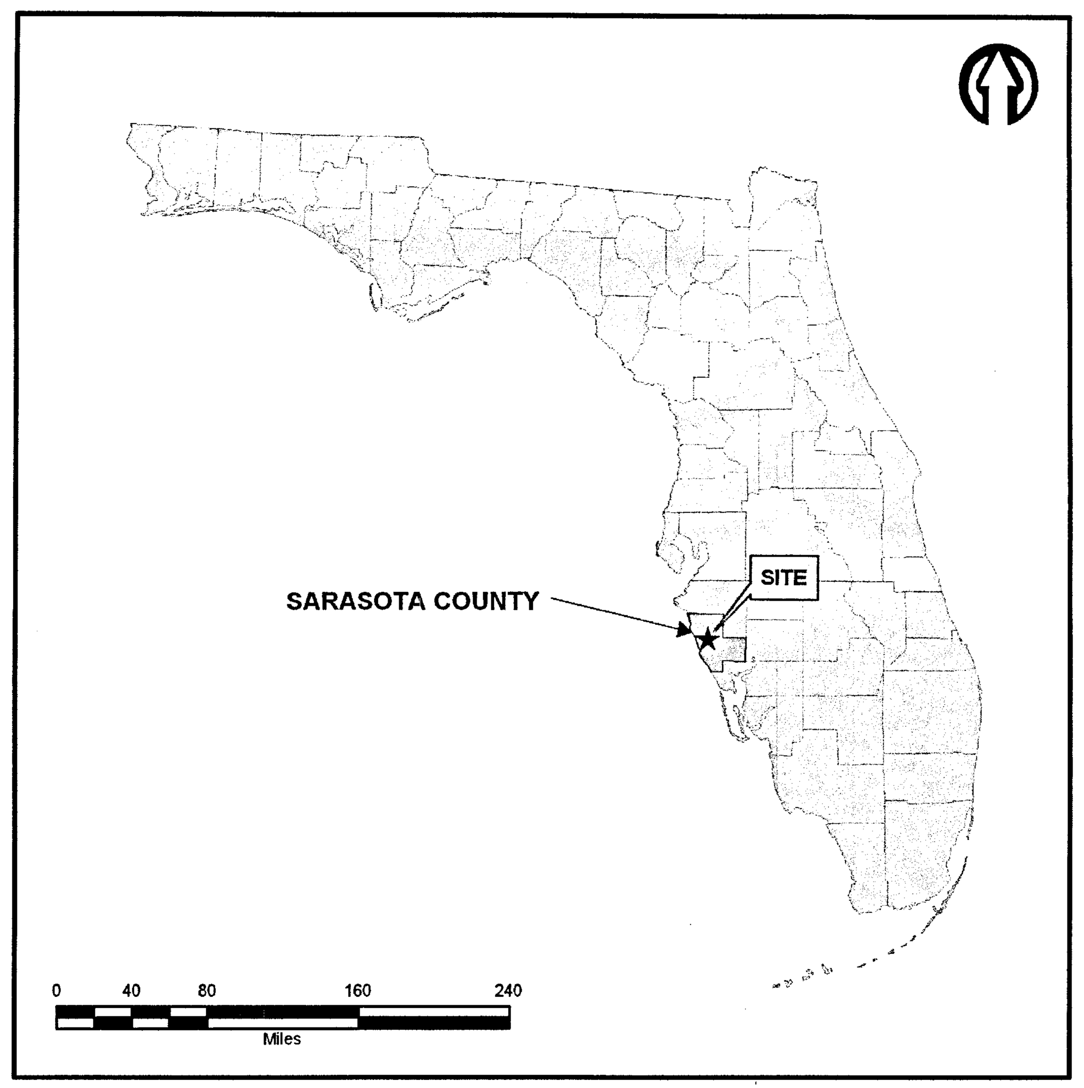
Sarasota County

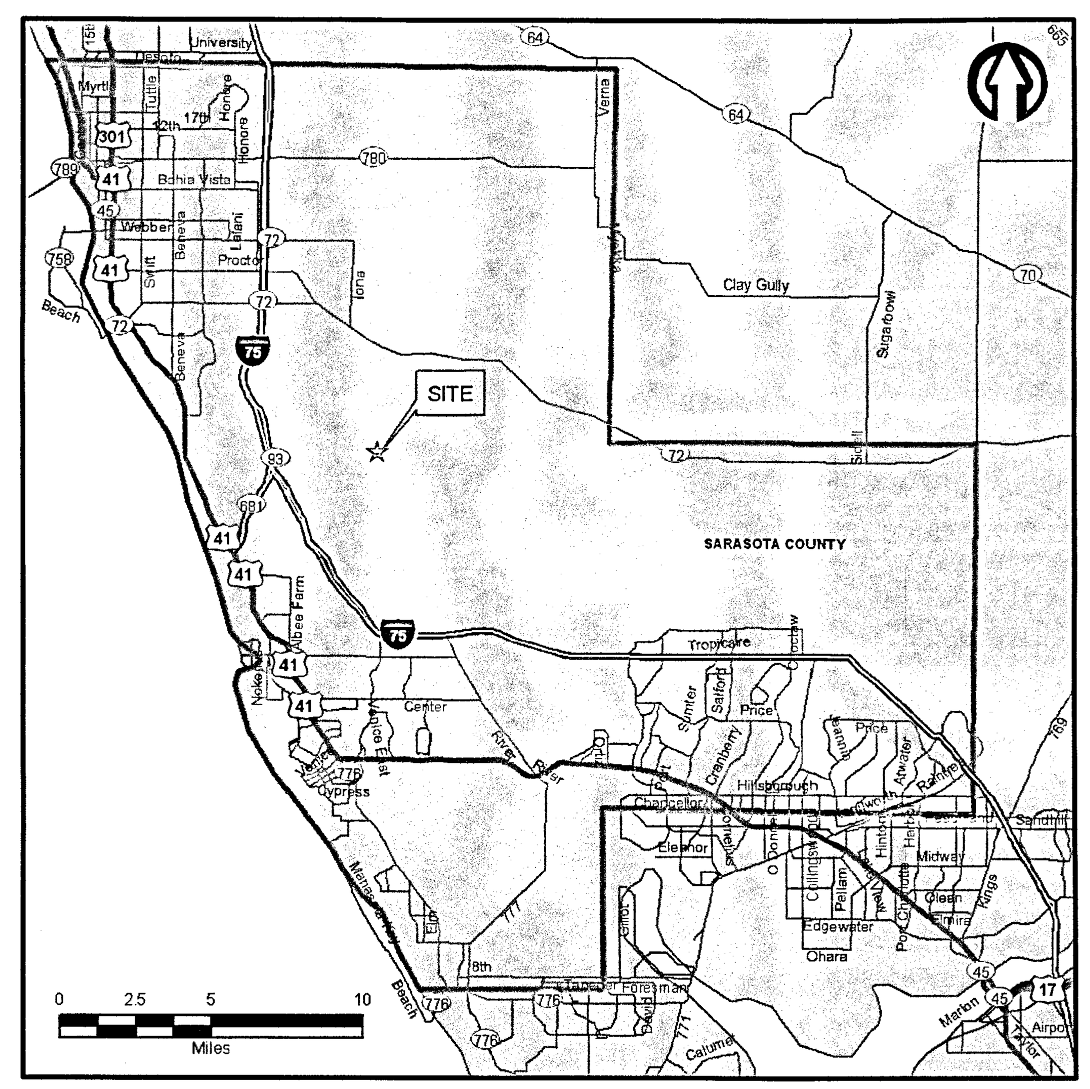
SOLID WASTE OPERATIONS

FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

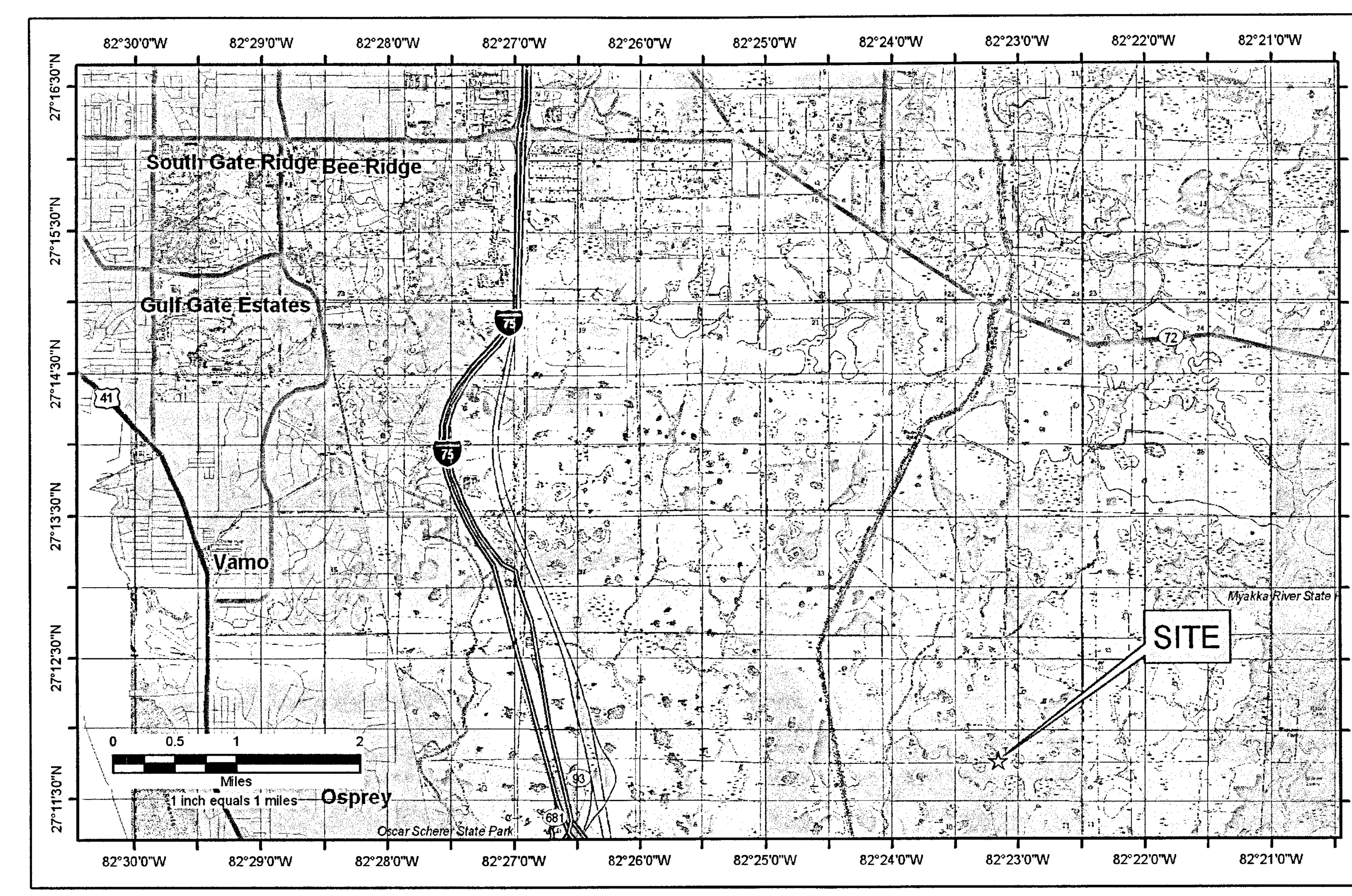
PERMIT DRAWINGS (NOVEMBER 2006)



STATE MAP



COUNTY MAP



VICINITY MAP

SEQUENTIAL DETAIL NUMBER — 9 / 13 — SHEET ON WHICH ABOVE DETAIL IS PRESENTED

DETAIL SYMBOL REFERENCE KEY

SEQUENTIAL DETAIL NUMBER — 9 / 11 — SHEET ON WHICH THE ABOVE DETAIL IS FIRST REFERENCED

DETAIL (TYPICAL)
PERFORATION AT BASE OF LEACHATE SUMP RISER
SCALE: NTS
XREF: 0495X02119
— DETAIL TITLE

DETAIL BAR REFERENCE KEY

EXAMPLE: DETAIL 9 WHICH IS PRESENTED ON SHEET 13 WAS FIRST REFERENCED ON SHEET 11.

B / 7 — SEQUENTIAL SECTION ALPHABET — SHEET ON WHICH ABOVE SECTION IS PRESENTED

SECTION SYMBOL REFERENCE KEY

SEQUENTIAL SECTION ALPHABET — B / 3 — SHEET ON WHICH THE ABOVE SECTION IS FIRST REFERENCED

SECTION (TYPICAL)
LANDFILL CROSS SECTION
SCALE: 1" = 5'
XREF: 0495X02093
— SECTION TITLE

SECTION BAR REFERENCE KEY

EXAMPLE: SECTION B WHICH IS PRESENTED ON SHEET 7 WAS FIRST REFERENCED ON SHEET 3.

NOTE: BLANK INDICATED FOR SHEET NUMBER IMPLIES THAT THE SECTION OR DETAIL IS NOT REFERENCED ON ANY SHEET.

LIST OF SHEETS

SHEET NO.	SHEET TITLE	REVISION
1	TITLE SHEET	1
2	SITE DEVELOPMENT PLAN	1
3	BASE GRADING PLAN	1
4	FINAL GRADING PLAN	0
5	TYPICAL CROSS SECTIONS	1
6	LINER SYSTEM DETAILS I	1
7	LINER SYSTEM DETAILS II	1
8	FLSC PIPING LAYOUT	1
9	LEACHATE MANAGEMENT SYSTEM PROCESS DIAGRAM LEGEND SHEET	1
10	LEACHATE MANAGEMENT SYSTEM MECHANICAL FLOW SCHEMATIC	1
11	LEACHATE MANAGEMENT SYSTEM PROCESS AND INSTRUMENTATION SCHEMATIC	0
12	WEIR DETAILS	1
13	MISCELLANEOUS DETAILS	1

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

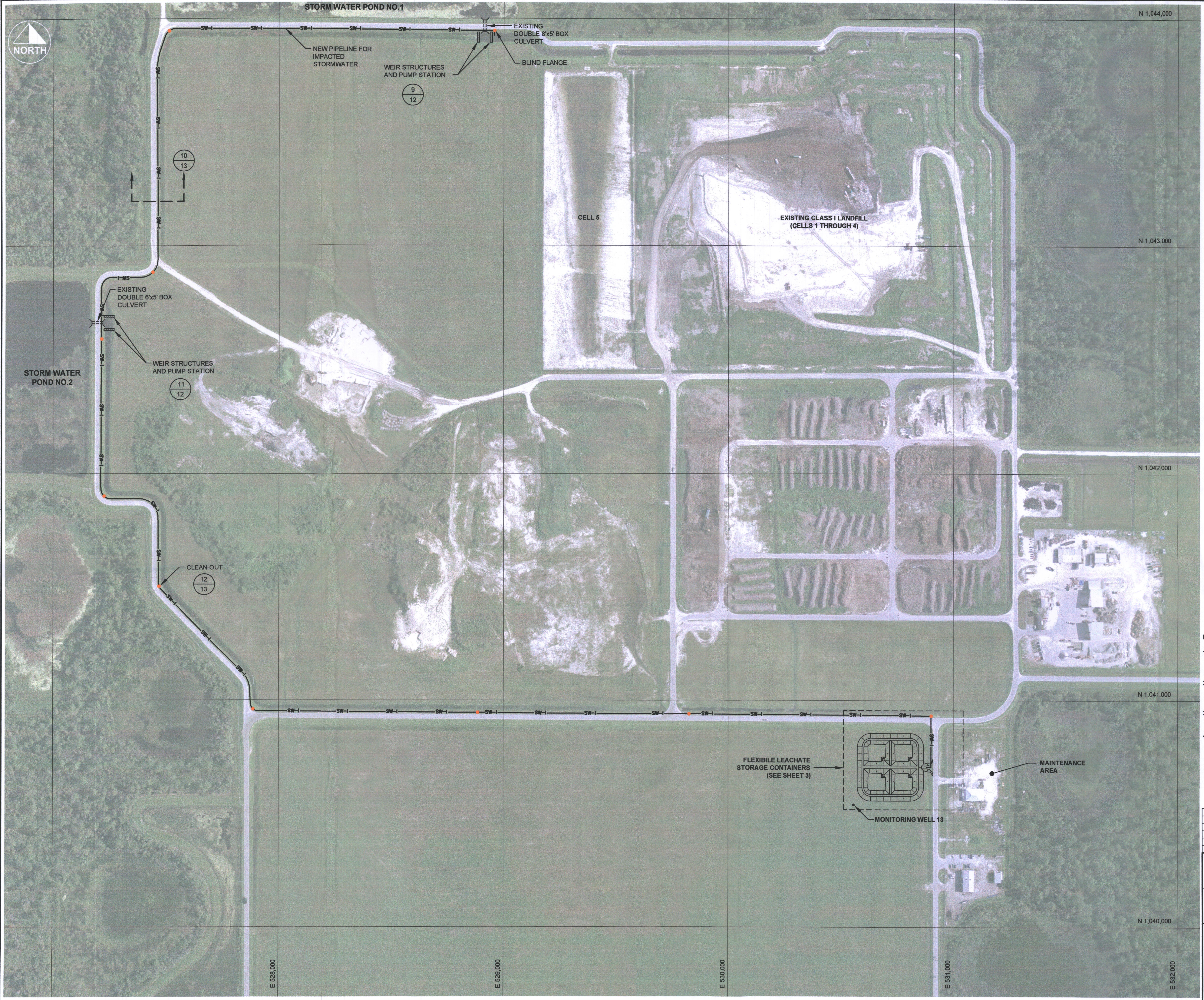
TITLE:
TITLE SHEET

A Gupta
29 MAR 2007
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02001
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 1 OF 13



PERMIT DRAWING

NORTH

0 100' 200' 400'

SCALE: 1" = 200'

LEGEND

SW-I — IMPACTED STORMWATER INFLOW PIPELINE

CLEANOUT LOCATION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT
TAMPA

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REFLECT FLORIDA STATE PLANE WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) AS ESTABLISHED BY OTHERS AND PROVIDED BY THE CLIENT.
2. THE AERIAL PHOTOGRAPH SHOWN IS BASED ON AN AERIAL SURVEY PERFORMED ON 6 JULY 2005 BY LANDAIR MAPPING, INC., PEACHTREE CITY, GEORGIA.
3. MONITORING WELL 13 WAS INSTALLED BY NATIONAL ENVIRONMENTAL TECHNOLOGY, INC. (DOVER, FLORIDA) ON 1 AUGUST 2006.
4. IMPACTED STORM WATER CONTAINED WITHIN THE SURFACE WATER DRAINAGE CHANNELS WILL BE PUMPED TO THE FLSC FACILITY. A SUBMERSIBLE PUMP, PLACED ON THE CONCRETE PAD ON THE SIDE OF THE WEIR WHERE THE IMPACTED STORM WATER IS CONTAINED, WILL BE CONNECTED TO THE IMPACTED STORM WATER PIPELINE AT THE ADJACENT CLEANOUT LOCATIONS.

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:

FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:

SITE DEVELOPMENT PLAN

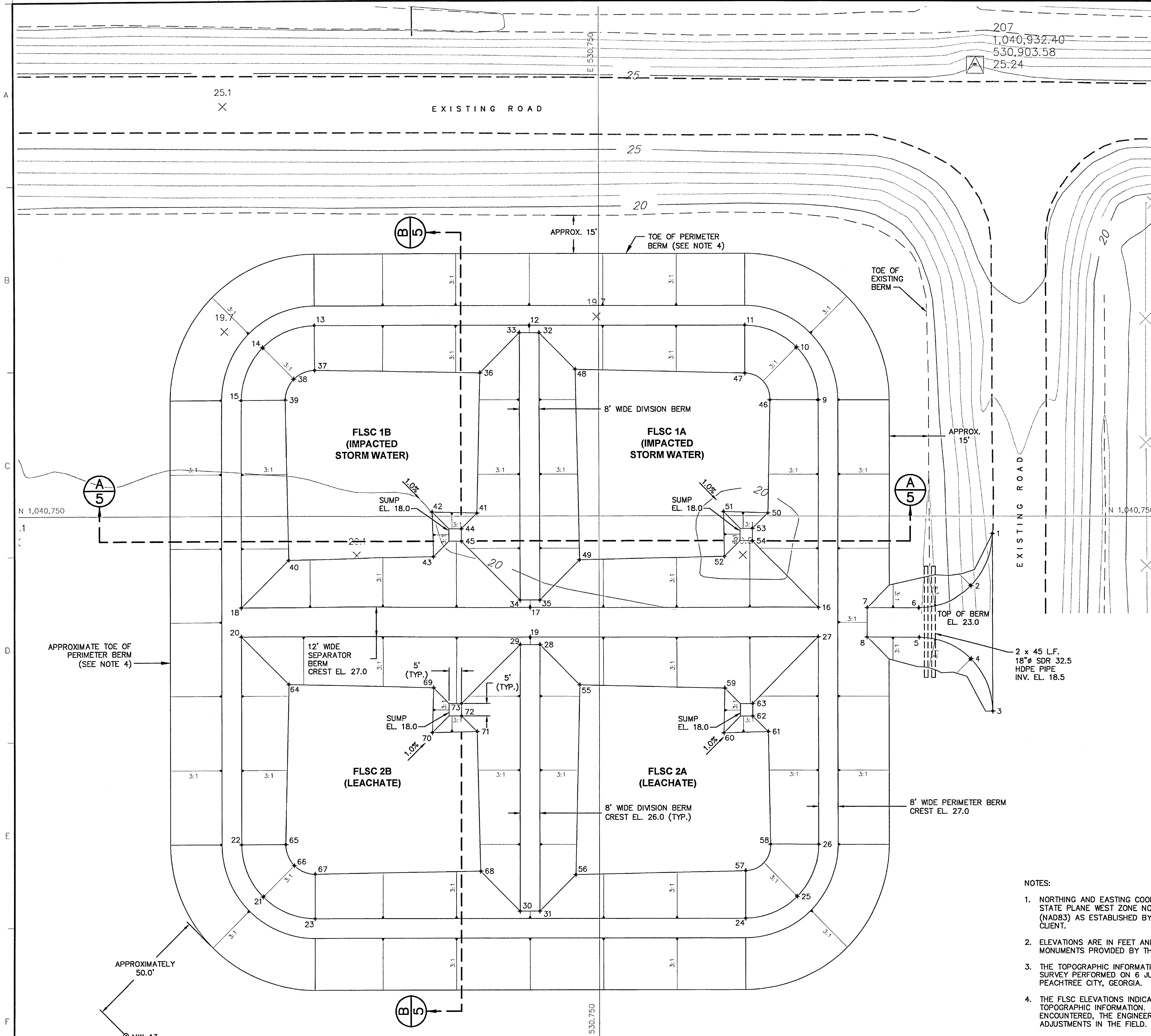
AGupta
3/29/07

AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: 1" = 200'
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02002
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 2 OF 13



NORTH

SCALE: 1" = 20'

0 10' 20' 40'

LEGEND

+10 CONSTRUCTION CONTROL POINT

⊙ MONITORING WELL LOCATION

CONSTRUCTION CONTROL POINTS				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1040742.98	530910.74	NOTE 5	FLSC BASE
2	1040721.70	530901.99	23.00	FLSC BASE
3	1040670.98	530910.96	NOTE 5	FLSC BASE
4	1040692.13	530902.14	23.00	FLSC BASE
5	1040700.89	530880.96	23.00	FLSC BASE
6	1040712.89	530880.74	23.00	FLSC BASE
7	1040712.89	530859.70	23.00	FLSC BASE
8	1040700.89	530859.70	23.00	FLSC BASE
9	1040796.89	530839.70	27.00	FLSC BASE
10	1040818.10	530830.91	27.00	FLSC BASE
11	1040826.89	530809.70	27.00	FLSC BASE
12	1040826.89	530721.70	27.00	FLSC BASE
13	1040826.89	530633.70	27.00	FLSC BASE
14	1040818.10	530612.49	27.00	FLSC BASE
15	1040796.89	530603.70	27.00	FLSC BASE
16	1040712.89	530839.70	27.00	FLSC BASE
17	1040712.89	530721.70	27.00	FLSC BASE
18	1040712.89	530603.70	27.00	FLSC BASE
19	1040700.89	530721.70	27.00	FLSC BASE
20	1040700.89	530603.70	27.00	FLSC BASE
21	1040595.67	530612.49	27.00	FLSC BASE
22	1040616.89	530603.70	27.00	FLSC BASE
23	1040586.89	530633.70	27.00	FLSC BASE
24	1040586.89	530809.70	27.00	FLSC BASE
25	1040595.67	530830.91	27.00	FLSC BASE
26	1040616.89	530839.70	27.00	FLSC BASE
27	1040700.89	530839.70	27.00	FLSC BASE
28	1040697.89	530725.70	26.00	FLSC BASE
29	1040697.89	530717.70	26.00	FLSC BASE
30	1040589.89	530717.70	26.00	FLSC BASE
31	1040589.89	530725.70	26.00	FLSC BASE
32	1040823.89	530725.70	26.00	FLSC BASE
33	1040823.89	530717.70	26.00	FLSC BASE
34	1040715.89	530717.70	26.00	FLSC BASE
35	1040715.89	530725.70	26.00	FLSC BASE
36	1040807.72	530701.53	20.51	FLSC BASE
37	1040808.88	530633.70	21.00	FLSC BASE
38	1040805.36	530625.22	21.03	FLSC BASE
39	1040796.89	530621.71	21.00	FLSC BASE
40	1040732.29	530623.11	20.53	FLSC BASE
41	1040751.24	530700.13	20.12	FLSC BASE
42	1040751.64	530681.95	20.25	FLSC BASE
43	1040733.53	530682.34	20.12	FLSC BASE
44	1040744.89	530693.70	18.00	FLSC BASE
45	1040739.89	530693.70	18.00	FLSC BASE
46	1040796.82	530819.95	20.42	FLSC BASE
47	1040807.61	530809.70	20.58	FLSC BASE
48	1040809.14	530740.44	21.09	FLSC BASE
49	1040732.26	530742.08	20.54	FLSC BASE
50	1040751.23	530819.04	20.12	FLSC BASE
51	1040751.64	530800.95	20.25	FLSC BASE
52	1040733.52	530801.33	20.12	FLSC BASE
53	1040744.89	530812.70	18.00	FLSC BASE
54	1040739.89	530812.70	18.00	FLSC BASE
55	1040681.51	530742.08	20.54	FLSC BASE
56	1040604.63	530740.44	21.09	FLSC BASE
57	1040606.16	530809.70	20.58	FLSC BASE
58	1040616.89	530819.95	20.42	FLSC BASE
59	1040680.25	530801.33	20.12	FLSC BASE
60	1040662.13	530800.95	20.25	FLSC BASE
61	1040662.54	530819.04	20.12	FLSC BASE
62	1040668.89	530812.70	18.00	FLSC BASE
63	1040673.89	530812.70	18.00	FLSC BASE
64	1040681.48	530623.11	20.53	FLSC BASE
65	1040616.89	530621.71	21.00	FLSC BASE
66	1040608.41	530625.22	21.03	FLSC BASE
67	1040604.89	530633.70	21.00	FLSC BASE
68	1040606.05	530701.53	20.51	FLSC BASE
69	1040680.25	530682.34	20.12	FLSC BASE
70	1040662.13	530681.95	20.25	FLSC BASE
71	1040662.53	530700.13	20.12	FLSC BASE
72	1040668.89	530693.70	18.00	FLSC BASE
73	1040673.89	530693.70	18.00	FLSC BASE

