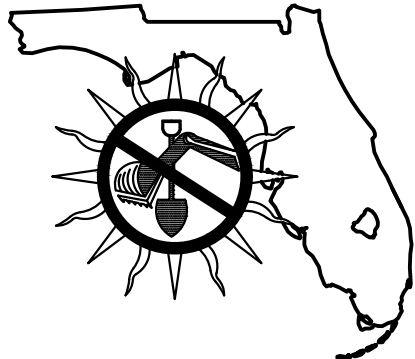


"INVESTIGATE BEFORE YOU EXCAVATE"



CALL SUNSHINE @ 1-800-432-4770
FL. STATUTE 553.851 (1979) REQUIRES A
MIN. OF 2 DAYS AND MAX. OF 5
DAYS NOTICE BEFORE YOU EXCAVATE.

SITE CONSTRUCTION PLANS

FOR

PELICAN GOLF CLUB

PHASE II EXPANSION - "CLUBHOUSE"

1501 INDIAN ROCKS ROAD

TOWN OF BELLEAIR, FLORIDA

"REVISION A"

INDEX OF DRAWINGS

DRAWING TITLE

SHEET NO.

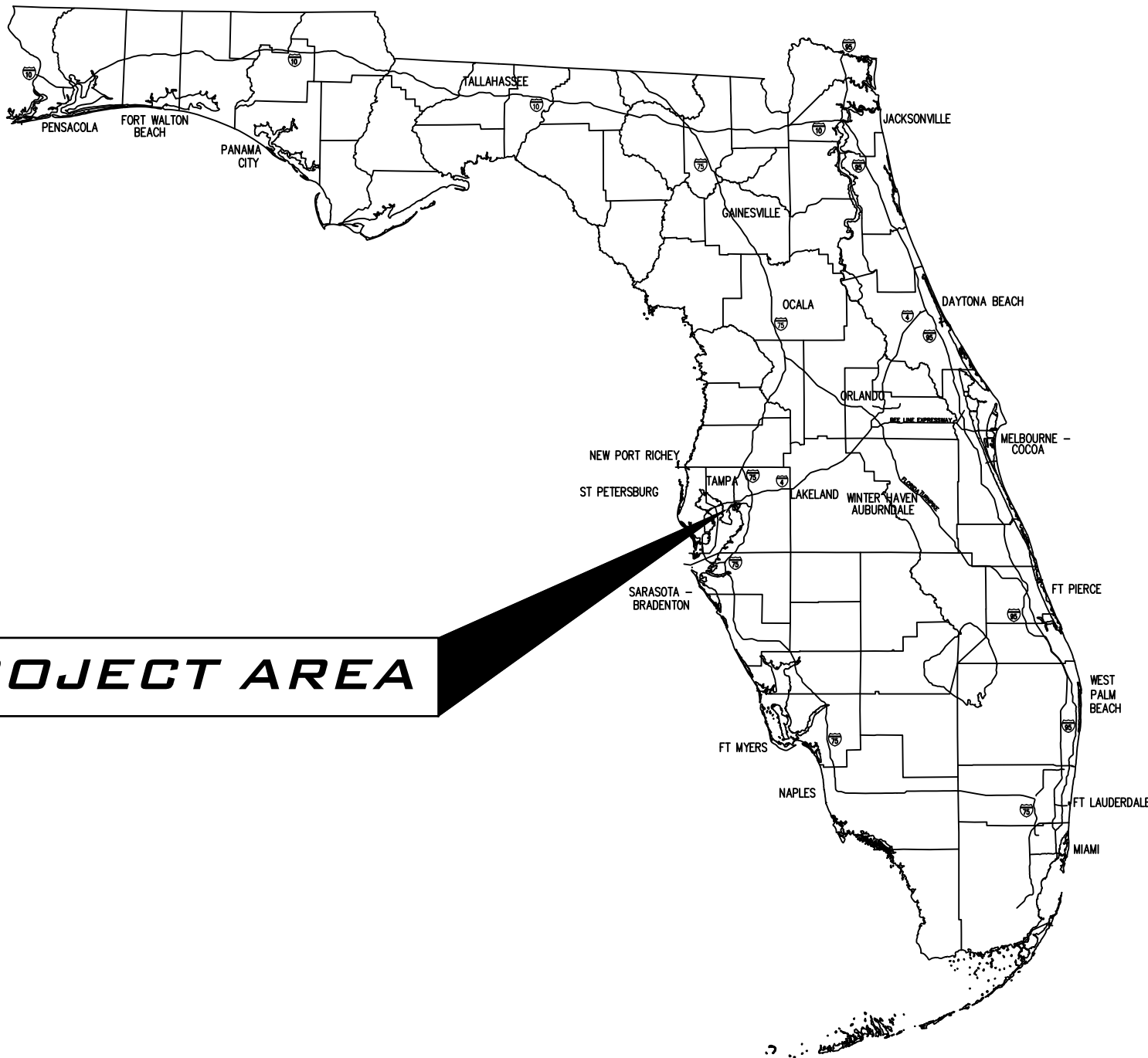
LATEST DATE

COVER SHEET		
AERIAL PHASING PLAN	G-1	8-1-2019
CONSTRUCTION NOTES AND TESTING SCHEDULE	G-2	8-1-2019
STORMWATER POLLUTION PREVENTION PLAN	G-3	8-1-2019
SITE PLAN LOWER LEVEL	C-1A	8-1-2019
SITE PLAN MAIN LEVEL	C-1B	8-1-2019
GRADING PLAN	C-2	8-1-2019
CLUBHOUSE RAMP GRADING PLAN	C-3	8-1-2019
STORMWATER PLAN	C-4	8-1-2019
CLUBHOUSE UNDERDRAIN PLAN	C-5	8-1-2019
CLUBHOUSE ROOF DRAIN PLAN	C-6	8-1-2019
PAVILION UNDERDRAIN PLAN	C-7	8-1-2019
UTILITY PLAN	C-8	8-1-2019
MISCELLANEOUS DETAILS	C-9	8-1-2019
WASTE WATER PUMP STATION PLAN	P-1	8-1-2019
WASTE WATER PUMP STATION DETAILS	P-2	8-1-2019
STORMWATER PUMP STATION PLAN AND DETAILS	P-3	8-1-2019

VICINITY MAP



LOCATION MAP



PROJECT AREA

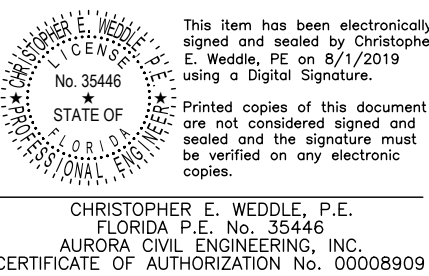
STORMWATER BASIN:
BELLEAIR CREEK / RATTLESNAKE CREEK
COMMUNITY NO. 12103C PANEL 0116 H
FLOOD ZONE: X EFFECTIVE DATE 5-17-2005

PREPARED BY



PREPARED FOR

HARROD PROPERTIES
5550 WEST EXECUTIVE DR - SUITE 550
TAMPA, FLORIDA 33609



PELICAN GOLF CLUB
PHASE II - CLUBHOUSE



PROJECT 18-174

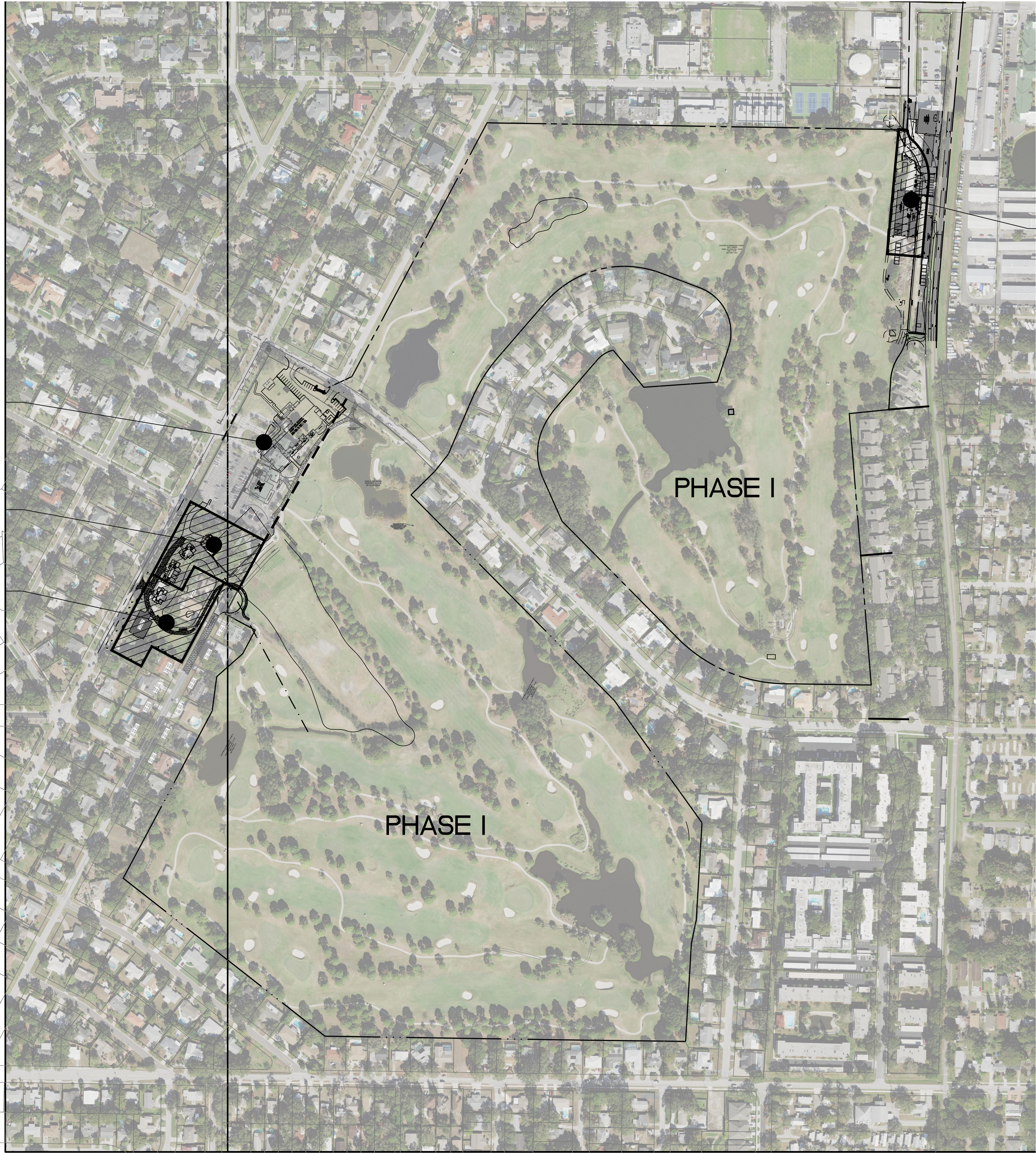
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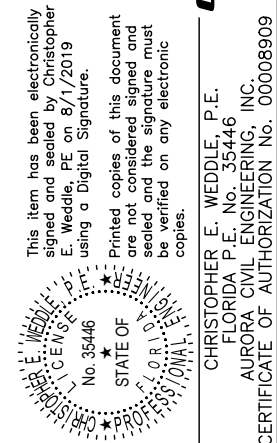
PHASE III
CLUBHOUSE

PHASE III
PERFORMANCE CENTER

PHASE IV
COTTAGES EXPANSION



PHASE III
MAINTENANCE AREA

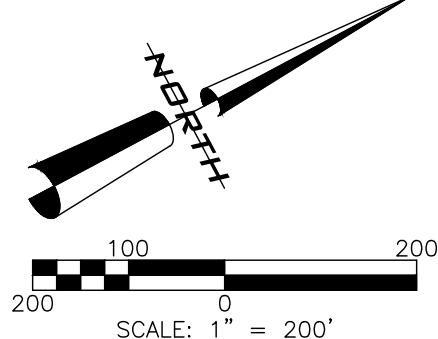


AUTORA
CIVIL ENGINEERING, INC.
610 E. Morgan Street Brandon, FL 33510 (813)643-9907

**PELICAN GOLF CLUB
CLUBHOUSE**
HARROD PROPERTIES, INC. - 550
5550 WEST EXECUTIVE DRIVE - 550
TAMPA, FLORIDA 33609

**AERIAL PHASING
PLAN**

REVISIONS		DATE	BY	DATE	DESCRIPTION
1	1	8-1-2019	Michael Knight	8-1-2019	Initial Design
2	1	8-1-2019	Michael Knight	8-1-2019	Final Design
3	1	8-1-2019	Michael Knight	8-1-2019	Final Design
4	1	8-1-2019	Michael Knight	8-1-2019	Final Design
5	1	8-1-2019	Michael Knight	8-1-2019	Final Design
6	1	8-1-2019	Michael Knight	8-1-2019	Final Design
7	1	8-1-2019	Michael Knight	8-1-2019	Final Design
8	1	8-1-2019	Michael Knight	8-1-2019	Final Design
9	1	8-1-2019	Michael Knight	8-1-2019	Final Design
10	1	8-1-2019	Michael Knight	8-1-2019	Final Design



I. MISCELLANEOUS

A. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES, THE ENGINEER, AND THE ARCHITECT. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.

B. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION.

C. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.

D. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR APPROVALS. FAILURE TO OBTAIN APPROVALS BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

E. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES.

F. THE WATER, SANITARY SEWER, AND STORM DRAINAGE FACILITIES ARE SUBJECT TO THE REVIEW AND APPROVAL AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE REQUIRED PERMITS TO PERFORM WORK IN THE PUBLIC RIGHTS-OF-WAYS.

G. IT WILL BE NECESSARY TO EXAMINE, COORDINATE AND ADJUST ACCORDING TO THE PROPOSED LOCATIONS OF THE VARIOUS COMPONENTS OF THE SITE UTILITIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT COORDINATION DRAWINGS SHOWING PIPE SIZES, STRUCTURES, AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING AND COORDINATION OF ALL THE UNDERGROUND WORK ASSOCIATED WITH THIS PROJECT.

II. SAFETY

A. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.

B. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED TO AND APPROVED BY CITY OF BELLEAIR PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.

C. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA.

D. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ITS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH ITS HEALTH AND SAFETY PROGRAM REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES, SUB CONTRACTORS, AND SUB CONTRACTORS EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. THE CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OSHA OR OCCUPATIONAL REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS.

THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST AS BASIC REQUIREMENTS.

E. ALL EXCAVATIONS BY THE THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.

F. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.

G. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.

H. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

I. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE ONE AT (800)-432-4770.

J. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.

K. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED AS REQUIRED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.

III. SITE PLAN AND COORDINATE CONTROL

A. ARCHITECTURAL BUILDING PLANS PREPARED BY: ELEVATION ARCHITECTURE

B. SITE PLAN PREPARED BY: AURORA CIVIL BASED ON CONCEPTUAL LAYOUT FURNISHED BY THE ARCHITECT.

C. STRUCTURAL AND MECHANICAL PLANS PREPARED BY: COLWILL ENGINEERING

D. ELECTRICAL PLANS PREPARED BY: COLWILL ENGINEERING

E. SUBSURFACE INVESTIGATION PREPARED BY: N/A

F. SURVEYS PREPARED BY:
FLORIDA DESIGN CONSULTANTS (2007)
GEODATA SERVICES, INC (2018-2019)
GEORGE A. SHIMP AND ASSOCIATES, INC. (2018)
DEUEL & ASSOCIATES (2019)

G. LANDSCAPE PLANS PREPARED BY: N/A

H. ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING.

I. MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT HIS OWN EXPENSE.

J. REFER TO THE GRADING SHEET AND/OR THE TOPOGRAPHIC SURVEYS FOR NOTES REGARDING THE BASIS OF VERTICAL DATUM.

K. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.

L. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION CERTIFIED BY A REGISTERED LAND SURVEYOR. THE "AS-BUILT" INFORMATION SHALL BE FURNISHED TO THE ENGINEER IN A LEGIBLE FORMAT MARKED ON FULL SIZE PRINTS OF THE APPROPRIATE PLAN SHEETS, OR IN A LEGIBLE FORMAT ON LETTER SIZE SKETCHES. THE ENGINEER MUST BE ABLE TO LOCATE AND COMPARE THIS INFORMATION ONTO THE ORIGINAL PLAN DOCUMENTS FOR SUBMITTAL TO THE APPROPRIATE AGENCIES FOR FINAL APPROVALS.

THE "AS-BUILT" INFORMATION SHALL CLEARLY AND ACCURATELY REPRESENT ALL CONSTRUCTED ITEMS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:

1. ELEVATIONS OF ALL STORM SEWER AND SANITARY SEWER STRUCTURE BOTTOMS, TOPS, AND INVERTS.

2. FIELD MEASURED LENGTHS OF PIPES FOR ALL INSTALLED UTILITIES, CONDUITS, SLEEVES, ETC.

3. LOCATIONS OF ALL STRUCTURES, PIPES, CONDUITS, SLEEVES, ETC.

4. CALCULATED SLOPE OF ALL SANITARY SEWER AND STORM SEWER LINES.

5. HORIZONTAL AND VERTICAL CONTROL OF ALL WATER MAIN FITTINGS AND APPURTENANCES, SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS AT ALL CROSSINGS, AND A MINIMUM OF EVERY 200 LINEAL FEET OF PIPE.

6. HORIZONTAL AND VERTICAL CONTROL OF ALL TOP OF BANKS, TOE OF SLOPES, ALL GRADE BREAKS, BUILDINGS, PONDS, DITCHES, BRIDGES, LITTORAL ZONES, ETC.

7. HORIZONTAL AND VERTICAL CONTROL ELEVATIONS OF ALL ELEMENTS OF SANITARY SEWER LIFT STATIONS INCLUDING TOP AND BOTTOM SLABS, INVERTS, ELEVATIONS AT WHICH THE FLOAT SWITCHES ENGAGE, ALL VALVES AND ASSOCIATED APPURTENANCES.

NO ENGINEER'S CERTIFICATE CAN BE SUBMITTED TO OBTAIN A CERTIFICATE OF OCCUPANCY UNTIL THE "AS-BUILT" INFORMATION IS RECEIVED, REVIEWED, AND APPROVED BY THE ENGINEER AND THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL ALLOW THE ENGINEER A MINIMUM OF FOUR WEEKS UPON RECEIPT TO COMPLETE THE REVIEW OF THE "AS-BUILT" INFORMATION AND COMPILE THE NECESSARY DRAWINGS FOR SUBMITTAL TO THE APPROPRIATE AGENCIES.

M. ALL DIMENSIONS SHOWN ON THE PLANS ARE TO FACE OF BUILDING, FACE OF CURBING, OR CENTERLINES OF STRUCTURES, UNLESS OTHERWISE NOTED ON THE PLANS.

IV. CLEARING / DEMOLITION

A. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN AS INDICATED ON THE CONSTRUCTION AND LANDSCAPE PLANS SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES AS WELL AS DETAILS AND NOTES PROVIDED IN THIS PLAN SET. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM CITY OF BELLEAIR.

B. THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING ACTUAL CONSTRUCTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. COPIES OF THE SOILS REPORT ARE AVAILABLE THROUGH THE OWNER. QUESTIONS REGARDING SITE PREPARATION REQUIREMENTS DESCRIBED IN THE SOILS REPORT ARE TO BE DIRECTED TO THE SOILS TESTING COMPANY.

C. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIALS IMMEDIATELY FOLLOWING CONSTRUCTION.

D. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS, OR AS DIRECTED BY THE OWNER.

V. PAVING AND GRADING

A. ALL DELETERIOUS SUBSURFACE MATERIAL, (I.E. MUCK, PEAT, BURIED DEBRIS), IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR THE OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY OWNER. EXCAVATED AREAS TO BE BACKFILLED WITH APPROPRIATE MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

C. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOIL REPORT.

D. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES UNLESS OTHERWISE NOTED ON PLANS. FINISHED GRADES OR CONTOURS IN SODDED AREAS REPRESENT FINISH GRADES AFTER PLACEMENT OF SOD.

E. THE CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

F. CURBING WILL BE PLACED AT THE EDGE OF ALL PAVEMENT, WHERE SHOWN ON THE PLANS.

G. REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. CURBING AND GUTTERS CALLED FOR IN THESE PLANS. REFER TO DETAILS IN THESE PLANS FOR MODIFIED CURB DETAILS.

H. CONTRACTOR TO PROVIDE 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS, (BUILDINGS, OTHER PLACED CONCRETE, ETC...).

I. ALL PAVEMENT MARKINGS WITHIN RIGHT-OF-WAY SHALL BE MADE WITH PERMANENT THERMOPLASTIC AND SHALL CONFORM TO F.D.O.T. STANDARD INDEX NO. 17346, SHEETS 1-7. PARKING STALL STRIPING TO BE 4" WIDE PAINTED STRIPES. ON-SITE STRIPING COLORS AS SHOWN ON THESE PLANS.

J. CONTRACTOR IS TO PROVIDE EROSION CONTROL AND SEDIMENT BARRIERS, (HAY BALES AND/OR SILTATION CURTAIN), TO PREVENT SILTATION OF ADJACENT PROPERTIES, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH, OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.

K. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREAS USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.

L. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. THE CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER.

M. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE SOILS TESTING. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING SCHEDULE LOCATED ON TAB SC-1 ON THIS SHEET. UPON COMPLETION OF THE WORK, THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

N. A QUALIFIED TESTING LABORATORY SELECTED BY THE OWNER SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS AND THE VARIOUS AGENCIES. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING ALL TESTING.

O. MIXING IN PLACE OF SOIL CEMENT WILL NOT BE ALLOWED.

VI. DRAINAGE

A. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS".

B. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III, (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS.

C. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO THE CENTER OF DRAINAGE STRUCTURES WITH THE EXCEPTION OF MITERED AND FLARED END SECTIONS WHICH ARE NOT INCLUDED IN LENGTHS. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES SUBMITTED FOR BID.

D. ALL DRAINAGE STRUCTURE GRATES AND COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS.

E. ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CITY OF BELLEAIR 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS.

F. THE CONTRACTOR SHALL MAINTAIN AND PROTECT THE STORM DRAINAGE SYSTEM APPURTENANCES, SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.

VII. SANITARY SEWER

A. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDER WATER MAINS. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.

WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS ABOVE.

B. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM THE JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

C. ALL SANITARY SEWER MAINS, LATERALS, AND FORCE MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.

D. ALL ON SITE PVC GRAVITY SANITARY SEWER PIPE SHALL BE MADE OF MATERIAL HAVING A CELL CLASSIFICATION OF 12454 B, 12454 C, OR 13354 B AS DEFINED IN ASTM-1784 AND CONFORM TO THE REQUIREMENTS OF SDR 26. ELASTOMERIC GASKET JOINTS SHALL BE UTILIZED.

E. ALL ON SITE DUCTILE IRON PIPE SHALL BE CLASS 52 AND SHALL RECEIVE INTERIOR AND EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.6, A 21.8, OR A 21.51.

F. POINTS OF CONNECTION FOR THE SANITARY SEWER LINES ARE TO BE COORDINATED WITH THE BUILDING PLUMBING PLANS. SANITARY SEWER CONNECTION LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE.

G. ALL SANITARY SEWER WORK SHALL CONFORM WITH APPLICABLE STANDARDS AND SPECIFICATIONS FOR PINELLAS COUNTY.

H. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW SANITARY SEWER LINES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES NEAR THE POINT OF CONNECTION AND NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES WITH DESIGN INFORMATION SHOWN IN THESE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE TOWN OF BELLEAIR AT LEAST 48 HOURS IN ADVANCE OF SCHEDULED WORK.

I. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VIDEO AND VISUAL INSPECTION BY THE OWNER'S ENGINEER AND THE TOWN OF BELLEAIR PRIOR TO PLACEMENT OF BASE AND PAVING AND AGAIN PRIOR TO OBTAINING CERTIFICATE OF OCCUPANCY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS.

J. THE CONTRACTOR SHALL PERFORM AT HIS OWN EXPENSE AN INFILTRATION OR EXFILTRATION TEST. A TELEVISION INSPECTION AND A MANDREL (CO. NO. 20) TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE ENGINEER'S REQUIREMENTS AND THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION OF TESTING AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

VIII. WATER DISTRIBUTION

A. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS A UNDER WATER MAINS. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.

WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS ABOVE.

B. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM THE JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

C. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.

D. ALL WATER SYSTEM WORK SHALL CONFORM WITH THE REQUIREMENTS OF PINELLAS COUNTY STANDARDS AND SPECIFICATIONS & THE TOWN OF BELLEAIR.

E. CONFLICTS BETWEEN WATER AND STORM OR SANITARY SEWER ARE TO BE RESOLVED BY ADJUSTING THE WATER LINES AS NECESSARY.

F. ALL ON SITE PVC WATER MAINS 4 INCHES THROUGH 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-900 AND SHALL BE CLASS 200 DR 14. ALL ON SITE PVC WATER MAINS 2 INCHES TO 3 INCHES SHALL BE CLASS 200 AND MEET REQUIREMENTS OF SDR 21 IN ACCORDANCE WITH ASTM D-2241.

G. ALL DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI STANDARD A21.51, MINIMUM CLASS 50. JOINTS FOR DUCTILE IRON PIPE SHALL BE MECHANICAL OR PUSH-ON JOINTS. PIPE SHALL HAVE AN EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A21.51. PIPE INTERIOR SHALL HAVE A CEMENT MORTAR LINING WITH AN ASPHALTIC SEAL COAT CONFORMING TO AWWA /ANSI C104/A21.4. THE WEIGHT AND CLASS DESIGNATION SHALL BE PAINTED IN WHITE ON THE EXTERIOR SURFACE OF ALL PIPES AND FITTINGS. MANUFACTURER'S CODE OR SERIAL NUMBER SHALL BE PROVIDED ON THE BELL OF EACH PIPE JOINT.

H. ALL DUCTILE FITTINGS SHALL BE MECHANICAL JOINT WITH A MINIMUM PRESSURE RATING OF 250 PSI AND SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA A21.10/C110. ALL FITTINGS SHALL BE COATED AND LINED AS SPECIFIED ABOVE FOR DUCTILE IRON PIPE.

I. THE CONTRACTOR IS TO INSTALL TEMPORARY BLOWOFFS AT THE END OF WATER SERVICE LATERALS TO BUILDINGS TO ASSURE ADEQUATE FLUSHING AND DISINFECTION.

J. THRUST BLOCKING SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS AS SHOWN ON DETAILS. ALL JOINTS SHALL BE RESTRAINT JOINT FITTINGS.

K. POINTS OF CONNECTION OF THE EXTERNAL WATER LINES ARE TO COINCIDE WITH THE BUILDING PLUMBING AS SHOWN ON THE BUILDING PLUMBING PLANS. CONNECTION LOCATIONS SHOWN ARE APPROXIMATE.

L. FIRE LINES TO BUILDINGS WITH FIRE SPRINKLER SYSTEMS SHALL BE INSTALLED BY A CONTRACTOR DULY LICENSED BY THE STATE FIRE MARSHAL'S OFFICE. THE CONTRACTOR SHALL VERIFY REQUIREMENTS PRIOR TO CONSTRUCTION.

M. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY INSPECTED AND ACCEPTED BY THE OWNER'S ENGINEER AND THE TOWN OF BELLEAIR UTILITY DEPARTMENT SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER AND PINELLAS COUNTY INSPECTORS 72 HOURS IN ADVANCE OF PERFORMING TESTS.

N. THE CONTRACTOR SHALL CONTRACT WITH A QUALIFIED LABORATORY TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING. COPIES OF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO THE OWNER'S ENGINEER.

O. WATER MAIN SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE BURIED OVER THE WATER MAIN.

IX. EROSION/TURBIDITY CONTROL

A. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.

B. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHALL BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORMWATER RUNOFF FROM BEING DISCHARGED INTO WETLAND OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.

C. CONSTRUCTION OPERATIONS IN OR ADJACENT TO WETLANDS SHALL BE RESTRICTED TO THOSE AREAS IDENTIFIED IN THE PLANS AND IN THE SPECIFICATIONS.

SC-1 TESTING SCHEDULE

ITEM	TEST	TEST FREQUENCY
BUILDING PADS	IN ACCORDANCE WITH GEOTECHNICAL REPORT	
EMBANKMENT	OPTIMUM MOISTURE/MAXIMUM DENSITY 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)	PER SOIL TYPE ONE PER 500 FEET HORIZONTALLY, IN 12 INCH LIFTS
UTILITY TRENCH BACKFILL OVER PIPELINES AND AROUND STRUCTURES WITHIN THE RIGHT-OF-WAY AND IN STRUCTURAL AREAS	OPTIMUM MOISTURE/MAXIMUM DENSITY 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)	PER SOIL TYPE *, **
UTILITY TRENCH BACKFILL OVER PIPELINES OUTSIDE THE RIGHT-OF-WAY AND IN NON-STRUCTURAL AREAS	OPTIMUM MOISTURE/MAXIMUM DENSITY 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)	PER SOIL TYPE *, **
STABILIZED SUBGRADE	OPTIMUM MOISTURE/MAXIMUM DENSITY MINIMUM LBR 40 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)	PER MATERIAL TYPE *** PER MATERIAL TYPE ***
BASE (OTHER THAN SOIL CEMENT)	OPTIMUM MOISTURE/MAXIMUM DENSITY MINIMUM LBR 100 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70) - NO TOLERANCE GRADATION, ATTERBURG LIMITS	PER SOURCE PER SOURCE *** EACH LIFT
CONCRETE	SLUMP TEST COMPRESSIVE STRENGTH CYLINDERS AIR CONTENT	ONE PER SET OF CYLINDERS ONE SET OF (3) CYLINDERS FOR 100 CUBIC YARDS OR FRACTION THEREOF ONE PER SET OF CYLINDERS
SOIL CEMENT BASE (NO IN-PLACE MIXING ALLOWED) (TO BE USED IF SEPARATION BETWEEN SHWT & BOTTOM OF BASE IS < 1,5')	MIX DESIGN/PER SPECIFICATIONS AS DETERMINED BY PORTLAND CEMENT ASSOCIATION SPECIFICATIONS MAXIMUM DENSITY AS DETERMINED BY AASHTO T134 OPTIMUM MOISTURE (STANDARD) COMPRESSIVE STRENGTH SPECIMENS AS DETERMINED BY PORTLAND CEMENT ASSOCIATION SPECIFICATIONS - 300 PSI @ 7 DAYS, TYPE DAILY **** TEST CORES AS DETERMINED BY PORTLAND CEMENT ASSOCIATION SPECIFICATIONS - 400 PSI @ 21 DAYS, SET OF COMPRESSIVE **** FIELD DENSITY AND THICKNESS 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T192,T238,ASTM D1556, D2922	ONE PER SOIL TYPE ONE PER SOIL TYPE DAILY ONE SET OF (3) PER SOIL TYPE DAILY ONE SET OF (3) CORES PER TEST STRENGTH SPECIMENS ONE PER 2500 SF HORIZONTAL
ASPHALTIC CONCRETE	AGGREGATE ANALYSIS DESIGN MIX BITUMEN CONTENT GRADATION STABILITY FLOW PROPERTIES OF IN-PLACE MATERIALS (MARSHALL) THICKNESS 95% OF LAB DENSITY	ONE PER DESIGN ONE PER TYPE ONE PER DAY ONE PER DAY ONE PER DAY ***

* TESTS SHALL BE LOCATED NO MORE THAN 500 FEET APART. TESTS SHALL BE PERFORMED ON EACH LIFT, EXCEPT THAT TESTS SHALL NOT BE FURTHER APART THAN ONE (1) FOOT VERTICALLY. FIELD DENSITIES SHALL BE TAKEN OVER ALL ROAD CROSSINGS. FIELD DENSITIES FOR SANITARY LINES SHALL BE STAGGERED TO INCLUDE RESULTS OVER SERVICE LATERALS. THERE SHALL BE A MINIMUM OF ONE (1) TEST SERIES FOR EACH 12 INCHES OF LIFT OVER PIPELINE BETWEEN MANHOLES. TESTS AROUND STRUCTURES SHALL BE SPIRALED IN 12 INCH LIFTS.

