CITRUS COUNTY
SOLID WASTE MANAGEMENT DIVISION
CENTRAL LANDFILL
PHASE 2 EXPANSION
RECORD DRAWINGS
BID NUMBER 071-03
CITRUS COUNTY, FLORIDA
JUNE 2005

BOARD OF COUNTY COMMISSIONERS

Roger Batchelor, Commissioner, District 1
Gary Bartell, 1st Vice Chairman, District 2
Vicki Phillips, 2nd Vice Chairman, District 3
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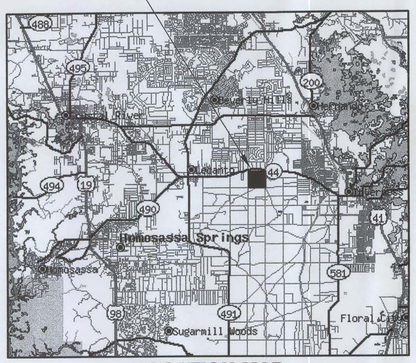
PUBLIC WORKS DEPARTMENT DIRECTOR

Kenneth L. Frink, P.E.

SOLID WASTE MANAGEMENT DIRECTOR

Susan J. Metcalfe, P.G.

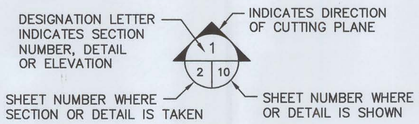
PROJECT LOCATION



LOCATION MAP

DRAWING INDEX

DRAWING NO.		DRAWING TITLE
1	-	COVER SHEET
2	-	OVERALL SITE PLAN
3	-	SEQUENCE I NEW STORMWATER IMPOUNDMENT
4	-	SEQUENCE II DEMOLITION PLAN - EXISTING STORMWATER SYSTEM
5	-	SEQUENCE III NEW WASTE DISPOSAL CELL LINER
6	-	SECTIONS
7	-	LEACHATE COLLECTION SYSTEM DETAILS
8	-	LEACHATE COLLECTION SYSTEM DETAILS
9	-	LEACHATE COLLECTION SYSTEM DETAILS
10	-	LEACHATE COLLECTION SYSTEM DETAILS
11	-	LINER SYSTEM DETAILS
12	-	STORMWATER IMPOUNDMENT PUMP STATION DETAILS
13	-	STORMWATER IMPOUNDMENT SUMP DETAIL
14	-	STORMWATER AND MISCELLANEOUS DETAILS
15	-	STORMWATER COLLECTION SYSTEM DETAILS
15A	-	REVISED CULVERT B
15B	-	REVISED CULVERT A
16	-	STORMWATER BOX CULVERT DETAILS
17	-	MISCELLANEOUS DETAILS



SECTION AND DETAIL DESIGNATION

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

EXISTING STORMWATER PIPELINE —— 8" —— —— SW ——
EXISTING LEACHATE FORCE MAIN —— 6" —— —— FM ——
UNDERGROUND POWER LINES —— —— UE —— ——
OVERHEAD POWER LINES —— —— OE —— ——

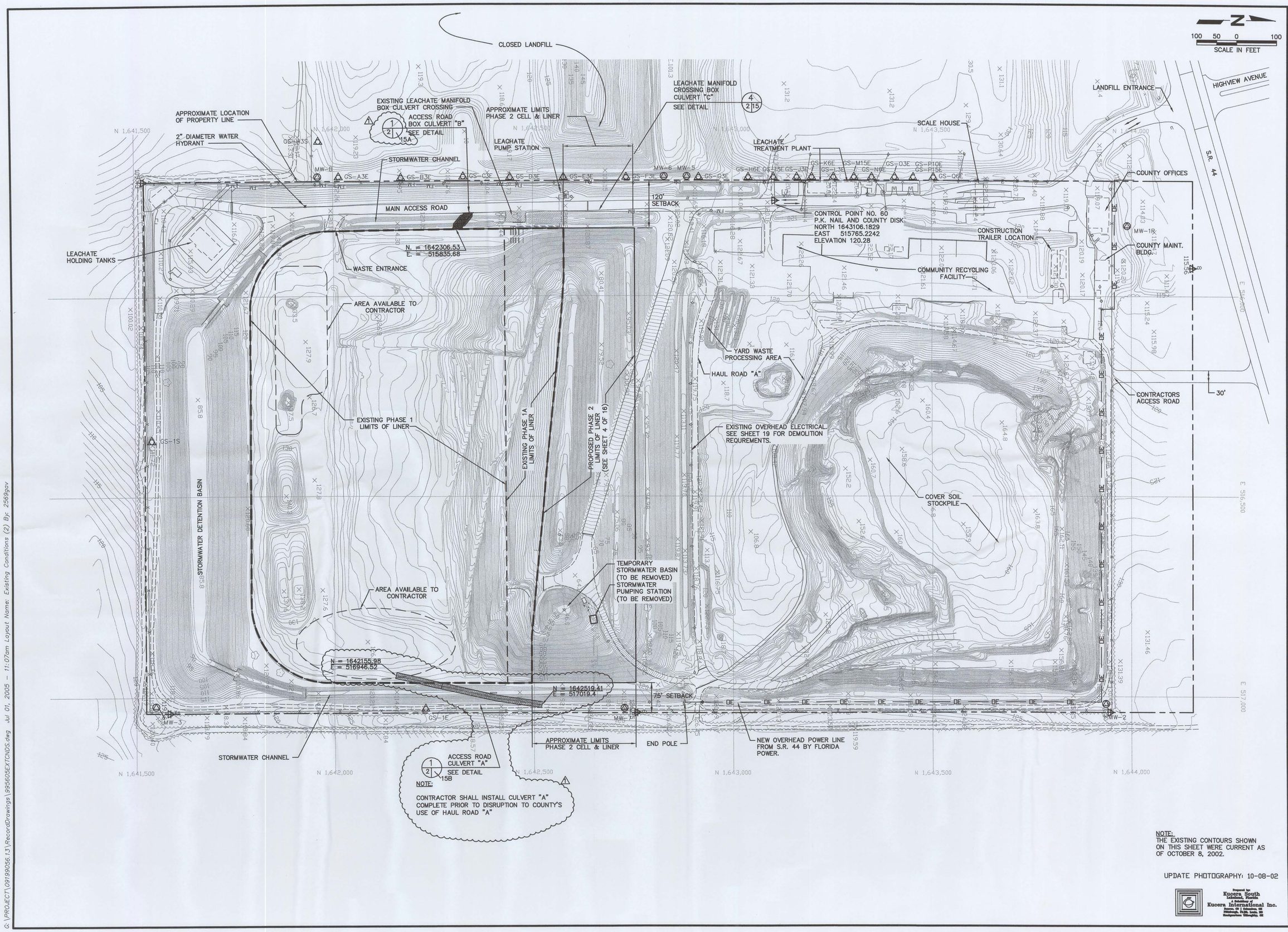
LEGEND AND ABBREVIATIONS

	SHEET FLOW DRAINAGE DIRECTION
	CONCENTRATED DRAINAGE FLOW DIRECTION
	FILL PROGRESSION
	DAILY PROGRESSION
	ZONE/PHASE BOUNDARY
	CENTERLINE OF SWALE
	CENTERLINE OF TEMPORARY SWALE
55	EXISTING CONTOUR
55	PROPOSED CONTOUR
55	PROJECTED EXISTING CONTOUR
	DOWNCHUTE
	LIMITS OF EXCAVATION OF ORGANIC MATERIAL
	PROPERTY LINE
	FENCELINE
LFG–1	LANDFILL GAS MONITORING WELL
PP	EXISTING POWER POLE
MW–6A	EXISTING GROUNDWATER MONITORING WELL
SB–1	SOIL BORING
	VEGETATION
APPROX	APPROXIMATE
CTRD	CENTERED
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
ELEV	ELEVATION
IE	INVERT ELEVATION
LF	LINEAR FEET
EXIST	EXISTING
SCH	SCHEDULE
TYP	TYPICAL
ø	DIAMETER
CONC	CONCRETE
W/	WITH
CMP	CORRUGATED METAL PIPE
MIN	MINIMUM
MAX	MAXIMUM
HDPE	HIGH DENSITY POLYETHYLENE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
NO	NUMBER
RCP	REINFORCED CONCRETE PIPE
DI	DUCTILE IRON PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
CPP	CORRUGATED POLYETHYLENE PIPE

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JUL 06 2005
SOUTHWEST DISTRICT
TAMPA

PHASE 2 - Record Dwg

G:\PROJECTS\091990056.13\RecordDrawings\1990560TITLE.dwg Jul 05, 2005 - 9:7pm By: 2378dp



NOTE:
THE EXISTING CONTOURS SHOWN ON THIS SHEET WERE CURRENT AS OF OCTOBER 8, 2002.

UPDATE PHOTOGRAPHY: 10-08-02

Prepared by: Kucera South Lakeland, Florida
A Subsidiary of Kucera International Inc.

REV	DATE	DESCRIPTION	BY
1	6/29/05	REVISED CULVERT A	JAB

DRAWING TITLE: OVERALL SITE PLAN

PROJECT TITLE: CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS

CLIENT: CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA

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

PROJ. NO. 09199056.05 | DSN. BY: BJC/LEK | DWN. BY: PEI | CHK. BY: JAB | Q/A RVW BY: BJC | APP. BY: RJD

CADD FILE: 995605EXTCNDS.dwg

DATE: JUNE 2003

SCALE: 1" = 100'

DRAWING NO. 2 of 17

G:\PROJECT\09199056.13\RecordDrawings\995605EXTCNDS.dwg Jul 01, 2005 - 11:07am Layout Name: Existing Conditions (2) By: 2569gav

TRANSITION TO EXISTING PAVEMENT
CONTRACTOR TO CONFIRM GRADES

N. = 1642965.86
E. = 515781.83

CENTERLINE OF MAIN ACCESS ROAD (1 / 3|17) SEE DETAIL

P.I. N. = 1642886.29
E. = 516211.31

SAND BAGS FOR RUN-AWAY TRUCK (2 / 3|14) SEE DETAIL

END ASPHALT PAVEMENT (WEST)
BEGIN CRUSHED CONCRETE (EAST)

CENTERLINE OF STORMWATER PUMP ACCESS ROAD (2 / 3|17) SEE DETAIL

80 LF OF 24"ø CPP
INV. ELEV. = 60.0 (N)
INV. ELEV. = 46.0 (S)

CENTERLINE OF IMPOUNDMENT SERVICE ROAD (3 / 3|17) SEE DETAIL

P.I. N. = 1642869.21
E. = 516457.28

NEW OVERHEAD POWER LINE BY FLORIDA POWER FROM S.R. 44 (SEE SHT. 2)

PUMP STATION PLAN (1 / 3|12)

N. = 1642939.80
E. = 516758.24

SCALE IN FEET: 40 20 0 40

4 / 3|14

45° ELBOW & THRUST BLOCK (4 / 3|17) SEE DETAIL

12"ø HDPE SDR 17 PVC DISCHARGE PIPE BURIED

SWALE

9.0% MAX.

2H:1V

3H:1V

CURB

EXISTING ELECTRICAL

1 / 3|14

8" HDPE (BURIED)

DOWN CHUTE SPILLWAY (5 / 3|17) SEE DETAIL

SPILLWAY EROSION PROTECTION (3 / 3|15) SEE DETAIL

STORMWATER IMPOUNDMENT AREA

DUAL PIPE INLET SUMP (4 / 3|15) SEE DETAIL

C DITCH INV. = 61.7

LINER LIMITS OF PHASE 2 AREA (SEE SHT. 5)

EXISTING 3" FORCE MAIN

CONCRETE ENDWALL AS PER FDOT INDEX 250

200 LF OF 24"ø CPP
INV. ELEV = 58.0 (W)
INV. ELEV = 46.0 (E)

STORMWATER PIPE PROTECTION (5 / 3|15) SEE DETAIL

EXISTING STORM WATER PUMP CONTROL & POWER PANELS

EXISTING UNDERGROUND POWER CONDUITS (TO REMAIN)

STORM WATER SWALE "A"

EXISTING ACCESS ROAD

DOWNCHUTE SPILLWAY, TYP. (6 / 3|14) SEE DETAIL

STORMWATER DIVERSION SWALE "B"

EXISTING CONCRETE PUMP STATION

CONTRACTOR SHALL MAINTAIN A PASSABLE TEMPORARY ACCESS ROAD FOR COUNTY MAINTENANCE VEHICLES UNTIL NEW STORM WATER IMPOUNDMENT AND ACCESS ROAD IS OPERATIONAL.

FUTURE PHASE 2 CELL

EXISTING DISCONNECT SWITCH

(2) EXISTING 8" HDPE DISCHARGE PIPELINES

EXISTING CONC. ENDWALL

EXISTING 30" RCP CULVERTS

EXISTING 30" RCP INLET PIPE

A / 3|15

EXISTING 6'ø CONC. MANHOLE

EXISTING 6"ø CONC. MANHOLE

EXISTING 24" RCP (TO BE REMOVED)

EXISTING INLET (TO BE REMOVED)

EXISTING PHASE 1A AREA (LIMITS OF LINER)

APPROX CENTERLINE OF EXISTING STORMWATER DIVERSION BERM. CONTRACTOR TO RE-LOCATE STORMWATER DISCHARGE TO PROPOSED DIVERSION SWALE "B"

STORMWATER DIVERSION BERM TO APPROX. EL. 105

DITCH

LAYOUT CONTROL		
POINT NO.	NORTHING	EASTING
1	1642891.07	516118.39
2	1642849.94	516336.06
3	1642852.30	516699.12
4	1642858.88	516774.70
5	1642869.06	516354.25
6	1642842.24	516750.48
7	1642819.32	516534.82
8	1642770.74	515952.02
9	1642761.85	516119.40
10	1642761.85	516336.35
11	1642771.17	516466.57
12	1642756.62	516965.10
13	1642494.18	516965.10
14	1642886.28	516532.42
15	1642756.62	515833.76

EXISTING ACCESS ROAD DEMOLITION LEGEND

- ASPHALTIC CONCRETE, 12" STABILIZED SUB-BASE AND 12" LIMEROCK BASE. (TO BE REMOVED, SEE NOTE NO. 4)
- 6" LIMEROCK SUB-BASE AND 2" THICK BALLAST ROCK.(TO BE REMOVED, SEE NOTE NO. 3)
- TEMPORARY ACCESS ROAD BY CONTRACTOR.

NEW ACCESS ROAD CONSTRUCTION LEGEND

- NEW ASPHALT PAVEMENT
- CRUSHED CONCRETE PUMP ACCESS ROAD
- IMPOUNDMENT SERVICE ADDED

NOTES:

1. CONTRACTOR SHALL PROVIDE TEMPORARY FACILITIES COMPATIBLE WITH PROPOSED IMPROVEMENTS & COMPATIBLE WITH COUNTY OPERATIONS, FOR DIVERTING STORM WATER RUNOFF FROM ACTIVE LANDFILL, SO THAT CONSTRUCTION CAN BE ACCOMPLISHED IN ACCORDANCE WITH SECTION. SEE SPECIFICATION SECTION 02220 FOR EXCAVATION PLAN REQUIREMENTS.
2. ALL FINISHED SLOPES GREATER THAN 10% SHALL BE SODDED. SOD ON SLOPES GREATER THAN 3:1 SHALL BE PINNED. CONTRACTOR SHALL STABILIZE ALL TEMPORARY SLOPES TO MINIMIZE EROSION.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL NOT DEMOLISH ANY ELECTRIC POWER OR STORMWATER EQUIPMENT AND FEATURES, UNTIL THE NEW, COMPLETE STORMWATER MANAGEMENT SYSTEM IS CONSTRUCTED AND OPERATIONAL, UNLESS OTHERWISE NOTED.
2. EXISTING STORMWATER PUMPS SHALL REMAIN PROPERTY OF COUNTY. CONTRACTOR SHALL COORDINATE WITH COUNTY AS TO LOCATION TO STORE PUMPS.

