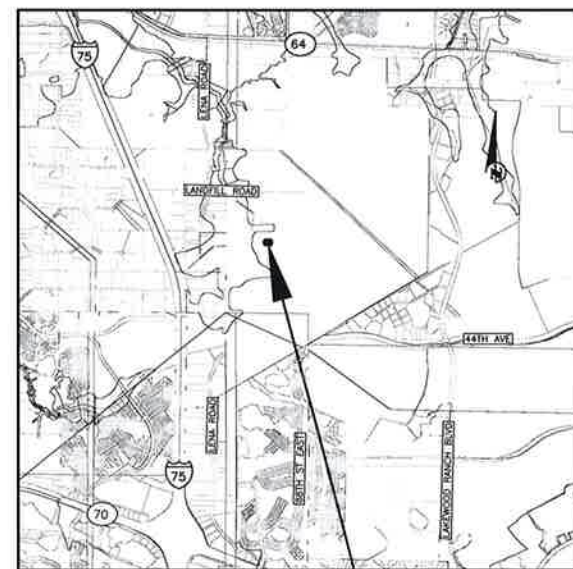
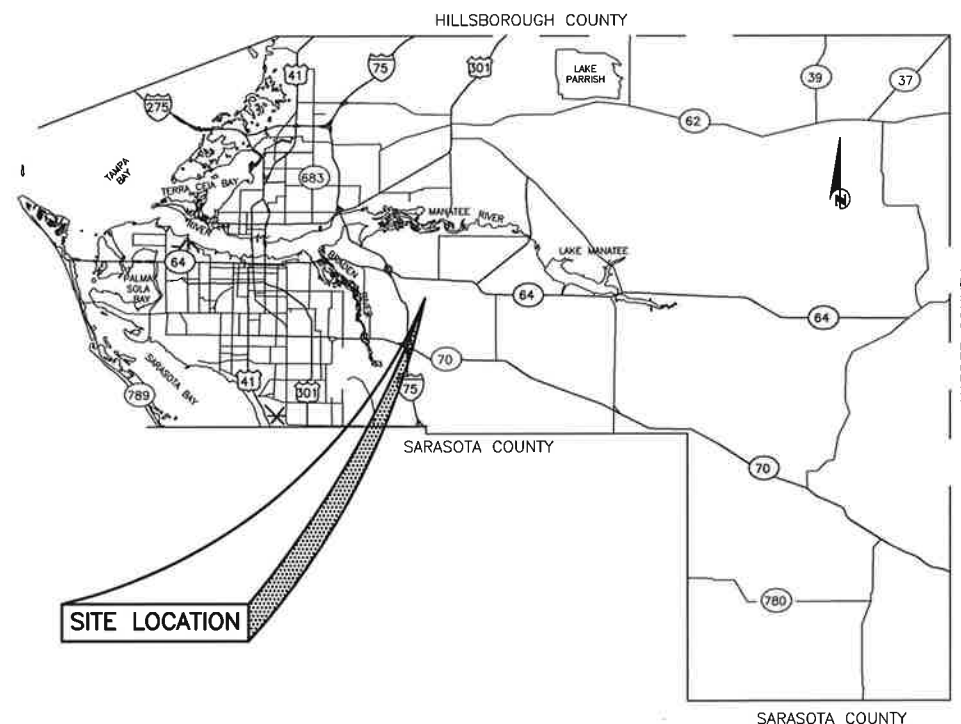


**MANATEE COUNTY, FLORIDA**  
**SOUTHEAST WATER RECLAMATION FACILITY**  
**AUTOMATIC BACKWASH FILTERS REFURBISHMENT**  
**6087780**

NOVEMBER 2016



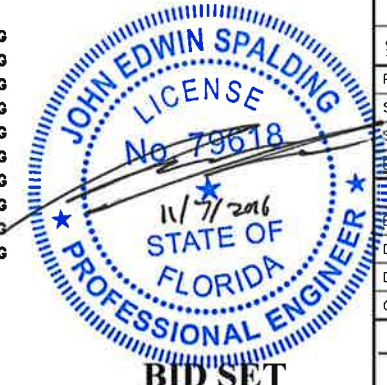
VICINITY MAP  
N.T.S.



### SITE LOCATION

## BID SET

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G-2	GENERAL NOTES
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S-1	EXISTING STRUCTURAL PLAN AND DEMOLITION
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R-9	RESOURCE DRAWING
R-10	RESOURCE DRAWING



STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL 941.385.5500 - FAX 941.388.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

DATE								
BY								
REVISION DESCRIPTION								
NO.								
PROJECT #		177310804						
SURVEY #		000						
SEC./TWN./RGE		26/33S/18E						
SCALE		1"=XX'						
	BY	DATE						
SURVEYED	N/A	—						
DESIGNED	JES	11/07/16						
DRAWN	SRP	11/07/16						
CHECKED	RJH	11/07/16						

JOHN E. SPALDING, P.E.

FLORIDA P.E. # 79618

Signature &amp; Date

SHEET G-1



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GENERAL

- \* 1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: TONY RUSSO, PE. AND CAN BE REACHED AT (941) 708-7450; EXT. 7349.
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 UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.
- \* 4. NOT USED
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.
6. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
7. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
8. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 OR THE NATIONAL 811 ONE CALL NUMBER WHEN APPLICABLE FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITIES FOR THE POSSIBLE RELOCATION OR THE TEMPORARY MOVEMENT OF ANY EXISTING UTILITIES WITHIN THE RIGHTS-OF-WAY.
9. NO WORK, EXCEPT FOR EMERGENCY TYPE, SHALL BE PERFORMED AFTER 7:00 PM AND BEFORE 7:00 AM. FOR ADDITIONAL PROJECT RESTRAINTS, REFER TO SECTION 01310 OF THE SPECIFICATIONS.

\* 10. NOT USED

11. THE CONSTRUCTION LENGTHS IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
12. SEPARATE PAYMENT SHALL BE MADE ONLY FOR THE ITEMS OF WORK LISTED AND IDENTIFIED BY APPROPRIATE PAY ITEM ON THE BID FORM. THE COST OF ANY RELATED WORK NOT SPECIFICALLY IDENTIFIED, BUT WHICH IS REQUIRED FOR SATISFACTORY COMPLETION OF THE WORK, SHALL BE CONSIDERED TO BE INCLUDED IN THE CONTRACT PRICE FOR THE APPROPRIATE BID ITEM.
13. THE CONTRACTOR SHALL HAVE A FOREMAN, OR RESPONSIBLE PARTY, ON SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. ALL WORKERS ON THE JOB SITE WILL BE COURTEOUS TO THE PUBLIC AT ALL TIMES, AND SHALL REFER ANY QUESTIONS OR CONCERNS TO THE CONTRACTOR'S FOREMAN OR THE COUNTY INSPECTOR. THE FOREMAN SHALL SPEAK AND UNDERSTAND ENGLISH AND SHALL BE AVAILABLE AT ALL TIMES FOR TIMELY RESOLUTION OF PROJECT-RELATED ISSUES.

\* 14. NOT USED

\* 15. NOT USED

\* 16. NOT USED

\* 17. NOT USED

SAFETY

18. 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.
19. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
20. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
21. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

22. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION ALL SEDIMENT AND EROSION CONTROL (SEC) DEVICES (E.G., BARRIERS, SEDIMENT TRAPS/BASINS, VEGETATIVE BUFFERS, ETC.) AS SPECIFIED IN THE FINAL APPROVED PLANS FOR THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SEC DEVICES UTILIZED DURING THE PROJECT, AS WELL AS INSTALLATION & MAINTENANCE OF ANY ADDITIONAL MEASURES DEEMED NECESSARY DURING PROJECT IMPLEMENTATION TO PREVENT EROSION AND OFF-SITE SEDIMENT MIGRATION. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL SEC DEVICES UPON CONCLUSION OF THE PROJECT, AND UPON ADEQUATE STABILIZATION OF DISTURBED SOILS.
- \* 23. NOT USED
- \* 24. NOT USED
25. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDEP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.
26. STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.
27. STORM WATER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. THIS WILL BE MAINTAINED TO PREVENT DEGRADATION OF THE WATERS OF THE COUNTY AND STATE.

28. SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF WATER, MUST BE INSTALLED, CONSTRUCTED, OR IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.
29. ALL SWALES, DITCHES, AND CHANNELS LEADING FROM THE SITE SHALL BE PROTECTED FROM SILTATION AND EROSION DURING CONSTRUCTION AND BE SODDED WITHIN THREE (3) DAYS OF EXCAVATION.
30. SOIL DISPLACED BY CONSTRUCTION WILL BE REMOVED. EROSION CONTROL SHALL BE IMPLEMENTED IN AREAS WHICH ARE CONSIDERED ENVIRONMENTALLY SENSITIVE. EROSION CONTROL SYSTEMS SHALL BE REQUIRED FOR ALL WORK WITHIN JURISDICTIONAL AREAS. THESE SYSTEMS MAY INCLUDE STAKED HAY BALES, SILT SCREENS, FILTER FABRIC, AND TURBIDITY SCREENS.
31. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
32. THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER WETLAND AREAS THAT MAY BE ON OR NEAR

THE CONSTRUCTION SITE. ALL WORK IN THE VICINITY OF OPEN WATER AND/OR WETLANDS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL REGULATIONS AND/OR PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES RESULTING FROM HIS VIOLATION OF ANY REGULATIONS OR PERMIT CONDITIONS.

33. FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.

UTILITIES

- \* 34. 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, MAY NOT BE IN THE EXACT LOCATION SHOWN OR MAY HAVE BEEN RELOCATED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) THAT MAY AFFECT HIS WORK. ALL EXISTING UTILITIES TO BE EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATION. ANY DISCREPANCIES OR CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.
35. 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. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED ITEM DUE TO HIS CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
36. THE CONTRACTOR SHALL USE APPROPRIATE TECHNIQUES, AS APPROVED, RECOMMENDED OR OFFERED BY FLORIDA POWER AND LIGHT TO PREVENT UNDERMINING OF POWER POLES DURING CONSTRUCTION. IF HOLDING OF POWER POLES IS RECOMMENDED OR REQUIRED BY THE UTILITY, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH THE UTILITY AND BEAR ALL RELATED COSTS.

\* 37. NOT USED

\* 38. NOT USED

\* 39. NOT USED

\* 40. NOT USED

RESTORATION

41. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
42. ALL DISTURBED GRASSED AREAS SHALL BE SODDED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER. ALL EXISTING SHRUBS, TREES, PLANTINGS AND OTHER VEGETATION, OUTSIDE OF RIGHT-OF-WAY DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH EQUIVALENT MATERIAL BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- \* 43. NOT USED
- \* 44. NOT USED
45. RESTORATION OF CURBS, DRIVEWAYS, SIDEWALKS, AND PLACEMENT OF SOD SHALL BE COMPLETED WITHIN FORTY-FIVE CALENDAR DAYS OF INITIAL DISTURBANCE, OR TWENTY-ONE CALENDAR DAYS OF SUBSTANTIAL COMPLETION, WHICHEVER OCCURS FIRST.

CONSTRUCTION

46. 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 BAFFLES POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.
47. 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.
48. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
49. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
50. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA, UNLESS OTHERWISE NOTED ON THE PLANS.
51. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM. THE CONTRACTOR SHALL SUBMIT DEWATERING PLAN TO DISTRICT FOR APPROVAL PRIOR TO CONSTRUCTION.

\* 52. NOT USED

\* 53. NOT USED

\* 54. NOT USED

\* 55. NOT USED

\* 56. NOT USED

\* 57. NOT USED

\* 58. NOT USED

\* 59. NOT USED

- \* 60. ALL MATERIALS NOT CLAIMED BY THE COUNTY SHALL BECOME PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN AREAS PROVIDED BY THE CONTRACTOR.

61. THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING, AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES OR TO MINIMIZE TRENCH WIDTH. WHERE A SEPARATE PAY ITEM IS NOT PROVIDED, THE COST OF ALL SHEETING, SHORING, AND BRACING REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEM OF WORK FOR WHICH SHEETING, SHORING, AND BRACING IS REQUIRED.

- \* 62. THE CONTRACTOR SHALL DISTURB NO MORE GROUND THAN IS NECESSARY FOR CONSTRUCTION. NO OPEN EXCAVATED TRENCH, OR OTHER UNSAFE CONDITION WILL BE LEFT OVERNIGHT. THE INTENT OF THIS PROVISION IS TO "SAFE-UP" THE PROJECT SITE AS WORK PROGRESSES, AND SHALL INCLUDE REMOVING FORMS, FILLING HOLES, GRADING, AND REMOVAL OF DEBRIS.

\* 63. NOT USED

\* 64. NOT USED

\* 65. NOT USED

\* 66. NOT USED

\* 67. NOT USED

\* 68. NOT USED

\* 69. NOT USED

\* 70. NOT USED

\* 71. NOT USED

\* 72. NOT USED

\* PROJECT NOTES

73. DIMENSIONS FOR ALL EQUIPMENT SHALL BE VERIFIED BY CONTRACTOR PER MANUFACTURERS' SHOP DRAWINGS AND REVISED AS NECESSARY PRIOR TO CONSTRUCTION. CONTRACTOR SHALL INFORM COUNTY OF ANY DISCREPANCY.
74. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, MECHANICAL EQUIPMENT, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS BUT IS NOT GUARANTEED TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ACTUAL SITE CONDITIONS PRIOR TO BIDDING. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, DIMENSIONS, MATERIALS AND OTHER PERTINENT DETAILS OF ALL EXISTING FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.