** FOR FLEXIBLE PIPE, (CORRUGATED STEEL, HDPE OR ALUMINUM), 95% OF MAXIMUM DENSITY (AASHTO-T99) PER F.D.O.T. SUPPLEMENTAL SPECIFICATIONS SUBARTICLE 125-8.3.2 MODIFIED.

*** TESTS SHALL BE LOCATED NO MORE THAN 500 FEET APART. THERE SHALL BE NO LESS THAN ONE (1) TEST PER STREET.

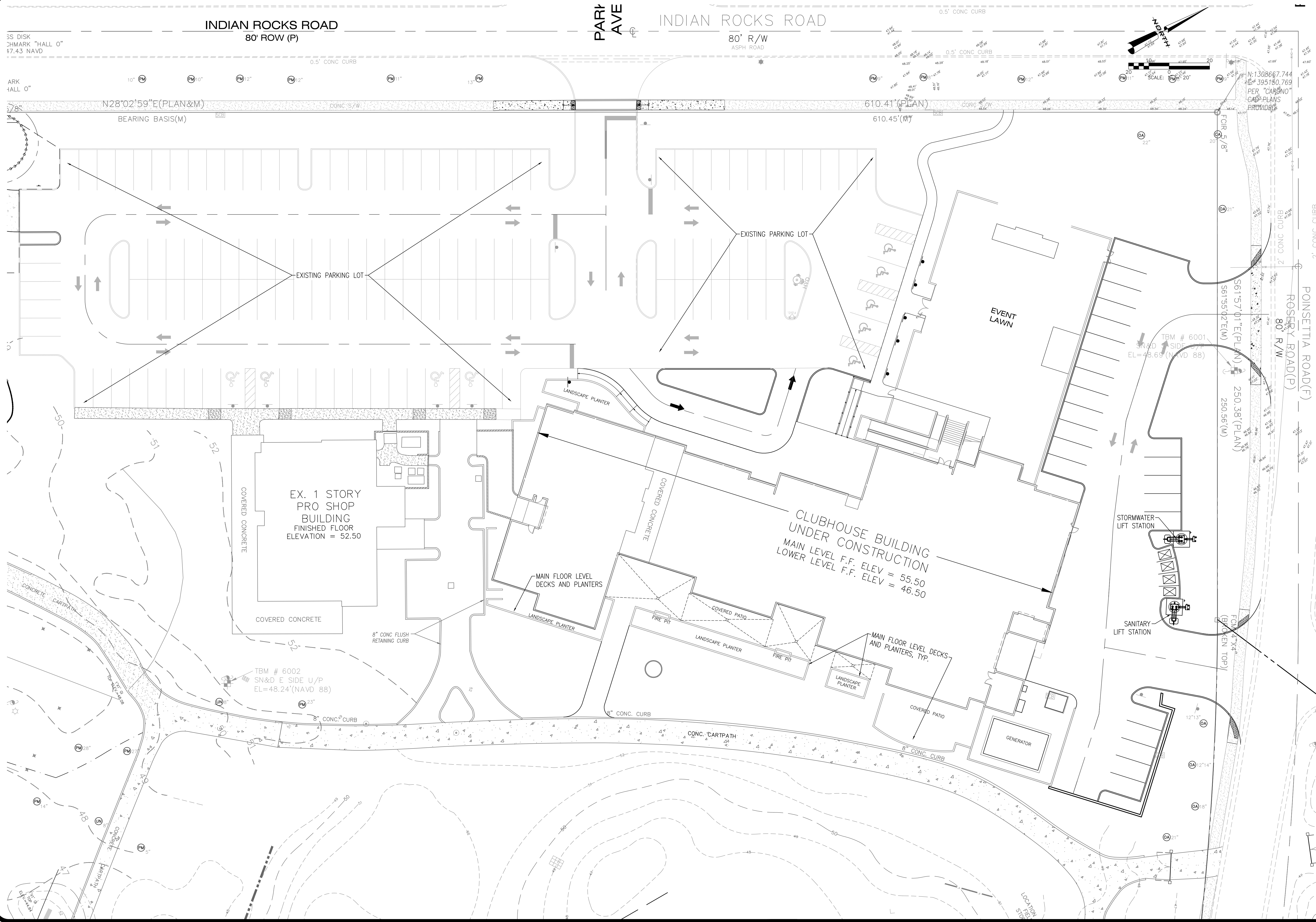
**** MAXIMUM STRENGTH LIMITS, AS ESTABLISHED BY THE SOILS TESTING COMPANY, SHALL NOT BE EXCEEDED.

D. ROUTINE AS NECESSARY FOR CONSTRUCTION, EXCAVATED MATERIAL SHALL NOT BE DEPOSITED IN THE WETLANDS OR IN A POSITION CLOSE ENOUGH THERETO TO BE WASHED AWAY BY HIGH WATER OR RUNOFF.

E. WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATERS FROM CONSTRUCTION AREAS, THE WATER SHALL BE TREATED PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE AND ARE NOT LIMITED TO: TURBID WATER BEING PUMPED INTO GRASSY SWALES OR APPROPRIATE VEGETATED AREAS, SEDIMENT BASINS, OR CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.

F. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSED, UNCOMPLETED CONSTRUCTION TO THE ELEMENTS SHALL BE AS

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REVISIONS		DATE	BY	CHKD	DESCRIPTION
1		8-1-2019	Michael Knight		Initial Design
2		8-1-2019	Michael Knight		Revised Design
3		8-1-2019	Michael Knight		Final Design

SITE PLAN LOWER LEVEL

PELICAN GOLF CLUB
CLUBHOUSE
HARROD PROPERTIES, INC.
5550 WEST EXECUTIVE DRIVE - 550
TAMPA, FLORIDA 33609

AUTRORA
CIVIL ENGINEERING, INC.
610 E. Morgan Street Brandon, FL 33510 (813)643-9807
This plan was prepared, checked, and sealed by Christopher Knight, a Professional Engineer, License No. 13086, State of Florida. It is to be used in accordance with the Florida Engineering Code of Ethics and the Florida Engineering Board of Regulations. No other person shall be permitted to use this plan without the written consent of Autrora Civil Engineering, Inc.

EX. 1 STORY
PRO SHOP
BUILDING
FINISHED FLOOR
ELEVATION = 52.50

TRANSFORMER
GENERATOR
EX. MASONRY WALL, TYP
A/C
A/C
A/C
REFRIGERATION
EX. SANITARY
EX. S/W RAMP
EX. 5.5' CONC SIDEWALK
EX. PAVERS
EX. 8" MASONRY WALL, TYP
LANDSCAPE PLANTER
YARD DRAIN, SEE SHEET C-4 FOR DETAILS
TOW 56.83 INCLUDING 4" CONCRETE CAP
STORM SEWER LOCATION PER FIELD DISCUSSION, CONTRACTOR TO FIELD VERIFY
TRENCH DRAIN, SEE SHEET C-4 FOR DETAILS
DRAIN PIPE, SEE SHEET C-4 FOR DETAILS
EX. GRATE INLET TOP EL=50.91
NOTE: NO STRUCTURE WAS INSTALLED
MATCH ±53.0
MATCH ±52.5
SCALE: 1" = 5'

[illegible]

**PELICAN GOLF CLUB
CLUBHOUSE**
HARROD PROPERTIES, INC.
5550 WEST EXECUTIVE DRIVE - 550
TAMPA, FLORIDA 33609

[illegible]

ST-15
TYPE C DBI
FDOT INDEX 201, 232
GRATE EL 49.45
INV 46.0 (NE)

~~ST-9 (NOT BUILT)
MANHOLE
RIM EL 51.0
INV 47.00 (N)
INV 46.00 (NW)
INV 46.00 (NE)~~

ST-9A
MINI C DBI
GRATE EL 50.80
GOLD BALL PROOF
INV 47.00 (NW)
INV 47.00 (NE)

ST-17
TYPE C DBI
FDOT INDEX 201, 232
GRATE EL 50.08
INV 45.70 (SW)
INV 45.70 (SE)
INV 45.20 (NE)

ST-11
TYPE C DBI
FDOT INDEX 201, 232
GRATE EL 50.07
INV 44.80 (SW)
INV 44.80 (NE)
INV 47.50 (NW (12" PVC)
INV 47.8 (SE) (8" RD)

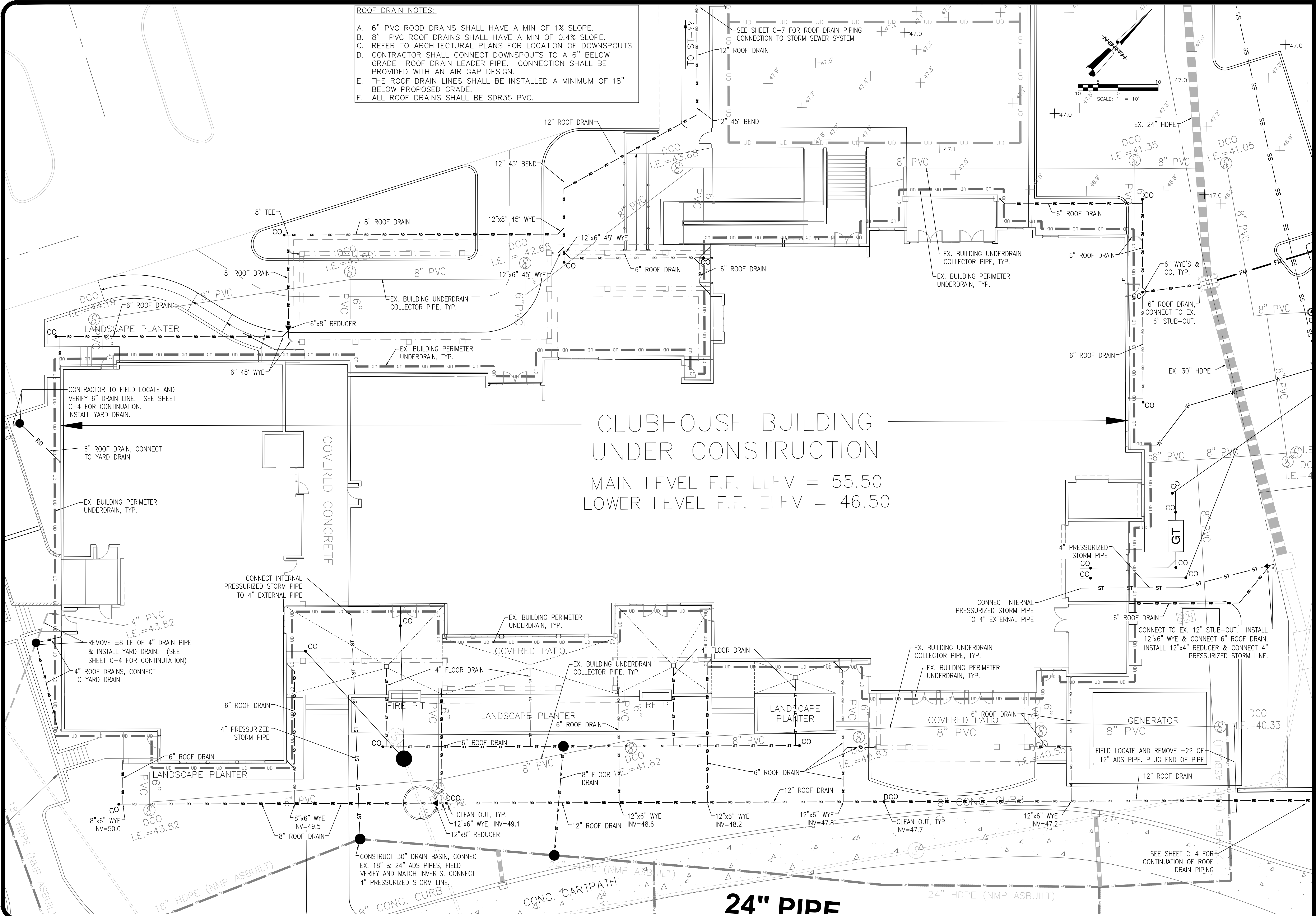




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ROOF DRAIN NOTES:

- 6" PVC ROOF DRAINS SHALL HAVE A MIN OF 1% SLOPE.
- 8" PVC ROOF DRAINS SHALL HAVE A MIN OF 0.4% SLOPE.
- REFER TO ARCHITECTURAL PLANS FOR LOCATION OF DOWNSPOUTS.
- CONTRACTOR SHALL CONNECT DOWNSPOUTS TO A 6" BELOW GRADE ROOF DRAIN LEADER PIPE. CONNECTION SHALL BE PROVIDED WITH AN AIR GAP DESIGN.
- THE ROOF DRAIN LINES SHALL BE INSTALLED A MINIMUM OF 18" BELOW PROPOSED GRADE.
- ALL ROOF DRAINS SHALL BE SDR35 PVC.



