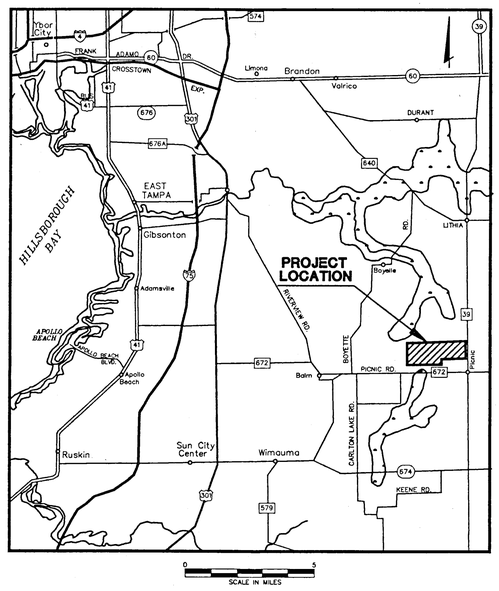
1457836 (1)

SOUTHEAST COUNTY FACILITY
LEACHATE TREATMENT AND
RECLAMATION FACILITIES
PERMIT DRAWINGS

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



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

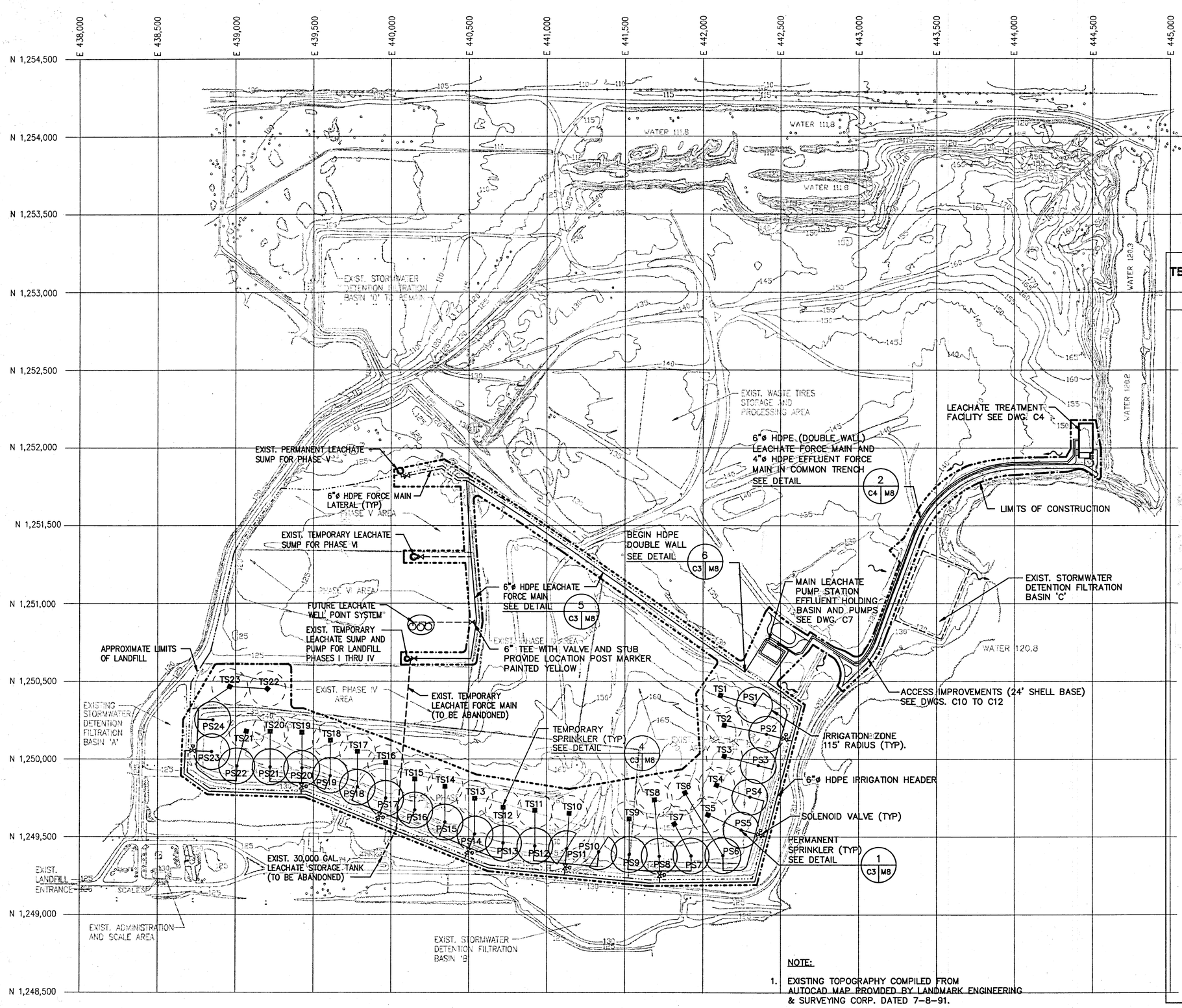
DRAWING INDEX

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

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

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

ROBERT B. SANDINE
CERTIFICATE NO. 17583
STATE OF FLORIDA
REGISTERED ENGINEER



(2)

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
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757

PROJ. NO. 90018.42
DSN. BY: SRK/LER
DWN. BY: LER/LER
CHK. BY: RAS/SMH
Q/A BY: RBG
APP. BY: RBG

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

SIDEWALK

6' CONCRETE

6' CONCRETE SIDEWALK

TH-23

TH-22

SEE DWG. M3

70'-0"ø

TH-21

TH-20

50'-0"ø

15'-0"ø

EXIST. ACCESS ROAD

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

185'-0"

75'-0"

75'-0"

10'-0"

20'-0"

ASPHALT

35'-0"

40'-0"

27'-0"

34'-0"

15'-6"

35'-6"

33'-0"

15'-0"

24'-0"

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)

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

2'R (TYP)

67'-0"

6'-0"

18'-0"

12'-0"

12'-0"

ACU SEE DWG. A1

TH-19

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

N 00°00'00" E
88.06'

(ASPHALT PAVEMENT)

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

50'R

56'-0"

32'-0"

36'-0"

℄ STA. 28+34, 36'LT.