REV	DATE	DESCRIPTION	BY
4	6/29/05	NOTES DELETED	JAB

DRAWING TITLE: SEQUENCE 1 NEW STORMWATER IMPOUNDMENT
PROJECT TITLE: CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS

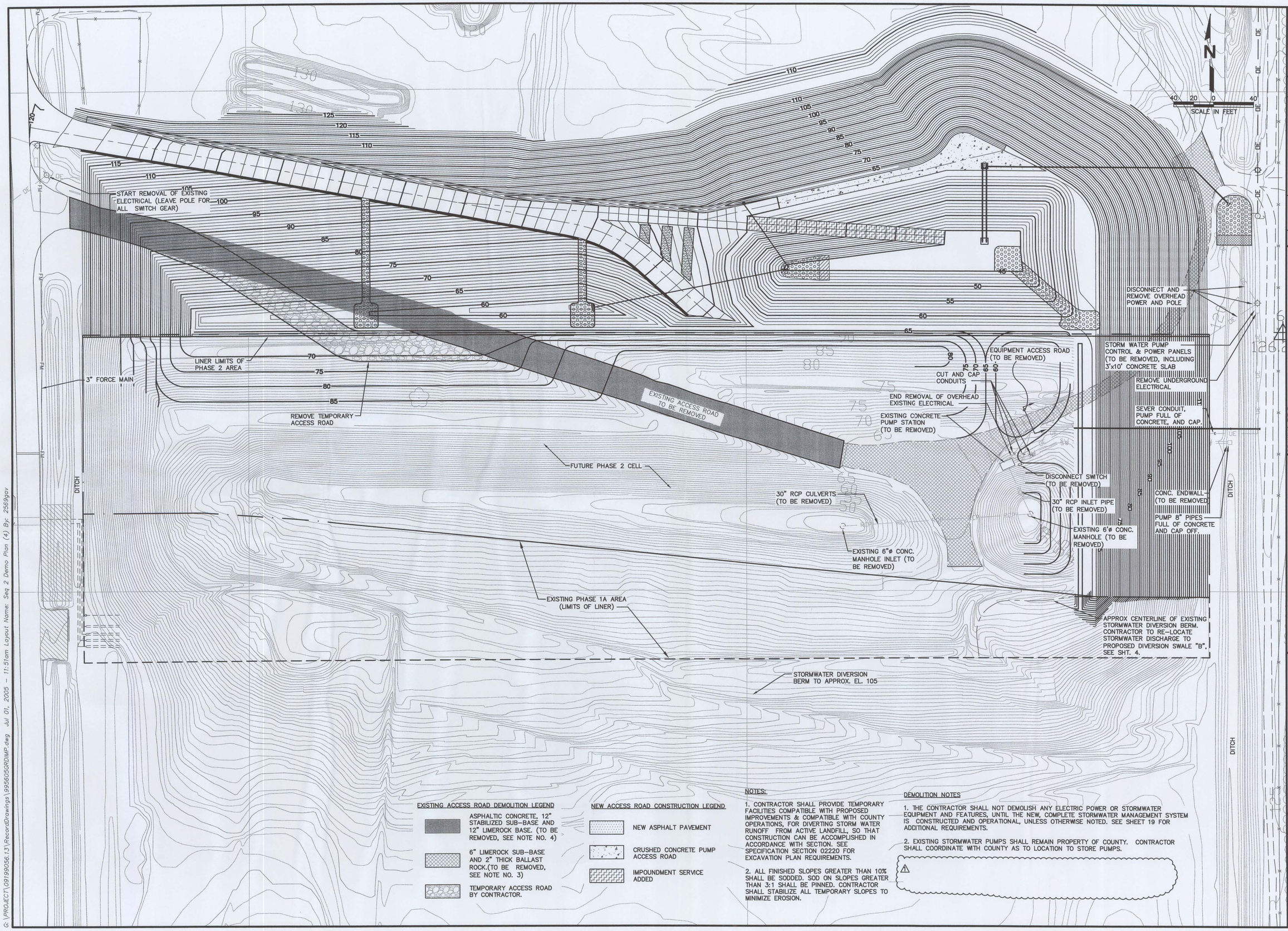
CLIENT: CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA

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

PROJ. NO. 09190056.05
DSN. BY: BJC/LEK
DWN. BY: PEI
CHK. BY: JAB
Q/A RVW. BY:
APP. BY: RJD

CADD FILE: 995605DEMOPLN.dwg
DATE: JUNE 2003
SCALE: 1" = 40'
DRAWING NO. 3 of 17

G:\PROJECT\09190056.13\RecordDrawings\995605DEMOPLN.dwg Jul 01, 2005 - 11:08am Layout Name: Sequence 1 (3) By: 2569gov



EXISTING ACCESS ROAD DEMOLITION LEGEND

- ASPHALTIC CONCRETE, 12" STABILIZED SUB-BASE AND 12" LIMEROCK BASE. (TO BE REMOVED, SEE NOTE NO. 4)
- 6" LIMEROCK SUB-BASE AND 2" THICK BALLAST ROCK.(TO BE REMOVED, SEE NOTE NO. 3)
- TEMPORARY ACCESS ROAD BY CONTRACTOR.

NEW ACCESS ROAD CONSTRUCTION LEGEND

- NEW ASPHALT PAVEMENT
- CRUSHED CONCRETE PUMP ACCESS ROAD
- IMPOUNDMENT SERVICE ADDED

NOTES:

1. CONTRACTOR SHALL PROVIDE TEMPORARY FACILITIES COMPATIBLE WITH PROPOSED IMPROVEMENTS & COMPATIBLE WITH COUNTY OPERATIONS, FOR DIVERTING STORM WATER RUNOFF FROM ACTIVE LANDFILL, SO THAT CONSTRUCTION CAN BE ACCOMPLISHED IN ACCORDANCE WITH SECTION. SEE SPECIFICATION SECTION 02220 FOR EXCAVATION PLAN REQUIREMENTS.
2. ALL FINISHED SLOPES GREATER THAN 10% SHALL BE SODDED. SOD ON SLOPES GREATER THAN 3:1 SHALL BE PINNED. CONTRACTOR SHALL STABILIZE ALL TEMPORARY SLOPES TO MINIMIZE EROSION.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL NOT DEMOLISH ANY ELECTRIC POWER OR STORMWATER EQUIPMENT AND FEATURES, UNTIL THE NEW, COMPLETE STORMWATER MANAGEMENT SYSTEM IS CONSTRUCTED AND OPERATIONAL, UNLESS OTHERWISE NOTED. SEE SHEET 19 FOR ADDITIONAL REQUIREMENTS.
2. EXISTING STORMWATER PUMPS SHALL REMAIN PROPERTY OF COUNTY. CONTRACTOR SHALL COORDINATE WITH COUNTY AS TO LOCATION TO STORE PUMPS.

REV	DATE	DESCRIPTION	BY
1	6/29/05	NOTES DELETED	JAB

DRAWING TITLE: SEQUENCE II DEMOLITION PLAN EXISTING STORMWATER SYSTEM

PROJECT TITLE: CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS

CLIENT: CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA

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

PROJ. NO. 09199056.05
DSN. BY: BJC/LEK
DWN. BY: PEI
CHK. BY: JAB
Q/A RVW BY: BJC
APP. BY: RJD

CADD FILE: 995605GRDIMP.dwg

DATE: JUNE 2003

SCALE: 1" = 40'

DRAWING NO. 4 of 17

G:\PROJECT\09199056.13\RecordDrawings\995605GRDIMP.dwg Jul 01, 2005 - 11:51am Layout Name: Seq 2 Demo Plan (4) By: 2569gov

EXISTING COVER SOIL STOCKPILE

LINING SIDE SLOPE ANCHOR TRENCH

10.0% MAX.

℄ DITCH INV. ELEV. = 61.7

TEMPORARY CAP

LEACHATE CLEANOUT SEE DETAIL

TYPICAL NORTH LINER ANCHOR TRENCH

ADDITIONAL LAYERS OF GEOCOMPOSITE

TOP OF LINER

CONNECTION TO EXISTING LINER

STORM WATER DITCH "B"

TOP OF FILL DIKE ELEV. = 70.0

PROPOSED 18" SLEEVE

ACCESS ROAD BOX CULVERT "C" SEE DETAIL

LEACHATE COLLECTION SUMP SEE DETAIL

LIMITS OF PHASE 2 LINER SYSTEM

SHADED PORTION DENOTES PROPOSED AREA OF ALTERNATE SIDESLOPE SUB-BASE.

EXISTING BOX CULVERT

TYPICAL TOP SLOPE LINER ANCHOR SYSTEM

SIDE SLOPE LINING CONNECTION

CONTRACTOR TO ROUTE STORMWATER RUNOFF TO THIS FEATURE AND/OR PUMP STORMWATER INTO EXISTING DITCH.

℄ DITCH INV. ELEV. = 63.00

LIMITS OF 2'-0" PROTECTIVE SAND COVER IN THE BOTTOM OF PHASE 2.

STORMWATER DIVERSION BERM TO APPROX. EL. 105

ACCESS ROAD BOX CULVERT "B" SEE DETAIL

ACCESS ROAD CULVERT "A" SEE DETAIL

SCALE IN FEET

LAYOUT CONTROL		
POINT NO.	NORTHING	EASTING
1	1642669.82	515788.75
2	1642756.62	515833.76
3	1642577.08	515833.56
4	1642756.62	516965.10
5	1642494.18	516965.10
6	1642494.18	516825.10
7	1642577.08	515933.56
8	1642662.90	516039.95
9	1642662.90	516667.01

NOTES:

1. CONTRACTOR SHALL PROVIDE TEMPORARY FACILITIES COMPATIBLE WITH PROPOSED IMPROVEMENTS & COMPATIBLE WITH COUNTY OPERATIONS, FOR DIVERTING STORM WATER RUNOFF FROM ACTIVE LANDFILL, SO THAT CONSTRUCTION CAN BE ACCOMPLISHED IN ACCORDANCE WITH SECTION. SEE SPECIFICATION SECTION 02220 FOR EXCAVATION PLAN REQUIREMENTS.

2. ALL FINISHED SLOPES GREATER THAN 10% SHALL BE SODDED. SOD ON SLOPES GREATER THAN 3:1 SHALL BE PINNED. CONTRACTOR SHALL STABILIZE ALL TEMPORARY SLOPES TO MINIMIZE EROSION.

REV	DATE	DESCRIPTION	BY
1	6/29/05	LEACHATE RISER PIPES	JAB
2	6/29/05	LEACHATE CLEANOUT	JAB
3	6/29/05	CULVERT CHANGED	JAB

DRAWING TITLE: SEQUENCE III NEW WASTE DISPOSAL CELL LINER

PROJECT TITLE: CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS

CLIENT: CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA

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

PROJ. NO. 091999056.05 | DWN. BY: PEI | Q/A RVW. BY: BJC | APP. BY: RJD | DSN. BY: BJC/LEK | CHK. BY: JAB

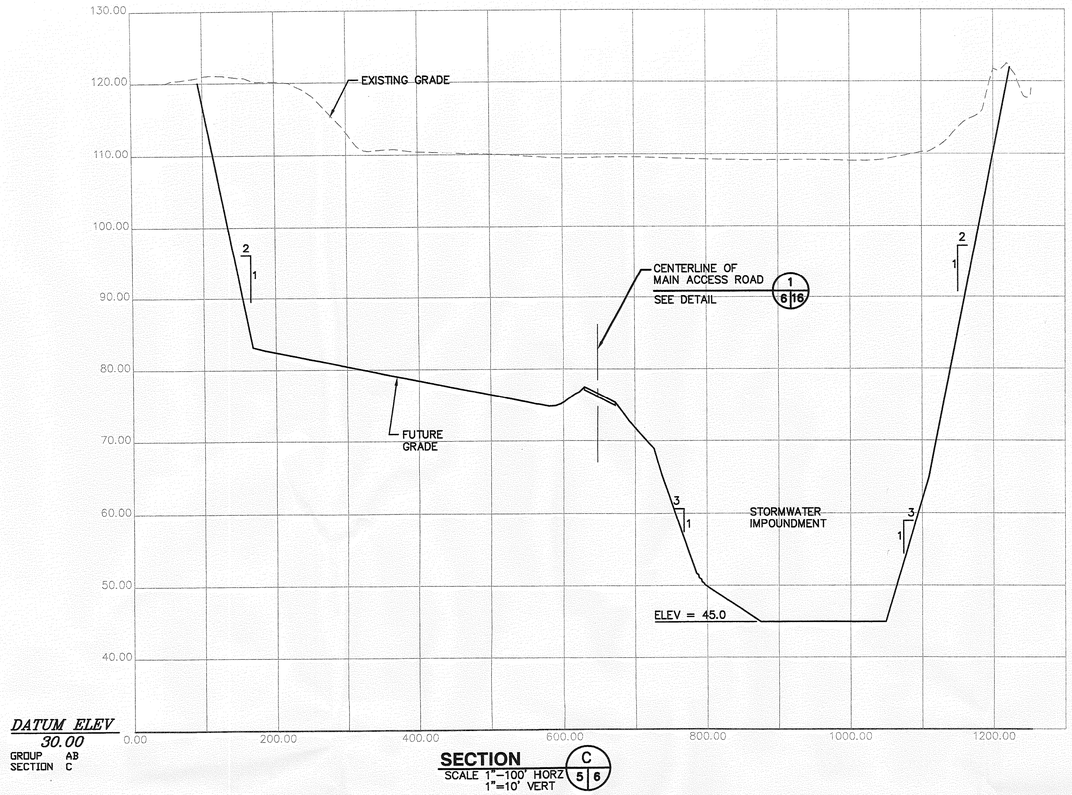
CADD FILE: 995605IMPNDGRD.dwg

DATE: JUNE 2003

SCALE: 1" = 40'

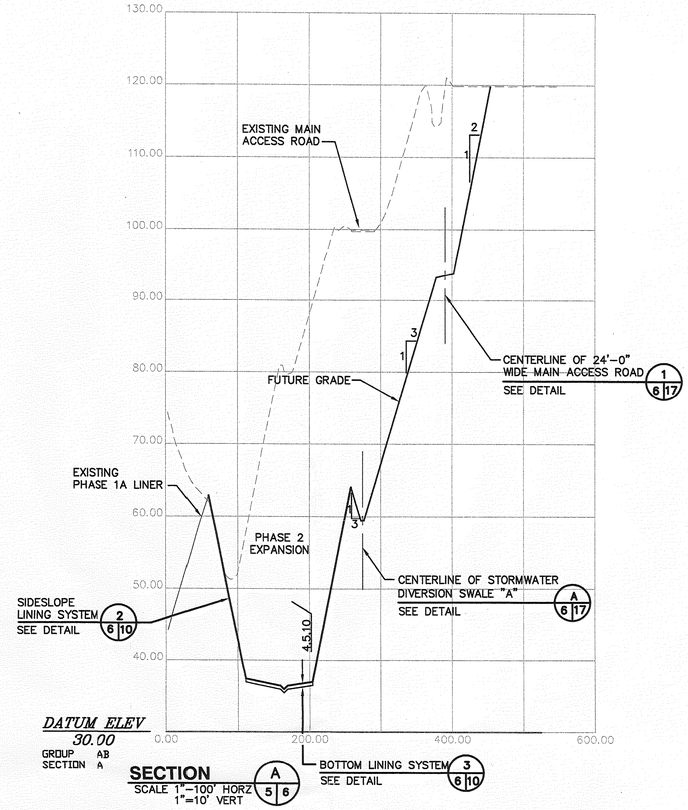
DRAWING NO. 5 of 17

G:\PROJECT\091999056.13\RecordDrawings\995605IMPNDGRD.dwg Jul 01, 2005 - 2:38pm Layout Name: Seq 3 grading (5) By: 2569gov



DATUM ELEV 30.00
GROUP AB
SECTION C

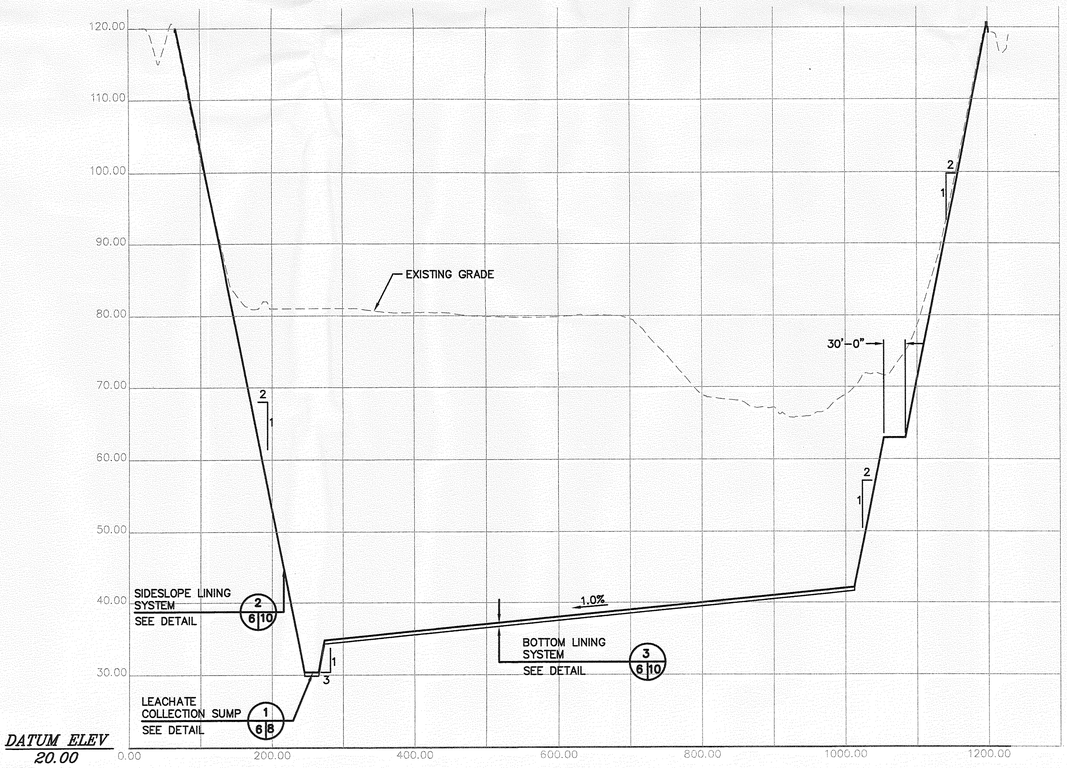
SECTION C (5 6)
SCALE 1"=100' HORZ
1"=10' VERT



DATUM ELEV 30.00
GROUP AB
SECTION A

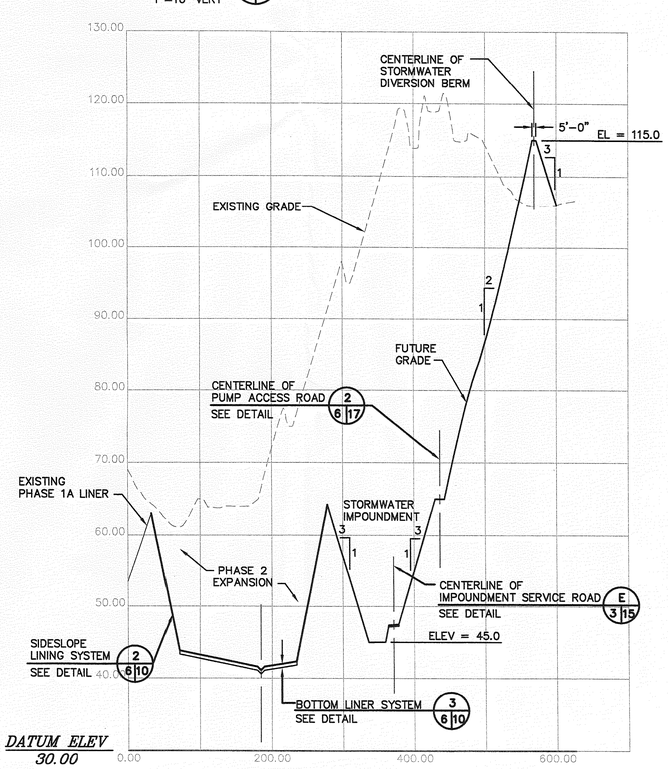
SECTION A (5 6)
SCALE 1"=100' HORZ
1"=10' VERT

