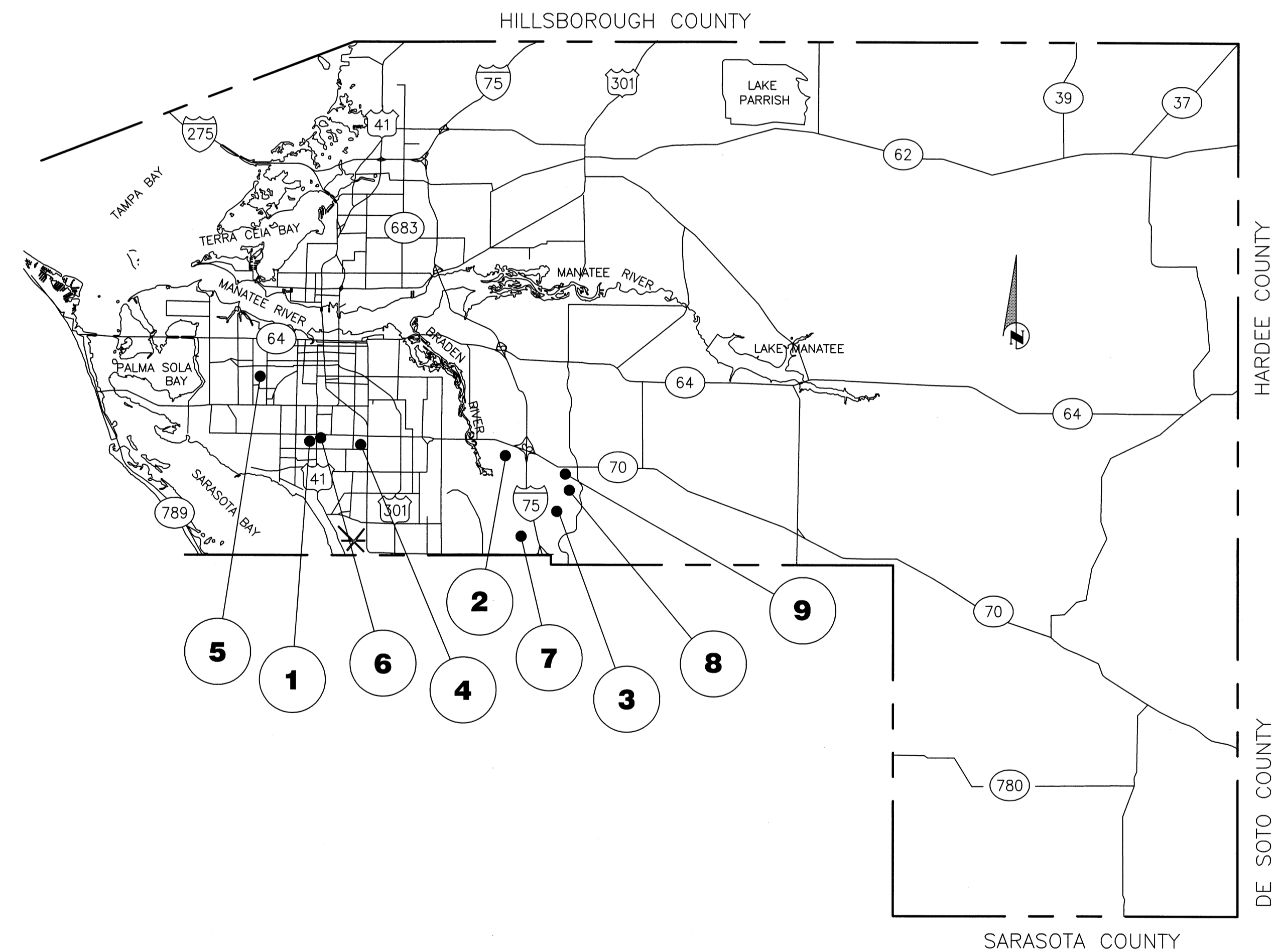


MANATEE COUNTY, FLORIDA LIFT STATION UPGRADES 2010 EMERGENCY LS GENERATORS

#	L.S.NAME/NO.	RTU #	ADDRESS	PROJECT NUMBER
1	#29-A	129	1801 55TH AVE. W.	402-5124980
2	TARA 3	348	6718 PLEASANT HILL ROAD	402-5124181
3	LINGER LODGE #14	325	7030 85TH ST. CT. E. (LINGER LODGE RD)	402-5124580
4	#21-A	432	5503 12TH ST. E.	402-5125180
5	#16-D	211	4629 26TH AVE. W.	402-5125280
6	#23-A	410	1313 53RD AVE. W.	402-5125080
7	UNIVERSITY PLACE 1	627	8005 PLANTERS KNOLL TERRACE	402-5124080
8	RIVER CLUB 2	495	6700 PINEHURST PL.	402-5124380
9	RIVER CLUB 1	494	6310 RIVER CLUB BLVD.	402-5124381




PROJECT DESCRIPTION

INSTALL SIX (6) DIESEL AND THREE (3) NATURAL GAS EMERGENCY GENERATOR SETS AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING, AT HIS OWN EXPENSE, WHAT IS NECESSARY TO OBTAIN ALL PERMITS REQUIRED FOR THE WORK. THE CONTRACTOR IS NOT RESPONSIBLE FOR INSTALLING NATURAL GAS SERVICE LINES AND SETTING UP GAS SERVICE METERS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING A GAS LINE FROM THE INSTALLED NATURAL GAS EMERGENCY GENERATORS AND CONNECT TO THE EXISTING GAS METERS/BALL VALVES INSTALLED BY TECO. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING RECORD DRAWINGS TO THE COUNTY.

SEC, TWP, RGE			
SURVEY BOOK NO.			
PROJECT NUMBER			
Surveyed	By	Checked	Date
Drawn	JSS		4/29/09
Designed	JAA		

NOTE:
THESE PLANS DO NOT REFLECT A TRUE BOUNDARY OR RIGHTS-OF-WAY SURVEY. THE LOCATION OF THE STREET RIGHTS-OF-WAY LINES SHOWN IS APPROXIMATE AND IS BASED ON INFORMATION CONTAINED IN THE SUBDIVISION PLATS, RIGHTS-OF-WAY MAPS ON RECORD IN MANATEE COUNTY AND ON TOPOGRAPHIC DATA COLLECTED ON THE ROUTE SURVEY OF THE RIGHTS-OF-WAY. CONSEQUENTLY THE RIGHTS-OF-WAY LINES SHOWN ARE NOT INTENDED TO INDICATE THE EXACT PROPERTY CORNERS.

JOHN A. ARMSTRONG, JR. 45802
Engineer, Reg. No.
John A. Armstrong
02/09/10
Signature & Date

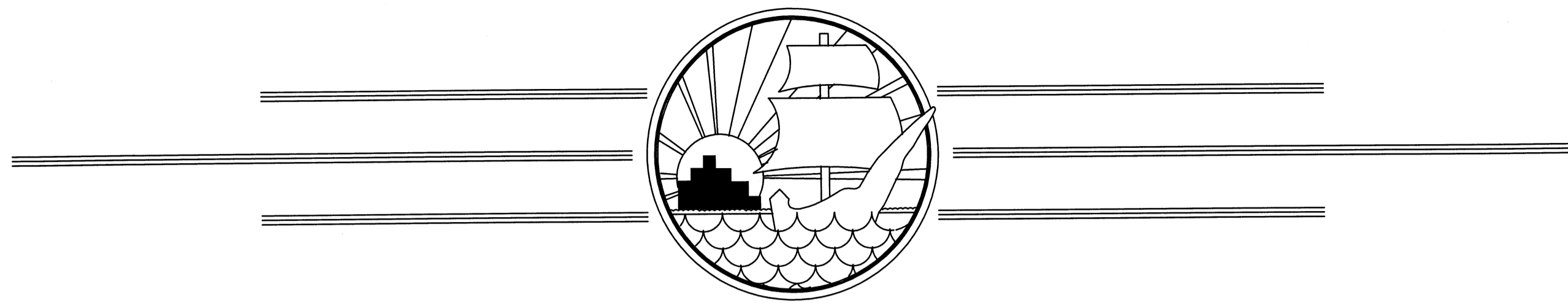
PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES
2010 EMERGENCY LS GENERATORS**

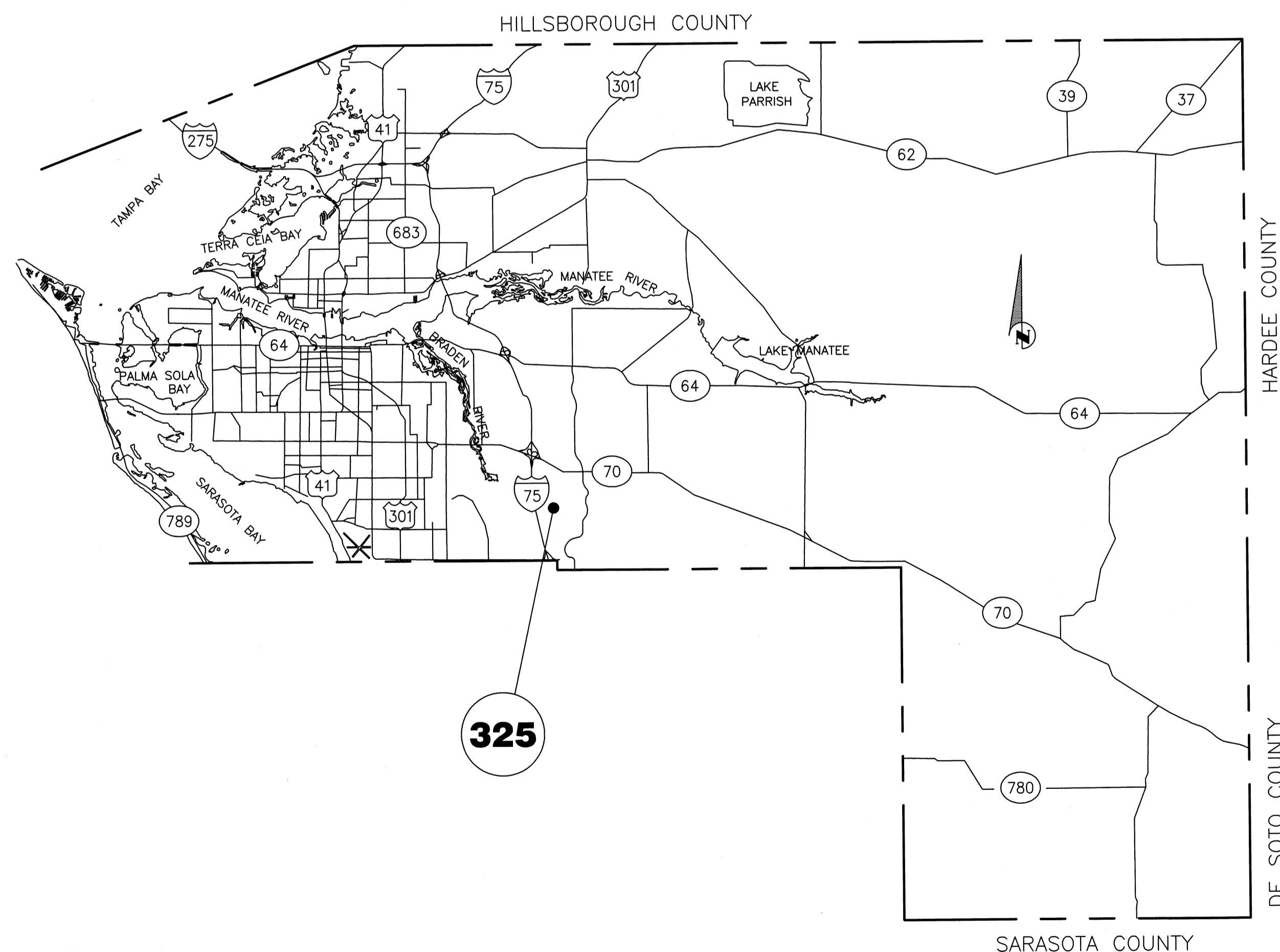
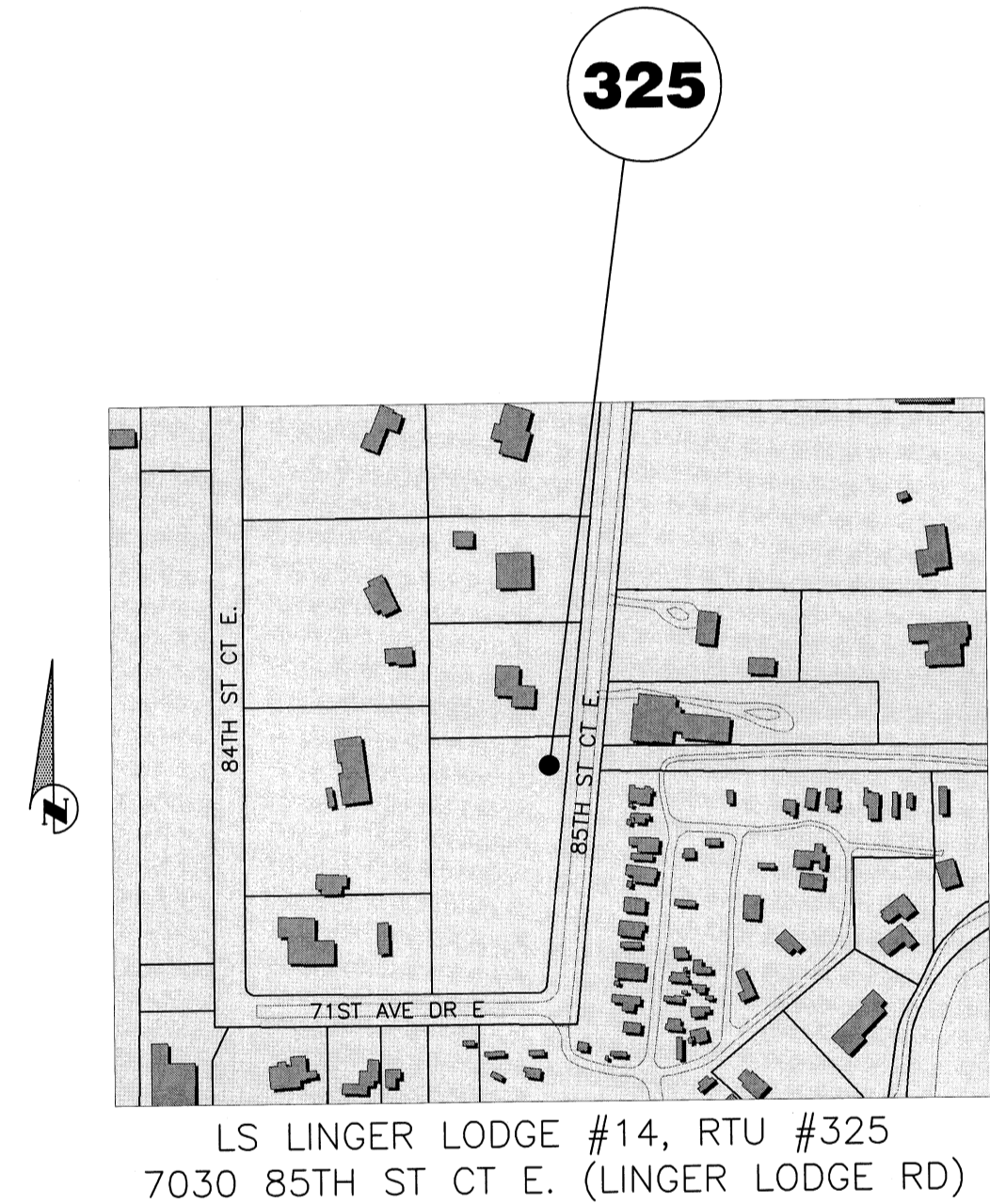
COVER SHEET

Sheet
COVER



MANATEE COUNTY, FLORIDA LIFT STATION UPGRADES, 2010 LS LINGER LODGE #14, RTU #325 402-5124580

NOVEMBER 2009



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |

PROJECT DESCRIPTION

INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

SEC, TWP, RGE	25/35S/18E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124580		
	By	Checked	Date
Surveyed	ZNS	-	4/29/09
Drawn	JSS		
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/09/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

COVER SHEET

Sheet 1 4

S:\PMD_Engineering\Share\Util_Eng_Design\Proj\San_Swr - LS Upgrades\Egema\2010_Egema\RTU_325_Linger_Lodge\14.dwg, 1-Cover_Sheet, 11/9/2009 1:42 PM Steve Shoun, 1:1, D-Arch (24"x36")

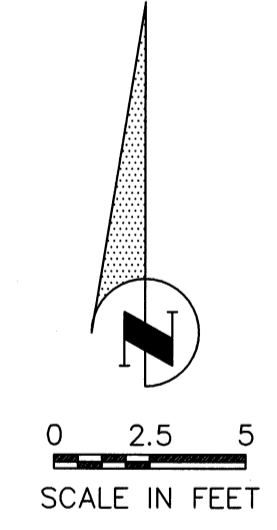
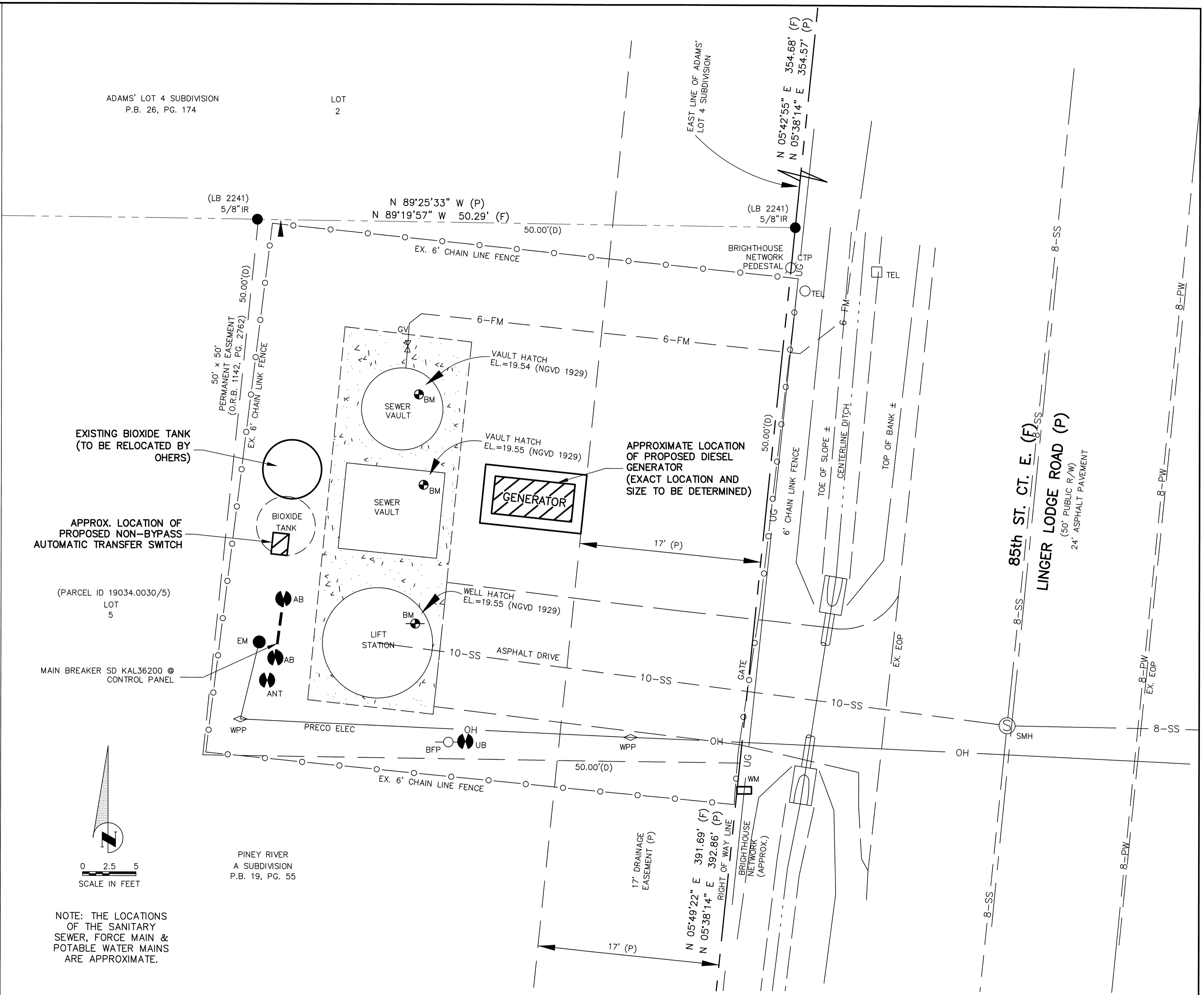
S:\PMD_Engineering\Share\JAH_Eng_Design\Proj\2010_Egna\RTU_325_Linger_Lodge\RTU_325_Linger_Lodge_#14.dwg, 3-Site Plan, 11/06/2009 1:42 PM Shao Shoun, 1:1, D-Arch (24"x36")

NOTES:

- BEARINGS ARE BASED ON THE EAST LINE OF ADAMS' LOT 4 SUBDIVISION, HAVING A BEARING OF N 05°42'55" E, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM MANATEE COUNTY GIS M 017.
- THE PROPERTY LIES WITHIN FLOOD ZONE "X" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0365 C, REVISED, JULY 15, 1992.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, BENCH MARK AT THE NORTHEAST CORNER OF ADAMS' LOT 4 SUBDIVISION CONCRETE MONUMENT FOUND, HAVING AN ELEVATION OF 20.17 AS SHOWN ON PLAT.

LEGEND:

IR	IRON ROD	IR	IRON ROD FOUND AS NOTED
CM	CONCRETE MONUMENT	CM	4"x4" CONCRETE MONUMENT FOUND AS NOTED
R/W	RIGHT OF WAY LINE	SMH	SANITARY SEWER MANHOLE
ID	IDENTIFICATION	BFP	BACK FLOW PREVENTER
LB	LICENSED BUSINESS	GV	FORCE MAIN GATE VALVE
O.R.B.	OFFICIAL RECORD BOOK	WPP	WOOD POWER POLE
P.B.	PLAT BOOK	WM	WATER METER
P.G.	PAGE	UB	UTILITY BOX
(F)	FIELD DATA	ANT	ANTENNA
(P)	PLAT DATA	AB	ALARM BOX
(D)	DEED DATA	EM	ELECTRIC METER
EL	ELEVATION	CTP	CABLE TV PEDESTAL
NGVD	NATIONAL GEODETIC VERTICAL DATUM	TEL	VERIZON PULL BOX
Δ	CENTRAL ANGLE	TELO	VERIZON PEDESTAL
R	RADIUS	—	MITER END SECTION
L	ARC LENGTH	OH	OVER HEAD LINES
T	TANGENT LENGTH	BM	BENCH MARK
CTP	CABLE TELEVISION PEDESTAL	19.55	EXISTING SPOT ELEVATION
TEL	TELEPHONE		
SHM	SANITARY SEWER MANHOLE		
WM	WATER METER		
UB	UTILITY BOX		
BFP	BACK FLOW PREVENTER		
WPP	WOOD POWER POLE		
ANT	ANTENNA		
AB	ALARM BOX		
EM	ELECTRIC METER		
GV	GATE VALVE		
BM	BENCH MARK		
OH	OVER HEAD LINES		
FM	FORCE MAIN		
RW	REUSE MAIN		
PW	POTABLE WATER MAIN		
EOP	EDGE OF PAVEMENT		



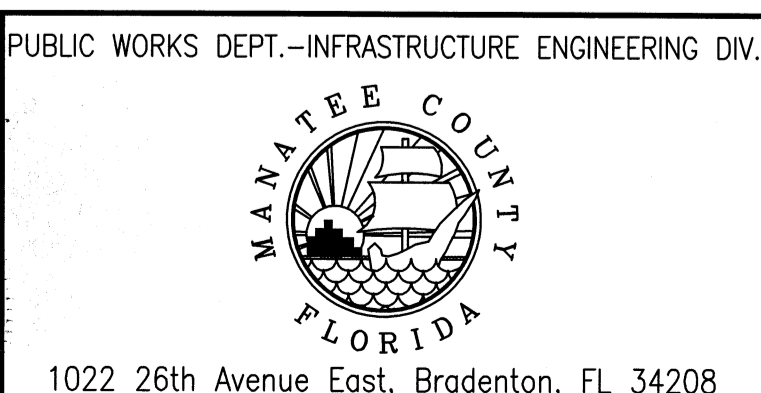
NOTE: THE LOCATIONS OF THE SANITARY SEWER, FORCE MAIN & POTABLE WATER MAINS ARE APPROXIMATE.

LS LINGER LODGE #14, RTU #325
7030 85TH ST CT E. (LINGER LODGE RD)

SEC, TWP, RGE	25/35S/18E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124580		
Surveyed	By	Checked	Date
Drawn	JNS	-	4/29/09
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
1/06/09
Signature & Date

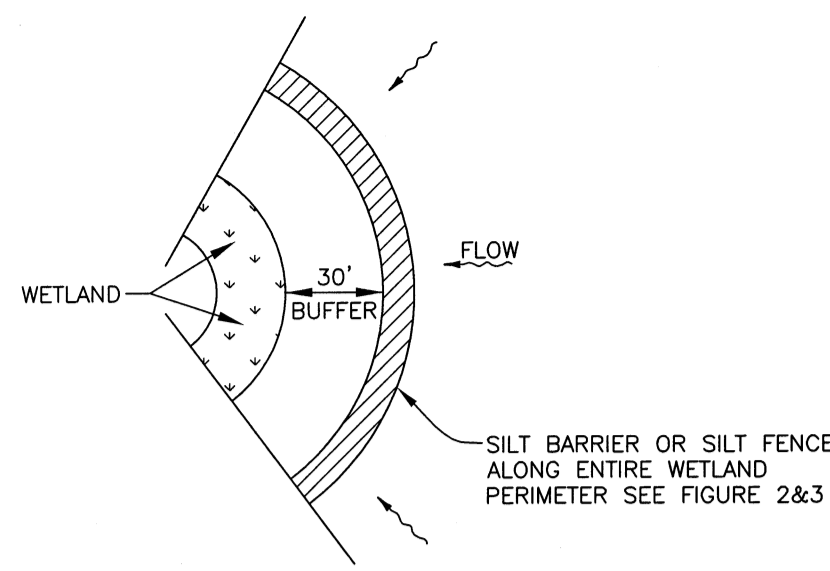


NO.	REVISION DESCRIPTION	BY	DATE

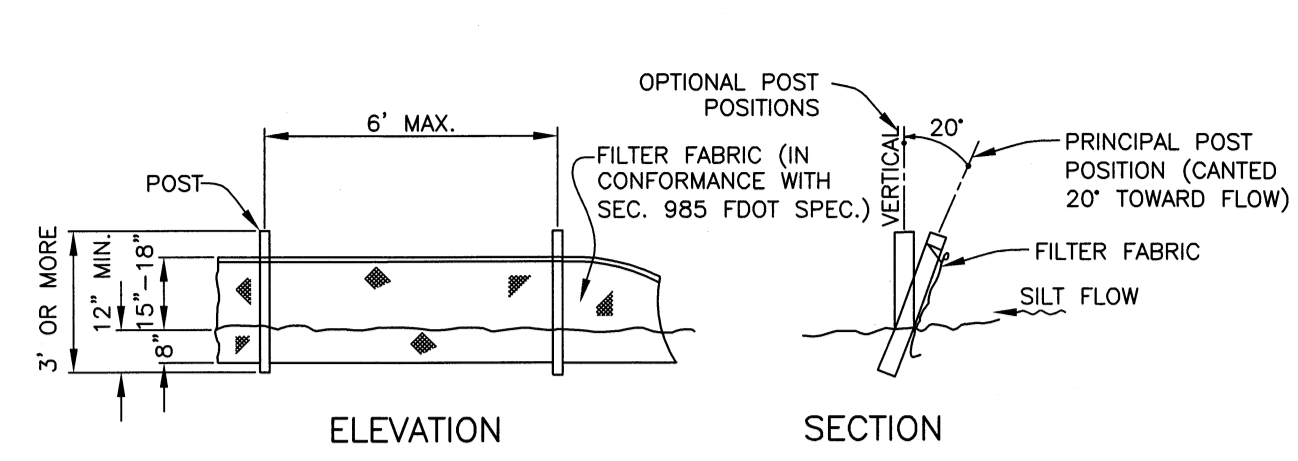
**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

SITE PLAN

Sheet 3
4

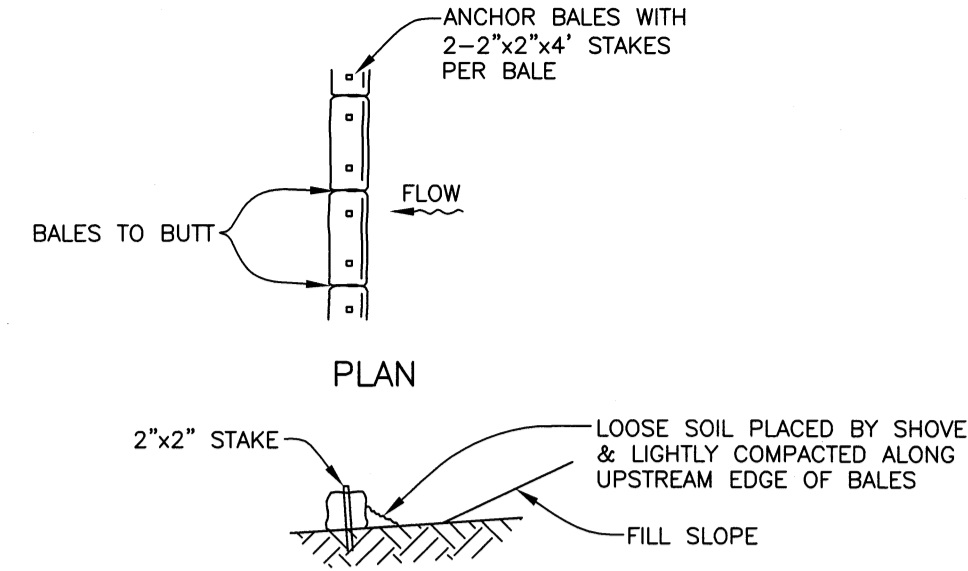


WETLAND BUFFER
FIGURE 1

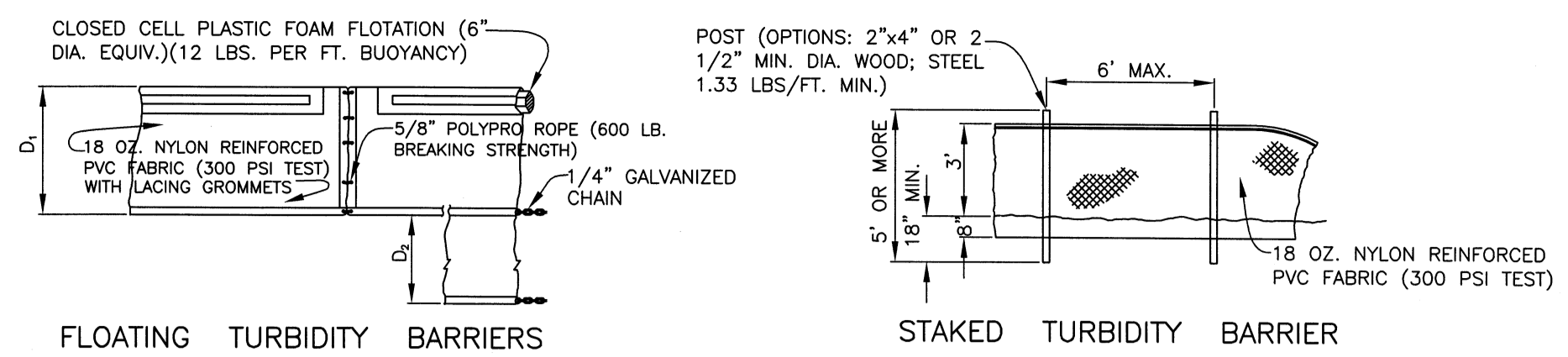


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

TYPICAL SILT FENCE
FIGURE 2

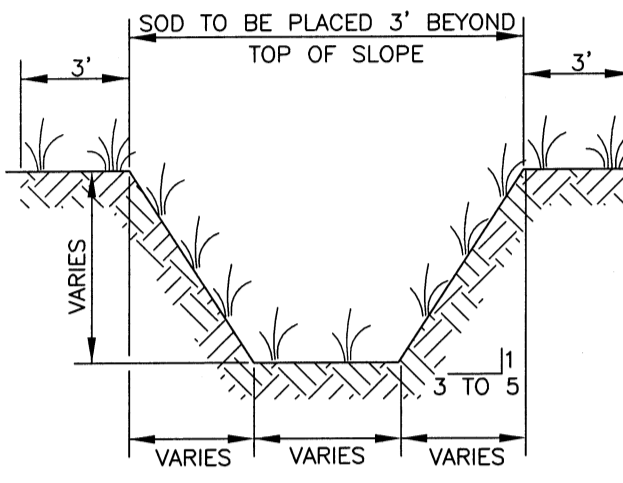


TYPICAL BALE SILT BARRIER
FIGURE 3

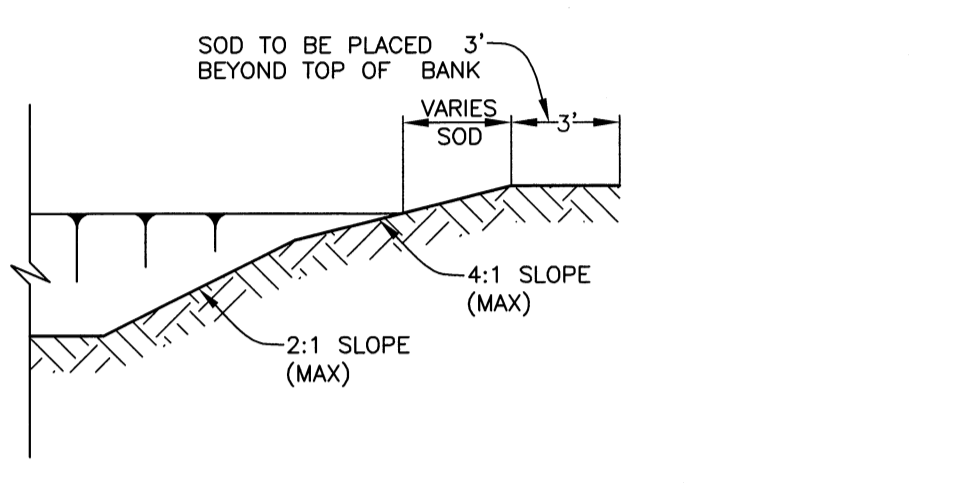


NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

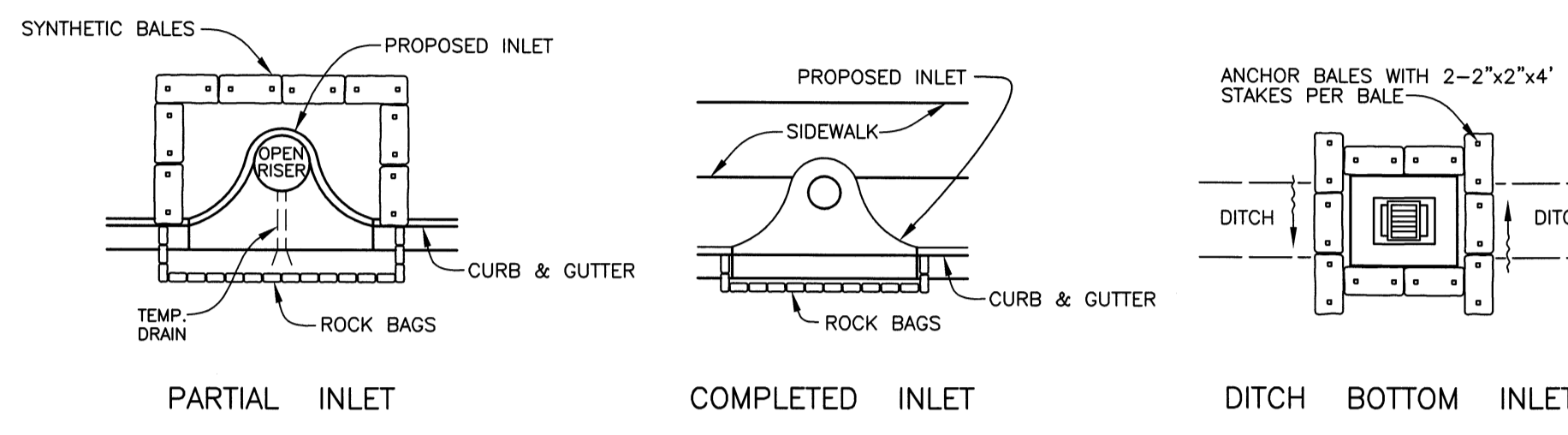
TURBIDITY BARRIERS
FIGURE 4



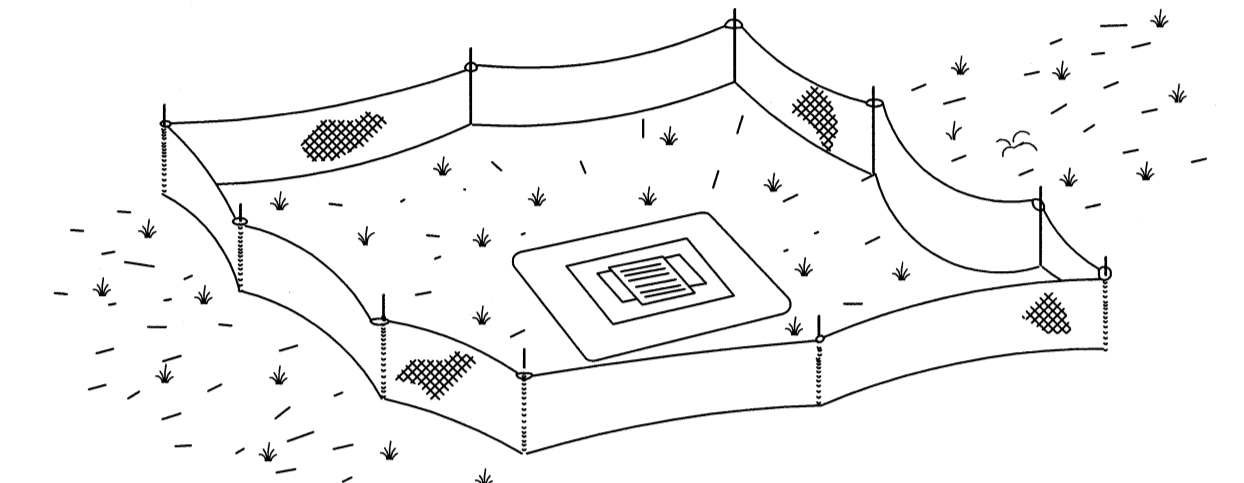
TYPICAL SWALE SECTION
FIGURE 5



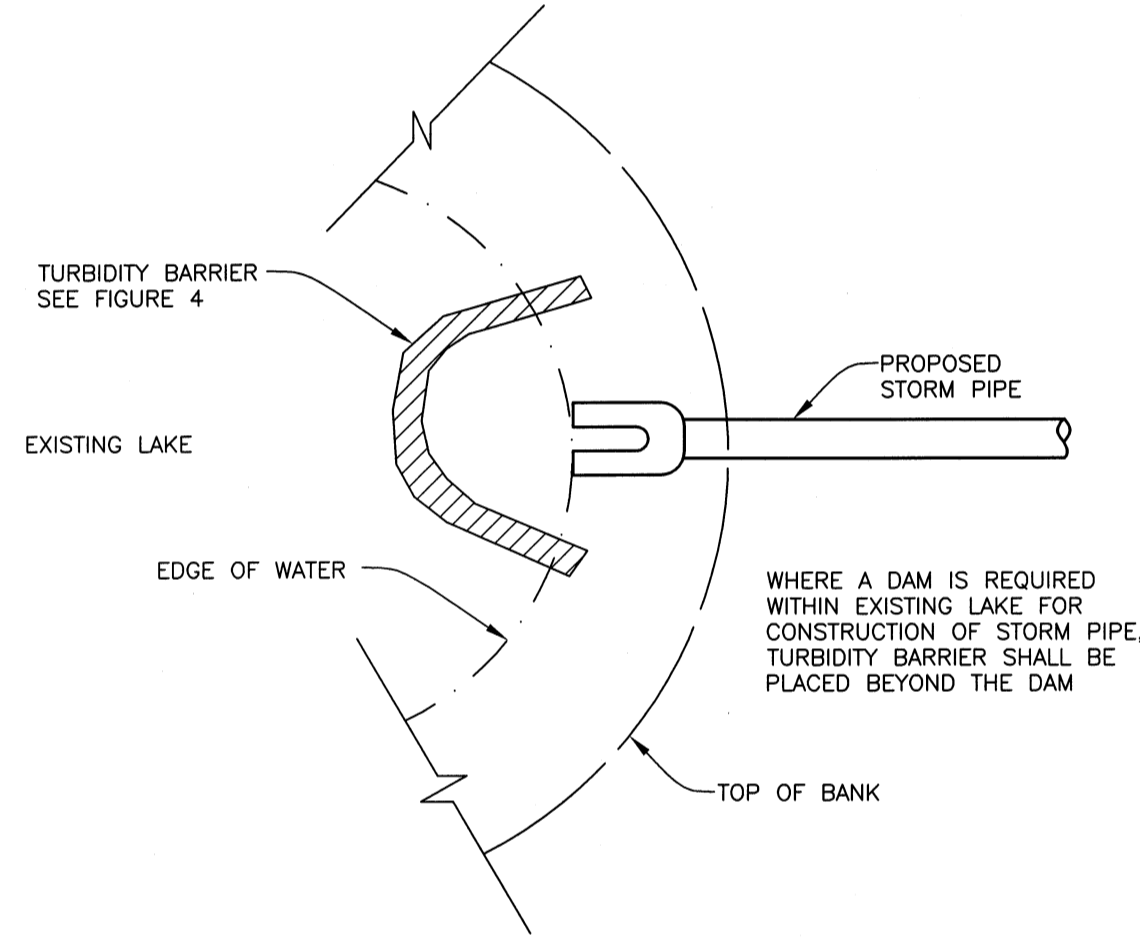
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



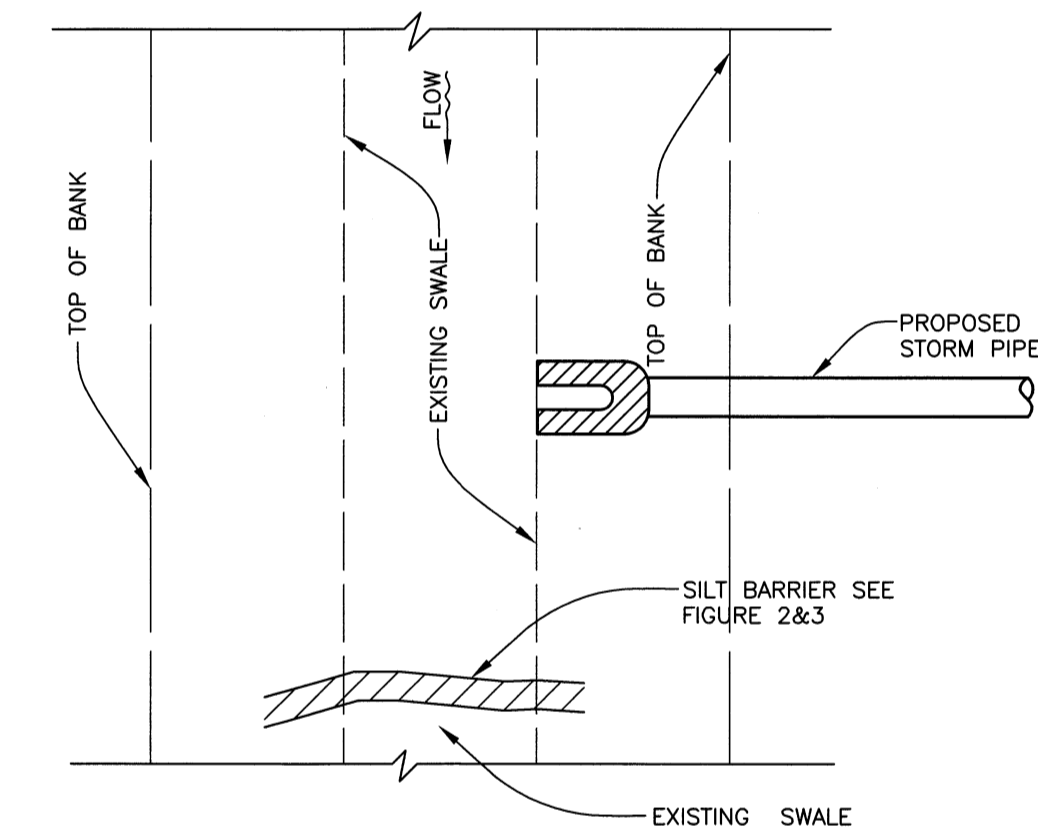
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



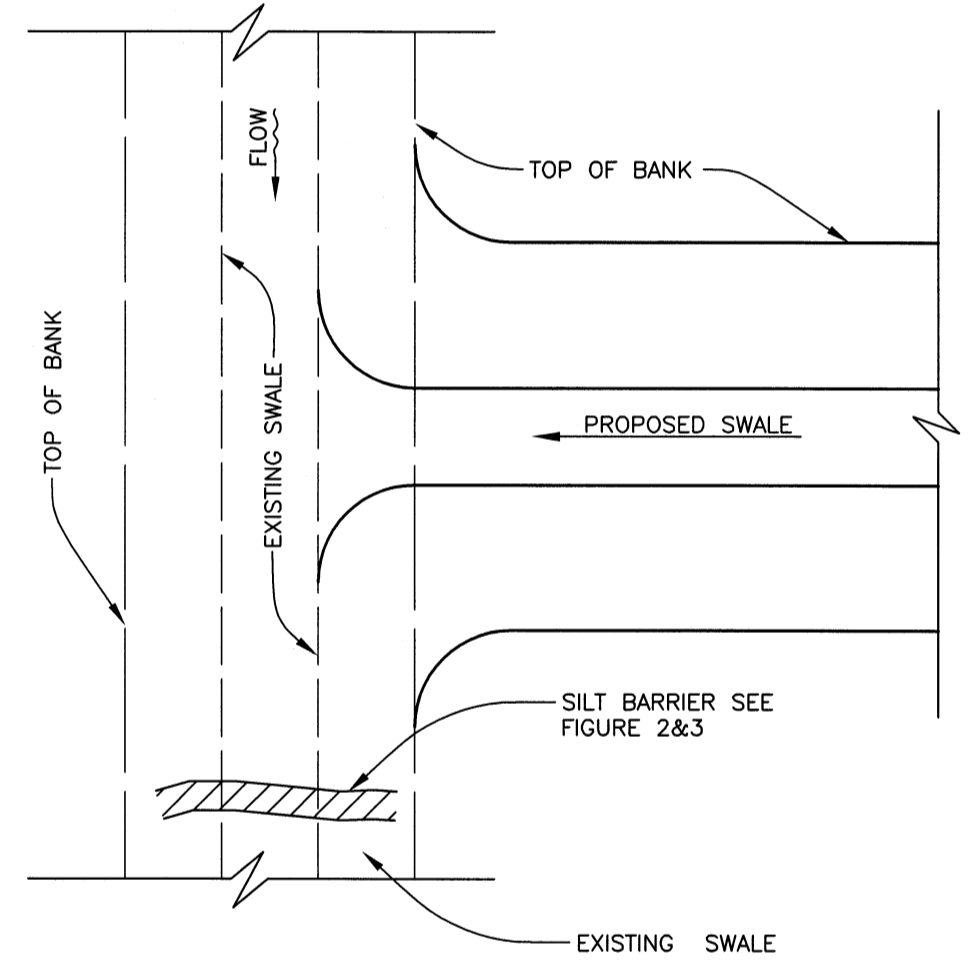
TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



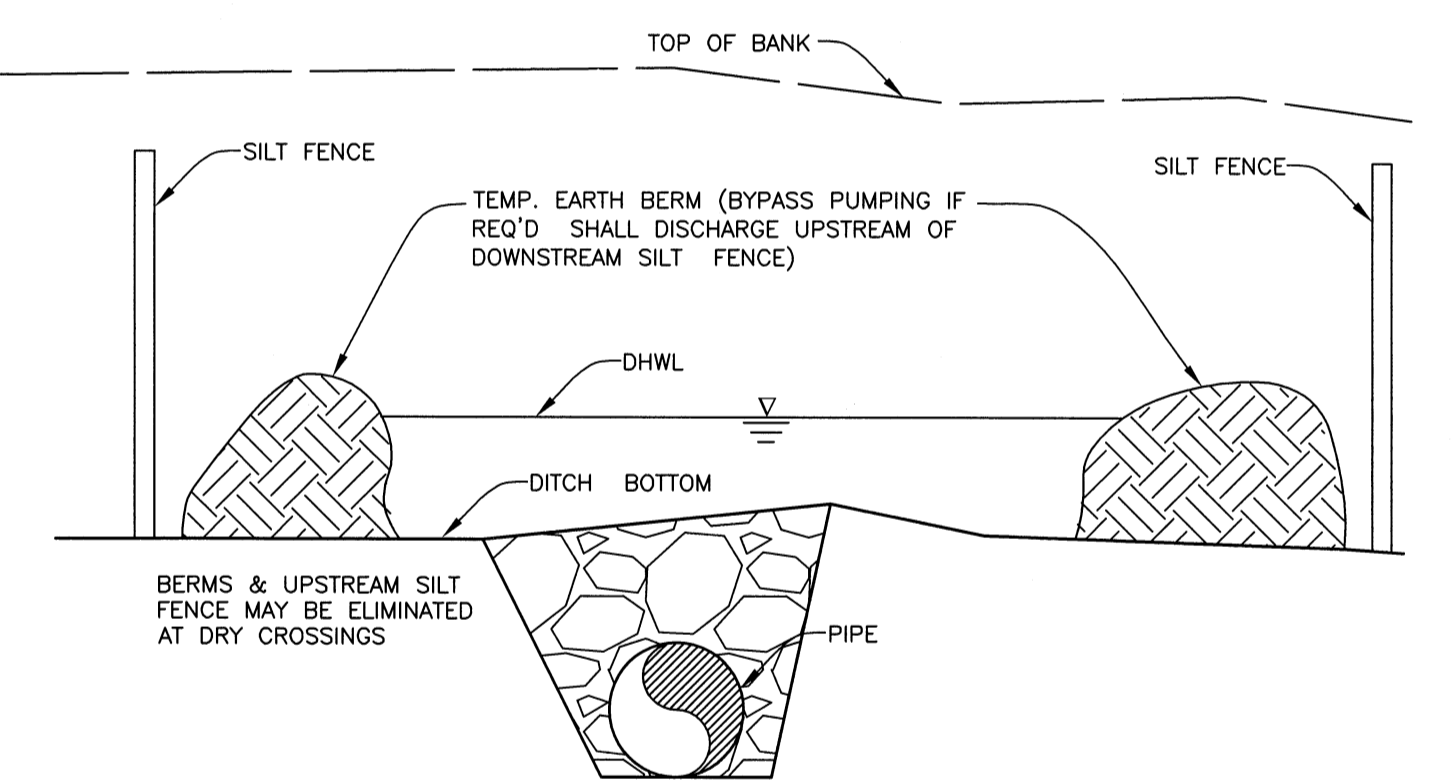
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



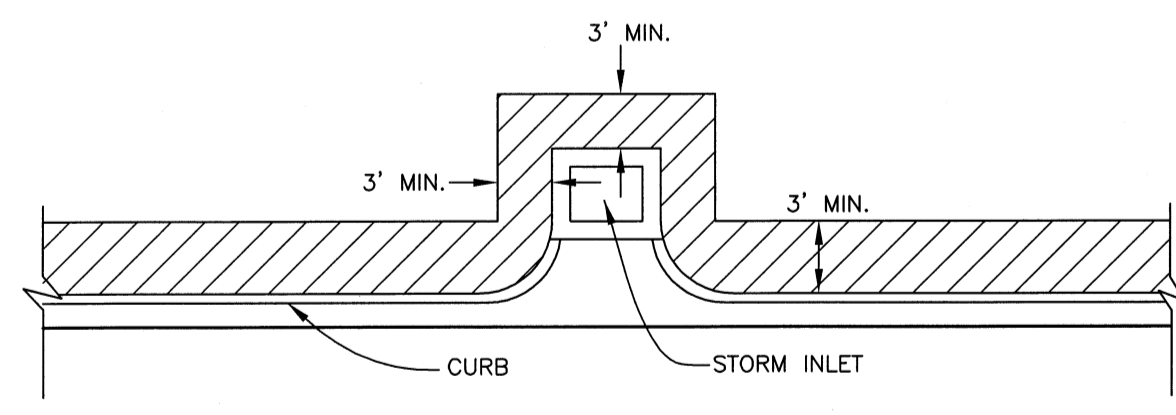
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



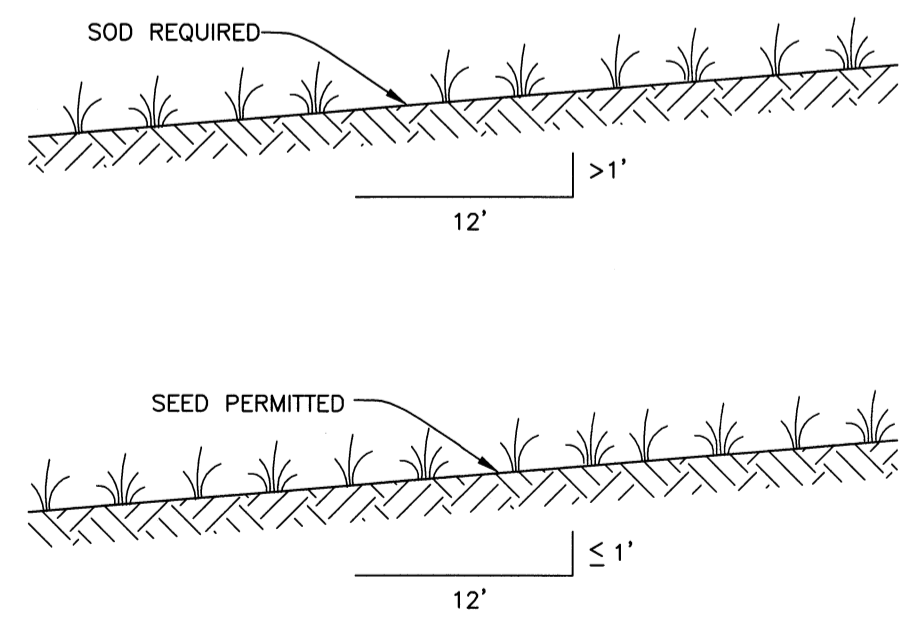
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



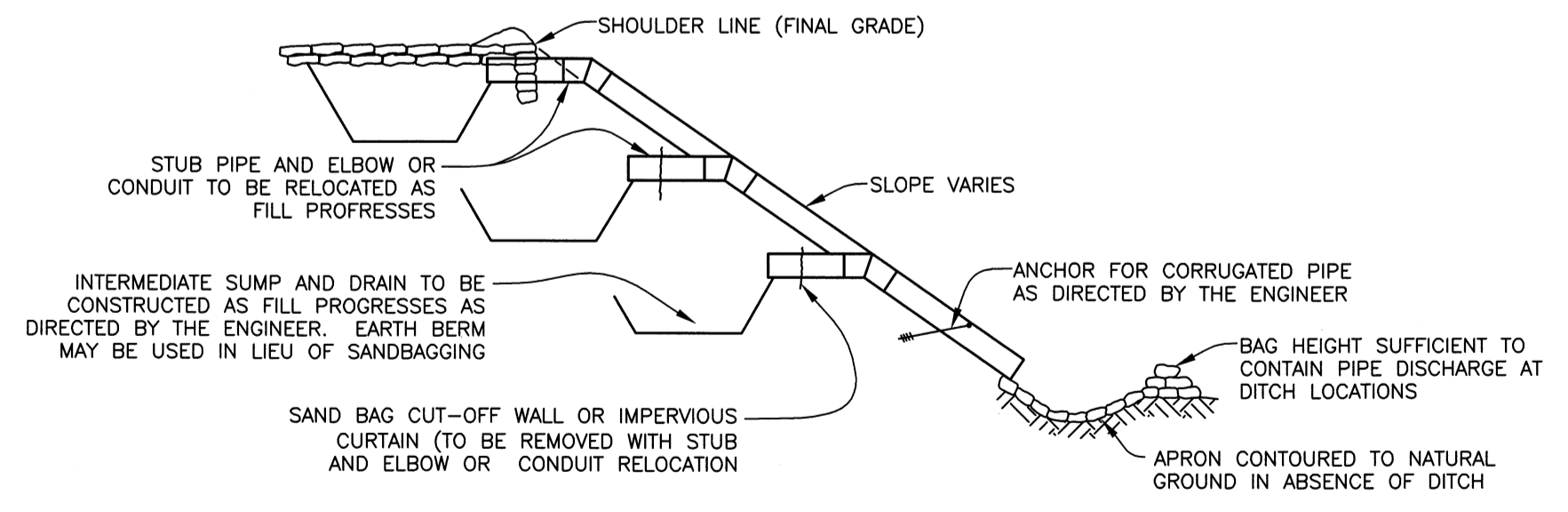
UNDERGROUND PIPE CROSSING
FIGURE 12



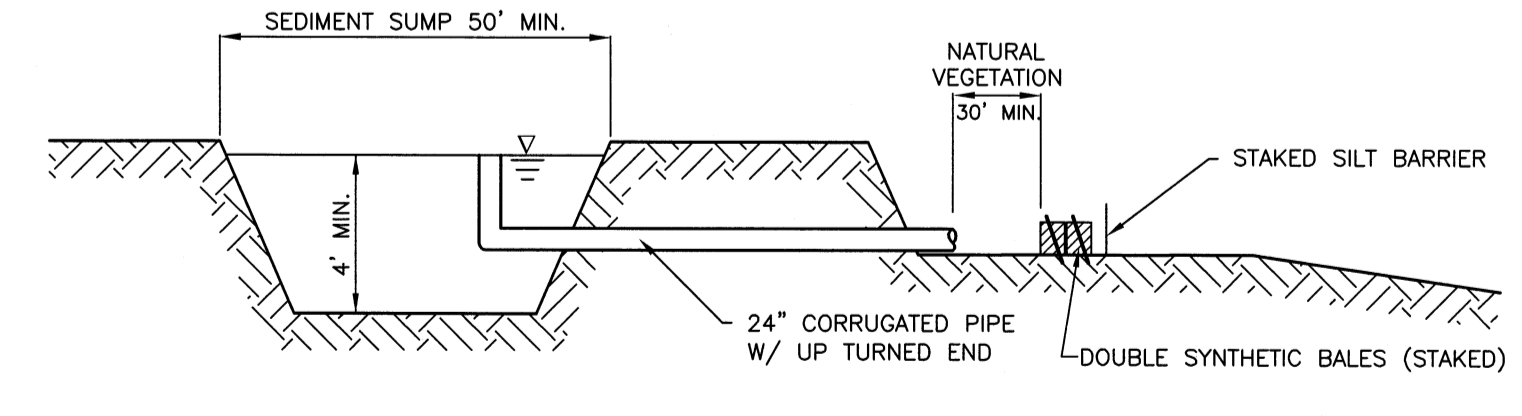
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