4"ø HDPE EFFLUENT FORCE MAIN

10'-0"

52'-0"

35'-8"

ASPHALT PAVEMENT SEE DETAIL 2 C4 C8

PROPOSED BASIN AREA SEE DWG. C5

5'R

35'R

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

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

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'

46.05'

30+00

S 55°34'20" E

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

STA. 28+00
BEGIN ASPHALT PAVEMENT

PC = 28+83.68

PI = 29+45.36

PI = 29+73.42

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

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

WATER EL.=120.8

N 1,251,750

E 444,250

E 444,500

E 444,750

N 1,252,000

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.

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.

3

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) 623-0757

PROJ. NO. 0990018.42 | DWN. BY: BLJ/VDR | CHK. BY: RAS/SMH | O/A RVW BY: ERC | APP. BY: RBG

DSN. BY: SRK/LER

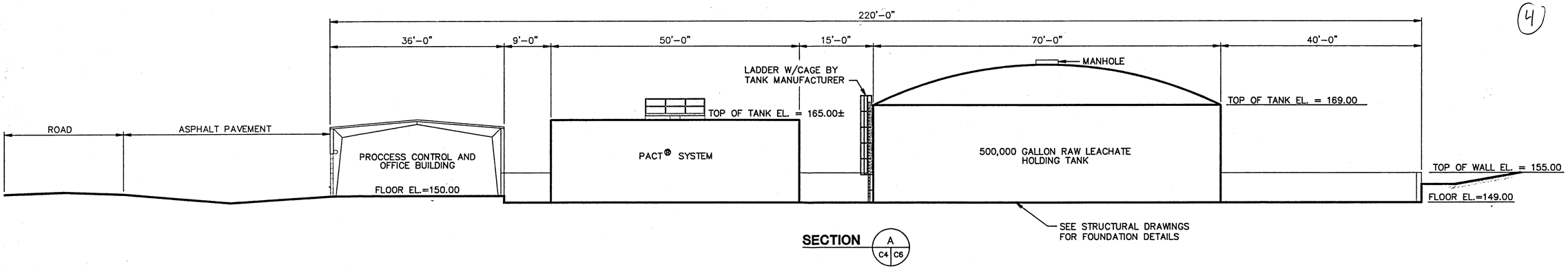
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DATE: FEB. 27, 1992

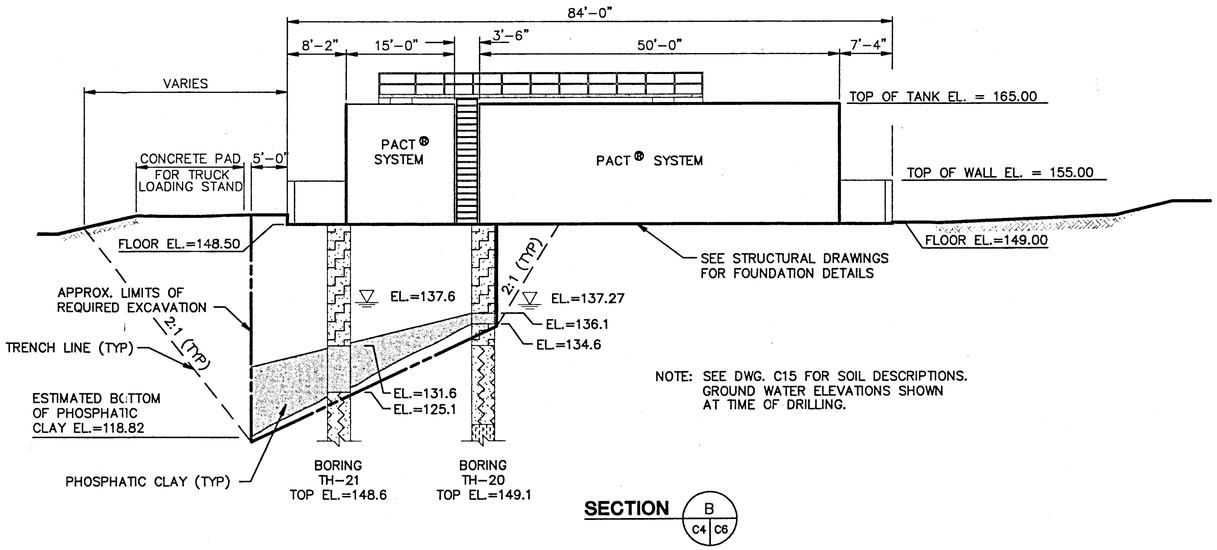
SCALE: 1"=20'

DRAWING NO. C4 of 15

(4)

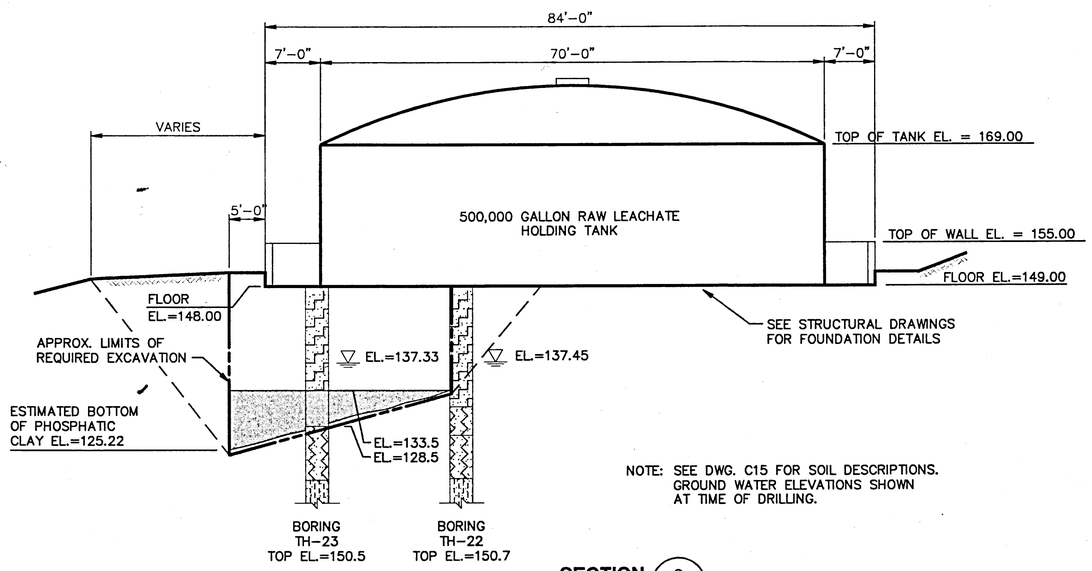


SECTION A (C4 | C6)



