NAPLES BEACH RESTORATION & WATER QUALITY IMPROVEMENT PROJECT - NORTH BASIN 2 60% DESIGN DRAWINGS

Prepared For: CITY OF NAPLES 735 8th St S, Naples, FL 34102

Teresa Heitmann, Mayor
Terry Hutchinson, Vice Mayor
Gary Price, Council Member
Mike McCabe, Council Member
Paul Perry, Council Member
Ted Blankenship, Council Member
Raymond Christman, Council Member

Dana Souza, Interim City Manager

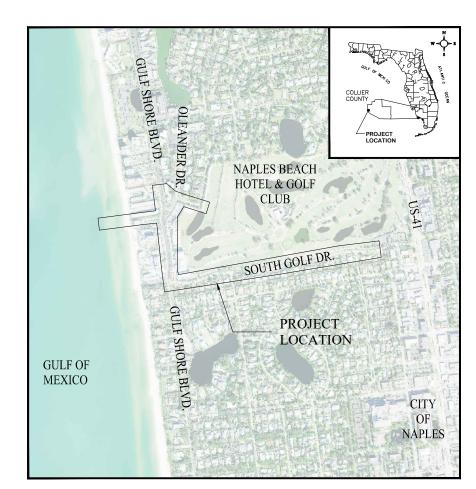
Gregg Strakaluse, Streets & Stormwater Management Director

Prepared By:



Erickson Consulting Engineers 7201 Delainey Court Sarasota FL, 34240 941-373-6460

Date: August 2021



VICINITY MAP

ECE Project No.: 20-380

| Revision By Appd. YY.MM.DD Issued By Appd. YY.MM.DD | |
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7201 Delainey Court Sarasota, FL 32420 www.ericksonconsultingengineers.com

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Improvement Project NPS_GENERAL.dwg
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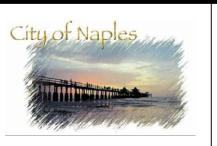
Client/Project

735 8th St S NAPLES, FL

CITY OF NAPLES

& Water Quality

Naples Beach Restoration



DRAWING INDEX

Project No. Scale AS NOTED 20-380 Drawing No. Sheet Revision **NPS** 0 2

PUMP STATION & GENERATOR- STRUCTURAL

PUMP STATION & GENERATOR - MECHANICAL

PUMP STATION & GENERATOR - ELECTRICAL

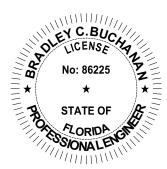
CIVIL / MECHANICAL ENGINEER: RAMON CASTELLA, P.E. LICENSE NO. 40073 STANTEC 5801 PELICAN BAY BOULEVARD SUITE 300 NAPLES, FLORIDA 34108



STRUCTURAL ENGINEER: PAUL R. DUQUETTE, P.E. LICENSE NO. 48457 STANTEC 5801 PELICAN BAY BOULEVARD SUITE 300 NAPLES, FLORIDA 34108



ELECTRICAL ENGINEER BRADLEY C. BUCHANAN LICENSE NO. 86225 STANTEC 5801 PELICAN BAY BOULEVARD SUITE 300 NAPLES, FLORIDA 34108



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DRAWING INDEX - ERICKSON CONSULTING ENGINEERS

GENERAL

EXISTING CONDITIONS

DEMOLITION OF EXISTING OUTFALL STRUCTURES PLANS

ACCESS & STAGING PLANS

STORMWATER CONSOLIDATION PLANS

OVERFLOW SYSTEM

OFFSHORE PIPELINE

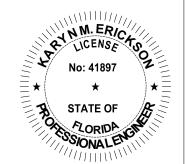
DEWATERING, EROSION, & TURBIDITY CONTROL

ROADWAY PLANS

SIGNING & PAVEMENT MARKING PLANS

KARYN M ERICKSON, P.E. LICENSE NO. 41897

ERICKSON CONSULTING ENGINEERS, INC. 7201 DELAINEY COURT SARASOTA, FL 34240



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CITY OF NAPLES 735 8th St S

NAPLES, FL Naples Beach Restoration & Water Quality Improvement Project

 JAW
 SMT
 KME
 21.06.01

 Dwn.
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SIGNATURE SHEET

Scale

Project No. AS NOTED 20-380 Drawing No. Sheet Revision 0 NPS

- EXPRESSED IN, NORTH AMERICAN DATUM 1983. TOPOGRAPHIC & DRAINAGE STRUCTURE SURVEY PROVIDED BY 1) STANTEC, COLLECTED
- MARCH 2017, 2) DAGOSTINO AND WOOD, COLLECTED SEPTEMBER 2019 AND 3) GAINES, COLLECTED FEBRUARY 2021.
- 4. OFFSHORE CONTOUR DATA PROVIDED BY FLORIDA DEP, COLLECTED SEPTEMBER 2017.
- 5. HARD BOTTOM DATA PROVIDED BY COLLIER COUNTY, COLLECTED 2015 & 2020.
- 6. AERIAL IMAGERY 2020 PROVIDED BY CITY OF NAPLES.
- 7. 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.
- 8. PRIOR TO THE INITIATION OF SITE CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ANY EXISTING UTILITIES INCLUDING GAS. WATER, ELECTRIC, CABLE TV. COMMUNICATIONS. SANITARY SEWERS, AND STORM DRAINAGE SYSTEMS, ON AND OR ADJACENT TO THE SITE. RELOCATE, REPLACE OR CAP AS NECESSARY.
- 9. THE CONTRACTOR SHALL EXERCISE CAUTION IN AREAS OF BURIED UTILITIES AND SHALL CALL "SUNSHINE ONE-CALL" AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO ARRANGE FOR FIELD LOCATIONS OF BURIED UTILITIES.
- 10. THE EXISTING FEATURES SHOWN WITHIN THESE PLANS, INCLUDING LITHLITIES, HAVE BEEN COMPILED FROM SURVEY AND INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES. THE ENGINEER MAKES NO CLAIM TO THE ACCURACY OF THE UTILITY LOCATIONS AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES OF THE PROPOSED CONSTRUCTION AND IS RESPONSIBLE FOR THE PROTECTION OF ALI UTILITIES ON THE SITE AND ADJACENT PUBLIC R.O.W. DAMAGE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPLACED IN LIKE KIND TO THE SATISFACTION OF THE RESPECTIVE UTILITY OWNER, ALL COSTS TO REMEDY DAMAGES TO EXISTING UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
- 11. 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 OR SUB-CONTRACTORS, AS CALLED FOR IN THESE CONTRACT DOCUMENTS.
- 12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION
- 13. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR REVIEW. FAILURE TO OBTAIN REVIEW BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- 14. CONTRACTOR TO COORDINATE WITH THE APPLICABLE ELECTRIC UTILITY SUPPLIER REGARDING ANY NECESSARY RELOCATION(S) OF UNDERGROUND AND OR OVERHEAD ELECTRIC FACILITIES, AND FOR THE LOCATION AND INSTALLATION OF TRANSFORMER PAD(S) AND ASSOCIATED ELECTRIC FACILITIES.
- 15. SAFETY:
- A DURING THE CONSTRUCTION AND OR MAINTENANCE OF THIS PROJECT ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE
- B. SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS HER PERSONNEL
- C. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
- D. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFER 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 CONSTRUCTION PERSONNEL FROM HAZARDS WITHIN THE PROJECT LIMITS.
- E. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISION SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
- F. 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.
- G. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN "ON-SITE PIPING PERMIT" (IF REQUIRED) PRIOR TO THE START OF CONSTRUCTION. THESE PLANS AND ANY SUBSEQUENT REVISIONS TO THESE PLANS THAT ARE ISSUED BY THE ENGINEER, WILL BE SUBJECT TO THE APPROVAL CONDITIONS OF THIS PERMIT.
- 17. THE GRAPHIC INFORMATION DEPICTED ON THESE PLANS HAS BEEN COMPILED TO PROPORTION BY SCALE AS ACCURATELY AS POSSIBLE HOWEVER DUE TO REPRODUCTION DISTORTION AND OR REVISIONS, INFORMATION CONTAINED HEREIN IS FOR PERMIT PURPOSES ONLY.
- 18. ALL SPECIFICATIONS AND DOCUMENTS REFERENCED HEREIN SHALL BE OF THE LATEST REVISION.
- 19. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH ANY OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS SUBCONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS HER ACTIVITIES ACCORDINGLY
- 20. THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATIONS FOR ADDRESSING THIS ISSUE.
- 21. NO KNOWN WELLS CURRENTLY EXIST ON THIS SITE. ANY WELLS DISCOVERED DURING

- EXCAVATION, EARTHMOVING OR CONSTRUCTION MUST BE REPORTED TO SARASOTA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH WITHIN 24 HOURS OF DISCOVERY. ANY WELLS DISCOVERED ON THIS SITE ARE TO BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN AN APPROVED MANNER.
- 22. IN THE EVENT THE CONSTRUCTION SITE IS ABANDONED PRIOR TO COMPLETION OF PROPOSED ACTIVITIES THE PROPERTY OWNER (CITY OF NAPLES) WILL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION AND VEGETATIVE DEBRIS AS WELL AS ALL STOCKPILED FILL ALL REMOVED DEBRIS IS TO BE DISPOSED OF PROPERLY ACCORDING TO STATE AND LOCAL LAW.
- 23. ALL SITE IMPROVEMENTS NEW CONSTRUCTION OUTLINED UNDER THESE PLANS ARE TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND THE FLORIDA ACCESSIBILITY CODE.
- 24. CONSTRUCTION ACTIVITIES WILL FOLLOW ALL LOCAL, STATE AND FEDERAL REGULATIONS PERTAINING TO THE PROTECTION OF THE WEST INDIAN MANATEE WITHIN A CONSTRUCTION ZONE. CONSTRUCTION ACTIVITIES WILL ALSO FOLLOW THE STANDARD PERMIT CONDITIONS AS SET FORTH UNDER ERP 44035340.000
- 25. ALL DISTURBED AREAS SHALL BE RESTORED, INCLUDING REGRADING, TO THEIR ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE NOTED.
- 26 CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY DAMAGED ITEMS INCLUDING, BUT NOT LIMITED TO, DRIVEWAYS, MAILBOXES, SIDEWALKS, STREET SIGNS, LANDSCAPING, AND PRIVATE FENCES AS REQUIRED BY OWNER, ENGINEER OF RECORD. AND/OR OTHER GOVERNING ENTITIES.
- 27. THRUST BLOCKING, TIE RODS, AND RESTRAINING GLANDS SHALL BE PROVIDED AS SHOWN ON THE PLANS OR AS REQUIRED IN THE FIELD BY THE CITY OF NAPLES UTILITIES DIVISION.
- 28. CONTRACTOR SHALL PROVIDE ACCESS FOR TRAFFIC ON GULF SHORE BLVD. AT ALL TIMES DURING CONSTRUCTION. CONSTRUCTION SHALL BE CONDUCTED IN SUCH A MANNER SO THAT ALL PROPERTY OWNERS RETAIN ACCESS TO THEIR DRIVEWAYS AND
- 29. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION AND PAYMENT OF RESTRAINING ALL POLES (FPL, LIGHTING, ETC.) AS REQUIRED DURING CONSTRUCTION
- 30. CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, TOOLS, MATERIALS AND SERVICES NEEDED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES. THESE MEASURES SHALL CONFORM TO THE PLANS AND SPECIFICATIONS AND ALL STATE AND LOCAL REQUIREMENTS
- 31 REQUIREMENTS OF THE CITY OF NAPI ES, LITH ITIES DIVISION SHALL GOVERN ALL WORK WHERE A CONFLICT EXISTS IN THE REQUIREMENTS OF A REFERENCED MATERIAL OR INSTALLATION STANDARD, THE REQUIREMENTS OF CITY OF NAPLES, SHALL PREVAIL WHERE THE REQUIREMENTS OF A STATE OR LOCAL AGENCY HAVING JURISDICTION ARE MORE STRINGENT, THOSE REQUIREMENTS SHALL PREVAIL
- 32. CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS SPECIFICATIONS AND SPECIAL PROVISIONS. AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- 33. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION
- 34. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
- 35. NO FIELD CHANGES OR DEVIATION FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER AND THE CITY.
- 36. THE CONTRACTORS TESTING CONTRACTOR SHALL CARRY OUT DENSITY TESTS TO DETERMINE COMPACTION OF BACKELL SPACED A MINIMUM OF ONE IN EVERY 300 FEET TRENCH CUT PER LIFT AND SHALL INCLUDE A TEST AT SPRING LINE OF PIPE MAINTENANCE OF TRAFFIC SIGNS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE PROVIDED BY THE CONTRACTOR DURING CONSTRUCTION AS REQUIRED BY THE F.D.O.T. / CITY OF NAPLES, ALL OPEN ROAD CUTS SHALL BE FILLED, COMPACTED AND COVERED WITH A TEMPORARY ASPHALT PATCH BEFORE DARK ON A DAILY BASIS DURING CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL OPEN CUTS, AS REQUIRED BY F.D.O.T./CITY OF NAPLES.
- 37. ALL PIPELINE ELEVATIONS ARE SHOWN AS MINIMUM BURIAL DEPTHS.
- 38. CONTRACTOR SHALL HIRE THE SERVICES OF AN INDEPENDENT GEOTECHNICAL ENGINEER DURING THE EXCAVATION AND SOIL SUPPORT ACTIVITIES AGAINST THE SOUTH RIGHT OF WAY OF THIRD AVENUE NORTH AND THE PRIVATE RESIDENCE ON 215 GUI F SHORE BLVD. INSTALL MONITOR, READ, RECORD, MAINTAIN, PROTECT, AND REMOVE OR ABANDON GEOTECHNICAL INSTRUMENTATION AS SPECIFY IN SECTION 02453 GEOTECHNICAL INSTRUMENTATION AND MONITORING. ENSURE THAT INSTRUMENTATION IS INSTALLED, FULLY FUNCTIONAL, THAT THE FIRST SET OF READINGS ARE TAKEN, AND THAT THE INSTRUMENTATION IS READY FOR MONITORING NO LATER THAN SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR ANOTHER LINDERGROLING CONSTRUCTION ACTIVITY WITHIN 200 FT IN PLAN OF THE DESIGNATED INSTRUMENTATION LOCATION.
- 39. CONTRACTOR SHALL BE RESPONSIBLE TO AVOID AND CONTROL MOVEMENTS OR DEFLECTION BY IMPLEMENTING APPROPRIATE CONSTRUCTION PROCEDURES DURING

EXCAVATION AND SUPPORT ACTIVITIES OF THE GROUND. RESTORE DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION- RELATED SETTLEMENT IN EXCESS OF

ALLOWABLE MAXIMUM VALUES AT NO ADDITIONAL COST TO THE OWNER. OBTAIN PRIOR

APPROVAL FROM THE OWNER FOR ANY PROPOSED REPAIRS TO ROADWAYS OR PRIVATE

PROPERTIES

40. THE CONTRACTOR SHALL INSTALL SEISMOGRAPHS AT THE NEAR POINT OF THE BUILDING LOCATED AT ADDRESS 215 GULF SHORE BLVD. FACING THE EXCAVATION SITE.

EASEMENTS HAVE BEEN OBTAINED, THE CONTRACTOR WILL BE RESPONSIBLE FOR NEGOTIATING PLACEMENT OF SEISMOGRAPHS, NOISE MONITORING AND GEOTECHNICAL INSTRUMENTATION AND MONITORING DEVICES (I.E.: SETTLEMENT MONITORING, OPTICAL SURVEY TARGETS) WITH PROPERTY OWNERS

41 IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT WATER

DISCHARGED FROM THE SITE DURING CONSTRUCTION SHALL MEET OR EXCEED STATE WATER QUALITY STANDARDS. SPECIFICALLY, THE TURBIDITY OF DISCHARGED WATER SHALL NOT EXCEED 29 NTU ABOVE THE BACKGROUND LEVEL. WATER QUALITY AND SILTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL EROSION CONTROL MEASURES ARE INSTALLED, ESTABLISHED AND ACCEPTED.

42. WHERE INDICATED, OR AS NECESSARY SILT FENCES AND OR HAY BALES SHALL BE PLACED ALONG THE PROJECT PERIMETER TO PREVENT SEDIMENT IN RUNOFF AND TURBID WATER FROM LEAVING THE SITE

CONSTRUCTION IN STREETS AND ROAD RIGHT-OF-WAYS:

- 1. OPEN ROAD CUTS REQUIRE PRIOR APPROVAL OF THE CITY, COUNTY, STATE OR ANY OTHER AGENCY WHICH MAY HAVE JURISDICTION.
- 2. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND STANDARDS
- 3. ALL AREAS IN EXISTING RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION SHALL RECEIVE GRASS SEED, MULCH OR SOLID SOD.
- 4. STREET OR HIGHWAY RESTORATION TO BE DONE AS PER LOCAL OR STATE AGENCY HAVING JURISDICTION.
- 5. CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITY REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.
- 6. TRAFFIC CONTROL ON ALL COUNTY, CITY OF NAPLES, AND STATE HIGHWAY RIGHT-OF-WAYS SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT / FHWA) AND REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION.
- 7. MAINTENANCE OF TRAFFIC PLANS TO BE SUBMITTED BY CONTRACTOR AT HIS SUBMITTAL FOR RIGHT-OF-WAY PERMITS.