SECTION AA
TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

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SEC, TWP, RGE	25/35S/18E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124580		
Surveyed	By	Checked	Date
Drawn	JSS	-	4/29/09
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/06/09
Signature & Date

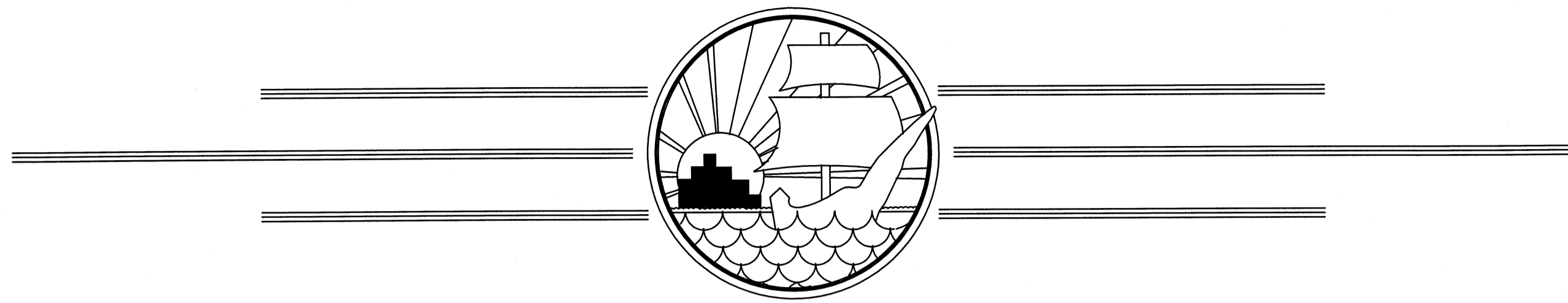
PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS
EROSION CONTROL

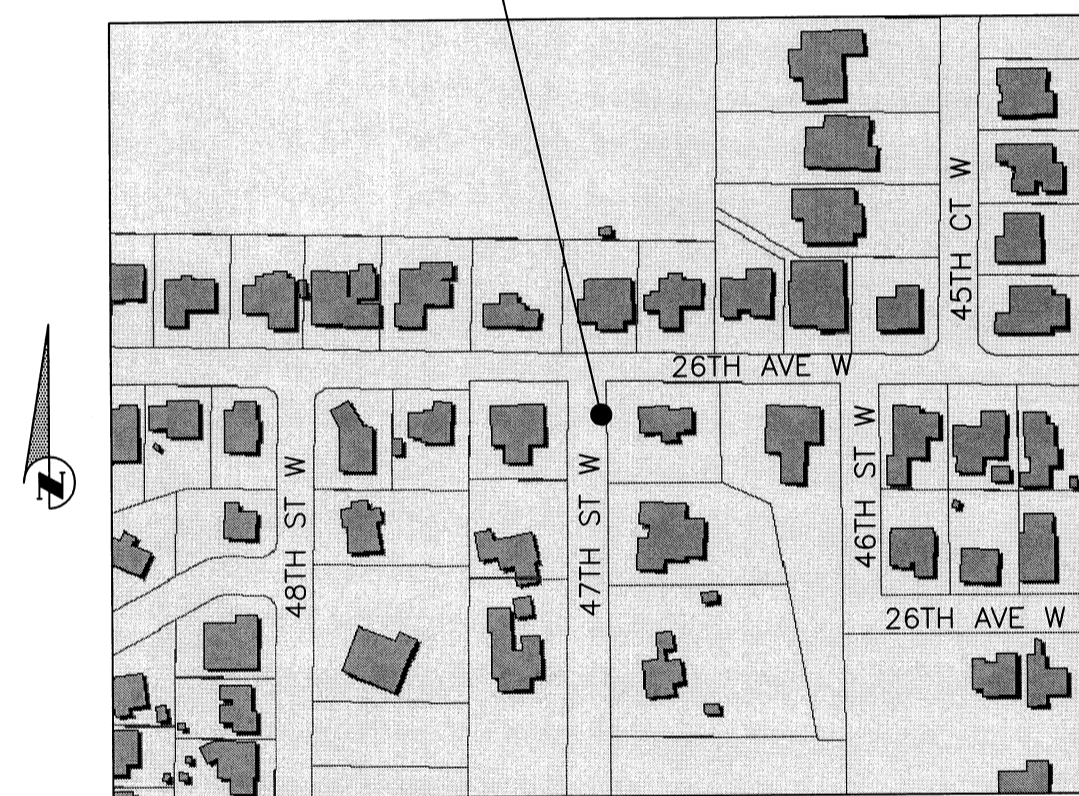
Sheet 4



MANATEE COUNTY, FLORIDA LIFT STATION UPGRADES, 2010 LS 16-D, RTU #211 402-5125280

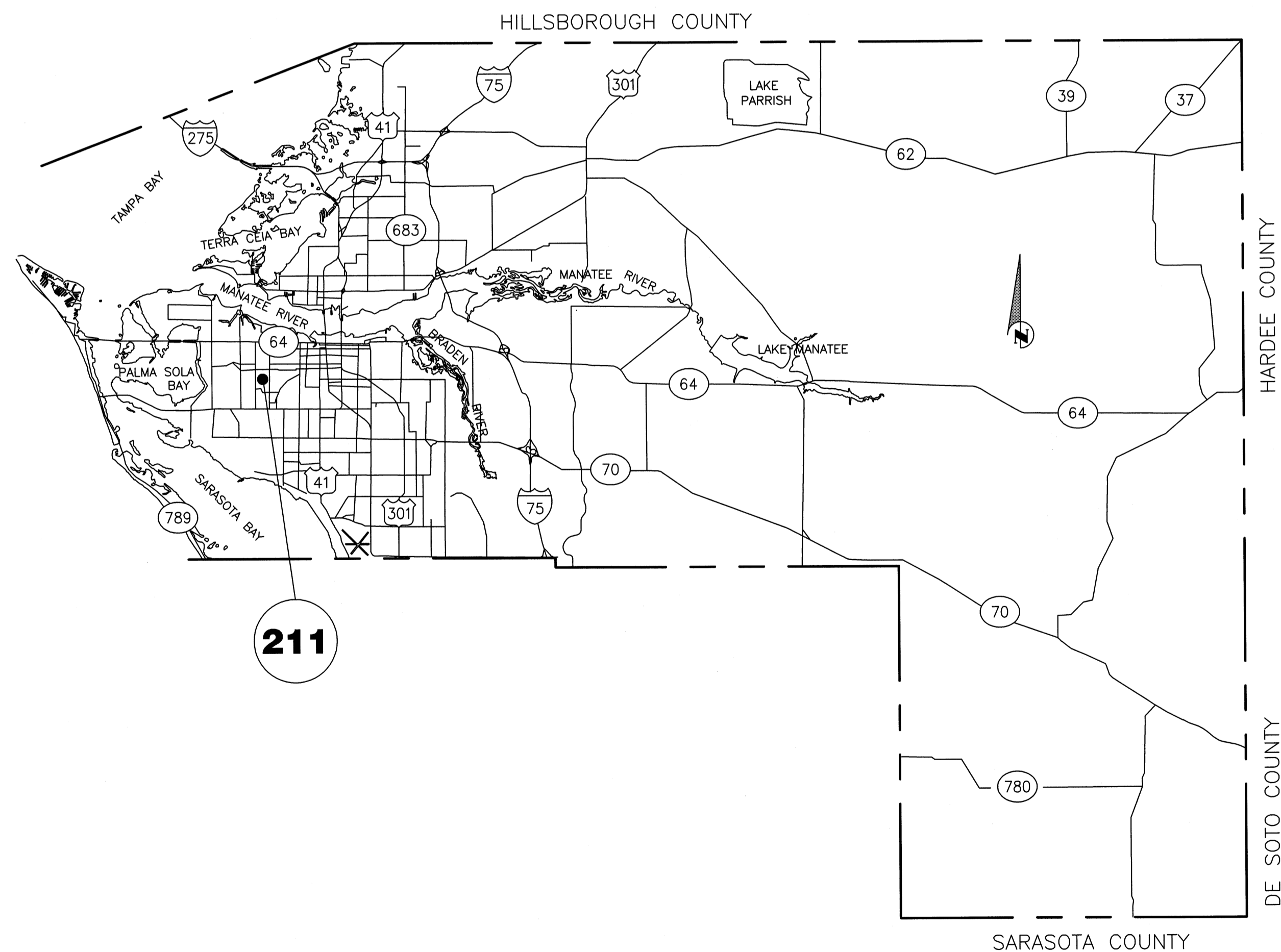
NOVEMBER 2009

211



LS 16-D, RTU #211
4629 26TH AVE W.

VICINITY MAP
N.T.S.



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |


PROJECT DESCRIPTION

INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

SEC, TWP, RGE	4, 35S, 17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125280		
By	Checked	Date	
Surveyed	ZNS	-	4/15/09
Drawn	JSS		
Designed	JAA		

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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/06/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

COVER SHEET

Sheet 1 4

S:\P\02-Engineering\Shore\Util_Eng_Design\Proj\LS-16-D\LS 16-D\01\DWG\Gen\RTU 211 LS 16-D.dwg, 11/6/2009 1:40 PM, Sheet Show, 1:1, D=Arch (24"x36")

GENERAL

- 1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: MICHAEL O'REILLY AND CAN BE REACHED AT (941) 708-7450; EXT. 7344
2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE PROJECT MANAGER.
3. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY PUBLIC WORKS UTILITY STANDARDS AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.

SAFETY

- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90-96, LAWS OF FLORIDA EFFECTIVE OCTOBER 1, 1990 AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.650, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
11. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.

ENVIRONMENTAL

- 14. WHEN A BENTONITE SPILL OR FRACK-OUT OCCURS OR THERE IS A LOSS OF RETURN INDICATING EXCESSIVE SEEPAGE OR LOSS OF DRILLING FLUID, DRILLING MUST BE STOPPED UNTIL THE LOCATION OF THE SPILL IS IDENTIFIED. UNDER NO CIRCUMSTANCES WILL DRILLING CONTINUE WHEN A SPILL IS APPARENT.
15. ONCE LOCATED, THE BENTONITE SPILL MUST BE ISOLATED AND SEEPAGE INTO ANY NEARBY WATER BODIES WILL BE BLOCKED DEPENDING ON THE DEGREE OF THE SPILL. THE ISOLATED BENTONITE MUST BE REMOVED MANUALLY OR MECHANICALLY AND DISPOSED OF BY APPROPRIATE MEANS OR REUSED.

RIGHT-OF-WAY

- 25. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
26. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

- 30. THE CONTRACTOR SHALL COORDINATE THE CUTTING OF DRIVEWAYS WITH THE PROPERTY OWNER PRIOR TO CUT. ALL DRIVEWAYS WILL BE IN PASSABLE CONDITION AT THE END OF THE WORK DAY AND FULLY RESTORED PER SECTION 02575.
31. A RIGHT OF ENTRY AGREEMENT SHALL BE OBTAINED BY THE PROJECT MANAGER FROM THE PROPERTY OWNER BEFORE ANY DRIVEWAY CONSTRUCTION WORK IS DONE OUTSIDE OF THE RIGHT-OF-WAY OR EASEMENT.

UTILITIES

- 32. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED.
33. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAIL BOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA.

RESTORATION

- 37. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
38. ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.

CONSTRUCTION

- 44. THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT BAFELLS POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.
45. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEEPED DAILY AS PART OF DAILY CLEAN UP.

- 62. ALL TEST POINT PIPING SHALL BE CUT LOOSE FROM THE CORPORATION STOP AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. A CORPORATION STOP PLUG SHALL BE INSTALLED AND THE CORPORATION STOP SHALL REMAIN IN PLACE.
63. ALL EXISTING MAINS THAT ARE BEING REPLACED SHALL BE ABANDONED IN PLACE UPON ACCEPTANCE AND ACTIVATION OF THE NEW MAINS. ABANDONED MAINS SHALL BE CUT, FILLED WITH GROUT, AND CAPPED. REFER TO SECTION 02064 OF THE SPECIFICATIONS FOR GROUTING OF ABANDONED PIPE.

Per MCG LDC, 103.2.4.1: Utility Installations (except substations) are exempt from the regulations of the code.

Per FL Statutes, 403.087.5: Construction Permits not required if installation is in response to NPDES requirements.

Rule 62-604.600(2)(f) FL Adminstrative Code: Modifications to lift stations associated with ancillary and electrical equipment and structures are exempt from FDEP Construction Permits.

FL State Statues, FL 62-762, Above ground diesel fuel storage tanks exempt if under 550 gallons.

CONTACTS

Table with contact information for Manatee County Public Works Dept., Verizon Florida Inc., South West Florida Water Management District, Department of Environmental Protection, Florida Gas Transmission Safety Harbor Team, and Peace River Electric Cooperative, Inc.

LEGEND

Legend table listing symbols for existing and proposed items such as Bench mark, Concrete Monument, Iron Pipe, Iron Rod, Hub, Nail & Disk, Elevation, Parcel ID No., Lot No., Guy Wire, Power Pole, Light Pole, Mail Box, Sign, Reflector, Sprinkler, Gas Marker, Back Flow Preventer, Blow Off Valve, Fire Hydrant, Water Valve, Reducer, Water Meter, Air Release Valve, Sanitary Sewer Manhole, Sanitary Sewer Clean-out, Soil Boring Location, Telephone Service Box, Top of Bank, Right of Way, Guard Rail, Bush, Tree, Oak Tree, Palm Tree, Pine Tree, Edge of Vegetation, Guard Rail, Chain Link Fence, Wood Fence, Force Main, Potable Water, Reclaimed Water, Sanitary Sewer, Storm Drain, Gas Line, Overhead Utility, Underground utility, Edge of Concrete, Edge of Road, Ditch-Toe of Slope, Property Line / Lot Line, Right of Way, Headwall, Drainage Structure, Mitered End Section, Gate Inlet, Sewer Flow Direction, Concrete, Asphalt, Driveway, Sidewalk, Edge of Pavement.

PROPOSED PROJECT NOTES JOB SPECIFIC (EXAMPLE): WATER LINE CALL-OUT (TYPICAL)

STA. 40+60, 17' LT. 1-6" GATE VALVE 1-6" FITTING

Table with project details: SEC. TWP, RGE (4, 35S, 17E), SURVEY BOOK NO. (-), PROJECT NUMBER (402-5125280), and a revision table with columns for Surveyed, Drawn, and Designed.

NOTE: THESE PLANS DO NOT REFLECT A TRUE BOUNDARY OR RIGHTS-OF-WAY SURVEY. THE LOCATION OF THE STREET RIGHTS-OF-WAY LINES SHOWN IS APPROXIMATE AND IS BASED ON INFORMATION CONTAINED IN THE SUBDIVISION PLANS, RIGHTS-OF-WAY MAPS ON RECORD IN MANATEE COUNTY AND ON TOPOGRAPHIC DATA COLLECTED ON THE ROUTE SURVEY OF THE RIGHTS-OF-WAY.

JOHN A. ARMSTRONG 45802 Engineer / Reg. No. Signature & Date (11/06/09)

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV. MANATEE COUNTY FLORIDA 1022 26th Avenue East, Bradenton, FL 34208

Table with columns: NO., REVISION DESCRIPTION, BY, DATE. Contains one revision entry.

LIFT STATION UPGRADES, 2010 EMERGENCY GENERATORS GENERAL NOTES AND LEGEND

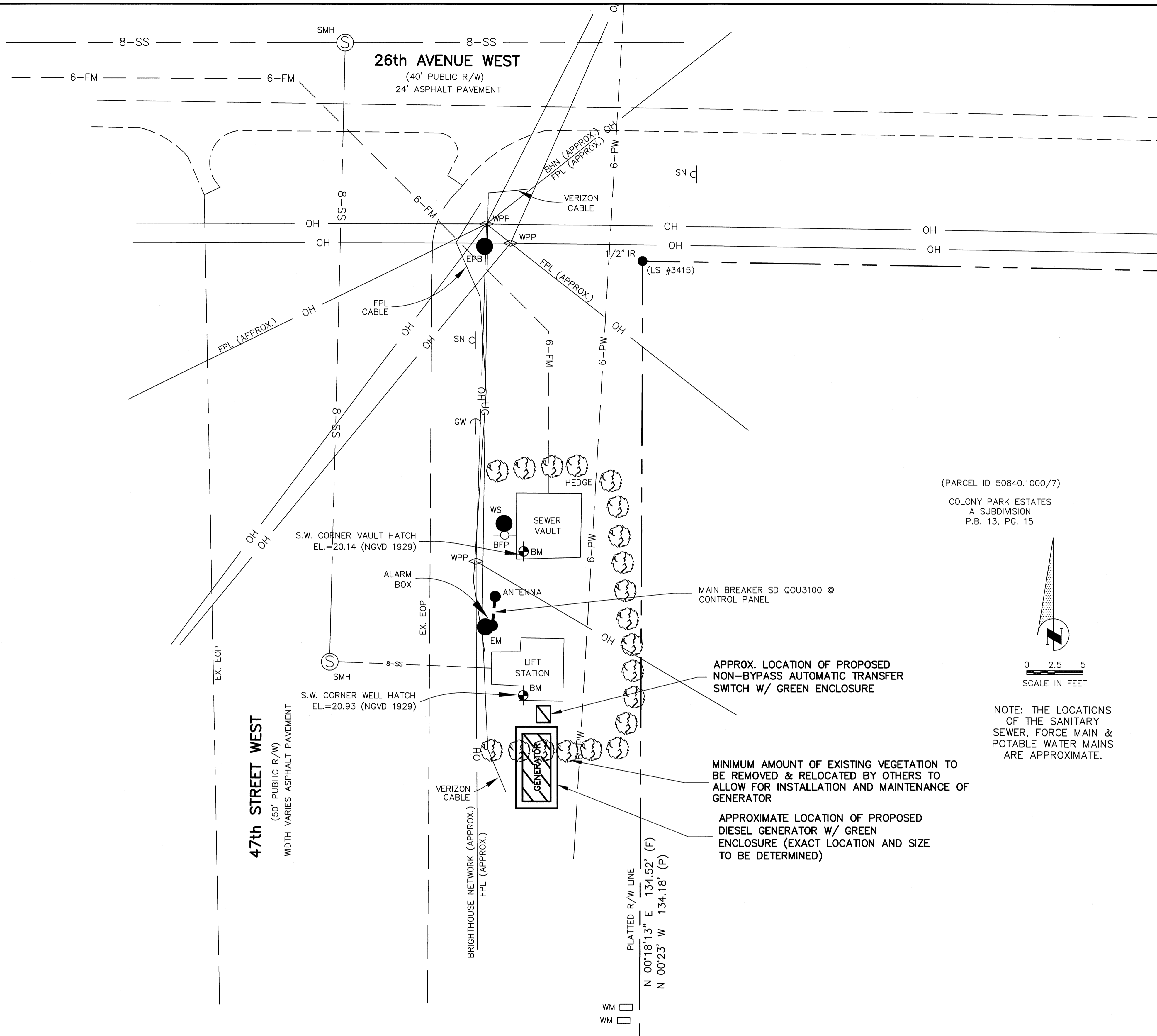
S:\PMD_Engineering\Share\URI_Eng_Design\Proj\2010_Egens\RTU 211 LS 16-D\DWG\Site Plan_11/6/2009 1:40 PM Sheo Shoun, 1:1 : D-Arch (24"x36")

NOTES:

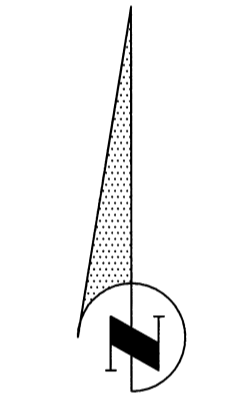
- BEARINGS AND COORDINATES ARE BASED ON THE SOUTH PLATTED RIGHT OF WAY OF 26th AVENUE EAST, HAVING A BEARING OF S 89°04'47" E, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM MANATEE COUNTY GIS CONTROL SURVEY (1988) MONUMENT No. 1707.
- THE PROPERTY LIES WITHIN FLOOD ZONE "C" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0326 B, REVISED, MARCH 15, 1984.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, CITY OF BRADENTON BENCH MARK No. "124", ELEVATION OF 22.46 AS PUBLISHED.

LEGEND:

CM	CONCRETE MONUMENT	CM	CONCRETE MONUMENT FOUND AS NOTED
IR	IRON ROD	IR	IRON ROD FOUND AS NOTED
R/W	RIGHT OF WAY LINE	SMH	SANITARY SEWER MANHOLE
ID	IDENTIFICATION	SN	SIGN
P.B.	PLAT BOOK	WM	WATER METER
PG.	PAGE	GW	GUY WIRE
(F)	FIELD DATA	WPP	WOOD POWER POLE
(P)	PLAT DATA	BFP	BACK FLOW PREVENTER
(D)	DEED DATA	EPB	ELECTRIC PULL BOX
LS	LAND SURVEYOR	WS	WATER SERVICE
EL.	ELEVATION	EM	ELECTRIC METER
NGVD	NATIONAL GEODETIC VERTICAL DATUM	BM	BENCH MARK
WPP	WOOD POWER POLE	OH	OVERHEAD WIRE
EPB	ELECTRIC PULL BOX	10.93	EXISTING SPOT ELEVATION
FPL	FLORIDA POWER & LIGHT		
SN	SIGN		
GW	GUY WIRE		
WS	WATER SERVICE		
BFP	BACK FLOW PREVENTER		
BM	BENCH MARK		
WM	WATER METER		
SMH	SANITARY SEWER MANHOLE		
EM	ELECTRIC METER		
FM	FORCE MAIN		
RW	REUSE MAIN		
PW	POTABLE WATER MAIN		
EOP	EDGE OF PAVEMENT		



(PARCEL ID 50840.1000/7)
COLONY PARK ESTATES
A SUBDIVISION
P.B. 13, PG. 15



0 2.5 5
SCALE IN FEET

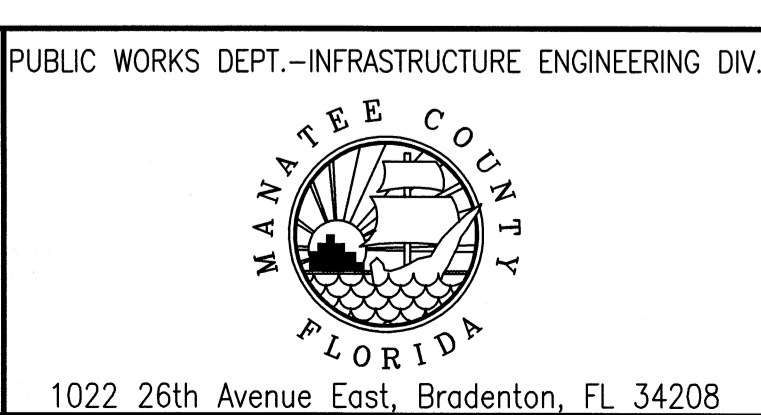
NOTE: THE LOCATIONS OF THE SANITARY SEWER, FORCE MAIN & POTABLE WATER MAINS ARE APPROXIMATE.

LS 16-D, RTU #211
4629 26TH AVE W.

SEC, TWP, RGE	4, 35S, 17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125280		
Surveyed	By	Checked	Date
Drawn	JSS	-	4/15/09
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
1/06/09
Signature & Date

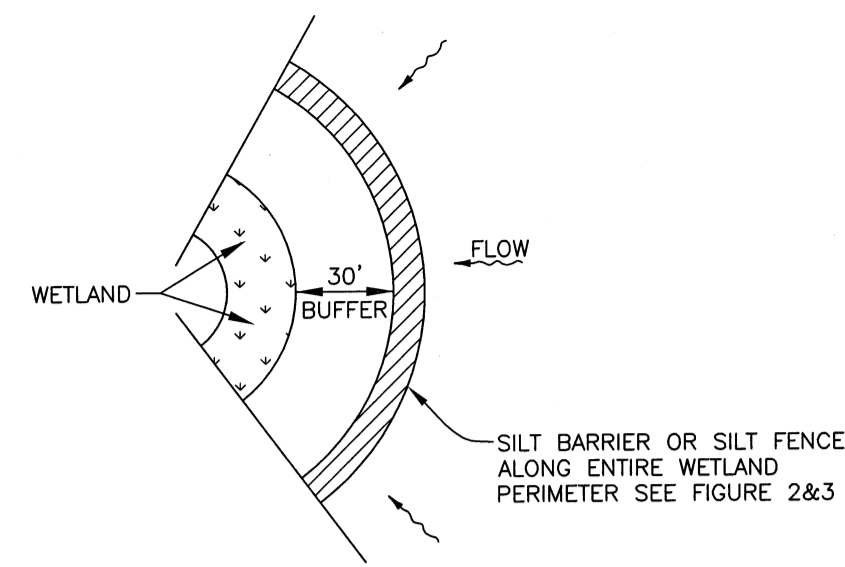


NO.	REVISION DESCRIPTION	BY	DATE

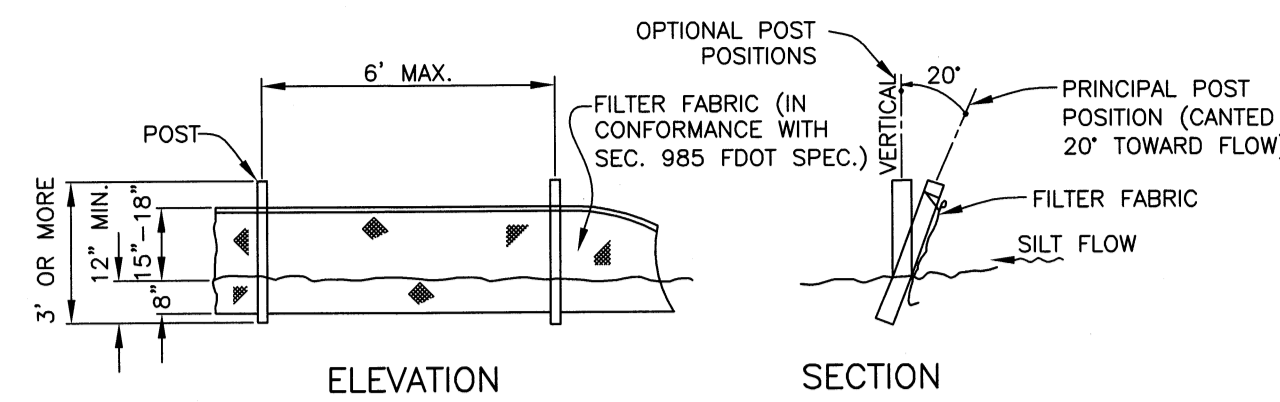
**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

SITE PLAN

Sheet
3
4

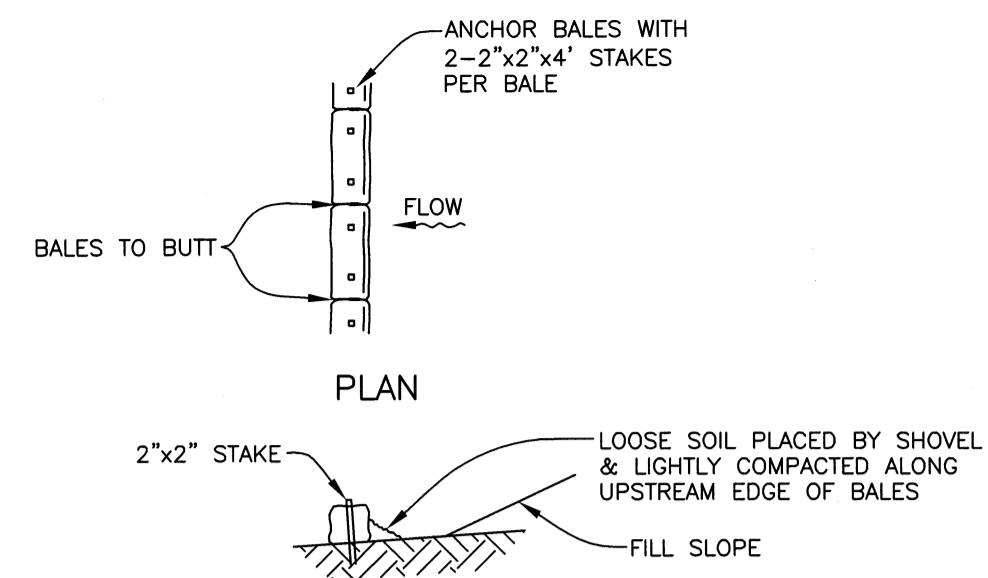


WETLAND BUFFER
FIGURE 1

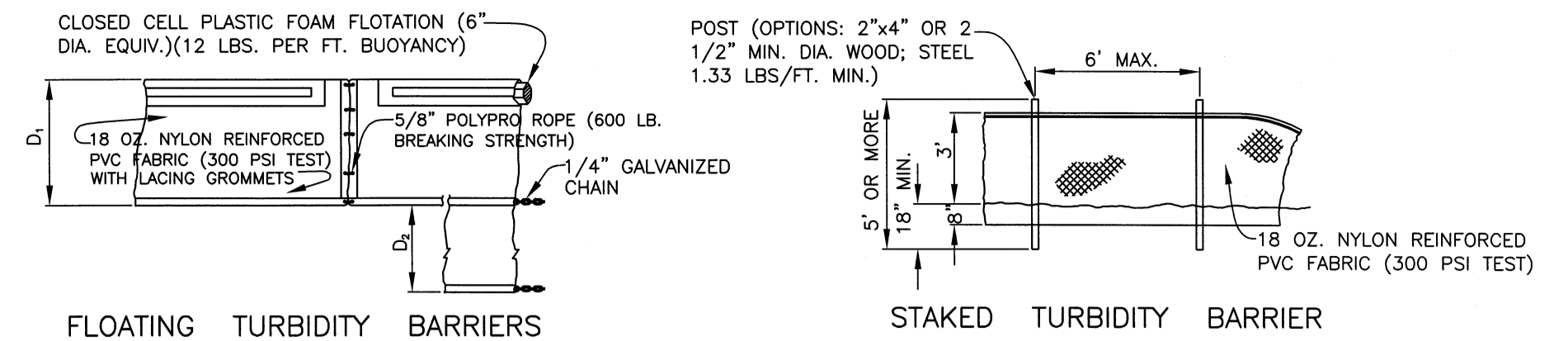


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

TYPICAL SILT FENCE
FIGURE 2



TYPICAL BALE SILT BARRIER
FIGURE 3

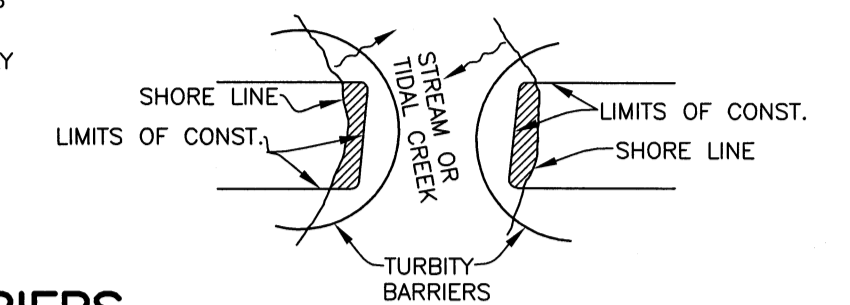


FLOATING TURBIDITY BARRIERS

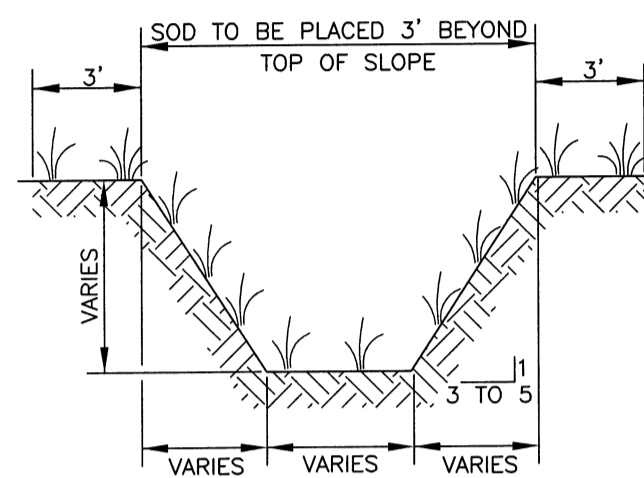
STAKED TURBIDITY BARRIER

D₁ = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS). D₂ = 5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5'). CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO(2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

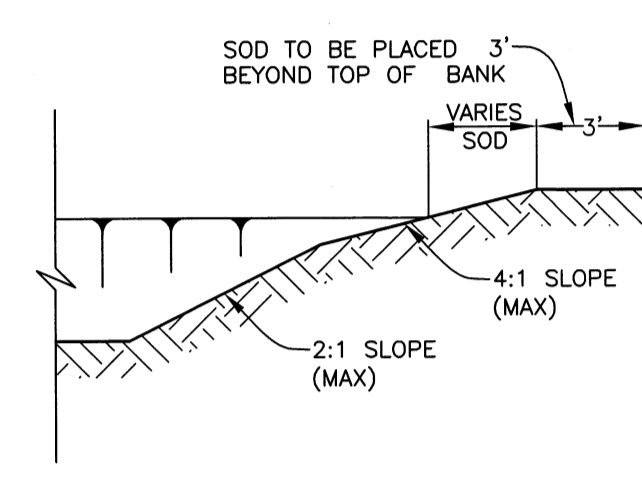
NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



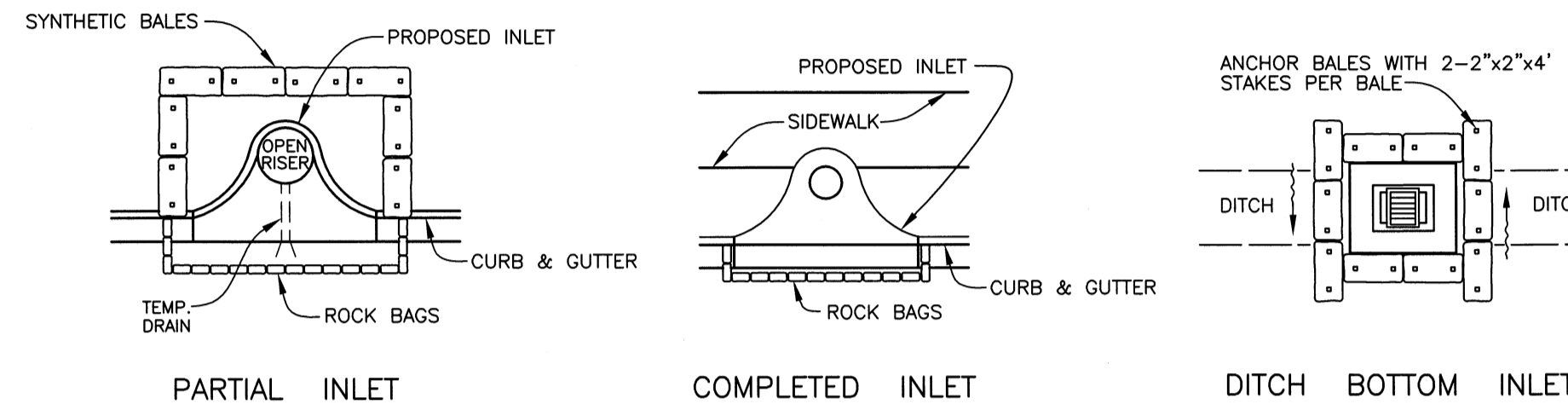
TURBIDITY BARRIERS
FIGURE 4



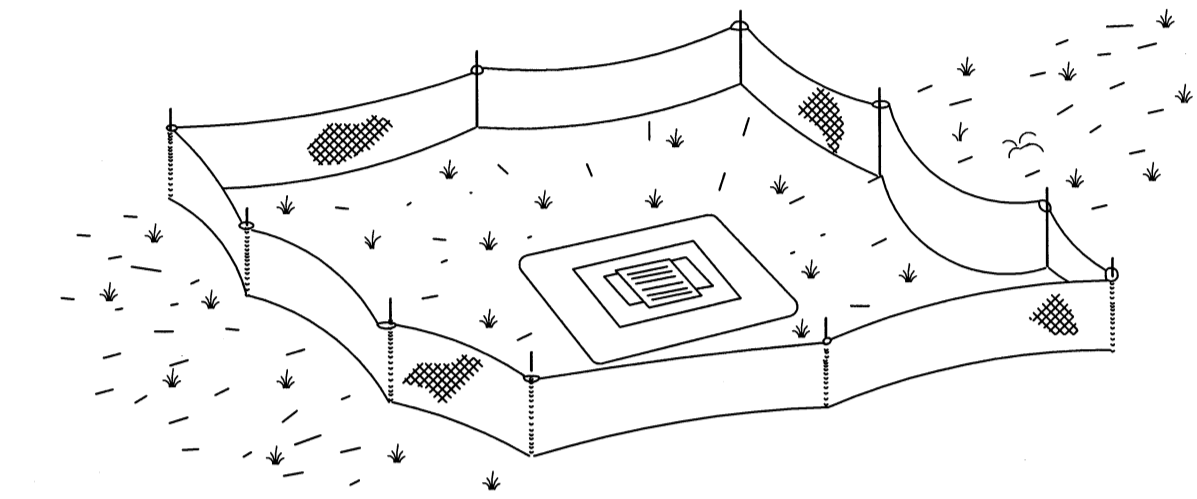
TYPICAL SWALE SECTION
FIGURE 5



TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6

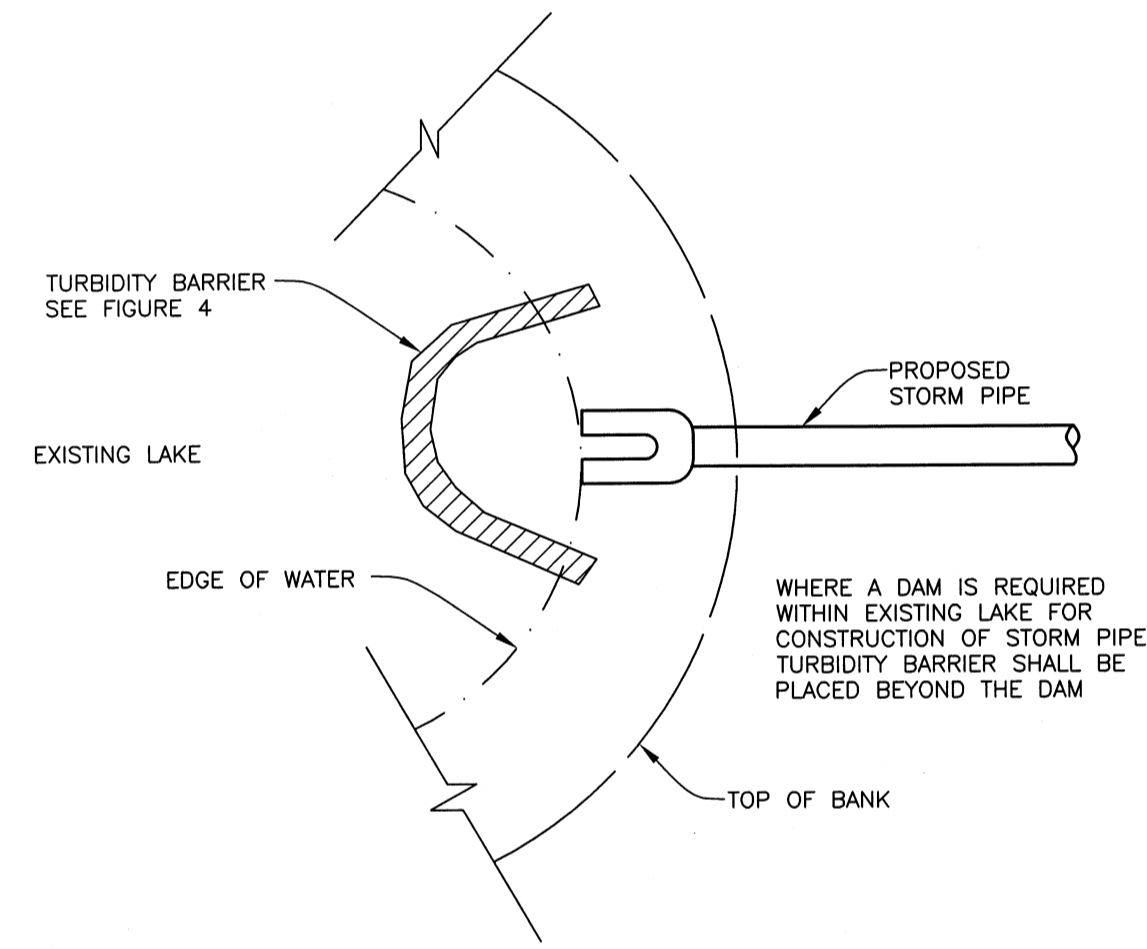


SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7

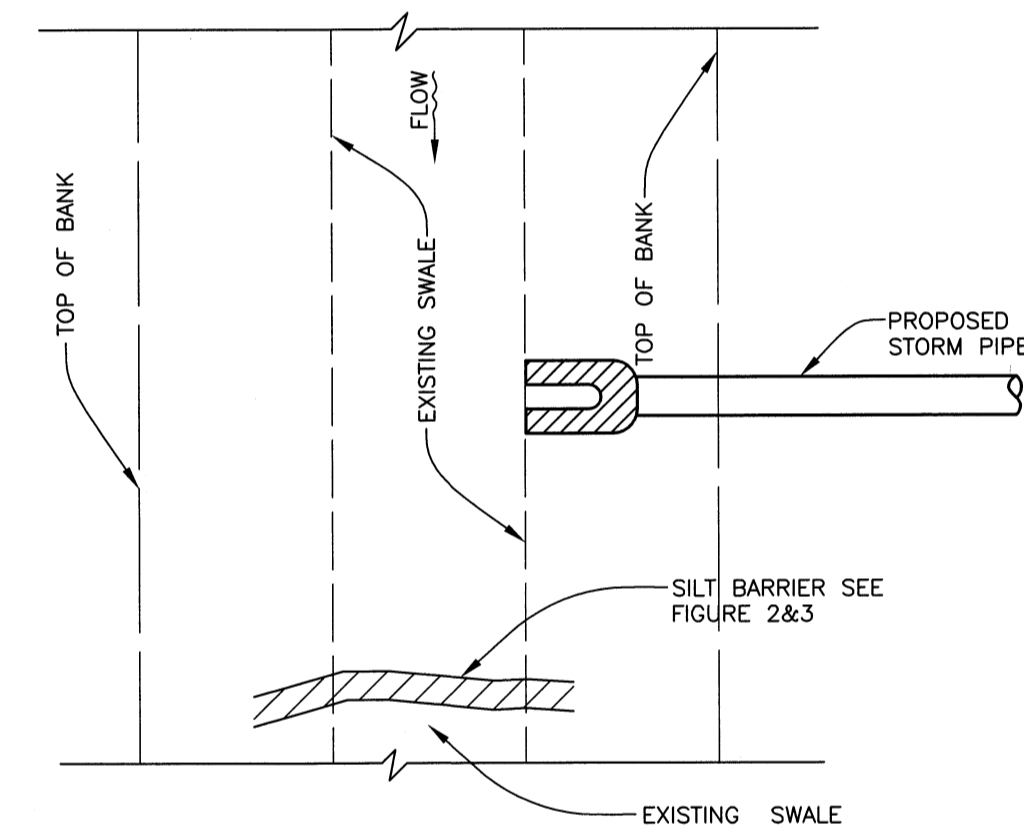


TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS

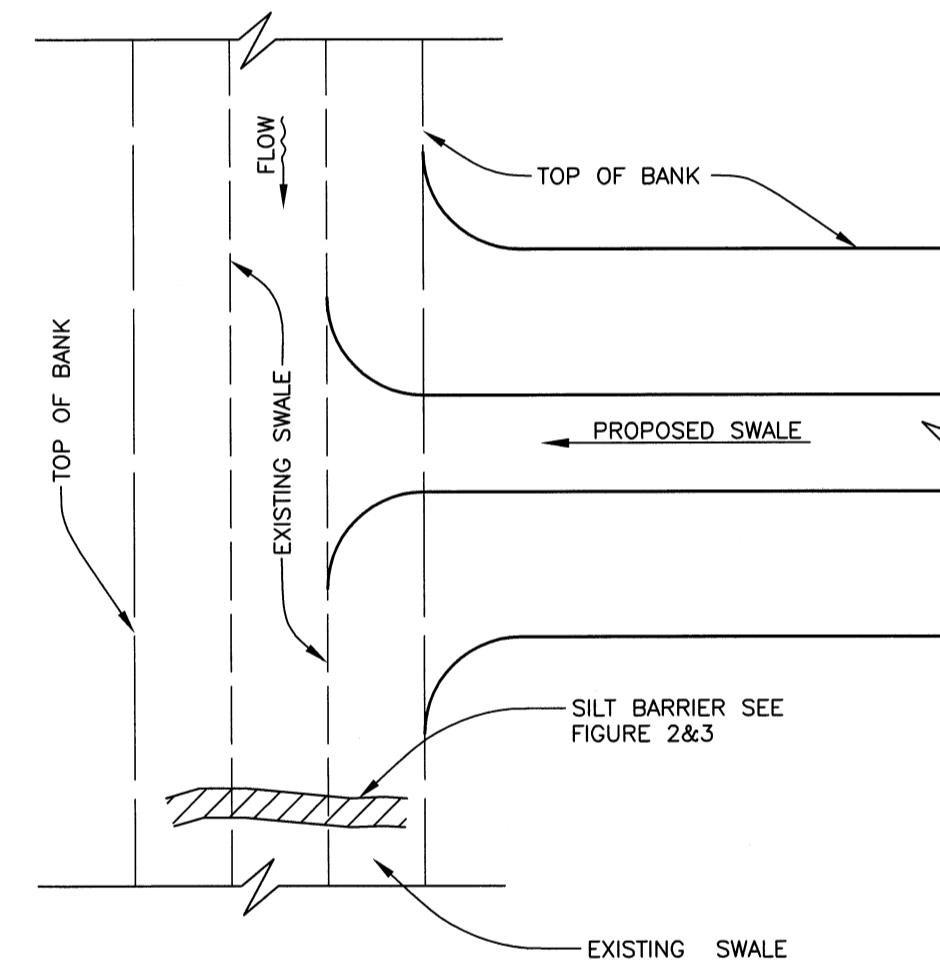
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



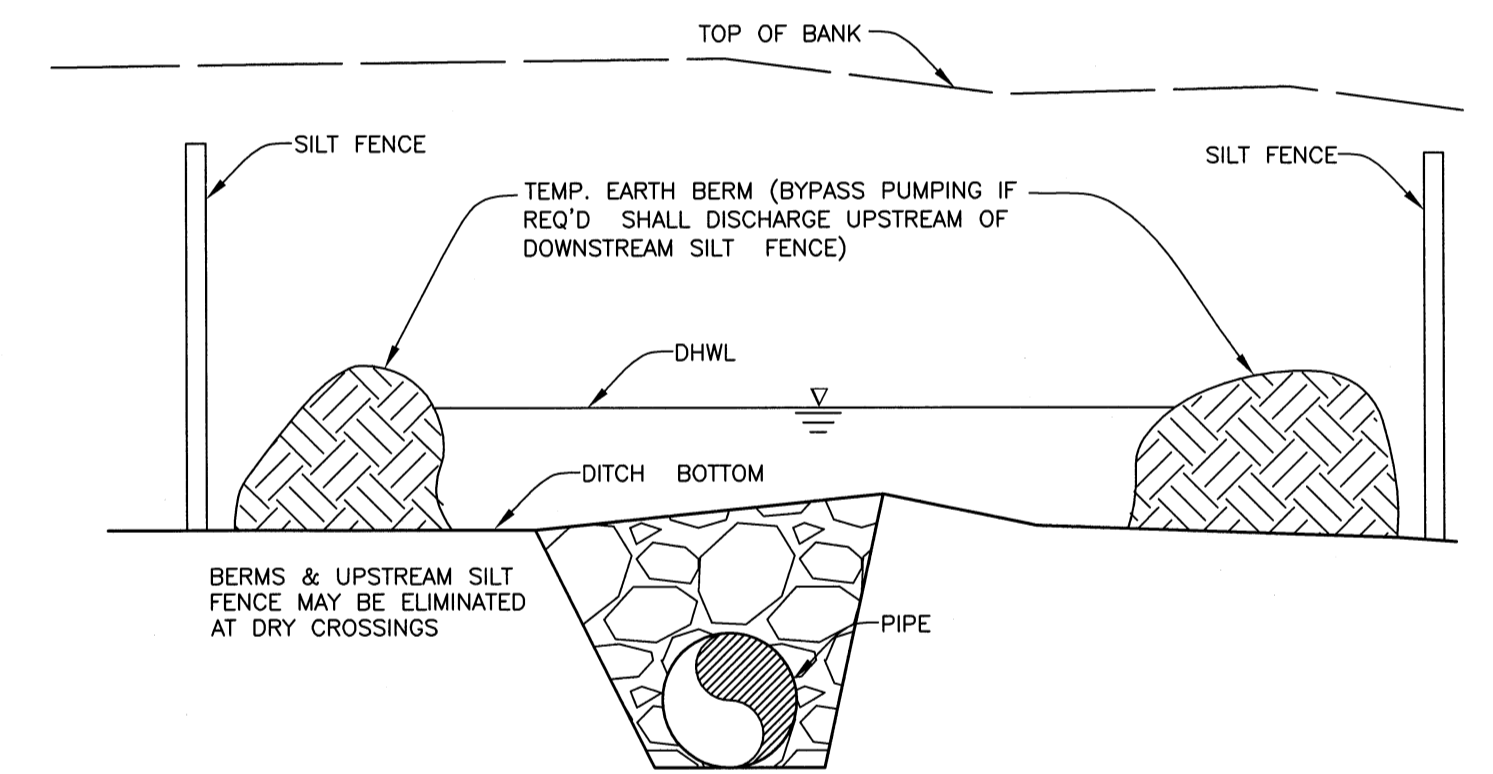
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



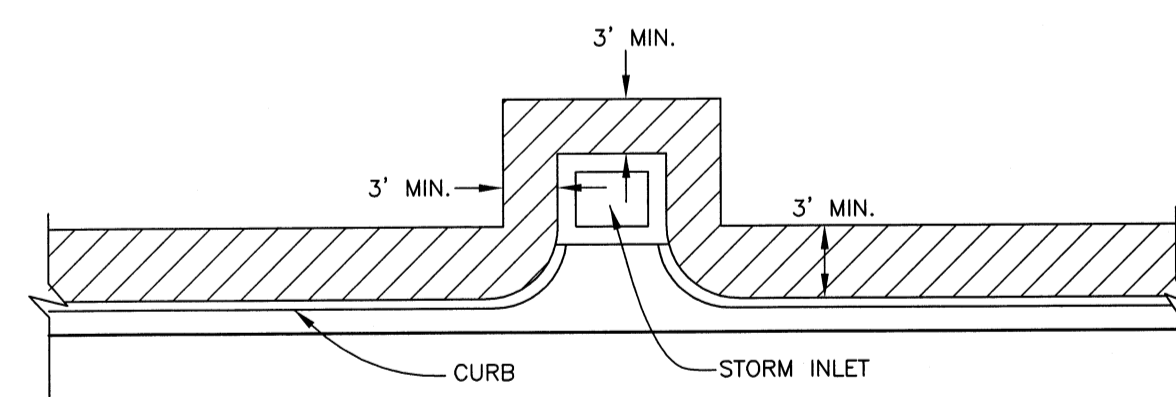
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



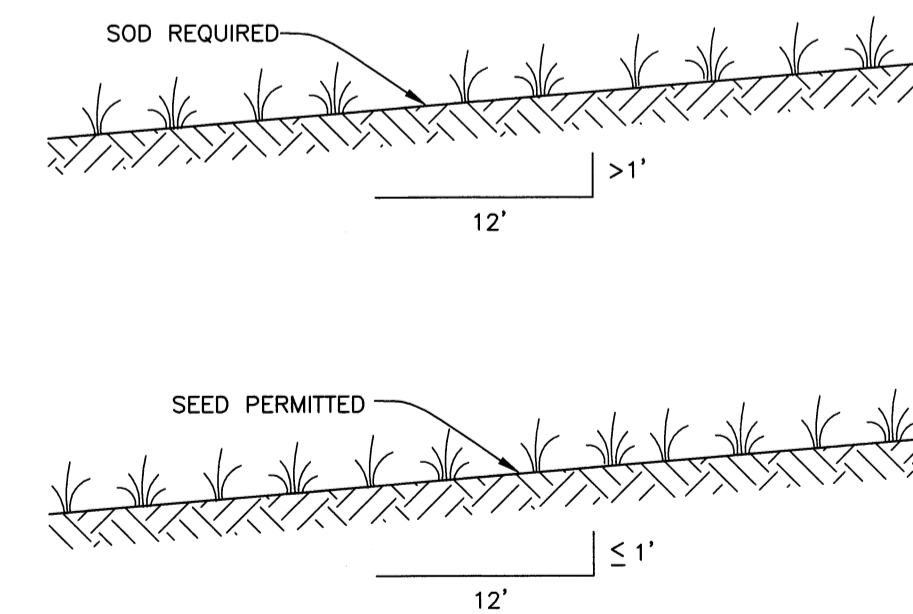
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



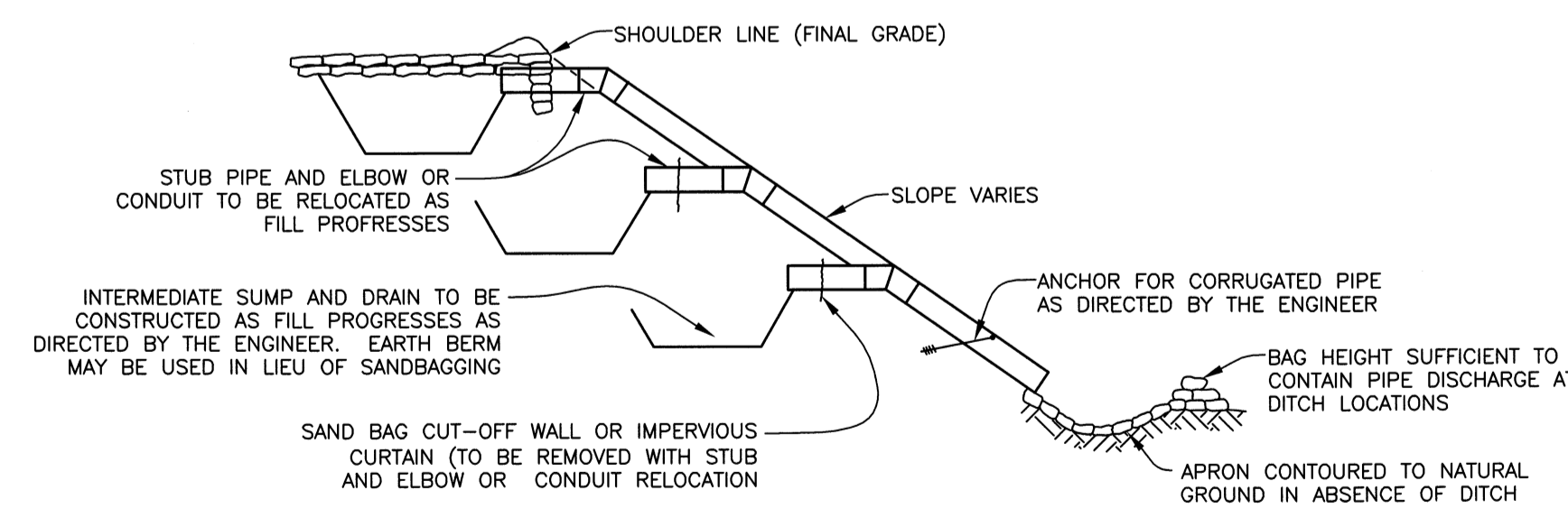
UNDERGROUND PIPE CROSSING
FIGURE 12



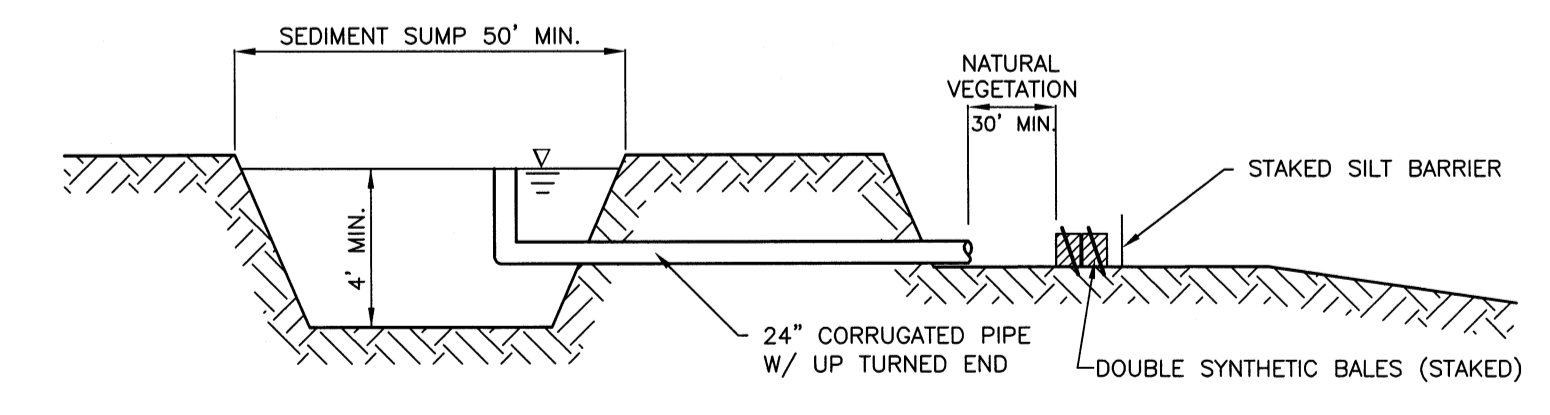
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

SEC, TWP, RGE	4, 35S, 17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125280		
By	Checked	Date	
Surveyed	ZNS	-	4/15/09
Drawn	JSS		
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/06/09
Signature & Date