BOTTOM LINING SYSTEM
SEE DETAIL 3 6 10



DATUM ELEV 20.00
GROUP D2
SECTION D

SECTION D (5 6)
SCALE 1"=100' HORZ
1"=10' VERT



DATUM ELEV 30.00
GROUP AB
SECTION B

SECTION B (5 6)
SCALE 1"=100' HORZ
1"=10' VERT

REV	DATE	DESCRIPTION	BY

DRAWING TITLE
SECTIONS
RETENTION POND / IMPOUND

PROJECT TITLE
CENTRAL LANDFILL
PHASE II EXPANSION
RECORD DRAWINGS

CLIENT
CITRUS COUNTY
SOLID WASTE MANAGEMENT DIVISION
CITRUS COUNTY, FLORIDA

SCS ENGINEERS
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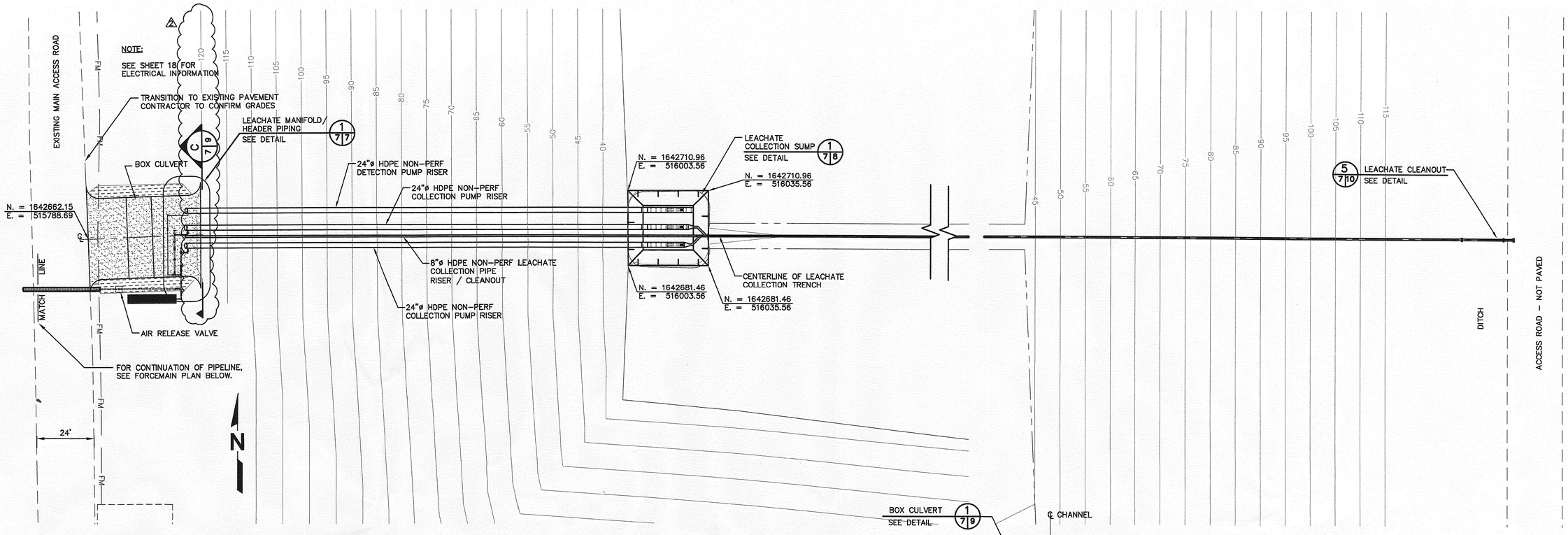
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 622-6757

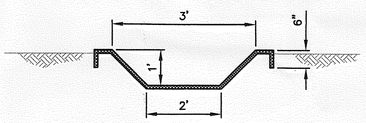
PROJ. NO. 091990056.05
DSR BJC
DWN. BY: PEI
CHK. BY: JAB
QA/QA RVW BY: BJC
APP. BY: RJD

CADD FILE: 995605IMPSECTS.dwg
DATE: JUNE 2003
SCALE: AS SHOWN
DRAWING NO. **6** of 17

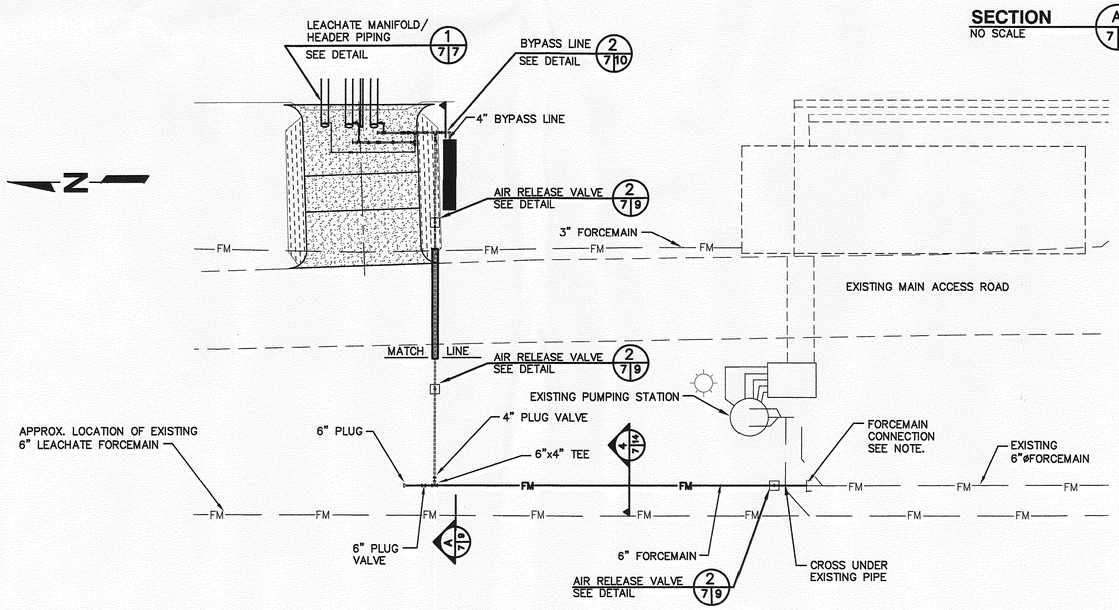
G:\PROJECT\091990056.13\RecordDrawings\995605IMPSECTS.dwg Jul 01, 2005 - 2:39pm Layout Name: Sections (6) By: 2569gov



COLLECTION HEADER, SUMP, AND RISER PLAN
NO SCALE



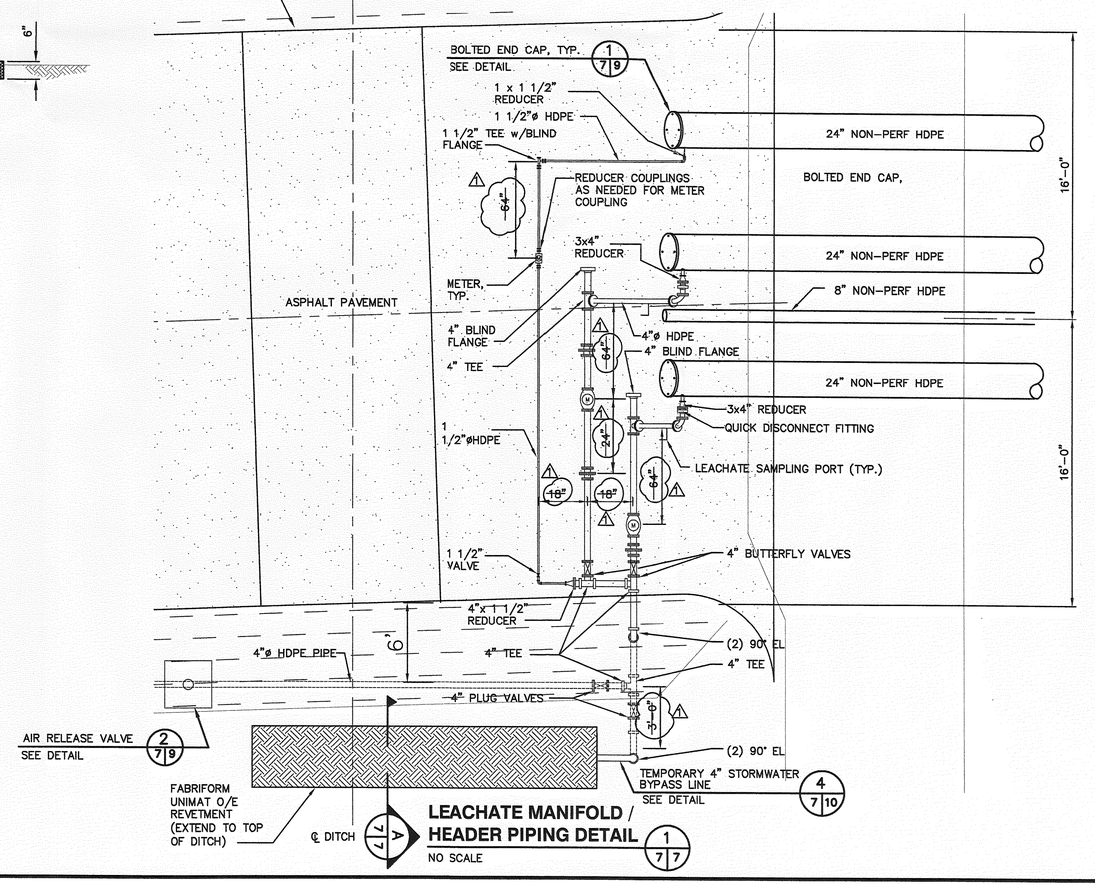
SECTION A/7/7
NO SCALE



6" FORCEMAIN PLAN
NO SCALE

NOTE:

REMOVE THRUST BLOCK AND BLIND FLANGE. CONNECT 6" FORCEMAIN TO EXISTING 6" FORCEMAIN.



LEACHATE MANIFOLD / HEADER PIPING DETAIL 1/7/7
NO SCALE

REV	DATE	DESCRIPTION	BY
2	6/29/05	DIMENSIONS REVISED	JAB
1	6/29/05	REVISED 120 CONTOUR	JAB

DRAWING TITLE: **LEACHATE COLLECTION SYSTEM DETAILS**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

CLIENT: **CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA**

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

PROJECT NO. 09199056.05 | DSN. BY: BJC | DWN. BY: PEI | CHK. BY: JAB | Q/A REV. BY: BJC | APP. BY: RJD

CADD FILE: 995605PLNSECLCH.dwg

DATE: JUNE 2003

SCALE: NO SCALE

DRAWING NO. **7** of 17

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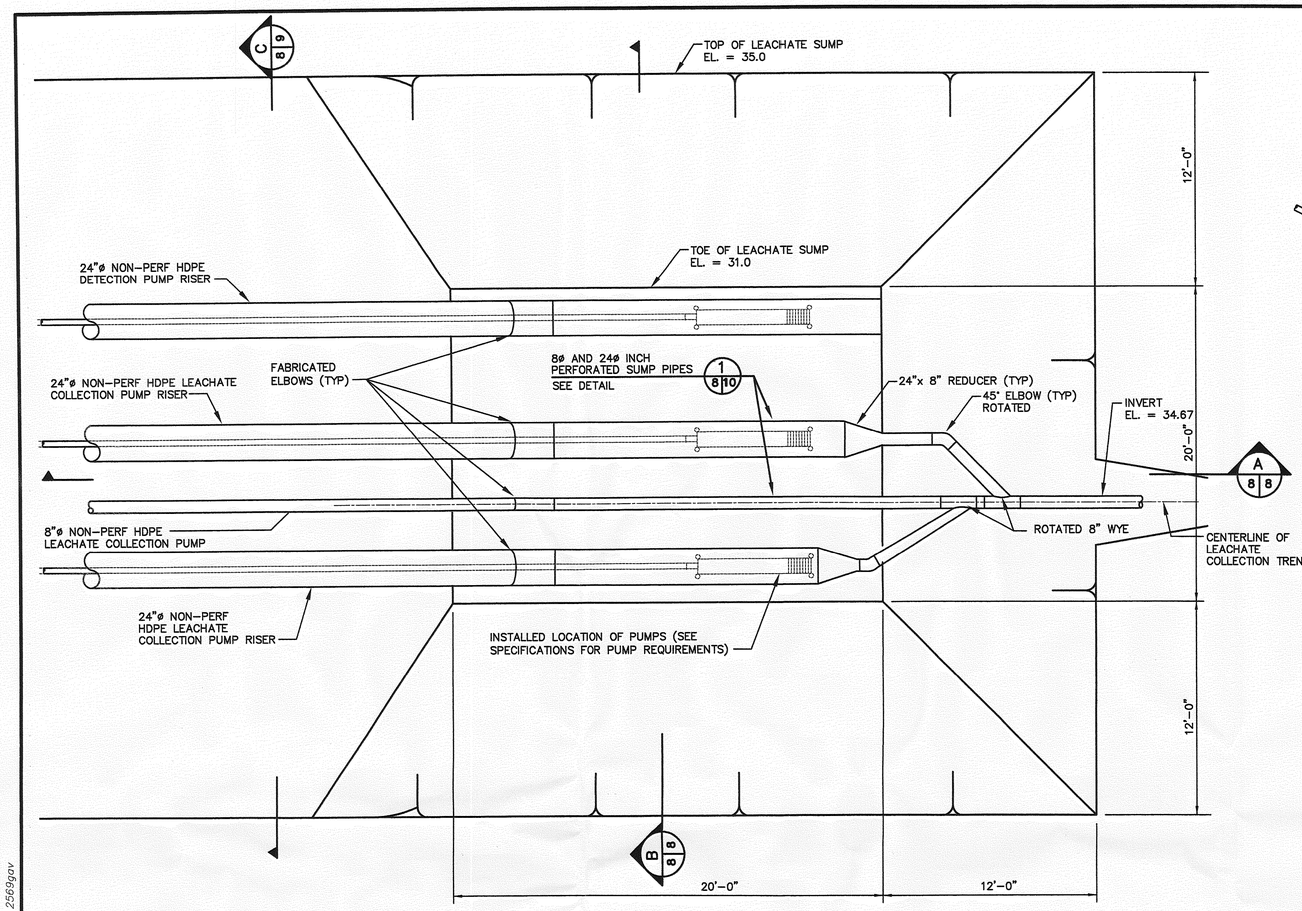
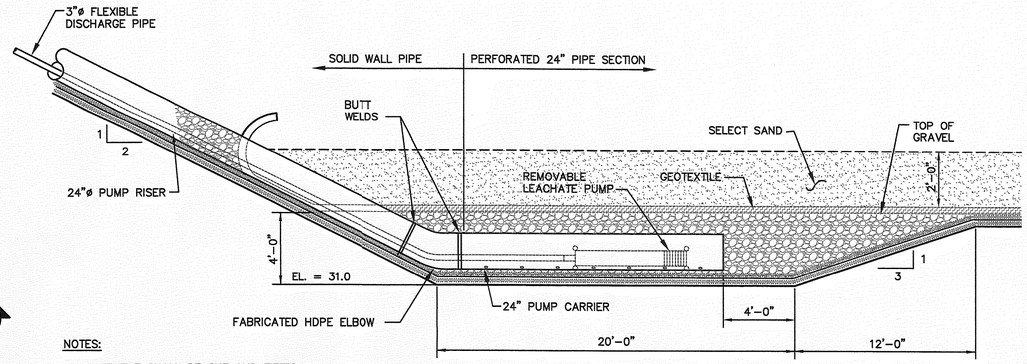


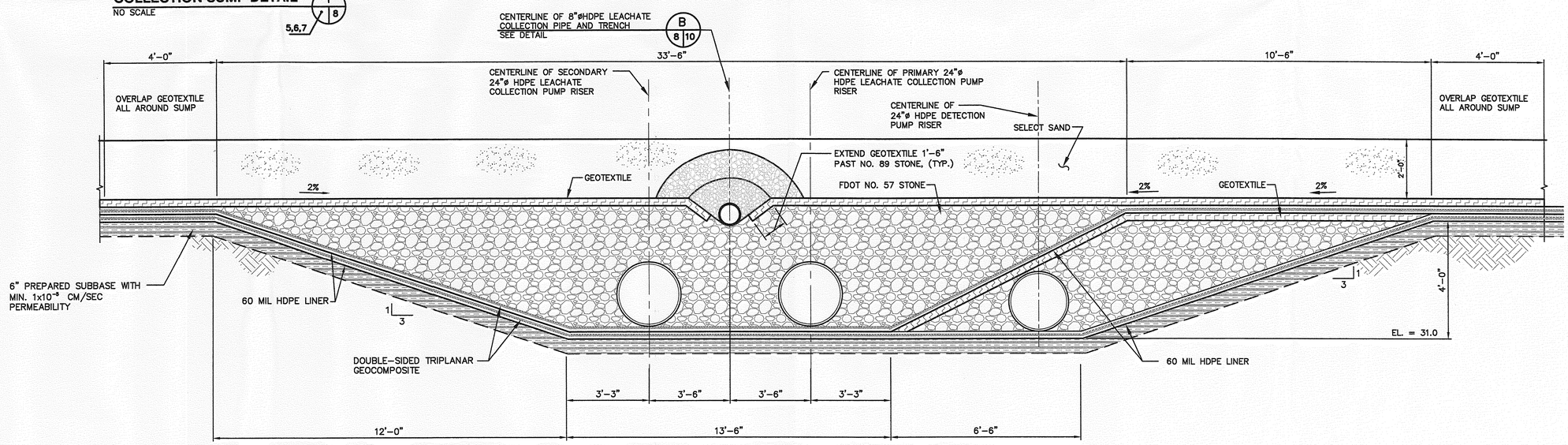
LEACHATE COLLECTION SUMP DETAIL 1 | 8 (5,6,7)
NO SCALE



NOTES:

1. GEOTEXTILE SHALL BE CUT AND FITTED AROUND THE 24"ø PUMP RISER.
2. GEOTEXTILE SHALL EXTEND UP THE SLOPE UNTIL IT DAYLIGHTS ABOVE THE 2'-0" SELECT SAND COVER.
3. CONTRACTOR SHALL GRIND SMOOTH THE WELD BEAD ON THE INTERIOR OF THE 24" PUMP RISER TUBE, 24" ELBOW AND 24" PUMP CARRIER PIPES.
4. THE GEOCOMPOSITE DRAINAGE NETS SHALL OVERLAP A MINIMUM OF 20 FEET WHEN MATS INTERSECT AT ANGLES GREATER THAN 45°.

