Environmental Consultants
and Contractors

4041 Park Oaks Blvd.
Suite 100
Tampa, FL 33610-9501

813 621-0080
FAX 813 623-6757
www.scsengineers.com

SCS ENGINEERS

March 21, 2014
File No. 09199033.23

Florida Department of Environmental Protection
Permitting and Compliance Assistance Program
2600 Blair Stone Rd/MS45656
Tallahassee, Florida 32399

Subject: Hardee County Class I Landfill
Phase II Section II Expansion Construction
Permit Number 38414-015-SC/01
Conformed Construction Drawings, Specifications, and CQA Plan

Dear Sir/Madam:

In accordance with Appendix 3.1.a of Construction Permit Number 38414-015-SC/01 for the Hardee County Class I Landfill Phase II Section II Expansion construction, and on behalf of the Hardee County Board of County Commissioners (BOCC), SCS Engineers (SCS) is notifying the Florida Department of Environmental Protection (FDEP) regarding the permit drawings. Please find attached a list of revisions made to the permit drawings to create the supplied conformed construction drawings. No technical changes have been made to the permit drawings; the quantity of drawings were reduced and renumbered to create the conformed construction drawings as explained below.

During a meeting conducted on June 7, 2013 with representatives from Hardee County, FDEP, and SCS a decision was made to combine the Hardee County Landfill Phase II Section II Expansion construction drawings and the Hardee County Landfill operation drawings into one set of drawings (construction/operations drawings) due to the simultaneous review by FDEP of the two applications (*Hardee County Class I Landfill Phase II Section II Expansion Application for Construction* and *Hardee County Class I Landfill Operations Permit Renewal Application*).

As mentioned above, the two sets of permit drawings were then created and combined into one set of drawings (construction/operations drawings) that contained sufficient information for both the construction permit application and the operation permit application processes for the facility. These permit drawings have been revised to remove the information that was specifically related to the operation permit application (i.e., fill sequence drawings, fill sequence sections, etc.). Therefore, construction/operations permit drawings 12, 13, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 37a have been removed from the conformed construction drawings. In addition, new drawings 9, 10, 11, 14, 15, and 16 were added to the conformed construction drawings to provide additional information and identify specific grading points that would be required during construction by the contractor. These new drawings only clarified the permit drawings, no changes were made to the design as a result.

Therefore, based on the above-mentioned information there are 26 conformed construction

drawings (Drawing 1 through 26) as opposed to 38 permit drawings (Drawing 1 through 37a). One electronic copy (provided on the attached CD) contains a PDF version of the conformed construction drawings with the above-mentioned revisions and one copy of the submittal has been placed on the DEP FTP website.

In addition, no changes have been made to the permitted specifications or Construction Quality Assurance (CQA) Plan, therefore, re-submittal of these documents is not required prior to construction of the above-referenced project.

Please do not hesitate to call should you have any questions or require additional information.

Sincerely,

Shane R. Fischer, P.E.
Project Manager
SCS ENGINEERS

C. Ed Hilton, P.E.
Vice President/Solid Waste Division Director
SCS ENGINEERS

SRF/CEH:srf

Attachments

cc: Teresa Carver, Hardee County Solid Waste Director

58026
3/21/14

HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION
REFERENCE BETWEEN PERMIT DRAWINGS AND CONFORMED DRAWINGS

Permit Drawing #		Conformed Drawing #		Revisions/Comments
1		1		Removed all Drawings previously supplied for the Operation Permit. Renumbered the Drawings as required. Original set had 38 Drawings (1 through 37a). Conformed Drawings are 1 through 26.
2		2		Revised title block to indicate 26 Drawings in the set.
3		3		Revised title block to indicate 26 Drawings in the set.
4		4		Revised title block to indicate 26 Drawings in the set. Added general notes for construction.
5		5		Revised title block to indicate 26 Drawings in the set. Added general notes for construction.
6		6		Revised title block to indicate 26 Drawings in the set. Added general notes for construction.
7		7		Revised title block to indicate 26 Drawings in the set. Added general notes for construction.
8		8		Revised title block to indicate 26 Drawings in the set. Revised callouts to indicate the correct Drawing due to removal of Drawings.
NA		9		Drawing added to identify grading points. Revised title block to indicate 26 Drawings in the set.
NA		10		Drawing added to identify grading points. Revised title block to indicate 26 Drawings in the set.
NA		11		Drawing added to identify grading points. Revised title block to indicate 26 Drawings in the set.
9		12		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.

HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION
REFERENCE BETWEEN PERMIT DRAWINGS AND CONFORMED DRAWINGS

Permit Drawing #		Conformed Drawing #		Revisions/Comments
10		13		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.
NA		14		Drawing added to identify grading points. Revised title block to indicate 26 Drawings in the set.
NA		15		Drawing added to identify grading points. Revised title block to indicate 26 Drawings in the set.
NA		16		Drawing added to identify grading points. Revised title block to indicate 26 Drawings in the set.
11		17		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings. Removed Operation Permit Details.
12		NA		Drawing removed, related completely to Operation Permit.
13		NA		Drawing removed, related completely to Operation Permit.
14		18		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings. Added and/or clarified Details.
15		19		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings. Removed Operation Permit Details.
16		20		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.
17		21		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.
18		22		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.

HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION
REFERENCE BETWEEN PERMIT DRAWINGS AND CONFORMED DRAWINGS

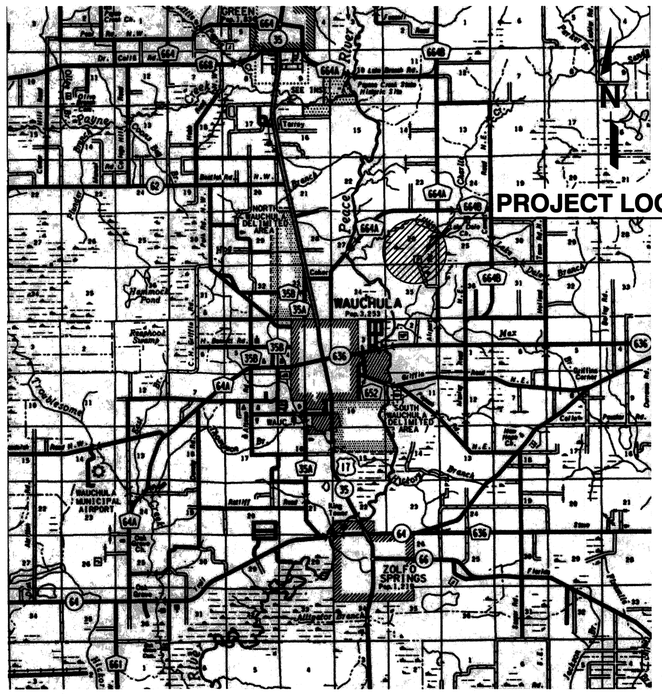
Permit Drawing #		Conformed Drawing #		Revisions/Comments
19		23		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.
20		24		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.
21 through 23 (3 Drawings)		NA		Drawing removed, related completely to Operation Permit.
24		25		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.
25		26		Revised title block to indicate 26 Drawings in the set. Revised/added callouts to indicate the correct Drawing due to removal of Drawings.
26 through 37a (13 Drawings)		NA		Drawings removed, related completely to Operation Permit.

HARDEE COUNTY LANDFILL
PHASE II SECTION II
CONSTRUCTION DRAWINGS

PREPARED FOR

BOARD OF COUNTY COMMISSIONERS
HARDEE COUNTY, FLORIDA

APRIL 2013



LOCATION MAP
NOT TO SCALE

HARDEE COUNTY 19 21 FLORIDA

DRAWING INDEX

DRAWING NO.		DRAWING TITLE
1	-	COVER
2	-	ABBREVIATIONS AND GENERAL NOTES
3	-	OVERALL AERIAL SITE PLAN - (JANUARY 2011)
4	-	EXISTING CONDITIONS - AERIAL PHOTOGRAPH (04/03/2012)
5	-	EXISTING CONDITIONS NORTH - TOPOGRAPHIC SURVEY (04/03/2012)
6	-	EXISTING CONDITIONS SOUTH - TOPOGRAPHIC SURVEY (04/03/2012)
7	-	PROJECT AREA EXISTING CONDITIONS SITE PLAN
8	-	TOP OF SUBGRADE - BOTTOM CELL GRADING SITE PLAN
9	-	TOP OF SUBGRADE GRADING CONTROL POINTS SITE PLAN
10	-	TOP OF SUBGRADE GRADING CONTROL POINTS TABLE - 1
11	-	TOP OF SUBGRADE GRADING CONTROL POINTS TABLE - 2
12	-	LEACHATE COLLECTION SYSTEM - SITE PLAN
13	-	TOP OF PROTECTIVE COVER - BOTTOM CELL GRADING SITE PLAN
14	-	TOP OF PROTECTIVE COVER GRADING CONTROL POINTS SITE PLAN
15	-	TOP OF PROTECTIVE COVER GRADING CONTROL POINTS TABLE - 1
16	-	TOP OF PROTECTIVE COVER GRADING CONTROL POINTS TABLE - 2
17	-	SECTIONS - BOTTOM CELL
18	-	PIPING DETAILS - BOTTOM CELL
19	-	TIE-IN DETAILS - BOTTOM CELL
20	-	PERIMETER ROAD AND TRENCH DETAILS - BOTTOM CELL
21	-	SUMP AND SIDESLOPE RISER DETAILS
22	-	DETAILS - 1
23	-	DETAILS - 2
24	-	DETAILS - 3
25	-	DETAILS - 4
26	-	DETAILS - 5

SCS ENGINEERS
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WWW.SCSENGINEERS.COM
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892
SCS PROJECT NO. 09199033.23

ISSUED FOR BID 01/06/14
CONFORMED 03/17/14

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER
STATE OF FLORIDA
SHANE R. FISCHER, P.E.
LICENSE NO. 58026

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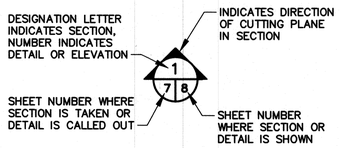
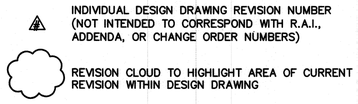
ABBREVIATIONS:

@	AT
∠	ANGLE
℄	CENTERLINE
Ø	DIAMETER
AB	ANCHOR BOLT
ADD'L	ADDITIONAL
ANCH	ANCHOR
APPROX	APPROXIMATE
BM	BEAM
BOT	BOTTOM
BP	BASE PLATE
C/C	CENTER TO CENTER
CIP	CAST IRON PIPE
CL	CENTER LINE
CLJ	CONTROL JOINT
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
C.O.	CLEAN OUT PORT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CPP	CORRUGATED PLASTIC PIPE
CTR	CENTER
CU FT	CUBIC FOOT/FEET
DET	DETAIL
DIA	DIAMETER
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
D.O.	DITTO
DWG	DRAWING
DWL	DOWEL
E	EAST
EA	EACH
EF	EACH FACE
EL,ELEV	ELEVATION
ENCL	ENCLOSURE
EQL	EQUAL
EW	EACH WAY
FBV	FLORIDA BEARING VALUE
FDN	FOUNDATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FE	FIRE EXTINGUISHER
FES	FLARED END SECTION
FIN	FINISHED
FL	FLOW LINE, OR FLORIDAN
FM	FORCE MAIN
FO	FIBER OPTIC
FT	FOOT
FTG	FOOTING
FTGS	FOOTINGS
FWM	FIRE MAIN WATER
GA	GAGE
GAL	GALLONS
GALV	GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
H,HORIZ	HORIZONTAL
I.E.	INVERT ELEVATION
IN	INCH
INV	INVERT
IRR	IRRIGATION
JT	JOINT
KCJ	KEYED CONSTRUCTION JOINT
KWY	KEYWAY
L	ANGLE
LBR	LIMEROCK BEARING RATIO
LF	LINEAR FEET
MAX	MAXIMUM
MES	MITERED END SECTION
MFR	MANUFACTURER
MIN	MINIMUM
MH	MANHOLE
MW	MONITORING WELL
N	NORTH
NE	NORTHEAST
NIC	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
NW	NORTHWEST
OC	ON CENTER
OPNG	OPENING
PC	POINT OF CURVATURE
PE	POLYETHYLENE
PI	POINT OF INTERSECTION
POB	POINT OF BEGINNING
POE	POINT OF ENDING
PT	POINT OF TANGENT
PP	POWER POLE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYLCHLORIDE
PZ	PIEZOMETER
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCW	RECLAIMED WATER
REINF	REINFORCING
REQ'D	REQUIRED
ROW	RIGHT OF WAY
S	SOUTH
SCHED,SCH	SCHEDULE
SE	SOUTHEAST
SECT	SECTION
SG	STAFF GAUGE
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SST	STAINLESS STEEL
STA	STATION
STD	STANDARD
STIR	STIRRUP
STL	STEEL
SW	SOUTHWEST, OR SURFACE WATER
T	TOP
T & B	TOP AND BOTTOM
TH	TEST HOLE
THK	THICKNESS
T.O.B.	TOP OF BOLT
T.O.C.	TOP OF CONCRETE
T.O.F.	TOP OF FOOTING
T.O.P.	TOP OF PAVEMENT, OR TOP OF PIPE
T.O.S.	TOP OF SLAB
T.O.W.	TOP OF WALL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
V,VERT	VERTICAL
W	WEST
W/O	WITHOUT
W/	WITH (COMBINATION FORM)
WM	WATER MAIN
WWF	WELDED WIRE FABRIC
WWM	WOVEN WIRE MESH



SECTION AND DETAIL DESIGNATION



DRAWING REVISION LEGEND

GENERAL NOTES:

1. TOPOGRAPHIC SURVEY PERFORMED BY PICKETT & ASSOCIATES, INC., 475 SOUTH FIRST AVENUE, BARTOW, FLORIDA 33830, TEL. (863) 533-9095.
2. TOPOGRAPHIC SURVEY WAS PREPARED BY PHOTOGRAMMETRIC METHODS. SEE THE SURVEYOR'S REPORT FOR MAP ACCURACY AND SURVEYOR'S SIGNATURE AND SEAL. THIS SURVEY IS LIMITED TO THOSE FEATURES VISIBLE ON AERIAL PHOTOGRAPHY. AERIAL PHOTOGRAPHY PERFORMED APRIL 3, 2012.
3. HORIZONTAL DATUM COORDINATES ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 1983, 1999 ADJUSTMENT. VERTICAL ELEVATIONS ARE REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929.
4. TRAFFIC MUST BE MAINTAINED AT ALL TIMES AS PER FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES, STRUCTURES, OR PRESERVATION AREAS AND OTHER FEATURES AFFECTING HIS WORK.
6. CONTRACTOR SHALL VERIFY ALL UTILITIES AND NOTIFY THE INDIVIDUAL UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, DRAINAGE CULVERTS, FENCES, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION.
8. THE INFORMATION PROVIDED IN THESE PLANS AND REFERENCED IN THE AVAILABLE SOILS REPORT IS SOLELY TO ASSIST THE CONTRACTOR IN ACCESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
9. THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY ON CONFLICTS DURING CONSTRUCTION ON ANY IMPROVEMENTS SHOWN ON THE DRAWINGS.
10. PIPE LENGTHS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS REQUIRED IN THE FIELD, UPON APPROVAL BY ENGINEER.
11. EROSION CONTROL AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING ANY CLEARING AND GRUBBING. THEY SHALL BE INSTALLED TO THE LIMITS SHOWN ON THE DRAWING, REQUIRED IN THE SPECIFICATIONS AND IN ACCORDANCE WITH ALL REGULATORY AGENCY REQUIREMENTS.
12. THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS SHALL BE STRICTLY OBSERVED BY THE CONTRACTOR. ALL INGRESS, EGRESS AND TRAFFIC PATTERNS ON THE SITE SHALL BE WITHIN THE LIMITS OF CONSTRUCTION.
13. FINISHED GRADE FOR GROUND ELEVATIONS ON DRAWINGS REFER TO GRADE AFTER SODDING, OR OTHER SURFACE TREATMENT.
14. INSTALLATION OF ALL STORM SEWERS, INLETS, PIPE END TREATMENT AND APPURTENANCES SHALL BE IN ACCORDANCE WITH ALL REQUIREMENTS OF THE APPLICABLE SECTIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, OR AS INDICATED ON THE DRAWINGS.
15. CONTRACTOR SHALL PLACE PROTECTIVE BARRIERS AROUND EXISTING MONITORING WELLS TO PREVENT DAMAGE DUE TO CONSTRUCTION ACTIVITIES IF REQUESTED BY THE COUNTY.
16. THE CONTRACTOR SHALL INSTALL SILT FENCING AROUND PERIMETER OF LAYDOWN-STAGING AREA. AT THE CONCLUSION OF PROJECT THE ENTIRE LAYDOWN AREA WILL BE CLEARED OF ALL DEBRIS AND THE AREA SEEDED TO ESTABLISH A GRASS COVER AND STABILIZE THE SOIL.
17. SURFACE AND GROUND WATER ELEVATIONS AND STORMWATER RUNOFF VARY WITH THE TIME OF YEAR AND RAINFALL AMOUNTS ACROSS THE SITE. NEITHER THE CONSULTANT NOR THE COUNTY CAN ACCURATELY ESTIMATE THE SURFACE AND GROUND WATER ELEVATIONS THAT MAY BE ENCOUNTERED DURING THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHOULD BE PREPARED TO PERFORM THE WORK AND BASE THE BID ON THE POTENTIAL SURFACE AND GROUND WATER ON SITE.
18. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN SILT FENCE PER SECTION 01568 – TEMPORARY EROSION AND SEDIMENTATION CONTROL OF THE CONTRACT DOCUMENTS. FDOT DESIGN STANDARDS INDEX NO. 102 TYPE III SILT FENCE SHALL BE INSTALLED BY THE CONTRACTOR ALONG THE ENTIRE EXTERIOR LIMITS OF WORK TO PREVENT DAMAGE TO PROPERTIES OUTSIDE THE LIMITS OF WORK FROM SILTATION DUE TO CONSTRUCTION OF THE PROJECT.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOADING AND TRANSPORTING DEMOLISHED MATERIALS (AS CALLED FOR IN THE PLANS AND SPECIFICATIONS) TO THE LANDFILL WORKING FACE (ACTIVE PHASE II SECTION I FILLING AREA), OR OTHER DESIGNATED ON-SITE AREA AS DIRECTED BY THE COUNTY FOR DISPOSAL OR STORAGE. THE COUNTY WILL NOT CHARGE THE CONTRACTOR A DISPOSAL FEE BUT THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OTHER COSTS.

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. PROVOST, P.E. LICENSE NO. 58026

DRAWING TITLE: ABBREVIATIONS AND GENERAL NOTES

PROJECT TITLE: HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD, SUITE 180, TAMPA, FL 33610
813 621-4060 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09199033.23 | DWN.: SDA | D/A RVW BY: CEH | APP. BY: SRF
DSN. BY: SRF | CHK. BY: SRF

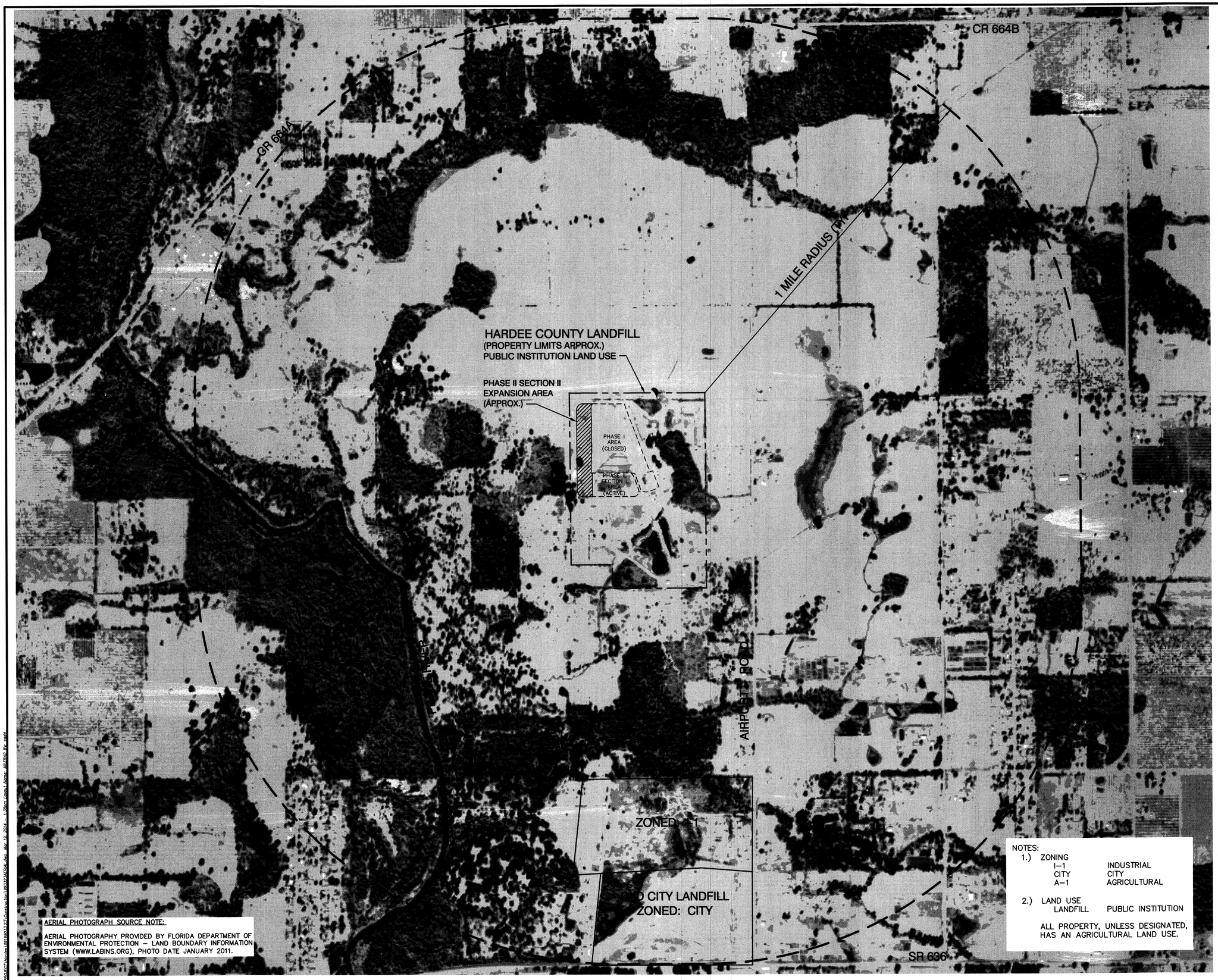
CADD FILE: 993323GENNOTE

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. 2 of 26

G:\PROJECTS\Hardee\09199033.23\Construction\993323GENNOTE.dgn Mar 18, 2014 - 8:30am kevin.l.bonnie Abbreviations and General Notes 24x36.dgn



AERIAL PHOTOGRAPH SOURCE NOTE:

AERIAL PHOTOGRAPHY PROVIDED BY FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - LAND BOUNDARY INFORMATION SYSTEM (WWW.LABINS.ORG), PHOTO DATE JANUARY 2011.

NOTES:

1.) ZONING

I-1	INDUSTRIAL
CITY	CITY
A-1	AGRICULTURAL

2.) LAND USE

LANDFILL	PUBLIC INSTITUTION

ALL PROPERTY, UNLESS DESIGNATED, HAS AN AGRICULTURAL LAND USE.

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E. LICENSE NO. 58026

DRAWING TITLE
OVERALL AERIAL SITE PLAN (JANUARY 2011)

PROJECT TITLE
HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-4757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09I199033.23 | DWN. BY: SDA | CHK. BY: SRF | QA RVW BY: CEH | APP. BY: SRF

CADD FILE: 993323AERIAL

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. **3** of **26**

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EXISTING

EXISTING MONITORING WELL TABLE		
WELL NUMBER	NORTHING	EASTING
MW-1	1177604.2260	726482.488
MW-2	1176800.972	727061.767
MW-4	1177588.34	727469.216
*MW-5	1177136.888	726199.5
MW-6	1176081.769	726652.386
MW-7	1175903.729	726370.416
*MW-8	1176543.71	726234.815
*MW-3	1176439.418	726193.823
MW-10R	1176262.89	726947.09
MW-11	1176198.382	726695.813
MW-12R	1176201.53	726403.89

EXISTING GAS PROBE TABLE		
PROBE NUMBER	NORTHING	EASTING
GP-1	1177602.658	726820.612
GP-2	1177601.357	726490.331
*GP-3	1177593.371	726188.964
*GP-4	1177304.268	726203.456
*GP-5	1176913.338	726205.276
*GP-6	1176692.365	726207.86
GP-9	1176697.437	727108.717
GP-10	1177021.197	726982.352
GP-11	1177341.968	726852.393
GP-12	1175710.195	726496.639
GP-13	1175700.036	726690.812

EXISTING PIEZOMETER TABLE		
WELL NUMBER	NORTHING	EASTING
P-7	1175812.82	726774.259
P-8	1175724.264	726530.637
P-11	1177153.801	726939.428
P-13	1176047.296	726494.261
P-14	1175889.67	726516.147
P-17	1177698.331	726212.616
P-18	1177585.22	725955.47
P-19	1177685.19	726890.76
P-20	1177564.956	726849.789
P-21	1177000.302	727105.589
P-22	1176021.166	726023.336
P-23	1175717.48	726021.42

EXISTING STAFF GAUGE TABLE		
POINT NUMBER	NORTHING	EASTING
SG 1	1177149.111	727100.065
SG 2	1177217.671	727292.17

* DENOTES GAS PROBE OR MONITORING WELL TO BE ABANDONED (TYP.)

NEW

NEW MONITORING WELL TABLE		
WELL NUMBER	NORTHING	EASTING
MW-13	1176675.10	725978.03
MW-14	1177140.10	725974.39

NEW GAS PROBE TABLE		
PROBE NUMBER	NORTHING	EASTING
GP-3R	1177624.46	726157.43
GP-4R	1177308.20	725945.51
GP-5R	1177004.63	725946.99
GP-6R	1176702.21	725946.53
GP-7R	1176402.21	725946.53
GP-8R	1176099.87	725949.54

NOTES:

1. GAS PROBES AND MONITORING WELLS TO BE INSTALLED (TYP.)
2. LOCATIONS TO BE CONFIRMED IN THE FIELD WITH THE OWNER PRIOR TO INSTALLATION.

N

200 100 0 200

SCALE IN FEET

LEGEND

- MW-13 — NEW GROUNDWATER MONITORING WELL
- MW-7 — EXISTING GROUNDWATER MONITORING WELL
- GP-7R — NEW GAS MONITORING PROBE
- GP-6 — EXISTING GAS MONITORING PROBE
- P-15 — EXISTING PIEZOMETER
- EXISTING MANHOLE
- SG-2 — EXISTING STAFF GUAGE
- EXISTING GROUNDWATER COLLECTION SYSTEM CLEANOUTS (APPROX. TYP. 9)
- EXISTING LFG CUTOFF TRENCH
- EXISTING LANDFILL PHASE LIMITS (APPROX.)
- PROPERTY LINE
- WETLAND LIMITS
- CONTRACTORS CONSTRUCTION LAYDOWN/STAGING AREA (APPROX.) – SEE NOTE 1.
- EXISTING LEACHATE COLLECTION PIPE AND MANHOLE
- APPROXIMATE LIMITS OF PHASE II SECTION II GEOMEMBRANE

NOTE:

1. THE GENERAL LOCATION OF THE CONTRACTOR'S CONSTRUCTION LAYDOWN/STAGING AREA IS SHOWN ON THE DRAWING. THE COUNTY AND THE CONTRACTOR WILL COORDINATE ON THE FINAL BOUNDARIES OF THE CONSTRUCTION LAYDOWN/STAGING AREA AND CONTRACTOR'S ACCESS FROM THE AREA TO THE MAIN ROAD AT THE PRE-CONSTRUCTION MEETING. THE CONSTRUCTION LAYDOWN/STAGING AREA SHALL BE GRADED TO EXISTING GRADES, SEEDED AND MULCHED AS REQUIRED UPON COMPLETION OF THE PROJECT PER THE SPECIFICATIONS.

CONFORMED
DATE: 03/17/14

AERIAL PHOTOGRAPH SOURCE NOTE:

AERIAL PHOTOGRAPHY PERFORMED BY
PICKETT & ASSOCIATES, INC.
502 MAIN STREET
WACHULA, FLORIDA 33873
PHONE: (863) 773-3990
PHOTO DATE: APRIL 3, 2012.

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E. LICENSE NO. 58026

DRAWING TITLE: EXISTING CONDITIONS AERIAL PHOTOGRAPH (04/03/2012)

PROJECT TITLE: HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD, SUITE 150, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09199033.23 | DWN. BY: SDA | CHK. BY: SRF | DSN. BY: SRF | QA/QC BY: CEH | APP. BY: SRF

CADD FILE: 993323AERIAL

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. 4 of 26

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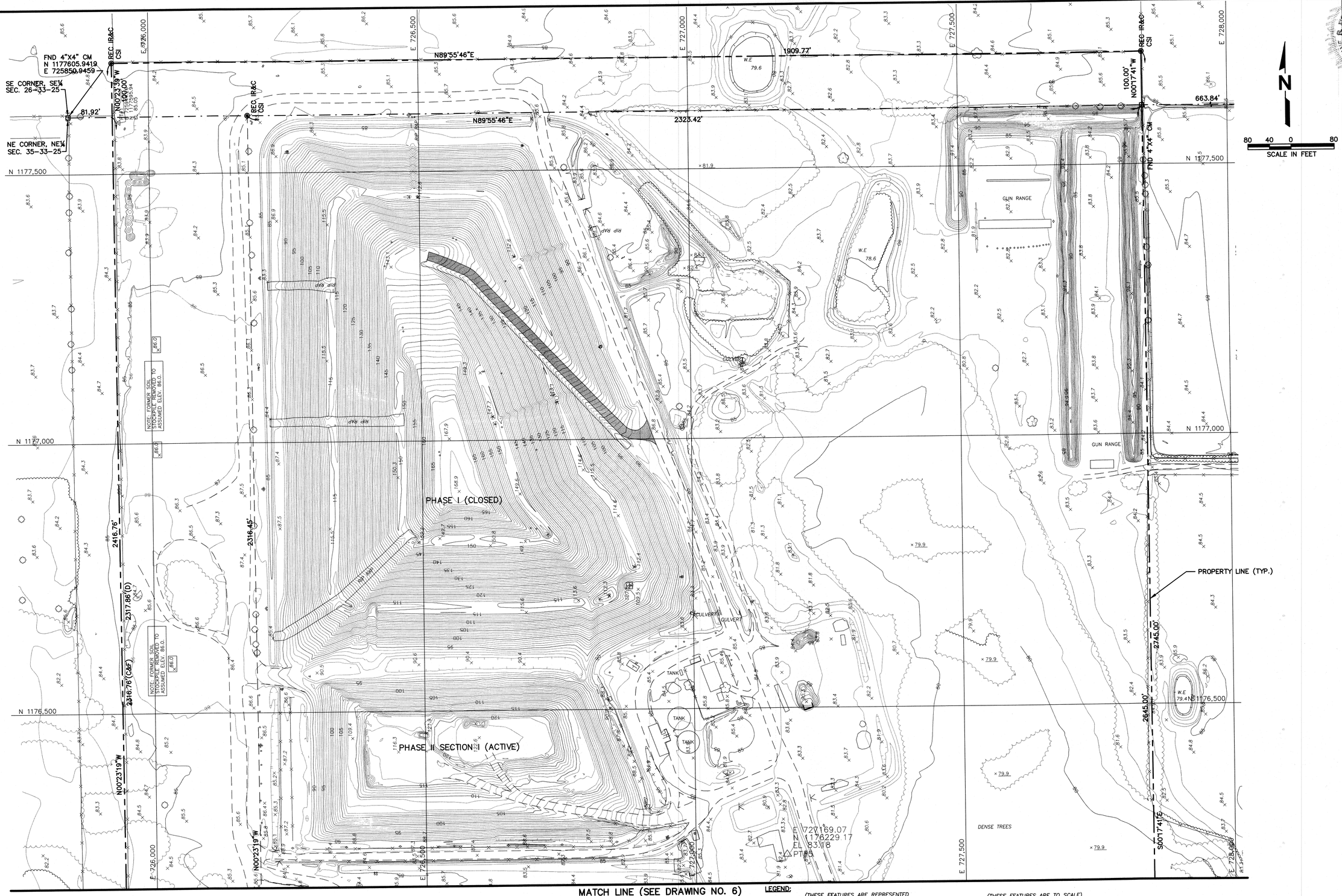

SURVEY SOURCE NOTE:

TOPOGRAPHIC SURVEY PERFORMED BY:
PICKETT & ASSOCIATES, INC.
475 SOUTH FIRST AVENUE
BARTOW, FLORIDA 33830
PHONE: (863) 533-9095
PHOTO DATE: APRIL 3, 2012.