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REFLECT FLORIDA STATE PLANE WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) AS ESTABLISHED BY OTHERS AND PROVIDED BY THE CLIENT.
2. ELEVATIONS ARE IN FEET AND BASED ON VERTICAL CONTROL MONUMENTS PROVIDED BY THE CLIENT.
3. THE TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AN AERIAL SURVEY PERFORMED ON 6 JULY 2005 BY LANDAIR MAPPING, INC., PEACHTREE CITY, GEORGIA.
4. THE FLSC ELEVATIONS INDICATED ARE BASED ON AVAILABLE TOPOGRAPHIC INFORMATION. IF DIFFERENT FIELD CONDITIONS ARE ENCOUNTERED, THE ENGINEER SHALL MAKE NECESSARY ADJUSTMENTS IN THE FIELD.
5. FOR CONTROL POINTS 1 AND 3, ELEVATIONS SHALL BE ESTABLISHED TO TRANSITION INTO EXISTING ROAD ELEVATIONS.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:

FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:

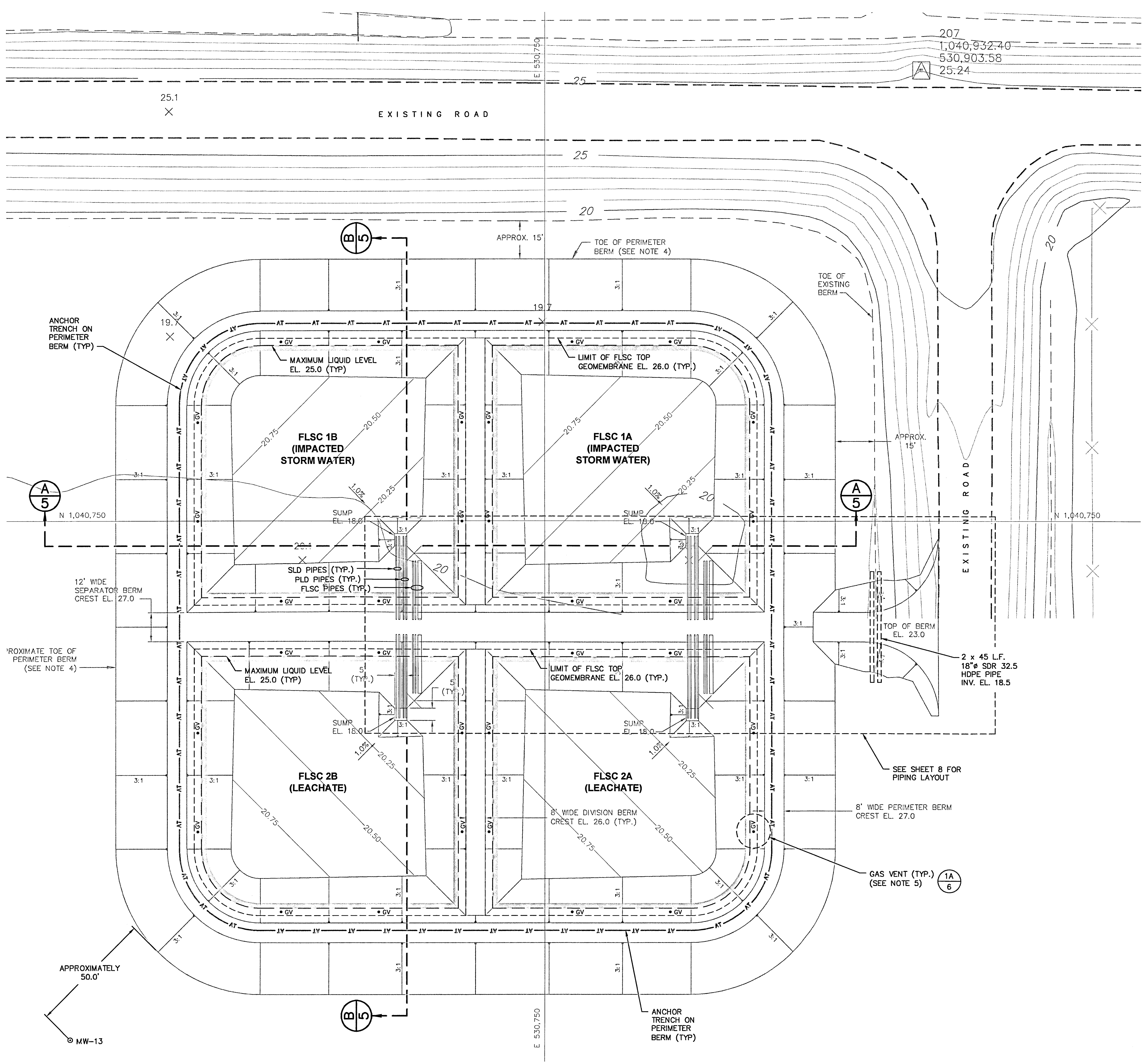
BASE GRADING PLAN

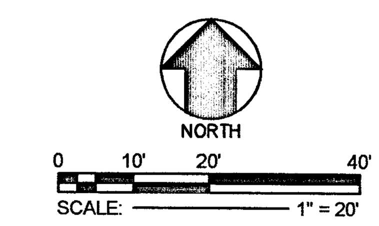
A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: 1" = 20'
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02003
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 3 OF 13





LEGEND

—AT——AT—	ANCHOR TRENCH
• GV	GEOMEMBRANE GAS VENT (SEE NOTE 5)
⊙	MONITORING WELL LOCATION

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REFLECT FLORIDA STATE PLANE WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) AS ESTABLISHED BY OTHERS AND PROVIDED BY THE CLIENT.
2. ELEVATIONS ARE IN FEET AND BASED ON VERTICAL CONTROL MONUMENTS PROVIDED BY THE CLIENT.
3. THE TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AN AERIAL SURVEY PERFORMED ON 6 JULY 2005 BY LANDAIR MAPPING, INC., PEACHTREE CITY, GEORGIA.
4. THE FLSC ELEVATIONS INDICATED ARE BASED ON AVAILABLE TOPOGRAPHIC INFORMATION. IF DIFFERENT FIELD CONDITIONS ARE ENCOUNTERED, THE ENGINEER SHALL MAKE NECESSARY ADJUSTMENTS IN THE FIELD.
5. GEOMEMBRANE GAS VENTS SHALL BE INSTALLED ALONG THE PERIMETER OF THE FLSC TOP GEOMEMBRANE AT A FREQUENCY OF TWO PER SIDE. THE VENT SHALL BE CONSTRUCTED BY CUTTING A 6"ø HOLE IN THE FLSC TOP GEOMEMBRANE AND THEN WELDING THE TOP AND SIDES OF A 1' x 1' PATCH OVER THE HOLE, LEAVING THE BOTTOM EDGE OF THE GEOMEMBRANE PATCH UNWELDED TO ALLOW FOR GASES TO ESCAPE.
6. THIS SHEET ONLY SHOWS PARTIAL PIPING LAYOUT. SEE SHEET 8 FOR DETAILED PIPING LAYOUT.
7. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

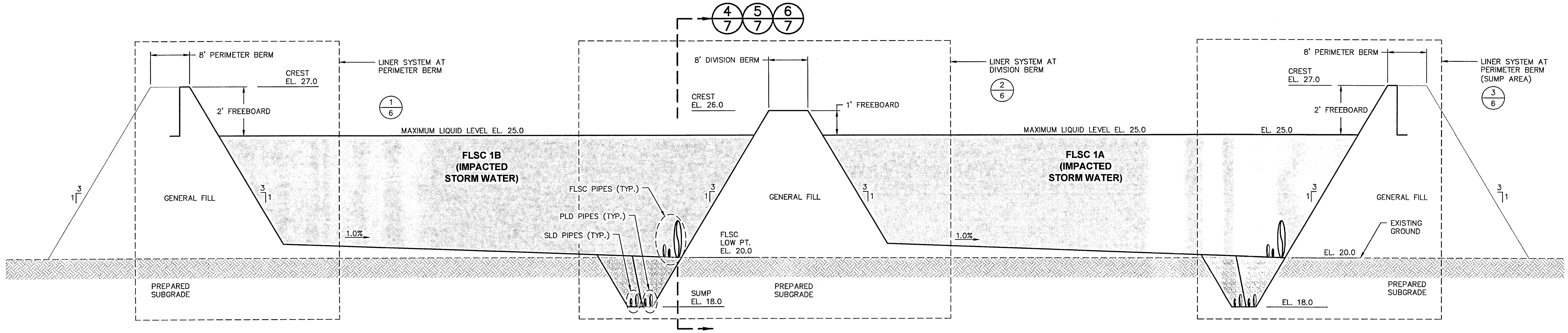
TITLE:
FINAL GRADING PLAN

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

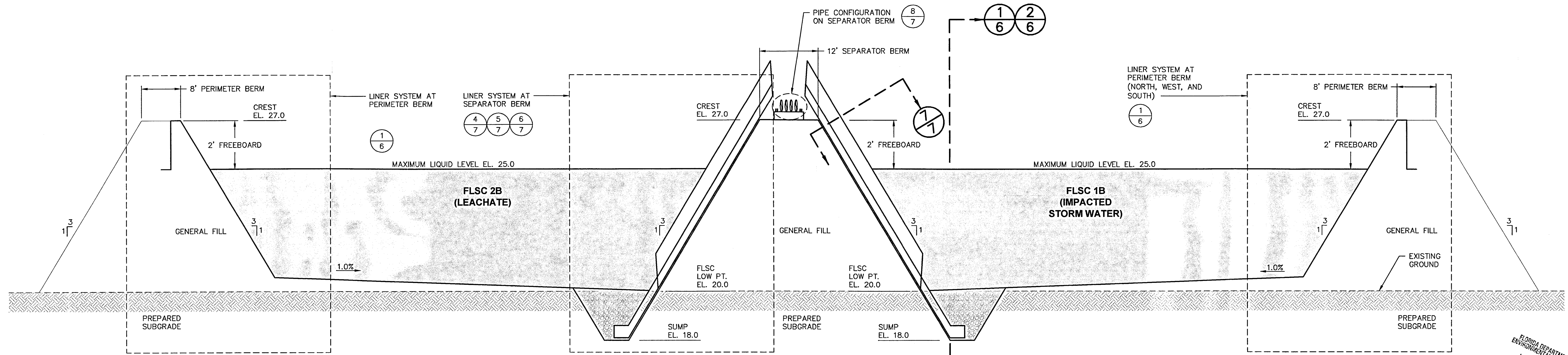
Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE:	NOVEMBER 2006
SCALE:	1" = 20'
PROJECT NO.:	FL0819.02
FILE NO.:	FL0819-02004
PDF DOC NO.:	GEAG-06-38A
SHEET NO.:	4 OF 13



A/4 TYPICAL SECTION
FLEXIBLE LEACHATE STORAGE CONTAINERS
SCALE: 1" = 10' HOR., 1" = 2' VER.



B/4 TYPICAL SECTION
FLEXIBLE LEACHATE STORAGE CONTAINERS
SCALE: 1" = 10' HOR., 1" = 2' VER.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REFLECT FLORIDA STATE PLANE WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) AS ESTABLISHED BY OTHERS AND PROVIDED BY THE CLIENT.
2. ELEVATIONS ARE IN FEET AND BASED ON VERTICAL CONTROL MONUMENTS PROVIDED BY THE CLIENT.
3. THE TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AN AERIAL SURVEY PERFORMED ON 6 JULY 2005 BY LANDAIR MAPPING, INC., PEACHTREE CITY, GEORGIA.
4. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.
5. PONDED STORM WATER THAT ACCUMULATES ON TOP OF THE FLSCs AND DOES NOT EVAPORATE WILL BE REMOVED, AS NEEDED, USING A SMALL SUBMERSIBLE PUMP. FROM THE PERIMETER OR DIVISION BERM, THE PUMP WILL BE LOWERED INTO POSITION USING AN EXTENSION ROD SUCH THAT THE TOP GEOMEMBRANE LAYER IS NOT DAMAGED.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FDEP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

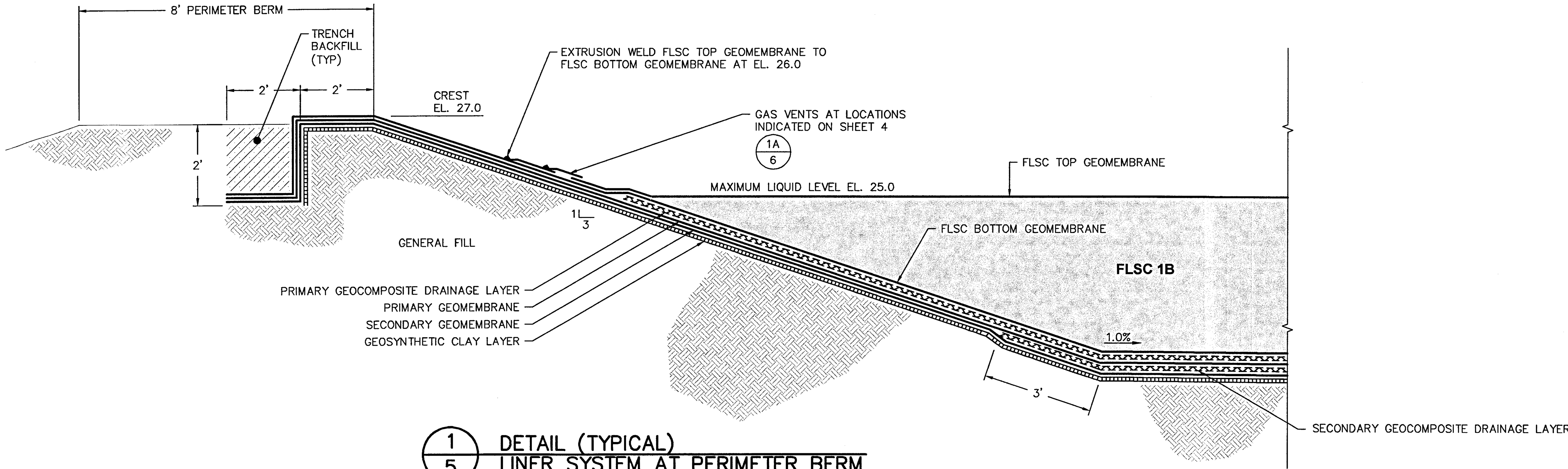
TITLE:
TYPICAL CROSS SECTIONS

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

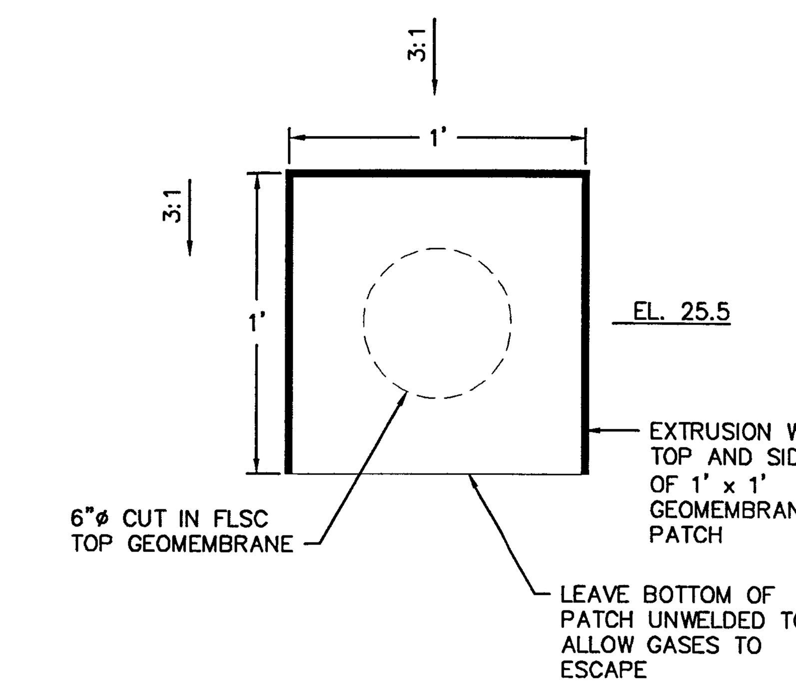
Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

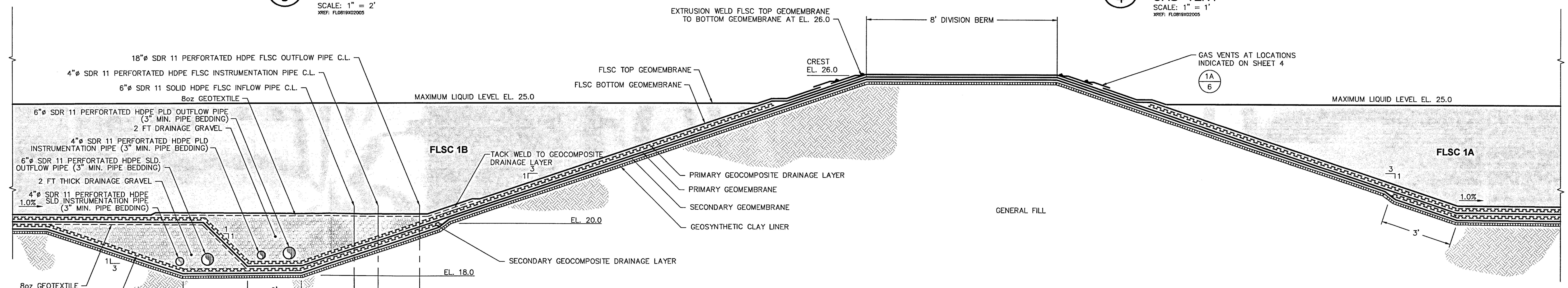
DATE:	NOVEMBER 2006
SCALE:	1" = 10'
PROJECT NO.:	FL0819.02
FILE NO.:	FL0819-02005
PDF DOC NO.:	GEAG-06-38A
SHEET NO.:	5 OF 13



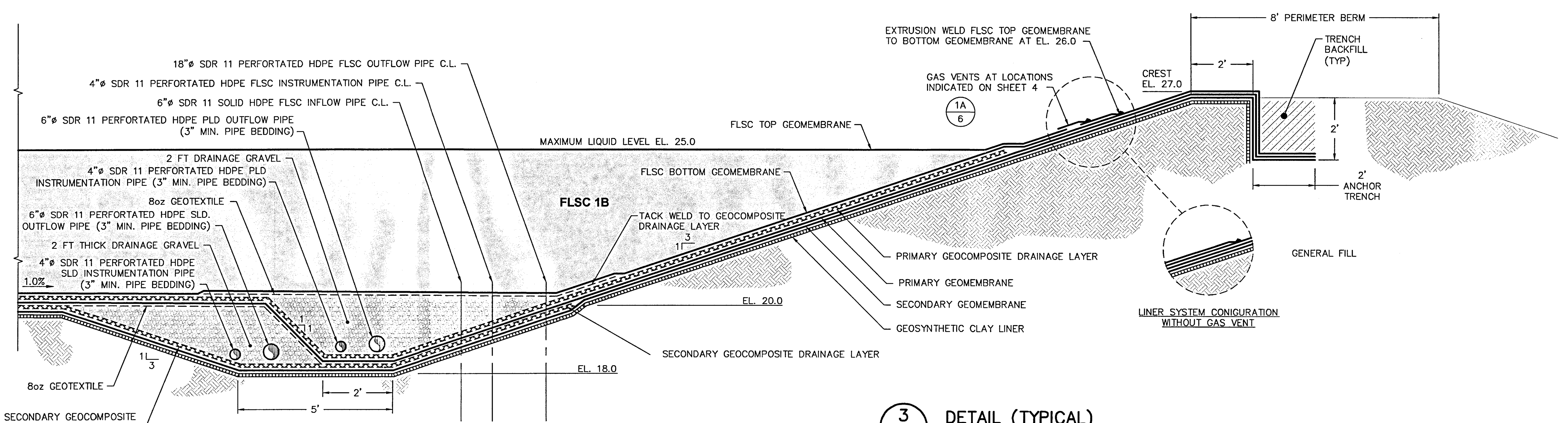
1
5
DETAIL (TYPICAL)
LINER SYSTEM AT PERIMETER BERM
SCALE: 1" = 2'
XREF: FL0819X02005



1A
4
DETAIL (TYPICAL)
GAS VENT
SCALE: 1" = 1'
XREF: FL0819X02005



2
5
DETAIL (TYPICAL)
LINER SYSTEM AT DIVISION BERM
SCALE: 1" = 2'
XREF: FL0819X02005



3
5
DETAIL (TYPICAL)
LINER SYSTEM AT PERIMETER BERM (SUMP AREA)
SCALE: 1" = 2'
XREF: FL0819X02005

NOTES:

1. ALL GEOMEMBRANES INDICATED ARE 60 mil HDPE TEXTURED GEOMEMBRANE.
2. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

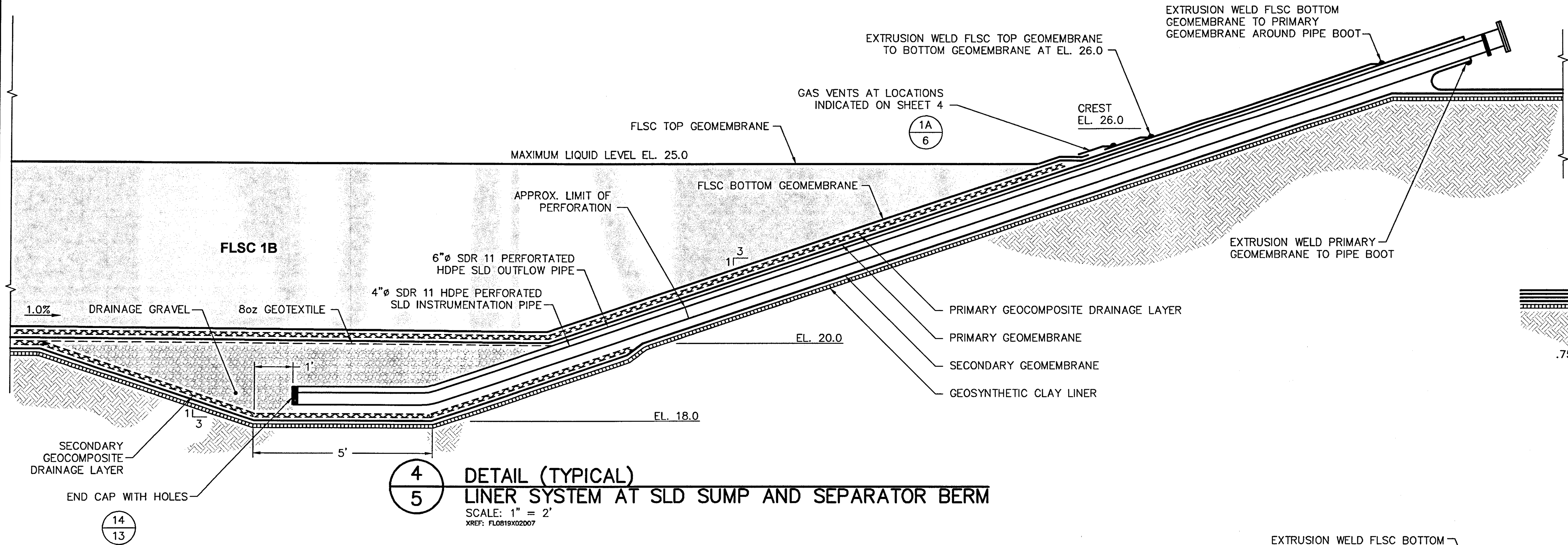
TITLE:
LINER SYSTEM DETAILS I

AGupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

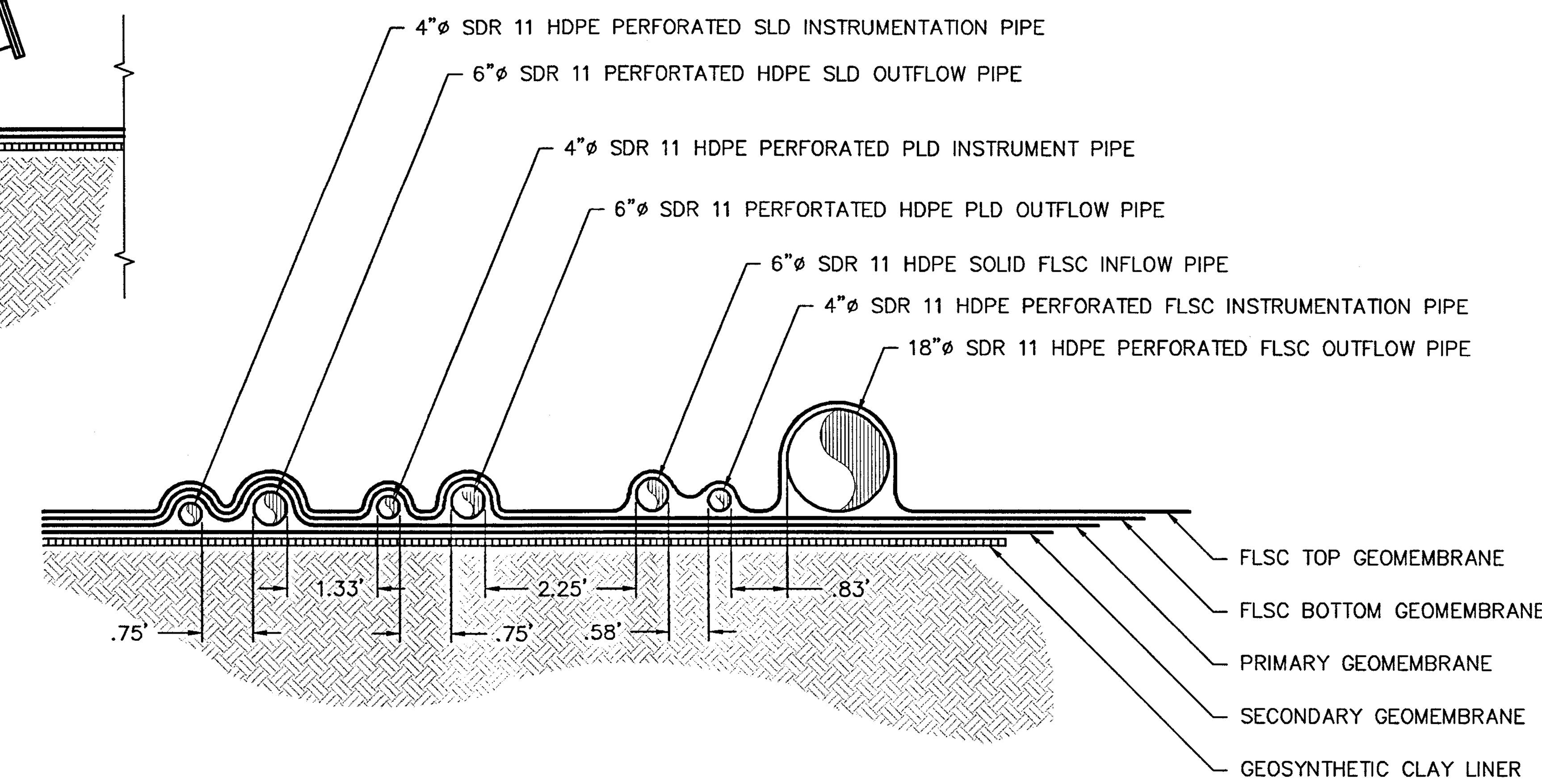
Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

