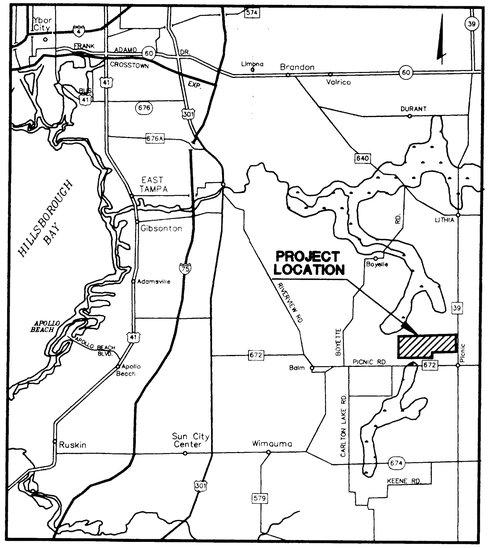
SOUTHEAST COUNTY FACILITY
LEACHATE TREATMENT AND
RECLAMINATION FACILITIES
PERMIT DRAWINGS

COUNTY OF HILLSBOROUGH, FLORIDA
DEPARTMENT OF SOLID WASTE
TAMPA, FLORIDA

LUACS #41173



LOCATION MAP

BOARD OF COUNTY COMMISSIONERS

PHYLLIS BUSANSKY, Chairman
JOE CHILLURA, Vice-Chairman
PAM IORIO, Commissioner
SYLVIA KIMBELL, Commissioner
JAN PLATT,Commissioner
JAMES SELVEY, Commissioner
ED TURANCHIK, Commissioner

D.E.P.
MAR 3 1992
SOUTHWEST DISTRICT
TAMPA

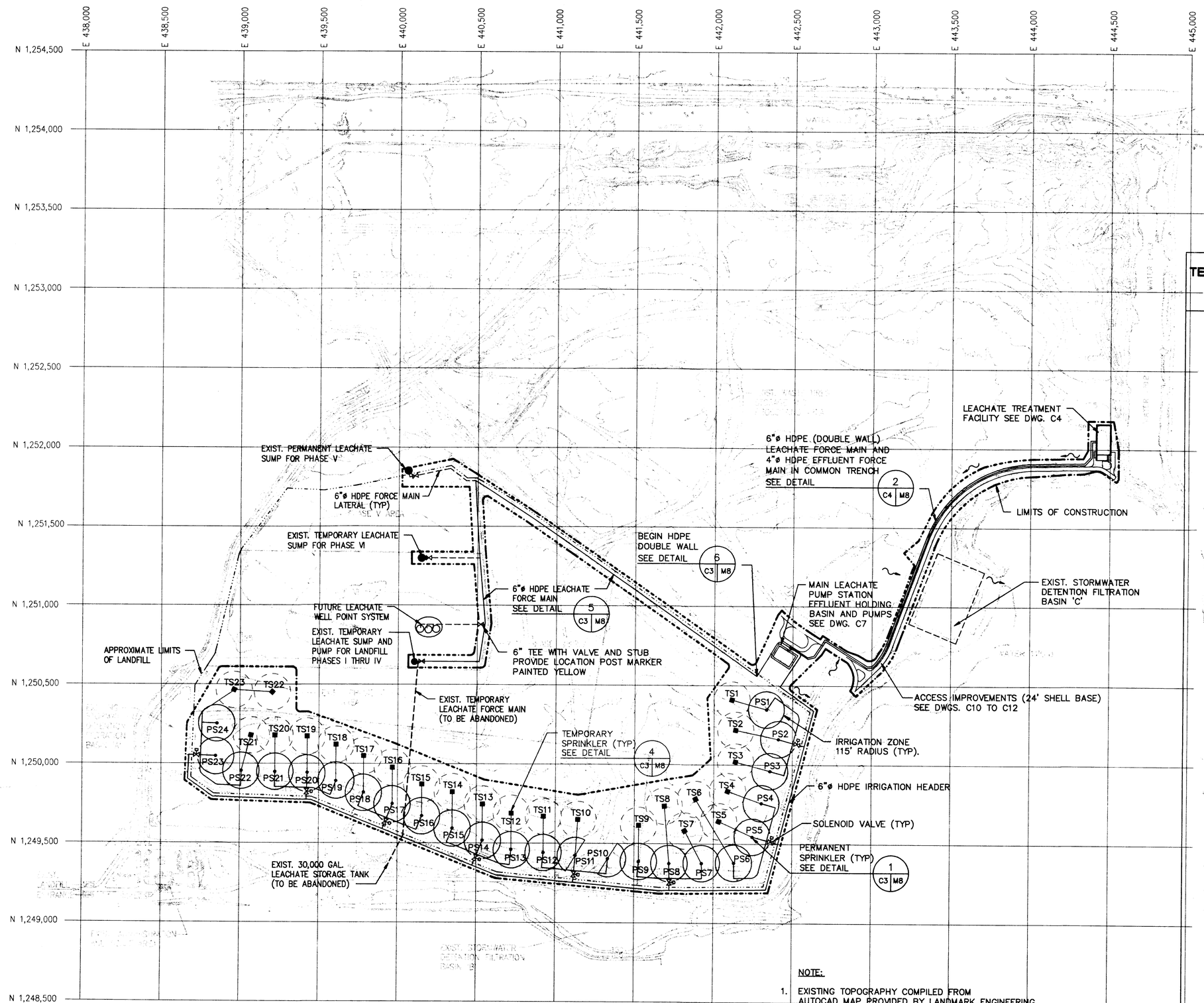
DRAWING INDEX

DRAWING NO.		DRAWING TITLE
C1	-	TITLE SHEET
C3	-	MASTER SITE PLAN
C4	-	FACILITY SITE PLAN
C6	-	FACILITY SECTIONS
M1	-	LEACHATE TREATMENT PROCESS FLOW SCHEMATIC
M2	-	PROCESS CONTROL PLAN 1
M3	-	PROCESS CONTROL PLAN 2
M5	-	PUMP STATION PLAN
M6	-	PUMP STATION DETAILS
M7	-	MECHANICAL DETAILS 1
M8	-	MECHANICAL DETAILS 2

4029C30775 1/1

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

REGISTERED
CERTIFICATE
ENGINEER
3/9/92



N

300 0 300 600

SCALE IN FEET

TEMPORARY SPRINKLER HEAD LOCATIONS (SEE NOTE 2)		PERMANENT SPRINKLER HEAD LOCATIONS (SEE NOTE 2)	
TS1	N. 1250409 E. 442113	PS1	N. 1250349 E. 442332
TS2	N. 1250219 E. 442137	PS2	N. 1250162 E. 442410
TS3	N. 1250019 E. 442137	PS3	N. 1249960 E. 442356
TS4	N. 1249833 E. 442088	PS4	N. 1249757 E. 442302
TS5	N. 1249642 E. 442032	PS5	N. 1249545 E. 442245
TS6	N. 1249782 E. 441886	PS6	N. 1249380 E. 442129
TS7	N. 1249582 E. 441818	PS7	N. 1249377 E. 441925
TS8	N. 1249737 E. 441688	PS8	N. 1249374 E. 441721
TS9	N. 1249615 E. 441528	PS9	N. 1249386 E. 441528
TS10	N. 1249650 E. 441145	PS10	N. 1249404 E. 441333
TS11	N. 1249670 E. 440924	PS11	N. 1249423 E. 441129
TS12	N. 1249689 E. 440720	PS12	N. 1249441 E. 440924
TS13	N. 1249746 E. 440538	PS13	N. 1249460 E. 440720
TS14	N. 1249823 E. 440347	PS14	N. 1249518 E. 440538
TS15	N. 1249871 E. 440153	PS15	N. 1249594 E. 440347
TS16	N. 1249976 E. 439967	PS16	N. 1249672 E. 440153
TS17	N. 1250049 E. 439785	PS17	N. 1249747 E. 439967
TS18	N. 1250120 E. 439608	PS18	N. 1249820 E. 439785
TS19	N. 1250172 E. 439426	PS19	N. 1249891 E. 439608
TS20	N. 1250178 E. 439223	PS20	N. 1249943 E. 439426
TS21	N. 1250178 E. 439074	PS21	N. 1249949 E. 439223
TS22	N. 1250318 E. 439088	PS22	N. 1249955 E. 439010
TS23	N. 1250465 E. 438963	PS23	N. 1250048 E. 438846
		PS24	N. 1250252 E. 438855

NOTE:

1. EXISTING TOPOGRAPHY COMPILED FROM AUTOCAD MAP PROVIDED BY LANDMARK ENGINEERING & SURVEYING CORP. DATED 7-8-91.
2. FINAL LOCATION OF TEMPORARY AND PERMANENT SPRINKLER TO BE DETERMINED IN THE FIELD AND APPROVED BY THE FIELD ENGINEER.