MANATEE COUNTY
FLORIDA

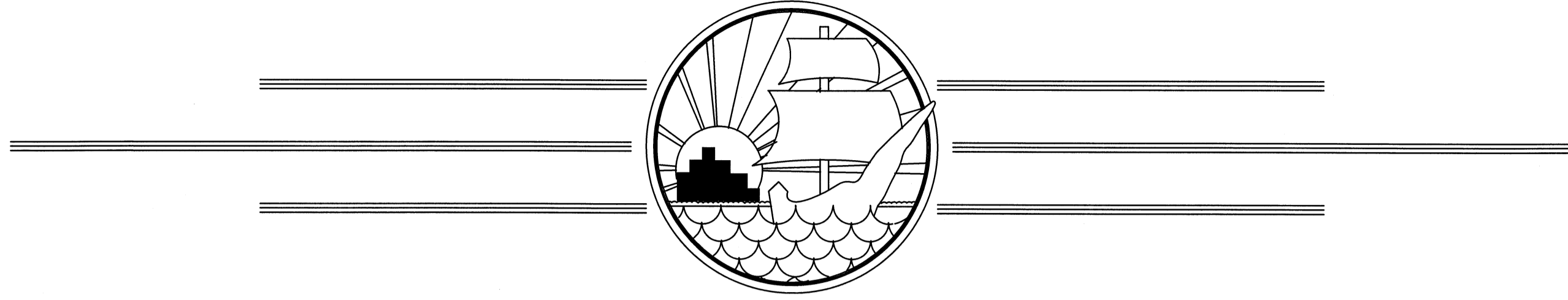
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

EROSION CONTROL

Sheet
4
4



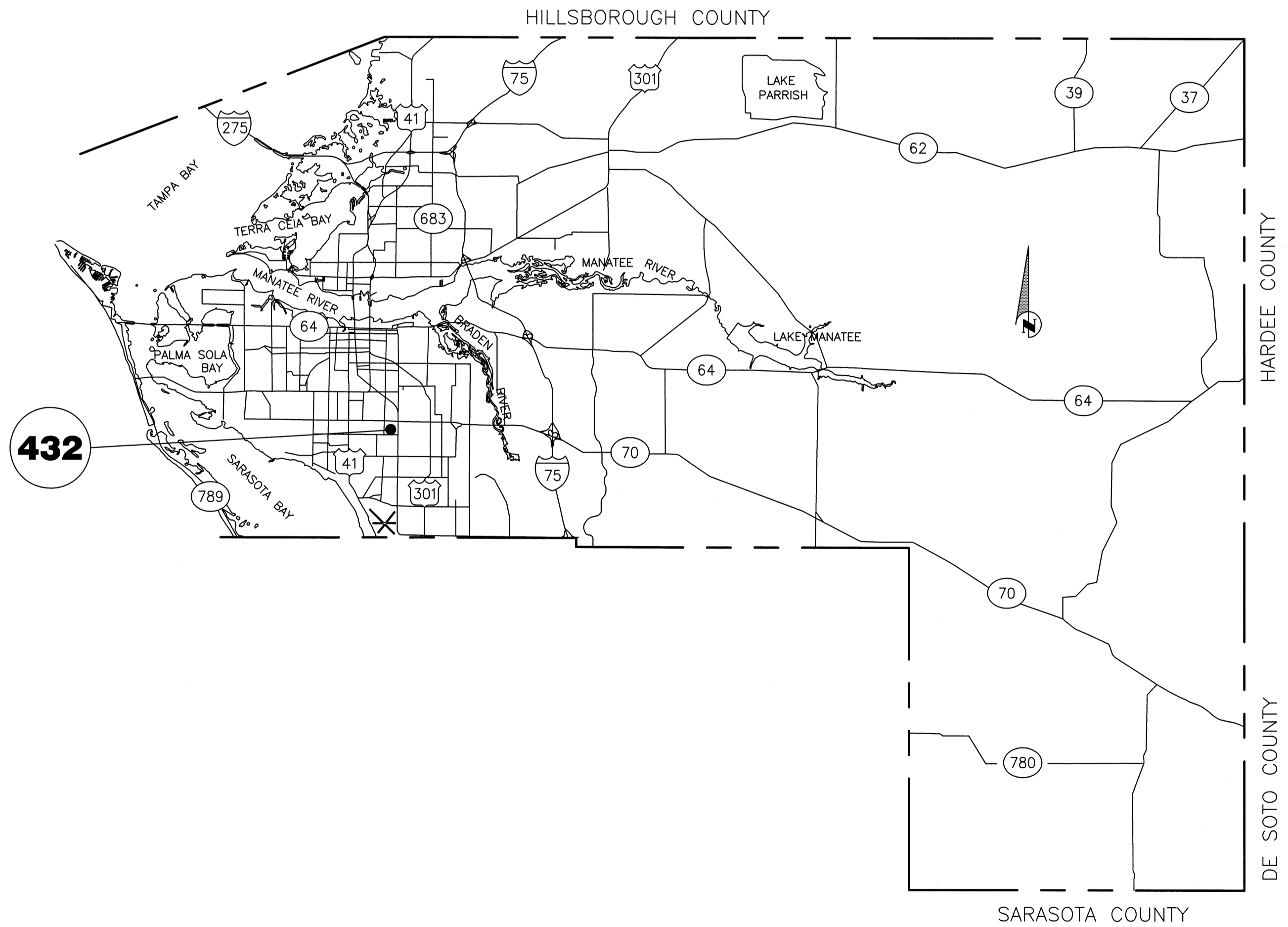
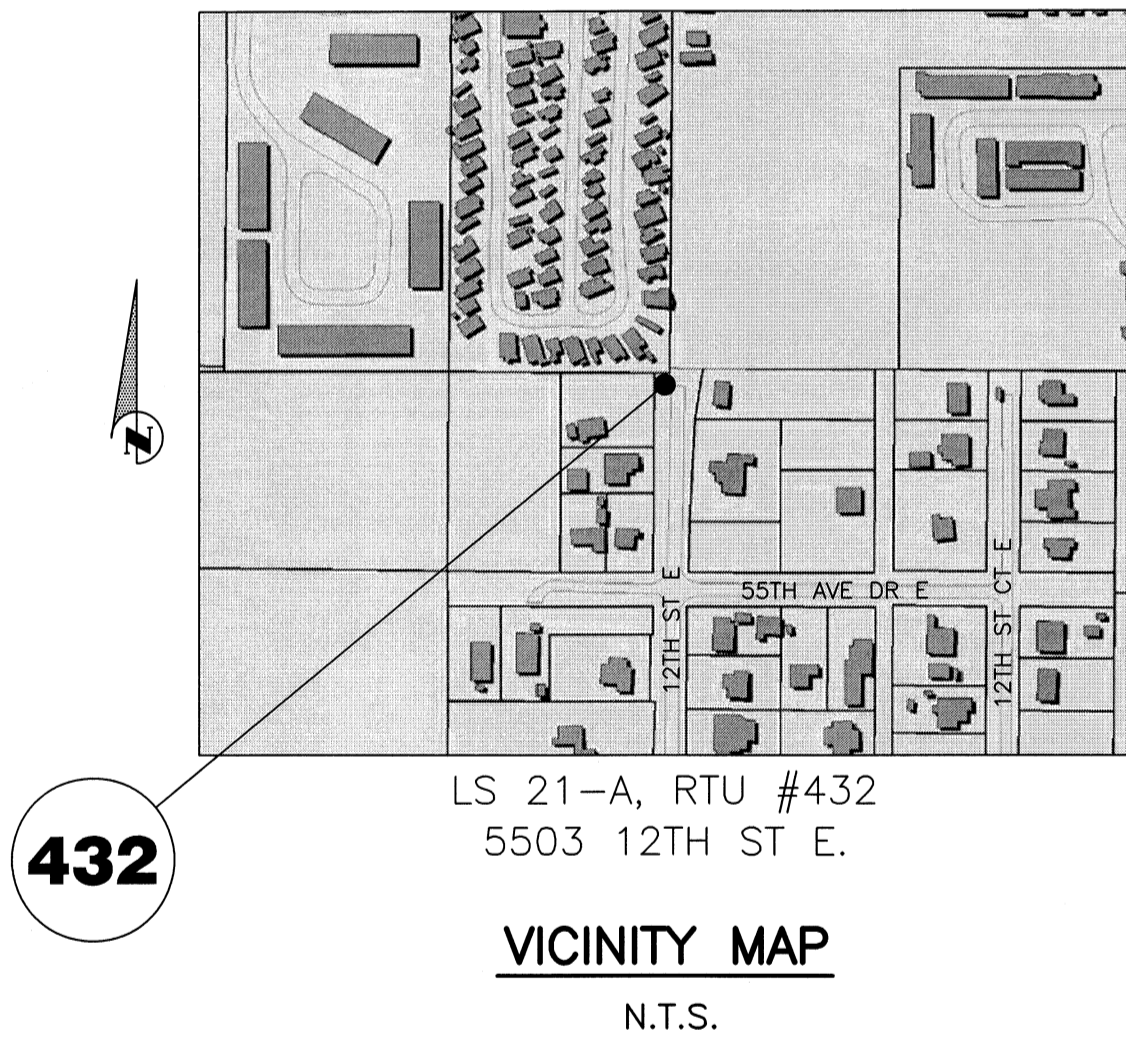
MANATEE COUNTY, FLORIDA

LIFT STATION UPGRADES, 2010

LS 21-A, RTU #432

402-5125180

NOVEMBER 2009



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |


PROJECT DESCRIPTION

INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

SEC. TWP. RGE	13/35S/17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125180		
	By	Checked	Date
Surveyed	ZNS	-	4/30/09
Drawn	JSS		
Designed	JAA		

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Engineer / Reg. No.
John A. Armstrong
11/10/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS

COVER SHEET

Sheet
1
4

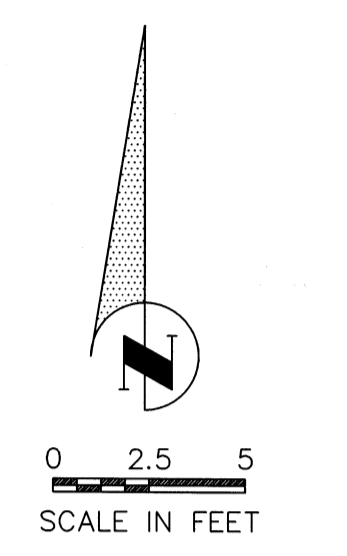
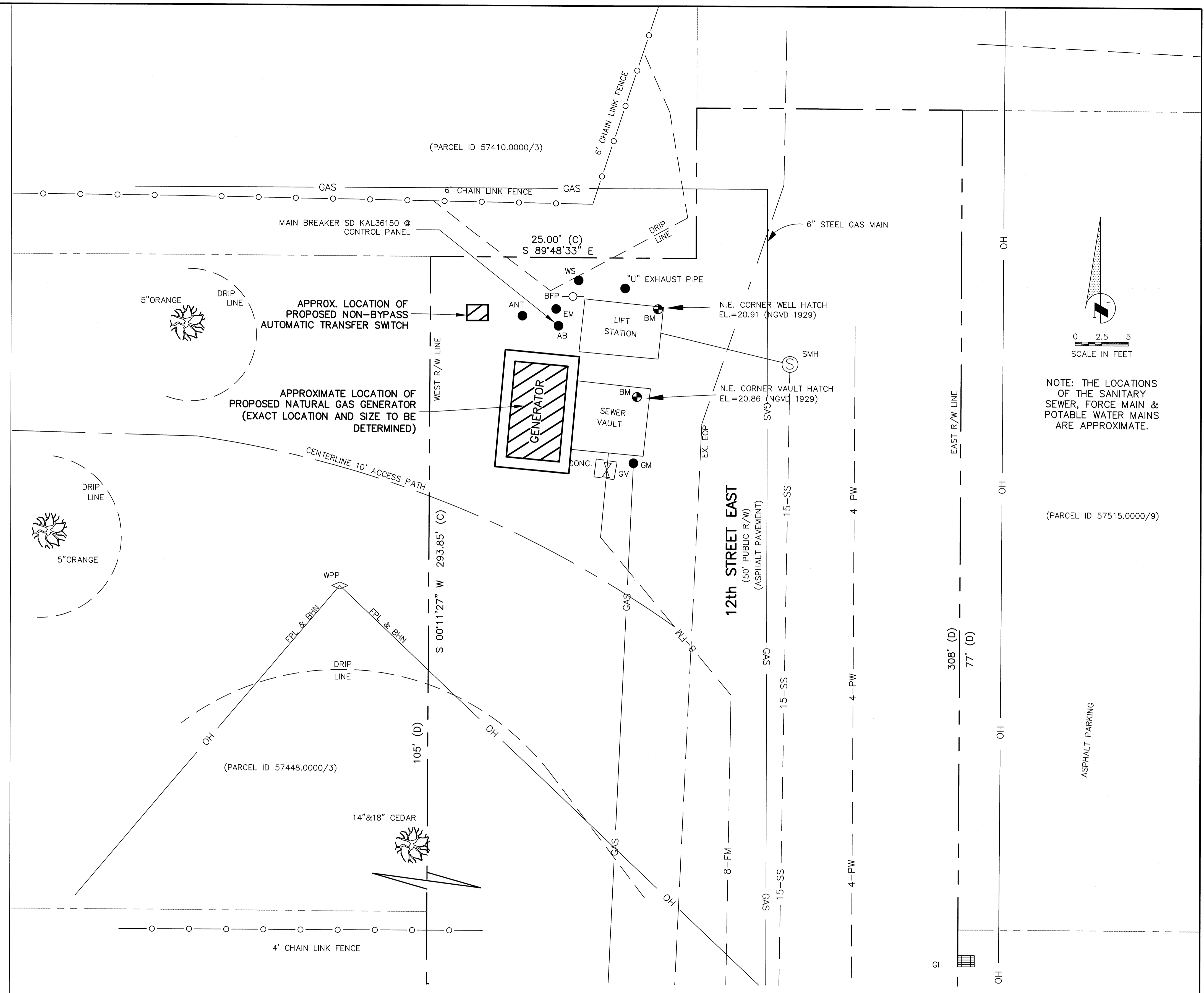
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S:\PMD-Engineering\Share\URI_Eng_Design\Proj\LS 21-A\LS 21-A\DWG\Site Plan\11/9/2009 10:49 AM Shep Shoun, 1:1 - ROTATED ARCH.D

- BEARINGS ARE BASED ON THE WEST RIGHT OF WAY LINE OF 12th STREET EAST, HAVING A BEARING OF S 00°11'27" W, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM MANATEE COUNTY GIS CONTROL SURVEY (1988) MONUMENTATION.
- THE PROPERTY LIES WITHIN FLOOD ZONE "B" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0333 B, REVISED, MARCH 15, 1984.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, NATIONAL GEODETIC SURVEY BENCH MARK No. "L 253", ELEVATION OF 16.46, AS PUBLISHED.
- NATURAL GAS SERVICE TO BE INSTALLED IN A CARRIER PIPE AND STRAPPED TO THE VALVE VAULT OR WET WELL, IF PASSING OVER FORCE MAIN OR DISCHARGE PIPING.
- CONTRACTOR SHALL INSTALL NATURAL GAS SERVICE FROM PROPOSED GENERATOR TO NATURAL GAS METER/BALL VALVE PROVIDED BY TECO. CONTRACTOR SHALL REMOVE PLUG AT NATURAL GAS METER/BALL VALVE AND CONNECT TO NATURAL GAS SERVICE PROVIDED BY TECO.

LEGEND:

IR	IRON ROD	CM	4"x4" CONCRETE MONUMENT FOUND AS NOTED
CM	CONCRETE MONUMENT	IR	IRON ROD FOUND (NO #)
R/W	RIGHT OF WAY LINE	SMH	SANITARY SEWER MANHOLE
ID	IDENTIFICATION	BFP	BACK FLOW PREVENTER
(F)	FIELD DATA	GV	FORCE MAIN GATE VALVE
(D)	DEED DATA	LP	WOOD LIGHT POLE
(C)	CALCULATE DATA	WS	WATER SERVICE
PRM	PERMANENT REFERENCE MONUMENT	ANT	ANTENNA
LB	LICENSED BUSINESS	AB	ALARM BOX
P.B.	PLAT BOOK	EM	ELECTRIC METER
PG.	PAGE	WPP	WOOD POWER POLE
EL	ELEVATION	GI	GRATE INLET
NGVD	NATIONAL GEODETIC VERTICAL DATUM	GM	GAS MARKER
ANT	ANTENNA	BM	BENCH MARK
WS	WATER SERVICE	19.41	EXISTING SPOT ELEVATION
BFP	BACK FLOW PREVENTER	OH	OVERHEAD POWER LINES
EM	ELECTRIC METER	GAS	UNDERGROUND GAS LINE
AB	ALARM BOX		
GV	GATE VALVE		
SMH	SANITARY SEWER MANHOLE		
BM	BENCH MARK		
CONC.	CONCRETE		
WPP	WOOD POWER POLE		
LP	LIGHT POLE		
CI	GRATE INLET		
OH	OVERHEAD		
GM	GAS MARKER		
FM	FORCE MAIN		
RW	REUSE MAIN		
PW	POTABLE WATER MAIN		
EOP	EDGE OF PAVEMENT		



NOTE: THE LOCATIONS OF THE SANITARY SEWER, FORCE MAIN & POTABLE WATER MAINS ARE APPROXIMATE.

(PARCEL ID 57515.0000/9)

LS 21-A, RTU #432
5503 12TH ST E.

SEC. TWP. RGE	13/35S/17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125180		
By	Checked	Date	
Surveyed	ZNS	-	4/30/09
Drawn	JSS		
Designed	JAA		

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JOHN A. ARMSTRONG 45802
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John A. Armstrong
4/16/09
Signature & Date

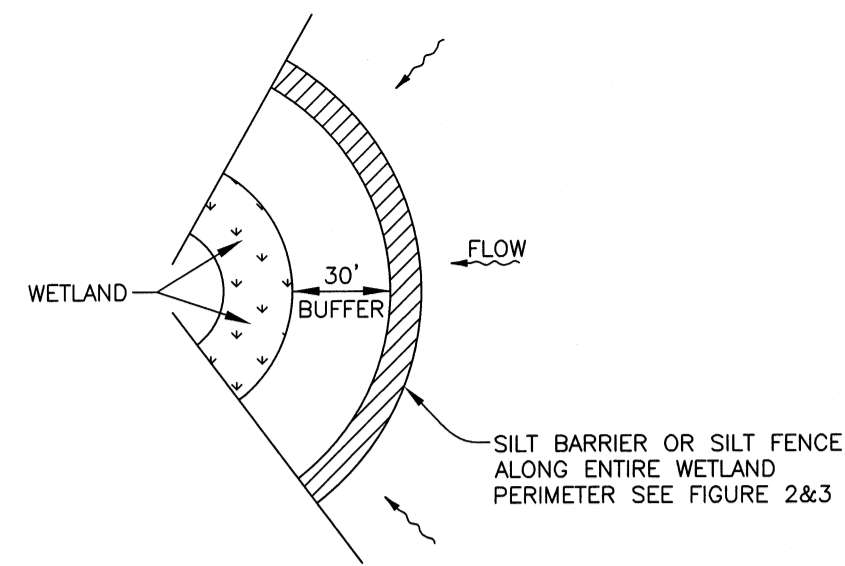
PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.
MANATEE COUNTY
FLORIDA
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

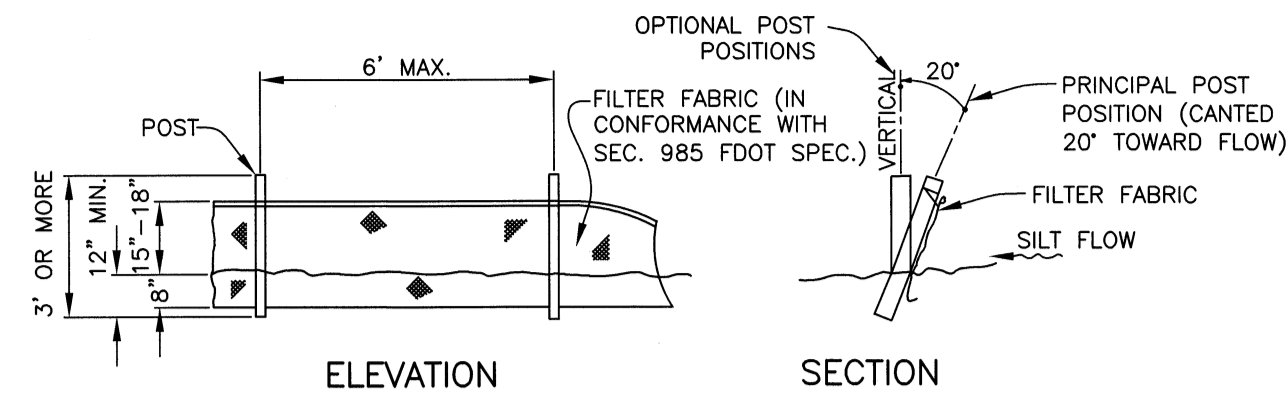
**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

SITE PLAN

Sheet
3
4

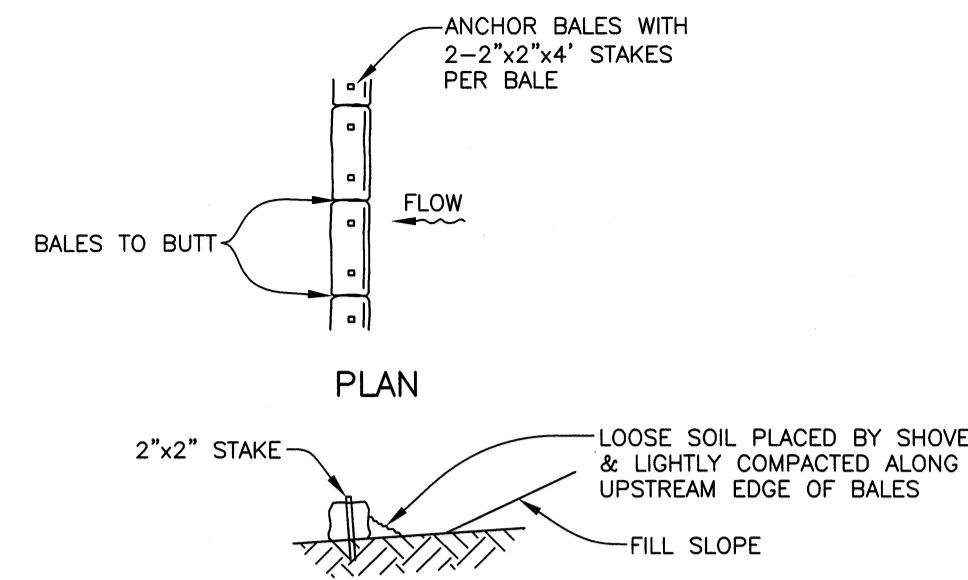


WETLAND BUFFER
FIGURE 1

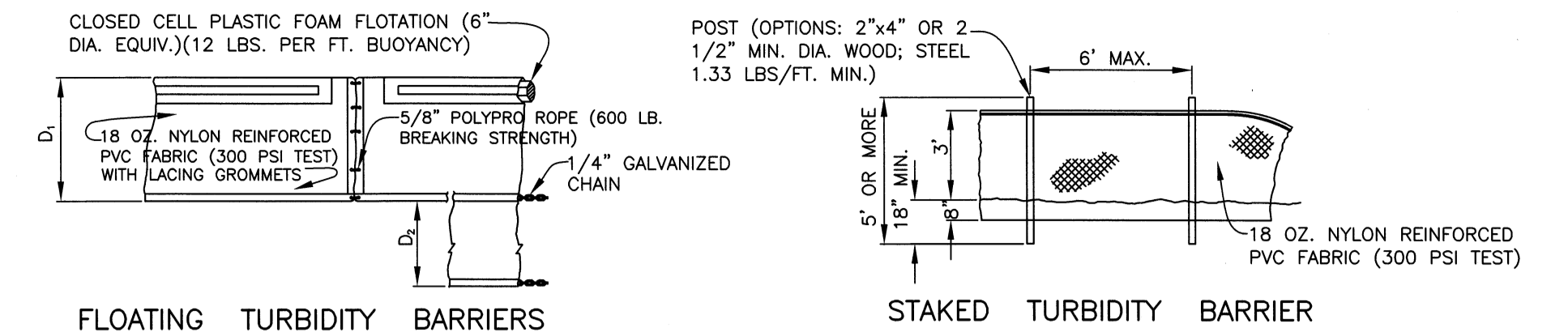


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

TYPICAL SILT FENCE
FIGURE 2



TYPICAL BALE SILT BARRIER
FIGURE 3



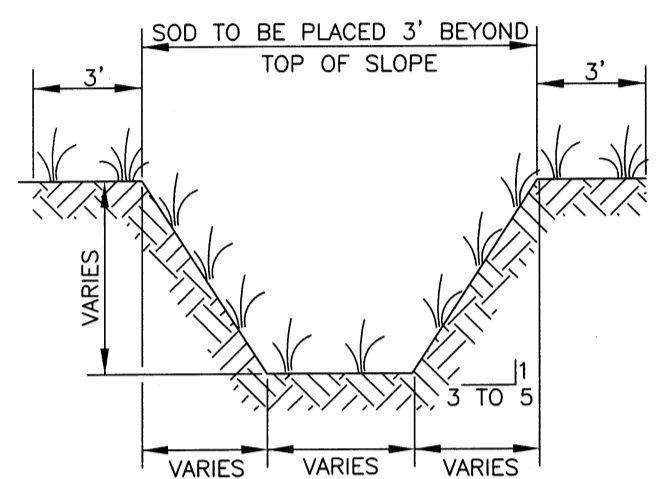
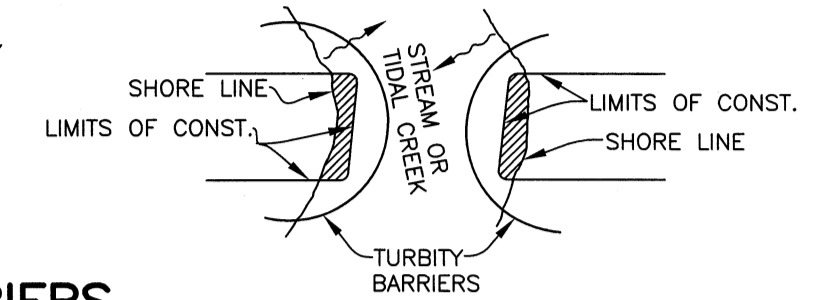
FLOATING TURBIDITY BARRIERS

STAKED TURBIDITY BARRIER

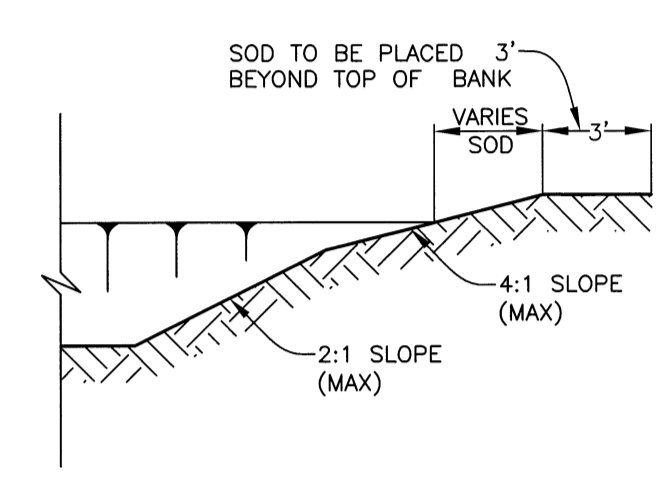
D₁ = 5" STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS). D₂ = 5" STD. (ADDITIONAL PANEL FOR DEPTHS > 5'). CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO(2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

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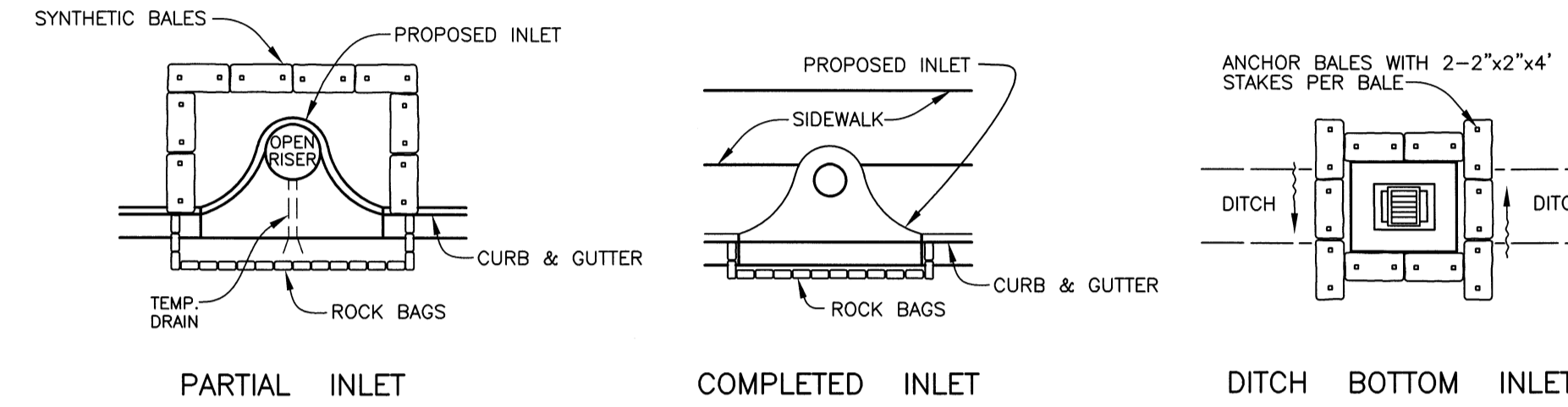
TURBIDITY BARRIERS
FIGURE 4



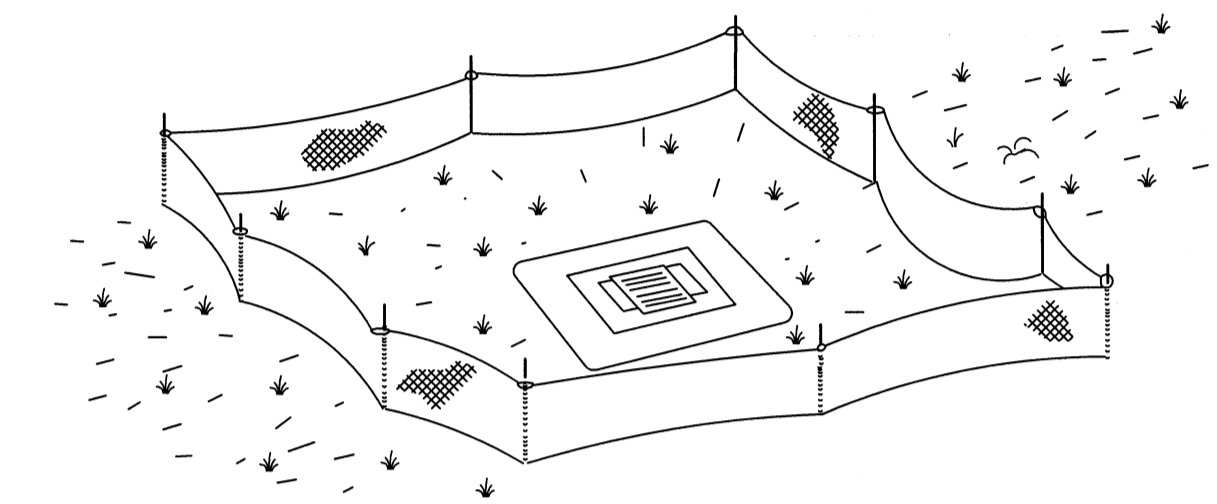
TYPICAL SWALE SECTION
FIGURE 5



TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6

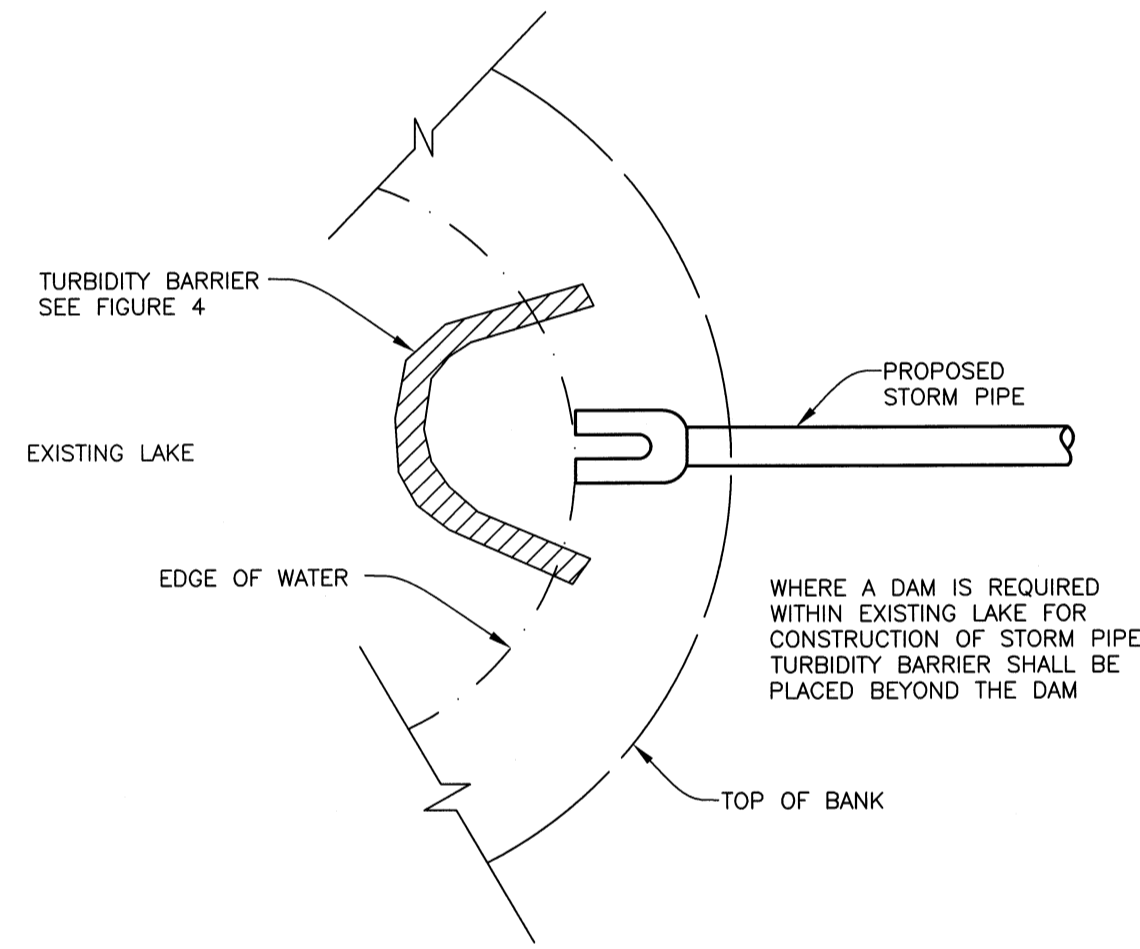


SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7

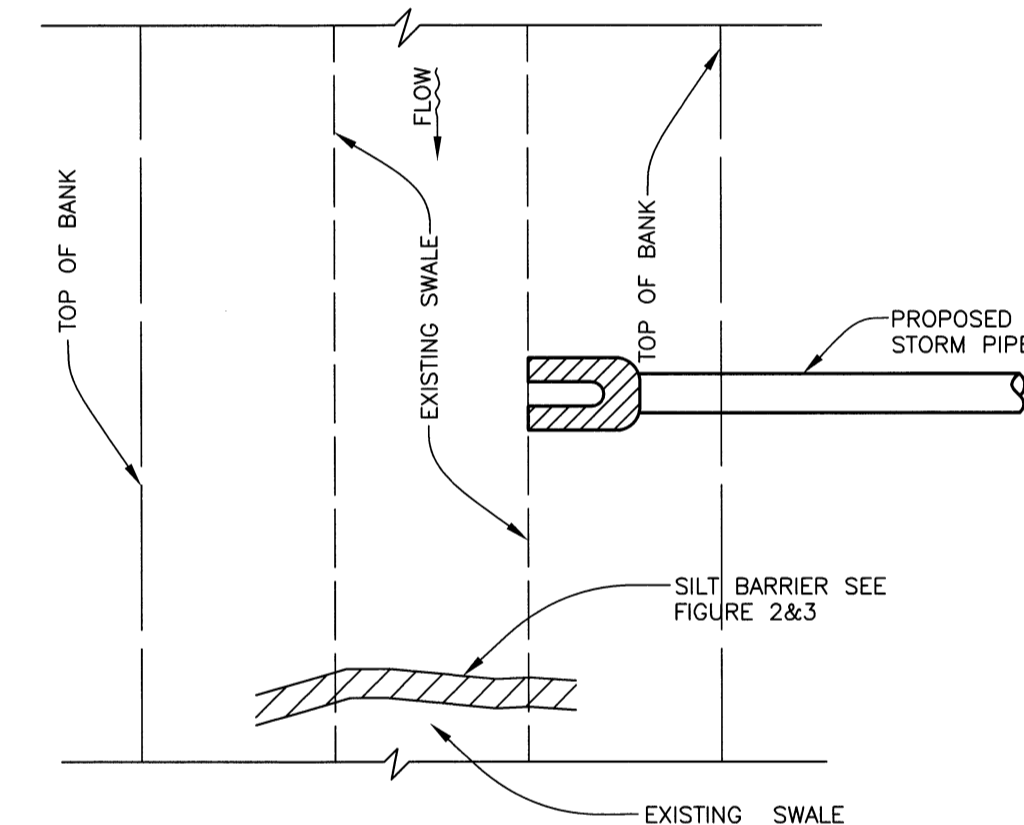


TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS

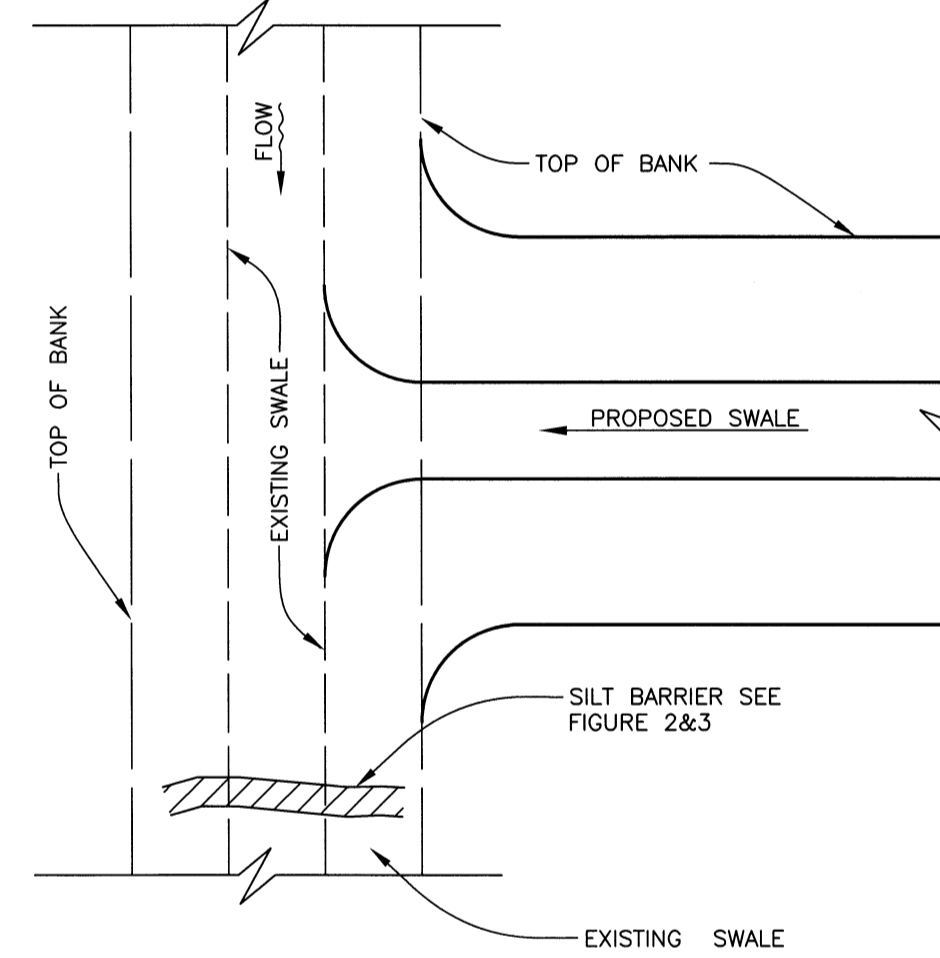
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



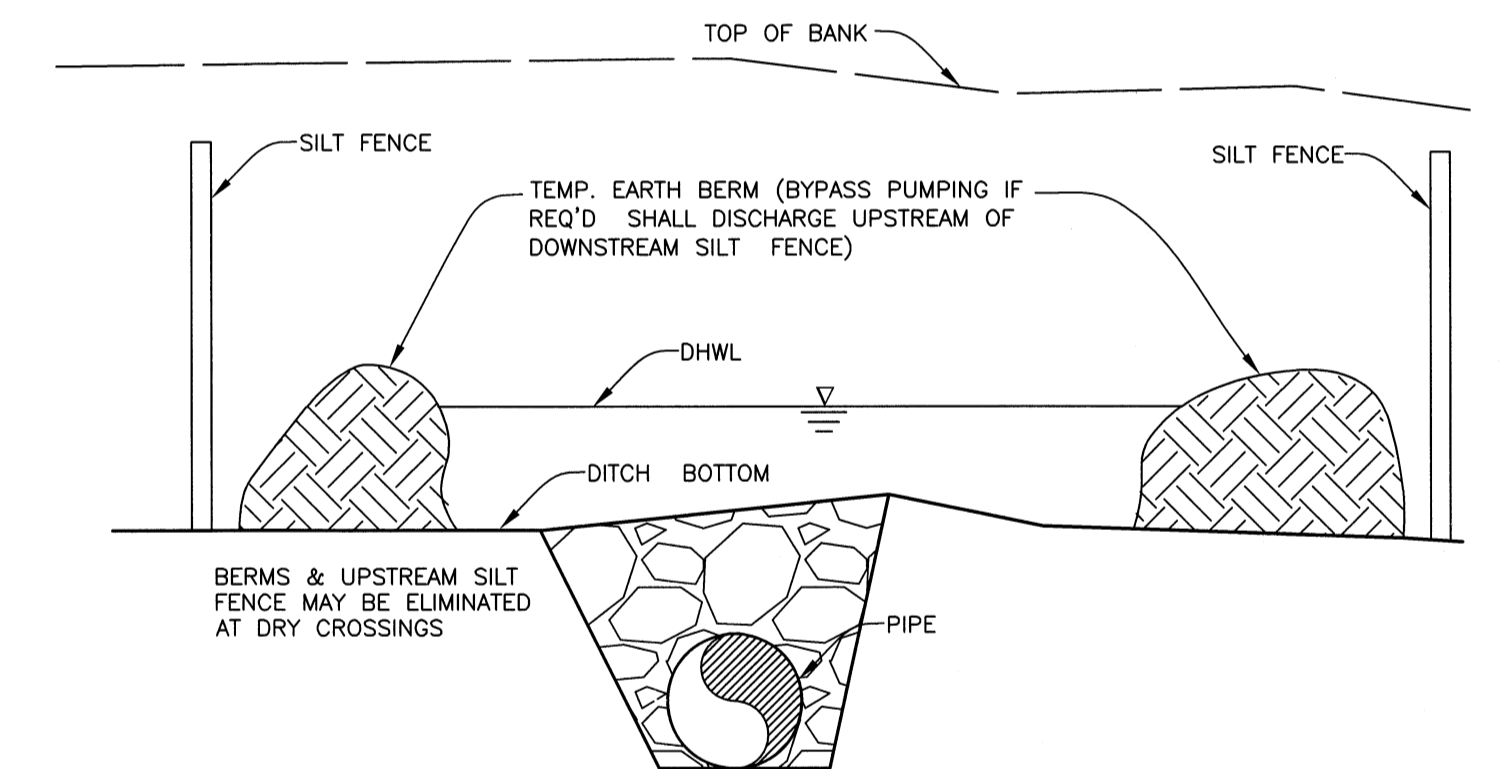
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



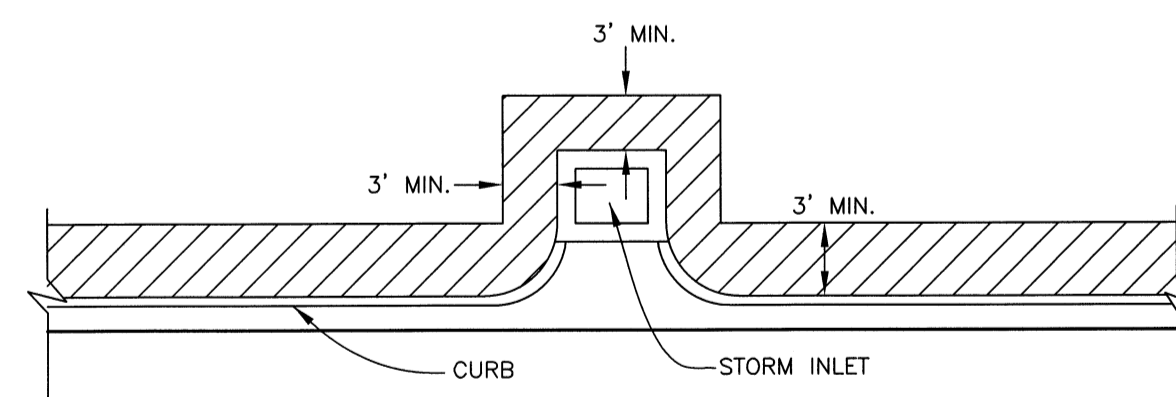
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



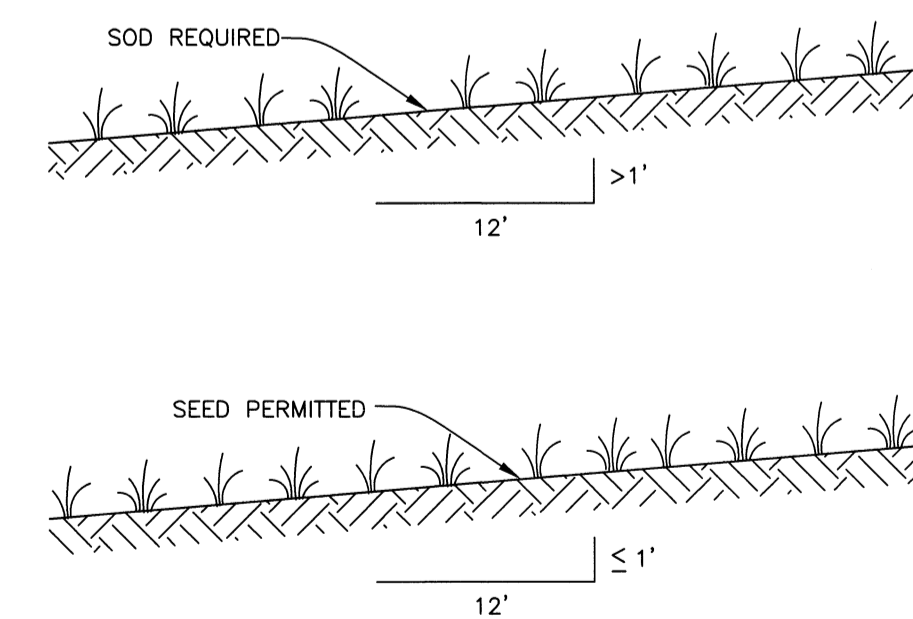
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



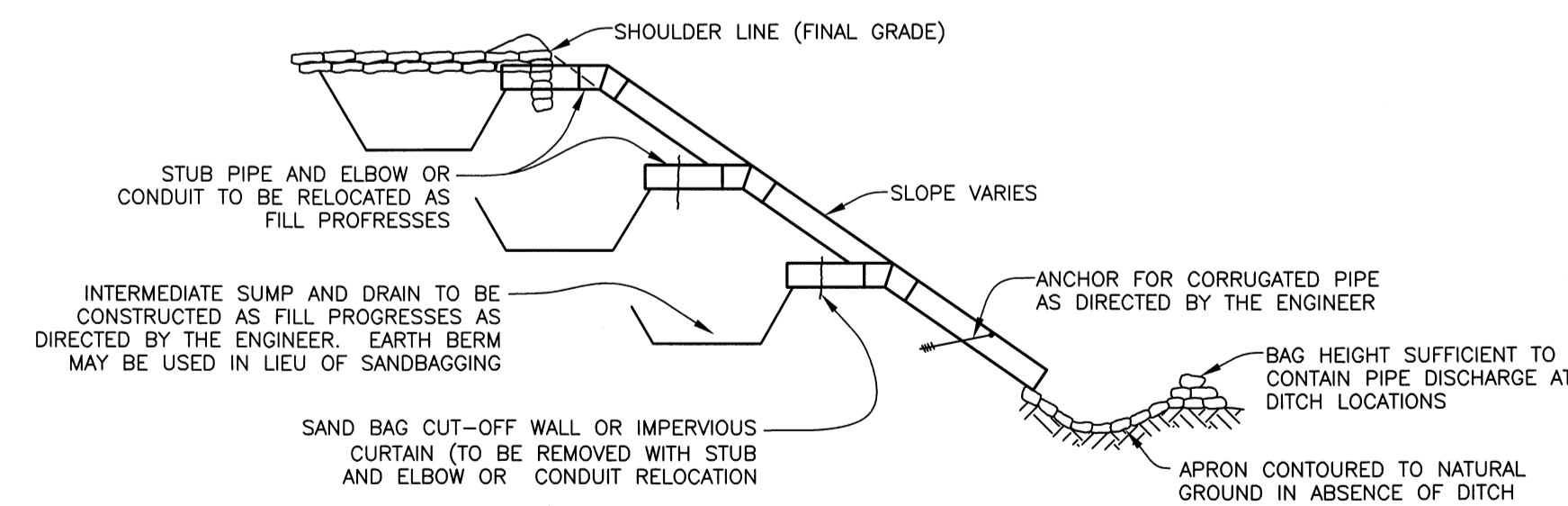
UNDERGROUND PIPE CROSSING
FIGURE 12



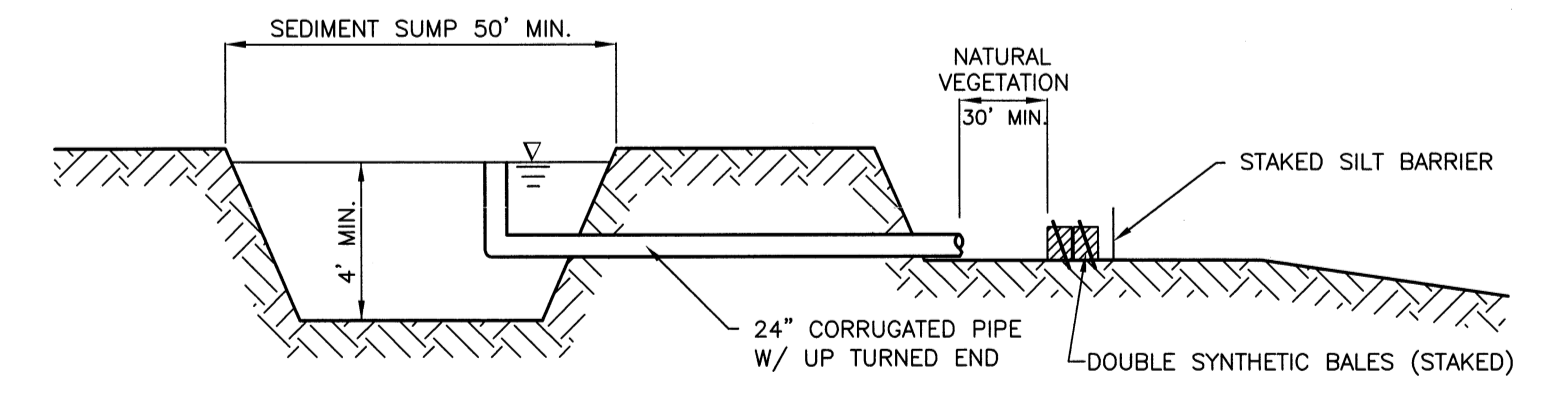
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



**SECTION AA
TEMPORARY SLOPE DRAIN**
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

SEC, TWP, RGE	13/35S/17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125180		
By	Checked	Date	
Surveyed	ZNS	-	4/30/09
Drawn	JSS		
Designed	JAA		

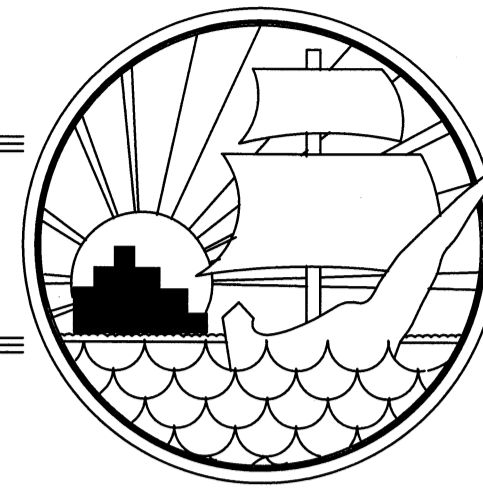
NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
1/10/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.
MANATEE COUNTY
FLORIDA
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**
EROSION CONTROL



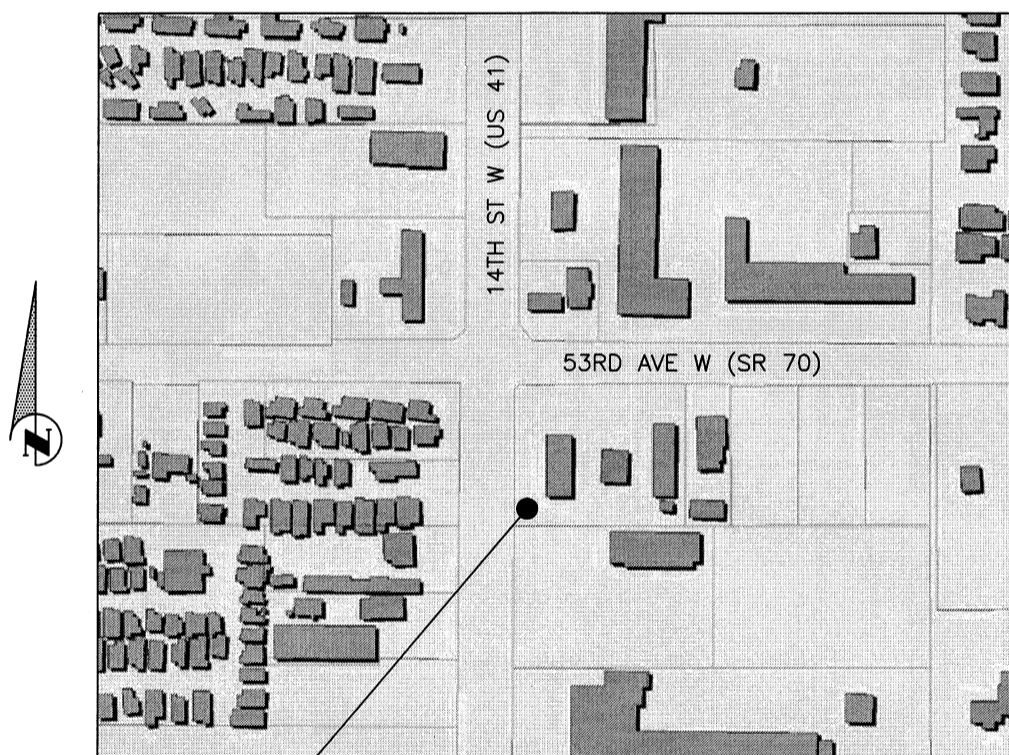
MANATEE COUNTY, FLORIDA

LIFT STATION UPGRADES, 2010

LS 23-A, RTU #410

402-5125080

NOVEMBER 2009

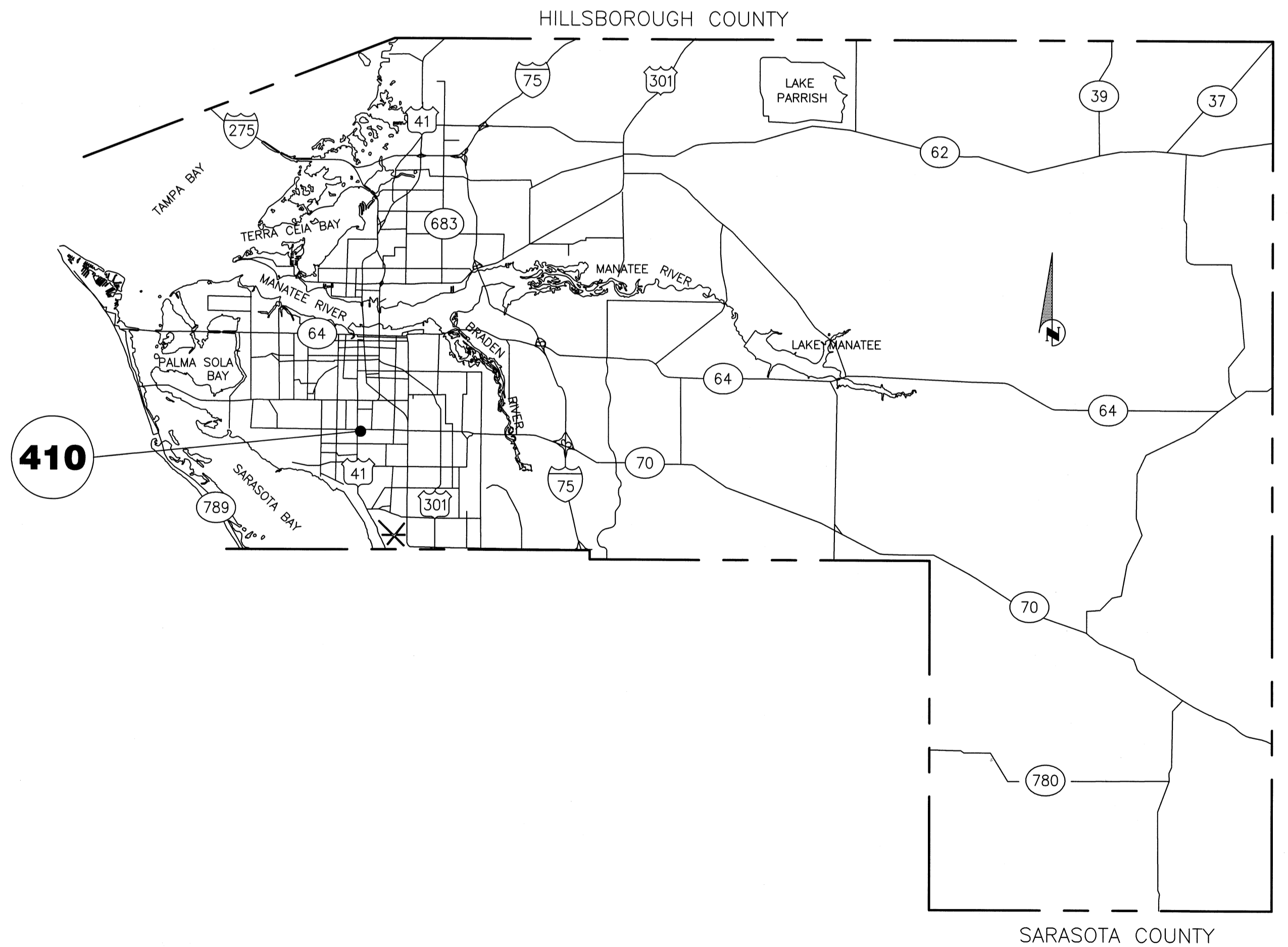


LS 23-A, RTU #410
1313 53RD AVE W.