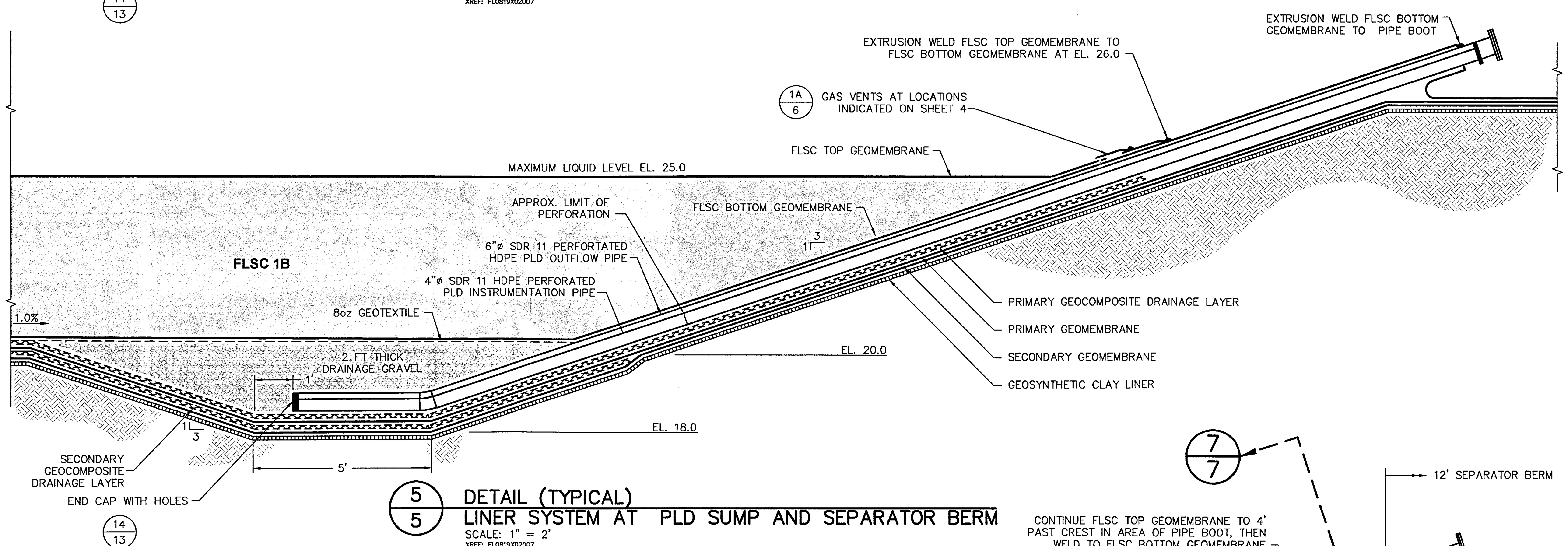
DATE: NOVEMBER 2006
SCALE: AS SHOWN
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02006
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 6 OF 13



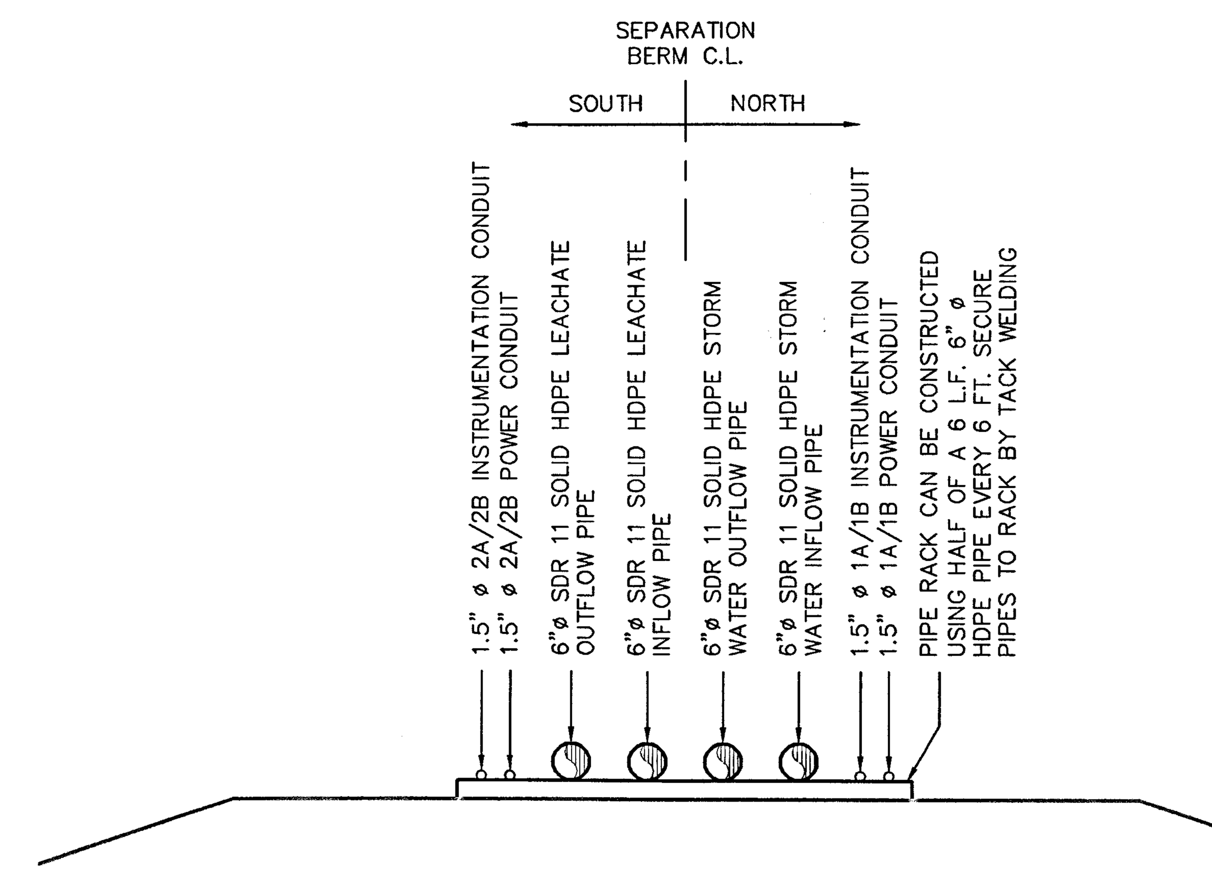
4/5 **DETAIL (TYPICAL)**
LINER SYSTEM AT SLD SUMP AND SEPARATOR BERM
SCALE: 1" = 2'
XREF: FL0819X02007



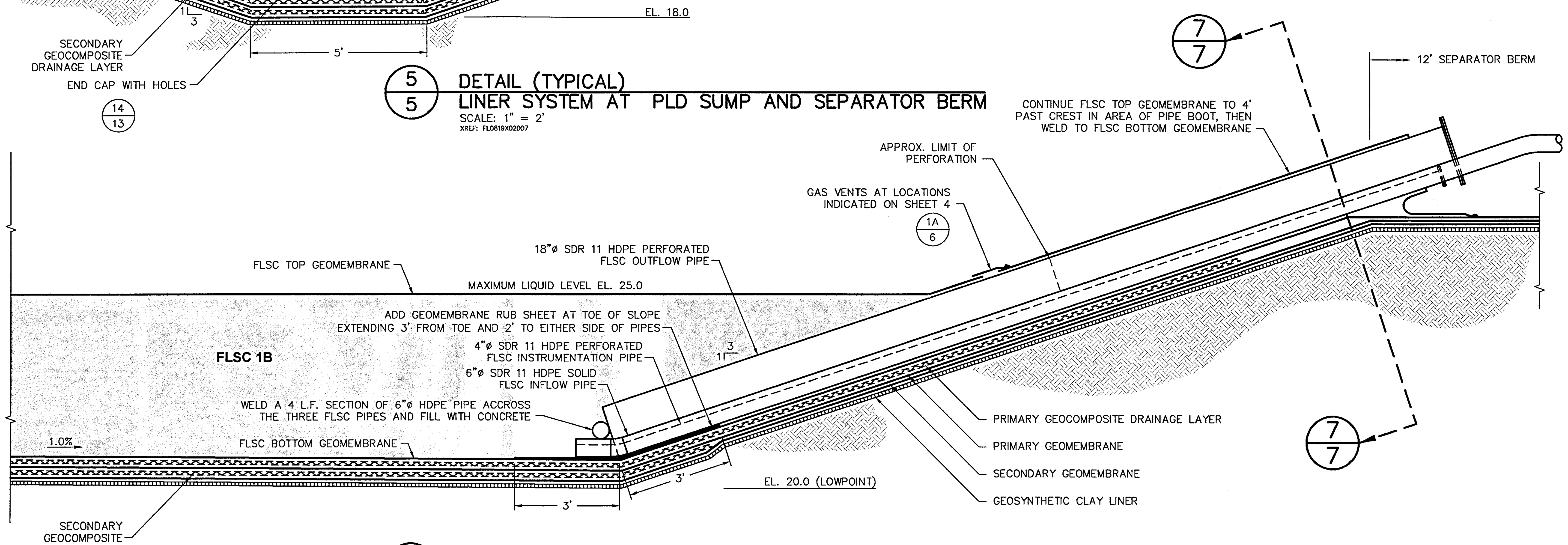
7/5 **SECTION (TYPICAL)**
PIPES ON SIDESLOPE
SCALE: 1" = 2'
XREF: FL0819X02007



5/5 **DETAIL (TYPICAL)**
LINER SYSTEM AT PLD SUMP AND SEPARATOR BERM
SCALE: 1" = 2'
XREF: FL0819X02007



8/5 **DETAIL (TYPICAL)**
PIPE CONFIGURATION ON SEPARATOR BERM
SCALE: 1" = 2'
XREF: FL0819X02007



6/5 **DETAIL (TYPICAL)**
LINER SYSTEM AT FLSC PIPES AND SEPARATOR BERM
SCALE: 1" = 2'
XREF: FL0819X02007

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

NOTES:

1. ALL GEOMEMBRANES INDICATED ARE 60-mil. HDPE TEXTURED GEOMEMBRANES.
2. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FDEP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT: FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE: **LINER SYSTEM DETAILS II**

PERMIT DRAWING

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

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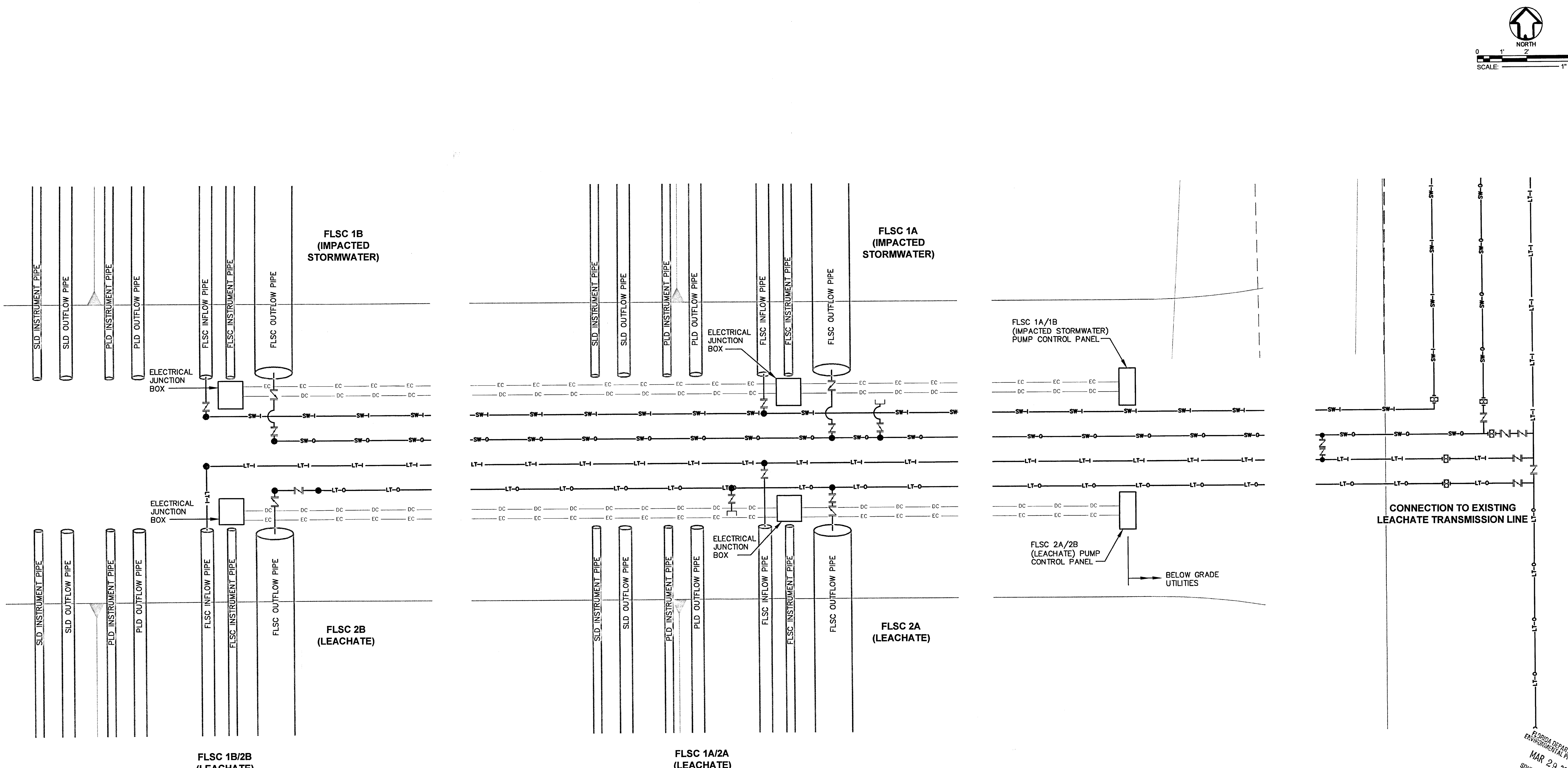
AUTHORIZATION CERTIFICATE NO. 00004321

DATE:	NOVEMBER 2006
SCALE:	AS SHOWN
PROJECT NO.:	FL0819.02
FILE NO.:	FL0819-02007
PDF DOC NO.:	GEAG-06-38A
SHEET NO.:	7 OF 13



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

NOTES:

1. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.

LEGEND

—SW-I—	IMPACTED STORMWATER INFLOW PIPELINE
—SW-O—	IMPACTED STORMWATER OUTFLOW PIPELINE
—LT-I—	LEACHATE INFLOW PIPELINE
—LT-O—	LEACHATE OUTFLOW PIPELINE
— EC — EC —	ELECTRIC POWER CONDUIT FOR LOAD-OUT PUMPS AND CONVENIENCE OUTLETS FOR SECONDARY AND PRIMARY PUMPS
— DC — DC —	DATA CONDUIT

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
FLSC PIPING LAYOUT

A Gupta
3/29/07
AYUSHMAN GUPTA
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AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: 1" = 2'
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02008
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 8 OF 13

EQUIPMENT IDENTIFICATION

- SUMP PUMP, CENTRIFUGAL (PC)
- HORIZONTAL CENTRIFUGAL PUMP (PC)
- SUBMERSIBLE POSITIVE DISPLACEMENT PUMP, PNEUMATIC (PS)
- SUBMERSIBLE CENTRIFUGAL PUMP, MOTOR DRIVEN (PS)
- FILTER OR STRAINER, BASKET TYPE (F)
- PACKAGED EQUIPMENT BOUNDARY (PA)

INSTRUMENTS

- INTERLOCK LOCAL MOUNTED
- INTERLOCK, MAIN PANEL MOUNTED
- INTERLOCK, REMOTE PANEL MOUNTED
- INTERLOCK, NORMALLY INACCESSIBLE
- DISCRETE INSTRUMENT–LOCAL MOUNTED
- DISCRETE INSTRUMENT–MAIN PANEL MOUNTED
- DISCRETE INSTRUMENT–REMOTE PANEL MOUNTED
- DISCRETE INSTRUMENT–NORMALLY INACCESSIBLE
- SHARED DISPLAY, SHARED CONTROL LOCAL MOUNTED
- SHARED DISPLAY, SHARED CONTROL MAIN PANEL MOUNTED
- SHARED DISPLAY, SHARED CONTROL REMOTE PANEL MOUNTED
- COMPUTER FUNCTION–LOCAL MOUNTED
- COMPUTER FUNCTION–MAIN PANEL MOUNTED
- COMPUTER FUNCTION–REMOTE PANEL MOUNTED
- COMPUTER FUNCTION–NORMALLY INACESSABLE
- INSTRUMENTS SHARING COMMON HOUSING–LOCAL MOUNTED
- INSTRUMENTS SHARING COMMON HOUSING–MAIN PANEL MOUNTED
- TURBINE METER
- TW THERMOWELL
- PCV PRESSURE REDUCING REGULATOR SELF CONTAINED (* = SET PRESSURE)
- PCV BACKPRESSURE REGULATOR SELF CONTAINED (* = SET PRESSURE)
- DIAPHRAGM ACTUATOR
- M MOTOR OR PISTON ACTUATOR M = MOTOR, P = PISTON
- S SOLENOID
- G GEAR ACTUATOR
- PSV PRESSURE SAFETY VALVE
- PVSV PRESSURE/VACUUM SAFETY VALVE
- PSE RUPTURE DISK OR SAFETY HEAD FOR PRESSURE RELIEF
- PSE RUPTURE DISK OR SAFETY HEAD FOR VACUUM RELIEF
- PSE PRESSURE/VACUUM RELIEF PLATE
- FV F0 FAILURE MODE

FAILURE POSITIONS
FC – FAIL CLOSED (ASSUMED)
FO – FAIL OPEN
FI – FAIL INDETERMINATE
FL – FAIL LOCKED

PIPING SYMBOLS

- FLANGED CONNECTION
- 12"x10" CONCENTRIC REDUCER
- 12"x10" ECCENTRIC REDUCER, F.O.T.
- BLIND FLANGE
- GATE VALVE
- BALL VALVE
- GLOBE VALVE
- ANGLE VALVE
- ANGLE GLOBE VALVE
- BUTTERFLY VALVE
- PLUG VALVE
- CHECK VALVE
- BLOCK AND BLEED VALVE
- INSTRUMENT VALVE
- NEEDLE VALVE
- AIR ELIMINATOR
- EXPANSION JOINT
- CAMLOCK CONNECTION FEMALE
- CAMLOCK CONNECTION MALE
- SP SAMPLE POINT
- PIPE CAP
- EXTERNAL STRAINER
- EPG PDISCONNECT ADAPTERS
- PRESSURE GUAGE
- FLOW METER
- LT LEVEL TRANSDUCER
- MT LEAK DETECTOR

LINE SYMBOLS

- MAJOR FLOW LINE
- SECONDARY FLOW LINE
- AIR DUCT
- FLEXIBLE HOSE
- PNEUMATIC INSTRUMENT SIGNAL
- HYDRAULIC INSTRUMENT SIGNAL
- CONDUIT
- ELECTRICAL SIGNAL
- CAPILLARY INSTRUMENT SIGNAL
- OPTICAL SIGNAL
- SOFTWARE LINK
- LINE CONTINUATION
- TIE POINT
- XX/XX SPECIFICATION BREAK, XX = PIPING MATERIAL AND CLASS

DEFINITIONS

CAP – CAPACITY
C.S. – CARBON STEEL
C.R.T. – CATHODE RAY TUBE
D.I. – DUCTILE IRON
°F – DEGREES FARENHEIT
F.O.T. – FLAT ON TOP
FRP – FIBERGLASS REINFORCED PLASTIC
gal – GALLON
gpm – GALLONS PER MINUTE
HLL – HIGH LIQUID LEVEL
HP – HORSEPOWER
HDPE – HIGH DENSITY POLYETHYLENE
LLL – LOW LIQUID LEVEL
mA – MILLIAMPERE
MW – MANWAY
NLL – NORMAL LIQUID LEVEL
O.D. – OUTSIDE DIAMETER
PRESS. – PRESSURE
psig – POUNDS PER SQUARE INCH GAUGE
PVC – POLYVINYL CHLORIDE
RPM – REVOLUTIONS PER MINUTE
RTD – RESISTANCE TEMPERATURE DETECTOR
SCFM – STANDARD CUBIC FEET PER MINUTE
S.S. – STAINLESS STEEL
TDH – TOTAL DYNAMIC HEAD
TEMP. – TEMPERATURE
T.H. – TOTAL HIEGHT
t.t. – TANGENT TO TANGENT
V – VOLTS
VFD – VARIABLE FREQUENCY DRIVE
WC – WATER COLUMN

EQUIPMENT TAG NUMBERS

B – 2 6 01 01
- SEQUENCE
- STATION NUMBER
- CLASSIFICATION
- SYSTEM
- EQUIPMENT IDENTIFICATION

INSTRUMENT TAG NUMBERS

PI – 3 1 12 01
- SEQUENCE
- STATION NUMBER
- CLASSIFICATION
- SYSTEM
- INSTRUMENT IDENTIFICATION

SYSTEM

1 – STORMWATER COLLECTION
2 – STORMWATER TRANSMISSION AND STORAGE
3 – STORMWATER DISPOSAL
4 – LEACHATE TRANSMISSION AND STORAGE
5 – LEACHATE DISPOSAL

CLASSIFICATION

1 – STORM WATER
2 – LEACHATE 1

INSTRUMENT IDENTIFICATION

FIRST LETTERS	INITIATING OR MEASURED VARIABLE	CONTROLLERS: RECORDING	CONTROLLERS: INDICATING	CONTROLLERS: BLIND	CONTROLLERS: SELF-ACTUATED CONTROL VALVES	READOUT DEVICES: RECORDING	READOUT DEVICES: INDICATING	SWITCHES AND ALARM DEVICES (a): HIGH**	SWITCHES AND ALARM DEVICES (a): LOW	SWITCHES AND ALARM DEVICES (a): COMB	TRANSMITTERS: RECORDING	TRANSMITTERS: INDICATING	TRANSMITTERS: BLIND	SOLENOIDS, RELAYS, COMPUTING DEVICES	PRIMARY ELEMENTS	DATA INPUT	WELL OR PROBE	VIEWING DEVICE, GLASS	FINAL ELEMENT
A	ANALYSIS	ARC	AIC	AC		AR	AI	ASH	ASL	ASHL	ART	AIT	AT	AV	AE		AW		AV
B	BURNER/COMBUSTION	BRC	BIC	BC		BR	BI	BSH	BSL	BSHL	BRT	BIT	BT	BY	BE		BW	BG	BZ
C	AIR/WATER RATIO															CX			
D	USER'S CHOICE																		
E	VOLTAGE	ERC	EIC	EC		ER	EI	ESH	ESL	ESHL	ERT	EIT	ET	EY	EE				EZ
F	FLOW RATE	FRC	FIC	FC	FCV, FICV	FR	FI	FSH (FAH)	FSL (FAL)	FSHL	FRT	FIT	FT	FY	FE			FG	FV
FQ	FLOW QUANTITY	FQRC	FQIC			FQR	FQI	FQSH	FQSL			FQIT	FQT	FQY	FQE				FQV
FF	FLOW RATIO	FFRC	FFIC	FFC				FFSH	FFSL						FE				FFV
G	USER'S CHOICE																		
H	HAND		HIC	HC						HS									HV
I	CURRENT	IRC	IIC			IR	II	ISH	ISL	ISHL	IRT	IIT	IT	IY	IE				IV
J	POWER	JRC	JIC			JR	JI	JSH	JSL	JSHL	JRT	JIT	JT	JY	JE				JV
KQ	TIME QUANTITY	KQRC	KQIC	KQC	KQCV	KQR	KQI	KQSH	KQSL	KQSHL	KQRT	KQIT	KQT	KQY	KQE				KQV
L	LEVEL	LRC	LIC	LC	LCV	LR	LI	LSH (LAH)	LSL (LAL)	LSHL	LRT	LIT	LT	LY	LE		LW	LG	LV
M	LEAK						MI	MSH (MAH)	MSL (MAL)										
N	USER'S CHOICE																		
O	USER'S CHOICE																		
P	PRESSURE/ VACUUM	PRC	PIC	PC	PCV	PR	PI	PSH	PSL	PSHL	PRT	PIT	PT	PY	PE				PV
PD	PRESSURE, DIFFERENTIAL	PDRC	PDIC	PDC	PDCV	PDR	PDI	PDSH	PDSL		PDRT	PDIT	PDT	PDY	PE				PDV
Q	QUANTITY	QRC	QIC			QR	QI	QSH	QSL	QSHL	QRT	QIT	QT	QY	QE				QZ
R	RADIATION	RRC	RIC	RC		RR	RI	RSH	RSL	RSHL	RRT	RIT	RT	RY	RE		RW		RZ
SP	SET POINT							SPH	SPL	SPHH									
T	TEMPERATURE	TRC	TIC	TC	TCV	TR	TI	TSH	TSL	TSHL	TRT	TIT	TT	TY	TE		TW		TV
TD	TEMPERATURE, DIFFERENTIAL	TDRC	TDIC	TDC	TDCV	TDR	TDI	TDSH	TDSL		TDRT	TDIT	TDT	TDY	TE		TW		TDV
U	MULTIVARIABLE					UR	UI							UY					UV
V	VIBRATION/MACHINERY ANALYSIS					VR	VI	VSH	VSL	VSHL	VRT	VIT	VT	VY	VE				VZ
W	WEIGHT/FORCE	WRC	WIC	WC	WCV	WR	WI	WSH	WSL	WSHL	WRT	WIT	WT	WY	WE				WZ
WD	WEIGHT/FORCE, DIFFERENTIAL	WDRC	WDIC	WDC	WDCV	WDR	WDI	WDSH	WDSL		WDRT	WDIT	WDT	WDY	WDE				WDZ
X	UNCLASSIFIED																		
Y	EVENT/STATE/ PRESENCE		YIC	YC		YR	YI	YSH	YSL				YT	YY	YE				YZ
Z	POSITION/DIMENSION	ZRC	ZIC	ZC	ZCV	ZR	ZI	ZSH	ZSL	ZSHL	ZRT	ZIT	ZT	ZY	ZE				ZV
ZD	GAUGING, DEVIATION	ZDRC	ZDIC	ZDC	ZDCV	ZDR	ZDI	ZDSH	ZDSL		ZDRT	ZDIT	ZDT	ZDY	ZDE				ZDV

(a) "A", ALARM, THE ANNUNCIATING DEVICE MAY BE USED IN THE SAME FASHION AS "S", SWITCH, THE ACTUATING DEVICE. THE LETTERS H AND L MAY BE OMITTED IN THE UNDEFINED CASE. HH OR LL MAY BE USED TO INDICATE HIGH–HIGH OR LOW–LOW DEVICES.