CLUBHOUSE ROOF
DRAIN PLAN

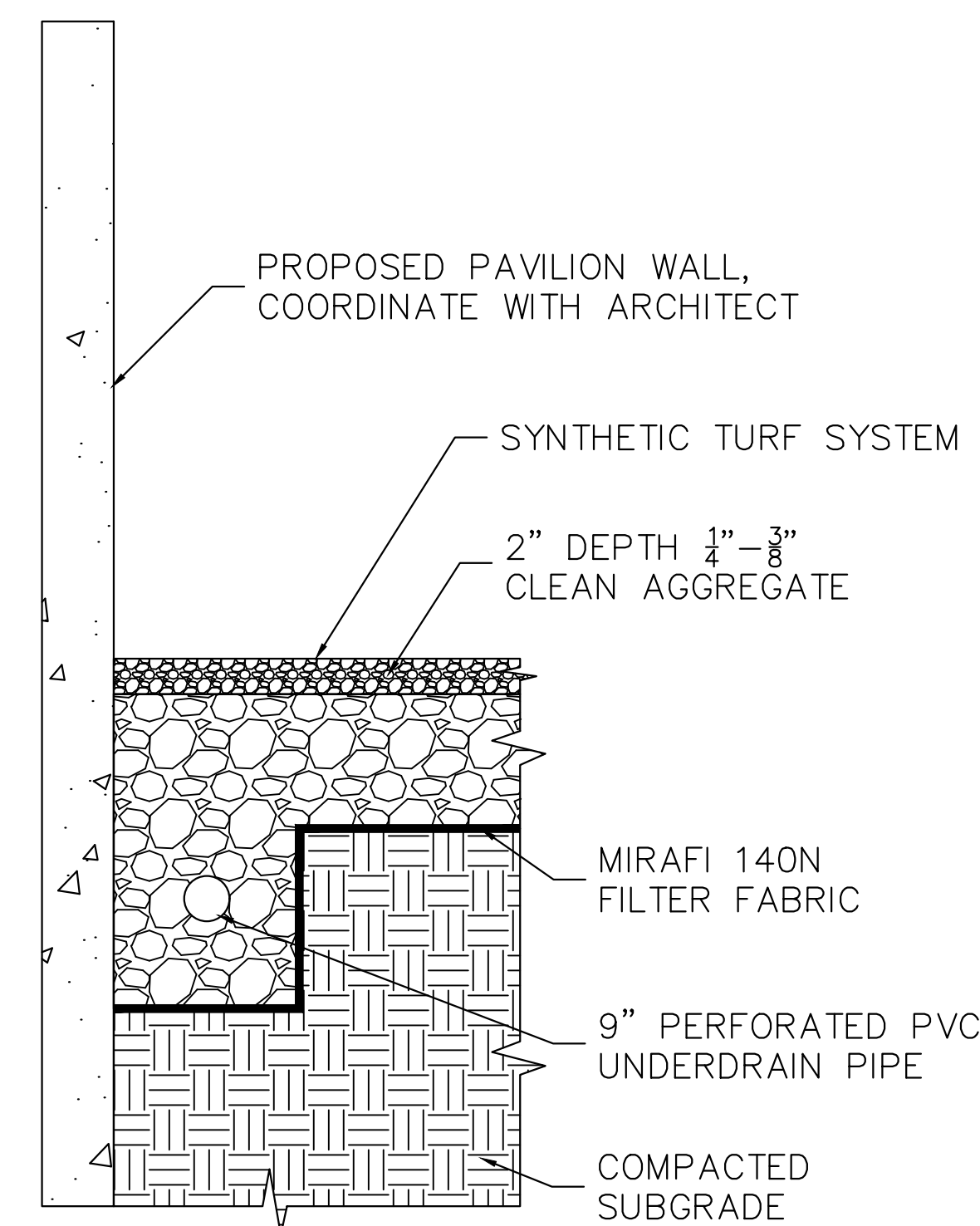
PELICAN GOLF CLUB
CLUBHOUSE

HARROD PROPERTIES, INC.
5550 WEST EXECUTIVE DRIVE - 550
TAMPA, FLORIDA 33608

AUTORA
ENGINEERING, INC.
610 E. Morgan Street Brandon, FL 33510 (813)643-9807

This plan was prepared, checked and sealed by a Professional Engineer, State of Florida, License No. 134146, using the metric system. It is hereby certified that the design was prepared by the engineer or under his direct supervision and control.

C-6

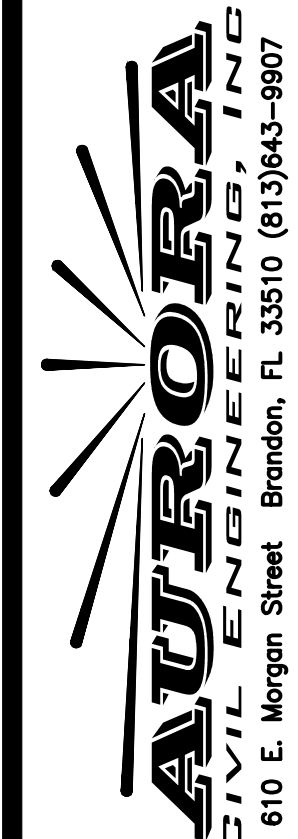


EVENT LAWN UNDERDRAIN DETAIL
NOT TO SCALE

[illegible]

PAVILION UNDERDRAIN PLAN

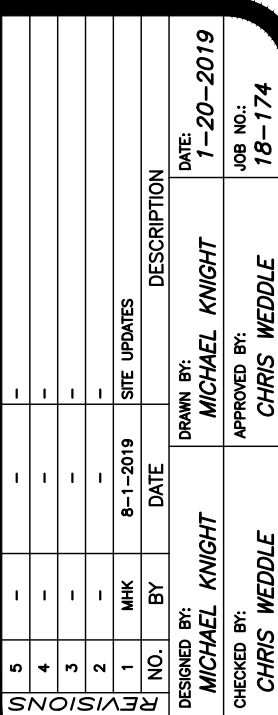
**PELICAN GOLF CLUB
CLUBHOUSE**
HARROD PROPERTIES, INC.
5550 WEST EXECUTIVE DRIVE - 550
TEMPA, FLORIDA 33609



This item has been electronically signed and sealed by Christopher E. Weddle, PE on 8/1/2019 using a Digital Signature.

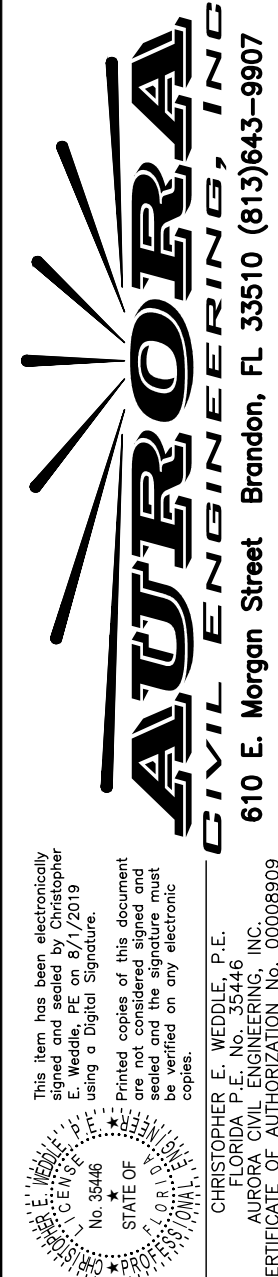
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CHRISTOPHER E. WEDDLE, P.E.
AUXPOX CIVIL ENGINEERING, INC.
CERTIFICATE OF AUTHORIZATION NO. 000019009

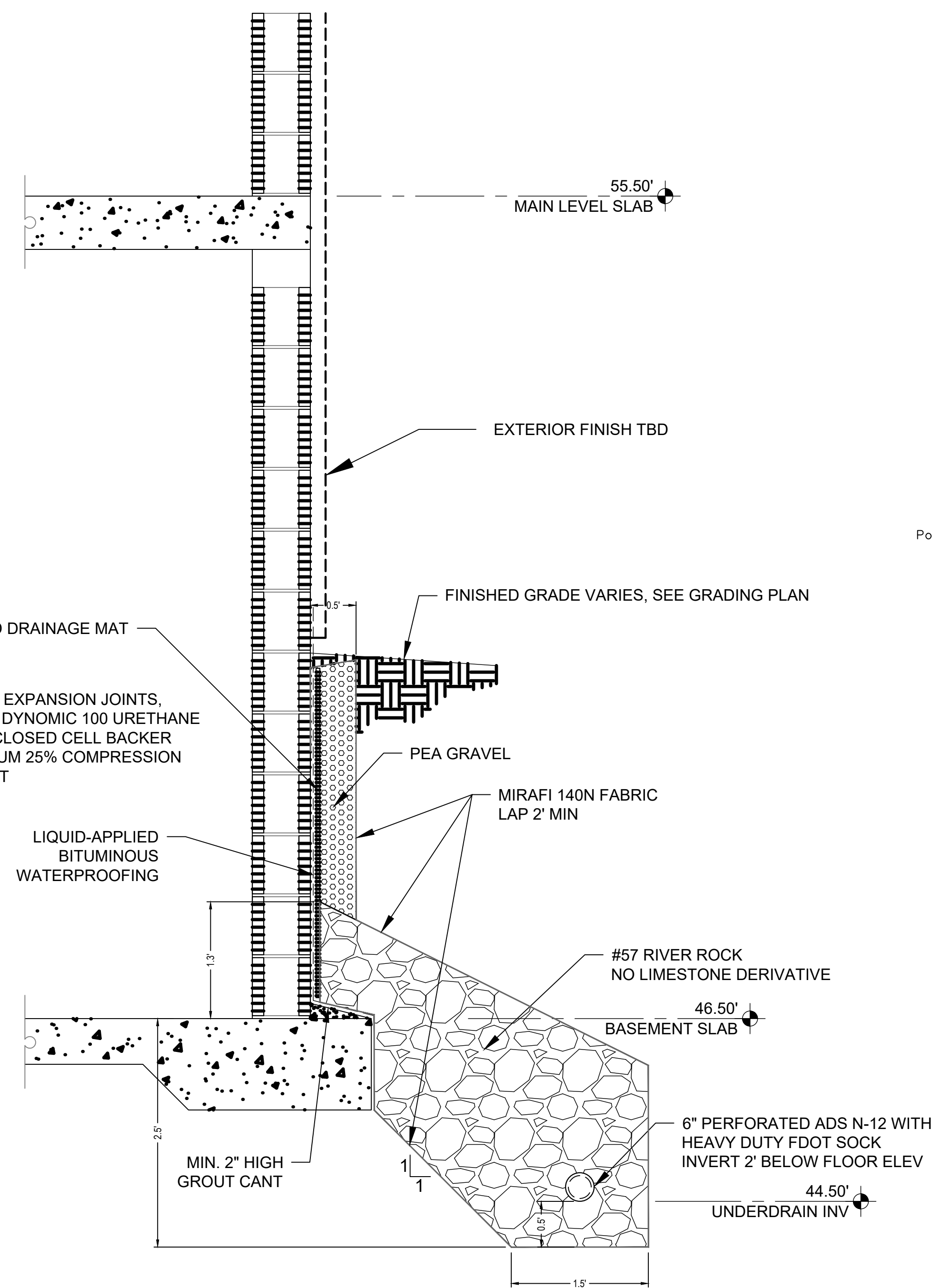


**PELICAN GOLF CLUB
CLUBHOUSE**

HARROD PROPERTIES, INC.
5550 WEST EXECUTIVE DRIVE - 550
TAMPA, FLORIDA 33609

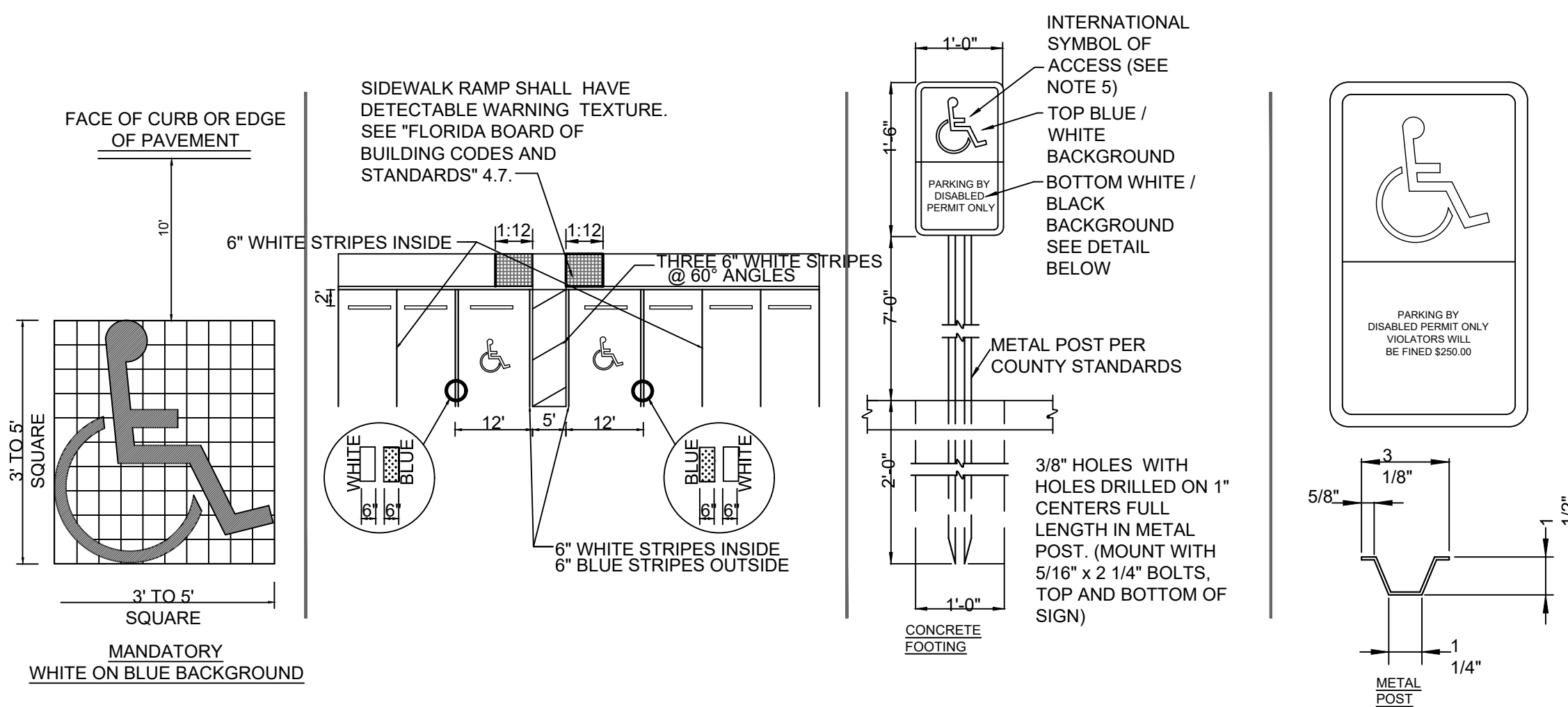


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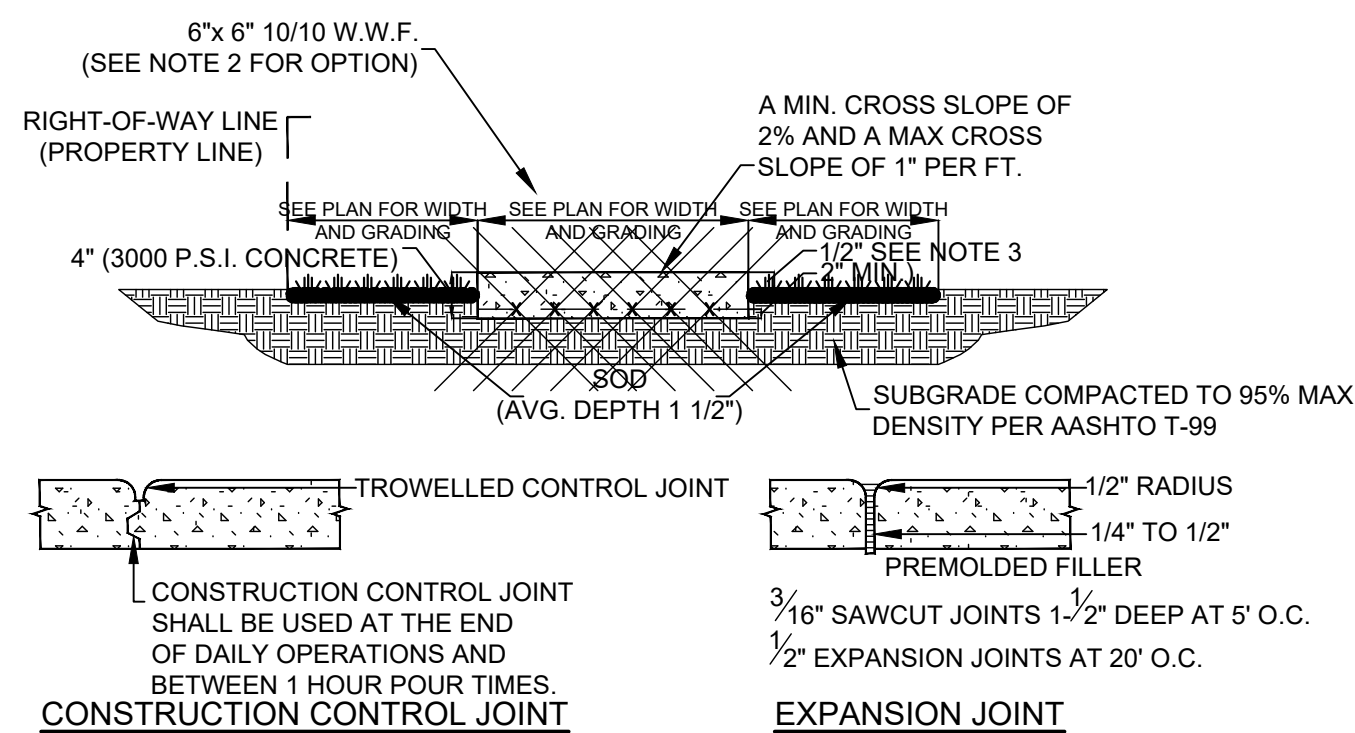