SURVEY NOTES:

1. NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1999 ADJUSTMENT.
2. ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. THIS TOPOGRAPHIC SURVEY WAS PREPARED BY PHOTOGRAMMETRIC METHODS. SEE THE SURVEYOR'S REPORT FOR MAP ACCURACY, SURVEYOR'S SIGNATURE, SEAL, AND REFERENCE BENCHMARK INFORMATION. THIS MAP IS LIMITED TO THOSE FEATURES VISIBLE ON AERIAL PHOTOGRAPHY.

LEGEND:

(THESE FEATURES ARE REPRESENTED BY SYMBOLS NOT TO SCALE)

- CONTROL
- PT# TARGET NUMBER
- N NORTHING
- E EASTING
- EL ELEVATION
- UTILITY POLE
- LIGHT POLE
- SIGN
- TRAFFIC LIGHT
- POST
- VALVE
- FLAG
- MAIL BOX
- GUYWIRE
- MANHOLE
- HYDRANT
- CULVERT
- CATCH BASIN
- AIR CONDITIONER
- ELECTRICAL
- MISCELLANEOUS SYMBOL
- TREE
- PALM
- SHRUB
- SWAMP/MARSH
- TOWER

(THESE FEATURES ARE TO SCALE)

- CURB
- PAVED SURFACE
- CONCRETE SURFACE
- UNPAVED ROAD
- FENCE
- GUARDRAIL
- WALL
- RAILROAD
- STRUCTURE
- TREE LINE
- SHRUB LINE
- MISC MISCELLANEOUS
- PIPELINE
- RECREATION
- EDGE OF GROVE
- EDGE OF WATER
- SWAMPLINE
- OBSCURED CONTOUR
- DEPRESSION CONTOUR

(THESE INFORMATIVE LABELS ARE NOT SCALE DEPENDENT)

- W.E. WATER ELEVATION
- × 120.1 SPOT ELEVATION
- × 120.1 OBSCURED SPOT

95 ELEVATION CONTOUR (5-FOOT INTERVAL)
ELEVATION CONTOUR (1-FOOT INTERVAL)

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

DRAWING TITLE
EXISTING CONDITIONS NORTH TOPOGRAPHIC SURVEY (04/03/2012)

PROJECT TITLE
HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	DWN. BY	C/A	RVW BY
09190333.23	SDA	EH	SRF
DSGN. BY	CHK. BY	APP. BY	
SRF	SRF	SRF	

CADD FILE: 993323EXTOPO
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. **5** of **26**

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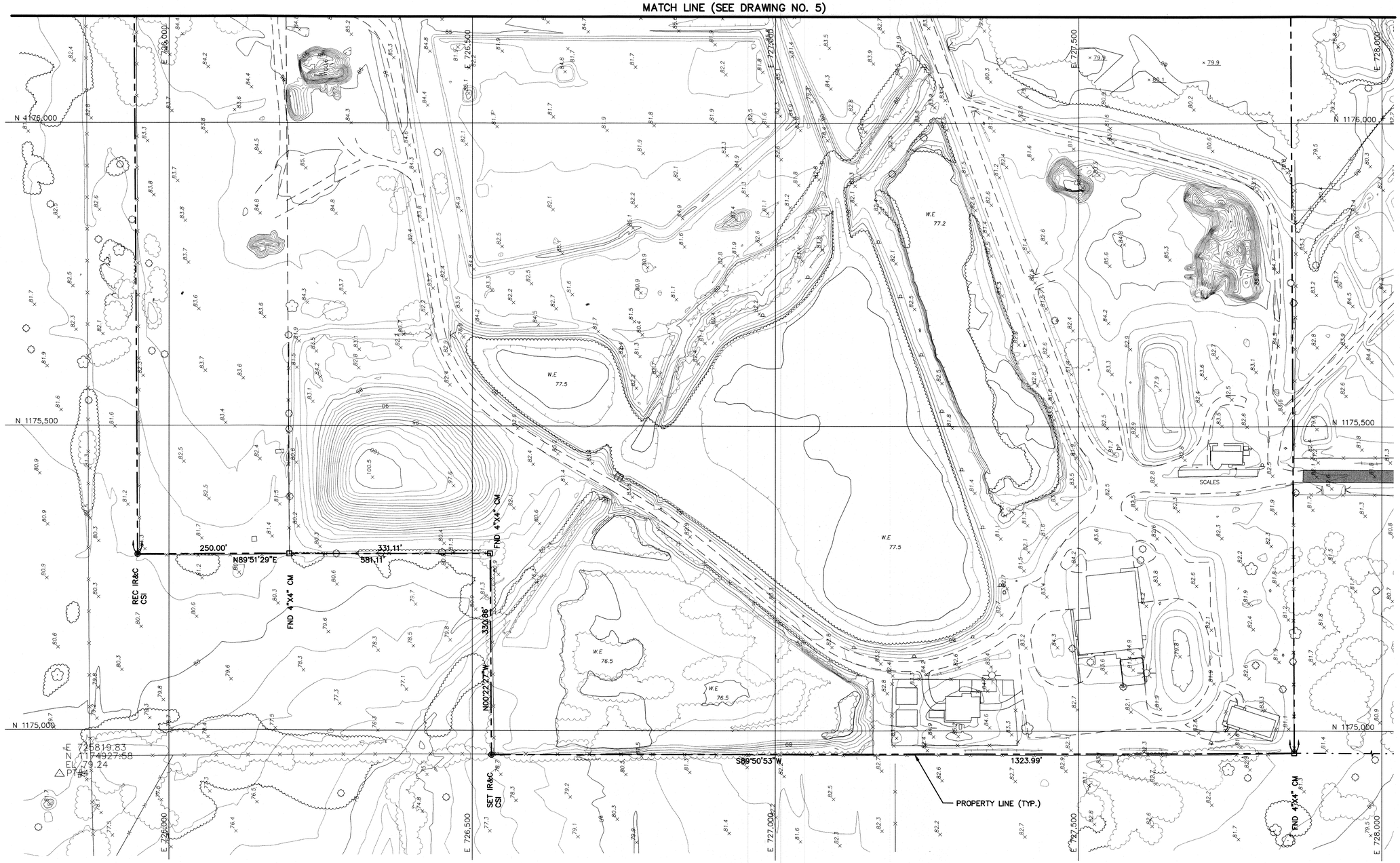
MATCH LINE (SEE DRAWING NO. 5)



N

80 40 0 80
SCALE IN FEET

SURVEY SOURCE NOTE:

TOPOGRAPHIC SURVEY PERFORMED BY:
PICKETT & ASSOCIATES, INC.
475 SOUTH FIRST AVENUE
BARTOW, FLORIDA 33830
PHONE: (863) 533-9095
PHOTO DATE: APRIL 3, 2012.

SURVEY NOTES:

1. NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1999 ADJUSTMENT.
2. ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. THIS TOPOGRAPHIC SURVEY WAS PREPARED BY PHOTOGRAMMETRIC METHODS. SEE THE SURVEYOR'S REPORT FOR MAP ACCURACY, SURVEYOR'S SIGNATURE, SEAL, AND REFERENCE BENCHMARK INFORMATION. THIS MAP IS LIMITED TO THOSE FEATURES VISIBLE ON AERIAL PHOTOGRAPHY.

LEGEND:

(THESE FEATURES ARE REPRESENTED BY SYMBOLS NOT TO SCALE)

- △ CONTROL
- PT# TARGET NUMBER
- N NORTHING
- E EASTING
- EL ELEVATION
- UTILITY POLE
- LIGHT POLE
- SIGN
- TRAFFIC LIGHT
- POST
- VALVE
- FLAG
- MAIL BOX
- GUYWIRE
- MANHOLE
- HYDRANT
- CULVERT
- CATCH BASIN
- AIR CONDITIONER
- ELECTRICAL
- MISCELLANEOUS SYMBOL
- TREE
- PALM
- SHRUB
- SWAMP/MARSH
- TOWER

(THESE FEATURES ARE TO SCALE)

- CURB
- PAVED SURFACE
- CONCRETE SURFACE
- UNPAVED ROAD
- FENCE
- GUARDRAIL
- WALL
- RAILROAD
- STRUCTURE
- TREE LINE
- SHRUB LINE
- MISC MISCELLANEOUS
- PIPELINE
- RECREATION
- EDGE OF GROVE
- EDGE OF WATER
- SWAMPLINE
- OBSCURED CONTOUR
- DEPRESSION CONTOUR

(THESE INFORMATIVE LABELS ARE NOT SCALE DEPENDENT)

- W.E. WATER ELEVATION
- × 120.1 SPOT ELEVATION
- × 120.1 OBSCURED SPOT
- 95 ELEVATION CONTOUR (5-FOOT INTERVAL)
- ELEVATION CONTOUR (1-FOOT INTERVAL)

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF
3			
4			
5			

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

DRAWING TITLE
EXISTING CONDITIONS SOUTH
TOPOGRAPHIC SURVEY (04/03/2012)

PROJECT TITLE
HARDEE COUNTY LANDFILL
PHASE II SECTION II EXPANSION
CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY
BOARD OF
COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 091199033.23
DSN. BY: SRF
DWN. BY: SDA
CHK. BY: SRF
Q/A RVW. BY: CEH
APP. BY: SRF

CADD FILE: 993323EXTOPO
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. **6** of **26**

© PROJECTS\Hardee\091199033.23\Construction\993323EXTOPO.dwg Mar 19, 2014 - 1:43pm srfischer Xrefs: Existing South Ph...ed.dwg

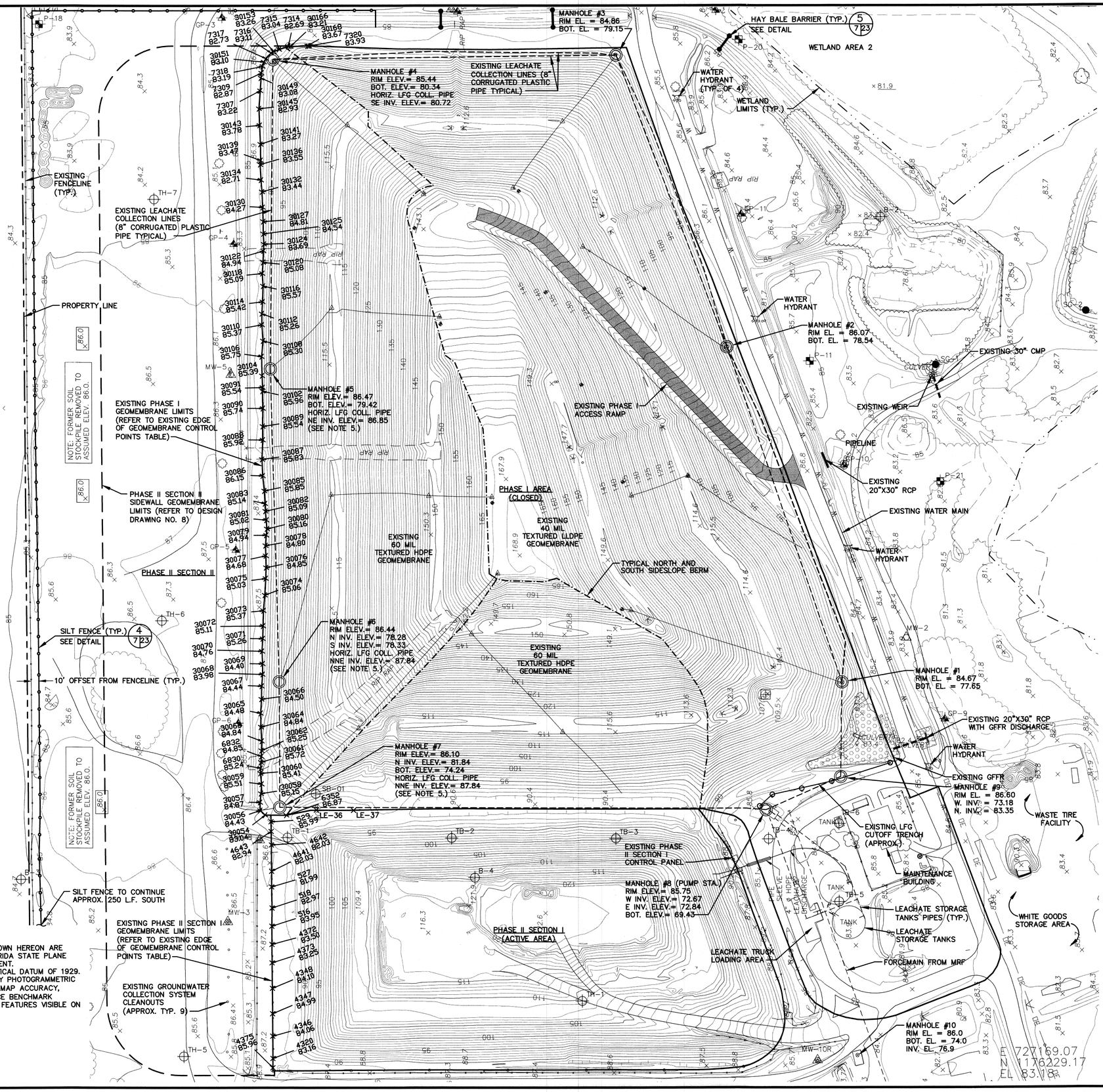
EXISTING EDGE OF GEOMEMBRANE CONTROL POINTS TABLE			
PHASE I			
POINT NO.	NORTHING	EASTING	ELEV.
6352	1176575.36	726268.86	86.87
6830	1176634.79	726236.20	85.24
6832	1176649.88	726237.10	84.85
7307	1177500.33	726237.77	83.22
7309	1177522.85	726239.30	82.87
7314	1177556.67	726273.80	82.69
7315	1177553.10	726261.87	83.04
7316	1177548.53	726251.95	83.11
7317	1177541.37	726245.22	82.73
7318	1177531.41	726240.95	83.19
7320	1177557.59	726300.26	83.93
30054	1176575.38	726241.81	83.04
30056	1176581.27	726235.48	84.43
30057	1176591.49	726235.30	84.87
30058	1176602.76	726236.60	85.15
30059	1176614.77	726237.30	85.51
30060	1176628.47	726235.87	85.41
30061	1176642.39	726236.69	85.72
30062	1176657.38	726237.30	85.25
30063	1176669.44	726237.66	84.84
30064	1176687.39	726236.72	84.84
30065	1176704.83	726236.45	84.48
30066	1176722.75	726237.49	84.50
30067	1176739.20	726237.86	84.44
30068	1176754.36	726239.05	83.98
30069	1176767.82	726239.10	84.40
30070	1176783.88	726238.34	84.76
30071	1176799.90	726239.33	85.26
30072	1176816.01	726239.79	85.11
30073	1176835.50	726240.34	85.37
30074	1176855.30	726242.13	85.06
30075	1176876.44	726243.40	85.03
30076	1176890.39	726243.84	84.85
30077	1176905.67	726243.59	84.68
30078	1176918.75	726243.15	84.80
30079	1176932.01	726244.23	84.94
30080	1176940.16	726245.08	85.16
30081	1176951.31	726244.44	85.02
30082	1176962.71	726243.15	85.09
30083	1176972.29	726242.73	85.14
30085	1176988.54	726241.84	85.85
30086	1177007.69	726239.81	86.15
30087	1177028.59	726238.95	85.83
30088	1177053.37	726240.06	85.92
30089	1177070.62	726239.89	85.54
30090	1177093.55	726240.19	85.74
30091	1177120.23	726240.02	85.54
30102	1177115.63	726239.77	85.96
30104	1177135.28	726239.29	85.39
30106	1177159.77	726238.74	85.75
30108	1177179.95	726240.67	85.30
30110	1177200.53	726239.17	85.37
30112	1177214.78	726239.17	85.26
30114	1177229.97	726240.17	85.42
30116	1177250.11	726240.89	85.57
30118	1177266.27	726239.92	85.09
30120	1177280.46	726240.91	85.08
30122	1177295.20	726241.46	84.94
30124	1177303.91	726241.99	83.69
30125	1177317.09	726241.37	84.54
30127	1177332.62	726241.20	84.81
30130	1177350.72	726240.59	84.27
30132	1177370.54	726239.80	83.44
30134	1177385.65	726238.52	82.71
30136	1177405.43	726237.45	83.55
30139	1177410.66	726238.10	83.47
30141	1177431.42	726237.91	83.27
30143	1177455.81	726236.91	83.78
30145	1177477.13	726236.14	82.93
30149	1177516.56	726238.60	83.08
30151	1177536.88	726242.70	83.10
30153	1177550.26	726255.13	83.26
30166	1177556.78	726276.50	83.21
30168	1177557.52	726298.49	83.67
LE–36	1176581.89	726307.44	83.89
LE–37	1176581.43	726354.95	84.36
PHASE II SECTION I			
POINT NO.	NORTHING	EASTING	ELEV.
516	1176433.66	726249.99	83.95
518	1176456.87	726250.29	82.97
527	1176483.79	726249.81	81.99
529	1176567.06	726249.29	85.99
4320	1176265.62	726250.98	83.16
4346	1176293.94	726250.80	84.06
4347	1176322.48	726250.71	84.99
4348	1176354.55	726250.49	84.10
4372	1176410.37	726250.10	83.50
4373	1176386.89	726250.16	83.25
4375	1176253.85	726251.00	85.96
4641	1176503.68	726249.87	82.03
4642	1176537.47	726249.68	82.03
4643	1176554.72	726249.44	82.94

SURVEY NOTES:

1. NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1999 ADJUSTMENT.
2. ELEVATIONS ARE TO NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. THIS TOPOGRAPHIC SURVEY WAS PREPARED BY PHOTOGRAMMETRIC METHODS. SEE THE SURVEYOR'S REPORT FOR MAP ACCURACY, SURVEYOR'S SIGNATURE, SEAL, AND REFERENCE BENCHMARK INFORMATION. THIS MAP IS LIMITED TO THOSE FEATURES VISIBLE ON AERIAL PHOTOGRAPHY.

SURVEY SOURCE NOTE:

TOPOGRAPHIC SURVEY PERFORMED BY:
PICKETT & ASSOCIATES, INC.
475 SOUTH FIRST AVENUE
BARTOW, FLORIDA 33830
PHONE: (863) 533–9095
PHOTO DATE: APRIL 3, 2012.



LEGEND:

- B–1 / TB–1 / SB–1 / TH–1 — EXISTING SOIL/TEST BORING (B = ENVISOR 1982, TB & SB = PSI 1997, TH = PSI 2003)
- GP–1 — EXISTING GAS MONITORING PROBE
- MW–2 — EXISTING MONITORING WELL
- P–20 — EXISTING PIEZOMETER
- *P–1 — EXISTING PIEZOMETER ABANDONED
- SG–1 — EXISTING STAFF GUAGE
- EXISTING LEACHATE MANHOLE
- 85.1 × — EXISTING SPOT ELEVATION
- VEGETATION
- EXISTING FENCE
- OE — OVERHEAD ELECTRIC
- UE — UNDERGROUND ELECTRIC
- W — EXISTING UNDERGROUND WATER LINE
- GUY WIRE
- APPROXIMATE WETLAND LIMIT
- 85 — EXISTING TOPOGRAPHIC CONTOUR (4/3/2012 SURVEY)
- EXISTING SIDEWALL GEOMEMBRANE LIMITS OR ANCHOR TRENCH
- × EXISTING SIDEWALL GEOMEMBRANE & PHASE II SECTION I GEOMEMBRANE ANCHOR TURNDOWN POINTS
- EXISTING LEACHATE COLLECTION LINE
- SILT FENCE
- EXISTING LANDFILL GAS VENT
- EXISTING LANDFILL HORIZONTAL COLLECTOR RISER AND PIPE

NOTES:

1. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING LINER, UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS AND SERVE AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED.
2. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THERE MAY BE SOME AREAS OF POSSIBLE UTILITY CONFLICTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT. THE CONTRACTOR SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES AT NO ADDITIONAL COST TO THE COUNTY.
3. THE COUNTY AND THE CONTRACTOR WILL COORDINATE ON THE FINAL BOUNDARIES OF THE CONTRACTORS CONSTRUCTION LAYDOWN/STAGING AREA AND CONTRACTOR'S ACCESS FROM THE AREA TO THE MAIN ROAD AT THE PRE–CONSTRUCTION MEETING. THE CONSTRUCTION LAYDOWN/STAGING AREA SHALL BE GRADED TO EXISTING GRADES, SEEDED AND MULCHED AS REQUIRED UPON COMPLETION OF THE PROJECT PER THE SPECIFICATIONS.
4. QUANTITY AND LOCATION OF SILT FENCE MAY VARY. CONTRACTOR SHALL HAVE EROSION AND SEDIMENTATION CONTROLS IN PLACE DURING ALL CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE ENGINEER.
5. MANHOLES #5, #6, AND #7 ACCESS LIDS COVERED WITH CONCRETE CAP DURING PHASE I CLOSURE CONSTRUCTION PER PERMIT NUMBER 38414–012–SF/01 DATED 11/9/2009.

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE: **PROJECT AREA EXISTING CONDITIONS SITE PLAN**

PROJECT TITLE: **HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS**

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

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD, SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 01199033.23 | DWN. BY: SDA | D/A REVIEW BY: CEH
DSN. BY: SRF | CHK. BY: SRF | APP. BY: SRF

CADD FILE: 993323EXSITE

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. **7** of **26**

GROUNDWATER CONTROL PIPING SYSTEM DETAIL (TYP.) SEE DETAIL 1/8 18

GROUNDWATER PIPE TRENCH DETAIL (TYP.) SEE DETAIL 4/8 18

8" PERF. SDR 11 HDPE GROUNDWATER COLLECTION PIPE @ 0.5% SLOPE (TYP. OF 9)

TRANSITION AND TIE TO EXISTING ROAD AT 5% SLOPE

REGRADE EXISTING SWALE TO DRAIN EAST

EAST SLOPE TIE-IN TO EXIST. PHASE II SECTION I (TYP.) SEE DETAIL 3/8 19

EAST SLOPE TIE-IN TO EXIST. PHASE II SECTION I AT LCS PIPE TRENCH (TYP.) SEE DETAIL 4/8 19

ANCHOR TRENCH SEE DETAIL 2/8 20

PROPERTY LINE

PERIMETER BERM (TYP.)

PERIMETER ROAD AND SWALE SEE DETAIL 1/8 20

LIMIT OF PRIMARY GRADING WORK

PERIMETER SWALE (TYP.)

10' SWALE BOT. (TYP.)

16' PERIMETER ROAD (TYP.)

ANCHOR TRENCH (TYP.)

BOTTOM LINER SYSTEM SEE DETAIL 5/8 18

PHASE II SECTION II

"●" DENOTES GAS PROBE OR MONITORING WELL TO BE ABANDONED (TYP.)

EAST SLOPE TIE-IN TO EXIST. SOUTH PHASE I (TYP.) SEE DETAIL 2/8 19

EAST SLOPE TIE-IN TO EXIST. PHASE I (TYP.) SEE DETAIL 1/8 19

EXISTING VENT TRENCH TIE-IN TO MANHOLE DETAIL (MH-5 AND MH-6). SEE DETAIL 2/8 23

STORMWATER FLUME (TYP.) SEE DETAIL 1/8 21

BOTTOM LINER SYSTEM WITH ADDL. LAYER OF 60-MIL LINER SEE DETAIL 6/8 18

TRANSITION AND TIE TO EXISTING ROAD AT 5% SLOPE

LIMITS OF ADDITIONAL LAYER 60-MIL LINER TO ELEV. 82.5

EXISTING HORIZONTAL LANDFILL GAS VENT TRENCH SEE DETAIL 3/8 20

EXISTING VENT TRENCH TIE-IN TO MANHOLE SEE DETAIL 1/8 23

EXISTING 8" GROUNDWATER COLLECTION PIPE (TYP. OF 9)

EXISTING 8" LEACHATE COLLECTION PIPE (TYP. OF 3)

PHASE II SECTION I (ACTIVE)

PHASE I (CLOSED)

4" ø HDPE LEACHATE DISCHARGE

PIPE SLEEVE

TANK

CULVERT

RIP RAP

H.P. 86.3

PT#1 E 725944.26 N 1177595.94 EL 85.05

MW-1 MW-2 MW-3 MW-5 MW-6 MW-7 MW-8 MW-10R MW-11 MW-12R MW-13 MW-14

GP-2 GP-3R GP-4R GP-5R GP-6R GP-7R GP-3 GP-4 GP-5 GP-6 GP-10

P-17 P-18 P-22

MH-1 MH-2 MH-3 MH-5 MH-6 MH-7

N

60 30 0 60

SCALE IN FEET

LEGEND

- EXISTING ELEVATIONAL CONTOUR (5 FOOT INTERVAL) APRIL 2012 SURVEY
- EXISTING ELEVATIONAL CONTOUR (1 FOOT INTERVAL) APRIL 2012 SURVEY
- EXISTING SPOT ELEVATION DEC. 2010 SURVEY
- EXISTING PROPERTY LINE/BOUNDARY (CHASTAIN SKILLMAN SURVEY)
- NEW GROUNDWATER MONITORING WELL
- EXISTING GROUNDWATER MONITORING WELL
- NEW GAS MONITORING PROBE
- EXISTING GAS MONITORING PROBE
- EXISTING PIEZOMETER
- EXISTING LEACHATE MANHOLE
- EXISTING LANDFILL GAS VENT
- EXISTING LANDFILL HORIZONTAL COLLECTOR RISER AND PIPE
- EXISTING EDGE OF LINER (SEE DRAWING NO. 7 FOR COORDINATE LOCATIONS)
- FINISHED GRADE ELEVATIONAL CONTOUR (5 FOOT INTERVAL)
- FINISHED GRADE ELEVATIONAL CONTOUR (1 FOOT INTERVAL)
- FINISHED GRADE TOE OF SLOPE/TOP OF SLOPE
- FINISHED GRADE SPOT ELEVATION
- ACCESS ROAD COMPACTED LIMEROCK
- ROADWAY CENTERLINE/BASELINE
- SURFACE WATER FLOW DIRECTION
- LEACHATE SHEET FLOW DIRECTION
- ADDITIONAL LAYER OF 60-MIL LINER TO ELEV. 82.5
- LIMIT OF PRIMARY GRADING WORK
- GROUNDWATER CONTROL PIPE AND CLEAN-OUT
- LEACHATE COLLECTION PIPE AND CLEAN-OUT
- EXISTING GROUNDWATER CONTROL PIPE AND CLEAN-OUT
- EXISTING LEACHATE COLLECTION PIPE AND CLEAN-OUT

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER, P.E. LICENSE NO. 59026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE: **TOP OF SUBGRADE BOTTOM CELL GRADING SITE PLAN**

PROJECT TITLE: **HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS**

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

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-5757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 01199033.23 | DWN. BY: SDA | D/A R/W BY: CEH | APP. BY: SRF | CHK. BY: SRF | DSN. BY: SRF

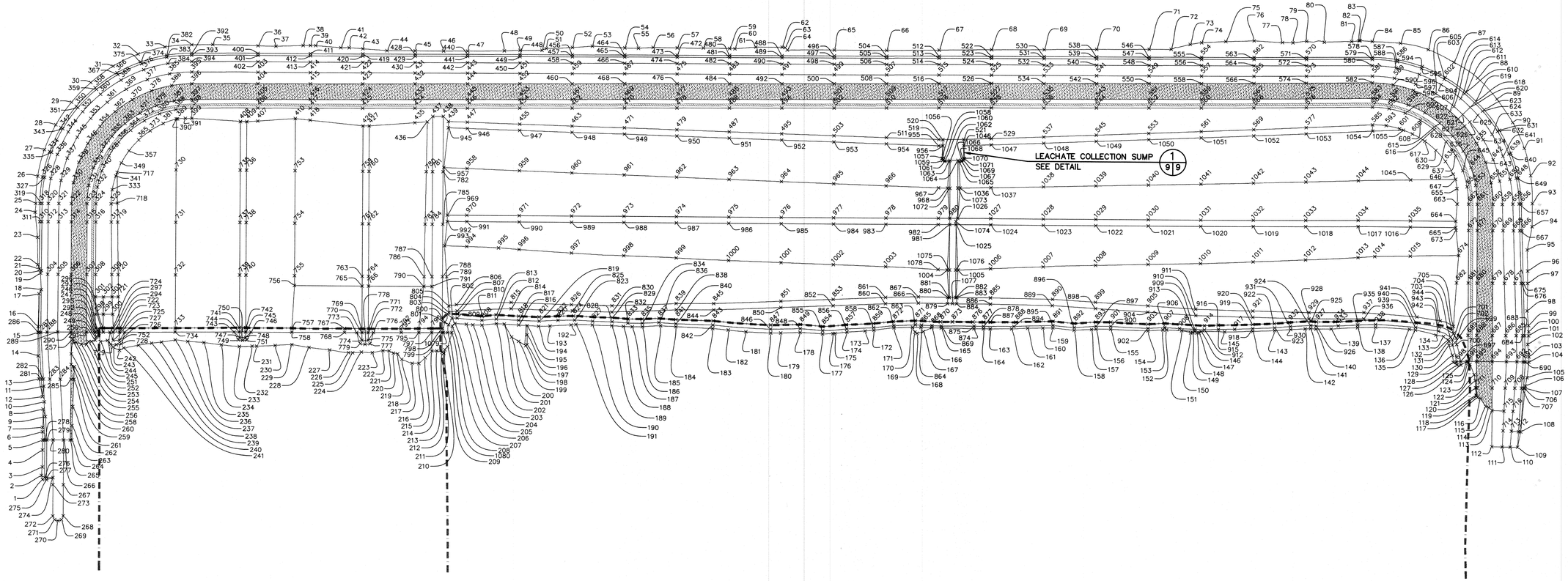
CADD FILE: 993323GRADING

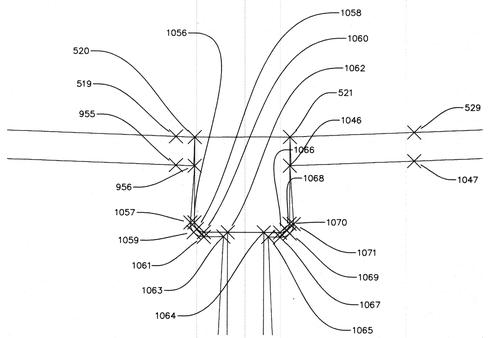
DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. **8** of 26

C:\SCS Projects\01199033.23\Construction\993323GRADING.dwg Mar 19, 2014 - 11:54am Layout Name: C8-1 Par. at Subgrade Plan.mod





LEACHATE COLLECTION SUMP DETAIL (1/9)

SCALE: 1" = 15'

LEGEND

- 1001 — TOP OF SUBGRADE HORIZONTAL AND VERTICAL CONTROL POINT AND IDENTIFICATION NUMBER (SEE DRAWING NO. 10 AND 11 FOR NORTHING AND EASTING COORDINATES AND ELEVATIONS.)
- VERTICAL GRADE BREAK/TRANSITION LINE
- LIMIT OF EXISTING PHASE I AND PHASE II SECTION I EDGE OF LINER (SEE NOTE 2)
- 2'-0" WIDE x 2'-0" DEEP LINER SYSTEM ANCHOR TRENCH (SEE NOTES 2 AND 3.)
- COMPACTED LIMEROCK ACCESS ROAD

NOTES:

1. GRADING CONTROL POINT NUMBERS 1 THROUGH 275 SHOWN AROUND THE PERIMETER ARE APPROXIMATE LOCATIONS WHERE THE NEW CONSTRUCTION GRADING MEETS EXISTING GRADE. IN ORDER TO MAINTAIN SET DESIGN SLOPES, ACTUAL HORIZONTAL AND VERTICAL TIE-IN LOCATIONS OF NEW GRADING TO EXISTING GRADE MAY VARY BASED ON EXISTING GRADE CONDITIONS AND ELEVATIONS AT THE TIME OF CONSTRUCTION.
2. GRADING CONTROL POINTS SHOWN ON OR INSIDE LIMITS OF THE PHASE II SECTION II ANCHOR TRENCH OR EXISTING EDGE OF LINER ON THE EAST SIDE REPRESENT THE TOP OF SUBGRADE LAYER ON WHICH THE LINER SYSTEM IS PLACED (SEE DETAILS 1 THRU 4, DRAWING NO. 19).
3. GRADING CONTROL POINTS SHOWN DO NOT DETAIL THE BOTTOM OF THE LINER SYSTEM ANCHOR TRENCH LOCATED AT ELEVATION 86.6 (SEE DETAIL 2, DRAWING NO. 20.)