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)

REV. | DATE | DESCRIPTION | CK. BY

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) 623-6757

PROJ. NO. 0900018.42 | DWN. BY: BL/JDR | Q/A REVIEW BY: EC
DSN. BY: DEP/LER | CHK. BY: RAS/SMH | APP. BY: RBG

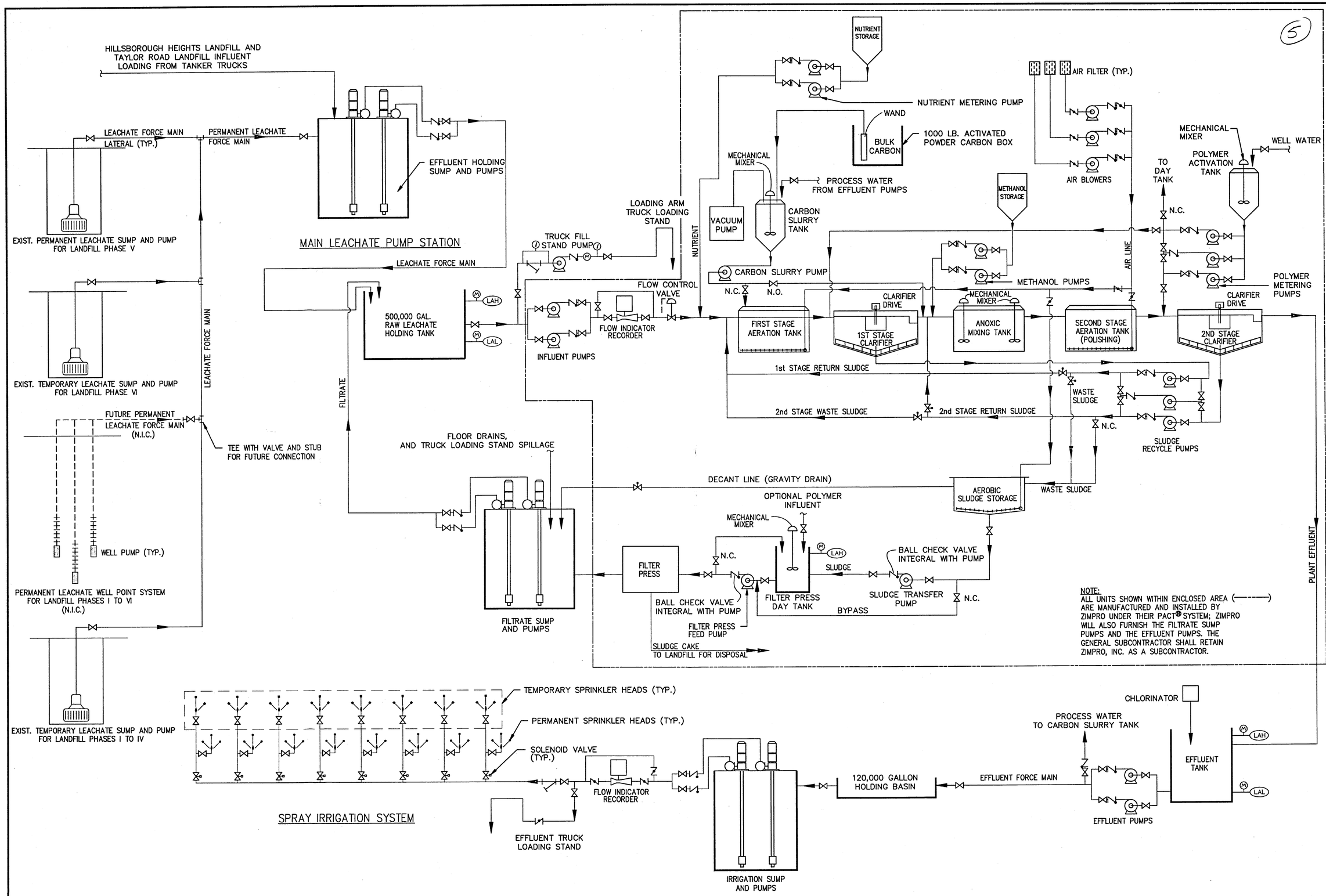
CADD FILE: CPLSECT

DATE: FEB. 26, 1992

SCALE: 1"=10'

DRAWING NO.

C6 of 15



(5)

CK. BY | DESCRIPTION | DATE | REV.

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. 0592.0018.42
DSN. BY: LKW/SRK
DWN. BY: EJL/LRP
CHK. BY: LKW/SMH
Q/A REVIEW BY:
APP. BY: RBG

CADD FILE: MPROCESS

DATE: FEB. 27, 1992

SCALE: NOT TO SCALE

DRAWING NO. M1 of 8

MATCH LINE – SEE SHEET M3

6' CONCRETE SIDEWALK

2ND STAGE CLARIFIER

ANOXIC MIXING TANK

1ST STAGE CLARIFIER

1ST STAGE AERATION TANK

CONTRACTOR SHALL CONNECT AIR SUPPLY PIPE(S) TO APPROPRIATE EQUIPMENT

2ND STAGE AERATION TANK (POLISHING)

AEROBIC SLUDGE STORAGE TANK

SEE DETAIL FOR TYPICAL PIPE CROSSING 10 M2 M8

ORIFICE TYPE DIFFUSER SEE DETAIL 8 M2 M8

2" CARBON STEEL FILL PIPE W/ QUICK DISCONNECT

INFLUENT BY-PASS TRUCK LOADING STAND SEE DETAIL 9 M2 M7

ADJUSTABLE PIPE SUPPORT (TYP) SEE DETAIL FOR 9 M2 M8

6' CONCRETE SIDEWALK

MOTOR CONTROL CENTER (SEE ELECTRICAL DWGS.)