CONTACTS

MANATEE COUNTY  
PUBLIC WORKS DEPT.  
INFRASTRUCTURE ENGINEERING  
SCOTT MAY, P.E.  
1022 26TH AVENUE EAST  
BRADENTON, FL 34208  
(941) 708-7450 x7650  
FAX: (941) 708-7415

TECO/PEOPLES GAS CO.  
DAN SHANAHAN  
8261 VICO COURT  
SARASOTA, FL 34240  
(941) 342-4006  
FAX: (941) 342-4011  
EMERGENCY: 1-877-832-6747  
dshanahan@tecoenergy.com

SUNSHINE STATE ONE CALL OF  
FLORIDA  
811

FLORIDA POWER & LIGHT  
TRANSMISSION  
PETER H. WASHIO, E.I.  
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JUNO BEACH, FL 33408  
(561) 904-3693  
Peter.H.Washio@fpl.com

FRONTIER COMMUNICATIONS  
TOM LINDSAY  
1701 RINGLING BLVD.  
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(813) 892-9659  
tom.lindsay@ftr.com  
WAYNE SUMMER  
wayne.summer@ftr.com  
(941) 330-9203  
ENGINEERING OFFICE:  
DENISE HUTTON  
denise.hutton@ftr.com  
(941) 906-6722

FLORIDA POWER & LIGHT  
DISTRIBUTION  
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Greg.Coker@fpl.com

MANATEE COUNTY HEALTH DEPT.  
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FAX: (941) 750-9364  
tom.larkin@doh.state.fl.us

SOUTHWEST FLORIDA WATER  
MANAGEMENT DISTRICT  
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FAX: (941) 373-7660

BRIGHTHOUSE NETWORKS  
TOM WRIGHT, ENGINEERING  
SUPERVISOR  
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tom.wright@mybighthouse.com

MANATEE COUNTY  
PUBLIC WORK DEPT.  
AUTOMATED TRAFFIC MANAGEMENT  
SYSTEM  
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2101 47th TERRACE EAST  
BRADENTON, FL 34203  
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paul.villaluz@mymanatee.org

DEPARTMENT OF ENVIRONMENTAL  
PROTECTION  
KELLY J. BOATWRIGHT, P.E.  
10551 W. BULWORTH AVE.  
TEMPLE TERRACE, FL 34677  
(813) 992-1800  
kelly.boatwright@dep.state.fl.us



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FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

\* INDICATES REVISION TO STANDARD MANATEE COUNTY NOTES.

MANATEE COUNTY, FLORIDA  
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES



1022 26th Avenue East  
Bradenton, FL 34208

SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
GENERAL NOTES

NO.	REVISION DESCRIPTION	BY	DATE		
PROJECT #				177310804	
SURVEY #				000	
SEC./TWN./RGE				26/33S/18E	
SCALE				1"=XX'	
		BY	DATE		
SURVEYED		N/A	—		
DESIGNED		JES	11/07/16		
DRAWN		SRP	11/07/16		
CHECKED		RJH	11/07/16		
JOHN E. SPALDING, P.E.					
FLORIDA P.E. # 79618					
Signature & Date					
SHEET G-2					



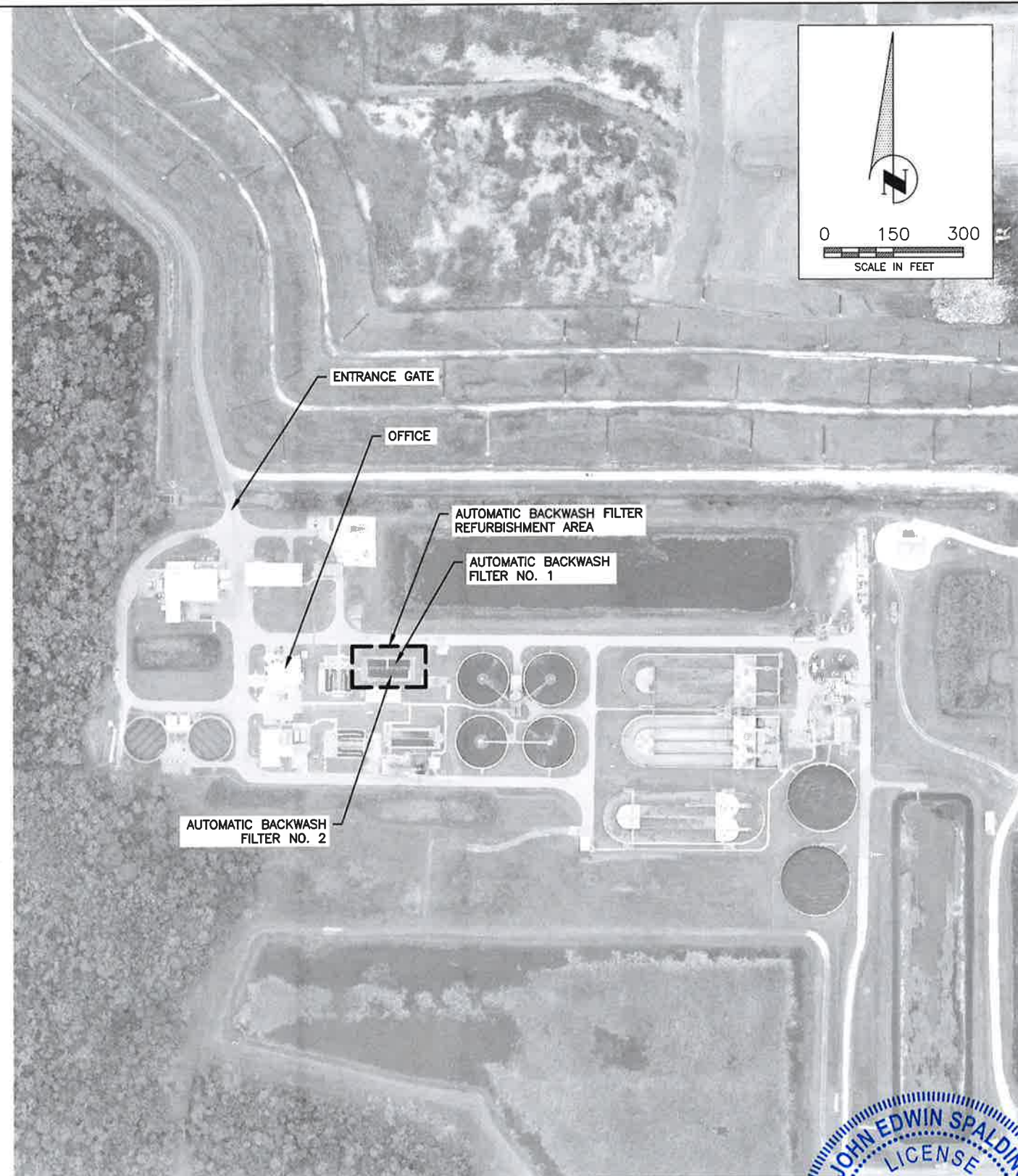
## PROPOSED

- 
- THE PHOTO BEING REFERENCED
- INDICATES LOCATION OF PHOTO TAKEN
- THE SHEET THE PHOTO IS LOCATED ON
- PHOTO CALL OUT SYMBOLS

- 
- THE DETAIL BEING REFERENCED
- THE SHEET THE DETAIL IS LOCATED ON
- DETAIL CALL OUT SYMBOLS

- 
- DIRECTION OF THE SECTION BEING REFERENCED
- THE SECTION BEING REFERENCED
- THE SHEET THE SECTION IS LOCATED ON
- SECTION CALL OUT SYMBOLS

- 
- THE SECTION/DETAIL NUMBER
- 1
- A-1
- SECTION/DETAIL TITLE
- N.T.S.
- THE SHEET THE SECTION/DETAIL IS LOCATED ON
- SECTION/DETAIL TITLE



Manatee  
County  
FLORIDA

1022 26th Avenue East  
Bradenton, FL 34208

**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
LEGEND AND AERIAL**

DATE						
BY						
REVISION DESCRIPTION						
NO.						
PROJECT #		177310804				
SURVEY #		000				
SEC./TWN./RGE		26/33S/18E				
SCALE		1"=XX'				
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SURVEYED	N/A	—				
DESIGNED	JES	11/07/				
DRAWN	SRP	11/07/				
CHECKED	RJH	11/07/				
JOHN E. SPALDING, P.E.						
FLORIDA P.E. # 79618						
Signature & Date						
SHEET G-3						

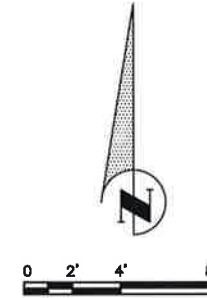
A circular blue ink seal for a Professional Engineer in the State of Florida. The outer ring contains the text "JOHN EDWIN SPALDIN" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the word "LICENSE" at the top, the license number "No. 79618" in the center, and the expiration date "11/7/2016" below it. The words "STATE OF FLORIDA" are at the bottom of the inner circle. Two horizontal lines are drawn across the seal, passing over the license number and date. Below the seal, the text "BID SET" is printed in large, bold, black capital letters.



STANTEC CONSULTING SERVICES INC.  
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TEL. 941.365.5500 - FAX 941.368.1822  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM



DATE	BY	REVISION DESCRIPTION	NO.	PROJECT #	SURVEY #	SEC./TWN./RGE	SCALE
				177310804	000	26/33S/18E	1/8"=1'-0"
				BY	DATE		
				SURVEYED	N/A	-	
				DESIGNED	JES	11/07/16	
				DRAWN	SRP	11/07/16	
				CHECKED	RJH	11/07/16	
JOHN E. SPALDING, P.E.							
FLORIDA P.E. # 79618							
Signature & Date							
SHEET S-1							



1. IN WALLS AND SLAB WHERE THE CONTROL JOINTS ARE ACCESSIBLE, THE EXISTING JOINT SEALANT AND FOAM BACKER SHALL BE REMOVED FROM THE CONTROL JOINTS AND THE CONCRETE SURFACES SHALL BE PREPARED FOR INSTALLATION OF NEW JOINT SEALANT.
2. THE RECOMMENDED PROCEDURE FOR REMOVING JOINT SEALANT AND PREPARING CONCRETE SURFACES IS BELOW. IF THE MANUFACTURER'S INSTRUCTIONS RECOMMEND DIFFERENT PROCEDURES, THESE SHALL BE SUBMITTED TO THE COUNTY FOR REVIEW.
  - A. SAW CUT TO REMOVE EXISTING SEALANT.
  - B. WATER BLAST JOINT FACES AND EDGES.
  - C. AIR BLAST JOINT FACES AND EDGES.
  - D. SAND BLAST JOINT FACES AND EDGES.
  - E. AIR BLAST JOINT FACES AND EDGES.

### AUTOMATIC BACKWASH FILTER PLAN



STANTEC CONSULTING SERVICES INC.  
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FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM



NO.	REVISION DESCRIPTION	BY	DATE

	BY	DATE
SURVEYED	N/A	-
DESIGNED	JES	11/07/16
DRAWN	SRP	11/07/16
CHECKED	RJH	11/07/16

Signature &amp; Date

SHEET S-2

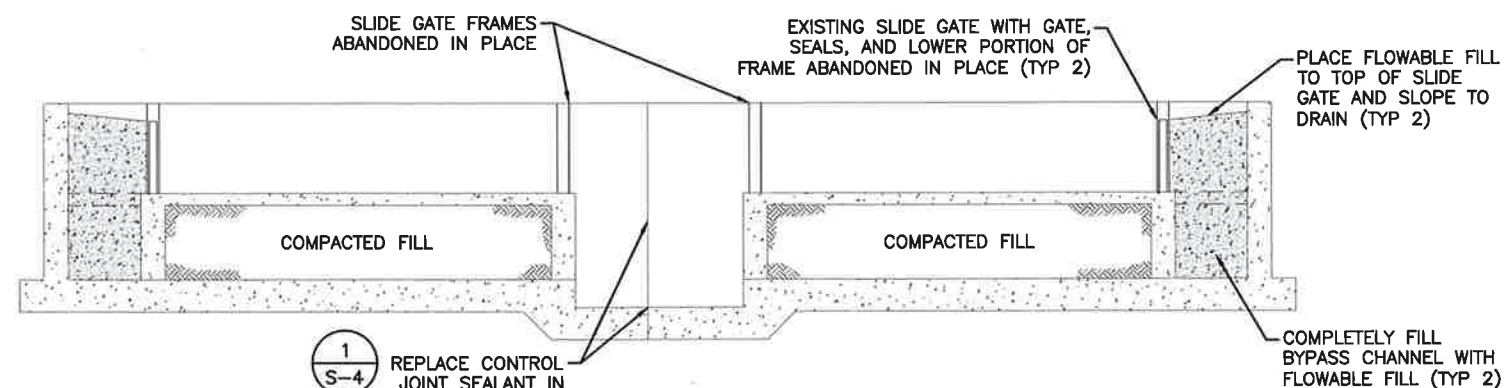




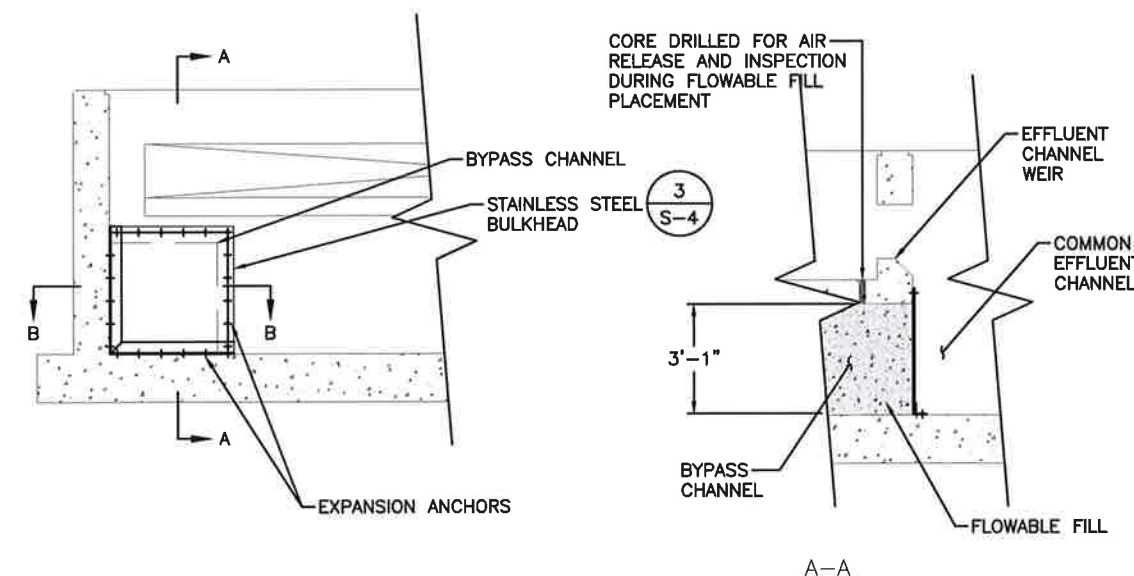


1022 26th Avenue East  
Bradenton, FL 34208

**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
STRUCTURAL SECTIONS**

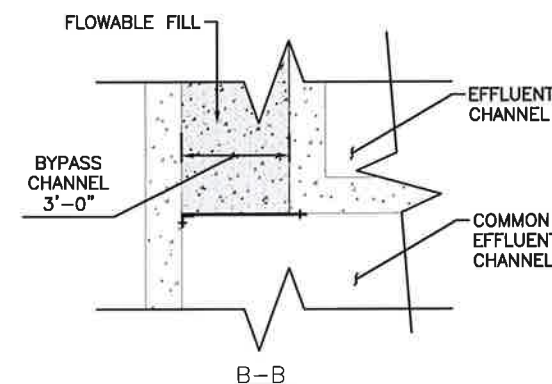


1  
S-2 SECTION  
SCALE=1/8"=1'-0"

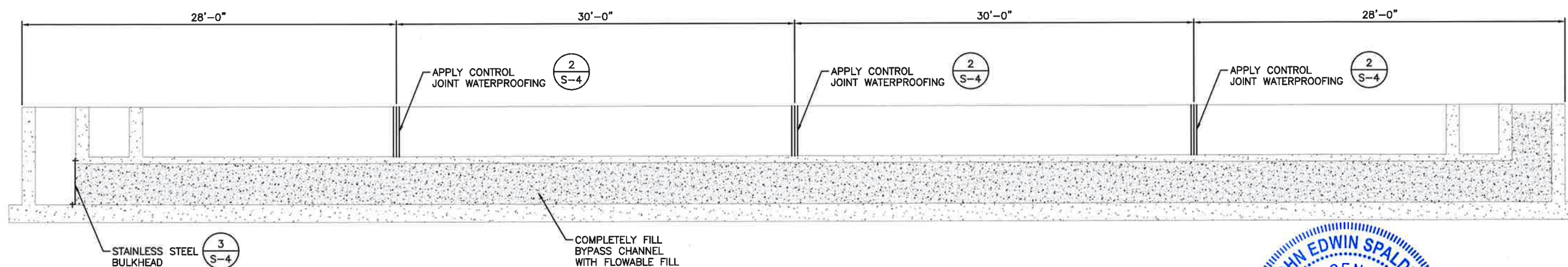


**NOTES:**

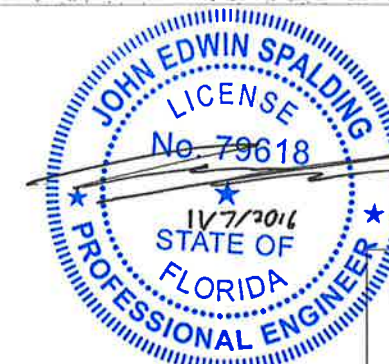
1. EXPANSION BOLTS SHALL BE 5/8" x 5" TYPE 316 STAINLESS STEEL EXPANSION ANCHORS COMPLYING WITH THE TECHNICAL SPECIFICATIONS.
2. STEEL SURFACES IN CONTACT WITH CONCRETE SHALL RECEIVE A PROTECTIVE COATING OF AN APPROVED HEAVY BITUMASTIC TROWELING MASTIC OR A 1/32" NEOPRENE GASKET SHALL BE PROVIDED BETWEEN THE STEEL AND CONCRETE.



2  
S-2 SECTION  
SCALE=1/8"=1'-0"



3  
S-2 SECTION  
SCALE=1/8"=1'-0"

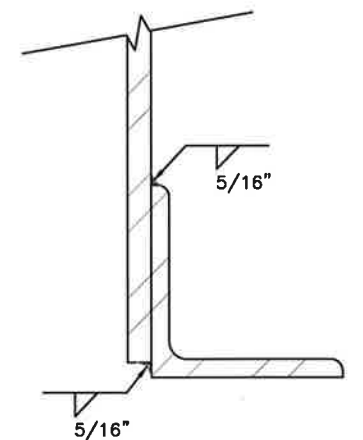


**BID SET**



STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL 941.365.5500 - FAX 941.366.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	177310804		
SURVEY #	000		
SEC./TWN./RGE	26/33S/18E		
SCALE	1/8"=1'-0"		
	BY	DATE	
SURVEYED	N/A		
DESIGNED	JES	11/07/16	
DRAWN	SRP	11/07/16	
CHECKED	RJH	11/07/16	
	JOHN E. SPALDING, P.E.		
	FLORIDA P.E. # 79618		
	Signature & Date		
	SHEET S-3		



TYPICAL ANGLE TO PLATE CONNECTION

1. CONTRACTOR SHALL VERIFY EXISTING DIMENSIONS AND CONDITIONS PRIOR TO FABRICATION.
2. PLATE AND ANGLES SHALL BE TYPE 316 STAINLESS STEEL.
3. ALL WELDS SHALL BE SHOP WELDED.
4. BOLT HOLE OPENINGS SHALL BE SIZED FOR 5/8"Ø EXPANSION ANCHORS.



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 TEL. 941.365.5500 • FAX 941.368.1922  
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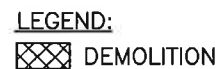


022 26th Avenue East  
Bradenton, FL 34208

**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
STRUCTURAL DETAILS**

[illegible]





GENERAL REFURBISHMENT NOTES:

1. BOTH FILTERS ARE TO BE REHABILITATED. ONE FILTER MUST REMAIN OPERATIONAL AT ALL TIMES.
2. ALL REPLACEMENT PARTS SHALL BE FROM THE ORIGINAL EQUIPMENT MANUFACTURER.
3. REHABILITATION SHALL INCLUDE ALL INCIDENTALS RECOMMENDED BY THE EQUIPMENT MANUFACTURER WHETHER SHOWN OR NOT.

SLIDE GATES #1 AND #2 NOTES:

1. EXISTING SLIDE GATES ARE TO BE DEMOLISHED. NEW SLIDE GATES SHALL BE INSTALLED AS SHOWN.
2. REMOVE EXISTING SLIDES, STEMS, LIFTING MECHANISMS, SEALS, AND ALL OTHER APPURTENANCES THAT ARE REMOVABLE. CUT EXISTING SLIDE GATE FRAMES EVEN WITH TOP OF CONCRETE WALLS. GRIND/FILE EXPOSED EDGES TO A SMOOTH SURFACE, FREE OF BURRS OR SHARP EDGES.
3. AS DIRECTED BY THE COUNTY, PROVIDE REMOVED SLIDE GATES COMPONENTS TO THE COUNTY. ALL OTHER REMOVED AND DEMOLISHED MATERIALS SHALL BE DISPOSED OFFSITE BY THE CONTRACTOR.
4. INSTALL PROPOSED SLIDE GATES #1 AND #2.
5. REMOVE AND DISPOSE OF EXISTING GRATING AT LOCATIONS WHERE EXISTING SLIDE GATES ARE DEMOLISHED AND PROPOSED SLIDE GATES ARE INSTALLED. PROVIDE AND INSTALL NEW GRATING. NEW GRATING SHALL MATCH EXISTING AND BE FABRICATED TO PROVIDE A CONTINUOUS WALKING SURFACE WITH NO GAPS BETWEEN GRATING SECTIONS EXCEPT AS REQUIRED AT NEWLY INSTALLED SLIDE GATES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY FIELD MEASUREMENTS AND FOR SUBMITTING SHOP DRAWINGS FOR REVIEW. GRATING SHALL BE MANUFACTURED IN SECTIONS SO THAT NO SINGLE PIECE WILL EXCEED 60 LBS. SIDES OF GRATING SHALL BE PROVIDED WITH BINDING STRIPS OF THE SAME DEPTH AND THICKNESS AS THE MAIN BARS WELDED THERETO.

SLIDE GATES #3 AND #4 NOTES:

1. EXISTING SLIDE GATES ARE TO BE ABANDONED IN PLACE IN THE LOWERED POSITION. EXISTING STEMS, LIFTING MECHANISMS, AND ASSOCIATED APPURTENANCES SHALL BE REMOVED. CUT EXISTING SLIDE GATE FRAMES EVEN WITH TOP OF CONCRETE WALLS. GRIND/FILE EXPOSED EDGES TO A SMOOTH SURFACE, FREE OF BURRS OR SHARP EDGES.
2. AS DIRECTED BY THE COUNTY, PROVIDE REMOVED SLIDE GATE COMPONENTS TO THE COUNTY. ALL OTHER REMOVED AND DEMOLISHED MATERIALS SHALL BE DISPOSED OFFSITE BY THE CONTRACTOR.
3. REMOVE AND DISPOSE OF EXISTING GRATING AT LOCATIONS WHERE SLIDE GATES ARE ABANDONED AND PROVIDE AND INSTALL NEW GRATING. NEW GRATING SHALL MATCH EXISTING AND BE FABRICATED TO PROVIDE A CONTINUOUS WALKING SURFACE WITH NO GAPS BETWEEN GRATING SECTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING ALL NECESSARY FIELD MEASUREMENTS AND FOR SUBMITTING SHOP DRAWINGS FOR REVIEW. GRATING SHALL MANUFACTURED IN SECTIONS SO THAT NO SINGLE PIECE WILL EXCEED 60 LBS. SIDES OF GRATING SHALL BE PROVIDED WITH BINDING STRIPS OF THE SAME DEPTH AND THICKNESS AS THE MAIN BARS WELDED THERETO.

[illegible]

JOHN E. SPALDING, P.E.  
FLORIDA P.E. # 79618

Signature &amp; Date

SHEET M-1

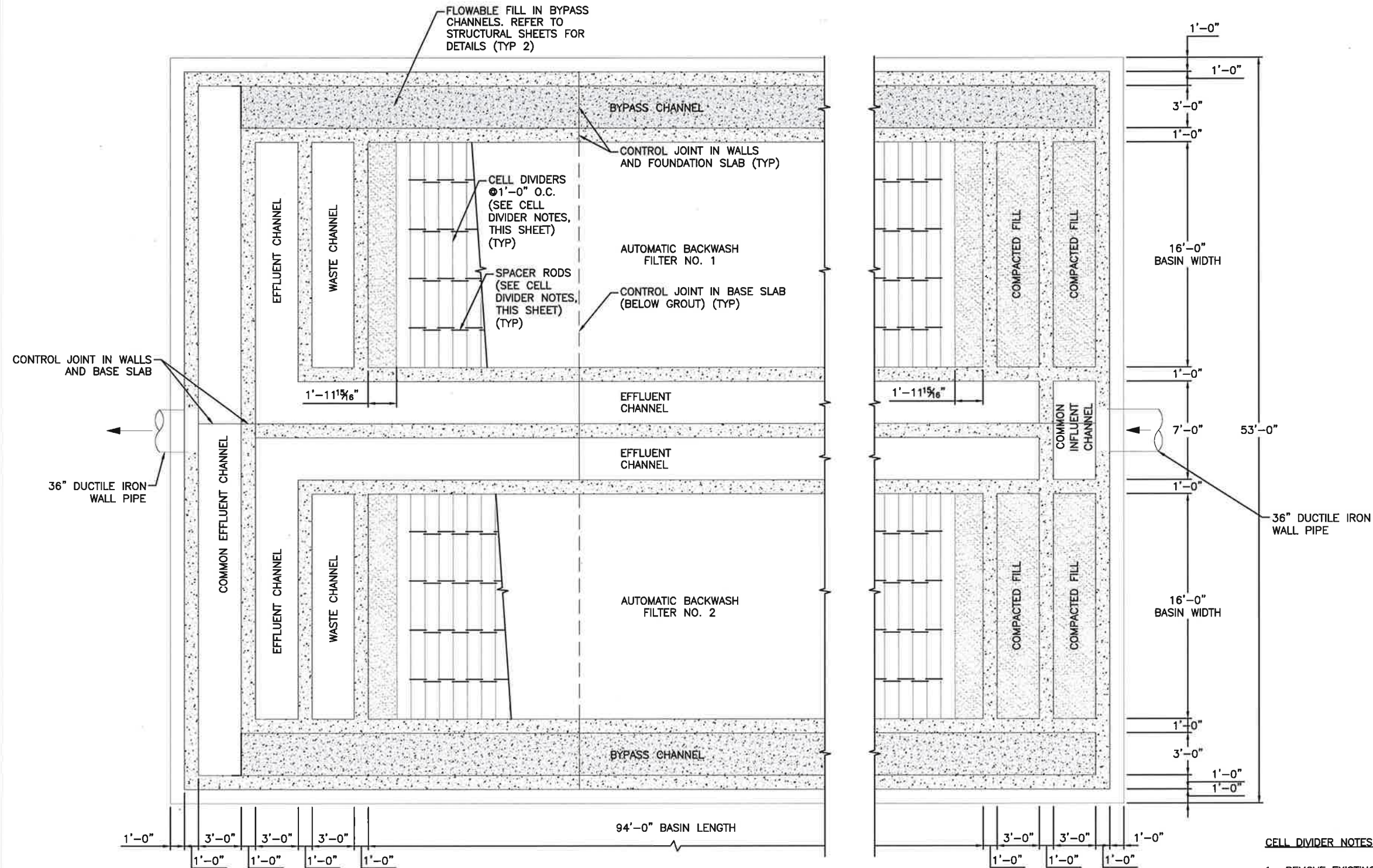


STANTEC CONSULTING SERVICES INC.  
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**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
AUTOMATIC BACKWASH FILTER  
LOWER PLAN**

DATE									
BT									
REVISION DESCRIPTION									
NO.									
PROJECT #				177310804					
SURVEY #				000					
SEC./TWN./RGE				26/33S/18E					
SCALE				1/8"=1'-0"					
				BY		DATE			
SURVEYED				N/A		—			
DESIGNED				JES		11/07/16			
DRAWN				SRP		11/07/16			
CHECKED				RJH		11/07/16			
JOHN E. SPALDING, P.E.									
FLORIDA P.E. # 79618									
Signature & Date									
SHEET M-2									



AUTOMATIC BACKWASH FILTER LOWER PLAN

CELL DIVIDER NOTES:

1. REMOVE EXISTING SPACER RODS. INSTALL FOUR (4) NEW TYPE 316 STAINLESS STEEL SPACER RODS AND HARDWARE FOR EACH CELL DIVIDER.
2. INSTALL TYPE 316 STAINLESS STEEL CELL DIVIDER CAPS TO REPAIR DAMAGED CELL DIVIDERS.
3. THE CONTRACTOR SHALL REPAIR CELL DIVIDERS DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE COUNTY.