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE: TOP OF SUBGRADE GRADING CONTROL POINTS SITE PLAN

PROJECT TITLE: HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 622-0757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 993033.23 | DWN. BY: SDA | CHK. BY: SRF | APP. BY: SRF | DSN. BY: SRF | 0/A RVW. BY:

CADD FILE: 993323GRAD-CTRL

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. 9 of 26

G:\PROJECT\Hardee\993033.23\Construction\993323GRAD-CTRL.dgn Mar 18, 2014 - 1:45pm Lionel Henry GPSD=Top of Subgrade Plan By: ssmith

Point Table			
Point #	Northing	Easting	Elevation
1	1176196.62	726395.30	85.29
2	1176195.70	726391.30	85.27
3	1176196.49	726383.31	85.47
4	1176196.53	726367.31	85.48
5	1176196.69	726357.92	85.52
6	1176196.48	726350.00	85.59
7	1176196.35	726345.75	85.63
8	1176196.84	726328.52	86.04
9	1176199.14	726335.56	86.07
10	1176198.01	726321.60	86.18
11	1176197.52	726306.75	86.06
12	1176196.12	726316.73	86.05
13	1176192.82	726300.00	85.50
14	1176191.95	726277.89	85.64
15	1176191.61	726255.66	85.92
16	1176191.78	726250.00	85.97
17	1176192.56	726218.61	86.17
18	1176194.58	726214.61	86.18
19	1176193.90	726198.93	86.45
20	1176194.66	726196.45	86.20
21	1176192.66	726195.19	86.21
22	1176191.14	726190.91	85.83
23	1176190.83	726164.91	85.76
24	1176188.43	726140.90	85.17
25	1176188.93	726132.55	85.29
26	1176190.69	726106.59	85.18
27	1176196.97	726081.25	85.06
28	1176207.73	726057.38	84.98
29	1176222.57	726035.75	84.93
30	1176240.87	726016.87	84.83
31	1176262.06	726001.12	84.65
32	1176285.83	725989.38	84.51
33	1176311.48	725982.49	84.52
34	1176336.90	725980.36	84.57
35	1176357.01	725980.17	84.56
36	1176400.00	725980.90	84.83
37	1176417.01	725981.21	84.95
38	1176443.01	725980.26	84.76
39	1176450.00	725980.19	84.76
40	1176455.01	725980.24	84.78
41	1176479.01	725981.97	85.26
42	1176487.01	725982.04	85.30
43	1176500.00	725982.90	85.54
44	1176523.02	725984.55	86.00
45	1176550.00	725984.60	86.07
46	1176577.02	725984.68	86.15
47	1176600.00	725984.54	86.16
48	1176635.02	725984.03	86.10
49	1176650.00	725983.50	86.00
50	1176671.02	725983.32	86.00
51	1176675.02	725981.61	85.58
52	1176700.00	725980.38	85.32
53	1176719.01	725979.08	85.04
54	1176750.00	725980.61	85.49
55	1176763.01	725980.85	85.57
56	1176777.01	725980.02	85.39
57	1176800.00	725980.16	85.48
58	1176825.01	725980.04	85.50
59	1176850.00	725980.44	85.65
60	1176855.02	725980.57	85.69
61	1176875.01	725978.81	85.29
62	1176900.00	725978.73	85.33
63	1176903.01	725979.18	85.44
64	1176905.02	725981.39	86.00
65	1176950.00	725981.13	86.03
66	1177000.00	725981.21	86.15
67	1177050.00	725980.72	86.13
68	1177100.00	725980.10	86.08
69	1177150.00	725979.58	86.06
70	1177200.00	725978.95	86.00

Point Table			
Point #	Northing	Easting	Elevation
71	1177250.00	725978.54	86.00
72	1177271.01	725978.36	86.00
73	1177289.00	725973.54	84.83
74	1177300.00	725971.85	84.43
75	1177322.99	725970.57	84.16
76	1177350.00	725969.82	84.03
77	1177377.00	725971.42	84.48
78	1177387.00	725971.57	84.54
79	1177400.00	725970.13	84.21
80	1177417.00	725970.99	84.46
81	1177443.00	725970.37	84.36
82	1177450.00	725969.57	84.17
83	1177450.99	725969.43	84.14
84	1177462.69	725970.20	84.36
85	1177489.68	725971.65	84.18
86	1177516.27	725977.39	83.90
87	1177540.77	725989.30	84.06
88	1177563.54	726004.23	83.91
89	1177581.96	726024.25	84.22
90	1177597.18	726046.57	84.29
91	1177608.35	726071.08	84.35
92	1177614.54	726097.18	84.53
93	1177616.34	726123.92	84.66
94	1177616.12	726145.99	84.66
95	1177611.62	726168.15	85.72
96	1177612.12	726188.15	85.55
97	1177612.09	726200.00	85.53
98	1177611.81	726226.20	85.53
99	1177613.20	726240.17	85.15
100	1177613.40	726246.17	85.08
101	1177613.22	726250.00	85.12
102	1177612.50	726258.21	85.28
103	1177613.80	726270.18	84.92
104	1177613.72	726275.18	84.93
105	1177612.03	726289.95	84.98
106	1177610.37	726297.86	85.20
107	1177610.17	726300.00	85.20
108	1177606.17	726341.47	85.15
109	1177603.27	726356.04	85.00
110	1177596.20	726356.04	83.00
111	1177588.68	726355.96	83.00
112	1177578.67	726355.81	85.67
113	1177578.75	726321.31	85.98
114	1177575.75	726318.65	86.17
115	1177572.75	726317.64	86.28
116	1177567.75	726310.36	86.74
117	1177564.75	726309.18	86.86
118	1177563.75	726307.87	86.95
119	1177563.45	726306.97	86.99
120	1177562.94	726300.00	87.34
121	1177562.45	726293.16	87.68
122	1177561.45	726287.44	87.97
123	1177557.45	726277.54	88.46
124	1177555.45	726276.45	88.52
125	1177554.46	726274.93	88.37
126	1177548.75	726278.40	89.86
127	1177544.99	726278.42	90.39
128	1177541.51	726275.95	90.43
129	1177540.62	726269.08	89.43
130	1177537.31	726259.82	89.00
131	1177537.15	726255.84	88.61
132	1177536.36	726254.56	88.60
133	1177532.10	726251.46	88.37
134	1177524.86	726250.03	89.08
135	1177505.24	726245.45	87.63
136	1177499.45	726244.72	87.48
137	1177467.15	726243.25	87.45
138	1177450.00	726243.63	87.50
139	1177424.72	726244.85	87.64
140	1177410.27	726244.92	87.71

Point Table			
Point #	Northing	Easting	Elevation
141	1177405.18	726244.50	87.66
142	1177400.00	726244.75	87.73
143	1177370.96	726246.51	88.36
144	1177350.00	726247.17	88.67
145	1177323.16	726247.81	88.98
146	1177300.84	726247.61	89.01
147	1177298.78	726248.84	89.21
148	1177296.77	726249.02	89.24
149	1177292.78	726248.70	89.18
150	1177290.77	726248.90	89.21
151	1177282.24	726246.83	88.84
152	1177267.84	726246.20	88.94
153	1177264.45	726246.21	89.02
154	1177250.19	726247.30	89.47
155	1177214.56	726245.88	89.30
156	1177200.77	726245.89	89.38
157	1177196.40	726246.32	89.50
158	1177179.88	726247.15	89.71
159	1177159.54	726245.10	88.97
160	1177150.00	726245.24	88.98
161	1177135.50	726245.47	89.02
162	1177120.21	726246.33	89.39
163	1177100.00	726246.47	89.56
164	1177093.57	726246.55	89.57
165	1177053.27	726245.97	89.18
166	1177044.31	726245.58	88.98
167	1177036.25	726249.43	89.67
168	1177030.22	726251.16	90.00
169	1177028.24	726249.87	89.80
170	1177025.93	726245.28	89.05
171	1177008.14	726245.89	88.95
172	1176989.06	726248.28	89.33
173	1176980.65	726249.10	89.44
174	1176963.26	726250.22	89.66
175	1176951.92	726251.58	90.10
176	1176950.00	726251.71	90.14
177	1176939.99	726252.27	90.33
178	1176918.57	726250.79	89.87
179	1176900.00	726251.49	90.19
180	1176890.33	726251.52	90.28
181	1176866.81	726250.60	90.19
182	1176850.00	726249.01	89.83
183	1176835.07	726247.67	89.51
184	1176800.00	726246.16	89.25
185	1176785.45	726245.41	89.09
186	1176767.98	726246.43	89.54
187	1176758.33	726246.57	89.66
188	1176750.00	726246.30	89.65
189	1176738.81	726245.62	89.53
190	1176720.36	726245.00	89.49
191	1176704.66	726244.67	90.12
192	1176700.00	726245.07	90.59
193	1176679.91	726246.29	91.73
194	1176669.11	726246.58	91.79
195	1176658.02	726246.01	91.49
196	1176658.06	726254.71	92.94
197	1176658.09	726264.23	94.52
198	1176656.80	726265.17	94.71
199	1176650.04	726261.10	93.95
200	1176643.27	726256.99	93.18
201	1176636.24	726244.68	91.02
202	1176628.69	726244.28	90.82
203	1176614.97	726245.89	91.14
204	1176606.24	726245.70	91.20
205	1176600.00	726245.13	90.89
206	1176589.18	726244.54	90.05
207	1176586.59	726247.10	90.21
208	1176586.22	726253.28	90.89
209	1176582.22	726266.78	91.51
210	1176579.62	726269.63	91.63

Point Table			
Point #	Northing	Easting	Elevation
211	1176578.62	726273.20	92.46
212	1176577.06	726272.16	92.29
213	1176572.06	726270.74	91.81
214	1176567.16	726270.98	91.88
215	1176560.89	726277.35	92.44
216	1176554.92	726282.87	92.78
217	1176548.61	726282.73	92.38
218	1176538.59	726278.99	90.57
219	1176534.56	726273.84	88.80
220	1176530.56	726273.06	88.52
221	1176526.55	726271.02	87.81
222	1176520.55	726270.78	87.72
223	1176510.56	726272.84	88.39
224	1176500.00	726272.32	88.19
225	1176491.72	726273.07	88.41
226	1176487.72	726273.00	88.39
227	1176469.70	726270.47	88.04
228	1176450.00	726268.28	88.04
229	1176433.68	726265.69	87.85
230	1176417.69	726266.70	87.79
231	1176400.00	726267.47	87.74
232	1176395.69	726267.60	87.74
233	1176383.69	726268.22	87.86
234	1176366.52	726266.66	87.76
235	1176350.00	726264.57	87.51
236	1176334.51	726263.61	87.65
237	1176322.50	726262.09	87.47
238	1176309.42	726264.27	87.70
239	1176300.00	726265.28	87.70
240	1176287.44	726267.34	87.93
241	1176273.45	726269.90	88.25
242	1176269.47	726272.22	88.91
243	1176263.45	726269.27	87.92
244	1176257.92	726262.91	87.42
245	1176251.37	726264.12	89.87
246	1176249.87	726256.05	87.70
247	1176248.87	726255.13	87.73
248	1176247.87	726259.23	87.83
249	1176246.87	726259.93	88.14
250	1176246.24	726262.63	88.22
251	1176242.94	726263.97	88.15
252	1176239.94	726264.11	88.14
253	1176237.94	726266.89	88.01
254	1176232.94	726266.80	87.91
255	1176227.94	726264.91	87.90
256	1176225.94	726265.34	87.84
257	1176224.94	726261.70	88.01
258	1176223.51	726275.86	87.27
259	1176223.44	726285.86	87.29
260	1176226.49	726287.88	87.59
261	1176226.07	726300.00	87.58
262	1176225.14	726325.87	87.54
263	1176224.50	726343.87	87.51
264	1176224.47	726357.59	87.54
265	1176222.99	726357.58	87.39
266	1176216.62	726357.59	84.00
267	1176216.62	726400.00	84.00
268	1176216.62	726429.59	84.00
269	1176214.95	726433.20	84.00
270	1176211.62	726434.21	84.00
271	1176208.34	726433.24	84.00
272	1176206.62	726429.78	84.00
273	1176206.62	726400.00	84.00
274	1176206.62	726393.31	84.00
275	1176200.62	726395.49	85.45
276	1176198.62	726393.31	86.00
277	1176200.62	726393.31	86.00
278	1176198.62	726357.84	86.00
279	1176200.62	726357.78	86.00
280	1176206.62	726357.59	84.00

Point Table			
Point #	Northing	Easting	Elevation
281	1176195.11	726300.00	86.07
282	1176197.11	726300.00	86.07
283	1176203.12	726300.00	84.07
284	1176213.13	726300.00	84.07
285	1176223.33	726300.00	87.30
286	1176192.40	726255.61	86.12
287	1176194.40	726255.54	86.12
288	1176200.41	726255.34	84.12
289	1176210.41	726255.00	84.12
290	1176222.94	726255.00	88.30
291	1176237.94	726255.00	88.60
292	1176246.24	726255.00	88.60
293	1176253.87	726255.00	85.97
294	1176263.37	726254.95	83.14
295	1176246.24	726251.00	88.60
296	1176253.85	726251.00	85.96
297	1176263.37	726250.98	83.16
298	1176246.24	726237.80	88.60
299	1176253.86	726237.80	86.00
300	1176262.82	726237.80	83.22
301	1176246.24	726221.12	88.60
302	1176253.88	726221.12	86.05
303	1176262.13	726221.12	83.31
304	1176200.64	726200.00	84.20
305	1176210.64	726200.00	84.20
306	1176222.94	726200.00	88.30
307	1176237.94	726200.00	88.60
308	1176246.24	726200.00	88.60
309	1176261.81	726200.00	83.41
310	1176192.85	726150.00	86.27
311	1176194.85	726150.00	86.27
312	1176200.85	726150.00	84.27
313	1176210.85	726150.00	84.27
314	1176222.94	726150.00	88.30
315	1176237.94	726150.00	88.60
316	1176246.24	726150.00	88.60
317	1176261.06	726150.00	83.66
318	1176192.93	726132.55	86.29
319	1176194.93	726132.55	86.30
320	1176200.93	726132.55	84.30
321	1176210.93	726132.55	84.30
322	1176222.94	726132.55	88.30
323	1176237.94	726132.55	88.60
324	1176246.24	726132.55	88.60
325	1176260.80	726132.55	83.75
326	1176195.22	726107.39	86.33
327	1176197.19	726107.74	86.33
328	1176203.10	726108.78	84.33
329	1176212.95	726110.51	84.33
330	1176224.69	726112.58	88.30
331	1176239.46	726115.19	88.60
332	1176247.63	726116.63	88.60
333	1176261.77	726119.12	83.82
334	1176201.85	726083.02	86.36
335	1176203.73	726083.70	86.36
336	1176209.36	726085.76	84.36
337	1176218.76	726089.18	84.36
338	1176229.88	726093.22	88.30
339	1176243.97	726098.35	88.60
340	1176251.77	726101.19	88.60
341	1176265.08	726106.03	83.88
342	1176212.60	726060.19	86.39
343	1176214.33	726061.19	86.39
344	1176219.52	726064.19	84.39
345	1176228.19	726069.19	84.39
346	1176238.35	726075.05	88.29
347	1176251.34	726082.55	88.60
348	1176258.53	726086.70	88.60
349	1176270.35	726093.53	84.05
350	1176227.14	726039.58	86.42

Point Table			
Point #	Northing	Easting	Elevation
351	1176228.67	726040.86	86.42
352	1176233.27	726044.72	84.42
353	1176240.93	726051.15	84.42
354	1176249.85	726058.63	88.29
355	1176261.34	726068.28	88.60
356	1176267.69	726073.61	88.60
357	1176277.58	726081.91	84.30
358	1176245.03	726021.82	86.45
359	1176246.31	726023.35	86.45
360	1176250.17	726027.95	84.45
361	1176256.60	726035.61	84.45
362	1176246.02	726044.46	88.29
363	1176273.66	726055.95	88.60
364	1176279.00	726062.31	88.60
365	1176286.73	726071.53	84.59
366	1176265.71	726007.45	86.48
367	1176266.71	726009.18	86.48
368	1176269.71	726014.38	84.48
369	1176274.71	726023.04	84.48
370	1176280.44	726032.96	88.29
371	1176287.94	726045.95	88.60
372	1176292.09	726053.14	88.60
373	1176297.62	726062.72	84.91
374	1176288.56	725996.89	86.51
375	1176289.25	725998.77	86.51
376	1176291.30	726004.41	84.51
377	1176294.72	726013.81	84.51
378	1176298.61	726024.49	88.29
379	1176303.74	726038.58	88.60
380	1176306.58	726046.38	88.60
381	1176310.00	726055.77	85.27
382	1176312.89	725990.47	86.54
383	1176313.24	725992.44	86.54
384	1176314.28	725998.35	84.54
385	1176316.01	726008.20	84.54
386	1176317.97	726019.30	88.29
387	1176320.58	726034.07	88.60
388	1176322.02	726042.25	88.60
389	1176323.60	726051.21	85.57
390	1176322.48	726051.34	85.59
391	1176331.12	726050.72	85.41
392	1176336.95	725988.37	86.57
393	1176336.97	725990.37	86.57
394	1176337.01	725996.37	84.57
395	1176337.08	726006.37	84.57
396	1176337.15	726017.56	88.30
397	1176337.26	726032.56	88.60
398	1176337.31	726040.86	88.60
399	1176337.31	726050.73	85.31
400	1176400.00	725988.20	86.66
401	1176400.00	725990.20	86.66
402	1176400.00	725996.21	84.66
403	1176400.00	726006.21	84.66
404	1176400.00	726017.13	88.30
405	1176400.00	726032.13	88.60
406	1176400.00	726040.43	88.60
407	1176400.00	726052.81	84.47
408	1176383.62	726053.64	84.23
409	1176389.62	726053.60	84.23
410	1176435.88	726050.11	85.29
411	1176450.00	725988.07	86.73
412	1176450.00	725990.07	86.73
413	1176450.00	725996.07	84.73
414	1176450.00	726006.07	84.73
415	1176450.00	726016.78	88.30
416	1176450.00	726031.78	88.60
417	1176450.00	726040.08	88.60
418	1176450.00	726051.51	84.79
419	1176500.00	725987.94	86.80
420	1176500.00	725989.94	86.80

Point Table			
Point #	Northing	Easting	Elevation
421	1176500.00	725995.94	84.80
422	1176500.00	726005.94	84.80
423	1176500.00	726016.44	88.30
424	1176500.00	726031.44	88.60
425	1176500.00	726039.74	88.60
426	1176500.45	726056.54	83.00
427	1176506.45	726056.50	83.00
428	1176550.00	725987.81	86.87
429	1176550.00	725989.81	86.87
430	1176550.00	725995.81	84.87
431	1176550.00	726005.81	84.87
432	1176550.00	726016.10	88.30
433	1176550.00	726031.10	88.60
434	1176550.00	726039.40	88.60
435	1176550.00	726053.21	84.00
436	1176561.86	726052.32	84.27
437	1176567.06	726047.08	86.00
438	1176577.06	726047.01	86.00
439	1176581.95	726051.87	84.37
440	1176600.00	725987.68	86.94
441	1176600.00	725989.68	86.94
442	1176600.00	725995.68	84.94
443	1176600.00	726005.68	84.94
444	1176600.00	726015.75	88.30
445	1176600.00	726030.75	88.60
446	1176600.00	726039.06	88.60
447	1176600.00	726052.42	84.14
448	1176650.00	725987.55	87.01
449	1176650.00	725989.55	87.01
450	1176650.00	725995.55	85.01
451	1176650.00	726005.55	85.01
452	1176650.00	726015.41	88.30
453	1176650.00	726030.41	88.60
454	1176650.00	726038.71	88.60
455	1176650.00	726053.95	83.52
456	1176700.00	725987.42	87.08
457	1176700.00	725989.42	87.08
458	1176700.00	725995.42	85.08
459	1176700.00	726005.42	85.08
460	1176700.00	726015.07	88.30
461	1176700.00	726030.07	88.60
462	1176700.00	726038.37	88.60
463	1176700.00	726055.47	82.90
464	1176750.00	725987.29	87.15
465	1176750.00	725989.29	87.15
466	1176750.00	725995.29	85.15
467	1176750.00	726005.29	85.15
468	1176750.00	726014.73	88.30
469	1176750.00	726029.73	88.60
470	1176750.00	726038.03	88.60
471	1176750.00	726056.99	82.28
472	1176800.00	725987.16	87.23
473	1176800.00	725989.16	87.23
474	1176800.00	725995.16	85.23
475	1176800.00	726005.16	85.23
476	1176800.00	726014.38	88.30
477	1176800.00	726029.38	88.60
478	1176800.00	726037.68	88.60
479	1176800.00	726058.52	81.66
480	1176850.00	725987.03	87.30
481	1176850.00	725989.03	87.30
482	1176850.00	725995.03	85.30
483	1176850.00	726005.03	85.30
484	1176850.00	726014.04	88.30
485	1176850.00	726029.04	88.60
486	1176850.00	726037.34	88.60
487	1176850.00	726060.04	81.03
488	1176900.00	725986.90	87.37
489	1176900.00	725988.90	87.37
490	1176900.00	725994.90	85.37

Point Table			
Point #	Northing	Easting	Elevation
491	1176900.00	726004.90	85.37
492	1176900.00	726013.70	88.30
493	1176900.00	726028.70	88.60
494	1176900.00	726037.00	88.60
495	1176900.00	726061.56	80.41
496	1176950.00	725986.77	87.44
497	1176950.00	725988.77	87.44
498	1176950.00	725994.77	85.44
499	1176950.00	726004.77	85.44
500	1176950.00	726013.36	88.30
501	1176950.00	726028.36	88.60
502	1176950.00	726036.66	88.60
503	1176950.00	726063.08	79.79
504	1177000.00	725986.64	87.51
505	1177000.00	725988.64	87.51
506	1177000.00	725994.64	85.51
507	1177000.00	726004.64	85.51
508	1177000.00	726013.01	88.30
509	1177000.00	726028.01	88.60
510	1177000.00	726036.31	88.60
511	1177000.00	726064.61	79.17
512	1177050.00	725986.51	87.58
513	1177050.00	725988.51	87.58
514	1177050.00	725994.51	85.58
515	1177050.00	726004.51	85.58
516	1177050.00	726012.67	88.30
517	1177050.00	726027.67	88.60
518	1177050.00	726035.97	88.60
519	1177050.00	726066.13	78.55
520	1177053.93	726066.24	78.50
521	1177073.93	726066.11	78.50
522	1177100.00	725986.38	87.65
523	1177100.00	725988.38	87.65
524	1177100.00	725994.38	85.65
525	1177100.00	726004.38	85.65
526	1177100.00	726012.33	88.30
527	1177100.00	726027.33	88.60
528	1177100.00	726035.63	88.60
529	1177100.00	726065.04	78.80
530	1177150.00	725986.24	87.72
531	1177150.00	725988.24	87.72
532	1177150.00	725994.24	85.72
533	1177150.00	726004.24	85.72
534	1177150.00	726011.98	88.30
535	1177150.00	726026.98	88.60
536	1177150.00	726035.28	88.60
537	1177150.00	726062.98	79.37
538	1177200.00	725986.11	87.79
539	1177200.00	725988.11	87.79
540	1177200.00	725994.11	85.79
541	1177200.00	726004.11	85.79
542	1177200.00	726011.64	88.30
543	1177200.00	726026.64	88.60
544	1177200.00	726034.94	88.60
545	1177200.00	726060.93	79.94
546	1177250.00	725985.98	87.86
547	1177250.00	725987.98	87.86
548	1177250.00	725993.98	85.86
549	1177250.00	726003.98	85.86
550	1177250.00	726011.30	88.30
551	1177250.00	726026.30	88.60
552	1177250.00	726034.60	88.60
553	1177250.00	726058.87	80.51
554	1177300.00	725985.85	87.93
555	1177300.00	725987.85	87.93
556	1177300.00	725993.85	85.93
557	1177300.00	726003.85	85.93
558	1177300.00	726010.96	88.30
559	1177300.00	726025.96	88.60
560	1177300.00	726034.26	88.60

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE: TOP OF SUBGRADE GRADING CONTROL POINTS TABLE - 1

PROJECT TITLE: HARDEE COUNTY LANDFILL
PHASE II SECTION II EXPANSION
CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813.621.0080 FAX 813.622.4757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO: 0993323.23
DSN. BY: SDA
DWN. BY: CEH
CHK. BY: SRF
QA/QC BY:
APP. BY: SRF

CADD FILE: 993323GRAD-CTRL
D

Point Table			
Point #	Northing	Easting	Elevation
561	1177300.00	726056.81	81.08
562	1177350.00	725985.72	88.00
563	1177350.00	725987.72	88.00
564	1177350.00	725993.72	86.00
565	1177350.00	726003.72	86.00
566	1177350.00	726010.61	88.30
567	1177350.00	726025.61	88.60
568	1177350.00	726033.91	88.60
569	1177350.00	726054.75	81.65
570	1177400.00	725985.59	88.07
571	1177400.00	725987.59	88.07
572	1177400.00	725993.59	86.07
573	1177400.00	726003.59	86.07
574	1177400.00	726010.27	88.30
575	1177400.00	726025.27	88.60
576	1177400.00	726033.57	88.60
577	1177400.00	726052.69	82.23
578	1177462.79	725985.43	88.16
579	1177462.81	725987.43	88.16
580	1177462.85	725993.43	86.16
581	1177462.92	726003.43	86.16
582	1177462.96	726009.84	88.30
583	1177463.06	726024.84	88.60
584	1177463.12	726033.14	88.60
585	1177463.20	726050.09	82.95
586	1177487.00	725987.47	88.19
587	1177486.67	725989.44	88.19
588	1177485.66	725995.36	86.19
589	1177484.00	726005.22	86.19
590	1177482.94	726011.45	88.30
591	1177480.44	726026.24	88.60
592	1177479.05	726034.42	88.60
593	1177476.30	726050.70	83.10
594	1177510.47	725993.68	88.22
595	1177509.80	725995.56	88.22
596	1177507.78	726001.22	86.22
597	1177504.43	726010.64	86.22
598	1177502.34	726016.50	88.30
599	1177497.31	726030.63	88.60
600	1177494.52	726038.45	88.60
601	1177489.13	726053.59	83.24
602	1177532.49	726003.86	88.25
603	1177531.50	726005.60	88.25
604	1177528.54	726010.82	86.25
605	1177523.60	726019.51	86.25
606	1177520.56	726024.85	88.29
607	1177513.15	726037.89	88.60
608	1177509.05	726045.11	88.60
609	1177501.52	726058.37	83.52
610	1177552.39	726017.71	88.28
611	1177551.12	726019.25	88.28
612	1177547.29	726023.87	86.28
613	1177540.92	726031.58	86.28
614	1177537.06	726036.24	88.29
615	1177527.50	726047.79	88.60
616	1177522.21	726054.19	88.60
617	1177513.22	726065.05	83.90
618	1177562.04	726026.54	88.30
619	1177560.63	726027.96	88.30
620	1177556.38	726032.20	86.30
621	1177549.31	726039.27	86.30
622	1177545.07	726043.52	88.30
623	1177569.84	726034.56	88.20
624	1177568.32	726035.86	88.20
625	1177563.75	726039.75	86.20
626	1177556.13	726046.23	86.20
627	1177551.33	726050.31	88.29
628	1177539.91	726060.03	88.60
629	1177533.59	726065.41	88.60
630	1177523.84	726073.71	84.33