DEMOLITION, CLEARING AND SITE PREPARATION NOTES:

- 1. THE CONTRACTOR SHALL VISIT THE SITE TO EVALUATE THE DEMOLITION WORK REQUIRED TO COMPLETE THE PROPOSED PROJECT AND CONFIRM THE ACCURACY OF THE DRAWINGS PRIOR TO PREPARING HIS OR HER BID.
- THE DEMOLITION WORK SHALL GENERALLY REQUIRE THE REMOVAL OF ALL EXISTING PAVEMENT DRAINAGE STRUCTURES AND PIPING CURRING AND LANDSCAPING LIMITATION ON LANDSCAPE REMOVAL ARE AS FOLLOWS: CONTRACTOR SHALL TAKE CARE TO PROTECT PLANTINGS ALONG THE PROPERTY LINES THAT DO NOT IMPACT CONSTRUCTION OF THE PROPOSED PROJECT AND PROVIDE VISUAL SCREENING FOR THE NEIGHBORING PROPERTIES. THIS NOTE IS NOT INTENDED TO BE A COMPREHENSIVE DESCRIPTION OF THE DEMOLITION WORK AND IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE FULL EXTENT OF DEMOLITION TO ACCOMPLISH INSTALLATION OF THE PROPOSED PROJECT IMPROVEMENTS.
- 3. DISPOSAL OF MATERIALS REMOVED DURING DEMOLITION SHALL BE IN A LEGAL MANOR AND IN COMPLIANCE WITH ALL APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL LAWS AND REGULATIONS
- 4. DISPOSAL COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE CONTRACTORS BID, NOTE ASBESTOS/CONCRETE PIPE MAY BE ENCOUNTERED.
- 5. ALL APPROPRIATE SAFEGUARDS SHALL BE PUT IN PLACE BY THE CONTRACTOR TO PROTECT THE ENVIRONMENT IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.
- 6. DEMOLITION AND DISPOSAL ACTIVITIES SHALL BE CONDUCTED BY THE CONTRACTOR TO MINIMIZE DUST AND NOISE NUISANCE FOR ADJACENT RESIDENTIAL PROPERTIES.
- CONTRACTOR SHALL CONDUCT OPERATIONS IN A MANNER THAT WILL MINIMIZE IMPACT TO LOCAL TRAFFIC.
- 8. CONTRACTOR SHALL PREPARE A TEMPORARY DRAINAGE PLAN ACCEPTABLE TO THE CITY TO ALLOW REMOVAL OF STORM WATER FROM ON-SITE AND OFF-SITE STORM EVENTS THROUGHOUT THE CONSTRUCTION PERIOD.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF THE EROSION CONTROL DEVICES, AS SHOWN ON THE CONSTRUCTION PLANS, PRIOR TO ANY SITE CLEARING AND OR DEMOLITION. REFER TO THE "EROSION CONTROL NOTES" SECTION CONTAINED HEREIN FOR ADDITIONAL REQUIREMENTS.
- 10. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN, AS INDICATED ON THE CONSTRUCTION PLANS, SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES, AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE(S) SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND THE LOCAL AGENCY HAVING JURISDICTION OVER THESE ACTIVITIES.
- 11. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS MUST BE SEEDED. MULCHED SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, IMMEDIATELY FOLLOWING CONSTRUCTION.
- 12. CONTRACTOR TO BE RESPONSIBLE FOR SECURING THE SITE AND PROPERTY.
- 13. REMOVAL OF THE EXISTING BEACH OUTFALLS WILL OCCUR ON THE SANDY BEACH ONLY AND WILL TERMINATE (CAP) AT THE SEAWARD EDGE OF VEGETATION SO AS NOT TO RESULT IN IMPACTS TO THE DUNES AND COASTAL VEGETATION. OUTFALL PIPE SHALL BE GROUTED AND CAPPED AT THE UPSTREAM INLET STRUCTURE AND DOWNSTREAM END AS SHOWN ON THE CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL REMOVE ALL EXISTING PIPE SUPPORTS AND ASSOCIATED STRUCTURES FROM THE BEACH. THE CONTRACTOR SHALL GRADE THE TEMPORARY EXCAVATION AREA TO MEET EXISTING ADJACENT GRADES ON THE BEACH. ALL BEACH SAND EXCAVATED SHALL BE TEMPORARILY STOCKPILED ONSITE AND REPLACED IN ITS ORIGINAL LOCATION, GRADES AND SLOPES.

CONSTRUCTION ACCESS, STAGING AND TRANSPORT OF MATERIALS:

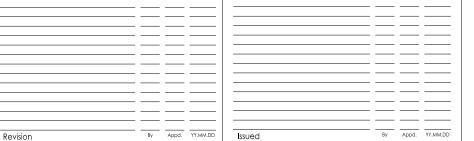
THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL PERMITS, LAWS AND REGULATIONS REGARDING WEIGHT LIMITS FOR ROADS UTILIZED FOR TRANSPORT OF EQUIPMENT AND MATERIALS TO THE SITE. THE CONTRACTOR IS LIKEWISE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE TRAFFIC, SAFETY, AND SPEED LAWS. THE CONTRACTOR SHALL NOTIFY, AND COORDINATE WITH, LOCAL LAW ENFORCEMENT

- REGARDING TRANSPORT ACTIVITIES, WHICH SHALL BE UNDERTAKEN FOR THE WORK.
- 2. CONTRACTOR SHALL PROPOSE THE PLAN OF WORK AND ACCESS AND STAGING AREAS TO BE UTILIZED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF WORK THE PLAN SHALL INCLUDE A DESCRIPTION OF THE ROUTES AND AREAS HE INTENDS TO USE TO TRANSPORT AND STORE MATERIAL AND EQUIPMENT DURING CONSTRUCTION. THE PLAN SHALL ALSO DESCRIBE HOW THE CONTRACTOR INTENDS TO ACCESS THE PROJECT SITE AND WORK AREAS. ALL TRANSPORT ROUTES, STORAGE AREAS, AND ACCESS AREAS ARE SUBJECT TO THE APPROVAL OF THE ENGINEER AND OWNER
- 3 ALL TEMPORARY VEHICLE ACCESS ROUTES REQUIRED FOR THE CONSTRUCTION OF THIS OJECT MUST BE REMOVED UPON PROJECT COMPLETION, AND THE AREAS AFFECTED MUST BE RESTORED TO THEIR ORIGINAL CONDITION BEFORE FINAL ACCEPTANCE OF THE
- 4. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL SIGNS, BARRICADES, WARNING SIGNALS, AND FLAGMEN TO SAFEGUARD PEDESTRIAN AND VEHICULAR TRAFFIC IN THE PROJECT AREA AS REQUIRED BY LOCAL REGULATIONS (IF APPLICABLE).

EROSION CONTROL NOTES:

- 1. CONTRACTOR IS TO PROVIDE EROSION CONTROL SEDIMENTATION BARRIERS (SILTATION CURTAINS) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWER AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH, RIP-RAF ROCK OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF EXCESSIVE QUANTITIES OF FARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE COUNTY AND THE ENGINEER DAILY.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING TO ESTABLISH BACKGROUND LEVELS AND TESTING DURING CONSTRUCTION. THE CONTRACTOR SHALL LIMIT THE DISCHARGE OF TURBID WATERS OFF-SITE 29 NTU'S (NEPHELOMETRIC TURBIDITY UNITS), ABOVE BACKGROUND LEVELS.
- 3. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER
- 4. CONTRACTOR SHALL INSPECT AND MAINTAIN ON A DAILY BASIS ALL EROSION SEDIMENTATION CONTROL FACILITIES.
- 5 THE CONTRACTOR SHALL ENSURE THAT SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACE IN UPLAND AREAS.
- 6. BARRIERS ARE TO BE REPLACED IF DAMAGED.
- 7. EROSION AND SEDIMENT CONTROL BMPS IN ADDITION TO THOSE PRESENTED ON THE PLANS AND OUTLINED IN THE EROSION AND SEDIMENT CONTROL PLAN (ECP) AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS. BMPS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH STATE AND LOCAL REGULATIONS. THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.
- 8 THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4)(C)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE
- 9. FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATER BODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES (PH: 941.861.5000; FAX: 941.861.0986). SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
- 10. IF CONTAMINATED SOIL AND OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE. AND WATER RESOURCES SHALL BE CONTACTED (PH: 941.861.5000: FAX: 941.861.0986).
- 11. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:
- A. NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT IN ACCORDANCE WITH RULE 62-621.300(4)(A), F.A.C. B. A COPY OF THE CERTIFIED NPDES NOL OR A COPY OF THE FDEP COVERAGE
- CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(A)PART III.C.2, F.A.C. C. A COPY OF THE CERTIFIED NPDES NOL OR A COPY OF THE FDEP COVERAGE
- CONFIRMATION LETTER SHALL BE PROVIDED TO SARASOTA COUNTY IN ACCORDANCE WITH RULE 62-621.300(4)(A) PART III.D.1, F.A.C. D. THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621,300(4)(A)PART
- VD6 FAC E. A COPY OF THE SWPPP. AND COPIES OF THE INSPECTION AND MAINTENANCE
- RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE, AND SHALL BE READILY AVAILABLE TO COUNTY OR STATE INSPECTORS
- 12. IF DEWATERING DISCHARGES WILL FLOW OFF SITE OR TO SURFACE WATERS APPROPRIATE FDEP AUTHORIZATION SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

Title





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Client/Project CITY OF NAPLES

> 735 8th St S NAPLES, FL

Naples Beach Restoration & Water Quality Improvement Project

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GENERAL NOTES (1)

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2. 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.

- ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOILS TESTING COMPANY AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.
- 4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED.
- 5. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.
- CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS
- PRIOR TO CONSTRUCTION OF CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR APPROVAL.
- 8. CONTRACTOR TO PROVIDE A 1" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE PAVEMENT SECTION AND OTHER APPURTENANCES (MANHOLES, INLETS, APRONS, ETC).
- 9. ALL PAVEMENT MARKINGS SHALL BE MADE IN ACCORDANCE WITH FDOT STANDARD INDEX 17346.
- 10. 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. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.
- 11. SLOPES OF 4:1 AND GREATER ARE TO BE SODDED. ALL DISTURBED AREAS WITHIN THE FDOT RIGHT-OF-WAY MUST BE SODDED. ALL OTHER DISTURBED AREAS ARE TO BE STABILIZED WITH SEED AND MULCH.
- 12. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT".
- 13. THE CONTRACTOR SHALL INSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.
- 14. CONSTRUCTION TESTING AND CONSTRUCTION STAKING ARE CONTRACTOR'S RESPONSIBILITY TO PROVIDE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THESE SERVICES DURING CONSTRUCTION.
- 15. THE LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THEIR EXACT LOCATION PRIOR TO CONSTRUCTION IN THEIR VICINITY.
- 16. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN THE AREA PRIOR TO CONSTRUCTION AND CALL THE SUNSHINE STATE ONE CALL 1-800-432-4770.
- 17 ALL FLEVATIONS REFER TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED
- 18. ANY TREES TO REMAIN ON-SITE SHALL BE BARRICADED PRIOR TO THE START OF CONSTRUCTION. SEE DETAILS. CONTRACTOR IS NOT TO REMOVE VEGETATION BY GRUBBING OR PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIALS, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE BARRICADED AREA AROUND ANY TREE TO REMAIN ON-SITE.
- 19. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE PRUNED IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
- 20. TREE ROOTS WITHIN APPROVED IMPROVEMENT AREAS SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA WITH A "COSKO ROOT PRUNER", OR SIMILAR.
- 21. ALL CONCRETE FOR ROADWAY, PARKING, SIDEWALK AND DRAINAGE STRUCTURES SHALL BE 3000 PSI PER FDOT STANDARD SPECIFICATION SECTION 346.
- 22. ALL DRAINAGE CULVERT JOINTS ARE TO BE WRAPPED PER FDOT INDEX 280.
- 23. ALL DRAINAGE STRUCTURES (INLETS, MANHOLES, CONTROL STRUCTURES, ETC.) SHALL CONTAIN PAVED INVERTS TO PREVENT WATER IMPOUNDMENT WITHIN THE STRUCTURE (SARASOTA CO. STM B.4.E.5).
- 24. ALL BEACH COMPATIBLE SAND EXCAVATED SEAWARD OF THE CCCL IS TO REMAIN SEAWARD OF THE CCCL
- 25. ALL PIPE LENGTHS ARE PLUS OR MINUS AND ARE MEASURED FROM THE CENTER OF STRUCTURES.
- 26. THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTMENTS OF VALVE BOX COVERS, MANHOLE RIMS AND COVER, GRATES, ETC., NECESSARY TO MATCH FINAL GRADES AS SHOWN ON PLANS.
- 27. ALL UNPAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE GRASSED AND MULCHED UNLESS OTHERWISE SHOWN ON THE PLANS OR DETAILS
- 28. EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
- 29. CONTRACTOR SHALL NOTIFY THE ENGINEER AND CITY A MINIMUM OF 48 HOURS BEFORE REQUIRED INSPECTIONS.
- 30. ALL FRAME AND GRATE INLETS TO BE HEAVY DUTY TRAFFIC RATED.
- 31. THE WATER MANAGEMENT SYSTEM OUTSIDE PROJECT LIMITS TO BE MAINTAINED BY CITY STREETS AND STORMWATER DEPARTMENT. THE WATER MANAGEMENT SYSTEM INSIDE PROJECT LIMITS TO BE MAINTAINED BY THE CONTRACTOR.
- 32. THE PROPOSED STABILIZED SUBGRADE SHALL HAVE L.B.R. OF 40 AND SHALL BE COMPACTED TO 98% MINIMUM DENSITY AS DETERMINED BY AASHTO T-180.
- 33. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT WATER DISCHARGED FROM THE SITE DURING CONSTRUCTION SHALL MEET OR EXCEED STATE WATER QUALITY STANDARDS, SPECIFICALLY, THE TURBIDITY OF DISCHARGED WATER NOT EXCEED 29 NTU ABOVE THE BACKGROUND LEVEL, WATER QUALITY AND SILTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL EROSION CONTROL MEASURES ARE INSTALLED, ESTABLISHED AND ACCEPTED.
- 34. WHERE INDICATED, OR AS NECESSARY SILT FENCES AND OR HAY BALES SHALL BE PLACED ALONG THE PROJECT PERIMETER TO PREVENT SEDIMENT IN RUNOFF AND TURBID WATER FROM LEAVING THE SITE

OFFSHORE CONSTRUCTION NOTES:

- CONTRACTOR SHALL COMPLY WITH ALL USCG RULES AND REGULATIONS SPECIFIC TO VESSEL MARKING AND LIGHTING. ALL CONSTRUCTION VESSELS WORKING IN THE GULF SHALL BE IN COMPLIANCE WITH FEDERAL USCG REGULATIONS. THE CONTRACTOR SHALL PROVIDE THE COAST GUARD WITH A NOTICE TO MARINERS IN ADVANCE OF THE WORK OCCURRING IN THE GULF AND DURING THE TIME WORK OCCURS IN THE GULF
- ALL WORK VESSELS SHALL BE MOORED TO PROVIDE SAFE NAVIGATION IN THE WATERS SURROUNDING THE WORK AREA.
- OFFSHORE REFUELING OF VESSELS IS NOT ANTICIPATED AT THIS TIME. SHOULD THE CONTRACTOR DESIRE OFFSHORE REFUELING OF CONSTRUCTION VESSELS. HE WILL BE REQUIRED TO SUBMIT A REFUELING PLAN IN ACCORDANCE WITH STATE AND FEDERAL GUIDELINES TO THE CITY