REV. | DATE | DESCRIPTION | CK. BY

DRAWING TITLE: MASTER SITE PLAN

PROJECT TITLE: SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES

CLIENT: HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE TAMPA, FLORIDA

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
9202 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757

PROJ. NO. 0990018.42 | DSN. BY: LRP/LER | CHK. BY: RAS/SMH | Q/A RVW BY: ERC | APP. BY: RBG

DSK. BY: SRK/LER

CADD FILE: SITE

DATE: FEB. 26, 1992

SCALE: 1" = 300'

DRAWING NO. C3 of 15

CURVE DATA

CURVE NO. ③	CURVE NO. ④
Δ = 35°20'26"	Δ = 32°49'33"
R = 100.00'	R = 35.00'
T = 31.86'	T = 10.31'
L = 61.68'	L = 20.05'

N. 1,252,155.28
E. 444,416

N. 1,252,155.28
E. 444,500

84'-0"
42'-0" 42'-0"

6' HIGH CONCRETE WALL, SEE DWGS. S1 & S3

STA. 28+58, 229' LT. END SWALE

LIMITS OF CONSTRUCTION

185'-0"
75'-0"
75'-0"

6' CONCRETE SIDEWALK

6' CONCRETE SIDEWALK

TH-23
TH-22
TH-21
TH-20
TH-19

SEE DWG. M3

70'-0"ø

50'-0"ø

27'-0"
34'-0"
15'-6"
35'-6"
33'-0"

10'-0"
20'-0"
40'-0"
35'-0"
19'-0"
35'-0"

ASPHALT

15'-0"

15'-0"ø

STA. 28+56, 101' LT. BEGIN SWALE TRANSITION INTO DITCH

SEE DWGS. M2 & M3 FOR YARD PIPING

PROCESS CONTROL AND OFFICE BUILDING (SEE DWG'S. A1 AND M2)

24'-0"

67'-0"
6'-0"
18'-0"
12'-0"
12'-0"

ACU SEE DWG. A1

N. 1,251,970.28
E. 444,416

2'R (TYP)

50'R

56'-0"
32'-0"
36'-0"

88.06'
N 00°00'00" E
ASPHALT PAVEMENT

4" WATER WELL
N. 1252004.42
E. 444541.01
SEE DETAIL 4 C4 C9

EXIST. MONITORING WELL (TO REMAIN)
EXIST. BM EL.=150.78
N. 1,251,906.72
E. 444,528.68
SEE DETAIL 2 C4 C9

GUARDRAIL
STA. 29+79, 65' LT. TO STA. 30+20, 15' LT.

PLUG EXIST. DBL. STEEL PIPES WITH BLIND FLANGE AS SPECIFIED

PIPES INSTALLED IN COMMON TRENCH SEE DETAIL 2 C4 M8

6"ø HDPE (DOUBLE WALL) LEACHATE FORCE MAIN SEE DETAIL 1 C4 M9

℄ DITCH FOR ALIGNMENT SEE DWGS. C11 TO C12

4"ø HDPE EFFLUENT FORCE MAIN

℄ STA. 28+34, 36'LT.

10'-0"
5'-0"
35'-8"

ASPHALT PAVEMENT SEE DETAIL 2 C4 C8

PROPOSED BASIN AREA SEE DWG. C5

5'R

35'R

35'R

FOR CONTINUATION SEE DWG. C12

27+00

SHELL BASE ROAD
SEE DWG. C10 TO C12

N 89°05'14" E

29+00

S 55°34'20" E 28.05'

N 32°49'33" E 37.29'

S 55°34'20" E 46.05'

30+00

STA. 30+19.47 END ASPHALT PAVEMENT MATCH EXIST. GRADE

GUARDRAIL LINE (TYP)
STA. 28+84, 3' RT. TO STA. 30+20, 3' RT.
SEE DETAIL 5 C4 C8

PC = 28+83.68

PI = 29+45.36

PI = 29+73.42

GUARDRAIL
STA. 29+16, 37' LT. TO STA. 29+58, 43' LT.

STA. 28+00 BEGIN ASPHALT PAVEMENT

FIRE HYDRANT ASSEMBLY
STA. 28+20, 20' RT.
WITH 120 LF OF 6" D.I. PIPE (FIELD VERIFY)
SEE DETAIL 1 C4 C9

N 1,252,000

N 1,251,750

E 444,250

E 444,500

E 444,750

NOTE:

EXISTING TOPOGRAPHY COMPILED FROM AUTOCAD MAP PROVIDED BY LANDMARK ENGINEERING & SURVEYING CORP. DATED 7-8-91 AND FIELD SURVEY DATA FROM HEIDT & ASSOCIATES, INC. DATED 10-16-91.

N

20 0 20 40
SCALE IN FEET

LEGEND

1. 1ST STAGE AERATION TANK
2. 1ST STAGE CLARIFIER
3. ANOXIC TANK
4. 2ND STAGE AERATION TANK
5. 2ND STAGE CLARIFIER
6. AERATED SLUDGE STORAGE TANK
7. STAIR–ACCESS BRIDGE
8. METHANOL STORAGE TANK
9. 500,000 GALLON RAW LEACHATE HOLDING TANK
10. ACCESS STAIR, SEE DETAIL 1, DWG. S2
11. STORMWATER DRAINAGE SUMP, SEE DWG. S1
12. 6" HDPE PIPE WITH NORMALLY CLOSED D.I. 6" GATE VALVE AND POST INDICATOR
13. BY–PASS CONC. TRUCK LOADING STAND
14. LEACHATE SPILL DRAINAGE TRENCH SEE DETAIL 7, DWG. S2
15. SIDEWALK RAMP, SEE DETAIL 6, DWG. C8
16. 12"X18" ERCP, SEE DWG. C5
17. EFFLUENT STORAGE TANK
18. FILTRATE SUMP
19. PARKING AREA, 4 SPACES REQUIRED, SEE DETAIL 1, DWG. C8
20. 6'X6' CHLORINATION ROOM, SEE DWG. M3
21. 1–1/2"ø WATER SUPPLY LINE
22. BOLLARDS (TYP) SEE DETAIL 4, DWG. C8

NOTE: ITEMS (1) THRU (8) TO BE MANUFACTURED BY ZIMPRO UNDER PACT® SYSTEM.

REV.	DATE	DESCRIPTION	CK. BY

DRAWING TITLE: FACILITY SITE PLAN

PROJECT TITLE: SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES

CLIENT: HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE TAMPA, FLORIDA

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

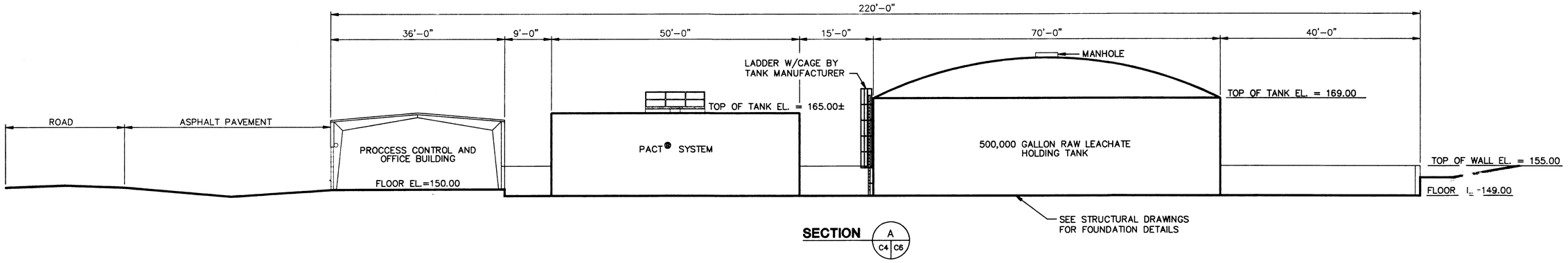
PROJ. NO. 0990018.42 | DWN. BY: BLJ/VDR | Q/A REVIEW: ERC
DSN. BY: SRK/LER | CHK. BY: RAS/SMH | APP. BY: RBG

