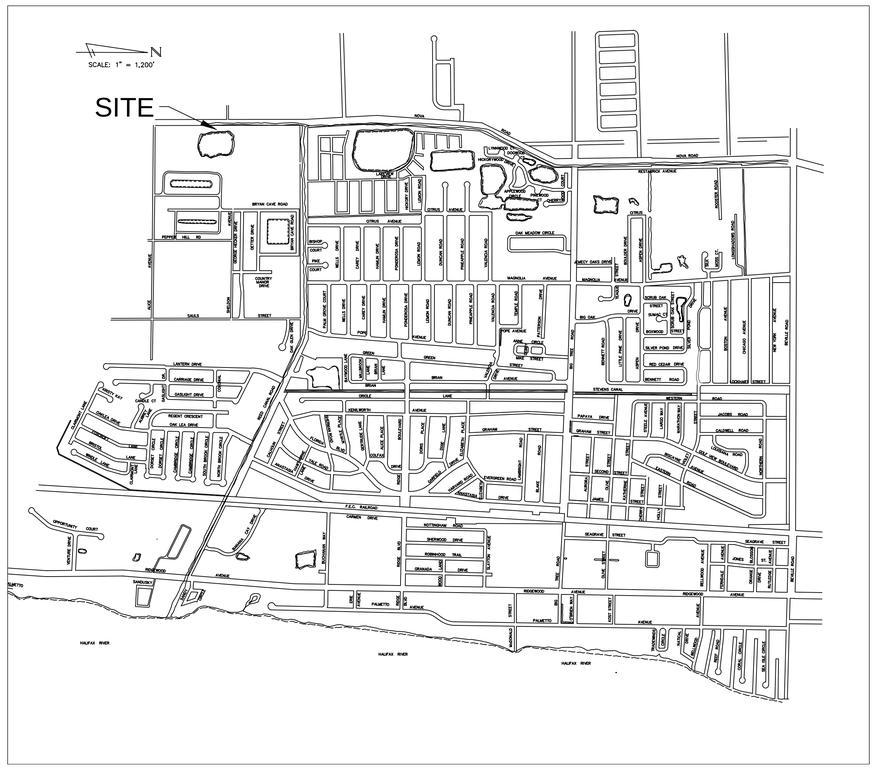
REED CANAL PARK STATIONARY PUMP IMPROVEMENTS

BID NO. 23-B-013



LOCATION MAP

PLANS MAY BE REDUCED SIZE
SCALE MAY NOT BE AS SHOWN

CITY OFFICIALS

MAYOR
WILLIAM C. HALL

VICE MAYOR
ERIC SANDER

COUNCIL MEMBERS
LISA O'NEAL
DOUG QUARTIER
BRANDON YOUNG

CITY MANAGER
JAMES L. GILLIS, JR.

SHEET INDEX

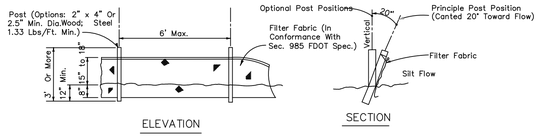
CITY OF SOUTH DAYTONA

PUBLIC WORKS DEPARTMENT

WET DETENTION POND SITE
PLAN VIEW

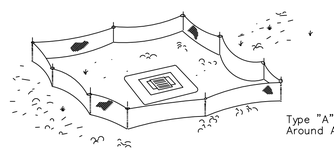
= TURBIDITY BARRIER

= SILT FENCE



Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).

SILT FENCE



Type "A" Silt Fence Protection Around All Catch Basin Inlets.

Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

DEMOLITION NOTES:

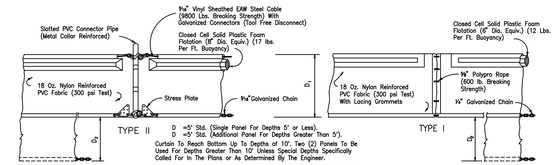
1. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SAFE ACCESS FOR AUTHORIZED CITY AND UTILITY WORKERS AND VEHICLE TRAFFIC.
2. EROSION CONTROLS SHALL BE IN PLACE PRIOR TO ANY SOIL DISTURBANCE, INCLUDING PAVEMENT REMOVAL.
3. ALL FOUNDATIONS, SLABS, STRUCTURAL STEEL, MASONRY, SIDEWALKS, RETAINING WALLS, CURB, APPARATUSES, PIPE, INLETS, VEGETATION, TREES, GRASS ETC., WITHIN THE DESIGNATED DEMOLITION LINES SHALL BE DEMOLISHED ACCORDING TO SPECIFICATIONS. ALL EXISTING UTILITIES, PAVEMENT, CURBS, FENCES, STRUCTURES OR OTHER IMPROVEMENTS MUST BE REMOVED WITHIN THE DEMOLITION AREA.
4. ALL CONCRETE SLABS, FOUNDATIONS, TREES, PIPES, FENCES, UTILITY POLES AND APPURTENANCES SHALL BE SPOILED OFF-SITE UNLESS OTHERWISE DIRECTED BY THE CITY'S REPRESENTATIVE. NO BURNING OF DEBRIS SHALL BE ALLOWED AND NO ON-SITE CONCRETE CRUSHING OPERATIONS OR ON-SITE DISPOSAL OF WILL BE ALLOWED.
5. THE CONTRACTOR SHALL BE PERMITTED TO SALVAGE ANY MATERIALS HE DEEMS FEASIBLE FOR THAT PURPOSE. ALL SALVAGED MATERIALS OR ITEMS SHALL BE REMOVED FROM THE SITE IMMEDIATELY UPON REMOVAL. NO SUCH MATERIAL SHALL BE STORED ON THE SITE AND ABSOLUTELY NO SALES OF SALVAGED MATERIALS WILL BE ALLOWED ON THE PROJECT SITE. ANY SALVAGED MATERIAL MUST BE REMOVED AND TRANSPORTED IN A LEGAL MANNER.
6. MANHOLES, CATCHBASINS, CLEANOUTS, VALVE BOXES, FRAMES, COVERS AND GRATES REMOVED SHALL REQUIRE THE AREA OF EXCAVATION BE ADJUSTED TO FINAL GRADE.
7. ABANDONMENT OF UTILITIES IN-PLACE SHALL BE ALLOWED.
8. ALL UTILITIES SHOWN TO BE REMOVED SHALL BE DISPOSED OF OFF SITE IN A LEGAL MANNER.
9. REMOVE EXISTING ELECTRICAL UTILITIES, IF ANY, ONLY AFTER CRITICAL NEW SYSTEMS ARE IN PLACE AND OPERATIONAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE PROPER REMOVAL INCLUDING SAFE SEQUENCING AND COORDINATION WITH APPROPRIATE UTILITY COMPANIES.
10. CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH APPROPRIATE UTILITY COMPANIES PRIOR TO STARTING WORK.

EROSION CONTROL NOTES:

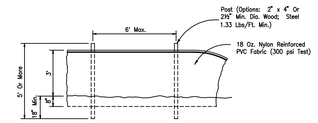
EROSION AND SEDIMENT CONTROL RECOMMENDED CONSTRUCTION SEQUENCE

PRE-CONSTRUCTION MEETING.

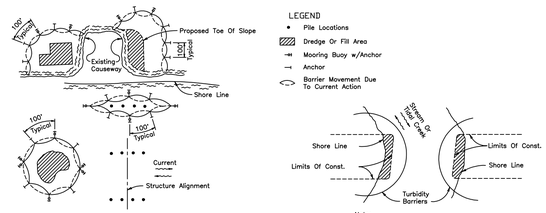
1. POST SIGN WITH NAME AND PHONE NUMBER OF EROSION SEDIMENT CONTROL SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN CONTAINING ISSUED PERMITS).
2. FLAG OR FENCE CLEARING LIMITS.
3. INSTALL CATCH BASIN PROTECTION AS REQUIRED.
4. INSTALL CONSTRUCTION ENTRANCE(S) SHALL CONFORM WITH FDOT DESIGN STANDARDS FOR LIMITED ACCESS INDEX NO. 665.
5. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
6. CONSTRUCT SURFACE WATER CONTROLS IF REQUIRED (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT.
7. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH FDOT SECTION 104 STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
8. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 104 AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT EROSION AND SEDIMENT CONTROL STANDARDS.
9. COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST OR EQUIVALENT.
10. WATER TRUCKS MAY BE REQUIRED DURING DRY SEASON TO CONTROL DUST.
11. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN SEVEN DAYS.
12. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
13. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BMP'S REMOVED IF APPROPRIATE.



FLOATING TURBIDITY BARRIERS



STAKED TURBIDITY BARRIER



NOTES:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.

Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

TURBIDITY BARRIER APPLICATIONS

NOTE:
BEST MANAGEMENT PRACTICES SHALL BE UTILIZED DURING THE DEMOLITION AND CONSTRUCTION PHASE BY THE CONTRACTOR ON THIS PROJECT THE DELINEATED MEASURES ARE THE MINIMUM REQUIRED AND ADDITIONAL CONTROLS WILL BE UTILIZED AS NEEDED, DEPENDENT OPON ACTUAL SITE CONDITIONS AND CONSTRUCTION OPERATIONS.

