STUB CONSURUCUION PLANS

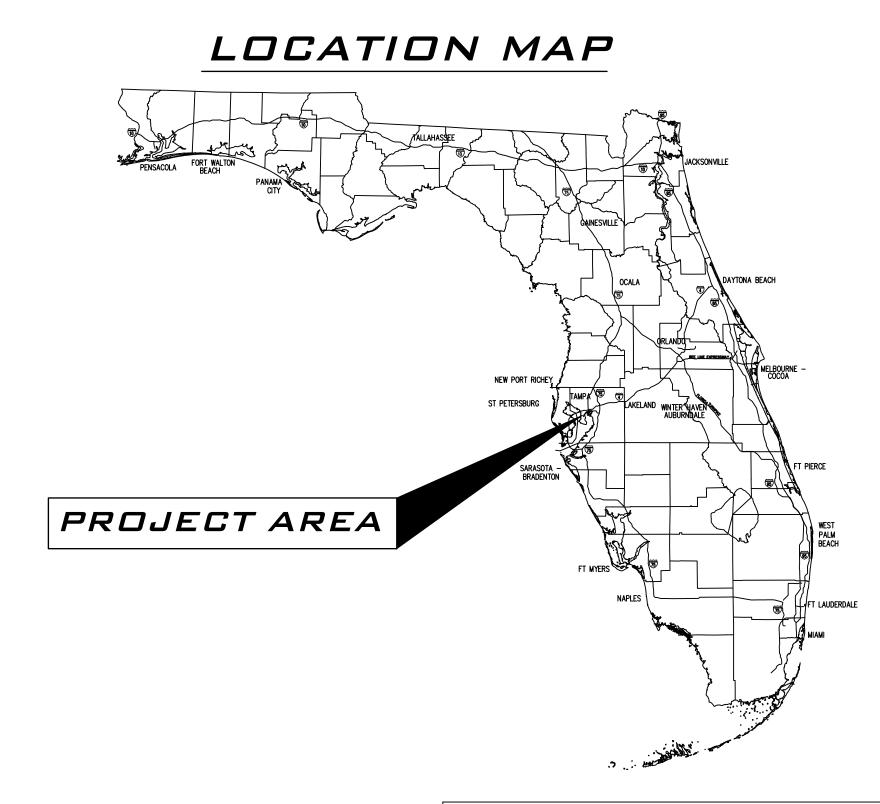
FOR

PELICAN GOLF CLUB PHASE II EXPANSION - "CLUBHOUSE" 1501 INDIAN ROCKS ROAD TOWN OF BELLEAIR, FLORIDA "REVISION A"

INDEX OF DRAWINGS

DRAWING TITLE	SHEET NO.	
COVER SHEET		LATEST DATE
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-1 A	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





STORMWATER BASIN:

BELLEAIR CREEK / RATTLESNAKE CREEK

COMMUNITY NO. 12103C PANEL 0116 H

FLOOD ZONE: X EFFECTIVE DATE 5-17-2005

PREPARED BY

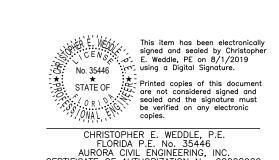


PREPARED FOR

HARROD PROPERTIES

5550 WEST EXECUTIVE DR - SUITE 550

TAMPA, FLORIDA 33609



AUG 1, 2019 January 20, 2019

PELICAN GOLF CLUB PHASE II - CLUBHOUSE



PROJECT 18-174

PHASE III MAINTENANCE AREA

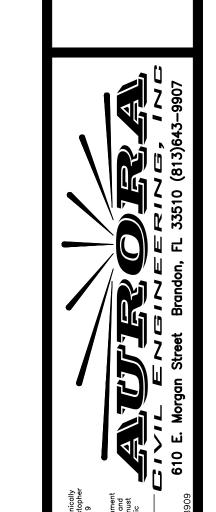
PHASE III CLUBHOUSE

PHASE III PERFORMANCE CENTER

PHASE IV

COTTAGES EXPANSION





OF THE LATEST REVISION.

- TO AGENCY INSTRUCTIONS. B. ALL SPECIFICATIONS AND DOCUMENTS REFEREED TO IN THESE PLANS SHALL BE
- 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.

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

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.

- 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.

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
- 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)
- . 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.
- . REFER TO THE GRADING SHEET AND/OR THE TOPOGRAPHIC SURVEYS FOR NOTES REGARDING THE BASIS OF VERTICAL DATUM.
- . 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.
- 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 OR LEGAL SIZE SKETCHES. THE ENGINEER MUST BE ABLE TO COMPILE 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, AND HORIZONTAL AND VERTICAL CONTROL OF THE TOPS OF WATER MAINS 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

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
- 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 TABLE 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.

- 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 FROM MUD, DIRT, DEBRIS, ETC., 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

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

DISCREPANCIES WITH DESIGN INFORMATION SHOWN IN THESE PLANS. THE

ADVANCE TO SCHEDULE INSPECTIONS. J. THE CONTRACTOR SHALL PERFORM AT HIS OWN EXPENSE AN INFILTRATION OR EXFILTRATION TEST, A TELEVISION INSPECTION, AND A MANDREL (GO, NO GO) 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.

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

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

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.

INCHES ABOVE THE TOP OF THE SEWER.

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 CONTINUOS 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.

D. EXCEPT 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.

. 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 SHORT AS PRACTICAL. CLEARING AND GRUBBING SHALL BE SO SCHEDULED AND PERFORMED THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.

G. THE CONTRACTOR AND/OR THE OWNER'S REPRESENTATIVE SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOILS ARE STABILIZED.

A. DEWATERING OF THE SITE FOR ANY CONSTRUCTION REQUIRING DEWATERING SHALL BE BY WELL POINT. THE WELL POINT SYSTEM MAY NOT DISCHARGE DIRECTLY INTO WETLAND AREAS. ANY OTHER METHOD OF DEWATERING WILL REQUIRE A DESIGNED SETTLING BASIN PRIOR TO DISCHARGE INTO WETLANDS.

PINELLAS COUNTY STANDARD SITE PLAN NOTES 1. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE PINELLAS COUNTY STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES SPECIFICATIONS, LATEST EDITION.

OWNER-DEVELOPER.

2. ALL ON-SITE WATER AND SEWER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE

. INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE THE FIRE MARSHALL AND THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES

APART FROM ANY ULTIMATELY APPROVED SITE PLAN. APPROVAL OF THIS SITE PLAN DOES NOT

NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS. 4. ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS

CONSTITUTE APPROVAL OF ANY SIGNAGE. . HANDICAP PARKING SPACES WILL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR OTHER APPLICABLE STANDARDS.

6. THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 7. ALL ON-SITE PARKING SPACES WILL BE STRIPED AND SIGNED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PARKING SPACES, DIRECTIONAL ARROWS, AND

STOP BARS SHALL BE STRIPED IN WHITE. IT SHALL BE THE OWNER/DEVELOPER'S RESPONSIBILITY TO

PROPERLY SIGN AND STRIPE THE SITE IN ACCORDANCE WITH APPLICABLE STANDARDS . THE OWNER/DEVELOPER ACKNOWLEDGES THAT THIS APPROVAL DOES NOT INCLUDE ANY WORK IN CITY RIGHT-OF-WAY. ALL RIGHT-OF-WAY WORK SHALL BE A FUNCTION OF AN APPROVED CITY OF

9. ALL CLEAR-SITE AREAS SHALL BE KEPT FREE OF ANY SIGNAGE, PLANTINGS, TREES, ETC. IN EXCESS OF THREE-AND-A-HALF (3-1/2) FEET IN HEIGHT.

RIGHT-OF-WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT-OF-WAY USE PERMITS. 11. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD/PUD CONDITIONS.

10. NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY CITY OR STATE

12. ALL STRUCTURES, INCLUDING BUFFER WALLS, RETAINING WALLS, SIGNAGE, ETC. REQUIRE SEPARATE BUILDING PERMITS.

BELLEAIR RIGHT-OF-WAY USE PERMIT.

13. NO ON-SITE BURNING IS PLANNED FOR THIS SITE. 14. ON-SITE FILL FROM AN OUTSIDE SOURCE IS NOT ANTICIPATED TO BE REQUIRED FOR THIS PROJECT. 15. IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT

LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS,

HISTORIC TRASH PITS, OR HISTORIC BUILDING FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND CITY OF BELLEAIR SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.

16. PRIOR TO CONSTRUCTION, A BUILDING PERMIT SHALL BE OBTAINED FOR ALL STRUCTURES THAT HAVE A FOOTER, REGARDLESS OF SIZE, THROUGH CITY OF BELLEAIR CENTRAL PERMITTING. INCLUDING BUT NOT INCLUSIVE BUILDINGS, ACCESSORIES AND RETAINING WALLS.

SC-1 TESTING SCHEDULE	NOT INCLÚSIVE BUILDINGS, ACCESSORIES AND RETAINING WALLS.		
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 PER SOURCE	
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.

· VEE * H 3 3/1

Pelican Golf Clubhouse is located on the south corner of Indian Rocks Road and Poinsettia Road within the City of Belleair in Section 28, Township 29S, Range 15E Pinellas County, FL.

Owner: DANIEL M. DOYLE
PELICAN GOLF, LLC.
1501 INDIAN ROCKS ROAD
BELLEAIR, FL 33756
PHONE:(727) 581-5498

Civil Engineer: Aurora Civil Engineering, Inc. 610 East Morgan Street Brandon, FL 33510 Phone: (813) 643-9907 Fax: (813) 643-9917 Attn: Chris Weddle, P.E.

Construction Plans: PELICAN GOLF CLUBHOUSE

SWFWMD Permit #: 43003204.002

NPDES General Permit: FLR20BL23 (June 12, 2017)

General Contractor: TRITON BUILDING GROUP, LLC

SEQUENCE OF CONSTRUCTION EVENTS:

- 1. Install staked silt fence and other erosion control features as indicated on construction plans.
- 2. Regrade to be used as sedimentation basins.
- 3. Excavate pond for sediment traps for site runoff.
 4. Construct perimeter diversion swales to route runoff to ponds as required.
- 5. Continue clearing & grubbing of remainder of site.
- 6. Fill building site to grade & begin building construction.
- 7. Excavate remainder of ponds. Stabilize pond banks with sod or seed and mulch per plans. 8. Fill remainder of site & install stormwater piping system and storm piping system silt controls.
- 9. Construct underground utility system and parking lot base, curbing & paving.
- 10. Final grading and landscaping/sod installation.
- 11. Clean stormwater system and remove sediments from pond as required.
- 12. Once all site areas stabilized, remove erosion protection devices.

NAME OF RECEIVING WATERS:

Belleair Creek/Rattlesnake Creek

EROSION AND SEDIMENT CONTROLS

STABILIZATION PRACTICES:

Denude only portions of the site expected to be graded or altered within 14 days. In no case denude more than one half the site area at a time.