VICINITY MAP

N.T.S.

410



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |

PROJECT DESCRIPTION

INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

SEC. TWP. RGE	14/35S/17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125080		
By	Checked	Date	
Surveyed	ZNS	-	4/30/09
Drawn	JSS		
Designed	JAA		

NOTE:
THESE PLANS DO NOT REFLECT A TRUE BOUNDARY OR RIGHTS-OF-WAY SURVEY. THE LOCATION OF THE STREET RIGHTS-OF-WAY LINES SHOWN IS APPROXIMATE AND IS BASED ON INFORMATION CONTAINED IN THE SUBDIVISION PLATS, RIGHTS-OF-WAY MAPS ON RECORD IN MANATEE COUNTY AND ON TOPOGRAPHIC DATA COLLECTED ON THE ROUTE SURVEY OF THE RIGHTS-OF-WAY. CONSEQUENTLY THE RIGHTS-OF-WAY LINES SHOWN ARE NOT INTENDED TO INDICATE THE EXACT PROPERTY CORNERS.

<p>JOHN A. ARMSTRONG 45802 Engineer / Reg. No. <i>John A. Armstrong</i> 11/10/09 Signature & Date</p>		<p>PUBLIC WORKS DEPT.—INFRASTRUCTURE ENGINEERING DIV. 1022 26th Avenue East, Bradenton, FL 34208</p>
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NO.	REVISION DESCRIPTION	BY	DATE

<h3 style="margin: 0;">LIFT STATION UPGRADES, 2010</h3> <h3 style="margin: 0;">EMERGENCY GENERATORS</h3>	<p>COVER SHEET</p>	<p>Sheet 1 4</p>
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S:\P\WD\Engineering\Shore\URI_Eng_Design\Proj\402-5125080\402-5125080-RTU-410-LS-23-A-N\DWG\ECOM\N\RTU_410_LS_23-A.dwg, 11/9/2009 10:47 AM Sheo Shoun, 1:1 - ROTATED ARCH D

S:\P\02-Engineering\Share\0210_Egms\RTU 410 LS 23-A.dwg, 3-Site Plan, 11/9/2009 10:47 AM Shea Shoun, 1:1, ROTATED ARCH D

NOTES:

- BEARINGS ARE BASED ON THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY 41, HAVING A BEARING OF S 00°27'43" E, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM MANATEE COUNTY GIS CONTROL SURVEY (1988) MONUMENTATION.
- THE PROPERTY LIES WITHIN FLOOD ZONE "X" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0329 C, REVISED, JULY 15, 1992.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, MANATEE COUNTY BENCH MARK No. "MANCO_BM+17.056_FB-93-67", ELEVATION OF 17.056 AS PUBLISHED.
- NATURAL GAS SERVICE TO BE INSTALLED IN A CARRIER PIPE AND STRAPPED TO THE VALVE VAULT OR WET WELL, IF PASSING OVER FORCE MAIN OR DISCHARGE PIPING.
- ANY ELECTRICAL WIRING THAT IS INSTALLED BETWEEN THE LIFT STATION'S WET WELL AND THE VALVE VAULT SHALL BE INSTALLED IN A CARRIER PIPE THAT IS STRAPPED TO THE WET WELL OR VALVE VAULT.
- CONTRACTOR SHALL INSTALL NATURAL GAS SERVICE FROM PROPOSED GENERATOR TO NATURAL GAS METER/BALL VALVE PROVIDED BY TECO. CONTRACTOR SHALL REMOVE PLUG AT NATURAL GAS METER/BALL VALVE AND CONNECT TO NATURAL GAS SERVICE PROVIDED BY TECO.

LEGEND:

CM	CONCRETE MONUMENT	CM	4"x4" CONCRETE MONUMENT FOUND AS NOTED
IR	IRON ROD	IR	IRON ROD FOUND (NO #)
IP	IRON PIPE	IP	IRON PIPE FOUND (NO #)
R/W	RIGHT OF WAY LINE	SMH	SANITARY SEWER MANHOLE
ID	IDENTIFICATION	BFP	BACK FLOW PREVENTER
O.R.B.	OFFICIAL RECORD BOOK	GV	FORCE MAIN GATE VALVE
P.B.	PLAT BOOK	LP	METAL LIGHT POLE
PG.	PAGE	WS	WATER SERVICE
(F)	FIELD DATA	ANT	ANTENNA
(D)	DEED DATA	AB	ALARM BOX
(C)	CALCULATE DATA	EM	ELECTRIC METER
EL	ELEVATION	WM	WATER METER
NGVD	NATIONAL GEODETIC VERTICAL DATUM	WPP	WOOD POWER POLE
CI	CURB INLET	WV	WATER VALVE
LP	LIGHT POLE	FH	FIRE HYDRANT
ANT	ANTENNA	ANCH	ANCHOR
WS	WATER SERVICE	BM	BENCH MARK
BFP	BACK FLOW PREVENTER	19.83	EXISTING SPOT ELEVATION
EM	ELECTRIC METER	OH	OVERHEAD LINES
AB	ALARM BOX	FM	FORCE MAIN
GV	GATE VALVE	RW	REUSE MAIN
SMH	SANITARY SEWER MANHOLE	PW	POTABLE WATER MAIN
BM	BENCH MARK	EOP	EDGE OF PAVEMENT
WM	WATER METER		
WPP	WOOD POWER POLE		
C.L.	CHAIN LINK		
WD	WOOD		
FH	FIRE HYDRANT		
WV	WATER VALVE		
OH	OVERHEAD		
FM	FORCE MAIN		
RW	REUSE MAIN		
PW	POTABLE WATER MAIN		
EOP	EDGE OF PAVEMENT		

**U.S. HIGHWAY 41
(STATE ROAD 45)
(14th STREET WEST)**
(84' PUBLIC R/W)
75' ASPHALT PAVEMENT

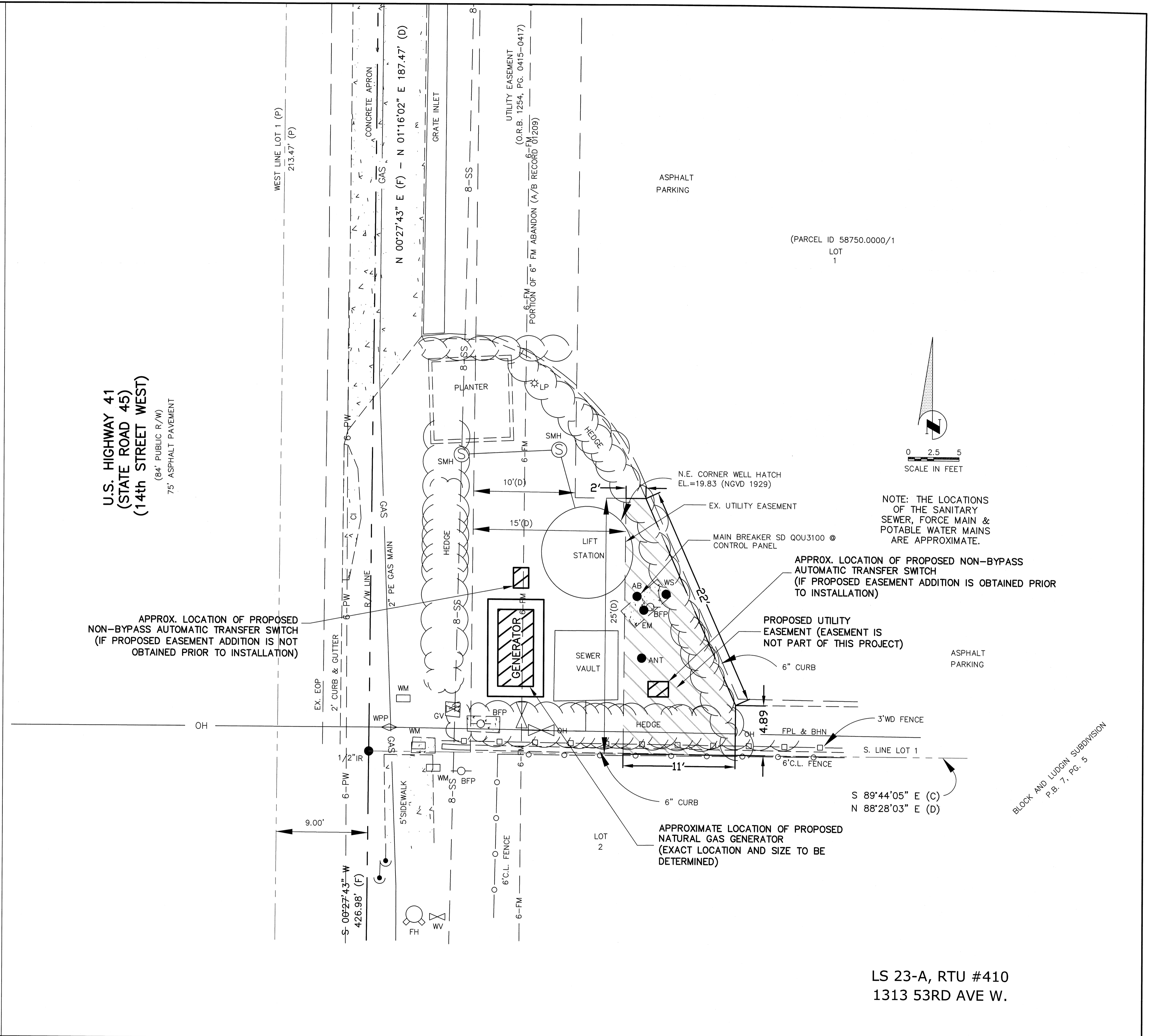
APPROX. LOCATION OF PROPOSED NON-BYPASS AUTOMATIC TRANSFER SWITCH (IF PROPOSED EASEMENT ADDITION IS NOT OBTAINED PRIOR TO INSTALLATION)

NOTE: THE LOCATIONS OF THE SANITARY SEWER, FORCE MAIN & POTABLE WATER MAINS ARE APPROXIMATE.

APPROX. LOCATION OF PROPOSED NON-BYPASS AUTOMATIC TRANSFER SWITCH (IF PROPOSED EASEMENT ADDITION IS OBTAINED PRIOR TO INSTALLATION)

PROPOSED UTILITY EASEMENT (EASEMENT IS NOT PART OF THIS PROJECT)

APPROXIMATE LOCATION OF PROPOSED NATURAL GAS GENERATOR (EXACT LOCATION AND SIZE TO BE DETERMINED)



LS 23-A, RTU #410
1313 53RD AVE W.

SEC, TWP, RGE	14/35S/17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125080		
By	Checked	Date	
Surveyed	ZNS	-	4/30/09
Drawn	JSS		
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/10/09
Signature & Date

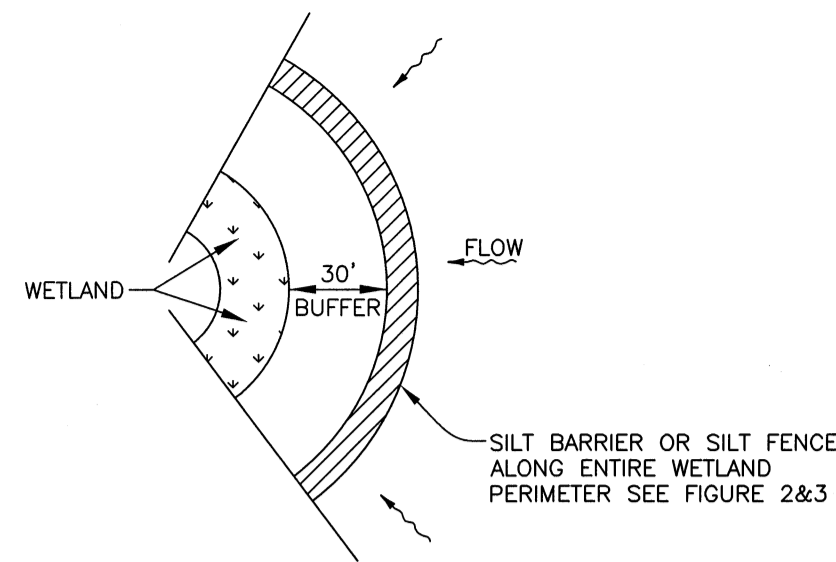
MANATEE COUNTY FLORIDA
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

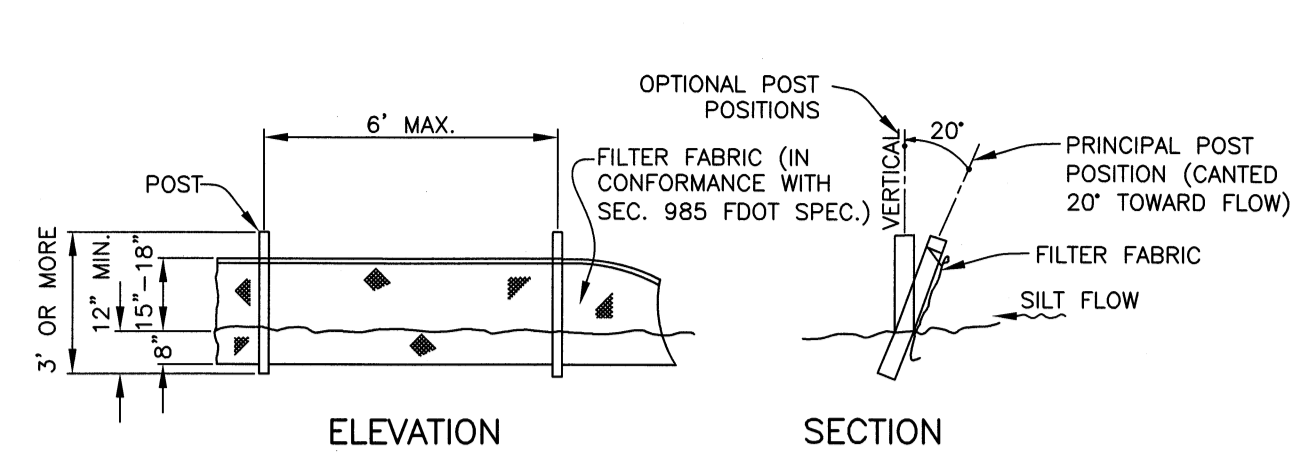
**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

SITE PLAN

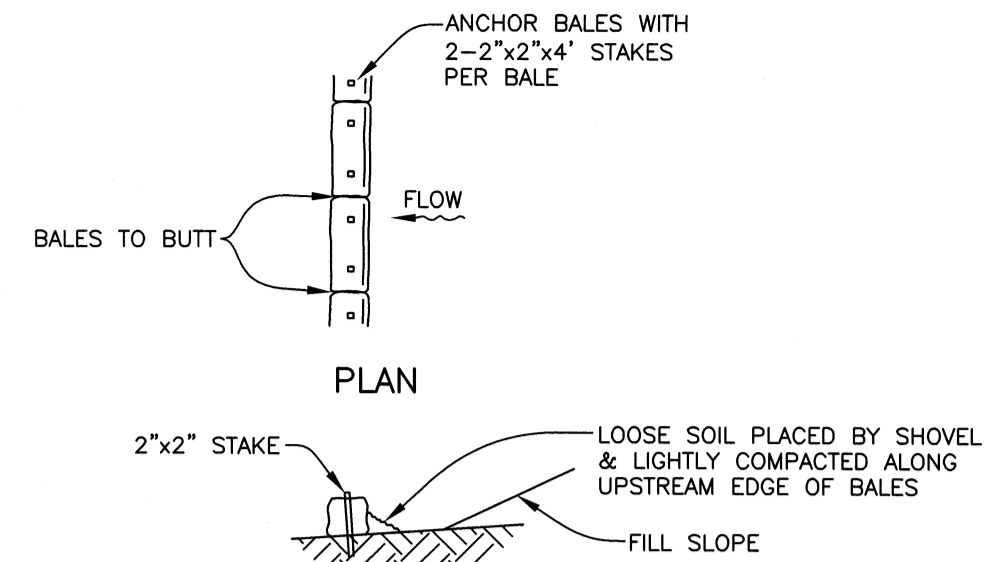
Sheet 3 of 4



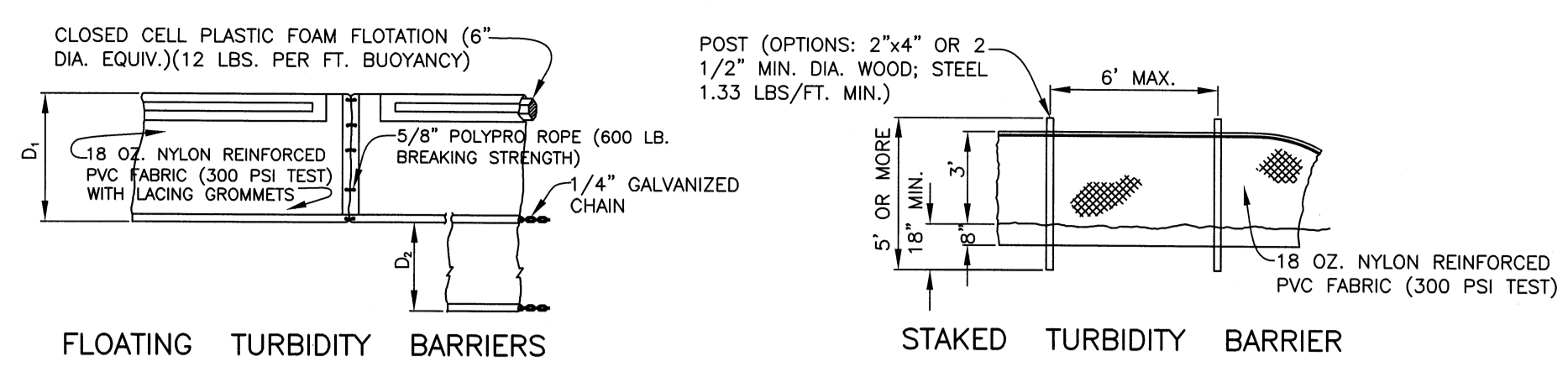
WETLAND BUFFER
FIGURE 1



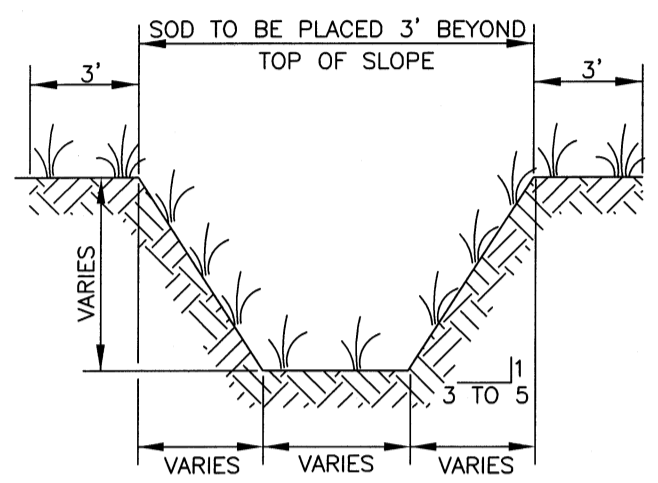
TYPICAL SILT FENCE
FIGURE 2



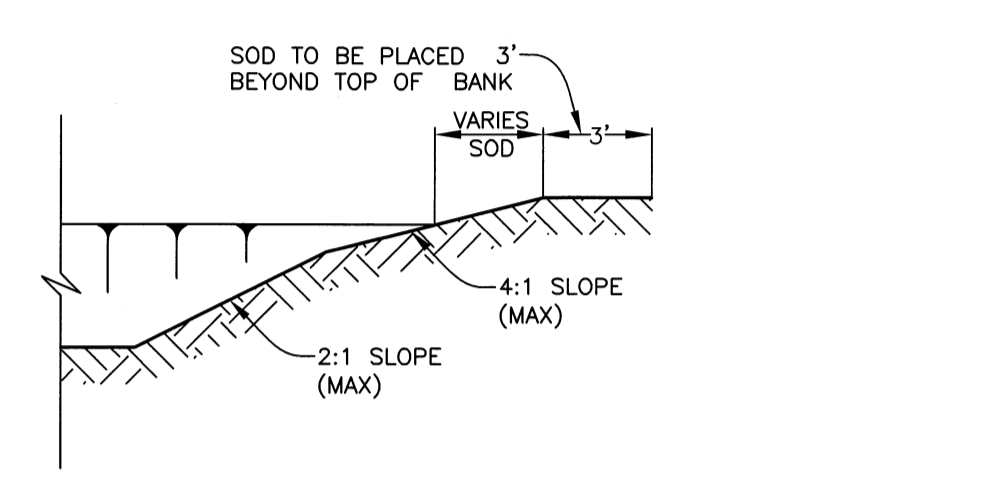
TYPICAL BALE SILT BARRIER
FIGURE 3



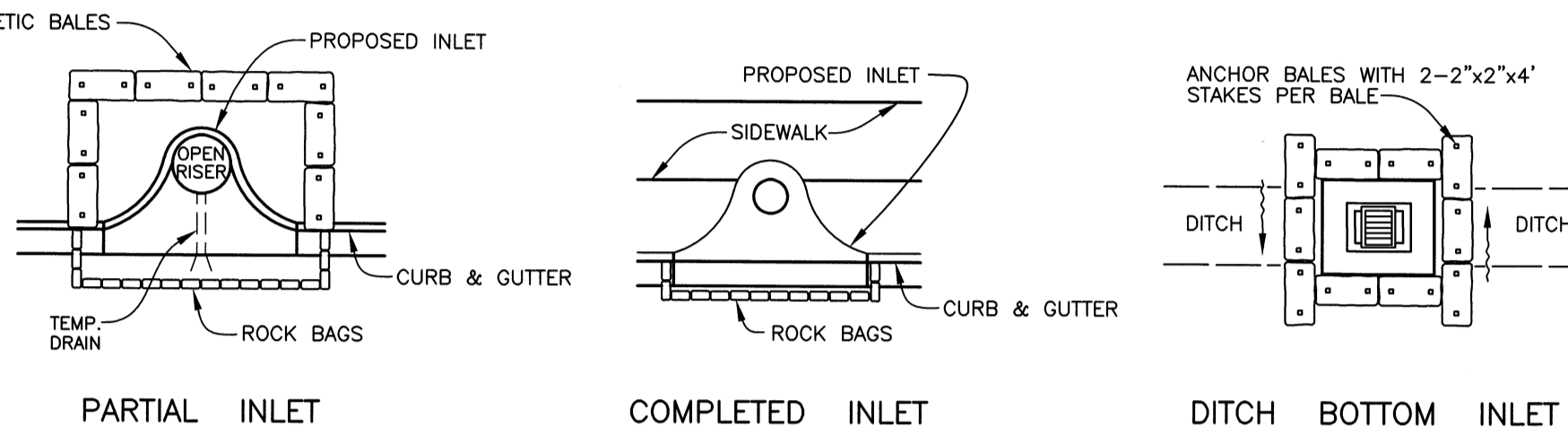
TURBIDITY BARRIERS
FIGURE 4



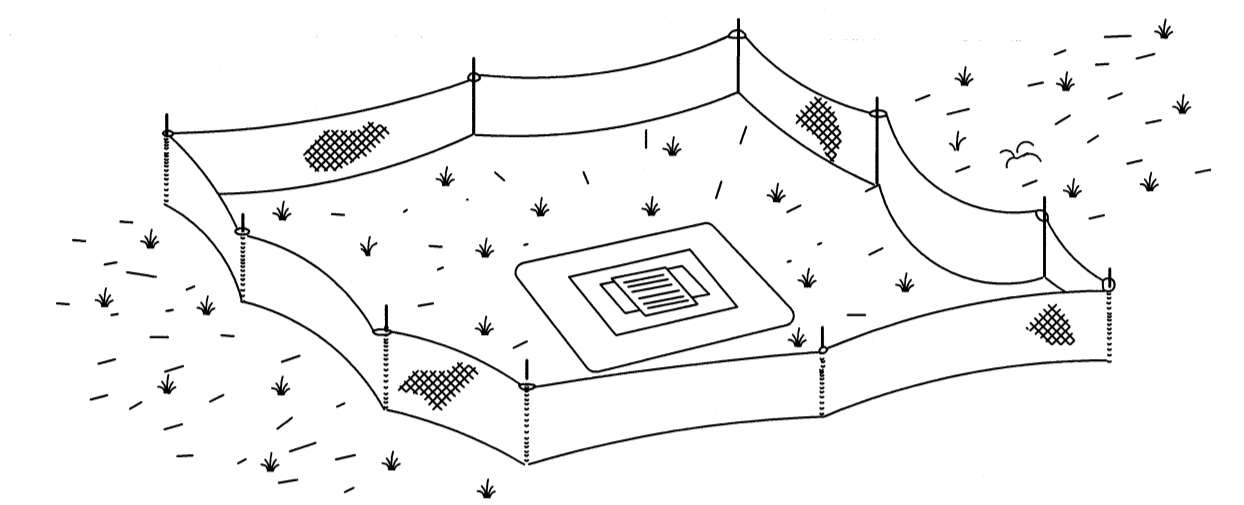
TYPICAL SWALE SECTION
FIGURE 5



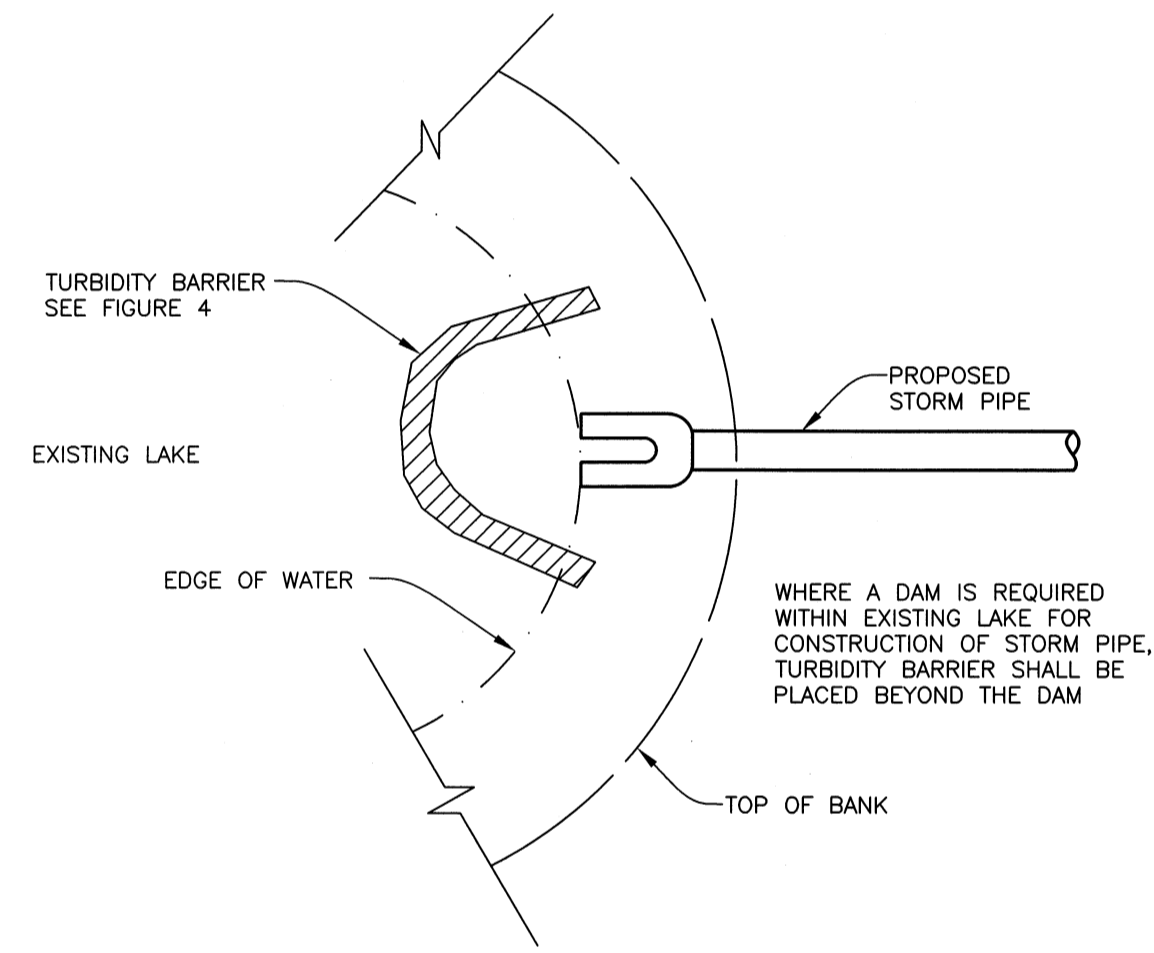
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



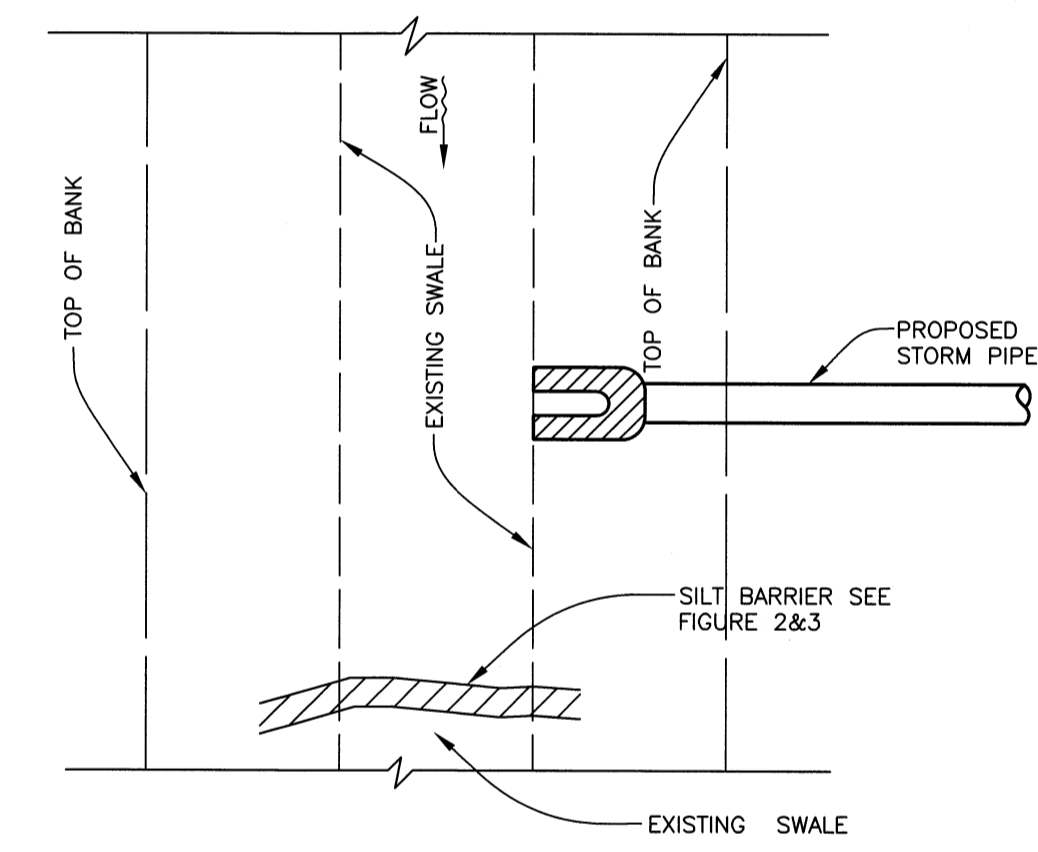
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



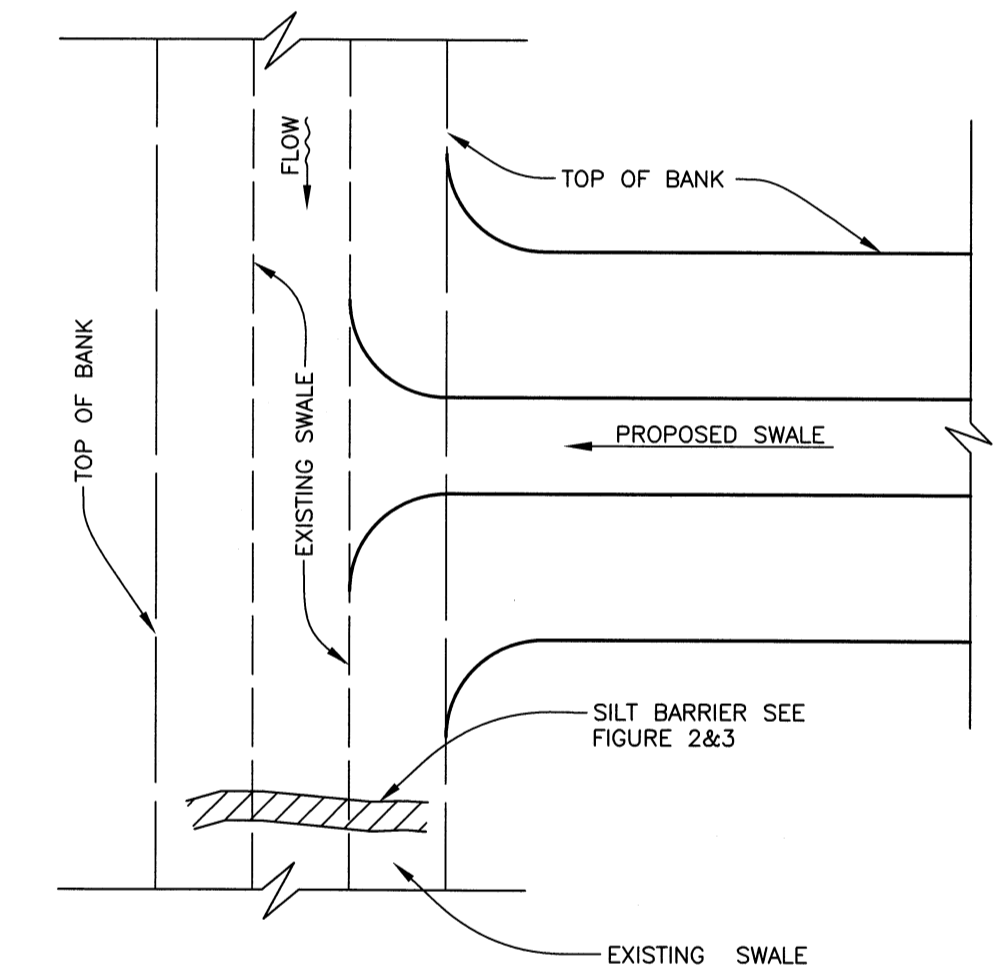
TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



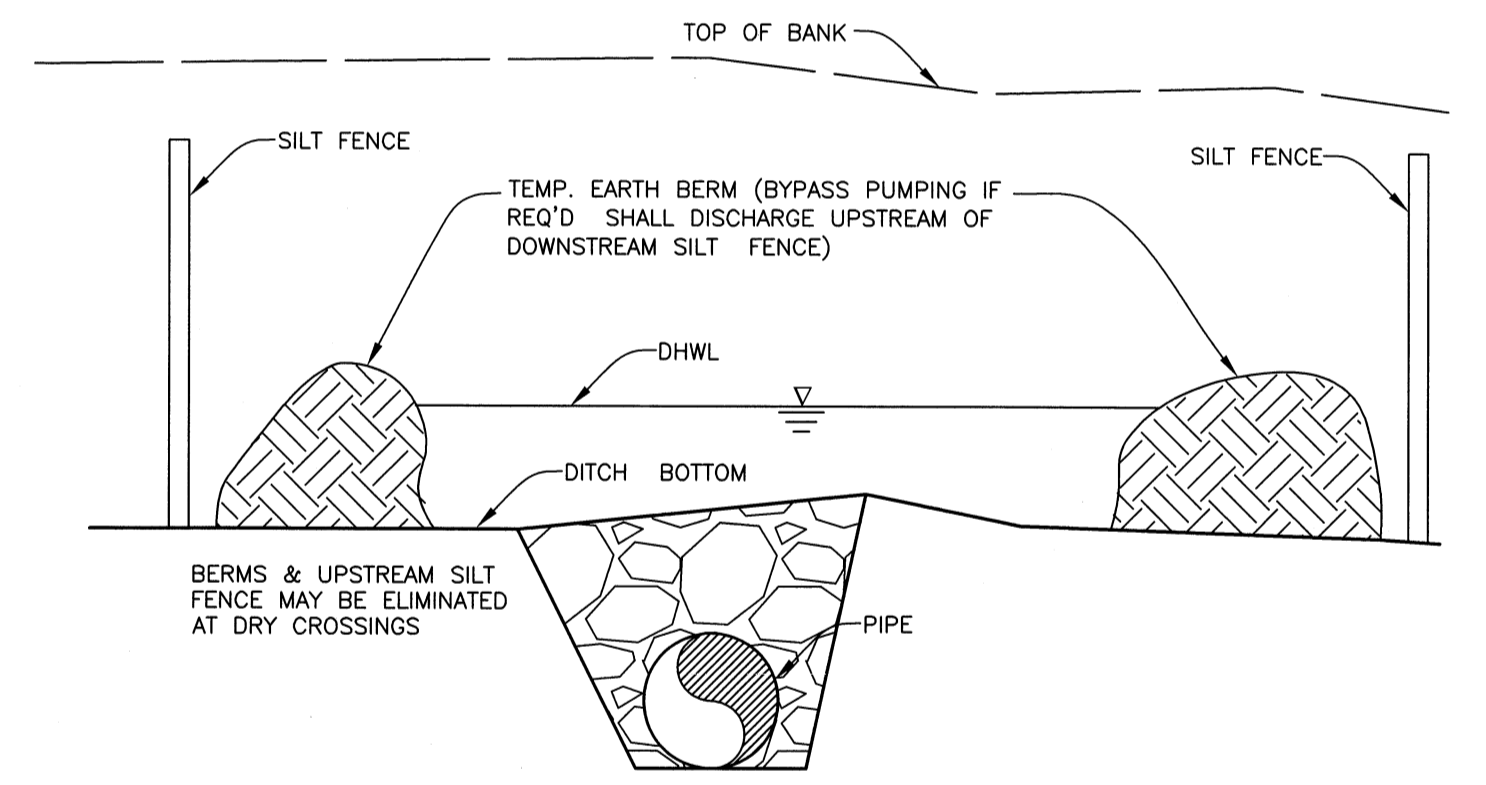
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



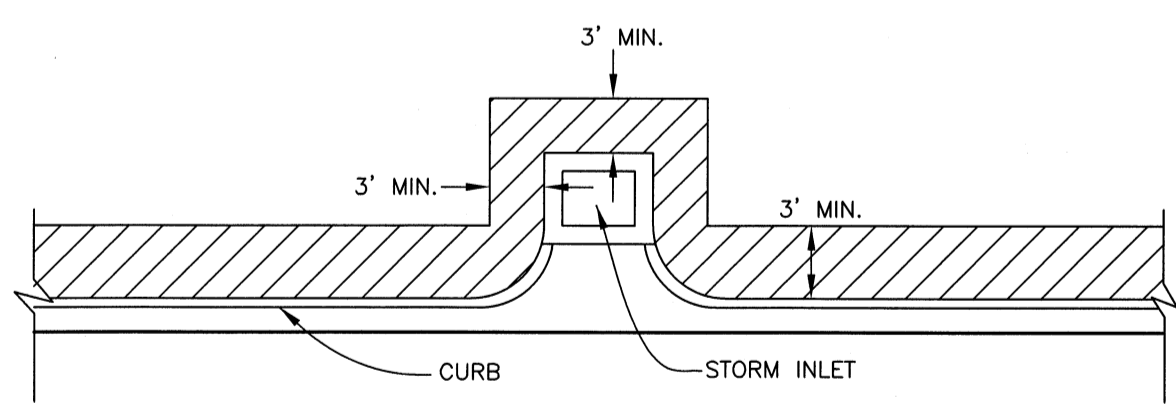
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



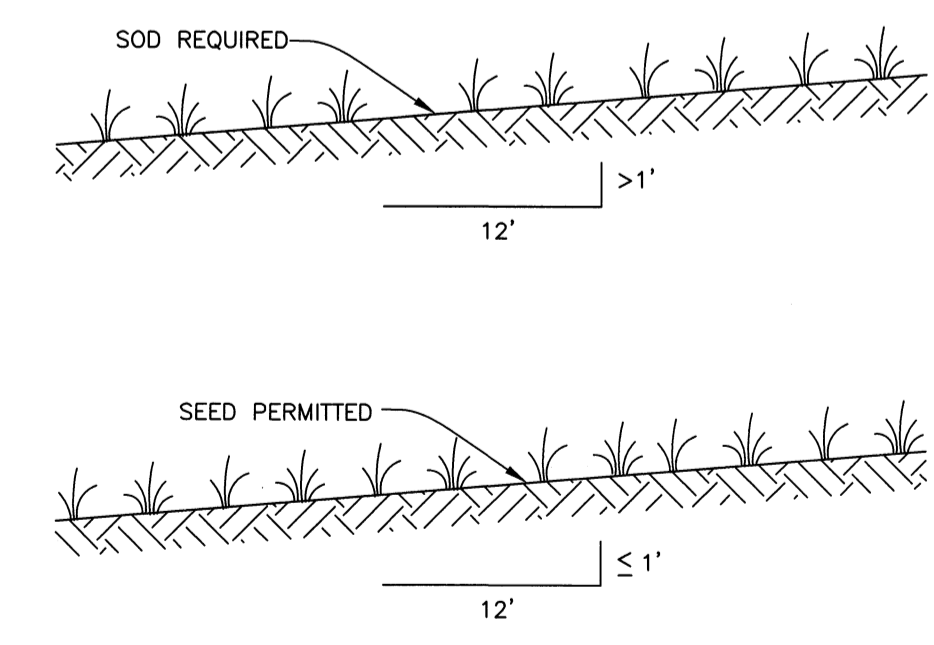
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



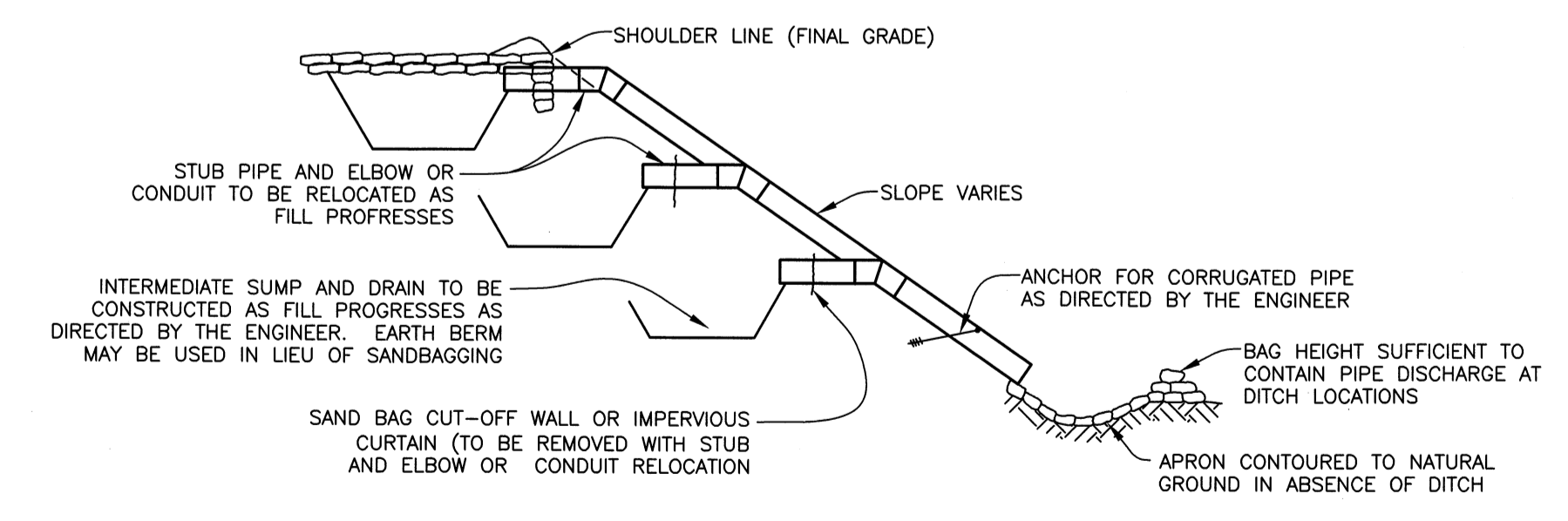
UNDERGROUND PIPE CROSSING
FIGURE 12



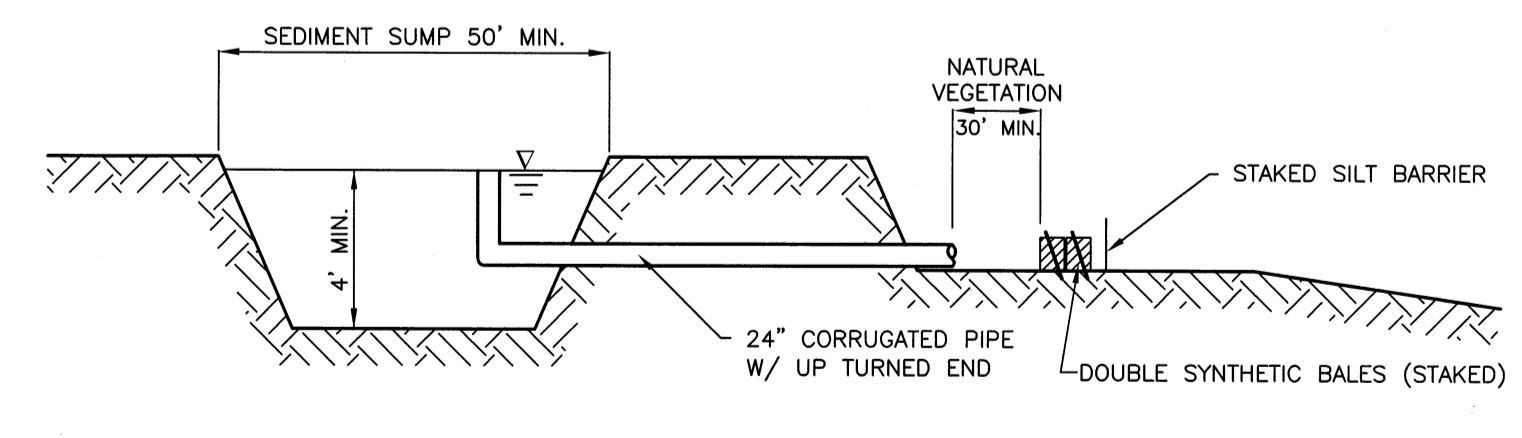
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



SECTION AA
TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

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SEC, TWP, RGE	14/35S/17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5125080		
Surveyed	By	Checked	Date
Drawn	ZNS	-	4/30/09
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/10/09
Signature & Date

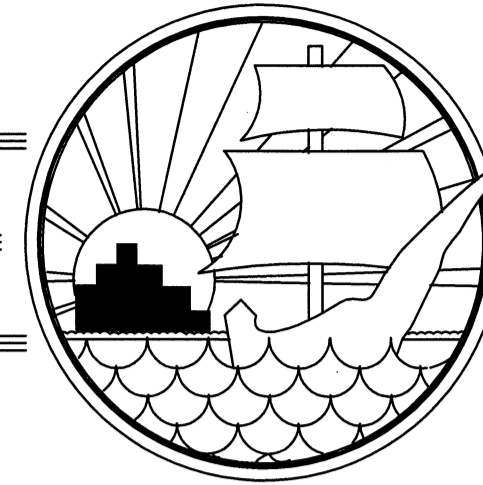
PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS
EROSION CONTROL

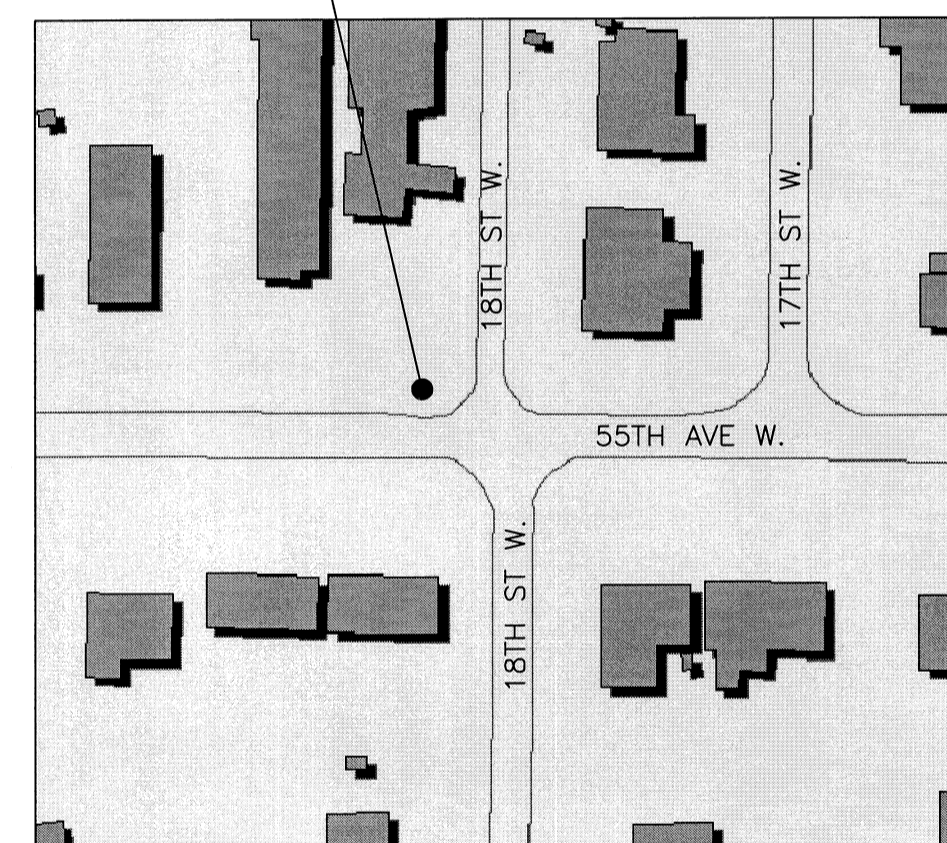
Sheet 4 of 4



MANATEE COUNTY, FLORIDA LIFT STATION UPGRADES, 2010 LS 29-A, RTU #129 402-5124980

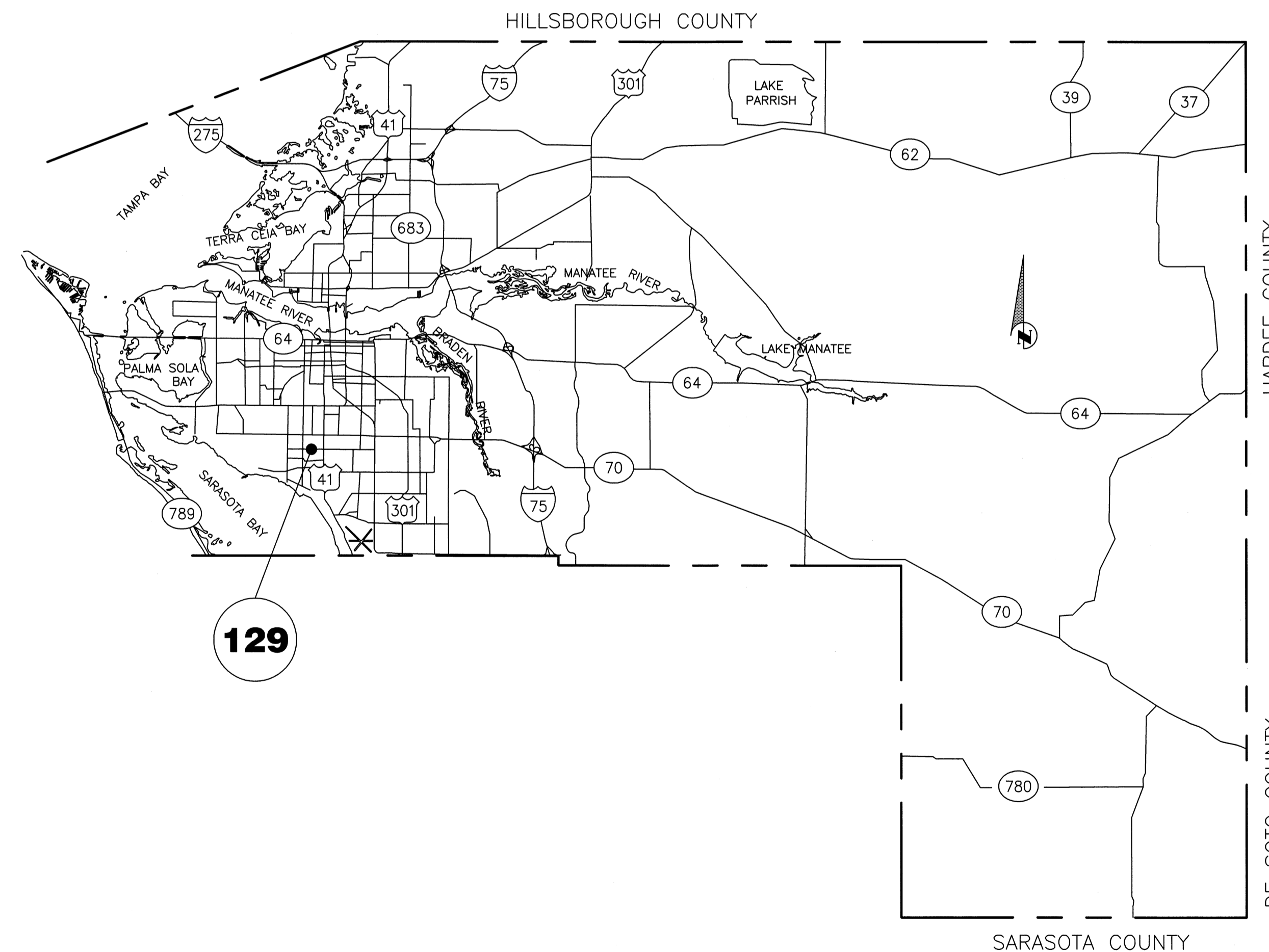
NOVEMBER 2009

129



LS 29-A, RTU #129
1801 55TH AVE W.

VICINITY MAP
N.T.S.



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |

PROJECT DESCRIPTION

INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

S:\P\W\Engineering\Sheets\1111 - SAN_SWR_Proj\San_Swr - LS Upgrades\Genra\2010 Egrns\RTU 129 LS 29-A.dwg\DWG\Genra\RTU 129 LS 29-A.dwg\1-Cover_Sheet_11/16/2009 1:42 PM Shee Show, 1:1 - D=Arch (24"x36")

SEC. TWP. RGE	15, 36S, 17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124980		
	By	Checked	Date
Surveyed	ZNS	-	4/30/09
Drawn	JSS		
Designed	JAA		

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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/06/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

LIFT STATION UPGRADES, 2010 EMERGENCY GENERATORS	Sheet 1 4
COVER SHEET	

S:\P\02_Engineering\Share\URS_Eng_Design\Proj\LS 29-A\DWG\RTU 129 LS 29-A.dwg, 3-Site Plan, 11/6/2009 1:42 PM, Sheet Show, 1:1, D-Arch (24x36)

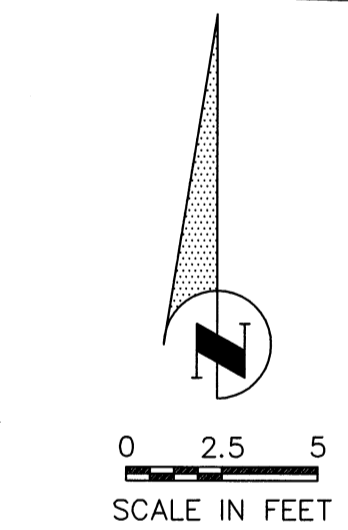
NOTES:

- BEARINGS ARE BASED ON THE NORTH RIGHT OF WAY LINE OF 55th AVENUE WEST, HAVING A BEARING OF S 89°36'20" E, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM MANATEE COUNTY GIS CONTROL SURVEY (1988) MONUMENTATION.
- THE PROPERTY LIES WITHIN FLOOD ZONE "X" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0329 C, REVISED, JULY 15, 1992.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, FOUND BENCH MARK No. "1", ELEVATION OF 21.89.