## BID SET



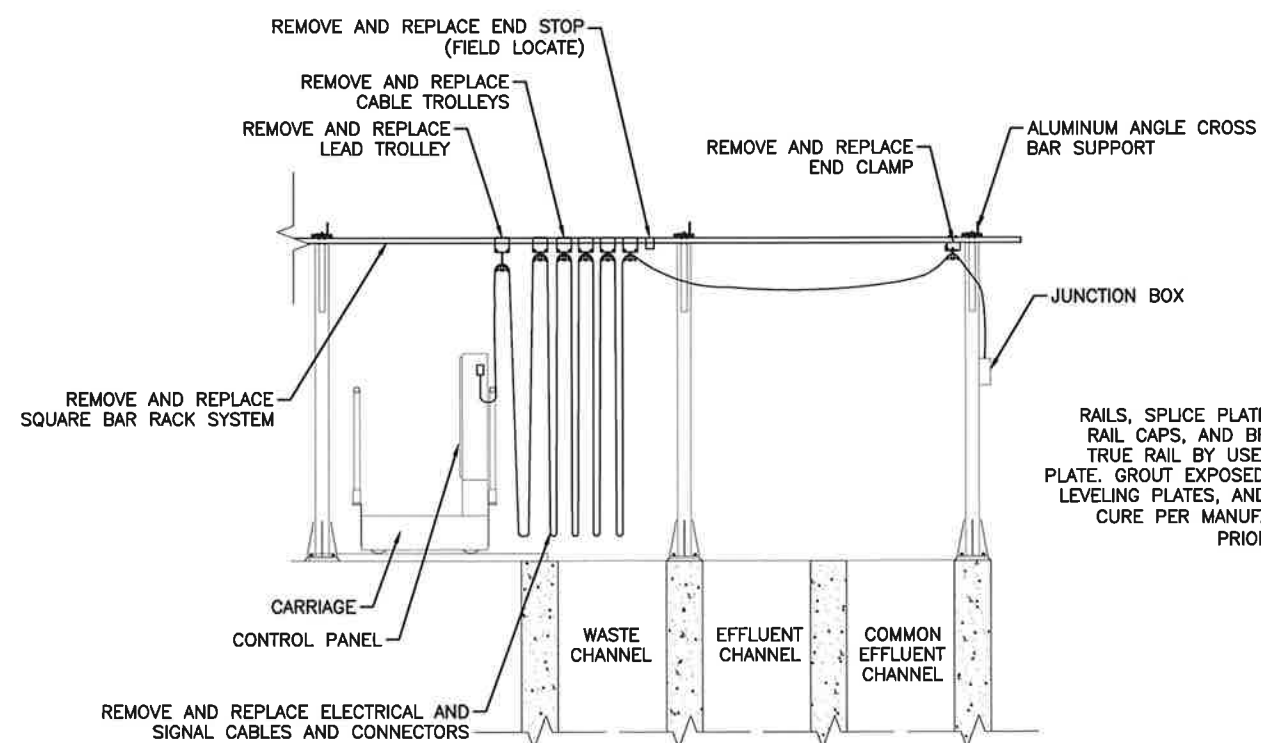
STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL. 941.365.5500 - FAX. 941.366.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

Signature &amp; Date

SHEET M-2

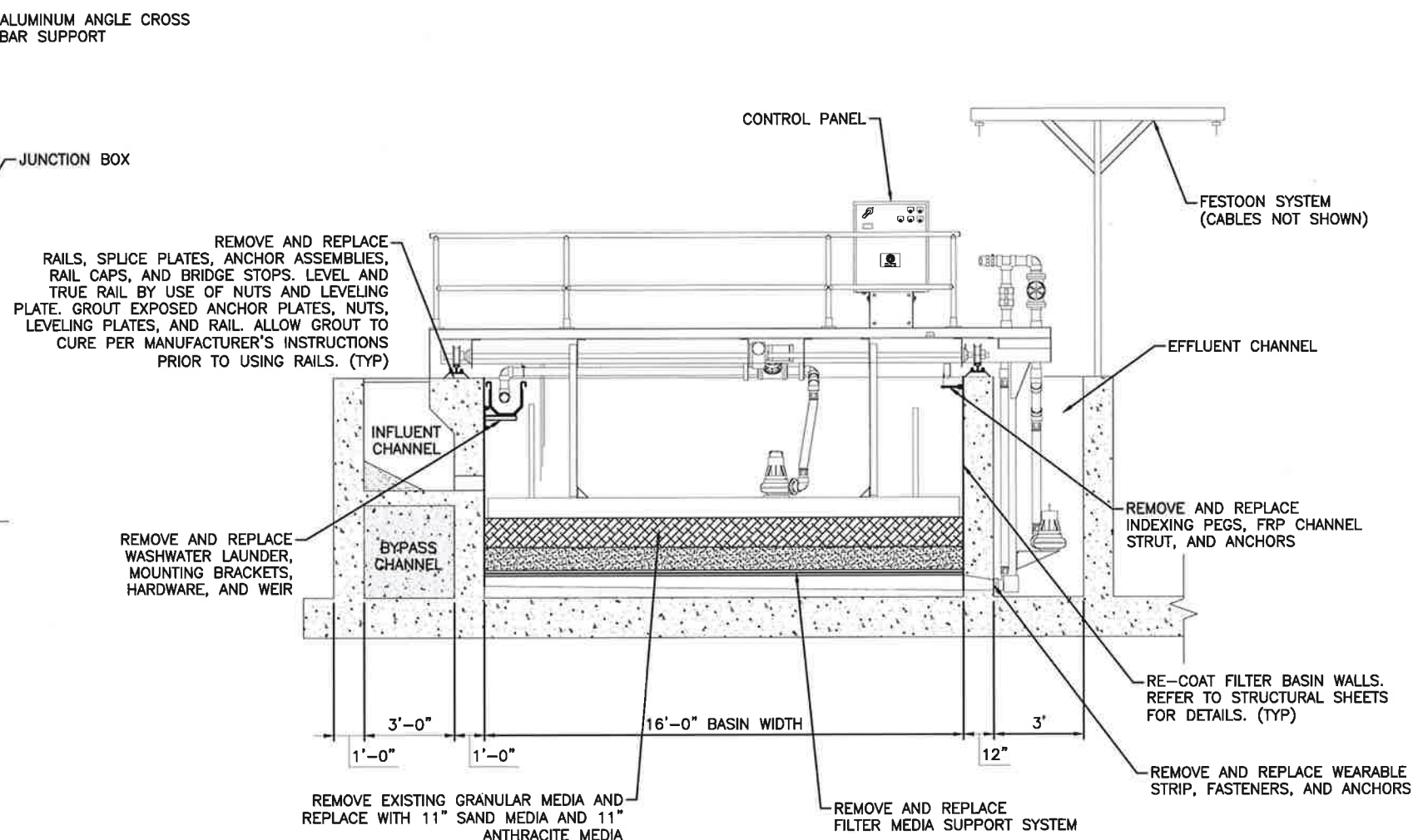


**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
AUTOMATIC BACKWASH SECTIONS**

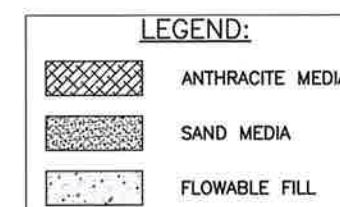
[illegible]

1 FESTOON SYSTEM  
M-3  $3/16" = 1'-0"$

0 2' 4' 6'



2 SECTION  
M-3  $\frac{3}{16}'' = 1'-0''$   
0 2' 4'



A circular blue ink seal for a Professional Engineer in the State of Florida. The outer ring contains the text "JOHN EDWIN SPALDING" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the text "LICENSE No. 79618" and "11/7/2016" with a star above the date. Below the date is "STATE OF FLORIDA". A black ink signature is written across the seal. At the bottom of the page, the text "BID SET" is printed in bold black letters.



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 STANTEC CONSULTING SERVICES INC.  
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- ## FIBERGLASS REPAIR

- TO CLEAN THE SURFACE
- THE BACKER TO PREVENT
- E HOLE
- THAT IS SUITABLE FOR
- OTH, EVEN SURFACE
- BID SET**



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MANATEE COUNTY, FLORIDA  
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES

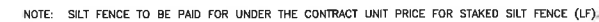
022 26th Avenue East  
Bradenton, FL 34208

**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
MECHANICAL DETAILS**

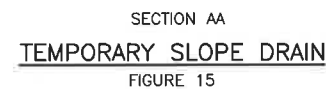
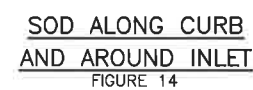
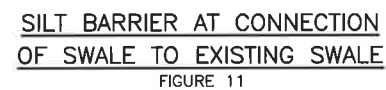
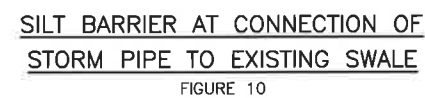
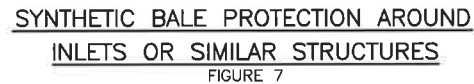
DATE					
BY					
REVISION DESCRIPTION					
NO.					
PROJECT #		177310804			
SURVEY #		000			
SEC./TWN./RGE		26/33S/18E			
SCALE		1"=XX'			
	BY	DATE			
DESIGNED	N/A	-			
DESIGNED	JES	11/07/1			
DRAWN	SRP	11/07/1			
CHECKED	RJH	11/07/1			
JOHN E. SPALDING, P.E.					
FLORIDA P.E. # 79618					
Signature & Date					
SHEET M-4					



## EROSION CONTROL DETAILS



TYPICAL SILT FENCE  
FIGURE 2



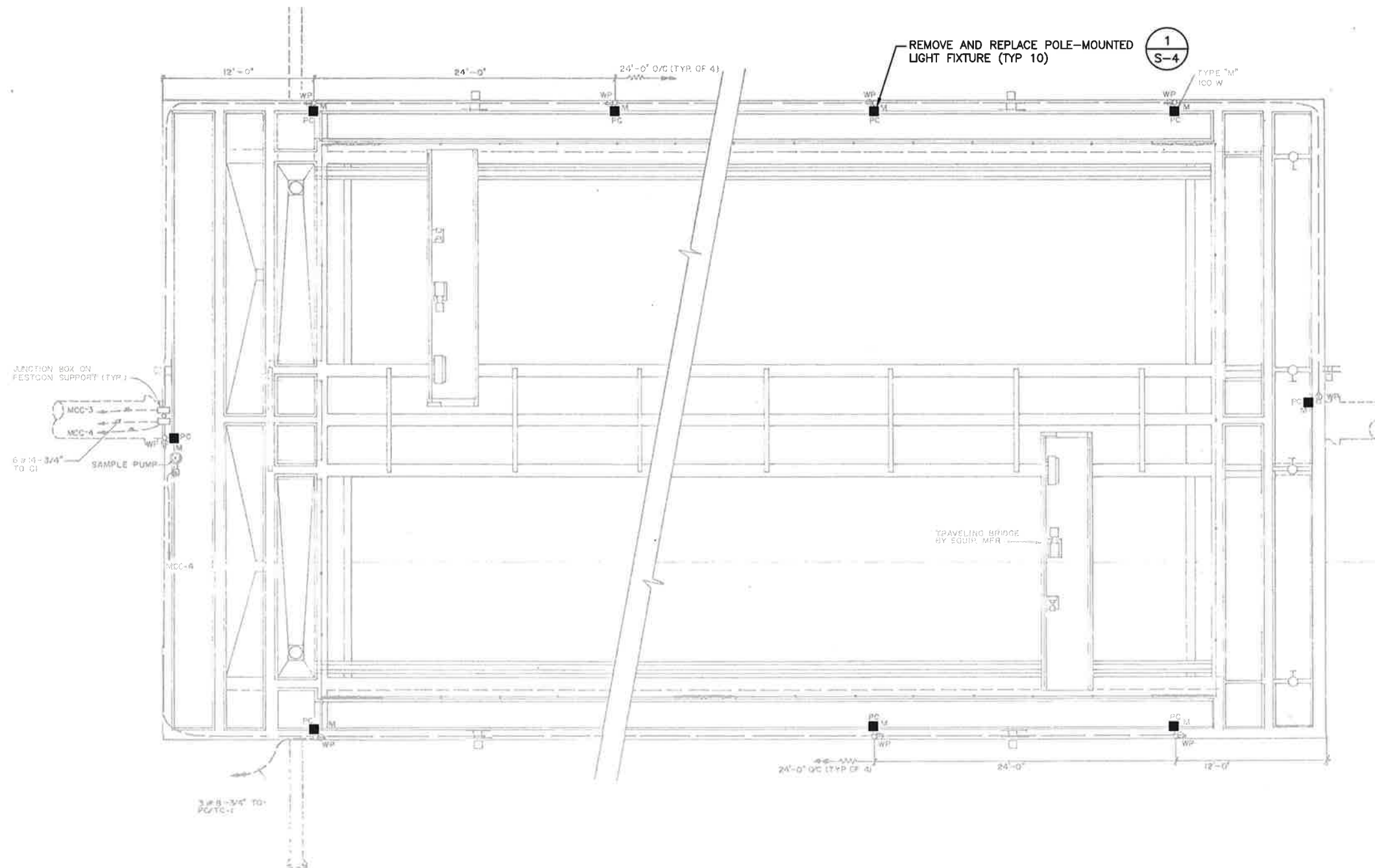
A circular blue ink seal for a Professional Engineer in the State of Florida. The outer ring contains the text "JOHN EDWIN SPALDING" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the text "LICENSE" at the top, "No. 79618" in the center, and "STATE OF FLORIDA" at the bottom. A date stamp "11/7/2016" is written over the center. A diagonal line is drawn across the seal.