48 HOURS BEFORE DIGGING
CALL 811
SUNSHINE STATE ONE CALL OF FLORIDA

NO.	DATE	APPR.	REVISION

DESIGNED: SD
DRAWN: MTJ
CHECKED:
DATE: 4-27-23
PLOTTED: –
SCALE: 1"=20'

CITY OF SOUTH DAYTONA
PUBLIC WORKS DEPARTMENT
1672 SOUTH RIDGEWOOD AVE, SOUTH DAYTONA, FLORIDA 32119
FAX: (386) 322-3029 PHONE: (386) 322-3080

REED CANAL PARK POND
STATIONARY PUMP IMPROVEMENT

SOUTH DAYTONA IMPROVEMENT PROJECT

SOUTH DAYTONA *FL*

DATE

Steve Danskine

NOT VALID WITHOUT EMBOSSED SEAL

DWG: RCPpump.dwg

PROJECT NO.

SHT. 2 OF 5

STRUCTURE PLAN VIEW

SCALE: 1:100

NORTH

GENERAL STRUCTURE NOTES

1. ALL STRUCTURES TO BE FDOT TYPE STRUCTURES AND EITHER PRE-CAST OR POURED IN PLACE MEETING THE MOST CURRENT FDOT DESIGN STANDARDS.
2. ANY FILL MATERIAL AROUND THE CULVERTS SHALL BE FILLED IN 1 FOOT LIFTS AND COMPACTED PER SPECIFICATIONS. FILL SHALL BE PLACED TO MEET THE PROPOSED ELEVATIONS AS SHOWN ON THE PLAN.
3. THE PUMP STRUCTURE SHALL BE INSTALLED AND THE PROPOSED INLET CULVERTS SHALL BE COMPLETED BEFORE THE FINAL GRADING AND SODDING IS DONE.
4. SPOOL PIPES TO BE COATED DUCTILE IRON.

GENERAL NOTES

1. ALL EXPOSED CORNERS AND EDGES OF CONCRETE ARE TO BE CHAMFERED 2".
2. CONCRETE MEETING THE REQUIREMENTS OF ASTM C-478 (4,000 PSI) MAY BE USED IN LIEU OF CONCRETE IN PRECAST ITEMS MANUFACTURED IN PLANTS WHICH ARE UNDER THE STANDARD OPERATION PROCEDURES FOR THE INSPECTION OF PRECAST DRAINAGE PRODUCTS.
3. ALL DISTURBED AREAS MUST BE RESTORED WITH BAHIA SOD AT NO ADDITIONAL COST. SOD SHOULD BE INCLUDED IN THE LUMP SUM BID. NO IRRIGATION IS INVOLVED WITH THIS PROJECT.
4. CONTRACTOR TO REPLACE ANY DAMAGED SIDEWALK ON SUBJECT PROPERTY AT NO ADDITIONAL COST. DAMAGED SIDEWALK REPLACEMENT SHOULD BE INCLUDED IN THE LUMP SUM BID.

CONSTRUCTION NOTES:

SITE PREPARATION:

AREA DESIGNATED FOR EXCAVATION, EMBANKMENT, AND STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL. ALL TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED. CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THAN 1:1. ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OFF OF THE SITE. WHEN SPECIFIED, A SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.

EARTH FILL:

MATERIAL – THE FILL MATERIAL SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", OR OTHER OBJECTIONABLE MATERIALS.

MATERIALS USED MUST HAVE THE CAPABILITY TO SUPPORT VEGETATION OF THE QUALITY REQUIRED TO PREVENT EROSION OF THE EMBANKMENT.

PLACEMENT – AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN MAXIMUM 12 INCH THICK (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL.

COMPACTION – THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THAN ONE TREAD TRACK OF HEAVY EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY A MINIMUM OF FOUR COMPLETE PASSES OF A SHEEPSFOOT, RUBBER TIRED OR VIBRATORY ROLLER. FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION WILL BE OBTAINED WITH THE EQUIPMENT USED. THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IF FORMED INTO A BALL IT WILL NOT CRUMBLE, YET NOT BE SO WET THAT WATER CAN BE SQUEEZED OUT.

WHEN REQUIRED BY THE REVIEWING AGENCY THE MINIMUM REQUIRED DENSITY SHALL NOT BE LESS THAN 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY AASHTO METHOD T-99 (STANDARD PROCTOR).

STRUCTURE BACKFILL:

BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED 4 INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A CONCRETE STRUCTURE OR PIPE, UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.