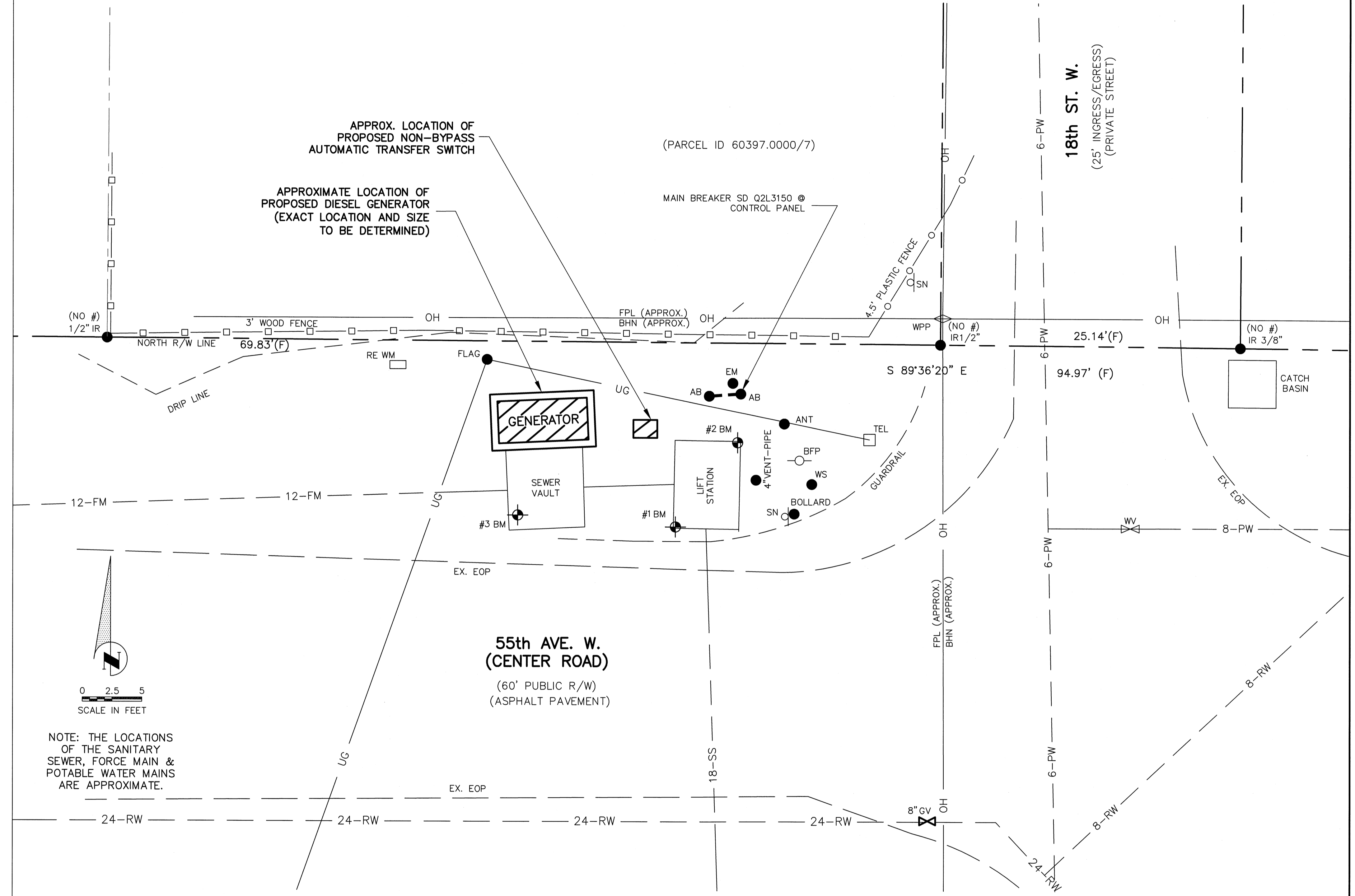
LEGEND:

IR	IRON ROD	IR ●	IRON ROD FOUND (NO #)
R/W	RIGHT OF WAY LINE	SMH ⊙	SANITARY SEWER MANHOLE
ID	IDENTIFICATION	BFP ⊖	BACK FLOW PREVENTER
(F)	FIELD DATA	GV ⊕	RECLAIMED GATE VALVE
EL	ELEVATION	TEL □	VERIZON FIOS BOX
NGVD	NATIONAL GEODETIC VERTICAL DATUM	WS ●	WATER SERVICE
ANT	ANTENNA	ANT ⊕	ANTENNA
WS	WATER SERVICE	AB ⊕	ALARM BOX
BFP	BACK FLOW PREVENTER	EM ●	ELECTRIC METER
EM	ELECTRIC METER	RE WM □	RECLAIMED WATER METER
AB	ALARM BOX	WPP ⊖	WOOD POWER POLE
GV	GATE VALVE	WV ⊕	WATER VALVE
SMH	SANITARY SEWER MANHOLE	SN ⊕	SIGN
BM	BENCH MARK	BM ●	BENCH MARK
WM	WATER METER	●	EXISTING SPOT ELEVATION
WPP	WOOD POWER POLE	— OH	OVERHEAD POWER LINES
WV	WATER VALVE	— UG	UNDERGROUND VERIZON LINE
OH	OVERHEAD		
UG	UNDERGROUND		
FM	FORCE MAIN		
RW	REUSE MAIN		
PW	POTABLE WATER MAIN		
EOP	EDGE OF PAVEMENT		

BENCH MARK #1
NAIL & DISK (LB 6982)
EL.=21.89 (NGVD 1929)
BENCH MARK #2
N.E. CORNER WELL HATCH
EL.=21.85 (NGVD 1929)
BENCH MARK #3
S.W. CORNER VAULT HATCH
EL.=20.15 (NGVD 1929)



NOTE: THE LOCATIONS OF THE SANITARY SEWER, FORCE MAIN & POTABLE WATER MAINS ARE APPROXIMATE.

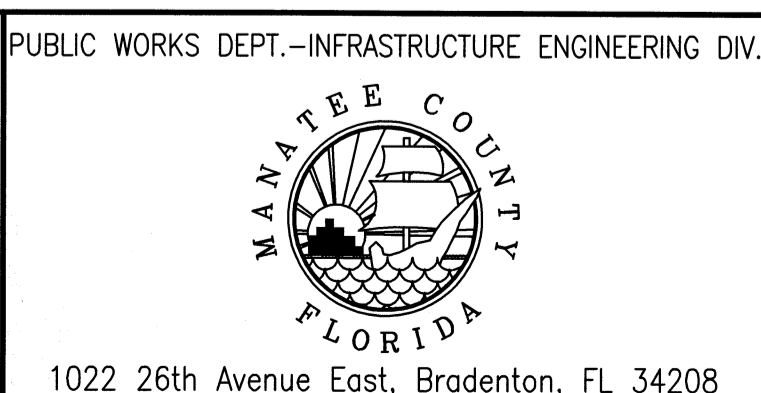


LS 29-A, RTU #129
1801 55TH AVE W.

SEC, TWP, RGE	15, 36S, 17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124980		
Surveyed	By	Checked	Date
Drawn	JSS	-	4/30/09
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
Signature & Date: 11/06/09

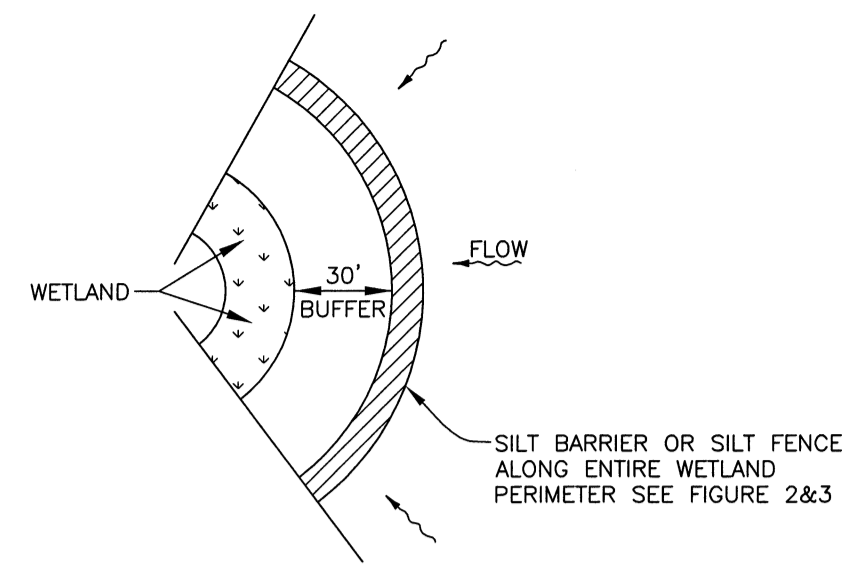


NO.	REVISION DESCRIPTION	BY	DATE

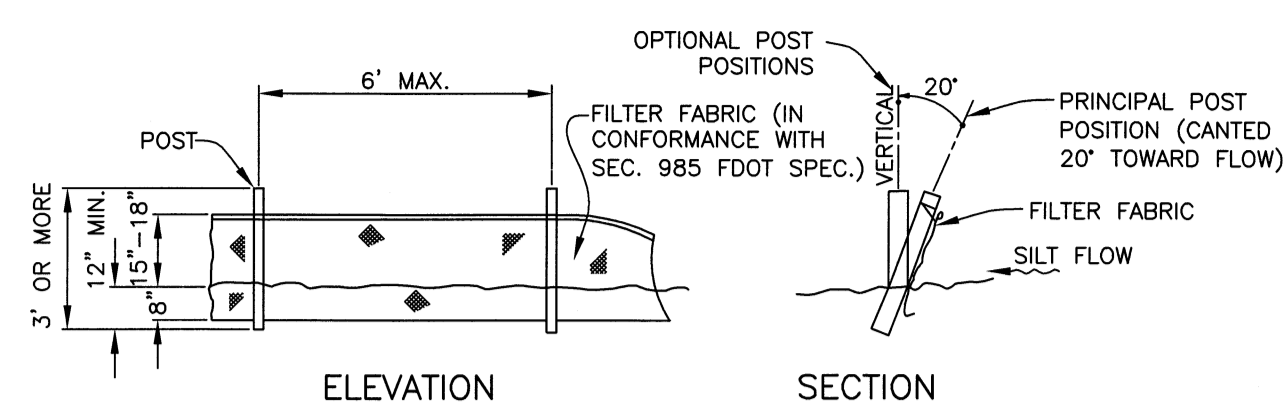
**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

SITE PLAN

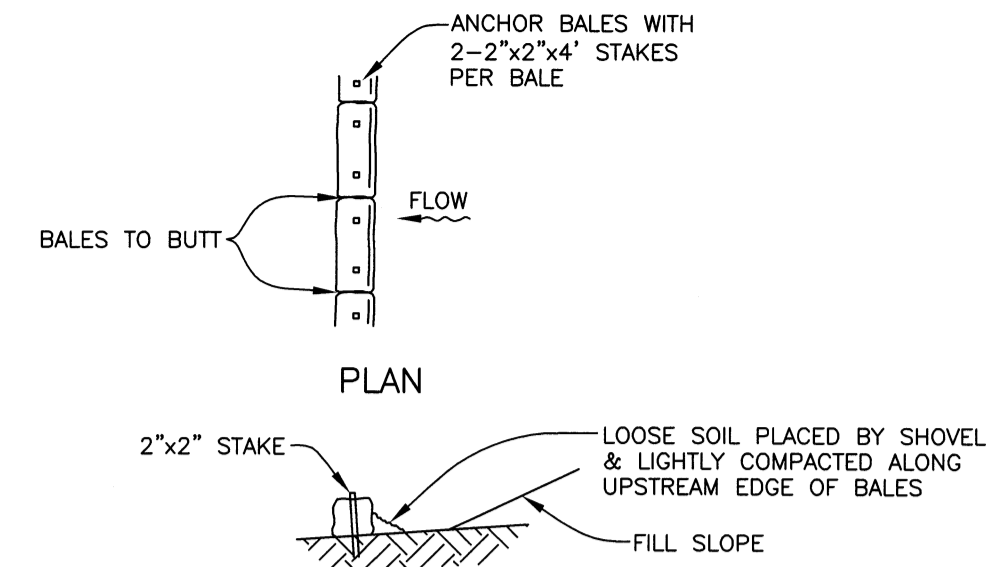
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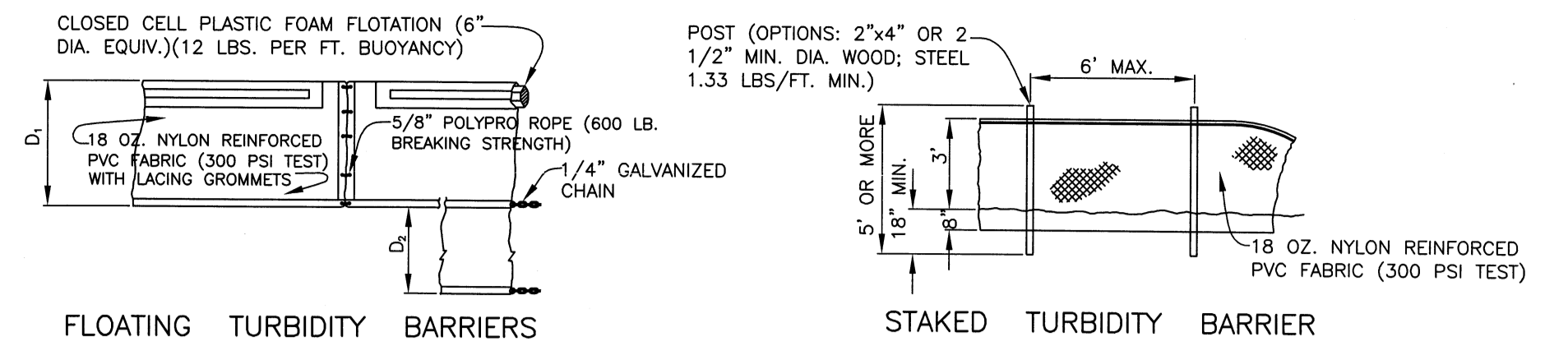
WETLAND BUFFER
FIGURE 1



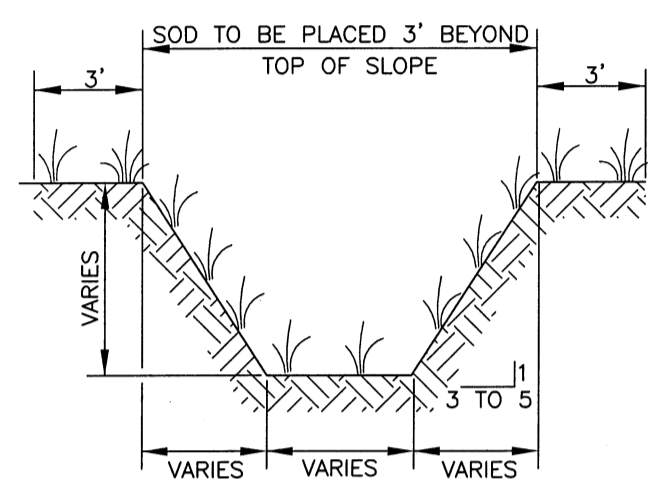
TYPICAL SILT FENCE
FIGURE 2



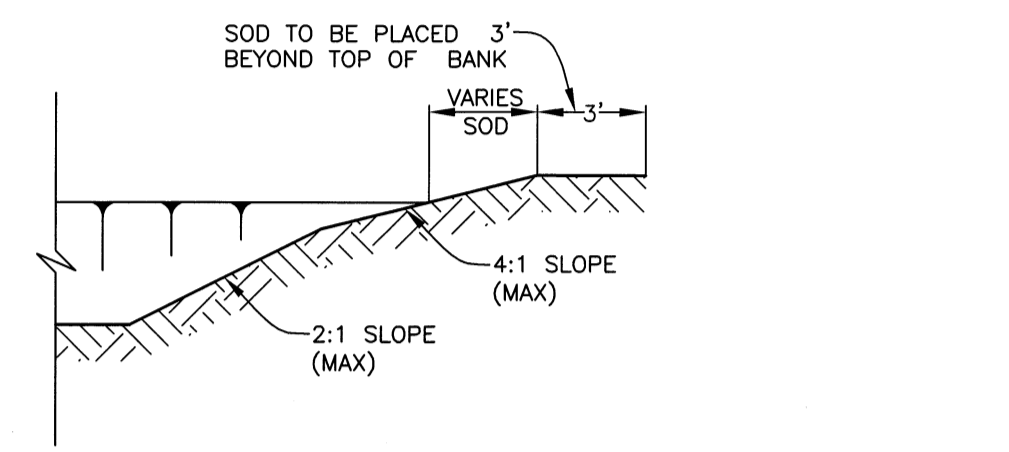
TYPICAL BALE SILT BARRIER
FIGURE 3



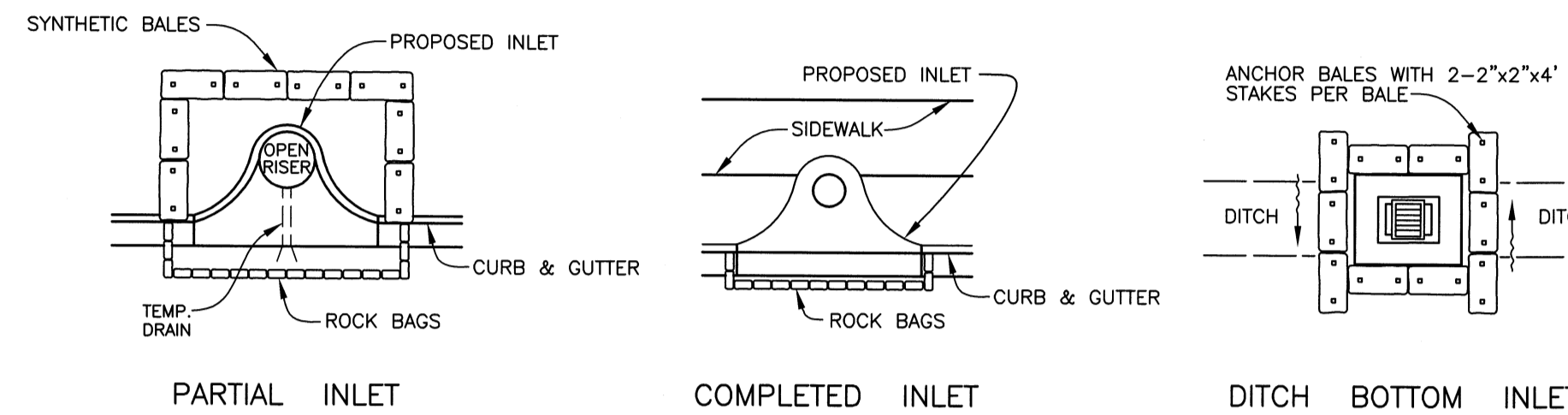
FLOATING TURBIDITY BARRIERS
STAKED TURBIDITY BARRIER
TURBIDITY BARRIERS
FIGURE 4



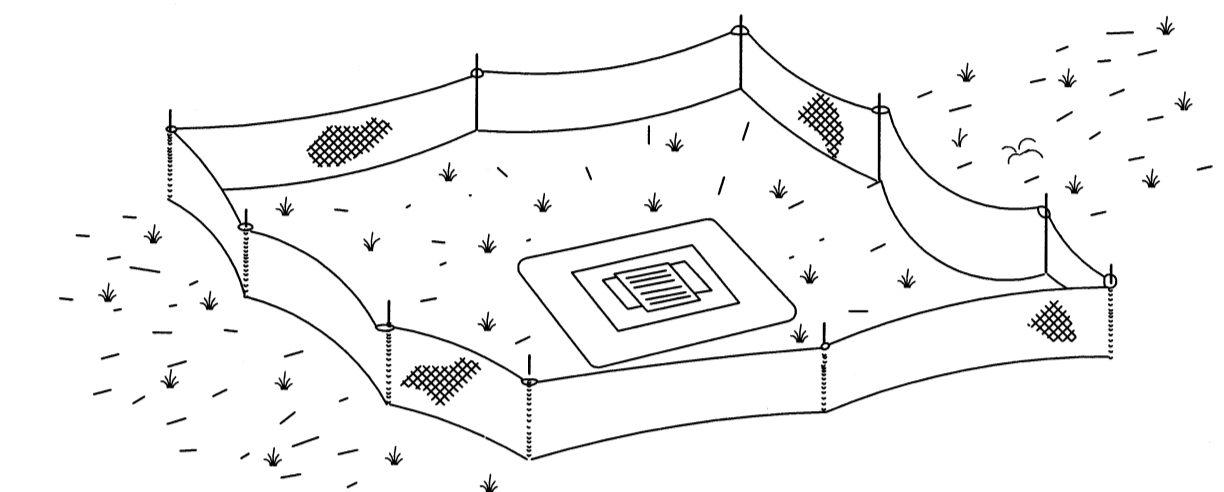
TYPICAL SWALE SECTION
FIGURE 5



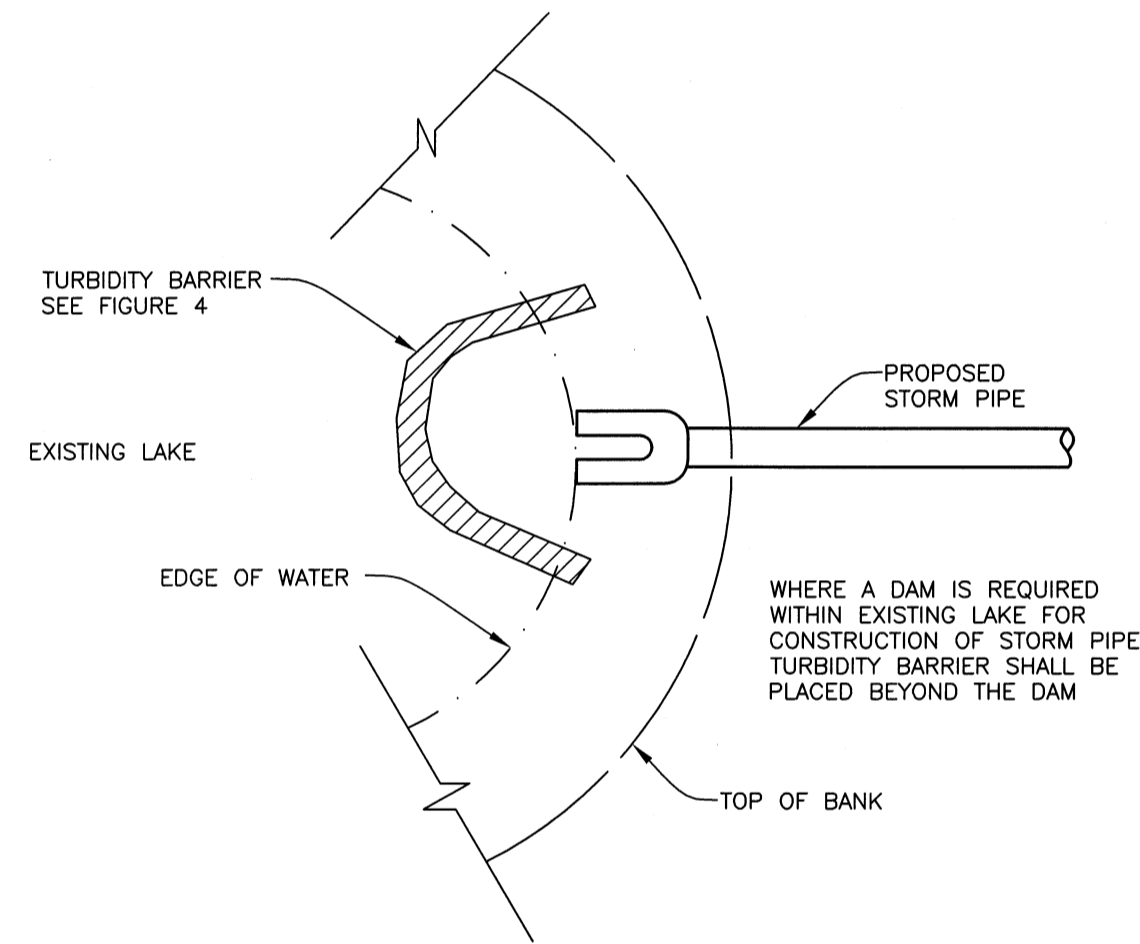
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



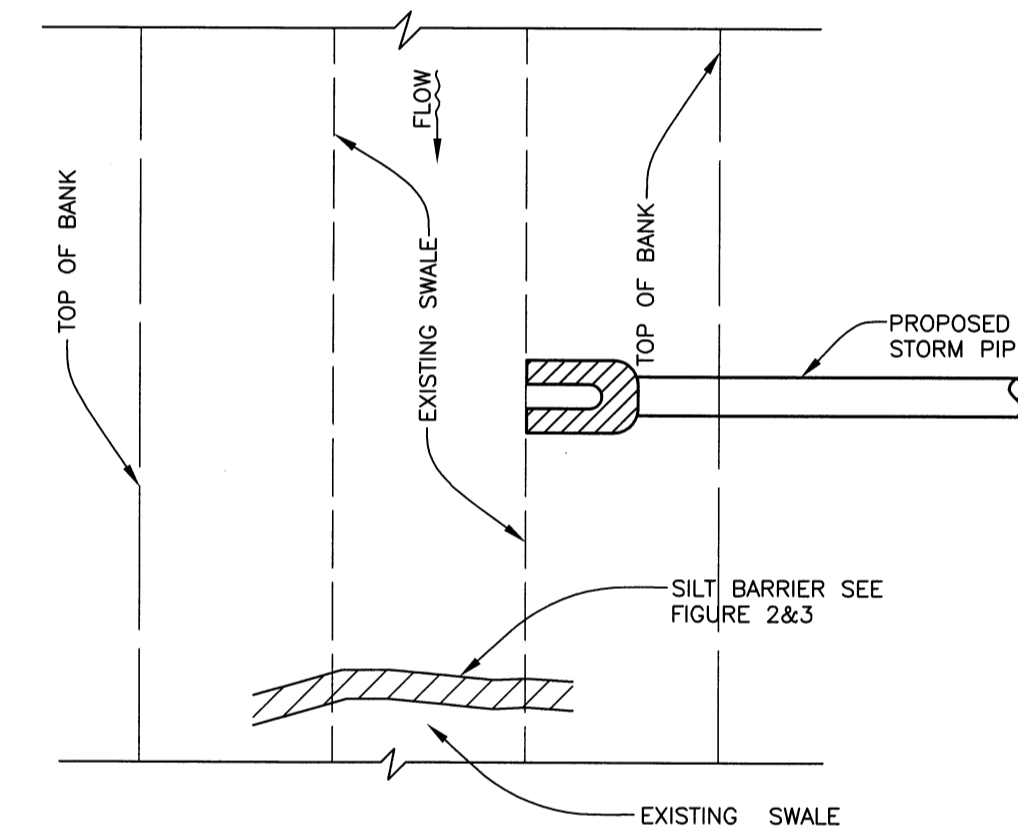
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



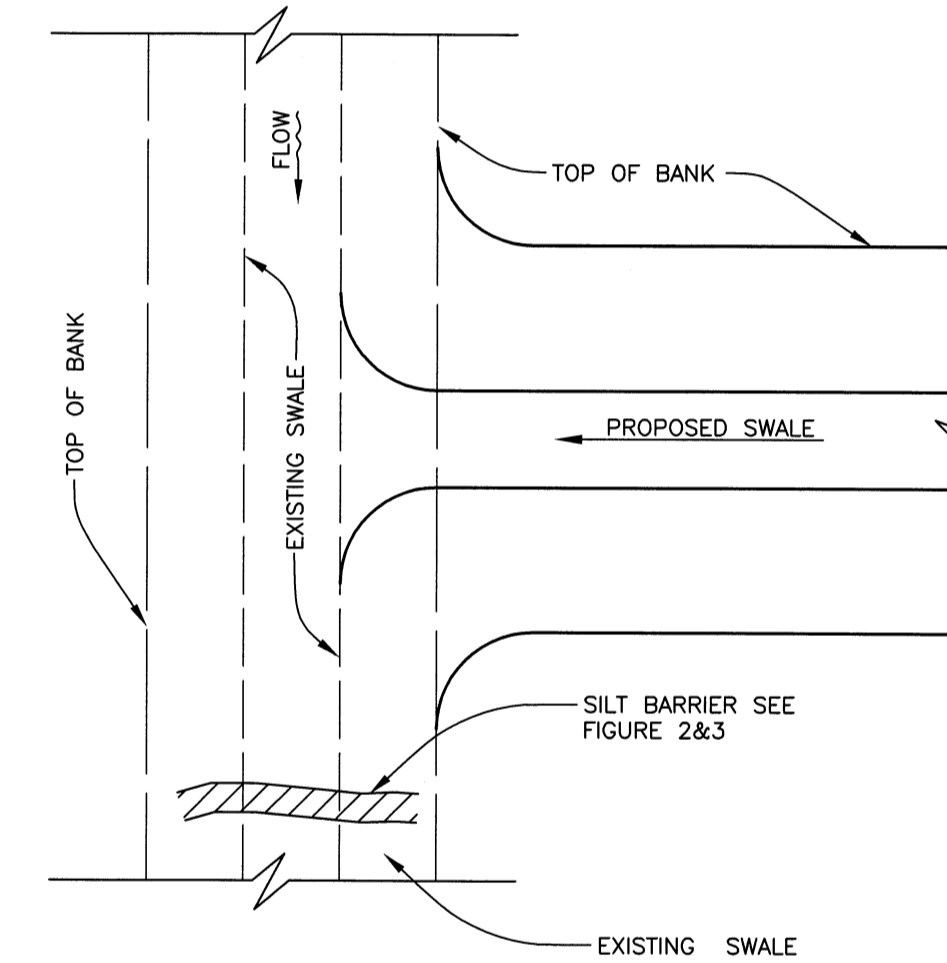
TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



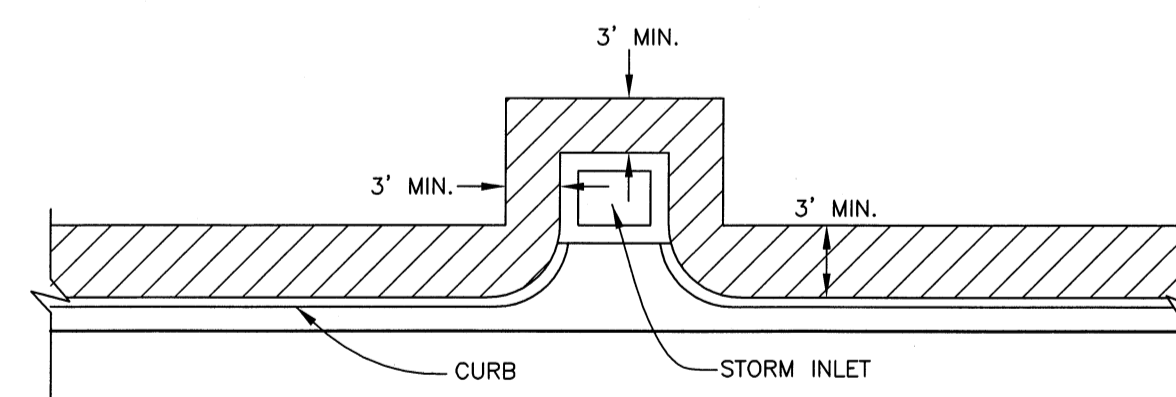
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



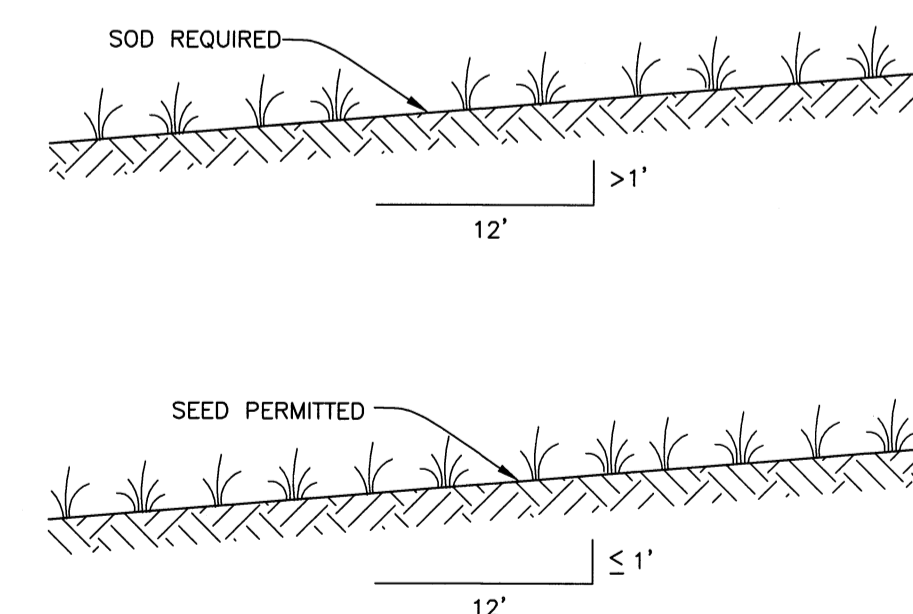
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



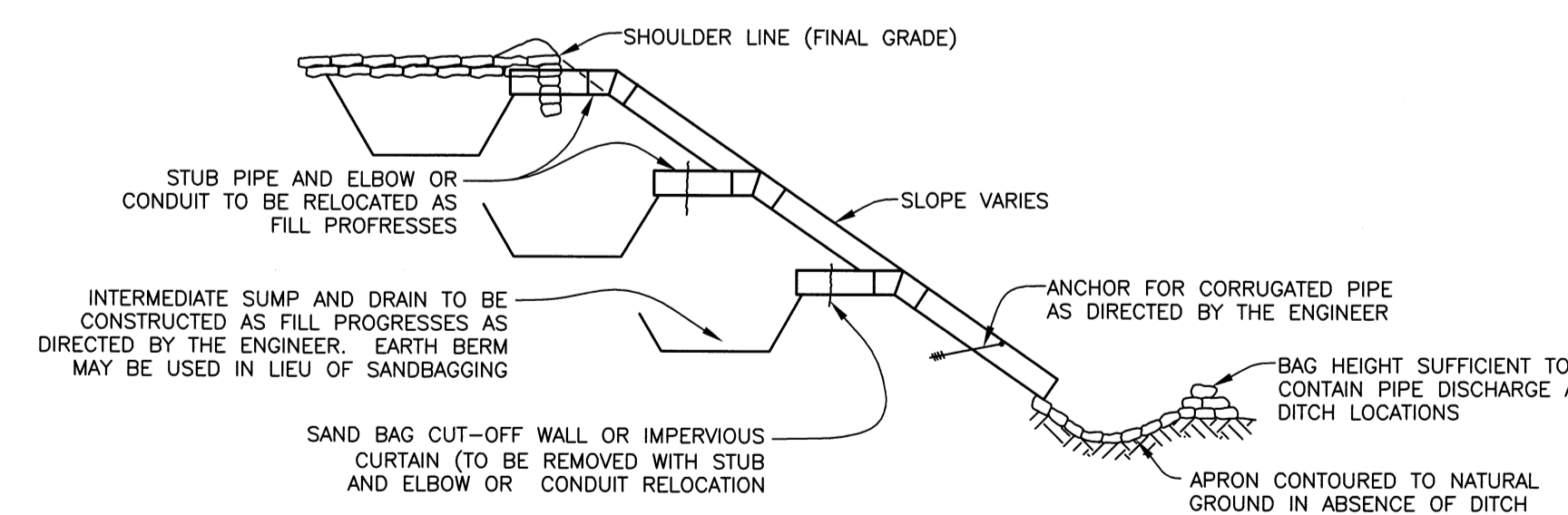
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



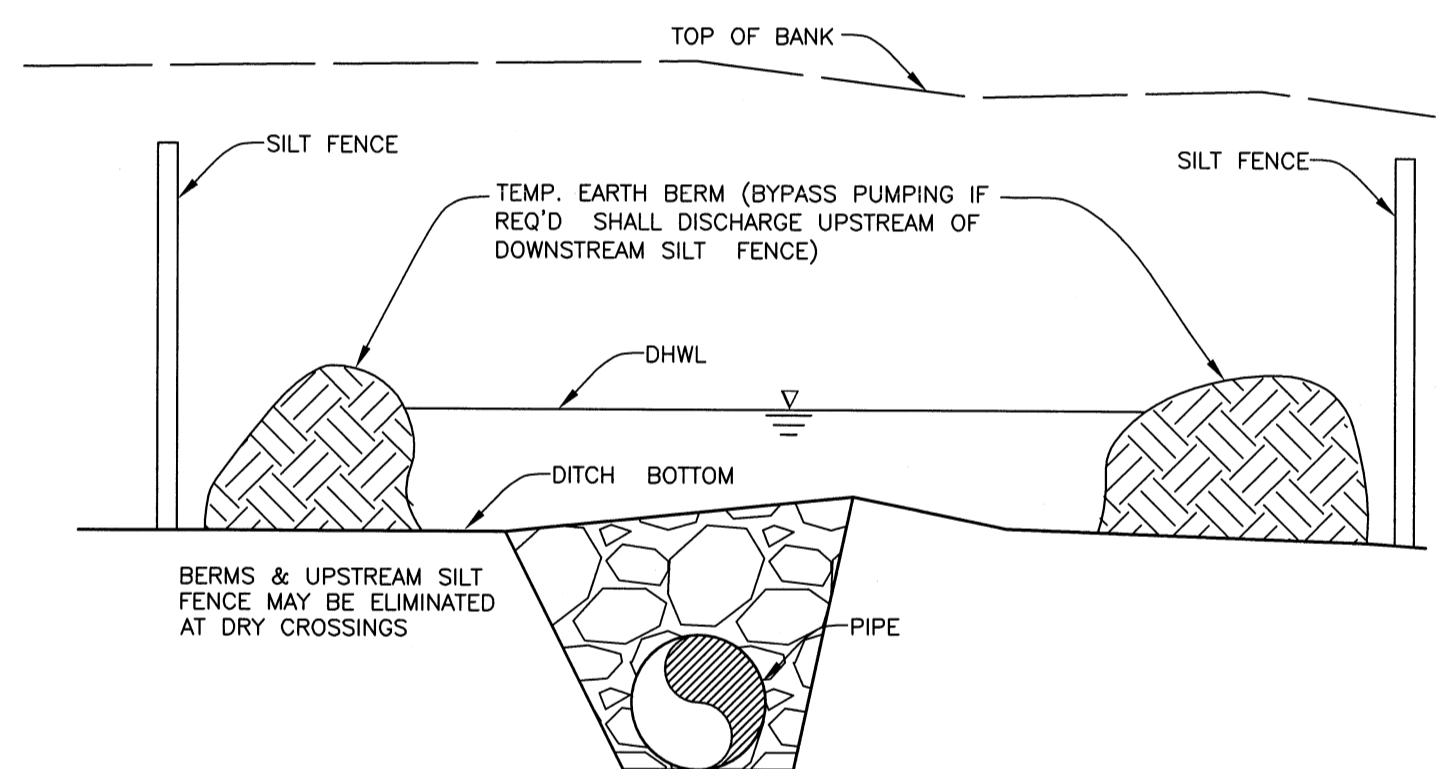
SOD ALONG CURB AND AROUND INLET
FIGURE 14



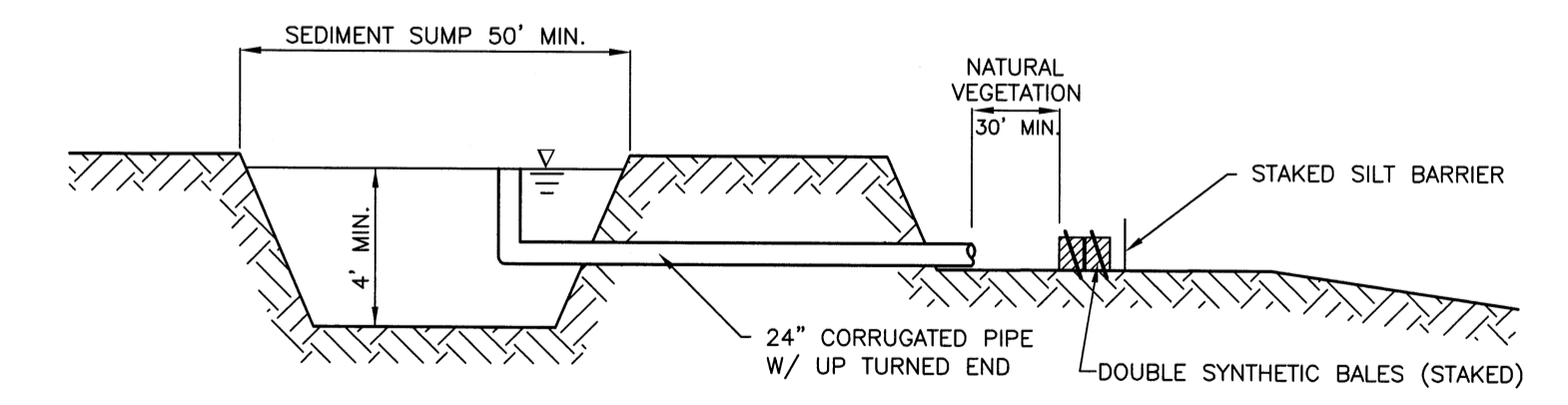
GRASS SLOPES
FIGURE 13



SECTION AA
TEMPORARY SLOPE DRAIN
FIGURE 15



UNDERGROUND PIPE CROSSING
FIGURE 12



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

SEC, TWP, RGE	15, 36S, 17E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124980		
Surveyed	By	Checked	Date
Drawn	JSS	-	4/30/09
Designed	JAA		

NOTE:
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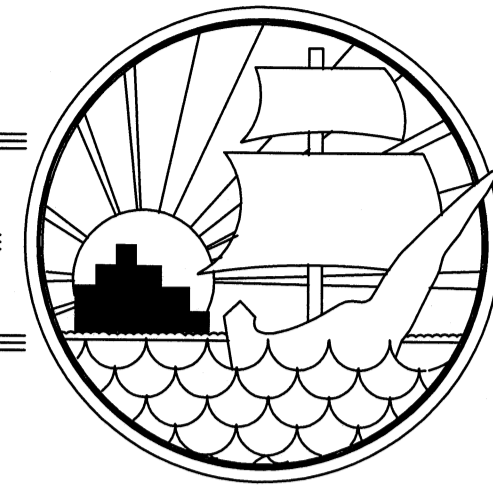
JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/06/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

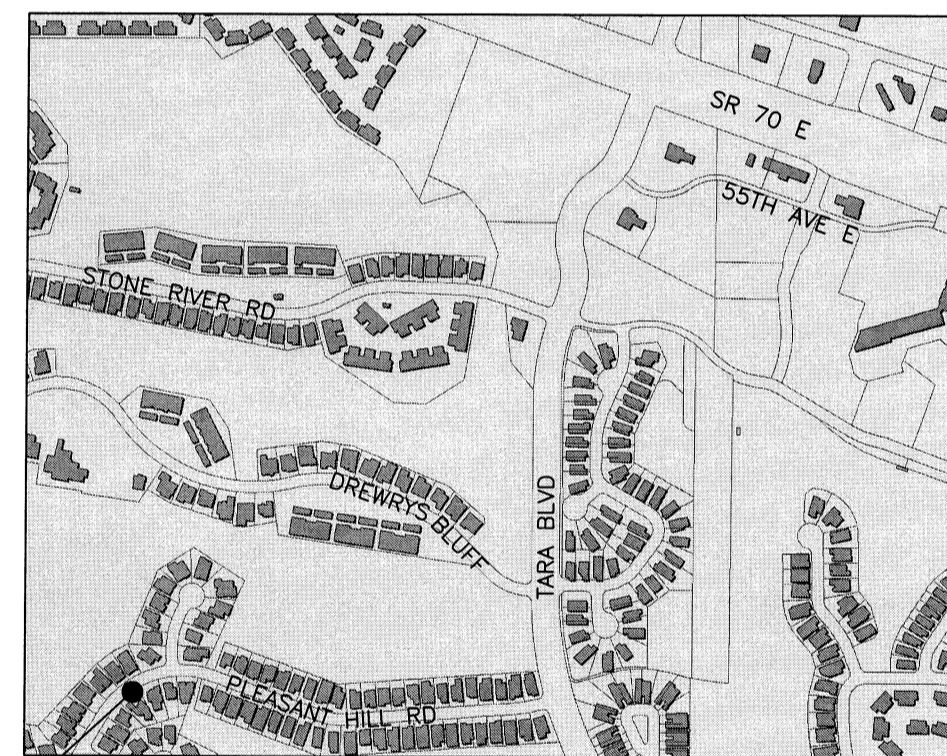
NO.	REVISION DESCRIPTION	BY	DATE

LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS
EROSION CONTROL



MANATEE COUNTY, FLORIDA LIFT STATION UPGRADES, 2010 LS TARA 3, RTU #348 402-5124181

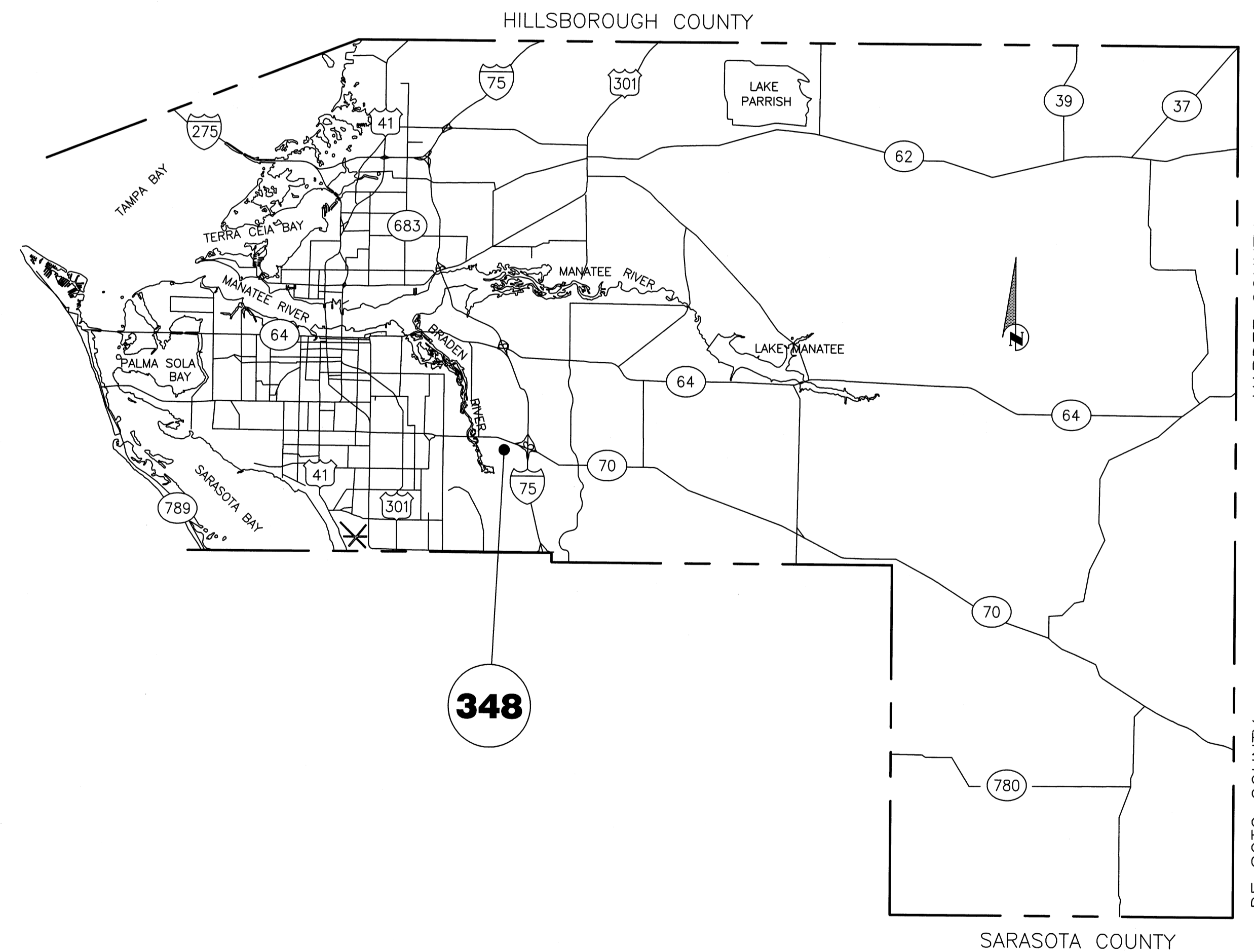
NOVEMBER 2009



LS TARA 3, RTU #348
6718 PLEASANT HILL RD

VICINITY MAP

N.T.S.



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |


PROJECT DESCRIPTION

INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

SEC, TWP, RGE	14/35S/18E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124181		
By	Checked	Date	
Surveyed	ZNS	-	4/29/09
Drawn	JSS		
Designed	JAA		

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Engineer / Reg. No.
John A. Armstrong
11/06/09
Signature & Date


 1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

COVER SHEET

Sheet
1
4

S:\P\01_Engineering\Shore\0101_Eng_Design\Proj\SSAN_SWR_Proj\Son_Swr - LS Upgrades\ECons\2010_Egens\RTU 348 LS TARA 3\DWG\EGen\RTU 348 LS TARA 3.dwg, 11/6/2009 1:43 PM Sheet Show, 1:1, D-Arch (24"x36")

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NOTES:

- BEARINGS ARE BASED ON THE CENTERLINE RIGHT OF WAY OF PLEASANT HILL ROAD, HAVING A BEARING OF S 31°23'14" W, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM NGS STATION "175 84 A06".
- THE PROPERTY LIES WITHIN FLOOD ZONE "X" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0365 C, REVISED, FEBRUARY 1, 1984.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, F.D.O.T. BENCH MARK No. "175 84 A06", ELEVATION OF 45.42 AS PUBLISHED.
- THE CAPACITY OF THE DIESEL FUEL TANK SHALL BE SUFFICIENT TO RUN THE GENERATOR CONTINUOUSLY FOR 96 HOURS AT 75% LOAD AS INDICATED IN THE SPECIFICATIONS. HOWEVER, THE DIESEL FUEL TANK @ LS TARA 3 SHALL NOT EXCEED 125 GALLONS.
- ANY ELECTRICAL WIRING THIS IS INSTALLED BETWEEN THE LIFT STATION'S WET WELL AND VALVE VAULT SHALL BE INSTALLED IN A CARRIER PIPE THAT IS STRAPPED TO THE WET WELL OR VALVE VAULT.

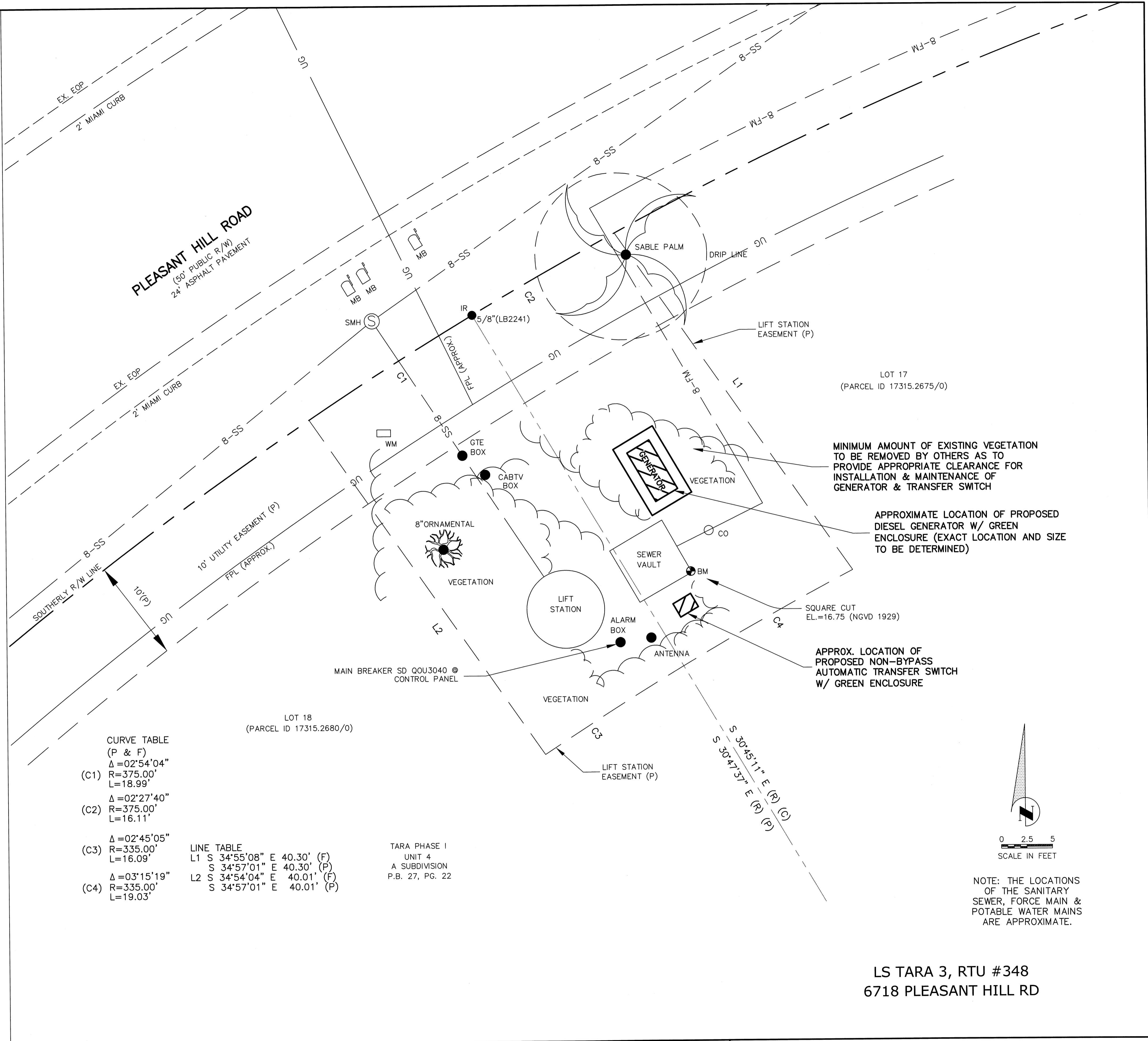
LEGEND:

- N&D PK NAIL & DISK FOUND AS NOTED
- CM CONCRETE MONUMENT FOUND AS NOTED
- IR IRON ROD FOUND AS NOTED
- CM CONCRETE MONUMENT
- IR IRON ROD
- PRM PERMANENT REFERENCE MONUMENT
- R/W RIGHT OF WAY LINE
- ID IDENTIFICATION
- P.B. PLAT BOOK
- PC PAGE
- CABTV CABLE TELEVISION
- (F) FIELD DATA
- (P) PLAT DATA
- (C) CALCULATED DATA
- F.D.O.T. FLORIDA DEPARTMENT OF TRANSPORTATION
- LS LAND SURVEYOR
- LB LICENSED BUSINESS
- EL ELEVATION
- NGVD NATIONAL GEODETIC VERTICAL DATUM
- Δ CENTRAL ANGLE
- R RADIUS
- L ARC LENGTH
- CB CHORD BEARING
- N&D NAIL & DISK
- C1 CURVE NUMBER (SEE CURVE TABLE)
- L1 LINE NUMBER (SEE LINE TABLE)
- WM WATER METER
- CO CLEAN OUT
- SHM SANITARY SEWER MANHOLE
- BM BENCH MARK
- MB MAIL BOX
- SMH SANITARY SEWER MANHOLE
- BM BENCH MARK
- WM WATER METER
- CO CLEAN OUT
- MB MAIL BOX
- 15.50 EXISTING SPOT ELEVATION

CURVE TABLE	LINE TABLE
(P & F) Δ = 02°54'04" R = 375.00' L = 18.99'	L1 S 34°55'08" E 40.30' (F) S 34°57'01" E 40.30' (P)
(C1) Δ = 02°27'40" R = 375.00' L = 16.11'	L2 S 34°54'04" E 40.01' (F) S 34°57'01" E 40.01' (P)
(C2) Δ = 02°45'05" R = 335.00' L = 16.09'	
(C3) Δ = 03°15'19" R = 335.00' L = 19.03'	

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TARA PHASE I
UNIT 4
A SUBDIVISION
P.B. 27, PG. 22



LS TARA 3, RTU #348
6718 PLEASANT HILL RD

SEC, TWP, RGE	14/35S/18E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124181		
By	Checked	Date	
Surveyed	ZNS	-	4/29/09
Drawn	JSS		
Designed	JAA		

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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
[Signature]
Signature & Date

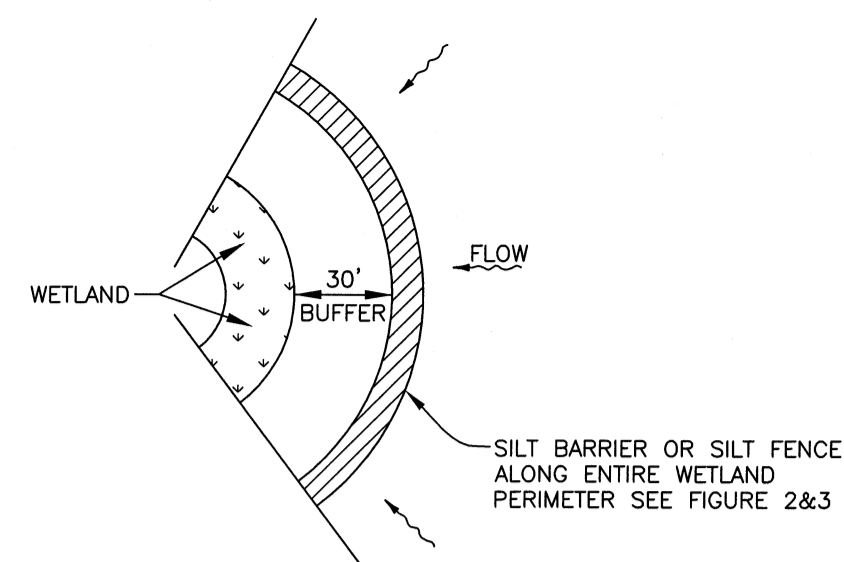
PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.
MANATEE COUNTY
FLORIDA
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

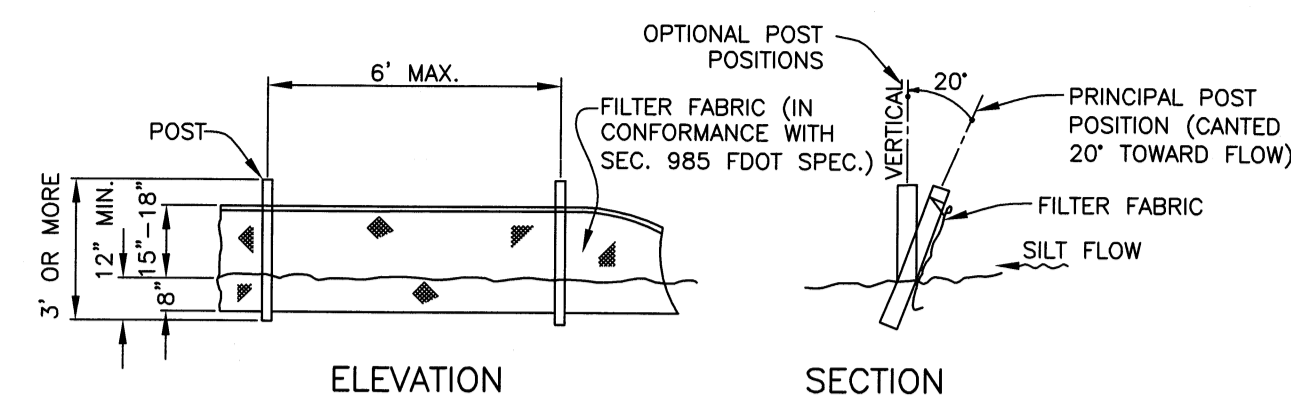
**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