CADD FILE: CPLPLAN

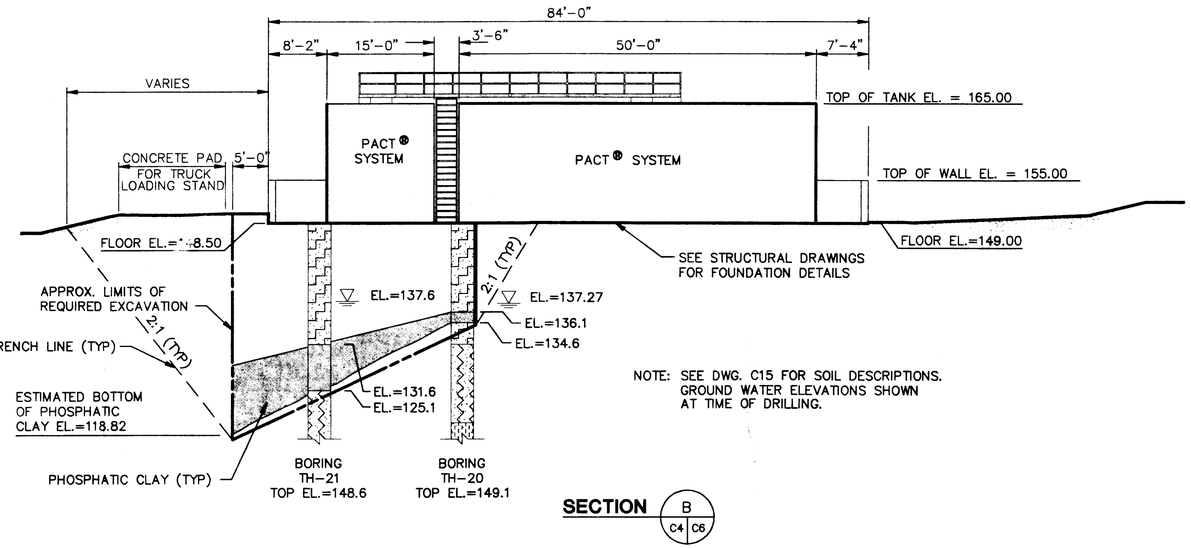
DATE: FEB. 27, 1992

SCALE: 1"=20'

DRAWING NO. C4 of 15

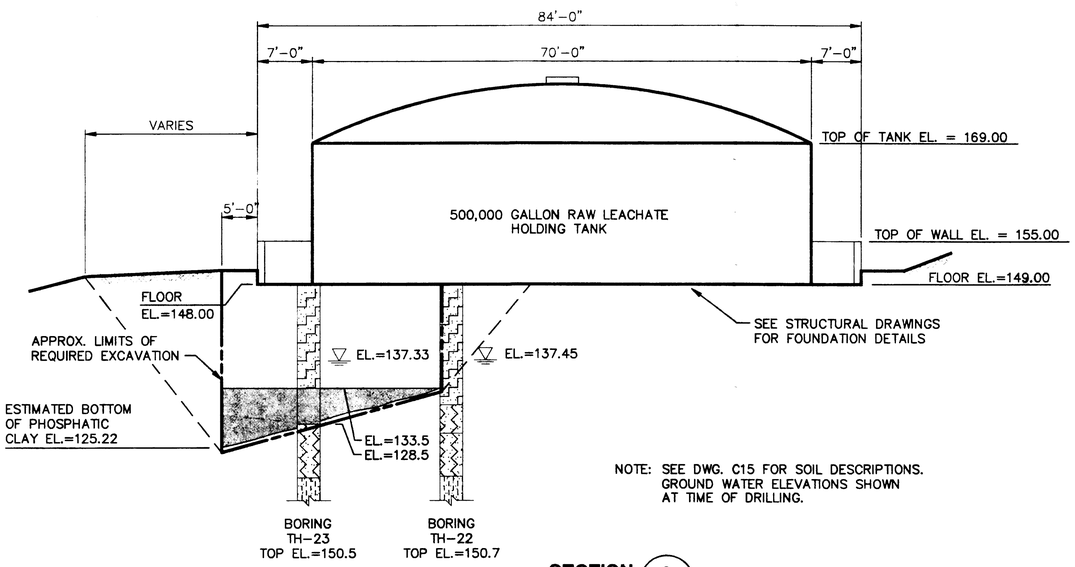


SECTION A (C4 | C6)



NOTE: SEE DWG. C15 FOR SOIL DESCRIPTIONS. GROUND WATER ELEVATIONS SHOWN AT TIME OF DRILLING.

SECTION B (C4 | C6)



NOTE: SEE DWG. C15 FOR SOIL DESCRIPTIONS. GROUND WATER ELEVATIONS SHOWN AT TIME OF DRILLING.

SECTION C (C4 | C6)

CK. BY | DESCRIPTION | DATE | REV

DRAWING TITLE: **FACILITY SECTIONS**

PROJECT TITLE: **SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES**

CLIENT: **HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE TAMPA, 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) 885-7757

PROJ. NO. 0990018.42 | DSN. BY: DEP/LER | DWN. BY: BLJ/VDR | CHK. BY: RAS/SMH | Q/A REVIEW BY: ERC | APP. BY: RBG

CADD FILE: CPLSECT

DATE: FEB. 26, 1992

SCALE: 1"=10'

DRAWING NO. **C6** of **15**

HILLSBOROUGH HEIGHTS LANDFILL AND TAYLOR ROAD LANDFILL INFLUENT LOADING FROM TANKER TRUCKS

LEACHATE FORCE MAIN LATERAL (TYP.)

PERMANENT LEACHATE FORCE MAIN

EFFLUENT HOLDING SUMP AND PUMPS

EXIST. PERMANENT LEACHATE SUMP AND PUMP FOR LANDFILL PHASE V

MAIN LEACHATE PUMP STATION

LEACHATE FORCE MAIN

TRUCK FILL STAND PUMP

LOADING ARM TRUCK LOADING STAND

NUTRIENT

NUTRIENT STORAGE

NUTRIENT METERING PUMP

WAND

BULK CARBON

1000 LB. ACTIVATED POWDER CARBON BOX

MECHANICAL MIXER

PROCESS WATER FROM EFFLUENT PUMPS

VACUUM PUMP

CARBON SLURRY TANK

CARBON SLURRY PUMP

N.C.

N.O.

FLOW CONTROL VALVE

500,000 GAL. RAW LEACHATE HOLDING TANK

LAH

LAL

INFLUENT PUMPS

FLOW INDICATOR RECORDER

FIRST STAGE AERATION TANK

CLARIFIER DRIVE

1ST STAGE CLARIFIER

MECHANICAL MIXER

ANOXIC MIXING TANK

METHANOL STORAGE

METHANOL PUMPS

AIR LINE

SECOND STAGE AERATION TANK (POLISHING)

CLARIFIER DRIVE

2ND STAGE CLARIFIER

AIR FILTER (TYP.)

AIR BLOWERS

TO DAY TANK

N.C.

MECHANICAL MIXER

POLYMER ACTIVATION TANK

WELL WATER

POLYMER METERING PUMPS

1st STAGE RETURN SLUDGE

2nd STAGE WASTE SLUDGE

2nd STAGE RETURN SLUDGE

WASTE SLUDGE

N.C.

SLUDGE RECYCLE PUMPS

LEACHATE FORCE MAIN

EXIST. TEMPORARY LEACHATE SUMP AND PUMP FOR LANDFILL PHASE VI

FUTURE PERMANENT LEACHATE FORCE MAIN (N.I.C.)

TEE WITH VALVE AND STUB FOR FUTURE CONNECTION

FILTRATE

FLOOR DRAINS, AND TRUCK LOADING STAND SPILLAGE

DECANT LINE (GRAVITY DRAIN)

OPTIONAL POLYMER INFLUENT

AEROBIC SLUDGE STORAGE

WASTE SLUDGE

PLANT EFFLUENT

MECHANICAL MIXER

N.C.

LAH

SLUDGE

BALL CHECK VALVE INTEGRAL WITH PUMP

FILTER PRESS

FILTER PRESS DAY TANK

SLUDGE TRANSFER PUMP

N.C.

BYPASS

BALL CHECK VALVE INTEGRAL WITH PUMP

FILTER PRESS FEED PUMP

SLUDGE CAKE TO LANDFILL FOR DISPOSAL

FILTRATE SUMP AND PUMPS

WELL PUMP (TYP.)

PERMANENT LEACHATE WELL POINT SYSTEM FOR LANDFILL PHASES I TO VI (N.I.C.)

EXIST. TEMPORARY LEACHATE SUMP AND PUMP FOR LANDFILL PHASES I TO IV

NOTE:
ALL UNITS SHOWN WITHIN ENCLOSED AREA (------) ARE MANUFACTURED AND INSTALLED BY ZIMPRO UNDER THEIR PACT® SYSTEM; ZIMPRO WILL ALSO FURNISH THE FILTRATE SUMP PUMPS AND THE EFFLUENT PUMPS. THE GENERAL SUBCONTRACTOR SHALL RETAIN ZIMPRO, INC. AS A SUBCONTRACTOR.

TEMPORARY SPRINKLER HEADS (TYP.)

PERMANENT SPRINKLER HEADS (TYP.)

SOLENOID VALVE (TYP.)