GENERAL NOTES

LANDSCAPING & IRRIGATION NOTES

- ALL PLANTS MUST BE HEALTHY. VIGOROUS MATERIAL. FREE OF PESTS AND DISEASES. ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE TO FLORIDA NO. 1 GRADE, ACCORDING TO THE "GRADES AND STANDARDS", ET AL PUBLISHED BY FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. PLANT MATERIALS IN SOME INSTANCES EXCEED NO. 1 GRADE IN ORDER TO MEET THE MINIMUM REQUIREMENTS OF THIS PROJECT AND INDIVIDUAL PLANT SPECIFICATIONS AS NOTED ON THE PLANT LIST; FLORIDA FANCY GRADES ARE REQUIRED FOR CERTAIN PALM TREES ON THIS PROJECT.
- 2 CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTS MEETING SPECIFICATION AS NOTED PRIOR TO INSTALLATION. CONTRACTOR SHALL IMMEDIATELY REMOVE ALL PLANT MATERIAL THAT AT ANY TIME DOES NOT CONFORM TO SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE.
- ALL ROOTBALLS SHALL CONFORM TO THE SIZE STANDARDS SET FORTH IN "AMERICAN STANDARDS FOR NURSERY STOCK", WHERE FLORIDA GRADES AND STANDARDS ARE SILENT ON ORNAMENTAL PLANT MATERIAL GRADES, THEN AMERICAN STANDARDS FOR NURSERY STOCK SHALL APPLY.
- CONTRACTOR TO SUBMIT TO THE LANDSCAPE ARCHITECT THE GROWER'S AND/OR STATE INSPECTION CERTIFICATE FOR PLANT MATERIAL TWO (2) WEEKS BEFORE COMMENCEMENT OF THE PROCUREMENT PHASE.
- 5. PLANT MATERIAL DESIGNATED IN THE DRAWINGS TO REMAIN SHALL BE PROTECTED DURING TRANSPORT AND DELIVERY TO JOB SITE WITH SHADE CLOTH OR OTHER ACCEPTABLE MEANS OF WINDBURN PREVENTION. CONTRACTOR SHALL FIELD VERIFY ALL SPECIES, QUANTITY, AND INSTALL LOCATION INFORMATION AND CONFIRM WITH THE LANDSCAPE ARCHITECT PRIOR TO INITIATING PLANTING INSTALLATION.
- ALL EXISTING PLANTING SHALL REMAIN INTACT AND UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS. CONTRACTOR SHALL INSTALL A 6.0' HEIGHT CHAIN LINK FENCE AND/OR A 4.0' HEIGHT ORANGE NYLON POLYPROPYLENE TYPE FENCE AFFIXED WITH NAILS OR STAPLES TO STURDY POSTS (METAL FENCE STAKES OR 2x4 WOOD, SET TO A DEPTH OF 2.0' MINIMUM) SURROUNDING ALL EXISTING VEGETATION AND/OR VEGETATION TO BE PROTECTED AND RELOCATED (SEE PLANS FOR LOCATIONS AND FENCE REQUIREMENTS). FENCE TO BE INSTALLED IN THE CRITICAL PROTECTION ZONE (DRIP LINE) - THE AREA SURROUNDING A TREE WITHIN A CIRCLE DESCRIBED BY A RADIUS OF ONE (1) FOOT FOR EACH INCH OF TREE TRUNK DIAMETER MEASURED AT 54" ABOVE FINISHED GRADE (FOR GROUPS OF TREES, LOCATE FENCE BETWEEN TREES AND CONSTRUCTION ACTIVITY AT THE DRIP LINE). THE FENCE SHALL BE LOCATED TO PROTECT A MINIMUM OF 90% OF THE CRITICAL PROTECTION ZONE. SHRUBS AND GROUNDCOVER VEGETATION SHALL HAVE A MINIMUM 5.0' BUFFER BETWEEN FENCE AND CONSTRUCTION ZONE. NO CONSTRUCTION DEBRIS OF ANY KIND, TOOL/MATERIAL STORAGE, VEHICLES, CHEMICALS (DIRECTLY OR INDIRECTLY APPLIED), OR OTHER CONSTRUCTION ACTIVITY SHALL BE ALLOWED WITHIN THE ROOT ZONE AND/OR CRITICAL PROTECTION ZONE. PROTECT THE CRITICAL PROTECTION ZONE FROM ALL RUN-OFF OF CONTAMINATED LIQUIDS.
- 7. ANY SUBSTITUTIONS IN SIZE AND/OR PLANT MATERIAL MUST BE APPROVED BY THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO PROCUREMENT AND/OR DELIVERY TO THE WORK SITE, ALL PLANTS WILL BE SUBJECT TO PROJECT SPECIFICATIONS THESE NOTES, AND APPROVAL BY LANDSCAPE ARCHITECT BEFORE PLANTING CAN
- LANDSCAPE CONTRACTOR SHALL FIFLD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE LANDSCAPE ARCHITECT TWO (2) DAYS PRIOR TO PLANTING.
- ALL TREES MUST BE STRAIGHT TRUNKED, FULL HEADED, AND MEET ALL REQUIREMENTS SPECIFIED. PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING CONSTRUCTION, SHOULD THE CONTRACTOR CAUSE DAMAGE TO ANY UTILITIES, NECESSARY REPAIRS SHALL BE MADE AS QUICKLY AS PRACTICABLE, AT CONTRACTOR'S EXPENSE, UNDER SUPERVISION OF THE GENERAL CONTRACTOR AND/OR OWNER.
- 10. INSTALLATION ALL PLANT MATERIAL SHALL BE INSTALLED IN A SOUND, WORKMANLIKE MANNER AND ACCORDING TO ACCEPTED GOOD PLANTING PROCEDURES AND ORNAMENTAL HORTICULTURAL PRACTICES/CODES WITH THE QUALITY OF PLANT MATERIALS AS HEREINAFTER DESCRIBED, ALL ELEMENTS OF LANDSCAPING SHALL BE INSTALLED SO AS TO MEET ALL APPLICABLE ORDINANCES AND CODE REQUIREMENTS OF THE STATE OF FLORIDA AND THE JURISDICTION THE INSTALLATION OCCURS WITHIN INCLUDING ALL BUILDING CODES AND THEIR
- 11. TYPICALLY, SHRUB AND GROUNDCOVER PLANTINGS ARE SHOWN ON THE DRAWINGS AS MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A TRIANGULAR SPACING CONFIGURATION (STAGGERED SPACING) AS SHOWN IN THE PLANTING DETAILS. PLANT CENTER TO CENTER DIMENSIONS (Ó.C.) ARE LISTED IN THE PLANT LIST/SCHEDULE.
- 12. CONTRACTOR SHALL ASSURE FREE DRAINAGE AND PERCOLATION OF ALI PLANTING PITS PRIOR TO INSTALLATION OF PLANT MATERIAL. CONTRACTOR SHALI FILL ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE THAT PROPER DRAINAGE AND PERCOLATION IS AVAILABLE. CORRECT IF REQUIRED TO ASSURE PERCOLATION. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ALL PLANTS LOST DUE TO INADEQUATE DRAINAGE CONDITIONS THAT MAY BE DETERMINED POST INSTALLATION BY THE LANDSCAPE ARCHITECT / OWNER
- 13. TREES GROWN IN GROW BAGS OR GROW BAG TYPE MATERIAL MUST HAVE THE GROW BAG REMOVED ENTIRELY PRIOR TO PLANTING
- 14. BALLED AND BURLAPPED MATERIAL SHALL HAVE THE TOP ONE HALF (1/2) OF THE BURLAP AROUND THE BASE OF THE TRUNK CUT AND PULLED BACK. DO NOT REMOVE BURLAP. WIRE CAGES, STRAPS, ETC. MUST BE CUT AND REMOVED PRIOR TO INSTALLATION.

- 15. CONTRACTOR TO REPLACE REJECTED PLANT MATERIAL WITHIN FIVE (5) BUSINESS
- 16. CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANTS LIST, GENERAL NOTES, PLANS AND THE PLANTING SPECIFICATIONS FOR COMPLETE LANDSCAPE PLANTING INSTRUCTIONS.

17. FERTILIZATION:

PALMS:

13-3-13 PLUS MINOR ELEMENTS - SLOW RELEASE

1/2 LB FERTILIZER PER 1/2 INCH CALIPER

SHRUBS AND GROUNDCOVERS

8-10-10 PLUS MINOR ELEMENTS - SLOW RELEASE 1/2 LB FERTILIZER PER 100 FT2

TREES:

8-6-6 PLUS MINOR ELEMENTS - SLOW RELEASE

1/2 LB FERTILIZER PER 1/2 INCH CALIPER

16-4-8 PLUS MINOR ELEMENTS - SLOW RELEASE

1 LB FERTILIZER PER 1000 FT2

THE COST FOR LANDSCAPE FERTILIZER AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE PER PLANT PRICE PROVIDED TO THE GENERAL CONTRACTOR / OWNER FOR CONTRACT BID AND MONTHLY DRAW PAY ITEMS.

18. SOIL PREPARATION AND SOIL MIX:

- A. APPLY ROUNDUP (MANUFACTURED BY MONSANTO CORP.) OR APPROVED HERBICIDE EQUAL ACCORDING TO MANUFACTURER'S RATE AND SPECIFICATION WITHIN LIMITS OF ALL AREAS TO BE PLANTED. PROTECT EXISTING PLANTS TO REMAIN FROM OVER-SPRAY OR SPRAY WITHIN ROOT ZONE. CONTRACTOR TO ENSURE TOTAL WEED ERADICATION
- B. BEFORE REPLACING TOPSOIL, RAKE SUBSOIL SURFACE CLEAR OF STONES (1 INCH DIAMETER AND LARGER), DEBRIS, RUBBISH, AND REMAINING FROM REMOVED PLANT MATERIAL.
- C. SCARIFY SUBSOIL TO A DEPTH OF 3 INCHES THEN APPLY "RONSTAR" OR APPROVED PRE-EMERGENT HERBICIDE IN ACCORDANCE WITH MANUFACTURER'S RATE AND SPECIFICATIONS. FOLLOW MANUFACTURER'S RECOMMENDED WAITING PERIOD PRIOR TO NEW LANDSCAPE INSTALLATION.
- D. PLANTING SOIL MIX FOR TREES, SHRUBS, AND GROUNDCOVERS SHALL CONSIST OF A THOROUGHLY BLENDED MIXTURE OF:

ROYAL PALMS: 60% CLEAN D.O.T. SAND

40% APPROVED TOPSOIL / SOLID WASTE COMPOST

TREES / ALL OTHER PALMS:

90% CLEAN D.O.T. SAND

10% APPROVED TOPSOIL / SOLID WASTE COMPOST SHRUBS, AND GROUND COVERS:

70% CLEAN D.O.T. SAND

30% APPROVED TOPSOIL / SOLID WASTE COMPOST

NOTE: CONTRACTOR TO SUBMIT 3RD PARTY LABORATORY SOIL TESTS OF THE SOIL MIXTURES LISTED ABOVE FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT. SOIL TEST TO IDENTIFY PH, MAJOR AND MINOR NUTRIENT MAKE-UPS, SOIL TEST RATINGS AND PROVIDE COMMENTS/ RECOMMENDATIONS OF THE LAB FOR ORNAMENTAL LANDSCAPE

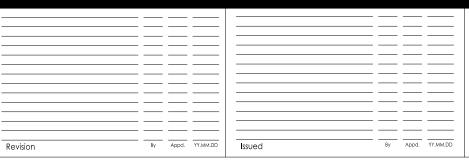
- E. COMPOST MIX SHALL BE FREE OF DELETERIOUS MATERIALS THAT WOULD BE HARMEUL TO PLANT GROWTH SHALL BE FREE OF NEMATODES, SHALL BE OF UNIFORM QUALITY AND SHALL HAVE A PH VALUE BETWEEN 5.3 AND 6.5 (AS DETERMINED IN ACCORDANCE WITH ASTM F70) FLORIDA PEAT SHALL BE STERILIZED TO MAKE FREE OF ALL VIABLE NUT GRASS AND OTHER UNDESIRABLE WEEDS.
- F. TOPSOIL SHALL BE NATURAL, FERTILE, AGRICULTURAL SOIL CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHALL BE OF UNIFORM COMPOSITION THROUGHOUT, WITH ADMIXTURE OF SUBSOIL IT SHALL BE FREE OF STONES, LUMPS, LIVE PLANTS AND THEIR ROOTS, STICKS, AND OTHER EXTRANEOUS MATTER. SPREAD TOPSOIL MIXTURE TO MINIMUM DEPTH OF THREE (3) INCHES THROUGHOUT ALL SOD AREAS AND SIX (6) INCHES IN ALL SHRUB AND GROUNDCOVER BEDS. REMOVE ALL ROCKS AND OTHER OBJECTS OVER ONE (1) INCH IN DIAMETER.
- G SMOOTH ALL PREPARED TOPSOIL TO FOUR (4) INCHES BELOW TOP OF SURROUNDING PAVEMENT EDGES. FINISH GRADE ALL PREPARED TOPSOIL AREAS TO A SMOOTH, EVEN SURFACE ASSURING POSITIVE DRAINAGE AWAY FROM THE STRUCTURES AND ELIMINATE ANY LOW AREAS WHICH MAY COLLECT WATER MEETING LINE AND GRADE AS SHOWN ON THE CIVIL ENGINEERS PLANS.
- H. SMOOTH TOPSOIL MIXTURE TO FOUR (4) INCHES BELOW GRADE IN AREAS TO
- TOPSOIL SHALL NOT BE EXTREMELY ACIDIC OR ALKALINE, NOR CONTAIN TOXIC SUBSTANCES WHICH MAY BE HARMEUL TO PLANT GROWTH. THE PH SHALL BE IN THE RANGE OF 5.5 TO 6.5. IF NECESSARY, THE CONTRACTOR SHALL APPLY THE APPROPRIATE SOIL AMENDMENTS ADJUSTING SOIL PH TO ASSURE A PH RANGE OF 5.5 TO 6.5.
- 19. GUYING / STAKING PRACTICES SHALL NOT PERMIT NAILS, SCREWS, WIRES ETC., TO PENETRATE OUTER SURFACE OF TREE OR PALM. TREES OR PALMS REJECTED DUE TO THIS PRACTICE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 20. MULCH: CONTRACTOR SHALL MULCH ALL PLANT MATERIAL THROUGHOUT AND

COMPLETELY TO A THREE (3) INCH DEPTH WITH CLEAN, WEED FREE MELALEUCA MULCH IN DARK BROWN COLOR UNLESS OTHERWISE SPECIFIED. USE FLORIMULCH BROWN" BY WWW.GOMULCH.COM (OR APPROVED EQUAL). SAMPLES ARE REQUIRED FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT AND/OR INSTALLATION.