SITE PLAN

Sheet
3
4

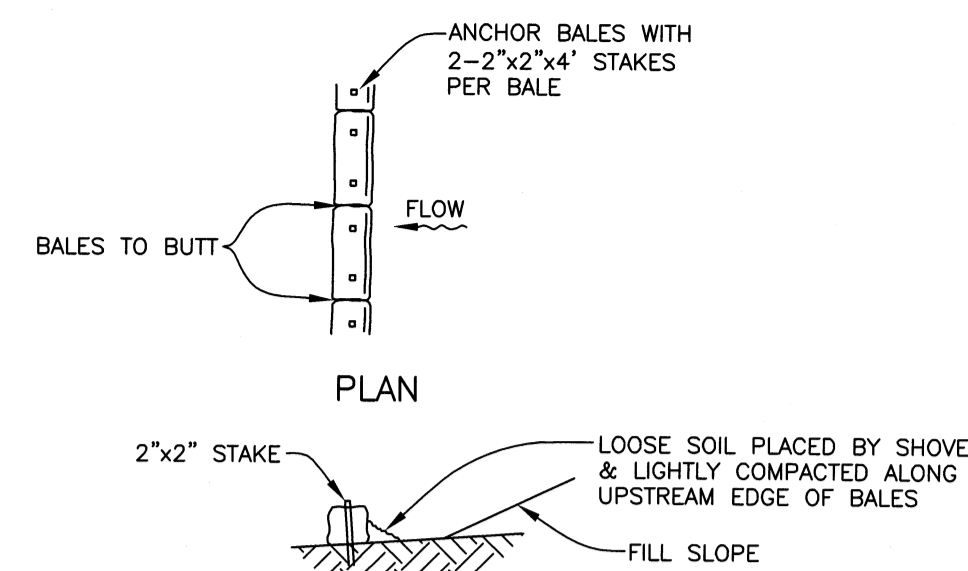


WETLAND BUFFER
FIGURE 1

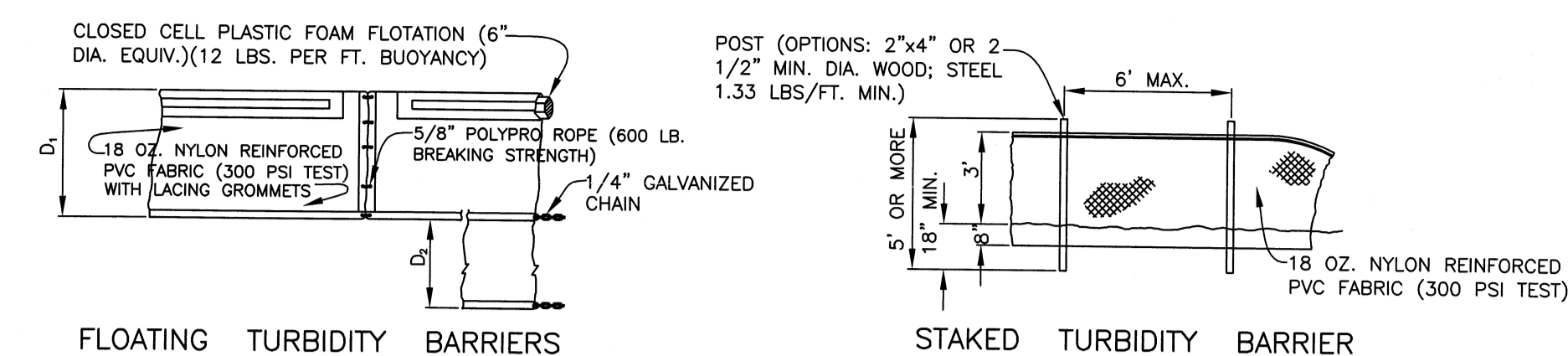


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

TYPICAL SILT FENCE
FIGURE 2

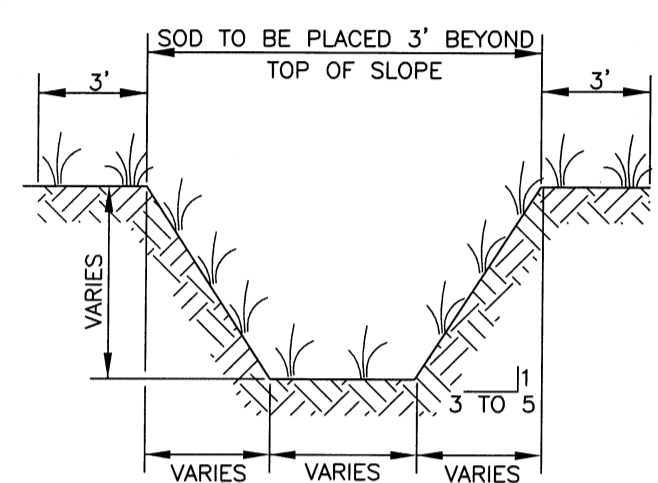


TYPICAL BALE SILT BARRIER
FIGURE 3

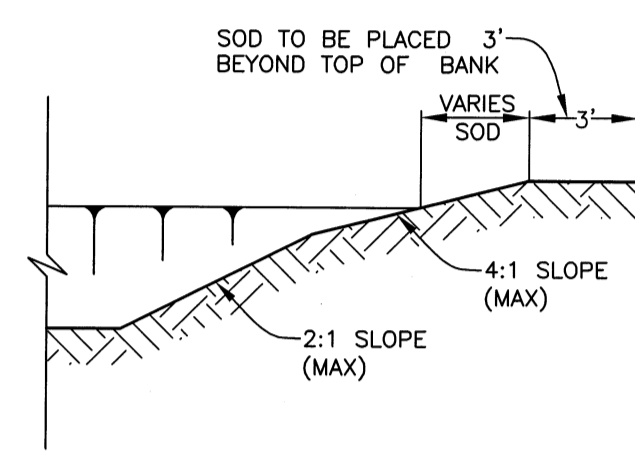


NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

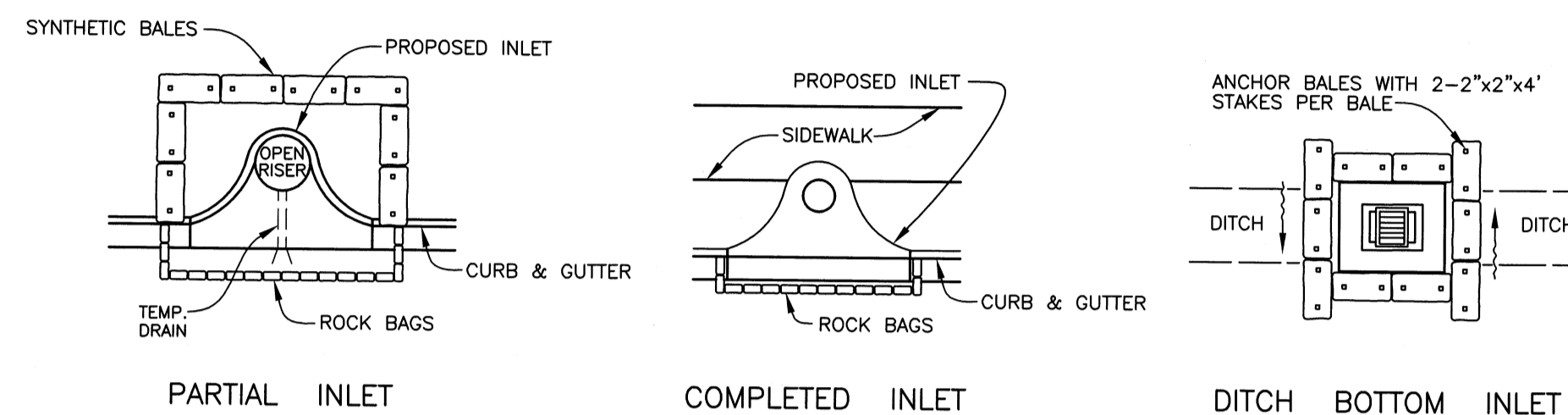
TURBIDITY BARRIERS
FIGURE 4



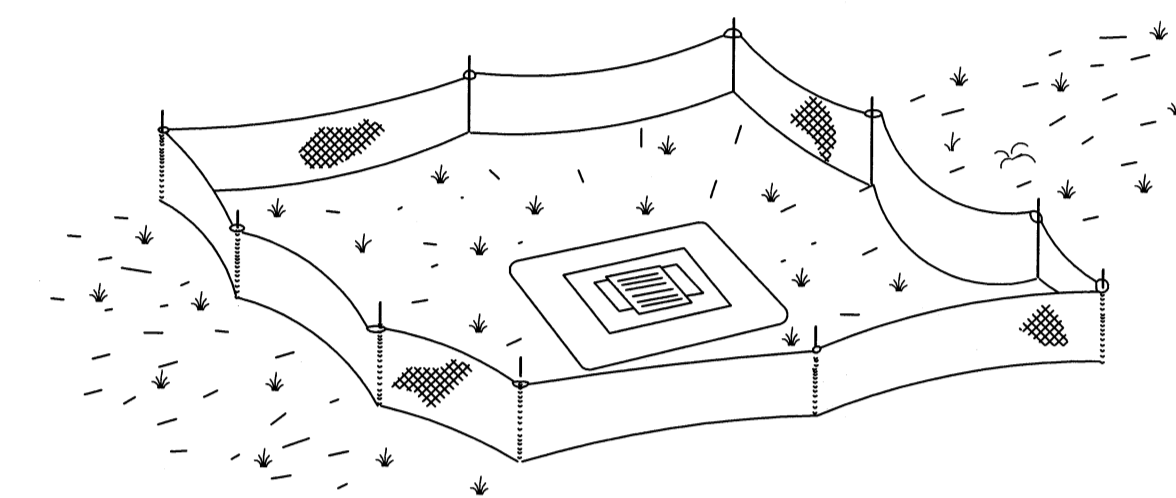
TYPICAL SWALE SECTION
FIGURE 5



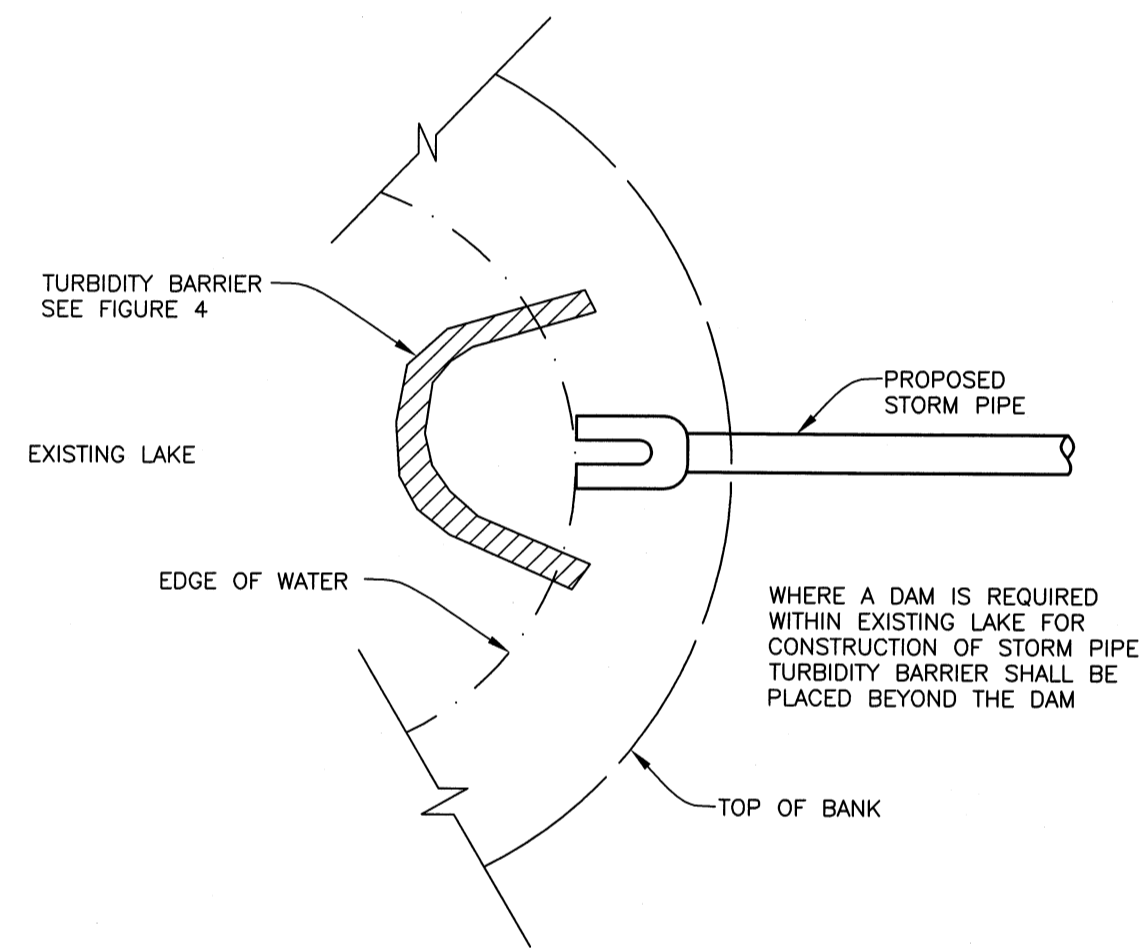
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



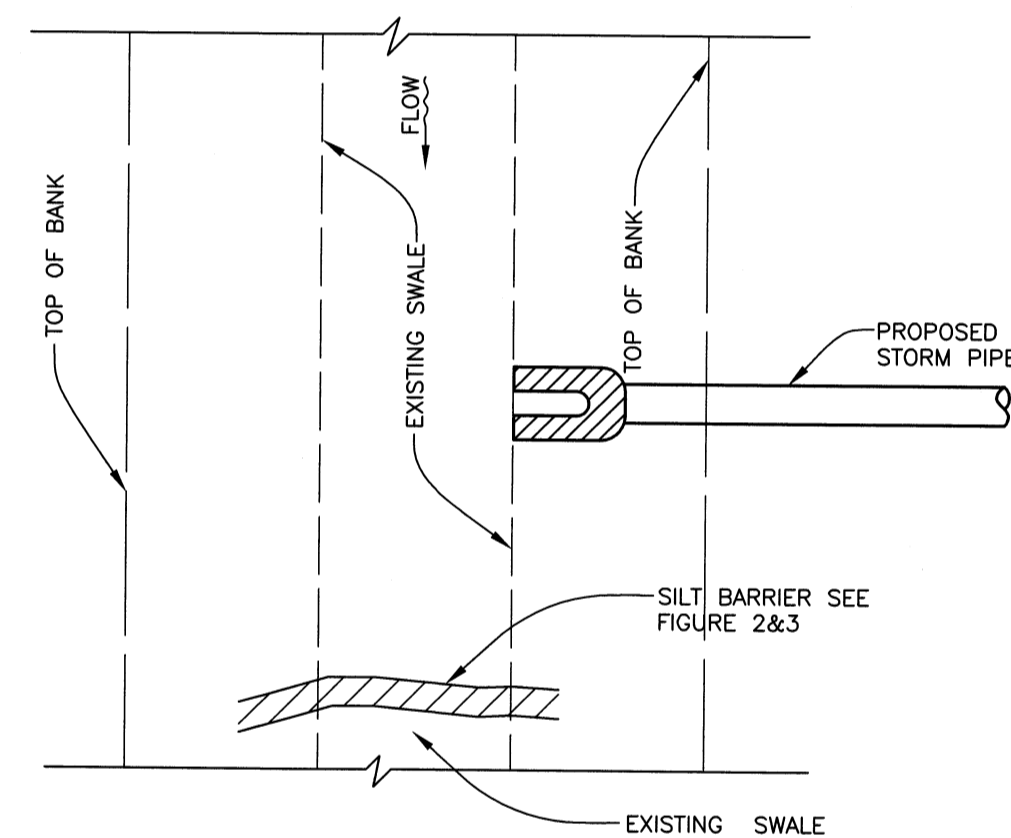
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



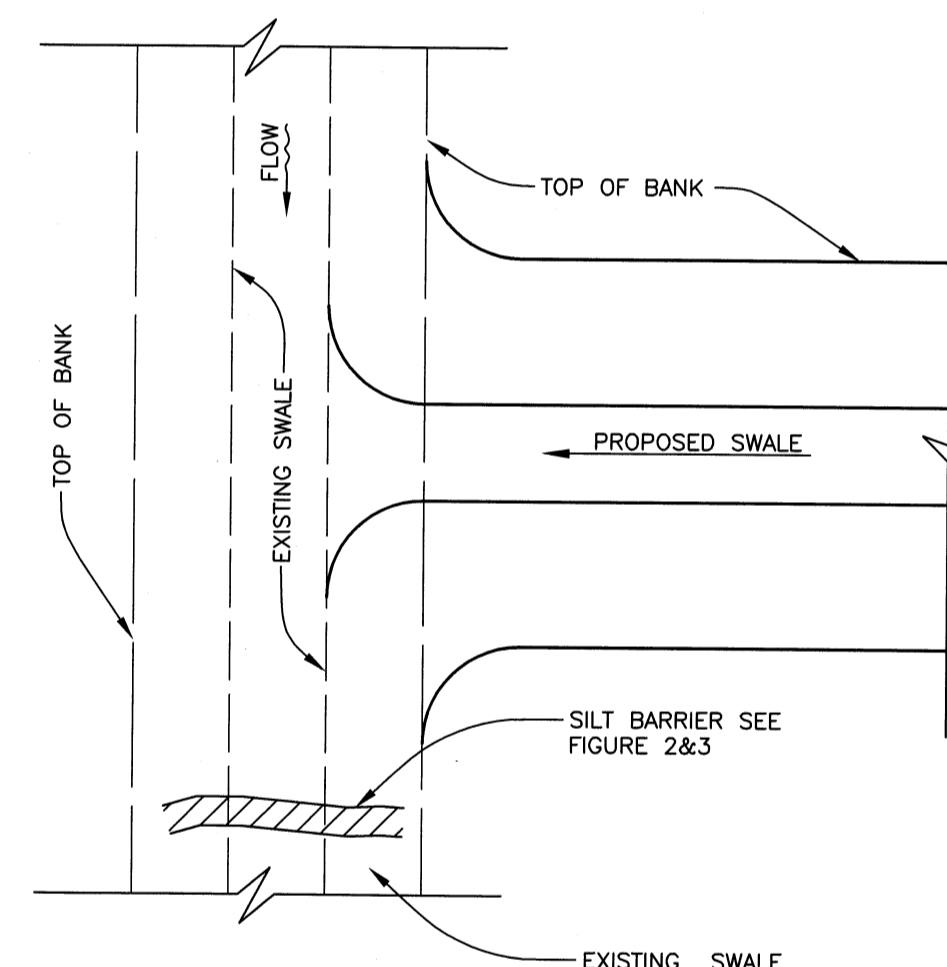
TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



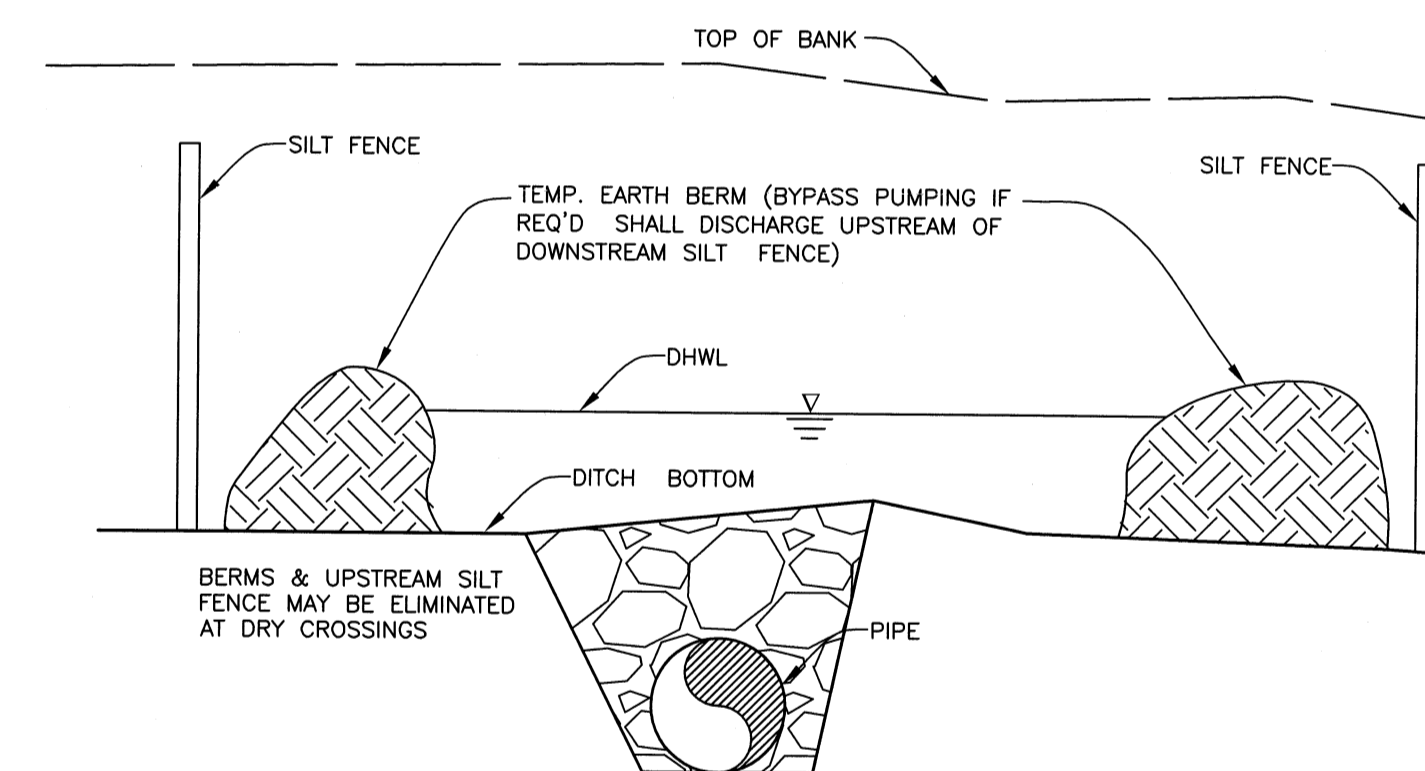
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



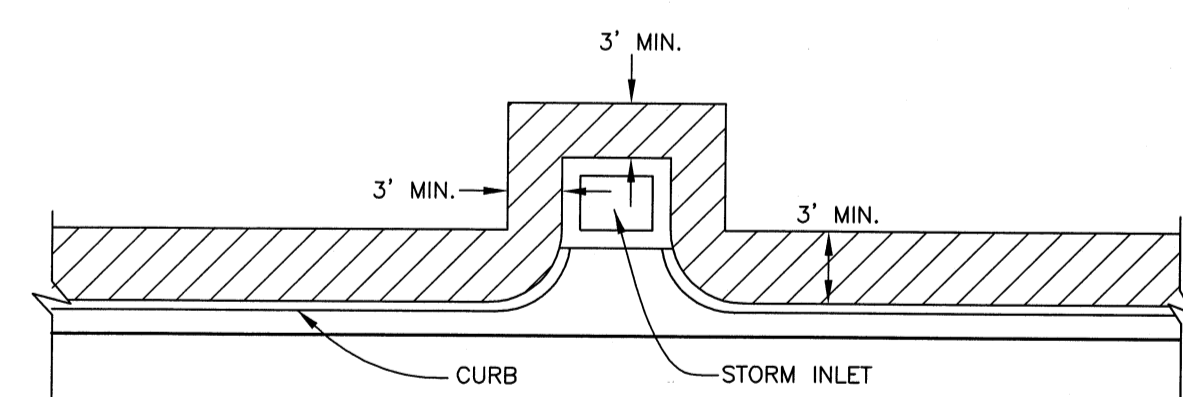
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



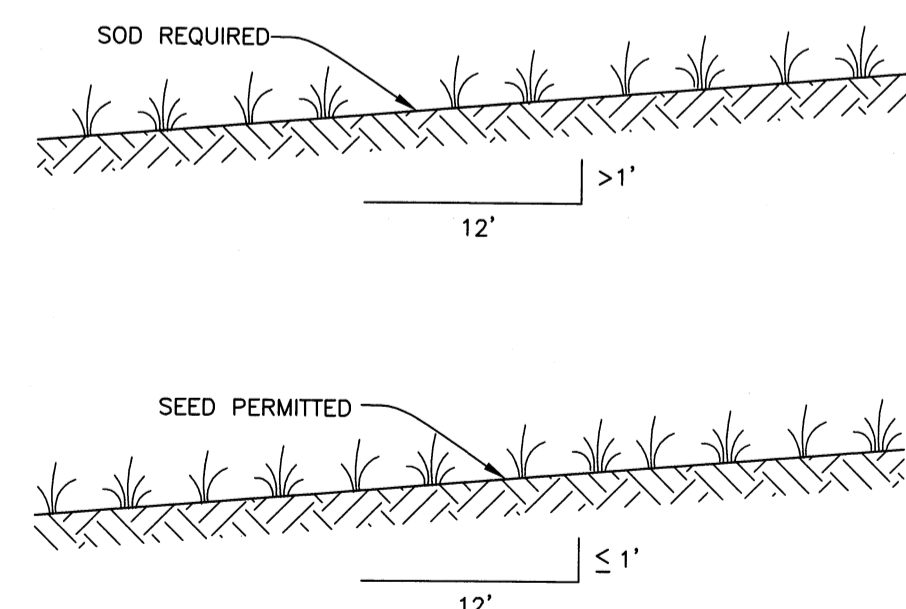
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



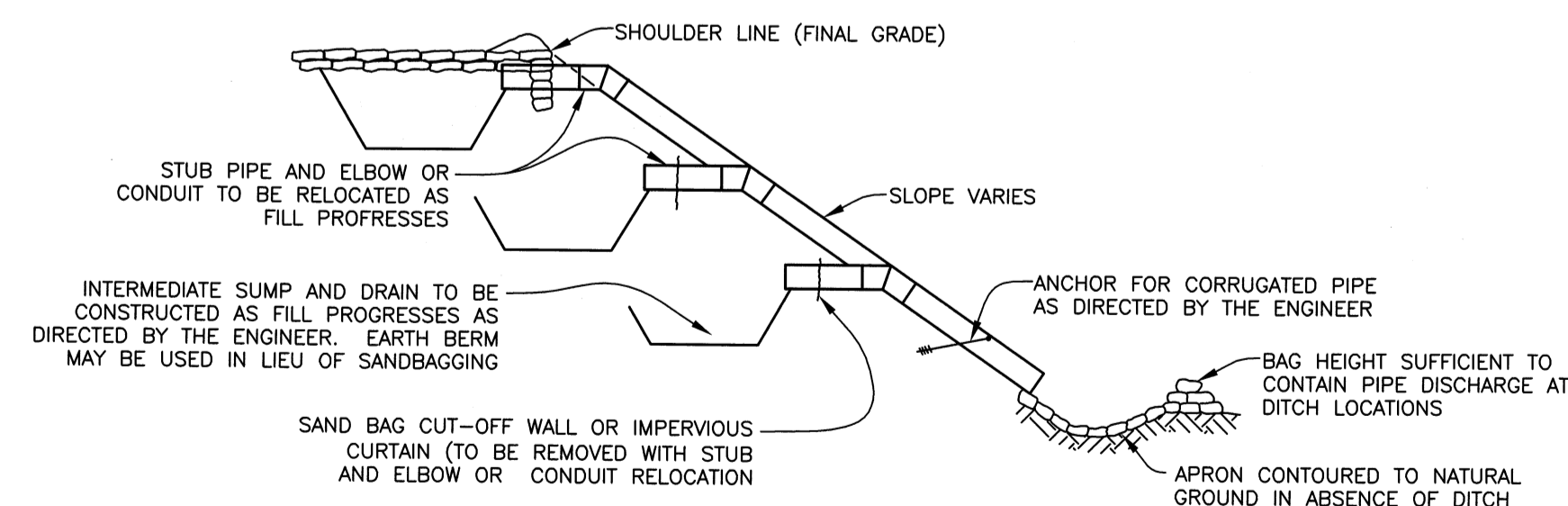
UNDERGROUND PIPE CROSSING
FIGURE 12



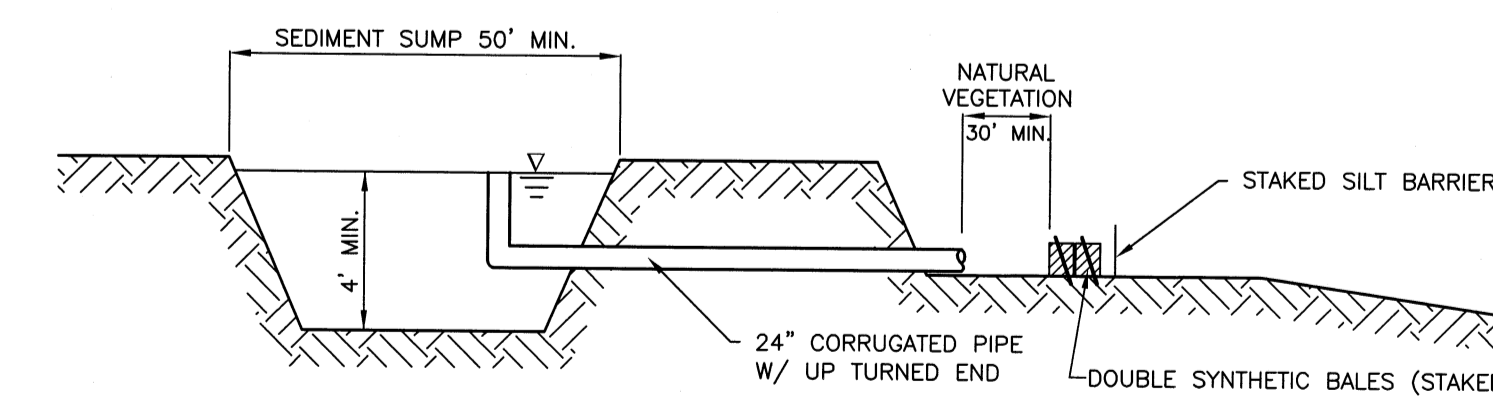
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

SEC, TWP, RGE	14/35S/18E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124181		
Surveyed	By	Checked	Date
Drawn	JSS	-	4/29/09
Designed	JAA		

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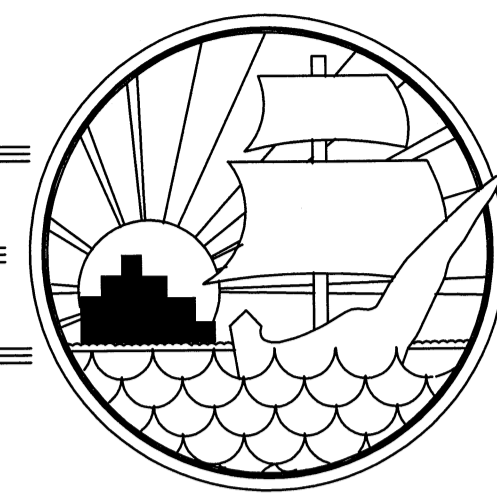
JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
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11/06/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.
MANATEE COUNTY
FLORIDA
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

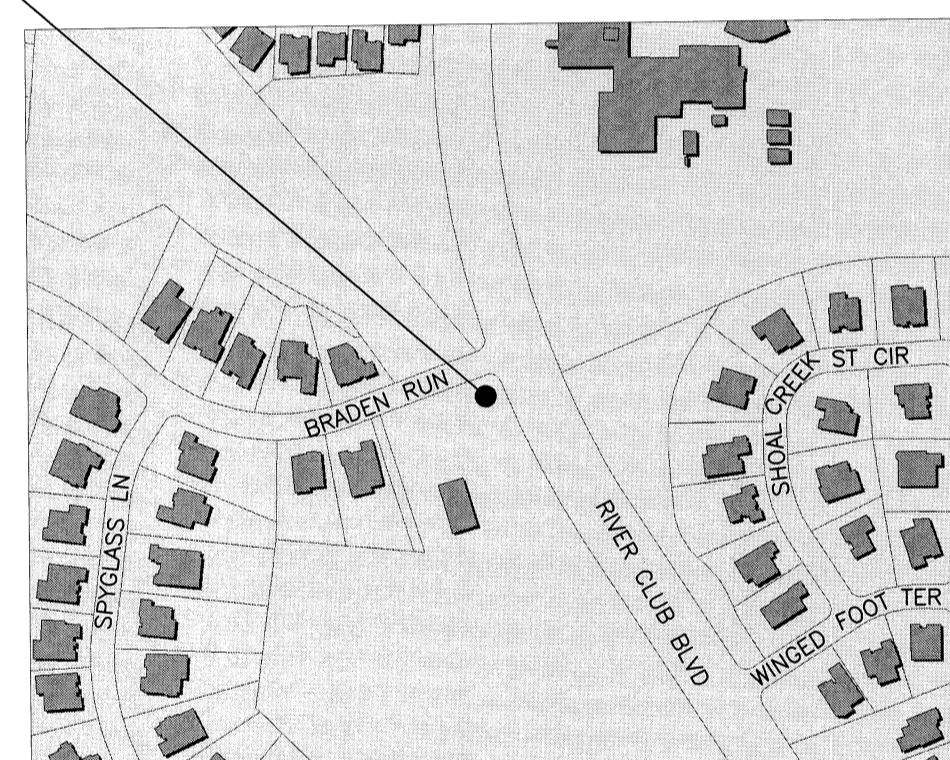
EROSION CONTROL



MANATEE COUNTY, FLORIDA LIFT STATION UPGRADES, 2010 LS RIVER CLUB 1, RTU #494 402-5124381

NOVEMBER 2009

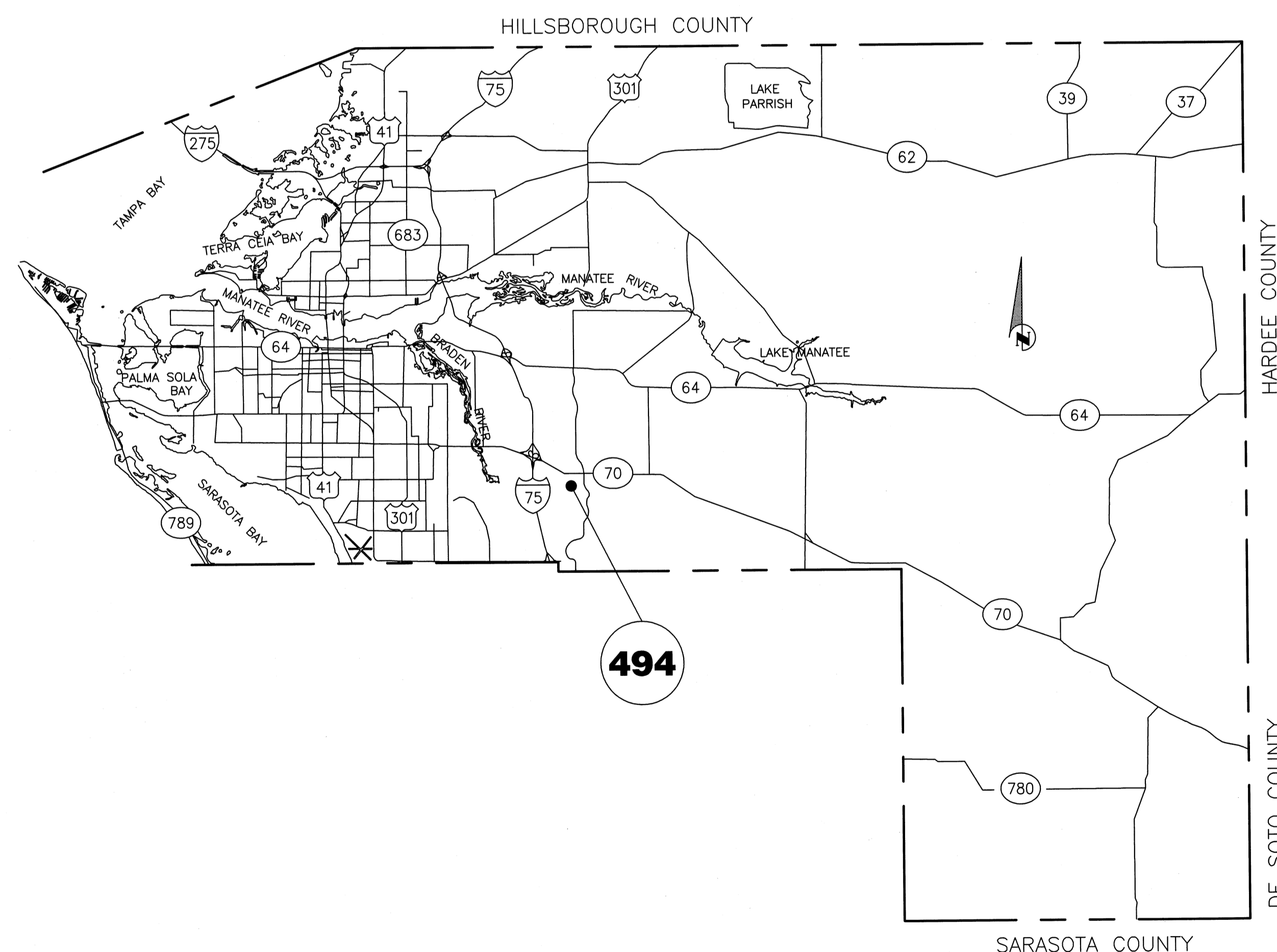
494



LS RIVER CLUB 1, RTU #494
6310 RIVER CLUB BLVD

VICINITY MAP

N.T.S.



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |

PROJECT DESCRIPTION

INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

S:\PMD_Engineering\Shara\JLI\Eng_Design\Proj\LS-Uprgrades\Ecena\2010_Egna\RTU_494_LS_River_Club_1\Drawn\1-Cover_Sheet_11/6/2009_1:40 PM_Sheet_Shoun_11..._D-Arch (24"x36")

SEC. TWP. RGE	19/35S/19E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124381		
	By	Checked	Date
Surveyed	ZNS	-	4/29/09
Drawn	JSS		
Designed	JAA		

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1022 26th Avenue East, Bradenton, FL 34208

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**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

COVER SHEET

Sheet 1 / 4

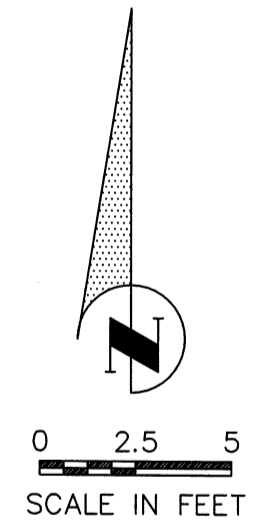
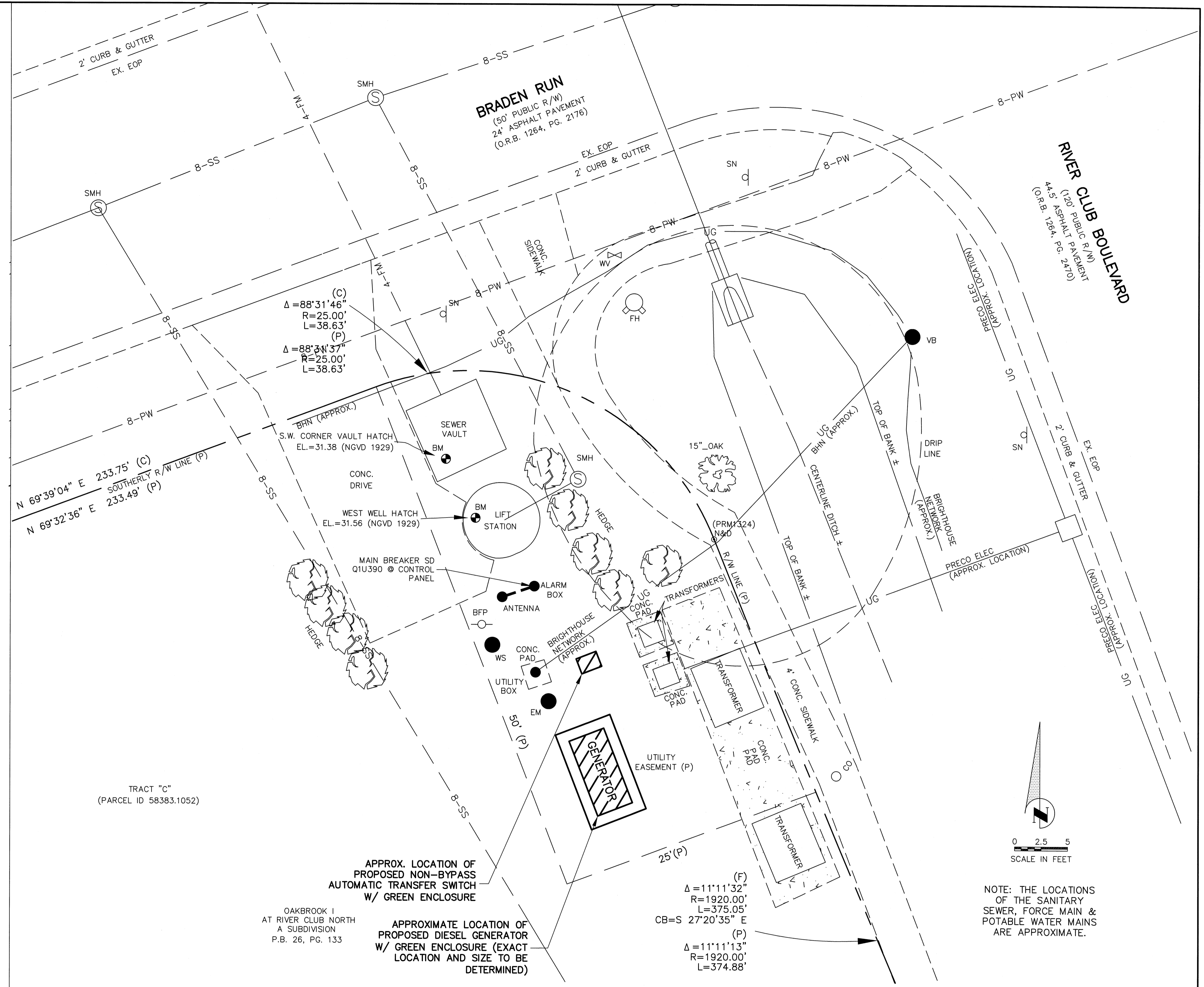
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NOTES:

- BEARINGS ARE BASED ON THE SOUTHERLY RIGHT OF WAY OF BRADEN RUN, HAVING A BEARING OF N 69°39'04" E, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM MANATEE COUNTY GIS CONTROL SURVEY (1988) MONUMENTATION.
- THE PROPERTY LIES WITHIN FLOOD ZONE "X" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0370 C, REVISED, JULY 15, 1992.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, BENCH MARK AS SHOWN ON OAKBROOK I AT RIVER CLUB NORTH, A SUBDIVISION, ELEVATION OF 19.97.

LEGEND:

PRM	PERMANENT REFERENCE MONUMENT
R/W	RIGHT OF WAY LINE
ID	IDENTIFICATION
O.R.B.	OFFICIAL RECORD BOOK
P.B.	PLAT BOOK
P.G.	PAGE
CONC.	CONCRETE
(F)	FIELD DATA
(P)	PLAT DATA
(C)	CALCULATED DATA
LB	LICENSED BUSINESS
EL	ELEVATION
NGVD	NATIONAL GEODETIC VERTICAL DATUM
Δ	CENTRAL ANGLE
R	RADIUS
L	ARC LENGTH
CB	CHORD BEARING
CM	CONCRETE MONUMENT
N&D	NAIL & DISK
SN	SIGN
FH	FIRE HYDRANT
WV	WATER VALVE
BFP	BACK FLOW PREVENTER
WS	WATER SERVICE
EM	ELECTRIC METER
CO	CLEAN OUT
SHM	SANITARY SEWER MANHOLE
FM	FORCE MAIN
RW	REUSE MAIN
PW	POTABLE WATER MAIN
EOP	EDGE OF PAVEMENT
N&D	PK NAIL & DISK FOUND AS NOTED
CM	CONCRETE MONUMENT FOUND AS NOTED
SMH	SANITARY SEWER MANHOLE
BM	BENCH MARK
WV	WATER LINE VALVE
CO	CLEAN OUT
BFP	BACK FLOW PREVENTER
SN	SIGN
VB	VERIZON BOX
FH	FIRE HYDRANT
WS	WATER SERVICE
MES	MITER END SECTION
SE	EXISTING SPOT ELEVATION



NOTE: THE LOCATIONS OF THE SANITARY SEWER, FORCE MAIN & POTABLE WATER MAINS ARE APPROXIMATE.

LS RIVER CLUB 1, RTU #494
6310 RIVER CLUB BLVD

SEC, TWP, RGE	19/35S/19E
SURVEY BOOK NO.	-
PROJECT NUMBER	402-5124381
Surveyed	By ZNS, Checked - , Date 4/29/09
Drawn	JSS
Designed	JAA

NOTE:
THESE PLANS DO NOT REFLECT A TRUE BOUNDARY OR RIGHTS-OF-WAY SURVEY. THE LOCATION OF THE STREET RIGHTS-OF-WAY LINES SHOWN IS APPROXIMATE AND IS BASED ON INFORMATION CONTAINED IN THE SUBDIVISION PLATS, RIGHTS-OF-WAY MAPS ON RECORD IN MANATEE COUNTY AND ON TOPOGRAPHIC DATA COLLECTED ON THE ROUTE SURVEY OF THE RIGHTS-OF-WAY. CONSEQUENTLY THE RIGHTS-OF-WAY LINES SHOWN ARE NOT INTENDED TO INDICATE THE EXACT PROPERTY CORNERS.

JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John Armstrong
1/10/09
Signature & Date

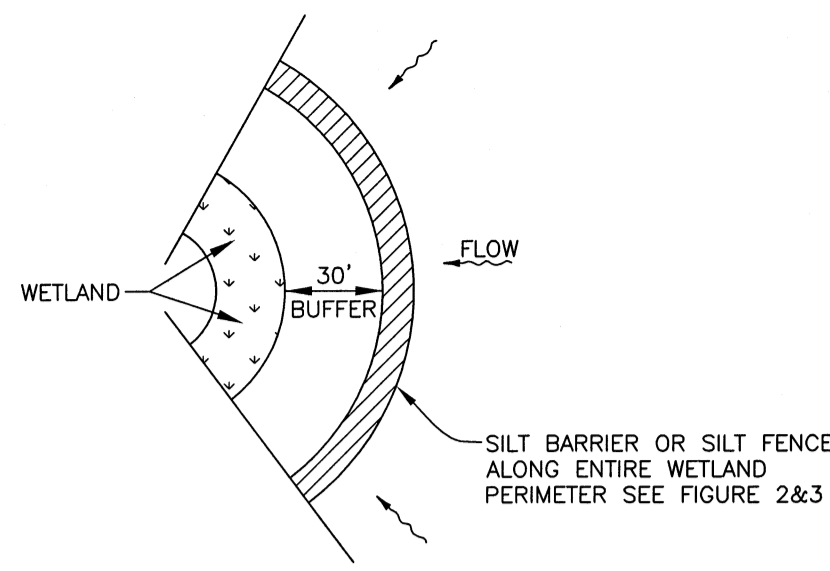
MANATEE COUNTY
FLORIDA
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

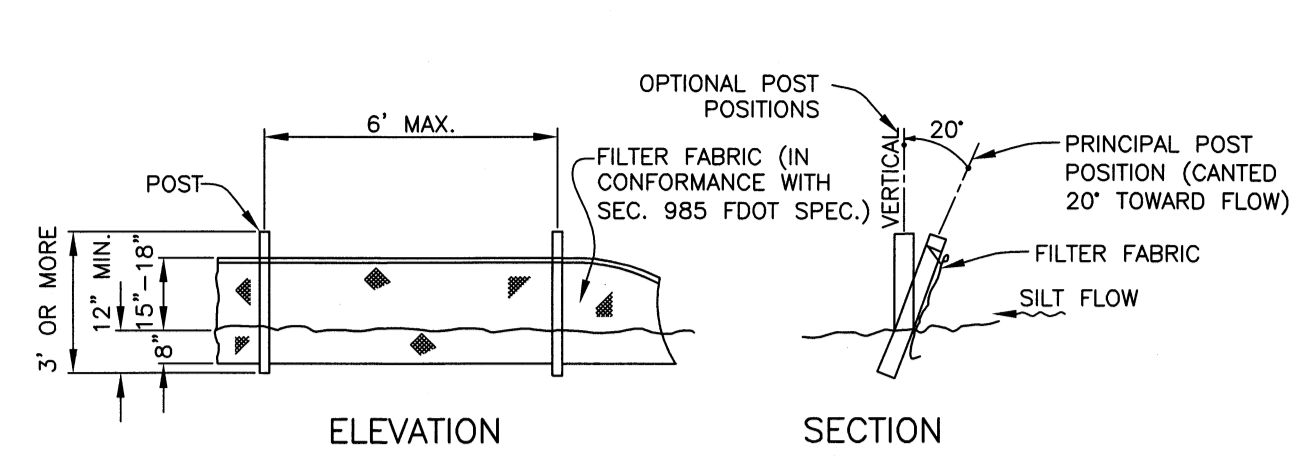
**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

SITE PLAN

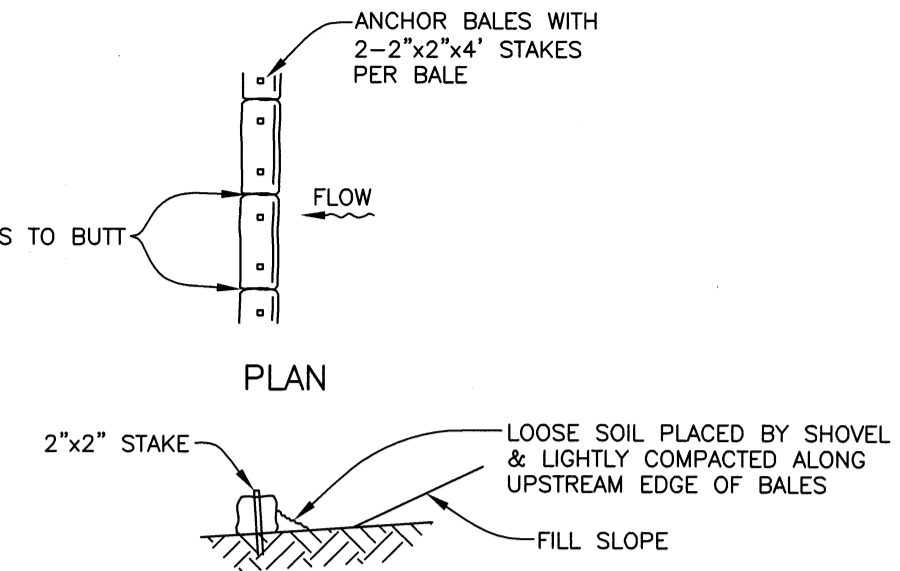
Sheet 3 of 4



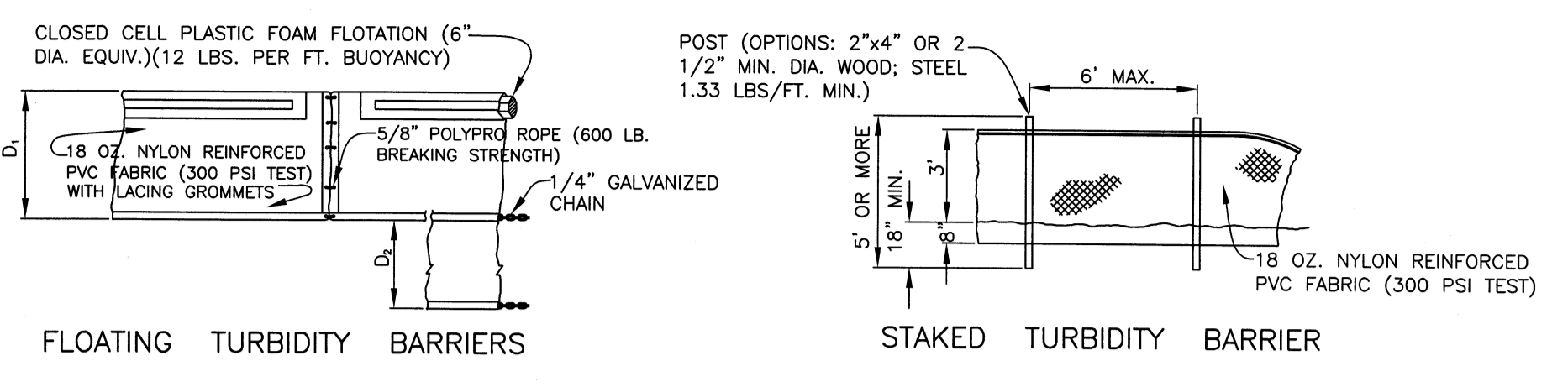
WETLAND BUFFER
FIGURE 1



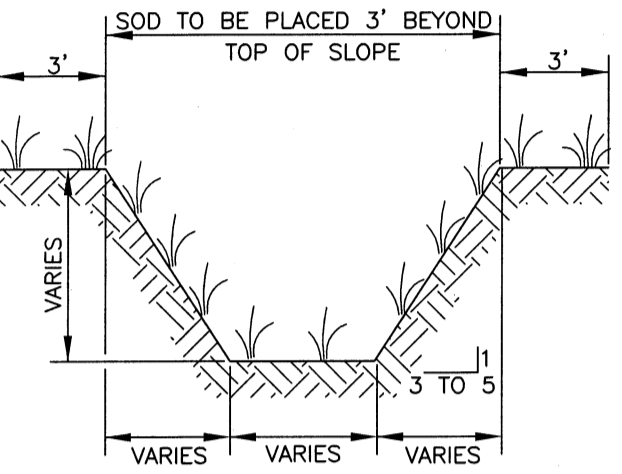
TYPICAL SILT FENCE
FIGURE 2



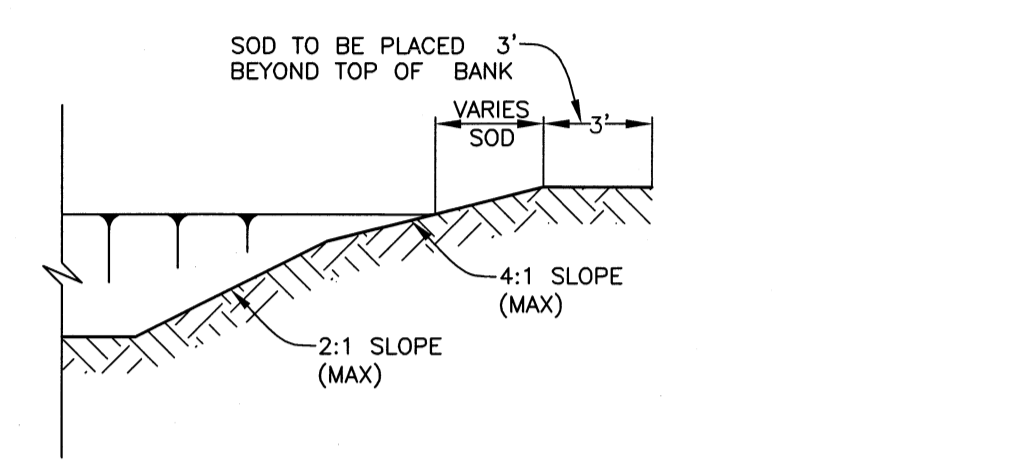
TYPICAL BALE SILT BARRIER
FIGURE 3



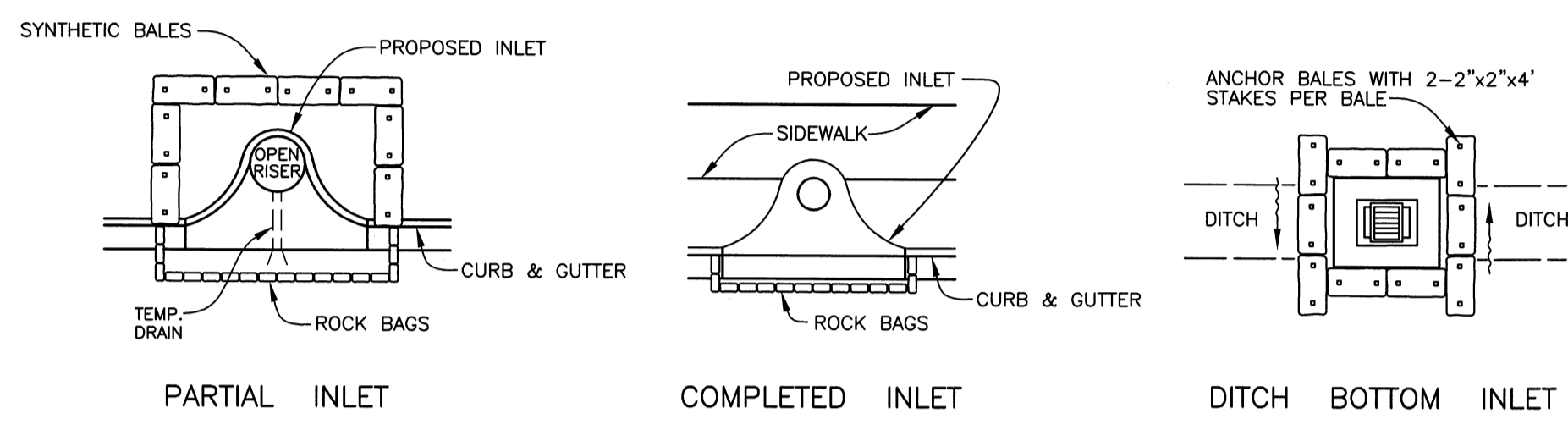
TURBIDITY BARRIERS
FIGURE 4



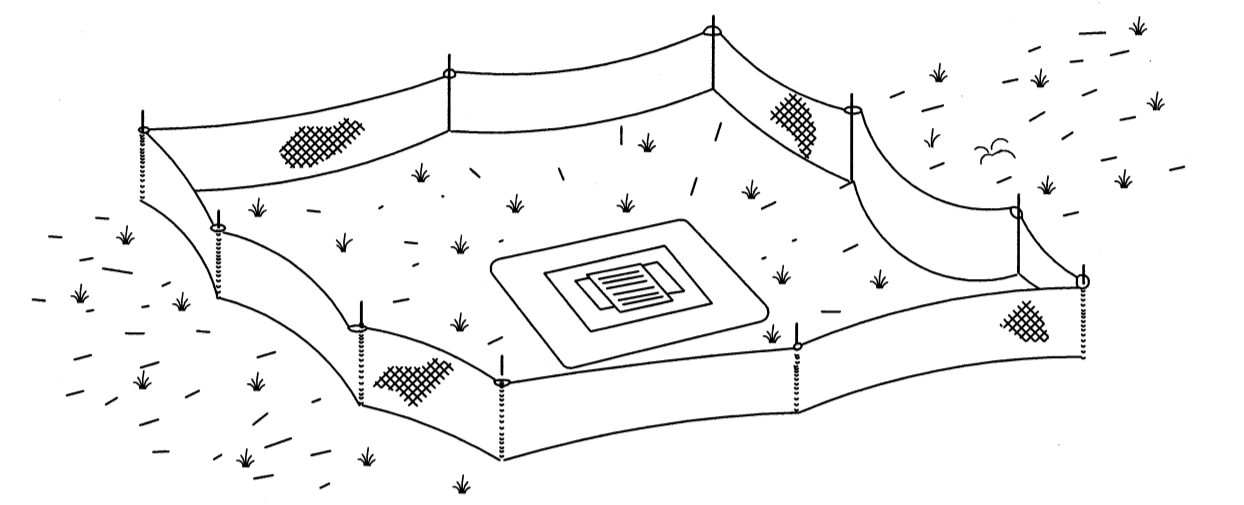
TYPICAL SWALE SECTION
FIGURE 5



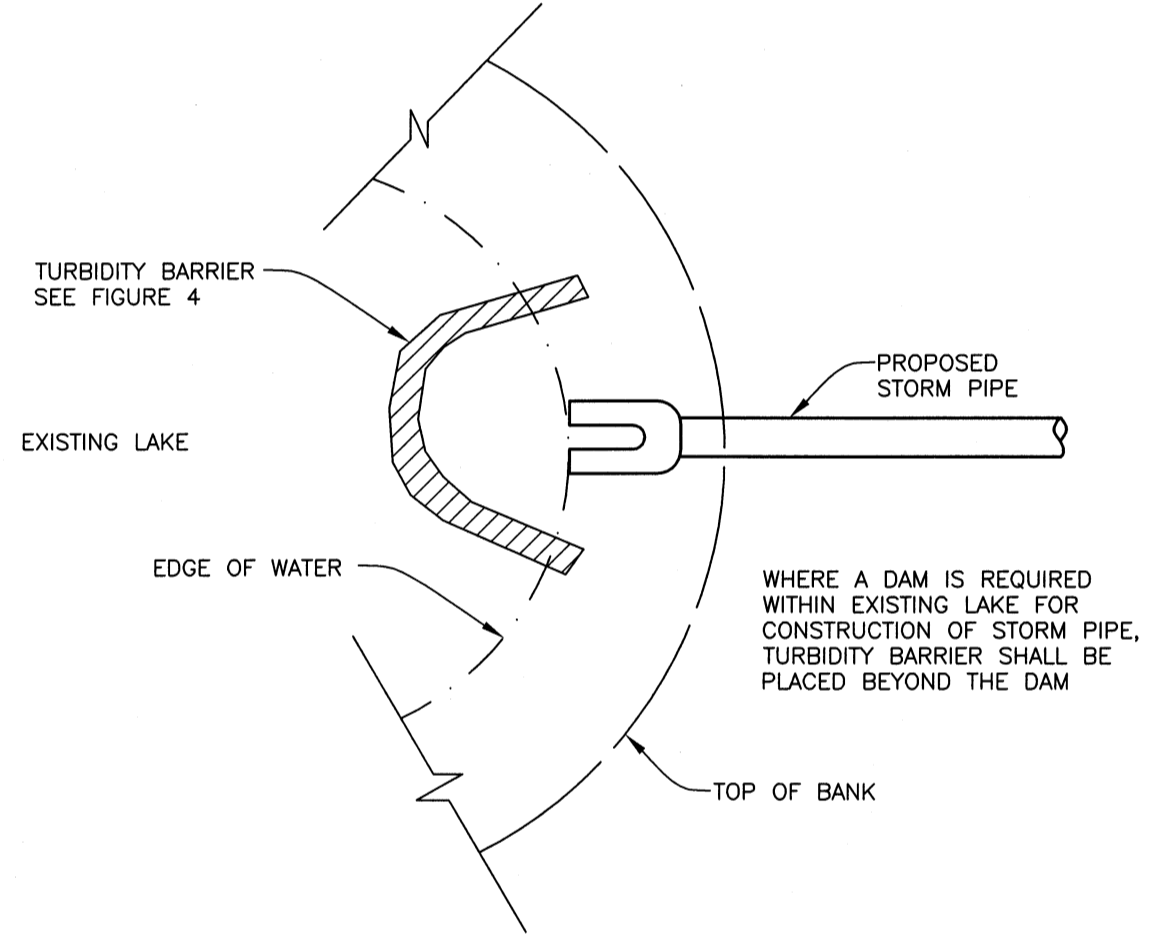
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