Point Table			
Point #	Northing	Easting	Elevation
631	1177584.46	726054.03	87.98
632	1177582.74	726055.05	87.98
633	1177577.56	726058.08	85.98
634	1177568.93	726063.14	85.99
635	1177562.94	726066.65	88.29
636	1177550.01	726074.24	88.60
637	1177542.85	726078.44	88.60
638	1177533.05	726084.19	84.81
639	1177595.53	726075.85	87.77
640	1177593.65	726076.54	87.77
641	1177588.03	726078.63	85.77
642	1177578.65	726082.12	85.77
643	1177571.54	726084.76	88.29
644	1177557.48	726089.99	88.60
645	1177549.70	726092.88	88.60
646	1177540.50	726096.30	85.33
647	1177542.79	726101.25	85.53
648	1177602.68	726099.36	87.55
649	1177600.71	726099.72	87.55
650	1177594.80	726100.80	85.55
651	1177584.96	726102.60	85.55
652	1177576.86	726104.09	88.29
653	1177562.11	726106.80	88.60
654	1177553.94	726108.29	88.60
655	1177544.28	726110.07	85.32
656	1177605.66	726124.26	87.33
657	1177603.66	726124.32	87.33
658	1177597.66	726124.51	85.33
659	1177587.67	726124.83	85.33
660	1177578.75	726124.84	88.30
661	1177563.75	726124.84	88.60
662	1177555.45	726124.84	88.60
663	1177544.52	726124.84	84.96
664	1177543.24	726141.36	84.53
665	1177543.24	726147.36	84.53
666	1177606.44	726150.00	87.07
667	1177604.44	726150.00	87.07
668	1177598.44	726150.00	85.07
669	1177588.44	726150.00	85.07
670	1177578.75	726150.00	88.30
671	1177563.75	726150.00	88.60
672	1177555.45	726150.00	88.60
673	1177543.52	726150.00	84.63
674	1177546.12	726173.87	85.49
675	1177607.96	726200.00	86.56
676	1177605.96	726200.00	86.56
677	1177599.96	726200.00	84.56
678	1177589.95	726200.00	84.57
679	1177578.75	726200.00	88.30
680	1177563.75	726200.00	88.60
681	1177555.45	726200.00	88.60
682	1177544.27	726200.00	84.87
683	1177609.48	726250.00	86.05
684	1177607.47	726250.00	86.06
685	1177601.47	726250.00	84.06
686	1177591.47	726250.00	84.06
687	1177578.75	726250.00	88.30
688	1177563.75	726250.00	88.60
689	1177555.45	726250.00	88.60
690	1177610.24	726275.08	85.81
691	1177608.23	726275.01	85.81
692	1177602.22	726274.83	83.81
693	1177592.22	726274.83	83.81
694	1177578.75	726274.83	88.30
695	1177563.75	726274.83	88.60
696	1177555.45	726274.83	88.60
697	1177548.46	726274.83	86.27
698	1177544.51	726275.46	87.40
699	1177540.65	726259.37	85.64
700	1177544.65	726258.84	85.00

Point Table			
Point #	Northing	Easting	Elevation
701	1177540.60	726254.57	85.00
702	1177544.28	726252.84	84.88
703	1177538.81	726251.78	85.00
704	1177541.53	726248.64	83.96
705	1177541.51	726241.57	83.95
706	1177608.71	726300.00	85.56
707	1177606.70	726300.00	85.56
708	1177600.36	726300.00	83.56
709	1177591.12	726300.00	83.56
710	1177578.75	726300.00	87.04
711	1177563.75	726300.00	87.34
712	1177604.17	726341.34	85.15
713	1177597.33	726340.82	83.15
714	1177589.35	726340.56	83.15
715	1177590.17	726321.79	83.34
716	1177598.73	726321.98	83.34
717	1176266.35	726102.64	83.90
718	1176266.79	726131.77	83.75
719	1176267.06	726150.00	83.66
720	1176267.81	726200.00	83.41
721	1176268.12	726221.03	83.31
722	1176269.37	726250.98	83.16
723	1176269.37	726254.91	83.14
724	1176260.18	726254.96	84.09
725	1176263.37	726262.77	83.12
726	1176269.37	726262.77	83.11
727	1176274.37	726254.89	83.29
728	1176271.21	726266.11	86.93
729	1176260.86	726266.51	87.62
730	1176322.48	726100.00	85.45
731	1176322.48	726150.00	85.30
732	1176322.48	726200.00	85.15
733	1176322.48	726250.71	84.99
734	1176322.46	726254.62	84.98
735	1176383.62	726100.00	84.00
736	1176389.62	726100.00	84.00
737	1176383.62	726150.00	83.75
738	1176389.62	726150.00	83.75
739	1176383.62	726200.00	83.50
740	1176389.62	726200.00	83.50
741	1176383.62	726250.16	83.25
742	1176389.62	726250.16	83.25
743	1176378.62	726254.32	83.36
744	1176383.62	726254.29	83.21
745	1176389.62	726254.26	83.21
746	1176394.62	726254.23	83.27
747	1176383.62	726259.53	83.17
748	1176389.62	726259.53	83.17
749	1176382.59	726261.95	85.80
750	1176386.67	726262.24	85.87
751	1176390.66	726261.94	85.79
752	1176266.37	726266.93	87.28
753	1176435.88	726100.00	85.04
754	1176435.88	726150.00	84.79
755	1176435.88	726200.00	84.54
756	1176435.88	726209.29	84.50
757	1176433.66	726249.99	83.95
758	1176433.61	726254.02	83.96
759	1176500.45	726100.00	82.78
760	1176506.45	726100.00	82.78
761	1176500.45	726150.00	82.53
762	1176506.45	726150.00	82.53
763	1176500.45	726200.00	82.28
764	1176506.45	726200.00	82.28
765	1176500.45	726209.28	82.24
766	1176506.45	726209.28	82.24
767	1176483.79	726249.81	82.39
768	1176483.81	726253.74	82.06
769	1176500.45	726249.87	82.03
770	1176500.45	726253.65	81.97

Point Table			
Point #	Northing	Easting	Elevation
771	1176506.45	726249.87	82.03
772	1176506.45	726253.62	81.97
773	1176495.45	726253.68	81.96
774	1176500.45	726261.05	81.86
775	1176506.45	726261.05	81.86
776	1176511.45	726253.59	81.97
777	1176508.18	726264.29	85.53
778	1176503.44	726264.93	85.74
779	1176498.74	726264.27	85.51
780	1176561.09	726100.00	84.01
781	1176567.06	726100.00	86.00
782	1176577.06	726100.00	86.00
783	1176560.29	726150.00	83.74
784	1176567.06	726150.00	86.00
785	1176577.06	726150.00	86.00
786	1176559.48	726200.00	83.48
787	1176567.06	726200.00	86.00
788	1176577.06	726200.00	86.00
789	1176581.02	726200.00	84.68
790	1176559.33	726209.29	83.43
791	1176567.06	726209.29	86.00
792	1176537.47	726249.68	82.61
793	1176537.94	726253.45	82.03
794	1176554.72	726249.44	82.94
795	1176554.76	726253.35	82.94
796	1176567.06	726249.29	86.00
797	1176567.06	726253.29	85.99
798	1176577.06	726249.29	86.00
799	1176577.06	726253.29	86.00
800	1176579.55	726242.88	85.17
801	1176582.98	726245.74	86.37
802	1176586.31	726239.39	84.90
803	1176581.76	726235.47	84.45
804	1176583.10	726233.87	83.98
805	1176583.10	726227.78	83.98
806	1176590.42	726226.51	83.92
807	1176591.22	726232.46	83.91
808	1176614.86	726241.31	86.56
809	1176591.30	726239.30	84.98
810	1176591.49	726235.30	84.87
811	1176614.77	726237.30	85.51
812	1176628.57	726239.88	86.42
813	1176628.47	726235.87	85.41
814	1176642.79	726229.98	83.48
815	1176642.80	726223.98	83.48
816	1176650.00	726245.52	91.34
817	1176650.00	726241.11	86.70
818	1176650.00	726237.11	84.85
819	1176669.48	726241.66	86.87
820	1176687.53	726240.72	86.34
821	1176669.44	726237.66	84.84
822	1176687.08	726236.74	84.84
823	1176703.45	726240.47	85.94
824	1176702.33	726236.49	84.53
825	1176701.28	726231.79	82.99
826	1176700.30	726225.77	82.99
827	1176720.57	726241.37	85.86
828	1176739.00	726241.86	85.75
829	1176739.20	726237.86	84.44
830	1176738.87	726232.53	82.67
831	1176738.95	726226.53	82.67
832	1176754.20	726243.05	86.22
833	1176754.36	726239.05	83.98
834	1176767.91	726243.10	86.21
835	1176767.82	726239.10	84.40
836	1176783.85	726242.35	86.09
837	1176783.88	726238.34	84.76
838	1176800.32	726230.01	82.15
839	1176800.13	726224.01	82.15
840	1176800.00	726243.33	86.42

Point Table			
Point #	Northing	Easting	Elevation
841	1176799.90	726239.33	85.26
842	1176835.26	726244.33	86.17
843	1176835.50	726240.34	85.37
844	1176836.13	726229.79	81.85
845	1176835.98	726223.79	81.85
846	1176890.36	726247.84	86.60
847	1176890.39	726243.84	84.85
848	1176918.65	726247.16	86.24
849	1176918.75	726243.15	84.80
850	1176900.00	726227.11	81.31
851	1176900.00	726221.10	81.31
852	1176950.00	726225.01	80.89
853	1176950.00	726219.00	80.89
854	1176940.16	726245.08	85.16
855	1176940.07	726249.09	87.15
856	1176963.02	726247.14	86.57
857	1176962.71	726243.15	85.09
858	1176988.86	726245.83	86.87
859	1176988.54	726241.84	85.85
860	1177000.00	726222.91	80.47
861	1177000.00	726216.90	80.47
862	1177007.98	726243.80	86.86
863	1177028.58	726242.95	86.83
864	1177033.93	726245.41	89.02
865	1177034.40	726243.21	86.91
866	1177031.34	726222.15	80.20
867	1177031.32	726216.15	80.20
868	1177044.39	726243.66	87.07
869	1177053.30	726244.06	87.27
870	1177052.57	726240.02	85.92
871	1177028.59	726238.95	85.83
872	1177007.69	726239.81	86.15
873	1177063.93	726239.96	85.69
874	1177084.54	726246.46	89.56
875	1177084.57	726244.07	87.18
876	1177083.48	726240.06	85.65
877	1177093.55	726240.19	85.74
878	1177093.56	726244.19	87.21
879	1177059.24	726222.54	79.97
880	1177059.43	726216.54	79.96
881	1177060.93	726216.70	79.81
882	1177066.93	726216.70	79.81
883	1177068.00	726216.70	79.96
884	1177067.96	726222.70	79.96
885	1177100.00	726216.89	80.23
886	1177100.00	726222.89	80.23
887	1177100.00	726240.07	85.80
888	1177124.23	726239.83	85.50
889	1177158.94	726223.71	80.73
890	1177159.17	726217.71	80.73
891	1177159.77	726238.74	85.75
892	1177179.95	726240.67	85.30
893	1177200.53	726239.17	85.37
894	1177122.42	726243.92	87.05
895	1177159.62	726242.74	86.61
896	1177179.90	726244.68	87.24
897	1177200.68	726243.17	86.66
898	1177200.06	726226.29	81.07
899	1177200.00	726220.28	81.07
900	1177214.65	726243.17	86.59
901	1177214.78	726239.17	85.26
902	1177250.16	726244.89	87.06
903	1177250.11	726240.89	85.57
904	1177250.00	726229.43	81.50
905	1177250.00	726223.42	81.50
906	1177266.25	726243.93	86.75
907	1177266.27	726239.92	85.09
908	1177280.25	726244.90	86.99
909	1177295.00	726245.46	87.06
910	1177295.65	726232.29	81.88

Point Table			
Point #	Northing	Easting	Elevation
911	1177295.47	726226.27	81.88
912	1177303.88	726246.00	87.31
913	1177294.71	726247.36	88.96
914	1177303.91	726241.99	83.69
915	1177317.21	726245.37	86.69
916	1177317.09	726241.37	84.54
917	1177332.71	726245.20	86.41
918	1177350.00	726244.62	86.11
919	1177350.00	726240.61	84.29
920	1177350.00	726233.80	82.34
921	1177350.00	726227.80	82.34
922	1177370.54	726239.80	83.44
923	1177370.79	726243.79	85.64
924	1177405.29	726241.46	84.62
925	1177405.43	726237.45	83.55
926	1177410.43	726242.10	84.89
927	1177410.66	726238.10	83.47
928	1177403.51	726235.17	82.79
929	1177403.59	726229.17	82.79
930	1177386.13	726245.39	87.94
931	1177385.93	726242.51	85.05
932	1177384.88	726238.59	82.75
933	1177431.52	726241.91	85.04
934	1177428.66	726237.94	83.30
935	1177450.00	726241.15	85.03
936	1177455.75	726235.27	83.23
937	1177455.96	726229.27	83.23
938	1177467.15	726240.50	84.70
939	1177505.51	726242.89	85.05
940	1177505.93	726238.91	83.65
941	1177506.57	726232.94	83.66
942	1177527.05	726246.24	84.97
943	1177527.93	726242.32	83.84
944	1177528.80	726236.38	83.85
945	1176581.96	726057.88	84.37
946	1176600.00	726058.43	84.14
947	1176650.00	726059.95	83.52
948	1176700.00	726061.47	82.90
949	1176750.00	726063.00	82.28
950	1176800.00	726064.52	81.65
951	1176850.00	726066.04	81.03
952	1176900.00	726067.56	80.41
953	1176950.00	726069.09	79.79
954	1177000.00	726070.61	79.17
955	1177050.00	726072.13	78.54
956	1177053.93	726072.25	78.50
957	1176577.84	726096.00	85.74
958	1176600.00	726096.77	85.47
959	1176650.00	726098.49	84.85
960	1176700.00	726100.22	0.00
961	1176750.00	726101.94	83.62
962	1176800.00	726103.66	83.01
963	1176850.00	726105.39	82.39
964	1176900.00	726107.11	81.78
965	1176950.00	726108.84	81.16
966	1177000.00	726110.56	80.55
967	1177050.00	726112.28	0.00
968	1177058.81	726112.56	79.83
969	1176581.36	726141.36	84.57
970	1176600.00	726141.36	84.35
971	1176650.00	726141.36	83.78
972	1176700.00	726141.36	83.21
973	1176750.00	726141.36	82.64
974	1176800.00	726141.36	82.07
975	1176850.00	726141.36	81.49
976	1176900.00	726141.36	80.92
977	1176950.00	726141.36	80.35
978	1177000.00	726141.36	79.78
979	1177050.00	726141.36	79.21
980	1177060.93	726141.36	79.05

Point Table			
Point #	Northing	Easting	Elevation
981	1177060.93	726147.36	79.11
982	1177050.00	726147.36	79.21
983	1177000.00	726147.36	79.78
984	1176950.00	726147.36	80.35
985	1176900.00	726147.36	80.92
986	1176850.00	726147.36	81.49
987	1176800.00	726147.36	82.07
988	1176750.00	726147.36	82.64
989	1176700.00	726147.36	83.21
990	1176650.00	726147.36	83.78
991	1176600.00	726147.36	84.35
992	1176581.36	726147.36	84.57
993	1176578.84	726170.50	85.41
994	1176600.00	726171.10	85.18
995	1176630.39	726172.15	84.87
996	1176650.00	726173.55	84.70
997	1176700.00	726176.59	84.23
998	1176750.00	726178.87	83.74
999	1176800.00	726180.66	83.23
1000	1176850.00	726182.65	82.73
1001	1176900.00	726184.29	82.22
1002	1176950.00	726185.94	81.70
1003	1177000.00	726187.59	81.19
1004	1177058.78	726190.54	80.62
1005	1177069.08	726190.61	80.62
1006	1177100.00	726189.14	80.92
1007	1177150.00	726186.87	81.41
1008	1177200.00	726185.24	81.93
1009	1177250.00	726184.00	82.46
1010	1177300.00	726182.83	82.99
1011	1177350.00	726181.03	83.50
1012	1177400.00	726179.05	84.00
1013	1177450.00	726176.81	84.49
1014	1177466.09	726175.73	84.64
1015	1177500.00	726174.98	85.00
1016	1177500.00	726147.36	84.04
1017	1177450.00	726147.36	83.46
1018	1177400.00	726147.36	82.89
1019	1177350.00	726147.36	82.32
1020	1177300.00	726147.36	81.75
1021	1177250.00	726147.36	81.18
1022	1177200.00	726147.36	80.60
1023	1177150.00	726147.36	80.03
1024	1177100.00	726147.36	79.46
1025	1177066.93	726147.36	79.11
1026	1177068.51	726141.36	79.05
1027	1177100.00	726141.36	79.46
1028	1177150.00	726141.36	80.03
1029	1177200.00	726141.36	80.60
1030	1177250.00	726141.36	81.18
1031	1177300.00	726141.36	81.75
1032	1177350.00	726141.36	82.32
1033	1177400.00	726141.36	82.89
1034	1177450.00	726141.36	83.46
1035	1177500.00	726141.36	84.04
1036	1177070.69	726112.40	79.85
1037	1177100.00	726111.81	80.20
1038	1177150.00	726110.62	80.80
1039	1177200.00	726109.42	81.40
1040	1177250.00	726108.23	82.00
1041	1177300.00	726107.03	82.61
1042	1177350.00	726105.84	83.21
1043	1177400.00	726104.65	83.81
1044	1177450.00	726103.45	84.41
1045	1177500.00	726102.26	85.01
1046	1177073.93	726072.11	78.50
1047	1177100.00	726071.05	78.79
1048	1177150.00	726068.99	79.36
1049	1177200.00	726066.93	79.94
1050	1177250.00	726064.87	80.51

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE
TOP OF SUBGRADE GRADING CONTROL POINTS TABLE - 2

PROJECT TITLE
HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09190033.23 | DWN. BY: SDA | Q/A RVW BY: CEH | DSN. BY: SRF | CHK. BY: SRF | APP. BY: SRF

CADD FILE: 993323GRAD-CTRL

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. **11** of 26

CONFORMED
DATE: 03/17/14

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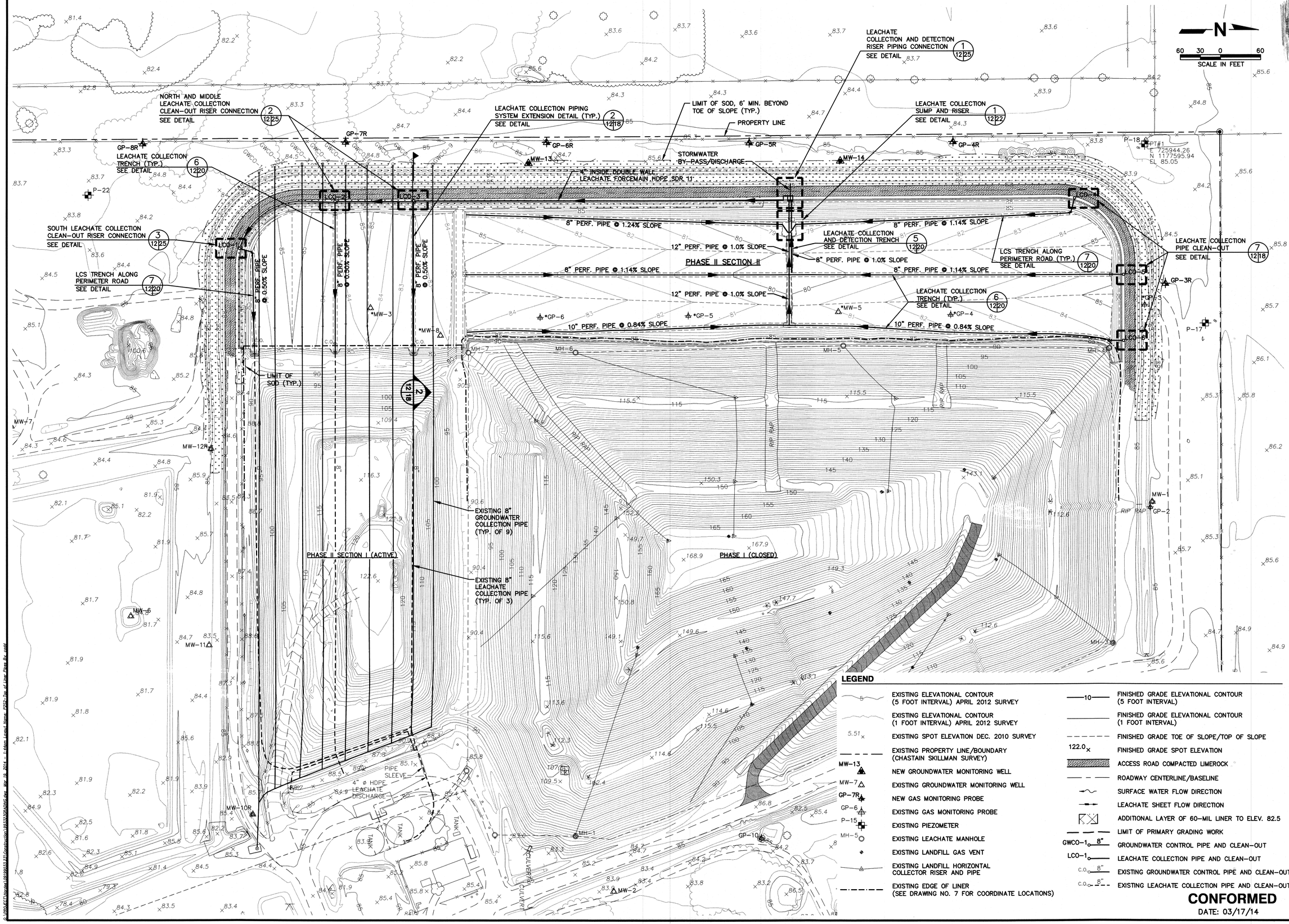

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE
LEACHATE COLLECTION SYSTEM SITE PLAN

PROJECT TITLE
HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 MACDILL AVE, SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6707
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09199033.23 | DSN. BY: SDA | C/A RVW BY: CEH | DSN. BY: SRF | CHK. BY: SRF | APP. BY: SRF

CADD FILE: 993323GRADING

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. **12** of **26**

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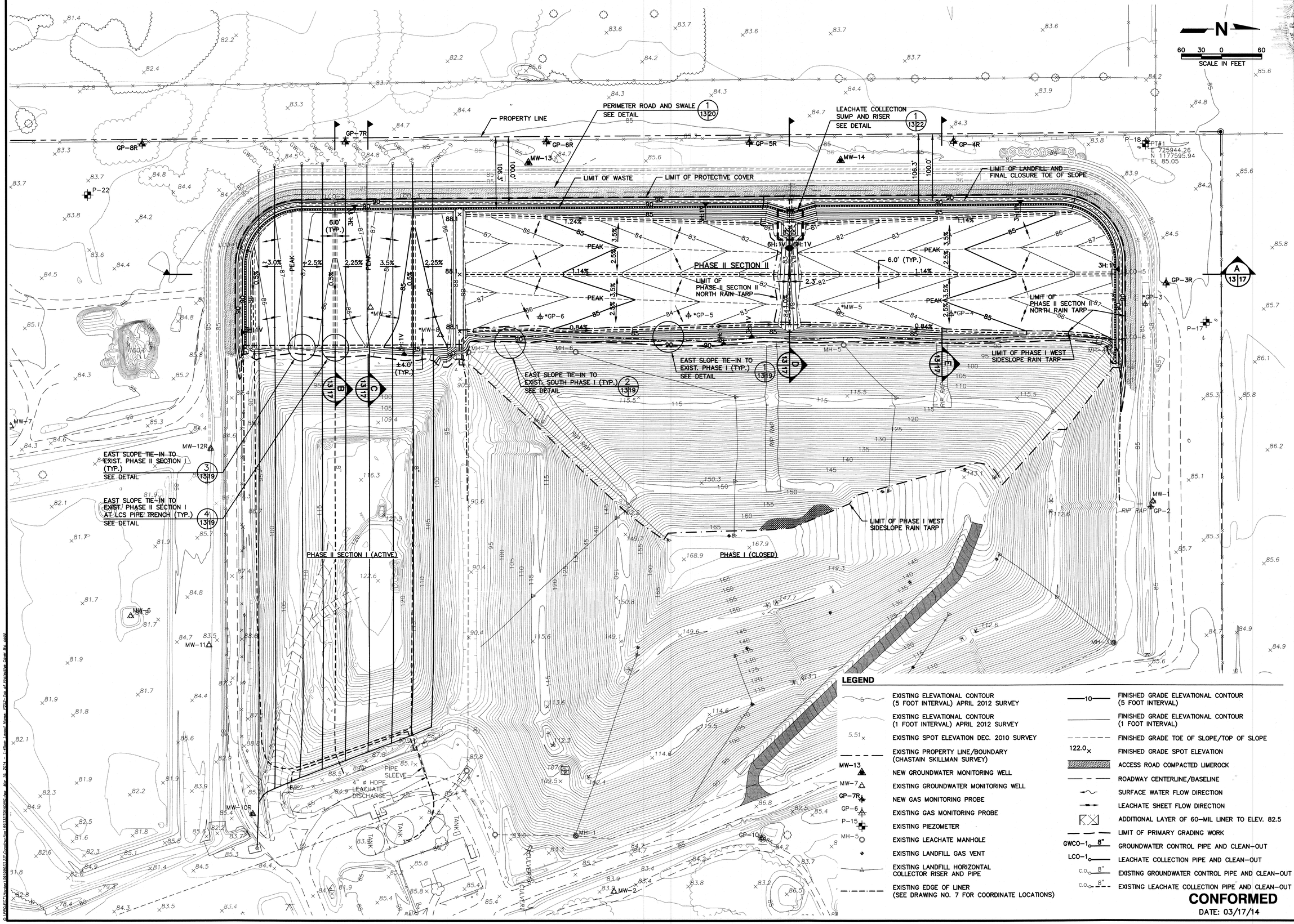

LEGEND

- EXISTING ELEVATIONAL CONTOUR (5 FOOT INTERVAL) APRIL 2012 SURVEY
- EXISTING ELEVATIONAL CONTOUR (1 FOOT INTERVAL) APRIL 2012 SURVEY
- EXISTING SPOT ELEVATION DEC. 2010 SURVEY
- EXISTING PROPERTY LINE/BOUNDARY (CHASTAIN SKILLMAN SURVEY)
- NEW GROUNDWATER MONITORING WELL
- EXISTING GROUNDWATER MONITORING WELL
- NEW GAS MONITORING PROBE
- EXISTING GAS MONITORING PROBE
- EXISTING PIEZOMETER
- EXISTING LEACHATE MANHOLE
- EXISTING LANDFILL GAS VENT
- EXISTING LANDFILL HORIZONTAL COLLECTOR RISER AND PIPE
- EXISTING EDGE OF LINER (SEE DRAWING NO. 7 FOR COORDINATE LOCATIONS)
- FINISHED GRADE ELEVATIONAL CONTOUR (5 FOOT INTERVAL)
- FINISHED GRADE ELEVATIONAL CONTOUR (1 FOOT INTERVAL)
- FINISHED GRADE TOE OF SLOPE/TOP OF SLOPE
- FINISHED GRADE SPOT ELEVATION
- ACCESS ROAD COMPACTED LIMEROCK
- ROADWAY CENTERLINE/BASELINE
- SURFACE WATER FLOW DIRECTION
- LEACHATE SHEET FLOW DIRECTION
- ADDITIONAL LAYER OF 60-MIL LINER TO ELEV. 82.5
- LIMIT OF PRIMARY GRADING WORK
- GROUNDWATER CONTROL PIPE AND CLEAN-OUT
- LEACHATE COLLECTION PIPE AND CLEAN-OUT
- EXISTING GROUNDWATER CONTROL PIPE AND CLEAN-OUT
- EXISTING LEACHATE COLLECTION PIPE AND CLEAN-OUT

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE
TOP OF PROTECTIVE COVER
BOTTOM CELL GRADING SITE PLAN

PROJECT TITLE
HARDEE COUNTY LANDFILL
PHASE II SECTION II EXPANSION
CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY
BOARD OF
COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD, SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09199033.23
DWN. BY: SDA
CHK. BY: SRF
DSN. BY: SRF
QA/QC BY: CEH
APP. BY: SRF

CADD FILE: 993323GRADING
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. **13** of **26**

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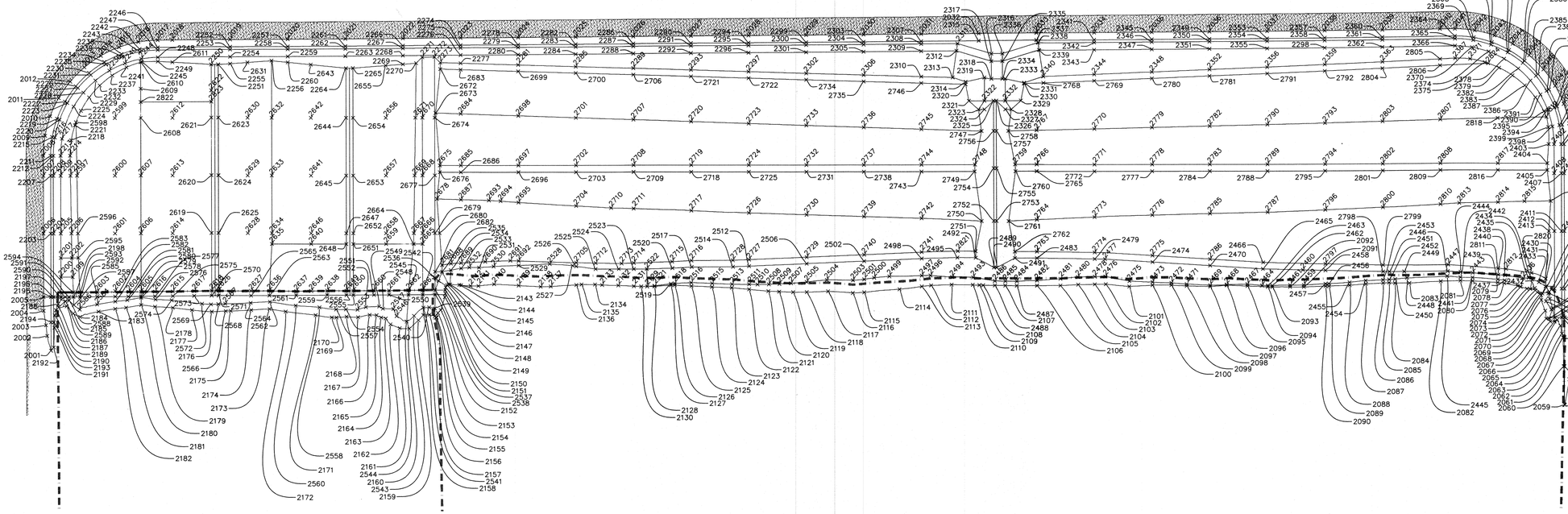

LEGEND

- 2001 — TOP OF PROTECTIVE COVER HORIZONTAL AND VERTICAL CONTROL POINT AND IDENTIFICATION NUMBER (SEE DRAWING NO. 15 AND 16 FOR NORTHING AND EASTING COORDINATES AND ELEVATIONS.)
- VERTICAL GRADE BREAK/TRANSITION LINE
- LIMIT OF EXISTING PHASE I AND PHASE II SECTION I EDGE OF LINER
- COMPACTED LIMEROCK ACCESS ROAD

NOTES:

1. GRADING CONTROL POINTS SHOWN REPRESENT THE TOP OF PROTECTIVE COVER (DRAINAGE SAND) OR TOP OF COMPACTED SELECT FILL (SEE SECTIONS ON DRAWING NO. 18, AND DETAIL 1 ON DRAWING NO. 20).
2. GRADING CONTROL POINT NUMBERS 2001 THROUGH 2192 SHOWN AROUND THE PERIMETER REPRESENT THE LIMITS OF PROTECTIVE COVER (DRAINAGE SAND) OR COMPACTED SELECT FILL.