STRUCTURE BACKFILL MAY BE FLOWABLE FILL MEETING THE REQUIREMENTS OF THE LOCAL DEPARTMENT OF TRANSPORTATION OR STATE MATERIALS TESTING AGENCY. THE MIXTURE SHALL HAVE A 100-200 PSI; 28 DAY UNCONFINED COMPRESSIVE STRENGTH. THE FLOWABLE FILL SHALL HAVE A MINIMUM PH OF 4.0 AND A MINIMUM RESISTIVITY OF 2,000 OHM-CM. MATERIAL SHALL BE PLACED SUCH THAT A MINIMUM OF 6" (MEASURED PERPENDICULAR TO THE OUTSIDE OF THE PIPE) OF FLOWABLE FILL SHALL BE UNDER (BEDDING), OVER AND, ON THE SIDES OF THE PIPE. IT ONLY NEEDS TO EXTEND UP TO THE SPRING LINE FOR RIGID CONDUITS. AVERAGE SLUMP OF THE FILL SHALL BE 7" TO ASSURE FLOWABILITY OF THE MATERIAL. ADEQUATE MEASURES SHALL BE TAKEN (SAND BAGS, ETC.) TO PREVENT FLOATING THE PIPE. WHEN USING FLOWABLE FILL, ALL METAL PIPE SHALL BE BITUMINOUS COATED. ANY ADJOINING SOIL FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL SHALL COMPLETELY FILL ALL VOIDS ADJACENT TO THE FLOWABLE FILL ZONE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A STRUCTURE OR PIPE UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.

NOTE:

BEST MANAGEMENT PRACTICES SHALL BE UTILIZED DURING THE DEMOLITION AND CONSTRUCTION PHASE BY THE CONTRACTOR ON THIS PROJECT THE DELINEATED MEASURES ARE THE MINIMUM REQUIRED AND ADDITIONAL CONTROLS WILL BE UTILIZED AS NEEDED, DEPENDENT UPON ACTUAL SITE CONDITIONS AND CONSTRUCTION OPERATIONS.

48 HOURS BEFORE DIGGING
CALL 811
SUNSHINE STATE ONE CALL OF FLORIDA

NO.	DATE	APPR.	REVISION

DESIGNED: SD
DRAWN: MTJ
CHECKED:
DATE: 4-27-23
PLOTTED:
SCALE: AS SHOWN

CITY OF SOUTH DAYTONA
PUBLIC WORKS DEPARTMENT
1672 SOUTH RIDGEWOOD AVE, SOUTH DAYTONA, FLORIDA 32119
FAX: (386) 322-3029 PHONE: (386) 322-3080

REED CANAL PARK POND
STATIONARY PUMP IMPROVEMENT

SOUTH DAYTONA
IMPROVEMENT PROJECT

SOUTH DAYTONA *FL*

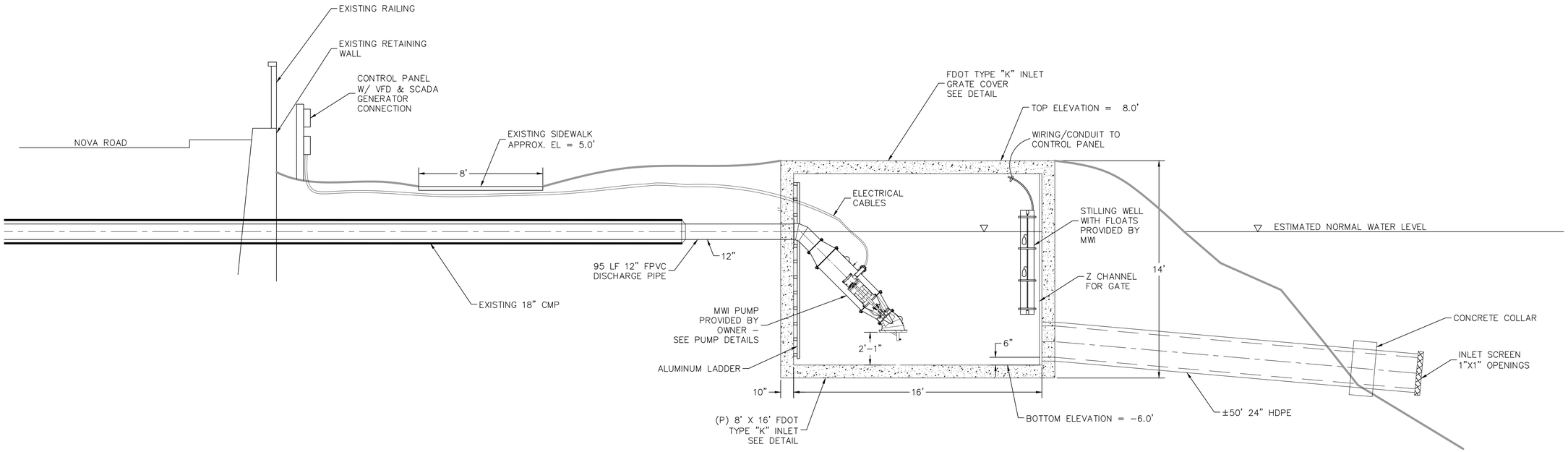
DATE

Steve Danskine

NOT VALID WITHOUT EMBOSSED SEAL

DWG: RCPpump.dwg

PROJECT NO.



