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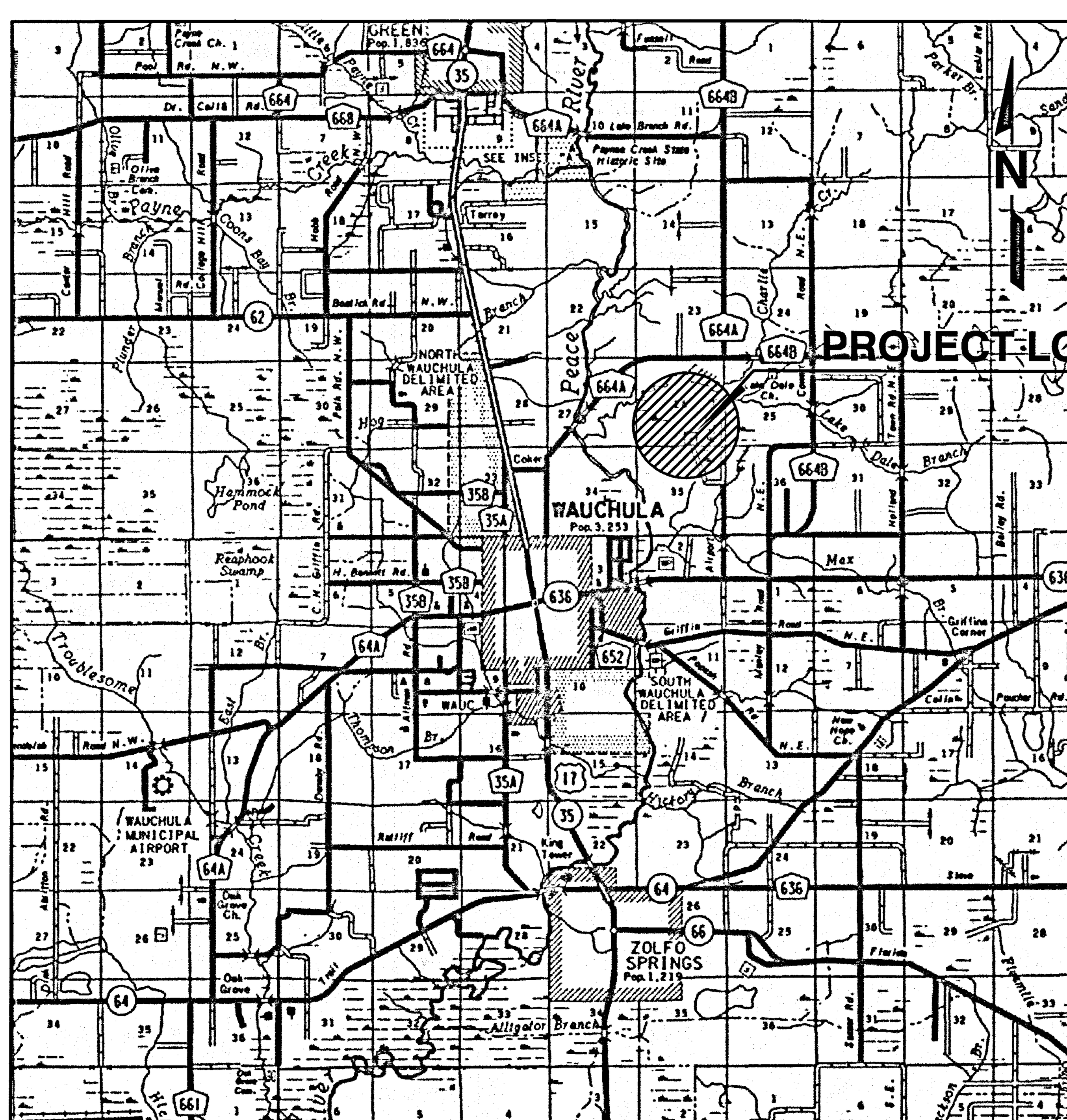
HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS

PREPARED FOR

BOARD OF COUNTY COMMISSIONERS
HARDEE COUNTY, FLORIDA

JANUARY 2004



LOCATION MAP
NOT TO SCALE

HARDEE COUNTY 1921 FLORIDA

DRAWING INDEX

DRAWING NO.		DRAWING TITLE
1	-	COVER SHEET
2	-	AERIAL PHOTOGRAPHY
3	-	AERIAL PHOTOGRAPHY SITE
4	-	EXISTING CONDITIONS AS OF MARCH 2003
5	-	FILL SEQUENCE - 3
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8	-	FINAL BUILDOUT
9	-	CROSS SECTIONS
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FEB 2 3 2004

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3012 U.S. HWY. 301 N. SUITE 700
TAMPA, FLORIDA 33619
(813) 621-0080

Florida Board of Professional Engineers
Certificate No. 00004892

REV	DATE	DESCRIPTION	BY
△			
△			
△			
△			
△			

JOSEPH H. O'NEILL, P.E.
CERTIFICATE NO. 52049

DRAWING TITLE
AERIAL PHOTOGRAPHY

PROJECT TITLE
HARDEE COUNTY
LANDFILL
OPERATIONS DRAWINGS

CLIENT
HARDEE COUNTY
BOARD OF
COUNTY COMMISSIONERS

FEB 2 3 2004

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	DWN. BY:	Q/A RVW BY:
09199033.09	XRH	JHO/RJD
DSN. BY:	CHK. BY:	APP. BY:
JHO	JHO	RJD

CADD FILE:
993309SEQ–AERIAL

DATE:
January 2004

SCALE:
AS SHOWN

DRAWING NO.
2 of 12

JOSEPH H. O'NEILL, P.E.
CERTIFICATE NO. 52049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE
AERIAL PHOTOGRAPHY SITE

PROJECT TITLE
HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS

CLIENT
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

SCS ENGINEERS
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CONSULTING ENGINEERS
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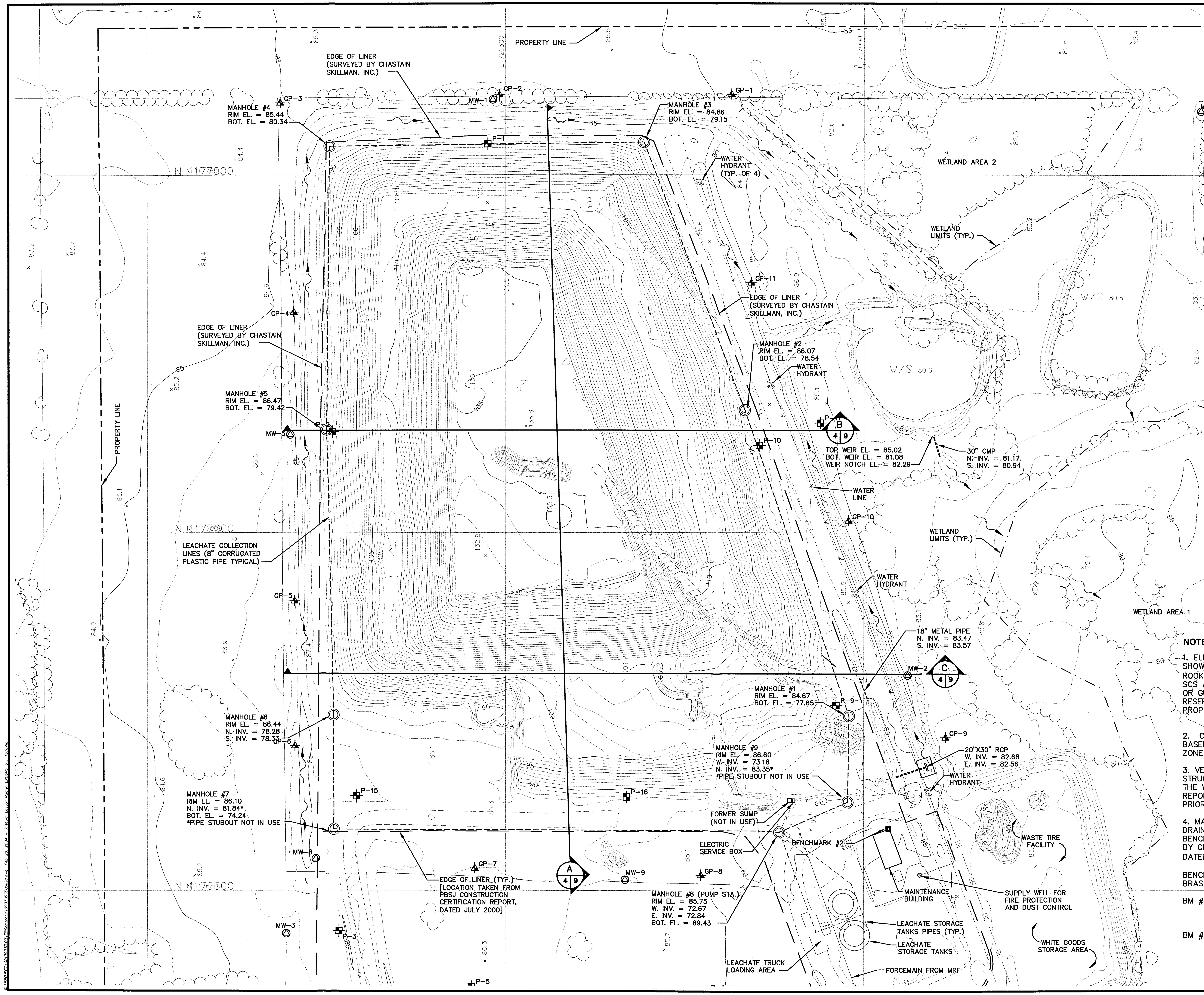
PROJ. NO. 09199033.09	DWN. BY: XRH	Q/A RVW BY: JHO/RJD
DSN. BY: JHO	CHK. BY: JHO	APP. BY: RJD

CADD FILE: 993309SEQ-AERIAL

DATE: January 2004

SCALE: AS SHOWN

DRAWING NO.
3 of **12**



LEGEND:

GP-1	GAS MONITORING PROBE
MW-2	MONITORING WELL
P-1	PIEZOMETER
◎	MANHOLE
85.1 ×	SPOT ELEVATION
	VEGETATION
—x—	FENCE
—85—	INDEX CONTOUR
	SURFACE WATER FLOW DIRECTION
— OE —	OVERHEAD ELECTRIC
— UE —	UNDERGROUND ELECTRIC
←	GUY WIRE

NOTES:

1. ELEVATIONS AND TOPOGRAPHIC INFORMATION SHOWN PROVIDED BY AERIAL SURVEY BY I.F. ROOKS & ASSOCIATES, INC. DATED 3/14/03. SCS AND I.F. ROOKS MAKE NO REPRESENTATION OR GUARANTEES PERTAINING TO EASEMENTS, RESERVATIONS, RIGHT-OF-WAYS, SETBACKS, PROPERTY LIMITS, AND OTHER SIMILAR MATTERS.

2. CONTROL POINTS FOR THE AERIAL SURVEY BASED UPON FLORIDA STATE PLANE, WEST ZONE NAD 1983 AND NGVD 1929.

3. VERIFY ALL EXISTING ELEVATIONS, STRUCTURES, AND UTILITIES WHICH MAY AFFECT THE WORK PRIOR TO BEGINNING CONSTRUCTION. REPORT TO THE ENGINEER ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.

4. MANHOLES, EDGE OF LINER, WETLAND LIMITS, DRAINAGE PIPES, MONITORING WELLS, BENCHMARKS AND PROPERTY LIMITS SURVEYED BY CHASTAIN SKILLMAN, INC. FIELD SURVEY DATED 7/2/2003.