OFFICE/LABORATORY

3' HIGH CONCRETE MASONRY UNIT

4 M2 M7 EMERGENCY EYE WASH AND SHOWER

COUNTER TOP

SINK

LAB HOOD SEE DWG.H1

EMERGENCY EYE WASH

A M2 M4 · B M2 M4 · C M2 M4 · E M2 M4

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

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) 623-6757

PROJ. NO. 0990018.42 · DSN. BY: RAS · Q/A REVW. BY: ERC · DRN. BY: RAS/SRK · CHK. BY: LKW/SMH · APP. BY: RBG

CADD FILE: MPLLAY

DATE: FEB. 27, 1992

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

DRAWING NO. M2 of 8

6" HDPE
(DOUBLE WALL)
FORCE MAIN
SEE DETAIL 1 (M3 | M7)

HDPE — DIP

END CAP
SEE DETAIL 7 (M3 | M8)

D (M3 | M4)

6' CONCRETE SIDEWALK

500,000 GALLON RAW LEACHATE HOLDING TANK

6' CONCRETE SIDEWALK

LADDER W/CAGE BY
TANK MANUFACTURER

CONTAINMENT AREA

PRE-FABRICATED CHLORINE
ROOM (PENNWALT SERIES
85-800 OR EQUAL AS
APPROVED BY ENGINEER
(SEE SPECIFICATIONS)

SCREENED INTAKE LOUVER

2-150 LB. CYLINDERS
IN STORAGE

TWO CYLINDER SCALE

CHLORINATOR
AND EJECTOR
SYSTEM

EXHAUST FAN
AND DUCT

6'-0"

6'-0"

STAIRS

PACT SYSTEM

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

N

0 2 4 8 12
SCALE IN FEET

(7)

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
9015 38 HWY, SUITE 700, TAMPA, FL 33619
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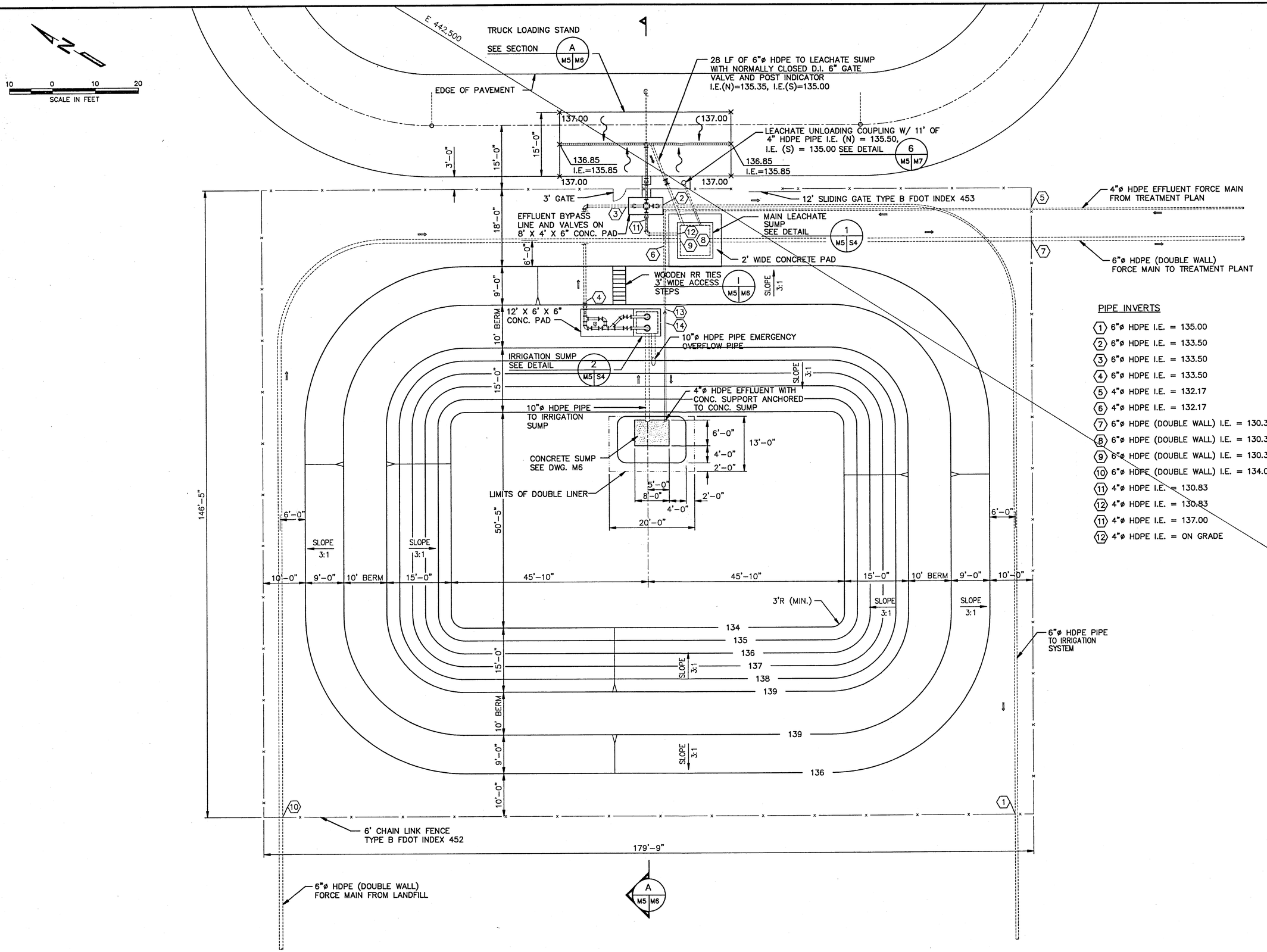
PROJ. NO. 09900016.42
TASK NO. RAS/SRK
DWN. BY: RAS
CHK. BY: LKW/SMH
Q/A REVIEW BY: CTC
APPR. BY: RBG

