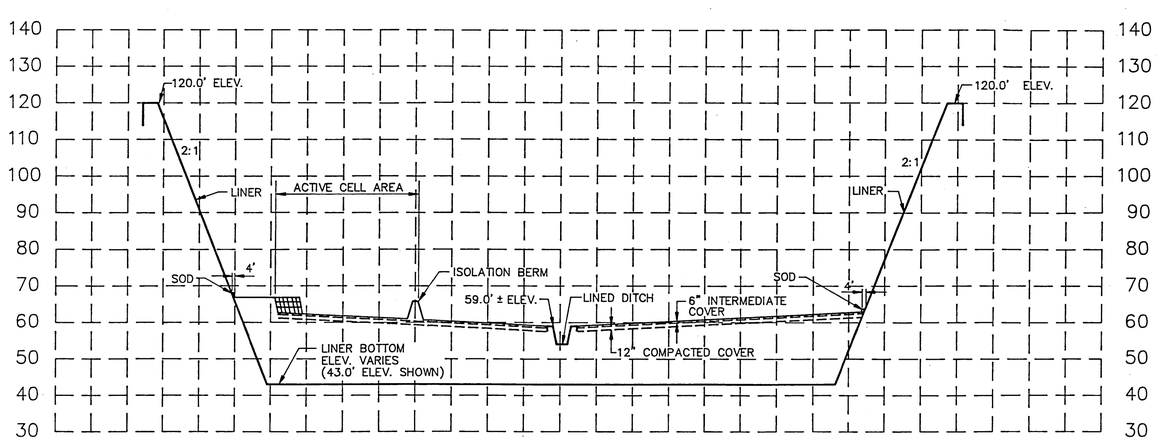
(IN FEET)
1 inch = 100 ft.

LEGEND

- B.M. 54 — BENCHMARK
- ABANDONED 2" MONITOR WELL
- ABANDONED 4" MONITOR WELL
- LP — LECHATE PUMP STATION
- W — MONITOR WELL
- GAS VENT
- FENCE
- ASPHALT DRIVE
- EXIST. DIRT DRIVE
- PROP. DIRT DRIVE
- PROPOSED ENDWALL



LECHATE CONTAINMENT BERM DETAIL
FOR PERIMETER OF ACTIVE CELL
N.T.S.



SECTION 'A'-'A'

COPY

Michael D Moore 2-1-93

			REVISIONS				PRELIMINARY		DESIGN	
BY: MDM DATE: 1-12-95	ADDED SLOPES TO LEACHATE CONTAINMENT BERM DETAIL - JJM	BY DATE		BY DATE			BY	DATE	BY	DATE
BY DATE		BY DATE		BY DATE		DRAWN	JJM	11/92	JJM	11/92
						PREPARED	RD	11/92	RD	11/92
						CHECKED	MDM	11/92	MDM	11/92

CITRUS COUNTY
DEPARTMENT OF TECHNICAL SERVICES
DIVISION OF ENGINEERING
1300 SOUTH LECANTO HIGHWAY
LECANTO, FLORIDA 34461
PHONE: (904) 746-2694

APPROVED BY:

DATE _____

CITRUS COUNTY CENTRAL LANDFILL
ACTIVE AND CLOSED PORTIONS MAP
ACTIVE 80 ACRE LANDFILL SITE

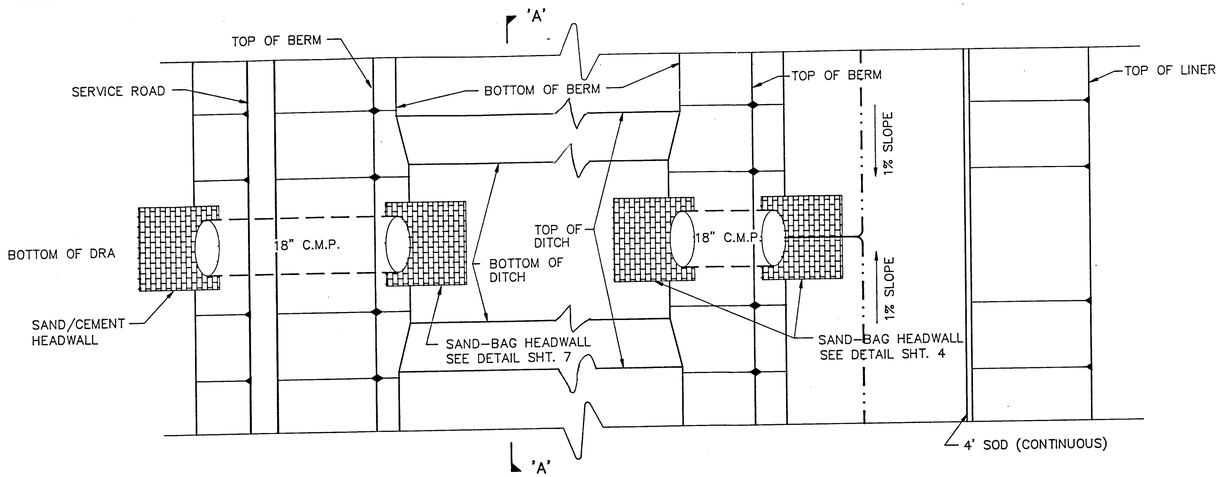
SECTION 1 TOWNSHIP 19 RANGE 18

PROJECT NUMBER 89-615

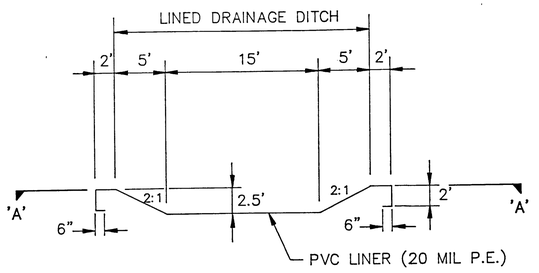
SCALE 1"=100'

SHEET 2 OF 7

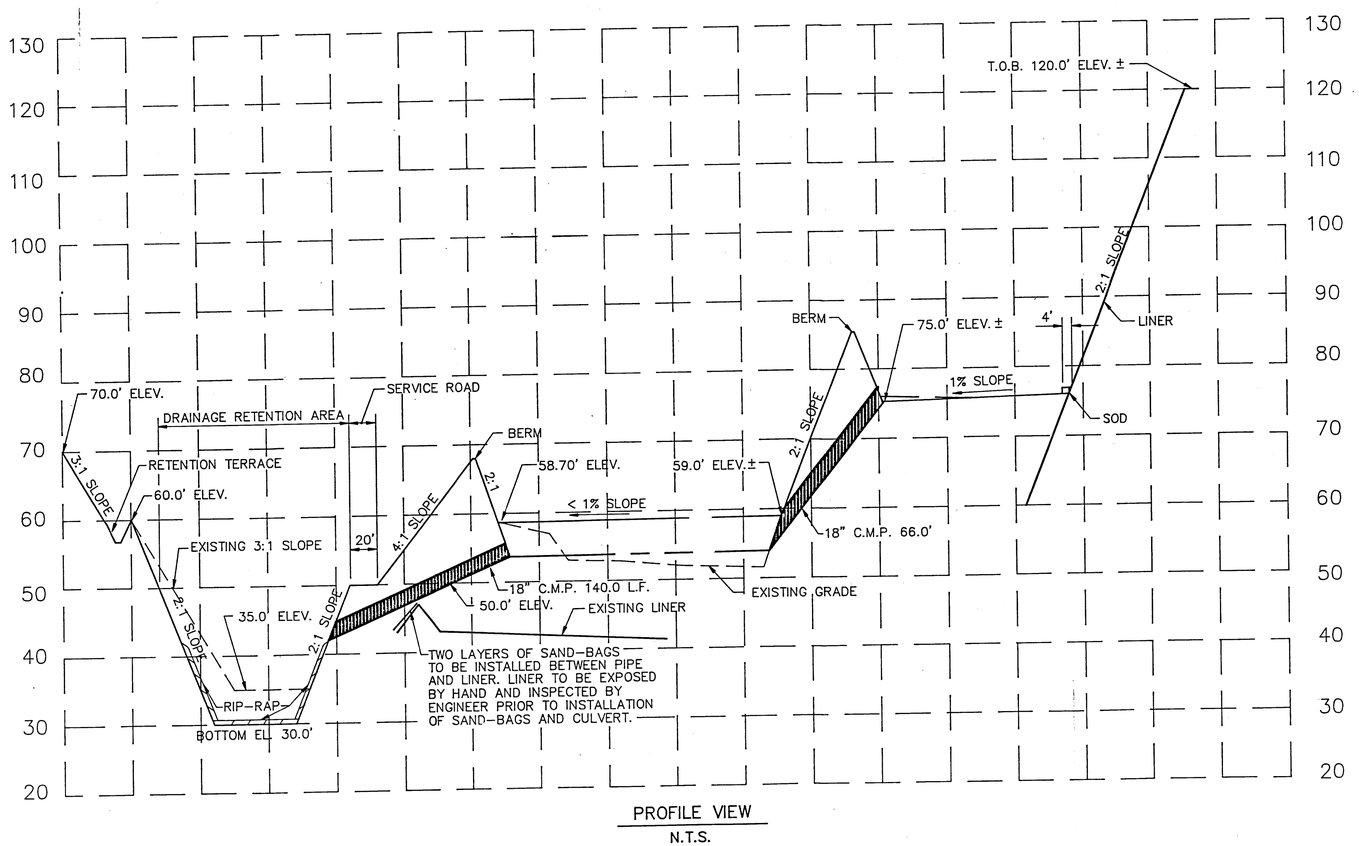
FILE: LAND-F3



PLAN VIEW
N.T.S.



SECTION A-A
N.T.S.



PROFILE VIEW
N.T.S.

GENERAL NOTES

1.) ALL CELLS INTENDED FOR CLOSURE SHALL RECIEVE, IN ADDTION TO A 6 INCH INTIAL COVER, A MINIMUM OF 12 INCHES OF COMPACTED COVER. COVER AT UNLINED SWALES SHALL BE 24 INCHES.