BENCHMARKS – CONCRETE MONUMENTS W/ BRASS DISK

		NEAR
BM #1	N 1175440.35 E 727746.08 EL. 84.025	SCALE HOUSE
BM #2	N 1176586.54 E 727034.07 EL. 85.875	MAINTENANCE BUILDING

FEB 2 3 2004

REV	DATE	DESCRIPTION	BY

JOSEPH R. O'NEILL, P.E.
CERTIFICATE NO. 52049

DRAWING TITLE: **EXISTING CONDITIONS AS OF MARCH 2003**

PROJECT TITLE: **HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS**

CLIENT: **HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS**

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
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FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	DWN. BY:	Q/A RVW BY:
09199033.09	KRH	JHO/RJD
DSN. BY:	CHK. BY:	APP. BY:
JHO	JHO	RJD

CADD FILE: 993309SEQbuild

DATE: JAN. 2004

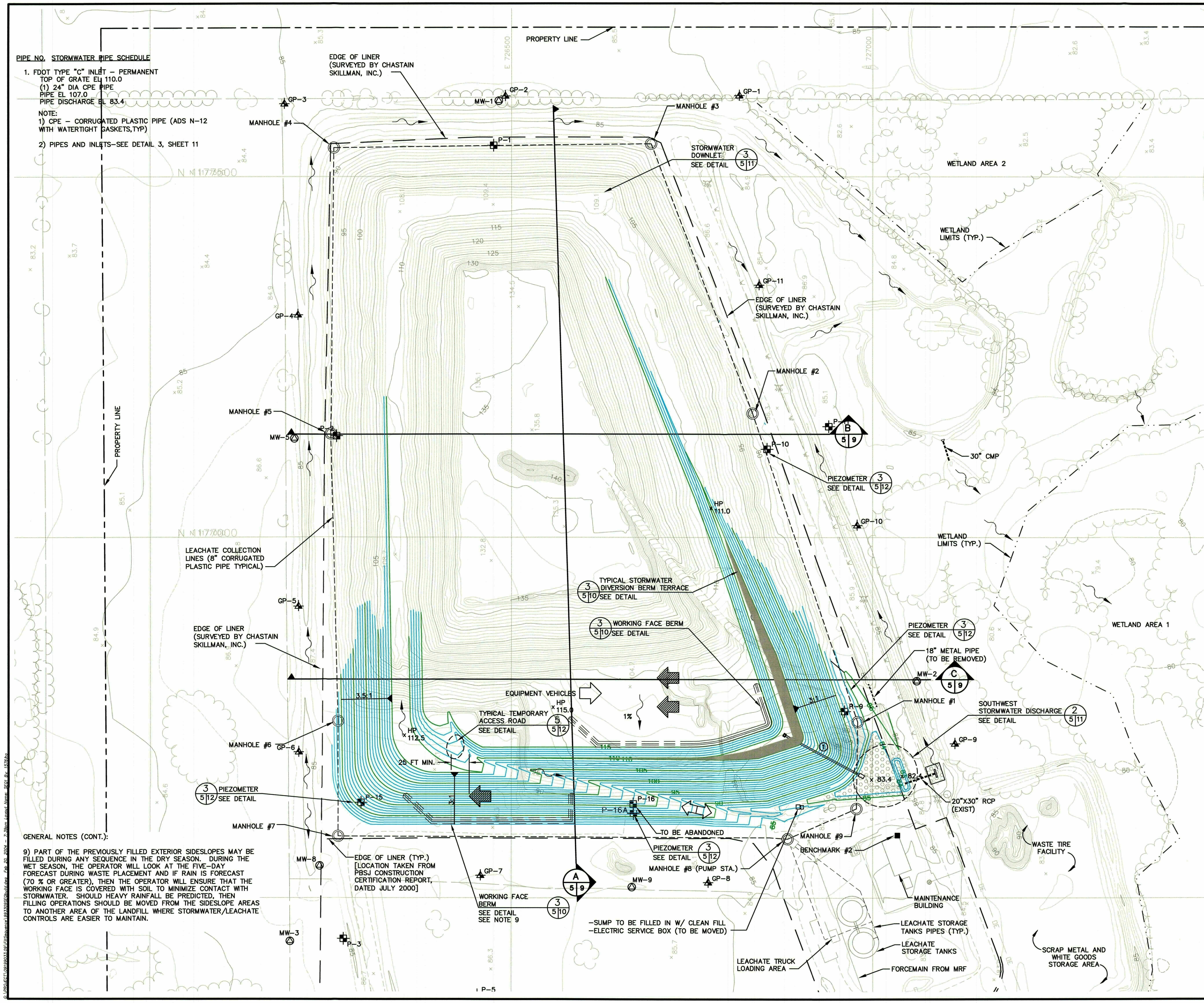
SCALE: AS SHOWN

DRAWING NO.

PIPE NO. STORMWATER PIPE SCHEDULE

1. FDOT TYPE "C" INLET – PERMANENT
TOP OF GRATE EL 110.0
(1) 24" DIA CPE PIPE
PIPE EL 107.0
PIPE DISCHARGE EL 83.4

NOTE:
1) CPE – CORRUGATED PLASTIC PIPE (ADS N-12 WITH WATERTIGHT GASKETS,TYP)
2) PIPES AND INLETS–SEE DETAIL 3, SHEET 11



GENERAL NOTES (CONT.):

9) PART OF THE PREVIOUSLY FILLED EXTERIOR SIDESLOPES MAY BE FILLED DURING ANY SEQUENCE IN THE DRY SEASON. DURING THE WET SEASON, THE OPERATOR WILL LOOK AT THE FIVE-DAY FORECAST DURING WASTE PLACEMENT AND IF RAIN IS FORECAST (70 % OR GREATER), THEN THE OPERATOR WILL ENSURE THAT THE WORKING FACE IS COVERED WITH SOIL TO MINIMIZE CONTACT WITH STORMWATER. SHOULD HEAVY RAINFALL BE PREDICTED, THEN FILLING OPERATIONS SHOULD BE MOVED FROM THE SIDESLOPE AREAS TO ANOTHER AREA OF THE LANDFILL WHERE STORMWATER/LEACHATE CONTROLS ARE EASIER TO MAINTAIN.

N

SCALE IN FEET: 60 0 60 120

LEGEND:

GP-1	GAS MONITORING PROBE
MW-2	MONITORING WELL
P-1	PIEZOMETER
	MANHOLE
85.1×	SPOT ELEVATION
	VEGETATION
—×—	FENCE
	SURFACE WATER FLOW DIRECTION
— OE —	OVERHEAD ELECTRIC
— UE —	UNDERGROUND ELECTRIC
	GUY WIRE
	TRAFFIC FLOW DIRECTION
	WASTE PROGRESSION DIRECTION
	STORMWATER DIVERSION BERMS SEE DETAIL 3/5|10
—85—	EXISTING CONTOUR (AS OF 3/2003)
—85—	MAJOR WASTE FILL CONTOUR (FILL SEQUENCE 3)
—85—	MINOR WASTE FILL CONTOUR (FILL SEQUENCE 3)
	TEMPORARY WORKING FACE BERM

GENERAL NOTES:

1) EXISTING TOPOGRAPHY FROM AERIAL PHOTOGRAPHIC SURVEY CONDUCTED BY I.F. ROOKS AND ASSOCIATES, DATED 3/14/03.
–FILL SEQUENCE 1 AND 2 ALREADY FILLED AS OF 3/14/03. REFER TO PBS&J DRAWINGS DATED APRIL 1998.
–FILLING WILL ALONG THE SOUTH SIDE UNTIL ELEVATION 115 REACHED.

2) FILLING WILL ONLY CONTINUE ON THE SOUTHSIDE OF THE LANDFILL DURING PERIODS OF WET WEATHER OR AS NEEDED TO MEET OPERATIONAL REQUIREMENTS OF THE FACILITY.

3) THE OPERATORS SHALL CHECK ELEVATIONS OF THE WASTE, BY SURVEY, AND SET FILL STAKES FOR WASTE PLACEMENT. FILL GRADES SHOWN ARE TOP OF INTERMEDIATE COVER.

4) TO MINIMIZE THE EXPOSED AREA OF WASTE AND TO USE THE COVER MATERIALS, KEEP THE WORKING FACE ONLY WIDE ENOUGH TO ACCOMODATE VEHICLES UNLOADING WASTE MATERIALS.

5) INITIAL COVER, CONSISTING OF 6–INCHES OF SOIL, WILL BE APPLIED AT THE END OF EACH WORK DAY OVER EXPOSED WASTE MATERIAL. TEMPORARY COVER SUCH AS TARPAULINS MAYBE USED IF WASTE PLACEMENT OCCURS WITHIN 18 HOURS. INCREASE THE FREQUENCY OF APPLICATION IF WIND OR RAIN DISPERSE WASTE MATERIALS.

6) IN AREAS THAT WILL NOT RECEIVE WASTE WITHIN 180 DAYS, APPLY 12 INCHES OF INTERMEDIATE COVER (CLEAN FILL) OVER THE EXISTING 6–INCHES OF INITIAL COVER.

7) GRADES SHOWN ARE TOP OF INTERMEDIATE COVER. APPROXIMATELY 18 INCHES ABOVE WASTE GRADES.

8) INSPECT THE AREAS WITH COVER SOILS AT LEAST WEEKLY DEPENDING UPON WEATHER CONDITIONS FOR DAMAGED AREAS. REPAIR DAMAGED AREAS AS QUICKLY AS OPERATIONS PERMIT. PLACE SOD, SEED, OR MULCH ON THE REPAIRED AREAS TO MINIMIZE ADDITIONAL DAMAGE.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

(3)

JOSEPH H. O'NEILL, P.E.
CERTIFICATE NO. 52049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: FILL SEQUENCE PLAN - 3

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

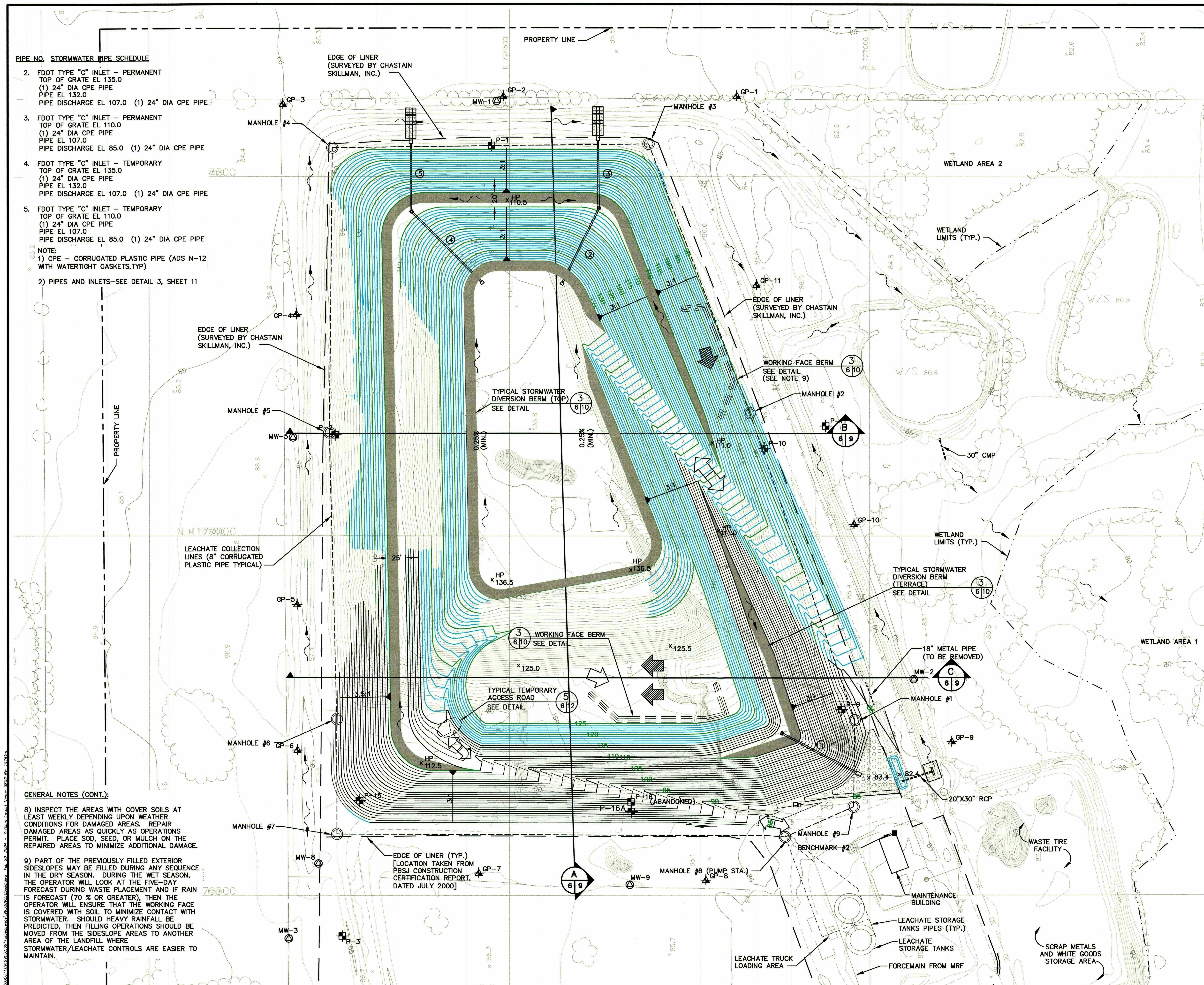
PROJ. NO. 09199033.09 | DWN. BY: XRH | Q/A RVW BY: JHO/RJD
DSN. BY: JHO | CHK. BY: JHO | APP. BY: RJD

CADD FILE: 993309SEQbuild

DATE: JAN. 2004

SCALE: AS SHOWN

DRAWING NO. 5 of 12



PIPE NO. STORMWATER PIPE SCHEDULE

2. FDOT TYPE "C" INLET – PERMANENT
   TOP OF GRATE EL 135.0
   (1) 24" DIA CPE PIPE
   PIPE EL 132.0
   PIPE DISCHARGE EL 107.0 (1) 24" DIA CPE PIPE

3. FDOT TYPE "C" INLET – PERMANENT
   TOP OF GRATE EL 110.0
   (1) 24" DIA CPE PIPE
   PIPE EL 107.0
   PIPE DISCHARGE EL 85.0 (1) 24" DIA CPE PIPE

4. FDOT TYPE "C" INLET – TEMPORARY
   TOP OF GRATE EL 135.0
   (1) 24" DIA CPE PIPE
   PIPE EL 132.0
   PIPE DISCHARGE EL 107.0 (1) 24" DIA CPE PIPE

5. FDOT TYPE "C" INLET – TEMPORARY
   TOP OF GRATE EL 110.0
   (1) 24" DIA CPE PIPE
   PIPE EL 107.0
   PIPE DISCHARGE EL 85.0 (1) 24" DIA CPE PIPE

NOTE:
1) CPE – CORRUGATED PLASTIC PIPE (ADS N-12 WITH WATERTIGHT GASKETS,TYP)

2) PIPES AND INLETS–SEE DETAIL 3, SHEET 11

LEGEND:

- GP-1 GAS MONITORING PROBE
- MW-2 MONITORING WELL
- P-1 PIEZOMETER
- MANHOLE
- 85.1× SPOT ELEVATION
- VEGETATION
- FENCE
- SURFACE WATER FLOW DIRECTION
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- GUY WIRE
- TRAFFIC FLOW DIRECTION
- WASTE PROGRESSION DIRECTION
- STORMWATER DIVERSION BERMS SEE DETAIL 3/6|10
- 85 EXIST CONTOUR (AS OF 3/2003)
- 85 MAJOR CONTOUR (PREVIOUS WASTE FILL SEQUENCE)
- 85 MINOR CONTOUR (PREVIOUS WASTE FILL SEQUENCE)
- 85 MAJOR WASTE FILL CONTOUR (FILL SEQUENCE 4)
- 85 MNOR WASTE FILL CONTOUR (FILL SEQUENCE 4)
- TEMPORARY WORKING FACE BERM

GENERAL NOTES:

1) FILLING WILL ALONG THE SOUTHSIDE UNTIL ELEVATION 125 REACHED. FILLING WILL OCCUR ALONG THE EAST SIDE TO BRING SIDESLOPE TO GRADE AND COMPLETE PERMANENT ROAD TO ELEV. 135.