EMBANKMENT AND STRUCTURE PROFILE VIEW

SCALE: 1:50

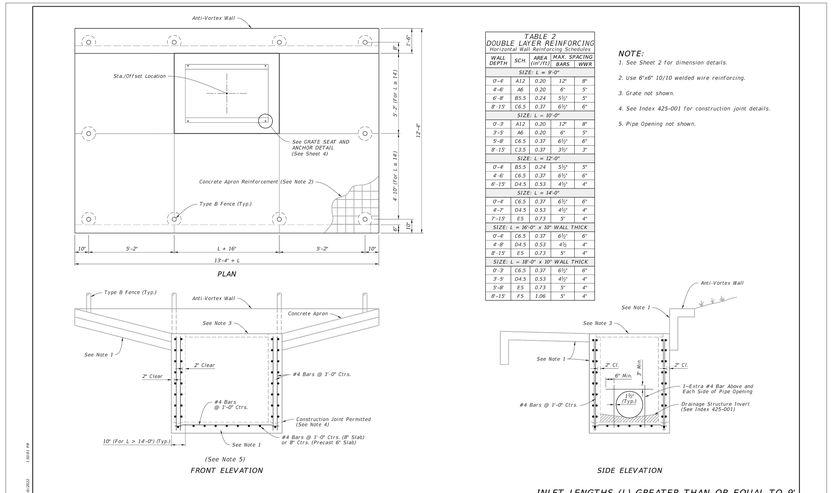


TABLE 2
DOUBLE LAYER REINFORCING
Horizontal Wall Reinforcing Schedules

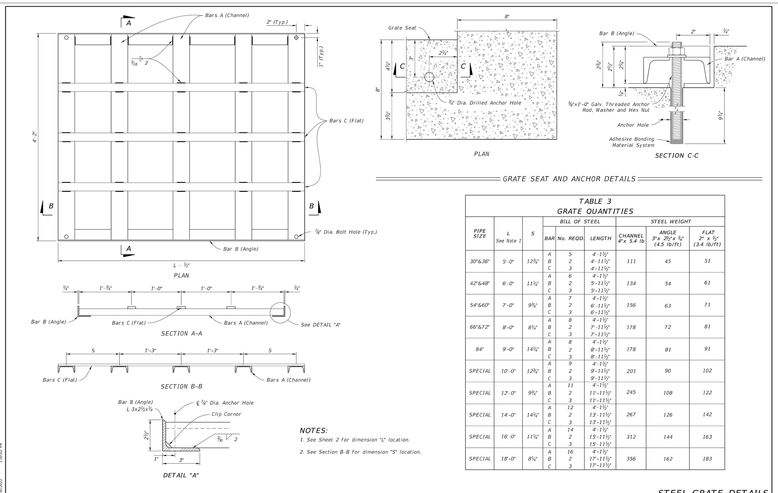
WALL DEPTH	SCH	AREA (in²/ft)	HOR. BARS	SPACING VWR
SIZE: L = 9'-0"				
0'-4'	A12	0.20	12"	8"
4'-6'	A8	0.20	6"	5"
6'-8'	B5.5	0.24	5½"	5"
8'-13'	C6.5	0.37	6½"	6"
SIZE: L = 30'-0"				
0'-3'	A12	0.20	12"	8"
3'-5'	A8	0.20	6"	5"
5'-8'	C6.5	0.37	6½"	6"
8'-13'	C3.5	0.37	3½"	3"
SIZE: L = 12'-0"				
0'-4'	B5.5	0.24	5½"	5"
4'-6'	C6.5	0.37	6½"	6"
6'-13'	D4.5	0.53	4½"	4"
SIZE: L = 24'-0"				
0'-4'	C6.5	0.37	6½"	6"
4'-7'	D4.5	0.53	4½"	4"
7'-13'	E5	0.73	5"	4"
SIZE: L = 36'-0" x 30" WALL THICK				
0'-4'	C6.5	0.37	6½"	6"
4'-8'	D4.5	0.53	4½	4"
8'-13'	E5	0.73	5"	4"
SIZE: L = 38'-0" x 30" WALL THICK				
0'-3'	C6.5	0.37	6½"	6"
3'-5'	D4.5	0.53	4½"	4"
5'-8'	E5	0.73	5"	4"
8'-13'	F5	1.06	5"	4"

NOTE:

1. See Sheet 2 for dimension details.
2. Use 6"x6" 10/10 welded wire reinforcing.
3. Grate not shown.
4. See Index 425-001 for construction joint details.
5. Pipe Opening not shown.