2.) THE FDER SHALL BE NOTIFIED OF ALL CELL CLOSURES AND INFORMED THAT RUNOFF IS TO BE DIRECTED TO THE DRAINAGE RETENTION AREA.

3.) PERIODIC MAINTENANCE OF CLOSED CELLS IS REQUIRED TO MAINTAIN THE INTEGRITY OF THE TEMPORARY CAP.

4.) ALL PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

COPY

Michael D Moore 2-1-93

REVISIONS					
BY: MDM	ADDED 6 IN. FOLD TO PVC LINER (SECTION A-A) - JJM	BY		BY	
DATE: 1-12-93		DATE		DATE	
BY		BY		BY	
DATE		DATE		DATE	

	PRELIMNARY		DESIGN	
	BY	DATE	BY	DATE
DRAWN	JJM	11/92	JJM	11/92
DESIGNED	RD	11/92	RD	11/92
CHECKED	MDM	11/92	MDM	11/92

CITRUS COUNTY
DEPARTMENT OF TECHNICAL SERVICES
DIVISION OF ENGINEERING
1300 SOUTH LECANTO HIGHWAY
LECANTO, FLORIDA 34461
PHONE: (904) 746-2694

APPROVED BY:

DATE

CITRUS COUNTY CENTRAL LANDFILL
PLAN AND PROFILE VIEWS

SECTION 1 TOWNSHIP 18 RANGE 18

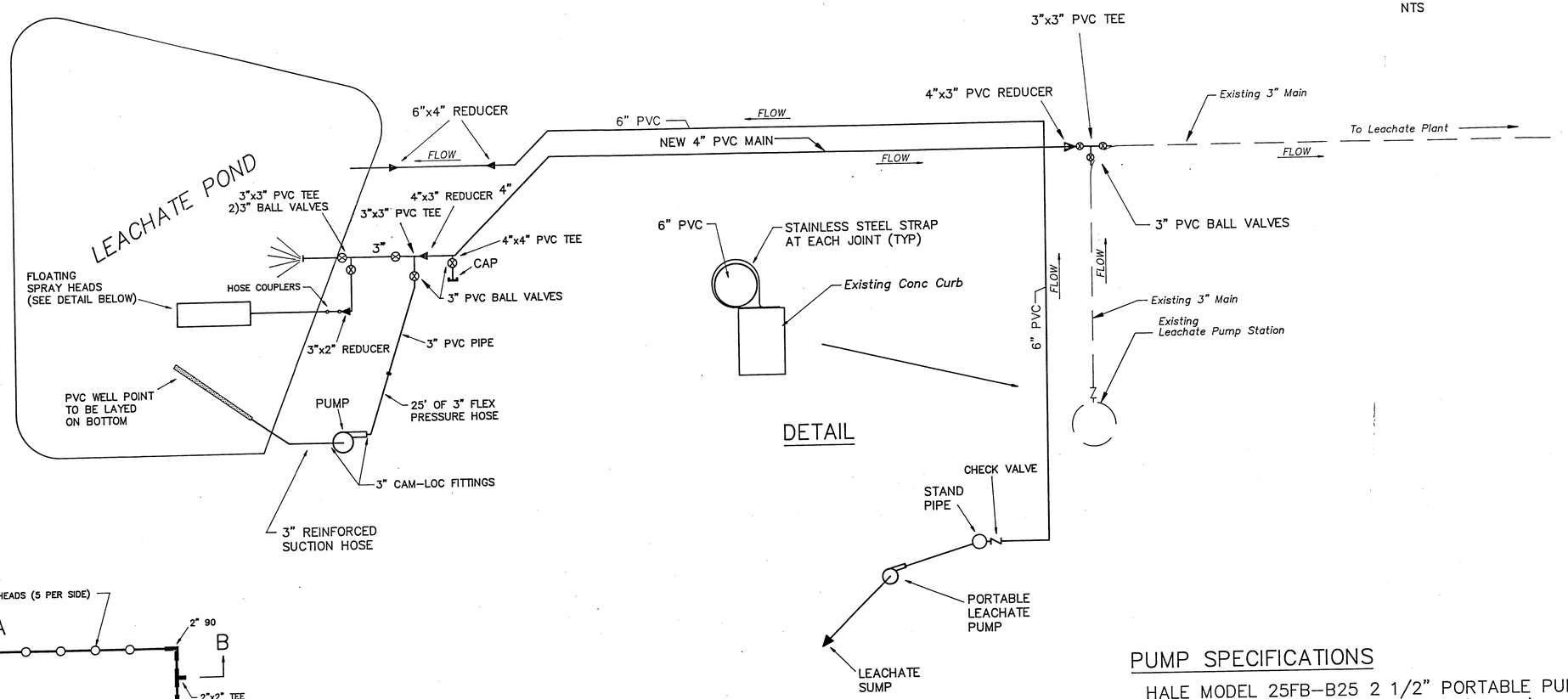
PROJECT NUMBER 89-615

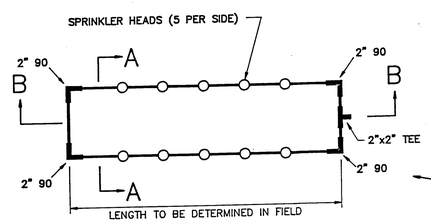
SCALE: N.T.S.