SHARED DISPLAY EXPLANATION

USED TO INDICATE A "SOFTWARE INTERNAL LINK" BETWEEN FUNCTIONS– NO EXTERNAL WIRING REQUIRED

FUNCTION PERFORMED WITHIN LOCAL PROCESSOR

FAL FIC

1. DATA AVAILABLE ON P.C.L. (PROCESS COMMUNICATIONS LINK)
2. FUNCTION PERFORMED BY LOCAL PROCESSOR
3. DISPLAY ON CONSOLE C.R.T. SCREEN
4. DATA CAN BE TREND RECORDED ON C.R.T. SCREEN AND HARD COPY REPORT

COMPUTER INTERFACE SYMBOLS

- AI ANALOG INPUT
- AO ANALOG OUTPUT
- DI DIGITAL INPUT
- DO DIGITAL OUTPUT

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
LEACHATE MANAGEMENT SYSTEM
PROCESS DIAGRAM LEGEND SHEET

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

AGupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
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TEL: (941) 861–1571 FAX: (941) 486–2620

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AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819–02009
PDF DOC NO.: GEAG–06–38A
SHEET NO.: 9 OF 13

PS-1100-01
PORTABLE STORM WATER PUMP

MODEL: SLIGO SERIES 3-5-4
DRIVER: 5 HP, 460-3PH.
DESIGN CAPACITY: 262 GPM @ 33 FT HEAD

PS-2000-01, PS-2000-02,
PS-4100-01, PS-4100-02
SUBMERSIBLE SUMP PUMP

MODEL: SLIGO SERIES 1-2-3 PSF
DRIVER: 2 HP, 460-3PH.
DESIGN CAPACITY: 50 GPM @ 46 FT HEAD

FI-2000-01 THROUGH FI-5100-02
TOTALIZING FLOW METER

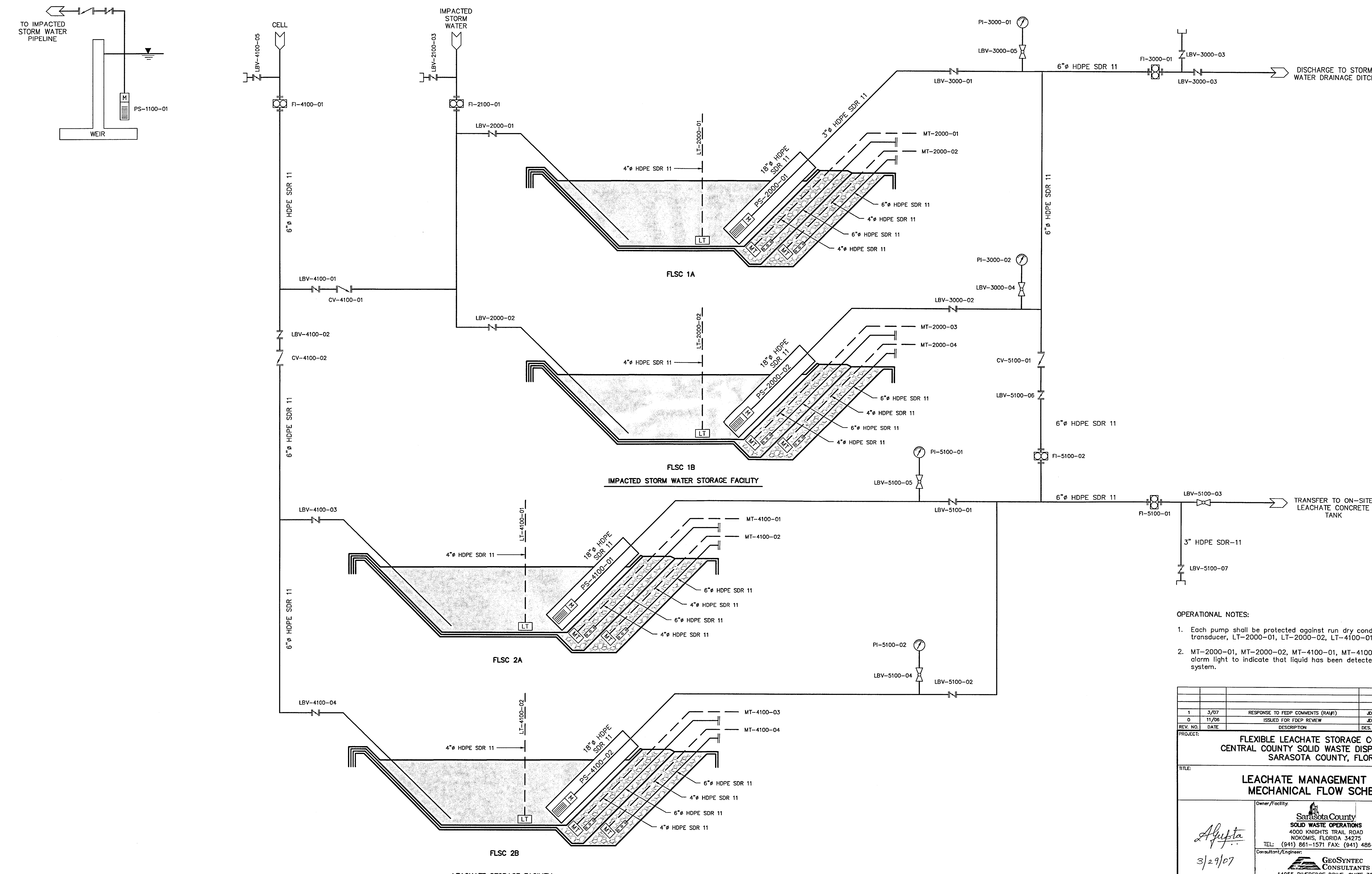
MODEL: TIGERMAG, FM656
MATERIALS: STAINLESS STEEL,
FLANGED FACED

LT-2000-01, LT-2000-02,
LT-4100-01, LT-4100-02
LEVEL TRANSDUCER

MODEL: SLIGO SYSTEMS SERIES PT-009-50
W/ BUILT-IN SURGE SUPPRESSION,
PT15X0__P

MT-2000-01 THROUGH MT-2000-04,
MT 4100-01 THROUGH MT-4100-04
LEAK DETECTION ELEMENT

MODEL: EPG LEAK DETECTION SENSOR,
ASLD-YH80



OPERATIONAL NOTES:

1. Each pump shall be protected against run dry conditions by a level transducer, LT-2000-01, LT-2000-02, LT-4100-01, and LT-4100-02.
2. MT-2000-01, MT-2000-02, MT-4100-01, MT-4100-02 will activate an alarm light to indicate that liquid has been detected in the leak detection system.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
LEACHATE MANAGEMENT SYSTEM
MECHANICAL FLOW SCHEMATIC

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

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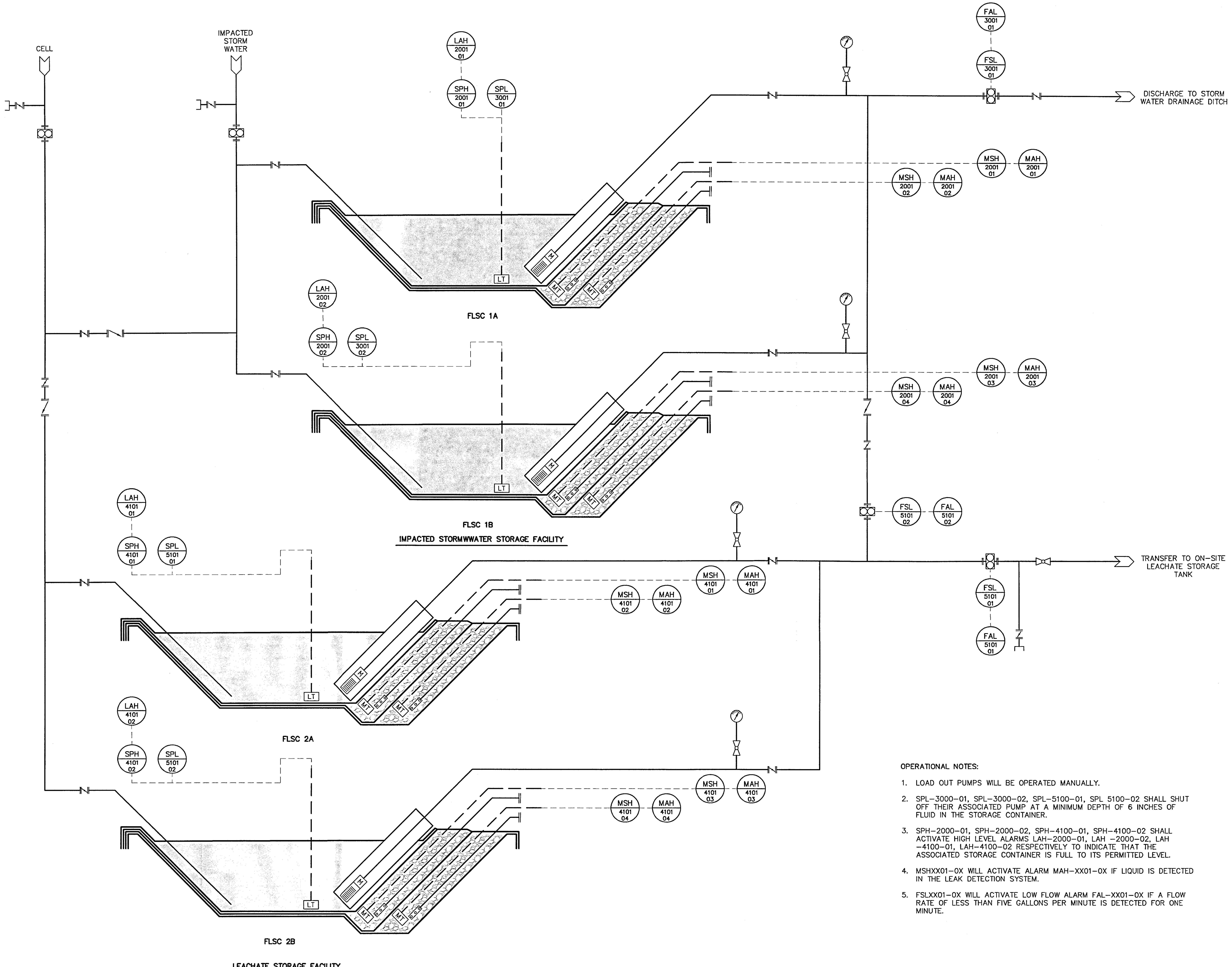
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02010
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 10 OF 13

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA



OPERATIONAL NOTES:

1. LOAD OUT PUMPS WILL BE OPERATED MANUALLY.
2. SPL-3000-01, SPL-3000-02, SPL-5100-01, SPL 5100-02 SHALL SHUT OFF THEIR ASSOCIATED PUMP AT A MINIMUM DEPTH OF 6 INCHES OF FLUID IN THE STORAGE CONTAINER.
3. SPH-2000-01, SPH-2000-02, SPH-4100-01, SPH-4100-02 SHALL ACTIVATE HIGH LEVEL ALARMS LAH-2000-01, LAH -2000-02, LAH -4100-01, LAH-4100-02 RESPECTIVELY TO INDICATE THAT THE ASSOCIATED STORAGE CONTAINER IS FULL TO ITS PERMITTED LEVEL.
4. MSHXX01-0X WILL ACTIVATE ALARM MAH-XX01-0X IF LIQUID IS DETECTED IN THE LEAK DETECTION SYSTEM.
5. FSLXX01-0X WILL ACTIVATE LOW FLOW ALARM FAL-XX01-0X IF A FLOW RATE OF LESS THAN FIVE GALLONS PER MINUTE IS DETECTED FOR ONE MINUTE.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 2? 2007
SOUTHWEST DISTRICT
TAMPA

TITLE:
LEACHATE MANAGEMENT SYSTEM PROCESS AND INSTRUMENTATION SCHEMATIC

AGupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

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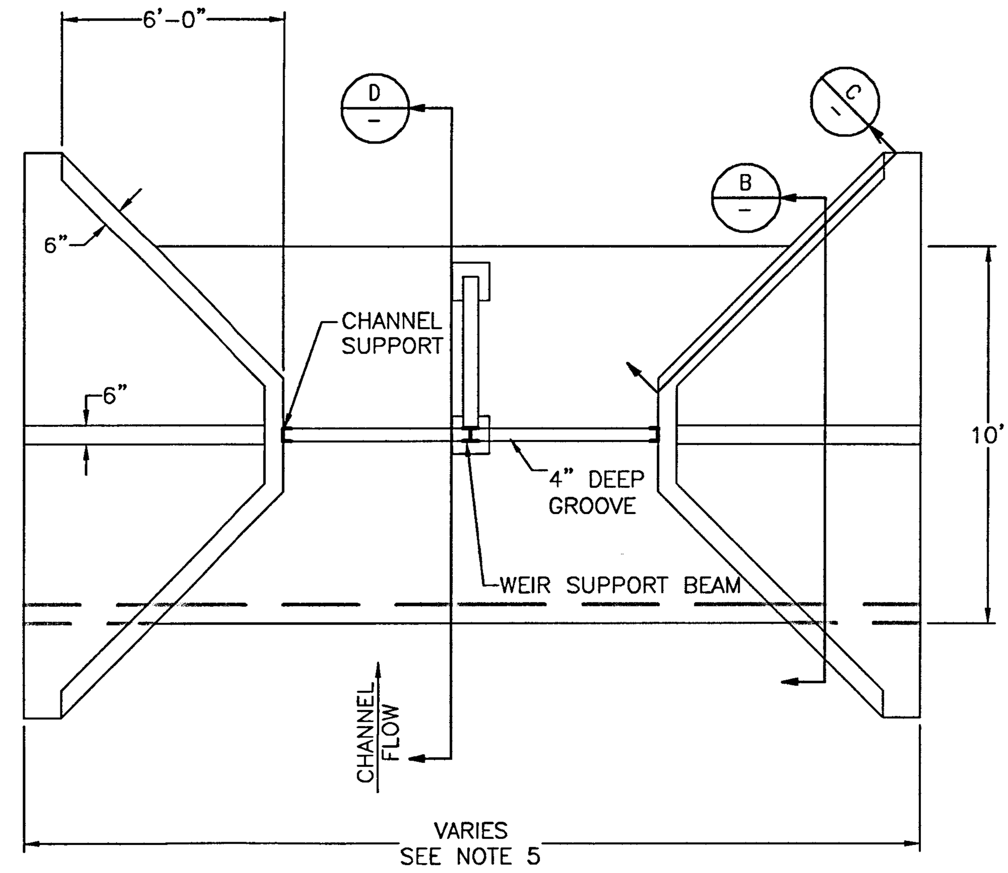
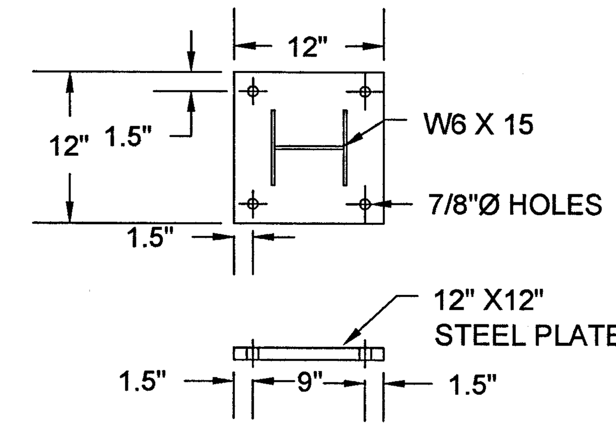
AUTHORIZATION CERTIFICATE NO. 00004321

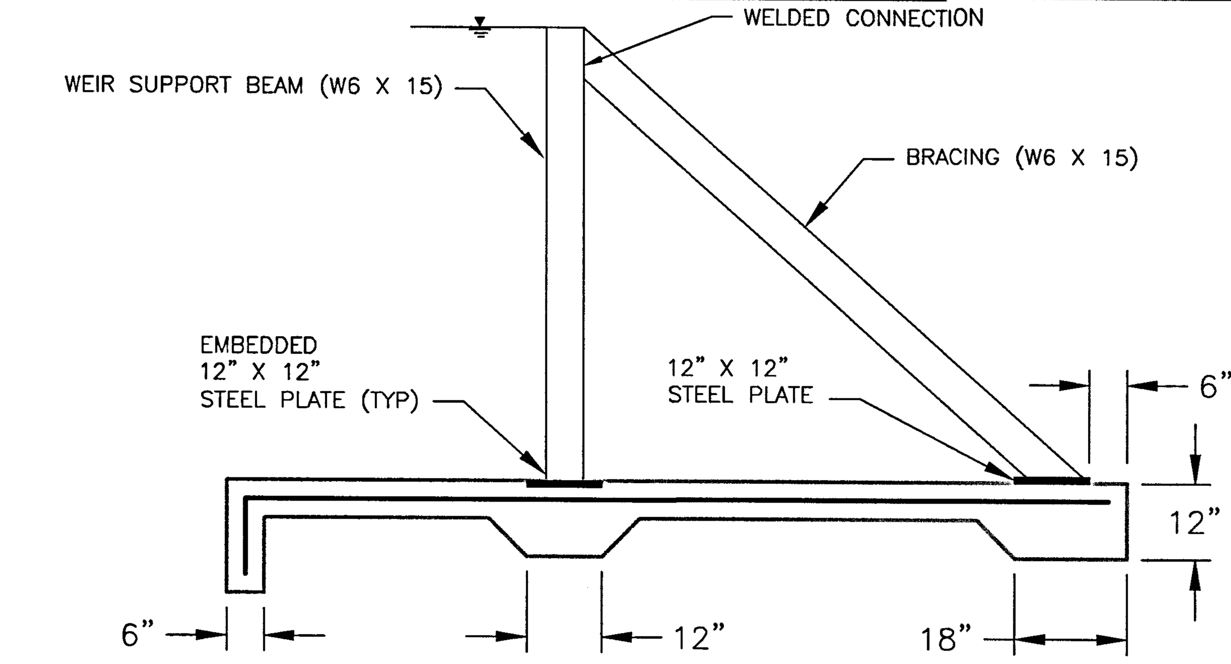
DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02011
PDF DOC NO.: GEAC-06-38A
SHEET NO.: 11 OF 13



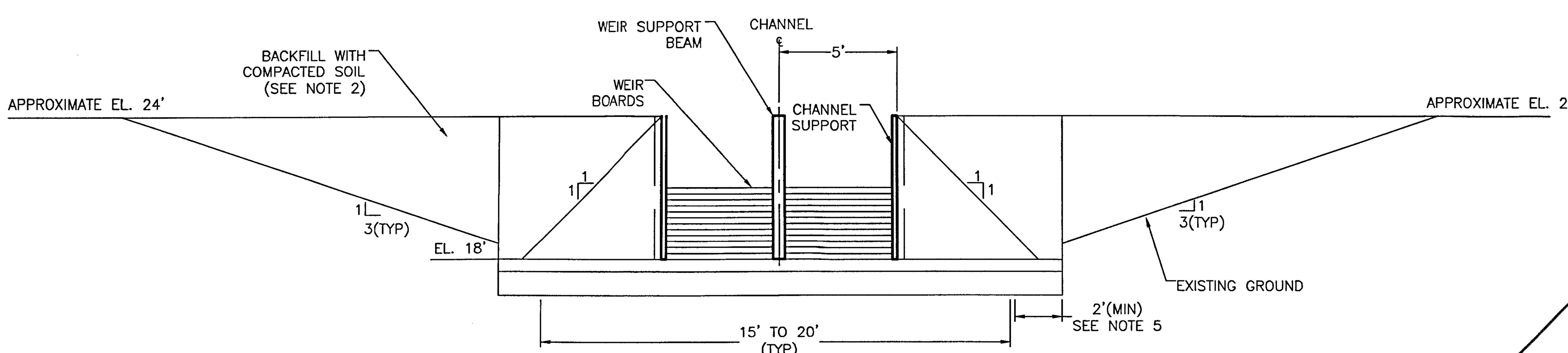
TOP VIEW



DETAIL (TYPICAL)
STEEL PLATE DETAIL
SCALE: 1" = 1'
FL0819X22014

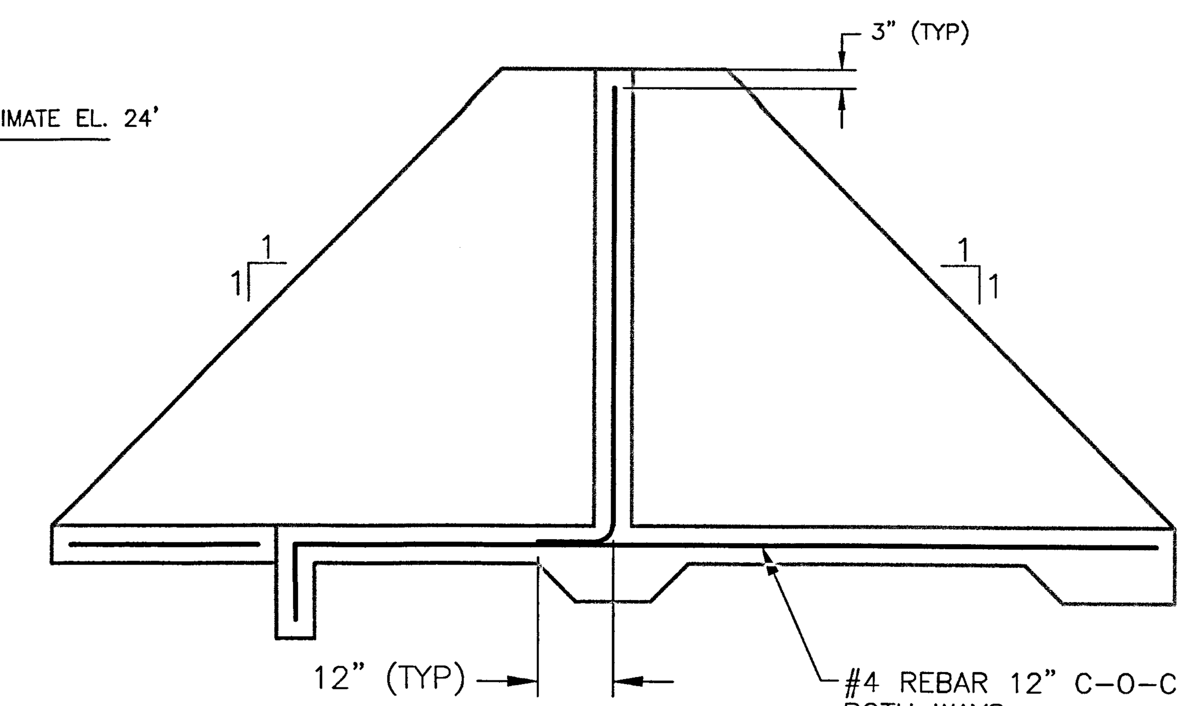


SECTION B–B
WEIR BEAM SUPPORT DESIGN
SCALE: 1" = 2'
FL0819X022012A

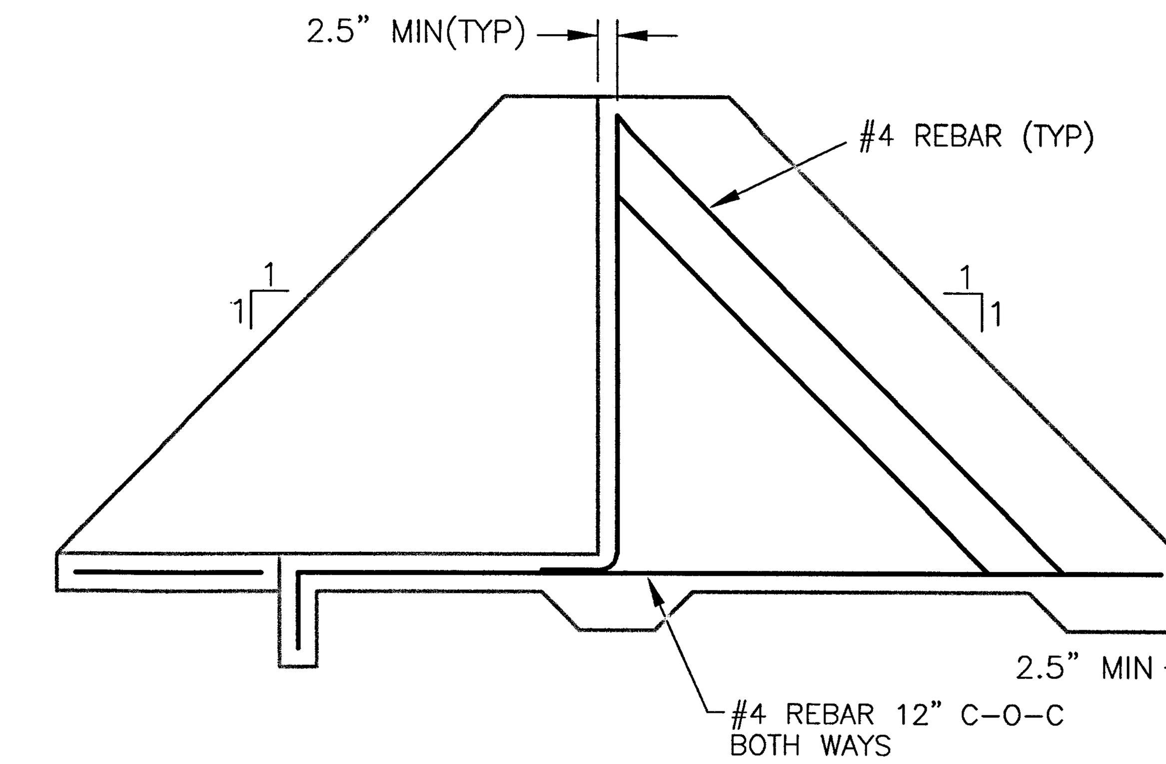


ELEVATION VIEW

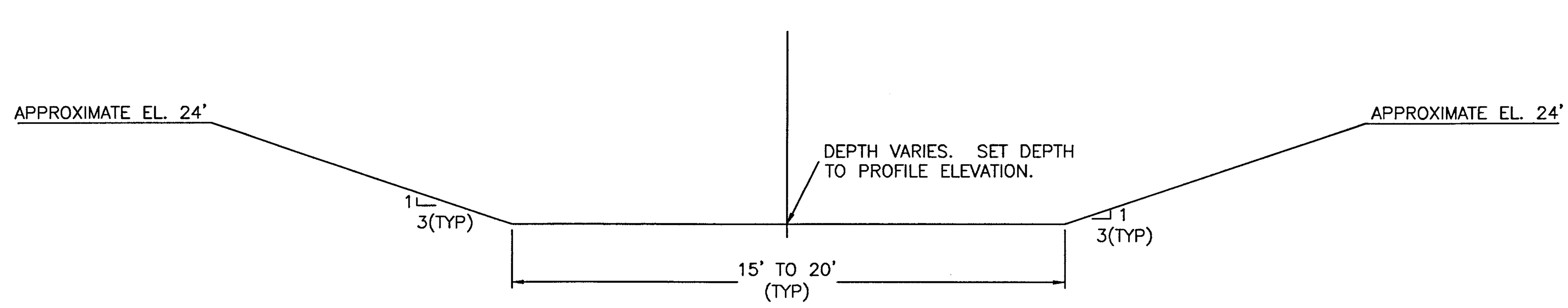
9/2 11/2 DETAIL (TYPICAL)
WEIR DETAILS
SCALE: 1" = 4'
FL0819X02213