LEACHATE COLLECTION SUMP SECTION A 8 | 8
NO SCALE



LEACHATE COLLECTION SUMP SECTION B 8 | 8
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G:\PROJECT\09199056.13\RecordDrawings\995605PLNSECLCH.dwg Jul 01, 2005 - 2:41pm Layout Name: Leachatesumpdet (8) By: 2569gov

REV | DATE | DESCRIPTION | BY

DRAWING TITLE
LEACHATE COLLECTION SYSTEM DETAILS

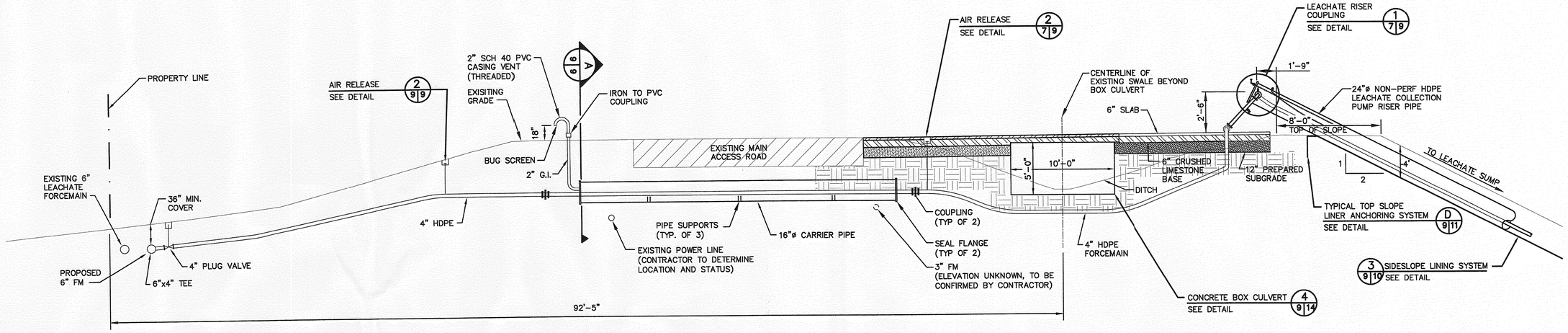
PROJECT TITLE
CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS

CLIENT
CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA

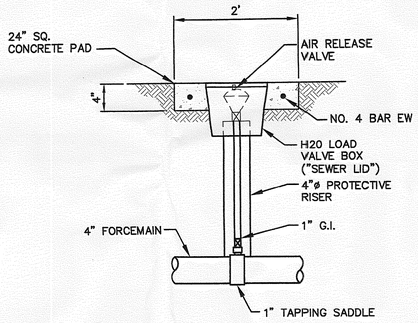
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757

PROJ. NO. 09199056.05 | DWN. BY: PEI | CHK. BY: JAB | O/A REV. BY: BJC | APP. BY: RJD
DSN. BY: BJC/LEK

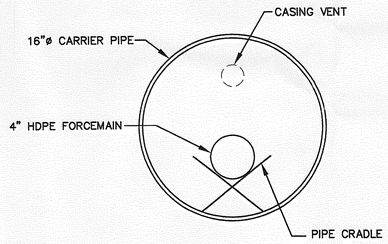
CADD FILE: 995605PLNSECLCH.dwg
DATE: JUNE 2003
SCALE: NO SCALE
DRAWING NO. **8** of 17



SECTION A 7|9
NO SCALE



AIR RELEASE DETAIL 2 9|7.9
NO SCALE



SECTION A 9|9
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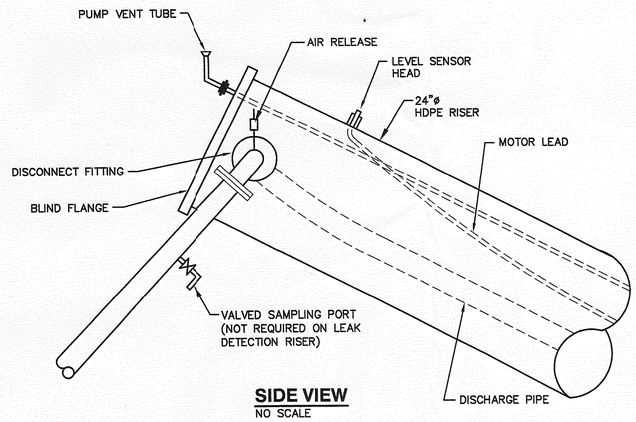
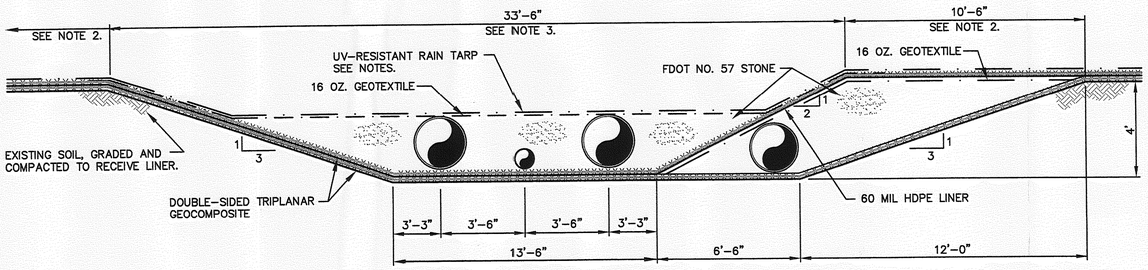


SIDE VIEW
NO SCALE

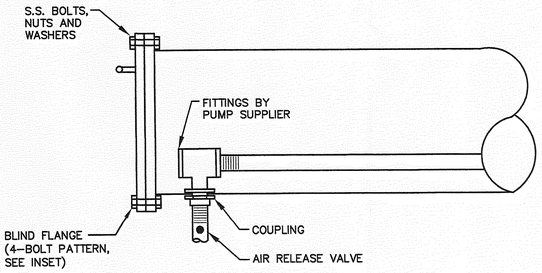


LEACHATE SIDESLOPE RISER SECTION C 9|7.8
NO SCALE

NOTES:

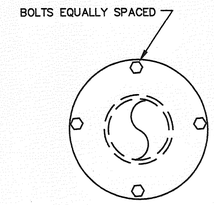
1. UV-RESISTANT RAIN TARP TO BE REMOVED AS FILLING OPERATIONS PROGRESS UP-SLOPE.
2. WHEN RAIN TARP IS REMOVED, 2'-0" OF SELECT SAND SHALL BE PLACED OVER GEOTEXTILE PRIOR TO PLACEMENT OF WASTE.
3. WHEN RAIN TARP IS REMOVED, PLACE 4' OF SAND PRIOR TO PLACING WASTE.
4. ALL PIPES SHOWN ON SIDESLOPE ARE SOLID WALL (NON-PERFORATED).

N.I.C.



PLAN VIEW
NO SCALE

LEACHATE RISER COUPLING DETAIL 1 7|9
NO SCALE



BOLT PATTERN INSET FOR 8" & 24" RISER
NO SCALE

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: **LEACHATE COLLECTION SYSTEM DETAILS**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

CLIENT: **CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA**

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PROJ. NO. 09199056.05
DSN. BY: BJC/LEK
DWN. BY: PEI
CHK. BY: JAB
Q/A RVW BY: BJC
APP. BY: RJD

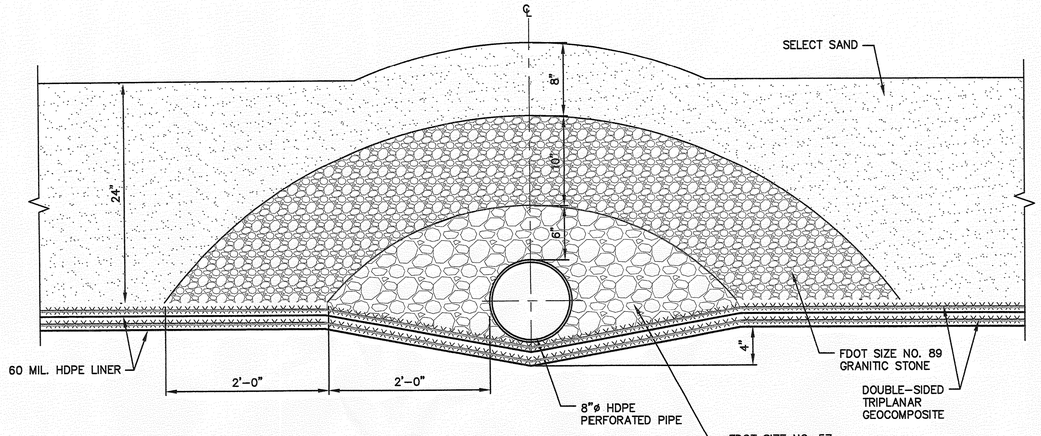
CADD FILE: 995605PLNSECLCH.dwg

DATE: JUNE 2003

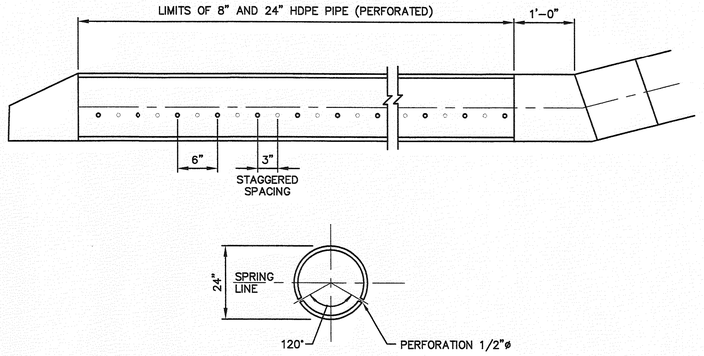
SCALE: NO SCALE

DRAWING NO. **9** of 17

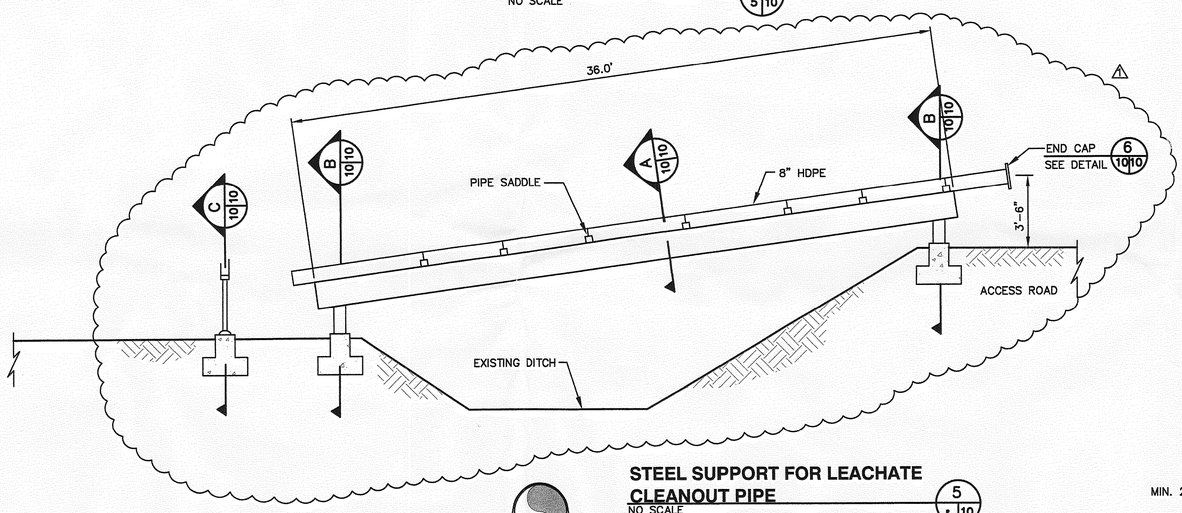
G:\PROJECT\09199056.13\RecordDrawings\995605PLNSECLCH.dwg Jul 01, 2005 - 2:41pm Layout Name: Leach-FM-Sect(9) By: 2569gov



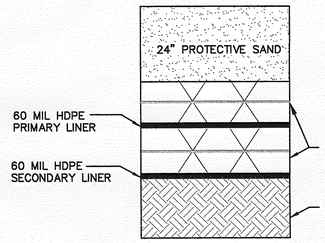
LEACHATE COLLECTION HEADER DETAIL B 5|10
NO SCALE



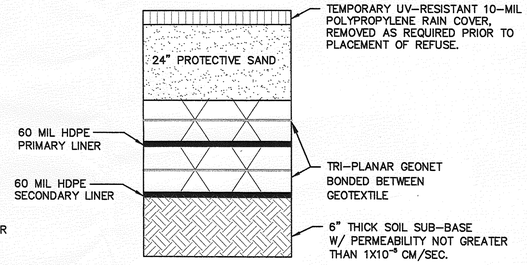
8" AND 24" SUMP PIPE PERFORATIONS DETAIL 1|8|10
NO SCALE



READY FOR WASTE FILLING

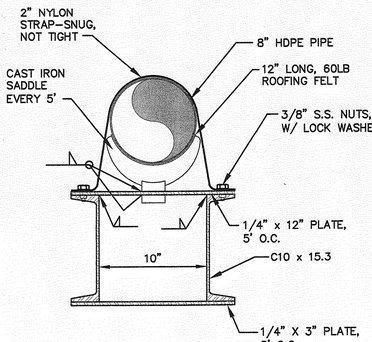


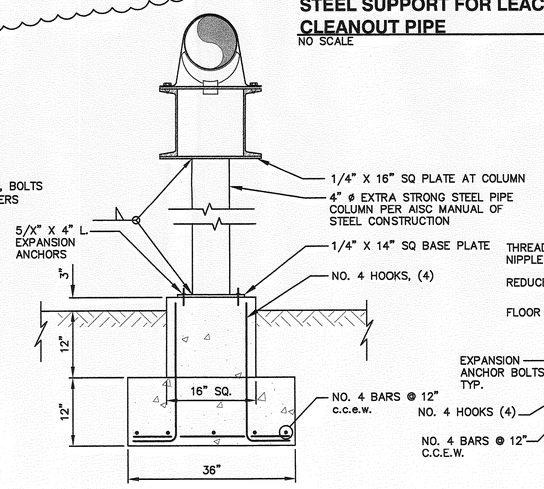
PRIOR TO WASTE FILLING

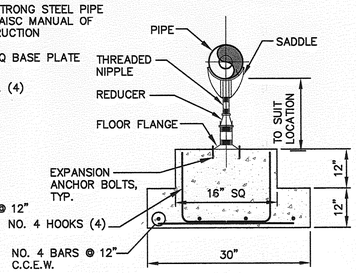


BOTTOM LINING SYSTEM 3|6,11|10
NOT TO SCALE

STEEL SUPPORT FOR LEACHATE CLEANOUT PIPE 5|5,7|10
NO SCALE



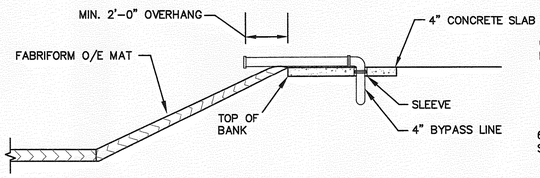




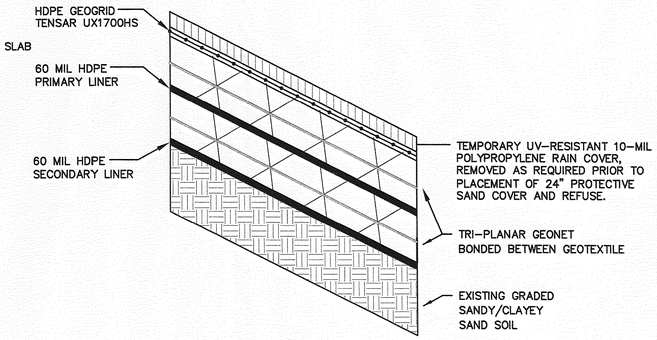
SECTION A 10|10
NO SCALE

SECTION B 10|10
NO SCALE

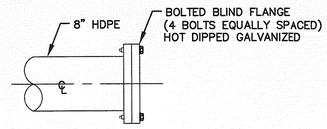
SECTION C 10|10
NO SCALE



TERMPORARY STORMWATER BYPASS LINE 4|7|10
NOT TO SCALE



SIDESLOPE LINING SYSTEM 2|6,11|10
NOT TO SCALE



PIPE END CAP 6|10|10
NOT TO SCALE

REV	DATE	DESCRIPTION	BY
1	6/29/05	CLEANOUT SUPPORT REVISED	JAB

DRAWING TITLE: **LEACHATE COLLECTION SYSTEM DETAILS**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

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PROJ. NO. 09199056.05 | DSN. BY: BJC/ALEK | DWN. BY: PEI | CHK. BY: JAB | QA/QA REVIEW BY: BJC | APP. BY: RJD