FLOW INDICATOR RECORDER

SPRAY IRRIGATION SYSTEM

EFFLUENT TRUCK LOADING STAND

IRRIGATION SUMP AND PUMPS

120,000 GALLON HOLDING BASIN

EFFLUENT FORCE MAIN

CHLORINATOR

PROCESS WATER TO CARBON SLURRY TANK

EFFLUENT TANK

LAH

LAL

EFFLUENT PUMPS

REV.	DATE	DESCRIPTION	CK. BY

DRAWING TITLE
LEACHATE TREATMENT PROCESS FLOW SCHEMATIC

PROJECT TITLE
SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES

CLIENT
HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE TAMPA, 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.	DWN. BY	CHK. BY	D/A R/W BY	APP. BY
0990018.42	BLJ/LRP	LKW/SMH	ERC	RBG

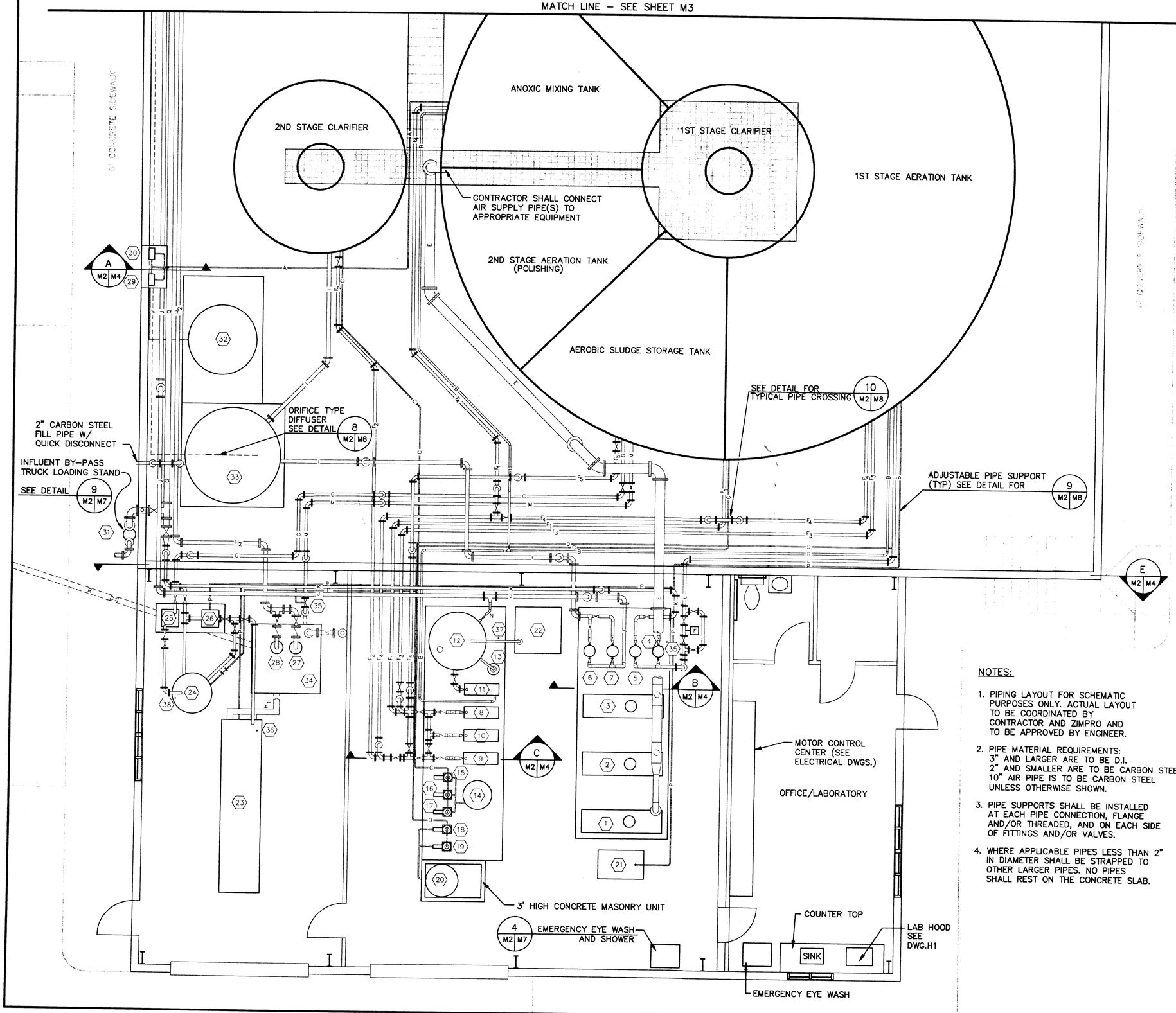
CADD FILE: MPROCESS

DATE: FEB. 27, 1992

SCALE: NOT TO SCALE

DRAWING NO.
M1 of 8

MATCH LINE – SEE SHEET M3



N

0 2 4 8 12
SCALE IN FEET

EQUIPMENT LEGEND

1. AERATION BLOWER NO. 1
2. AERATION BLOWER NO. 2
3. AERATION BLOWER NO. 3
4. INFLUENT PUMP NO. 1
5. INFLUENT PUMP NO. 2
6. EFFLUENT PUMP NO. 1
7. EFFLUENT PUMP NO. 2
8. RECYCLE PUMP NO. 2
9. RECYCLE PUMP NO. 1
10. RECYCLE PUMP NO. 3
11. CARBON SLURRY TRANSFER PUMP
12. CARBON SLURRY TANK
13. VACUUM ASSEMBLY PUMP
14. POLYMER ACTNATION TANK
15. POLYMER METERING PUMP NO. 1
16. POLYMER METERING PUMP NO. 2
17. POLYMER METERING PUMP NO. 3
18. NUTRIENT METERING PUMP NO. 1
19. NUTRIENT METERING PUMP NO. 2
20. NUTRIENT STORAGE TANK
21. INSTRUMENT AIR COMPRESSOR/REFRIGERANT DRYER
22. 1000 LB. ACTIVATED POWDER CARBON BOX
23. FILTER PRESS
24. FILTER PRESS DAY TANK
25. SLUDGE TRANSFER PUMP
26. FILTER PRESS FEED PUMP
27. FILTRATE PUMP NO. 1
28. FILTRATE PUMP NO. 2
29. METHANOL ADDITION PUMP NO. 1
30. METHANOL ADDITION PUMP NO. 2
31. TRUCK FILL STAND PUMP
32. METHANOL STORAGE TANK
33. EFFLUENT STORAGE TANK 1865 GAL CAPACITY
34. FILTRATE SUMP
35. AIR OPERATED VALVE, NORMALLY OPEN
36. FLOW RECORDER
37. SHIFTER MOTOR
38. CARBON SLURRY MIXER
39. FILTER PRESS DAY TANK MIXER

NOTES:

1. PIPING LAYOUT FOR SCHEMATIC PURPOSES ONLY. ACTUAL LAYOUT TO BE COORDINATED BY CONTRACTOR AND ZIMPRO AND TO BE APPROVED BY ENGINEER.
2. PIPE MATERIAL REQUIREMENTS: 3" AND LARGER ARE TO BE D.I. 2" AND SMALLER ARE TO BE CARBON STEEL 10" AIR PIPE IS TO BE CARBON STEEL UNLESS OTHERWISE SHOWN.
3. PIPE SUPPORTS SHALL BE INSTALLED AT EACH PIPE CONNECTION, FLANGE AND/OR THREADED, AND ON EACH SIDE OF FITTINGS AND/OR VALVES.
4. WHERE APPLICABLE PIPES LESS THAN 2" IN DIAMETER SHALL BE STRAPPED TO OTHER LARGER PIPES. NO PIPES SHALL REST ON THE CONCRETE SLAB.