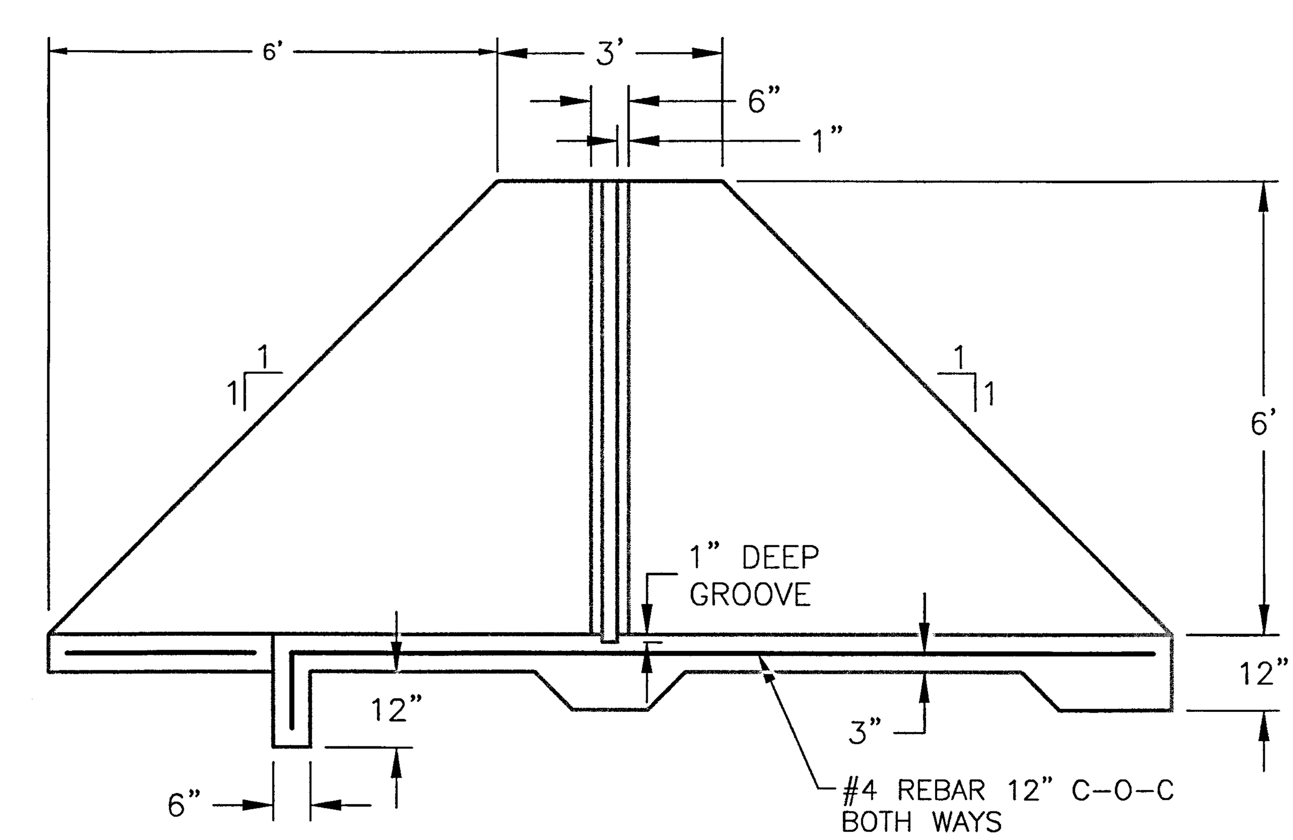
B SECTION B–B
WEIR CROSS SECTION
SCALE: 1" = 2'
FL0819X022012A



C SECTION C–C
WEIR CROSS SECTION
SCALE: 1" = 2'
FL0819X022012A



SECTION (TYPICAL)
PERIMETER DRAINAGE CHANNEL
SCALE: 1" = 4'
FL0819X022013



D SECTION D–D
WEIR CROSS SECTION
SCALE: 1" = 2'
FL0819X022012A

NOTES:

1. WEIR BOARDS SHALL CONSIST OF 4"X6" LUMBER. BOARDS MAY BE FACED WITH MARINE GRADE PLYWOOD OR OTHER HARD SHEETING TO REDUCE LEAKAGE THROUGH BOARDS.
2. SOIL BACKFILL SHALL BE COMPACTED TO 95 PERCENT OF STANDARD PROCTOR DENSITY (ASTM D698), AT A MOISTURE CONTENT WITHIN 2 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
4. REINFORCING STEEL SHALL HAVE A MINIMUM TENSILE STRENGTH OF 60 KSI.
5. CONCRETE WEIR STRUCTURE SHALL EXTEND A MINIMUM OF 2FT INTO THE EXISTING DRAINAGE CHANNEL SIDE SLOPE.
6. CONCRETE ANCHOR BOLT HOLES SHALL BE 7" DEEP WITH A 1"ø.
7. THREADED ANCHOR BOLTS SHALL BE 7/8"ø, 304SS, RAWL CHEM-STUD TYPE BOLTS (OR EQUIVALENT.)

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FDEP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
WEIR DETAILS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

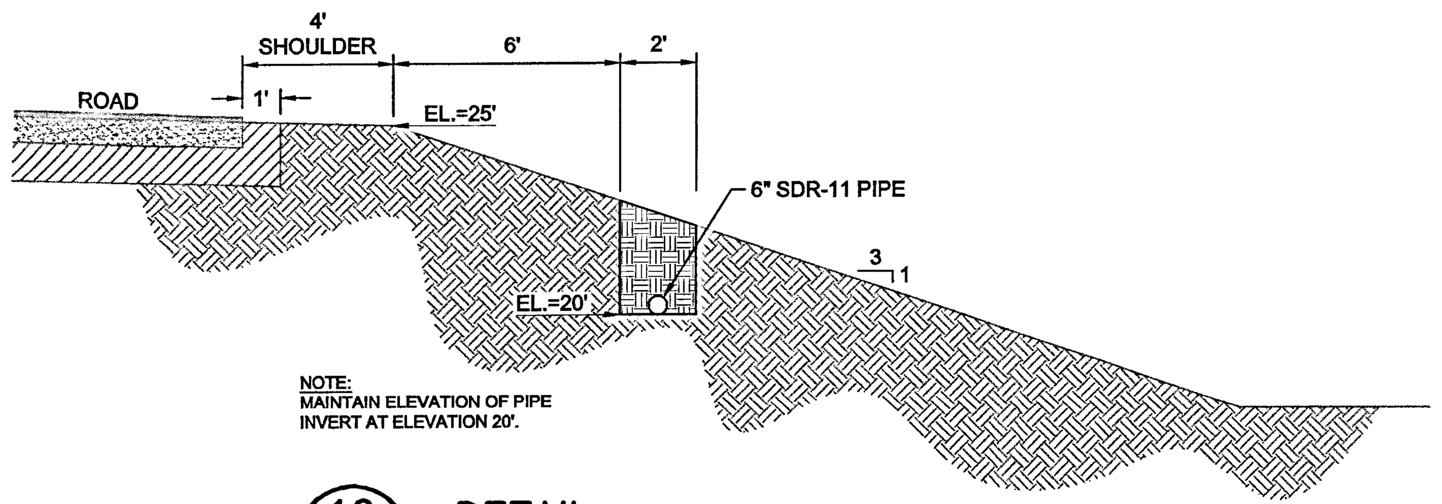
Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

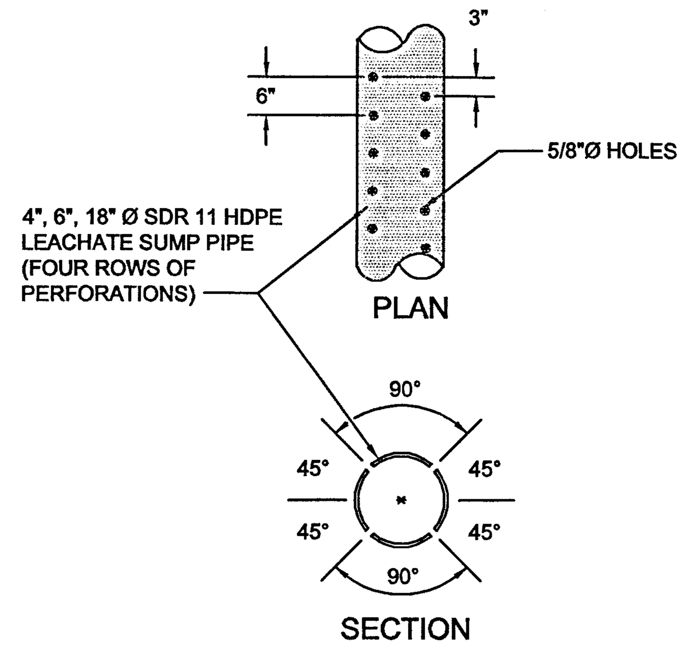
AGupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

DATE:	NOVEMBER 2006
SCALE:	NA
PROJECT NO.:	FL0819.02
FILE NO.:	FL0819-02012
PDF DOC NO.:	GEAG-06-38A
SHEET NO.:	12 OF 13

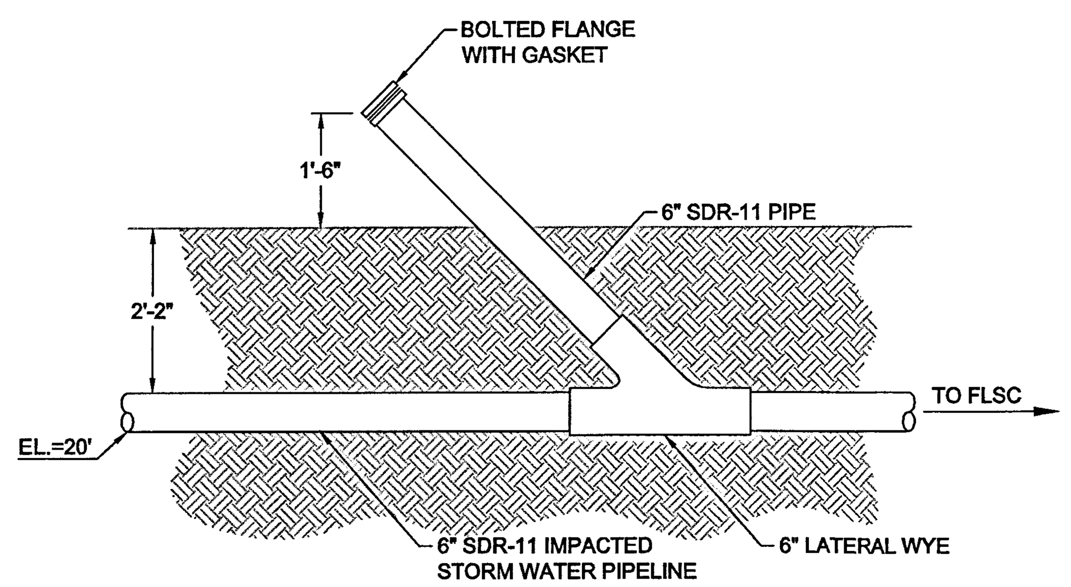
PERMIT DRAWING



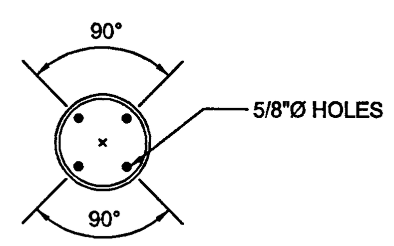
10 / 2 DETAIL
IMPACTED STORM WATER PIPELINE
SCALE: 1" = 4'
FL0819X1011



13 / 6 DETAIL – TYPICAL (NOTE 1)
PERFORATION FOR LEACHATE SUMP PIPES
SCALE: NTS
FL0819.X02012



12 / 2 DETAIL – TYPICAL
IMPACTED STORM WATER CLEAN-OUT
SCALE: 1" = 2'
FL0819X2012



14 / 7 DETAIL – TYPICAL
PERFORATION FOR END CAPS ON LECHATE SUMP PIPES
SCALE: NTS
FL0819.X02014

NOTES:

1. PEFORATION DETAIL APPLIES TO ALL PIPES EXCEPT FOR THE FLSC INFLOW PIPES.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

FLORIDA DEPARTMENT ENVIRONMENTAL PROTE
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

TITLE:
MISCELLANEOUS DETAILS

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

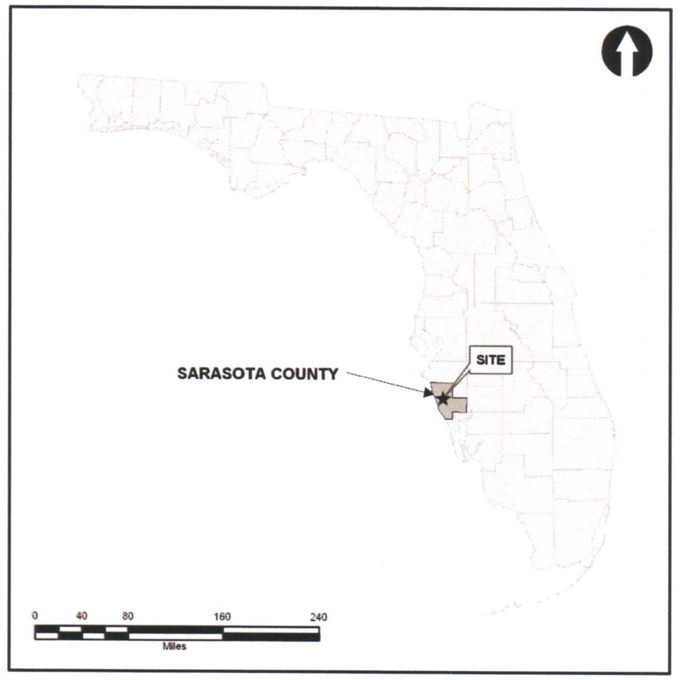
DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02013
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 13 OF 13

Sarasota County
SOLID WASTE OPERATIONS

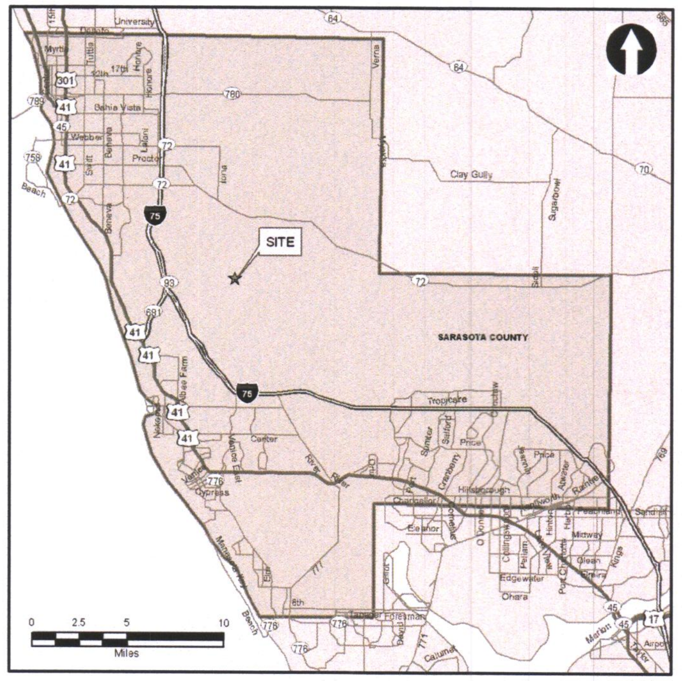
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

PERMIT DRAWINGS (NOVEMBER 2006)

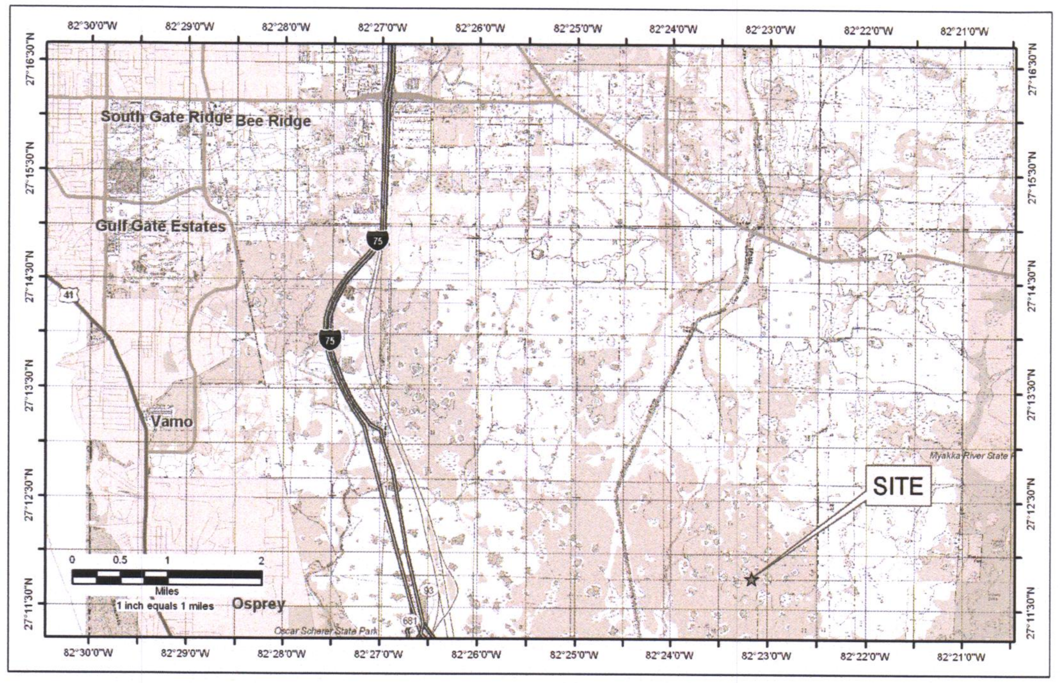
Dept. of Environmental Protection
MAR 29 2007
Southwest District



STATE MAP



COUNTY MAP



VICINITY MAP

SEQUENTIAL DETAIL NUMBER
9
13
SHEET ON WHICH ABOVE DETAIL IS PRESENTED

DETAIL SYMBOL REFERENCE KEY

SEQUENTIAL DETAIL NUMBER
SHEET ON WHICH THE ABOVE DETAIL IS FIRST REFERENCED
9
11
DETAIL (TYPICAL)
PERFORATION AT BASE OF LEACHATE SUMP RISER
SCALE: NTS
XREF: 0495X02119
DETAIL TITLE

DETAIL BAR REFERENCE KEY

EXAMPLE: DETAIL 9 WHICH IS PRESENTED ON SHEET 13 WAS FIRST REFERENCED ON SHEET 11.

B
7
SEQUENTIAL SECTION ALPHABET
SHEET ON WHICH ABOVE SECTION IS PRESENTED

SECTION SYMBOL REFERENCE KEY

SEQUENTIAL SECTION ALPHABET
SHEET ON WHICH THE ABOVE SECTION IS FIRST REFERENCED
B
3
SECTION (TYPICAL)
LANDFILL CROSS SECTION
SCALE: 1" = 5'
XREF: 0495X02093
SECTION TITLE

SECTION BAR REFERENCE KEY

EXAMPLE: SECTION B WHICH IS PRESENTED ON SHEET 7 WAS FIRST REFERENCED ON SHEET 3.

NOTE: BLANK INDICATED FOR SHEET NUMBER IMPLIES THAT THE SECTION OR DETAIL IS NOT REFERENCED ON ANY SHEET.

LIST OF SHEETS

SHEET NO.	SHEET TITLE	REVISION
1	TITLE SHEET	1
2	SITE DEVELOPMENT PLAN	1
3	BASE GRADING PLAN	1
4	FINAL GRADING PLAN	0
5	TYPICAL CROSS SECTIONS	1
6	LINER SYSTEM DETAILS I	1
7	LINER SYSTEM DETAILS II	1
8	FLSC PIPING LAYOUT	1
9	LEACHATE MANAGEMENT SYSTEM PROCESS DIAGRAM LEGEND SHEET	1
10	LEACHATE MANAGEMENT SYSTEM MECHANICAL FLOW SCHEMATIC	1
11	LEACHATE MANAGEMENT SYSTEM PROCESS AND INSTRUMENTATION SCHEMATIC	0
12	WEIR DETAILS	1
13	MISCELLANEOUS DETAILS	1

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

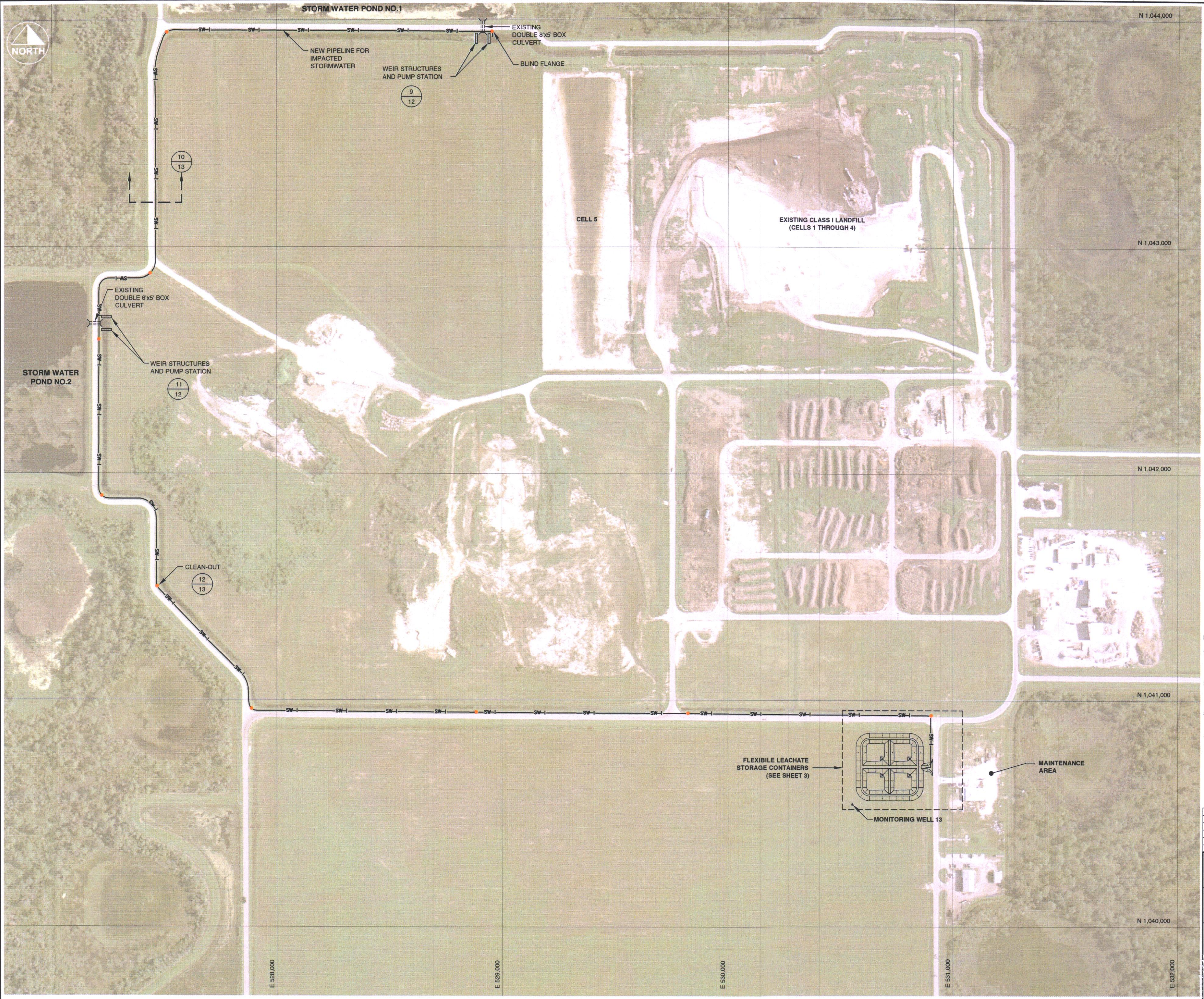
TITLE:
TITLE SHEET

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02001
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 1 OF 13



NORTH

0 100' 200' 400'
SCALE: 1" = 200'

LEGEND

—SW-I— IMPACTED STORMWATER INFLOW PIPELINE

CLEANOUT LOCATION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REFLECT FLORIDA STATE PLANE WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) AS ESTABLISHED BY OTHERS AND PROVIDED BY THE CLIENT.
2. THE AERIAL PHOTOGRAPH SHOWN IS BASED ON AN AERIAL SURVEY PERFORMED ON 6 JULY 2005 BY LANDAIR MAPPING, INC., PEACHTREE CITY, GEORGIA.
3. MONITORING WELL 13 WAS INSTALLED BY NATIONAL ENVIRONMENTAL TECHNOLOGY, INC. (DOVER, FLORIDA) ON 1 AUGUST 2006.
4. IMPACTED STORM WATER CONTAINED WITHIN THE SURFACE WATER DRAINAGE CHANNELS WILL BE PUMPED TO THE FLSC FACILITY. A SUBMERSIBLE PUMP, PLACED ON THE CONCRETE PAD ON THE SIDE OF THE WEIR WHERE THE IMPACTED STORM WATER IS CONTAINED, WILL BE CONNECTED TO THE IMPACTED STORM WATER PIPELINE AT THE ADJACENT CLEANOUT LOCATIONS.