STANTEC CONSULTING SERVICES INC.  
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SHEET C-1



\\081231-001\WORKGROUP\177310804\Design\Drawings\Sheet\177310804-013.dwg, 11/7/2016 3:19 PM Lateral, Max, 11, ANSI Full Sheet B (17200 x 11000 inches)

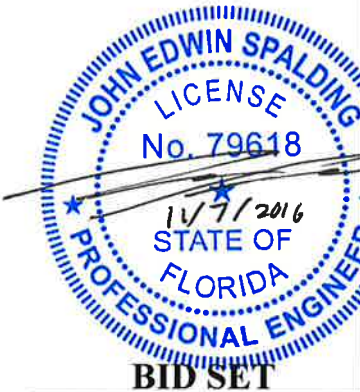


**ELECTRICAL NOTES:**

1. ALL ELECTRICAL WORK SHALL BE PERFORMED BY A QUALIFIED ELECTRICAL CONTRACTOR WHO IS LICENSED BY THE FLORIDA ELECTRICAL CONTRACTORS' LICENSING BOARD.
2. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL INCIDENTALS, ACQUIRING AND COMPLYING WITH ALL NECESSARY PERMITS, AND COMPLYING WITH ALL APPLICABLE REGULATIONS AT NO ADDITIONAL COST TO THE COUNTY.

**LEGEND:**

- M = POLE MOUNTED FIXTURE  
MCC = MOTOR CONTROL CENTER  
PC = PHOTO CELL  
TC = TIME CLOCK  
WP = WEATHERPROOF RECEPTACLE (DUPLEX SURFACE-MOUNTED, 125V, 20A, 3W)



**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
LIGHTING PLAN**

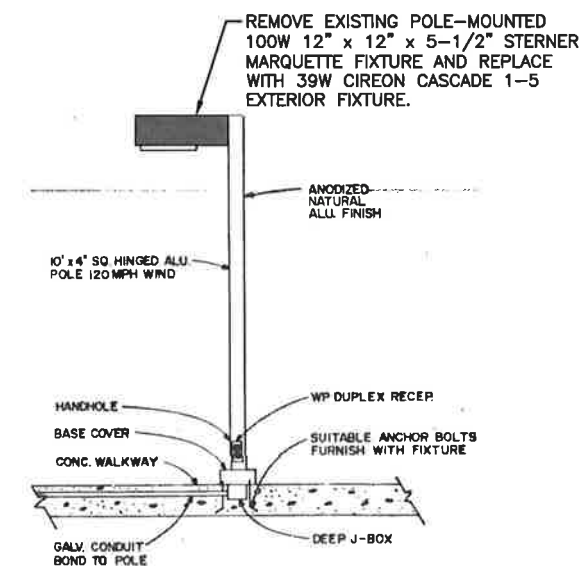
NO.	REVISION DESCRIPTION	BY	DATE

JOHN E. SPALDING, P.E.  
FLORIDA P.E. # 79618

Signature & Date  
**SHEET E-1**



**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
ELECTICAL DETAILS**




NOTE: PROVIDE MOUNT AS  
RECOMMENDED BY MANUFACTURER FOR  
MOUNTING TO EXISTING POLE.

1 POLE MOUNTED FIXTURE  
E-1 N.T.S.



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TEL. 941.365.5500 - FAX. 941.368.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

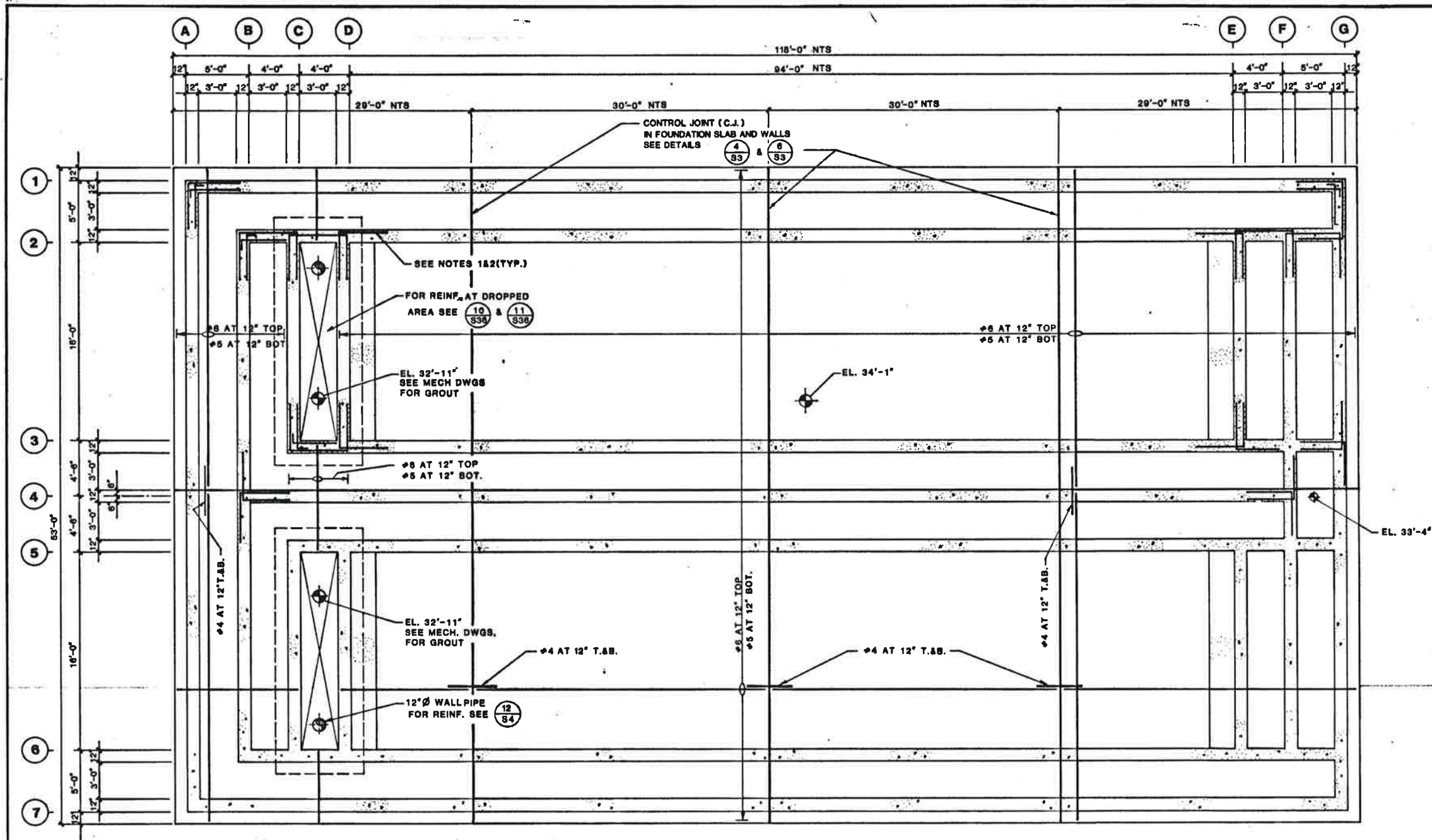
REVISION DESCRIPTION	BY										
	DATE										
NO.											
PROJECT #		177310804									
SURVEY #		000									
SPT./TWN./RGE		26/33S/18E									
SCALE		1"=XX'									
		BY	DATE								
	SURVEYED	N/A		—							
	DESIGNED	JES		11/07/16							
	DRAWN	SRP		11/07/16							
	CHECKED	RJH		11/07/16							
JOHN E. SPALDING, P.E.											
FLORIDA P.E. # 79618											
Signature & Date											
SHEET E-2											







DATE							
BY							
REVISION							
DESCRIPTION							
NO.							
PROJECT #				177310804			
SURVEY #				000			
SEC./TWN./RGE				26/33S/18E			
SCALE				1"=XX'			
		BY		DATE			
SURVEYED		N/A		-			
DESIGNED		JES		11/07/16			
DRAWN		SRP		11/07/16			
CHECKED		RJH		11/07/16			
JOHN E. SPALDING, P.E.							
FLORIDA P.E. # 79618							
Signature & Date							
SHEET R-2							

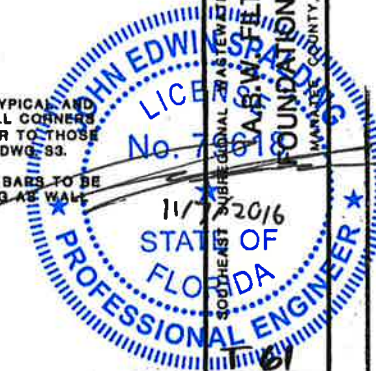


**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"

NOTE:  
REFERENCE DRAWING IS PROVIDED FOR INFORMATION ONLY AND IS NOT GUARANTEED TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS, ELEVATIONS, DIMENSIONS, MATERIALS, AND ALL OTHER PERTINENT DETAILS OF ALL EXISTING FEATURES AFFECTING THIS WORK.

**NOTE 1:** ADDED BARS SHOWN ARE TYPICAL AND ARE TO BE PROVIDED AT ALL CORNERS AND INTERSECTIONS SIMILAR TO THOSE SHOWN. SEE DET. 1 & 2 ON DWG. 93.

**NOTE 2:** CORNER AND INTERSECTION BARS TO BE THE SAME SIZE AND SPACING AS WALL REINFORCING



25-01

DRAWN WSM  
CHECKED MA

SCALE  
AS SHOWN

APPROVED BE  
DATE MARCH 86

DRAWING NUMBER  
84-1609-E32

PROJECT NO  
6042-22

SHEET NO

## BID SET



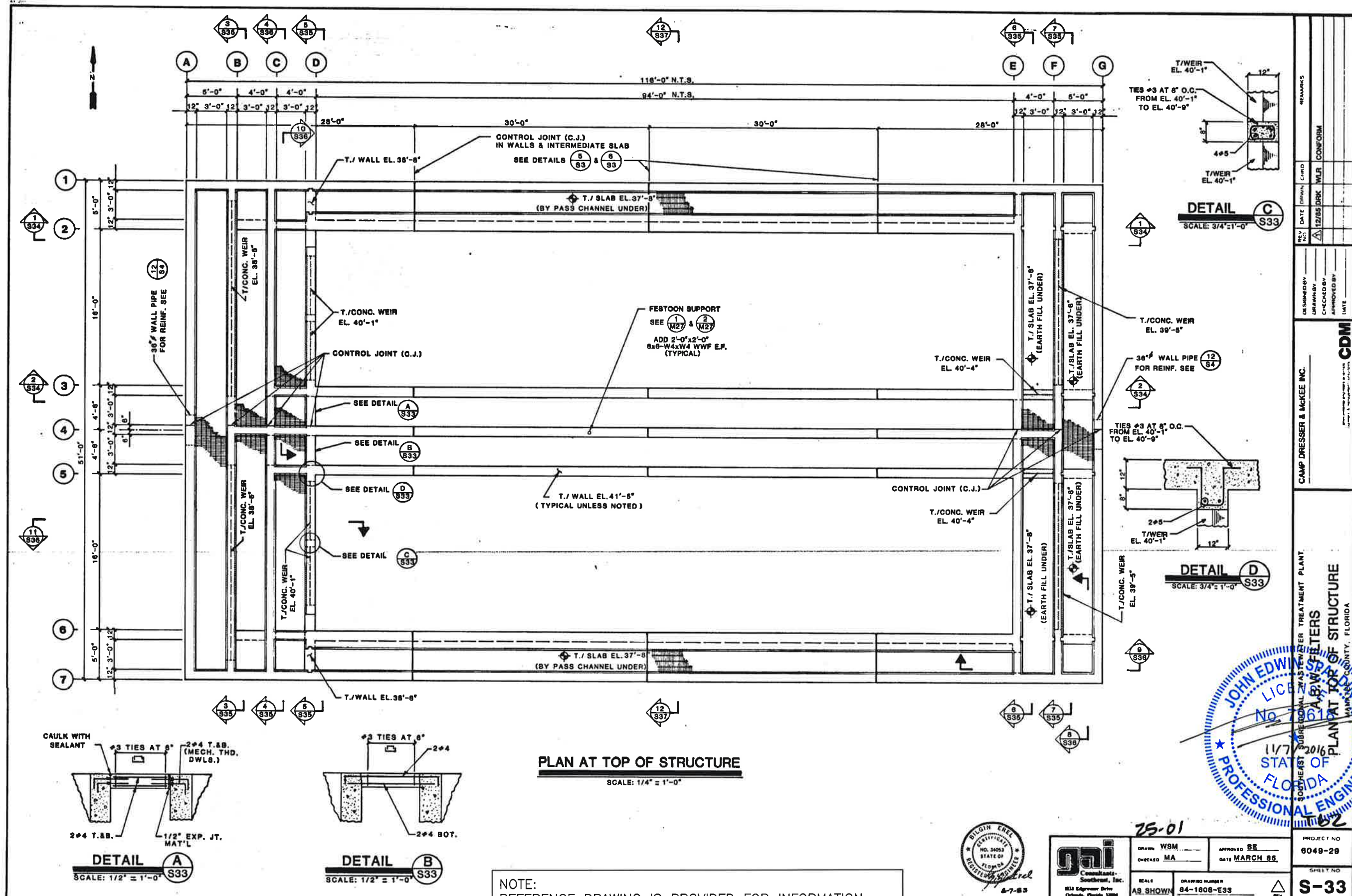
STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL. 941.385.5500 - FAX. 941.386.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM



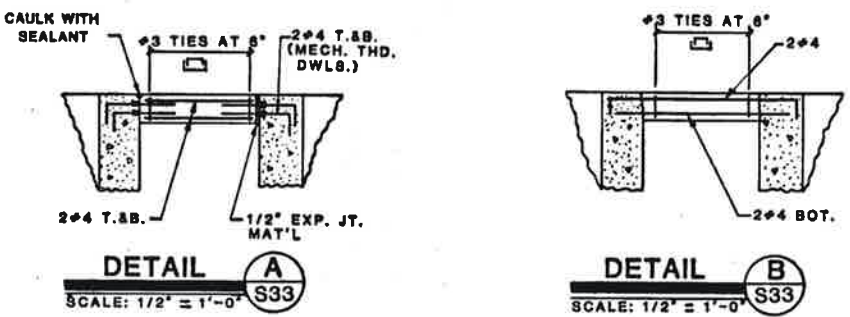
**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
RESOURCE DRAWING**

NO.	REVISION DESCRIPTION	BY	DATE
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PROJECT #	177310804
SURVEY #	000
SEC./TWN./RGE	26/33S/18E
SCALE	1"=XX'
SURVEYED	N/A
DESIGNED	JES 11/07/16
DRAWN	SRP 11/07/16
CHECKED	RJH 11/07/16
JOHN E. SPALDING, P.E.	
FLORIDA P.E. # 79618	
Signature & Date	
SHEET R-3	



**PLAN AT TOP OF STRUCTURE**  
SCALE: 1/4" = 1'-0"



NOTE:  
REFERENCE DRAWING IS PROVIDED FOR INFORMATION ONLY AND IS NOT GUARANTEED TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS, ELEVATIONS, DIMENSIONS, MATERIALS, AND ALL OTHER PERTINENT DETAILS OF ALL EXISTING FEATURES AFFECTING THIS WORK.



25-01

PROJECT NO. 8049-29  
SHEET NO. S-33

DRAWN: WSM  
CHECKED: MA  
DATE: MARCH 85

SCALE: AS SHOWN  
DRAWING NUMBER: 84-1808-E33

**RECORD DRAWING**

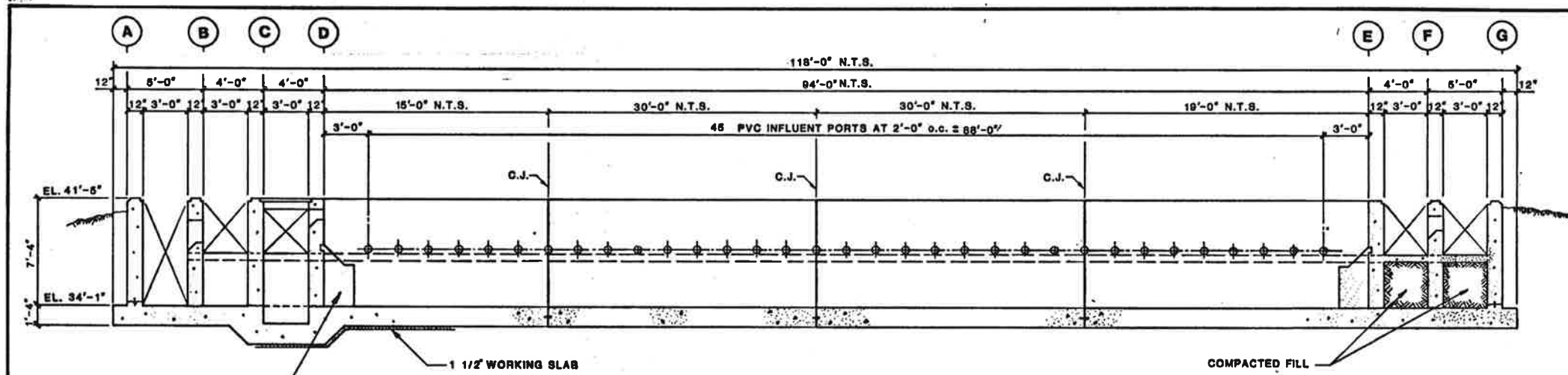
**BID SET**



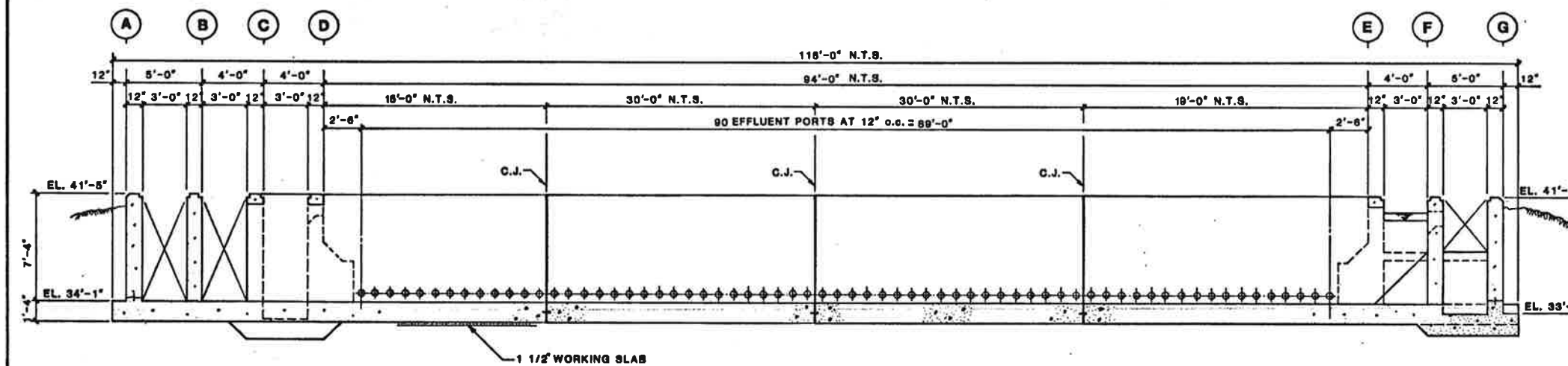


**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
RESOURCE DRAWING**

DATE									
BT									
REVISION DESCRIPTION									
NO.									
PROJECT #					177310804				
SURVEY #					000				
SEC./TWN./RGE					26/33S/18E				
SCALE					1"=XX'				
			BY		DATE				
SURVEYED			N/A		-				
DESIGNED			JES		11/07/16				
DRAWN			SRP		11/07/16				
CHECKED			RJH		11/07/16				
JOHN E. SPALDING, P.E.									
FLORIDA P.E. # 79618									
Signature & Date									
SHEET R-4									

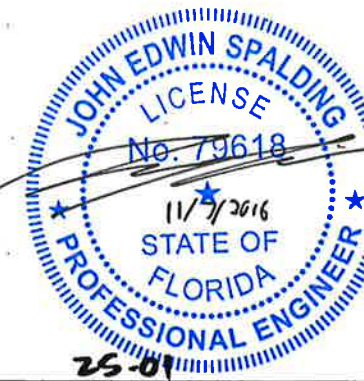


**SECTION** 1  
**SCALE:** 1/4" = 1'-0" S33



SECTION 2  
SCALE: 1/4" = 1'-0" S33

NOTE:  
REFERENCE DRAWING IS PROVIDED FOR INFORMATION ONLY AND IS NOT GUARANTEED TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS, ELEVATIONS, DIMENSIONS, MATERIALS, AND ALL OTHER PERTINENT DETAILS OF ALL EXISTING FEATURES AFFECTING THIS WORK.



DRAWN WSM  
CHECKED MA

SCALE AS SHOWN

DRAWING NO. 84-1

APPROVED BE  
DATE MARCH 85

PLANS BY  
603-E34

 REV

6048-29

SHEET NO

**S-34**

## RECORD DRAWING

## BID SET



STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL. 941.365.5500 - FAX. 941.368.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM



[illegible]

PROJECT #	177310804	
SURVEY #	000	
SEC./TWN./RGE	26/33S/18E	
SCALE	1"=XX'	
	BY	DATE
SURVEYED	N/A	—
DESIGNED	JES	11/07/1
DRAWN	SRP	11/07/1
CHECKED	RJH	11/07/1

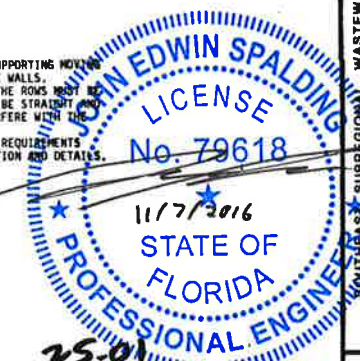
JOHN E. SPALDING, P.E.  
FLORIDA P.E. # 79618


Signature & Date

**SHEET R-5**



1. A SKINNER ASSEMBLY AND ITS SUPPORTING MOVING CARRIAGE TRAVEL BETWEEN THESE WALLS. THE 16'-0" DISTANCE BETWEEN THE ROOMS MUST BE MAINTAINED AND THE WALL MUST BE STRAIGHT AND PLUMB WITHOUT BULGES TO INTERFERE WITH THE MECH. EQUIP. TOLERANCE PER MANUFACTURER'S REQUIREMENTS SEE "M" DWG'S. FOR RAIL LOCATION AND DETAILS.



DRAWN <u>WSM</u>	APPROVED <u>BE</u>
CHECKED <u>MA</u>	DATE <u>MARCH 85</u>
SCALE	DRAWING NUMBER
<u>AS SHOWN</u>	<u>84-1608-E37</u>
	 REV

T66

PROJECT NO  
8048-20

SHEET NO  
S-37

NOTE:  
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**RECORD DRAWING 2-1**

## BID SET



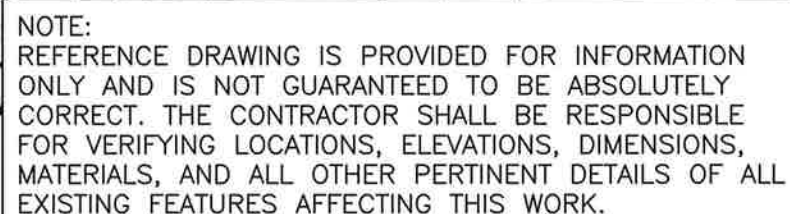
STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL. 941.365.5500 - FAX. 941.368.1922  
FLORIDA CERTIFICATE NO. 27103 - [WWW.STANTEC.COM](http://WWW.STANTEC.COM)



[illegible]