NOTE: VERTICAL EXCAVATION AT FOOTING TO SHALL BE LIMITED TO 25' OPEN AT ANY TIME

BUILDING PERIMETER UNDERDRAIN
NOT TO SCALE

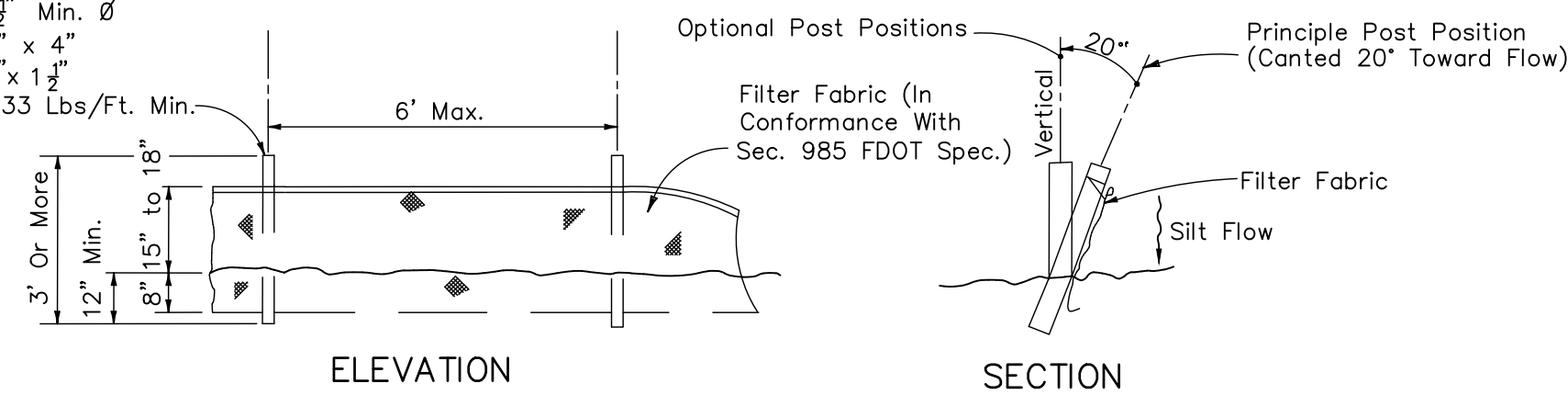


HANDICAP SIGNAGE DETAIL PER FDOT INDEX 17346 & 17355
NOT TO SCALE



TYPICAL SIDEWALK AND CONTROL JOINT DETAIL
NOT TO SCALE

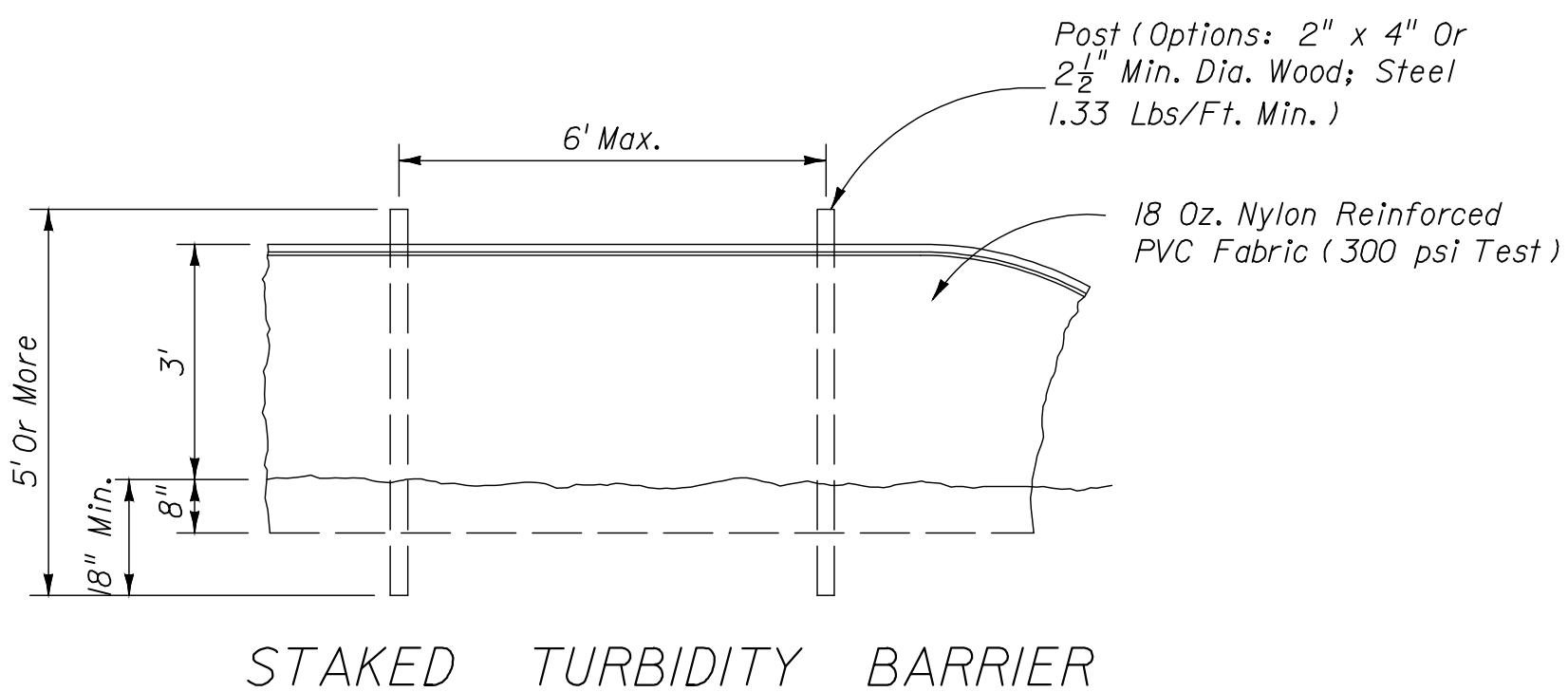
Post Options: Wood 2½" Min. Ø
Wood 2" x 4"
Oak 1½" x 1½"
Steel 1.33 Lbs/Ft. Min.~



NOTE:
ALL EROSION CONTROL SHALL BE INSTALLED IN ACCORDANCE
WITH F.D.O.T. INDEX NO.'S 102 AND 103. INSTALLATION IS
REQUIRED PRIOR TO COMMENCING CONSTRUCTION AND THE
CONTRACTOR IS RESPONSIBLE FOR THE MONITORING AND
MAINTENANCE OF EROSION CONTROL THROUGHOUT CONSTRUCTION.

TYPE III SILT FENCE

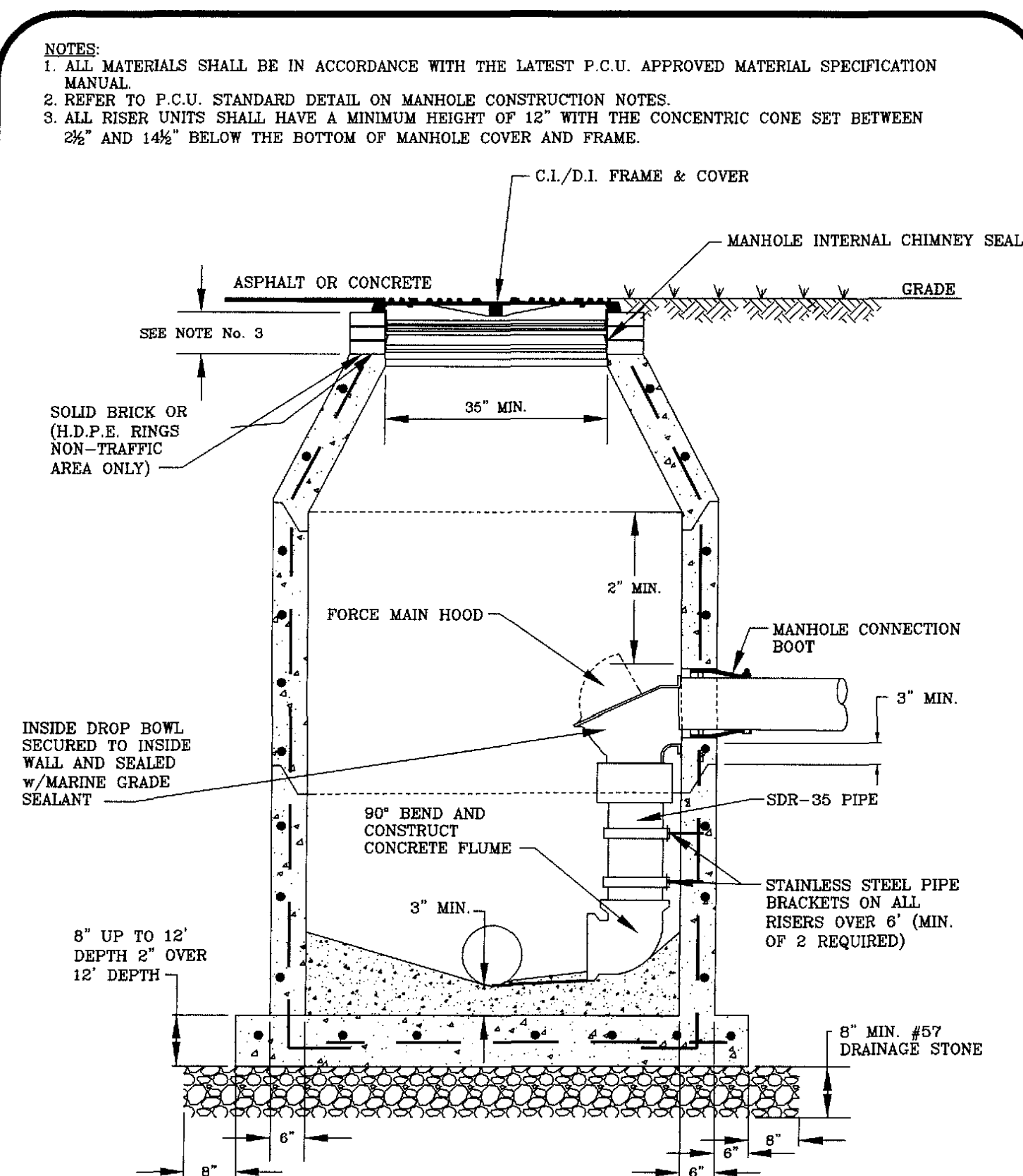
FDOT INDEX No. 102



STAKED TURBIDITY BARRIER

NOTES:

1. EXPANSION JOINT
NEEDED EVERY 50'
TROWELLED CONTROL
JOINT
2. IN LIEU OF WIRE WOVEN
FABRIC CONTRACTOR MAY
USE CONCRETE
REINFORCED WITH
FIBERGLASS AS AN
ACCEPTABLE ALTERNATE.
3. A SPECIAL ATTENTION
SHALL BE GIVEN TO THE
GRADED SOD
PLACEMENT TRENCH. THE
GRADING BY THE
CONTRACTOR SHALL
PROVIDE A 1/2" DROP FROM
THE SIDEWALK TO THE TOP
OF THE SOD.

**PINELLAS COUNTY**

INSIDE DROP MANHOLE CONNECTION DETAIL

DETAIL INDEX I.D.:	
PCU SD 1b	
DATE:	FEB/2016
KEVIN BECOTTE, P.E.	
<i>Kevin Becotte</i>	
REVISION:	

NO.	BY	DATE	DESCRIPTION
5	=	=	
4	=	=	
3	=	=	
2	=	=	
1	MARK	8-1-2019	SITE UPDATES

DESIGNED BY: **MICHAEL KNIGHT**

CHECKED BY: **CHRIS WEDDE**

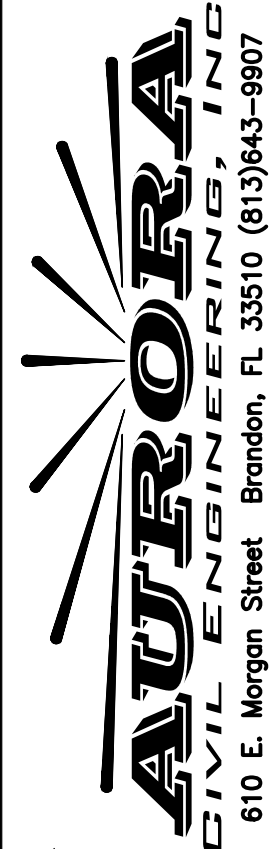
DATE: **1-20-2019**

JOB NO.: **19-174**

MISCELLANEOUS DETAILS

**PELICAN GOLF CLUB
CLUBHOUSE**
HARROD PROPERTIES, INC.

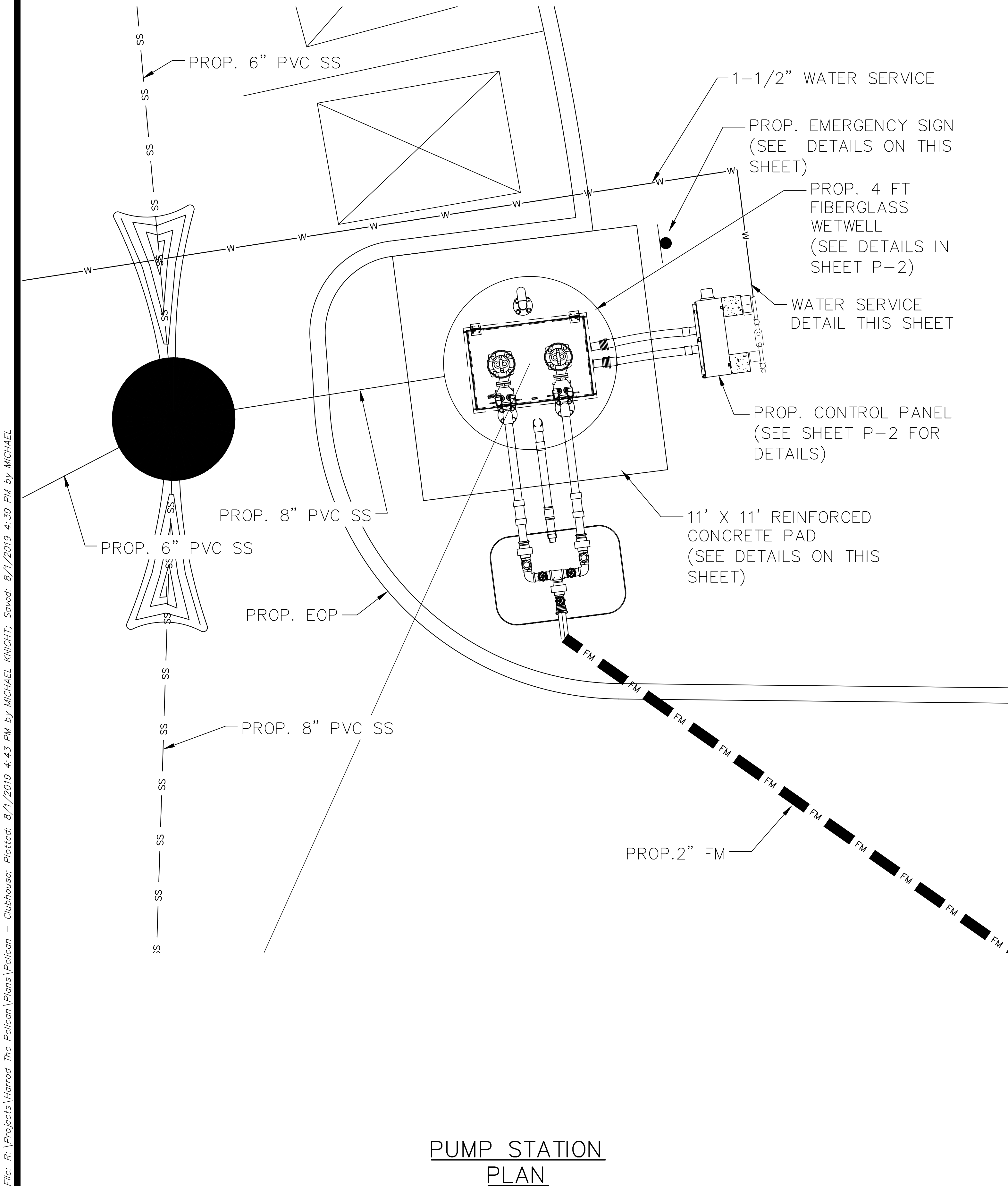
5550 WEST EXECUTIVE DRIVE - 550
TAMPA, FLORIDA 33609