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:

FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:

SITE DEVELOPMENT PLAN

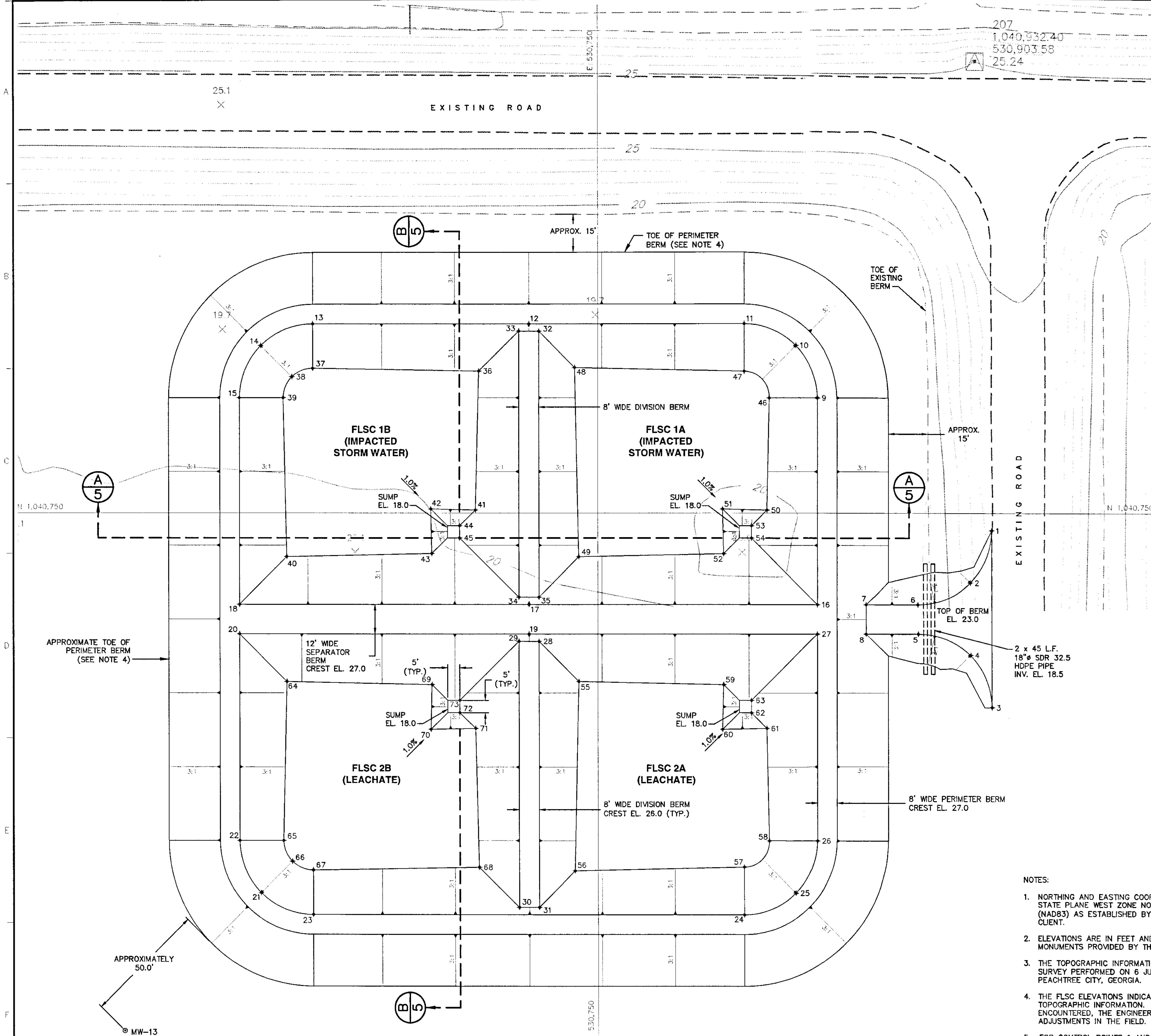
A Gupta
3/29/07

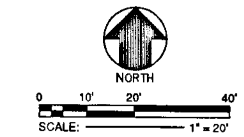
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: 1" = 200'
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02002
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 2 OF 13





LEGEND

- CONSTRUCTION CONTROL POINT
- MONITORING WELL LOCATION

CONSTRUCTION CONTROL POINTS				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1040742.98	530910.74	NOTE 5	FLSC BASE
2	1040721.70	530901.99	23.00	FLSC BASE
3	1040670.98	530910.96	NOTE 5	FLSC BASE
4	1040692.13	530902.14	23.00	FLSC BASE
5	1040700.89	530880.96	23.00	FLSC BASE
6	1040712.89	530880.74	23.00	FLSC BASE
7	1040712.89	530859.70	23.00	FLSC BASE
8	1040700.89	530859.70	23.00	FLSC BASE
9	1040796.89	530839.70	27.00	FLSC BASE
10	1040818.10	530830.91	27.00	FLSC BASE
11	1040826.89	530809.70	27.00	FLSC BASE
12	1040826.89	530721.70	27.00	FLSC BASE
13	1040826.89	530633.70	27.00	FLSC BASE
14	1040818.10	530612.49	27.00	FLSC BASE
15	1040796.89	530603.70	27.00	FLSC BASE
16	1040712.89	530839.70	27.00	FLSC BASE
17	1040712.89	530721.70	27.00	FLSC BASE
18	1040712.89	530603.70	27.00	FLSC BASE
19	1040700.89	530721.70	27.00	FLSC BASE
20	1040700.89	530603.70	27.00	FLSC BASE
21	1040595.67	530612.49	27.00	FLSC BASE
22	1040616.89	530603.70	27.00	FLSC BASE
23	1040586.89	530633.70	27.00	FLSC BASE
24	1040586.89	530809.70	27.00	FLSC BASE
25	1040595.67	530830.91	27.00	FLSC BASE
26	1040616.89	530839.70	27.00	FLSC BASE
27	1040700.89	530839.70	27.00	FLSC BASE
28	1040697.89	530725.70	26.00	FLSC BASE
29	1040697.89	530717.70	26.00	FLSC BASE
30	1040589.89	530717.70	26.00	FLSC BASE
31	1040589.89	530725.70	26.00	FLSC BASE
32	1040823.89	530725.70	26.00	FLSC BASE
33	1040823.89	530717.70	26.00	FLSC BASE
34	1040715.89	530717.70	26.00	FLSC BASE
35	1040715.89	530725.70	26.00	FLSC BASE
36	1040807.72	530701.53	20.51	FLSC BASE
37	1040808.88	530633.70	21.00	FLSC BASE
38	1040805.36	530625.22	21.03	FLSC BASE
39	1040796.89	530621.71	21.00	FLSC BASE
40	1040732.29	530623.11	20.53	FLSC BASE
41	1040751.24	530700.13	20.12	FLSC BASE
42	1040751.64	530681.95	20.25	FLSC BASE
43	1040733.53	530682.34	20.12	FLSC BASE
44	1040744.89	530693.70	18.00	FLSC BASE
45	1040739.89	530693.70	18.00	FLSC BASE
46	1040796.82	530819.95	20.42	FLSC BASE
47	1040807.61	530809.70	20.58	FLSC BASE
48	1040809.14	530740.44	21.09	FLSC BASE
49	1040732.26	530742.08	20.54	FLSC BASE
50	1040751.23	530819.04	20.12	FLSC BASE
51	1040751.64	530800.95	20.25	FLSC BASE
52	1040733.52	530801.33	20.12	FLSC BASE
53	1040744.89	530812.70	18.00	FLSC BASE
54	1040739.89	530812.70	18.00	FLSC BASE
55	1040681.51	530742.08	20.54	FLSC BASE
56	1040604.63	530740.44	21.09	FLSC BASE
57	1040606.16	530809.70	20.58	FLSC BASE
58	1040616.89	530819.95	20.42	FLSC BASE
59	1040680.25	530801.33	20.12	FLSC BASE
60	1040662.13	530800.95	20.25	FLSC BASE
61	1040662.54	530819.04	20.12	FLSC BASE
62	1040668.89	530812.70	18.00	FLSC BASE
63	1040673.89	530812.70	18.00	FLSC BASE
64	1040681.48	530623.11	20.53	FLSC BASE
65	1040616.89	530621.71	21.00	FLSC BASE
66	1040608.41	530625.22	21.03	FLSC BASE
67	1040604.89	530633.70	21.00	FLSC BASE
68	1040606.05	530701.53	20.51	FLSC BASE
69	1040680.25	530682.34	20.12	FLSC BASE
70	1040662.13	530681.95	20.25	FLSC BASE
71	1040662.53	530700.13	20.12	FLSC BASE
72	1040668.89	530693.70	18.00	FLSC BASE
73	1040673.89	530693.70	18.00	FLSC BASE

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REFLECT FLORIDA STATE PLANE WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) AS ESTABLISHED BY OTHERS AND PROVIDED BY THE CLIENT.
2. ELEVATIONS ARE IN FEET AND BASED ON VERTICAL CONTROL MONUMENTS PROVIDED BY THE CLIENT.
3. THE TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AN AERIAL SURVEY PERFORMED ON 6 JULY 2005 BY LANDAIR MAPPING, INC., PEACHTREE CITY, GEORGIA.
4. THE FLSC ELEVATIONS INDICATED ARE BASED ON AVAILABLE TOPOGRAPHIC INFORMATION. IF DIFFERENT FIELD CONDITIONS ARE ENCOUNTERED, THE ENGINEER SHALL MAKE NECESSARY ADJUSTMENTS IN THE FIELD.
5. FOR CONTROL POINTS 1 AND 3, ELEVATIONS SHALL BE ESTABLISHED TO TRANSITION INTO EXISTING ROAD ELEVATIONS.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

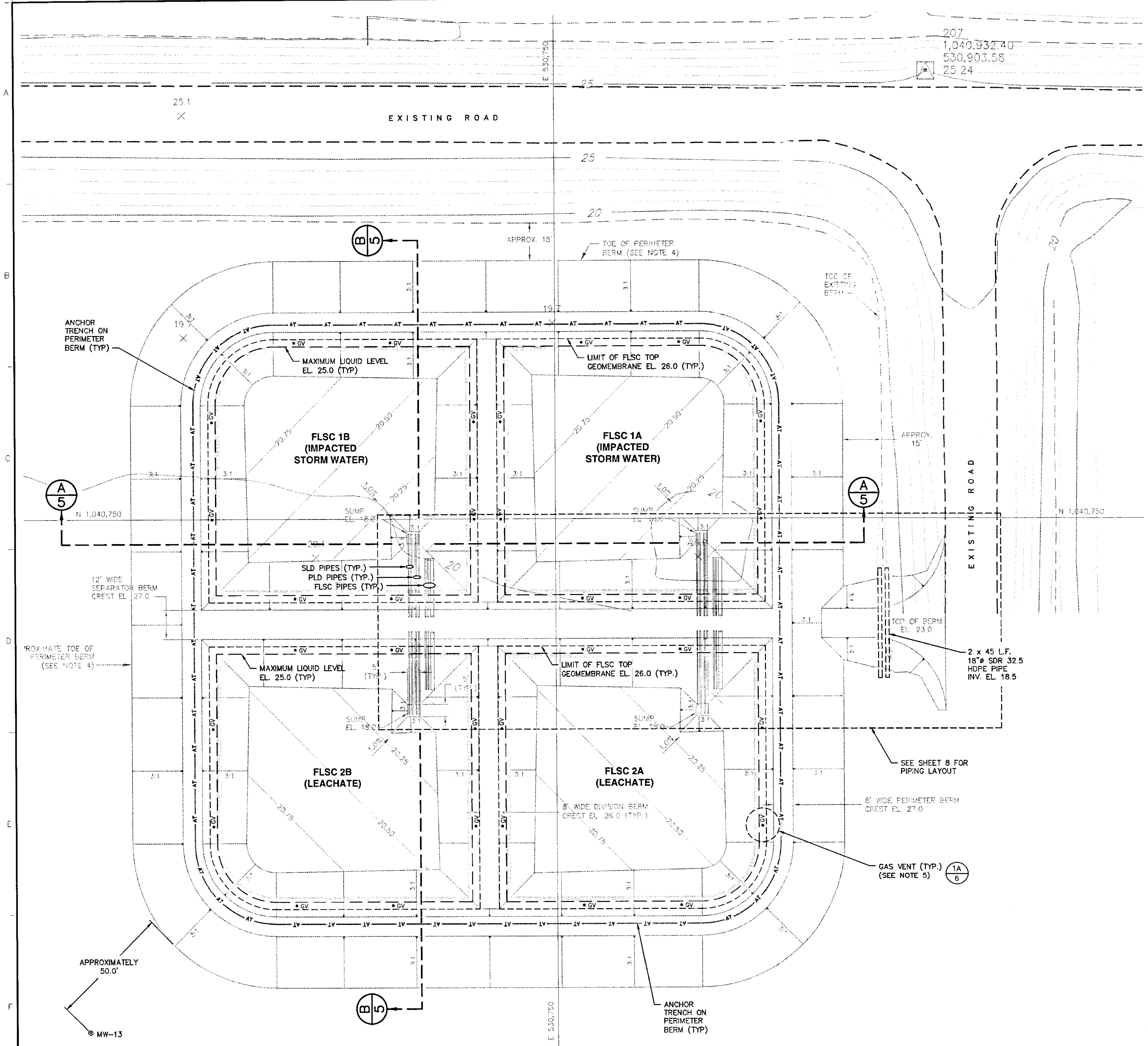
TITLE:
BASE GRADING PLAN

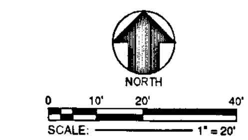
A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 831-1571 FAX: (941) 486-2620

Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: 1" = 20'
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02003
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 3 OF 13





LEGEND

—AT——AT—	ANCHOR TRENCH
• GV	GEOMEMBRANE GAS VENT (SEE NOTE 5)
⊙	MONITORING WELL LOCATION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REFLECT FLORIDA STATE PLANE WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) AS ESTABLISHED BY OTHERS AND PROVIDED BY THE CLIENT.
2. ELEVATIONS ARE IN FEET AND BASED ON VERTICAL CONTROL MONUMENTS PROVIDED BY THE CLIENT.
3. THE TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AN AERIAL SURVEY PERFORMED ON 6 JULY 2005 BY LANDAIR MAPPING, INC., PEACHTREE CITY, GEORGIA.
4. THE FLSC ELEVATIONS INDICATED ARE BASED ON AVAILABLE TOPOGRAPHIC INFORMATION. IF DIFFERENT FIELD CONDITIONS ARE ENCOUNTERED, THE ENGINEER SHALL MAKE NECESSARY ADJUSTMENTS IN THE FIELD.
5. GEOMEMBRANE GAS VENTS SHALL BE INSTALLED ALONG THE PERIMETER OF THE FLSC TOP GEOMEMBRANE AT A FREQUENCY OF TWO PER SIDE. THE VENT SHALL BE CONSTRUCTED BY CUTTING A 6"ø HOLE IN THE FLSC TOP GEOMEMBRANE AND THEN WELDING THE TOP AND SIDES OF A 1' x 1' PATCH OVER THE HOLE, LEAVING THE BOTTOM EDGE OF THE GEOMEMBRANE PATCH UNWELDED TO ALLOW FOR GASES TO ESCAPE.
6. THIS SHEET ONLY SHOWS PARTIAL PIPING LAYOUT. SEE SHEET 8 FOR DETAILED PIPING LAYOUT.
7. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
FINAL GRADING PLAN

PERMIT DRAWING

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
TEL: (941) 861-1571 FAX: (941) 486-2620

Consultant/Engineer:
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14055 RIVEREDGE DRIVE, SUITE 300,
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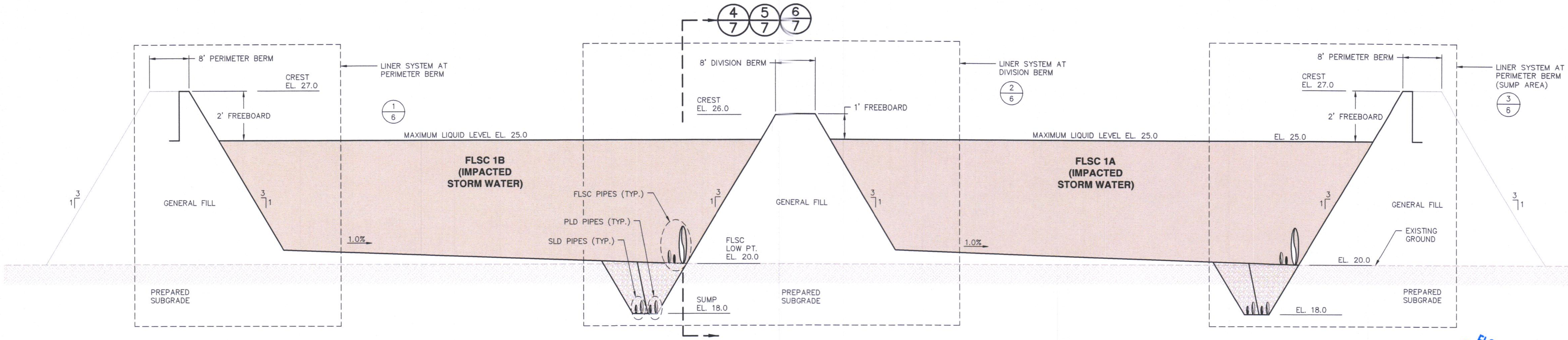
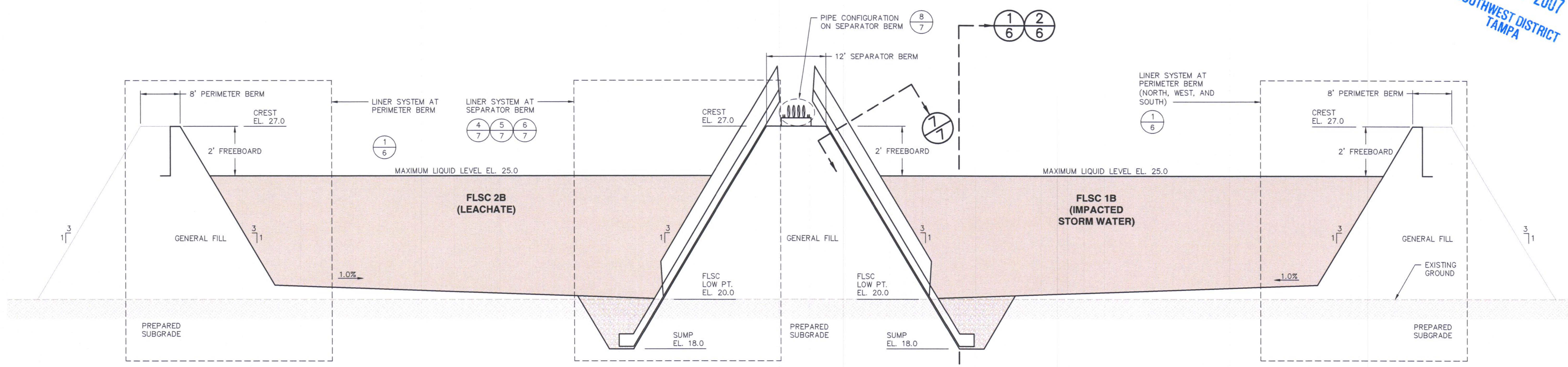
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: 1" = 20'
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02004
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 4 OF 13



A/4 TYPICAL SECTION
FLEXIBLE LEACHATE STORAGE CONTAINERS
SCALE: 1" = 10' HOR., 1" = 2' VER.



B/4 TYPICAL SECTION
FLEXIBLE LEACHATE STORAGE CONTAINERS
SCALE: 1" = 10' HOR., 1" = 2' VER.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REFLECT FLORIDA STATE PLANE WEST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) AS ESTABLISHED BY OTHERS AND PROVIDED BY THE CLIENT.
2. ELEVATIONS ARE IN FEET AND BASED ON VERTICAL CONTROL MONUMENTS PROVIDED BY THE CLIENT.
3. THE TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AN AERIAL SURVEY PERFORMED ON 6 JULY 2005 BY LANDAIR MAPPING, INC., PEACHTREE CITY, GEORGIA.
4. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.
5. PONDED STORM WATER THAT ACCUMULATES ON TOP OF THE FLSCs AND DOES NOT EVAPORATE WILL BE REMOVED, AS NEEDED, USING A SMALL SUBMERSIBLE PUMP. FROM THE PERIMETER OR DIVISION BERM, THE PUMP WILL BE LOWERED INTO POSITION USING AN EXTENSION ROD SUCH THAT THE TOP GEOMEMBRANE LAYER IS NOT DAMAGED.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FDEP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
TYPICAL CROSS SECTIONS

A Gupta
3/29/07
AYUSHMAN GUPTA
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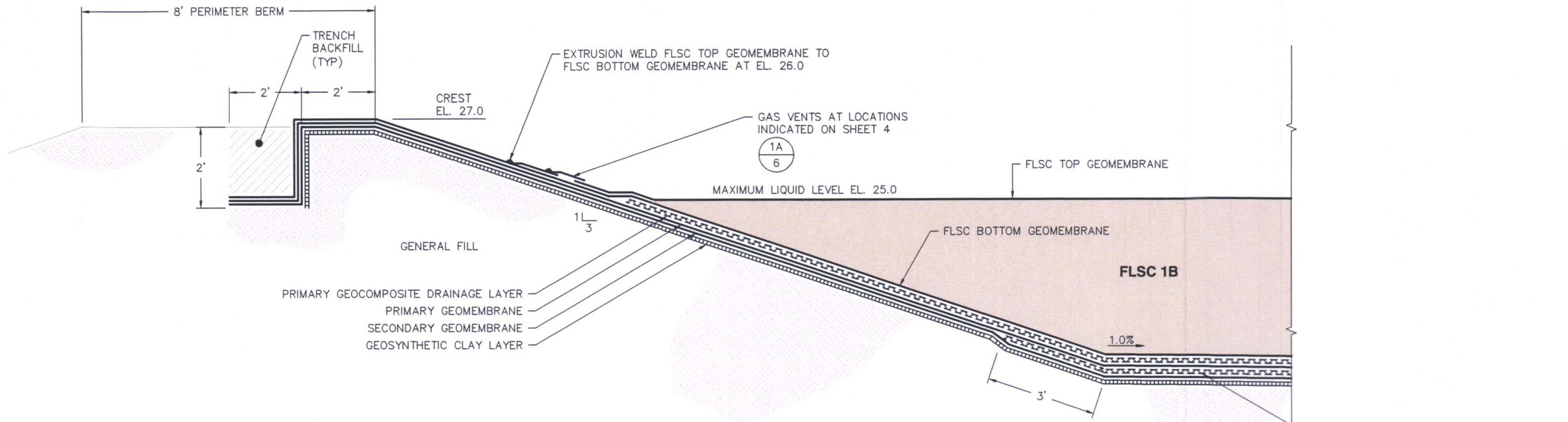
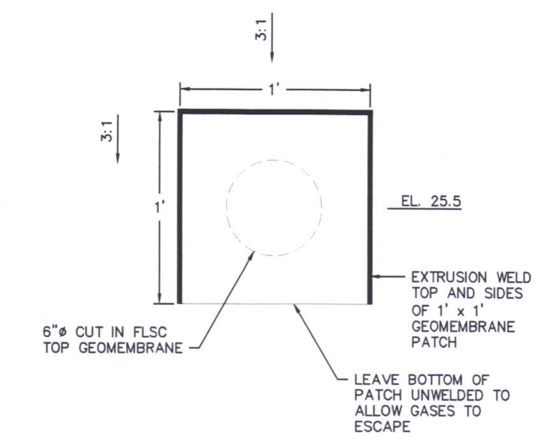
AUTHORIZATION CERTIFICATE NO. 00004321

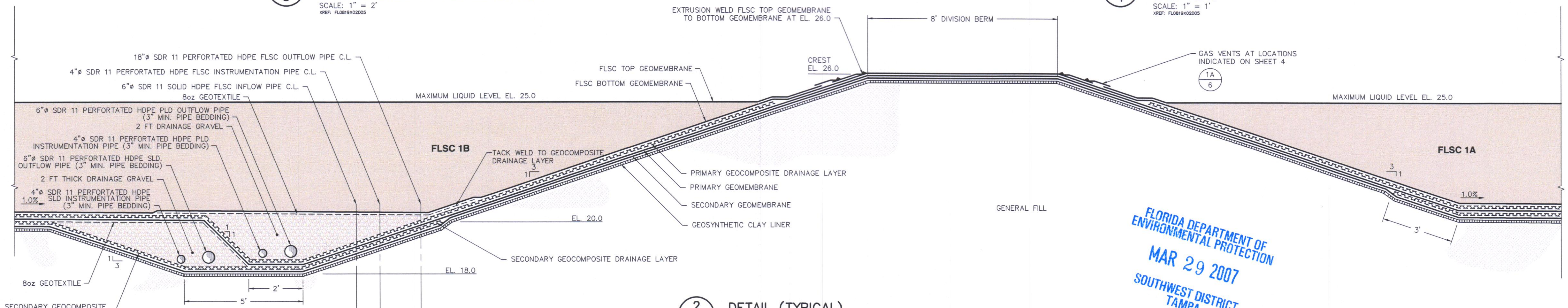
DATE: NOVEMBER 2006
SCALE: 1" = 10'
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02005
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 5 OF 13



1
5
DETAIL (TYPICAL)
LINER SYSTEM AT PERIMETER BERM
SCALE: 1" = 2'
XREF: FL0819X02005



1A
4
DETAIL (TYPICAL)
GAS VENT
SCALE: 1" = 1'
XREF: FL0819X02005

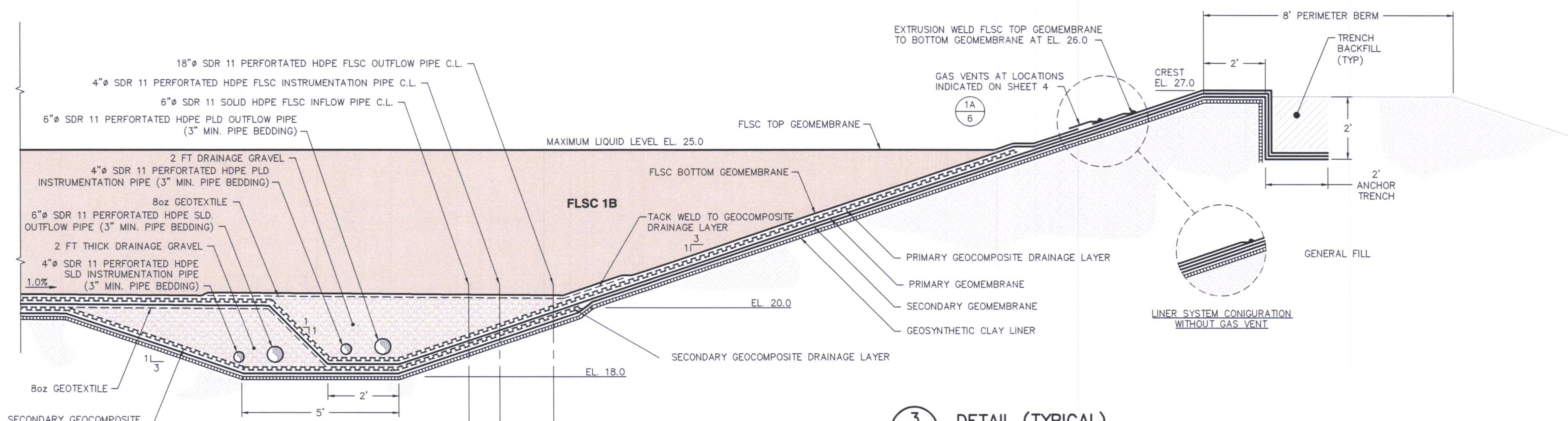


FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT
TAMPA

2
5
DETAIL (TYPICAL)
LINER SYSTEM AT DIVISION BERM
SCALE: 1" = 2'
XREF: FL0819X02005

NOTES:

1. ALL GEOMEMBRANES INDICATED ARE 60 mil HDPE TEXTURED GEOMEMBRANE.
2. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.