	BY	DATE
SURVEYED	N/A	
DESIGNED	JES	11/07/
DRAWN	SRP	11/07/
CHECKED	RJH	11/07/

SHEET R-6

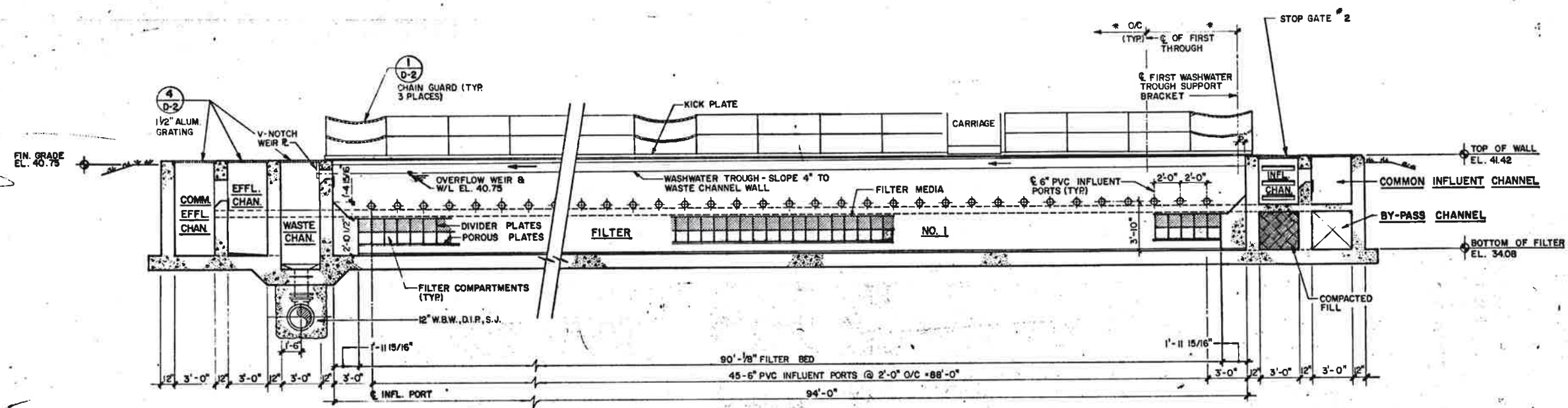


## BID SET

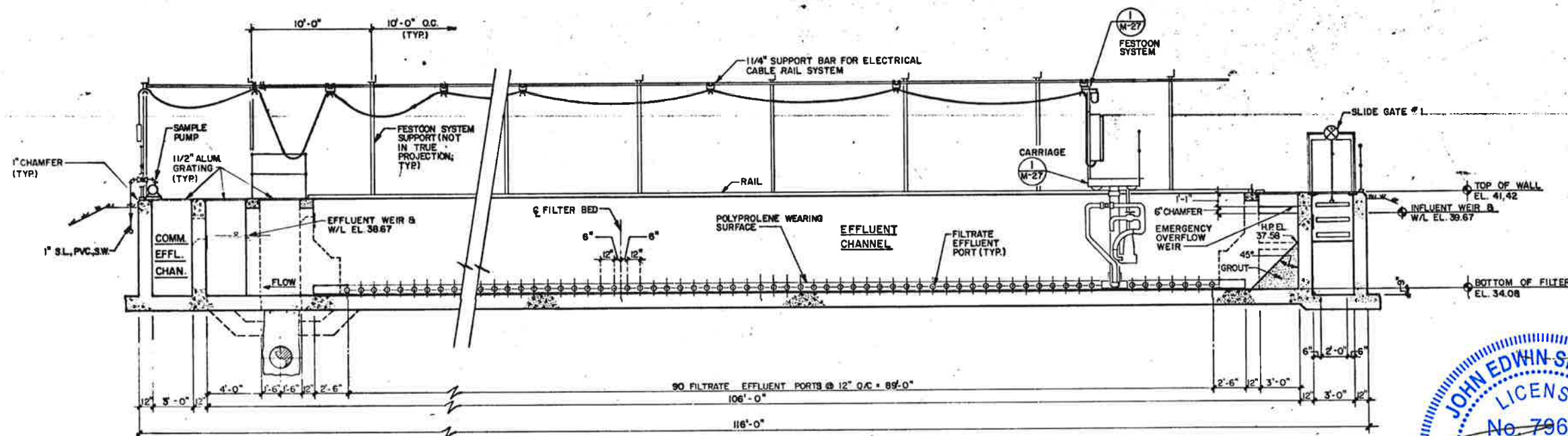




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SECTION 1  
1/4\"/>



SECTION 2  
1/4\"/>

NOTE:  
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RECORD DRAWING

BID SET

**Stantec**  
STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL 941.365.5500 - FAX 941.368.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

SOUTHEAST SUBREGIONAL WASTEWATER TREATMENT PLANT											
AUTOMATIC BACKWASH FILTERS-SECTIONS											
PROJECT NO 6049-29											
SHEET NO M-23											
MANATEE COUNTY, FLORIDA											
CAMP DRESSER & MCKEE INC.											
environmental engineers, scientists and architects & management consultants											
CDMI											
DESIGNED BY: C.S.L.		DATE: 12/08/95		DRAWN BY: D.T.D.		DATE: 12/08/95		CHECKED BY: J.E.S.		DATE: 12/08/95	
APPROVED BY: J.E.S.		DATE: 12/08/95		APPROVED BY: J.E.S.		DATE: 12/08/95		APPROVED BY: J.E.S.		DATE: 12/08/95	
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APPRO											

MANATEE COUNTY, FLORIDA  
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES

**Manatee County**  
FLORIDA

1022 26th Avenue East  
Bradenton, FL 34208

SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
RESOURCE DRAWING

SOUTHEAST SUBREGIONAL WASTEWATER TREATMENT PLANT  
AUTOMATIC BACKWASH FILTERS-SECTIONS

PROJECT NO  
6049-29  
SHEET NO  
M-23



**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
RESOURCE DRAWING**

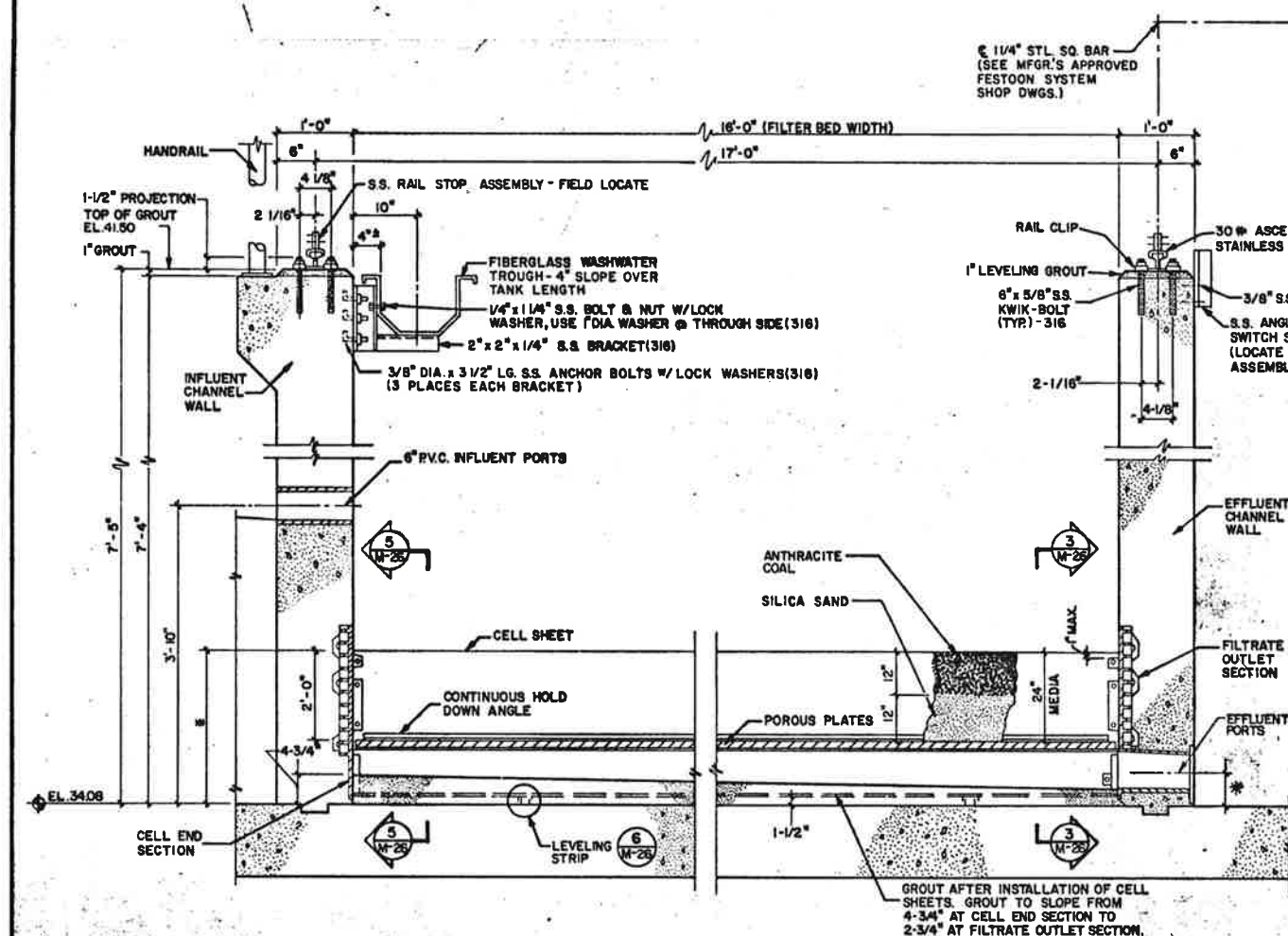
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NO.			
PROJECT #		177310804	
SURVEY #		000	
SEC./TWN./RGE		26/33S/18E	
SCALE		1"=XX'	
	BY	DATE	
SURVEYED	N/A	-	
DESIGNED	JES	11/07/	
DRAWN	SRP	11/07/	
CHECKED	RJH	11/07/	

JOHN E. SPALDING, P.E.  
FLORIDA P.E. # 79618

---

Signature & Date

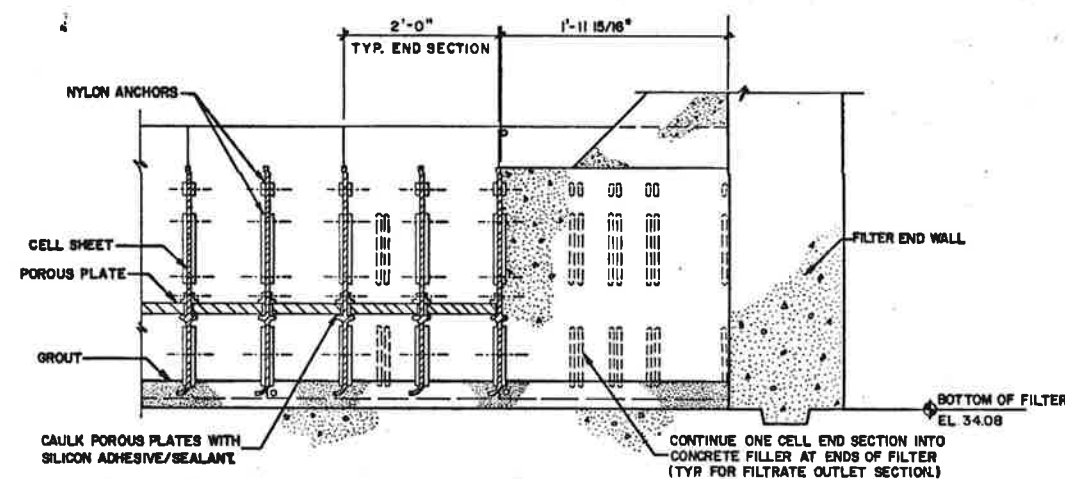
SHEET R-8



### TYPICAL SECTION - FILTER BED

NTS

# SEE MFR.'S APPROVED SHOP DRAWINGS

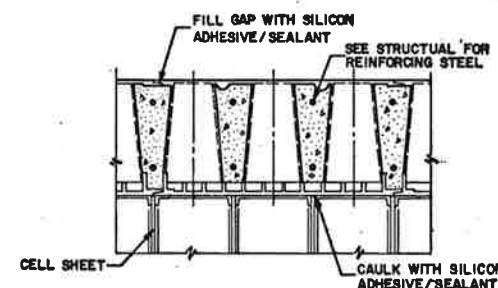


**SECTION** 5  
1'-1/2" • 1'-0" M-26

 $1 - 1/2^n \cdot 1 - 0^n$ 

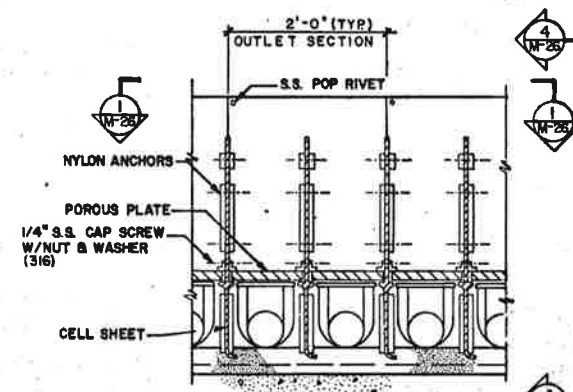
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M-2E

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SECTION 1  
M-26

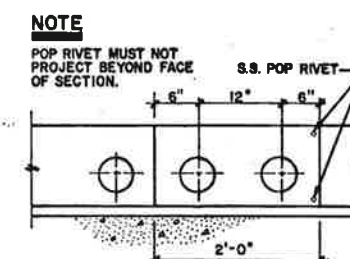
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SECTION **3**  
M-26

NY

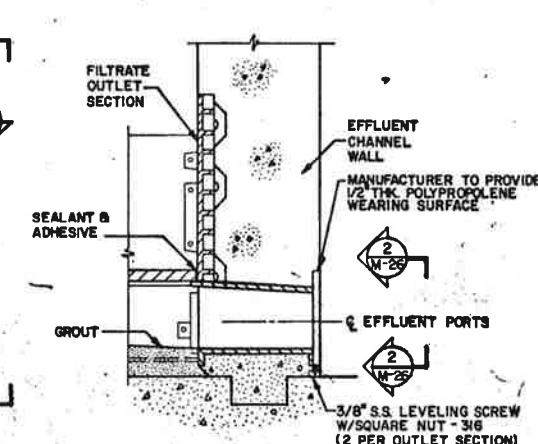
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SECTION 2

NY

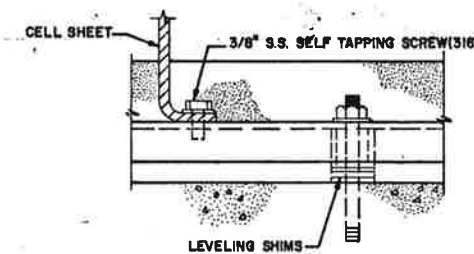
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SECTION 4  
M-26

**NTC**

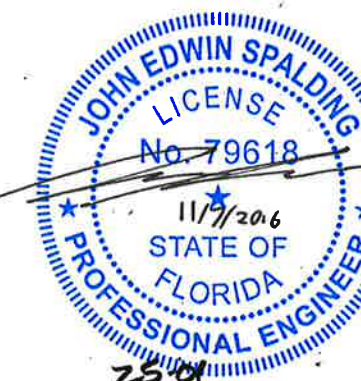
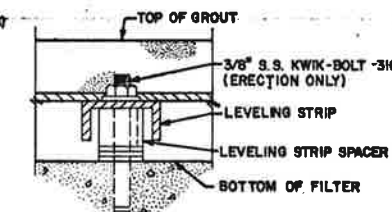
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M-26



DETAIL 6  
M-2

NAME \_\_\_\_\_

6  
M-2



**CAMP DRESSER & MCKEE INC.**

**SOUTHEAST SUBREGIONAL WASTEWATER TREATMENT PLANT**

**AUTOMATIC BACKWASH FILTERS - SECTIONS**

MANATEE COUNTY, FLORIDA

PROJECT NO.  
6049-29

SHEET NO.