CADD FILE: 995605PLNSECLCH.dwg

DATE: JUNE 2003

SCALE: NO SCALE

DRAWING NO. **10** of 17

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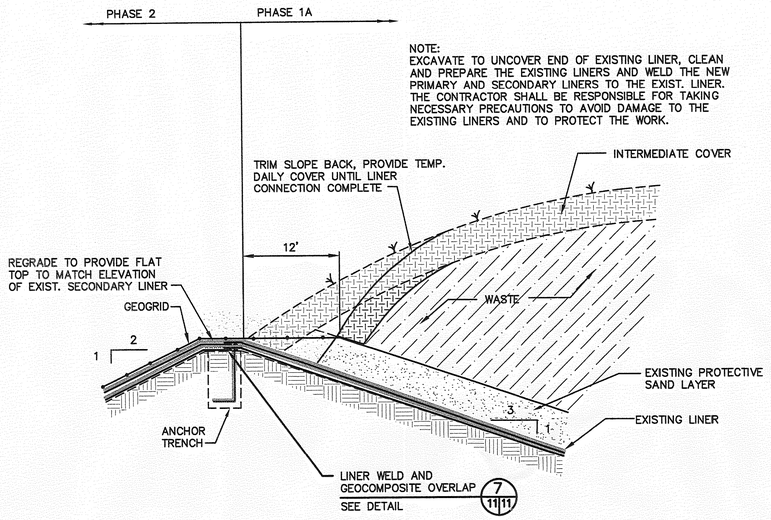
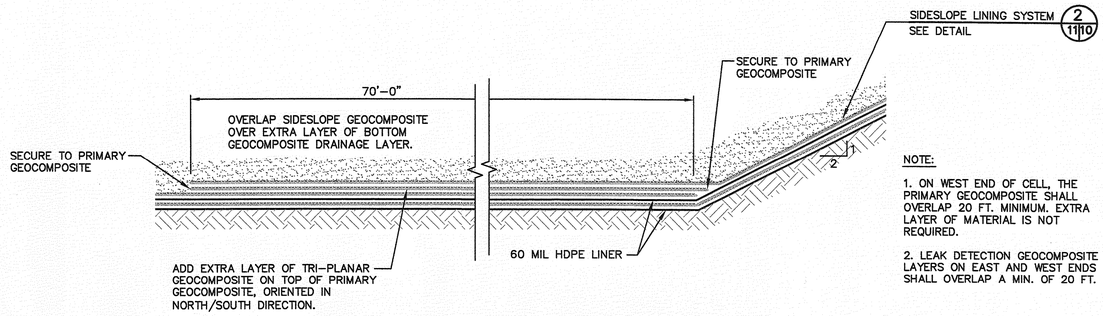


CONNECTION TO EXISTING LINER B 5|11

NO SCALE

GENERAL STEPS FOR CONNECTING LINERS FROM PHASE 1A TO PHASE 2

1. REMOVE GRASSING AND INTERMEDIATE COVER AND TRIM BACK SLOPE TO EXPOSE EXISTING LINERS.
2. PROVIDE TEMPORARY DAILY COVER TO EXPOSED SLOPE UNTIL LINER CONNECTIONS ARE COMPLETE. COORDINATE WITH COUNTY, WHO WILL FURNISH COVER MATERIAL.
3. CUT ALL LINER LAYERS AT ANCHOR TRENCH, EXCEPT SECONDARY HDPE LINER (BOTTOM LINER).
4. EXTRUSION WELD NEW SECONDARY LINER TO EXPOSED EXISTING SECONDARY LINER. OVERLAP NEW GEOCOMPOSITE OVER EXISTING GEOCOMPOSITE 2'–0".
5. EXTRUSION WELD NEW PRIMARY LINER TO EXPOSED EXISTING PRIMARY LINER. OVERLAP NEW GEOCOMPOSITE OVER EXISTING GEOCOMPOSITE 2'–0".
6. APPLY PROTECTIVE SAND COVER TO JOINED SECTIONS, AND REGRADE EXISTING WASTE SLOPE AS NEEDED.

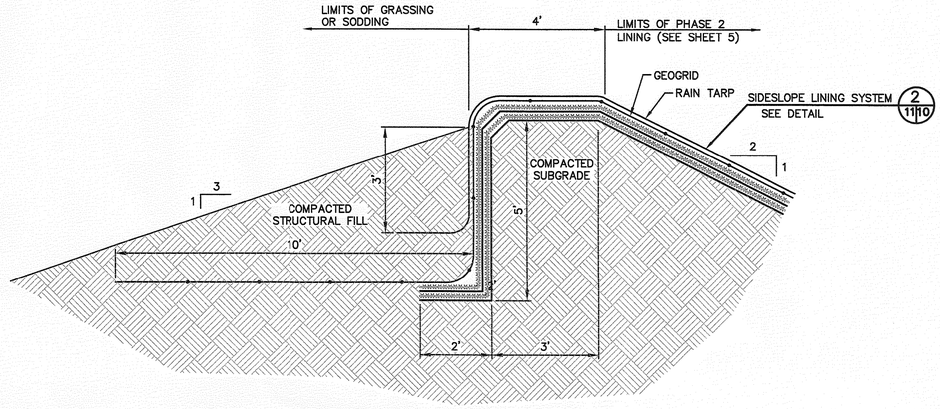


NOTE:

1. ON WEST END OF CELL, THE PRIMARY GEOCOMPOSITE SHALL OVERLAP 20 FT. MINIMUM. EXTRA LAYER OF MATERIAL IS NOT REQUIRED.
2. LEAK DETECTION GEOCOMPOSITE LAYERS ON EAST AND WEST ENDS SHALL OVERLAP A MIN. OF 20 FT.

EAST END GEOCOMPOSITE ADDITION F 5|11

NO SCALE

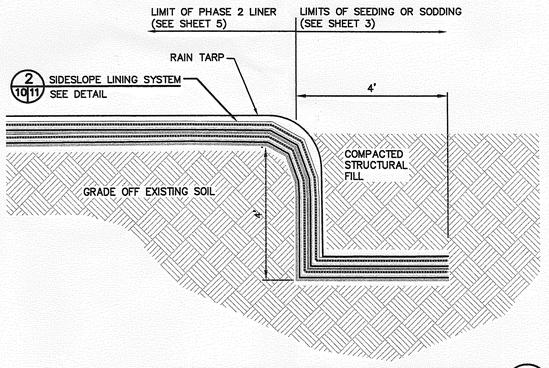


SIDE SLOPE LINING CONNECTION E 5|11

NO SCALE

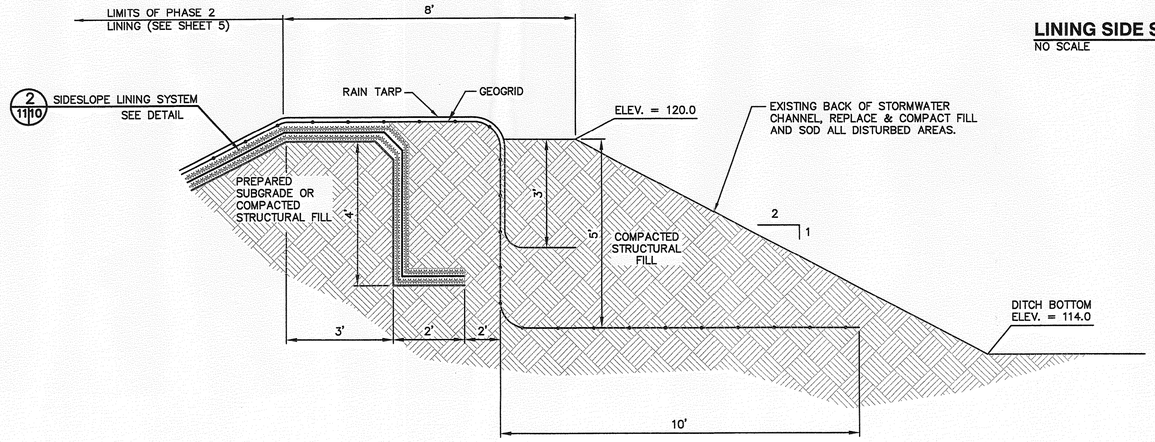
GENERAL NOTES:

1. EXPOSE LINERS FROM EXISTING ANCHOR TRENCH. (ANCHOR TRENCH NOT SHOWN).
2. PULL BACK RAIN TARP AND CUT EXISTING GEOGRID AT ADJOINING AREA.
3. PULL BACK ALL OTHER LINERS, WELD NEW SECONDARY LINER TO EXISTING SECONDARY LINER.
4. OVERLAP EXISTING GEOCOMPOSITE, THEN WELD NEW PRIMARY LINER TO EXIST. PRIMARY LINER.
5. OVERLAP EXIST. GEOCOMPOSITE, THEN JOIN NEW RAIN TARP TO EXIST. RAIN TARP.



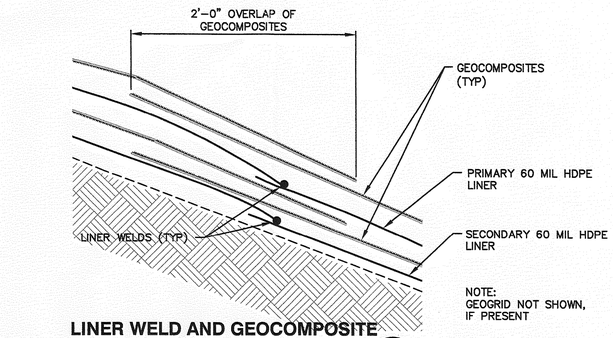
LINING SIDE SLOPE ANCHOR TRENCH C 5|11

NO SCALE



LINING TOP SLOPE ANCHOR TRENCH D 5|11

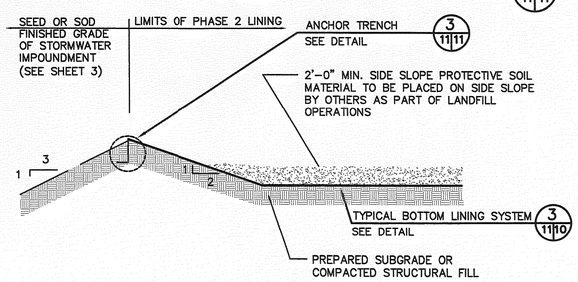
NO SCALE



NOTE:
GEOGRID NOT SHOWN, IF PRESENT

LINER WELD AND GEOCOMPOSITE OVERLAP DETAIL 7 11|11

NO SCALE



NORTH END LINER TERMINATION DETAIL A 5|11

NO SCALE

TYPICAL NORTH LINER ANCHOR TRENCH 3 5|11

NO SCALE

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: STORMWATER COLLECTION DETAILS

PROJECT TITLE: CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS

CLIENT: CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA

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PROJ. NO. 09199056.05
DSN. BY: PEI
DWN. BY: PEI
CHK. BY: JAB
Q/A REVIEW BY: BJC
APP. BY: RJD

CADD FILE: 995605DTLS2.dwg

DATE: JUNE 2003

SCALE: NO SCALE

DRAWING NO. 11 of 17

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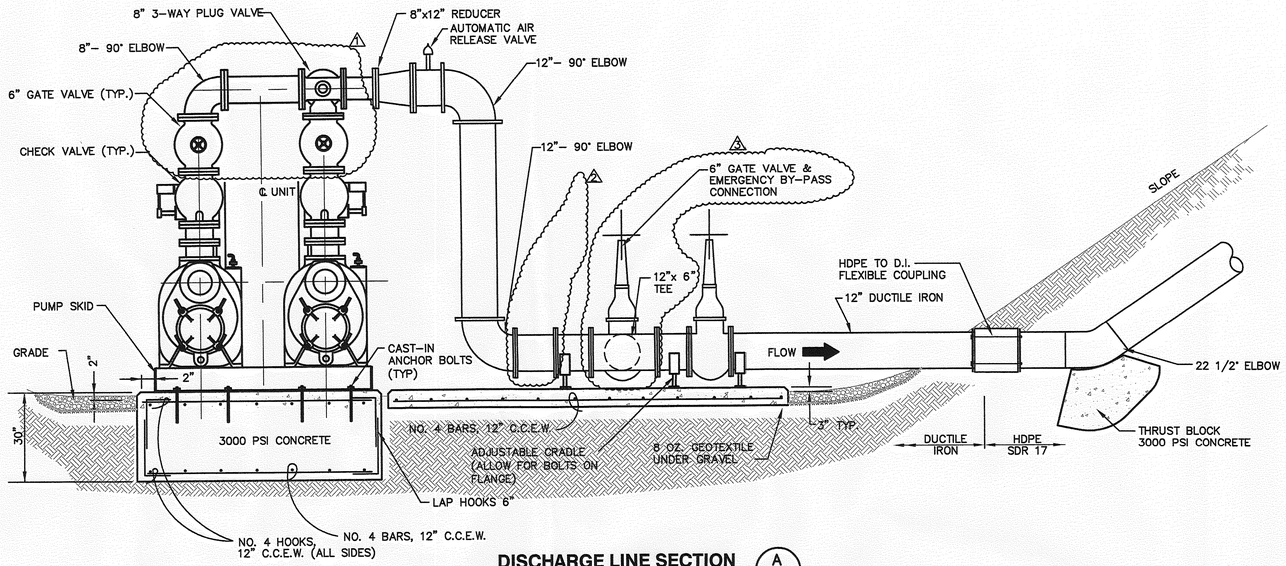
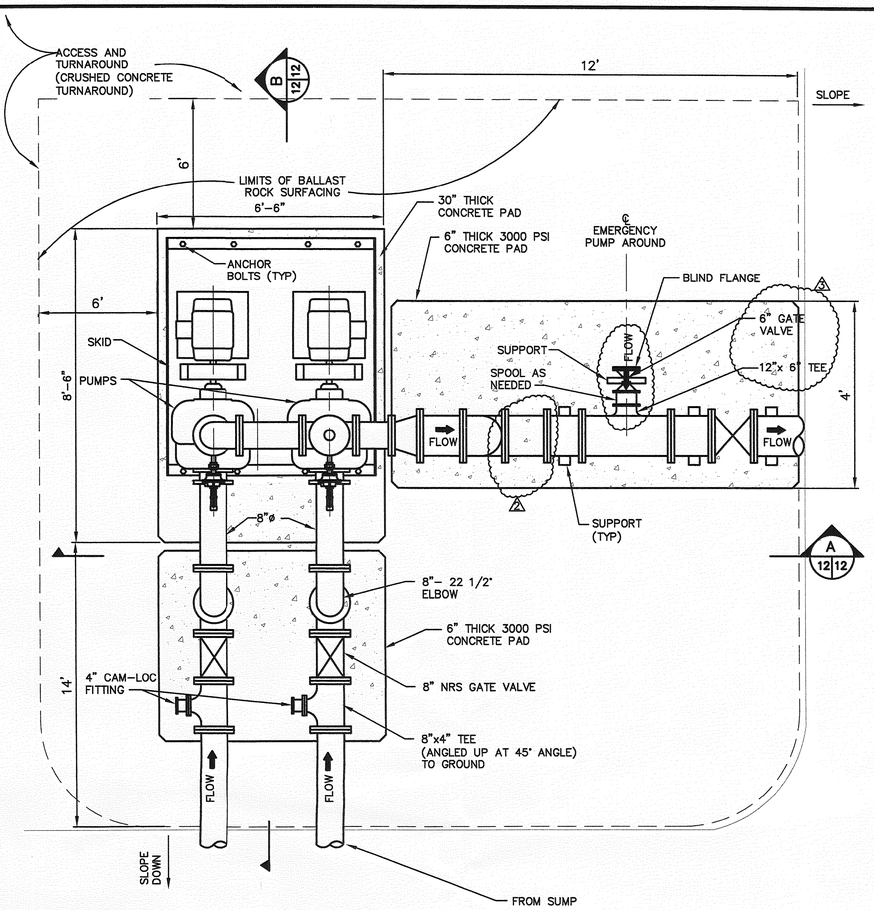


DISCHARGE LINE SECTION (A 12|12)
NO SCALE

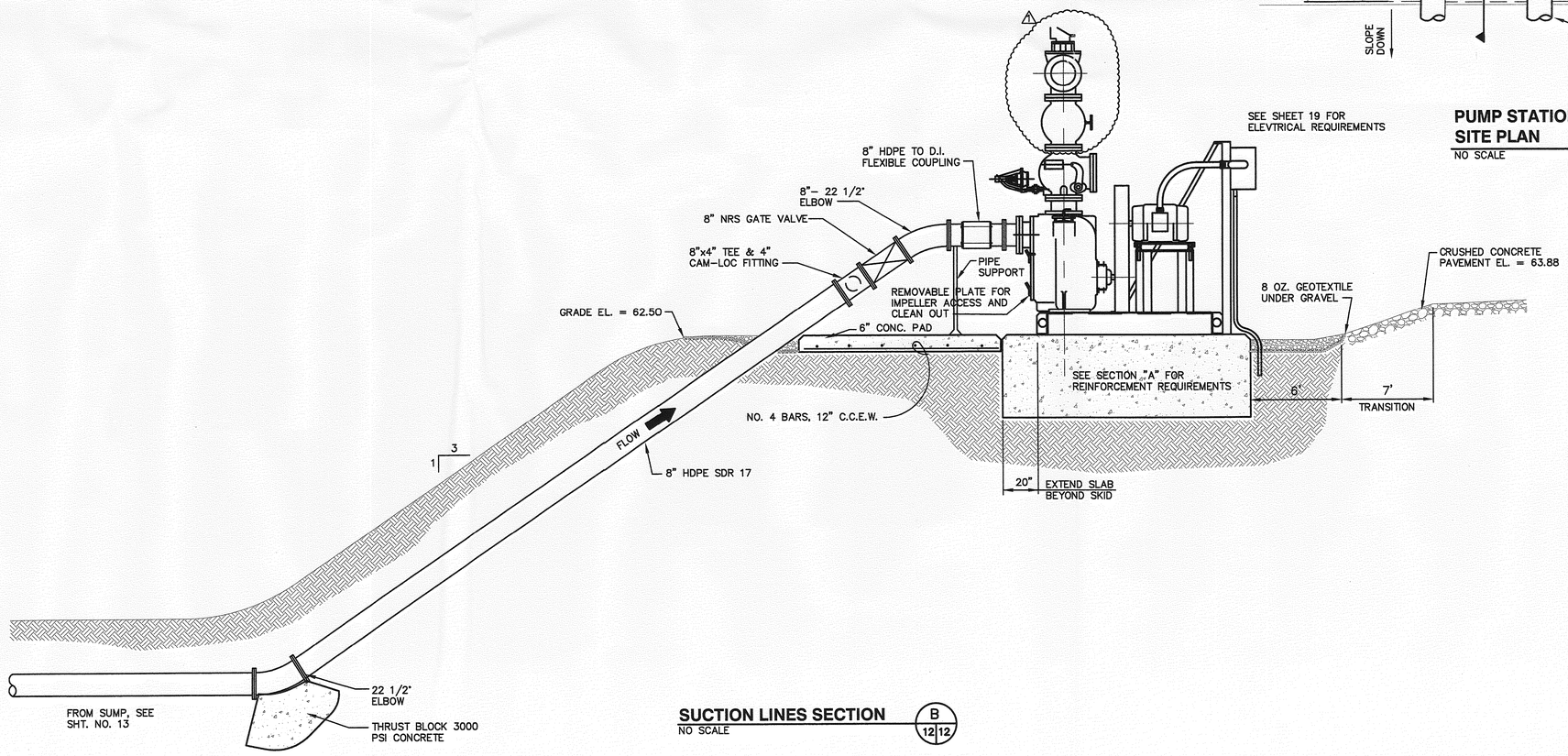


PUMP STATION SITE PLAN (1 3|12)
NO SCALE

SEE SHEET 19 FOR ELEVTRICAL REQUIREMENTS

NOTE:

ALL FITTINGS ARE FLANGED UNLESS OTHERWISE NOTED.