PIPE LEGEND

A – 1"ø METHANOL FEED PIPE
B – 2"ø POWERED ACTIVATED CARBON SLURRY FEED PIPE
C – 1"ø POLYMER FEED PIPE (STAINLESS STEEL)
D – 1"ø NUTRIENT FEED PIPE (STAINLESS STEEL)
E – 10"ø AIR PIPE
F_1 – 3"ø SLUDGE SUCTION PIPE (1ST STAGE)
F_2 – 3"ø SLUDGE SUCTION PIPE (2ND STAGE)
F_3 – 3"ø SLUDGE DISCHARGE PIPE (1ST STAGE)
F_4 – 3"ø SLUDGE DISCHARGE PIPE (2ND STAGE)
F_5 – 3"ø SLUDGE WASTE PIPE
G – 3"ø THICKENED SLUDGE PIPE
H_1 – 6"ø FILTRATE PIPE
H_2 – 4"ø FILTRATE SUMP DISCHARGE PIPE
I – 4"ø EFFLUENT PIPE
J – 4"ø EFFLUENT FORCE MAIN
K – 3"ø INFLUENT SUCTION PIPE
L – 3"ø INFLUENT DISCHARGE PIPE
M – 3"ø AERATED SLUDGE STORAGE DECANT PIPE
N – 2"ø PROCESS WATER PIPE
O – 8"ø TRUCK FILL STAND INFLUENT PIPE
P – 1"ø INSTRUMENT AIR PIPE
Q – 8"ø INFLUENT SUCTION PIPE
R – 6"ø HDPE EFFLUENT SPILLAGE PIPE FROM TRUCK LOADING STAND
S – 4"ø FILTRATE SUMP VENT TO ROOF
V – 3/4"ø S.S. CHLORINE SOLUTION LINE

REV.	DATE	DESCRIPTION	CK. BY
0	7/4	R/W BY ERC	
		JOB BY RBG	
		DWN. BY RAS	
		CHK. BY LKW/SMH	

DRAWING TITLE: PROCESS CONTROL PLAN 1

PROJECT TITLE: SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES

CLIENT: HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE TAMPA, 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) 622-6757

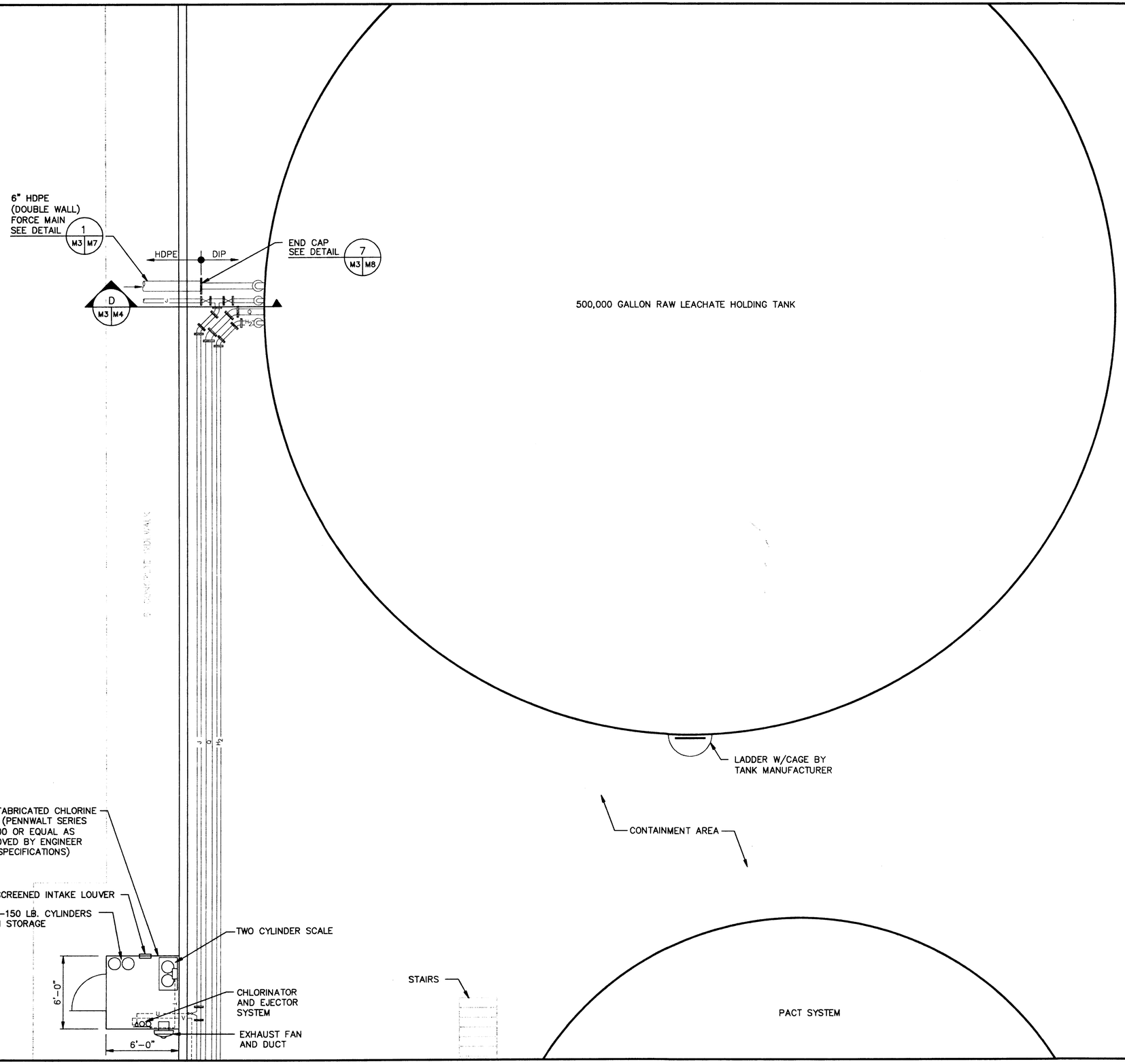
PROJ. NO. 0900018.42
DSN. BY: RAS/SRK

CADD FILE: MPLLAY

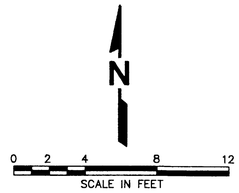
DATE: FEB. 27, 1992

SCALE: 1/4" = 1'-0"

DRAWING NO. M2 of 8



MATCH LINE – SEE SHEET M2



PIPE LEGEND

H_2 – 4" SUMP DISCHARGE PIPE
J – 4" EFFLUENT FORCE MAIN
Q – 8" INFLUENT SUCTION PIPE
T – 1/2" SS CHLORINE LINE
U – 3/8" PVC PROCESS WATER PIPE
V – 3/4" SS CHLORINE SOLUTION LINE

REV.	DATE	DESCRIPTION	CK. BY

DRAWING TITLE
PROCESS CONTROL PLAN 2

PROJECT TITLE
SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES

CLIENT
HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE
TAMPA, 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. 09900018.42
DSN. BY: RAS/SRK
DWN. BY: RAS
CHK. BY: LKW/SMH
Q/A REVIEW BY: RBG
APP. BY:

CADD FILE: MPLLAY2
DATE: FEB. 27, 1992
SCALE: 1/4" = 1'-0"
DRAWING NO. **M3** of 8

N

10 0 10 20
SCALE IN FEET

E 442,500

TRUCK LOADING STAND
SEE SECTION A (M5 | M6)

28 LF OF 6"ø HDPE TO LEACHATE SUMP WITH NORMALLY CLOSED D.I. 6" GATE VALVE AND POST INDICATOR
I.E.(N)=135.35, I.E.(S)=135.00

EDGE OF PAVEMENT

137.00 | 137.00

LEACHATE UNLOADING COUPLING W/ 11' OF 4" HDPE PIPE I.E. (N) = 135.50, I.E. (S) = 135.00 SEE DETAIL 6 (M5 | M7)

136.85 I.E.=135.85 | 136.85 I.E.=135.85

137.00 | 137.00

3' GATE

12' SLIDING GATE TYPE B FDOT INDEX 453

4"ø HDPE EFFLUENT FORCE MAIN FROM TREATMENT PLAN

EFFLUENT BYPASS LINE AND VALVES ON 8' X 4' X 6" CONC. PAD

MAIN LEACHATE SUMP SEE DETAIL 1 (M5 | S4)

2' WIDE CONCRETE PAD

6"ø HDPE (DOUBLE WALL) FORCE MAIN TO TREATMENT PLANT

WOODEN RR TIES 3' WIDE ACCESS STEPS I (M5 | M6) SLOPE 3:1

12' X 6' X 6" CONC. PAD

10"ø HDPE PIPE EMERGENCY OVERFLOW PIPE

IRRIGATION SUMP SEE DETAIL 2 (M5 | S4)

SLOPE 3:1

4"ø HDPE EFFLUENT WITH CONC. SUPPORT ANCHORED TO CONC. SUMP

10"ø HDPE PIPE TO IRRIGATION SUMP

CONCRETE SUMP SEE DWG. M6

LIMITS OF DOUBLE LINER

6'-0" | 4'-0" | 2'-0" = 13'-0"

5'-0" | 8'-0" | 4'-0" | 2'-0"

20'-0"

146'-5" | 50'-5"

3'-0" | 15'-0" | 18'-0" | 6'-0" | 9'-0" | 10' BERM | 15'-0" | 15'-0"

6'-0" | 10'-0" | 9'-0" | 10' BERM | 15'-0" | 45'-10" | 45'-10" | 15'-0" | 10' BERM | 9'-0" | 10'-0" | 6'-0"

SLOPE 3:1

3'R (MIN.)