- 21. INSTALLATION PERIOD: THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING IN FULL, ALL PLANTING AREAS (INCLUDING WATERING, SPRAYING, MULCHING, MOWING, FERTILIZING, WEEDING, ETC.) UNTIL THE JOB IS ACCEPTED, IN FULL, AT THE END OF THE INSTALLATION PHASE BY THE OWNER AND LANDSCAPE ARCHITECT. CONTRACTOR SHALL REQUEST INSPECTION OF PROJECT IN WRITING AT END OF INSTALLATION PERIOD. LANDSCAPE ARCHITECT AND OWNER ACCEPTANCE SHALL BEGIN THE ESTABLISHMENT PERIOD. THE ENTIRE PROJECT WILL BE ACCEPTED AT ONE TIME AND WILL NOT BE ACCEPTED BY AREAS OR PHASED PARTS.
- 22 ESTABLISHMENT PERIOD : CONTRACTOR TO GUARANTEE MAINTAIN AND WATER PLANT MATERIAL FOR A NINETY (90) DAY ESTABLISHMENT PERIOD FOLLOWING DATE OF INSTALLATION PERIOD COMPLETION, CONTRACTOR SHALL REQUEST INSPECTION OF PROJECT IN WRITING AFTER NINETY (90) DAY ESTABLISHMENT PERIOD. LANDSCAPE ARCHITECT AND OWNER ACCEPTANCE SHALL BEGIN THE GUARANTEE PERIOD.
- 23. GUARANTEE PERIOD: IF ALL WORK IS SATISFACTORY AND COMPLETE IN ACCORDANCE WITH THE CONDITIONS OF THE CONTRACT DOCUMENTS, THEN THE OWNER AND LANDSCAPE ARCHITECT SHALL DECLARE SUBSTANTIAL COMPLETION IN WRITING UPON WRITTEN REQUEST OF THE CONTRACTOR OF ACCEPTANCE OF THE WORKS AT THE END OF ESTABLISHMENT. ACKNOWLEDGMENT OF SUBSTANTIAL COMPLETION CONSTITUTES THE BEGINNING OF THE ONE (1) YEAR GUARANTEE PERIOD.
- 24. ALL PLANT MATERIAL SHALL BE OF FLORIDA NO. 1 OR BETTER QUALITY AT TIME OF INSTALLATION AND SHALL BE MAINTAINED IN THIS SAME CONDITION UNTIL COMPLETION OF THE GUARANTEE PERIOD. DECLINE IN CONDITION OF PLANT MATERIAL DURING ANY PERIOD (INSTALLATION, ESTABLISHMENT, GUARANTEE) SHALL BE GROUNDS FOR REJECTION AND REPLACEMENT AS DETERMINED BY THE LANDSCAPE ARCHITECT AND OWNER AT THE CONTRACTOR'S EXPENSE.
- 25. REMOVAL OF ALL STAKING AND GUYING OF TREES AND PALMS AFTER GUARANTEE PERIOD SHALL BE THE RESPONSIBILITY OF THE OWNER UNLESS OTHERWISE AGREED UPON WITH THE CONTRACTOR IN WRITING.
- 26. IRRIGATION NOTES AND MINIMUM REQUIREMENTS:
- LANDSCAPE CONTRACTOR TO PROVIDE AS-BUILT IRRIGATION DRAWINGS AS PART OF THIS PROJECT'S LANDSCAPE INSTALLATION AND CLOSE-OUT
- a. A FULLY AUTOMATIC IRRIGATION SYSTEM WITH A CONTROLLER AND APPLICABLE MOISTURE (RAIN) SENSOR LOCATED TO RECEIVE DIRECT RAINFALL SHALL BE PROVIDED.
- b. ALL PLANTINGS SHALL HAVE 100% FULL COVERAGE WITH IRRIGATION. PROVIDE ONE BUBBLER PER TREE / PALM AND DRIP OR SPRAY MECHANISMS FOR SHRUBS, GROUNDCOVER AND GRASSES/TURE.
- c. VALVE SIZING, DETAILING AND MAINLINE ROUTING MAY BE ADJUSTED BY THE LANDSCAPE ARCHITECT TO ACCOMMODATE THE NEEDS OF THE LANDSCAPE DESIGN IN THE FIELD. d. LANDSCAPE ARCHITECT MAY CHOOSE TO USE DRIP, BUBBLERS, STREAM
- BUBBLER, OR SPRAY IRRIGATION IN SHRUB AREAS AS REQUIRED BY FIELD e. THE IRRIGATION SYSTEM WILL OPERATE WITH SEPARATE VALVE ZONES
- FOR TURF AREAS AND SHRUB PLANTING AREAS WHERE EFFICIENCY OF SEPARATION ALLOWS. THE CONTROLLER WILL BE SET TO OPERATE APPROPRIATE RUN TIMES FOR THE VARIOUS ZONES AND THEIR REQUIRED PRECIPITATION NEEDS IN ACCORDANCE WITH
- BEST MANAGEMENT PRACTICES FOR IRRIGATION OF FLORIDA LANDSCAPES. f. THE IRRIGATION SYSTEM WILL BE INSTALLED TO MINIMIZE THE
- APPLICATION OF WATER TO IMPERVIOUS AREAS, ADJACENT PROPERTIES, AND EXISTING VEGETATION. g. IRRIGATION SHALL BE INSTALLED TO MEET OR EXCEED APPENDIX F -
- "PROPOSED CONSTRUCTION BUILDING CODES FOR TURF AND LANDSCAPE IRRIGATIONS SYSTEMS" OF THE FLORIDA BUILDING CODE. (LATEST EDITION), IN ACCORDANCE WITH ASTM D2855, AND WITH LOCAL AND STATE CODE.

UTILITY NOTES

- CONTRACTOR SHALL MARK LOCATIONS OF ALL PRESSURE PIPES BY INSTALLING METALIZED IDENTIFICATION TAPE BURIED APPROXIMATELY 12" (NOT MORE THAN 18") ABOVE TOP OF PIPE. TAPE WIDTH SHALL BE 3 INCH MINIMUM
- CONTRACTOR SHALL INSTALL 4 INCH 3M ELECTRONIC BALL MARKERS, OR APPROVED EQUAL, EVERY 200 LF AND AT EACH PIPE ELBOW LOCATION. HORIZONTAL AND VERTICAL DEFLECTION OF THE PRESSURE MAINS SHALL NOT EXCEED THE PIPE MANUFACTURER'S SPECIFICATIONS. BENDS SHALL BE USED WHERE
- DEFLECTIONS EXCEED THE MANUFACTURER'S SPECIFICATIONS. COVER FOR MAINS SHALL BE MEASURED FROM FINISHED GRADES IT IS THE
- CONTRACTOR'S RESPONSIBILITY TO INSURE MINIMUM COVER, REGARDLESS OF EXISTING CONTRACTOR SHALL CONSTRUCT ALL WATER AND STORMWATER APPURTENANCES INCLUDING METER BOXES, BLOW-OFFS, VALVE BOXES, AIR RELEASE VALVES, FIRE
- HYDRANTS, ETC. TO FINISHED GRADE. CONTRACTOR SHALL COORDINATE DURING THE CONSTRUCTION STAKE-OUT AND PRIOR TO CONSTRUCTION OF SAID APPURTENANCES WITH OWNER AND ENGINEER REGARDING FINISHED GRADE IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE CONSTRUCTION OF SAID APPURTENANCES TO FINISHED





Naples, FL 34108



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CITY OF NAPLES

735 8th St S NAPLES, FL

Naples Beach Restoration & Water Quality Improvement Project

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 KME
 21.06.01

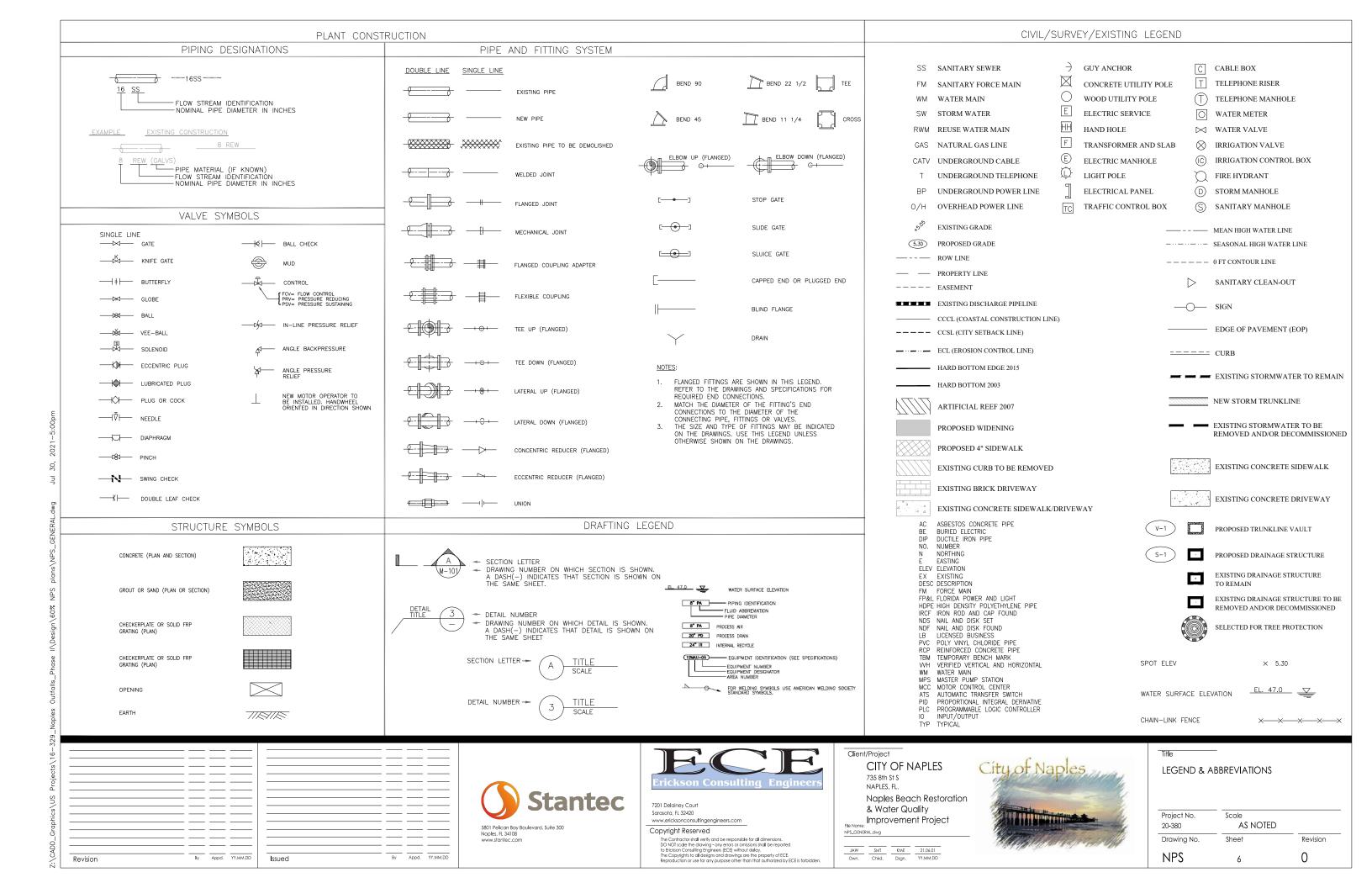
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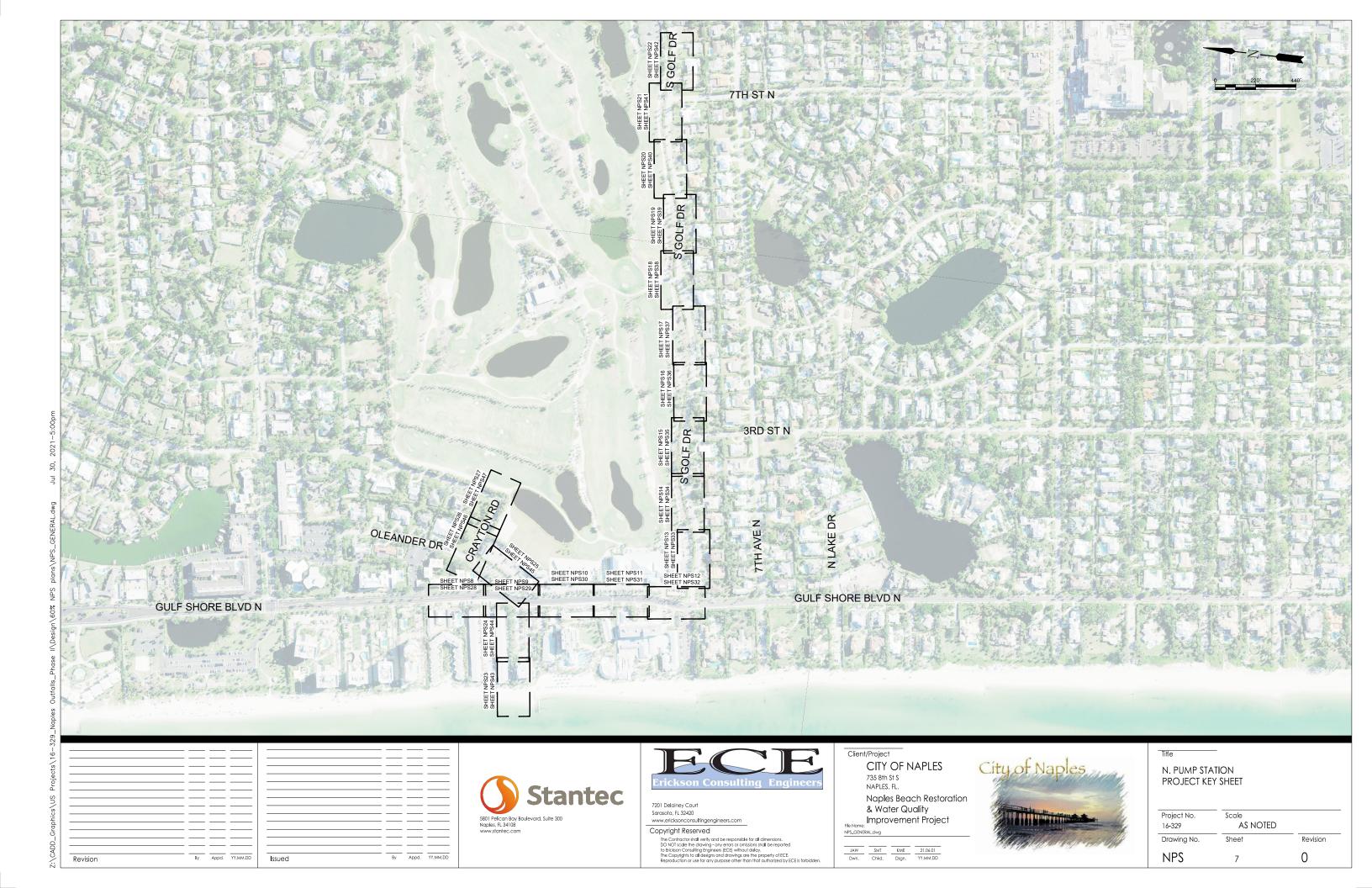


GENERAL NOTES (2)

Title

Project No. Scale AS NOTED 20-380 Drawina No. Sheet Revision 0 **NPS**









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Project No.

Drawing No.

20-380

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By Appd. YY.MM.DD





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Project No.

Drawing No.

20-380

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Improvement Project

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Scale

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AS NOTED

Revision

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Revision

By Appd. YY.MM.DD

By Appd. YY.MM.DD

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Naples Beach Restoration & Water Quality Improvement Project

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STATION

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By Appd. YY.MM.DD

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N. PUMP STATION EXISTING CONDITIONS PLAN STATION

Scale AS NOTED Project No. 20-380 Drawing No. Sheet Revision NPS 0 14



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20-380

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Drawing No.

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By Appd. YY.MM.DD

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CITY OF NAPLES
735 8th St S
NAPLES, FL.

NAPLES, FL.
Naples Beach Restoration
& Water Quality
Improvement Project

File Name: NPS_EXCON.dwg

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N. PUMP STATION EXISTING CONDITIONS PLAN

STATION

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 AS NOTED

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By Appd. YY.MM.DD

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N. PUMP STATION EXISTING CONDITIONS PLAN STATION

| Project No. 20-380 | Scale AS NOTED | |
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Project No. 20-380

Drawing No.

NPS

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Revision

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Revision

By Appd. YY.MM.DD

By Appd. YY.MM.DD

By Appd. YY.MM.DD

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Improvement Project
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N. PUMP STATION EXISTING CONDITIONS PLAN

STATION

Scale AS NOTED Project No. 20-380

Drawing No. Sheet Revision NPS 0 20



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Revision

By Appd. YY.MM.DD

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File Name: NPS_EXCON.dwg

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 Project No.
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Project No.

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Scale AS NOTED

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Sheet

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Project No.

Drawing No.

20-380

NPS

Improvement Project

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 21.06.01

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 YY.MM.DD

Revision

By Appd. YY.MM.DD



By Appd. YY.MM.DD

By Appd. YY.MM.DD

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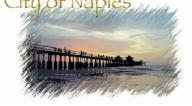
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| Project No. 20-380 | Scale AS NOTED | |
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| NPS | 26 | 0 |









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RIE Name:
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 21.06.01

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 YY.MM.DD

Project No.

Drawing No.

20-380

NPS

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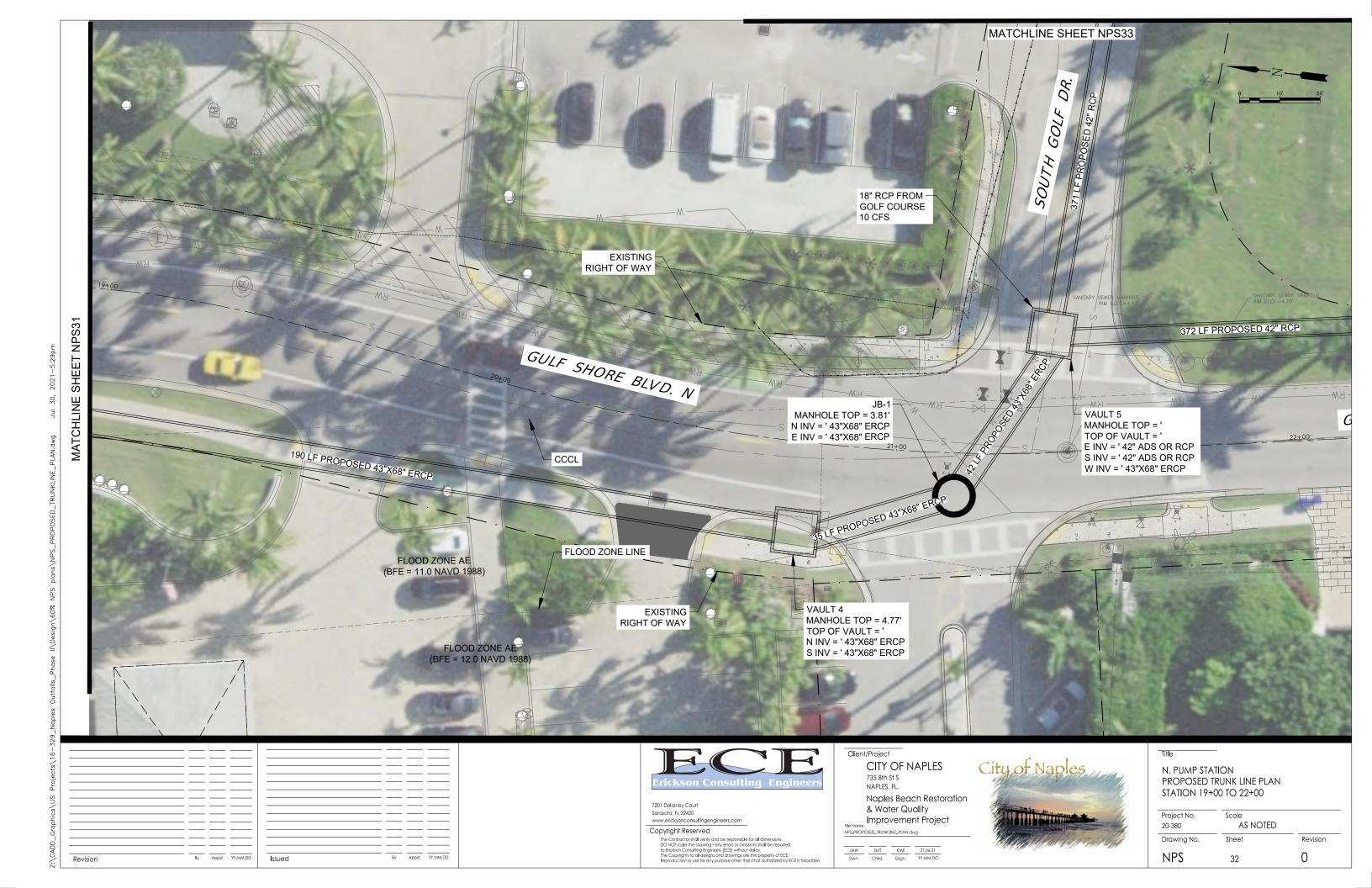
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 21.06.01

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AS NOTED

Revision

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Sheet

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20-380

NPS

Drawing No.