SUCTION LINES SECTION (B 12|12)
NO SCALE

REV	DATE	DESCRIPTION	BY
1	6/29/05	ADD 6" GATE VALVES	JAB
2	6/29/05	REMOVE 12" GATE VALVE	JAB
3	6/29/05	REVISE TEE AND GATE VALVE	JAB

DRAWING TITLE: **STORMWATER IMPOUNDMENT PUMP STATION DETAILS**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

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DSN. BY: BJC/LEK
DWN. BY: PEI
CHK. BY: JAB
QA/QC BY: BJC
APP. BY: RJD

CADD FILE: 995605SMPDTLS.dwg

DATE: JUNE 2003

SCALE: NO SCALE

DRAWING NO. **12** of 17

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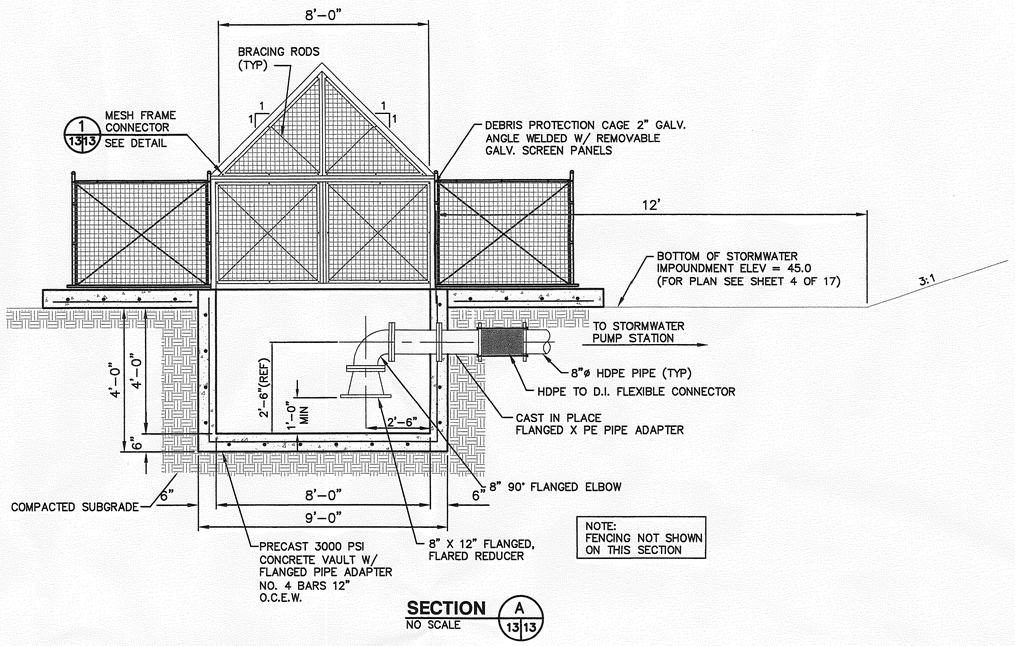
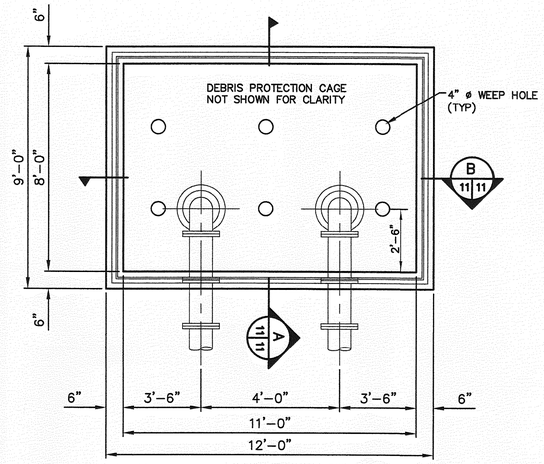
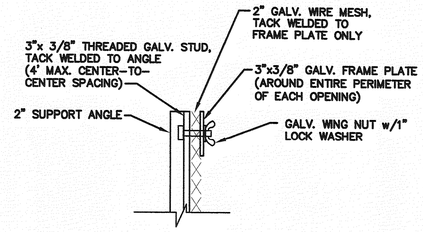


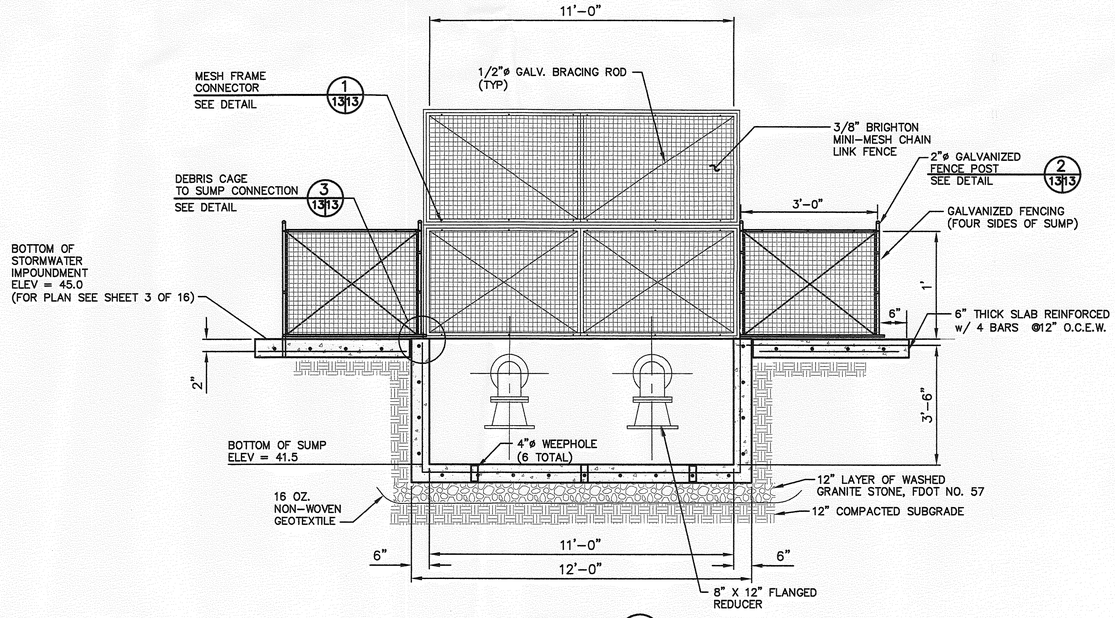
SECTION A
13|13
NO SCALE



DUAL PIPE INLET SUMP DETAIL 4
13
3,12
NO SCALE

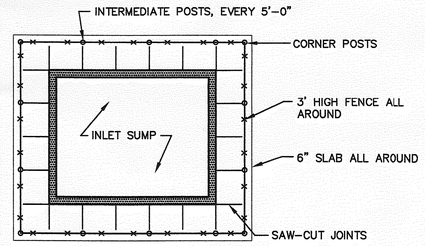


MESH FRAME CONNECTOR 1
13|13
NO SCALE



SECTION B
13|13
NO SCALE

NOTE:
FOR FENCE PLAN VIEW, SEE SUMP FENCING PLAN THIS SHEET.



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13|13
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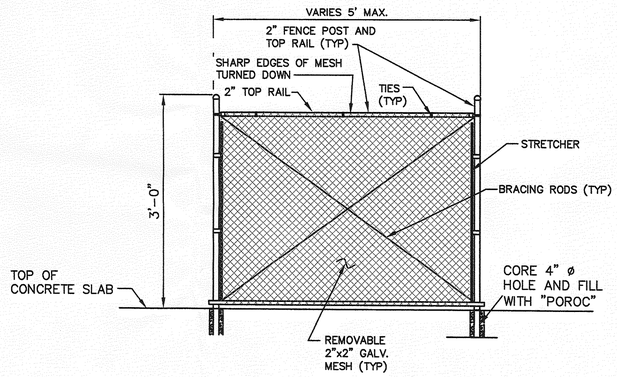

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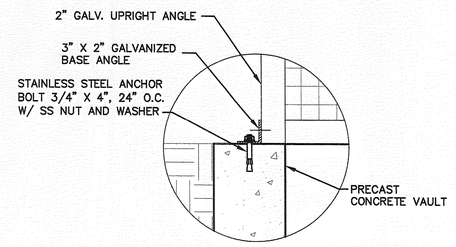

DEBRIS CAGE TO SUMP CONNECTION 3
13|13
NO SCALE

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: **STORMWATER IMPOUNDMENT SUMP DETAILS**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

CLIENT: **CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA**

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
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PROJ. NO.	DWN. BY:	CHK. BY:	QA/QC BY:	APP. BY:
09199056.05	PEI	JAB	BJC	RJD

BJC/LEK

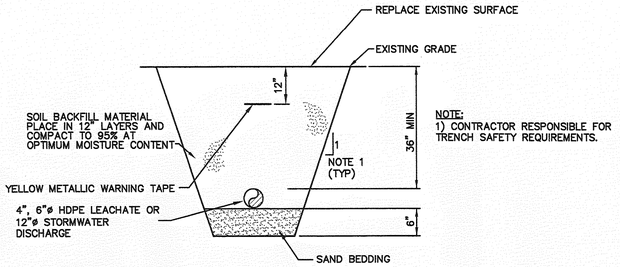
CADD FILE: 995605SMPDTLS.dwg

DATE: JUNE 2003

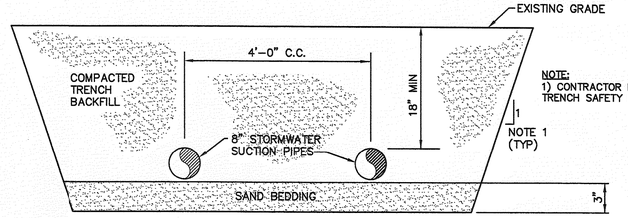
SCALE: NO SCALE

DRAWING NO. **13** of 17

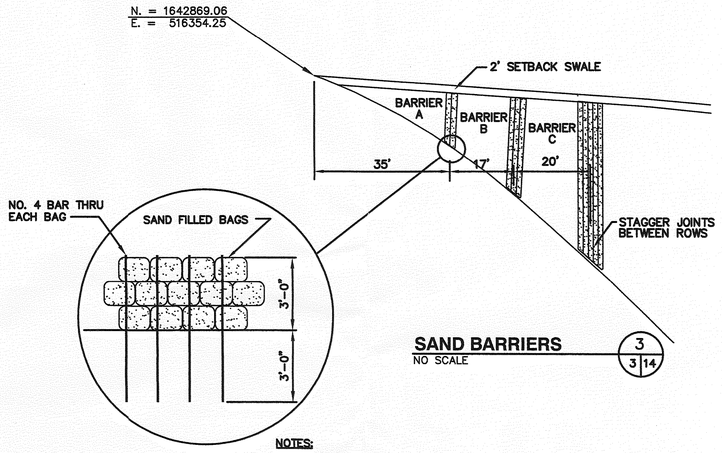
G:\PROJECT\09199056.13\RecordDrawings\995605SMPDTLS.dwg Jul 01, 2005 - 3:42pm Layout Name: STRM SUMP(13) By: 2569gav



TYPICAL PIPELINE TRENCH 4 / 3,7 14
NO SCALE



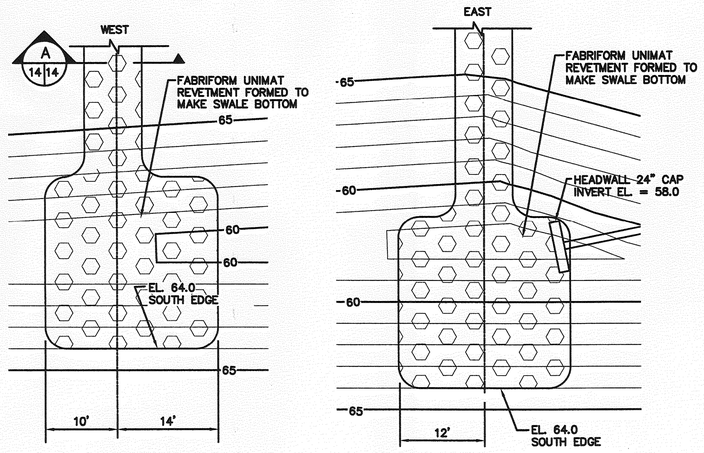
STORMWATER SUCTION PIPE TRENCH DETAIL 1 / 3 14
NO SCALE



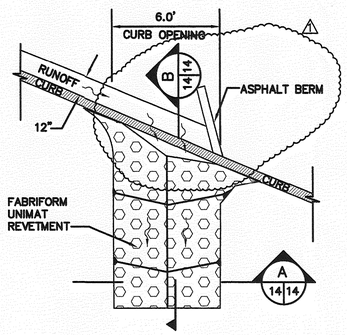
SAND BARRIERS 3 / 3 14
NO SCALE

NOTES:

1. BARRIER B AND C ARE SAME HEIGHT AS BARRIER A, EXCEPT B IS 3 ROWS WIDE, AND C IS 5 ROWS WIDE.
2. ALL SOD SHALL BE SECURELY PINNED.
3. SAND BAGS SHALL BE OF TIGHT WOVEN MATERIAL RESISTANT TO U.V. DEGRADATION.



DOWNCHUTE SPILLWAY PLAN 6 / 4 14
NO SCALE



DOWNCHUTE 3 / 3 14
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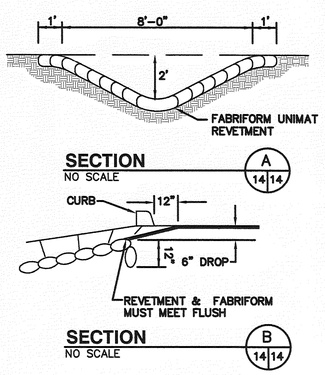

SECTION A / 14 14
NO SCALE

SECTION B / 14 14
NO SCALE

REV	DATE	DESCRIPTION	BY
1	6/29/05	REVISED INLET	JAB

DRAWING TITLE: **STORMWATER COLLECTION DETAILS**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

CLIENT: **CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA**

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
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PROJ. NO. 09199056.05 | DSN. BY: BJC/LEK | DWN. BY: PEI | CHK. BY: JAB | QA/A RVW BY: BJC | APP. BY: RJD

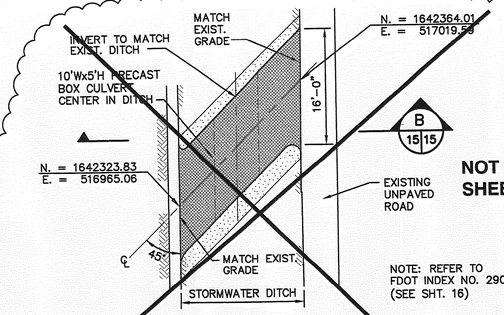
CADD FILE: 995605DTLS2.dwg

DATE: JUNE 2003

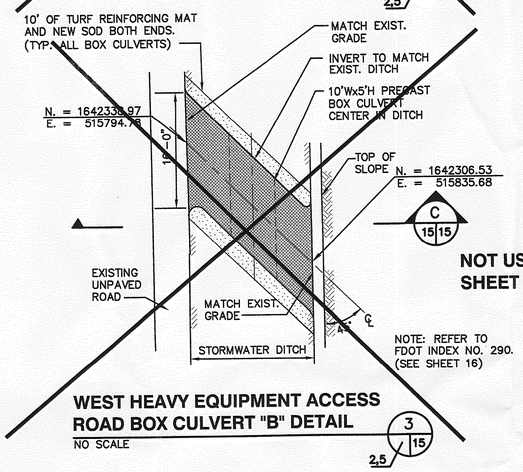
SCALE: NO SCALE

DRAWING NO. **14** of 17

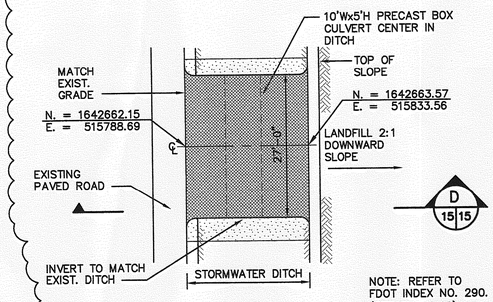
G:\PROJECT\09199056.03\RecordDrawings\995605DTLS2.dwg Jul 01, 2005 - 2:46pm Layout Name: Stormwater Details (14) By: 2569gov