134
135
136
137
138
139
139
136

6"ø HDPE PIPE TO IRRIGATION SYSTEM

6' CHAIN LINK FENCE TYPE B FDOT INDEX 452

179'-9"

6"ø HDPE (DOUBLE WALL) FORCE MAIN FROM LANDFILL

A (M5 | M6)

PIPE INVERTS

1. 6"ø HDPE I.E. = 135.00
2. 6"ø HDPE I.E. = 133.50
3. 6"ø HDPE I.E. = 133.50
4. 6"ø HDPE I.E. = 133.50
5. 4"ø HDPE I.E. = 132.17
6. 4"ø HDPE I.E. = 132.17
7. 6"ø HDPE (DOUBLE WALL) I.E. = 130.34
8. 6"ø HDPE (DOUBLE WALL) I.E. = 130.34
9. 6"ø HDPE (DOUBLE WALL) I.E. = 130.34
10. 6"ø HDPE (DOUBLE WALL) I.E. = 134.00
11. 4"ø HDPE I.E. = 130.83
12. 4"ø HDPE I.E. = 130.83
11. 4"ø HDPE I.E. = 137.00
12. 4"ø HDPE I.E. = ON GRADE

REV.	DATE	DESCRIPTION	CK. BY

DRAWING TITLE: PUMP STATION PLAN

PROJECT TITLE: SOUTHEAST COUNTY FACILITY
LEACHATE TREATMENT AND RECLAMATION FACILITIES

CLIENT: HILLSBOROUGH COUNTY
DEPARTMENT OF SOLID WASTE
TAMPA, 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

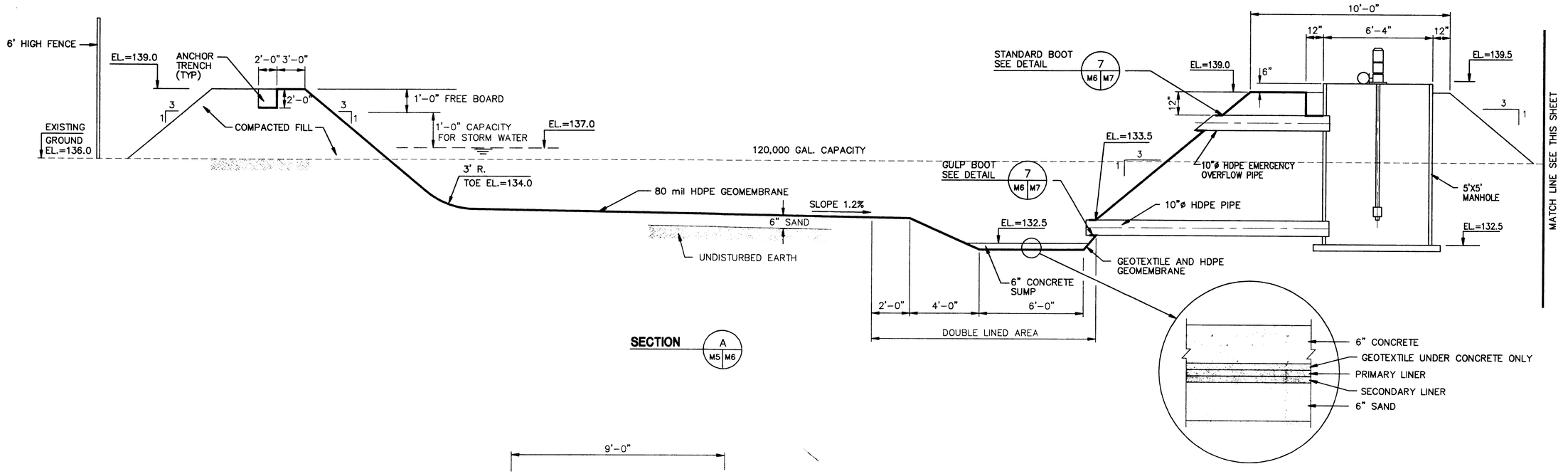
PROJ. NO. 0900018.42
DSN. BY: KKS/LKW
DWN. BY: BLJ/VDR
CHK. BY: LER/SMH
QA/A REVIEW BY: ETC
APP. BY: RBG

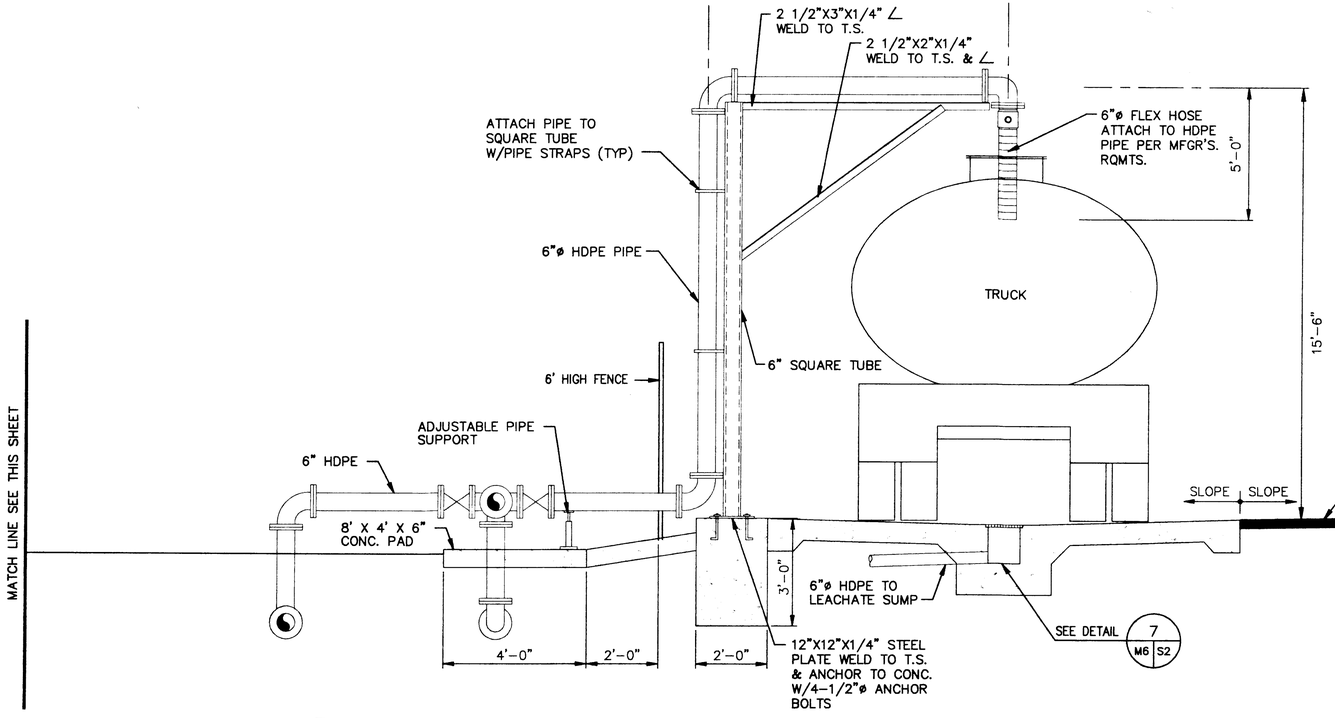
CADD FILE: MSPPLAN

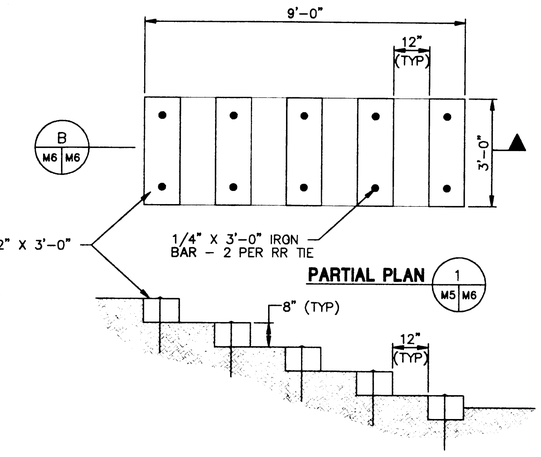
DATE: FEB. 27, 1992

SCALE: 1"=10'

DRAWING NO. M5 of 8







REV.	DATE	DESCRIPTION	CK. BY

DRAWING TITLE: **PUMP STATION SECTIONS**

PROJECT TITLE: **SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES**

CLIENT: **HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE TAMPA, 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

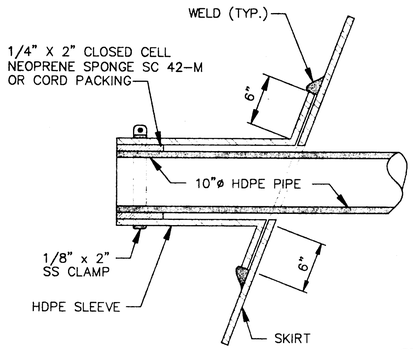
PROJ. NO.	DSN. BY	DWN. BY	CK'K BY	APP. BY
0990018.42	KKS/LKW	BLJ/VDR	LKW/LER	RBG