CADD FILE: MPLLAY2

DATE: FEB. 27, 1992

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

DRAWING NO.
M3 of 8



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

8

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

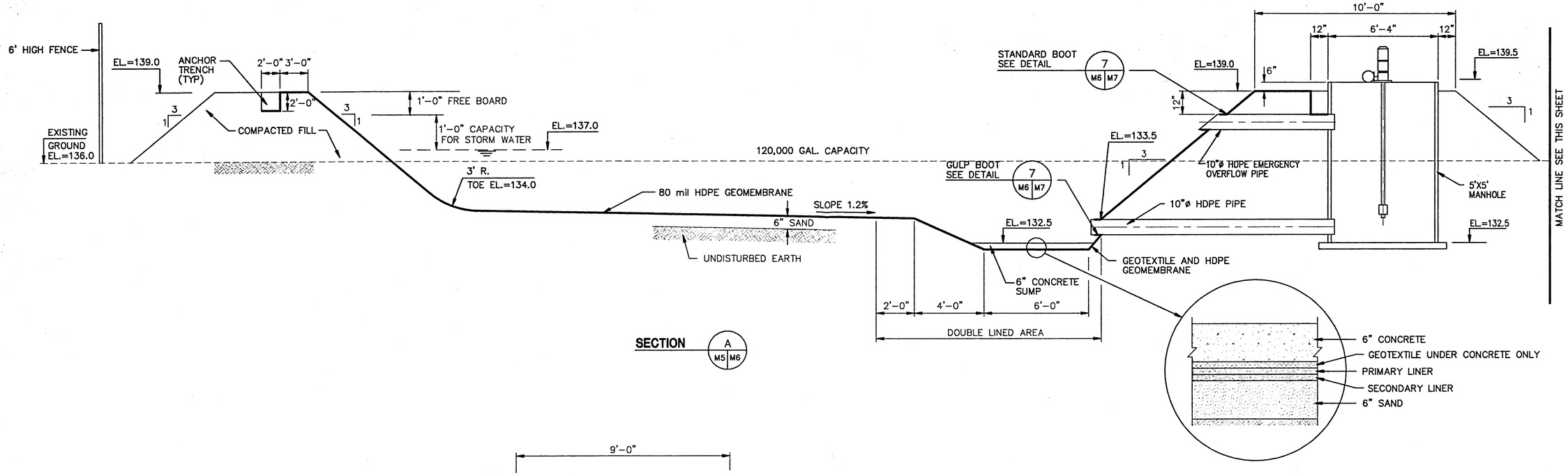
PROJ. NO. 0950018.42 | DSN. BY: KKS/LKW | DWN. BY: BLJ/VDR | CHK. BY: LER/SMH | Q/A REVIEW BY: ERC | APP. BY: RBG

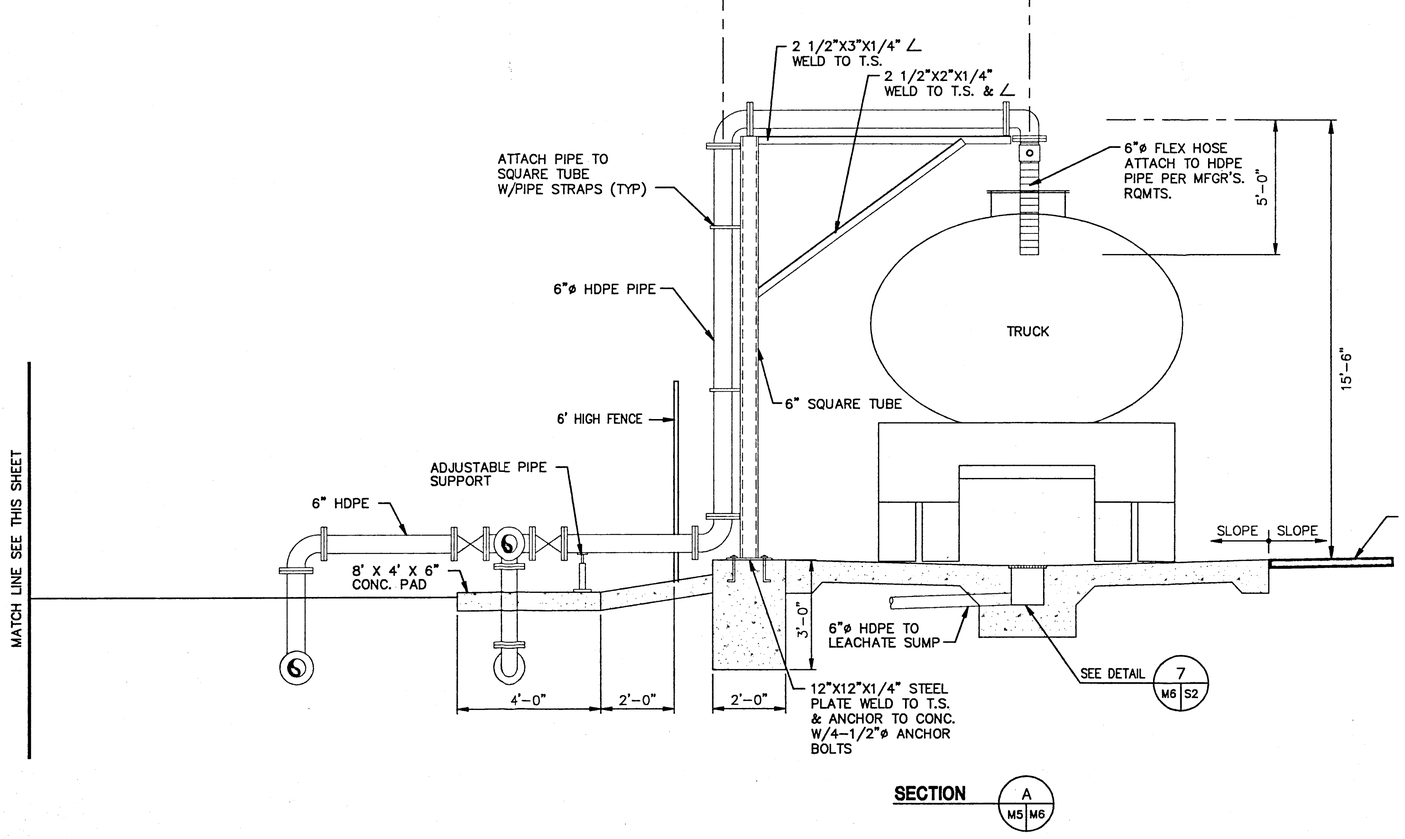
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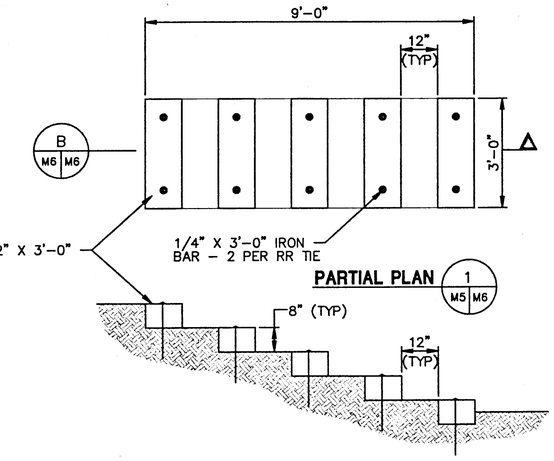
DATE: FEB. 27, 1992