2) FILLING WILL ONLY CONTINUE ON THE SOUTHSIDE OF THE LANDFILL DURING PERIODS OF WET WEATHER OR AS NEEDED TO MEET OPERATIONAL REQUIREMENTS OF THE FACILITY.

3) THE OPERATORS SHALL CHECK ELEVATIONS OF THE WASTE, BY SURVEY, AND SET FILL STAKES FOR WASTE PLACEMENT. FILL GRADES SHOWN ARE TOP OF INTERMEDIATE COVER.

4) TO MINIMIZE THE EXPOSED AREA OF WASTE AND TO USE THE COVER MATERIALS, KEEP THE WORKING FACE ONLY WIDE ENOUGH TO ACCOMODATE VEHICLES UNLOADING WASTE MATERIALS.

5) INITIAL COVER, CONSISTING OF 6–INCHES OF SOIL, WILL BE APPLIED AT THE END OF EACH WORK DAY OVER EXPOSED WASTE MATERIAL. TEMPORARY COVER SUCH AS TARPAULINS MAYBE USED IF WASTE PLACEMENT OCCURS WITHIN 18 HOURS. INCREASE THE FREQUENCY OF APPLICATION IF WIND OR RAIN DISPERSE WASTE MATERIALS.

6) IN AREAS THAT WILL NOT RECEIVE WASTE WITHIN 180 DAYS, APPLY 12 INCHES FOOT OF INTERMEDIATE COVER (CLEAN FILL) OVER THE EXISTING 6–INCHES OF INITIAL COVER.

7) GRADES SHOWN ARE TOP OF INTERMEDIATE COVER. APPROXIMATELY 18 INCHES ABOVE WASTE GRADES.

GENERAL NOTES (CONT.):

8) INSPECT THE AREAS WITH COVER SOILS AT LEAST WEEKLY DEPENDING UPON WEATHER CONDITIONS FOR DAMAGED AREAS. REPAIR DAMAGED AREAS AS QUICKLY AS OPERATIONS PERMIT. PLACE SOD, SEED, OR MULCH ON THE REPAIRED AREAS TO MINIMIZE ADDITIONAL DAMAGE.

9) PART OF THE PREVIOUSLY FILLED EXTERIOR SIDESLOPES MAY BE FILLED DURING ANY SEQUENCE IN THE DRY SEASON. DURING THE WET SEASON, THE OPERATOR WILL LOOK AT THE FIVE–DAY FORECAST DURING WASTE PLACEMENT AND IF RAIN IS FORECAST (70 % OR GREATER), THEN THE OPERATOR WILL ENSURE THAT THE WORKING FACE IS COVERED WITH SOIL TO MINIMIZE CONTACT WITH STORMWATER. SHOULD HEAVY RAINFALL BE PREDICTED, THEN FILLING OPERATIONS SHOULD BE MOVED FROM THE SIDESLOPE AREAS TO ANOTHER AREA OF THE LANDFILL WHERE STORMWATER/LEACHATE CONTROLS ARE EASIER TO MAINTAIN.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

(6)

JOSEPH H. O'NEILL, P.E.
CERTIFICATE NO. 52049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: FILL SEQUENCE PLAN - 4

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09199033.09 | DWN. BY: XRH | Q/A RVW BY: JHO/RJD
DSN. BY: JHO | CHK. BY: JHO | APP. BY: RJD

CADD FILE: 993309SEQbuild
DATE: JAN. 2004
SCALE: AS SHOWN
DRAWING NO. 6 of 12

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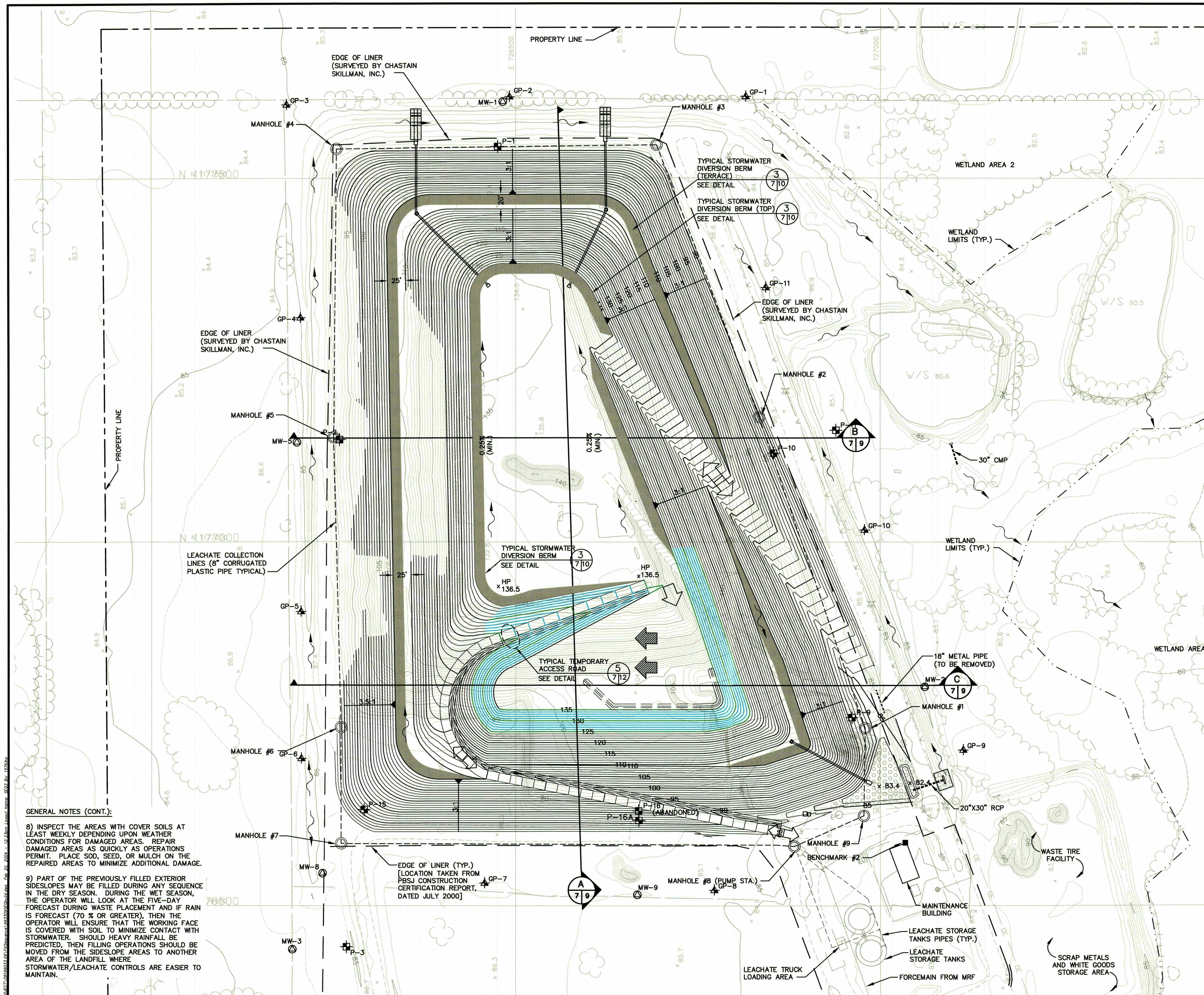

LEGEND:

GP-1	GAS MONITORING PROBE
MW-2	MONITORING WELL
P-1	PIEZOMETER
	MANHOLE
85.1 ×	SPOT ELEVATION
	VEGETATION
—×—	FENCE
	SURFACE WATER FLOW DIRECTION
— OE —	OVERHEAD ELECTRIC
— UE —	UNDERGROUND ELECTRIC
	GUY WIRE
	TRAFFIC FLOW DIRECTION
	WASTE PROGRESSION DIRECTION
	STORMWATER DIVERSION BERMS SEE DETAIL 3 7 10
—85—	EXIST CONTOUR (AS OF 3/2003)
—85—	MAJOR CONTOUR (PREVIOUS WASTE FILL SEQUENCE)
—85—	MINOR CONTOUR (PREVIOUS WASTE FILL SEQUENCE)
—85—	MAJOR WASTE FILL CONTOUR (FILL SEQUENCE 5)
—85—	MINOR WASTE FILL CONTOUR (FILL SEQUENCE 5)
	TEMPORARY WORKING FACE BERM

GENERAL NOTES:

1) FILLING FROM UPPER PORTION OF THE LANDFILL TO FILL ABOVE EL 125.0.

2) FILLING WILL ONLY CONTINUE ON THE SOUTHSIDE OF THE LANDFILL DURING PERIODS OF WET WEATHER OR AS NEEDED TO MEET OPERATIONAL REQUIREMENTS OF THE FACILITY.

3) THE OPERATORS SHALL CHECK ELEVATIONS OF THE WASTE, BY SURVEY, AND SET FILL STAKES FOR WASTE PLACEMENT. FILL GRADES SHOWN ARE TOP OF INTERMEDIATE COVER.

4) TO MINIMIZE THE EXPOSED AREA OF WASTE AND TO USE THE COVER MATERIALS, KEEP THE WORKING FACE ONLY WIDE ENOUGH TO ACCOMODATE VEHICLES UNLOADING WASTE MATERIALS.

5) INITIAL COVER, CONSISTING OF 6–INCHES OF SOIL, WILL BE APPLIED AT THE END OF EACH WORK DAY OVER EXPOSED WASTE MATERIAL. TEMPORARY COVER SUCH AS TARPAULINS MAYBE USED IF WASTE PLACEMENT OCCURS WITHIN 18 HOURS. INCREASE THE FREQUENCY OF APPLICATION IF WIND OR RAIN DISPERSE WASTE MATERIALS.

6) IN AREAS THAT WILL NOT RECEIVE WASTE WITHIN 180 DAYS, APPLY 12 INCHES FOOT OF INTERMEDIATE COVER (CLEAN FILL) OVER THE EXISTING 6–INCHES OF INITIAL COVER.

7) GRADES SHOWN ARE TOP OF INTERMEDIATE COVER. APPROXIMATELY 18 INCHES ABOVE WASTE GRADES.

GENERAL NOTES (CONT.):

8) INSPECT THE AREAS WITH COVER SOILS AT LEAST WEEKLY DEPENDING UPON WEATHER CONDITIONS FOR DAMAGED AREAS. REPAIR DAMAGED AREAS AS QUICKLY AS OPERATIONS PERMIT. PLACE SOD, SEED, OR MULCH ON THE REPAIRED AREAS TO MINIMIZE ADDITIONAL DAMAGE.

9) PART OF THE PREVIOUSLY FILLED EXTERIOR SIDESLOPES MAY BE FILLED DURING ANY SEQUENCE IN THE DRY SEASON. DURING THE WET SEASON, THE OPERATOR WILL LOOK AT THE FIVE–DAY FORECAST DURING WASTE PLACEMENT AND IF RAIN IS FORECAST (70 % OR GREATER), THEN THE OPERATOR WILL ENSURE THAT THE WORKING FACE IS COVERED WITH SOIL TO MINIMIZE CONTACT WITH STORMWATER. SHOULD HEAVY RAINFALL BE PREDICTED, THEN FILLING OPERATIONS SHOULD BE MOVED FROM THE SIDESLOPE AREAS TO ANOTHER AREA OF THE LANDFILL WHERE STORMWATER/LEACHATE CONTROLS ARE EASIER TO MAINTAIN.