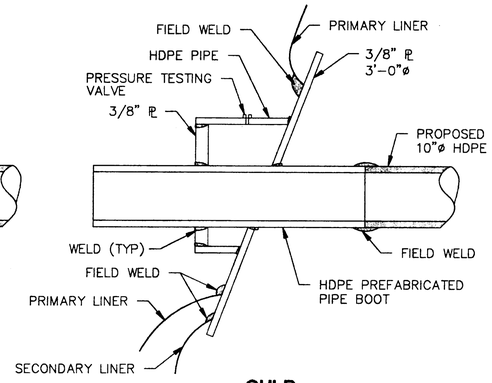
CADD FILE: MDET1

DATE: FEB. 27, 1992

SCALE: NOT TO SCALE

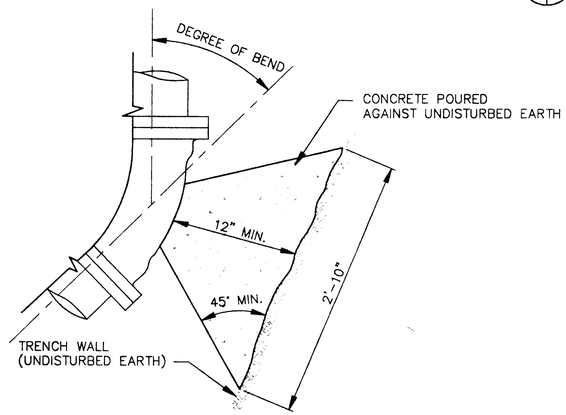
DRAWING NO. **M6** of 8





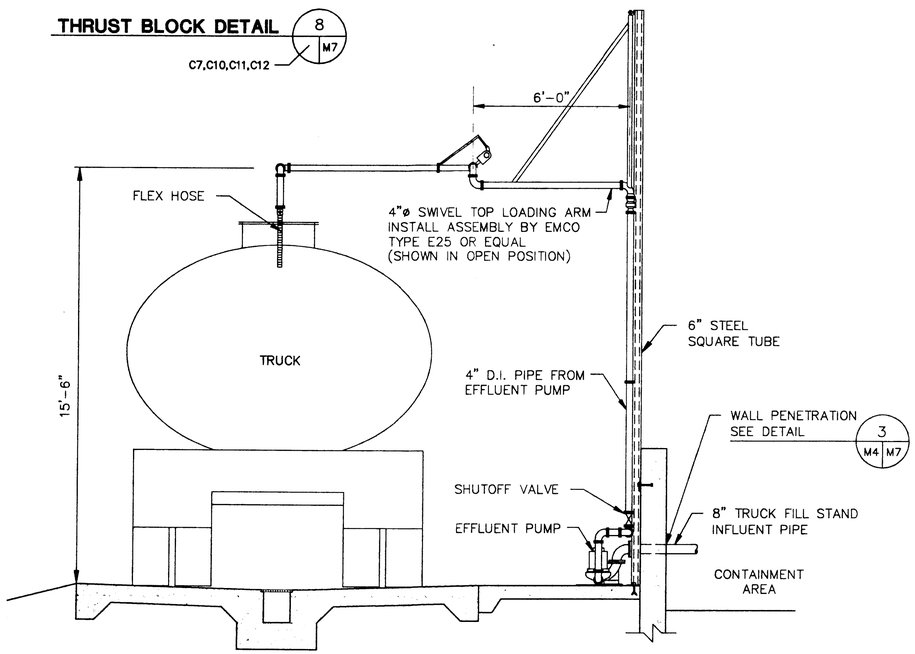
STANDARD **GULP**

PIPE LINER PENETRATION DETAILS (7 / M6 | M7)

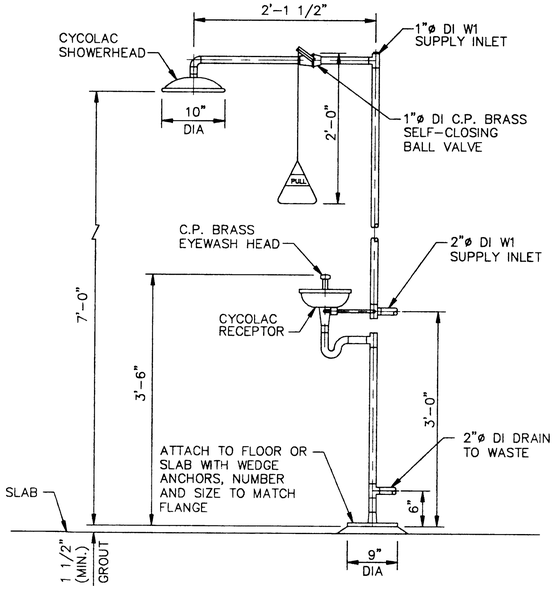


THRUST BLOCK DETAIL (8 / M7)

C7,C10,C11,C12

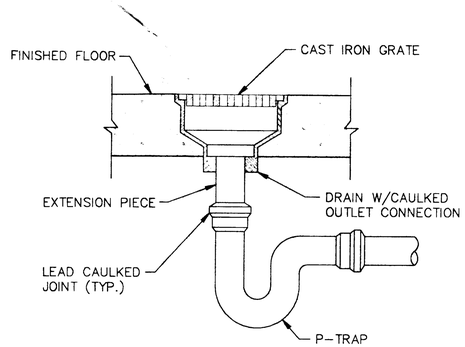


TRUCK LOADING STAND DETAIL (9 / M2 | M7)

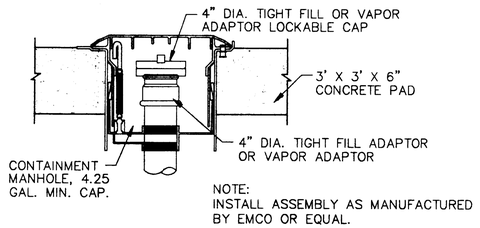


EMERGENCY EYEWASH AND SHOWER (4 / M7)

M2,P1

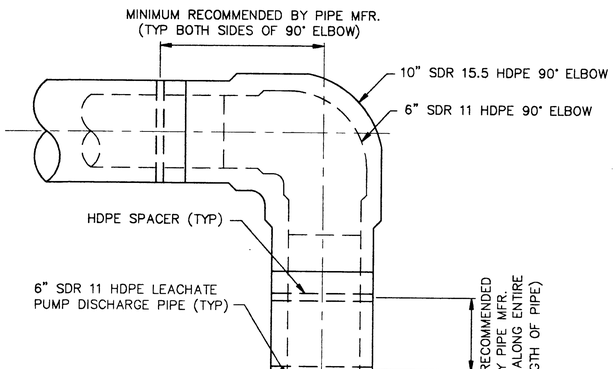


FLOOR DRAIN DETAIL (5 / P1 | M7)



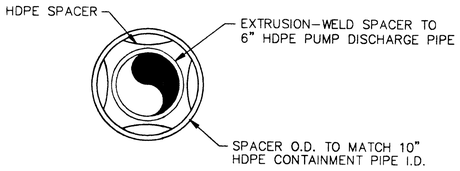
NOTE:
INSTALL ASSEMBLY AS MANUFACTURED BY EMCO OR EQUAL.

LEACHATE UNLOADING COUPLING DETAIL (6 / M5 | M7)

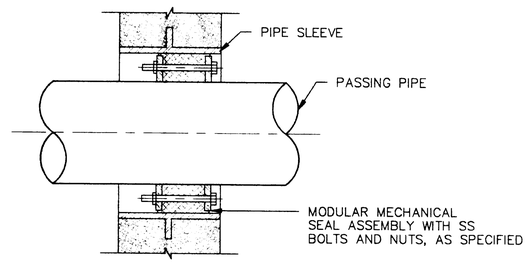


HDPE DOUBLE WALL PIPE DETAIL (1 / M7)

C4,M3



SECTION (2 / M7 | M7)



WALL PENETRATION SEAL DETAIL (3 / M7)

M4,M8,P2

REV.	DATE	DESCRIPTION	CK. BY

DRAWING TITLE: **MECHANICAL DETAILS 1**

PROJECT TITLE: **SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES**

CLIENT: **HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE TAMPA, 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

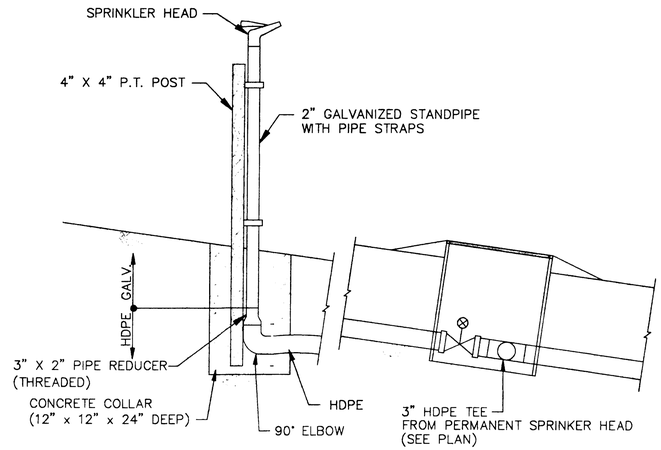
PROJ. NO.	DWN. BY	CHK. BY	Q/A REVIEW BY	APP. BY
0990018.42	BLJ/VDR	LKW/SMH	ERC	RBG
DSN. BY	LKW/RAS			