SHEET 3 OF 7

FILE: LAND-F

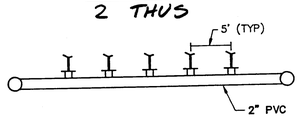
NTS



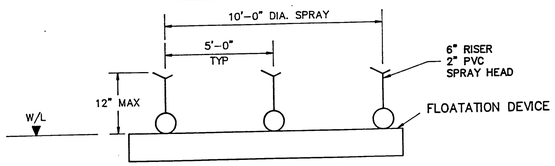


PLAN VIEW

2 THUS



SECTION B-B



SECTION A-A

MATERIAL LIST

EACH	
4	2"x2" TEE
20	2"x1/2" TEE
8	2" 90 BEND
20	1/2"x6" THREADED RISER
20	1/2" THREADED 360 SPRINKLER (3 GPM RAINBIRD OR EQUAL) 10' DIAMETER SPRAY PATTERN

NOTE

ALL FITTINGS & PIPE TO BE SCHEDULE 40
FLOATATION DEVICE TO BE ANCHORED (AS DIRECTED)

PUMP SPECIFICATIONS

HALE MODEL 25FB-B25 2 1/2" PORTABLE PUMP
FLOW RATE: 100GPM @ 90 PSI(208' HEAD) @ 10' SUCTION LIFT
DRIVER: 11HP BRIGGS & STRATON GASOLINE ENGINE
(ALTERNATE BACK-UP PUMP,SAME AS ABOVE)

MAINTENANCE SCHEDULE

1) THE FIRE PUMP WILL BE LUBRICATED MONTHLY
2) THE PVC WELL POINT AT THE PUMP INTAKE WILL BE INSPECTED AND CLEANED WEEKLY
3) ALL PIPE RUNS ARE TO BE INSPECTED FOR DEFECTS EACH DAY OF OPERATION
4) SCREENS AT THE LEACHATE SUMP WILL BE INSPECTED AND CLEANED EACH DAY OF USE

COPY

Michael D Moore 2-1-93

REVISIONS												
BY: MDM DATE: 1-12-93	CHANGED DISTANCE BETWEEN SPRAY HEADS TO 5'-0" - JJM	BY DATE		BY DATE			PRELIMINARY		DESIGN	
BY DATE		BY DATE		BY DATE			BY	DATE	BY	DATE
						DRAWN	DWY	12/92	DWY	12/92
						DESIGNED	MDM	12/92	MDM	12/92
						CHECKED	MDM	12/92	MDM	12/92

CITRUS COUNTY
DEPARTMENT OF TECHNICAL SERVICES
DIVISION OF ENGINEERING
1300 S. LECANTO HIGHWAY
LECANTO, FLORIDA 34461
PHONE: (904) 746-2694

APPROVED BY:

DATE

RECIRCULATION AND
SPRAY FIELD SCHEMATIC

SECTION 1 TOWNSHIP 19 RANGE 18

PROJECT NUMBER 89-615

SCALE NTS

SHEET 4 OF 7

FILE: LFH20

CLOSED 60 ACRE LANDFILL SITE

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

N 7377.3145
E 10002.1157
HAZARDOUS MATERIALS COLLECTION CENTER
LEACHATE RECIRCULATION RES.
PROPOSED LEACHATE WATER LINE
N 7799.0797
E 10004.1278
MONITOR WELL "MW-B" N 7805.5937
M.P. ELEV= 111.94' E 9992.1895
S 00°16'24" W 421.77'
PROPOSED 6" DIA. PVC. LEACHATE LINE
EXISTING LEACHATE LINE
ASPHALT PAVED ACCESS ROAD
S 00°16'24" W 2151.81'
SCALE HOUSE COMPLEX
LEACHATE TREATMENT PLANT FACILITY
MONITOR WELL "B-1" N 9930.5846
M.P. ELEV= 117.57' E 10045.3686
N 10059.0649
E 10034.1194
N 10007.2751
E 10033.9821
N 10007.3658
E 10014.5623
HANLEY TERR.
N 10006.0248
E 10301.8713
N 10127.4944
E 10302.1934
RECYCLE ALLEY
DRA
ADMINISTARTION BUILDING
OPERATIONS BUILDING
MAINT. BUILDING
PROPOSED LEACHATE RECIRC. RES.
PROPOSED LEACHATE PUMP STATION
NEW 4" LEACHATE LINE (IN SERVICE)
EXISTING LEACHATE PUMP STATION
PROPOSED 6" DIA. PVC. LEACHATE LINE
STAND PIPE
COVER DIRT STOCK PILE
VEGETATIVE BUFFER
STATE ROAD No. 44
100.00' RIGHT-OF-WAY
S 89°43'40" E 1324.89'
STORMWATER DRA
WITHLACHOOCHEE STATE FOREST
N 89°43'57" W 1037.72'
N 00°16'35" E 2630.18'
MONITOR WELL "B-3" N 7375.0845
M.P. ELEV= 120.47' E 11313.4919
N 7371.0197
E 11326.9908
MONITOR WELL "B-2" N 9980.6144
ELEV= 136.29' E 11317.1514
N 10001.18
E 11339.58