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

REV	DATE	DESCRIPTION	BY

JOSEPH H. O'NEILL P.E. CERTIFICATE NO. 52049

DRAWING TITLE: FILL SEQUENCE PLAN - 5

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

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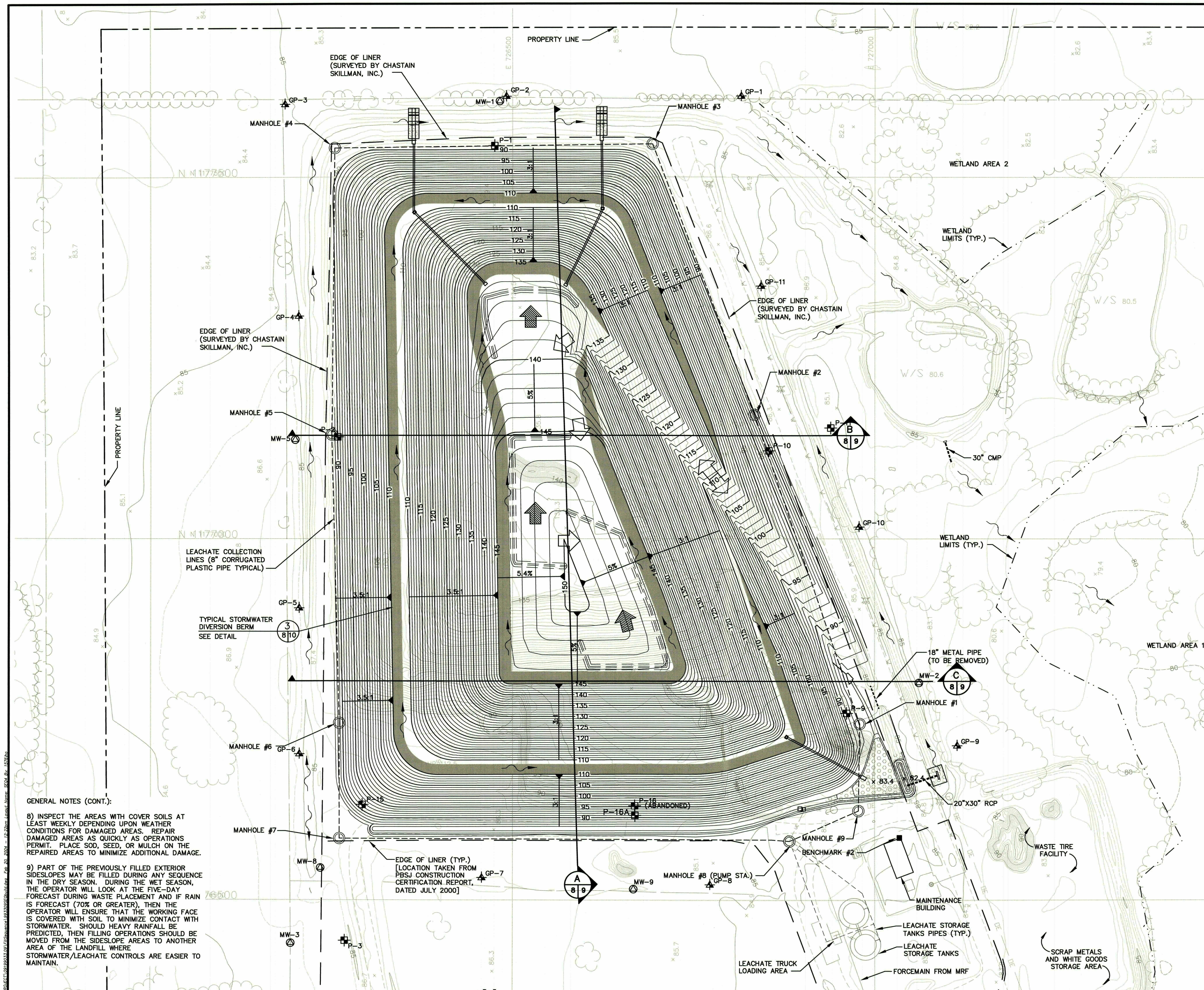
DSN. BY: JHO	CHK. BY: JHO	APP. BY: RJD

CADD FILE: 993309SEQbuild

DATE: JAN. 2004

SCALE: AS SHOWN

DRAWING NO. 7 of 12



GENERAL NOTES (CONT.):

8) INSPECT THE AREAS WITH COVER SOILS AT LEAST WEEKLY DEPENDING UPON WEATHER CONDITIONS FOR DAMAGED AREAS. REPAIR DAMAGED AREAS AS QUICKLY AS OPERATIONS PERMIT. PLACE SOD, SEED, OR MULCH ON THE REPAIRED AREAS TO MINIMIZE ADDITIONAL DAMAGE.

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LEGEND:

- GP-1 GAS MONITORING PROBE
- MW-2 MONITORING WELL
- P-1 PIEZOMETER
- MANHOLE
- 85.1× SPOT ELEVATION
- VEGETATION
- FENCE
- SURFACE WATER FLOW DIRECTION
- OE OVERHEAD ELECTRIC
- UE UNDERGROUND ELECTRIC
- GUY WIRE
- TRAFFIC FLOW DIRECTION
- WASTE PROGRESSION DIRECTION
- STORMWATER DIVERSION BERMS SEE DETAIL 3 8 10
- 85 EXIST CONTOUR (AS OF 3/2003)
- 85 MAJOR CONTOUR (TOP OF INTERMEDIATE COVER)
- 85 MINOR CONTOUR (TOP OF INTERMEDIATE COVER)
- TEMPORARY WORKING FACE BERM

GENERAL NOTES:

1) FILLING FROM UPPER PORTION OF THE LANDFILL TO FILL ABOVE EL 125.0. FILL ACCESS ROAD WITH LOOSE FILL TO ACHIEVE GRADES SHOWN ON SOUTH SIDE. FILL UPPER PORTION OF LANDFILL UPON COMPLETION OF SOUTHSIDE.

2) FILLING WILL ONLY CONTINUE ON THE SOUTHSIDE OF THE LANDFILL DURING PERIODS OF WET WEATHER OR AS NEEDED TO MEET OPERATIONAL REQUIREMENTS OF THE FACILITY.

3) THE OPERATORS SHALL CHECK ELEVATIONS OF THE WASTE, BY SURVEY, AND SET FILL STAKES FOR WASTE PLACEMENT. FILL GRADES SHOWN ARE TOP OF INTERMEDIATE COVER.

4) TO MINIMIZE THE EXPOSED AREA OF WASTE AND TO USE THE COVER MATERIALS, KEEP THE WORKING FACE ONLY WIDE ENOUGH TO ACCOMODATE VEHICLES UNLOADING WASTE MATERIALS.

5) INITIAL COVER, CONSISTING OF 6-INCHES OF SOIL, WILL BE APPLIED AT THE END OF EACH WORK DAY OVER EXPOSED WASTE MATERIAL. TEMPORARY COVER SUCH AS TARPAULINS MAYBE USED IF WASTE PLACEMENT OCCURS WITHIN 18 HOURS. INCREASE THE FREQUENCY OF APPLICATION IF WIND OR RAIN DISPERSE WASTE MATERIALS.

6) IN AREAS THAT WILL NOT RECEIVE WASTE WITHIN 180 DAYS, APPLY 12 INCHES OF INTERMEDIATE COVER (CLEAN FILL) OVER THE EXISTING 6-INCHES OF INITIAL COVER.

7) GRADES SHOWN ARE TOP OF INTERMEDIATE COVER. APPROXIMATELY 18 INCHES ABOVE WASTE GRADES.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

JOSEPH H. O'CONNELL, P.E. CERTIFICATE NO. 52049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: FINAL BUILDOUT

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

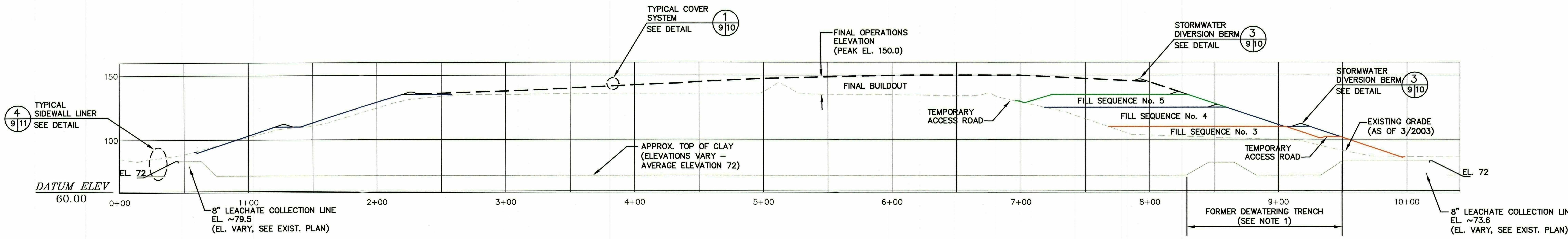
PROJ. NO. 09199033.09 | DWN. BY: XRH | Q/A RVW BY: JHO/RJD
DSN. BY: JHO | CHK. BY: JHO | APP. BY: RJD

CADD FILE: 993309SEQbuild

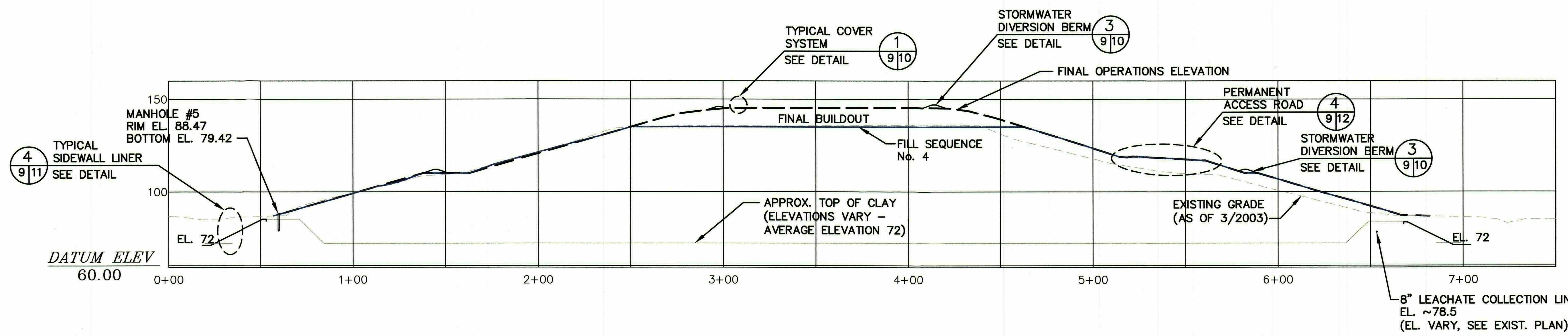
DATE: JAN. 2004

SCALE: AS SHOWN

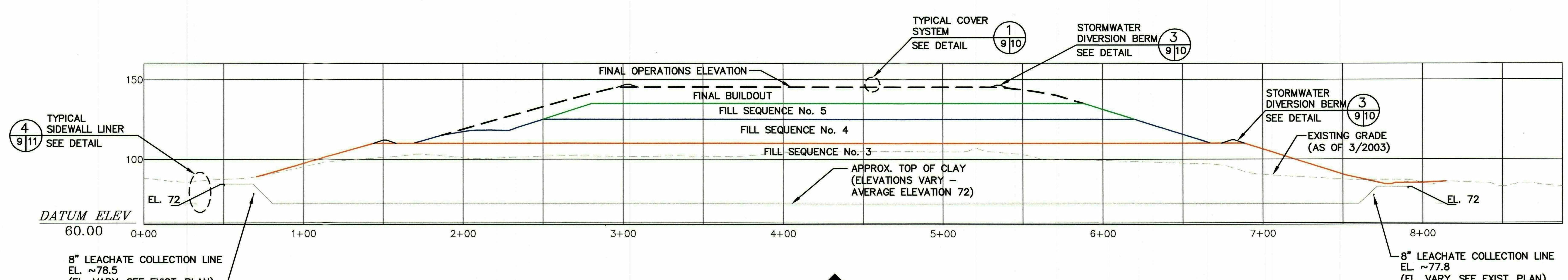
DRAWING NO.



SECTION A 9
H 1" = 40'
V 1" = 40' 4,5,6,7,8



SECTION B 9
H 1" = 40'
V 1" = 40' 4,5,6,7,8



SECTION C 9
H 1" = 40'
V 1" = 40' 4,5,6,7,8

NOTES:

1. BOTTOM CLAY ELEVATIONS AND SIDESLOPE SHOWN WERE APPROXIMATED FROM DRAWINGS BY ENVISOR, DATED NOVEMBER 1982, PROJECT NO. 81 014-82(1). ACTUAL DEPTH OF WASTE NOT DETERMINED.
2. FILL SEQUENCE No. 1 AND 2 ALREADY FILLED. (SEE PBSJ DRAWINGS, DATED APRIL 1998)
3. FINE GRADING WITH CLEAN SOIL ONLY (FREE OF WASTE, ROCKS, DEBRIS).
4. PREVIOUSLY FILLED OUTER SLOPES DESIGNATED TO RECEIVE WASTE SHALL BE SURVEYED OR HAND BORINGS DUG AND MARKED IN THE FIELD TO ENSURE THAT AT LEAST A 2-FOOT THICK COMPACTED WASTE LAYER CAN BE PLACED PRIOR TO DISTURBING EXISTING COVER. ADDITIONAL SPACE CAN BE MADE AVAILABLE BY REMOVING COVER SOILS; HOWEVER, 18 INCHES OF SOILS SHALL BE PLACED OVER THE WASTE MATERIAL TO ACHIEVE GRADES SHOWN.
5. SLOPES SHALL NOT EXCEED 3(H):1(V) AT ANY TIME, AFTER APPLICATION OF COVER SOILS. ALL FINAL SLOPES SHALL CONFORM TO THE DESIGN DIMENSIONS, SLOPES, AND ELEVATION.
6. ALL FILL SEQUENCE GRADES SHOWN ARE TOP OF INTERMEDIATE COVER.