Temporary Stabilization — Denuded areas, soil stockpiles and other areas of the site where construction activity temporarily ceases for at least 21 days will be stabilized with temporary seed and mulch no later than 14 days after the last construction activity in that area. Hydromulch using locally recommended application for quick germinating ground cover. As an alternative, manually apply rye grain at the rate of 150 pounds per acre (or other quick germinating ground cover at recommended rate for area) along with 10-10-10 fertilizer at rate recommended by manufacturer and apply 3,000 pounds per acre of straw (or other fibrous mulch) secured by crimping. Reapply as required until vegetative cover established.

Wind Erosion Stabilization — Manage fugitive dust from bare areas and areas of active construction by applying water spray to saturate surface soils. Apply water spray on a daily basis or as needed to maintain minimal dust transport. Monitor fugitive dust on a continuous basis and use additional measures as required to control off—site transport of unacceptable levels of dust. Stabilize area to be paved by spreading base material.

Permanent Stabilization — Permanently stabilize all disturbed areas with pavement, landscaping & mulch, sod, seed & mulch, etc. per plans. Maintain as required.

STRUCTURAL PRACTICES:

Prior to disturbing the site, install staked silt fence barriers and other erosion control measures per plans. Excavate portions of ponds to use as sediment basins and construct diversion swales to route site runoff into sediment basins. Inspect all aspects of the system per the inspection plan and maintain as required. Install additional erosion control measures such as staked hay or straw bales, double row of silt fence, etc. at locations of excessive erosion. Install sediment traps such as geotextile fabric with clean rock cover at sediment pond outfall locations if turbid discharge is noted.

STORM WATER MANAGEMENT:

The permanent storm water system will include curbed and paved parking areas with storm inlets. An underground stormwater piping system will convey stormwater to the ponds. Sediments accumulated in the stormwater system and ponds during construction will be removed prior to completion of the project. All pervious areas of the site disturbed during construction will be revegetated with a permanent vegetative cover.

OTHER CONTROLS

WASTE MANAGEMENT:

Collect and contain all waste materials in a controlled area in accordance with applicable regulations. All trash and construction debris to be removed from site and properly disposed. No construction debris to be buried on—site. The General Contractor for the site is responsible for assuring that all personnel are instructed regarding the correct procedures for waste disposal and will be responsible for implementing these procedures.

HAZARDOUS WASTE:

Local and state environmental agencies will be notified if any hazardous materials or waste are encountered on the site. Hazardous waste/materials will be identified, removed from the site and properly disposed per applicable regulations. Hazardous materials/waste generated and/or stored on—site will be handled, stored, transported and disposed per applicable regulations. The General Contractor for the site is responsible for assuring that all personnel are instructed regarding the correct procedures for hazardous waste/materials and will be responsible for implementing these procedures.

ONSITE BURNING:

No onsite burning is proposed for this site.

SANITARY WASTE:

Portable toilet units will be utilized to collect sanitary waste. Waste from portable toilet units to be collected and disposed by licensed sanitary waste hauler in accordance with applicable regulations.

OFF-SITE VEHICLE TRACKING:

Stabilized construction entrances will be constructed to minimize off—site vehicle tracking. Paved streets used for haul routes will be cleaned as needed to remove excess mud, dirt and rock tracked from the site. Dump trucks hauling material from and to the site to be covered with a tarpaulin at all times.

TIMING OF CONTROLS/MEASURES:

The Sequence of Construction (see above) will be followed as practicable.

CERTFICATION OF COMPLIANCE

This Storm Water Pollution Prevention Plan reflects applicable Federal, State and local regulations for stormwater management and erosion and sediment control.

MAINTENANCE/INSPECTION PROCEDURES

EROSION & SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

- * Less than one half of the site will be denuded at one time.
- * All control measures will be inspected at least once each week and following any storm event of 0.5 inches or greater.

 * All measures will be maintained in good working order and; if repair is necessary, will be initiated within 24 hours of the
- report.

 * Built up sediment will be removed from silt fences when it has reached one—third the height of the fence.
- * Silt fence will be inspected for depth of sediment, tears, secure attachment to posts and firm embedment of posts in the ground.
- * Sediment basin(s) will be inspected for depth of sediment and built up sediment will be removed when it reaches ten percent of the design capacity and at the end of the job.
- * Other erosion control devices installed and diversion swales will be inspected and any needed repairs made within 24 hours of the report.

 * Temporary and permanent seed & mulch/sod areas will be inspected for bare spots, washouts and healthy growth.
- Repairs and reseeding to be initiated within 24 hours of the report.

 * A maintenance inspection report will be made after each inspection. A copy of the report to be completed by the
- inspector is attached. Reports to be kept in a bound notebook at the project site office.

 * The General Contractor for the site will assign the Site Superintendent to be responsible for inspections, maintenance and repair activities. The Site Superintendent is authorized to assign responsibility for inspections and maintenance and repair activities to a designated representative(s). General Contractor to advise Owner and Engineer of the names of the Site Superintendent and designated representative(s) and provide 24 hour contact information for same. General Contractor to provide training for Site Superintendent and designated representative(s) to assure they are aware of the inspection and maintenance practices required by this SWPPP.

NON-STORM WATER DISCHARGES:

It is expected that the following non-stormwater discharges will occur from the site during the construction period:

- * Water from water line flushing(s).
- * Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- * Uncontaminated groundwater from dewatering operations.

INVENTORY FOR POLLUTION PREVENTION PLAN:

The following materials and substances may be present on the site during construction:

- * Concrete * Detergents
- * Paints (enamel & latex)
- * Metal Studs
- * Tar
- * Fertilizers
- * Petroleum Based Products and Fuels* Cleaning Solvents
- * Wood (including pressure treated)
- * Masonry Block* Roofing Shingles
- * Chlorine (for disinfection of water lines)
- * Asphalt * Glass
- * Stone

GOOD HOUSEKEEPING:

The following good housekeeping practices will be followed at the site during the construction of the project:

- * An effort will be made to store only enough product required to do the job
- * All materials stored onsite will be stored in a neat, orderly manner in appropriate containers and, if possible, under a
- roof or other enclosure.

 * Products will be kept in their original containers with the original manufacturer's labels.
- * Substances will not be mixed with one another unless recommended by the manufacturer.
- * Whenever possible, all of a product will be used up before disposing of the container.

 * Manufacturer's recommendation for proper use and disposal will be followed.
- * Manufacturer's recommendation for proper use and disposal will be followed.

 * The Site Superintendent will inspect daily to endure proper use and disposal of materials onsite.
- 'The Site Superintendent will inspect daily to endure proper use and disposal of materials onsite

These practices are use to reduce the risks associated with hazardous materials:

- * Products will be kept in their original containers unless they are not re-sealable.
- * Original labels and material safety data will be retained since they contain important product information.

 * If surplus product must be disposed of, manufacturer's as well as local, State and Federal recommended methods for
- proper handling, transport and disposal will be followed.

 * Prior to handling hazardous materials, personnel will receive all required training and wear appropriate personal protective equipment.

PRODUCT SPECIFIC PRACTICES:

Petroleum Products — All on—site vehicles and mobile equipment will be monitored for leaks and receive regular preventive maintenance to reduce the chance for leakage. Petroleum products will be stored in appropriately labeled approved containers. Any asphalt substances used on—site will be applied according to the manufacturer's recommendations.

Fertilizers — Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, the fertilizer will be worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints — All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged into the storm water system but will be properly disposed of according to

Concrete Trucks — The Site Superintendent will designate an area for concrete trucks to wash out or discharge surplus concrete. A containment berm will be installed around this area to prevent runoff to the remainder of the site. Hard debris will be properly disposed off—site upon completion of the project.

SPILL CONTROL PRACTICES:

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

* Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
* Material and equipment necessary for spill cleanup will be kept in the material storage area on—site. Equipment and

* Material and equipment necessary for spill cleanup will be kept in the material storage area on—site. Equipment and materials will include at a minimum; brooms, dust pans, mops, rags, cloves, goggles, kitty litter, sand sawdust and plastic and metal trash containers specifically designated for this purpose.

* All spills will be cleaned up immediately after discovery.

* The spill area will be kept well ventilated and personnel will wear appropriate protective clothing & equipment to prevent injury from contact with hazardous substances.

* Spills of toxic or hazardous material will be reported to the appropriate local and State government agency, regardless of the size of the spill.

* Should a spill occur, the spill prevention plan will be adjusted to include measures to prevent the same type of spill from

reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the

cleanup measures implemented will also be included.

* The Site Superintendent will be the spill prevention and cleanup coordinator. The Site Superintendent may designate other site personnel who will receive spill prevention and cleanup training. These individuals may be assigned responsibility for a specific phase of prevention and cleanup. The names and 24 hour contact information for the spill personnel will be posted in the material storage area and in the office trailer on—site.

NOTICE OF TERMINATION:

A Notice of Termination will be submitted to the Florida Department of Environmental Protection after the construction has been completed and the site has undergone final stabilization.

POLLUTION PREVENTION PLAN CERTIFICATION BY OWNER:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

OWNER

TITLE

NAME

SIGNATURE

DATE

CONTRACTORS CERTIFICATION:

I certify under penalty of law that I understand the terms and conditions of the generic National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to Section 403.0885, F.S. that authorizes storm water discharges associated with industrial activity from the construction site identified as part of this certification.