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DRAWING NO. M5 of 8







DRAWING TITLE
PUMP STATION SECTIONS

PROJECT TITLE
SOUTHEAST COUNTY FACILITY LEACHATE TREATMENT AND RECLAMATION FACILITIES

CLIENT
HILLSBOROUGH COUNTY DEPARTMENT OF SOLID WASTE TAMPA, FLORIDA

REV.	DATE	DESCRIPTION	CK. BY

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3621 HUNTSMAN BLVD, SUITE 200, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757

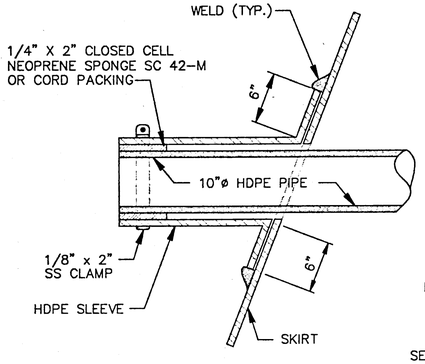
PROJ. NO.	DWN. BY	Q/A RVW BY	APP. BY
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DSN. BY	CHK. BY		
KKS/LKW	LKW/LER		

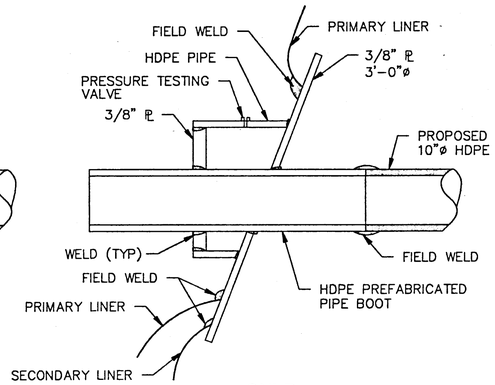
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DATE: FEB. 27, 1992

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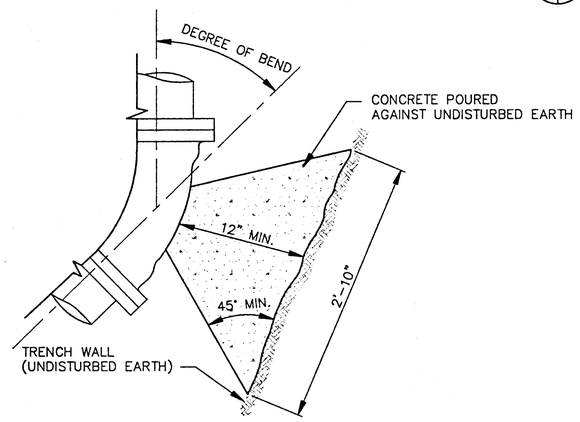
DRAWING NO.
M6 of 8



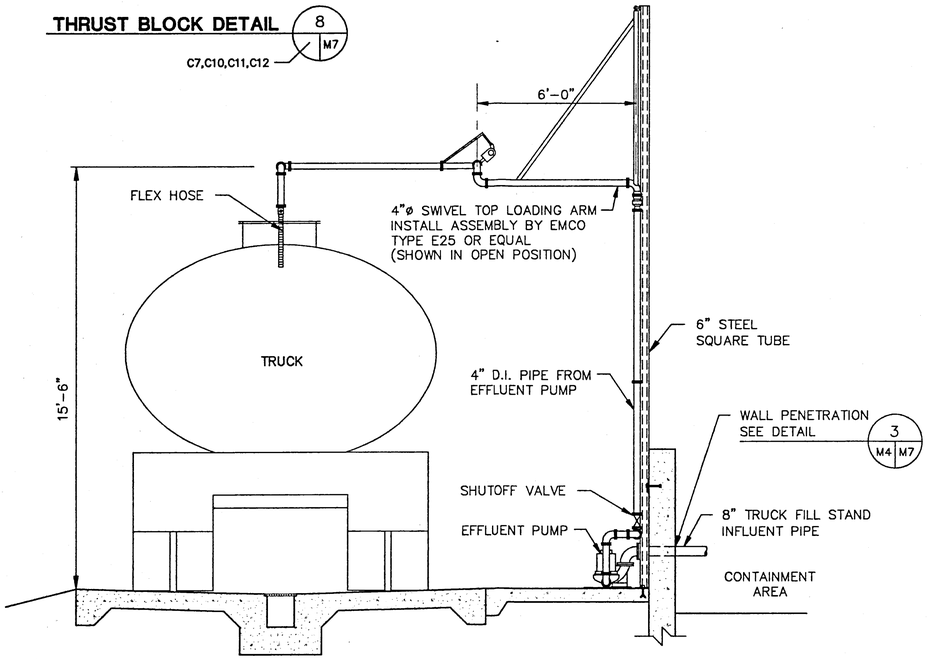


STANDARD **GULP**

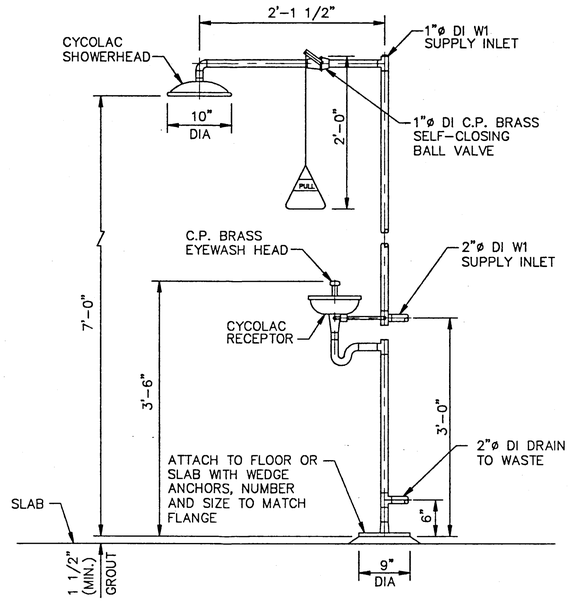
PIPE LINER PENETRATION DETAILS 7 (M6 | M7)