JOSEPH H. O'NEILL, P.E. CERTIFICATE NO. 52049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: CROSS SECTIONS

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

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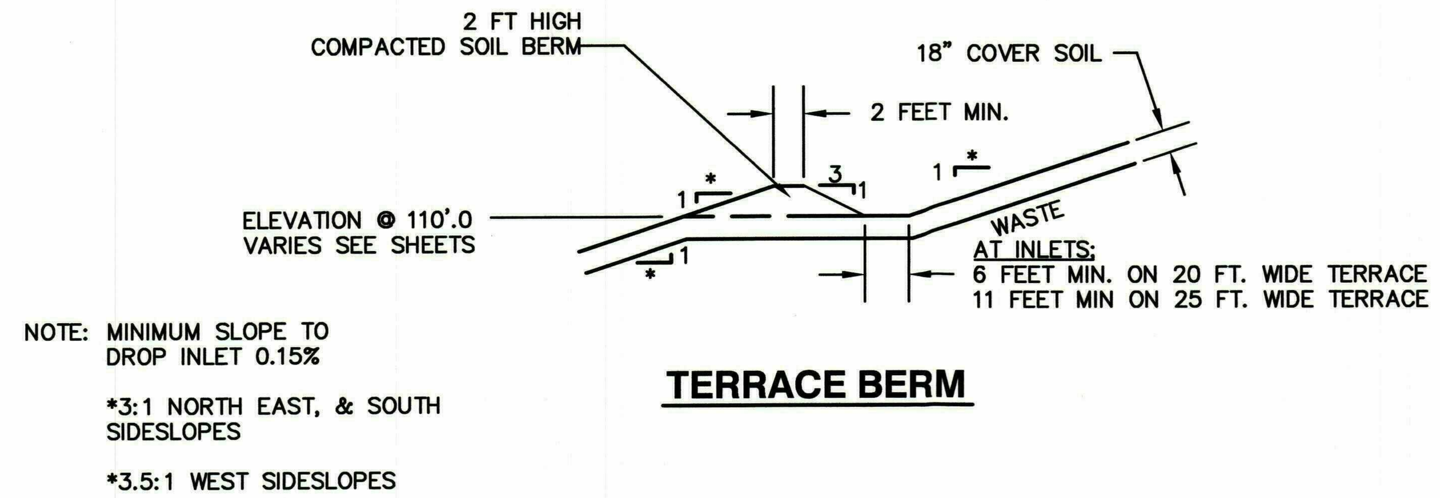
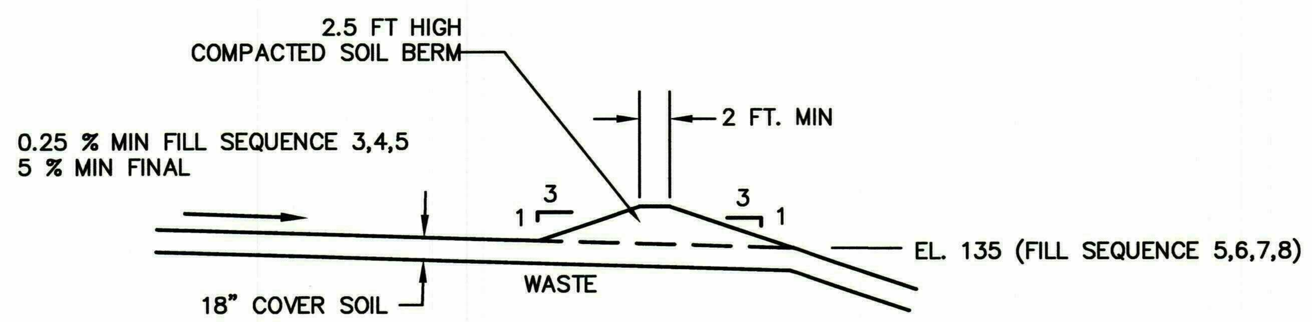
DATE: JAN. 2004

SCALE: AS SHOWN

DRAWING NO. 9 of 12



TERRACE BERM

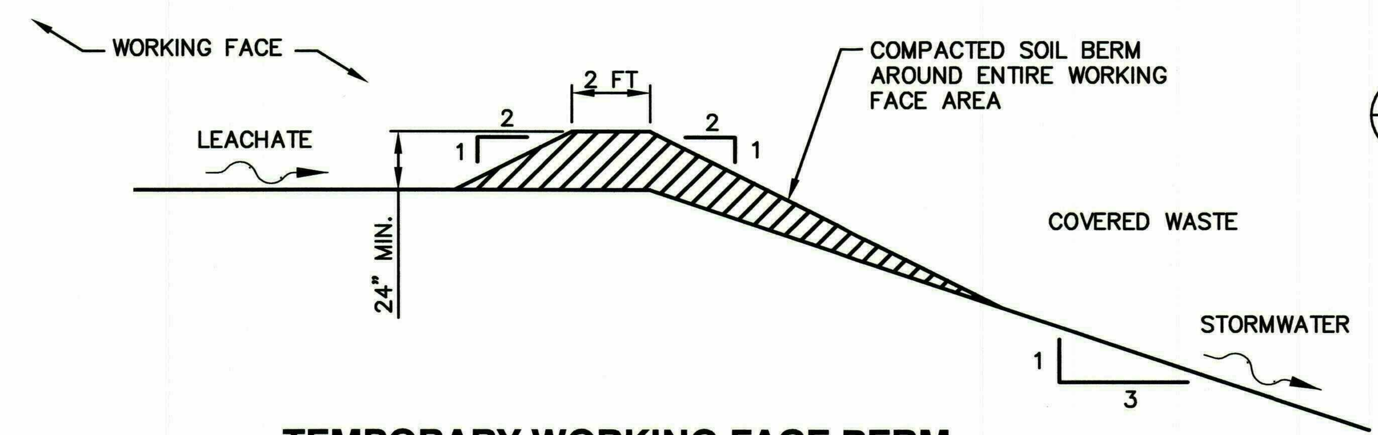


BERM ON TOP OF LANDFILL

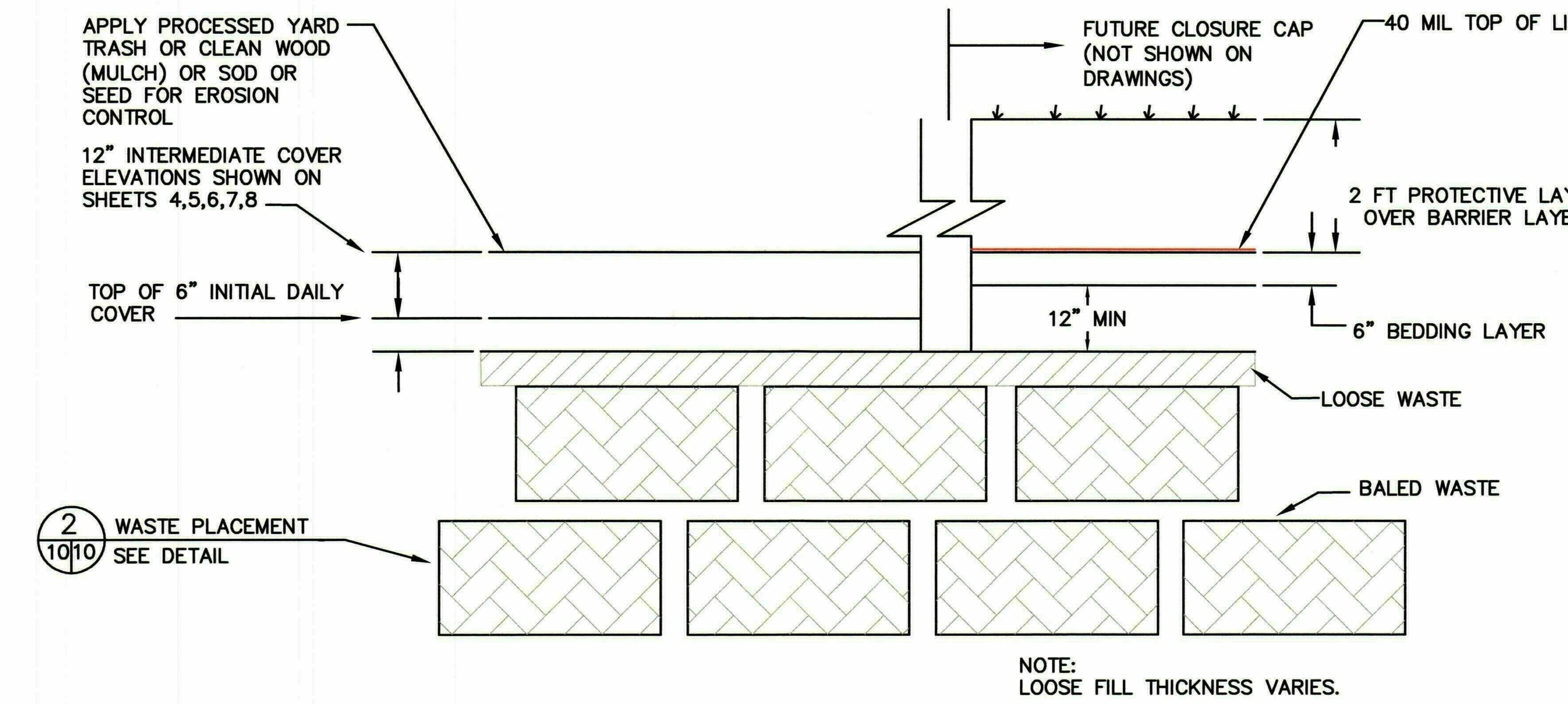
TYPICAL STORMWATER DIVERSION BERM DETAIL 3/10

SCALE H 1" = 10'
V 1" = 10'

5,6,7,8,9

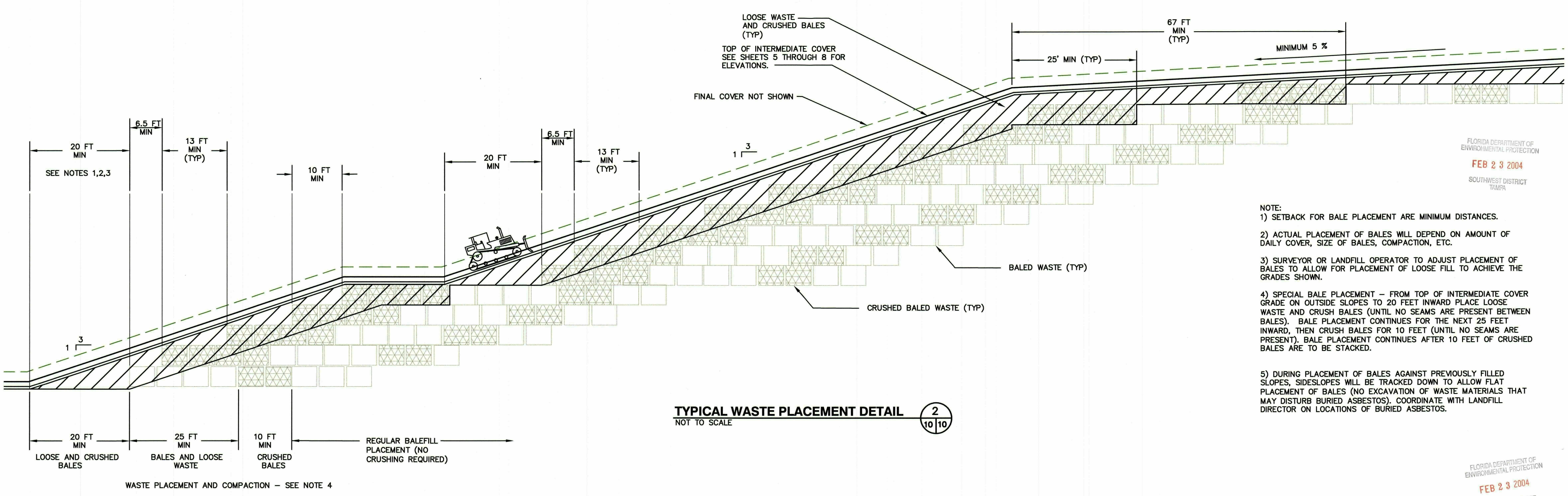


TEMPORARY WORKING FACE BERM



TYPICAL COVER SYSTEM DETAIL 1/9 10

NO SCALE



TYPICAL WASTE PLACEMENT DETAIL 2/10 10

NOT TO SCALE

NOTE:
1) SETBACK FOR BALE PLACEMENT ARE MINIMUM DISTANCES.

2) ACTUAL PLACEMENT OF BALES WILL DEPEND ON AMOUNT OF DAILY COVER, SIZE OF BALES, COMPACTION, ETC.

3) SURVEYOR OR LANDFILL OPERATOR TO ADJUST PLACEMENT OF BALES TO ALLOW FOR PLACEMENT OF LOOSE FILL TO ACHIEVE THE GRADES SHOWN.

4) SPECIAL BALE PLACEMENT – FROM TOP OF INTERMEDIATE COVER GRADE ON OUTSIDE SLOPES TO 20 FEET INWARD PLACE LOOSE WASTE AND CRUSH BALES (UNTIL NO SEAMS ARE PRESENT BETWEEN BALES). BALE PLACEMENT CONTINUES FOR THE NEXT 25 FEET INWARD, THEN CRUSH BALES FOR 10 FEET (UNTIL NO SEAMS ARE PRESENT). BALE PLACEMENT CONTINUES AFTER 10 FEET OF CRUSHED BALES ARE TO BE STACKED.