INDIVIDUAL RESPONSIBLE COMPANY RESPONSIBILITY

General Contractor

SIGNATURE:

DATE:

NAME:

NAME: Site Contractor

TITLE:

SIGNATURE:

DATE:

NAME:

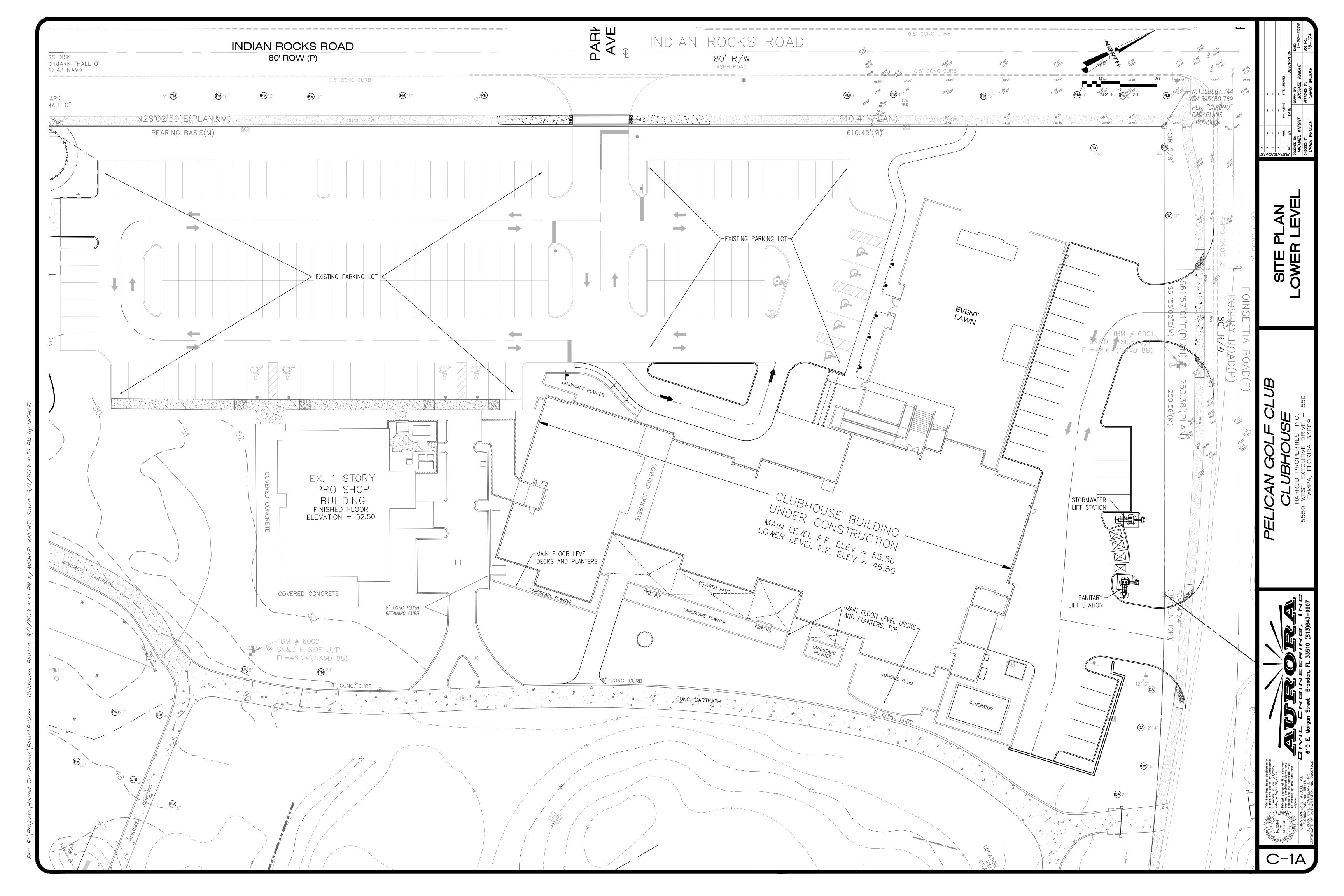
TITLE:

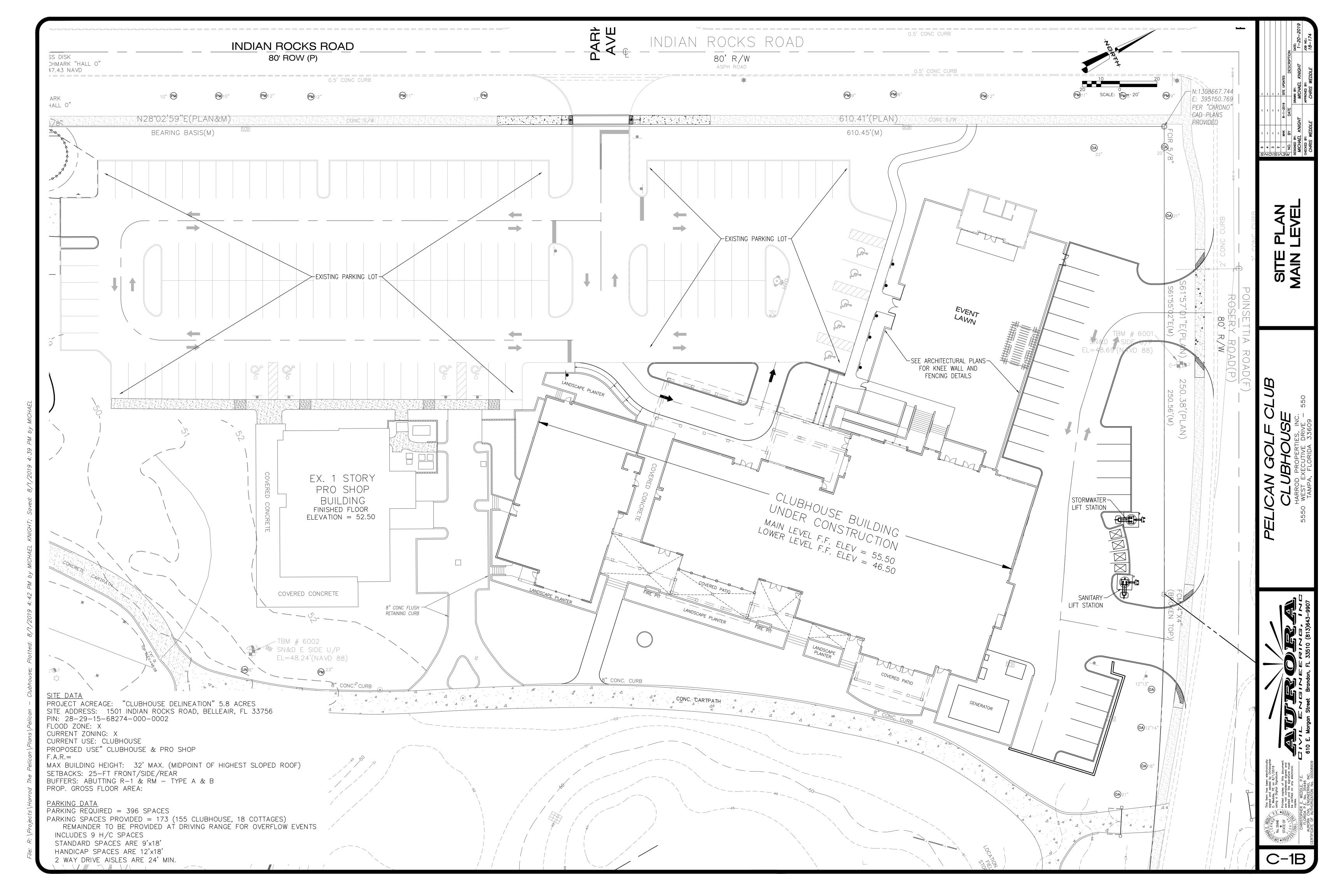
SIGNATURE:

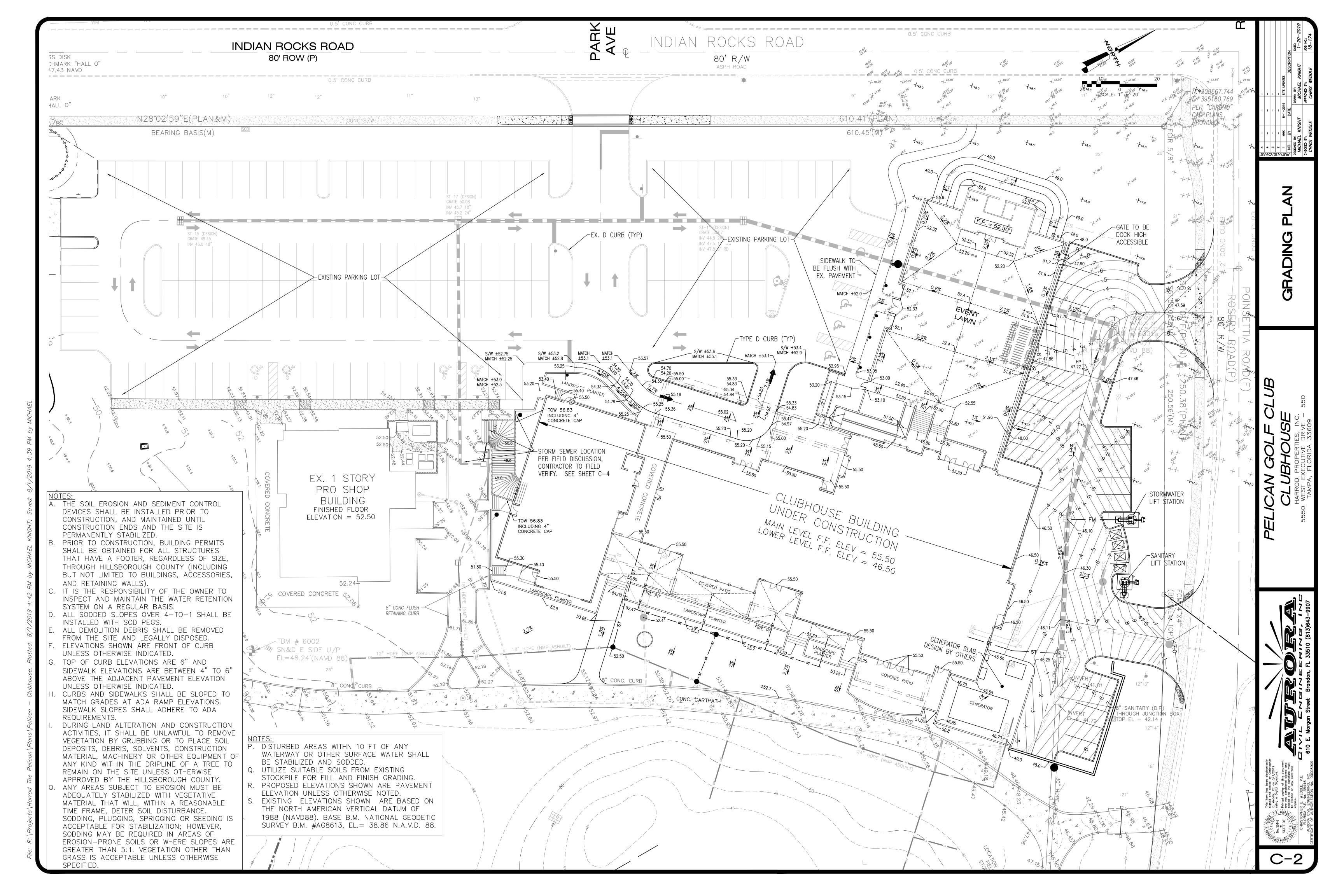
DATE:

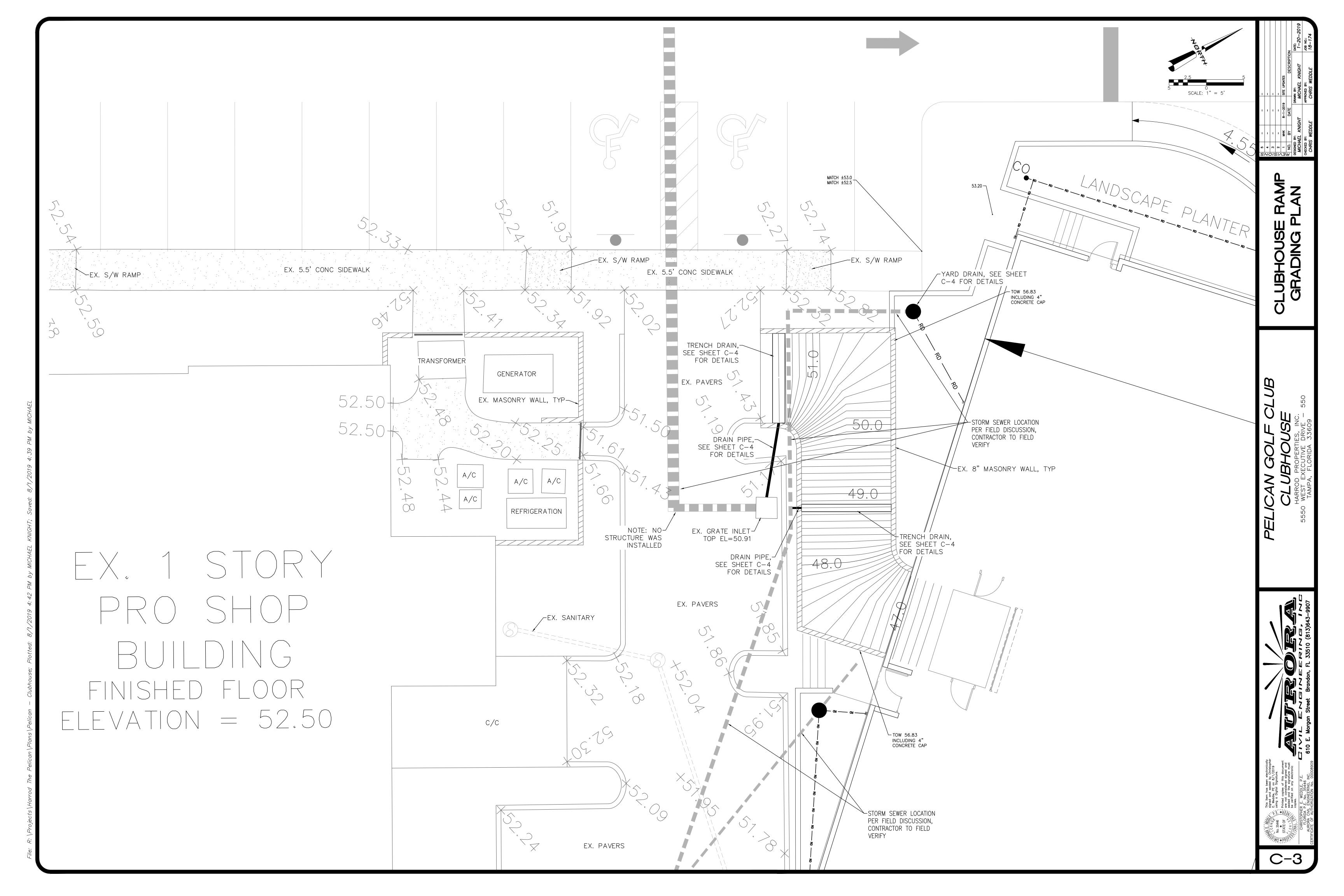
PELICAN GOLF CLU CLUBHOUSE HARROD PROPERTIES, INC.