LEGEND

- B.M. 54 — BENCHMARK
- ABANDONED 2" MONITOR WELL
- ABANDONED 4" MONITOR WELL
- LP — LECHATE PUMP STATION
- W — MONITOR WELL
- GAS VENT
- FENCE
- ASPHALT DRIVE
- DIRT DRIVE
- WV — VALVE AND PIPE
- PUMP STATION AND PIPE
- P — LEACHATE PUMP STATION
- CV — CHECK VALVE AND PIPE

Michael S. Moore 2-1-93

REVISIONS					
BY DATE		BY DATE		BY DATE	
BY DATE		BY DATE		BY DATE	

	PRELIMINARY		DESIGN	
	BY	DATE	BY	DATE
DRAWN	RDT	9/92	JJM	12/92
PREPARED	TEF	9/92	RD	12/92
	MDM	9/92	MDM	12/92

CITRUS COUNTY
DEPARTMENT OF TECHNICAL SERVICES
DIVISION OF ENGINEERING
1300 S. LECANTO HIGHWAY
LECANTO, FLORIDA 34461
PHONE: (904) 746-2694

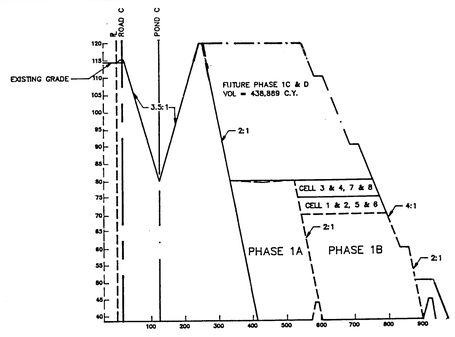
APPROVED BY:
DATE

CITRUS COUNTY CENTRAL LANDFILL
PROPOSED LEACHATE RECIRCULATION SYSTEM
ACTIVE 80 ACRE LANDFILL SITE
SECTION 1 TOWNSHIP 19 RANGE 18

PROJECT NUMBER 89-615
SCALE 1"=100'
SHEET 5 OF 7
FILE: LAND-5

NOTES:
1. ALL PONDED LECHATE SHALL BE PUMPED TO THE TREATMENT PLANT OR THE LECHATE RESERVIOR.
2. PHASE 1A SHALL BE GRADED AND CAPPED WITH A SANITARY COVER AND DRAINAGE FACILITIES INSTALLED PER OPERATIONAL PERMIT REQUIREMENTS.
3. THE STORMWATER LIFT STATION WILL BE REPAIRED TO SPECIFICATIONS.
4. LANDFILL OPERATIONS SHALL BE CONFINED TO THE ACTIVE CELL.
5. A CONTAINMENT BERM SHALL BE CONSTRUCTED AT THE PERIMETER OF THE ACTIVE CELL.
6. INACTIVE CELLS WILL BE GRADED AND CAPPED WITH A TEMPORARY SANITARY COVER AND DRAINAGE FACILITIES TO BE INSTALLED.
7. TO FACILITATE TRAFFIC CONTROL COMMERCIAL CARRIERS AND PUBLIC VEHICULAR TRAFFIC WILL BE SEPARATED. SEPARATE TRAFFIC ACCESS LANES WILL BE PROVIDED INTO ACTIVE CELL.
8. REFER TO SHEET 2 FOR DRAINAGE DETAILS.