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

DRAWING TITLE: TOP OF PROTECTIVE COVER GRADING CONTROL POINTS SITE PLAN

PROJECT TITLE: HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-0757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09990033.23
DWN: BY SDA | CHK: BY SRF | Q/A RVW: BY CEH | APP: BY SRF

CADD FILE: 993323GRAD-CTRL
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. 14 of 26

A:\SCS Projects\09990033.23\Permitting\993323GRAD-CTRL.dwg, Mar 19, 2014 - 1:45pm, Layout: Layout, PSPC: Sys. of Projection Group, Inc. 4956

Point Table			
Point #	Northing	Easting	Elevation
2001	1176244.24	726301.40	88.38
2002	1176240.94	726288.60	87.92
2003	1176239.94	726279.40	88.05
2004	1176237.94	726266.89	88.01
2005	1176237.94	726255.00	88.60
2006	1176237.94	726200.00	88.60
2007	1176237.94	726150.00	88.60
2008	1176237.94	726132.55	88.60
2009	1176239.47	726115.19	88.60
2010	1176244.00	726098.36	88.60
2011	1176251.38	726082.58	88.60
2012	1176261.37	726068.30	88.60
2013	1176273.67	726055.96	88.60
2014	1176287.96	726045.98	88.60
2015	1176303.76	726038.63	88.60
2016	1176320.58	726034.12	88.60
2017	1176337.26	726032.56	88.60
2018	1176350.00	726032.47	88.60
2019	1176400.00	726032.13	88.60
2020	1176450.00	726031.78	88.60
2021	1176500.00	726031.44	88.60
2022	1176550.00	726031.10	88.60
2023	1176600.00	726030.75	88.60
2024	1176650.00	726030.41	88.60
2025	1176700.00	726030.07	88.60
2026	1176750.00	726029.73	88.60
2027	1176800.00	726029.38	88.60
2028	1176850.00	726029.04	88.60
2029	1176900.00	726028.70	88.60
2030	1176950.00	726028.36	88.60
2031	1177000.00	726028.01	88.60
2032	1177050.00	726027.67	88.60
2033	1177100.00	726027.33	88.60
2034	1177150.00	726026.98	88.60
2035	1177200.00	726026.64	88.60
2036	1177250.00	726026.30	88.60
2037	1177300.00	726025.96	88.60
2038	1177350.00	726025.61	88.60
2039	1177400.00	726025.27	88.60
2040	1177450.00	726024.93	88.60
2041	1177463.06	726024.84	88.60
2042	1177480.43	726026.27	88.60
2043	1177497.29	726030.68	88.60
2044	1177513.13	726037.93	88.60
2045	1177527.49	726047.81	88.60
2046	1177539.89	726060.05	88.60
2047	1177549.97	726074.27	88.60
2048	1177557.44	726090.01	88.60
2049	1177562.09	726106.80	88.60
2050	1177563.75	726124.84	88.60
2051	1177563.75	726150.00	88.60
2052	1177563.75	726200.00	88.60
2053	1177563.75	726250.00	88.60
2054	1177563.75	726274.83	88.60
2055	1177563.75	726300.00	87.34
2056	1177563.75	726307.87	86.95
2057	1177561.45	726328.39	86.69
2058	1177557.45	726350.74	86.90
2059	1177557.11	726350.27	86.93
2060	1177556.54	726317.07	88.59
2061	1177556.11	726292.20	89.83
2062	1177555.11	726288.88	90.00
2063	1177553.81	726282.06	89.90
2064	1177551.05	726276.95	89.24
2065	1177548.75	726278.40	89.86
2066	1177544.99	726278.42	90.39
2067	1177541.51	726275.95	90.43
2068	1177540.62	726269.08	89.43
2069	1177537.31	726259.82	89.00
2070	1177537.15	726255.84	88.61

Point Table			
Point #	Northing	Easting	Elevation
2071	1177536.36	726254.56	88.60
2072	1177533.77	726253.13	88.53
2073	1177532.10	726251.46	88.37
2074	1177527.72	726250.41	88.74
2075	1177524.86	726250.03	89.08
2076	1177519.52	726248.53	88.47
2077	1177516.81	726247.81	88.19
2078	1177505.24	726245.45	87.63
2079	1177499.45	726244.72	87.48
2080	1177477.54	726243.55	87.38
2081	1177467.15	726243.25	87.45
2082	1177450.00	726243.63	87.50
2083	1177422.72	726244.88	87.63
2084	1177410.27	726244.92	87.71
2085	1177405.18	726244.50	87.66
2086	1177400.01	726244.75	87.73
2087	1177385.07	726245.46	87.96
2088	1177370.96	726246.51	88.36
2089	1177352.98	726247.13	88.65
2090	1177350.00	726247.17	88.67
2091	1177331.16	726247.71	88.92
2092	1177319.16	726247.67	88.95
2093	1177303.87	726247.70	89.01
2094	1177300.00	726247.58	89.00
2095	1177282.24	726246.83	88.84
2096	1177264.45	726246.21	89.02
2097	1177250.00	726247.30	89.47
2098	1177229.64	726246.76	89.46
2099	1177216.34	726245.99	89.32
2100	1177200.00	726245.94	89.39
2101	1177179.88	726247.15	89.71
2102	1177159.54	726245.10	88.97
2103	1177150.00	726245.24	88.98
2104	1177135.50	726245.47	89.02
2105	1177120.21	726246.33	89.39
2106	1177100.00	726246.47	89.56
2107	1177072.54	726246.27	89.42
2108	1177053.27	726245.97	89.18
2109	1177050.00	726245.78	89.09
2110	1177044.31	726245.58	88.98
2111	1177025.93	726245.28	89.05
2112	1177008.14	726245.89	88.95
2113	1177000.00	726246.77	89.08
2114	1176980.65	726249.10	89.44
2115	1176950.00	726251.71	90.14
2116	1176939.99	726252.27	90.33
2117	1176918.57	726250.79	89.87
2118	1176900.00	726251.49	90.19
2119	1176888.19	726251.45	90.28
2120	1176876.09	726251.07	90.26
2121	1176866.81	726250.60	90.19
2122	1176850.00	726249.01	89.83
2123	1176835.07	726247.67	89.51
2124	1176817.81	726246.94	89.38
2125	1176800.00	726246.16	89.25
2126	1176785.45	726245.41	89.09
2127	1176782.14	726245.46	89.13
2128	1176767.98	726246.43	89.54
2129	1176761.52	726246.52	89.62
2130	1176756.33	726246.55	89.67
2131	1176750.00	726246.30	89.65
2132	1176736.57	726245.57	89.53
2133	1176722.44	726245.14	89.52
2134	1176716.37	726244.70	89.43
2135	1176704.66	726244.67	90.12
2136	1176700.00	726245.07	90.59
2137	1176677.91	726246.42	91.82
2138	1176669.11	726246.58	91.79
2139	1176650.00	726245.52	91.34
2140	1176628.69	726244.28	90.82

Point Table			
Point #	Northing	Easting	Elevation
2141	1176614.97	726245.89	91.14
2142	1176608.23	726245.79	91.23
2143	1176600.00	726245.13	90.89
2144	1176598.43	726244.94	90.75
2145	1176590.48	726244.59	90.14
2146	1176589.18	726244.54	90.05
2147	1176587.85	726245.13	90.08
2148	1176586.59	726247.10	90.21
2149	1176586.27	726249.41	90.48
2150	1176586.28	726252.43	90.78
2151	1176585.79	726255.45	91.19
2152	1176582.22	726266.78	91.51
2153	1176579.81	726269.30	91.58
2154	1176578.62	726273.20	92.46
2155	1176578.06	726273.23	92.31
2156	1176577.06	726272.16	92.29
2157	1176572.56	726270.79	91.83
2158	1176567.16	726270.98	91.88
2159	1176562.88	726275.49	92.32
2160	1176554.92	726282.87	92.78
2161	1176546.61	726282.32	92.13
2162	1176538.59	726278.99	90.57
2163	1176534.56	726273.84	88.80
2164	1176530.56	726273.06	88.52
2165	1176526.55	726271.02	87.81
2166	1176520.55	726270.78	87.72
2167	1176510.56	726272.84	88.39
2168	1176500.55	726272.31	88.19
2169	1176491.72	726273.07	88.41
2170	1176487.72	726273.00	88.39
2171	1176473.71	726270.98	88.07
2172	1176447.69	726267.98	88.04
2173	1176433.68	726265.69	87.85
2174	1176417.69	726266.70	87.79
2175	1176400.00	726267.47	87.74
2176	1176383.69	726268.22	87.86
2177	1176366.52	726266.66	87.76
2178	1176350.00	726264.57	87.51
2179	1176334.51	726263.61	87.65
2180	1176322.50	726262.09	87.47
2181	1176309.42	726264.27	87.70
2182	1176300.00	726265.28	87.70
2183	1176285.44	726267.68	87.97
2184	1176269.47	726272.22	88.91
2185	1176263.45	726269.27	87.92
2186	1176257.92	726262.91	87.42
2187	1176250.87	726263.89	89.97
2188	1176250.54	726260.90	89.08
2189	1176248.58	726266.27	89.47
2190	1176247.58	726270.70	89.58
2191	1176247.19	726281.47	89.17
2192	1176246.58	726298.57	88.52
2193	1176246.58	726276.82	89.61
2194	1176244.24	726276.82	89.61
2195	1176244.24	726255.00	90.70
2196	1176246.58	726255.00	90.70
2197	1176252.88	726255.00	88.60
2198	1176263.73	726254.94	85.24
2199	1176263.16	726237.80	85.32
2200	1176252.88	726237.80	88.60
2201	1176252.88	726221.12	88.60
2202	1176262.47	726221.12	85.41
2203	1176244.24	726200.00	90.70
2204	1176246.58	726200.00	90.70
2205	1176252.88	726200.00	88.60
2206	1176262.15	726200.00	85.51
2207	1176244.24	726150.00	90.70
2208	1176246.58	726150.00	90.70
2209	1176252.88	726150.00	88.60
2210	1176261.40	726150.00	85.76

Point Table			
Point #	Northing	Easting	Elevation
2211	1176244.24	726132.55	90.70
2212	1176246.58	726132.55	90.70
2213	1176252.88	726132.55	88.60
2214	1176261.14	726132.55	85.85
2215	1176245.66	726116.28	90.69
2216	1176247.97	726116.69	90.70
2217	1176254.17	726117.78	88.61
2218	1176262.11	726119.18	85.92
2219	1176249.89	726100.51	90.68
2220	1176252.09	726101.31	90.70
2221	1176265.40	726106.15	85.98
2222	1176256.79	726085.70	90.70
2223	1176258.82	726086.87	90.70
2224	1176264.28	726090.02	88.61
2225	1176270.62	726093.69	86.16
2226	1176266.16	726072.32	90.69
2227	1176267.96	726073.83	90.70
2228	1176272.78	726077.88	88.62
2229	1176277.83	726082.12	86.40
2230	1176277.71	726060.78	90.68
2231	1176279.22	726062.57	90.70
2232	1176283.27	726067.39	88.60
2233	1176286.94	726071.78	86.69
2234	1176291.09	726051.41	90.69
2235	1176292.26	726053.43	90.70
2236	1176295.41	726058.89	88.62
2237	1176297.75	726063.02	87.02
2238	1176305.89	726044.50	0.00
2239	1176306.69	726046.70	0.00
2240	1176308.85	726052.62	88.60
2241	1176310.11	726056.09	87.37
2242	1176321.67	726040.28	90.68
2243	1176322.08	726042.58	90.70
2244	1176323.17	726048.79	88.62
2245	1176323.66	726051.55	87.67
2246	1176337.30	726038.86	90.70
2247	1176337.31	726041.20	90.70
2248	1176337.36	726047.50	88.60
2249	1176337.38	726051.08	87.41
2250	1176383.62	726053.98	86.33
2251	1176389.62	726053.94	86.33
2252	1176400.00	726038.43	90.70
2253	1176400.00	726040.77	90.70
2254	1176400.00	726047.07	88.60
2255	1176400.00	726053.16	86.57
2256	1176435.88	726050.45	87.39
2257	1176450.00	726038.08	90.70
2258	1176450.00	726040.42	90.70
2259	1176450.00	726046.72	88.60
2260	1176450.00	726051.86	86.89
2261	1176500.00	726037.74	90.70
2262	1176500.00	726040.08	90.70
2263	1176500.00	726046.38	88.60
2264	1176500.45	726056.89	85.10
2265	1176506.45	726056.84	85.10
2266	1176550.00	726037.40	90.70
2267	1176550.00	726039.74	90.70
2268	1176550.00	726046.04	88.60
2269	1176550.00	726053.56	86.09
2270	1176561.49	726052.69	86.36
2271	1176566.72	726047.42	88.10
2272	1176577.40	726047.35	88.10
2273	1176582.31	726052.23	86.46
2274	1176600.00	726037.06	90.70
2275	1176600.00	726039.40	90.70
2276	1176600.00	726045.70	88.60
2277	1176600.00	726052.76	86.24
2278	1176650.00	726036.71	90.70
2279	1176650.00	726039.05	90.70
2280	1176650.00	726045.35	88.60

Point Table			
Point #	Northing	Easting	Elevation
2281	1176650.00	726054.29	85.62
2282	1176700.00	726036.37	90.70
2283	1176700.00	726038.71	90.70
2284	1176700.00	726045.01	88.60
2285	1176700.00	726055.81	85.00
2286	1176750.00	726036.03	90.70
2287	1176750.00	726038.37	90.70
2288	1176750.00	726044.67	88.60
2289	1176750.00	726057.33	84.38
2290	1176800.00	726035.68	90.70
2291	1176800.00	726038.02	90.70
2292	1176800.00	726044.32	88.60
2293	1176800.00	726058.86	83.76
2294	1176850.00	726035.34	90.70
2295	1176850.00	726037.68	90.70
2296	1176850.00	726043.98	88.60
2297	1176850.00	726060.38	83.13
2298	1177350.00	726040.55	88.60
2299	1176900.00	726035.00	90.70
2300	1176900.00	726037.34	90.70
2301	1176900.00	726043.64	88.60
2302	1176900.00	726061.90	82.51
2303	1176950.00	726034.66	90.70
2304	1176950.00	726037.00	90.70
2305	1176950.00	726043.30	88.60
2306	1176950.00	726063.43	81.89
2307	1177000.00	726034.31	90.70
2308	1177000.00	726036.65	90.70
2309	1177000.00	726042.95	88.60
2310	1177000.00	726064.95	81.27
2311	1177031.59	726036.44	90.70
2312	1177030.69	726042.74	88.60
2313	1177027.39	726065.78	80.93
2314	1177038.58	726069.58	80.79
2315	1177050.00	726033.97	90.70
2316	1177060.93	726045.24	90.70
2317	1177060.93	726051.82	88.60
2318	1177060.93	726067.12	83.50
2319	1177054.86	726065.97	83.50
2320	1177038.58	726071.75	80.79
2321	1177041.36	726086.18	81.25
2322	1177054.86	726086.18	83.50
2323	1177049.69	726093.63	81.40
2324	1177054.86	726093.63	82.26
2325	1177062.77	726086.18	83.50
2326	1177065.10	726086.18	83.50
2327	1177073.00	726093.63	82.26
2328	1177078.17	726093.63	81.40
2329	1177086.54	726086.18	81.24
2330	1177089.38	726071.45	80.77
2331	1177089.37	726070.68	80.77
2332	1177073.00	726086.18	83.50
2333	1177073.00	726067.04	83.50
2334	1177070.51	726067.12	83.50
2335	1177070.51	726051.82	88.60
2336	1177070.51	726045.24	90.70
2337	1177100.00	726033.63	90.70
2338	1177101.44	726035.96	90.70
2339	1177102.39	726042.25	88.60
2340	1177105.83	726065.14	80.96
2341	1177150.00	726033.28	90.70
2342	1177150.00	726035.62	90.70
2343	1177150.00	726041.92	88.60
2344	1177150.00	726063.32	81.47
2345	1177200.00	726032.94	90.70
2346	1177200.00	726035.28	90.70
2347	1177200.00	726041.58	88.60
2348	1177200.00	726061.27	82.04
2349	1177250.00	726032.60	90.70
2350	1177250.00	726034.94	90.70

Point Table			
Point #	Northing	Easting	Elevation
2351	1177250.00	726041.24	88.60
2352	1177250.00	726059.21	82.61
2353	1177300.00	726032.26	90.70
2354	1177300.00	726034.60	90.70
2355	1177300.00	726040.90	88.60
2356	1177300.00	726057.15	83.18
2357	1177350.00	726031.91	90.70
2358	1177350.00	726034.25	90.70
2359	1177350.00	726055.09	83.75
2360	1177400.00	726031.57	90.70
2361	1177400.00	726033.91	90.70
2362	1177400.00	726040.21	88.60
2363	1177400.00	726053.03	84.33
2364	1177463.11	726031.14	88.60
2365	1177463.12	726033.48	88.60
2366	1177463.17	726039.78	88.60
2367	1177463.22	726050.43	85.05
2368	1177479.39	726032.45	90.68
2369	1177479.00	726034.76	90.70
2370	1177477.94	726040.97	88.62
2371	1177476.24	726051.03	85.20
2372	1177495.19	726036.57	90.69
2373	1177494.41	726038.77	90.70
2374	1177492.29	726044.71	88.61
2375	1177489.01	726053.91	85.34
2376	1177510.04	726043.37	90.69
2377	1177508.88	726045.40	90.70
2378	1177505.77	726050.88	88.62
2379	1177501.36	726058.64	85.63
2380	1177523.48	726052.65	90.68
2381	1177521.99	726054.45	90.70
2382	1177517.98	726059.30	88.61
2383	1177513.01	726065.30	86.01
2384	1177535.11	726064.12	90.69
2385	1177533.33	726065.63	90.70
2386	1177528.53	726069.71	88.61
2387	1177523.59	726073.92	86.44
2388	1177544.57	726077.43	90.69
2389	1177542.55	726078.61	90.70
2390	1177537.12	726081.80	88.61
2391	1177532.76	726084.36	86.92
2392	1177551.58	726092.19	90.68
2393	1177549.38	726093.00	90.70
2394	1177543.48	726095.20	88.61
2395	1177540.18	726096.42	87.43
2396	1177555.91	726107.93	90.69
2397	1177553.61	726108.35	90.70
2398	1177547.41	726109.49	88.62
2399	1177543.93	726110.13	87.42
2400	1177557.45	726124.84	90.70
2401	1177555.11	726124.84	90.70
2402	1177548.81	726124.84	88.60
2403	1177544.17	726124.85	87.05
2404	1177542.89	726141.38	86.63
2405	1177542.89	726147.32	86.63
2406	1177557.45	726150.00	90.70
2407	1177555.11	726150.00	90.70
2408	1177548.81	726150.00	88.60
2409	1177545.77	726173.86	87.59
2410	1177557.45	726200.00	90.70
2411	1177555.11	726200.00	90.70
2412	1177548.81	726200.00	88.60
2413	1177543.97	726200.00	86.99
2414	1177557.45	726250.00	90.70
2415	1177555.11	726250.00	90.70
2416	1177548.81	726250.00	88.60
2417	1177557.45	726274.83	90.70
2418	1177555.11	726274.83	90.70
2419	1177548.81	726274.83	88.60
2420	1177557.37	726292.21	89.83

Point Table			
Point #	Northing	Easting	Elevation
2421	1177557.26	726317.07	88.59
2422	1177544.08	726275.53	90.00
2423	1177546.09	726268.07	88.52
2424	1177547.11	726266.84	88.03
2425	1177541.39	726260.87	88.53
2426	1177544.65	726258.84	87.21
2427	1177543.52	726254.03	87.53
2428	1177544.28	726252.84	87.09
2429	1177538.15	726254.10	88.31
2430	1177541.16	726248.01	86.05
2431	1177541.16	726241.39	86.05
2432	1177531.57	726249.54	88.09
2433	1177535.23	726244.37	86.00
2434	1177529.36	726242.21	85.95
2435	1177526.31	726240.68	85.93
2436	1177521.66	726240.99	85.90
2437	1177505.61	726242.90	87.20
2438	1177505.99	726238.58	85.75
2439	1177499.69	726241.98	87.03
2440	1177500.00	726238.03	85.70
2441	1177477.67	726240.58	86.89
2442	1177467.17	726240.32	86.96
2443	1177477.77	726236.47	85.52
2444	1177467.28	726235.73	85.43
2445	1177455.57	726239.24	86.77
2446	1177456.06	726234.95	85.33
2447	1177456.53	726229.33	85.34
2448	1177420.75	726240.41	86.87
2449	1177418.35	726234.89	85.02
2450	1177410.40	726241.44	87.13
2451	1177405.51	726234.88	84.91
2452	1177405.22	726241.75	87.20
2453	1177399.88	726241.96	87.27
2454	1177384.87	726242.58	87.48
2455	1177370.82	726243.95	87.94
2456	1177352.91	726245.01	88.29
2457	1177350.00	726245.11	88.33
2458	1177350.00	726233.46	84.44
2459	1177331.13	726246.03	88.63
2460	1177330.46	726232.95	84.27
2461	1177319.21	726246.18	88.70
2462	1177303.86	726246.44	88.80
2463	1177300.00	726246.49	88.82
2464	1177294.88	726246.37	88.79
2465	1177295.67	726231.95	83.98
2466	1177295.92	726226.33	83.98
2467	1177282.29	726245.26	88.58
2468	1177264.43	726245.58	88.91
2469	1177250.00	726246.12	89.27
2470	1177250.00	726229.09	83.60
2471	1177229.70	726245.11	89.19
2472	1177216.45	726244.05	89.00
2473	1177200.00	726243.28	88.95
2474	1177200.08	726225.95	83.17
2475	1177179.97	726242.47	88.93
2476	1177159.21	726238.51	87.87
2477	1177158.95	726223.37	82.83
2478	1177150.00	726238.53	87.86
2479	1177150.00	726223.22	82.75
2480	1177135.28	726238.82	87.91
2481	1177120.18	726240.43	88.41
2482	1177100.00	726242.00	88.82
2483	1177100.00	726222.55	82.33
2484	1177082.59	726242.66	88.92
2485	1177072.60	726242.43	88.78
2486	1177063.51	726242.31	88.67
2487	1177082.54	726246.43	89.55
2488	1177063.49	726246.10	89.30
2489	1177062.77	726230.65	84.81
2490	1177065.10	726230.67	84.81

Point Table			
Point #	Northing	Easting	Elevation
2491	1177080.91	726222.43	82.17
2492	1177046.95	726221.94	82.17
2493	1177044.57	726239.03	87.89
2494	1177026.42	726238.70	87.95
2495	1177030.97	726221.81	82.30
2496	1177007.58	726237.32	87.52
2497	1177000.06	726237.37	87.50
2498	1177000.00	726222.57	82.57
2499	1176971.82	726237.97	87.54
2500	1176958.69	726239.15	87.86
2501	1176950.00	726240.48	88.26
2502	1176950.00	726224.67	82.99
2503	1176940.23	726241.32	88.49
2504	1176917.52	726240.97	88.24
2505	1176900.00	726242.70	88.72
2506	1176900.00	726226.77	83.41
2507	1176886.43	726243.81	89.01
2508	1176867.18	726244.73	89.21
2509	1176876.37	726244.38	89.15
2510	1176857.29	726244.77	89.17
2511	1176850.00	726244.67	89.10
2512	1176850.00	726228.87	83.83
2513	1176835.25	726244.55	88.99
2514	1176836.12	726229.45	83.95
2515	1176817.94	726243.87	88.87
2516	1176799.76	726243.19	88.75
2517	1176800.31	726229.67	84.25
2518	1176785.48	726243.89	88.84
2519	1176782.08	726244.23	88.93
2520	1176783.43	726230.61	84.39
2521	1176767.96	726246.03	89.48
2522	1176761.29	726231.41	84.58
2523	1176750.00	726231.38	84.67
2524	1176736.92	726231.34	84.78
2525	1176716.90	726231.27	84.95
2526	1176700.00	726228.93	85.10
2527	1176696.80	726228.30	85.12
2528	1176677.04	726226.86	85.29
2529	1176650.00	726228.11	85.52
2530	1176628.33	726228.94	85.70
2531	1176615.63	726229.97	85.81
2532	1176607.15	726229.78	85.88
2533	1176600.00	726230.53	85.94
2534	1176591.11	726232.14	86.01
2535	1176583.46	726233.46	86.08
2536	1176580.43	726241.44	87.09
2537	1176577.40	726249.41	88.10
2538	1176577.40	726253.29	88.10
2539	1176577.22	726265.28	92.10
2540	1176572.19	726264.42	91.81
2541	1176567.12	726264.58	91.86
2542	1176566.72	726253.29	88.10
2543	1176559.13	726271.73	92.32
2544	1176552.69	726276.63	92.74
2545	1176554.38	726253.36	85.02
2546	1176543.95	726271.90	90.96
2547	1176541.13	726265.62	88.80
2548	1176532.06	726265.36	88.52
2549	1176528.84	726263.44	87.81
2550	1176537.47	726253.42	84.65
2551	1176524.35	726253.51	84.41
2552	1176517.33	726264.08	87.79
2553	1176510.05	726266.34	88.39
2554	1176500.00	726265.97	88.19
2555	1176506.45	726253.62	84.07
2556	1176500.45	726253.65	84.07
2557	1176491.43	726266.04	88.41
2558	1176477.01	726264.24	88.12
2559	1176483.79	726253.59	84.43
2560	1176456.42	726262.76	88.04

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Point Table			
Point #	Northing	Easting	Elevation
2561	1176456.89	726253.89	85.06
2562	1176434.04	726259.44	87.85
2563	1176433.61	726254.02	86.06
2564	1176417.20	726260.43	87.79
2565	1176417.62	726254.10	85.69
2566	1176395.69	726267.60	87.74
2567	1176395.32	726261.31	87.74
2568	1176389.37	726261.74	87.81
2569	1176382.94	726261.88	87.87
2570	1176383.62	726254.29	85.31
2571	1176389.62	726254.26	85.31
2572	1176375.19	726261.32	87.89
2573	1176368.46	726254.37	85.72
2574	1176349.08	726258.17	87.50
2575	1176350.00	726254.47	86.24
2576	1176334.96	726257.38	87.65
2577	1176334.46	726254.56	86.74
2578	1176322.46	726255.78	87.47
2579	1176322.46	726254.62	87.08
2580	1176310.48	726257.82	87.70
2581	1176311.37	726254.68	86.71
2582	1176300.00	726258.96	87.69
2583	1176300.00	726254.75	86.29
2584	1176284.33	726261.50	87.97
2585	1176284.29	726254.83	85.75
2586	1176269.15	726265.91	88.91
2587	1176264.04	726261.88	87.55
2588	1176259.91	726258.03	87.42
2589	1176256.64	726258.52	88.62
2590	1176256.65	726254.98	87.43
2591	1176259.90	726254.96	86.43
2592	1176269.37	726254.91	85.24
2593	1176269.34	726250.98	85.26
2594	1176263.71	726250.98	85.26
2595	1176268.09	726221.03	85.41
2596	1176267.78	726200.00	85.51
2597	1176267.03	726150.00	85.76
2598	1176266.33	726103.60	85.99
2599	1176300.00	726100.00	86.94
2600	1176300.00	726150.00	86.73
2601	1176300.00	726200.00	86.53
2602	1176300.00	726250.00	86.36
2603	1176284.37	726250.87	85.81
2604	1176311.78	726250.75	86.74
2605	1176322.48	726250.71	87.09
2606	1176322.48	726200.00	87.25
2607	1176322.48	726150.00	87.40
2608	1176322.48	726100.00	87.55
2609	1176322.48	726074.70	87.62
2610	1176322.48	726051.68	87.69
2611	1176350.00	726051.75	87.15
2612	1176350.00	726100.00	86.90
2613	1176350.00	726150.00	86.70
2614	1176350.00	726200.00	86.51
2615	1176350.00	726250.52	86.32
2616	1176334.44	726250.63	86.76
2617	1176368.55	726250.33	85.79
2618	1176383.62	726250.16	85.35
2619	1176383.62	726200.00	85.60
2620	1176383.62	726150.00	85.85
2621	1176383.62	726100.00	86.10
2622	1176383.62	726076.31	86.22
2623	1176389.62	726100.00	86.10
2624	1176389.62	726150.00	85.85
2625	1176389.62	726200.00	85.60
2626	1176389.62	726250.16	85.35
2627	1176417.65	726250.07	85.74
2628	1176415.00	726200.00	86.17
2629	1176415.00	726150.00	86.42
2630	1176415.00	726100.00	86.67