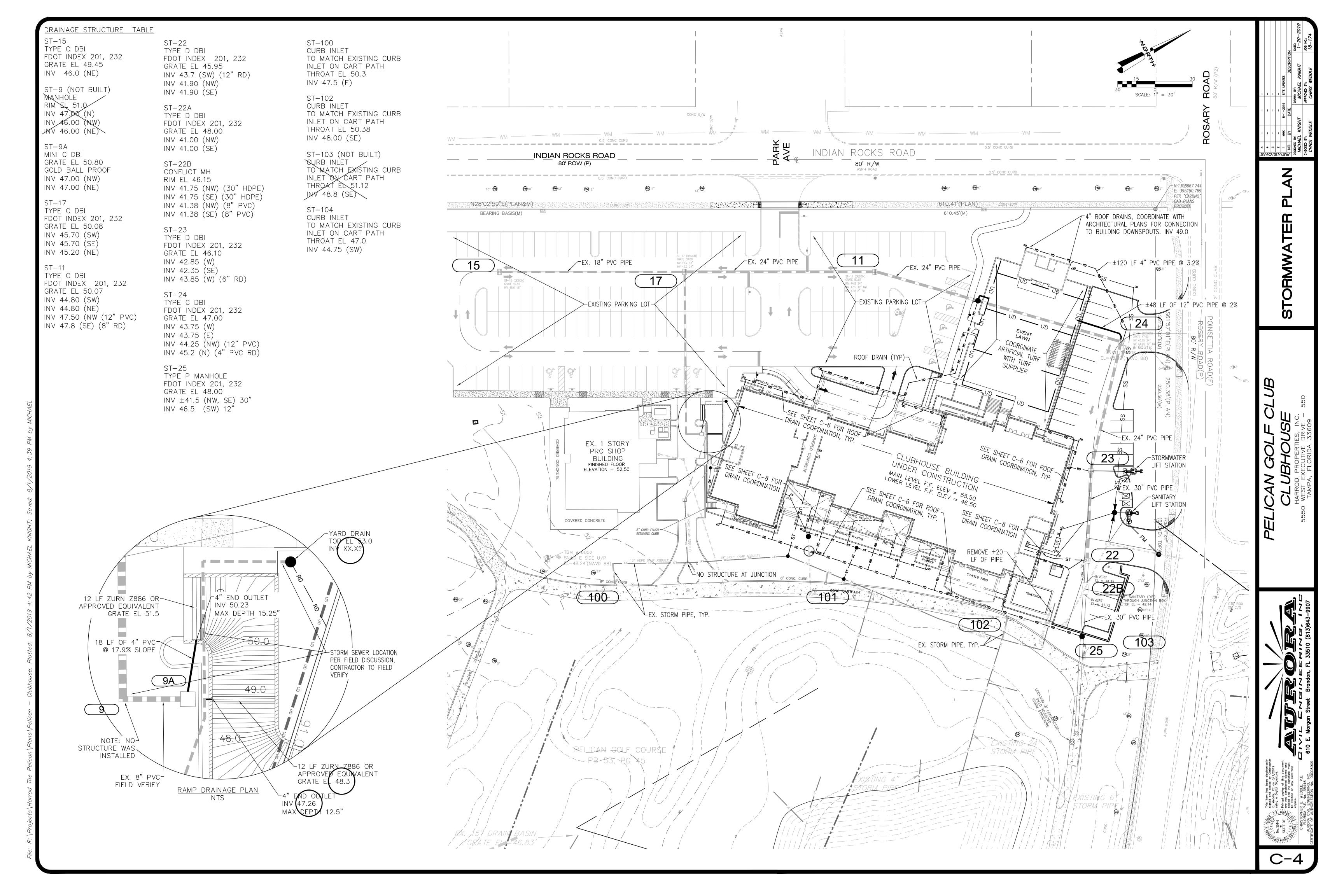
· VEE * H 3 3/1

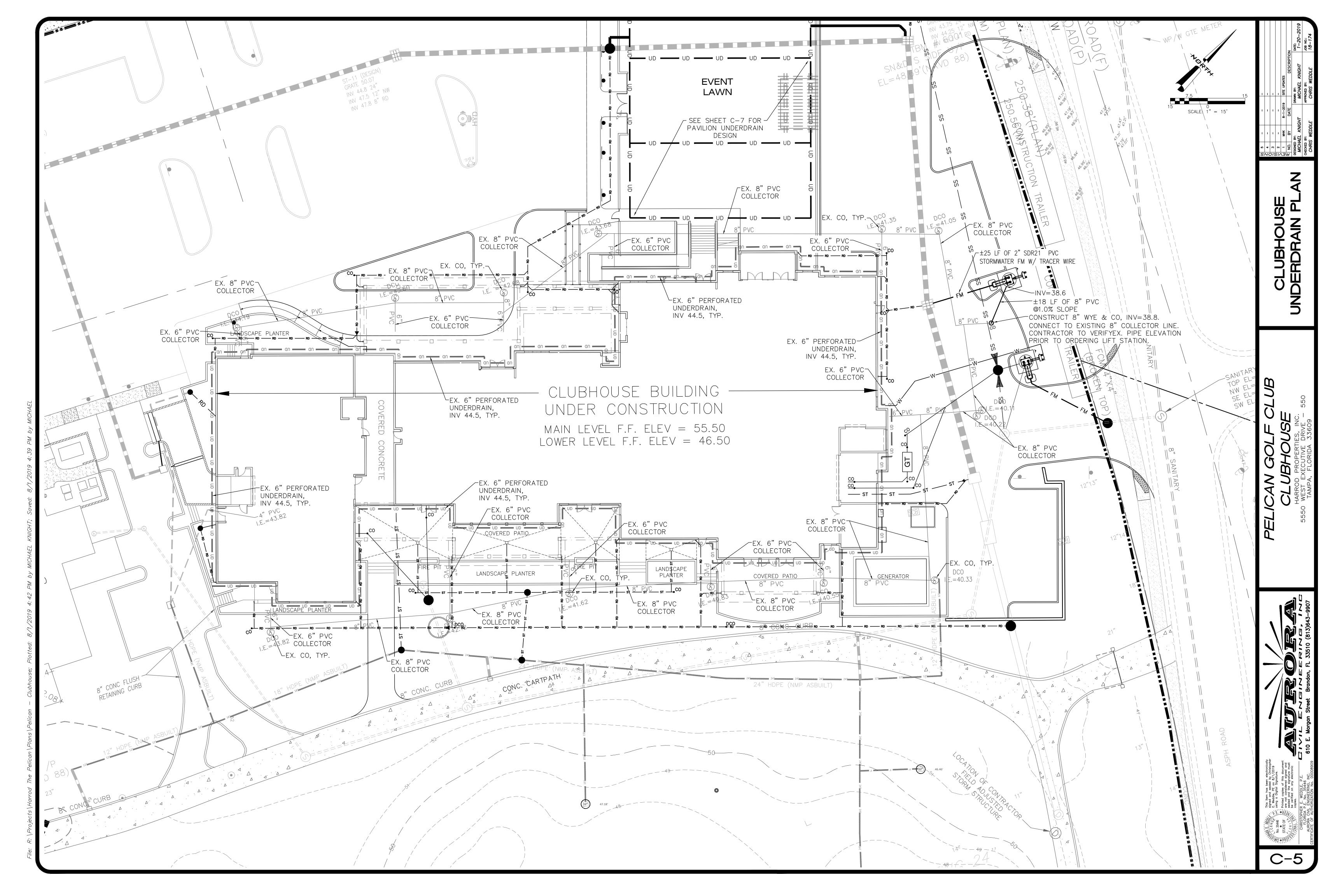


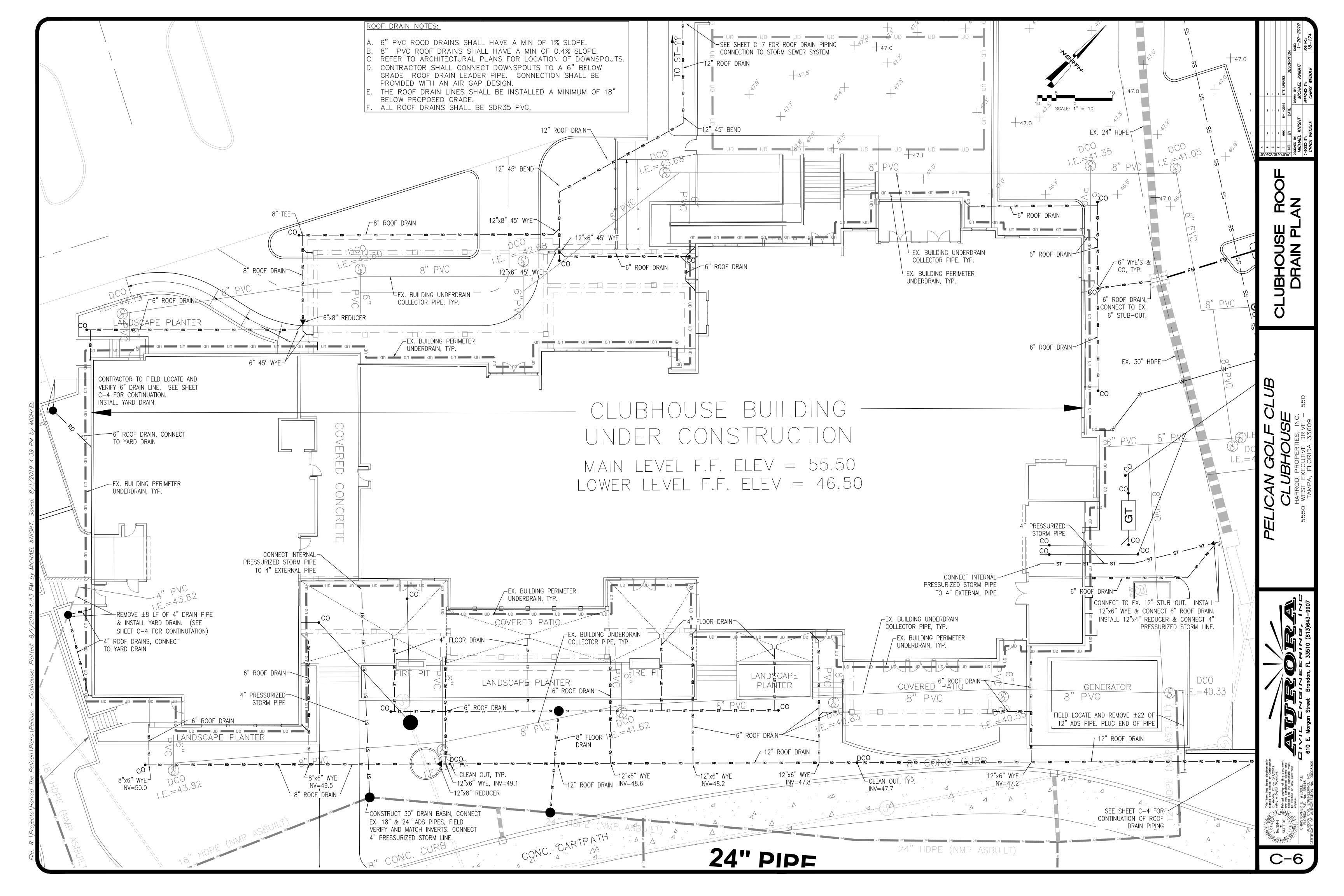


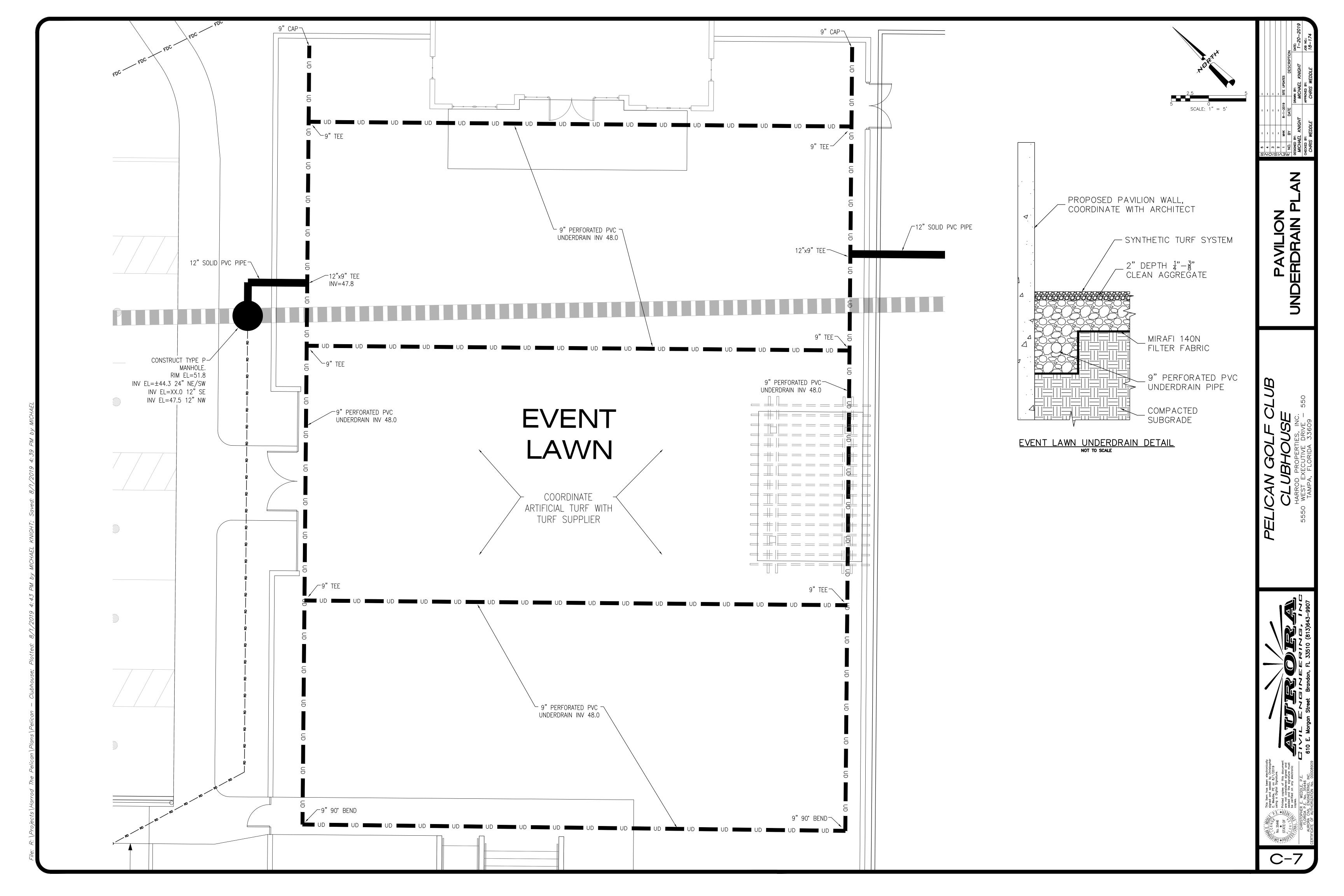


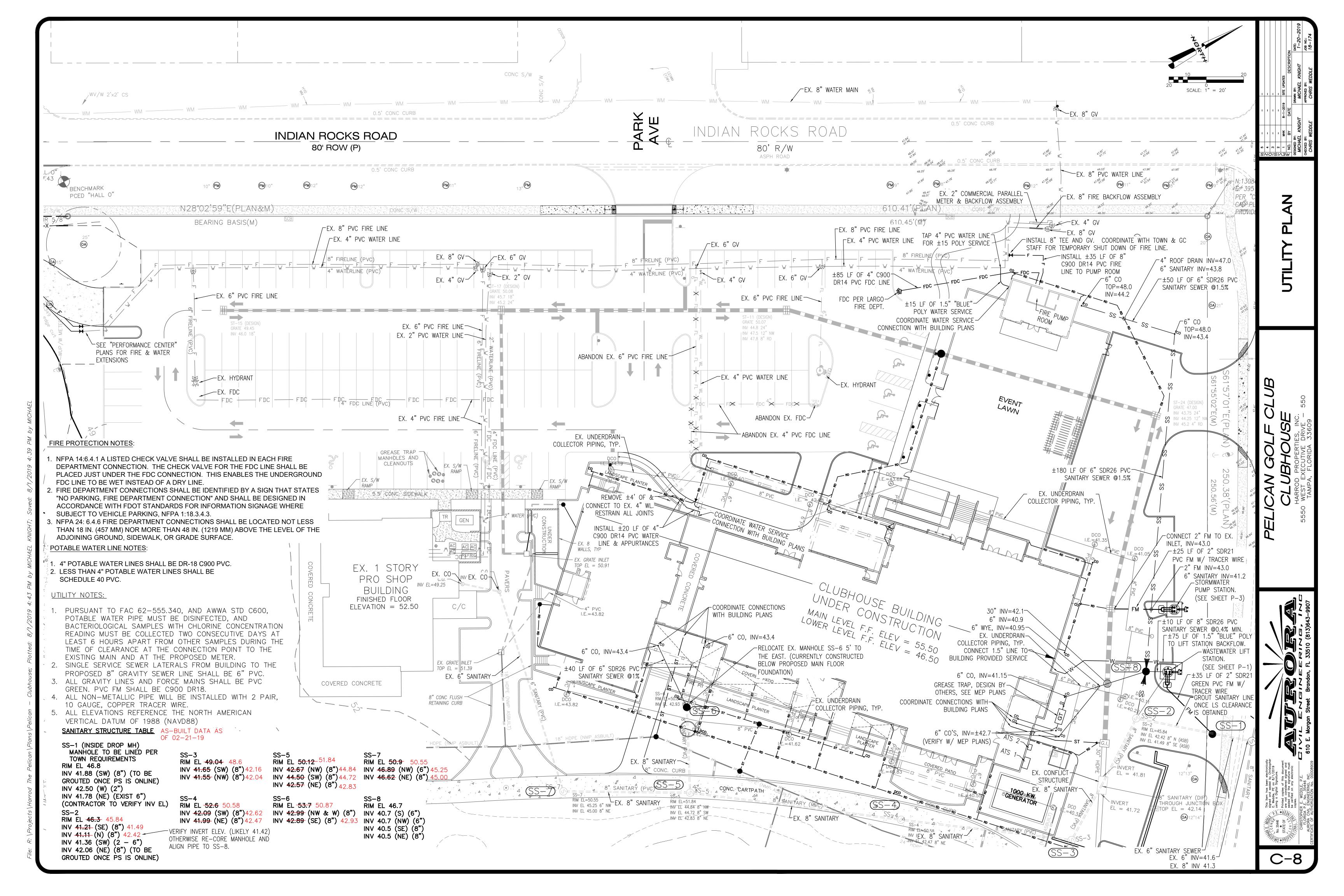


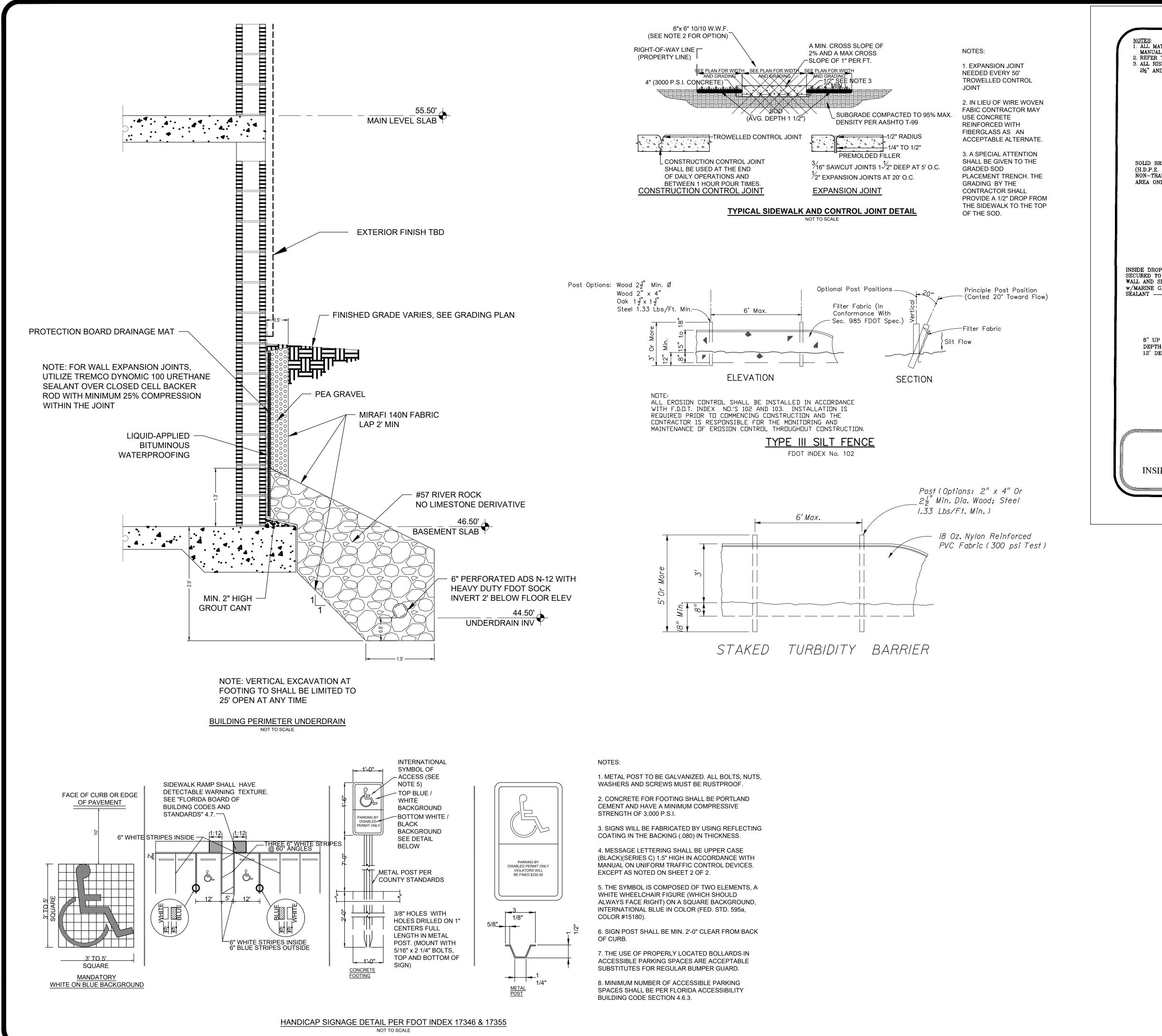


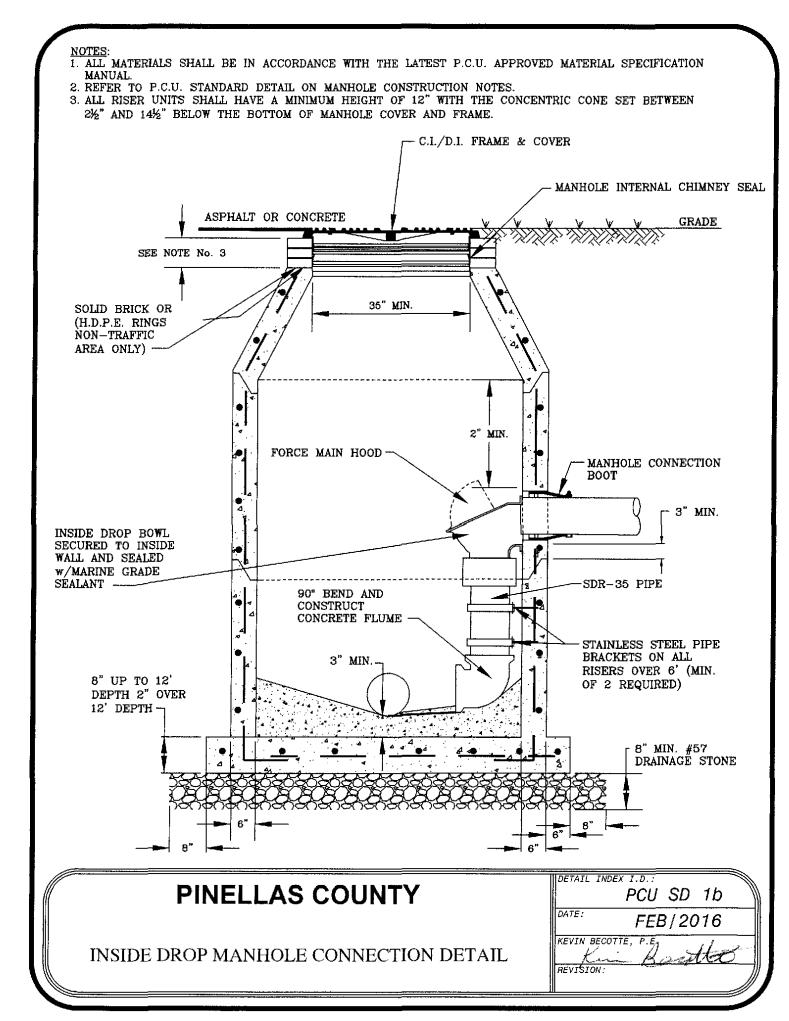






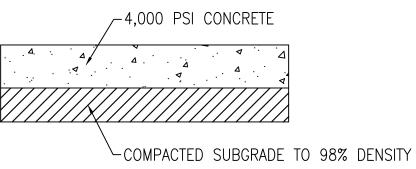






ANA E

A

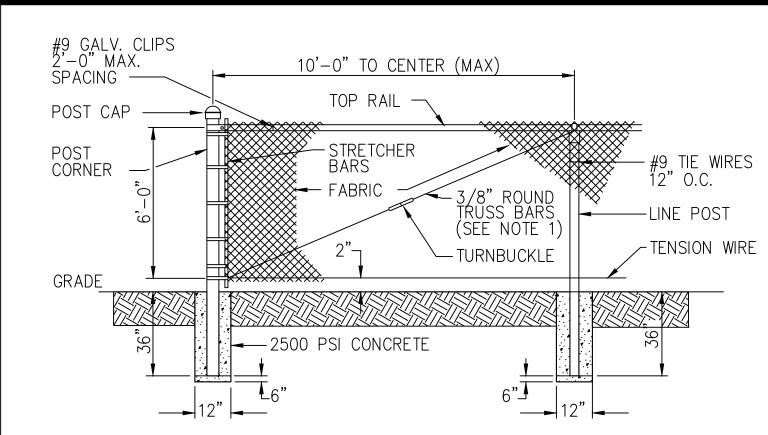


CONCRETE PAVEMENT NOTES:

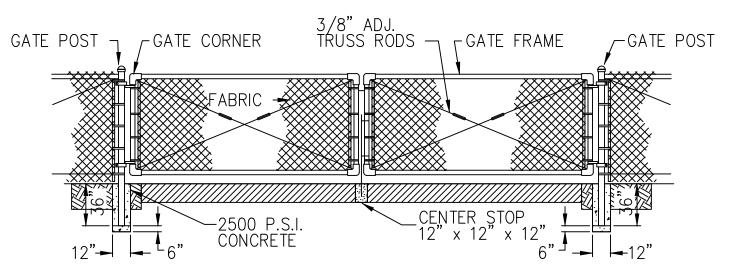
1. CONCRETE TO BE PLACED OVER COMPACTED STABILIZED SUBGRADE, (98% T-180, LBR 40 MINIMUM.)

- 2. CONCRETE TO BE 6" THICK, 4000 PSI, 6X6X6 WWM.
- 3. CONCRETE TO BE PLACED AT 3" SLUMP $(\pm 1/2")$
- 4. WATER/MIST CURE CONCRETE FOR 7 DAYS AFTER
- 5. PROVIDE SAWCUT JOINTS AT 10 FEET ON CENTER MAXIMUM EACH WAY. SAWCUT JOINT DEPTH TO BE 1/4 TO 1/3 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

CONCRETE PAD DETAIL N.T.S.