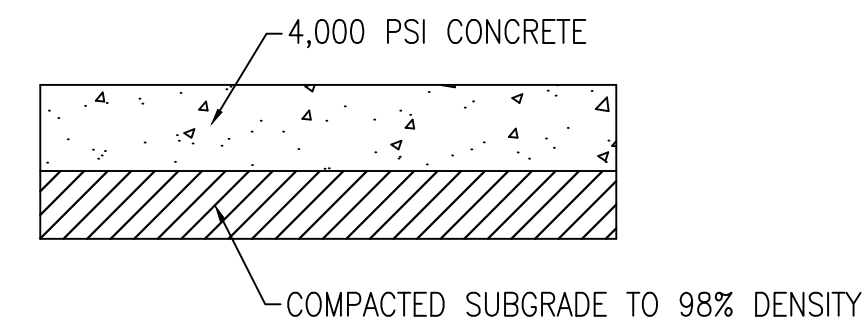
This item has been electronically signed and sealed by Christopher E. Weddle, PE on 8/1/2019 using a Digital Signature.

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CHRISTOPHER E. WEDDLE, P.E.
FLORIDA P.E. NO. 35446
AURORA CIVIL ENGINEERING, INC.
CERTIFICATE OF AUTHORIZATION NO. 00008909



PUMP STATION PLAN

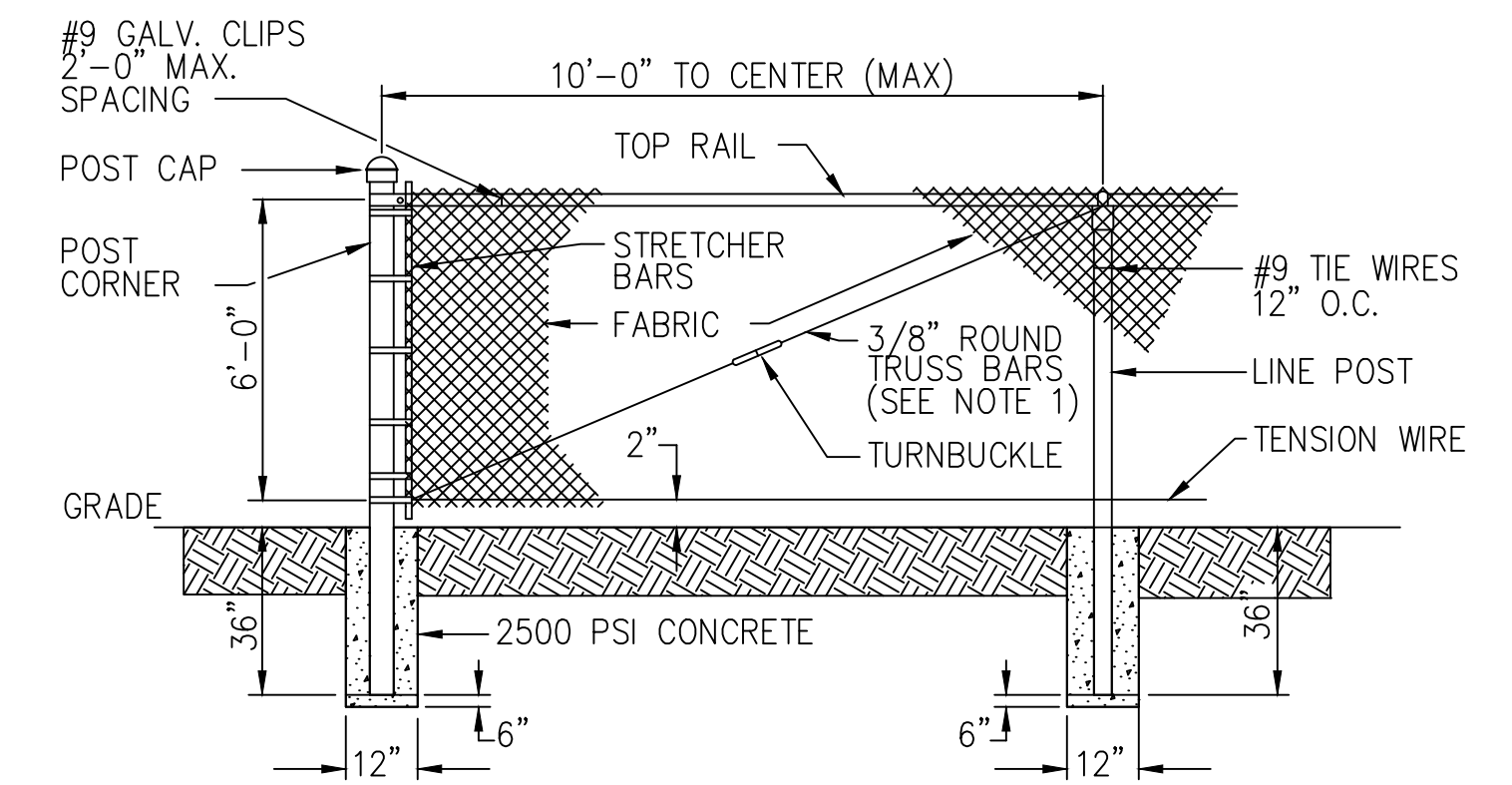


CONCRETE PAVEMENT NOTES:

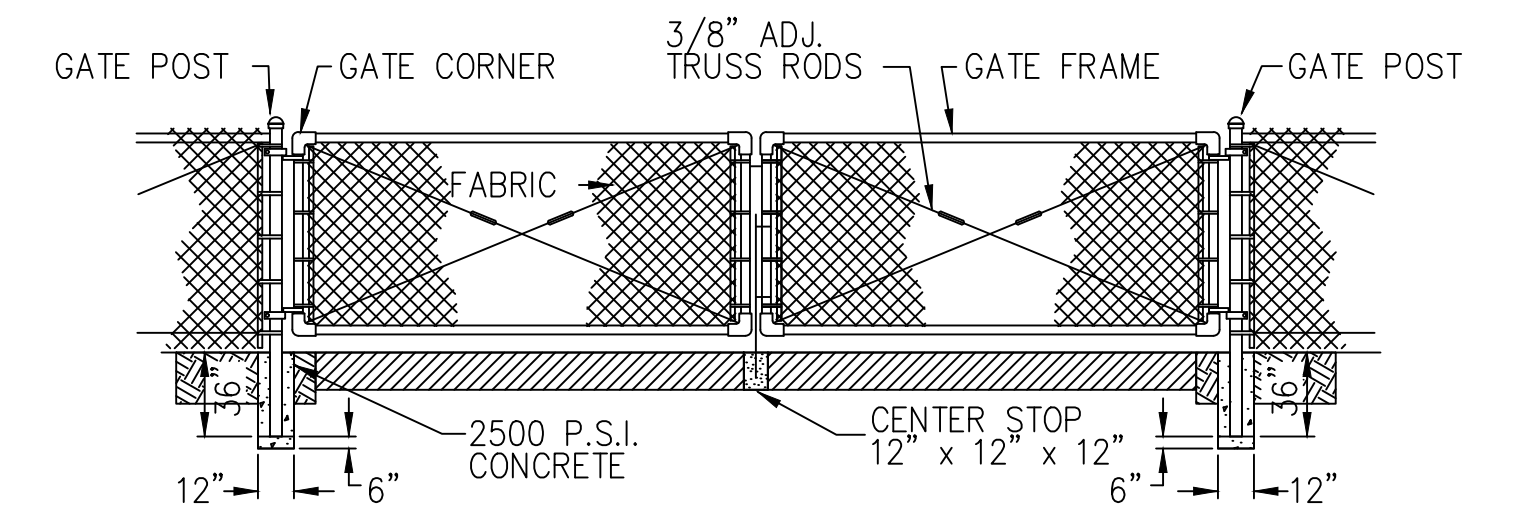
1. CONCRETE TO BE PLACED OVER COMPACTED STABILIZED SUBGRADE, (98% T-180, LBR 40 MINIMUM.)
2. CONCRETE TO BE 6" THICK, 4000 PSI, 6X6X6 WWM.
3. CONCRETE TO BE PLACED AT 3" SLUMP ($\pm \frac{1}{2}$ ")
4. WATER/MIST CURE CONCRETE FOR 7 DAYS AFTER PLACEMENT.
5. PROVIDE SAWCUT JOINTS AT 10 FEET ON CENTER MAXIMUM EACH WAY. SAWCUT JOINT DEPTH TO BE $\frac{1}{4}$ TO $\frac{1}{2}$ THE THICKNESS OF THE CONCRETE. THE CONTRACTOR SHALL PREPARE AND SUBMIT A JOINT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION OF CONCRETE PAVEMENT.
6. ALL CONCRETE SHALL HAVE A MEDIUM BROOM FINISH TO PROVIDE A NON-SLIP SURFACE UNLESS DIRECTED OTHERWISE BY THE OWNER.

CONCRETE PAD DETAIL

N.T.S.



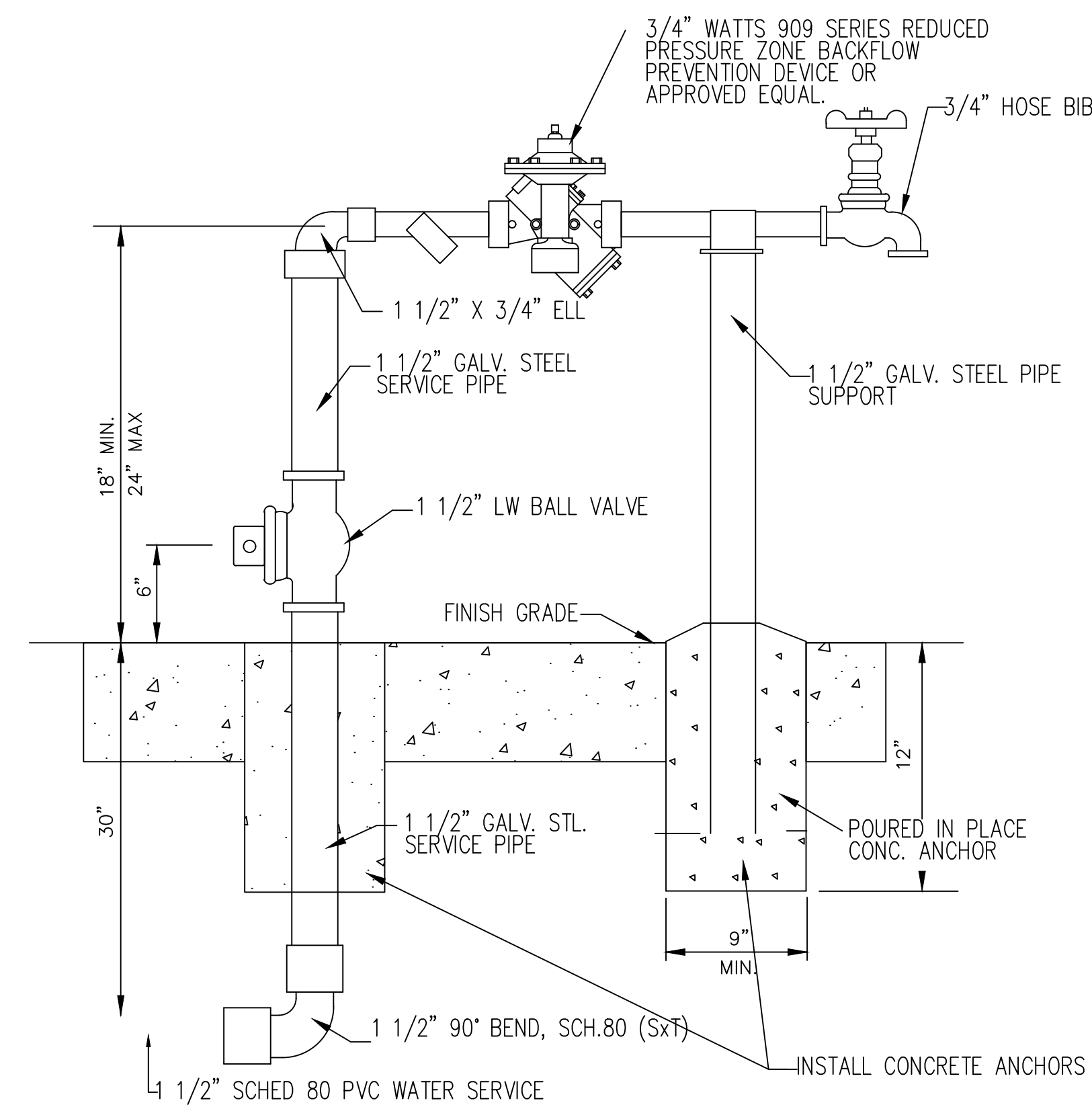
FENCE DETAIL



DOUBLE SWING GATE DETAIL

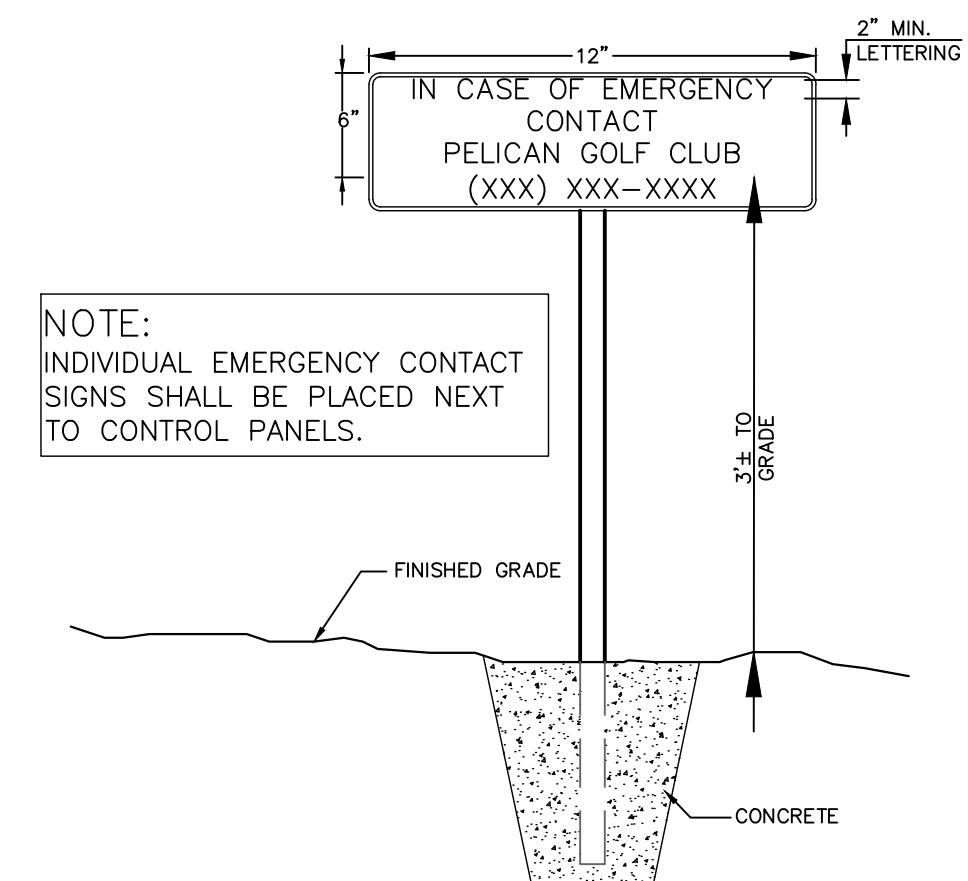
NOTES:

1. TRUSS BARS ARE REQUIRED FOR EACH GATE SECTION AND THE FIRST SPAN ON EACH SIDE OF A CORNER POST ONLY.
2. BLACK VINYL COATED CHAIN LINK FENCE, 6 FOOT TALL.