Point Table			
Point #	Northing	Easting	Elevation
2631	1176415.00	726052.03	86.91
2632	1176435.88	726100.00	87.14
2633	1176435.88	726150.00	86.89
2634	1176435.88	726200.00	86.64
2635	1176435.88	726209.29	86.60
2636	1176433.66	726249.99	86.05
2637	1176456.87	726250.29	85.07
2638	1176483.79	726249.81	84.49
2639	1176470.00	726250.06	84.79
2640	1176470.00	726209.29	85.40
2641	1176470.00	726150.00	85.70
2642	1176470.00	726100.00	85.95
2643	1176470.00	726053.85	86.18
2644	1176500.45	726100.00	84.88
2645	1176500.45	726150.00	84.63
2646	1176470.00	726200.00	85.45
2647	1176500.45	726200.00	84.38
2648	1176500.45	726209.28	84.34
2649	1176500.45	726249.87	84.13
2650	1176506.45	726249.87	84.13
2651	1176506.45	726209.28	84.34
2652	1176506.45	726200.00	84.38
2653	1176506.45	726150.00	84.63
2654	1176506.45	726100.00	84.88
2655	1176535.00	726054.69	85.75
2656	1176535.00	726100.00	85.52
2657	1176535.00	726150.00	85.27
2658	1176535.00	726200.00	85.02
2659	1176535.00	726209.28	84.98
2660	1176524.34	726249.76	84.47
2661	1176537.47	726249.68	84.71
2662	1176554.36	726249.45	85.03
2663	1176566.72	726249.45	88.10
2664	1176558.97	726209.29	85.52
2665	1176566.72	726209.29	88.10
2666	1176566.72	726200.00	88.10
2667	1176559.12	726200.00	85.57
2668	1176566.72	726150.00	88.10
2669	1176559.92	726150.00	85.84
2670	1176566.72	726100.00	88.10
2671	1176560.73	726100.00	86.10
2672	1176582.31	726057.85	86.46
2673	1176578.18	726096.01	87.84
2674	1176577.40	726100.00	88.10
2675	1176581.71	726141.38	86.66
2676	1176581.71	726147.32	86.66
2677	1176577.40	726150.00	88.10
2678	1176579.19	726170.50	87.50
2679	1176577.40	726200.00	88.10
2680	1176581.39	726200.00	86.77
2681	1176583.46	726227.74	86.08
2682	1176577.40	726233.46	88.10
2683	1176600.00	726058.39	86.24
2684	1176600.00	726096.76	87.57
2685	1176600.00	726141.38	86.45
2686	1176600.00	726147.32	86.45
2687	1176600.00	726171.09	87.29
2688	1176591.18	726226.47	86.01
2689	1176600.00	726225.99	85.94
2690	1176620.99	726224.86	85.76
2691	1176642.80	726224.00	85.58
2692	1176650.00	726224.25	85.52
2693	1176624.28	726171.77	87.03
2694	1176634.43	726172.30	86.93
2695	1176650.00	726173.54	86.80
2696	1176650.00	726147.32	85.88
2697	1176650.00	726141.38	85.88
2698	1176650.00	726098.48	86.95
2699	1176650.00	726059.91	85.62
2700	1176700.00	726061.44	85.00

Point Table			
Point #	Northing	Easting	Elevation
2701	1176700.00	726100.21	86.34
2702	1176700.00	726141.38	85.31
2703	1176700.00	726147.32	85.31
2704	1176700.00	726176.58	86.33
2705	1176700.00	726225.79	85.10
2706	1176750.00	726062.96	84.38
2707	1176750.00	726101.93	85.72
2708	1176750.00	726141.38	84.74
2709	1176750.00	726147.32	84.74
2710	1176730.41	726178.35	86.05
2711	1176750.00	726178.86	85.84
2712	1176716.94	726226.12	84.95
2713	1176739.39	726226.56	84.76
2714	1176750.00	726226.18	84.67
2715	1176783.18	726224.99	84.39
2716	1176800.00	726224.04	84.25
2717	1176800.00	726180.65	85.33
2718	1176800.00	726147.32	84.17
2719	1176800.00	726141.38	84.17
2720	1176800.00	726103.65	85.11
2721	1176800.00	726064.48	83.75
2722	1176850.00	726066.00	83.13
2723	1176850.00	726105.38	84.49
2724	1176850.00	726141.38	83.59
2725	1176850.00	726147.32	83.59
2726	1176850.00	726182.63	84.83
2727	1176850.00	726223.23	83.83
2728	1176835.98	726223.82	83.95
2729	1176900.00	726221.13	83.41
2730	1176900.00	726184.28	84.32
2731	1176900.00	726147.32	83.02
2732	1176900.00	726141.38	83.02
2733	1176900.00	726107.10	83.88
2734	1176900.00	726067.53	82.51
2735	1176950.00	726069.05	81.89
2736	1176950.00	726108.83	83.26
2737	1176950.00	726141.38	82.45
2738	1176950.00	726147.32	82.45
2739	1176950.00	726185.93	83.80
2740	1176950.00	726219.03	82.99
2741	1177000.00	726216.93	82.57
2742	1177000.00	726187.58	83.29
2743	1177000.00	726147.32	81.88
2744	1177000.00	726141.38	81.88
2745	1177000.00	726110.55	82.65
2746	1177000.00	726070.57	81.27
2747	1177052.24	726112.34	82.01
2748	1177046.53	726141.38	81.35
2749	1177046.20	726147.32	81.35
2750	1177052.21	726190.17	82.78
2751	1177046.95	726216.31	82.17
2752	1177062.77	726190.17	84.54
2753	1177065.10	726190.17	84.54
2754	1177062.77	726144.68	84.08
2755	1177065.10	726144.68	84.08
2756	1177062.77	726112.34	83.76
2757	1177065.10	726112.34	83.76
2758	1177075.62	726112.33	82.01
2759	1177081.33	726141.38	81.35
2760	1177081.66	726147.32	81.35
2761	1177075.63	726190.29	82.79
2762	1177080.91	726216.80	82.17
2763	1177100.00	726216.92	82.33
2764	1177100.00	726189.13	83.02
2765	1177100.00	726147.32	81.56
2766	1177100.00	726141.38	81.56
2767	1177100.00	726111.80	82.30
2768	1177105.92	726070.77	80.96
2769	1177150.00	726068.95	81.46
2770	1177150.00	726110.60	82.90

Point Table			
Point #	Northing	Easting	Elevation
2771	1177150.00	726141.38	82.13
2772	1177150.00	726147.32	82.13
2773	1177150.00	726186.86	83.52
2774	1177150.00	726217.58	82.75
2775	1177200.00	726220.30	83.17
2776	1177200.00	726185.23	84.03
2777	1177200.00	726147.32	82.70
2778	1177200.00	726141.38	82.70
2779	1177200.00	726109.41	83.50
2780	1177200.00	726066.89	82.04
2781	1177250.00	726064.83	82.61
2782	1177250.00	726108.22	84.10
2783	1177250.00	726141.38	83.28
2784	1177250.00	726147.32	83.28
2785	1177250.00	726183.99	84.56
2786	1177250.00	726223.44	83.60
2787	1177300.00	726182.82	85.09
2788	1177300.00	726147.32	83.85
2789	1177300.00	726141.38	83.85
2790	1177300.00	726107.02	84.71
2791	1177300.00	726062.78	83.18
2792	1177350.00	726060.72	83.75
2793	1177350.00	726105.83	85.31
2794	1177350.00	726141.38	84.42
2795	1177350.00	726147.32	84.42
2796	1177350.00	726181.02	85.60
2797	1177350.00	726227.82	84.44
2798	1177400.00	726234.74	84.86
2799	1177400.00	726229.11	84.86
2800	1177400.00	726179.04	86.10
2801	1177400.00	726147.32	84.99
2802	1177400.00	726141.38	84.99
2803	1177400.00	726104.64	85.91
2804	1177400.00	726058.66	84.32
2805	1177450.00	726050.97	84.90
2806	1177450.00	726056.60	84.90
2807	1177450.00	726103.44	86.51
2808	1177450.00	726141.38	85.56
2809	1177450.00	726147.32	85.56
2810	1177450.00	726176.80	86.59
2811	1177500.00	726232.39	85.70
2812	1177506.80	726233.00	85.76
2813	1177466.31	726175.70	86.74
2814	1177500.00	726174.97	87.10
2815	1177522.87	726174.16	87.34
2816	1177500.00	726147.32	86.14
2817	1177500.00	726141.38	86.14
2818	1177500.00	726102.25	87.11
2819	1177542.42	726101.24	87.62
2820	1177528.81	726236.41	85.95
2821	1177031.32	726216.17	82.30
2822	1176322.48	726086.21	87.59
2823	1176383.62	726086.21	86.17
2824	1177491.84	726054.88	85.38

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF
3			
4			
5			
6			

DRAWING TITLE
TOP OF PROTECTIVE COVER GRADING CONTROL POINTS TABLE - 2

PROJECT TITLE
HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

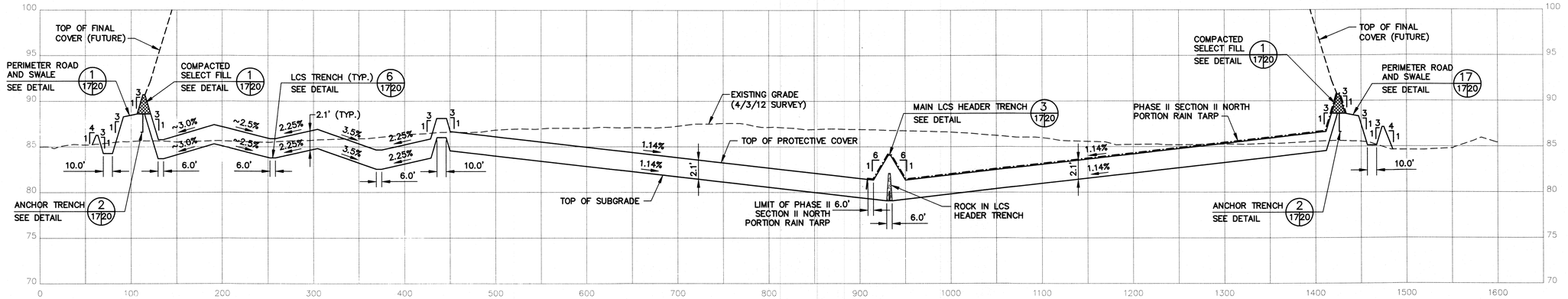
CLIENT
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 881-0080 FAX 813 622-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

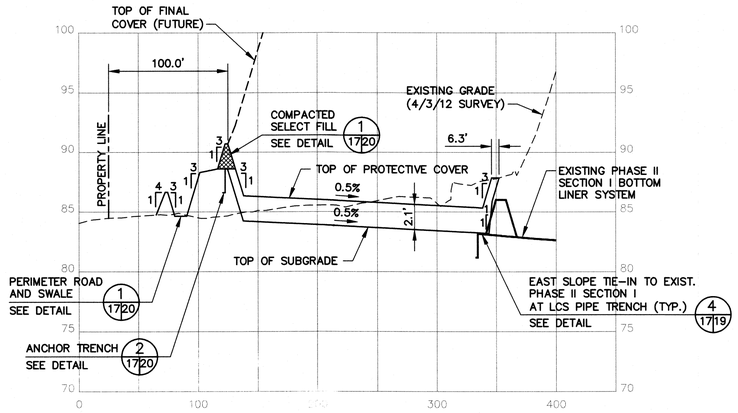
PROJ. NO. 09193033.23
DSN. BY: SRF | DWN. BY: SDA | CHK. BY: SRF | QA/QC BY: CEH | APP. BY: SRF

CADD FILE: 993323GRAD-CTRL
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. **16** of 26

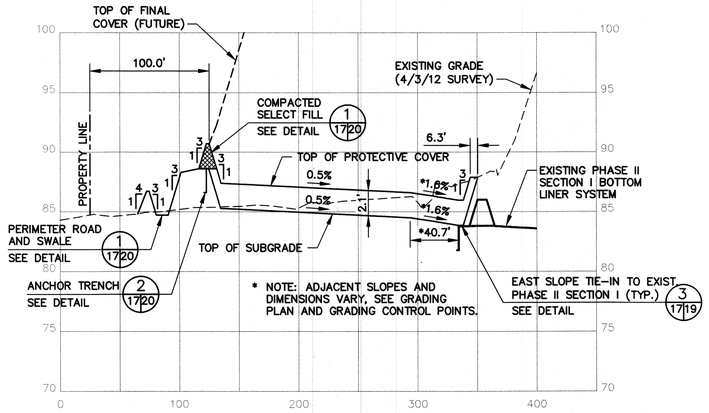
G:\SCS FILES\Projects\09193033.23\Construction\CAD\GRADING\993323GRAD-CTRL.dwg, Mar 19, 2014 - 1:43pm, Arnold, Donna, 22"x34" (Ext. to Protective Cover Grade & Elev. sheet)



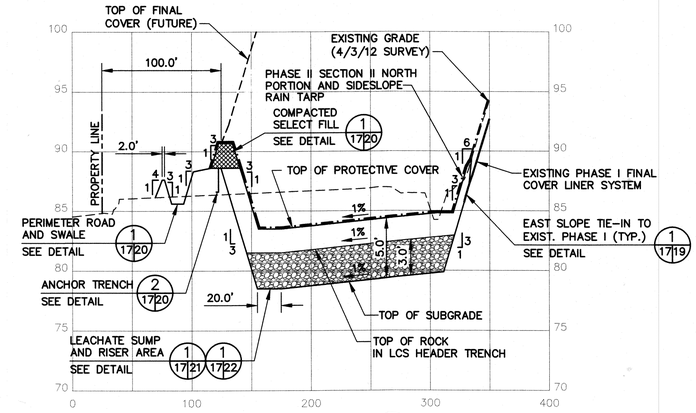
SECTION A 17
SCALE: 1" = 60' HORIZ. 1" = 6' VERT. 8.13



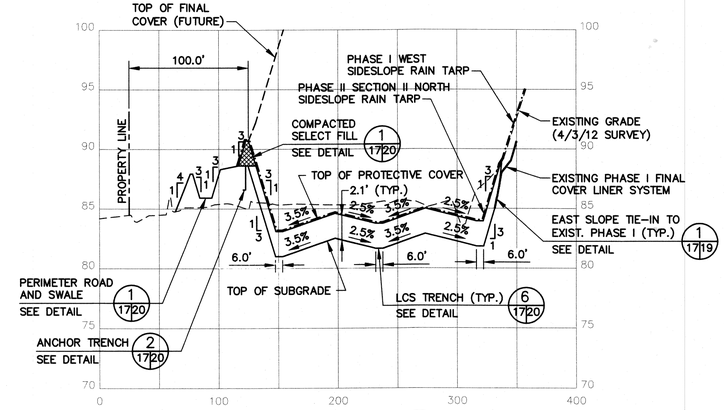
SECTION B 17
SCALE: 1" = 60' HORIZ. 1" = 6' VERT. 8.13



SECTION C 17
SCALE: 1" = 60' HORIZ. 1" = 6' VERT. 8.13



SECTION D 17
SCALE: 1" = 60' HORIZ. 1" = 6' VERT. 8.13



SECTION E 17
SCALE: 1" = 60' HORIZ. 1" = 6' VERT. 8.13

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E. LICENSE NO. 58026

DRAWING TITLE: SECTIONS - BOTTOM CELL

PROJECT TITLE: HARDEE COUNTY LANDFILL
PHASE II SECTION II EXPANSION
CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 150, TAMPA, FL 33610
813.621.0080 FAX 813.621.0201
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO. 09199033.23
DSN. BY: SRF
DRN. BY: SDA
CHK. BY: SRF
QA/A KYW BY: CEH
APP. BY: SRF

CADD FILE: 993323SECTIONS1
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. 17 of 26

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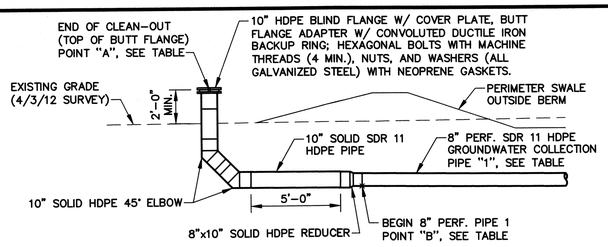
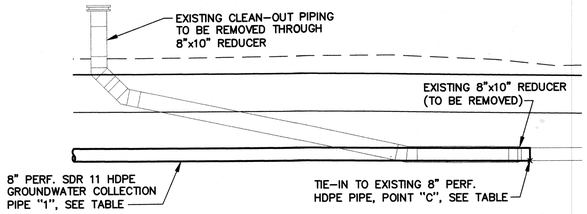
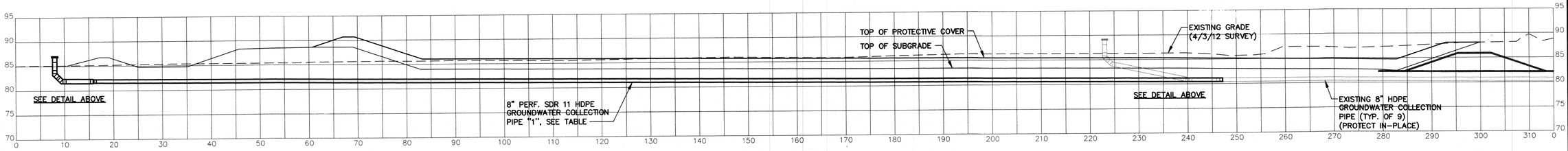


GROUNDWATER COLLECTION PIPE CLEAN-OUT DETAIL

GROUNDWATER COLLECTION PIPE TABLE										
END OF CLEAN-OUT (POINT "A")				BEGIN 8" PERF. PIPE (POINT "B")			8" PERF. PIPE (PIPE "1")	END 8" PERF. PIPE AND TIE-IN TO EXISITNG PIPE (POINT "C")		
CLEAN-OUT NO.	NORTHING	EASTING	ELEV.	NORTHING	EASTING	ELEV.	LINEAR FEET/SLOPE	NORTHING	EASTING	ELEV.
GWCO-1	1176273.17	725989.76	87.0	1176273.17	725998.17	81.65	224.0' @ 0.5%	1176273.17	726222.19	80.53
GWCO-2	1176296.68	725981.25	87.0	1176296.68	725989.78	81.53	234.3' @ 0.5%	1176296.68	726224.04	80.36
GWCO-3	1176337.32	725978.92	87.0	1176337.32	725987.52	81.46	234.8' @ 0.5%	1176337.32	726222.28	80.28
GWCO-4	1176368.12	725978.92	87.0	1176368.12	725987.53	81.45	233.6' @ 0.5%	1176368.12	726221.05	80.28
GWCO-5	1176402.41	725978.92	87.0	1176402.41	725987.50	81.48	230.2' @ 0.5%	1176402.41	726217.62	80.32
GWCO-6	1176434.31	725978.92	87.0	1176434.31	725987.48	81.49	233.2' @ 0.5%	1176434.31	726220.75	80.32
GWCO-7	1176472.76	725978.92	87.0	1176472.76	725987.41	81.57	230.7' @ 0.5%	1176472.76	726218.06	80.41
GWCO-8	1176502.37	725978.92	87.5	1176502.37	725987.95	81.02	228.8' @ 0.5%	1176502.37	726216.73	79.87
GWCO-9	1176532.36	725978.92	88.0	1176532.36	725988.04	80.94	233.6' @ 0.5%	1176532.36	726221.64	79.77



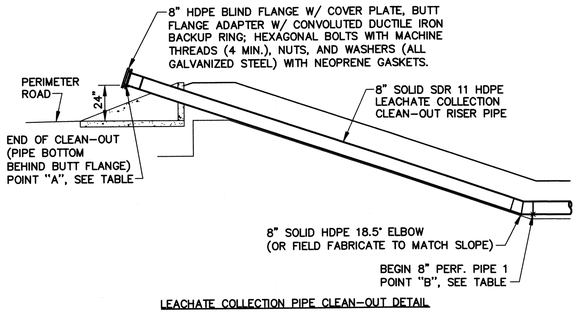
GROUNDWATER COLLECTION PIPE TIE-IN DETAIL



SECTION VIEW

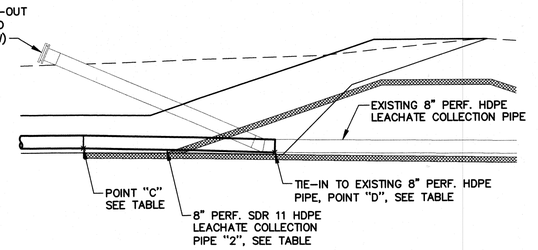
GROUNDWATER CONTROL PIPING SYSTEM DETAIL (TYP.) 1 | 8 | 18

SCALE: 1" = 10'



LEACHATE COLLECTION PIPE CLEAN-OUT DETAIL

LEACHATE COLLECTION PIPE TABLE															
END OF CLEAN-OUT (POINT "A")				BEGIN 8" PERF. PIPE 1 (POINT "B")			8" PERF. PIPE 1 (PIPE "1")	END 8" PERF. PIPE PIPE 1 AND BEGIN PIPE 2 (POINT "C")			8" PERF. PIPE 2 (PIPE "2")	END 8" PERF. PIPE 2 AND TIE-IN TO EXISITNG PIPE (POINT "D")		
CLEAN-OUT NO.	NORTHING	EASTING	ELEV.	NORTHING	EASTING	ELEV.	LINEAR FEET/SLOPE	NORTHING	EASTING	ELEV.	LINEAR FEET/SLOPE	NORTHING	EASTING	ELEV.
LCO-1	1176244.26	726105.81	90.60	1176263.48	726112.55	84.48	108.6' @ 0.5%	1176265.12	726221.12	83.94	41.2' @ 0.5%	1176266.37	726262.31	83.73
LCO-2	1176386.49	726034.78	90.60	1176386.62	726053.78	84.48	196.4' @ 0.5%	1176386.62	726250.16	83.50	8.9' @ 1.0%	1176386.62	726259.07	83.41
LCO-3	1176503.31	726033.98	90.60	1176503.45	726056.68	83.25	193.2' @ 0.5%	1176503.45	726249.88	82.28	10.7' @ 2.9%	1176503.45	726260.59	81.97

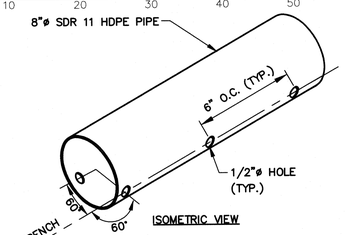


LEACHATE COLLECTION PIPE TIE-IN DETAIL

SECTION VIEW

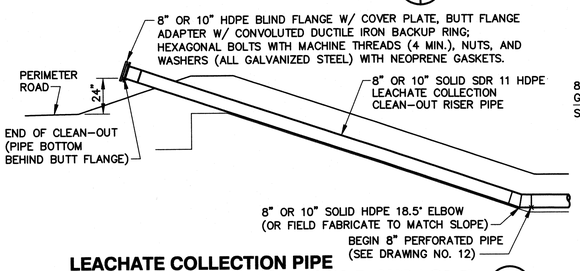
LEACHATE COLLECTION PIPING SYSTEM EXTENSION DETAIL (TYP.) 2 | 12 | 18

SCALE: 1" = 10'



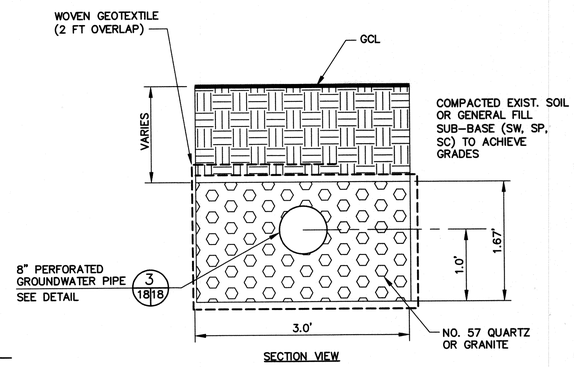
8" PERFORATED GROUNDWATER PIPE DETAIL 3 | 18 | 18

NOT TO SCALE



LEACHATE COLLECTION PIPE CLEAN-OUT DETAIL (LC0-4, LC0-5, AND LC0-6) 7 | 12 | 18

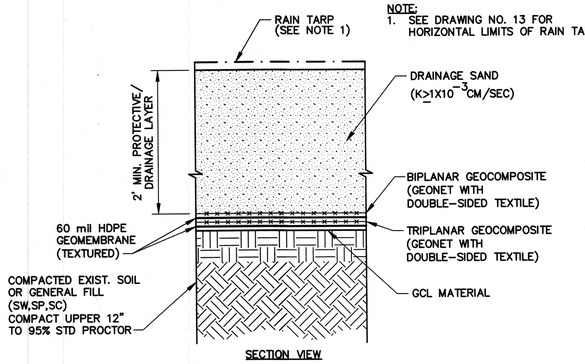
SCALE: 1" = 4'



SECTION VIEW

GROUNDWATER PIPE TRENCH DETAIL 4 | 8 | 18

SCALE: 1" = 4'

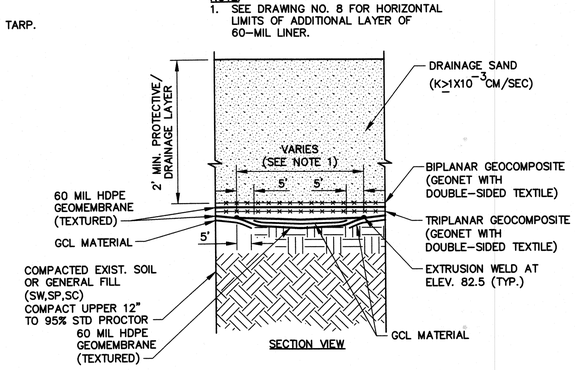


SECTION VIEW

BOTTOM LINER SYSTEM DETAIL 5 | 18

NOT TO SCALE

8,20,22



SECTION VIEW

BOTTOM LINER SYSTEM WITH ADDL. LAYER OF 60-MIL LINER DETAIL 6 | 18

NOT TO SCALE

8,20,21,22

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
	01/06/14	ISSUED FOR BID	SRF
	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E.
LICENSE NO. 56026

DRAWING TITLE
PIPING DETAILS - BOTTOM CELL

PROJECT TITLE
HARDEE COUNTY LANDFILL
PHASE II SECTION II EXPANSION
CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
401 PARK OAKS BLVD, SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-5757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	DWN. BY:	CHK. BY:	DSN. BY:	D/A. RVW BY:	APP. BY:
09199033.23	SDA	SRF	SRF	CEH	SRF

CADD FILE: 993323SECTIONS1

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. **18** of **26**

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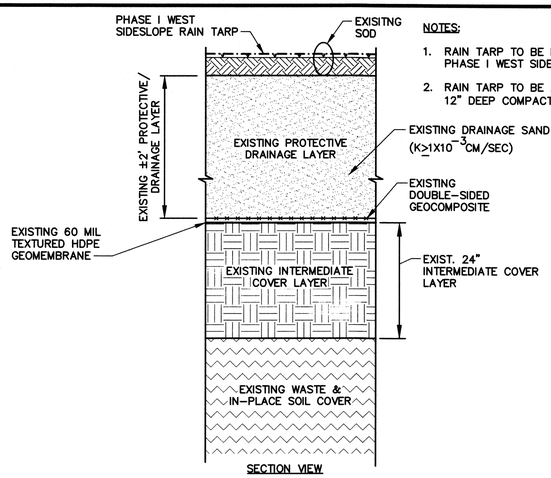
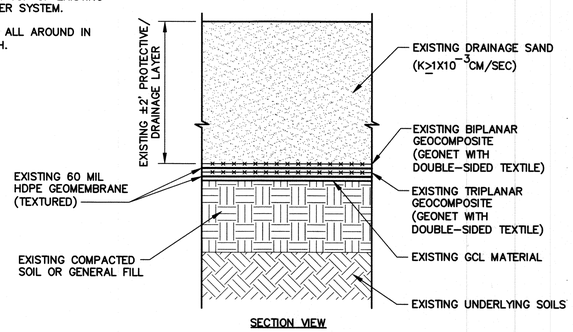


NOTES:

1. RAIN TARP TO BE PLACED ON TOP OF EXISTING PHASE I WEST SIDESLOPE LINER SYSTEM.
2. RAIN TARP TO BE ANCHORED ALL AROUND IN 12" DEEP COMPACTED TRENCH.

EXISTING PHASE I WEST SIDESLOPE FINAL COVER AND LINER SYSTEM DETAIL 5 (21|19)

NOT TO SCALE

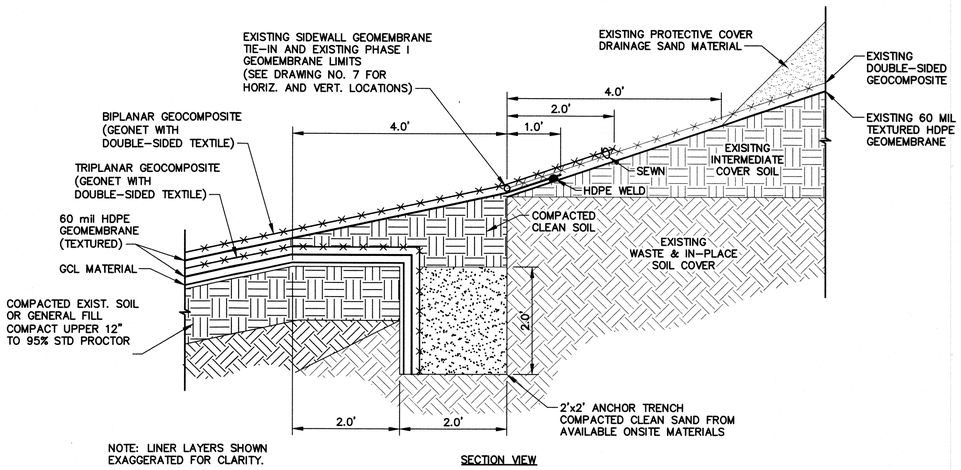


EXISTING PHASE II SECTION I BOTTOM LINER SYSTEM DETAIL 6 (19|19)

NOT TO SCALE

LINER SYSTEM TIE-IN TO EXISITNG PHASE II SECTION I LINER SYSTEM DETAIL 7 (19|19)

NOT TO SCALE

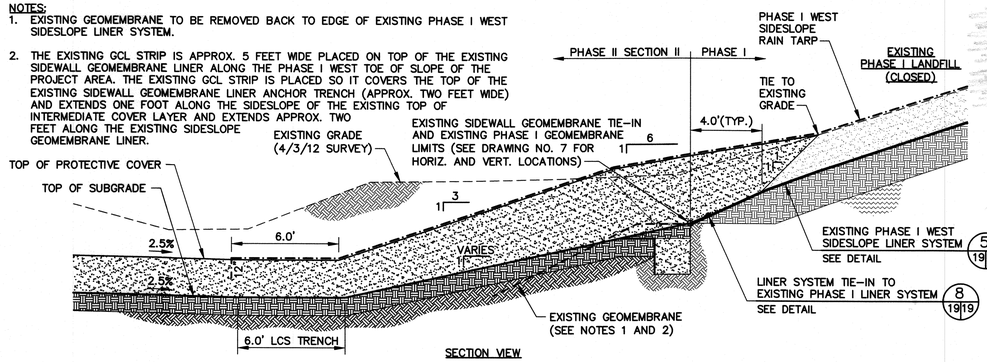


LINER SYSTEM TIE-IN TO EXISTING PHASE I LINER SYSTEM DETAIL 8 (19|19)

NOT TO SCALE

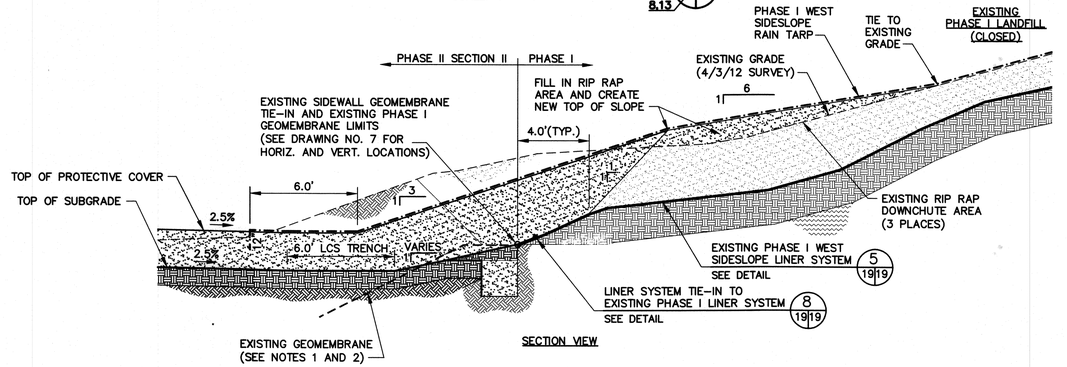
NOTES:

1. EXISTING GEOMEMBRANE TO BE REMOVED BACK TO EDGE OF EXISTING PHASE I WEST SIDESLOPE LINER SYSTEM.
2. THE EXISTING GCL STRIP IS APPROX. 5 FEET WIDE PLACED ON TOP OF THE EXISTING SIDEWALL GEOMEMBRANE LINER ALONG THE PHASE I WEST TOE OF SLOPE OF THE PROJECT AREA. THE EXISTING GCL STRIP IS PLACED SO IT COVERS THE TOP OF THE EXISTING SIDEWALL GEOMEMBRANE LINER ANCHOR TRENCH (APPROX. TWO FEET WIDE) AND EXTENDS ONE FOOT ALONG THE SIDESLOPE OF THE EXISTING TOP OF INTERMEDIATE COVER LAYER AND EXTENDS APPROX. TWO FEET ALONG THE EXISTING SIDESLOPE GEOMEMBRANE LINER.