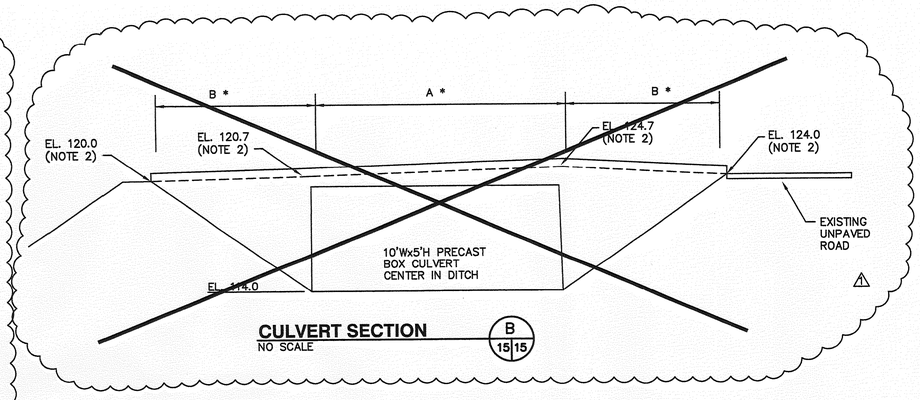
EAST HEAVY EQUIPMENT ACCESS ROAD BOX CULVERT "A" DETAIL (2 | 15 | 2.5)
NO SCALE



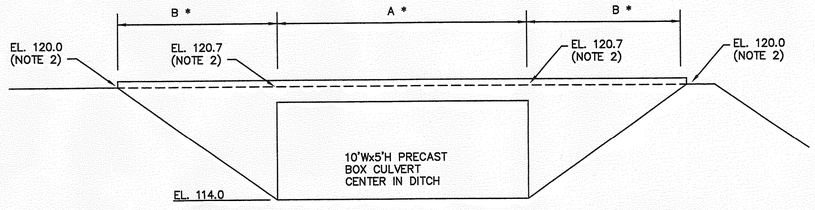
WEST HEAVY EQUIPMENT ACCESS ROAD BOX CULVERT "B" DETAIL (3 | 15 | 2.5)
NO SCALE



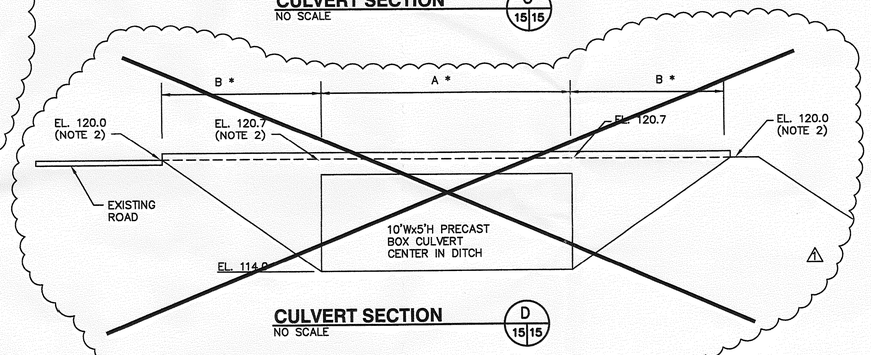
LEACHATE MANIFOLD CROSSING BOX CULVERT "C" (LOCATED EAST OF PHASE 2) DETAIL (4 | 15 | 2.5)
NO SCALE



CULVERT SECTION (B | 15 | 15)
NO SCALE



CULVERT SECTION (C | 15 | 15)
NO SCALE



CULVERT SECTION (D | 15 | 15)
NO SCALE

CULVERT PAVEMENT GUIDE

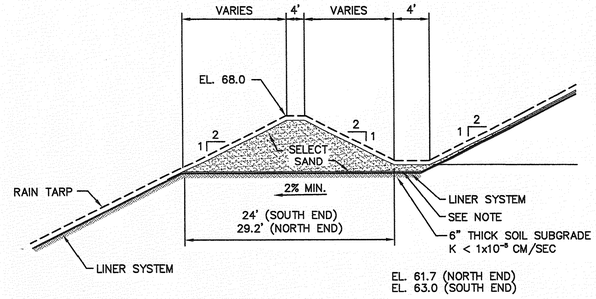
A = 2" ASPHALT ONLY

B = 2" ASPHALT OVER 8" LIMEROCK BASE

NOTE:

1. CONTRACTOR SHALL VERIFY DEPTH OF EXISTING DITCH PRIOR TO ORDERING BOX CULVERT, AND ASCERTAIN IF THERE IS AT LEAST 6' OF DEPTH. IF LESS THAN 6' OF DEPTH, THEN INSIDE HEIGHT OF BOX MAY HAVE TO BE CHANGED ACCORDINGLY.

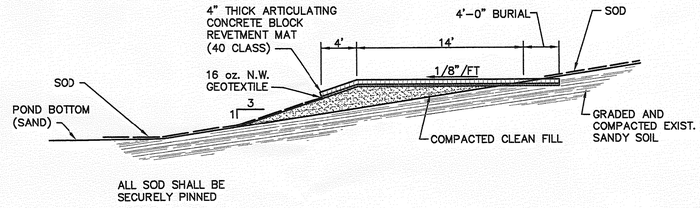
2. CONTRACTOR SHALL VERIFY EXISTING GRADES AND MAKE ADJUSTMENT AS NEEDED IN FILL PLACEMENT AND APPLICATION OF PAVEMENT SO THAT TRANSITION FROM NEW SURFACE TO EXISTING SURFACE IS FLUSH.



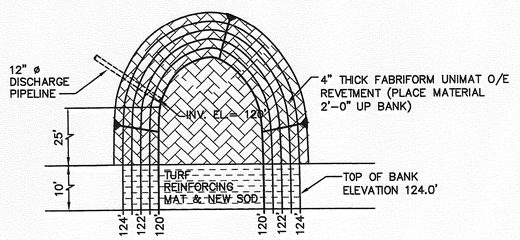
STORMWATER DIVERSION SWALE "B" SECTION (A | 15 | 7.9)
NO SCALE

NOTE:
THE COUNTY SHALL REMOVE RAIN TARP AND REGRADE SAND BERM TO ACHEIVE A 2' THICK LAYER OF PROTECTIVE SAND COVER OVER BENCH AREA PRIOR TO PLACING REFUSE AT THIS LEVEL.

N.I.C.



IMPOUNDMENT SERVICE ROAD EROSION PROTECTION SECTION (E | 3 | 15)
NO SCALE



SPILLWAY EROSION PROTECTION SECTION (1 | 3 | 15)
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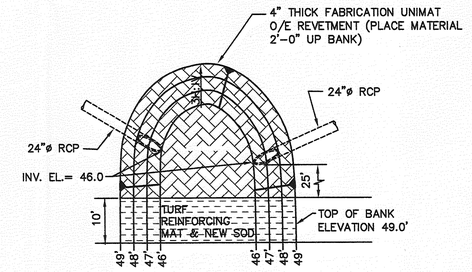

STORMWATER DISCHARGE PIPE PROTECTION DETAIL (5 | 3 | 15)
NO SCALE

REV	DATE	DESCRIPTION	BY
1	6/29/05	CULVERTS REVISED	JAB

DRAWING TITLE: STORMWATER COLLECTION SYSTEM DETAILS

PROJECT TITLE: CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS

CLIENT: CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
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PROJ. NO. 091 99056.05
DSN: BJC/LEK
DWN. BY: PEI
CHK. BY: JAB
O/A RVW BY: BJC
APP. BY: RJD

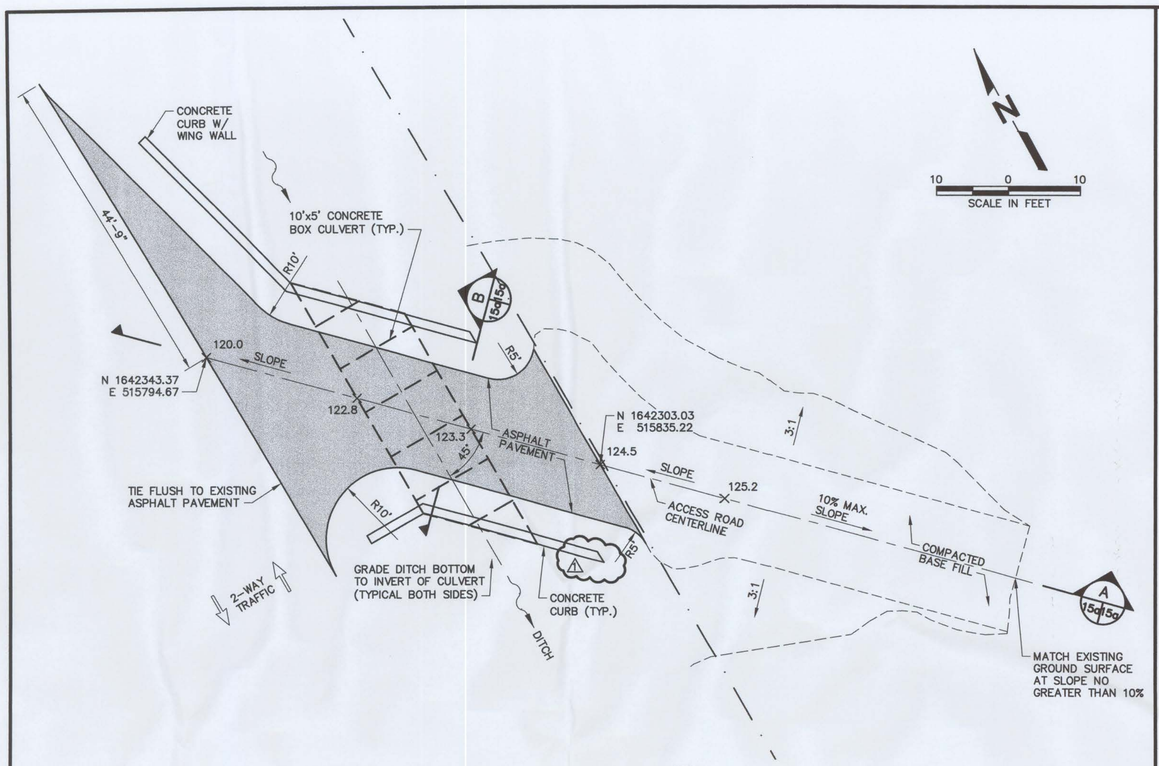
CADD FILE: 995605DTLS1.dwg

DATE: JUNE 2003

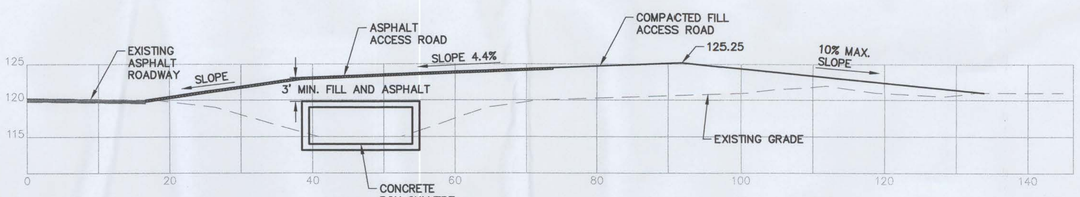
SCALE: NO SCALE

DRAWING NO. 15 of 17

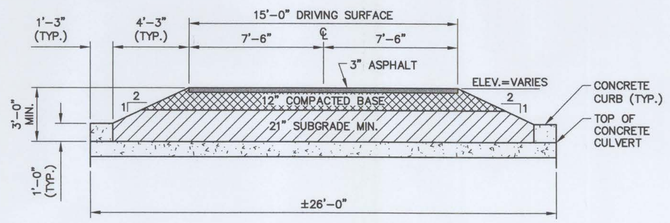
G:\PROJECT\091990056.13\RecordDrawings\995605DTLS1.dwg Jul 01, 2005 - 2:50pm Layout Name: Details(15) By: 2569gav



CULVERT "B" PLAN (1 / 2 15a)
SCALE: 1" = 10'



SECTION (A / 15a 15a)
SCALE: 1" = 10'



SECTION (B / 15a 15a)
SCALE: 1" = 4'

REV	DATE	DESCRIPTION	BY
1	6/29/05	NEW SHEET	JAB

DRAWING TITLE: **REVISED CULVERT B**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

CLIENT: **CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA**

SCS ENGINEERS
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PROJ. NO. 09199056.05
DSN. BY: PEI
DWN. BY: JAB
CHK. BY: BJC/LEK
Q/A REVW. BY: BJC
APP. BY: RJD

CADD FILE: 995602DTLS3.dwg

DATE: JUNE 2003

SCALE: AS SHOWN

DRAWING NO.

15a of 17

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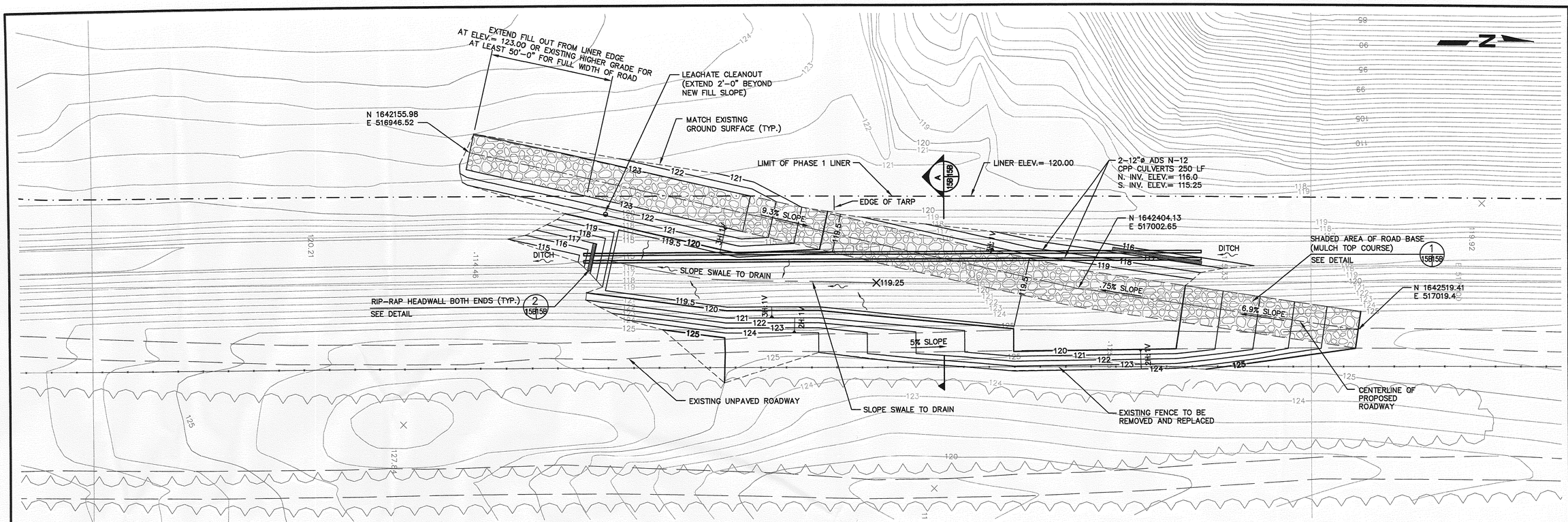
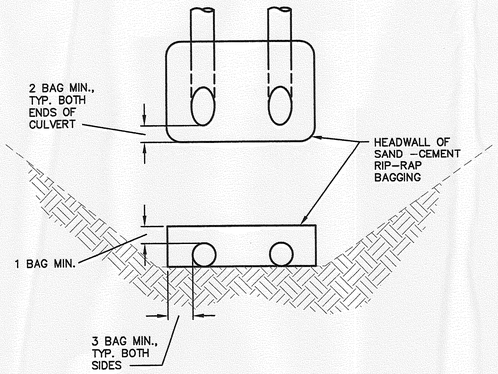
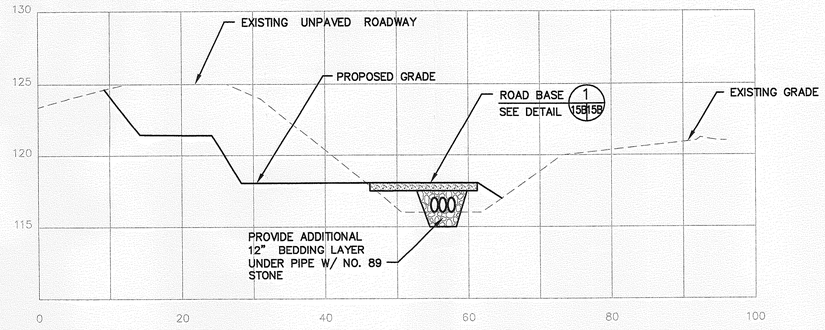


CULVERT "A" PLAN (1 | 2 158|158)
SCALE: 1" = 20'

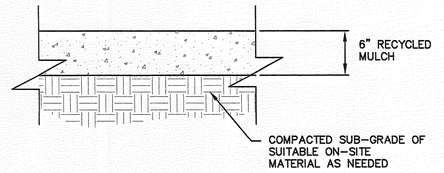
NOTE:
ALL DISTURBED AREAS TO BE REVEGETATED WITH SOD EXCEPT ROAD BASE AREA.



RIP-RAP HEADWALL (2 | 158|158)
NOT TO SCALE



SECTION (A | 158|158)
SCALE: 1" = 10' HORIZ.
SCALE: 1" = 5' VERT.



DETAIL (1 | 158|158)
NOT TO SCALE

REV	DATE	DESCRIPTION	BY
1	1/6/04	NEW SHEET	JAB

DRAWING TITLE: **REVISED CULVERT A**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

CLIENT: **CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA**

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
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PROJ. NO. 09199056.02 | DSN. BY: JAB | DWN. BY: SDA | CHK. BY: JAB | QA/QC BY: BJC | APP. BY: RJD

CADD FILE: 995602DTLS3a.dwg

DATE: JANUARY 2004

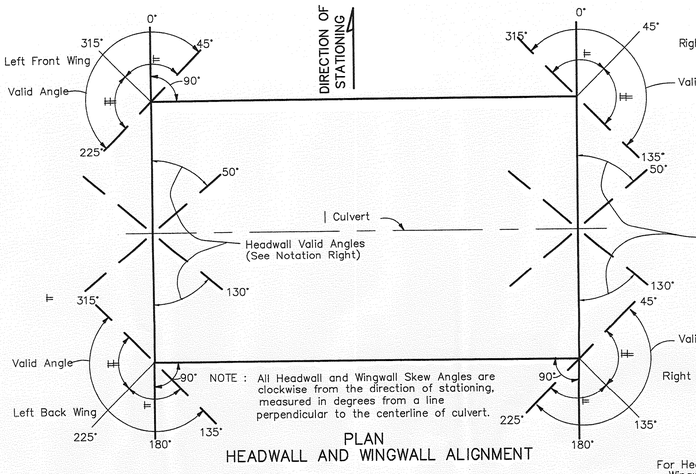
SCALE: AS SHOWN

DRAWING NO. **15 B** of 17

G:\PROJECT\09199056_13\RecordDrawings\995602DTLS3a.dwg Jul 01, 2005 - 2:55pm Layout Name: Details(15b) By: 2569gav

F.D.O.T. INDEX 290

NOTE: Designs for box culverts under this index are to be produced only by computer analysis, utilizing the program named PSTDN55. Designs under this index are to be limited to the live loads and dimensional restraints shown in the General Notes of this index and to the fill on the barrel(s) as shown in the roadway plans. It is the construction Contractors responsibility to provide for suppporting construction loads that exceed the above loadings.