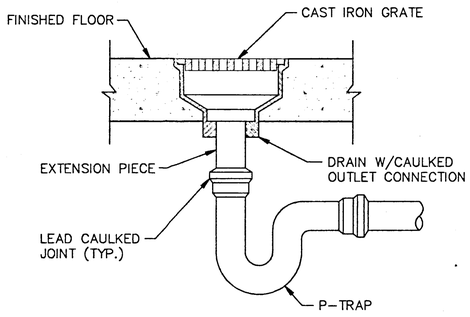
THRUST BLOCK DETAIL 8 (M7)
C7,C10,C11,C12



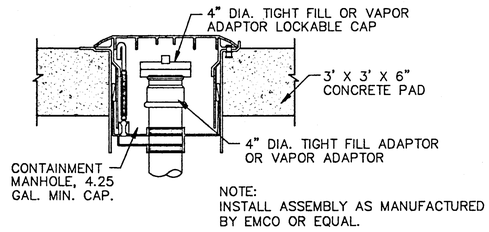
TRUCK LOADING STAND DETAIL 9 (M2 | M7)



EMERGENCY EYEWASH AND SHOWER 4 (M7)
M2,P1

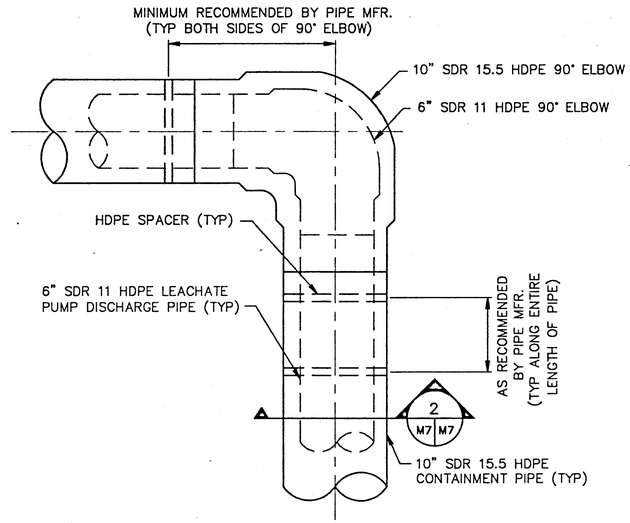


FLOOR DRAIN DETAIL 5 (P1 | M7)

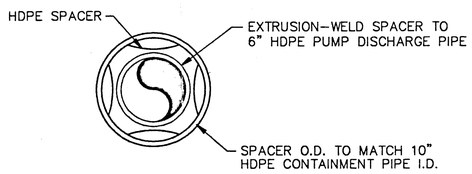


NOTE:
INSTALL ASSEMBLY AS MANUFACTURED BY EMCO OR EQUAL.

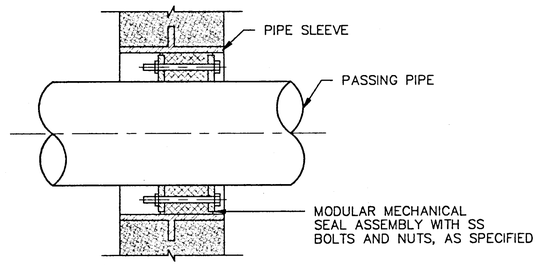
LEACHATE UNLOADING COUPLING DETAIL 6 (M5 | M7)



HDPE DOUBLE WALL PIPE DETAIL 1 (M7)
C4,M3



SECTION 2 (M7 | M7)



WALL PENETRATION SEAL DETAIL 3 (M7)
M4,M8,P2

(10)

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

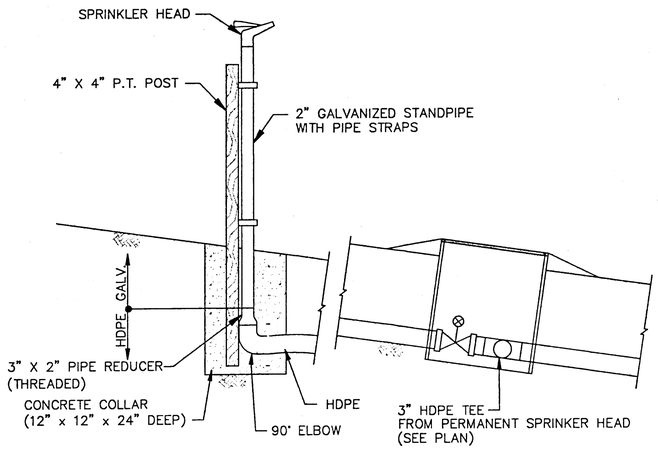
PROJECT NO. 0900018.42 | DSN. BY: BLJ/VDR | DRK. BY: LKW/RAS | D/A REVIEW: ERC | APP. BY: RBG | CHK. BY: LKW/SMH

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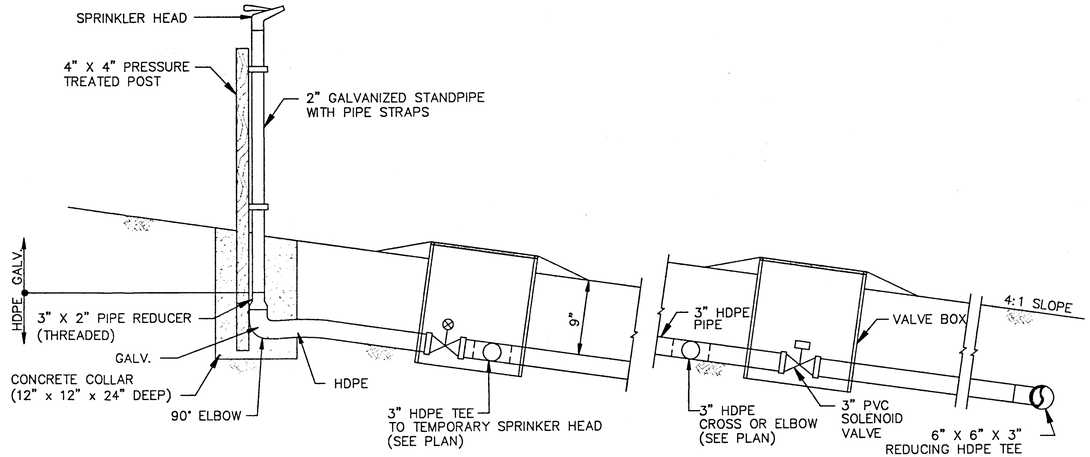
DATE: FEB. 27, 1992