3
5
DETAIL (TYPICAL)
LINER SYSTEM AT PERIMETER BERM (SUMP AREA)
SCALE: 1" = 2'
XREF: FL0819X02005

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FDEP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
LINER SYSTEM DETAILS I

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

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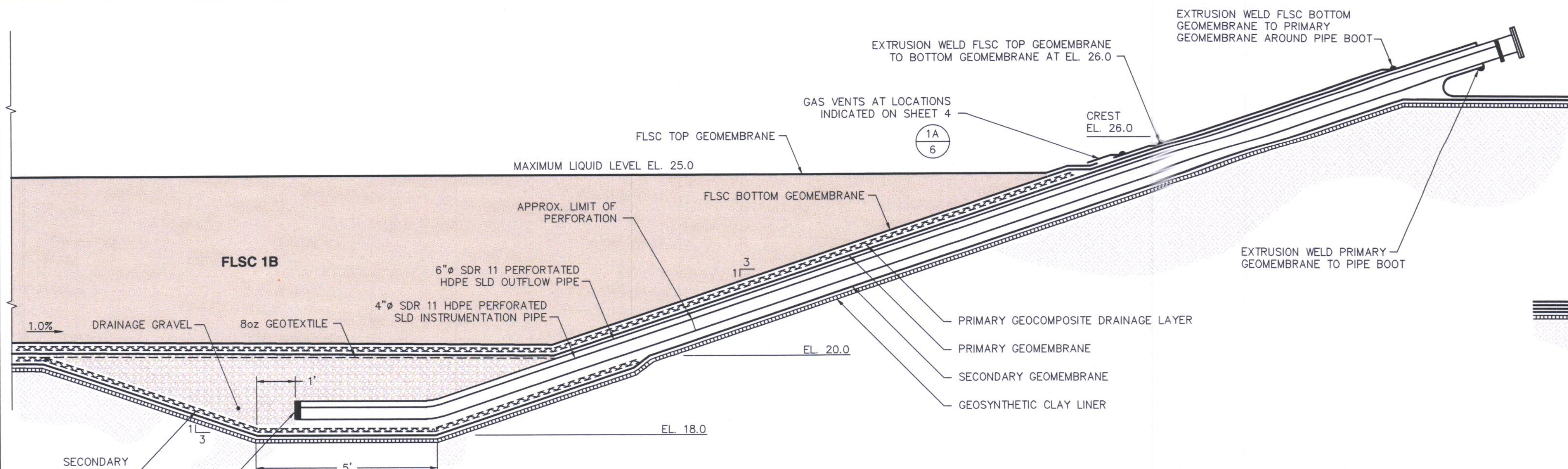
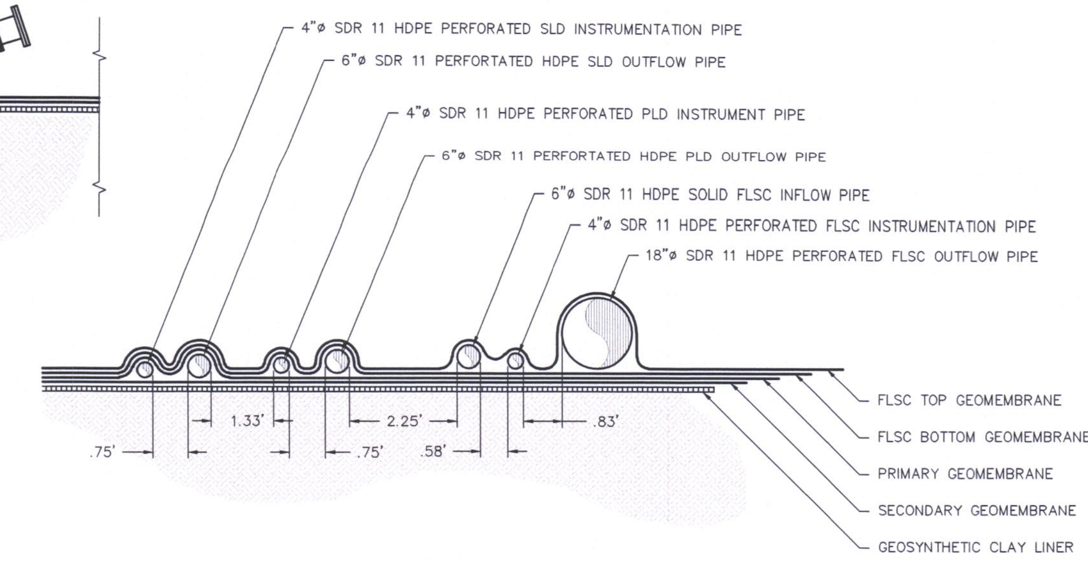
AUTHORIZATION CERTIFICATE NO. 00004321

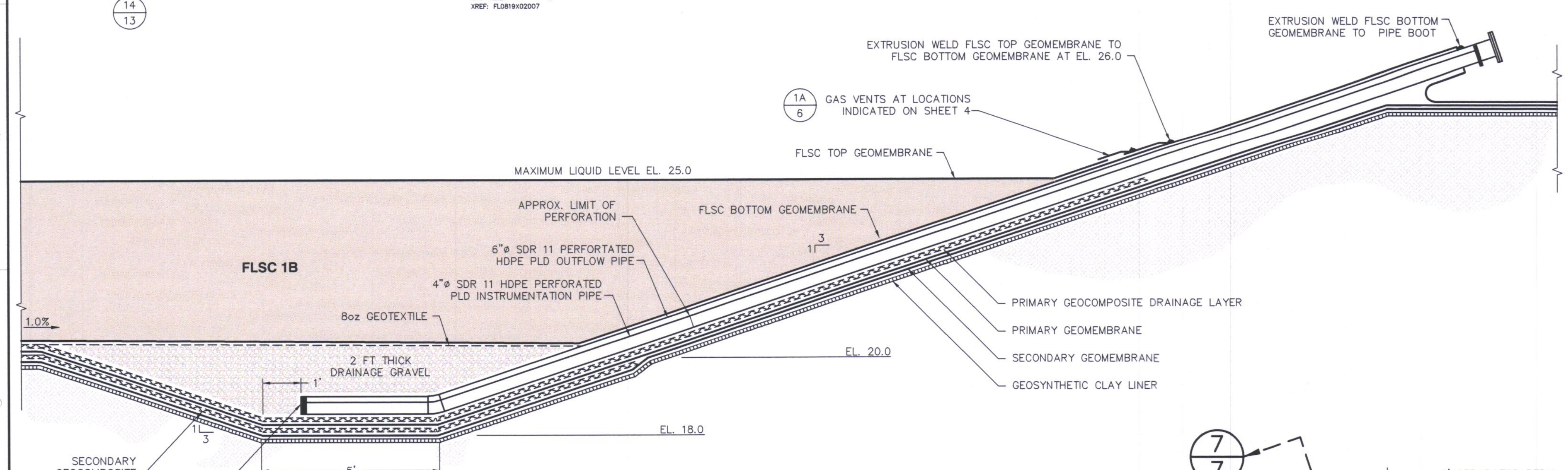
DATE: NOVEMBER 2006
SCALE: AS SHOWN
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02006
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 6 OF 13



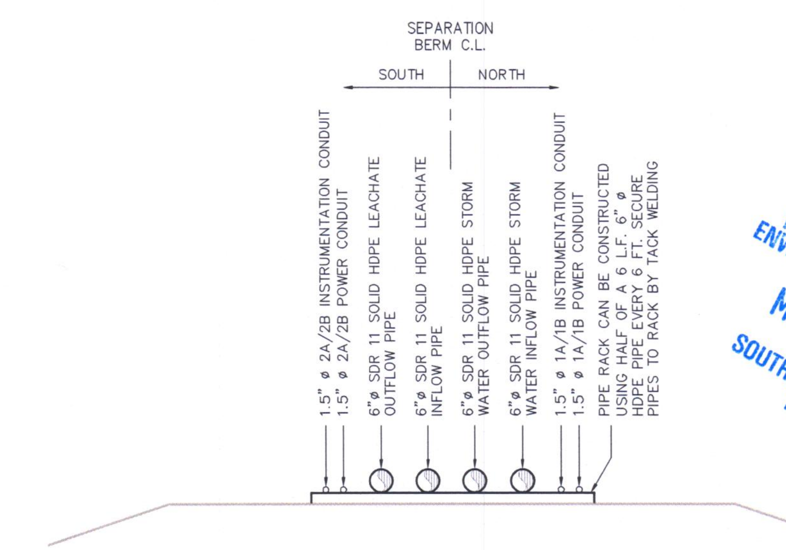
4
5
DETAIL (TYPICAL)
LINER SYSTEM AT SLD SUMP AND SEPARATOR BERM
SCALE: 1" = 2'
XREF: FL0819X02007



7
5
SECTION (TYPICAL)
PIPES ON SIDESLOPE
SCALE: 1" = 2'
XREF: FL0819X02007

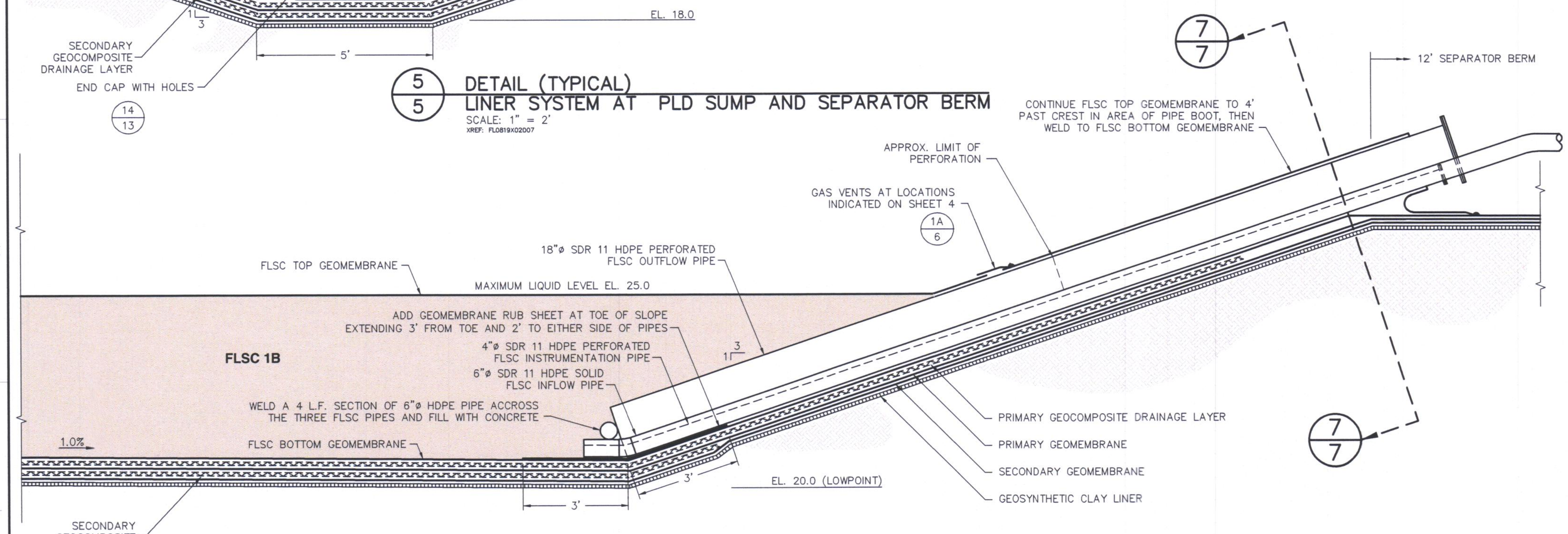


5
5
DETAIL (TYPICAL)
LINER SYSTEM AT PLD SUMP AND SEPARATOR BERM
SCALE: 1" = 2'
XREF: FL0819X02007



8
5
DETAIL (TYPICAL)
PIPE CONFIGURATION ON SEPARATOR BERM
SCALE: 1" = 2'
XREF: FL0819X02007

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA



6
5
DETAIL (TYPICAL)
LINER SYSTEM AT FLSC PIPES AND SEPARATOR BERM
SCALE: 1" = 2'
XREF: FL0819X02007

NOTES:

1. ALL GEOMEMBRANES INDICATED ARE 60-mil. HDPE TEXTURED GEOMEMBRANES.
2. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FDEP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT: FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE: LINER SYSTEM DETAILS II

A. Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

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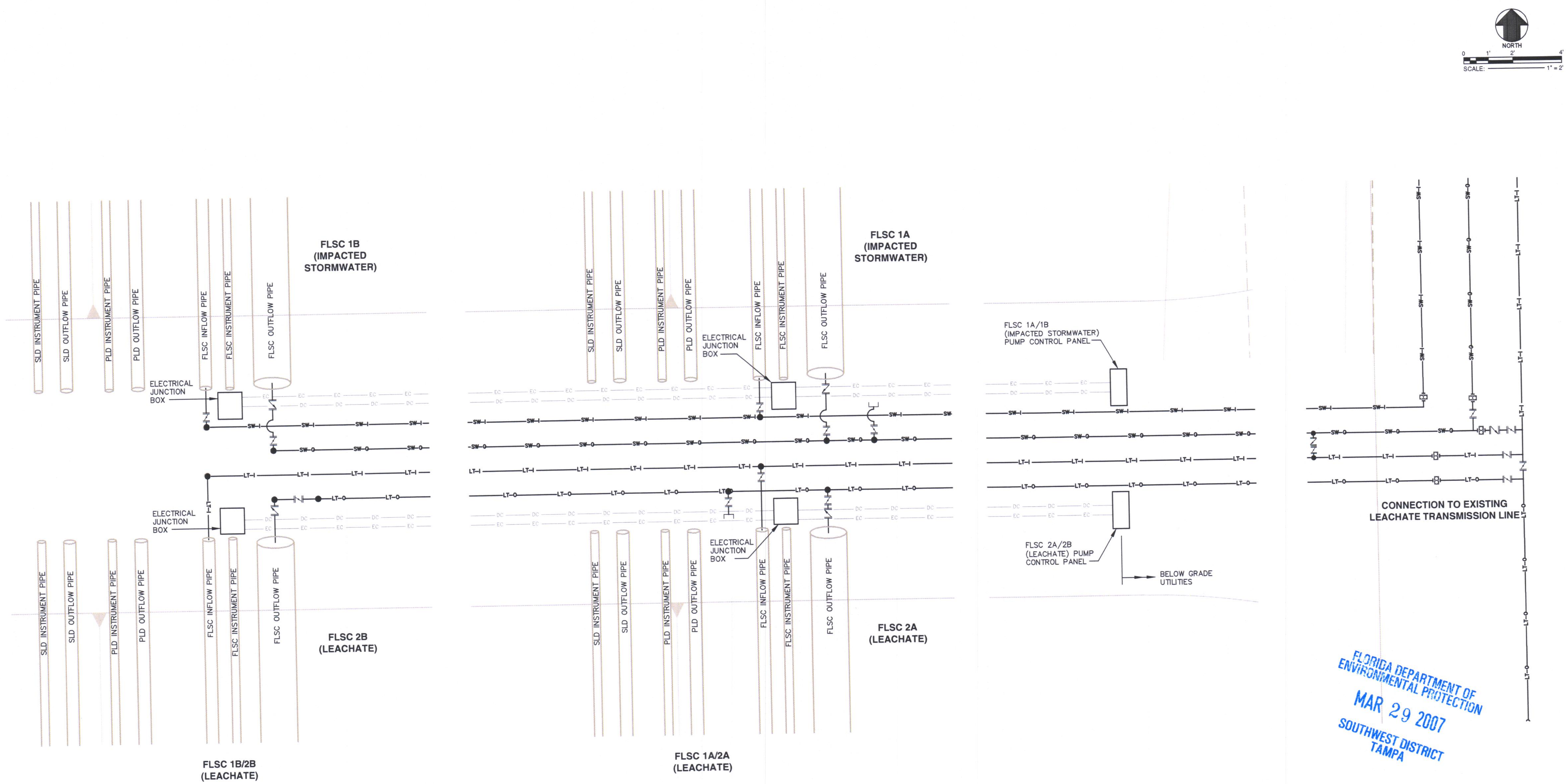
AUTHORIZATION CERTIFICATE NO. 00004321

DATE:	NOVEMBER 2006
SCALE:	AS SHOWN
PROJECT NO.:	FL0819.02
FILE NO.:	FL0819-02007
PDF DOC NO.:	GEAG-06-38A
SHEET NO.:	7 OF 13



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT
TAMPA

NOTES:

1. FLSC = FLEXIBLE LEACHATE STORAGE CONTAINER, PLD = PRIMARY LEAK DETECTION, AND SLD = SECONDARY LEAK DETECTION.

LEGEND

SW-I	IMPACTED STORMWATER INFLOW PIPELINE
SW-O	IMPACTED STORMWATER OUTFLOW PIPELINE
LT-I	LEACHATE INFLOW PIPELINE
LT-O	LEACHATE OUTFLOW PIPELINE
EC	ELECTRIC POWER CONDUIT FOR LOAD-OUT PUMPS AND CONVENIENCE OUTLETS FOR SECONDARY AND PRIMARY PUMPS
DC	DATA CONDUIT

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
FLSC PIPING LAYOUT

A Gupta
3/29/07
AYUSHMAN GUPTA
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TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: 1" = 2'
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02008
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 8 OF 13

EQUIPMENT IDENTIFICATION

- SUMP PUMP, CENTRIFUGAL (PC)
- HORIZONTAL CENTRIFUGAL PUMP (PC)
- SUBMERSIBLE POSITIVE DISPLACEMENT PUMP, PNEUMATIC (PS)
- SUBMERSIBLE CENTRIFUGAL PUMP, MOTOR DRIVEN (PS)
- FILTER OR STRAINER, BASKET TYPE (F)
- PACKAGED EQUIPMENT BOUNDARY (PA)

INSTRUMENTS

- INTERLOCK LOCAL MOUNTED
- INTERLOCK, MAIN PANEL MOUNTED
- INTERLOCK, REMOTE PANEL MOUNTED
- INTERLOCK, NORMALLY INACCESSIBLE
- DISCRETE INSTRUMENT–LOCAL MOUNTED
- DISCRETE INSTRUMENT–MAIN PANEL MOUNTED
- DISCRETE INSTRUMENT–REMOTE PANEL MOUNTED
- DISCRETE INSTRUMENT–NORMALLY INACCESSIBLE
- SHARED DISPLAY, SHARED CONTROL LOCAL MOUNTED
- SHARED DISPLAY, SHARED CONTROL MAIN PANEL MOUNTED
- SHARED DISPLAY, SHARED CONTROL REMOTE PANEL MOUNTED
- COMPUTER FUNCTION–LOCAL MOUNTED
- COMPUTER FUNCTION–MAIN PANEL MOUNTED
- COMPUTER FUNCTION–REMOTE PANEL MOUNTED
- COMPUTER FUNCTION–NORMALLY INACESSABLE
- INSTRUMENTS SHARING COMMON HOUSING–LOCAL MOUNTED
- INSTRUMENTS SHARING COMMON HOUSING–MAIN PANEL MOUNTED
- TURBINE METER
- THERMOWELL
- PRESSURE REDUCING REGULATOR SELF CONTAINED (* = SET PRESSURE)
- BACKPRESSURE REGULATOR SELF CONTAINED (* = SET PRESSURE)
- DIAPHRAGM ACTUATOR
- MOTOR OR PISTON ACTUATOR M = MOTOR, P = PISTON
- SOLENOID
- GEAR ACTUATOR
- PRESSURE SAFETY VALVE
- PRESSURE/VACUUM SAFETY VALVE
- RUPTURE DISK OR SAFETY HEAD FOR PRESSURE RELIEF
- RUPTURE DISK OR SAFETY HEAD FOR VACUUM RELIEF
- PRESSURE/VACUUM RELIEF PLATE
- FAILURE MODE

FAILURE POSITIONS

- FC – FAIL CLOSED (ASSUMED)
- FO – FAIL OPEN
- FI – FAIL INDETERMINATE
- FL – FAIL LOCKED

LINE SYMBOLS

- MAJOR FLOW LINE
- SECONDARY FLOW LINE
- AIR DUCT
- FLEXIBLE HOSE
- PNEUMATIC INSTRUMENT SIGNAL
- HYDRAULIC INSTRUMENT SIGNAL
- CONDUIT
- ELECTRICAL SIGNAL
- CAPILLARY INSTRUMENT SIGNAL
- OPTICAL SIGNAL
- SOFTWARE LINK
- LINE CONTINUATION
- TIE POINT
- SPECIFICATION BREAK, XX = PIPING MATERIAL AND CLASS

PIPING SYMBOLS

- FLANGED CONNECTION
- CONCENTRIC REDUCER (12"x10")
- ECCENTRIC REDUCER, F.O.T. (12"x10")
- BLIND FLANGE
- GATE VALVE
- BALL VALVE
- GLOBE VALVE
- ANGLE VALVE
- ANGLE GLOBE VALVE
- BUTTERFLY VALVE
- PLUG VALVE
- CHECK VALVE
- BLOCK AND BLEED VALVE
- INSTRUMENT VALVE
- NEEDLE VALVE
- AIR ELIMINATOR
- EXPANSION JOINT
- CAMLOCK CONNECTION FEMALE
- CAMLOCK CONNECTION MALE
- SAMPLE POINT (SP)
- PIPE CAP
- EXTERNAL STRAINER
- EPG PDISCONNECT ADAPTERS
- PRESSURE GUAGE
- FLOW METER
- LEVEL TRANSDUCER (LT)
- LEAK DETECTOR (MT)

SHARED DISPLAY EXPLANATION

USED TO INDICATE A "SOFTWARE INTERNAL LINK" BETWEEN FUNCTIONS– NO EXTERNAL WIRING REQUIRED

FUNCTION PERFORMED WITHIN LOCAL PROCESSOR

FAL / FRC

1. DATA AVAILABLE ON P.C.L. (PROCESS COMMUNICATIONS LINK)
2. FUNCTION PERFORMED BY LOCAL PROCESSOR
3. DISPLAY ON CONSOLE C.R.T. SCREEN
4. DATA CAN BE TREND RECORDED ON C.R.T. SCREEN AND HARD COPY REPORT

COMPUTER INTERFACE SYMBOLS

- AI – ANALOG INPUT
- AO – ANALOG OUTPUT
- DI – DIGITAL INPUT
- DO – DIGITAL OUTPUT

DEFINITIONS

CAP – CAPACITY
C.S. – CARBON STEEL
C.R.T. – CATHODE RAY TUBE
D.I. – DUCTILE IRON
°F – DEGREES FARENHEIT
F.O.T. – FLAT ON TOP
FRP – FIBERGLASS REINFORCED PLASTIC
gal – GALLON
gpm – GALLONS PER MINUTE
HLL – HIGH LIQUID LEVEL
HP – HORSEPOWER
HDPE – HIGH DENSITY POLYETHYLENE
LLL – LOW LIQUID LEVEL
mA – MILLIAMPERE
MW – MANWAY
NLL – NORMAL LIQUID LEVEL
O.D. – OUTSIDE DIAMETER
PRESS. – PRESSURE
psig – POUNDS PER SQUARE INCH GAUGE
PVC – POLYVINYL CHLORIDE
RPM – REVOLUTIONS PER MINUTE
RTD – RESISTANCE TEMPERATURE DETECTOR
SCFM – STANDARD CUBIC FEET PER MINUTE
S.S. – STAINLESS STEEL
TDH – TOTAL DYNAMIC HEAD
TEMP. – TEMPERATURE
T.H. – TOTAL HIEGHT
t.t. – TANGENT TO TANGENT
V – VOLTS
VFD – VARIABLE FREQUENCY DRIVE
WC – WATER COLUMN

EQUIPMENT TAG NUMBERS

B–2 6 01 01

- SEQUENCE
- STATION NUMBER
- CLASSIFICATION
- SYSTEM
- EQUIPMENT IDENTIFICATION

INSTRUMENT TAG NUMBERS

PI–3 1 12 01

- SEQUENCE
- STATION NUMBER
- CLASSIFICATION
- SYSTEM
- INSTRUMENT IDENTIFICATION

SYSTEM

1 – STORMWATER COLLECTION
2 – STORMWATER TRANSMISSION AND STORAGE
3 – STORMWATER DISPOSAL
4 – LEACHATE TRANSMISSION AND STORAGE
5 – LEACHATE DISPOSAL

CLASSIFICATION

1 – STORM WATER
2 – LEACHATE 1

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT
TAMPA

INSTRUMENT IDENTIFICATION

FIRST LETTERS	INITIATING OR MEASURED VARIABLE	CONTROLLERS: RECORDING	CONTROLLERS: INDICATING	CONTROLLERS: BLIND	CONTROLLERS: SELF-ACTUATED CONTROL VALVES	READOUT DEVICES: RECORDING	READOUT DEVICES: INDICATING	SWITCHES AND ALARM DEVICES (a): HIGH**	SWITCHES AND ALARM DEVICES (a): LOW	SWITCHES AND ALARM DEVICES (a): COMB	TRANSMITTERS: RECORDING	TRANSMITTERS: INDICATING	TRANSMITTERS: BLIND	SOLENOIDS, RELAYS, COMPUTING DEVICES	PRIMARY ELEMENTS	DATA INPUT	WELL OR PROBE	VIEWING DEVICE, GLASS	FINAL ELEMENT
A	ANALYSIS	ARC	AIC	AC		AR	AI	ASH	ASL	ASHL	ART	AIT	AT	AV	AE		AW		AV
B	BURNER/COMBUSTION	BRC	BIC	BC		BR	BI	BSH	BSL	BSHL	BRT	BIT	BT	BY	BE		BW	BG	BZ
C	AIR/WATER RATIO															CX			
D	USER'S CHOICE																		
E	VOLTAGE	ERC	EIC	EC		ER	EI	ESH	ESL	ESHL	ERT	EIT	ET	EY	EE				EZ
F	FLOW RATE	FRC	FIC	FC	FCV, FICV	FR	FI	FSH (FAH)	FSL (FAL)	FSHL	FRT	FIT	FT	FY	FE			FG	FV
FQ	FLOW QUANTITY	FQRC	FQIC			FQR	FQI	FQSH	FQSL			FQIT	FQT	FQY	FQE				FQV
FF	FLOW RATIO	FFRC	FFIC	FFC				FFSH	FFSL						FE				FFV
G	USER'S CHOICE																		
H	HAND		HIC	HC						HS									HV
I	CURRENT	IRC	IIC			IR	II	ISH	ISL	ISHL	IRT	IIT	IT	IY	IE				IV
J	POWER	JRC	JIC			JR	JI	JSH	JSL	JSHL	JRT	JIT	JT	JY	JE				JV
KQ	TIME QUANTITY	KQRC	KQIC	KQC	KQCV	KQR	KQI	KQSH	KQSL	KQSHL	KQRT	KQIT	KQT	KQY	KQE				KQV
L	LEVEL	LRC	LIC	LC	LCV	LR	LI	LSH (LAH)	LSL (LAL)	LSHL	LRT	LIT	LT	LY	LE		LW	LG	LV
M	LEAK						MI	MSH (MAH)	MSL (MAL)										
N	USER'S CHOICE																		
O	USER'S CHOICE																		
P	PRESSURE/ VACUUM	PRC	PIC	PC	PCV	PR	PI	PSH	PSL	PSHL	PRT	PIT	PT	PY	PE				PV
PD	PRESSURE, DIFFERENTIAL	PDRC	PDIC	PDC	PDCV	PDR	PDI	PDSH	PDSL		PDRT	PDIT	PDT	PDY	PE				PDV
Q	QUANTITY	QRC	QIC			QR	QI	QSH	QSL	QSHL	QRT	QIT	QT	QY	QE				QZ
R	RADIATION	RRC	RIC	RC		RR	RI	RSH	RSL	RSHL	RRT	RIT	RT	RY	RE		RW		RZ
SP	SET POINT							SPH	SPL	SPHH									
T	TEMPERATURE	TRC	TIC	TC	TCV	TR	TI	TSH	TSL	TSHL	TRT	TIT	TT	TY	TE		TW		TV
TD	TEMPERATURE, DIFFERENTIAL	TDRC	TDIC	TDC	TDCV	TDR	TDI	TDSH	TDSL		TDRT	TDIT	TDT	TDY	TE		TW		TDV
U	MULTIVARIABLE					UR	UI							UY					UV
V	VIBRATION/MACHINERY ANALYSIS					VR	VI	VSH	VSL	VSHL	VRT	VIT	VT	VY	VE				VZ
W	WEIGHT/FORCE	WRC	WIC	WC	WCV	WR	WI	WSH	WSL	WSHL	WRT	WIT	WT	WY	WE				WZ
WD	WEIGHT/FORCE, DIFFERENTIAL	WDRC	WDIC	WDC	WDCV	WDR	WDI	WDSH	WDSL		WDRT	WDIT	WDT	WDY	WDE				WDZ
X	UNCLASSIFIED																		
Y	EVENT/STATE/ PRESENCE		YIC	YC		YR	YI	YSH	YSL				YT	YY	YE				YZ
Z	POSITION/DIMENSION	ZRC	ZIC	ZC	ZCV	ZR	ZI	ZSH	ZSL	ZSHL	ZRT	ZIT	ZT	ZY	ZE				ZV
ZD	GAUGING, DEVIATION	ZDRC	ZDIC	ZDC	ZDCV	ZDR	ZDI	ZDSH	ZDSL		ZDRT	ZDIT	ZDT	ZDY	ZDE				ZDV