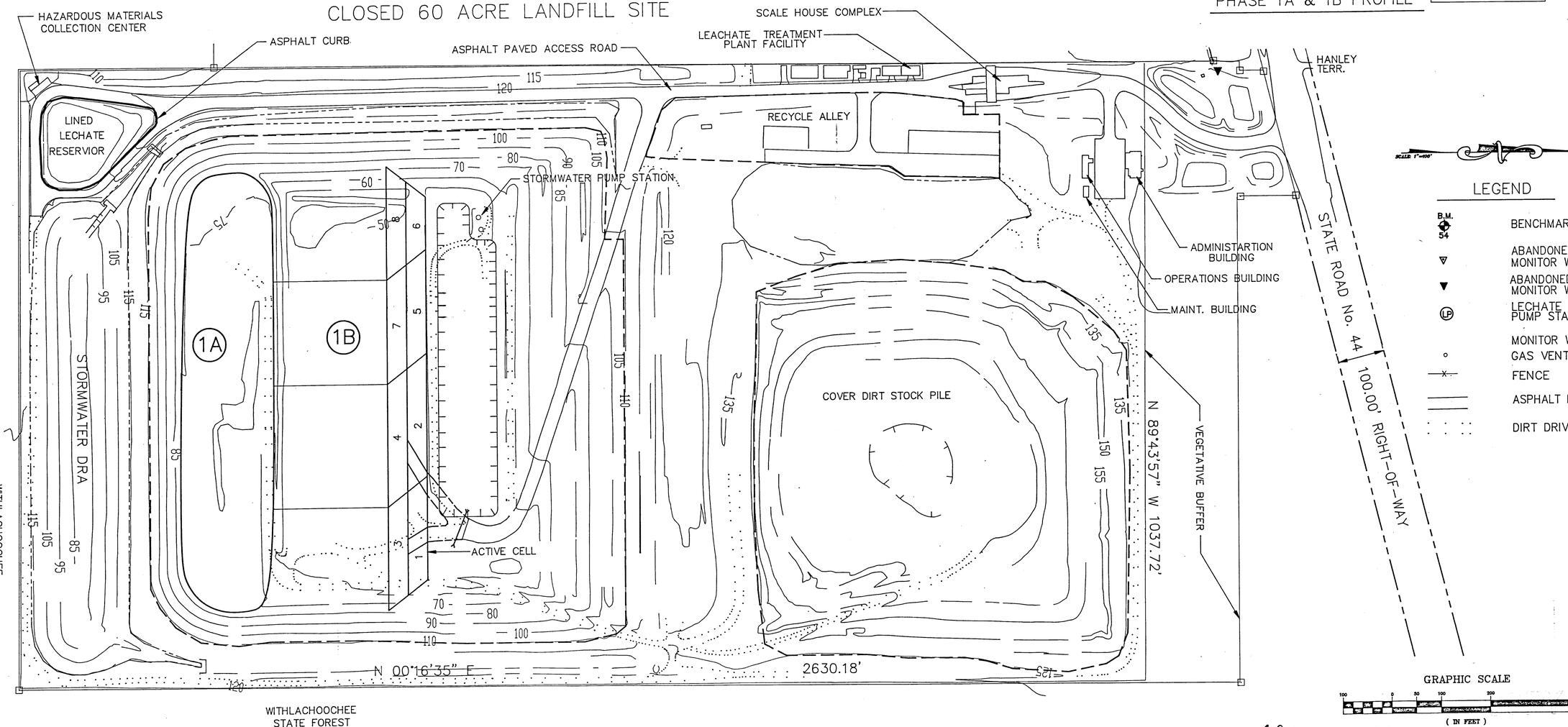
PROPOSED CELL CLOSURE SCHEDULE	
CELL NO.	DATE
1	CLOSE CELL BY JANUARY 18, 1993
2	CLOSE CELL BY MARCH 7, 1993
3	CLOSE CELL BY APRIL 17, 1993
4	CLOSE CELL BY MAY 29, 1993
5	CLOSE CELL BY JULY 7, 1993
6	CLOSE CELL BY AUGUST 5, 1993
7	CLOSE CELL BY SEPTEMBER 10, 1993
8	CLOSE CELL BY OCTOBER 12, 1993



PHASE 1A & 1B PROFILE

SCALE: 1" = 20' VERT.
1" = 200' HORIZ.

CLOSED 60 ACRE LANDFILL SITE



LEGEND

- B.M. 54 — BENCHMARK
- ABANDONED 2" MONITOR WELL
- ABANDONED 4" MONITOR WELL
- LP — LECHATE PUMP STATION
- MONITOR WELL
- GAS VENT
- FENCE
- ASPHALT DRIVE
- DIRT DRIVE

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft

Michael D. Moore 2-1-93

REVISIONS					
BY: MDM DATE: 1-12-93	CHANGED PHASE 1A & 1B PROFILE - JJM	BY DATE		BY DATE	
BY DATE		BY DATE		BY DATE	

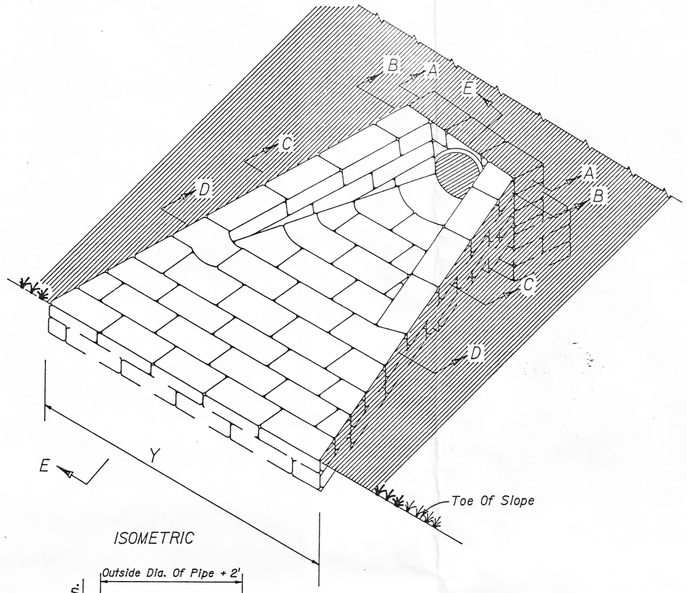
	PRELIMNARY		DESIGN	
	BY	DATE	BY	DATE
DRAWN	RDT	9/92	JJM	12/92
PREPARED	TEF	9/92	RD	12/92
REVIEWED	MDM	9/92	MDM	12/92