**M-2**

## RECORD DRAWING

## BID SET



# Stantec

STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL. 941.385.5500 - FAX, 941.388.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM



**SOUTHEAST WATER RECLAMATION FACILITY  
AUTOMATIC BACKWASH FILTERS  
REFURBISHMENT  
RESOURCE DRAWING**

NO.	REVISION	DESCRIPTION	BY	DATE

PROJECT #	177310804
SURVEY #	000
SEC./TWN./RGE	26/33S/18E
SCALE	1"=XX'
SURVEYED	N/A
DESIGNED	JES 11/07/16
DRAWN	SRJ 11/07/16
CHECKED	RJH 11/07/16

JOHN E. SPALDING, P.E.  
FLORIDA P.E. # 79618

Signature & Date

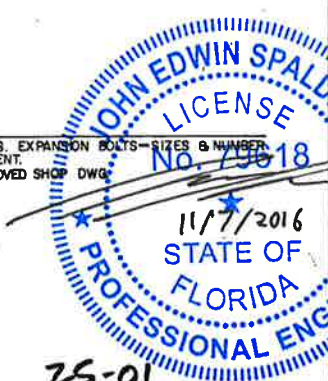
SHEET R-9

REMARKS	DATE	BY	CHKD	APP'D

DESIGNED BY: C.S.L.  
DRAWN BY: D.D.  
CHECKED BY: JES  
APPROVED BY: SRJ  
DATE: MARCH, 1985

CAMP DRESSER & MCKEE INC.  
SUBREGIONAL WASTEWATER TREATMENT PLANT  
AUTOMATIC BACKWASH FILTERS-SECTIONS  
MANATEE COUNTY, FLORIDA

M-25



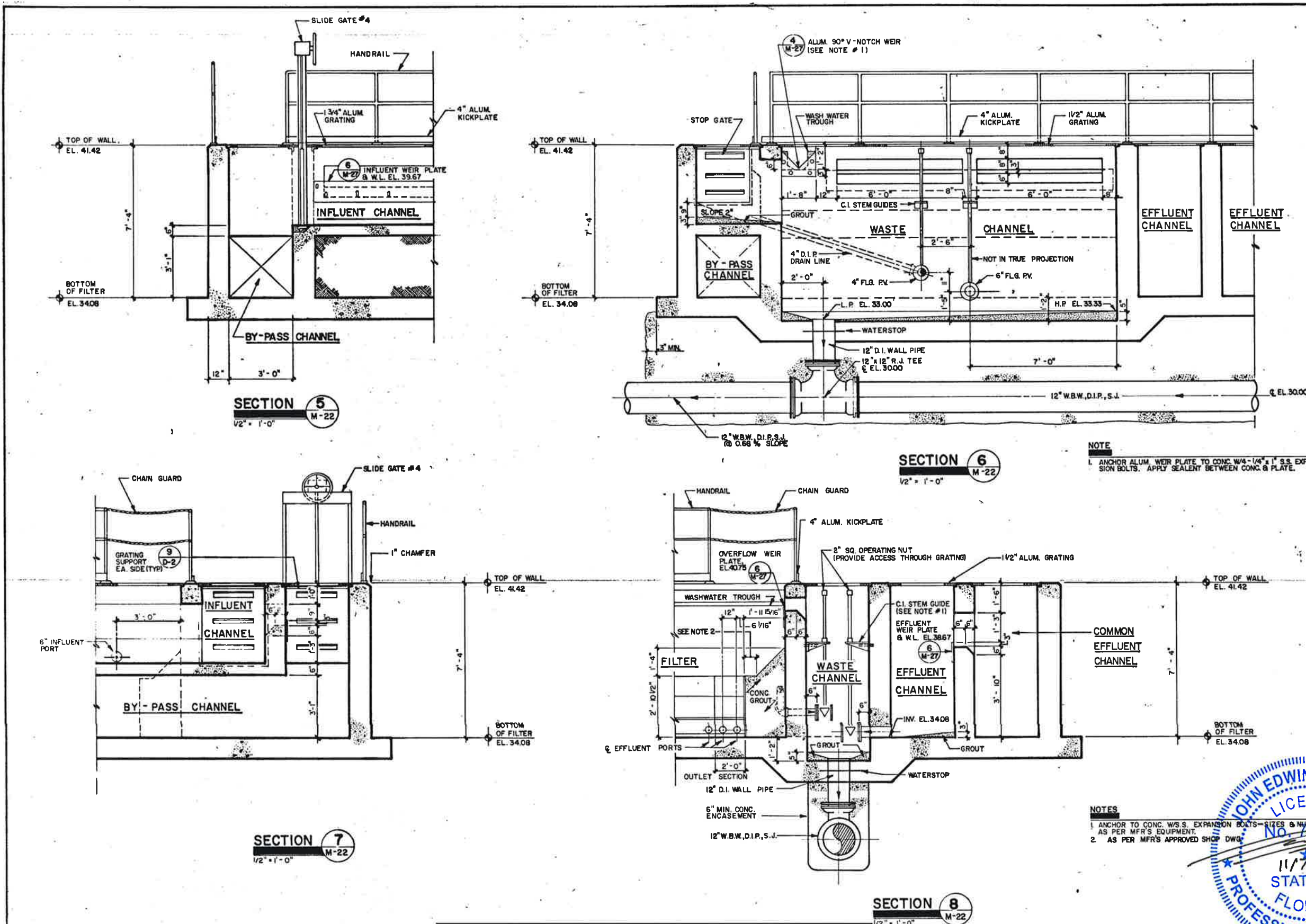
25-01

**RECORD DRAWING**

**BID SET**

**Stantec**  
STANTEC CONSULTING SERVICES INC.  
5172 STATION WAY, SARASOTA, FLORIDA 34233  
TEL. 941.365.5500 - FAX. 941.366.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

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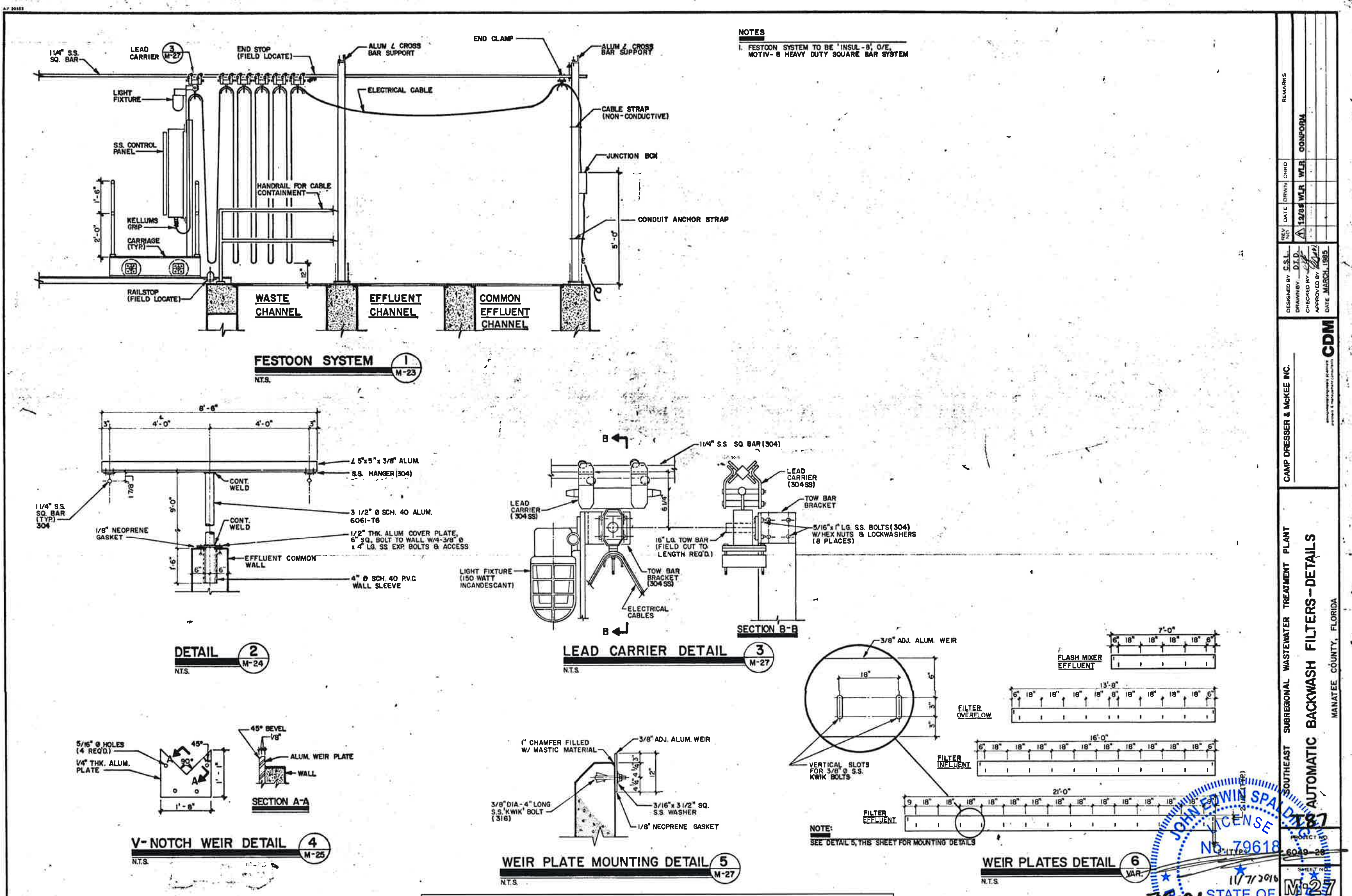


NOTE  
1. ANCHOR ALUM. WEIR PLATE TO CONC. W/4-1/4" x 1" S.S. EXPAN-  
SION BOLTS. APPLY SEALANT BETWEEN CONC. & PLATE.

NOTES  
1. ANCHOR TO CONC. W/S.S. EXPANSION BOLTS - SIZES & NUMBER  
AS PER MFR'S EQUIPMENT.  
2. AS PER MFR'S APPROVED SHOP DWG.



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NOTES  
1. FESTOON SYSTEM TO BE 'INSUL-B' O/E,  
MOTIV-B HEAVY DUTY SQUARE BAR SYSTEM

REVISION	DATE	BY	DESCRIPTION
1	11/7/2016	SRP	ISSUED FOR BIDDING
2	11/7/2016	RJH	REVISION
3	11/7/2016	RJH	REVISION
4	11/7/2016	RJH	REVISION
5	11/7/2016	RJH	REVISION
6	11/7/2016	RJH	REVISION
7	11/7/2016	RJH	REVISION
8	11/7/2016	RJH	REVISION
9	11/7/2016	RJH	REVISION
10	11/7/2016	RJH	REVISION
11	11/7/2016	RJH	REVISION
12	11/7/2016	RJH	REVISION
13	11/7/2016	RJH	REVISION
14	11/7/2016	RJH	REVISION
15	11/7/2016	RJH	REVISION
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97	11/7/2016	RJH	REVISION
98	11/7/2016	RJH	REVISION
99	11/7/2016	RJH	REVISION
100	11/7/2016	RJH	REVISION

NOTE:  
REFERENCE DRAWING IS PROVIDED FOR INFORMATION ONLY AND  
IS NOT GUARANTEED TO BE ABSOLUTELY CORRECT. THE  
CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS,  
ELEVATIONS, DIMENSIONS, MATERIALS, AND ALL OTHER PERTINENT  
DETAILS OF ALL EXISTING FEATURES AFFECTING THIS WORK.

RECORD DRAWING



STANTEC CONSULTING SERVICES INC.  
5172 STATIONWAY, SARASOTA, FLORIDA 34233  
TEL. 941.365.5500 - FAX 941.368.1922  
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

MANATEE COUNTY, FLORIDA  
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES

1022 26th Avenue East  
Bradenton, FL 34208

**SOUTHEAST WATER RECLAMATION FACILITY**  
**AUTOMATIC BACKWASH FILTERS**  
**REFURBISHMENT**  
**RESOURCE DRAWING**

NO.	REVISION DESCRIPTION	BY	DATE
1	ISSUED FOR BIDDING	SRP	11/7/2016
2	REVISION	RJH	11/7/2016
3	REVISION	RJH	11/7/2016
4	REVISION	RJH	11/7/2016
5	REVISION	RJH	11/7/2016
6	REVISION	RJH	11/7/2016
7	REVISION	RJH	11/7/2016
8	REVISION	RJH	11/7/2016
9	REVISION	RJH	11/7/2016
10	REVISION	RJH	11/7/2016
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100	REVISION	RJH	11/7/2016

PROJECT #	177310804
SURVEY #	000
SEC./TWN./RGE	26/33S/18E
SCALE	1"=XX'
SURVEYED	N/A
DESIGNED	JES 11/07/16
DRAWN	SRP 11/07/16
CHECKED	RJH 11/07/16
JOHN E. SPALDING, P.E.	
FLORIDA P.E. # 79618	
Signature & Date	

**SHEET R-10**