5) DURING PLACEMENT OF BALES AGAINST PREVIOUSLY FILLED SLOPES, SIDESLOPES WILL BE TRACKED DOWN TO ALLOW FLAT PLACEMENT OF BALES (NO EXCAVATION OF WASTE MATERIALS THAT MAY DISTURB BURIED ASBESTOS). COORDINATE WITH LANDFILL DIRECTOR ON LOCATIONS OF BURIED ASBESTOS.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

JOSEPH H. O'NEILL, P.E.
CERTIFICATE NO. 52049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: DETAILS - 1

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CADD FILE: 993309SEQDETL

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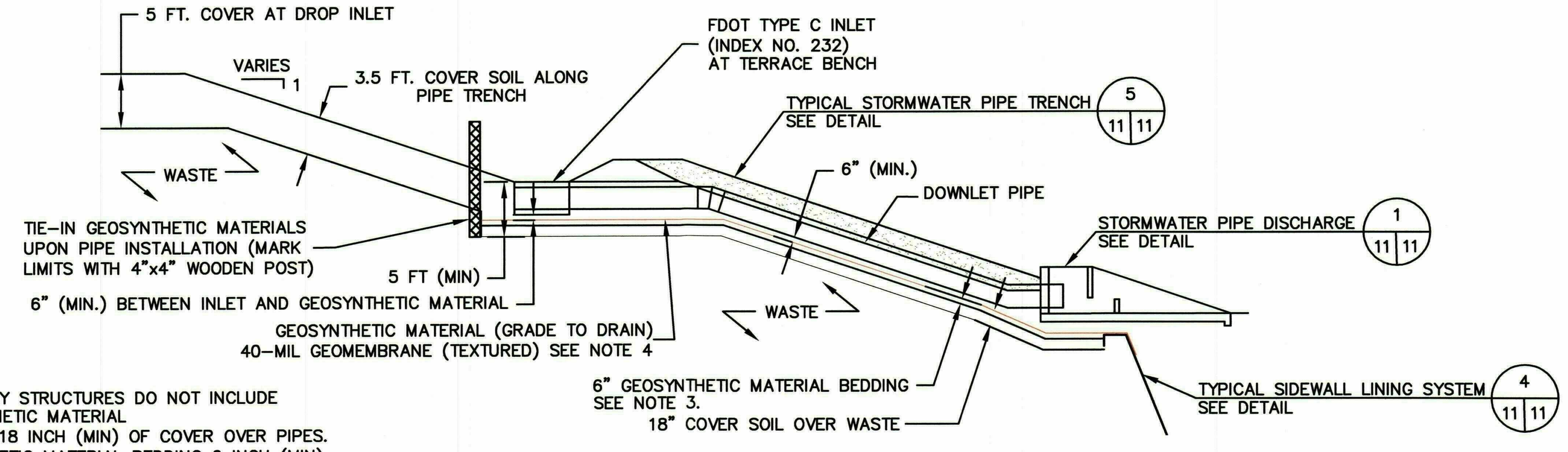
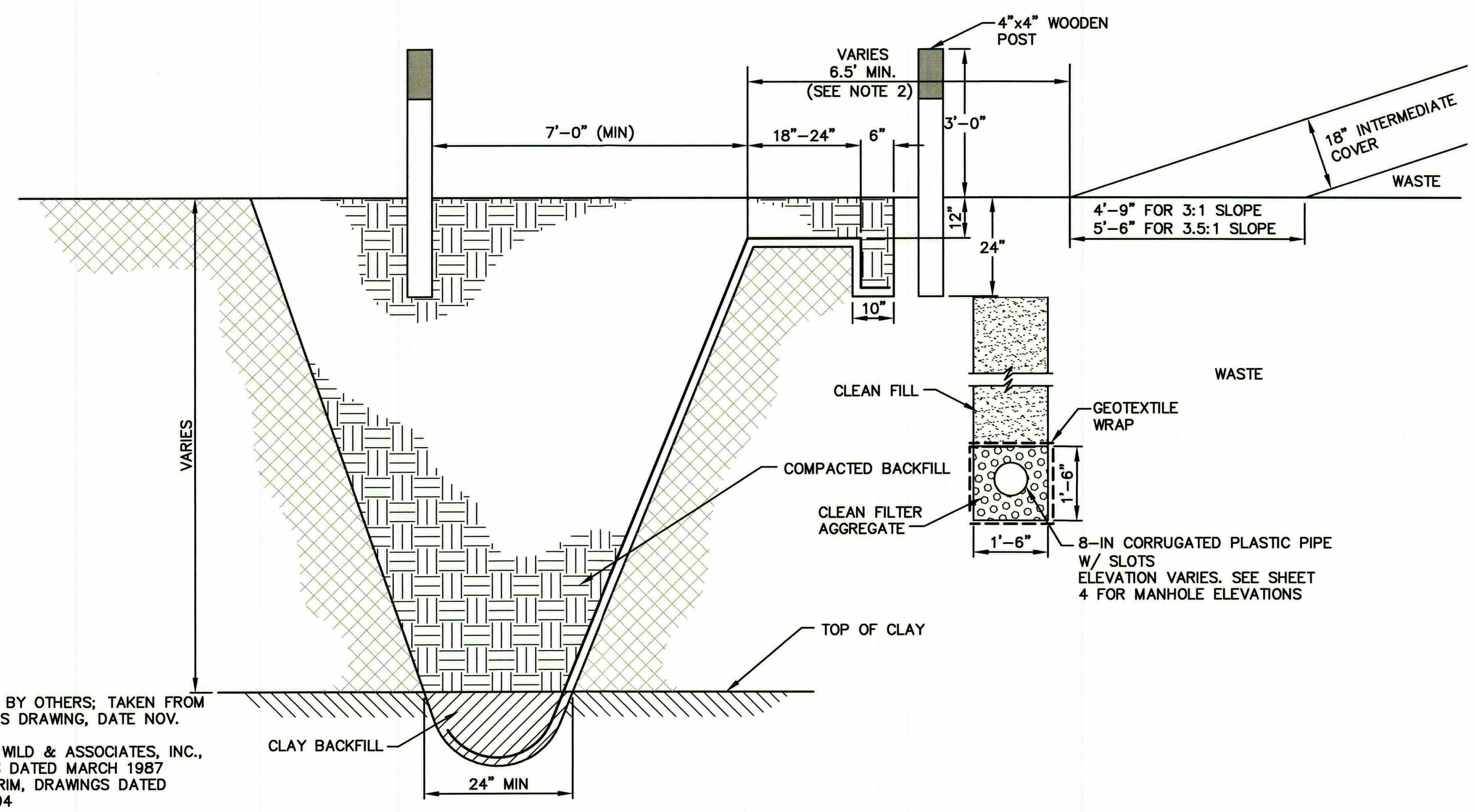
SCALE: AS SHOWN

DRAWING NO. 10 of 12



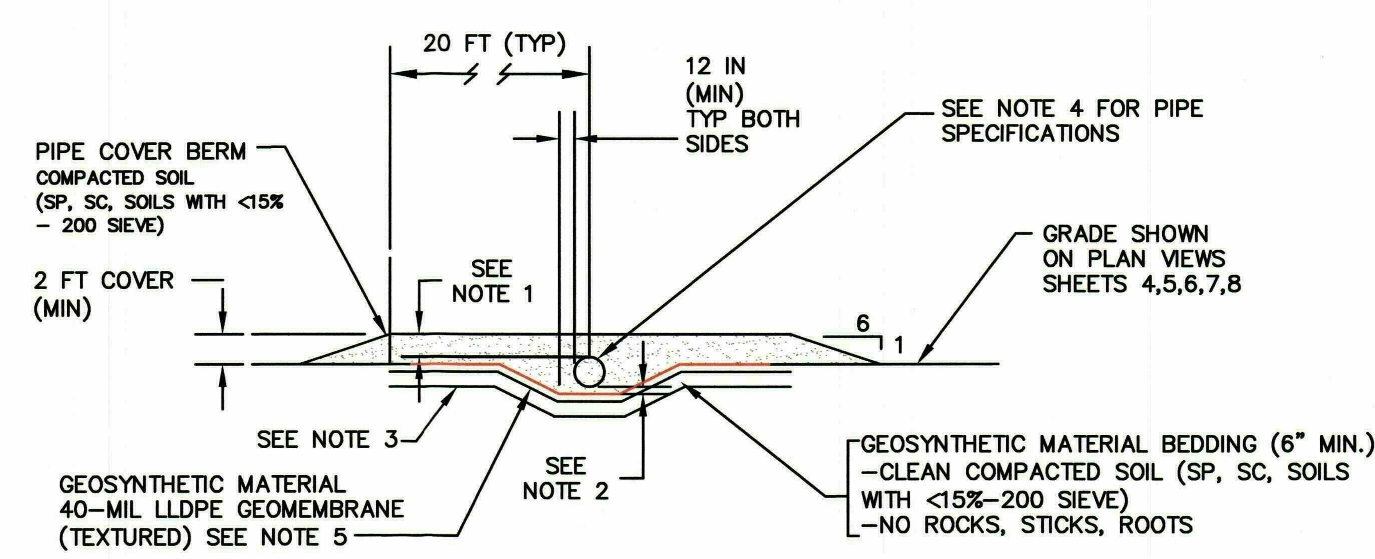
NOTES:
1. TEMPORARY STRUCTURES DO NOT INCLUDE GEOSYNTHETIC MATERIAL
2. MAINTAIN 18 INCH (MIN) OF COVER OVER PIPES.
3. GEOSYNTHETIC MATERIAL BEDDING 6 INCH (MIN)
   – CLEAN COMPACTED SOIL (SP, SC, SOILS WITH <15%-200 SIEVE)
   – NO ROCKS, STICKS, ROOTS
4. PLACE ADDITIONAL PIECE OF GEOSYNTHETIC MATERIAL,40-MIL LLDPE GEOMEMBRANE (TEXTURED), OVER 40-MIL GEOMEMBRANE (TEXTURED) UNDER ALL PERMANENT STRUCTURE, INLETS, AND END TREATMENTS

TYPICAL STORMWATER DOWNLET DETAIL 3 5|11
SCALE H 1" = 10'
V 1" = 10'



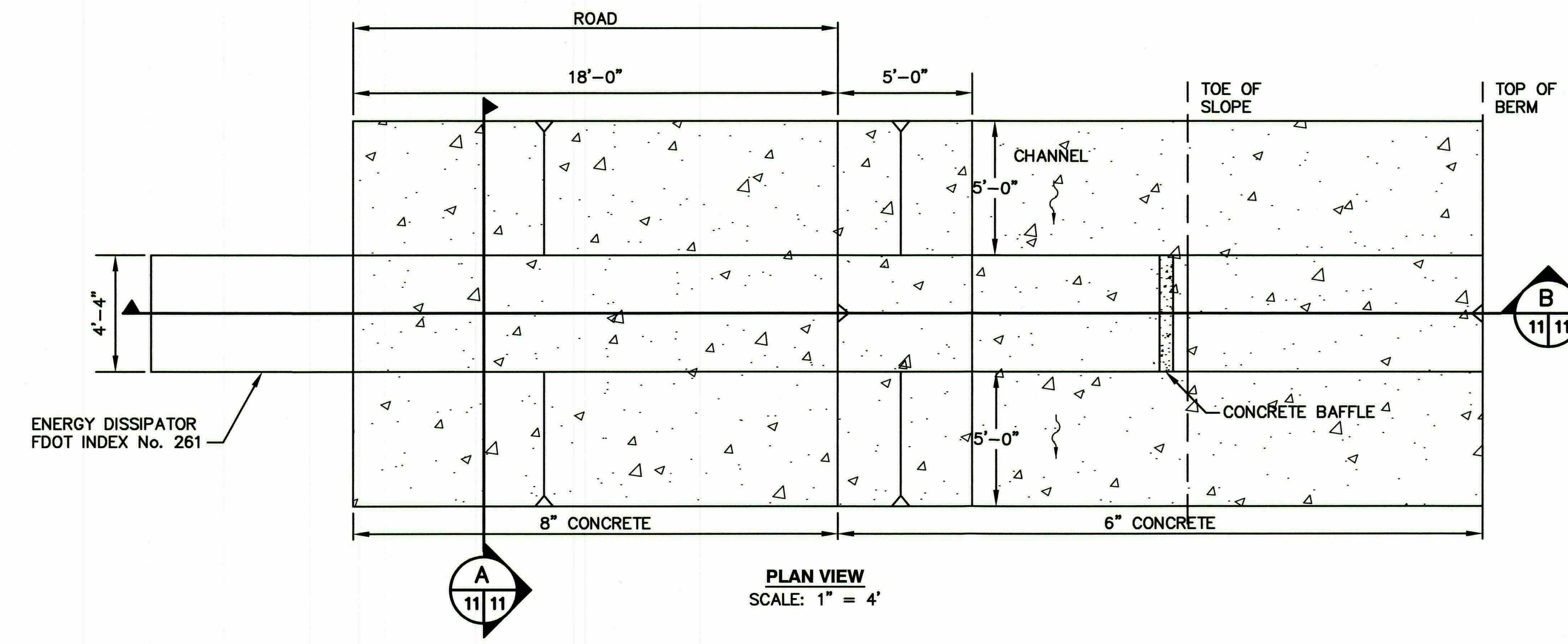
NOTES:
1. DESIGNED BY OTHERS; TAKEN FROM
   –ENVISORS DRAWING, DATE NOV. 1982
   –BRILEY, WILD & ASSOCIATES, INC., DRAWINGS DATED MARCH 1987
   –WADE TRIM, DRAWINGS DATED SEPT. 1994
2. SEE PLANS FOR LIMITS OF INTERMEDIATE COVER.