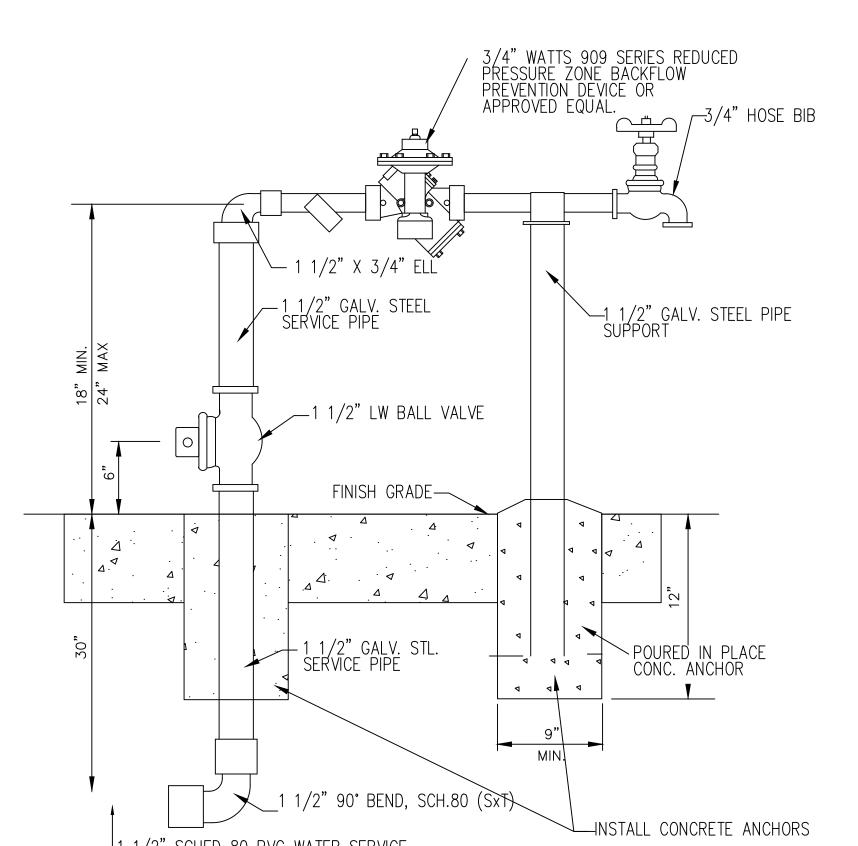


FENCE DETAIL



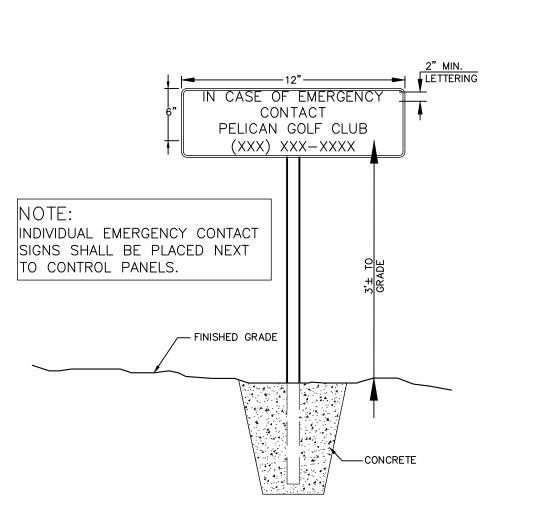
DOUBLE SWING GATE DETAIL

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.



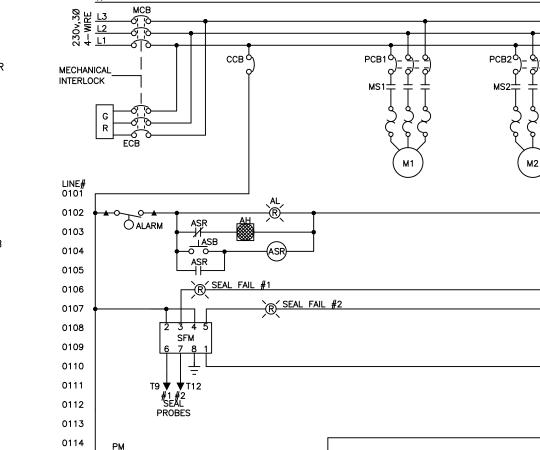
PUMP AN

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

0115

0116

ENCLOSURE AND DEADFRONT LAYOUT (TYPICAL)



THREE PHASE WIRING DIAGRAM

NEMA RATED ENCLOSURE 4X FIBERGLASS

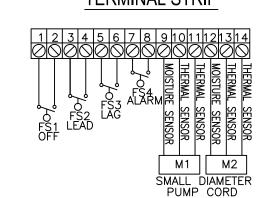
3R STAINLESS STEEL

LEGEND ALARM SILENCE BUTTON HAND OFF AUTO SWITCH HOA VOLT MONITOR BYPASS VMB RL RUN LIGHT INDICATING LIGHT SEAL FAIL MODULE

MCB MAIN CIRCUIT BREAKER ECB EMERGENCY CIRCUIT BREAKER PCB1,2 PUMP CIRCUIT BREAKER CCB CONTROL CIRCUIT BREAKER MS1,2 MOTOR STARTER ASR ALARM SILENCE RELAY OVERLOAD HEATER GENERATOR RECEPTACLE RUN CAPACITOR VM VOLT MONITOR START CAPACITOR ETM ELAPSED TIME METER START RELAY PHASE MONITOR ALTERNATOR PMB PHASE MONITOR BYPASS

ALARM HORN ALARM LIGHT

(OUTER DOOR NOT SHOWN FOR CLARITY) OL RESETS

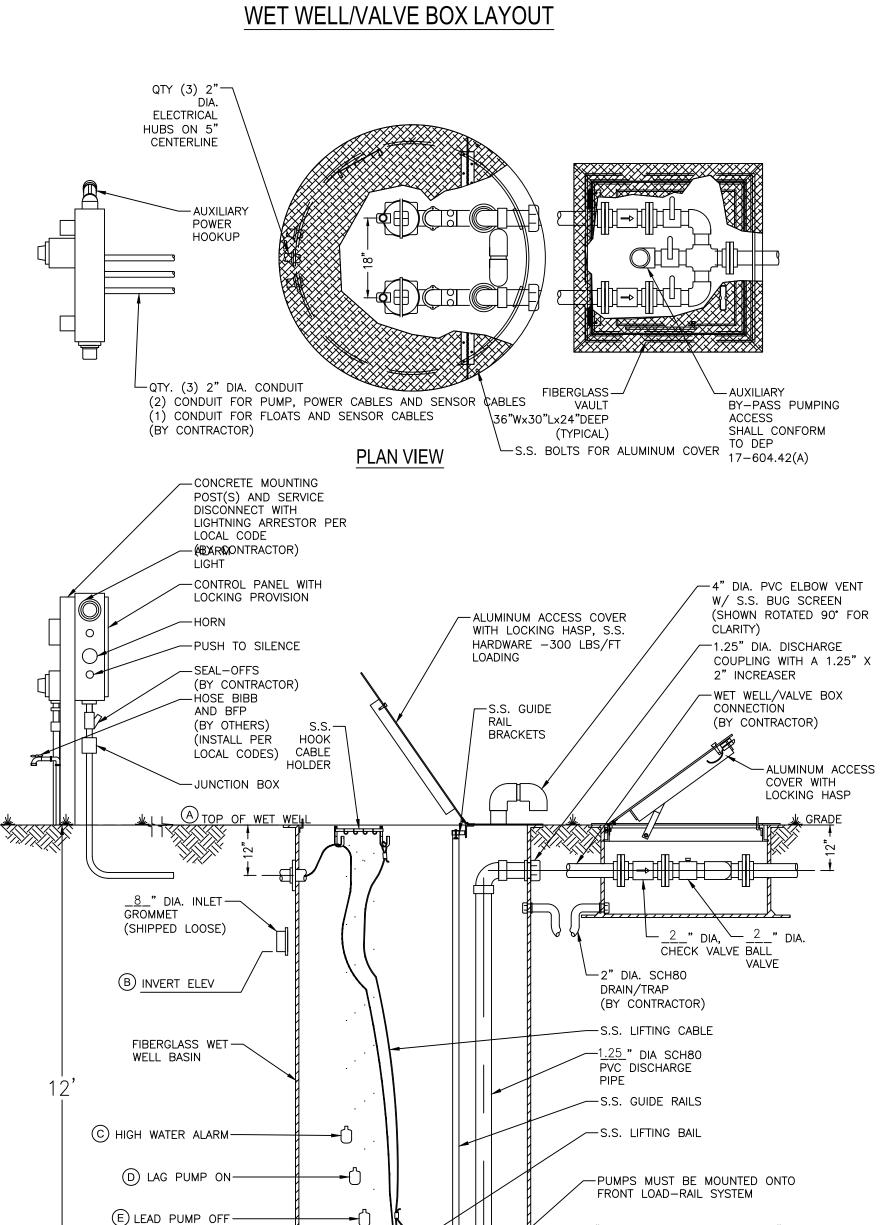


ALL PANELS SHALL BE UL LISTED AND CONFORM TO FLORIDA DEP 64-604.42A

4) ALL PANELS, WET WELL, VALVE BOX, AND ACCESS DOORS SHALL HAVE LOCKABLE MECHANISMS. CONTRACTOR TO 5) POST UNOBSTRUCTED SIGN MADE OF DURABLE WEATHER RESISTANT MATERIAL WITH THE FOLLOWING: PUBLIC NOTICE: IN CASE OF EMERGENCY CONTACT:

6) THE CONTROL PANEL SHALL BE SUITABLY INSTALLED TO PREVENT SETTLING OR TIPPING. 7) FLOAT SWITCHES SHALL BE UL LISTED.

PUMP PERFORMANCE CURVE Total Dynamic Head (ft.) \Rightarrow System lotal Dynamic Head and Pumping Analysis =3



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

(F) PUMP OFF-

G BOTTOM OF WET WELL

PUMP MODEL 4.50" IMPELLER DIAMETER 50 **GP** PUMP DESIGN CAPACITY 22 FT PUMP DESIGN TDH SECONDARY CAPACITY SECONDARY TDH HORSEPOWER 208 γ VOLTAGE 3 PHASE 1.25" DISCHARGE SIZE NOTES: 1.5 IN. STRUCTURE THICKNESS (FIBERGLASS REINFORCED POLYESTER)

FLOTATION CALCULATIONS WET WELL WALL THICKNESS: ANTIFLOTATION BASE THICKNESS: ANTIFLOTATION BASE DIMENSION: BALLAST HEIGHT: WET WELL MATERIAL DENSITY BARREL WEIGHT:

ANTIFLOTATION BALLAST VOLUME: ANTIFLOTATION BALLAST WEIGHT: SOIL WEIGHT: TOTAL WEIGHT: WEIGHT OF WATER DISPLACED (BUOYANCY):

SAFETY FACTOR:

SECTION VIEW

ANTI-FLOTATION DEVICE IS SQUARE PLATE INSTALLED ON BASE OF PUMP STATION FT. RECOMMENDED FILL ABOVE BASE ANTI-FLOTATION PLATE 90 LBS/CFDENSITY OF FIBERGLASS REINFORCED POLYESTER (ASSUMED FIBERGLASS + POLYESTER) 1,604 LBS WET WELL IS ASSUMED TO BE EMPTY AND DOES NOT INCLUDE BASE ANTIFLOTATION PLATE OR TOP SLAB. 65.44 CF EQUIVALENT TO 2.4 CY

9,816 LBS ASSUMED CONCRETE DENSITY = 150 LBS/CF 23,956 LBS SOIL DENSITY IS 2.2 X 62.4 LBS/CF 35,376 LBS TOTAL WEIGHT OF STRUCTURE WITH BACKFILLED CONDITION 16,482 LBS BUOYANCY = CROSS-SECTIONAL AREA (WETWELL + BASE) * HEIGHT * 7.4805 GAL/CF * 8.345 LBS/GAL OF WATER WET WELL IS ASSUMED TO BE EMPTY.