(a) "A", ALARM, THE ANNUNCIATING DEVICE MAY BE USED IN THE SAME FASHION AS "S", SWITCH, THE ACTUATING DEVICE. THE LETTERS H AND L MAY BE OMITTED IN THE UNDEFINED CASE. HH OR LL MAY BE USED TO INDICATE HIGH–HIGH OR LOW–LOW DEVICES.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT: FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE: LEACHATE MANAGEMENT SYSTEM
PROCESS DIAGRAM LEGEND SHEET

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

Owner/Facility:
Sarasota County
SOLID WASTE OPERATIONS
4000 KNIGHTS TRAIL ROAD
NOKOMIS, FLORIDA 34275
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Consultant/Engineer:
GEOSYNTEC CONSULTANTS
14055 RIVEREDGE DRIVE, SUITE 300,
TAMPA, FLORIDA 33637 USA
TEL: 813-558-0990 FAX: 813-558-9726
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02009
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 9 OF 13

PS-1100-01
PORTABLE STORM WATER PUMP

MODEL: SLIGO SERIES 3-5-4
DRIVER: 5 HP, 460-3PH.
DESIGN CAPACITY: 262 GPM @ 33 FT HEAD

PS-2000-01, PS-2000-02,
PS-4100-01, PS-4100-02
SUBMERSIBLE SUMP PUMP

MODEL: SLIGO SERIES 1-2-3 PSF
DRIVER: 2 HP, 460-3PH.
DESIGN CAPACITY: 50 GPM @ 46 FT HEAD

FI-2000-01 THROUGH FI-5100-02
TOTALIZING FLOW METER

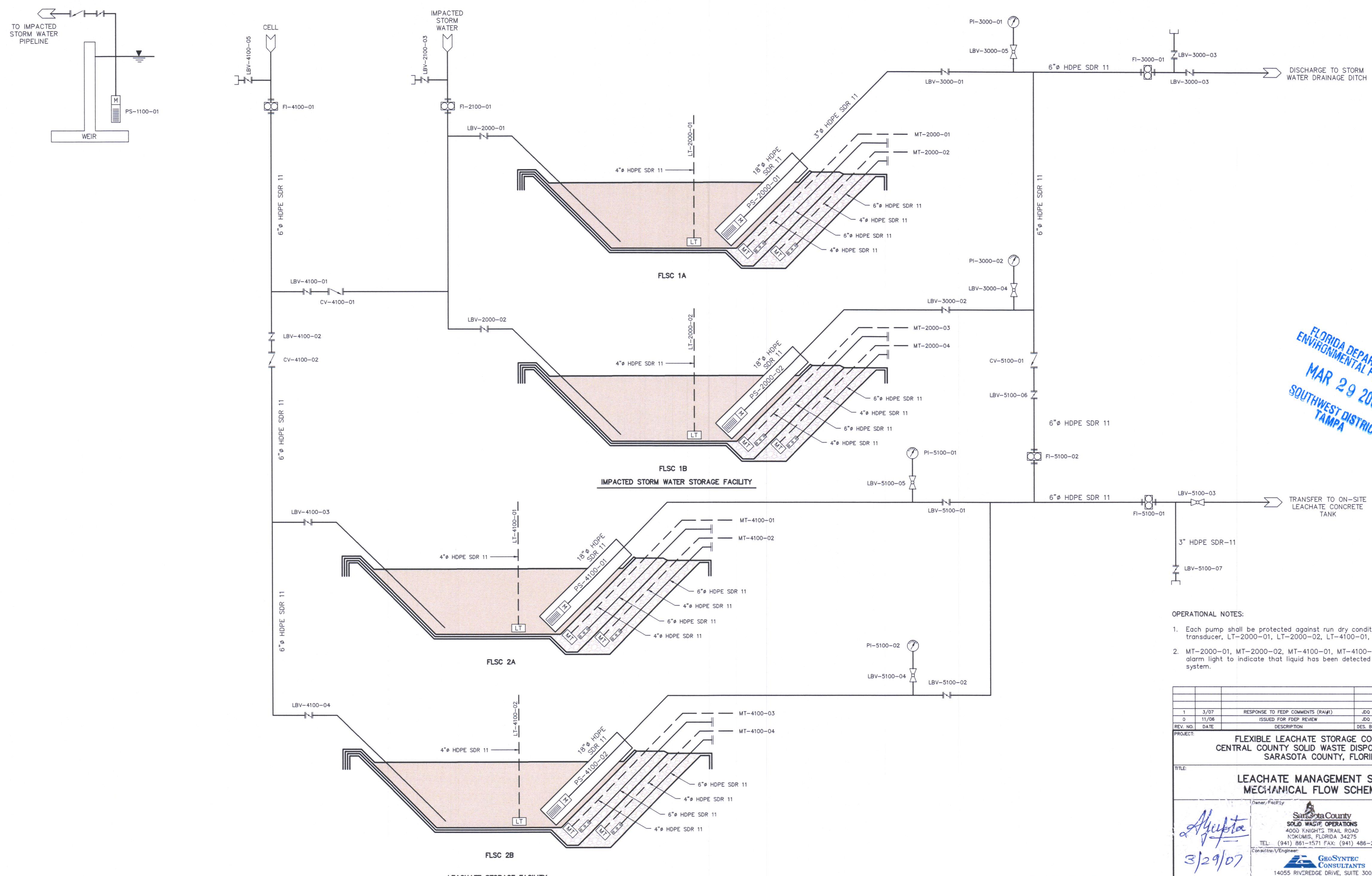
MODEL: TIGERMAG, FM656
MATERIALS: STAINLESS STEEL, FLANGED FACED

LT-2000-01, LT-2000-02,
LT-4100-01, LT-4100-02
LEVEL TRANSDUCER

MODEL: SLIGO SYSTEMS SERIES PT-009-50 W/ BUILT-IN SURGE SUPPRESSION, PT15X0__P

MT-2000-01 THROUGH MT-2000-04,
MT 4100-01 THROUGH MT-4100-04
LEAK DETECTION ELEMENT

MODEL: EPG LEAK DETECTION SENSOR, ASLD-YH80



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

OPERATIONAL NOTES:

1. Each pump shall be protected against run dry conditions by a level transducer, LT-2000-01, LT-2000-02, LT-4100-01, and LT-4100-02.
2. MT-2000-01, MT-2000-02, MT-4100-01, MT-4100-02 will activate an alarm light to indicate that liquid has been detected in the leak detection system.

PERMIT DRAWING

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
LEACHATE MANAGEMENT SYSTEM
MECHANICAL FLOW SCHEMATIC

A Gupta 3/29/07
AYUSHMAN GUPTA
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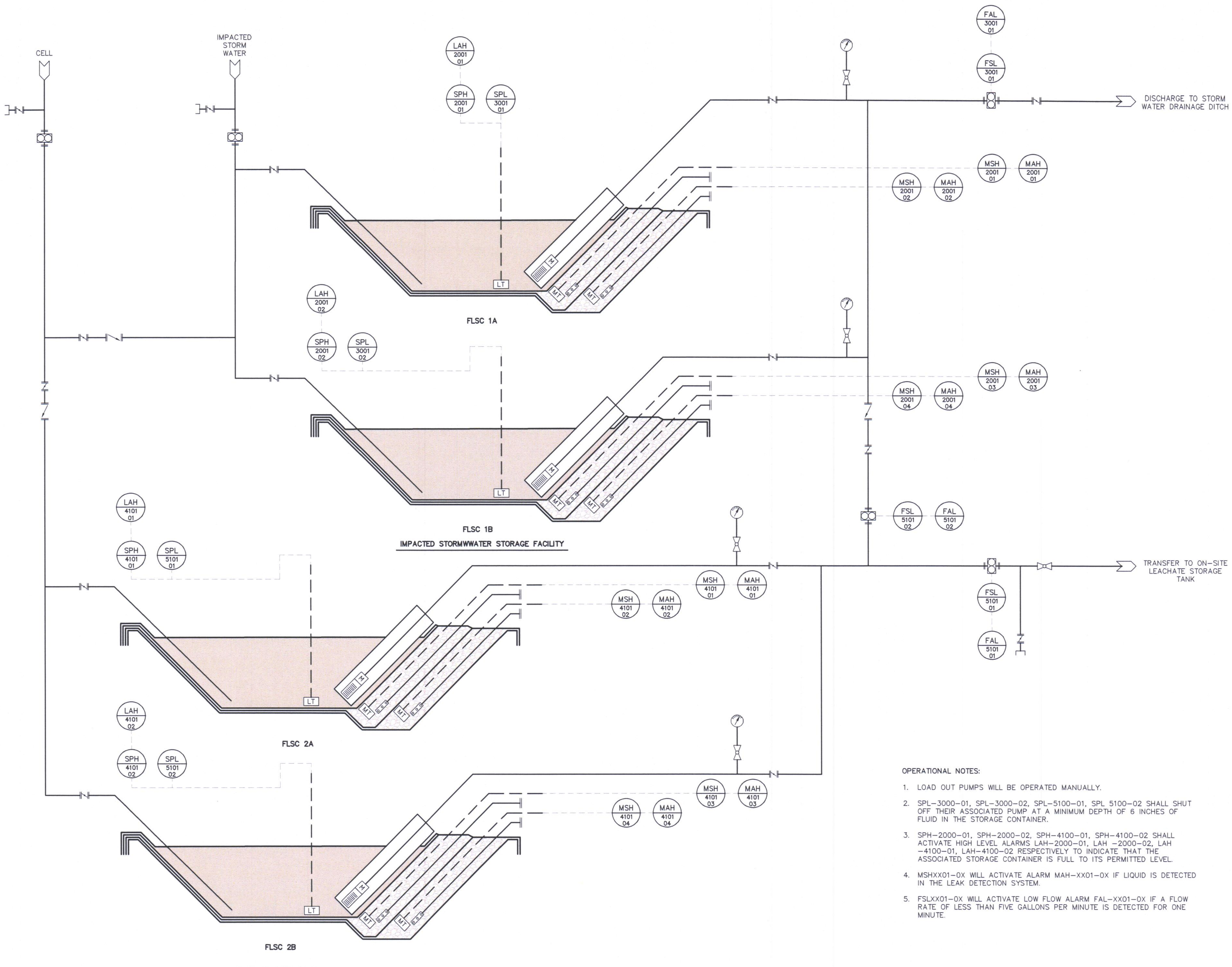
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02010
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 10 OF 13



OPERATIONAL NOTES:

1. LOAD OUT PUMPS WILL BE OPERATED MANUALLY.
2. SPL–3000–01, SPL–3000–02, SPL–5100–01, SPL 5100–02 SHALL SHUT OFF THEIR ASSOCIATED PUMP AT A MINIMUM DEPTH OF 6 INCHES OF FLUID IN THE STORAGE CONTAINER.
3. SPH–2000–01, SPH–2000–02, SPH–4100–01, SPH–4100–02 SHALL ACTIVATE HIGH LEVEL ALARMS LAH–2000–01, LAH –2000–02, LAH –4100–01, LAH–4100–02 RESPECTIVELY TO INDICATE THAT THE ASSOCIATED STORAGE CONTAINER IS FULL TO ITS PERMITTED LEVEL.
4. MSHXX01–0X WILL ACTIVATE ALARM MAH–XX01–0X IF LIQUID IS DETECTED IN THE LEAK DETECTION SYSTEM.
5. FSLXX01–0X WILL ACTIVATE LOW FLOW ALARM FAL–XX01–0X IF A FLOW RATE OF LESS THAN FIVE GALLONS PER MINUTE IS DETECTED FOR ONE MINUTE.

PERMIT DRAWING

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT
TAMPA

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
1	3/07	RESPONSE TO FEDP COMMENTS (RAI#1)	JDQ	JWO	AG	JDQ	
0	11/06	ISSUED FOR FDEP REVIEW	JDQ	JWO	AG	JDQ	AG

PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
LEACHATE MANAGEMENT SYSTEM
PROCESS AND INSTRUMENTATION SCHEMATIC

AGupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

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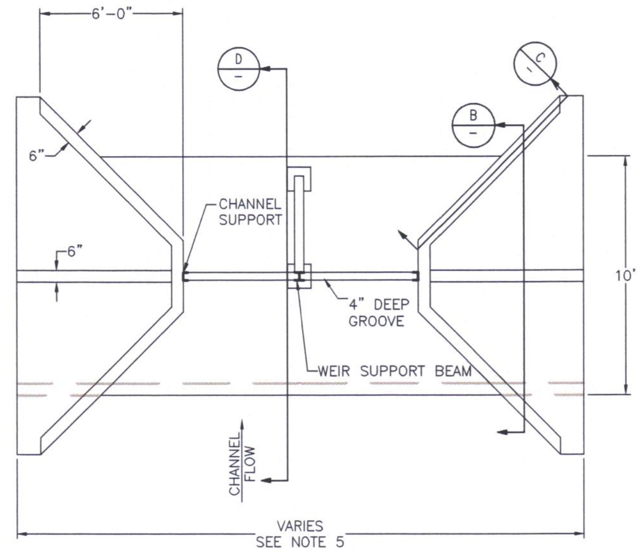
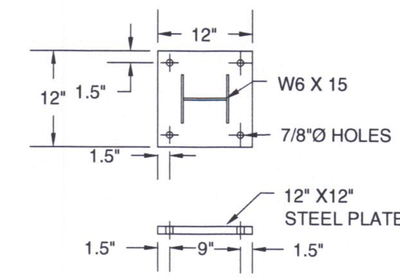
AUTHORIZATION CERTIFICATE NO. 00004321

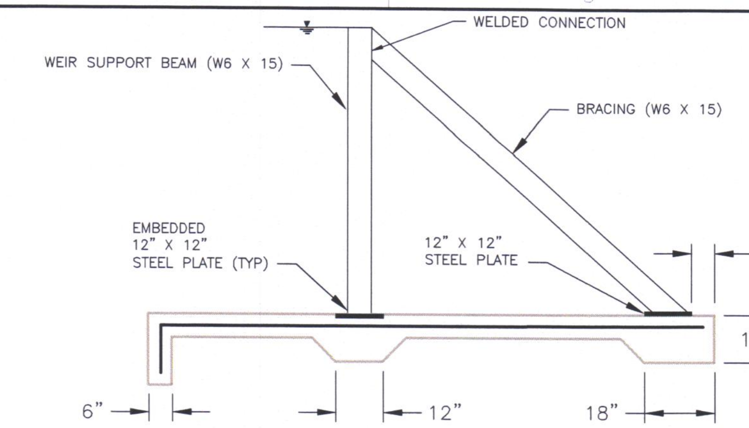
DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819–02011
PDF DOC NO.: GEAG–06–38A
SHEET NO.: 11 OF 13



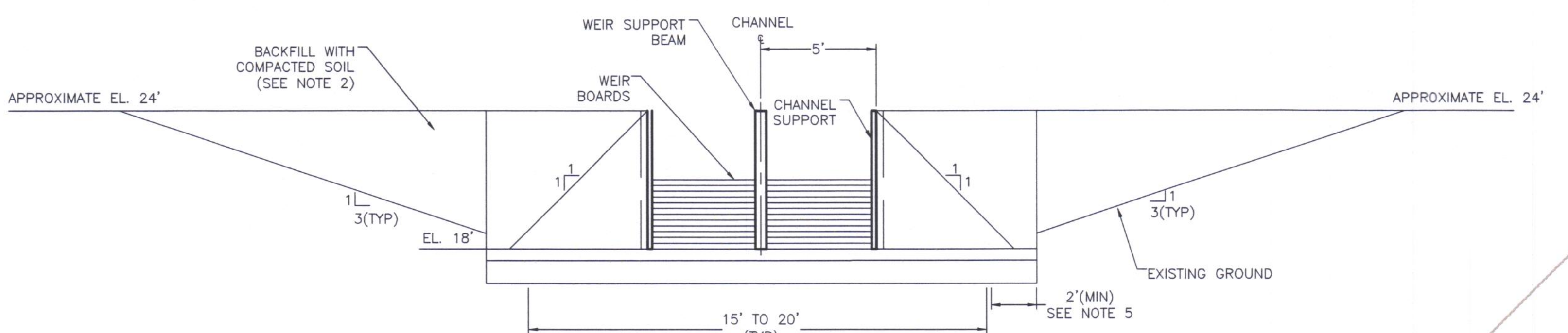
TOP VIEW



DETAIL (TYPICAL)
STEEL PLATE DETAIL
SCALE: 1" = 1'

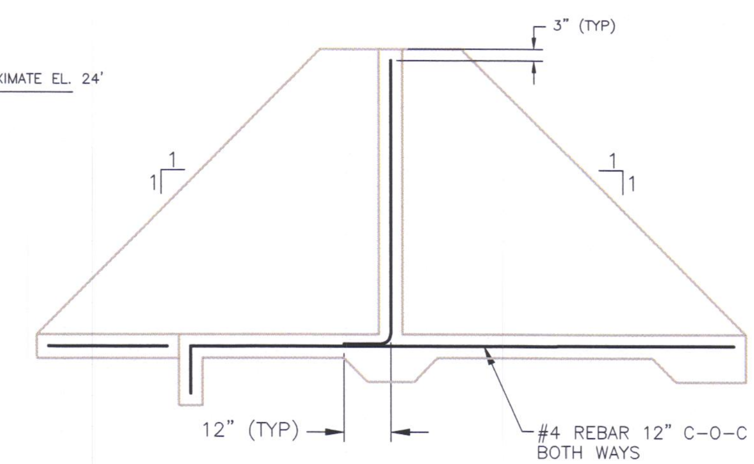


SECTION B-B
WEIR BEAM SUPPORT DESIGN
SCALE: 1" = 2'

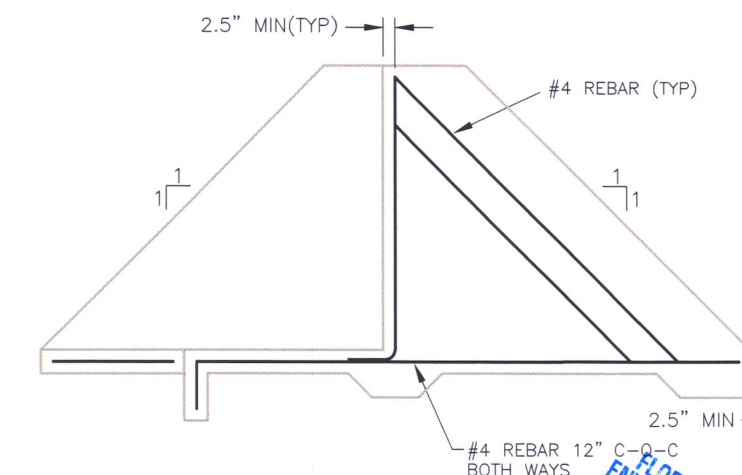


ELEVATION VIEW

DETAIL (TYPICAL)
WEIR DETAILS
SCALE: 1" = 4'

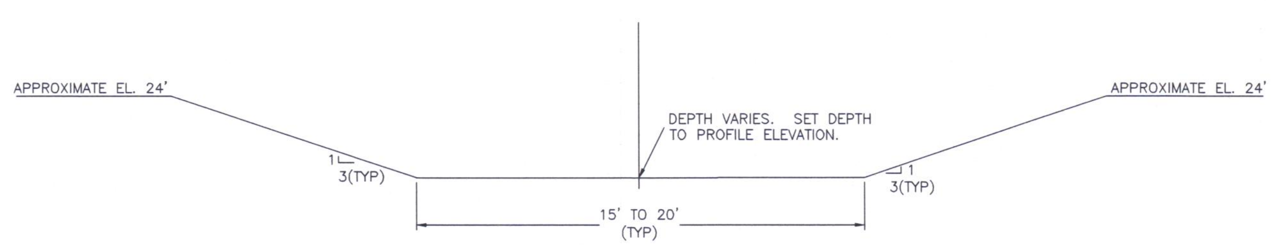


SECTION B-B
WEIR CROSS SECTION
SCALE: 1" = 2'

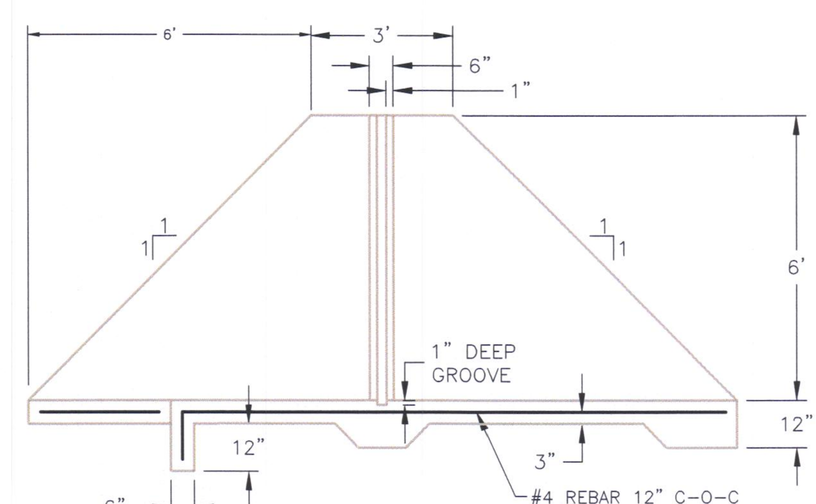


SECTION C-C
WEIR CROSS SECTION
SCALE: 1" = 2'

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA



SECTION (TYPICAL)
PERIMETER DRAINAGE CHANNEL
SCALE: 1" = 4'



SECTION D-D
WEIR CROSS SECTION
SCALE: 1" = 2'

NOTES:

1. WEIR BOARDS SHALL CONSIST OF 4"X6" LUMBER. BOARDS MAY BE FACED WITH MARINE GRADE PLYWOOD OR OTHER HARD SHEETING TO REDUCE LEAKAGE THROUGH BOARDS.
2. SOIL BACKFILL SHALL BE COMPACTED TO 95 PERCENT OF STANDARD PROCTOR DENSITY (ASTM D698), AT A MOISTURE CONTENT WITHIN 2 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
4. REINFORCING STEEL SHALL HAVE A MINIMUM TENSILE STRENGTH OF 60 KSI.
5. CONCRETE WEIR STRUCTURE SHALL EXTEND A MINIMUM OF 2FT INTO THE EXISTING DRAINAGE CHANNEL SIDE SLOPE.
6. CONCRETE ANCHOR BOLT HOLES SHALL BE 7" DEEP WITH A 1"ø.
7. THREADED ANCHOR BOLTS SHALL BE 7/8"ø, 304SS, RAWL CHEM-STUD TYPE BOLTS (OR EQUIVALENT.)

REV. NO.	DATE	DESCRIPTION	DES. BY	DR. BY	CHK. BY	RVW. BY	APP. BY
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PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
WEIR DETAILS

A Gupta
3/29/07
AYUSHMAN GUPTA
CERTIFICATE NO. 54023

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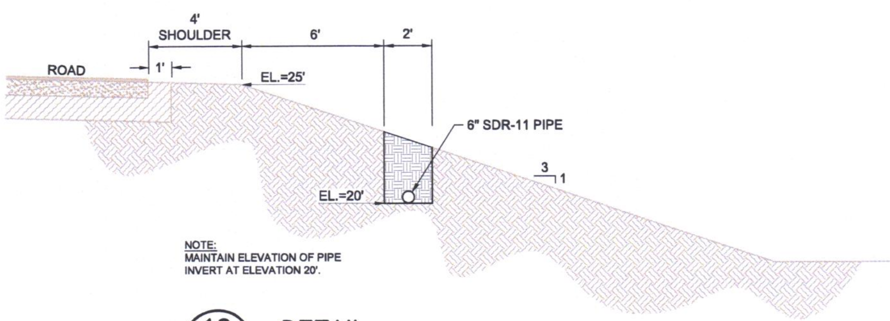
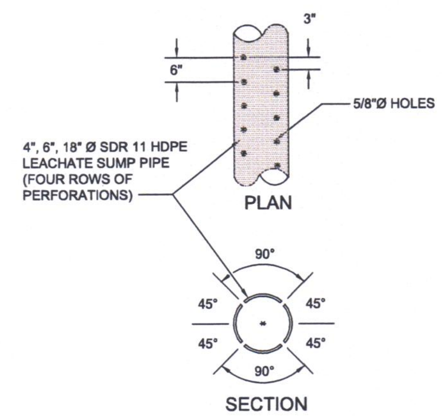
AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
SCALE: NA
PROJECT NO.: FL0819.02
FILE NO.: FL0819-02012
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 12 OF 13

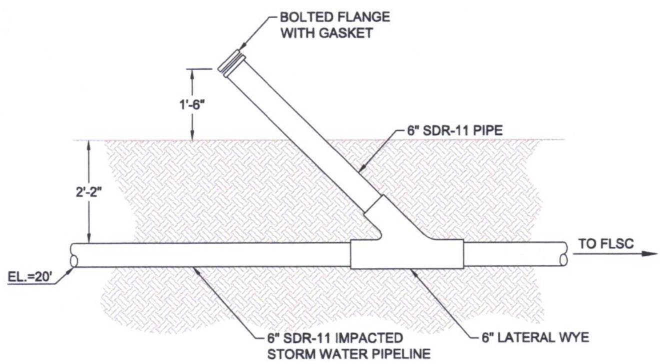
PERMIT DRAWING



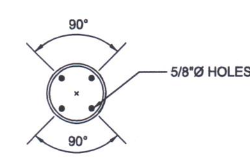
10 / 2 DETAIL
IMPACTED STORM WATER PIPELINE
SCALE: 1" = 4'
FL0819X1011



13 / 6 DETAIL – TYPICAL (NOTE 1)
PERFORATION FOR LEACHATE SUMP PIPES
SCALE: NTS
FL0819.X02012



12 / 2 DETAIL – TYPICAL
IMPACTED STORM WATER CLEAN–OUT
SCALE: 1" = 2'
FL0819X2012



14 / 7 DETAIL – TYPICAL
PERFORATION FOR END CAPS ON LECHATE SUMP PIPES
SCALE: NTS
FL0819.X02014

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 29 2007
SOUTHWEST DISTRICT TAMPA

NOTES:

1. PEFORATION DETAIL APPLIES TO ALL PIPES EXCEPT FOR THE FLSC INFLOW PIPES.

PERMIT DRAWING

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PROJECT:
FLEXIBLE LEACHATE STORAGE CONTAINERS
CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX
SARASOTA COUNTY, FLORIDA

TITLE:
MISCELLANEOUS DETAILS

A Gupta
3/29/07
AYUSHMAN GUPTA
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AUTHORIZATION CERTIFICATE NO. 00004321

DATE: NOVEMBER 2006
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PROJECT NO.: FL0819.02
FILE NO.: FL0819-02013
PDF DOC NO.: GEAG-06-38A
SHEET NO.: 13 OF 13