PUMP STATION WATER SERVICE

N.T.S.

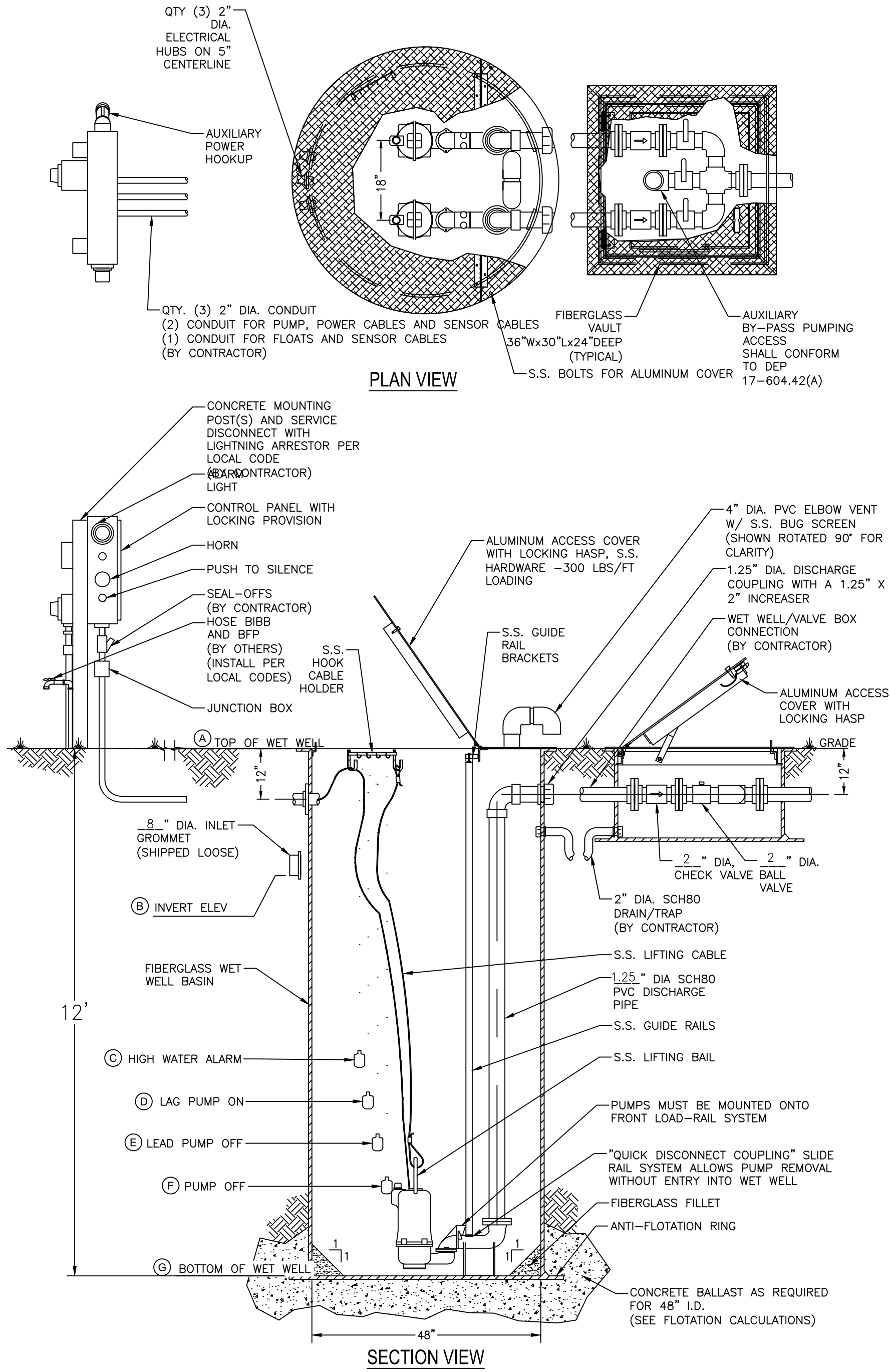


EMERGENCY CONTACT SIGN

DETAIL

N.T.S.

WET WELL/VALVE BOX LAYOUT



ELEVATIONS	
(A) TOP OF WET WELL	47.70
(B) INLET INVERT	40.40
(C) HIGH WATER ALARM	39.90
(D) LAG PUMP ON	39.40
(E) LEAD PUMP ON	38.90
(F) PUMP OFF	37.70
(G) BOTTOM OF WET WELL	35.70

FLOTATION CALCULATIONS	
WET WELL WALL THICKNESS:	1.5 IN.
ANTI-FLOTATION BASE THICKNESS:	0.0 FT.
ANTI-FLOTATION BASE DIMENSION:	6 FT.
BALLAST HEIGHT:	3 FT.
WET WELL MATERIAL DENSITY	90 LBS/CF
BARREL WEIGHT:	1,604 LBS
ANTI-FLOTATION BALLAST VOLUME:	65.44 CF
ANTI-FLOTATION BALLAST WEIGHT:	9,816 LBS
SOIL WEIGHT:	23,366 LBS
TOTAL WEIGHT:	35,576 LBS
WEIGHT OF WATER DISPLACED (BUOYANCY):	16,482 LBS
SAFETY FACTOR:	2.1

STRUCTURE THICKNESS (FIBERGLASS REINFORCED POLYESTER)	
ANTI-FLOTATION DEVICE IS SQUARE PLATE INSTALLED ON BASE OF PUMP STATION	
RECOMMENDED FILL ABOVE BASE ANTI-FLOTATION PLATE	
DENSITY OF FIBERGLASS REINFORCED POLYESTER (ASSUMED FIBERGLASS + POLYESTER)	
WET WELL IS ASSUMED TO BE EMPTY AND DOES NOT INCLUDE BASE ANTI-FLOTATION PLATE OR TOP SLAB.	
EQUIVALENT TO 2.4 CY	
ASSUMED CONCRETE DENSITY = 150 LBS/CF	
SOIL DENSITY IS 2.2 X 62.4 LBS/CF	
TOTAL WEIGHT OF STRUCTURE WITH BACKFILLED CONDITION	
BUOYANCY = CROSS-SECTIONAL AREA (WETWELL + BASE) * HEIGHT * 7.4805 GAL/CF * 8.345 LBS/GAL OF WATER	
WET WELL IS ASSUMED TO BE EMPTY.	

PUMP DATA TABLE	
PUMP MODEL	HPG200
IMPELLER DIAMETER	4.50"
PUMP DESIGN CAPACITY	50 GPM
PUMP DESIGN TDH	22 FT
SECONDARY CAPACITY	-- GPM
SECONDARY TDH	-- FT
HORSEPOWER	2 HP
VOLTAGE	208 V.
PHASE	3 PH.
DISCHARGE SIZE	1.25"
NOTES:	

GENERAL NOTES

PUMPS SHALL BE OF THE SUBMERSIBLE TYPE (MANUFACTURED BY HYDROMATIC). EACH PUMP SHALL BE MOUNTED ON A 02" RAIL SYSTEM. THE RAIL SYSTEM SHALL BE SELF ENGAGING RESULTING IN A LEAKPROOF COUPLING. THE RAIL SYSTEM SHALL INCLUDE THE BASE ELBOW, DISCHARGE FLANGE ASSEMBLY, 304SS GUIDE RAILS, 316SS UPPER GUIDE BRACKET, 316SS LIFTING BAIL AND CABLE, AND A SIX-HOOK 316SS CABLE HOLDER. THE RAIL SYSTEM SHALL BE MOUNTED AND PRE-PIPED BY THE PUMP SUPPLIER.

PUMP CONSTRUCTION
THE PUMP VOLUTE, MOTOR AND SEAL HOUSING SHALL BE CONSTRUCTED OF CAST IRON. ALL EXTERNAL FASTENERS SHALL BE SERIES 300 STAINLESS STEEL. THE PUMP SHAFT SHALL BE CONSTRUCTED OF SERIES 416 STAINLESS STEEL.

IMPELLER
THE IMPELLER SHALL BE OF MULTI-VANE, SEMI-OPEN CONSTRUCTION. THE IMPELLER SHALL BE STATICALLY AND HYDRAULICALLY BALANCED.

CUTTERS
A CUTTER ASSEMBLY SHALL BE MOUNTED ON THE SUCTION SIDE OF THE PUMP WITH DIRECT DISCHARGE INTO THE PUMP IMPELLER. THE GRINDER SHALL BE CAPABLE OF GRINDING MATERIALS FOUND IN NORMAL, DOMESTIC SEWAGE. BOTH THE STATIONARY AND ROTATING CUTTERS SHALL BE CONSTRUCTED OF HARDENED STEEL.

MOTOR
THE MOTOR SHALL BE MOUNTED IN A SEALED, SUBMERSIBLE TYPE HOUSING. THE STATOR SHALL BE SECURELY HELD IN PLACE WITH A REMOVABLE END RING AND THREADED FASTENERS FOR EASE OF REMOVAL WITHOUT THE USE OF HEAT OR A PRESS. THE MOTOR WILL HAVE TWO HEAVY-DUTY BALL BEARINGS; ONE UPPER (RADIAL) AND ONE LOWER (THRUST), TO SUPPORT THE SHAFT. THE MOTOR SHALL BE EQUIPPED WITH A WINDING THERMOSTAT THAT IS WIRED TO SHUT THE MOTOR OFF IN CASE OF MOTOR OVERHEATING.

SEAL CHAMBER
THE PUMP SHALL HAVE TWO MECHANICAL SEALS, MOUNTED IN TANDEM WITH AN OIL CHAMBER BETWEEN THE SEALS. THE PUMP SHALL BE EQUIPPED WITH A SEAL LEAK DETECTION PROBE AND WARNING SYSTEM BY USING A SEAL FAILURE SENSOR INSTALLED IN THE SEAL CHAMBER.

WET WELL
THE PUMP SUPPLIER SHALL PROVIDE THE WET WELL. THIS GLASS FIBER-REINFORCED POLYESTER BASIN SHALL BE CONSTRUCTED OF A COMMERCIAL GRADE OF GLASS FIBER AND SHALL BE PROVIDED WITH FILLET AND AN ANTI-FLOTATION RING WITH A MINIMUM DIAMETER OF THREE INCHES LARGER THAN THE BASIN DIAMETER. THE RAIL SYSTEM, INTERNAL PIPING AND DISCHARGE CONNECTIONS SHALL BE PRE-INSTALLED BY THE PUMP SUPPLIER.

HATCH COVER
THE HATCH COVER SHALL BE 2/3 HINGED TO ALLOW FOR MAXIMUM ACCESS TO THE WET WELL. THE HATCH COVER SHALL BE ALUMINUM WITH STAINLESS STEEL FASTENERS, RATED FOR 300 PSF OR GREATER. THE HATCH COVER SHALL INCLUDE A SINGLE OR DUAL DOOR OF DIMENSIONS SPECIFIED BY THE PUMP MANUFACTURER FOR PROPER PUMP CLEARANCE. THE COVER SHALL BE MANUFACTURED BY US FABRICATION, OR EQUAL.

VALVE BOX
THE VALVE BOX IS FIBERGLASS WITH ALUMINUM LOCKABLE COVER. STANDARD SIZE VALVE BOX IS 3' X 2 1/2' X 2'.

VALVES
VALVES SHALL BE SEWAGE SWING CHECK WITH CLEAN-OUT PORTS AND BRASS GATE VALVES.

FLOATS
FLOATS SHALL BE ANCHOR SCIENTIFIC ROTO-FLOATS OR EQUAL.

CONTROLS
THE CONTROL PANEL SHALL BE UL508 LISTED. A NEMA 3R ENCLOSURE SHALL BE PROVIDED IN EITHER 4X FIBERGLASS OR 3R STAINLESS STEEL. THE PANEL SHALL INCLUDE AN ALTERNATING CONTROL SCHEME (DUPLEX AND ABOVE), MAIN CIRCUIT BREAKER, GENERATOR RECEPTACLE, HIGH LEVEL ALARM LIGHT AND HORN, ELAPSED TIME METERS, VOLTAGE OR PHASE MONITOR, SEAL FAILURE AND OVERLOAD SENSORS. THE LIGHTNING ARRESTOR SHALL BE PROVIDED BY CONTRACTOR.

ELECTRICAL
ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.

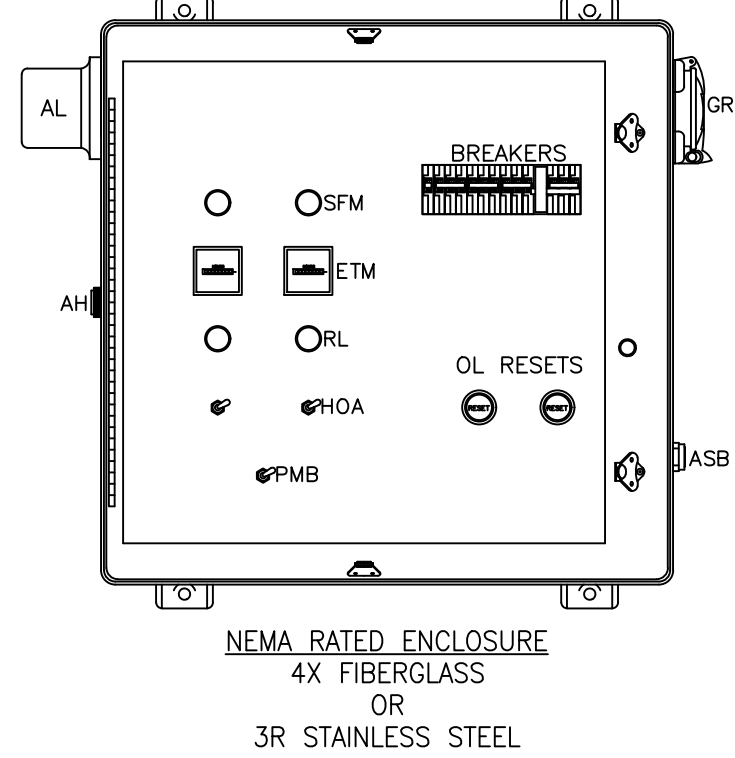
SUPPLIER
PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, FIBERGLASS BASIN AND VALVE BOX, CONTROL PANEL, FLOAT SWITCHES, ALUMINUM HATCHES AND ACCESSORIES TO INSURE PROPER OPERATIONS AND WARRANTY. THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASES, RAIL ASSEMBLIES, AND DISCHARGE PIPING ASSEMBLED BY BARNEY'S PUMPS INC. READY FOR FIELD INSTALLATION.