INLET LENGTHS (L) GREATER THAN OR EQUAL TO 9'

LAST REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPE K	INDEX	SHEET
10/01/20	REVISED			425-055	3 of 4



NOTES:

1. See Sheet 2 for dimension "L" location.
2. See Section B-B for dimension "S" location.

TABLE 3
GRATE QUANTITIES

PIPE SIZE	L See Note 1	S	BILL OF STEEL BAR	No. REQD.	LENGTH	STEEL WEIGHT CHANNEL #"x 5.4 lb	ANGLE 3"x 3½"x ½" (4.5 lb/ft)	FLAT 2" x ½" (3.4 lb/ft)
30"x36"	5'-0"	12½"	A	5	4'-11½"	111	45	51
			B	2	4'-11½"			
			C	3	4'-11½"			
42"x48"	6'-0"	11½"	A	6	4'-11½"	134	54	61
			B	2	5'-11½"			
			C	3	5'-11½"			
54"x60"	7'-0"	9½"	A	7	4'-11½"	156	63	71
			B	2	6'-11½"			
			C	3	6'-11½"			
66"x72"	8'-0"	8½"	A	8	4'-11½"	178	72	81
			B	2	7'-11½"			
			C	3	7'-11½"			
84"	9'-0"	14½"	A	8	4'-11½"	178	81	91
			B	2	8'-11½"			
			C	3	8'-11½"			
SPECIAL	10'-0"	12½"	A	9	4'-11½"	201	90	102
			B	2	9'-11½"			
			C	3	9'-11½"			
SPECIAL	12'-0"	9½"	A	11	4'-11½"	245	108	122
			B	2	11'-11½"			
			C	3	11'-11½"			
SPECIAL	14'-0"	14½"	A	12	4'-11½"	267	126	142
			B	2	13'-11½"			
			C	3	13'-11½"			
SPECIAL	16'-0"	11½"	A	14	4'-11½"	312	144	163
			B	2	15'-11½"			
			C	3	15'-11½"			
SPECIAL	18'-0"	8½"	A	16	4'-11½"	356	162	183
			B	2	17'-11½"			
			C	3	17'-11½"			

STEEL GRATE DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPE K	INDEX	SHEET
10/01/20	REVISED			425-055	4 of 4

FDOT TYPE "K" DETAIL

NOTE:

BEST MANAGEMENT PRACTICES SHALL BE UTILIZED DURING THE DEMOLITION AND CONSTRUCTION PHASE BY THE CONTRACTOR ON THIS PROJECT THE DELINEATED MEASURES ARE THE MINIMUM REQUIRED AND ADDITIONAL CONTROLS WILL BE UTILIZED AS NEEDED, DEPENDENT UPON ACTUAL SITE CONDITIONS AND CONSTRUCTION OPERATIONS.

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CITY OF SOUTH DAYTONA
PUBLIC WORKS DEPARTMENT
1672 SOUTH RIDGEWOOD AVE, SOUTH DAYTONA, FLORIDA 32119
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REED CANAL PARK POND
STATIONARY PUMP IMPROVEMENT