Revision

By Appd. YY.MM.DD

By Appd. YY.MM.DD

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Project No. Scale **AS NOTED** 20-380 Sheet Revision Drawing No. NPS 0 34

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Project No.

Drawing No.

20-380

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& Water Quality

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 21.06.01

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File Name:

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Improvement Project



Revision

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Naples Beach Restoration & Water Quality

Improvement Project
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N. PUMP STATION PROPOSED TRUNK LINE PLAN

STATION

Project No. **AS NOTED** 20-380 Sheet Revision Drawing No. NPS 0 36

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Project No. 20-380

Drawing No.

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Revision

By Appd. YY.MM.DD

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n, pump station proposed trunk line plan station

| Project No. 20-380 | Scale AS NOTED | |
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| Drawing No. | Sheet | Revision |
| NPS | 38 | 0 |

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N. PUMP STATION PROPOSED TRUNK LINE PLAN STATION

Scale AS NOTED Project No. 20-380 Drawing No. Sheet Revision NPS 0 39

By Appd. YY.MM.DD

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Project No. Scale **AS NOTED** 20-380 Drawing No. Sheet Revision NPS 0 40



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STATION

Scale AS NOTED Project No. 20-380 Drawing No. Sheet Revision NPS 0 42



By Appd. YY.MM.DD

By Appd. YY.MM.DD

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N. PUMP STATION PROPOSED TRUNK LINE PLAN STATION

Project No. Scale **AS NOTED** 20-380 Sheet Drawing No. Revision NPS 0 44

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AS NOTED

Revision

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20-380

NPS

Drawing No.

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By Appd. YY.MM.DD

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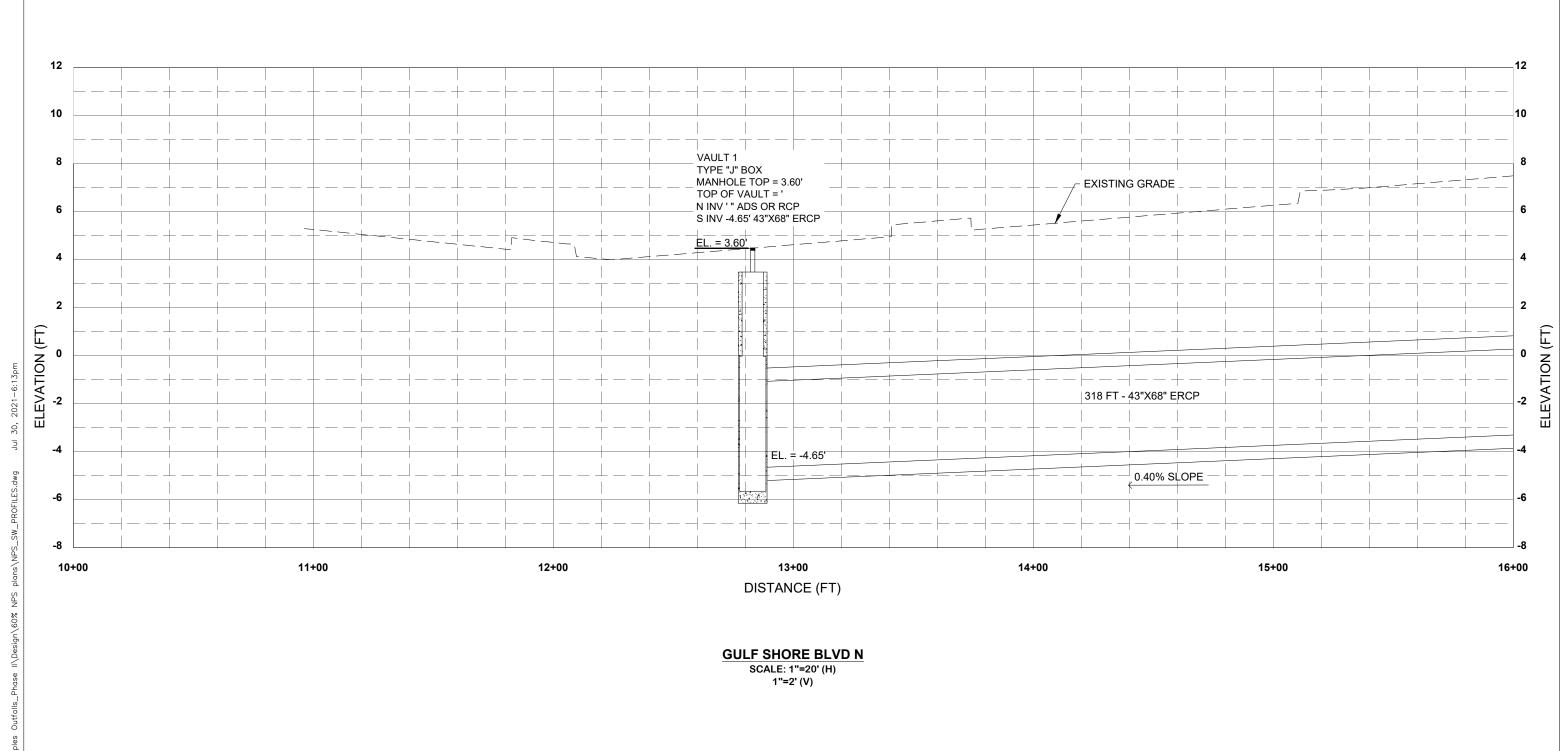
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| Project No. 20-380 | Scale AS NOTED | |
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CITY OF NAPLES

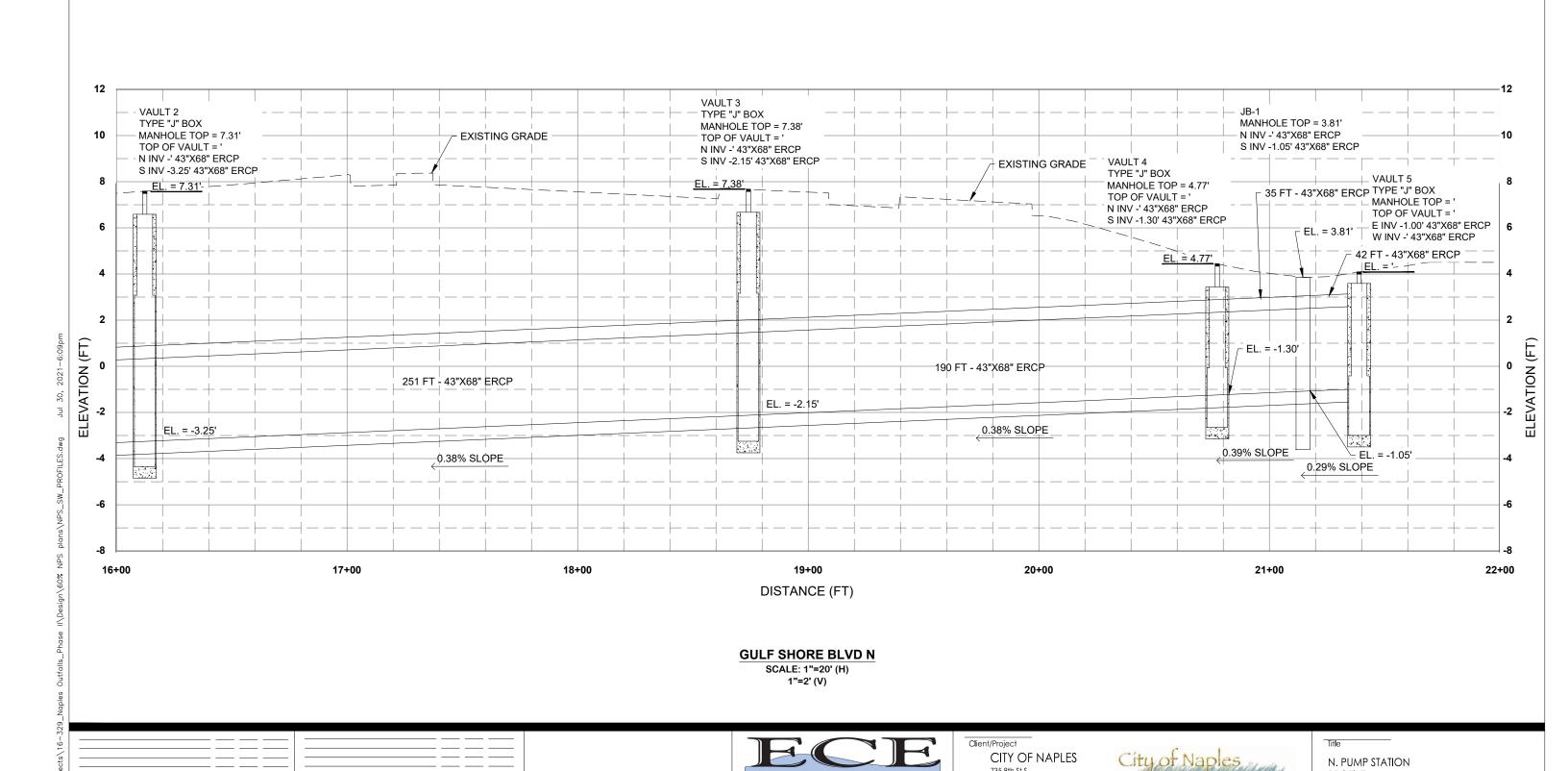
NAPLES, FL.

Naples Beach Restoration
& Water Quality
Improvement Project



N. PUMP STATION
PROFILE
STATION 10+00 TO 16+00

| Project No. 20-380 | Scale AS NOTED | |
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Revision

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NPS_SW_PROFILES.dwg

& Water Quality

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 21.06.01

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Improvement Project

Naples Beach Restoration

N. PUMP STATION

STATION 16+00 TO 22+00

Scale

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AS NOTED

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PROFILE

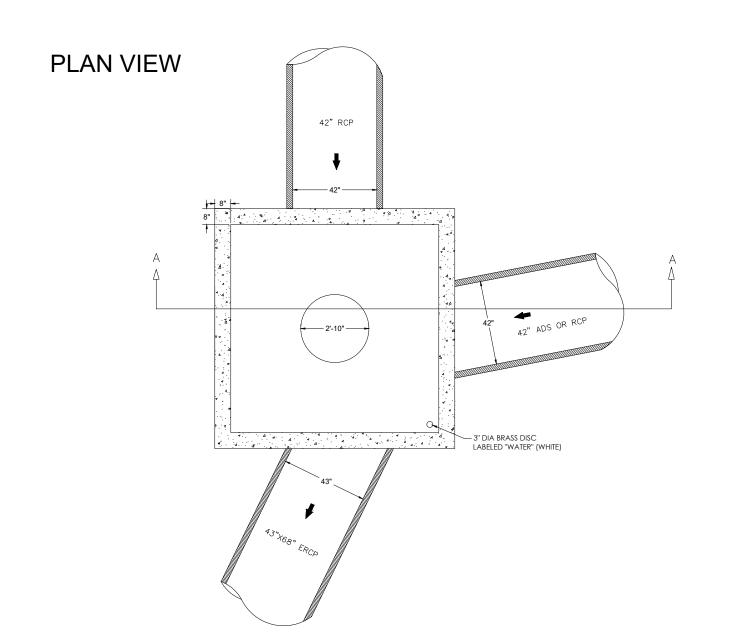
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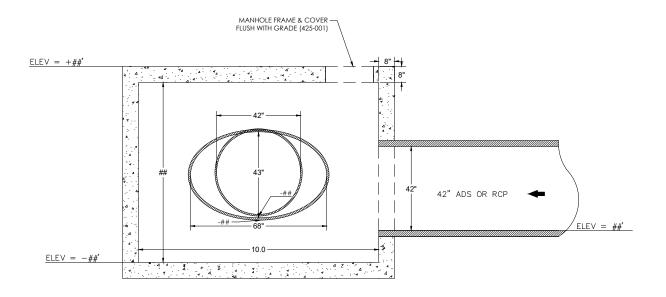
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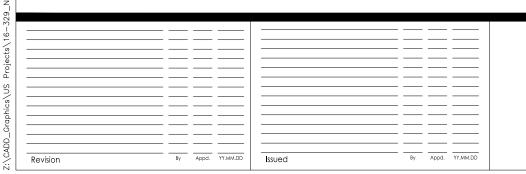
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VAULT 5 (NPS) FDOT J-BOX 10.0' X 12.0' (INDEX 425-010)



SECTION A-A







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Naples Beach Restoration & Water Quality Improvement Project
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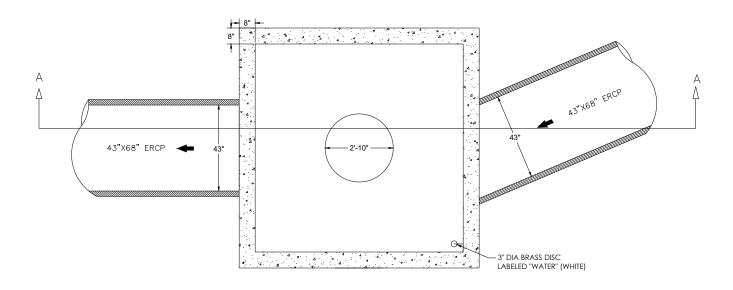
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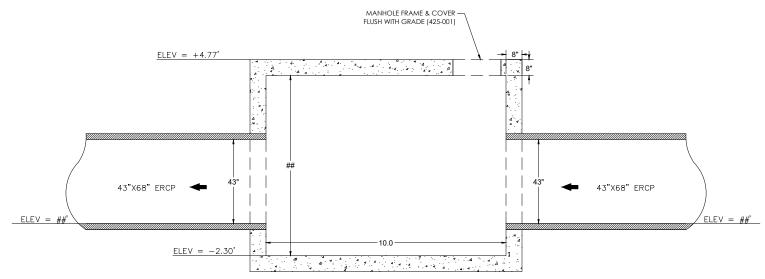


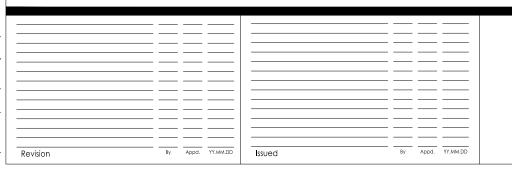
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| Drawing No. | Sheet | Revision |
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VAULT 4 (NPS) FDOT J-BOX 10.0' X 10.0' (INDEX 425-010)

PLAN VIEW SECTION A-A









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CITY OF NAPLES 735 8th St S NAPLES, FL. Naples Beach Restoration & Water Quality Improvement Project