CITRUS COUNTY
DEPARTMENT OF TECHNICAL SERVICES
DIVISION OF ENGINEERING
1300 SOUTH LECANTO HIGHWAY
LECANTO, FLORIDA 34461
PHONE: (904) 746-2694

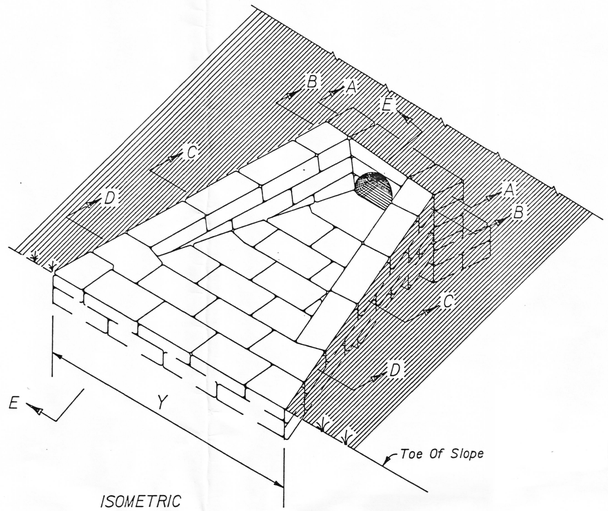
APPROVED BY:
DATE

SITE SEQUENCING, OPERATIONAL AND TRAFFIC CONTROL PLAN
ACTIVE 80 ACRE LANDFILL SITE
SECTION 1 TOWNSHIP 19 RANGE 18

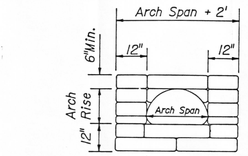
PROJECT NUMBER 89-615
SCALE 1"=100'
SHEET 6 OF 7
FILE: LAND-6



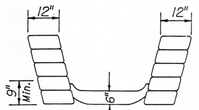
ISOMETRIC



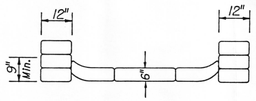
ISOMETRIC



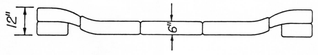
SECTION AA



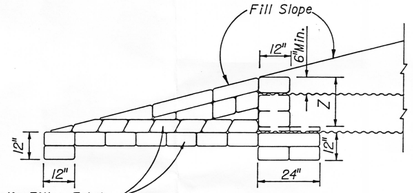
SECTION BB



SECTION CC



SECTION DD



Place Plastic Filter Fabric (Subsurface Type) Around And Below Sand-Bag And Or Sand-Bag Cement Rip-Rap Cost Of Fabric To Be Included In Cost Of Sand-Bag And Or Sand-Bag Cement Riprap

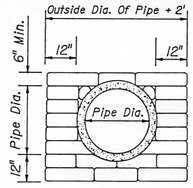
SECTION EE

DETAILS FOR SINGLE METAL PIPE ARCH CULVERTS

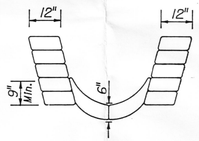
NOTE: For multiple metal pipe arch culvert spacing between arch centers = X

DIMENSIONS AND QUANTITIES FOR METAL PIPE ARCH CULVERTS

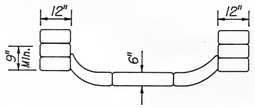
Span	Rise	Dimensions: X	Dimensions: Y 1-Arch	Y 2-Arch	Y 3-Arch	Y 4-Arch	Dimensions: Z	Quantity of Sand-Bag and Sand-Bag Cement Riprap in Cu. Yds. for One Endwall: For 2:1 Slopes 1-Arch	For 2:1 Slopes 2-Arch	For 2:1 Slopes 3-Arch	For 2:1 Slopes 4-Arch	For 4:1 Slopes 1-Arch	For 4:1 Slopes 2-Arch	For 4:1 Slopes 3-Arch	For 4:1 Slopes 4-Arch	For 6:1 Slopes 1-Arch	For 6:1 Slopes 2-Arch	For 6:1 Slopes 3-Arch	For 6:1 Slopes 4-Arch
17"	13"	2'-6"	6'-6"	9'-0"	11'-6"	14'-0"	1'-7"	1.0	1.5	2.0	2.5	1.5	2.2	2.9	3.6				
21"	15"	2'-10"	7'-6"	10'-4"	13'-2"	16'-0"	1'-9"	1.2	1.8	2.4	3.0	1.9	2.7	3.5	4.3				
28"	20"	3'-5"	9'-3"	12'-8"	16'-1"	19'-6"	2'-0"	1.7	2.5	3.3	4.1	2.6	3.7	4.8	5.9				
35"	24"	4'-0"	11'-0"	15'-0"	19'-0"	23'-0"	2'-0"	2.2	3.1	4.0	4.9	3.4	4.7	6.0	7.3				
42"	29"	4'-9"	12'-9"	17'-6"	22'-3"	27'-0"	2'-0"	2.9	4.1	5.3	6.5	4.5	6.1	7.7	9.3				
49"	33"	5'-6"	14'-6"	20'-0"	25'-6"	31'-0"	2'-0"	3.5	4.9	6.3	7.7	5.5	7.4	9.3	11.2				
57"	38"	6'-4"	16'-6"	22'-10"	29'-2"	35'-6"	2'-0"	4.4	6.1	7.8	9.5	6.9	9.2	11.5	13.8				
64"	43"	7'-1"	18'-3"	25'-4"	32'-5"	39'-6"	2'-0"	5.1	7.0	8.9	10.8	8.1	10.7	13.3	15.9				
71"	47"	7'-10"	20'-0"	27'-10"	35'-8"	43'-6"	2'-0"	5.9	8.1	10.3	12.5	9.5	12.4	15.3	18.2				