SOUTH DAYTONA IMPROVEMENT PROJECT

SOUTH DAYTONA *FL*

DATE

Steve Danskine

NOT VALID WITHOUT EMBOSSED SEAL

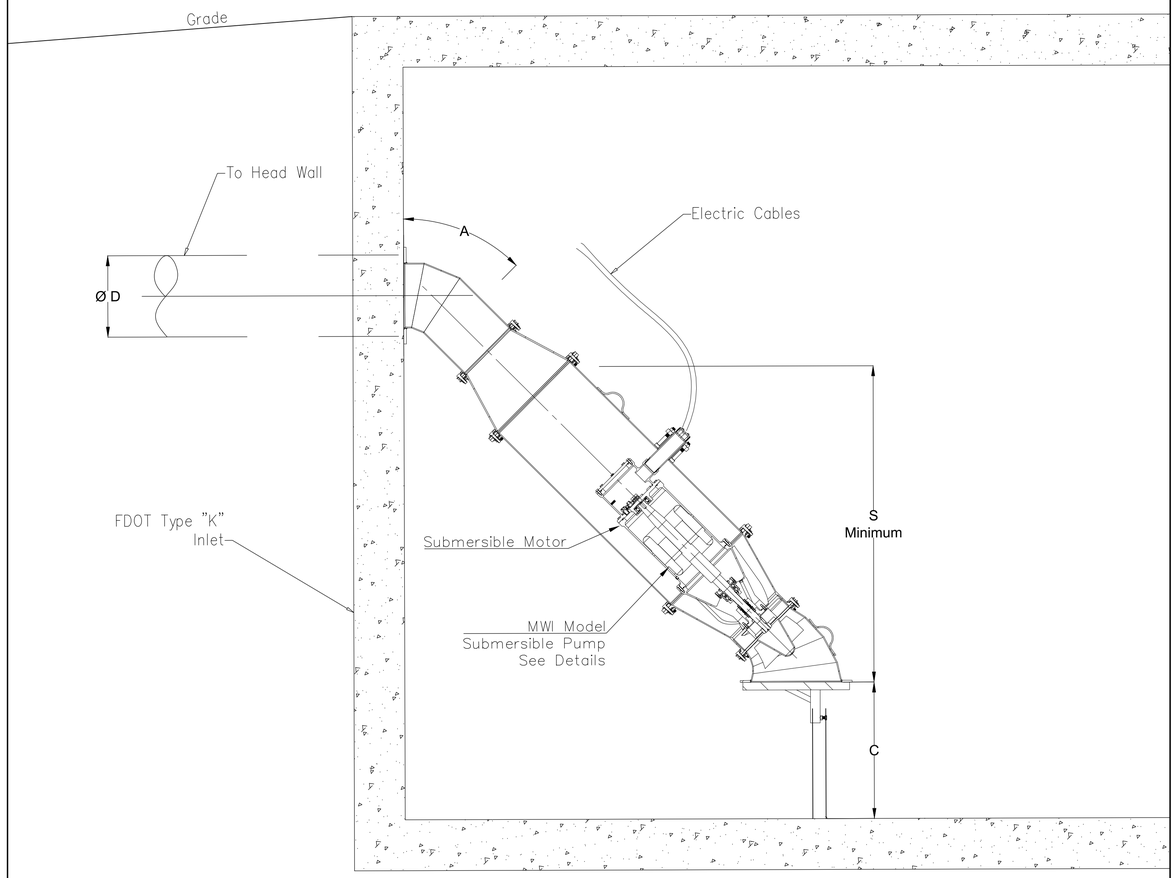
DWG: RCPpump.dwg

PROJECT NO.

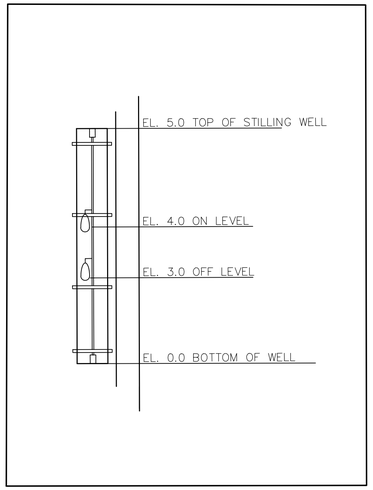
SHT. 4 OF 5

Description	SEA310
Pump Head weight (lbs.) (*)	650
Motor weight (lbs.)	265
Gpm	3000
Head ft. (given)	7.00
Motor MRL losses ft.	3.38
Rated head ft.	10.38
A – angle (deg.)	45
C – sump floor minimum clearance (in.)	5
S – minimum submergence (in.)	45
SP – spacing between pumps (in.)	30
D – discharge diameter (in.)	12
Motor Hp	15
Motor Rpm	1800
Motor – voltage/phase/hertz	460/3/60