 JAW
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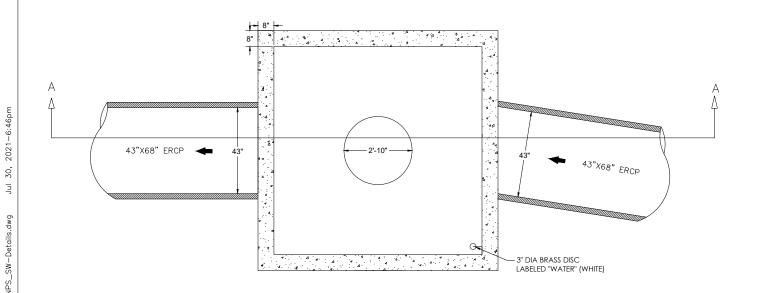
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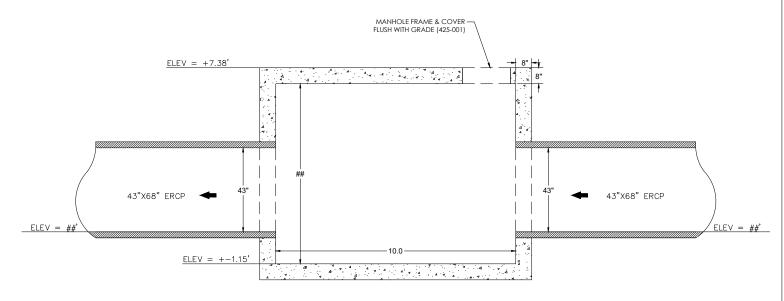


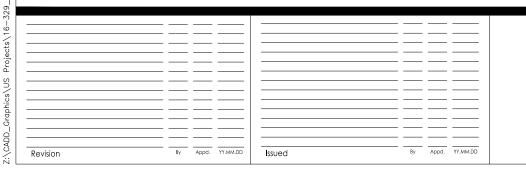
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| Drawing No. | Sheet | Revision |
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VAULT 3 (NPS) FDOT J-BOX 10.0' X 10.0' (INDEX 425-010)

PLAN VIEW SECTION A-A









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735 8th St S
NAPLES, FL.
Naples Beach Restoration
& Water Quality
Improvement Project

 JAW
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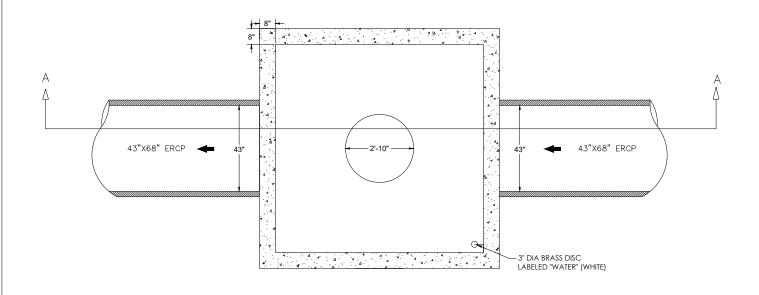
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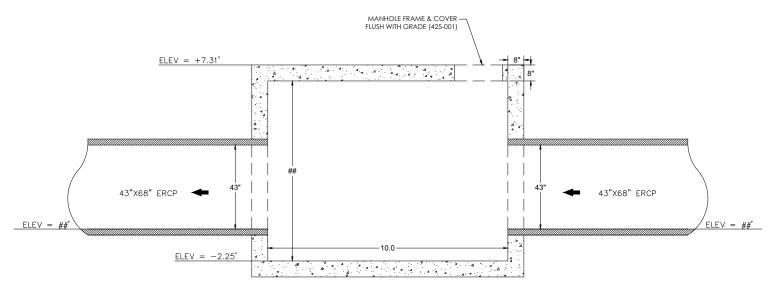
Client/Project

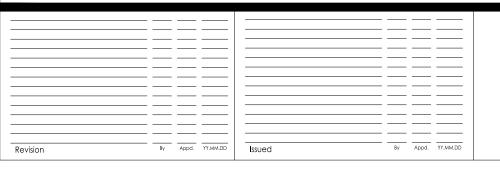
City of Naples

| Project No. 20-380 | Scale 1" = 2' | |
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| Drawing No. | Sheet | Revision |
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PLAN VIEW SECTION A-A









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& Water Quality Improvement Project

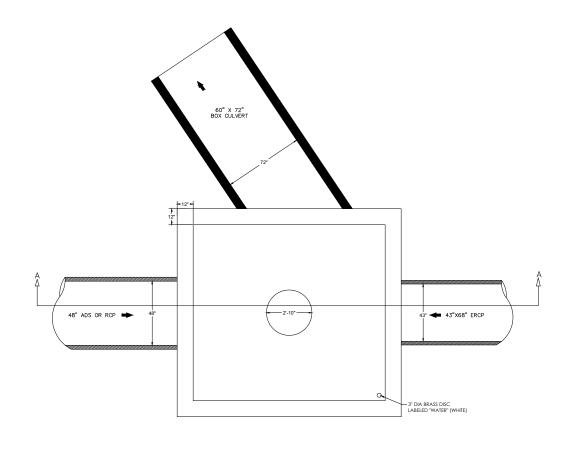
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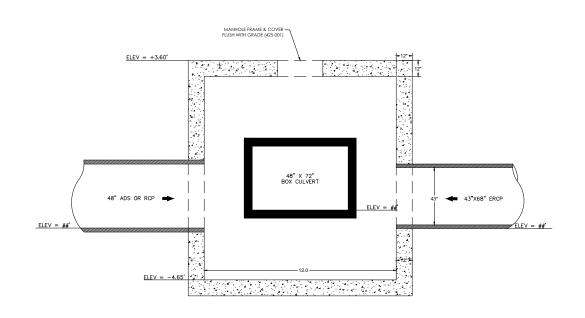
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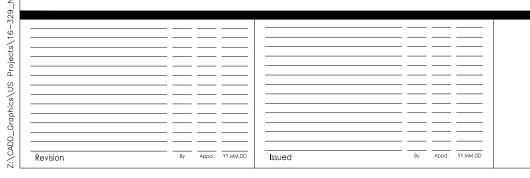


| Project No. 20-380 | Scale 1" = 2' | |
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| Drawing No. | Sheet | Revision |
| NPS | 53 | 0 |

PLAN VIEW SECTION A-A









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Naples Beach Restoration & Water Quality Improvement Project

| JAW | SMT | KME | 21.06.01 |
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| Project No. 20-380 | Scale 1" = 3' | |
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| Drawing No. | Sheet | Revision |
| NPS | 54 | 0 |

GENERAL NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST APPLICABLE FEDERAL, STATE, AND LOCAL AGENCY STANDARDS.
- 2. CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES (SUNSHINE STATE ONE CALL, 811) FOR UTILITY LOCATES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION OPERATIONS.
- 3. ALL ELEVATIONS ARE BASED UPON MEAN SEA LEVEL, NAVD 88. HORIZONTAL DATA IS EXPRESSED IN, NORTH AMERICAN DATUM 1983.
- 4. THE EXISTING FEATURES SHOWN WITHIN THESE PLANS, INCLUDING UTILITIES, HAVE BEEN COMPILED FROM SURVEY AND INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES. THE ENGINEER MAKES NO CLAIM TO THE ACCURACY OF THE UTILITY LOCATIONS AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES OF THE PROPOSED CONSTRUCTION AND IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES ON THE SITE AND ADJACENT PUBLIC R.O.W. DAMAGE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPLACED IN LIKE KIND TO THE SATISFACTION OF THE RESPECTIVE UTILITY OWNER. ALL COSTS TO REMEDY DAMAGES TO EXISTING UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
- 5. ALL DISTURBED AREAS SHALL BE RESTORED, INCLUDING REGRADING, TO THEIR ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE NOTED.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY DAMAGED ITEMS INCLUDING, BUT NOT LIMITED TO, DRIVEWAYS, MAILBOXES, SIDEWALKS, STREET SIGNS, LANDSCAPING, AND PRIVATE FENCES AS REQUIRED BY OWNER, ENGINEER OF RECORD, AND/OR OTHER GOVERNING ENTITIES.
- 7. THRUST BLOCKING, TIE RODS, AND RESTRAINING GLANDS SHALL BE PROVIDED AS SHOWN ON THE PLANS OR AS REQUIRED IN THE FIELD BY THE CITY OF NAPLES UTILITIES DIVISION.
- 8. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS BEFORE COMMENCING WORK.
- 9. CONTRACTOR IS RESPONSIBLE FOR REPLANTING VEGETATION IN ALL AREAS DISTURBED BY THE CONSTRUCTION. ALL VEGETATION SHALL BE MAINTAINED UNTIL ESTABLISHED OR FOR THE DURATION OF THE CONTRACT.
- 10. CONTRACTOR SHALL PROVIDE ACCESS FOR TRAFFIC ON GULF SHORE BLVD. AT ALL TIMES DURING CONSTRUCTION. CONSTRUCTION SHALL BE CONDUCTED IN SUCH A MANNER SO THAT ALL PROPERTY OWNERS RETAIN ACCESS TO THEIR DRIVEWAYS AND FACILITIES AT ALL TIMES.
- 11. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION AND PAYMENT OF RESTRAINING ALL POLES OR REMOVING ELECTRICAL LINES / POLES (FPL, LIGHTING, ETC.) AS REQUIRED DURING CONSTRUCTION.
- 12. CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, TOOLS, MATERIALS AND SERVICES NEEDED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES. THESE MEASURES SHALL CONFORM TO THE PLANS AND SPECIFICATIONS AND ALL STATE AND LOCAL REQUIREMENTS.
- 13. REQUIREMENTS OF THE CITY OF NAPLES, UTILITIES DIVISION SHALL GOVERN ALL WORK, WHERE A CONFLICT EXISTS IN THE REQUIREMENTS OF A REFERENCED MATERIAL OR Installation standard, the requirements of city of naples, shall prevail. Where the requirements of a state or local agency having jurisdiction are more STRINGENT, THOSE REQUIREMENTS SHALL PREVAIL.
- 14. CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS SPECIFICATIONS AND SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- 15. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
- 16. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE COMMENCING WORK.
- 17. NO FIELD CHANGES OR DEVIATION FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER AND THE CITY.
- 18. CONTRACTOR MUST ADHERE TO FEDERAL REGISTER VOL. 58, NO. 9, RULES AND REGULATIONS, PAGE 4552 AND THE O.S.H.A. TRENCH SAFETY ACT.
- 19. CONTRACTOR SHALL FURNISH "AS-BUILT" ELEVATIONS AND HORIZONTAL LOCATIONS AS REQUIRED BY THE CITY OF NAPLES.
- 20. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL IMPROVEMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A QUALIFIED TESTING FIRM FOR ALL MATERIAL TESTING. ALL IMPROVEMENTS WITHIN PUBLIC RIGHT-OF- WAY OR ON THE LANDS SUBJECT TO THESE REQUIREMENTS, OR THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION OVER THAT AREA, WHICHEVER IS MORE STRINGENT.
- 21. THE CONTRACTORS TESTING COMPANY SHALL CARRY OUT DENSITY TESTS TO DETERMINE COMPACTION OF BACKFILL SPACED A MINIMUM OF ONE IN EVERY 300 FEET OF TRENCH CUT PER LIFT AND SHALL INCLUDE A TEST AT SPRING LINE OF THE PIPE.
- 22. MAINTENANCE OF TRAFFIC SIGNS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE PROVIDED BY THE CONTRACTOR DURING CONSTRUCTION AS REQUIRED BY THE F.D.O.T. / CITY OF NAPLES. ALL OPEN ROAD CUTS SHALL BE FILLED, COMPACTED AND COVERED WITH A TEMPORARY ASPHALT PATCH BEFORE DARK ON A DAILY BASIS DURING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE ALL OPEN CUTS, AS REQUIRED BY F.D.O.T./CITY OF NAPLES.
- 23. CONTRACTOR SHALL HIRE THE SERVICES OF AN INDEPENDENT GEOTECHNICAL ENGINEER DURING THE EXCAVATION AND SOIL SUPPORT ACTIVITIES AGAINST THE SOUTH RIGHT OF WAY OF THIRD AVENUE NORTH AND THE PRIVATE RESIDENCE ON 215 GULF SHORE BLVD. INSTALL MONITOR, READ, RECORD, MAINTAIN, PROTECT, AND REMOVE OR ABANDON GEOTECHNICAL INSTRUMENTATION AS SPECIFY IN SECTION 02453 GEOTECHNICAL INSTRUMENTATION AND MONITORING. ENSURE THAT INSTRUMENTATION IS INSTALLED, FULLY FUNCTIONAL, THAT THE FIRST SET OF READINGS ARE TAKEN, AND THAT THE INSTRUMENTATION IS READY FOR MONITORING NO LATER THAN SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR ANOTHER UNDERGROUND CONSTRUCTION ACTIVITY WITHIN 200 FT IN PLAN OF THE DESIGNATED INSTRUMENTATION LOCATION.
- 24. CONTRACTOR SHALL BE RESPONSIBLE TO AVOID AND CONTROL MOVEMENTS OR DEFLECTION BY IMPLEMENTING APPROPRIATE CONSTRUCTION PROCEDURES DURING THE EXCAVATION AND SUPPORT ACTIVITIES OF THE GROUND. RESTORE DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION- RELATED SETTLEMENT IN EXCESS OF ALLOWABLE MAXIMUM VALUES AT NO ADDITIONAL COST TO THE OWNER. OBTAIN PRIOR APPROVAL FROM THE OWNER FOR ANY PROPOSED REPAIRS TO ROADWAYS OR PRIVATE PROPERTIES.
- 25. THE CONTRACTOR SHALL INSTALL SEISMOGRAPHS AT THE NEAR POINT OF THE BUILDING LOCATED AT ADDRESS 215 GULF SHORE BLVD. FACING THE EXCAVATION SITE. UNLESS EASEMENTS HAVE BEEN OBTAINED, THE CONTRACTOR WILL BE RESPONSIBLE FOR NEGOTIATING PLACEMENT OF SEISMOGRAPHS, NOISE MONITORING AND GEOTECHNICAL INSTRUMENTATION AND MONITORING DEVICES (I.E.: SETTLEMENT MONITORING, OPTICAL SURVEY TARGETS) WITH PROPERTY OWNERS.
- 26. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT WATER DISCHARGED FROM THE SITE DURING CONSTRUCTION SHALL MEET OR EXCEED STATE WATER QUALITY STANDARDS. SPECIFICALLY, THE TURBIDITY OF DISCHARGED WATER SHALL NOT EXCEED 29 NTU ABOVE THE BACKGROUND LEVEL. WATER QUALITY AND SILTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL EROSION CONTROL MEASURES ARE INSTALLED, ESTABLISHED AND ACCEPTED.
- 27. WHERE INDICATED, OR AS NECESSARY SILT FENCES AND OR HAY BALES SHALL BE PLACED ALONG THE PROJECT PERIMETER TO PREVENT SEDIMENT IN RUNOFF AND TURBID WATER FROM LEAVING THE SITE.

CONSTRUCTION IN STREETS AND ROAD RIGHT-OF-WAYS

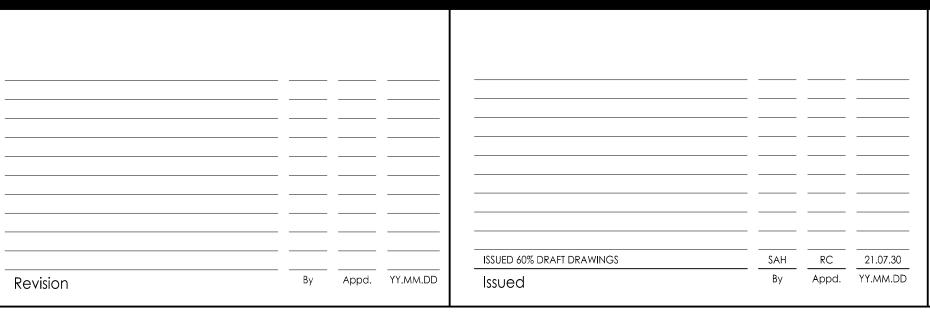
- 1. OPEN ROAD CUTS REQUIRE PRIOR APPROVAL OF THE CITY, COUNTY, STATE OR ANY OTHER AGENCY WHICH MAY HAVE JURISDICTION.
- 2. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND STANDARDS.
- 3. ALL AREAS IN EXISTING RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION SHALL RECEIVE GRASS SEED, MULCH OR SOLID SOD.
- 4. STREET OR HIGHWAY RESTORATION TO BE DONE AS PER LOCAL OR STATE AGENCY HAVING JURISDICTION.
- 5. CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITY REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.
- 6. TRAFFIC CONTROL ON ALL COUNTY, CITY OF NAPLES, AND STATE HIGHWAY RIGHT-OF-WAYS SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT / FHWA) AND REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING
- 7. MAINTENANCE OF TRAFFIC PLANS TO BE SUBMITTED BY CONTRACTOR AT HIS SUBMITTAL FOR RIGHT-OF-WAY PERMITS.