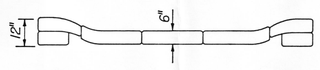
SECTION AA



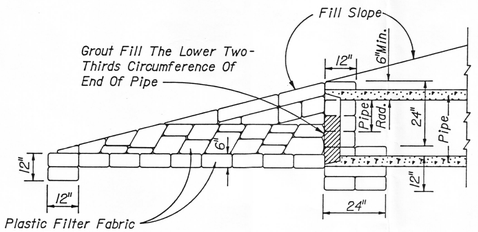
SECTION BB



SECTION CC



SECTION DD



Place Plastic Filter Fabric (Subsurface Type) Around And Below Sand-Bag And Or Sand-Bag Cement Rip-Rap Cost Of Fabric To Be Included In Cost Of Sand-Bag And Or Sand-Bag Cement Riprap

SECTION EE

DETAIL FOR SINGLE PIPE CULVERT

Note: For multiple pipe culvert spacing between pipe centers = X

DIMENSIONS AND QUANTITIES FOR ROUND PIPE CULVERTS

Pipe Dia.	Dimensions: X	Dimensions: Y 1-Pipe	Y 2-Pipes	Y 3-Pipes	Y 4-Pipes	Quantity of Sand-Bag and Sand-Bag Cement Riprap in Cu. Yds. for One Endwall: For 2:1 Slopes 1-Pipe	For 2:1 Slopes 2-Pipes	For 2:1 Slopes 3-Pipes	For 2:1 Slopes 4-Pipes	For 4:1 Slopes 1-Pipe	For 4:1 Slopes 2-Pipes	For 4:1 Slopes 3-Pipes	For 4:1 Slopes 4-Pipes	For 6:1 Slopes 1-Pipe	For 6:1 Slopes 2-Pipes	For 6:1 Slopes 3-Pipes	For 6:1 Slopes 4-Pipes
15"	2'-7"	7'-0"	9'-7"	12'-2"	14'-9"	1.2	1.6	2.1	2.6	1.7	2.4	3.0	3.6				
18"	2'-10"	8'-0"	10'-10"	13'-8"	16'-6"	1.4	2.0	2.6	3.1	2.1	2.9	3.7	4.4				
24"	3'-5"	10'-0"	13'-5"	16'-10"	20'-3"	1.9	2.7	3.5	4.3	2.9	4.0	5.1	6.3				
30"	4'-3"	12'-0"	16'-3"	20'-6"	24'-9"	2.5	3.6	4.8	5.9	3.8	5.4	7.0	8.6				
36"	5'-1"	14'-0"	19'-1"	24'-2"	29'-3"	3.1	4.6	6.2	7.7	4.8	7.0	9.2	11.4				
42"	6'-0"	16'-0"	22'-0"	28'-0"	34'-0"	3.8	5.8	7.7	9.7	6.0	8.8	11.7	14.5				
48"	6'-9"	18'-0"	24'-9"	31'-6"	38'-3"	4.5	7.0	9.4	11.8	7.2	10.8	14.3	17.9				
54"	7'-8"	20'-0"	27'-8"	35'-4"	43'-0"	5.3	8.3	11.3	14.2	8.5	12.9	17.3	21.7				
60"	8'-6"	22'-0"	30'-6"	39'-0"	47'-6"	6.2	9.7	13.3	16.9	10.0	15.3	20.6	25.9				

COPY

Michael D Moore 2-1-93

BY	DATE	REVISIONS	BY	DATE

	PRELIMINARY BY	PRELIMINARY DATE	DESIGN BY	DESIGN DATE
DRAWN	JJM	11/92	JJM	11/92
DESIGNED	RD	11/92	RD	11/92
CHECKED	MDM	11/92	MDM	11/92

CITRUS COUNTY
DEPARTMENT OF TECHNICAL SERVICES
DIVISION OF ENGINEERING
1300 S. LECANTO HIGHWAY
LECANTO, FLORIDA 34461
PHONE: (904) 746-2694

APPROVED BY:

DATE _____

CITRUS COUNTY CENTRAL LANDFILL
U-TYPE SAND-BAG AND OR SAND-BAG CEMENT ENDWALL DETAILS

SECTION 1 TOWNSHIP 19 RANGE 18

PROJECT NUMBER 89-615

SHEET 7 OF 7

SCALE N.T.S.

LAND-F2