TYPICAL SIDEWALL LINING SYSTEM DETAIL 4 11
NOT TO SCALE
9,11

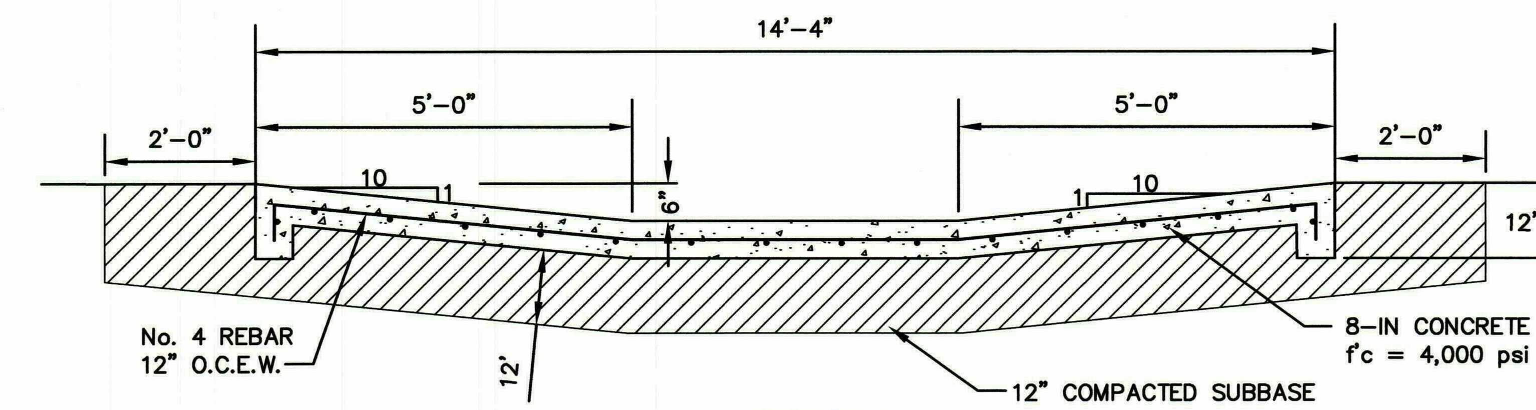


NOTE:
1. MAINTAIN 18 INCH (MIN) OF COMPACTED SOIL (SP, SC, SOILS WITH <15%-200 SIEVE) COVER OVER PIPES
2. MAINTAIN 6 INCH OF COMPACTED SOIL (SP, SC, SOILS WITH <15%-200 SIEVE) BETWEEN PIPE AND GEOSYNTHETIC MATERIALS
3. MAINTAIN 18 INCH COVER SOIL OVER WASTE
4. ALL STORMWATER PIPES–CORRUGATED PLASTIC PIPE SMOOTH INTERIOR ADS N-12 WITH WATERTIGHT COUPLINGS AND FITTINGS. INSTALL PIPE PER ASTM D 2321
5. PLACE ADDITIONAL PIECE OF GEOSYNTHETIC MATERIAL,40-MIL LLDPE GEOMEMBRANE (TEXTURED), OVER 40-MIL LLDPE GEOMEMBRANE (TEXTURED) UNDER ALL PERMANENT STRUCTURE, INLETS, AND END TREATMENTS

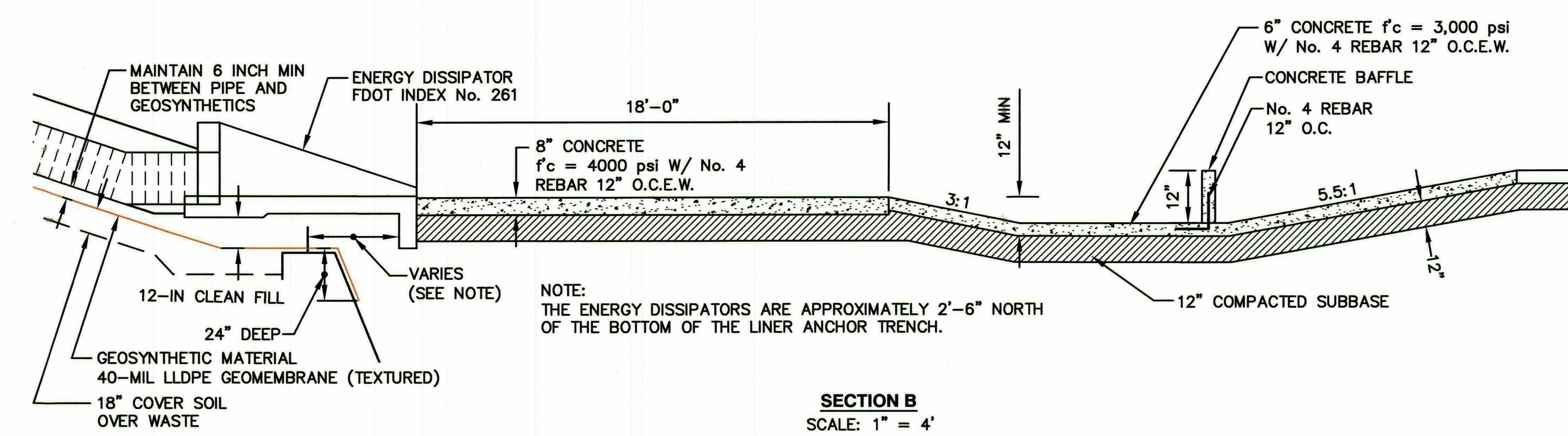
TYPICAL STORMWATER TRENCH DETAIL 5 11|11
SCALE H 1" = 10'
V 1" = 10'



PLAN VIEW
SCALE: 1" = 4'



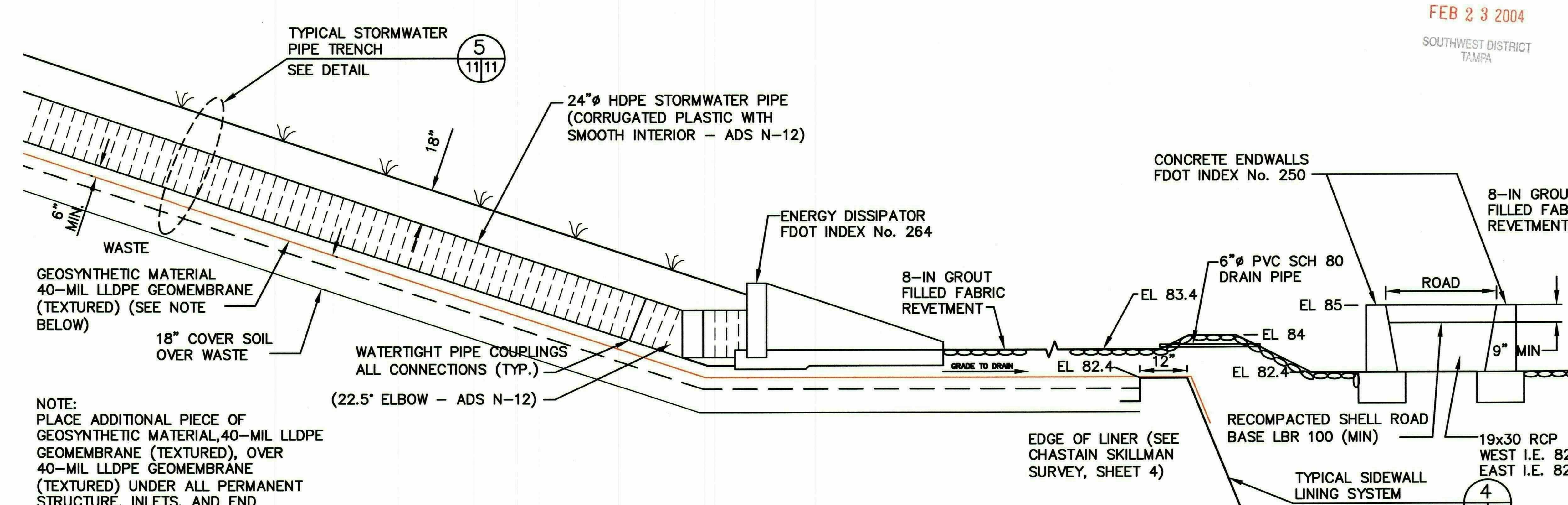
SECTION A
SCALE: 1" = 2'



NOTE:
THE ENERGY DISSIPATORS ARE APPROXIMATELY 2'-6" NORTH OF THE BOTTOM OF THE LINER ANCHOR TRENCH.

SECTION B
SCALE: 1" = 4'

STORMWATER PIPE DISCHARGE DETAIL 1 11
NO SCALE
5,11



NOTE:
PLACE ADDITIONAL PIECE OF GEOSYNTHETIC MATERIAL,40-MIL LLDPE GEOMEMBRANE (TEXTURED), OVER 40-MIL LLDPE GEOMEMBRANE (TEXTURED) UNDER ALL PERMANENT STRUCTURE, INLETS, AND END TREATMENTS.

SOUTHWEST STORMWATER DISCHARGE DETAIL 2 5|11
NO SCALE

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

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FEB 2 3 2004
SOUTHWEST DISTRICT TAMPA