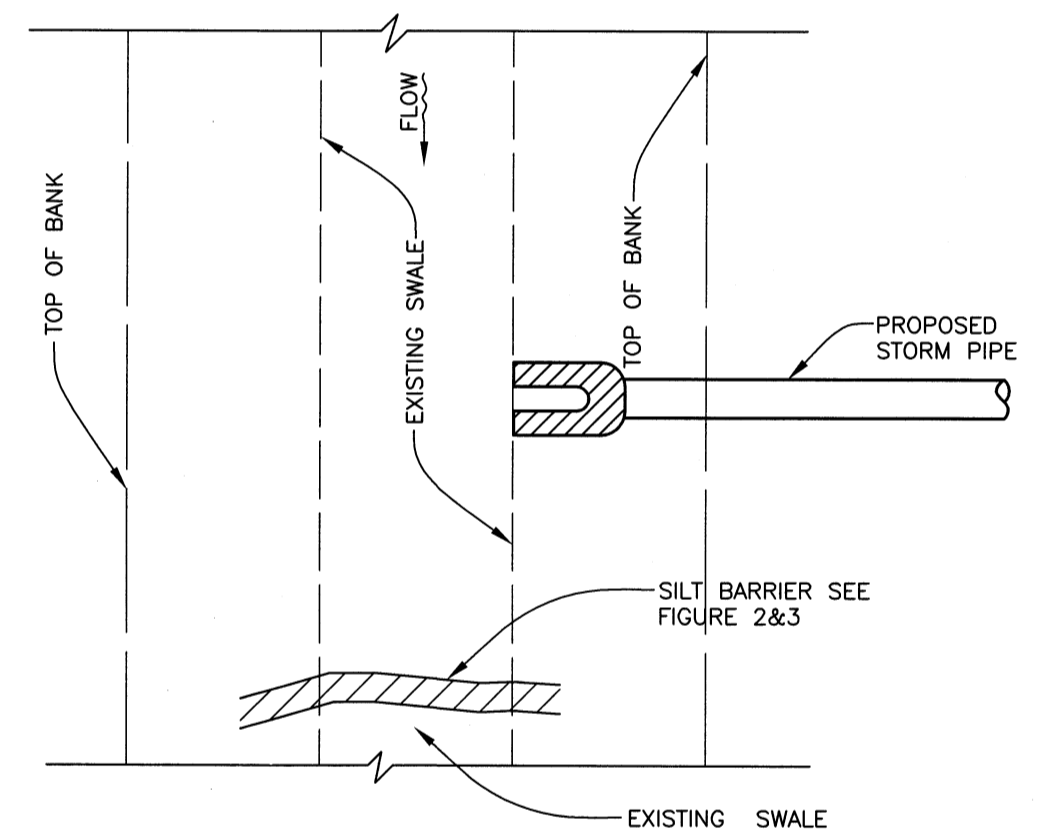
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



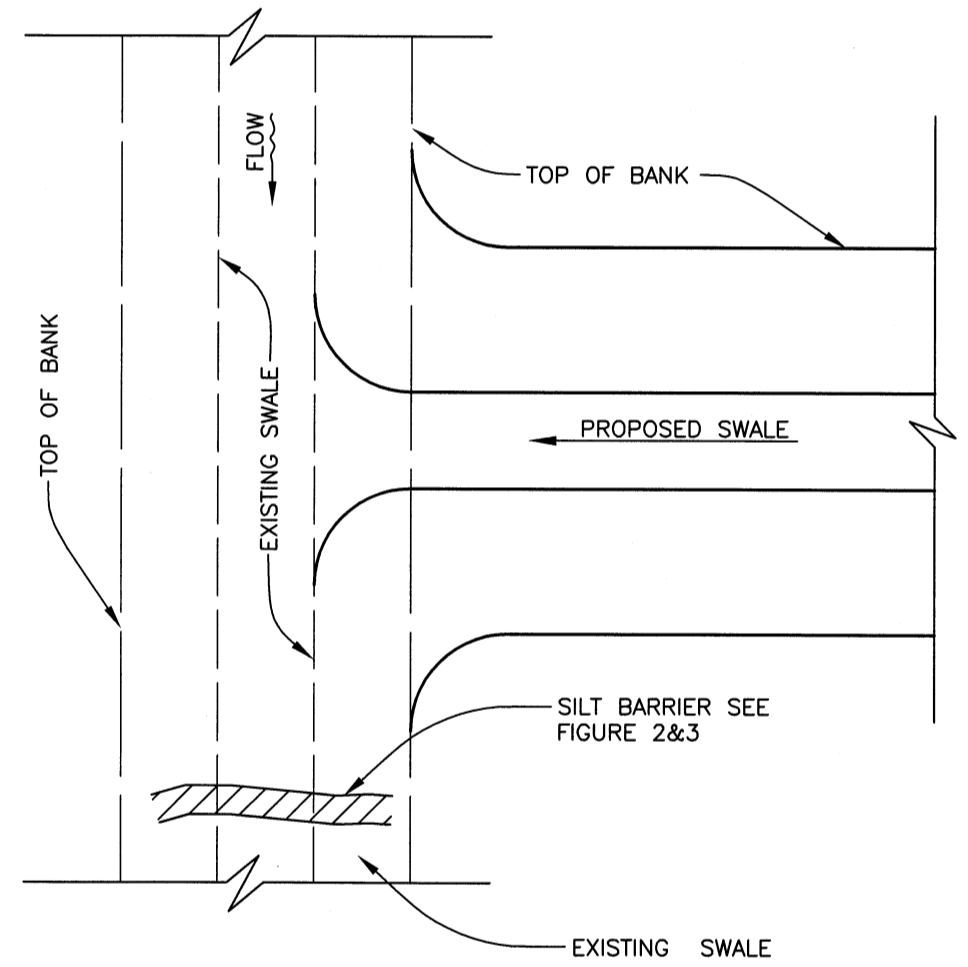
TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



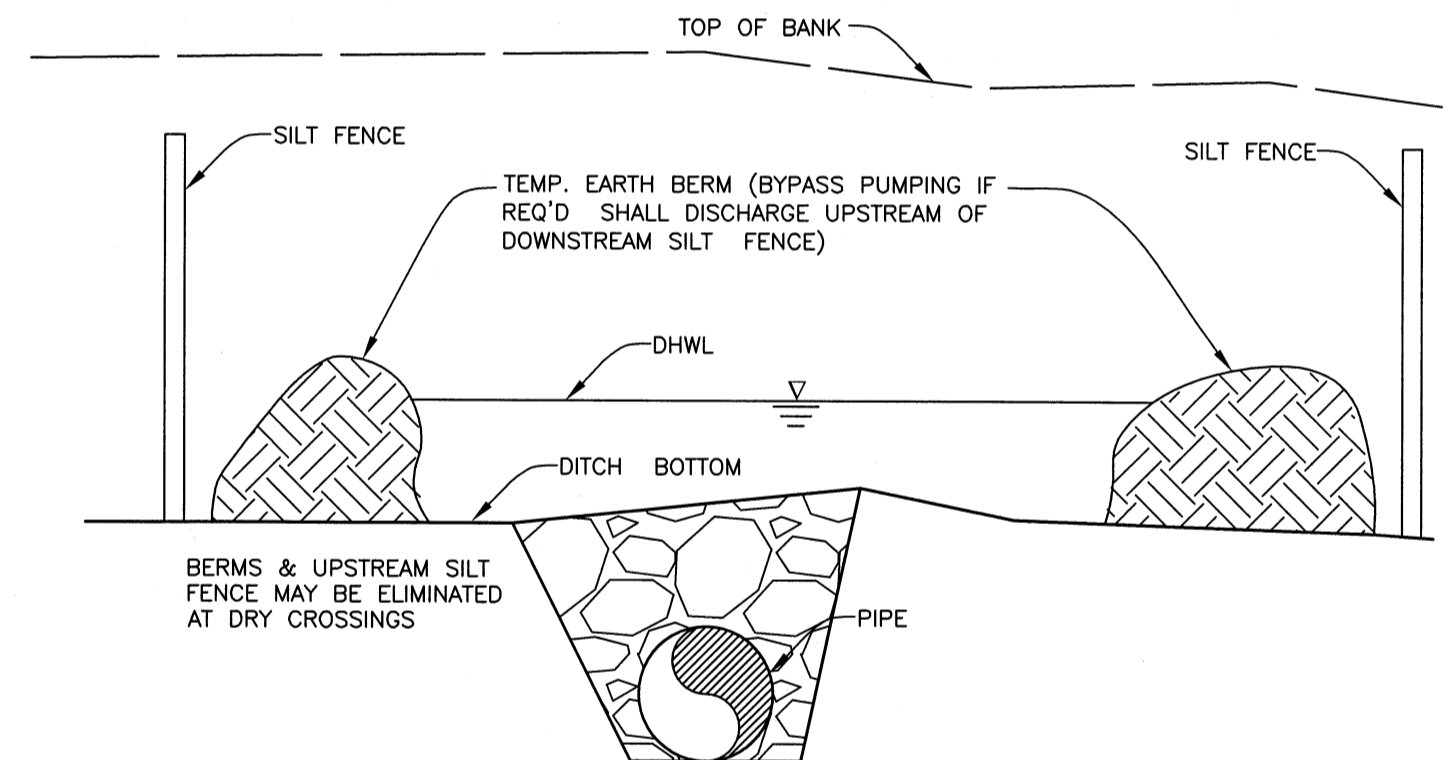
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



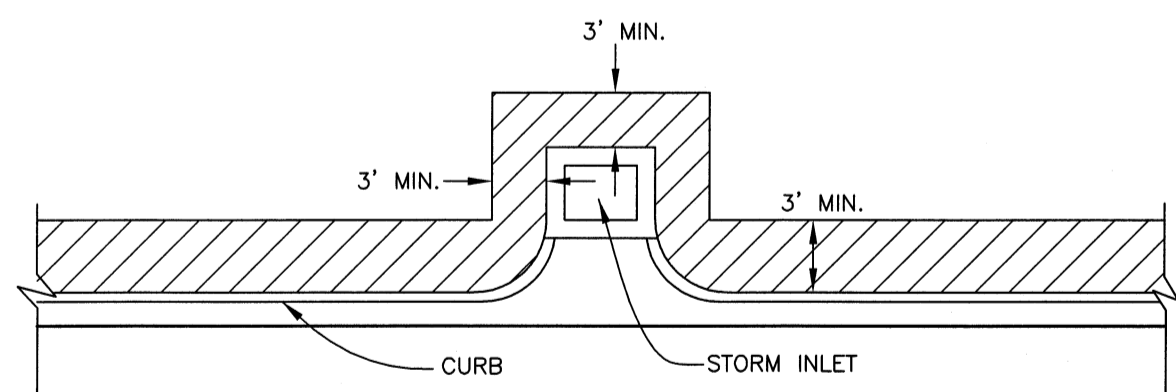
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



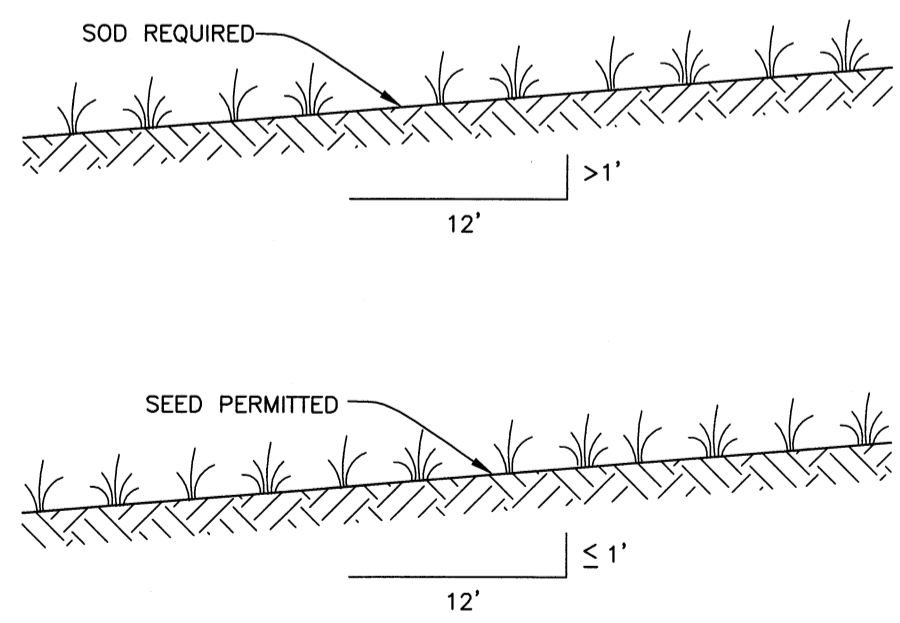
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



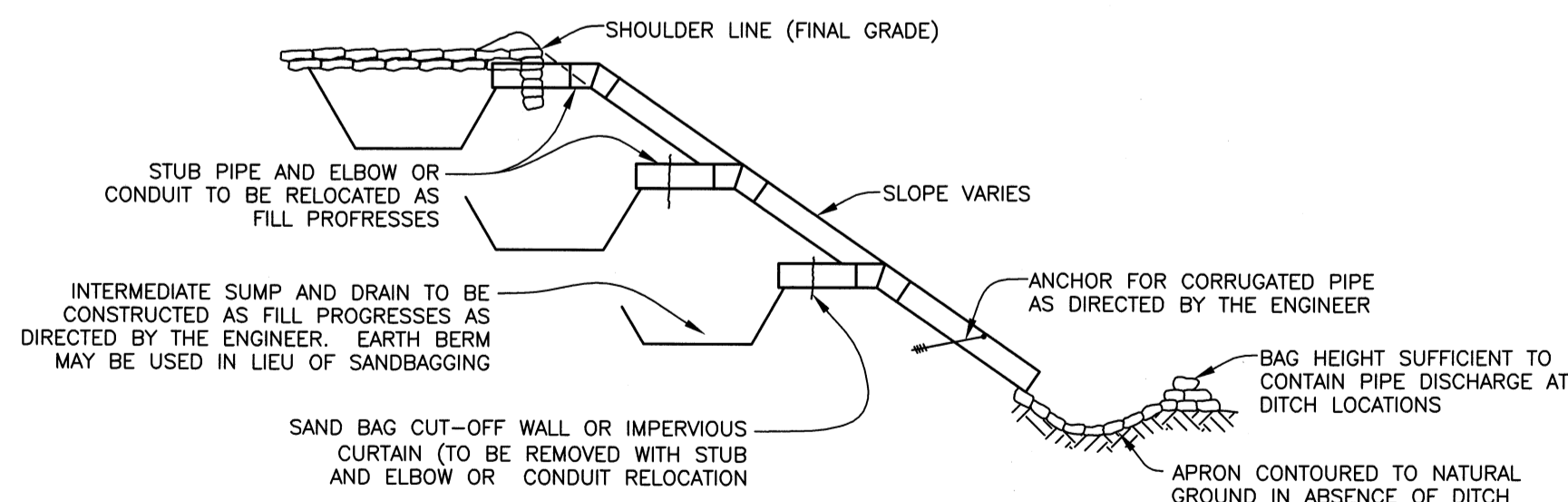
UNDERGROUND PIPE CROSSING
FIGURE 12



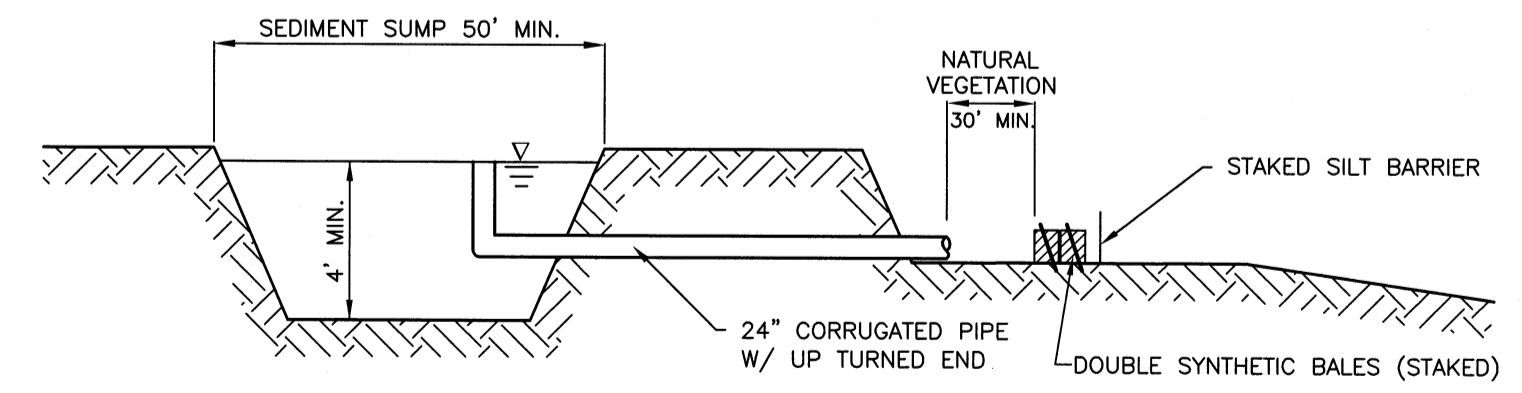
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



SECTION AA
TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

S:\PMD_Engineering\Share\LIB_Eng_Design\Proj\2010_Erns\RTU_494_Ls_River_Club_1.dwg 4-Erosion Control, 11/15/2009 1:40 PM Shea Shuman, 1.1, D-Arch (24"x36")

SEC, TWP, RGE	19/35S/19E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124381		
Surveyed	By	Checked	Date
Drawn	JSS	-	4/29/09
Designed	JAA		

NOTE:
THESE PLANS DO NOT REFLECT A TRUE BOUNDARY OR RIGHTS-OF-WAY SURVEY. THE LOCATION OF THE STREET RIGHTS-OF-WAY LINES SHOWN IS APPROXIMATE AND IS BASED ON INFORMATION CONTAINED IN THE SUBDIVISION PLATS, RIGHTS-OF-WAY MAPS ON RECORD IN MANATEE COUNTY AND ON TOPOGRAPHIC DATA COLLECTED ON THE ROUTE SURVEY OF THE RIGHTS-OF-WAY. CONSEQUENTLY THE RIGHTS-OF-WAY LINES SHOWN ARE NOT INTENDED TO INDICATE THE EXACT PROPERTY CORNERS.

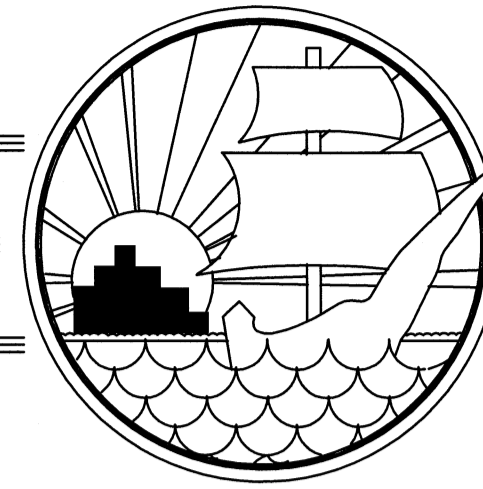
JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
11/08/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.

1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

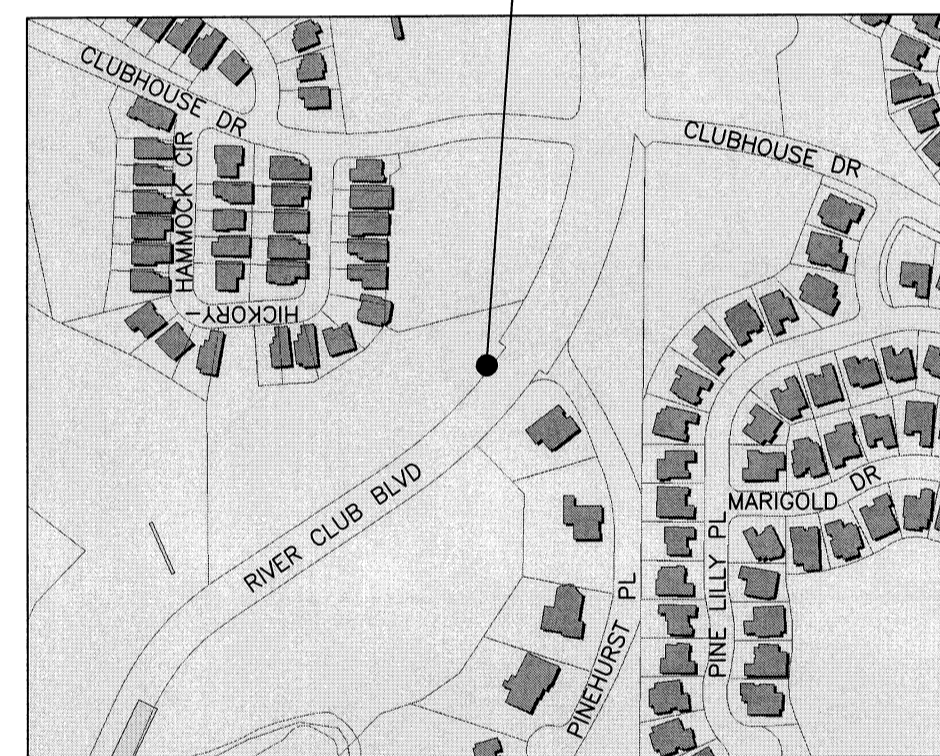
LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS
EROSION CONTROL



MANATEE COUNTY, FLORIDA LIFT STATION UPGRADES, 2010 LS RIVER CLUB 2, RTU #495 402-5124380

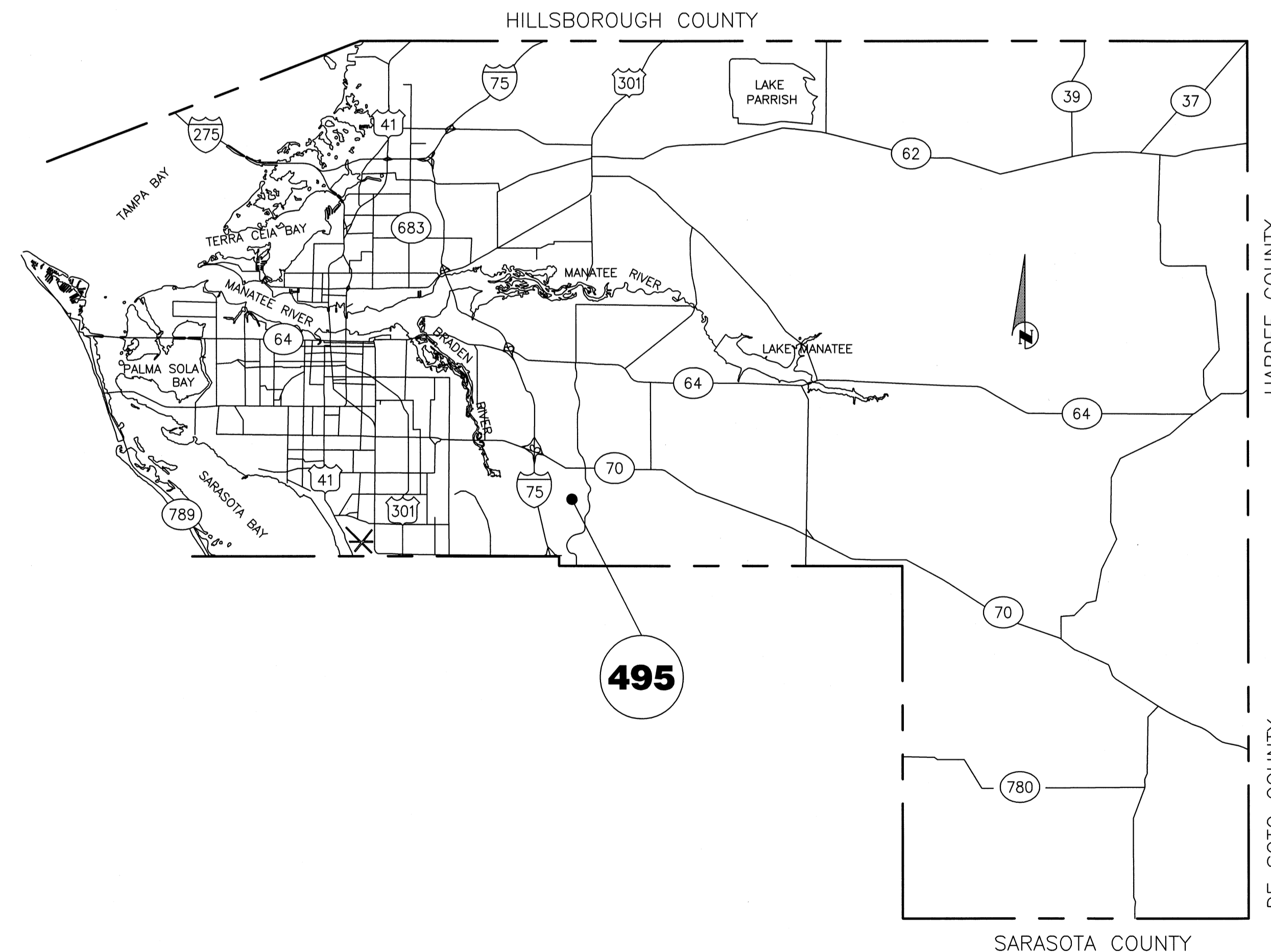
NOVEMBER 2009

495



LS RIVER CLUB 2, RTU #495
6700 PINEHURST PL

VICINITY MAP
N.T.S.



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |

PROJECT DESCRIPTION

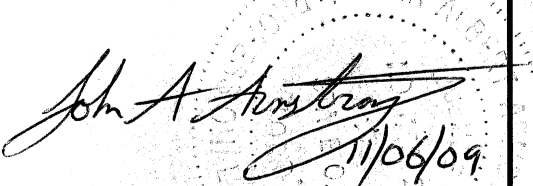
INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

S:\DWG_Engineering\Shore\GIS\Eng_Design\Proj\LS Upgrades\Genra\2010_Epans\RTU_495_LS_RIVER_CLUB_2\DWG\EGEN\RTU_495_LS_River_Club_2.dwg - Cover Sheet - 11/16/2009 1:40 PM Shea Shoun, 1:1 D-Arch (24"x36")


SEC, TWP, RGE	19/35S/19E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124380		
	By	Checked	Date
Surveyed	ZNS	-	4/29/09
Drawn	JSS		
Designed	JAA		

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.



Signature & Date



1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

COVER SHEET

Sheet 1 4

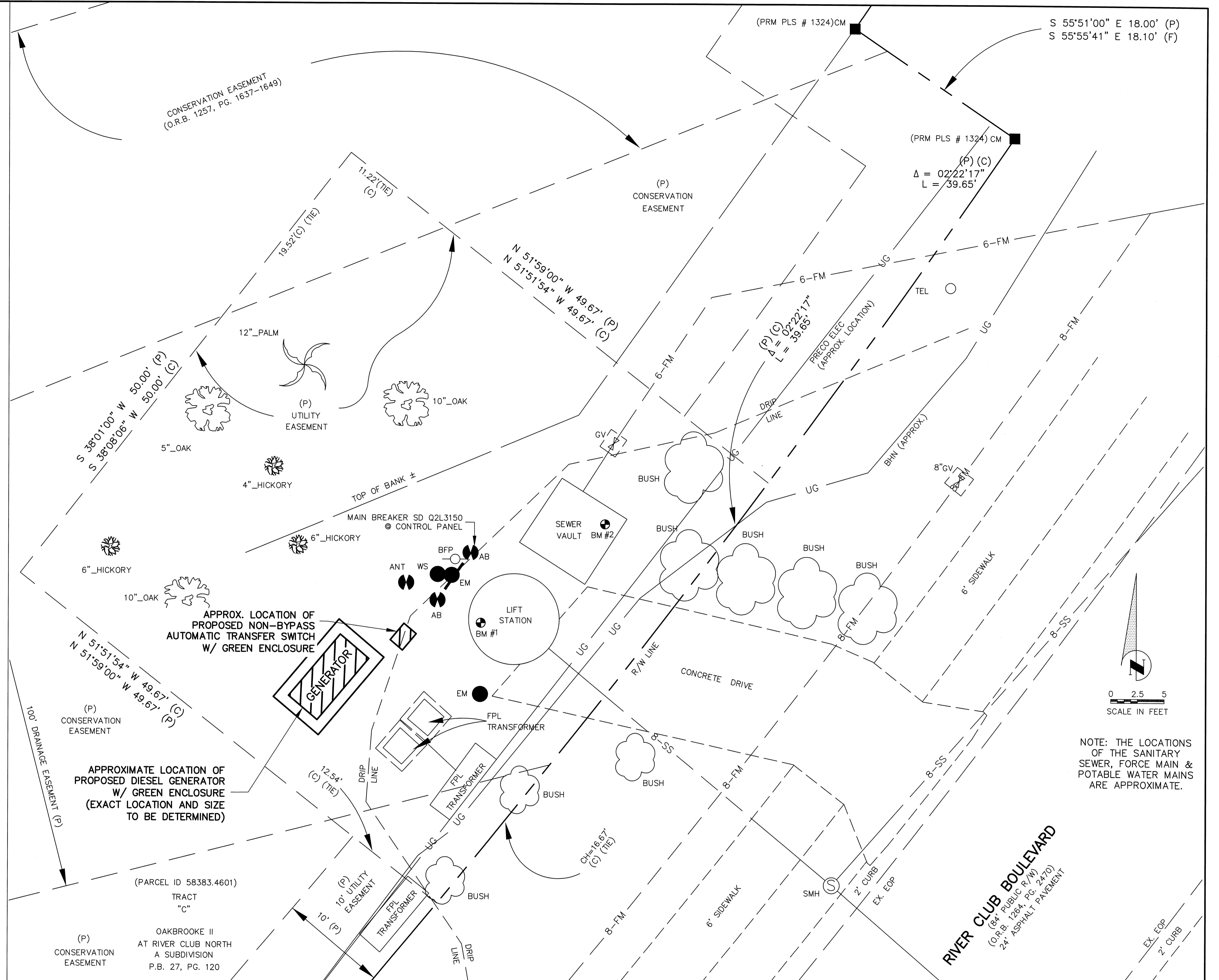
S:\P\d\Engineering\Share\Uti_Eng_Design\Pro]_LS Upgrades\EGens\RTU 495 LS River Club 2.dwg,3-Site Plan, 11/6/2009 1:40 PM Sheo Shoun, 1:1, 1, D-Arch (24"x36")

NOTES:

1. BEARINGS ARE BASED ON THE EAST RIGHT OF WAY LINE OF RIVER CLUB BOULEVARD, HAVING A BEARING OF S 55°55'41" E, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM MANATEE COUNTY GIS CONTROL SURVEY (1988) MONUMENTATION.
2. THE PROPERTY LIES WITHIN FLOOD ZONE "X" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0370 C, REVISED, JULY 15, 1992.
3. ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, BENCH MARK AS SHOWN ON SHEET 3 OF 4 OF OAKBROOKE II AT RIVER CLUB NORTH, A SUBDIVISION, HAVING AN ELEVATION OF 21.82 AS SHOWN ON PLAT.

LEGEND:

CM	CONCRETE MONUMENT	CM	4"x4" CONCRETE MONUMENT FOUND AS NOTED
PRM	PERMANENT REFERENCE MONUMENT	SMH	SANITARY SEWER MANHOLE
R/W	RIGHT OF WAY LINE	BFP	BACK FLOW PREVENTER
ID	IDENTIFICATION	GV	FORCE MAIN GATE VALVE
LB	LICENSED BUSINESS	LP	CONCRETE LIGHT POLE
PLS	PROFESSIONAL LAND SURVEYOR	WS	WATER SERVICE
O.R.B.	OFFICIAL RECORD BOOK	ANT	ANTENNA
P.B.	PLAT BOOK	AB	ALARM BOX
PG.	PAGE	EM	ELECTRIC METER
(F)	FIELD DATA	TEL	VERIZON PEDESTAL
(P)	PLAT DATA	BM	BENCH MARK
(C)	CALCULATE DATA	EL	EXISTING SPOT ELEVATION
EL	ELEVATION	BENCH MARK	
NGVD	NATIONAL GEODETIC VERTICAL DATUM	BENCH MARK #1	BENCH MARK #1
Δ	CENTRAL ANGLE	WELL HATCH	WELL HATCH
R	RADIUS	EL.=21.88 (NGVD 1929)	EL.=21.88 (NGVD 1929)
L	ARC LENGTH	BENCH MARK #2	BENCH MARK #2
CH	CHORD LENGTH	VAULT HATCH	VAULT HATCH
FPL	FLORIDA POWER & LIGHT	EL.=21.82 (NGVD 1929)	EL.=21.82 (NGVD 1929)
LP	LIGHT POLE		
ANT	ANTENNA		
WS	WATER SERVICE		
BFP	BACK FLOW PREVENTER		
EM	ELECTRIC METER		
AB	ALARM BOX		
GV	GATE VALVE		
TEL	TELEPHONE		
BM	BENCH MARK		
FM	FORCE MAIN		
RW	REUSE MAIN		
PW	POTABLE WATER MAIN		
EOP	EDGE OF PAVEMENT		



NOTE: THE LOCATIONS OF THE SANITARY SEWER, FORCE MAIN & POTABLE WATER MAINS ARE APPROXIMATE.

LS RIVER CLUB 2, RTU #495
6700 PINEHURST PL

SEC, TWP, RGE	19/35S/19E
SURVEY BOOK NO.	-
PROJECT NUMBER	402-5124380
Surveyed	By: ZNS, Checked: - Date: 4/29/09
Drawn	JSS
Designed	JAA

NOTE:
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JOHN A. ARMSTRONG 45802
Engineer / Reg. No.

Signature & Date: *John A. Armstrong* 11/6/09

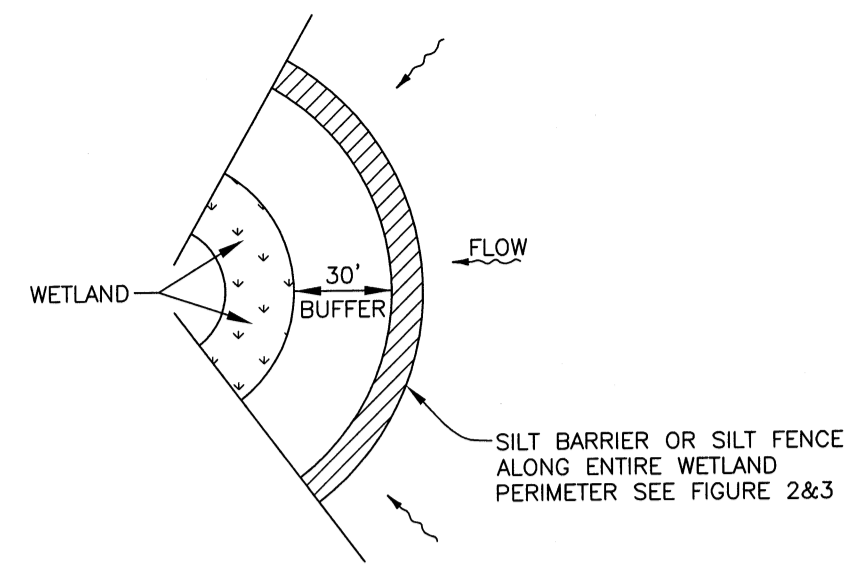
MANATEE COUNTY FLORIDA
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

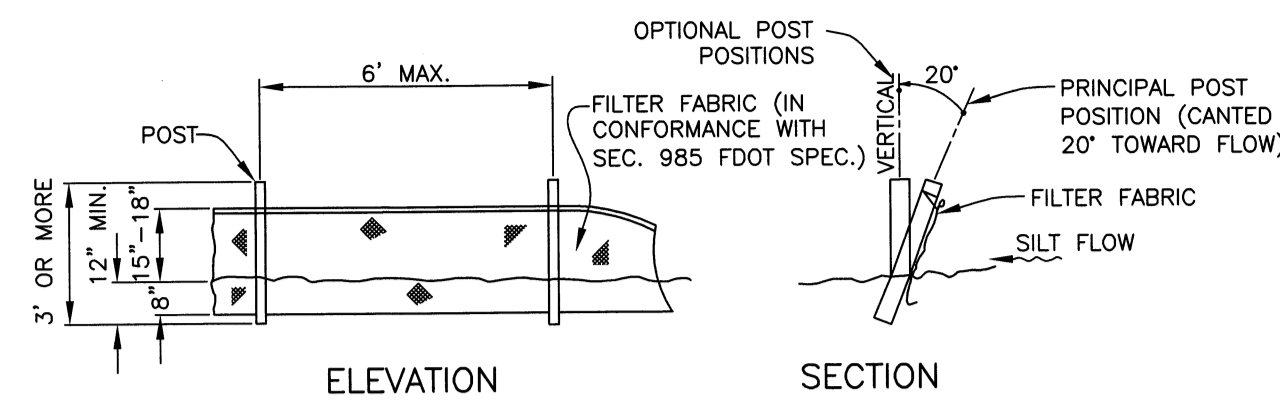
LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS

SITE PLAN

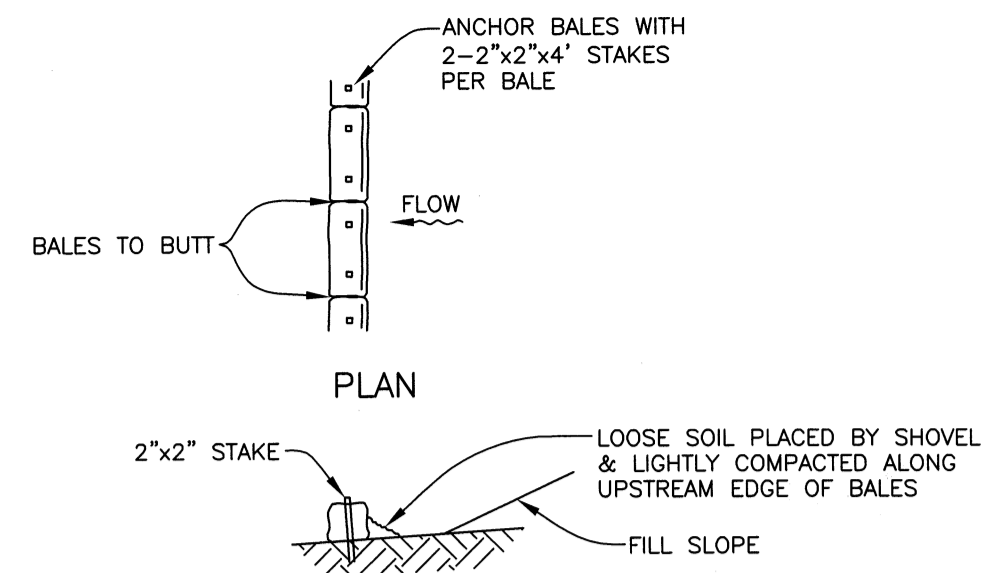
Sheet 3 of 4



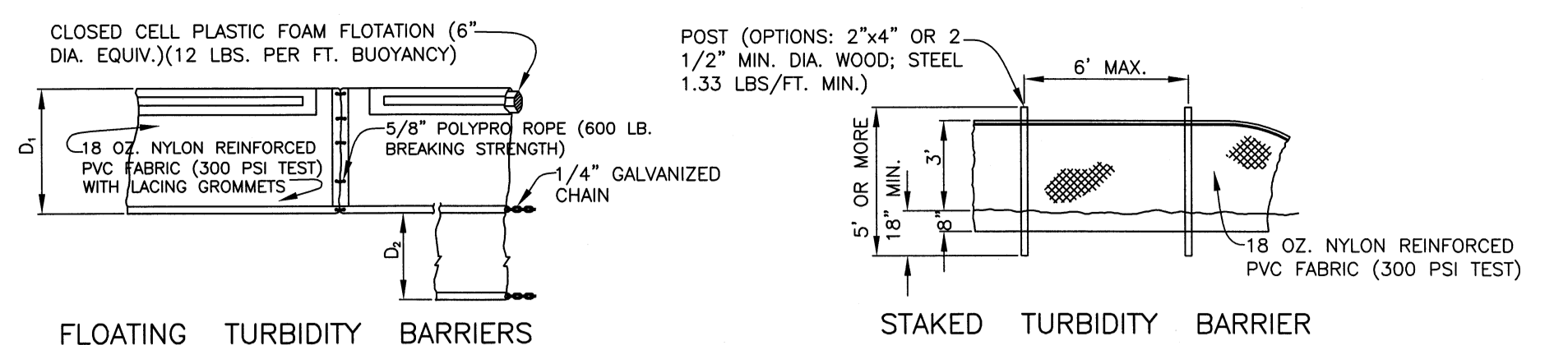
WETLAND BUFFER
FIGURE 1



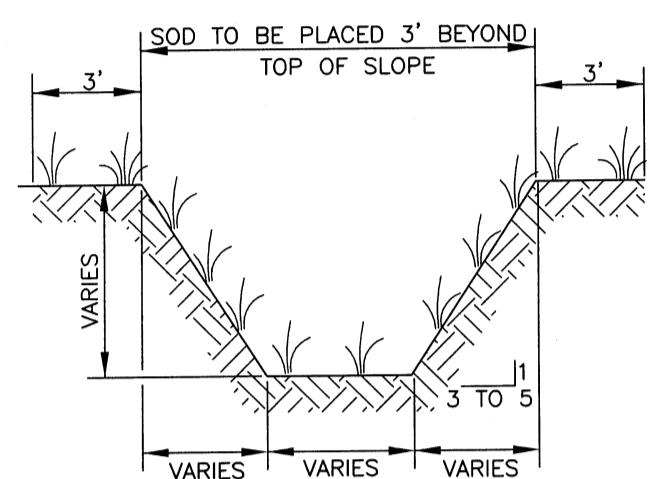
TYPICAL SILT FENCE
FIGURE 2



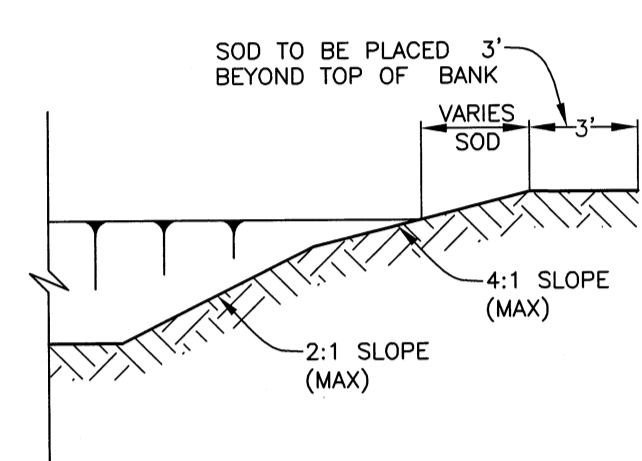
TYPICAL BALE SILT BARRIER
FIGURE 3



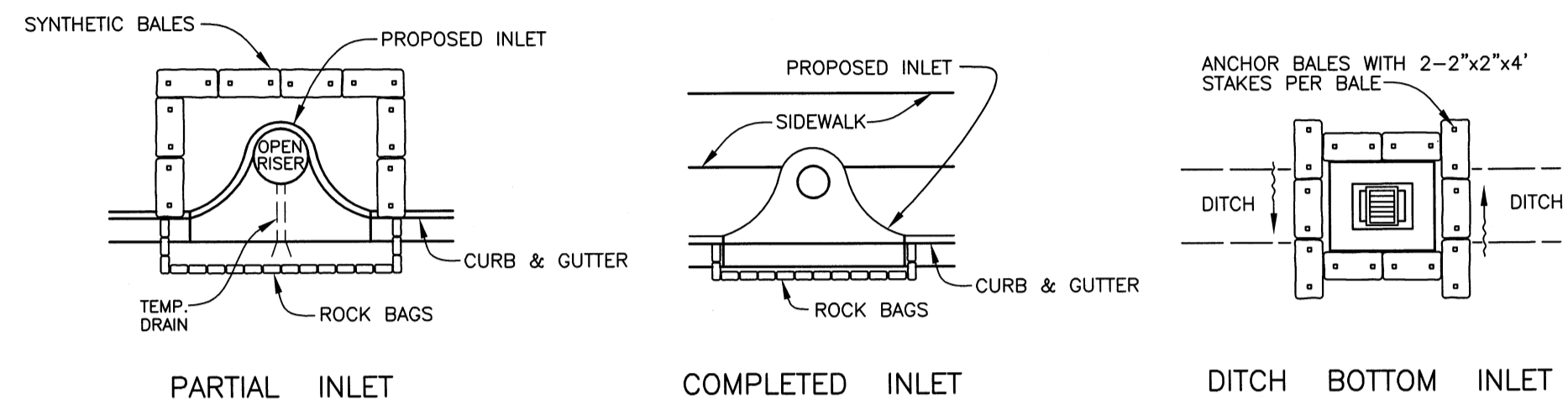
FLOATING TURBIDITY BARRIERS
STAKED TURBIDITY BARRIER
FIGURE 4



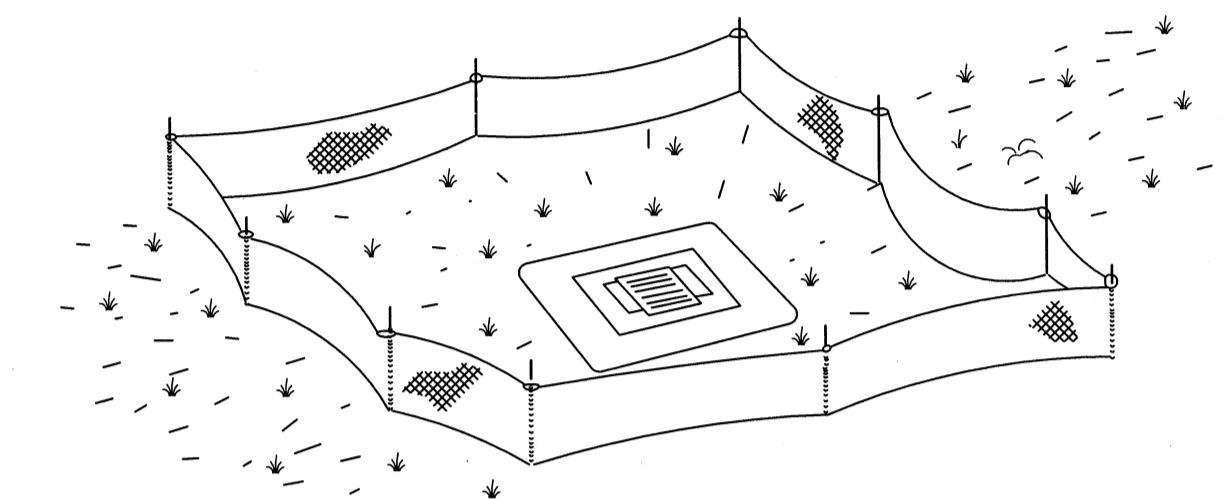
TYPICAL SWALE SECTION
FIGURE 5



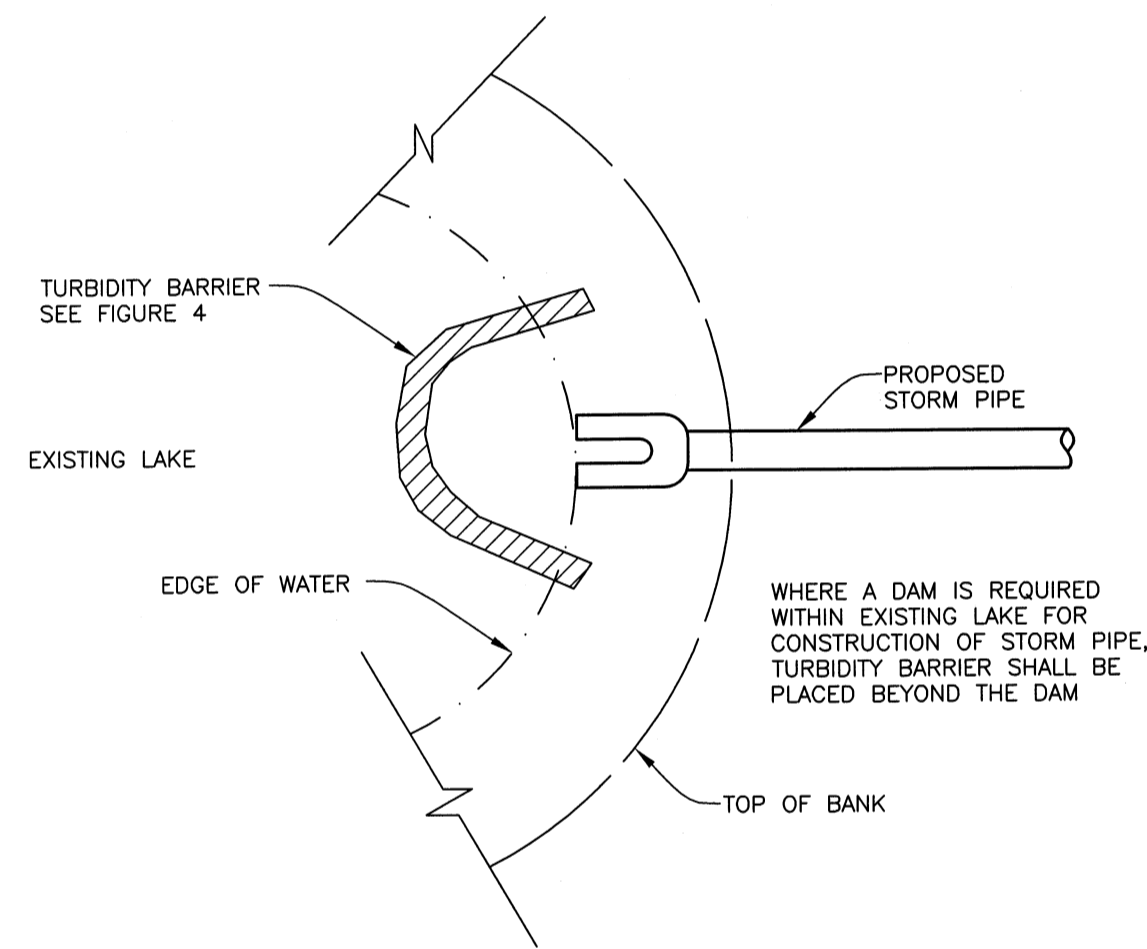
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



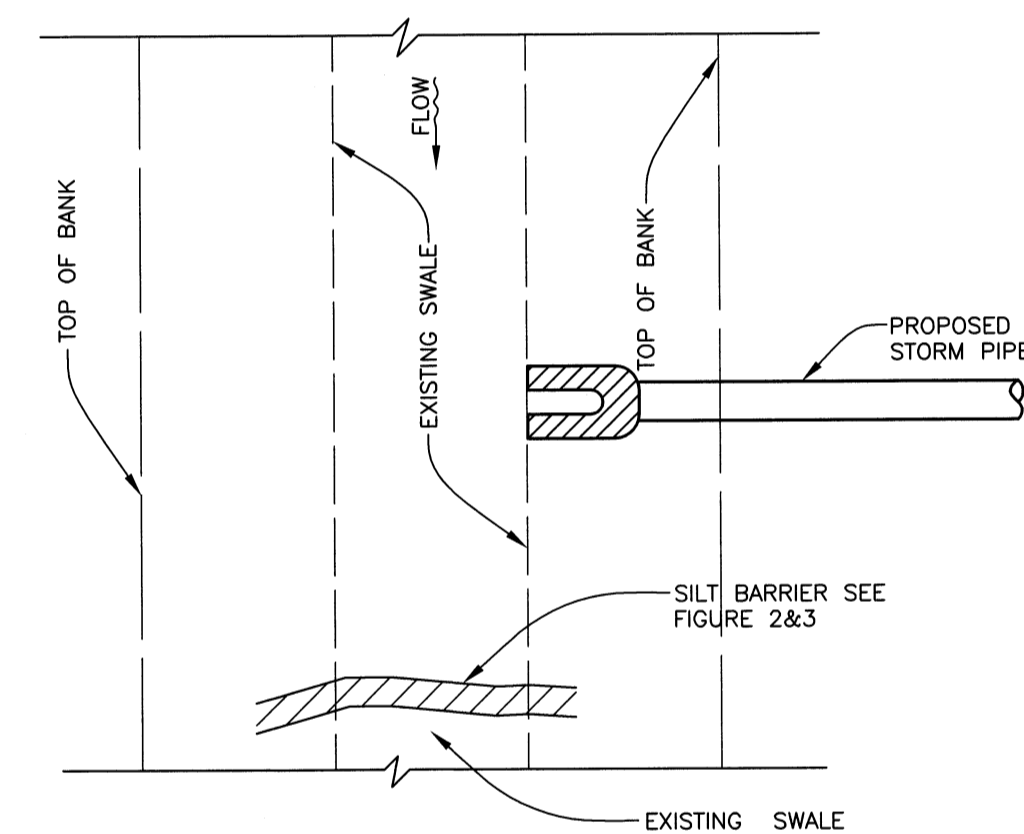
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



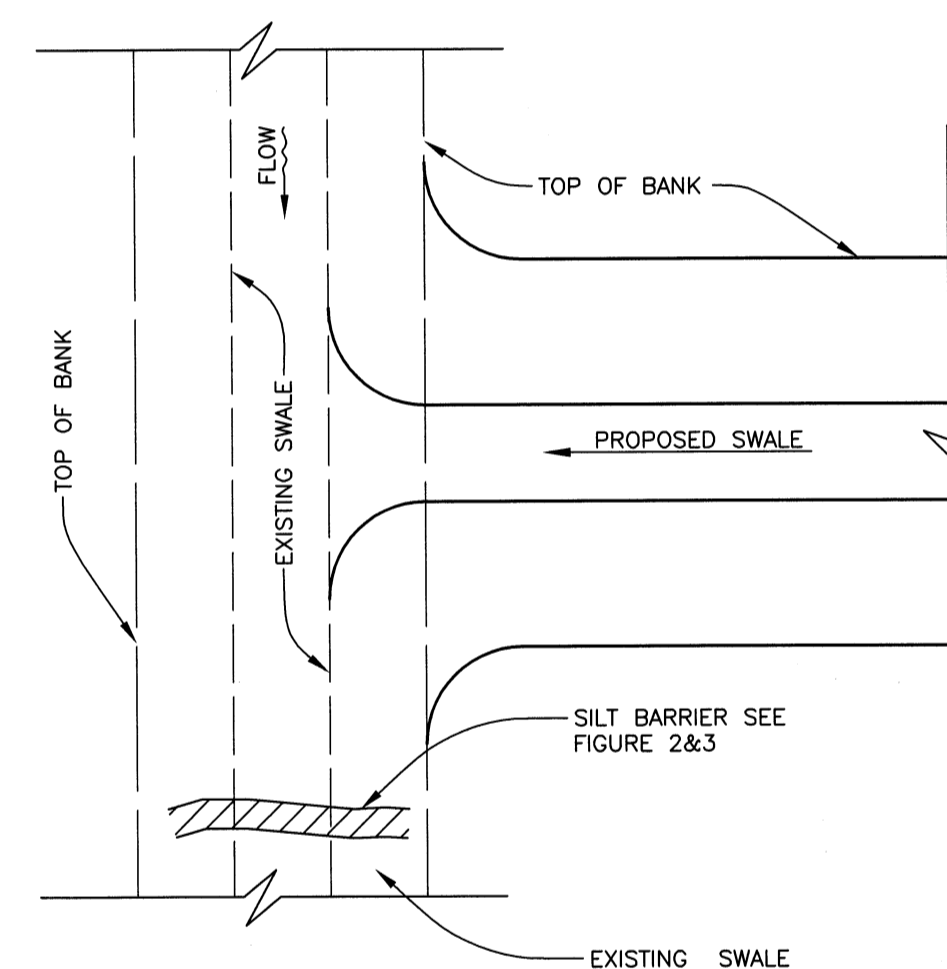
TURBIDITY BARRIERS
FIGURE 4
TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