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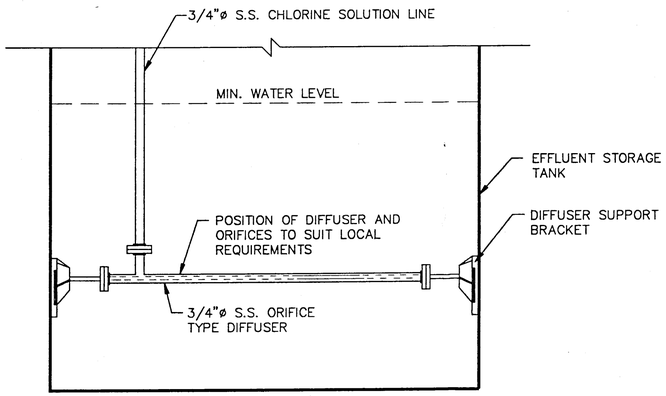
DRAWING NO. **M7** of 8



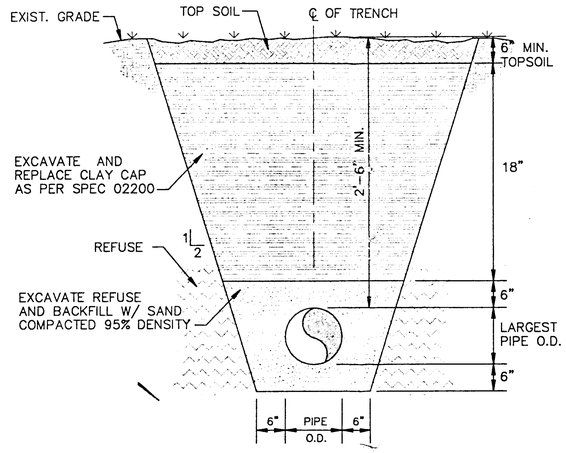
TEMPORARY SPRINKLER DETAIL 4 (C3 | M8)



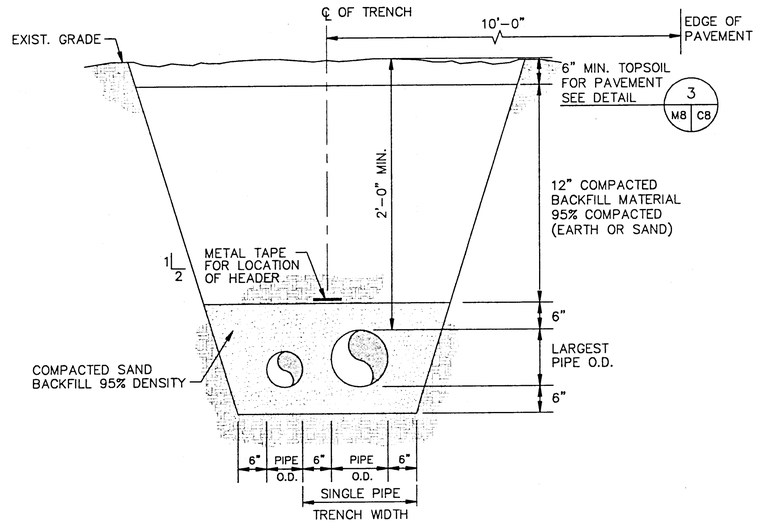
PERMANENT SPRINKLER DETAIL 1 (C3 | M8)



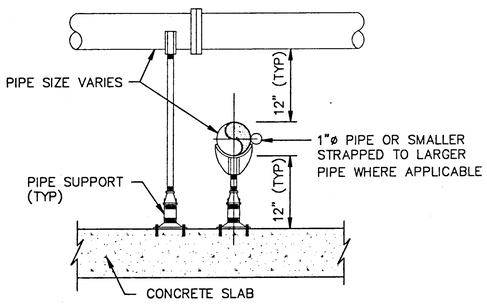
ORIFICE TYPE DIFFUSER DETAIL 8 (M2 | M8)



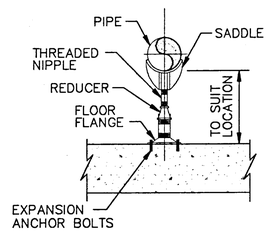
TYPICAL TRENCH DETAIL 5 (C3 | M8)



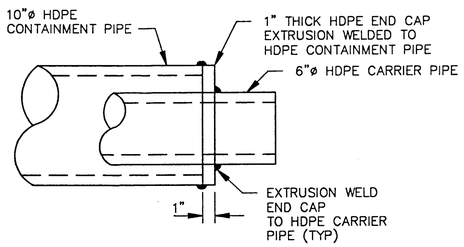
TYPICAL TRENCH DETAIL 2 (M8) — C3,C4,C10–C13



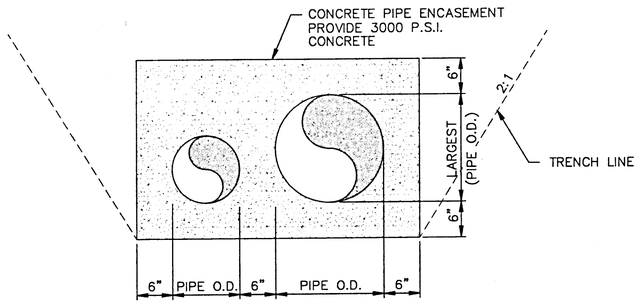
TYPICAL PIPE CROSSING DETAIL 10 (M2 | M8)



ADJUSTABLE PIPE SUPPORT 9 (M2 | M8)



END CAP DETAIL 7 (M8 | M8) — M8,M3



ENCASEMENT DETAIL 3 (C7 | M8)

(11)

CK. BY | DESCRIPTION | DATE | REV.

DRAWING TITLE: **MECHANICAL DETAILS 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

PROJ. NO. 0990018.42 | DSN. BY: LER/LKW | DWN. BY: BLJ/VDR | CHK. BY: LKW/SMH | C/A or W.P. BY: ERC | APP. BY: RBC

CADD FILE: MDET3

DATE: FEB. 27, 1992

SCALE: NOT TO SCALE

DRAWING NO. **M8** of 8