DRAINAGE NOTES

- 1. ALL PIPE LENGTHS ARE PLUS OR MINUS AND ARE MEASURED FROM THE CENTER OF STRUCTURES.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTMENTS OF VALVE BOX COVERS, MANHOLE RIMS AND COVER, GRATES, ETC., NECESSARY TO MATCH FINAL GRADES AS SHOWN ON PLANS.
- 3. ALL UNPAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE GRASSED AND MULCHED UNLESS OTHERWISE SHOWN ON THE PLANS OR DETAILS.
- EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
- 5. CONTRACTOR SHALL NOTIFY THE ENGINEER AND CITY A MINIMUM OF 48 HOURS BEFORE REQUIRED
- 6. ALL FRAME AND GRATE INLETS TO BE HEAVY DUTY TRAFFIC RATED.
- 7. THE WATER MANAGEMENT SYSTEM OUTSIDE PROJECT LIMITS TO BE MAINTAINED BY CITY STREETS AND STORMWATER DEPARTMENT. THE WATER MANAGEMENT SYSTEM INSIDE PROJECT LIMITS TO BE MAINTAINED BY THE CONTRACTOR.

UTILITY NOTES

- CONTRACTOR SHALL MARK LOCATIONS OF ALL PRESSURE PIPES BY INSTALLING METALIZED IDENTIFICATION TAPE BURIED APPROXIMATELY 12" (NOT MORE THAN 18") ABOVE TOP OF PIPE. TAPE WIDTH SHALL BE 3 INCH MINIMUM.
- 2. CONTRACTOR SHALL INSTALL 4 INCH 3M ELECTRONIC BALL MARKERS, OR APPROVED EQUAL, EVERY 200 LF AND AT EACH PIPE ELBOW LOCATION.
- 3. HORIZONTAL AND VERTICAL DEFLECTION OF THE PRESSURE MAINS SHALL NOT EXCEED THE PIPE MANUFACTURER'S SPECIFICATIONS. BENDS SHALL BE USED WHERE DEFLECTIONS EXCEED THE MANUFACTURER'S SPECIFICATIONS.
- 4. COVER FOR MAINS SHALL BE MEASURED FROM FINISHED GRADES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE MINIMUM COVER, REGARDLESS OF EXISTING GRADE.
- CONTRACTOR SHALL CONSTRUCT ALL WATER AND STORMWATER APPURTENANCES INCLUDING METER BOXES, BLOW-OFFS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, ETC, TO FINISHED GRADE, CONTRACTOR SHALL COORDINATE DURING THE CONSTRUCTION STAKE-OUT AND PRIOR TO CONSTRUCTION OF SAID APPURTENANCES WITH OWNER AND ENGINEER REGARDING FINISHED GRADE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE CONSTRUCTION OF SAID APPURTENANCES TO FINISHED GRADE.
- ALL MATERIALS, DEBRIS, UNSUITABLE EARTH, ETC. OF NO SALVAGE VALUE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR



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Consultants



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CITY OF NAPLES 735 8th St S

Naples Beach Restoration & Water Quality Improvement Project

File Name: 10606_2G-002.dwg

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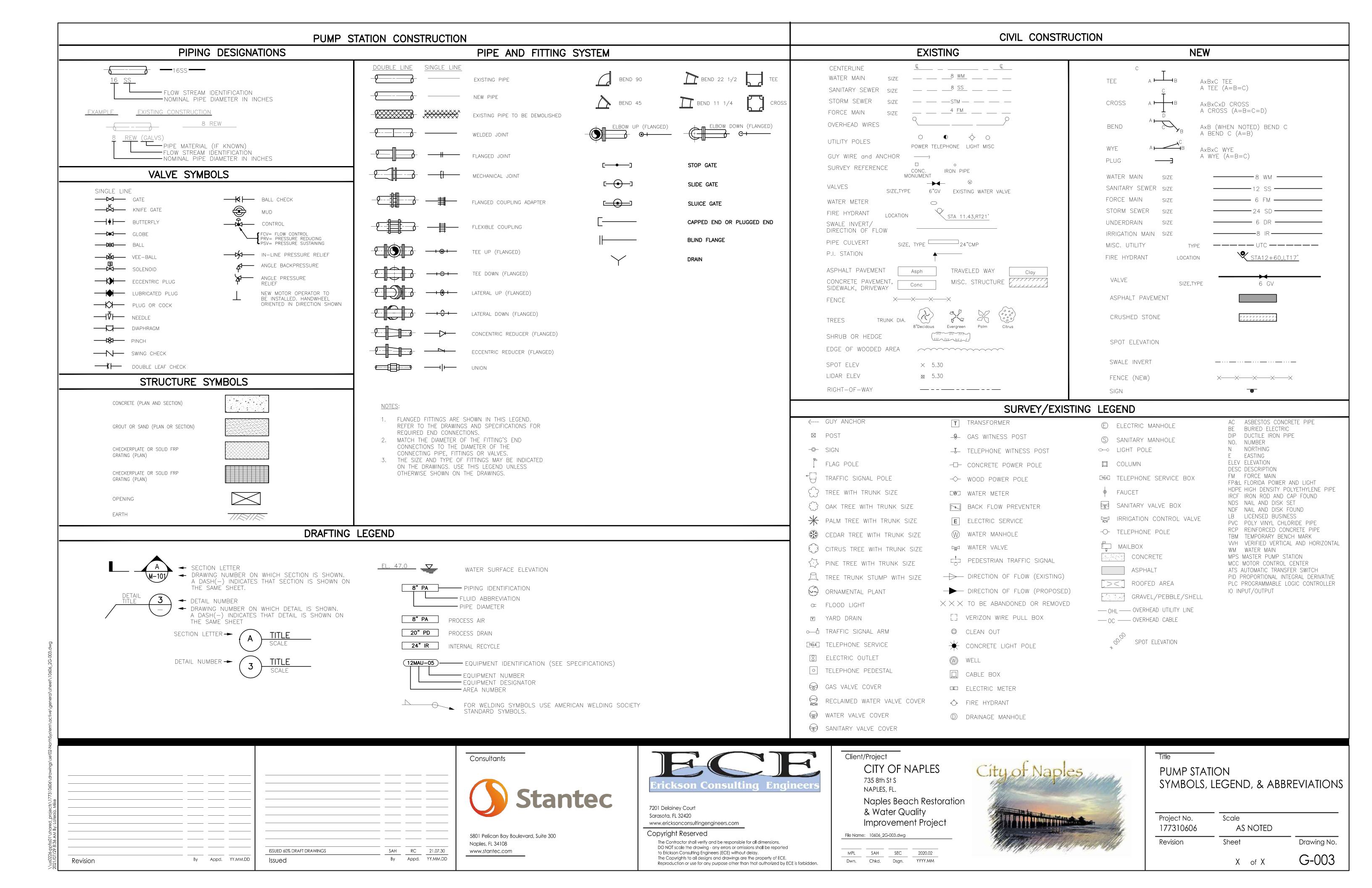
PUMP STATION GENERAL NOTES

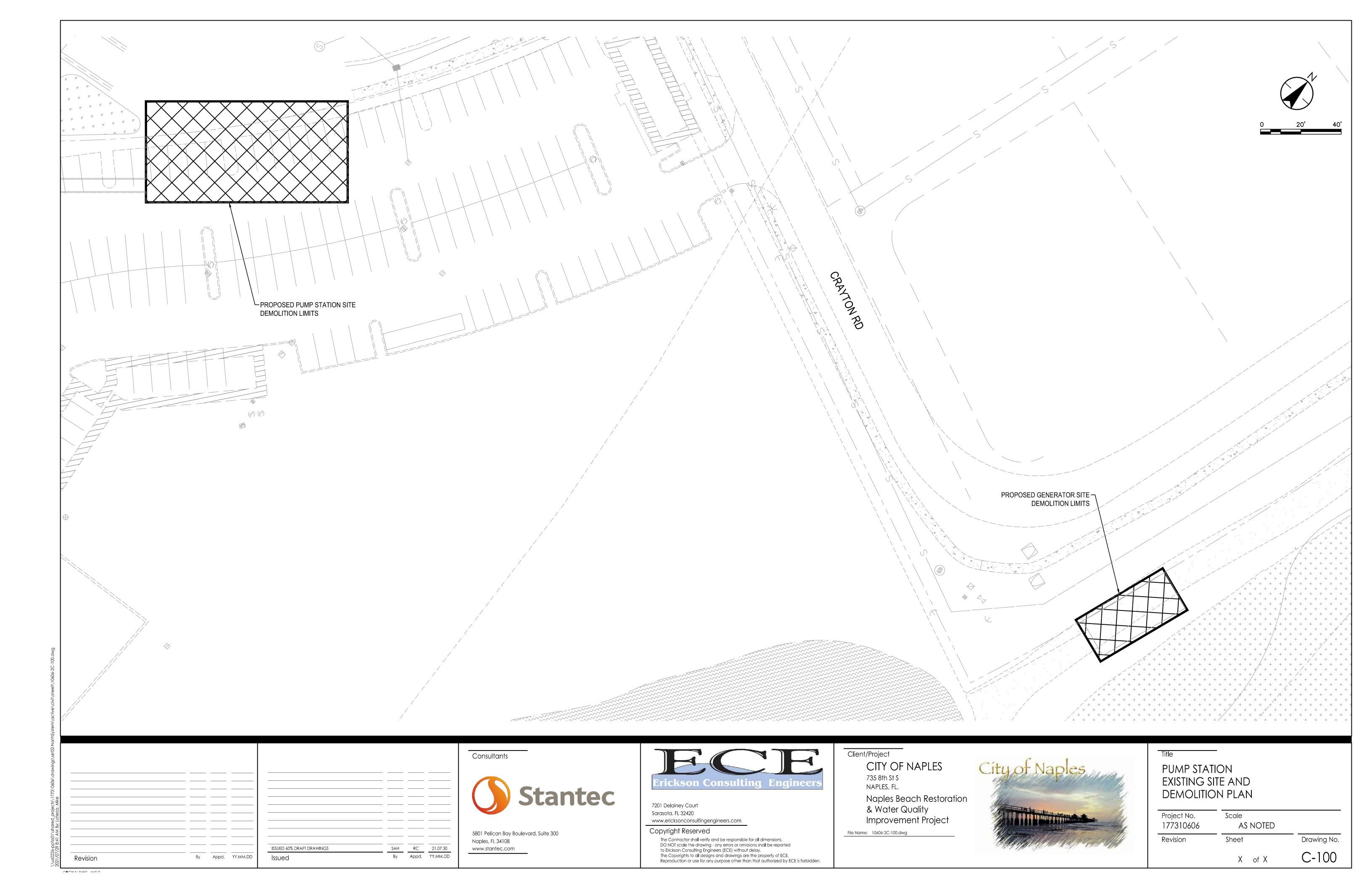
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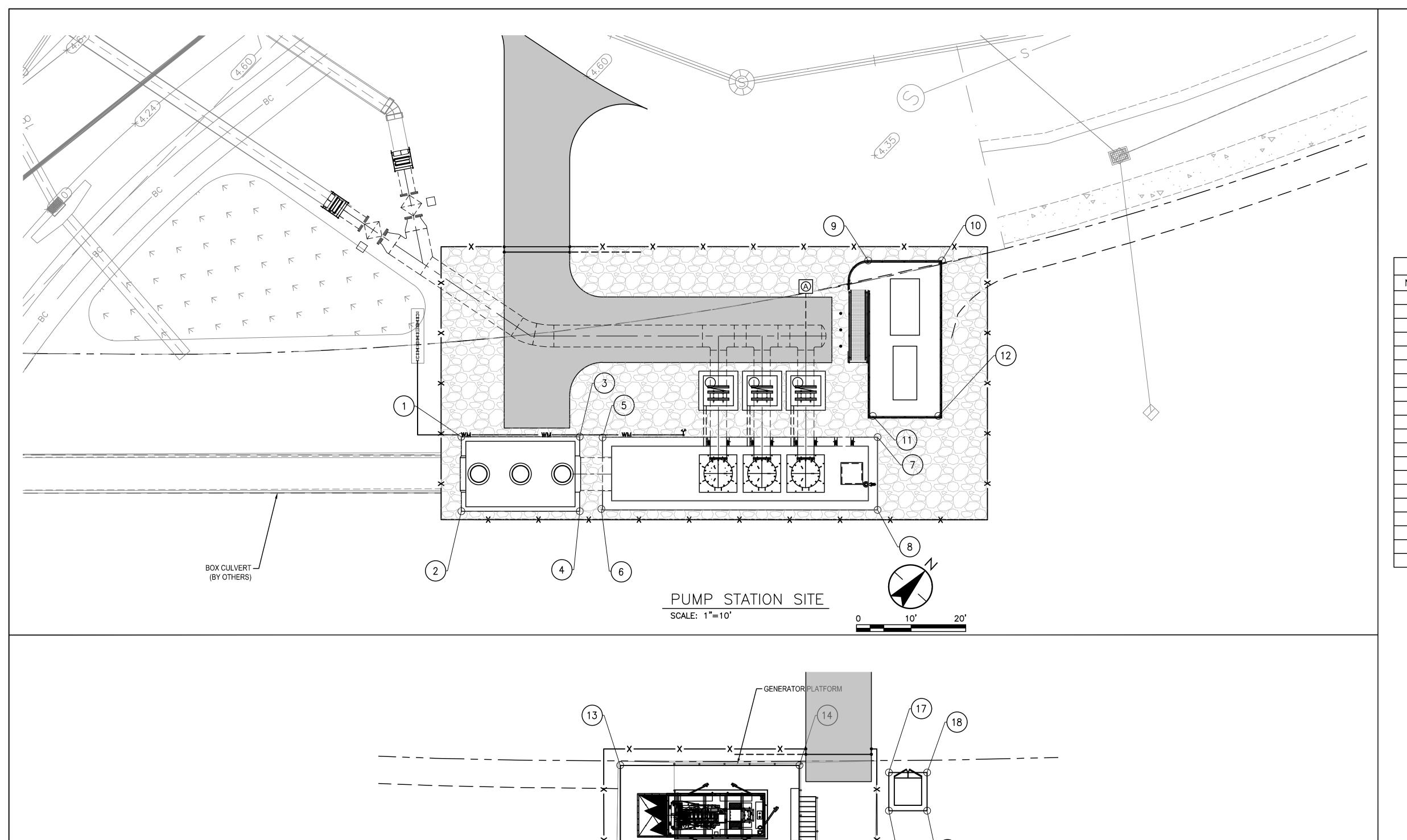
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> G-002 X of X

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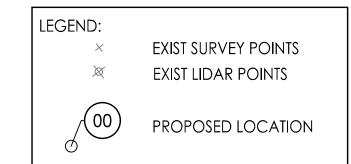




| NO | DECC | NODTUNG | FACTING | |
|-----|----------------------------|-----------|-----------|-----------|
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| 2 | SCREENING STRUCTURE | 664137.34 | 391078.68 | TOS = 5.4 |
| 3 | PUMP STATION PAD | 664162.17 | 391084.97 | TOS = X.X |
| 4 | SCREENING STRUCTURE | 664152.26 | 391094.38 | TOS = 5.4 |
| 5 | PUMP STATION PAD | 664164.94 | 391088.11 | TOS = X.X |
| 6 | PUMP STATION PAD | 664155.30 | 391096.97 | TOS = X.X |
| 7 | PUMP STATION PAD | 664199.67 | 391124.54 | TOS = X.X |
| 8 | PUMP STATION PAD | 664190.00 | 391133.73 | TOS = X.X |
| 9 | ELEVATED CONTROL PANEL PAD | 664221.92 | 391101.03 | TOS = X. |
| 10 | ELEVATED CONTROL PANEL PAD | 664231.22 | 391110.82 | TOS = X. |
| 11 | ELEVATED CONTROL PANEL PAD | 664201.88 | 391121.24 | TOS = X.X |
| 12 | ELEVATED CONTROL PANEL PAD | 664210.14 | 391129.94 | TOS = X.X |
| 13 | GENERATOR PLATFORM | 664303.19 | 391557.32 | |
| 14 | GENERATOR PLATFORM | 664334.76 | 391566.29 | |
| 15 | GENERATOR PLATFORM | 664298.27 | 391574.63 | XX.XX |
| 16 | GENERATOR PLATFORM | 664329.84 | 391583.60 | XX.XX |
| 17 | TRANSFORMER PAD | 664336.56 | 391578.23 | |
| 18 | TRANSFORMER PAD | 664343.29 | 391580.14 | |
| 19 | TRANSFORMER PAD | 664334.64 | 391584.96 | |
| 20 | TRANSFORMER PAD | 664341.38 | 391586.88 | |

NOTES:

 ALL ELEVATIONS ARE BASED UPON MEAN SEA LEVEL, NAVD 88. HORIZONTAL DATA IS EXPRESSED IN, NORTH AMERICAN DATUM 1983.