-"QUICK DISCONNECT COUPLING" SLIDE

RAIL SYSTEM ALLOWS PUMP REMOVAL WITHOUT ENTRY INTO WET WELL

-CONCRETE BALLAST AS REQUIRED

PUMP DATA TABLE

HPG200

(SEE FLOTATION CALCULATIONS)

-FIBERGLASS FILLET

-ANTI-FLOTATION RING

FOR 48" I.D.

BY CONTRACTOR.

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.

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

GENERAL NOTES

PUMPS SHALL BE OF THE SUBMERSIBLE TYPE (MANUFACTURED BY HYDROMATIC). EACH PUMP SHALL BE MOUNTED ON

A Ø2" 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

THE PUMP VOLUTE, MOTOR AND SEAL HOUSING SHALL BE CONSTRUCTED OF CAST IRON. ALL EXTERNAL FASTENERS

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

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.

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

THE PUMP SHALL HAVE TWO MECHANICAL SEALS, MOUNTED IN TANDEM WITH AN OIL CHAMBER BETWEEN THE SEALS.

THE PUMP SUPPLIER SHALL PROVIDE THE WET WELL. THIS GLASS FIBER-REINFORCED POLYESTER BASIN SHALL BE

THE HATCH COVER SHALL BE 2/3 HINGED TO ALLOW FOR MAXIMUM ACCESS TO THE WET WELL. THE HATCH COVER

INCLUDE A SINGLE OR DUAL DOOR OF DIMENSIONS SPECIFIED BY THE PUMP MANUFACTURER FOR PROPER PUMP

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

SHALL BE ALUMINUM WITH STAINLESS STEEL FASTENERS, RATED FOR 300 PSF OR GREATER. THE HATCH COVER SHALL

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

ANTI-FLOTATION RING WITH A MINIMUM DIAMETER OF THREE INCHES LARGER THAN THE BASIN DIAMETER. THE RAIL

CONSTRUCTED OF A COMMERCIAL GRADE OF GLASS FIBER AND SHALL BE PROVIDED WITH FILLET AND AN

CLEARANCE. THE COVER SHALL BE MANUFACTURED BY US FABRICATION, OR EQUAL.

FLOATS SHALL BE ANCHOR SCIENTIFIC ROTO-FLOATS OR EQUAL.

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

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

SYSTEM, INTERNAL PIPING AND DISCHARGE CONNECTIONS SHALL BE PRE-INSTALLED BY THE PUMP SUPPLIER.

THE PUMP SHALL BE EQUIPPED WITH A SEAL LEAK DETECTION PROBE AND WARNING SYSTEM BY USING A SEAL FAILURE

BOTH THE STATIONARY AND ROTATING CUTTERS SHALL BE CONSTRUCTED OF HARDENED STEEL.

SHALL BE SERIES 300 STAINLESS STEEL. THE PUMP SHAFT SHALL BE CONSTRUCTED OF SERIES 416 STAINLESS STEEL.

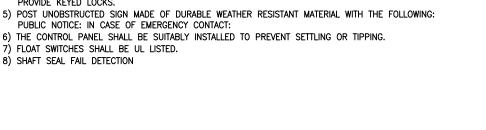
MOUNTED AND PRE-PIPED BY THE PUMP SUPPLIER.

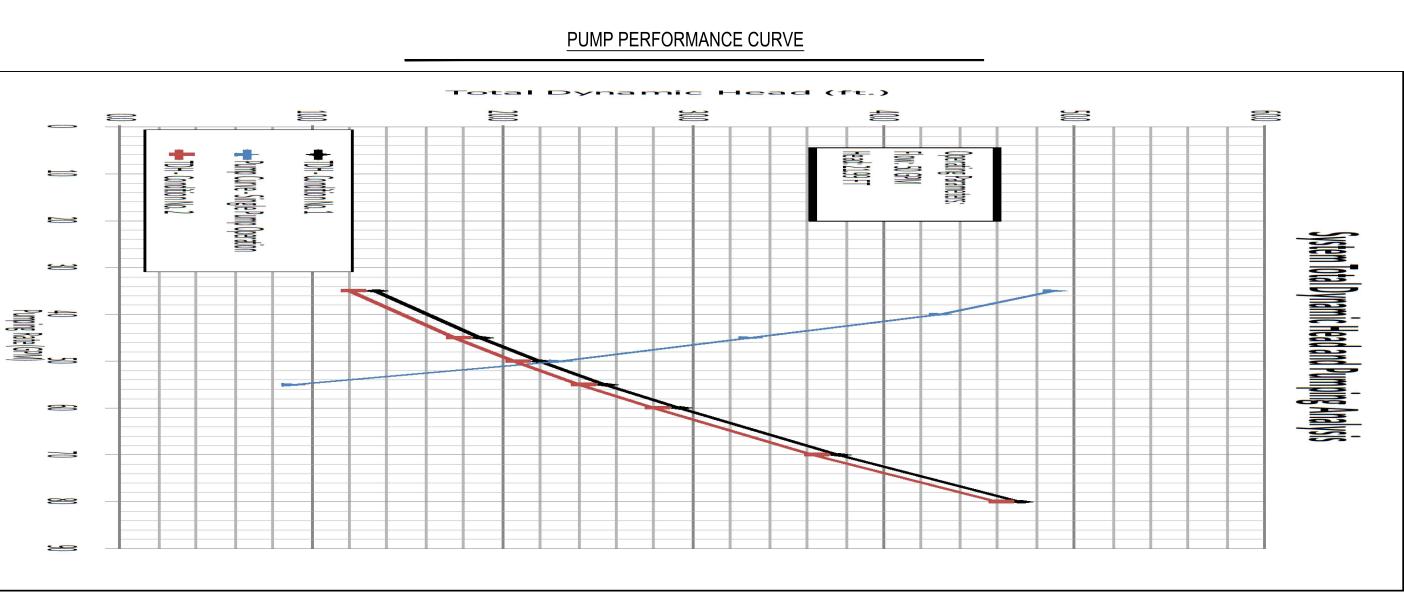
SHUT THE MOTOR OFF IN CASE OF MOTOR OVERHEATING.

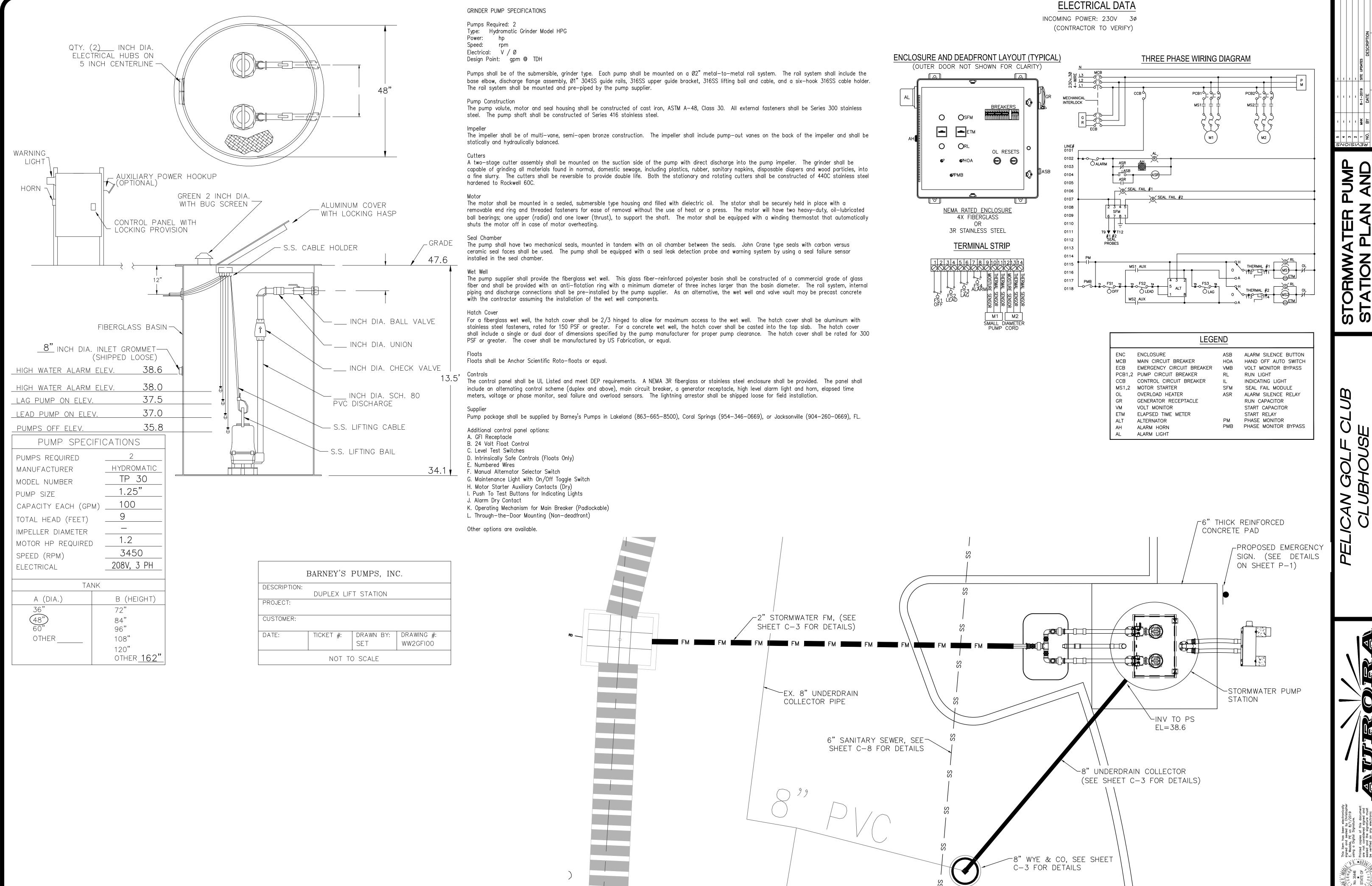
SENSOR INSTALLED IN THE SEAL CHAMBER.

HYDRAULICALLY BALANCED.

GENERATOR RECEPTACLE WITH INTERLOCK FOR EMERGENCY POWER CONNECTION. SURGE AND LIGHTNING PROTECTION SHALL BE PROVIDED BY CONTRACTOR AND MOUNTED EXTERNAL TO THE CONTROL PANEL. 3) PHASE OR VOLTAGE MONITOR SHALL BE PROVIDED IN CONTROL PANEL.







PUMP STATION PLAN

N.T.S.

File: R: \Projects\Harrod The Pelican\Plans\Pelican - Clubhouse; Plotted: 8/1/2019 4:43 PM by MICHAEL