PUMP PACKAGE SHALL BE SUPPLIED BY BARNEY'S PUMPS INC. IN LAKELAND (863-665-8500), CORAL SPRINGS (954-346-0669), OR JACKSONVILLE (904-260-0669), FL.

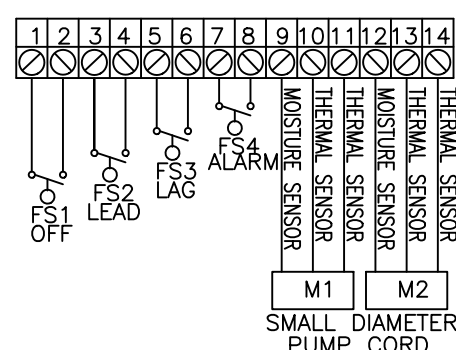
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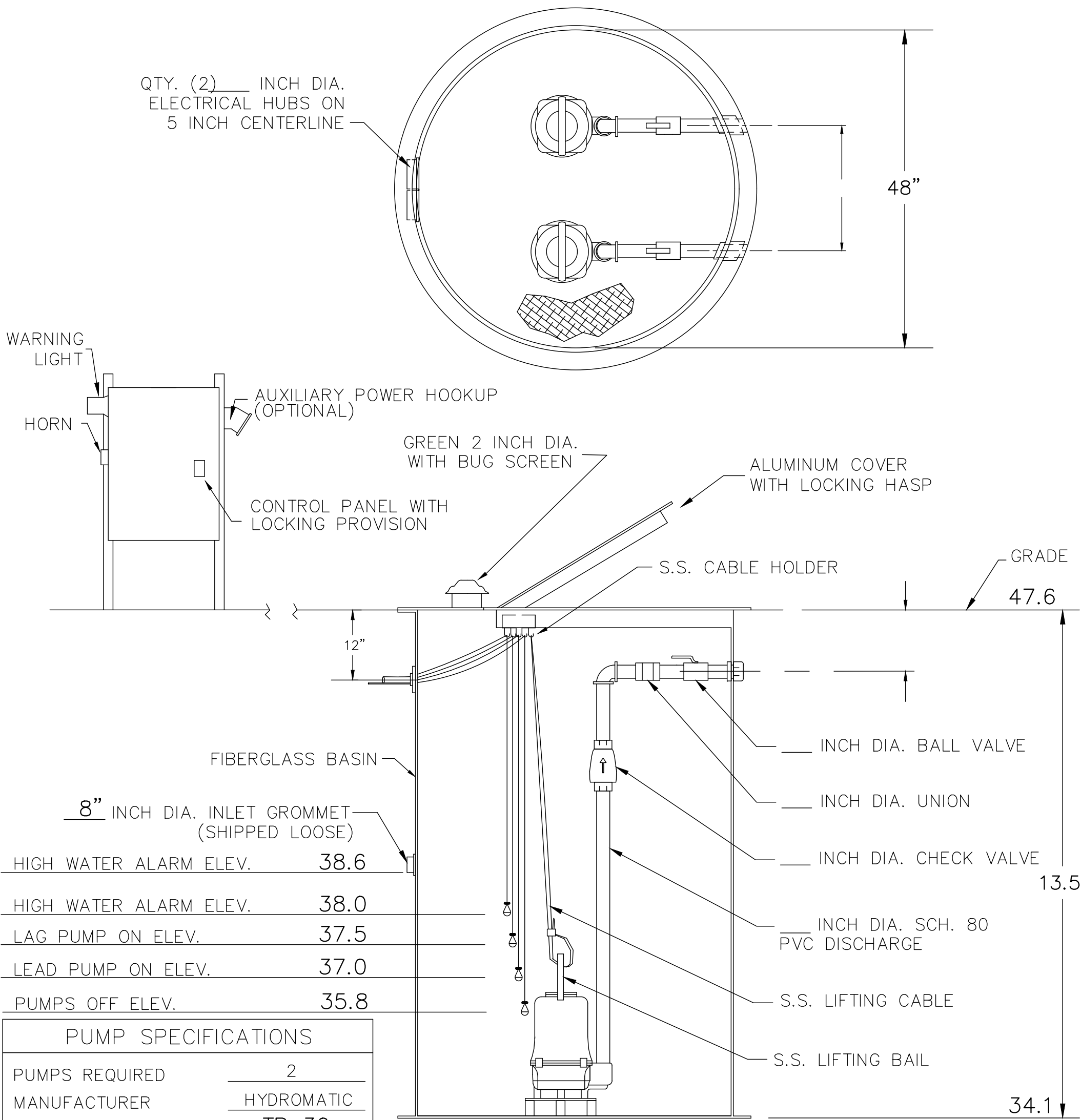
INCOMING POWER: 230V 3Ø
(CONTRACTOR TO VERIFY)

ENCLOSURE AND DEADFRONT LAYOUT (TYPICAL)
(OUTER DOOR NOT SHOWN FOR CLARITY)



TERMINAL STRIP





PUMP SPECIFICATIONS	
PUMPS REQUIRED	2
MANUFACTURER	HYDROMATIC
MODEL NUMBER	TP 30
PUMP SIZE	1.25"
CAPACITY EACH (GPM)	100
TOTAL HEAD (FEET)	9
IMPELLER DIAMETER	—
MOTOR HP REQUIRED	1.2
SPEED (RPM)	3450
ELECTRICAL	208V, 3 PH

TANK	
A (DIA.)	B (HEIGHT)
36"	72"
48"	84"
60"	96"
OTHER _____	108"
	120"
	OTHER 162"

BARNEY'S PUMPS, INC.			
DESCRIPTION: DUPLEX LIFT STATION			
PROJECT:			
CUSTOMER:			
DATE:	TICKET #:	DRAWN BY:	DRAWING #:
	SET	SET	WW2GFI00
NOT TO SCALE			

GRINDER PUMP SPECIFICATIONS

Pumps Required: 2
Type: Hydromatic Grinder Model HPG
Power: hp
Speed: rpm
Electrical: V / Ø
Design Point: gpm @ TDH

Pumps shall be of the submersible, grinder type. Each pump shall be mounted on a Ø2" metal-to-metal rail system. The rail system shall include the base elbow, discharge flange assembly, Ø1" 304SS guide rails, 316SS upper guide bracket, 316SS lifting bail and cable, and a six-hook 316SS cable holder. The rail system shall be mounted and pre-piped by the pump supplier.

Pump Construction
The pump volute, motor and seal housing shall be constructed of cast iron, ASTM A-48, Class 30. All external fasteners shall be Series 300 stainless steel. The pump shaft shall be constructed of Series 416 stainless steel.

Impeller
The impeller shall be of multi-vane, semi-open bronze construction. The impeller shall include pump-out vanes on the back of the impeller and shall be statically and hydraulically balanced.

Cutters
A two-stage cutter assembly shall be mounted on the suction side of the pump with direct discharge into the pump impeller. The grinder shall be capable of grinding all materials found in normal, domestic sewage, including plastics, rubber, sanitary napkins, disposable diapers and wood particles, into a fine slurry. The cutters shall be reversible to provide double life. Both the stationary and rotating cutters shall be constructed of 440C stainless steel hardened to Rockwell 60C.

Motor
The motor shall be mounted in a sealed, submersible type housing and filled with dielectric oil. The stator shall be securely held in place with a removable end ring and threaded fasteners for ease of removal without the use of heat or a press. The motor will have two heavy-duty, oil-lubricated ball bearings; one upper (radial) and one lower (thrust), to support the shaft. The motor shall be equipped with a winding thermostat that automatically shuts the motor off in case of motor overheating.

Seal Chamber
The pump shall have two mechanical seals, mounted in tandem with an oil chamber between the seals. John Crane type seals with carbon versus ceramic seal faces shall be used. The pump shall be equipped with a seal leak detection probe and warning system by using a seal failure sensor installed in the seal chamber.

Wet Well
The pump supplier shall provide the fiberglass wet well. This glass fiber-reinforced polyester basin shall be constructed of a commercial grade of glass fiber and shall be provided with an anti-flotation ring with a minimum diameter of three inches larger than the basin diameter. The rail system, internal piping and discharge connections shall be pre-installed by the pump supplier. As an alternative, the wet well and valve vault may be precast concrete with the contractor assuming the installation of the wet well components.

Hatch Cover
For a fiberglass wet well, the hatch cover shall be 2/3 hinged to allow for maximum access to the wet well. The hatch cover shall be aluminum with stainless steel fasteners, rated for 150 PSF or greater. For a concrete wet well, the hatch cover shall be casted into the top slab. The hatch cover shall include a single or dual door of dimensions specified by the pump manufacturer for proper pump clearance. The hatch cover shall be rated for 300 PSF or greater. The cover shall be manufactured by US Fabrication, or equal.

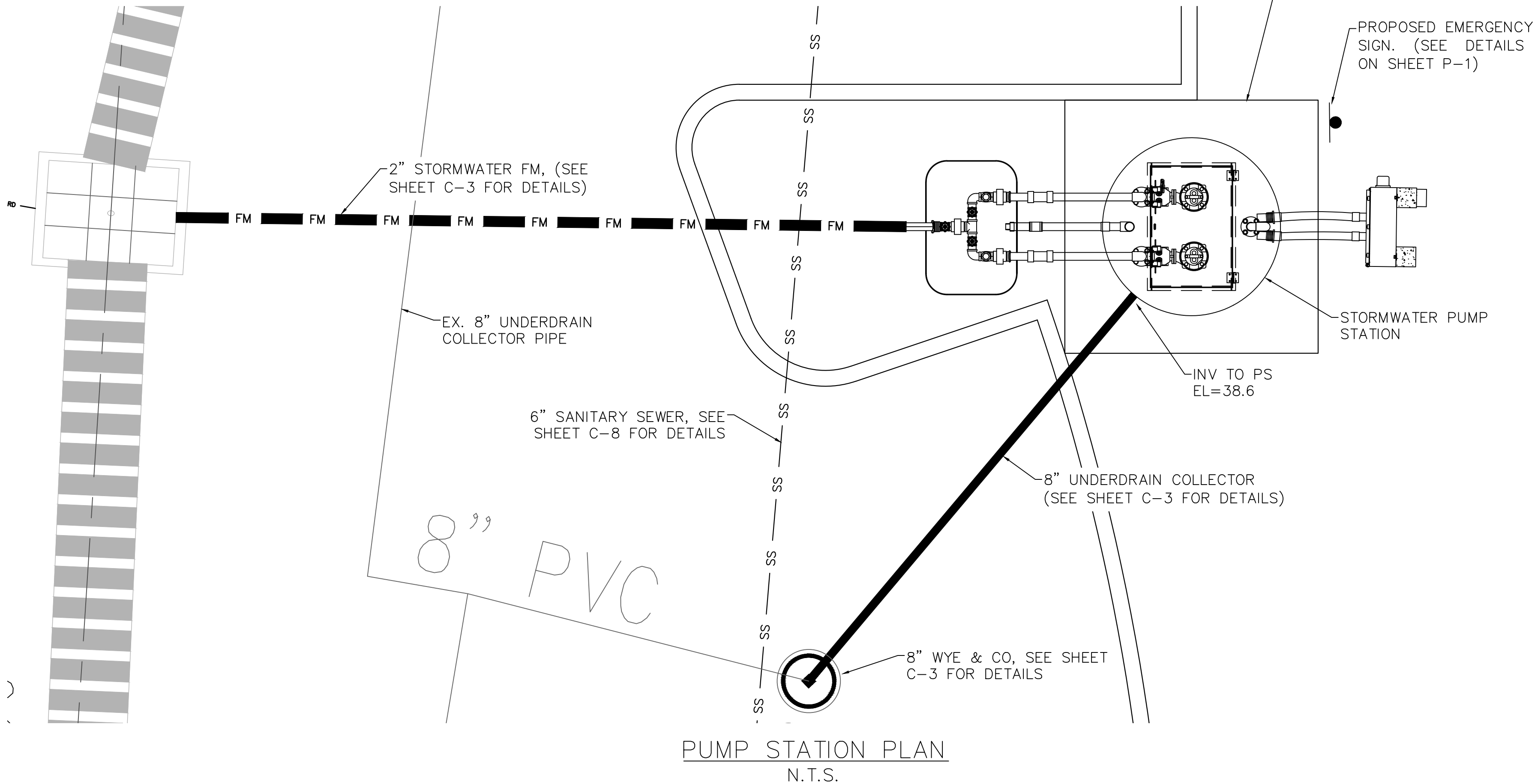
Floats
Floats shall be Anchor Scientific Roto-floats or equal.

Controls
The control panel shall be UL Listed and meet DEP requirements. A NEMA 3R fiberglass or stainless steel enclosure shall be provided. The panel shall include an alternating control scheme (duplex and above), main circuit breaker, a generator receptacle, high level alarm light and horn, elapsed time meters, voltage or phase monitor, seal failure and overflow sensors. The lightning arrester shall be shipped loose for field installation.

Supplier
Pump package shall be supplied by Barney's Pumps in Lakeland (863-665-8500), Coral Springs (954-346-0689), or Jacksonville (904-260-0669), FL.

Additional control panel options:
A. GFI Receptacle
B. 24 Volt Float Control
C. Level Test Switches
D. Intrinsically Safe Controls (Floats Only)
E. Numbered Wires
F. Manual Alternator Selector Switch
G. Maintenance Light with On/Off Toggle Switch
H. Motor Starter Auxiliary Contacts (Dry)
I. Push To Test Buttons for Indicating Lights
J. Alarm Dry Contact
K. Operating Mechanism for Main Breaker (Padlockable)
L. Through-the-Door Mounting (Non-deadfront)

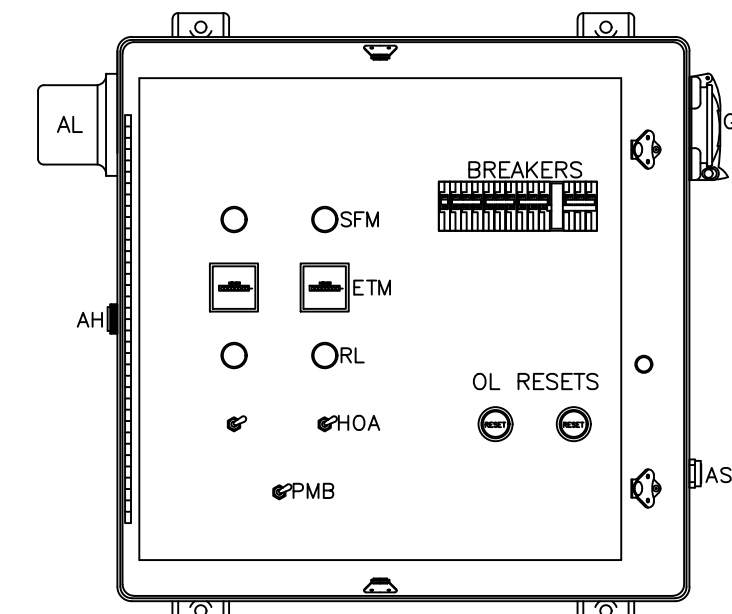
Other options are available.



ELECTRICAL DATA

INCOMING POWER: 230V 3Ø
(CONTRACTOR TO VERIFY)

ENCLOSURE AND DEADFRONT LAYOUT (TYPICAL) (OUTER DOOR NOT SHOWN FOR CLARITY)



TERMINAL STRIP