JOSEPH H. O'NEILL P.E.
CERTIFICATE NO. 52049

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DRAWING TITLE: DETAILS - 2

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS DRAWINGS

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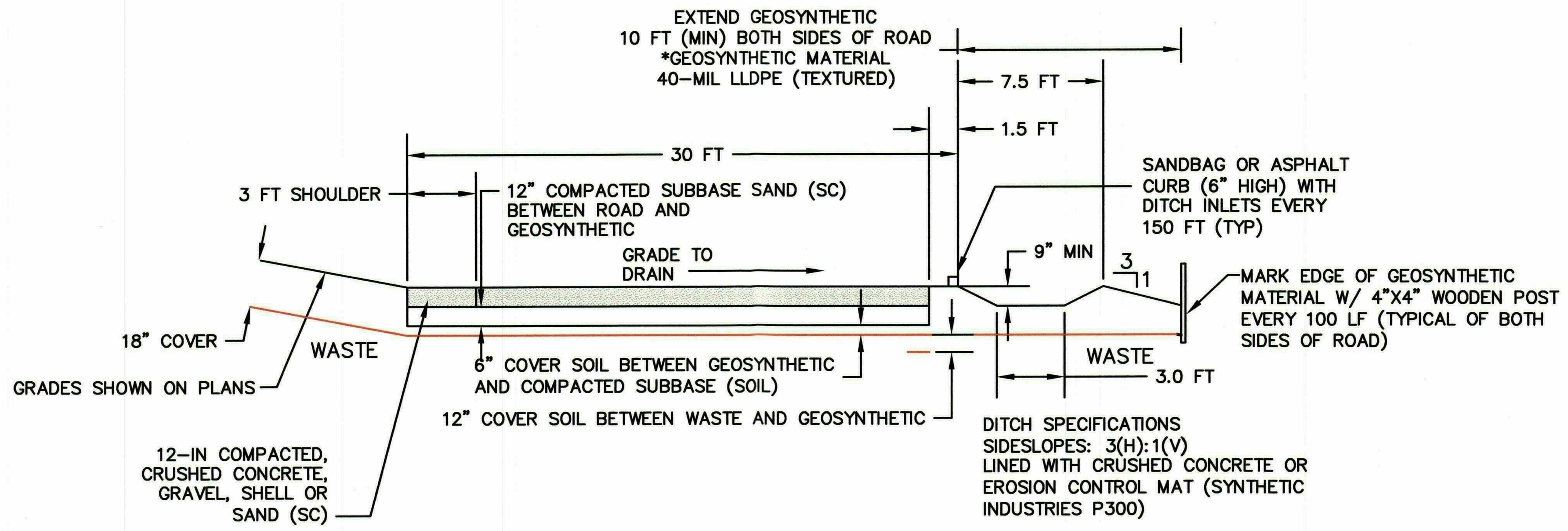
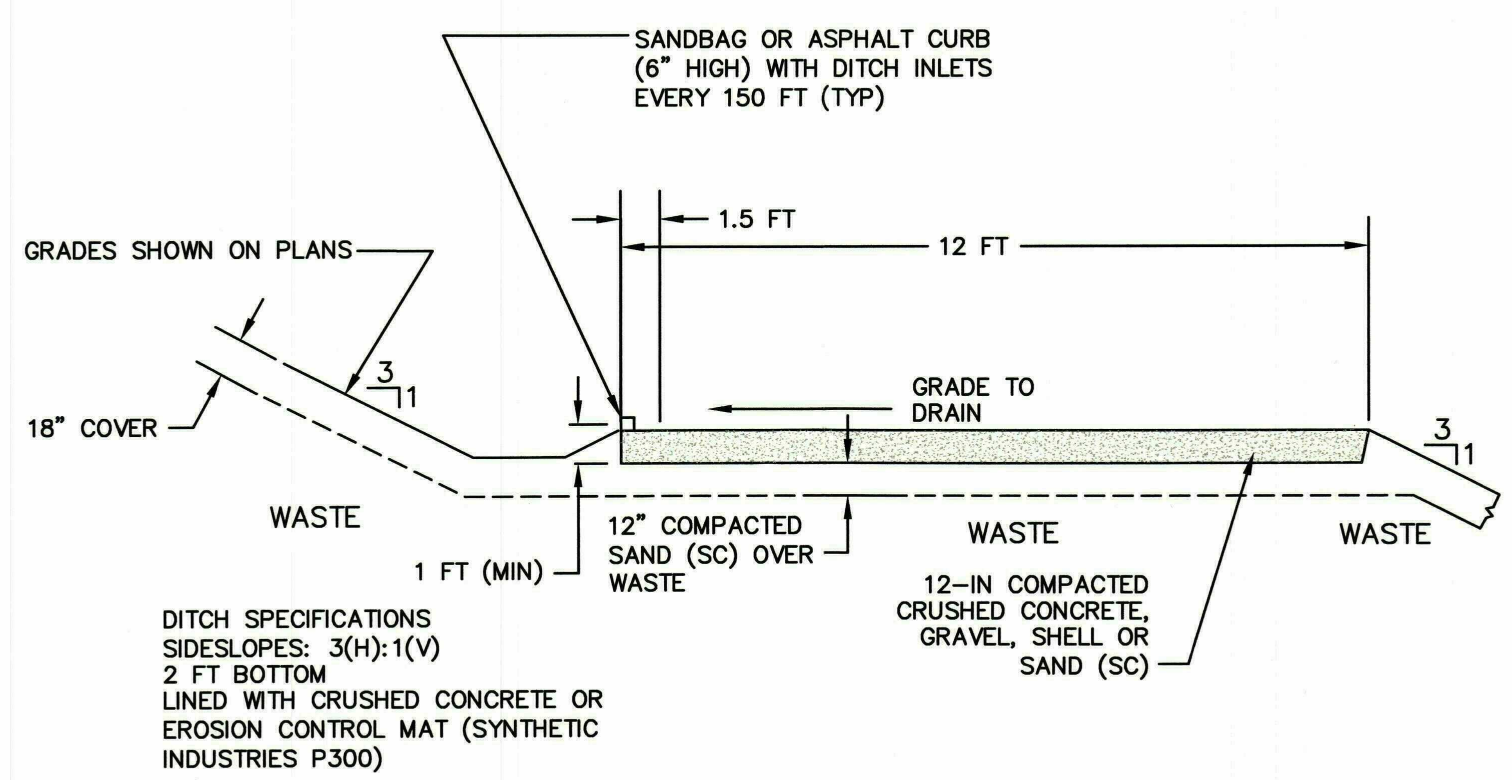
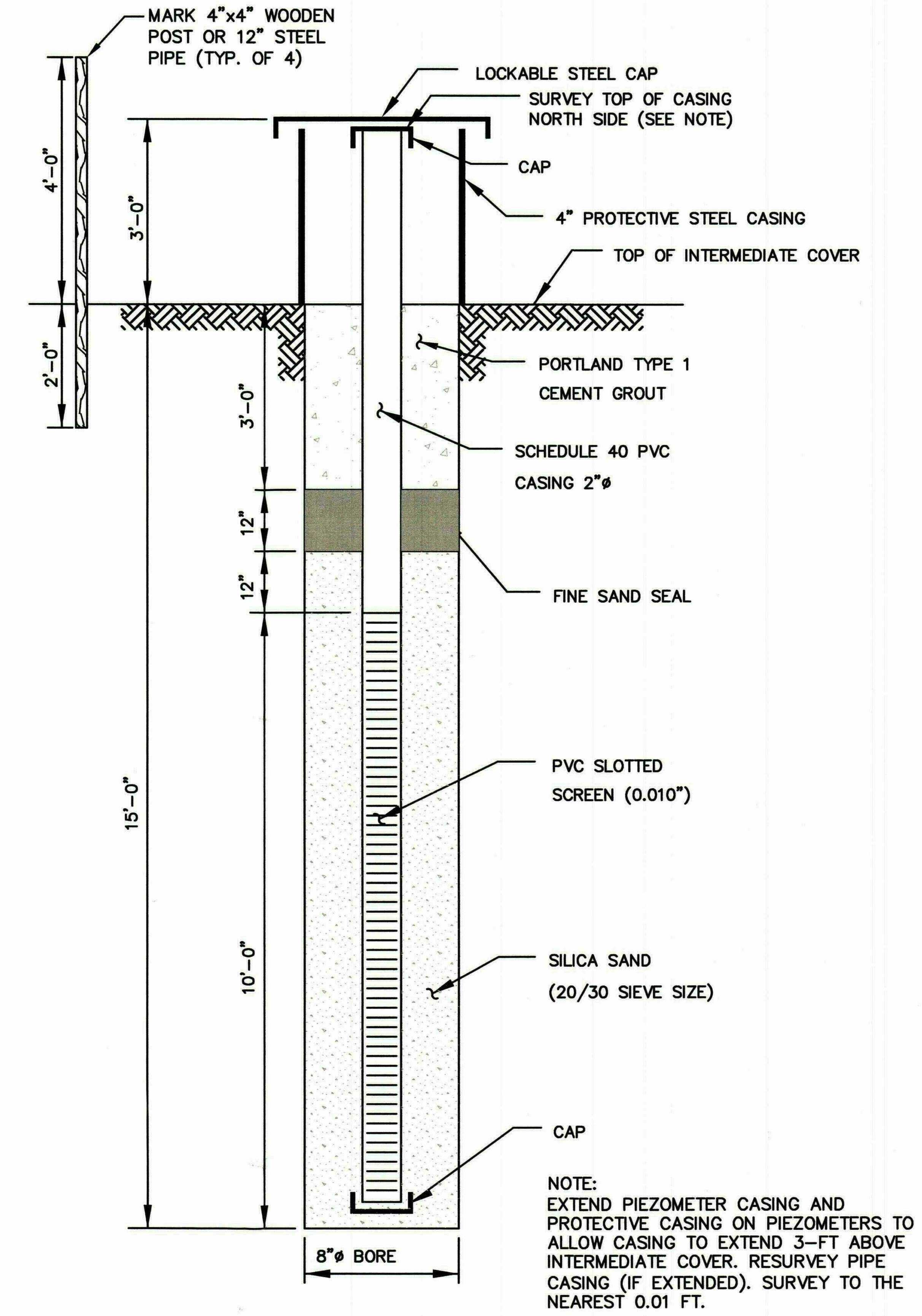
SCALE: AS SHOWN
DRAWING NO. 11 of 12



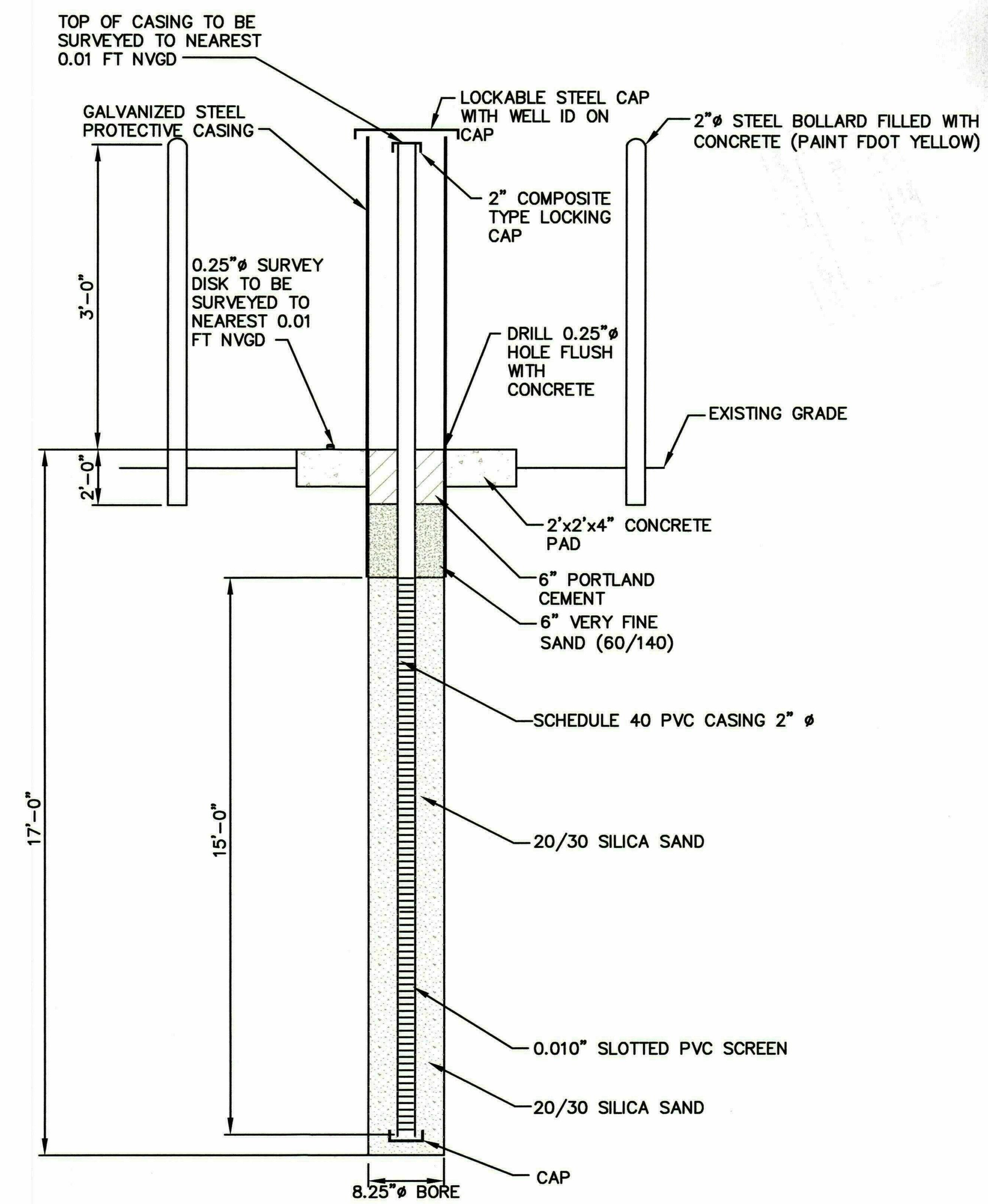
TYPICAL PERMANENT ACCESS ROAD DETAIL 4 / 12
NOT TO SCALE
5,9



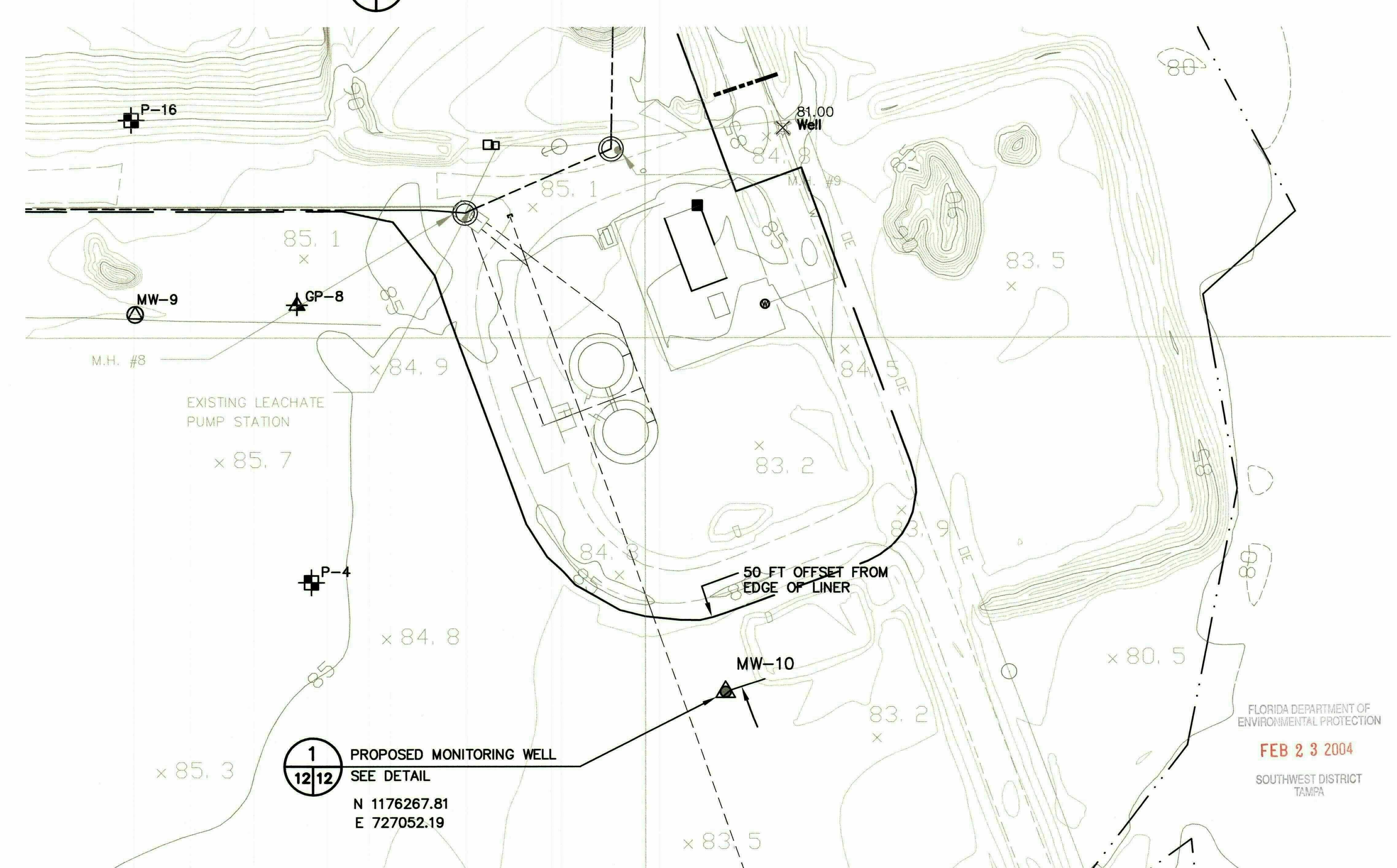
TYPICAL TEMPORARY ACCESS ROAD DETAIL 5 / 12
NOT TO SCALE
5,6,7



TYPICAL PIEZOMETER DETAIL 3 / 5 12
NOT TO SCALE



TYPICAL MONITORING WELL DETAIL 1 / 12
NOT TO SCALE
3,12



MONITORING WELL LOCATION MAP 2 / 3 12
NOT TO SCALE

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DRAWING NO.

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