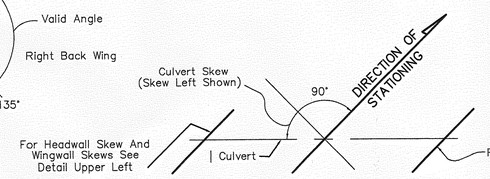


⊨ Within these limits the top surface of the Wingwalls shall be level.

⊨⊨ Within these limits the top surface of the Wingwalls shall.be sloped

NOTE : Headwalls with skew angles between 51° and 129° require special design authorization. Other design options should be considered. Contact the District Drainage Engineer to obtain authorization.

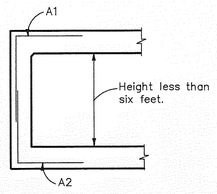
PLAN
HEADWALL AND WINGWALL ALIGNMENT



SKETCH "A"

NOTE : For Culvert Skew see Roadway Plans.

CULVERT ALIGNMENT



DETAIL "J"

GENERAL NOTES

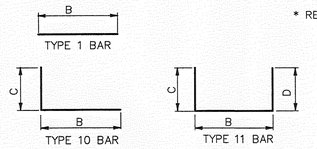
DESIGN SPECIFICATIONS: A.A.S.H.T.O. 1983.

LOADING: HS20–44, Modified for Military Loading as Required

SURFACE FINISH: The Class Surface finish for all concrete surfaces shall be a general surface finish.

SKEWED CONSTRUCTION JOINTS: Construction joints in barrels of culverts with skewed wingwalls may be placed parallel to the headwalls and the reinforcing steel, in the slabs may be cut provided that the cut reinforcing steel extends beyond the construction joint enough for splices to be made in accordance with the table (lower right) this sheet. The cost of construction joints shall be at the expense of the contractor.

CULVERT EXTENTIONS: For cut backs and ties into existing concrete box culverts see Index No. 280



* REINFORCING BAR SCHEDULE:

A. When the depth is less than or equal to 2.0 feet, Bars C2 are utilized in the bottom of the top slab. In all other cases, Bars C2 are replaced with Bars C1 spaced at 18 inches on centers.

B. When the skew angle for a headwall equals 0 degrees plus or minus 11 degrees the respective S Bars (S2 or S3) will not be utilized.

C. When the barrel height is less than 6 Feet, Bars B2 will be eliminated as shown in Detail J.

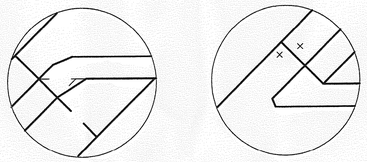
D. If the span is less than five feet, Bars A1 and A2 will be Type II Bars.

E. The portions of Bars"N" that extend thru Construction Joints into wingwalls above footings shall be given one coat of approved zinc rich paint and shall be encased in approved capped plastic (PVC) pipes filled with durable lubricant or cut back asphalt. The length and inside diameter of the plastic pipe shall be approximately 1/4" larger than those of the bar.

F. For culvert extensions Bar C1 is redesignated Bar C3 in the botton slab.

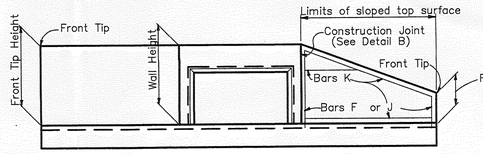
TABLE OF MINIMUM BAR SPLICE LENGTHS

BAR SIZE	SPLICE	BAR SIZE	SPLICE
4	1'– 8"	8	3'– 10
5	2'– 2"	9	4'– 10"
6	2'– 7"	10	6'– 1"
7	3'– 0"	11	7'– 6"



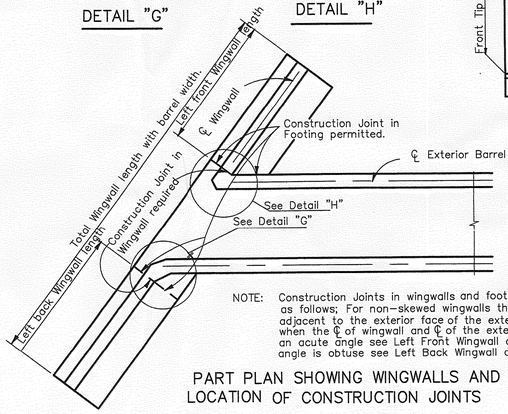
DETAIL "G"

DETAIL "H"



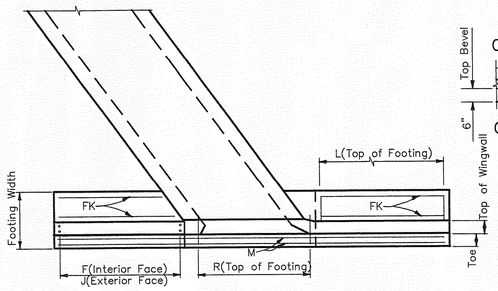
END ELEVATION
OF CULVERT

NOTE: Cut the vertical bars F as required for the longest bar and use the remainder for the shortest bar in the wingwall. The vertical bars J and the horizontal bars K shall be constructed likewise . The lengths shown in the reinforcing steel bar schedule for bars F , J and K require cutting for sloped wingwalls only.

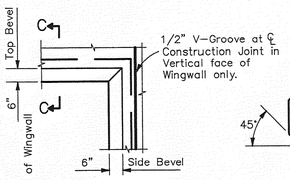


NOTE: Construction Joints in wingwalls and footings are located as follows; For non–skewed wingwalls they are located adjacent to the exterior face of the exterior barrel wall when the ℄ of wingwall and ℄ of the exterior barrel wall results in an acute angle see Left Front Wingwall above and when the angle is obtuse see Left Back Wingwall above.

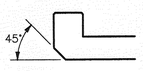
PART PLAN SHOWING WINGWALLS AND THE LOCATION OF CONSTRUCTION JOINTS



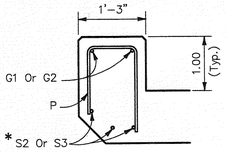
PART PLAN AT END OF CULVERT



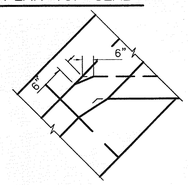
DETAIL "B"



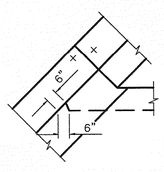
SECTION C–C



DETAIL "D"

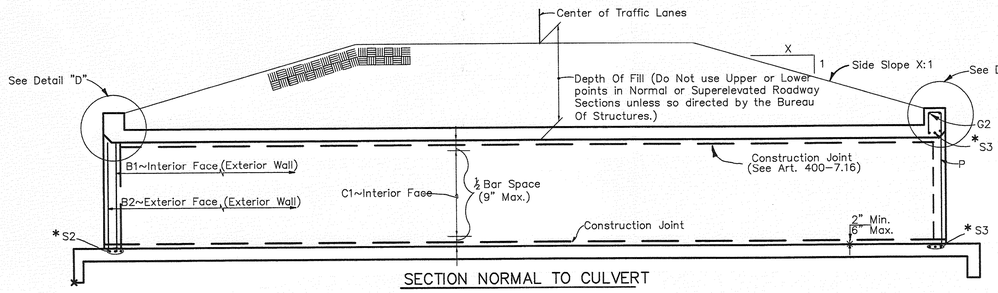


DETAIL "E"



DETAIL "F"

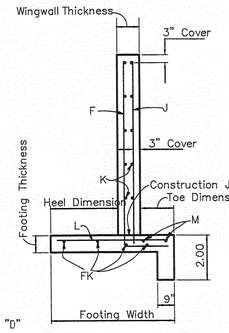
END ELEVATION



SECTION NORMAL TO CULVERT

PART PLAN TOP SLAB

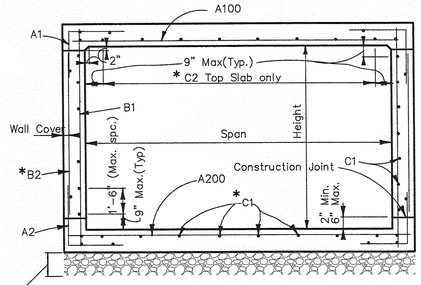
PART PLAN BOTTOM SLAB



SECTION THRU WINGWALL

NOTE: For Bars F,J,K,L andor FK in the Wingwalls, the subscripts 1 thru 4 apply as follows:
1~Left Front
2~Left Back
3~Right Front
4~Right Back

* See Culvert Details and Reinforcing Bar Schedule, Sheet 1 of 5



NOTE: The location of the first bar from the ends of the culvert shall not be less than .25, but not greater than one half the bar spacing.

SECTION THRU BARREL

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3011 W. GRAY STREET, SUITE 200, TAMPA, FL 33609
PH (813) 621-0080 FAX NO. (813) 623-6757

Q/A RVW. BY: BJC
APP. BY: RJD
DWN. BY: PEI
CHK. BY: JAB
PROJ. NO. 091990056.05
DSN. BY: BJC/LEK

CADD FILE: 995605SMPDTLS.dwg

DATE: JUNE 2003

SCALE: NO SCALE

DRAWING NO. 16 of 17

CLIENT
CITRUS COUNTY
SOLID WASTE MANAGEMENT DIVISION
CITRUS COUNTY, FLORIDA

REV	DATE	DESCRIPTION	BY

DRAWING TITLE
STORMWATER BOX CULVERT DETAILS

PROJECT TITLE
CENTRAL LANDFILL
PHASE II EXPANSION
RECORD DRAWINGS

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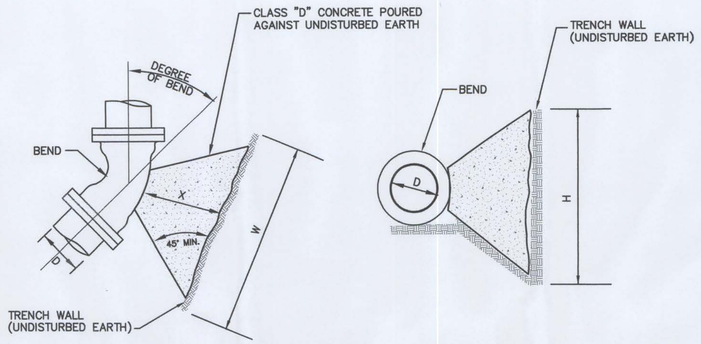
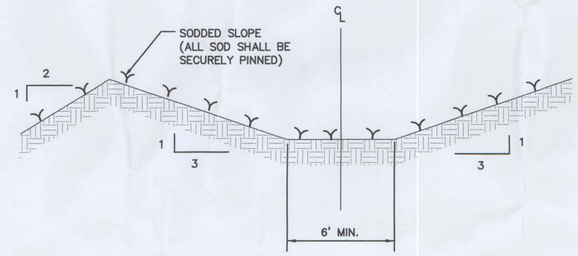


THRUST BLOCK DETAIL 4 (3|17)
NO SCALE

DIMENSIONS OF THRUST BLOCKS FOR GOOD SOIL

	SIZE (D)	4"	6"	8"	12"
11-1/4" BEND	THRUST (lbs.)	532	1100	1892	4024
	BEARING AREA (ft.²)	0.27	0.55	0.95	2.01
	CONCRETE (yds³)	0.02	0.04	0.08	0.24
	H	5"	7"	9"	1'-1"
	W	8"	1'-0"	1'-4"	1'-11"
	X	12" Min.	12" Min.	12" Min.	18" Min.
22-1/2" BEND	THRUST (lbs.)	1059	2188	3765	8010
	BEARING AREA (ft.²)	0.53	1.09	1.88	4.01
	CONCRETE (yds³)	0.03	0.08	0.15	0.48
	H	7"	10"	1'-0"	1'-6"
	W	1'-0"	1'-5"	1'-10"	2'-8"
	X	12" Min.	12" Min.	12" Min.	18" Min.
45° BEND	THRUST (lbs.)	2078	4293	7384	15,711
	BEARING AREA (ft.²)	1.04	2.15	3.69	7.81
	CONCRETE (yds³)	0.07	0.16	0.30	0.94
	H	9"	1'-1"	1'-5"	2'-1"
	W	1'-4"	2'-0"	2'-6"	3'-8"
	X	12" Min.	12" Min.	12" Min.	18" Min.
6'-8"	THRUST (lbs.)	3838	7932	13,645	15,711
	BEARING AREA (ft.²)	1.92	3.97	6.82	14.51
	CONCRETE (yds³)	0.12	0.29	0.55	1.75
	H	1'-0"	1'-6"	2'-0"	2'-11"
	W	1'-10"	2'-8"	3'-4"	5'-0"
	X	12" Min.	12" Min.	12" Min.	18" Min.

NOTES:
1. Concrete shall be kept at sufficient distance from joint for removal of all joint accessories including bolts.
2. All bearing surfaces to be carried to undisturbed soil.
3. This table shows the minimum size thrust blocks for soil bearing pressure of 2000 psf and an internal pressure of 150 psi.
4. Poor and wet sol (silty soils, clay, muck and peat) will require larger thrust blocks.
5. Fittings shall be completely polywrapped prior to pouring thrust blocks.



STORMWATER DIVERSION SWALE "A" SECTION A (3,5|17)
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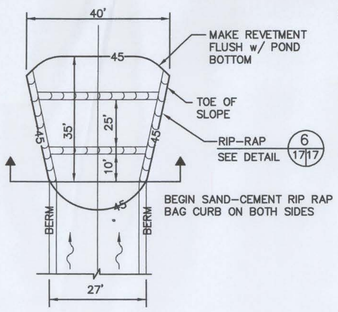
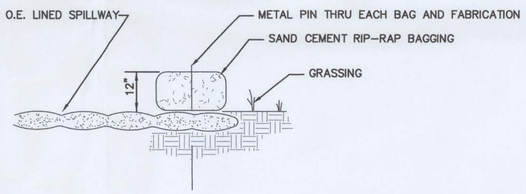
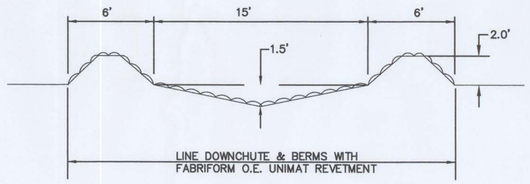




RIP-RAP DETAIL 6 (17|17)
NO SCALE

DOWNCHUTE SPILLWAY 5 (3|17)
NO SCALE



DOWNCHUTE FROM SWALE "B" B (3|17)
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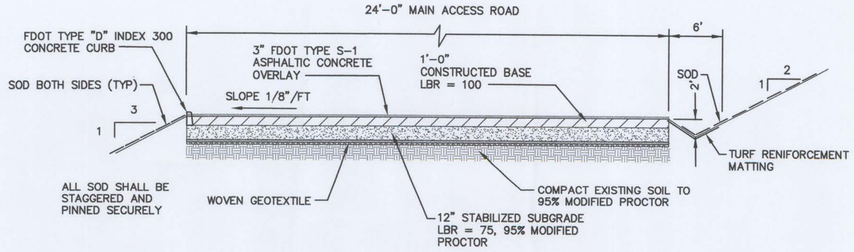

MAIN ACCESS ROADS 1 (3|17)
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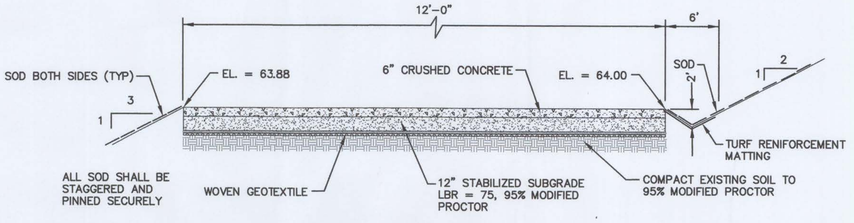

STORMWATER PUMP ACCESS ROAD 2 (3|17)
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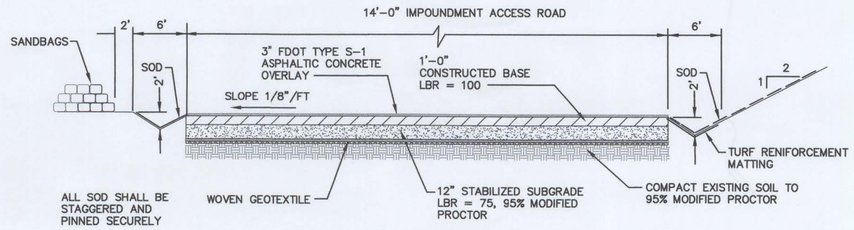

IMPOUNDMENT ACCESS ROADS 3 (3|17)
NO SCALE

STATE OF FLORIDA
BRIAN J. CONRAD
No. 52557
STATE OF
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: **MISCELLANEOUS DETAILS**

PROJECT TITLE: **CENTRAL LANDFILL PHASE II EXPANSION RECORD DRAWINGS**

CLIENT: **CITRUS COUNTY SOLID WASTE MANAGEMENT DIVISION CITRUS COUNTY, FLORIDA**

SCS ENGINEERS
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DSN BY: BJC/JEK
DWN. BY: PEI
CHK. BY: JAB
Q/A REV. BY: BJC
APP. BY: RJD

CADD FILE: 995605DTLS1.dwg

DATE: JUNE 2003

SCALE: NO SCALE

DRAWING NO. **17** of 17

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