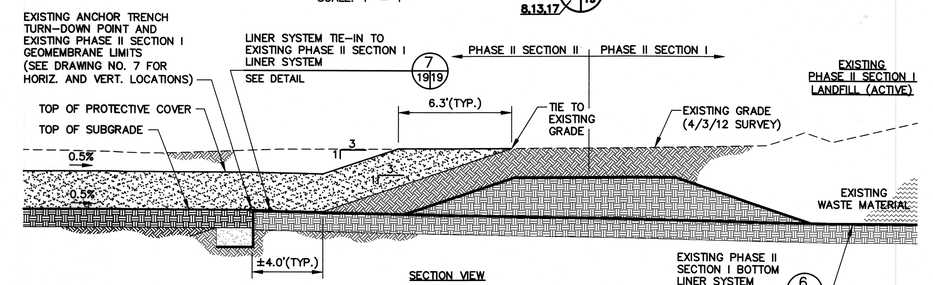
EAST SLOPE TIE-IN TO EXIST. PHASE I (TYP.) 1 (8.13|19)

SCALE: 1" = 4'



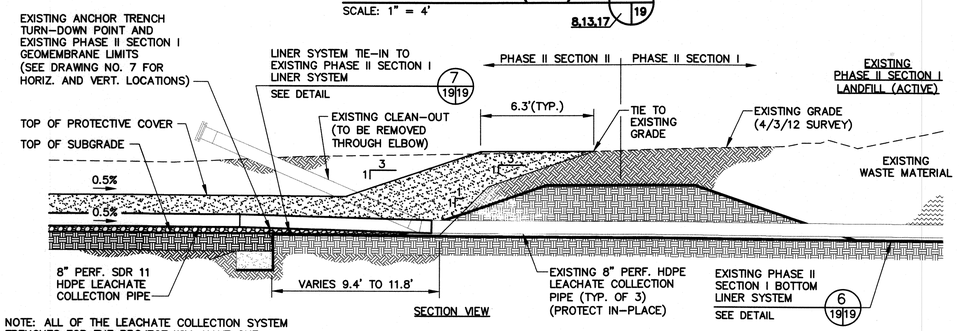
EAST SLOPE TIE-IN TO EXIST. SOUTH PHASE I 2 (8.13.17|19)

SCALE: 1" = 4'



EAST SLOPE TIE-IN TO EXIST. PHASE II SECTION I (TYP.) 3 (8.13.17|19)

SCALE: 1" = 4'



EAST SLOPE TIE-IN TO EXIST. PHASE II SECTION I AT LCS PIPE TRENCH (TYP.) 4 (8.13.17|19)

SCALE: 1" = 4'

NOTE: ALL OF THE LEACHATE COLLECTION SYSTEM TRENCHES FOR THE PROJECT WILL HAVE ONE ADDITIONAL LAYER OF TRIPLANAR GEOCOMPOSITE IN WIDTH (APPROXIMATELY 12.5 FEET) THAT WILL BE INSTALLED TO FLOW TOWARD THE EXISTING PHASE II SECTION I AREA, TOWARDS THE LEACHATE COLLECTION SYSTEM HEADER TRENCH, OR THE SUMP DEPENDING ON THE LOCATION INSTALLED.

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
	01/06/14	ISSUED FOR BID	SRF
	03/17/14	CONFORMED	SRF

DRAWING TITLE: TIE-IN DETAILS - BOTTOM CELL

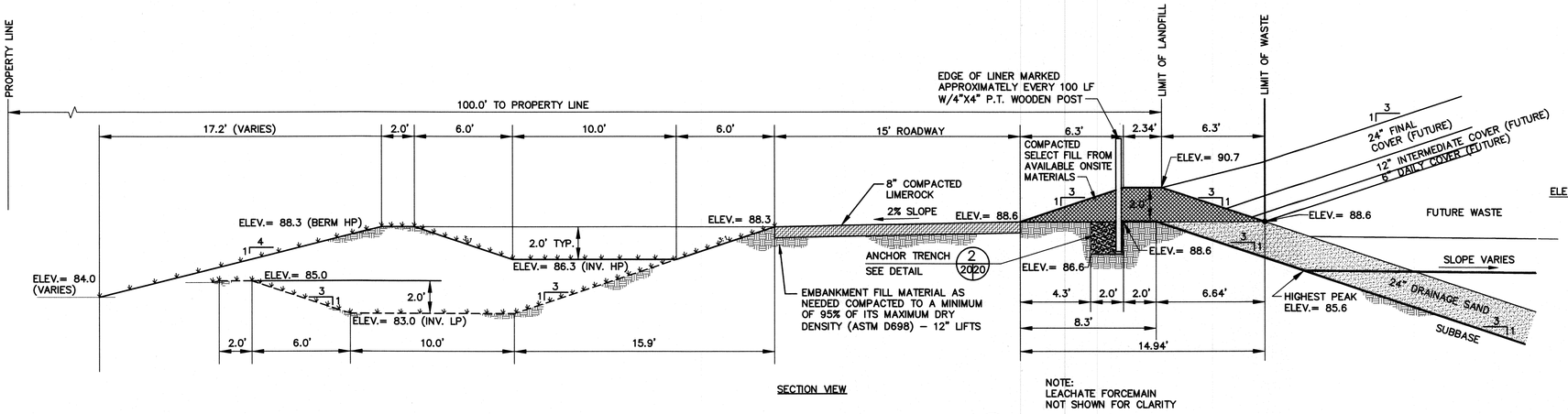
PROJECT TITLE: HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-4757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 01993033.23
DSN. BY: SRF
DWN. BY: SDA
CHK. BY: SRF
QA RVW BY: CEH
APP. BY: SRF

CADD FILE: 993323SECTIONS1
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. 19 of 26



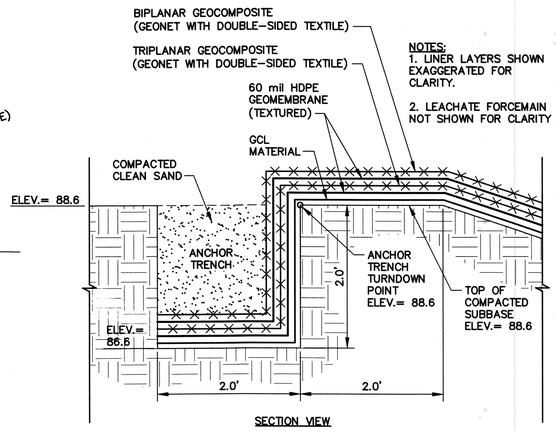
SECTION VIEW

NOTE:
LEACHATE FORCEMAIN NOT SHOWN FOR CLARITY

PERIMETER ROAD AND SWALE DETAIL (1/20)

SCALE: 1" = 4'

8.13.17



NOTES:
1. LINER LAYERS SHOWN EXAGGERATED FOR CLARITY.
2. LEACHATE FORCEMAIN NOT SHOWN FOR CLARITY

SECTION VIEW

ANCHOR TRENCH DETAIL (2/20)

SCALE: 1" = 1'–0"

8.17.20

TYPICAL TEMPORARY SHELL ACCESS ROADWAY DETAIL

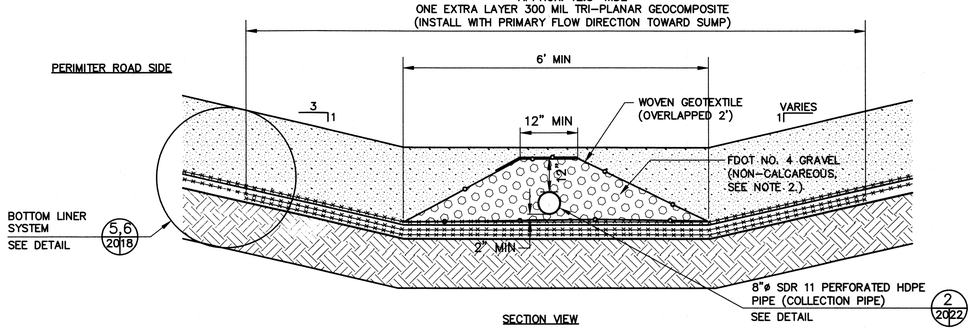
SECTION VIEW

LEACHATE COLLECTION SYSTEM TRENCH DETAIL (TYP.) (6/20)

NOT TO SCALE

12.17

NOTES:
1. SEE DRAWING NO. 13 FOR HORIZONTAL LIMITS OF RAIN TARP.
2. AGGREGATE SHALL CONSIST OF CLEAN, SOUND, DURABLE PARTICLES OF CRUSHED STONE, OR GRAVEL. SCREENINGS, SLAGS, EXPANDED CLAYS, AND SHALES SHALL NOT BE USED. MATERIAL SHALL BE COMPOSED OF SUB–ROUNDED TO ROUNDED PARTICLES OF UNIFORM DENSITY SUCH THAT IT WILL NOT DAMAGE OR PUNCTURE THE WOVEN GEOTEXTILE AND HDPE GEOMEMBRANE. SEE SPECIFICATION SECTION 02220 PART 2.05.C.



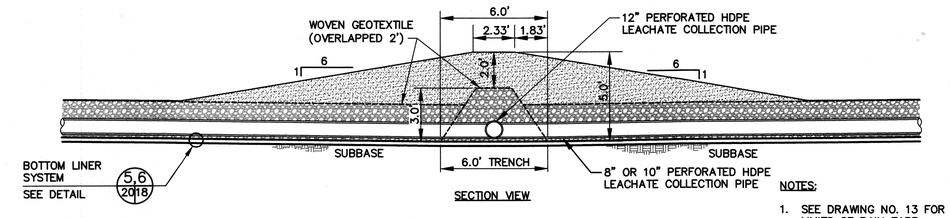
SECTION VIEW

LEACHATE COLLECTION SYSTEM TRENCH ALONG PERIMETER ROAD DETAIL (TYP.) (7/20)

NOT TO SCALE

12.17

NOTES:
1. SEE DRAWING NO. 13 FOR HORIZONTAL LIMITS OF RAIN TARP.
2. AGGREGATE SHALL CONSIST OF CLEAN, SOUND, DURABLE PARTICLES OF CRUSHED STONE, OR GRAVEL. SCREENINGS, SLAGS, EXPANDED CLAYS, AND SHALES SHALL NOT BE USED. MATERIAL SHALL BE COMPOSED OF SUB–ROUNDED TO ROUNDED PARTICLES OF UNIFORM DENSITY SUCH THAT IT WILL NOT DAMAGE OR PUNCTURE THE WOVEN GEOTEXTILE AND HDPE GEOMEMBRANE. SEE SPECIFICATION SECTION 02220 PART 2.05.C.

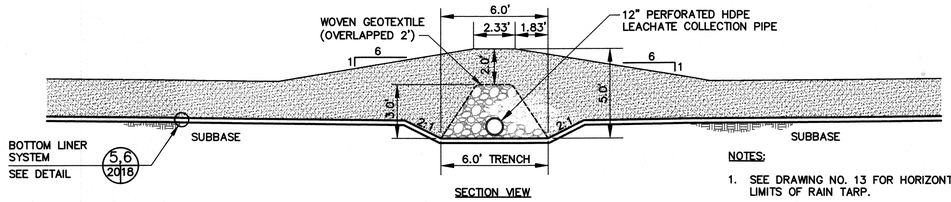


SECTION VIEW

MAIN LCS HEADER TRENCH AT TRENCH INTERSECTION DETAIL (3/17/20)

SCALE: 1" = 4'

NOTES:
1. SEE DRAWING NO. 13 FOR HORIZONTAL LIMITS OF RAIN TARP.
2. SEE DRAWING NO. 8 FOR HORIZONTAL LIMITS OF ADDITIONAL LAYER OF 60–MIL LINER TO BE INSTALLED UP TO ELEVATION 82.5, AND PER DETAIL 6, DRAWING NO. 18.

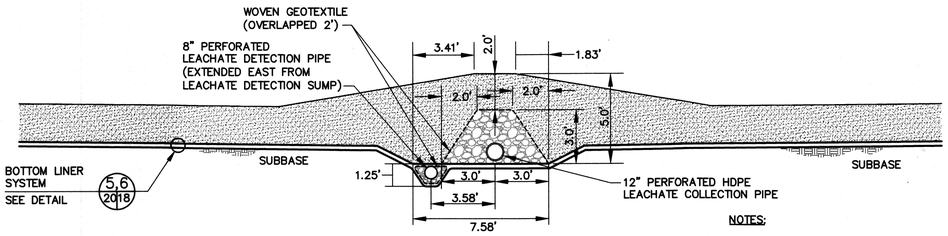


SECTION VIEW

NOTES:
1. SEE DRAWING NO. 13 FOR HORIZONTAL LIMITS OF RAIN TARP.
2. SEE DRAWING NO. 8 FOR HORIZONTAL LIMITS OF ADDITIONAL LAYER OF 60–MIL LINER TO BE INSTALLED UP TO ELEVATION 82.5, AND PER DETAIL 6, DRAWING NO. 18.

MAIN LCS HEADER TRENCH AT CELL PEAK DETAIL (4/12/20)

SCALE: 1" = 4'



SECTION VIEW

NOTES:
1. SEE DRAWING NO. 13 FOR HORIZONTAL LIMITS OF RAIN TARP.
2. SEE DRAWING NO. 8 FOR HORIZONTAL LIMITS OF ADDITIONAL LAYER OF 60–MIL LINER TO BE INSTALLED UP TO ELEVATION 82.5, AND PER DETAIL 6, DRAWING NO. 18.

MAIN LCS AND LDS HEADER TRENCH AT CELL PEAK DETAIL (5/12/20)

SCALE: 1" = 4'

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE
PERIMETER ROAD AND TRENCH DETAILS BOTTOM CELL

PROJECT TITLE
HARDEE COUNTY LANDFILL
PHASE II SECTION II EXPANSION
CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 150, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO. 09199033.23
DSN: BY: SRF | DWN: BY: SDA | CHK: BY: SRF | QA RVW BY: CEH | APP: BY: SRF

CADD FILE:
993323SECTIONS1

DATE:
APRIL 2013

SCALE:
AS SHOWN

DRAWING NO.
20 of 26

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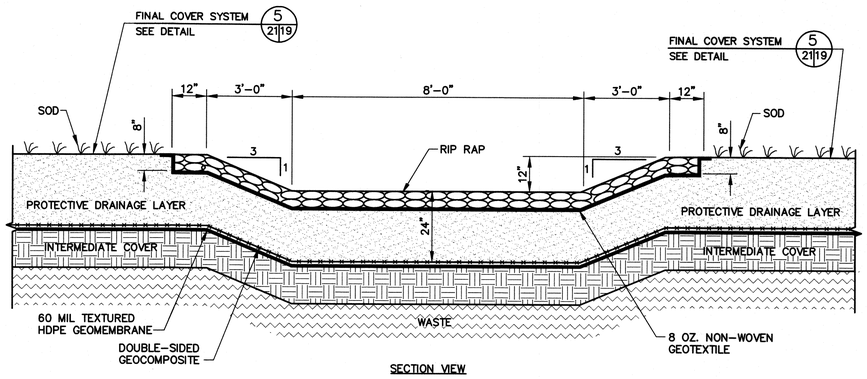
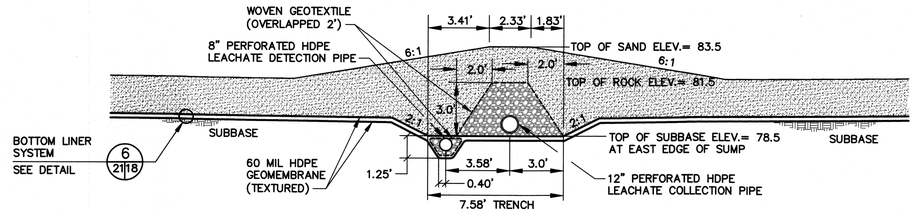


SECTION VIEW

EXISTING PHASE I TEMPORARY STORMWATER FLUME DETAIL 1 | 8 | 17

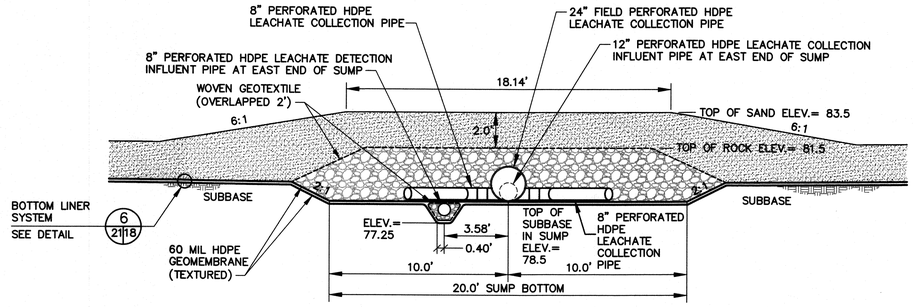
SCALE: 1" = 2'-0"



SUMP MOUND AND COLLECTION TRENCH AT EAST SUMP ENTRANCE

SECTION A | 22 | 21

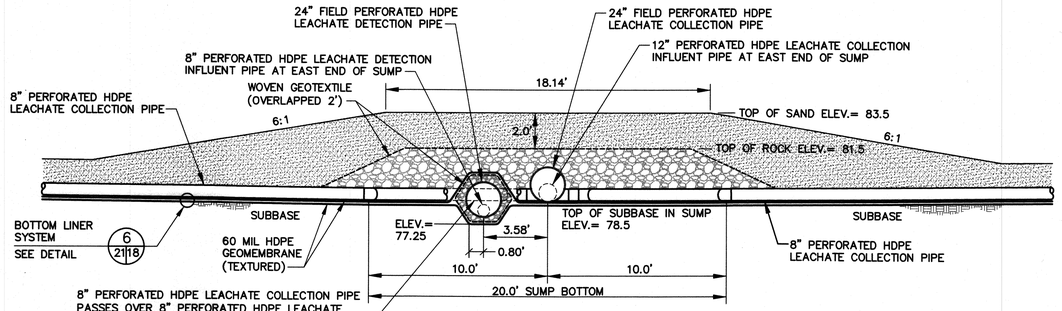
SCALE: 1" = 4'



SUMP MOUND AND COLLECTION TRENCH PIPING

SECTION B | 22 | 21

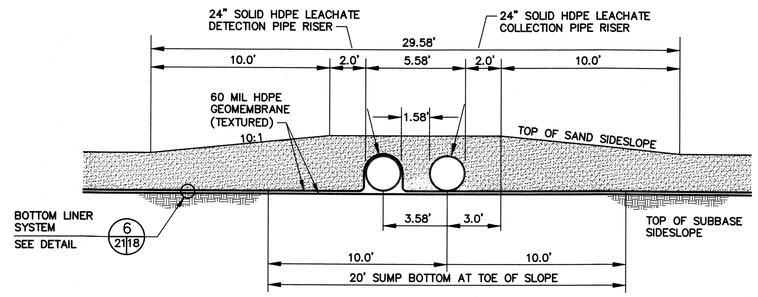
SCALE: 1" = 4'



SUMP MOUND AND COLLECTION TRENCH PIPING

SECTION C | 22 | 21

SCALE: 1" = 4'



SIDESLOPE RISER MOUND AND PIPING

SECTION D | 22 | 21

SCALE: 1" = 4'

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E.
LICENSE NO. 59026

DRAWING TITLE
SUMP AND SIDESLOPE RISER DETAILS

PROJECT TITLE
HARDEE COUNTY LANDFILL
PHASE II SECTION II EXPANSION
CONSTRUCTION DRAWINGS

CLIENT
HARDEE COUNTY
BOARD OF
COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	09199033.23	O/A R/W BY:	CEH
DWN. BY:	SDA	APP. BY:	SRF
CHK. BY:	SRF		
DSN. BY:	SRF		

CADD FILE: 993323SECTIONS1

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. **21** of **26**

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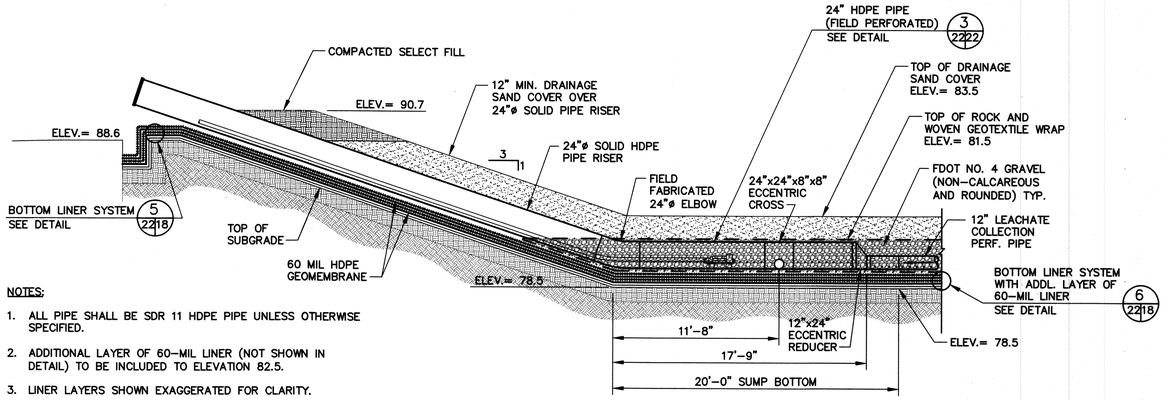
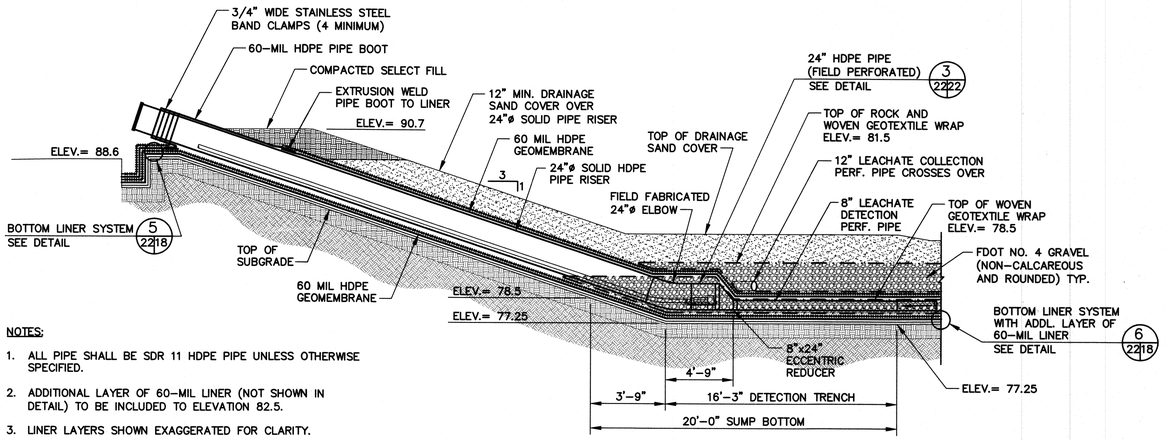


NOTES:

1. ALL PIPE SHALL BE SDR 11 HDPE PIPE UNLESS OTHERWISE SPECIFIED.
2. ADDITIONAL LAYER OF 60-MIL LINER (NOT SHOWN IN DETAIL) TO BE INCLUDED TO ELEVATION 82.5.
3. LINER LAYERS SHOWN EXAGGERATED FOR CLARITY.

LEACHATE COLLECTION PUMPING SECTION A 22 22

NOT TO SCALE

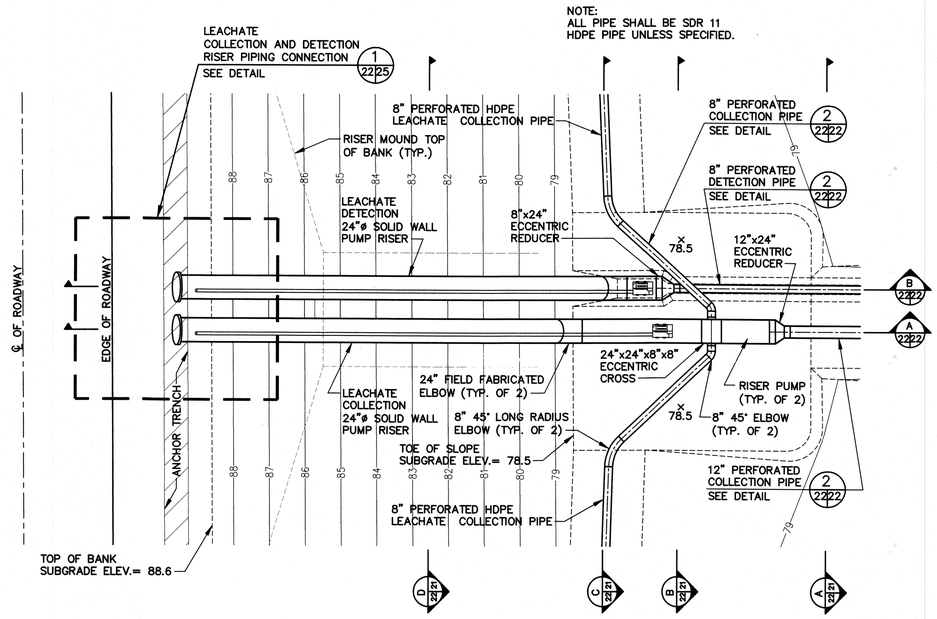


NOTES:

1. ALL PIPE SHALL BE SDR 11 HDPE PIPE UNLESS OTHERWISE SPECIFIED.
2. ADDITIONAL LAYER OF 60-MIL LINER (NOT SHOWN IN DETAIL) TO BE INCLUDED TO ELEVATION 82.5.
3. LINER LAYERS SHOWN EXAGGERATED FOR CLARITY.

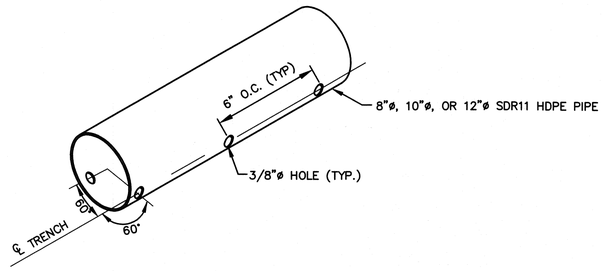
LEACHATE DETECTION PUMPING SECTION B 22 22

NOT TO SCALE



LEACHATE SUMP AND RISER DETAIL 1 12,13 22

SCALE: 1" = 6'-0"

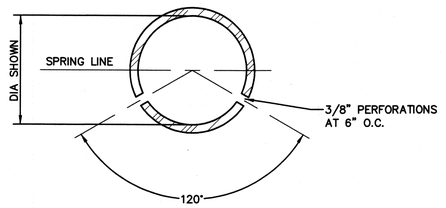


NOTES:

1. CONTRACTOR SHALL PLACE PERFORATED PIPE AS SHOWN (HOLES TOWARDS BOTTOM OF TRENCH).
2. PIPE SHALL HAVE SIX PERFORATIONS FOR EVERY ONE FOOT OF PIPE.