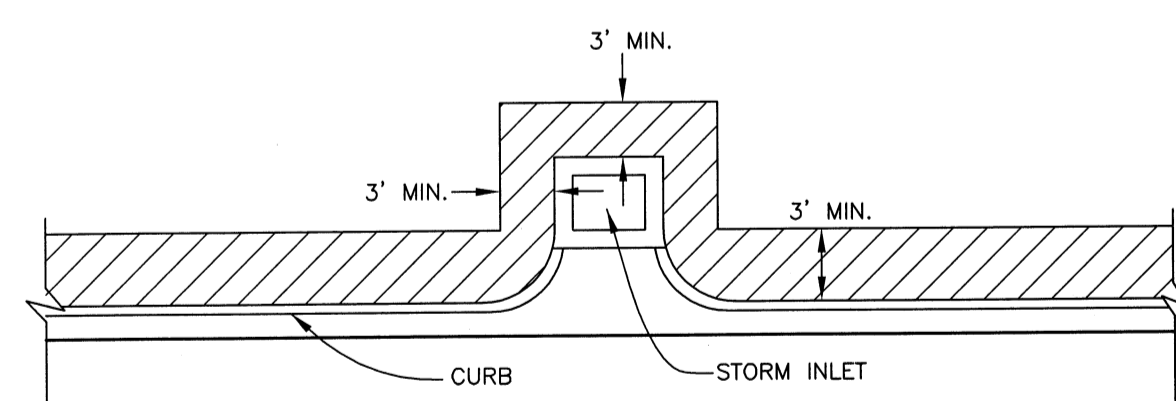
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



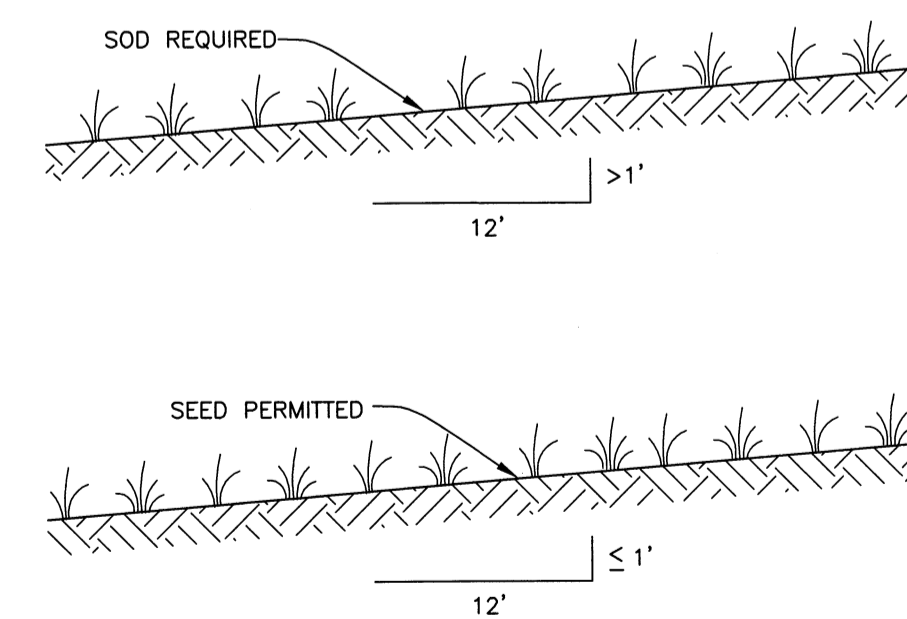
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



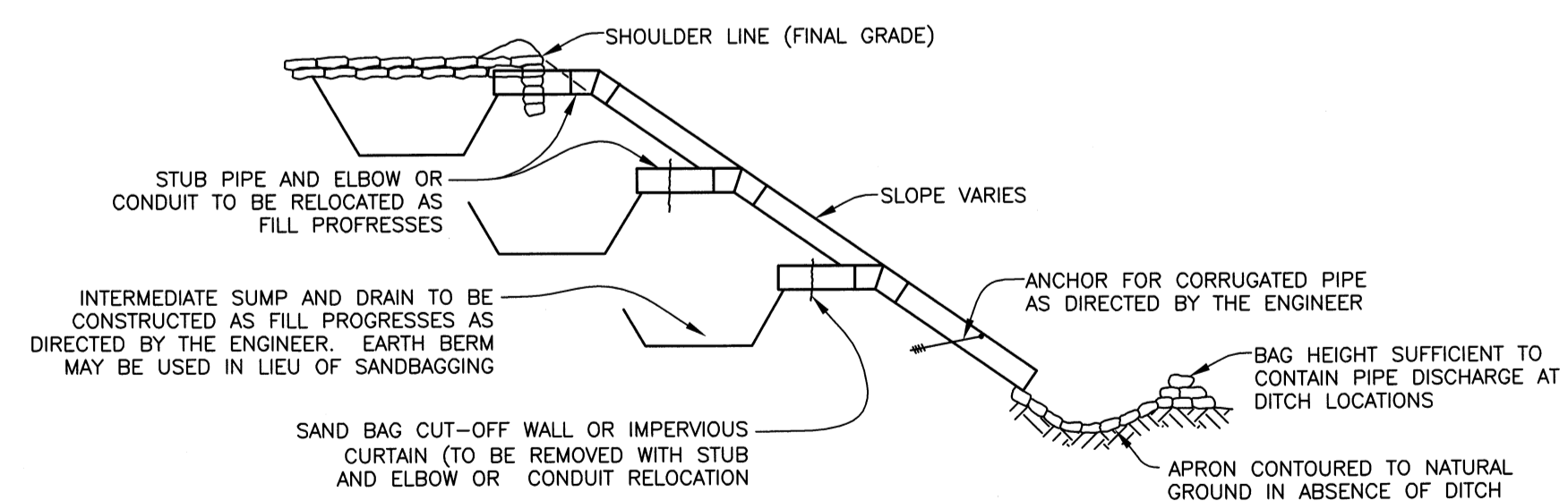
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



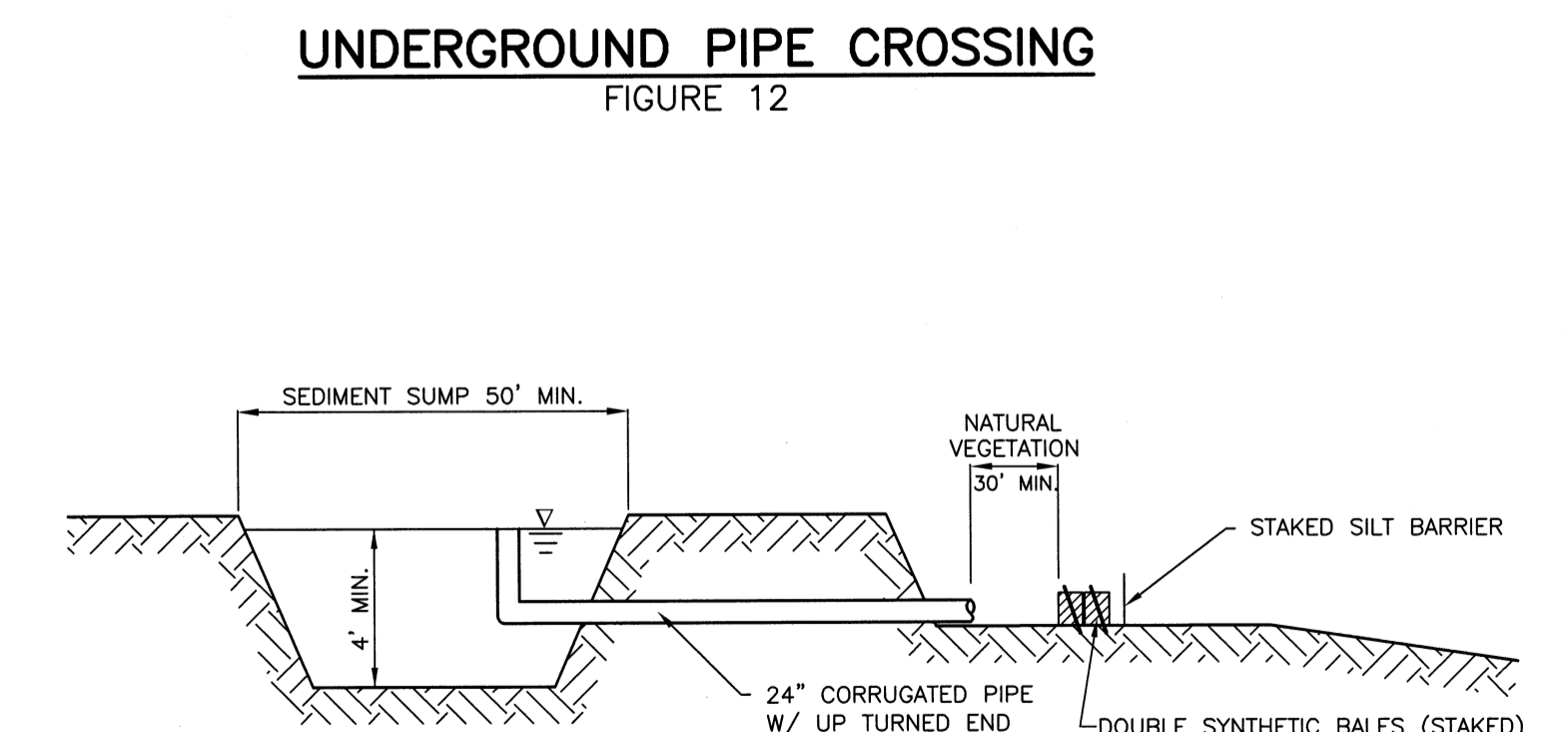
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

JOHN A. ARMSTRONG 45802
Engineer / Reg. No.
John A. Armstrong
1/16/09
Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.
1022 26th Avenue East, Bradenton, FL 34208

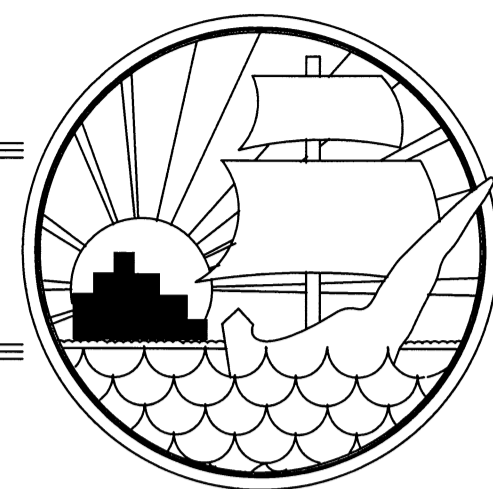
NO.	REVISION DESCRIPTION	BY	DATE

LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS

EROSION CONTROL

Sheet 4 of 4

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MANATEE COUNTY, FLORIDA

LIFT STATION UPGRADES, 2010

LS UNIVERSITY PLACE 1, RTU #627

402-5124080

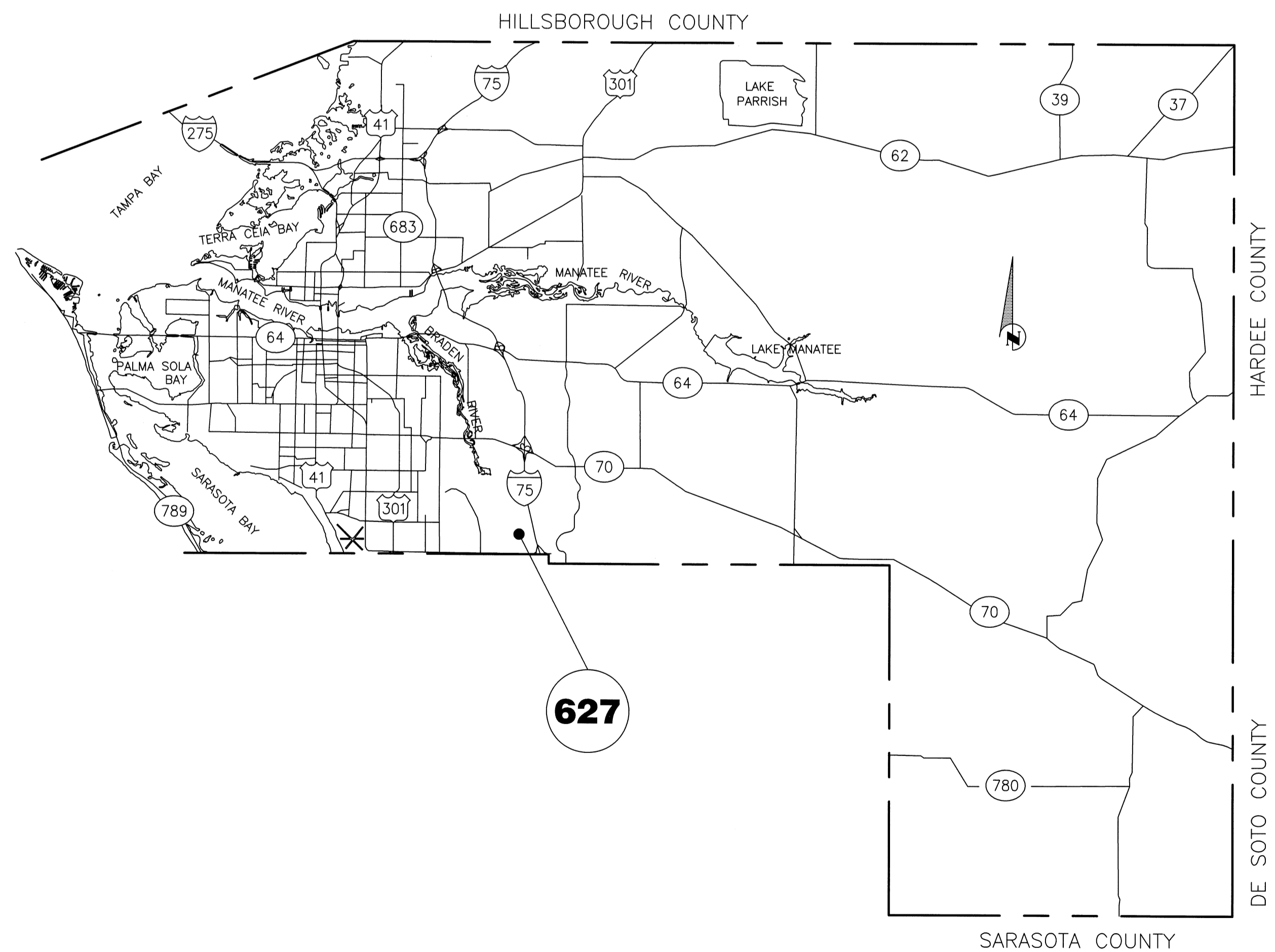
NOVEMBER 2009



LS UNIVERSITY PLACE 1, RTU #627
8005 PLANTERS KNOLL TERRACE

VICINITY MAP

N.T.S.



100% PLANS

NO. INDEX OF SHEETS

- | | |
|----|------------------------|
| 1. | COVER SHEET |
| 2. | GENERAL NOTES & LEGEND |
| 3. | SITE PLAN |
| 4. | EROSION CONTROL |

PROJECT DESCRIPTION

INSTALL EMERGENCY GENERATOR AT SELECTED LIFT STATION IN ORDER TO MAINTAIN CONTINUOUS OPERATION IN THE EVENT THAT THE PRIMARY POWER SOURCE IS NOT AVAILABLE.

SEC. TWP. RGE	36/35S/18E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124080		
	By	Checked	Date
Surveyed	ZNS	-	4/29/09
Drawn	JSS		
Designed	JAA		

NOTE:

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JOHN A. ARMSTRONG 45802

Engineer / Reg. No.

John A. Armstrong
11/10/09

Signature & Date

PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.



1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

COVER SHEET

Sheet
1
4

S:\P\WD_Engineering_Shera\Util_Eng_Design\Proj\LS University Place 1.dwg, 3--Site Plan, 11/9/2009 10:53 AM Sheri Shoun, 1:1 - ROTATED ARCH D

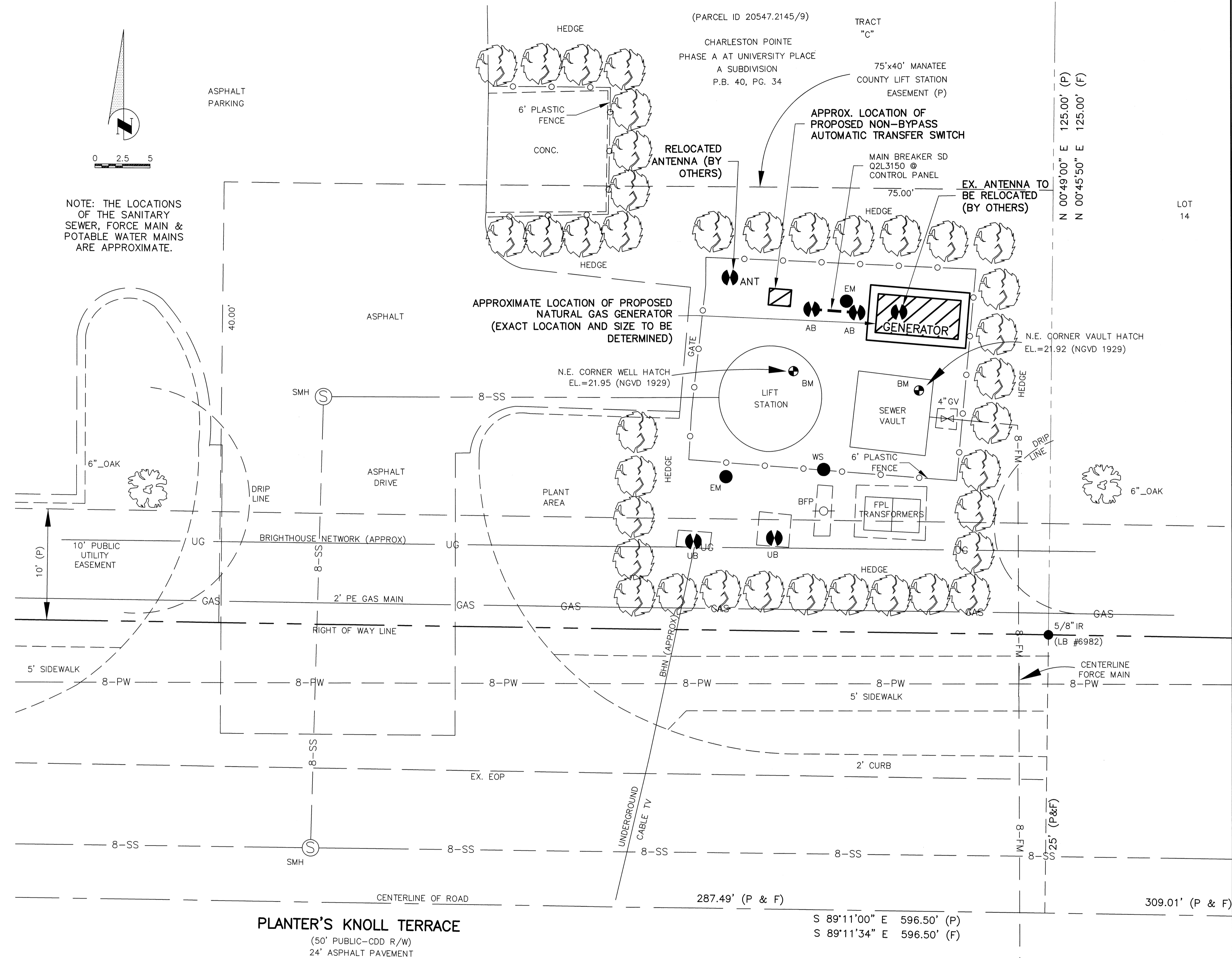
NOTES:

- BEARINGS ARE BASED ON THE CENTERLINE OF PLANTER'S KNOLL TERRACE, HAVING A BEARING OF S 89°11'34" E, AND ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/90 DERIVED FROM MANATEE COUNTY GIS M 085.
- THE PROPERTY LIES WITHIN FLOOD ZONE "X" AS SHOWN ON MANATEE COUNTY FLOOD INSURANCE RATE MAP PANEL No. 120153 0365 C, REVISED, JULY 15, 1992.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929 DATUM, CHARLESTON POINT PHASE A AT UNIVERSITY PLACE, BENCH MARK AT SOUTHWEST INTERSECTION OF CHARLESTON STREET AND SOUTH RIGHT OF WAY LINE OF COOPER CREEK BOULEVARD (EXISTING CONCRETE MONUMENT (PRM # LB6982), HAVING AN ELEVATION OF 22.37).
- NATURAL GAS SERVICE TO BE INSTALLED IN A CARRIER PIPE AND STRAPPED TO THE VALVE VAULT OR WET WELL, IF PASSING OVER FORCE MAIN OR DISCHARGE PIPING.
- ANY ELECTRICAL WIRING THAT IS INSTALLED BETWEEN THE LIFT STATION'S WET WELL AND THE VALVE VAULT SHALL BE INSTALLED IN A CARRIER PIPE THAT IS STRAPPED TO THE WET WELL OR VALVE VAULT.
- CONTRACTOR SHALL INSTALL NATURAL GAS SERVICE FROM PROPOSED GENERATOR TO NATURAL GAS METER/BALL VALVE PROVIDED BY TECO. CONTRACTOR SHALL REMOVE PLUG AT NATURAL GAS METER/BALL VALVE AND CONNECT TO NATURAL GAS SERVICE PROVIDED BY TECO.

LEGEND:

IR ●	IRON ROD	IR ●	IRON ROD FOUND AS NOTED
N&D ⊙	PK NAIL & DISK	N&D ⊙	NAIL & DISK FOUND AS NOTED
R/W ---	RIGHT OF WAY LINE	SMH ⊙	SANITARY SEWER MANHOLE
ID ---	IDENTIFICATION	BFP ---	BACK FLOW PREVENTER
LB ---	LICENSED BUSINESS	GV ---	FORCE MAIN GATE VALVE
P.B. ---	PLAT BOOK	UB ---	UTILITY BOX
P.G. ---	PAGE	ANT ---	ANTENNA
(F) ---	FIELD DATA	AB ---	ALARM BOX
(P) ---	PLAT DATA	WS ---	WATER SERVICE
CONC. ---	CONCRETE	EM ●	ELECTRIC METER
EL ---	ELEVATION	BM ⊙	BENCH MARK
FPL ---	FLORIDA POWER & LIGHT	20.00	EXISTING SPOT ELEVATION
CDD ---	COMMUNITY DEVELOPMENT DISTRICT		
NGVD ---	NATIONAL GEODETIC VERTICAL DATUM		
LB ---	LICENSED BUSINESS		
SMH ⊙	SANITARY SEWER MANHOLE		
EM ●	ELECTRIC METER		
ANT ---	ANTENNA		
AB ---	ALARM BOX		
GV ---	GATE VALVE		
BM ⊙	BENCH MARK		
WS ---	WATER SERVICE		
UB ---	UTILITY BOX		
FM ---	FORCE MAIN		
RW ---	REUSE MAIN		
PW ---	POTABLE WATER MAIN		
EOP ---	EDGE OF PAVEMENT		

NOTE: THE LOCATIONS OF THE SANITARY SEWER, FORCE MAIN & POTABLE WATER MAINS ARE APPROXIMATE.



LS UNIVERSITY PLACE 1, RTU #627
8005 PLANTERS KNOLL TERRACE

SEC, TWP, RGE	36/35S/18E		
SURVEY BOOK NO.	-		
PROJECT NUMBER	402-5124080		
	By	Checked	Date
Surveyed	ZNS	-	4/29/09
Drawn	JSS		
Designed	JAA		

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John A. Armstrong
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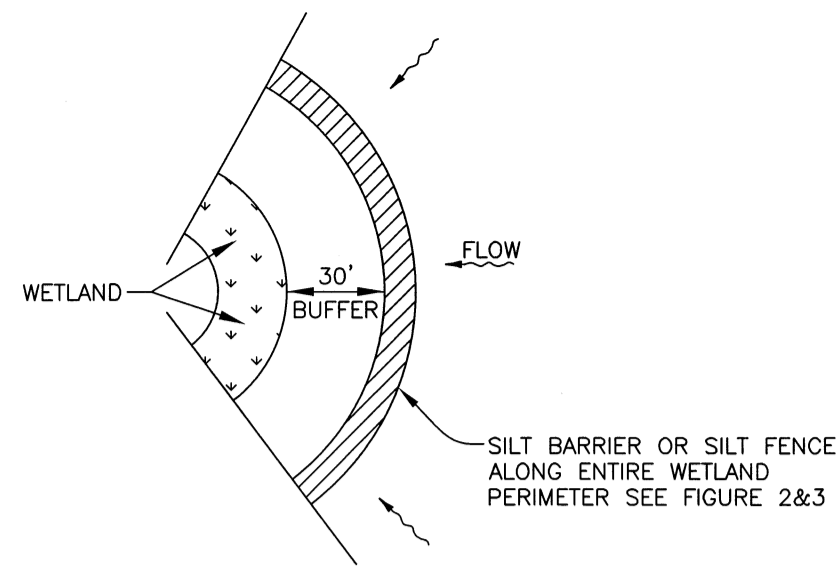
PUBLIC WORKS DEPT.-INFRASTRUCTURE ENGINEERING DIV.
MANATEE COUNTY
FLORIDA
1022 26th Avenue East, Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE

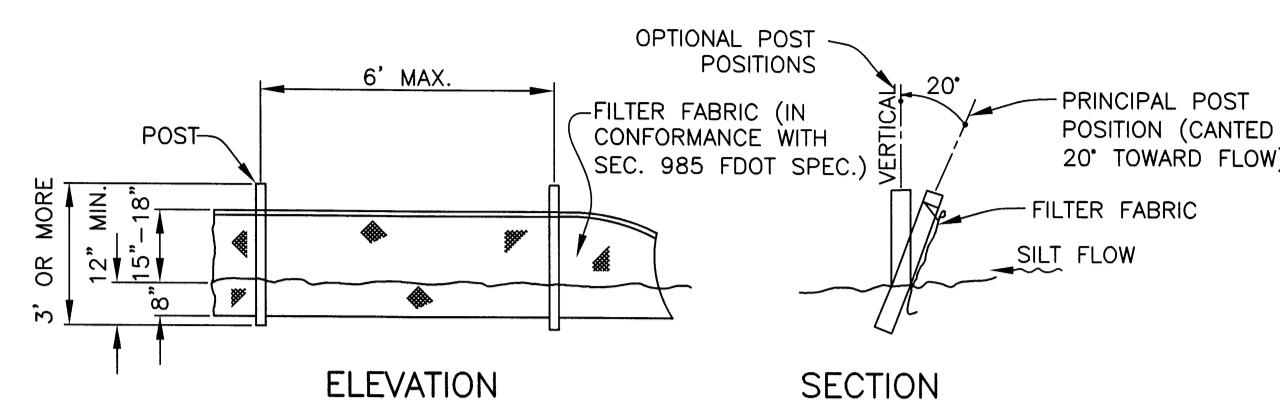
**LIFT STATION UPGRADES, 2010
EMERGENCY GENERATORS**

SITE PLAN

Sheet 3 of 4

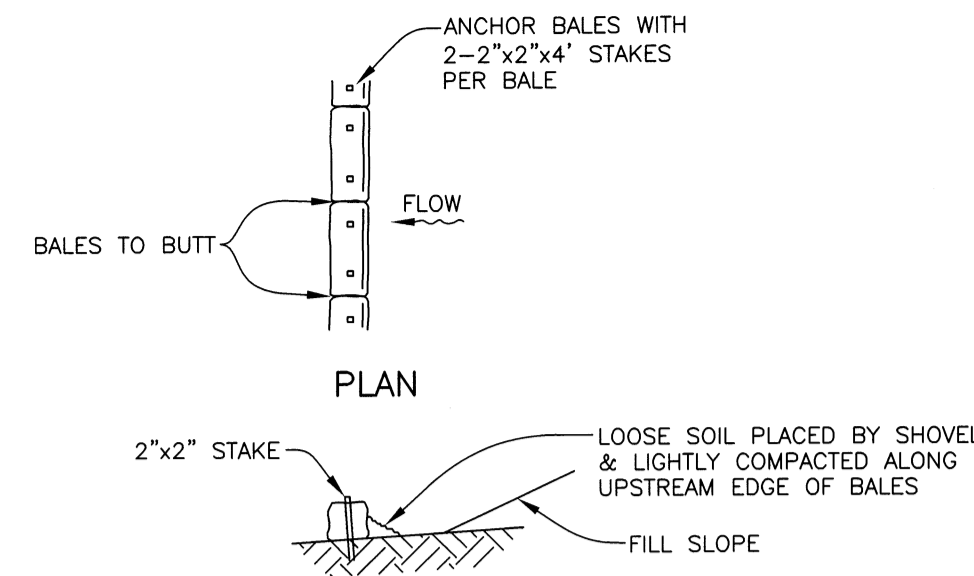


WETLAND BUFFER
FIGURE 1

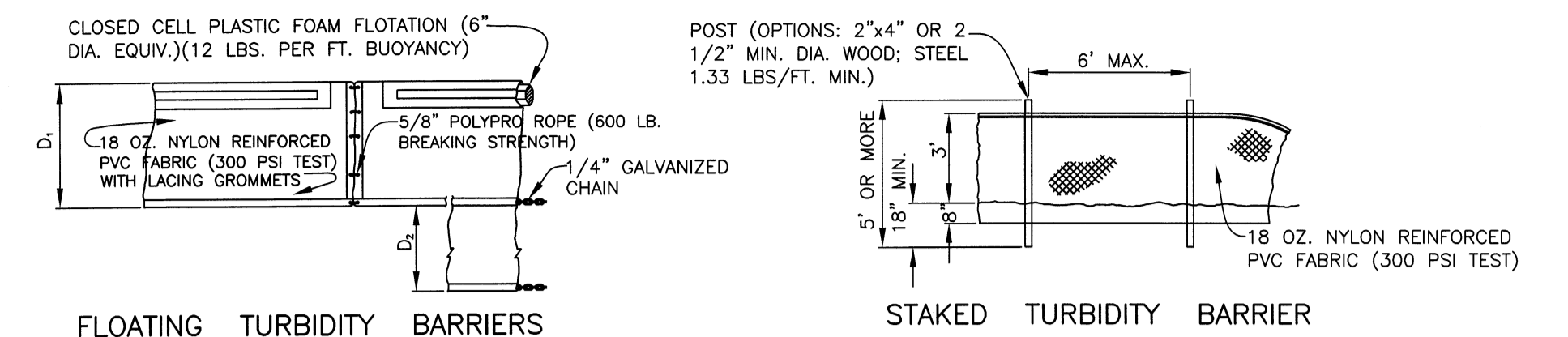


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

TYPICAL SILT FENCE
FIGURE 2

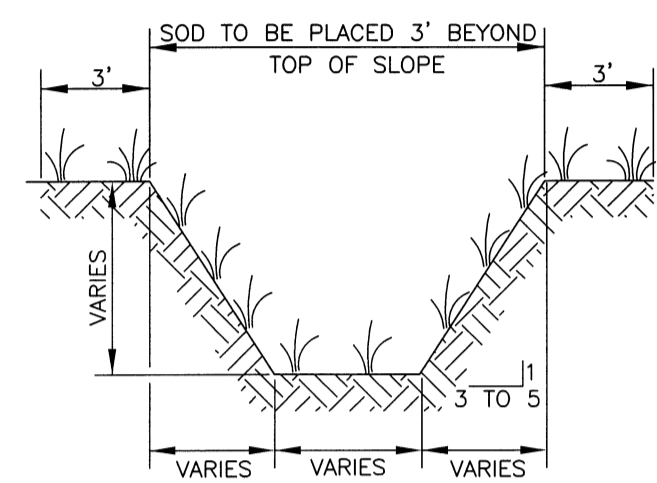
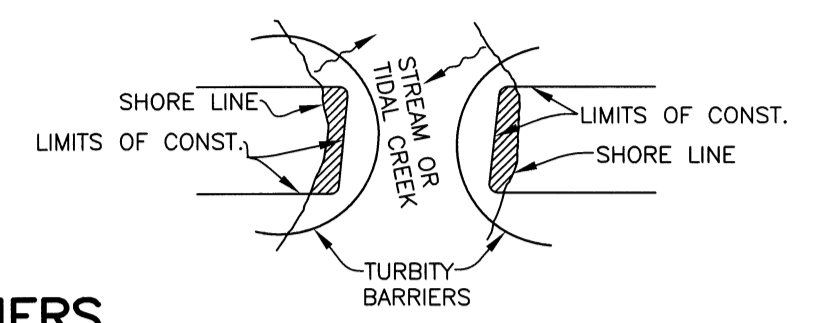


TYPICAL BALE SILT BARRIER
FIGURE 3

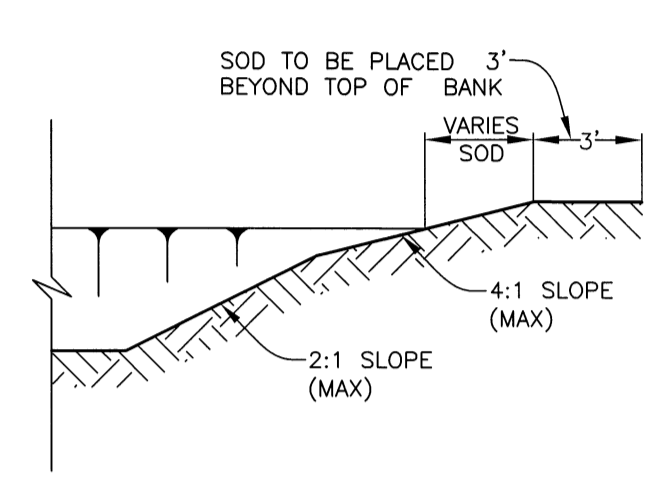


NOTE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

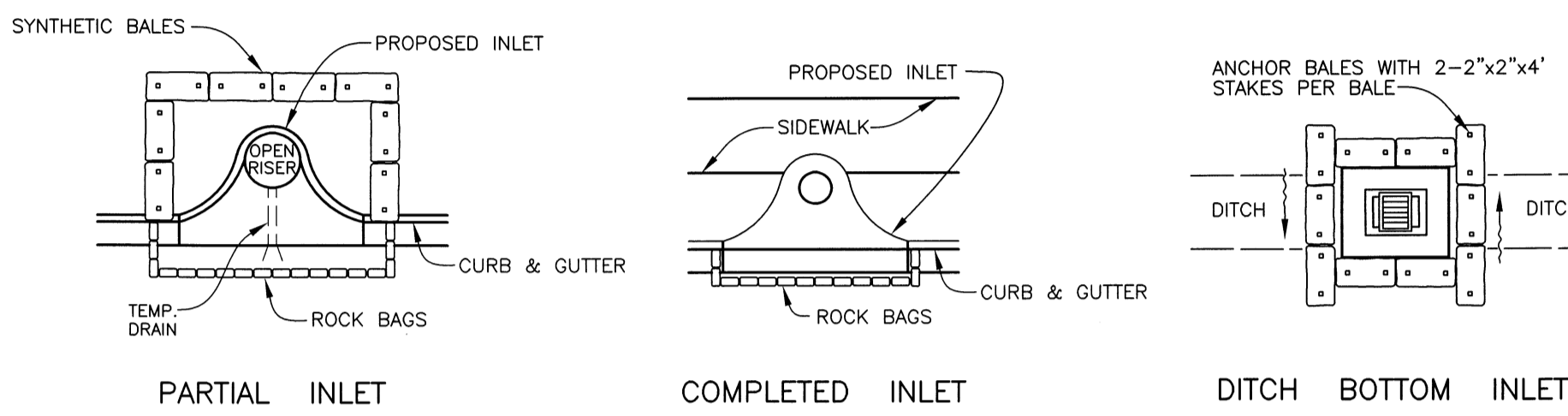
TURBIDITY BARRIERS
FIGURE 4



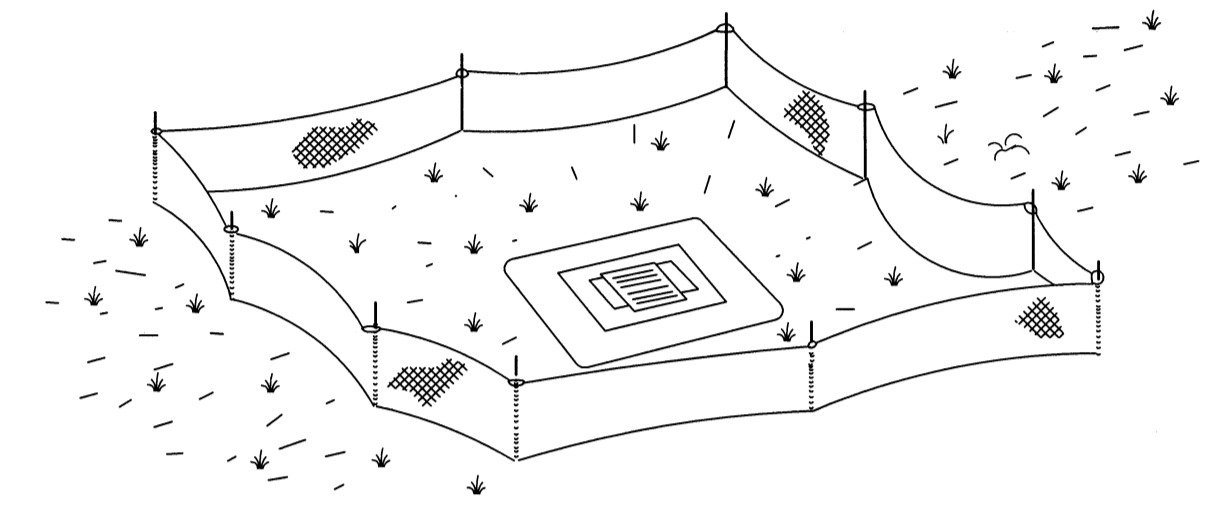
TYPICAL SWALE SECTION
FIGURE 5



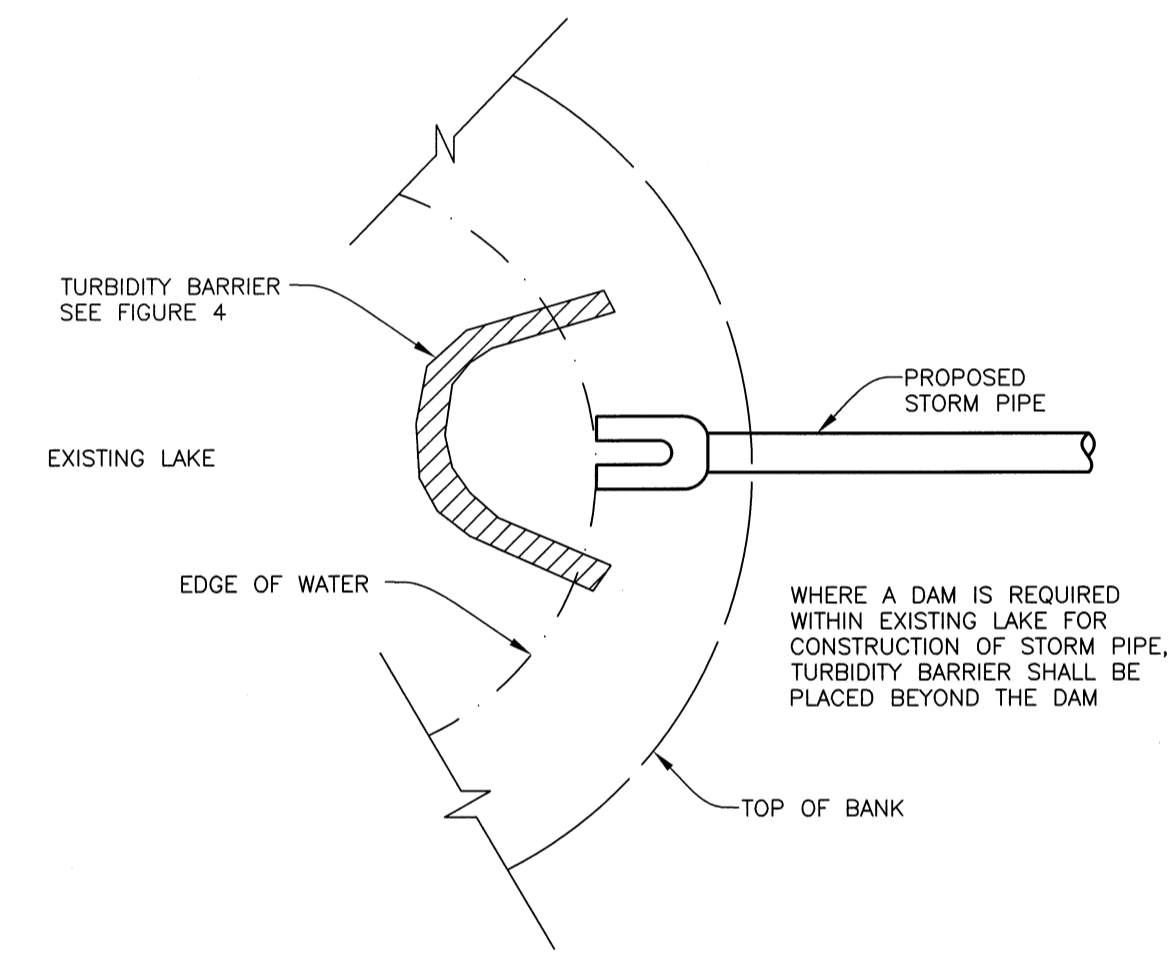
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



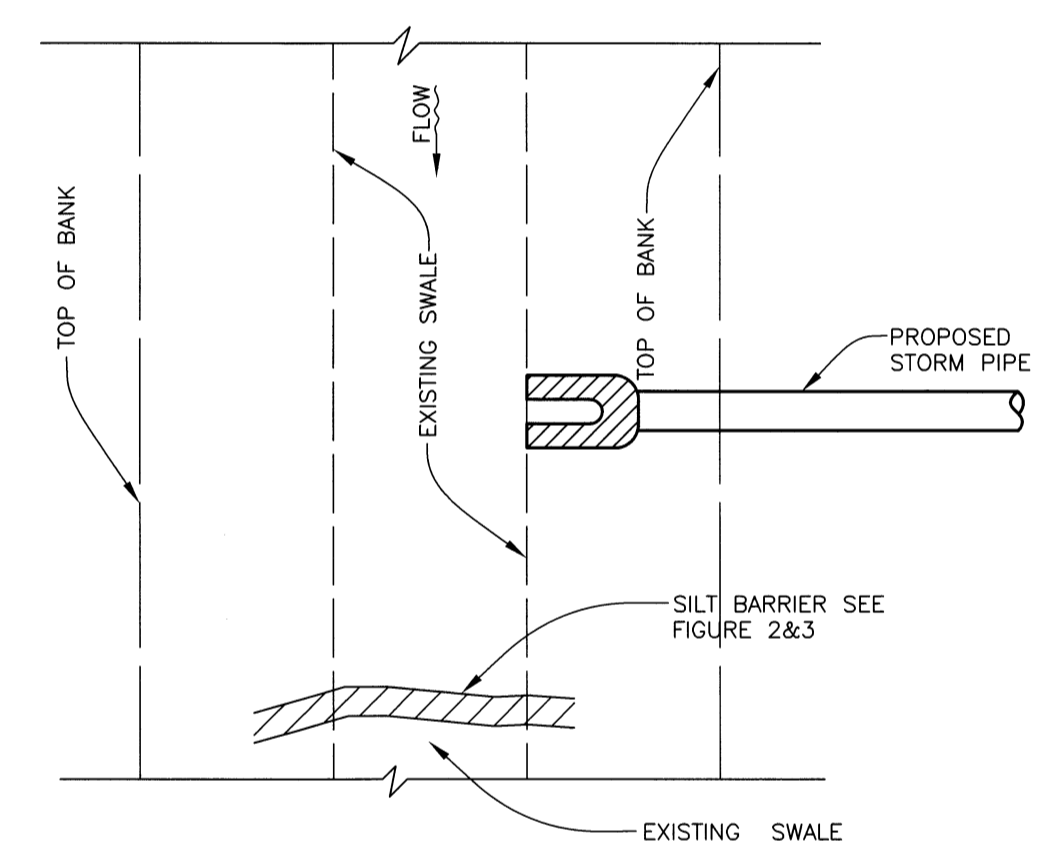
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



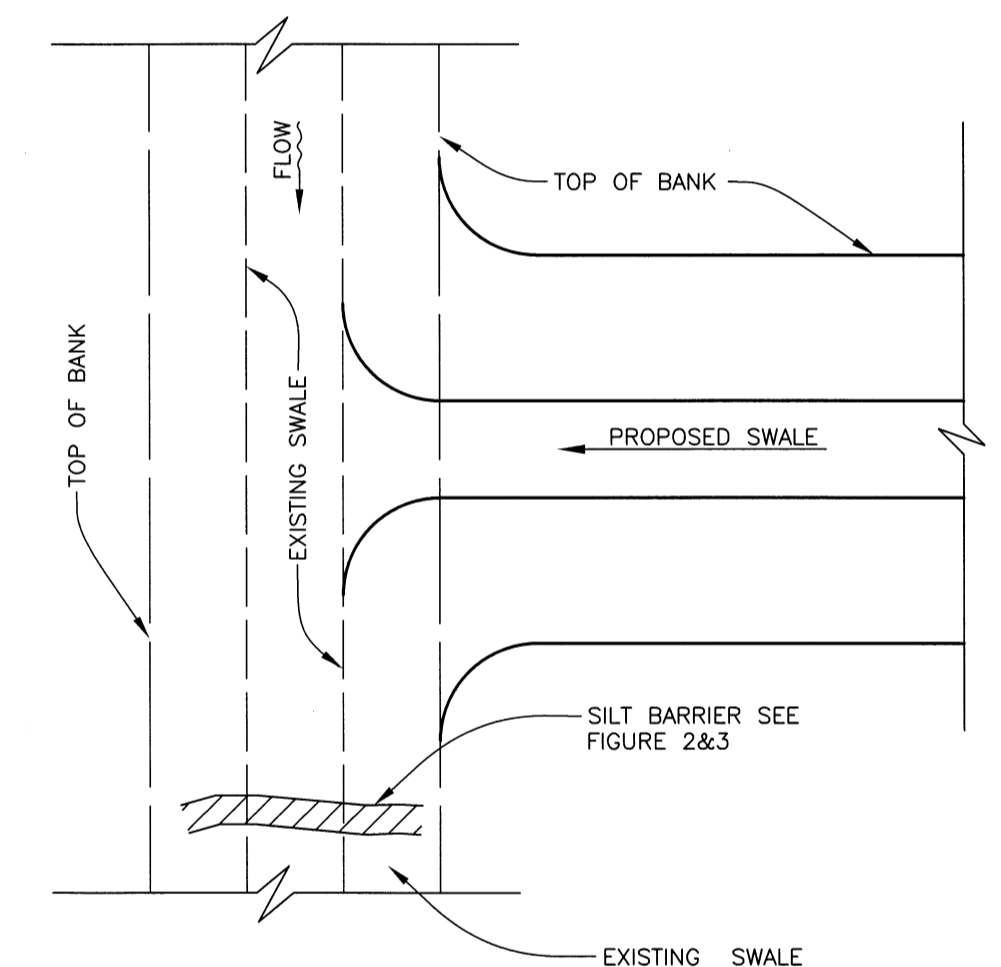
TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



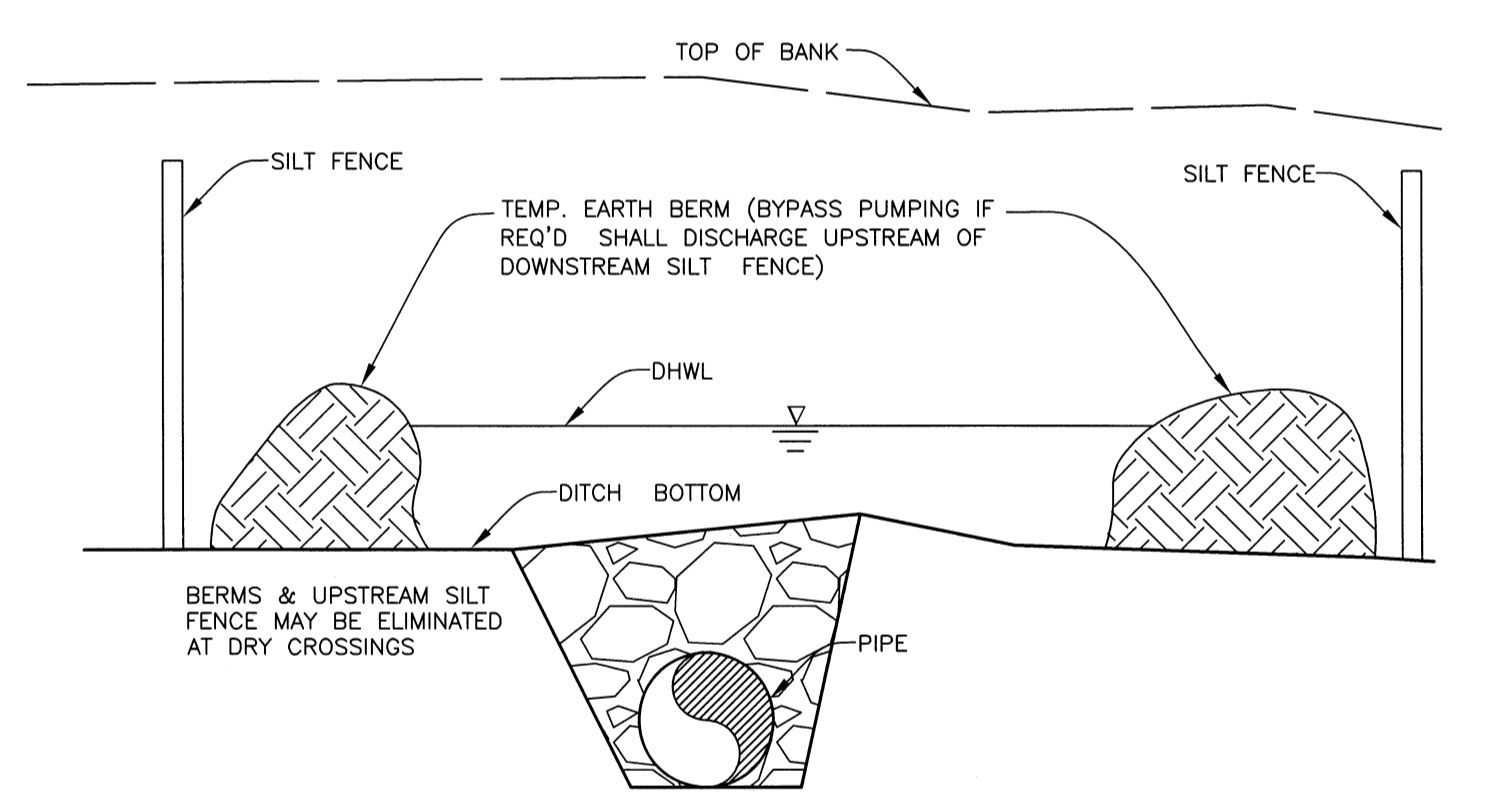
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



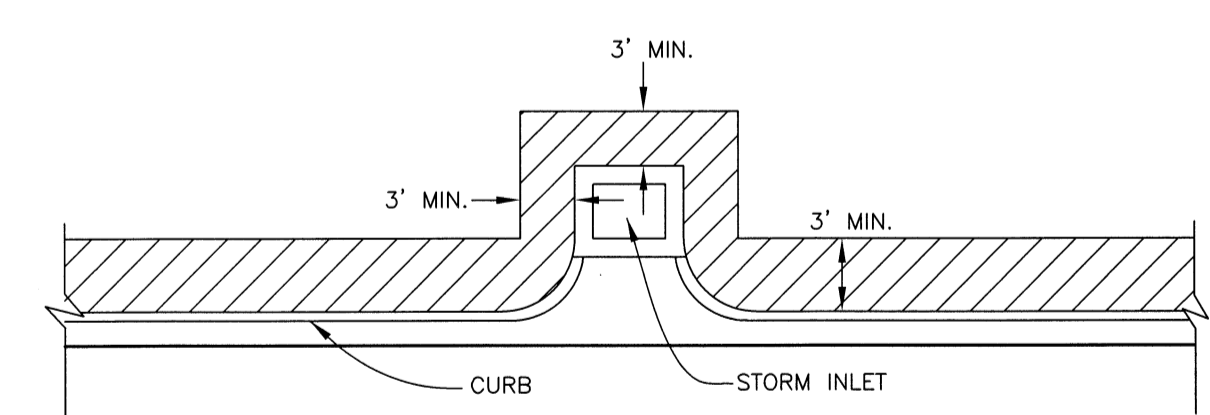
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



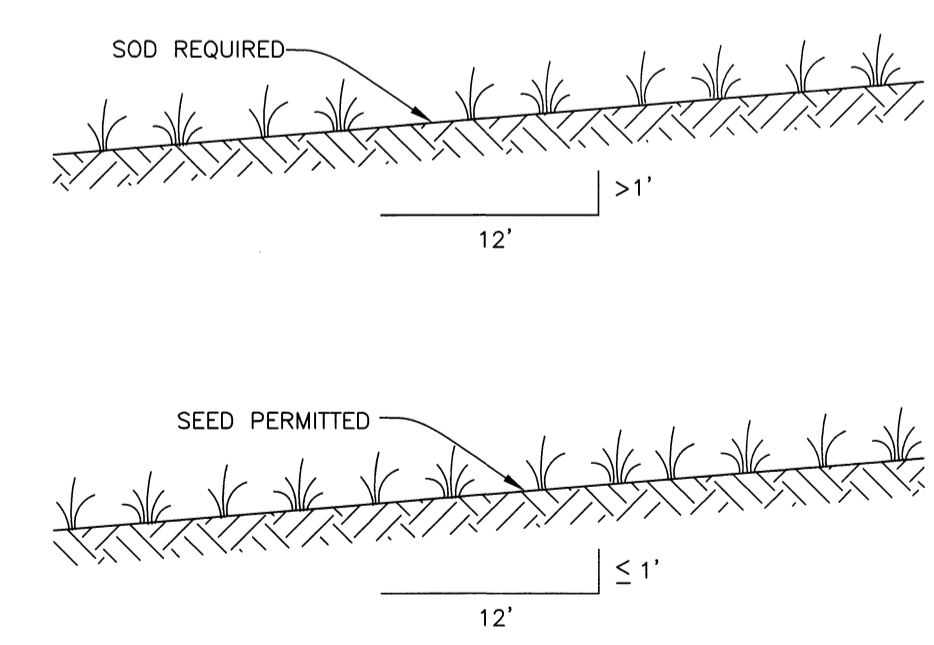
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



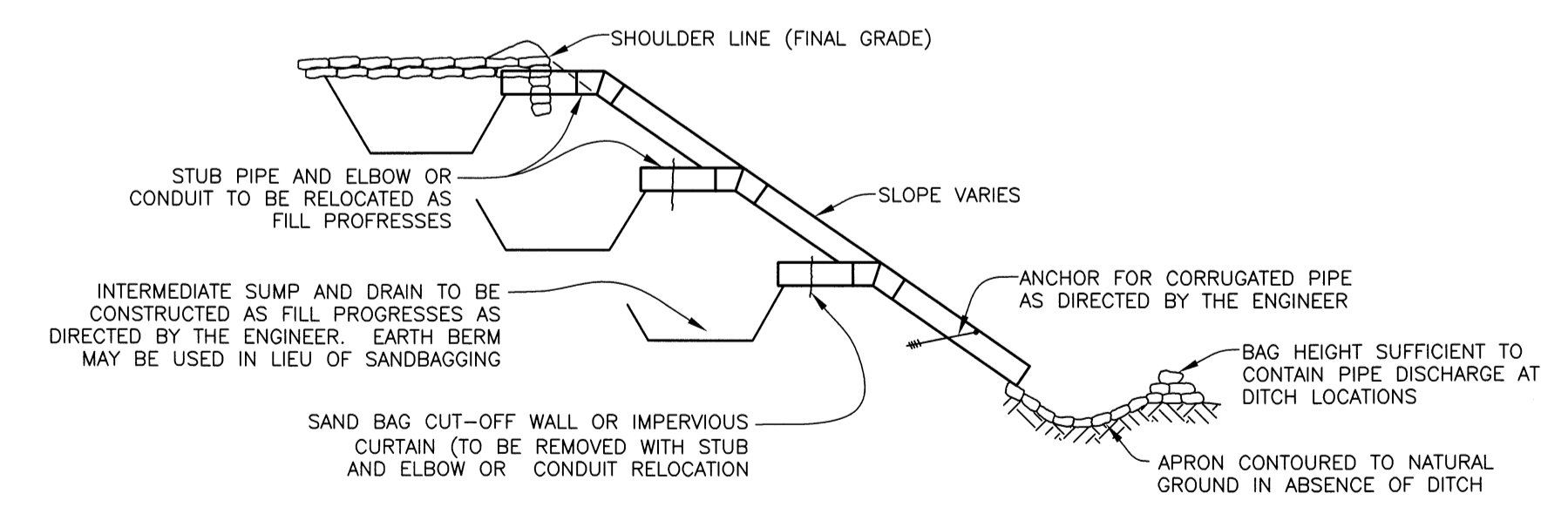
UNDERGROUND PIPE CROSSING
FIGURE 12



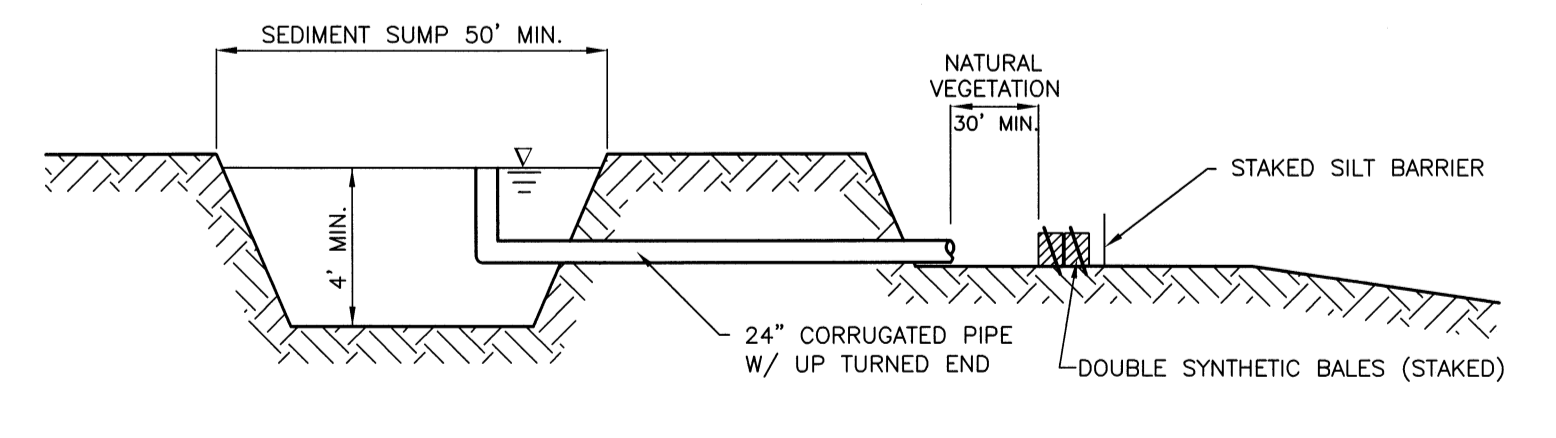
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

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EROSION CONTROL

Sheet 4 of 4