(*) Pump Head weight does not include discharge column and elbow



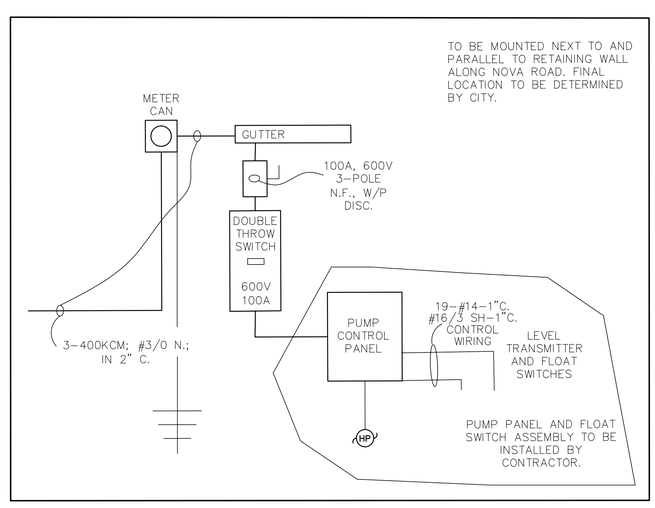
PUMP DETAIL
NOT TO SCALE



PUMP STATION FLOAT CONTROLS
NOT TO SCALE

REED CANAL POND PUMP STATION
CITY OF SOUTH DAYTONA, FL
Bid Form

Item No.	Description	Est. Quantity	Units	Unit Price	Total Amount
1	Mobilization & General Conditions	1	LS		
2	Demolition & Erosion and Sediment Control	1	LS		
3	FDOT Type "K" Inlet w. Grate Top	1	LS		
4	MWI Pump Installation w. 12" DIP Discharge Piping	1	LS		
5	Control Panel w. Square D VFD, SCADA & Generator Recepticle	1	LS		
6	Intake Pipe w. Screen & Concrete Collar	50	LF		
7	12" FPVC C-900 Discharge Piping	130	LF		
8	Restoration	1	LS		
				Total	



PUMPSTATION CONTROL PANELS
INCLUDE VFD & GENERATOR RECEPTABLE
NOT TO SCALE

SERVICE RISER NOTES

1. CONTRACTOR TO COORDINATE WITH FPL SITE SERVICE REP THE PROVISION OF A PAD-MOUNT TRANSFORMER WTHIN THE REAL PROPERTY OF THE SITE PLAN. INSTALL FPL-FURNISHED 5" PRIMARY CONDUIT (OR DIRECTIONAL DRILL) AND TRANSFORMER PAD TO FPL SPECIFICATIONS AND REQUIREMENTS. OBTAIN ANY EASEMENTS OR RIGHTS-OF-WAY AND PAY ALL COSTS AND FEES ASSOCIATED THEREWITH. PROVIDE SERVICE LATERAL INDICATED.
2. PROVIDE FPL-APPROVED IN-LINE METER CAN IN LOCATION SHOWN IN PLANS SUITABLE FOR 100-AMP, 3-PHASE SERVICE AT 460 VOLTS.
3. PROVIDE 100 AMP, 3-POLE, 600 VOLT, ADJUSTABLE TRIP THERMAL-MAGNETIC CIRCUIT BREAKER WITH SHUNT TRIP IN NEMA 1 ENCLOSURE. LABEL THIS BREAKER AS "SERVICE MAIN DISCONNECT."
4. SERVICE GROUND TO BE #1/0 BARE COPPER WIRE, CONNECTED TO NEUTRAL AND GROUND LUGS OF SERVICE MAIN BREAKER ENCLOSURE, TO BUILDING FOOTER REINFORCING STEEL BAR, TO TWO EACH, 20-FOOT DRIVEN COPPER ELECTRODES, 20 FEET ON CENTERS, MINIMUM, AND IF PRESENT, TO METAL WATER PIPE.
5. LIGHTNING ARRESTOR TO BE SQUARE D, MODEL SDSA3650.
6. STORMWATER PUMP CONTROL PANEL (PCP) WITH ANALOG/DIGITAL INPUT/OUTPUT CAPABILITIES TO AUTOMATICALLY RUN PUMPS AND MAINTAIN WATER LEVEL AT ADJUSTABLE PRESET LEVEL. PCP SHALL INCLUDE INTEGRAL FLOAT WIRING.

NORMAL PUMP OPERATION (ON FLOATS):
REFER TO PUMP STATION FLOAT CONTROLS FOR ESTABLISHED LEVELS.

NO.	DATE	APPR.	REVISION

DESIGNED: SD
DRAWN: MTJ
CHECKED:
DATE: 4-27-23
PLOTTED:
SCALE: N.A.

CITY OF SOUTH DAYTONA
COMMUNITY DEVELOPMENT DEPARTMENT
1672 SOUTH RIDGEWOOD AVE, SOUTH DAYTONA, FLORIDA 32119
FAX: (386) 322-3029 PHONE: (386) 322-3020

REED CANAL PARK POND
STATIONARY PUMP IMPROVEMENT

SOUTH DAYTONA
IMPROVEMENT PROJECT

SOUTH DAYTONA *FL*

DATE

Steve Danskinee

NOT VALID WITHOUT EMBOSSED SEAL

DWG: RCPpump.dwg

PROJECT NO.

SHT. 5 OF 5