COLLECTION/DETECTION PIPE PERFORATION DETAIL 2 20,22 22

NOT TO SCALE



FIELD PERF. PIPE DETAIL 3 22 22

NOT TO SCALE

CONFORMED
DATE: 03/17/14

Seal: SHANE R. FISCHER, P.E. LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE: DETAILS - 1

PROJECT TITLE: HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

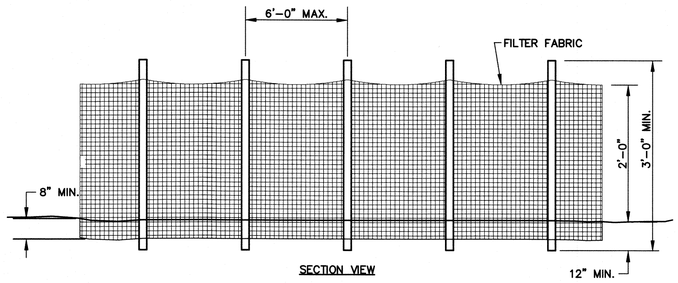
CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-6787
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09199033.23
DSN. BY: SRF | DWN. BY: SDA | CHK. BY: SRF | QA RVW BY: CEH | APP. BY: SRF

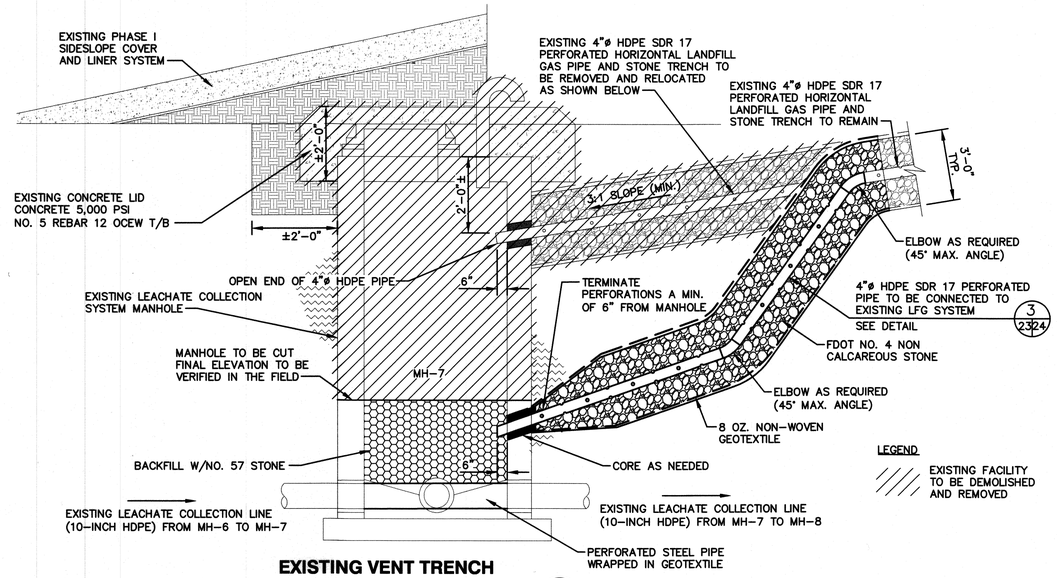
CADD FILE: 993323SUMPDETLS1
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. 22 of 26

A:\2009 Projects\09199033.23\Construction\993323SUMPDETLS1.dgn Mar 19, 2014 - 1:55pm Layout Name: Layout1 By: scott



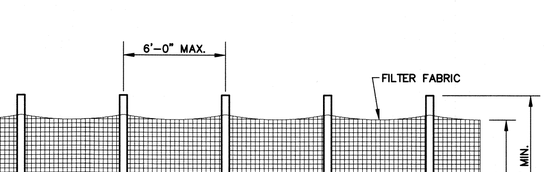
TYPE III FDOT SILT FENCE BARRIER DETAIL (4 / 7 | 23)

NOT TO SCALE



EXISTING VENT TRENCH TIE-IN TO MANHOLE DETAIL (1 / 8.24 | 23)

NOT TO SCALE

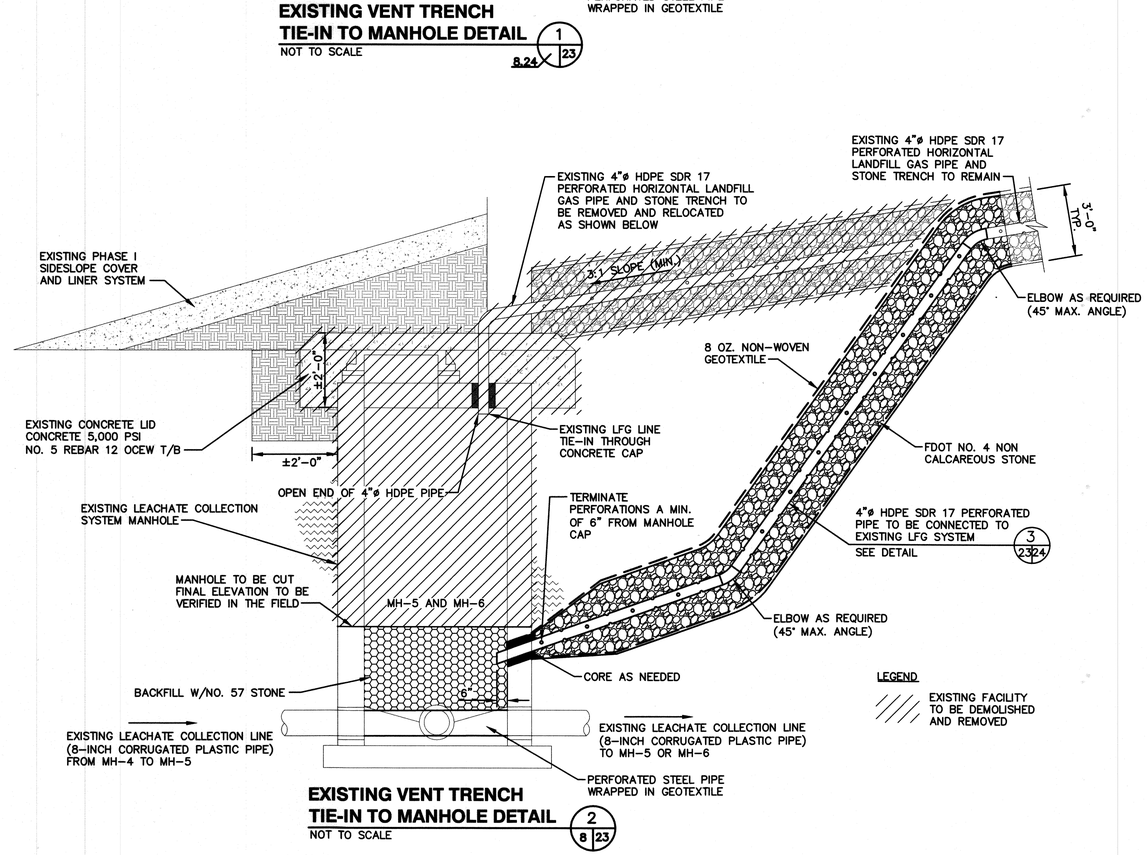


NOTES:

1. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF FOUR INCHES.
2. BALES SHALL BE SECURELY ANCHORED IN PLACE BY 3/8 INCH REBAR STAKES DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
3. INSPECTION SHALL BE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
4. WHEN SILT REACHES A DEPTH OF 6 INCHES, IT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AS TO NOT CREATE A SILTATION PROBLEM.
5. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, THE BALE AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED SPOIL DISPOSAL SITE.

HAY BALE BARRIER DETAIL (5 / 7 | 23)

NOT TO SCALE



EXISTING VENT TRENCH TIE-IN TO MANHOLE DETAIL (2 / 8 | 23)

NOT TO SCALE

CONFORMED
DATE: 03/17/14

G:\PROJECT\Hardee\0993033.23\Construction\993323LFG\ELL\dwg, Mar 18, 2014 - 1:56pm, Layout: Name, LFGDetails_1 Bw.dgnd

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE: DETAILS - 2

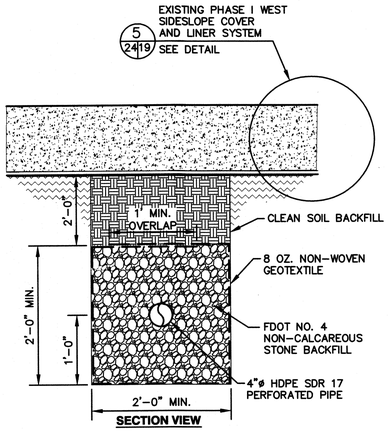
PROJECT TITLE: HARDEE COUNTY LANDFILL
PHASE II SECTION II EXPANSION
CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 626-2717
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO. 01199033.23
DSN. BY: SDA
DWN. BY: CEH
CHK. BY: SRF
QA REVIEW: CEH
APP. BY: SRF

CADD FILE: 993323LFGDETL1
DATE: APRIL 2013
SCALE: AS SHOWN
DRAWING NO. 23 of 26



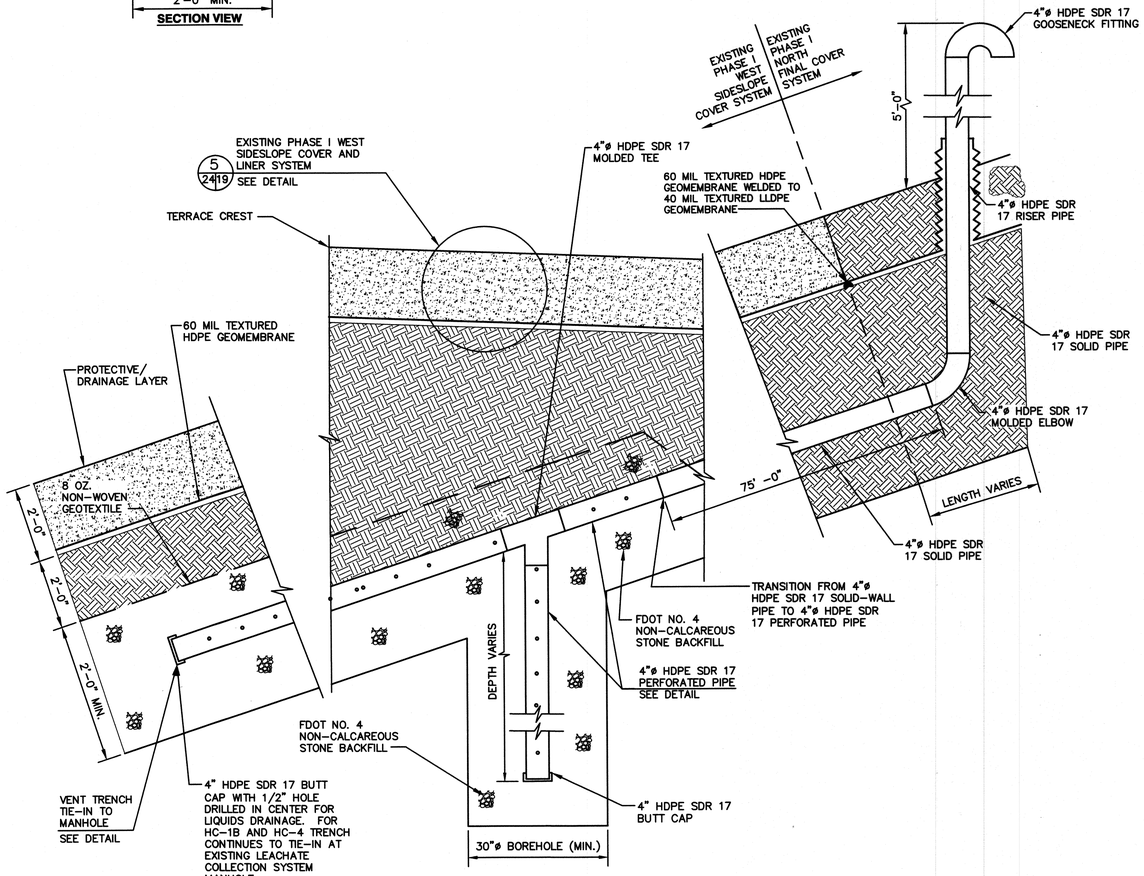
SECTION VIEW

LANDFILL GAS MONITORING PROBE SCHEDULE

Probe ID	Northing	Easting	Approx. Ground Surface	Well Depth	Slotted Pipe Length	Solid Pipe Length Below Grade	Solid Pipe Length Above Grade
GP-3R	1177624.46	726157.43	85.0	7.56	7.05	2.5	3
GP-4R	1177308.20	725945.51	83.8	8.54	5.85	2.5	3
GP-5R	1177004.63	725946.99	85.5	9.54	7.55	2.5	3
GP-6R	1176702.21	725946.53	85.0	9.92	7.92	2.5	3
GP-7R	1176402.21	725946.53	84.4	9.42	6.52	2.5	3
GP-8R	1176099.87	725949.54	83.7	10.59	5.82	2.5	3

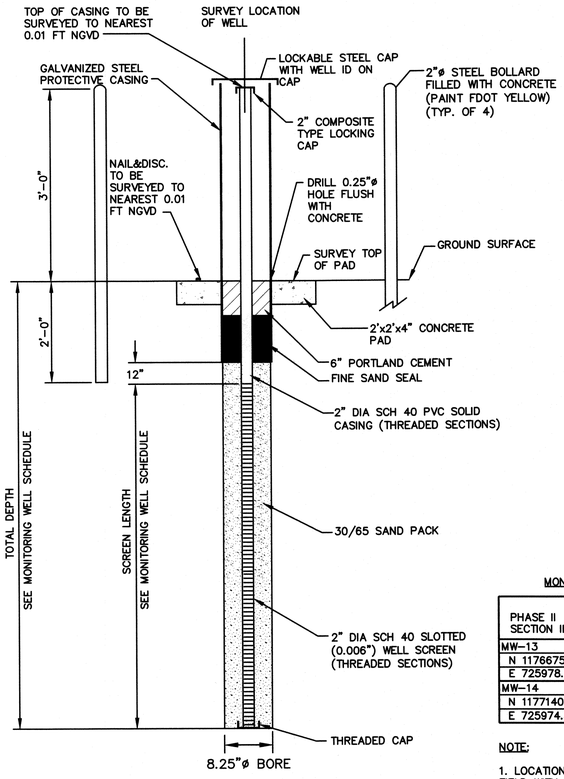
NOTE:

1. LOCATIONS TO BE CONFIRMED IN THE FIELD WITH THE OWNER PRIOR TO INSTALLATION.



EXISTING HORIZONTAL LANDFILL GAS VENT TRENCH DETAIL (TYP.) 3 / 8|24

NOT TO SCALE



TYPICAL MONITORING WELL DETAIL 1 / 4,8,12|24

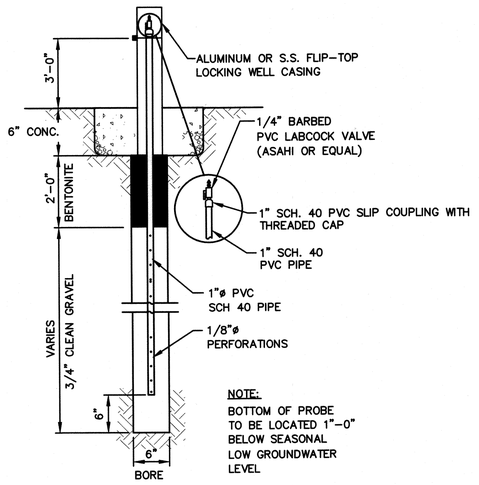
NOT TO SCALE

MONITORING WELL SCHEDULE

PHASE II SECTION II	GROUND ELEV. (FT NGVD)	TOTAL DEPTH (FT BLS)	SCREEN LENGTH (FT)
MW-13	85.9	17.0	15.0
N 1176675.10			
E 725978.03			
MW-14	86.0	17.0	15.0
N 1177140.10			
E 725974.39			

NOTE:

1. LOCATIONS TO BE CONFIRMED IN THE FIELD WITH THE OWNER PRIOR TO INSTALLATION.



NOTE:
BOTTOM OF PROBE TO BE LOCATED 1'-0" BELOW SEASONAL LOW GROUNDWATER LEVEL

LANDFILL GAS MONITORING PROBE (GP) DETAIL 2 / 4,8,12|24

NOT TO SCALE

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E. LICENSE NO. 58026

DRAWING TITLE: DETAILS - 3

PROJECT TITLE: HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 623-0707
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09199033.23 | DWN. BY: SDA | CHK. BY: SRF | QA/QC BY: CEH | APP. BY: SRF | DSN. BY: SRF

CADD FILE: 993323LFGDETL1

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. 24 of 26

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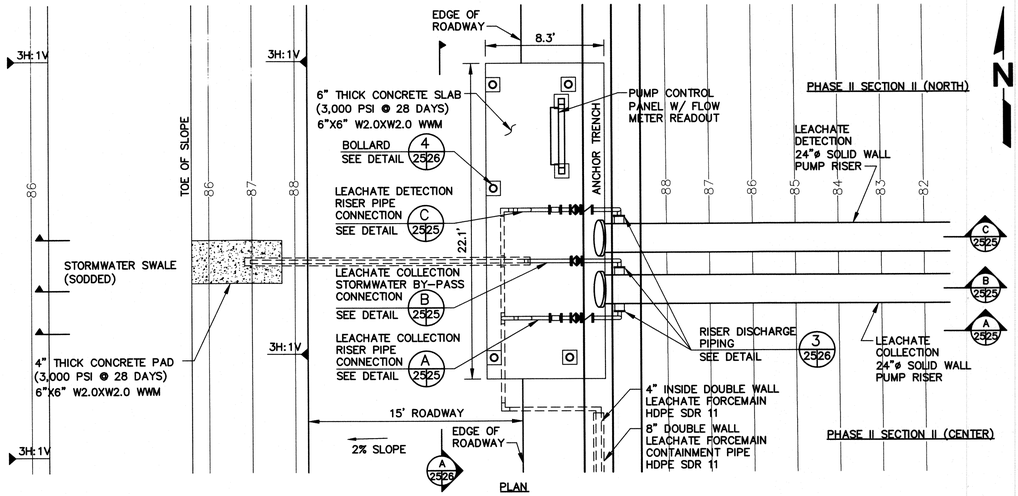
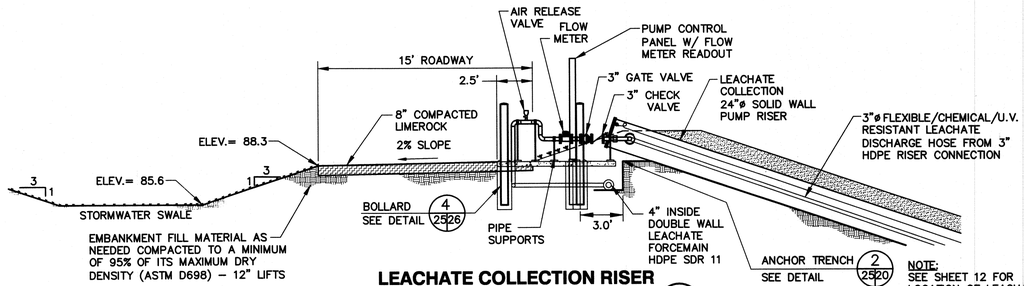


LEACHATE COLLECTION AND DETECTION RISER PIPING CONNECTION DETAIL

1 / 12,22 / 25

SCALE: 1" = 5'

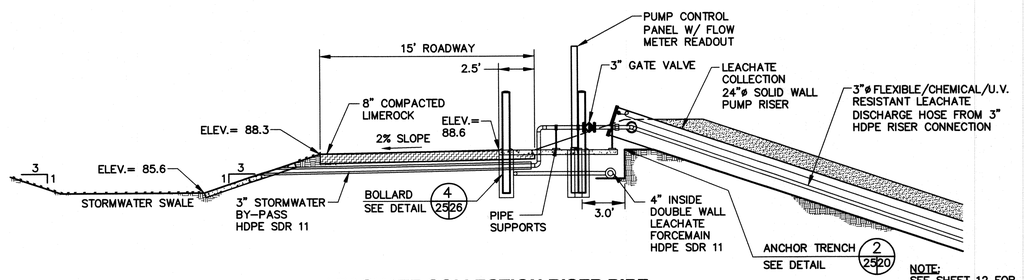


NOTE: SEE SHEET 12 FOR LOCATION OF LEACHATE FORCEMAIN.

LEACHATE COLLECTION RISER PIPE CONNECTION SECTION

A / 25 / 25

SCALE: 1" = 5'

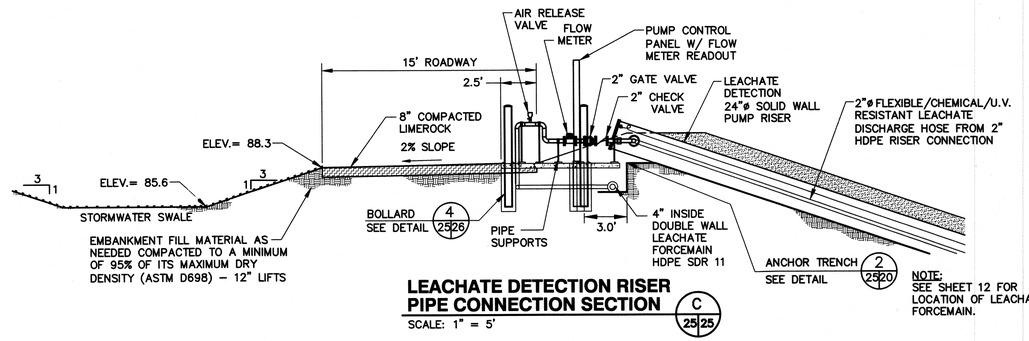


NOTE: SEE SHEET 12 FOR LOCATION OF LEACHATE FORCEMAIN.

LEACHATE COLLECTION RISER PIPE STORMWATER BY-PASS CONNECTION SECTION

B / 25 / 25

SCALE: 1" = 5'

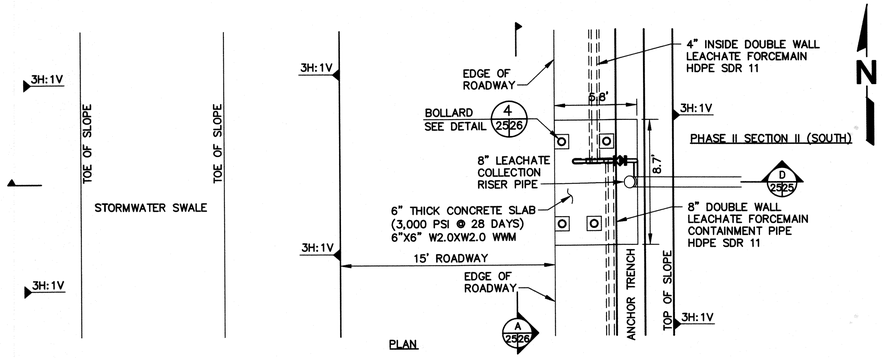


NOTE: SEE SHEET 12 FOR LOCATION OF LEACHATE FORCEMAIN.

LEACHATE DETECTION RISER PIPE CONNECTION SECTION

C / 25 / 25

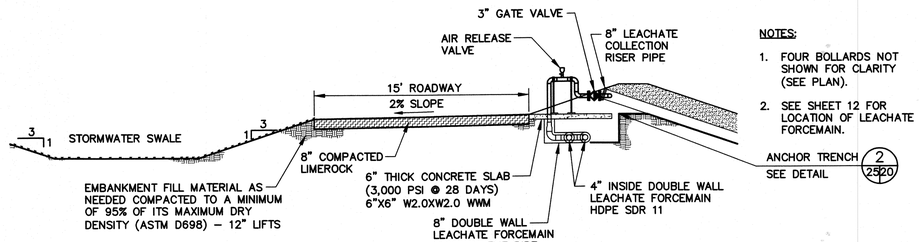
SCALE: 1" = 5'



NORTH AND MIDDLE LEACHATE COLLECTION CLEAN-OUT RISER CONNECTION DETAIL

2 / 12 / 25

NOT TO SCALE



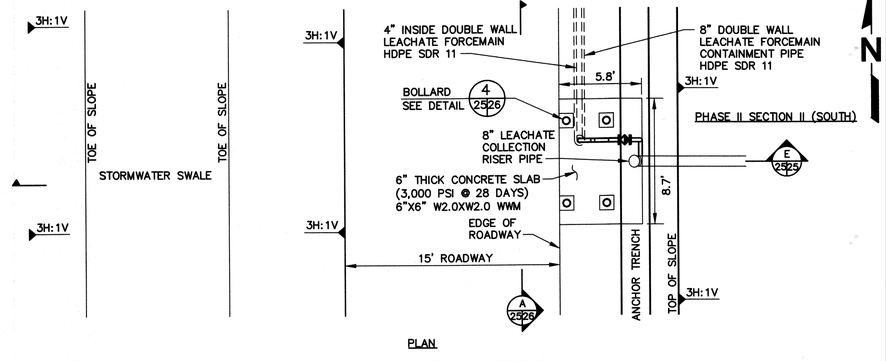
NOTES:

1. FOUR BOLLARDS NOT SHOWN FOR CLARITY (SEE PLAN).
2. SEE SHEET 12 FOR LOCATION OF LEACHATE FORCEMAIN.

NORTH AND MIDDLE LEACHATE COLLECTION CLEAN-OUT RISER CONNECTION SECTION

D / 25 / 25

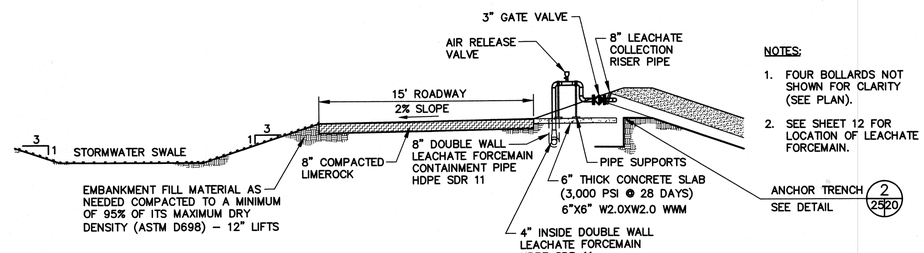
NOT TO SCALE



SOUTH LEACHATE COLLECTION CLEAN-OUT RISER CONNECTION DETAIL

3 / 12 / 25

NOT TO SCALETS



NOTES:

1. FOUR BOLLARDS NOT SHOWN FOR CLARITY (SEE PLAN).
2. SEE SHEET 12 FOR LOCATION OF LEACHATE FORCEMAIN.

SOUTH LEACHATE COLLECTION CLEAN-OUT RISER CONNECTION SECTION

E / 25 / 25

NOT TO SCALE

CONFORMED
DATE: 03/17/14

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

DRAWING TITLE: **DETAILS - 4**

PROJECT TITLE: **HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS**

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

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
813 621-0080 FAX 813 622-0157
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 093033.23 | DWN: BF | CHK: BF | APP: BF
TASK NO. SDA | QA REVIEW: CEH | SRF
DSN. BY: SRF

CADD FILE: 993323SUMPDETLS2

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. **25** of **26**

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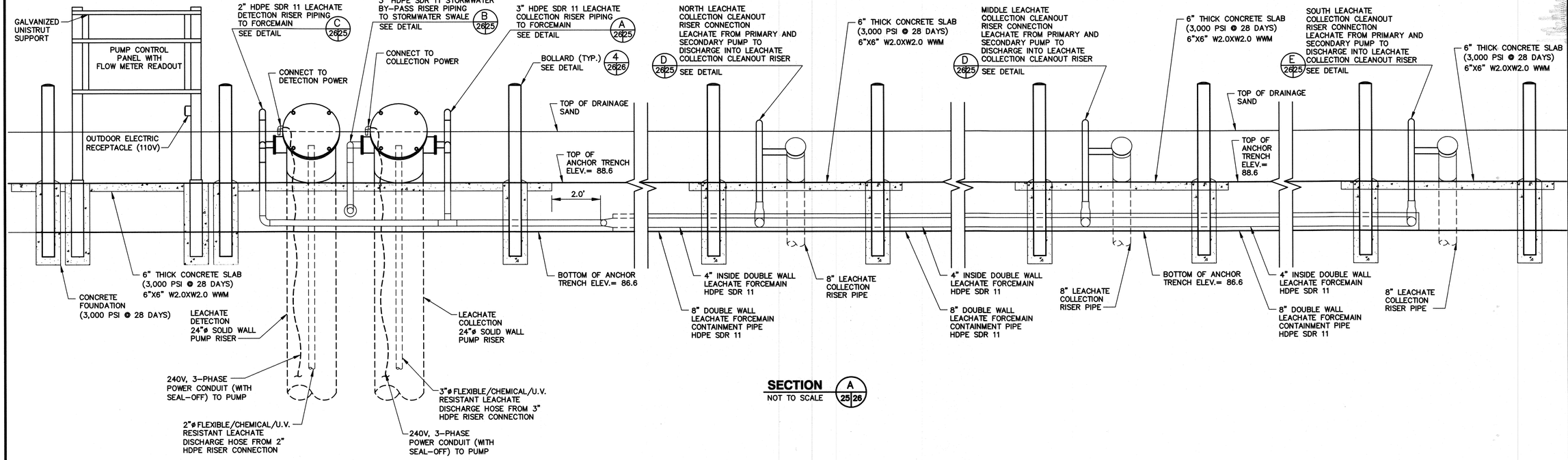
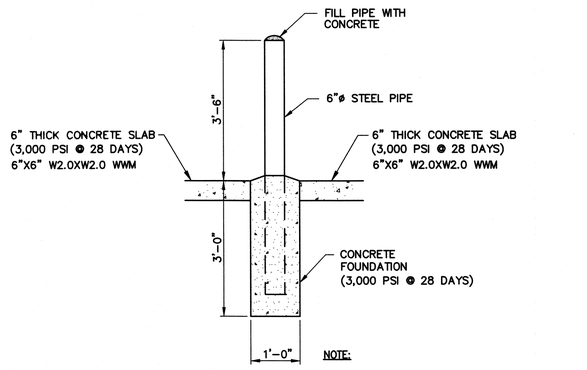
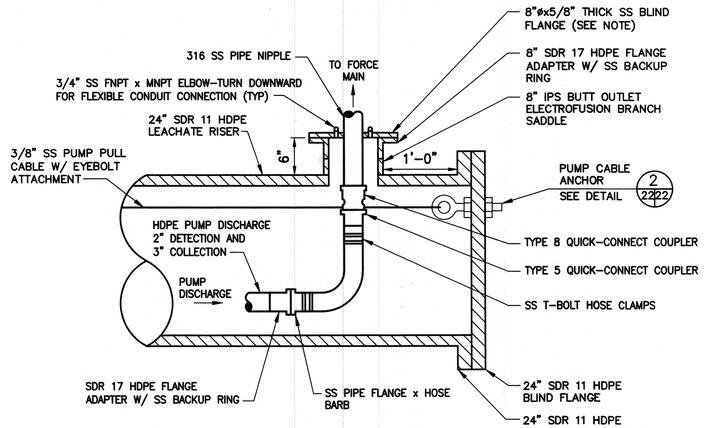


SECTION A 25 26
NOT TO SCALE



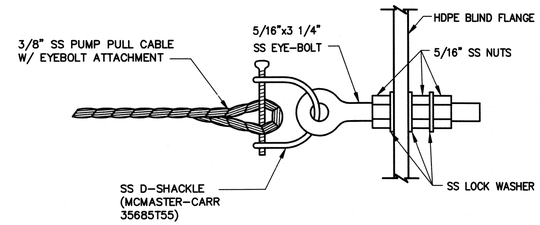
NOTE:
PAINT EXPOSED BOLLARD SURFACES SOLID YELLOW.

BOLLARD DETAIL 4 25 26
NOT TO SCALE

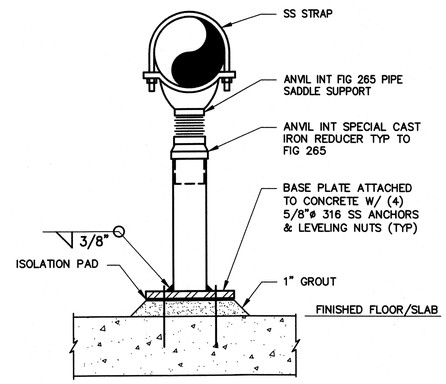


NOTE:
PIPE AND FITTING PENETRATIONS THROUGH SS FLANGE SHALL BE THREADED TO KEEP PENETRATIONS GAS TIGHT.

RISER DISCHARGE DETAIL 3 22 22
NOT TO SCALE



PUMP ANCHOR DETAIL 1 22 22
NOT TO SCALE



PIPE SUPPORT DETAIL 2 22 22
NOT TO SCALE

CONFORMED
DATE: 03/17/14

REV	DATE	DESCRIPTION	BY
1	01/06/14	ISSUED FOR BID	SRF
2	03/17/14	CONFORMED	SRF

SHANE R. FISCHER, P.E.
LICENSE NO. 58026

DRAWING TITLE: DETAILS - 5

PROJECT TITLE: HARDEE COUNTY LANDFILL PHASE II SECTION II EXPANSION CONSTRUCTION DRAWINGS

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 150, TAMPA, FL 33610
813 621-0080 FAX 813 623-0757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09199033.23 | DWN. BY: SDA | CHK. BY: SRF | DSN. BY: SRF | QA RVW. BY: CEH | APP. BY: SRF

CADD FILE: 993323SUMPDETLS2

DATE: APRIL 2013

SCALE: AS SHOWN

DRAWING NO. 26 of 26

G:\09\CAD\Hardee\09199033.23\Construction\993323\SUMPDETLS2.dgn Mar 18, 2014 - 1:59pm Leonel Vargas-Bonilla 2 Bit, color