CADD FILE: MDET2

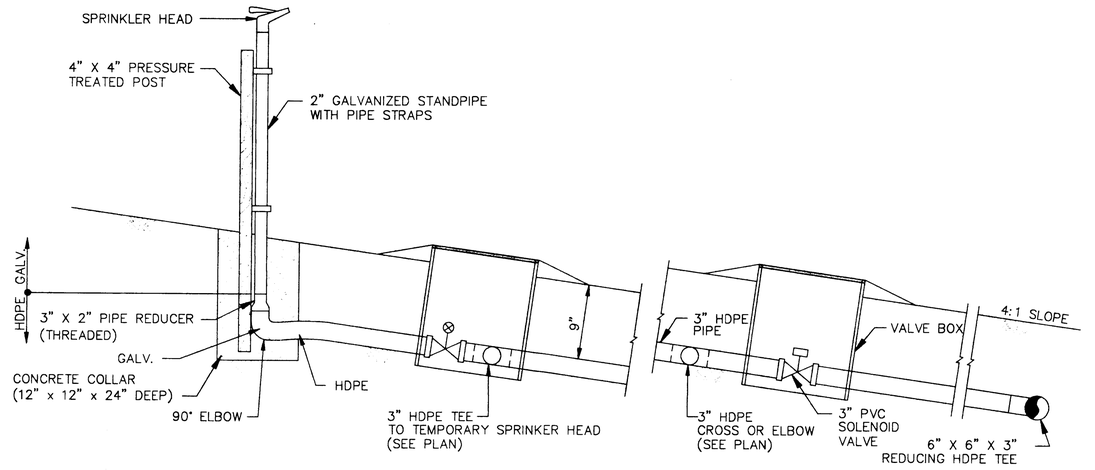
DATE: FEB. 27, 1992

SCALE: NOT TO SCALE

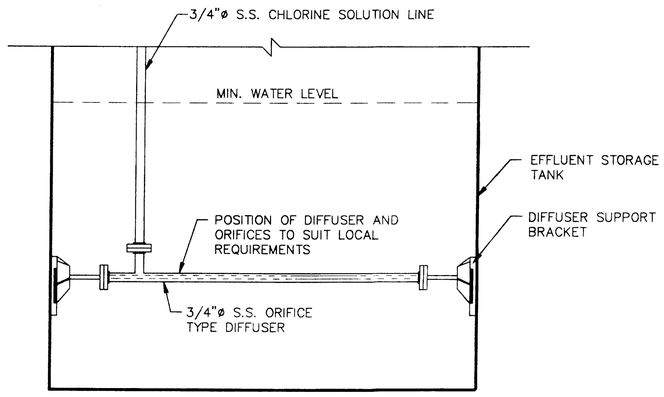
DRAWING NO.: **M7** of 8



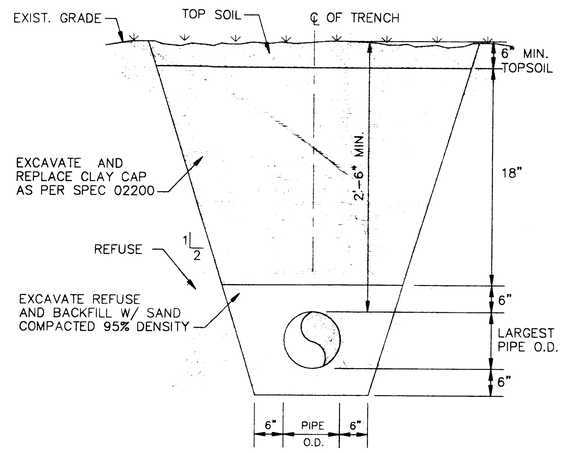
TEMPORARY SPRINKLER DETAIL 4 / C3 | M8



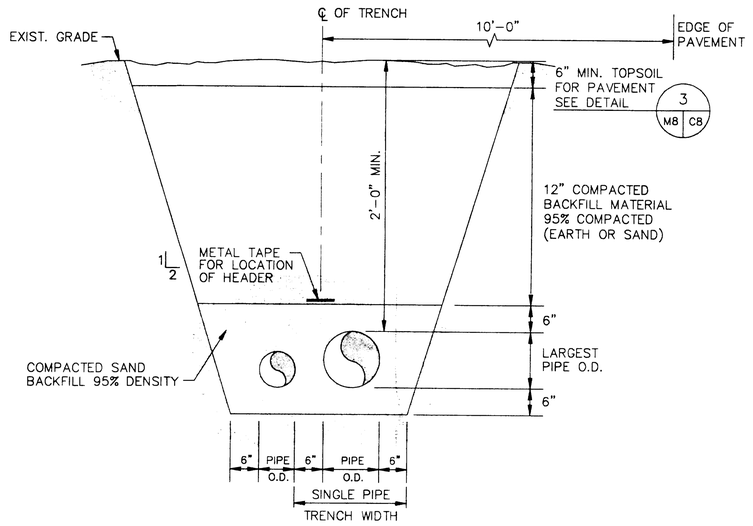
PERMANENT SPRINKLER DETAIL 1 / C3 | M8



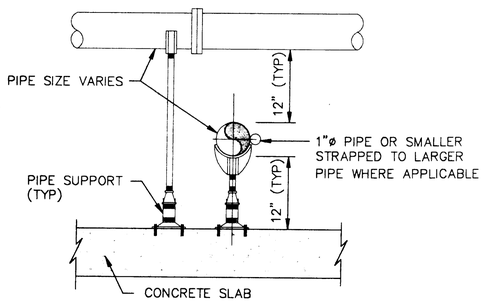
ORIFICE TYPE DIFFUSER DETAIL 8 / M2 | M8



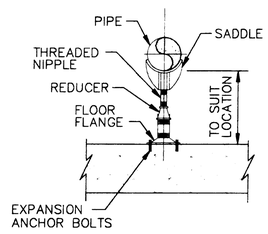
TYPICAL TRENCH DETAIL 5 / C3 | M8



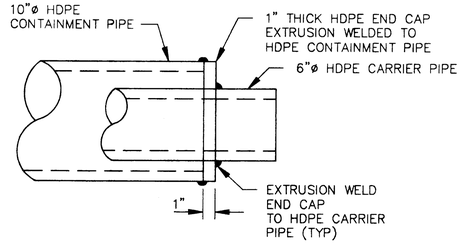
TYPICAL TRENCH DETAIL 2 / M8 — C3,C4,C10–C13



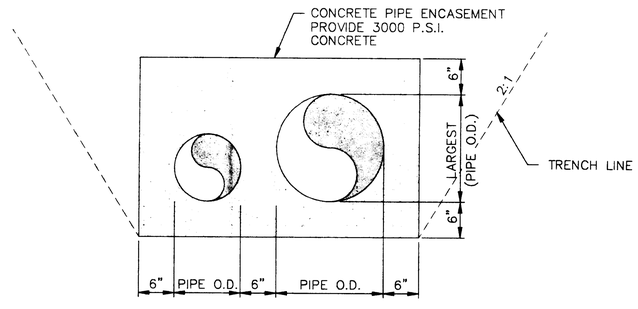
TYPICAL PIPE CROSSING DETAIL 10 / M2 | M8



ADJUSTABLE PIPE SUPPORT 9 / M2 | M8



END CAP DETAIL 7 / M8 — M8,M3



ENCASEMENT DETAIL 3 / C7 | M8

CLIENT
HILLSBOROUGH COUNTY
DEPARTMENT OF SOLID WASTE
TAMPA, FLORIDA

REV.	DATE	DESCRIPTION	CK. BY

DRAWING TITLE: MECHANICAL DETAILS 2

PROJECT TITLE: SOUTHEAST COUNTY FACILITY
LEACHATE TREATMENT AND
RECLAMATION FACILITIES

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
302 W. HWY 50, SUITE 200, TAMPA, FL 33609
PH (813) 621-0080 FAX NO. (813) 623-6757

PROJ. NO. 09900018.42
DSN. BY: LER/LKW
DWN. BY: BLJ/VDR
CHK. BY: LKW/SMH
QA/A RVW BY: ERC
APP. BY: RBG

CADD FILE: MDET3

DATE: FEB. 27, 1992

SCALE: NOT TO SCALE

DRAWING NO. M8 of 8