OBICINIAL CHEET ANCID

Stantec

GENERATOR SITE

SCALE: 1"=10'

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Client/Project

CITY OF NAPLES

735 8th St S

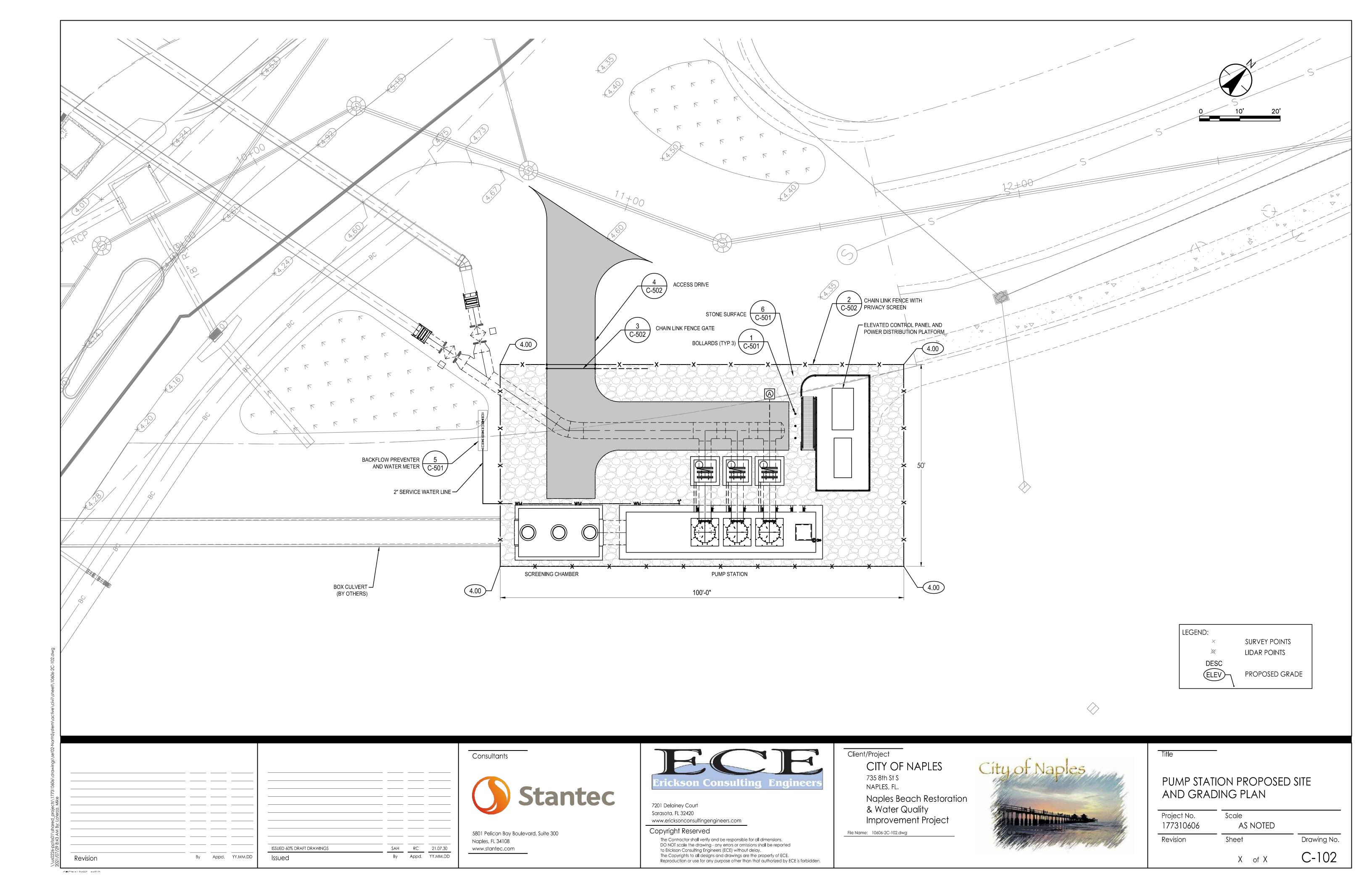
Naples, FL.
Naples Beach Restoration
& Water Quality
Improvement Project

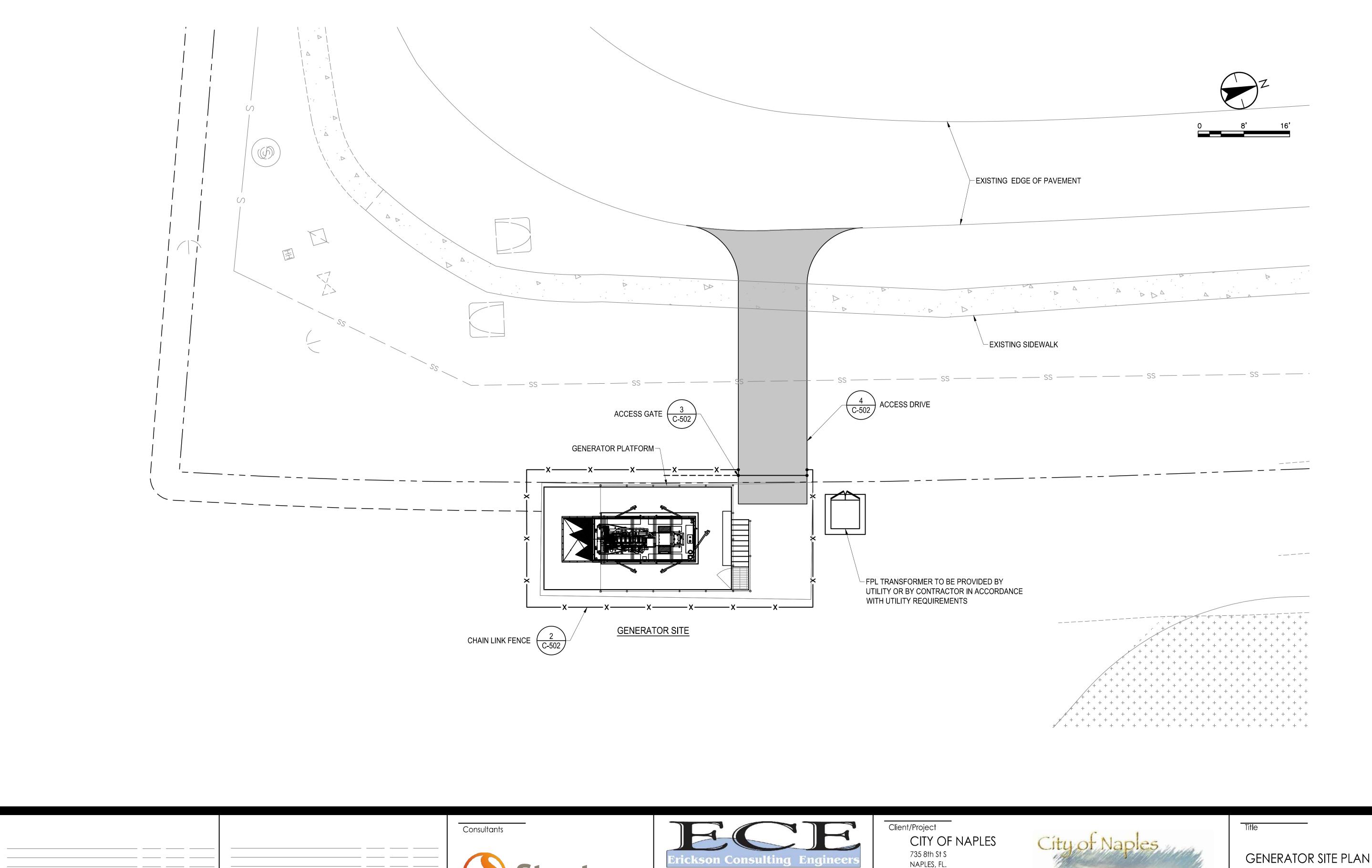
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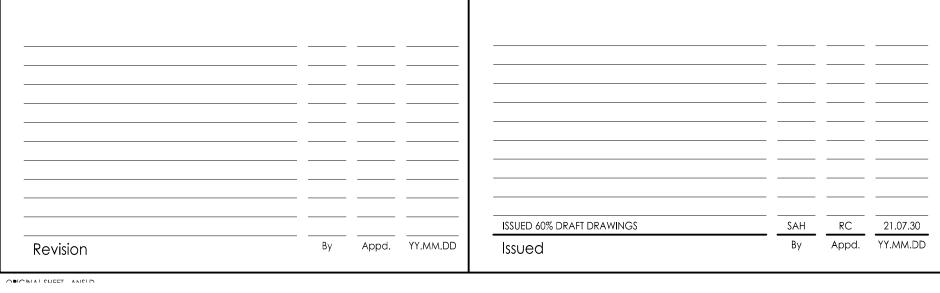


PUMP STATION AND GENERATOR GEOREFERENCE AND PIPING CONNECTION SITE PLAN

| Project No. 177310606 | Scale AS NOTED | |
|--------------------------|-------------------|-------------|
| Revision | Sheet | Drawing No. |
| | X of X | C-101 |









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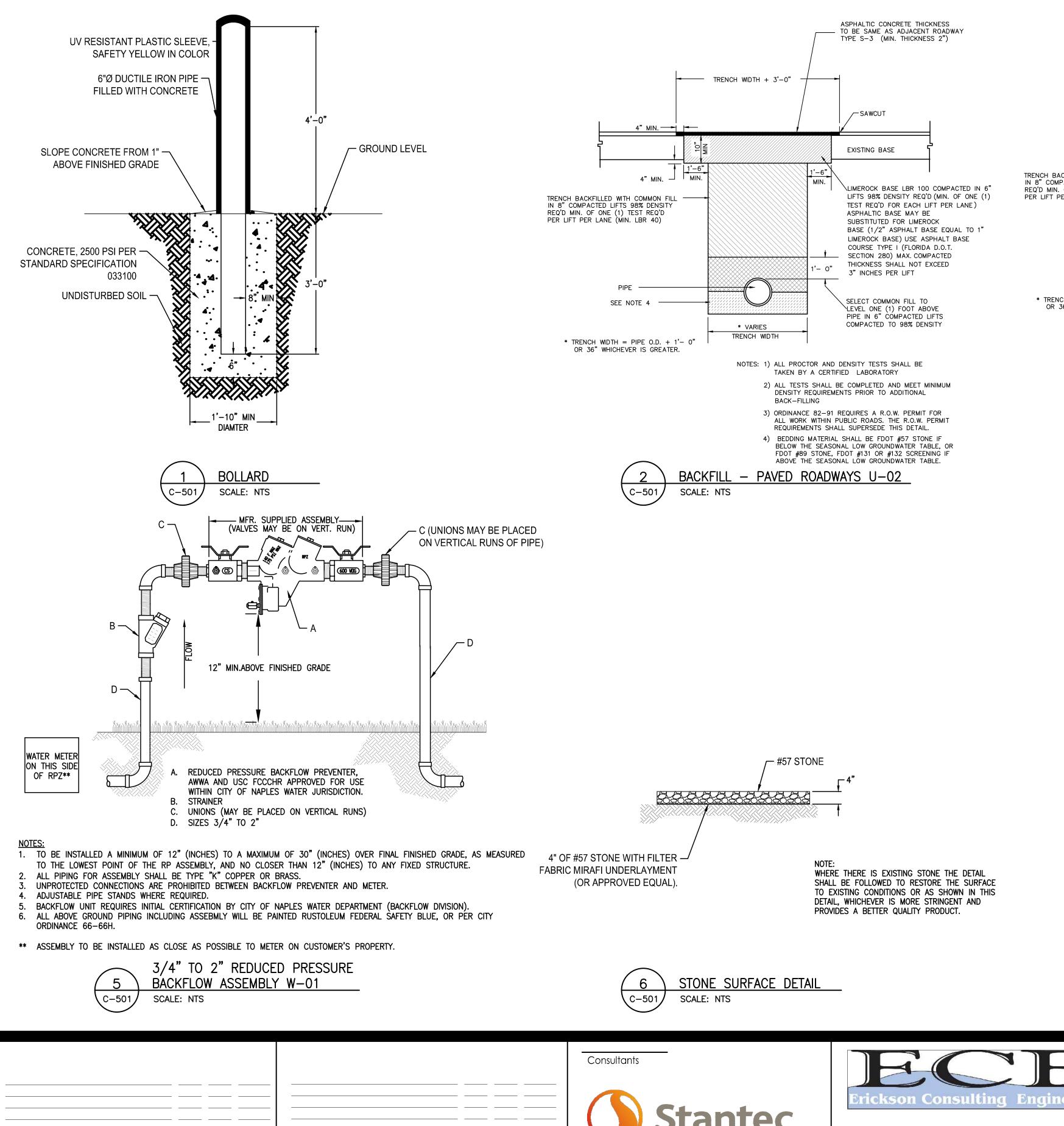
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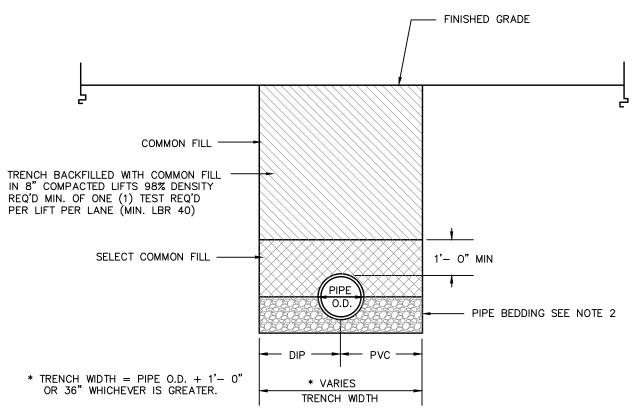
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File Name: 10606-2C-103.dwg



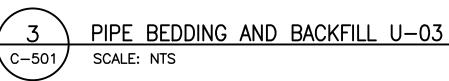
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| Revision | Sheet | Drawing No |
| | X of X | C-103 |

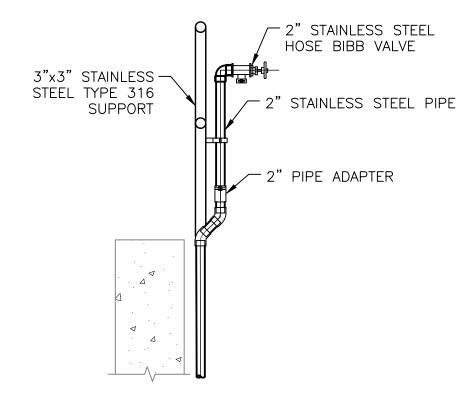




NOTES: 1) COMMON FILL SHALL BE COMPACTED TO MATCH CRITERIA PROVIDED IN BACKFILL DETAILS FOR PAVED AND UNPAVED LOCATIONS RESPECTIVELY.

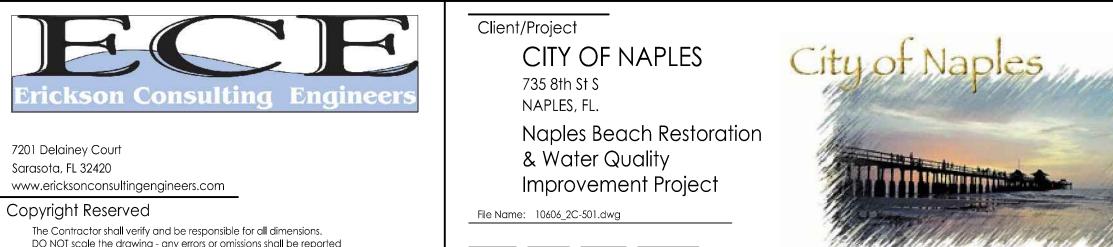
- 2) BEDDING MATERIAL SHALL BE FDOT #57 STONE IF BELOW THE SEASONAL LOW GROUNDWATER TABLE, OR FDOT #89 STONE, FDOT #131 OR #132 SCREENING IF ABOVE THE SEASONAL LOW GROUNDWATER TABLE.
- 3) ORDINANCE 82-91 REQUIRES A R.O.W. PERMIT FOR ALL WORK WITHIN PUBLIC ROADS. THE R.O.W. PERMIT REQUIREMENTS SHALL SUPERSEDE THIS DETAIL.





- 1. ALL HOSE VALVES TO BE CONTROLLED BY INDIVIDUAL SHUT-OFF VALVES (BALL OR PLUG VALVES) EXCEPT WHERE INDIVIDUALLY CONTROLLED BRANCH MAIN SERVES HOSE VALVES ONLY
- 2. ALL SUPPORTS AND ANCHORS SHALL BE STAINLESS STEEL.





PUMP STATION **DETAILS**

Project No. Scale 177310606 AS NOTED Drawing No. Revision Sheet C-501 X of X

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By Appd. YY.MM.DD Revision

SAH RC 21.07.30 ISSUED 60% DRAFT DRAWINGS By Appd. YY.MM.DD Issued

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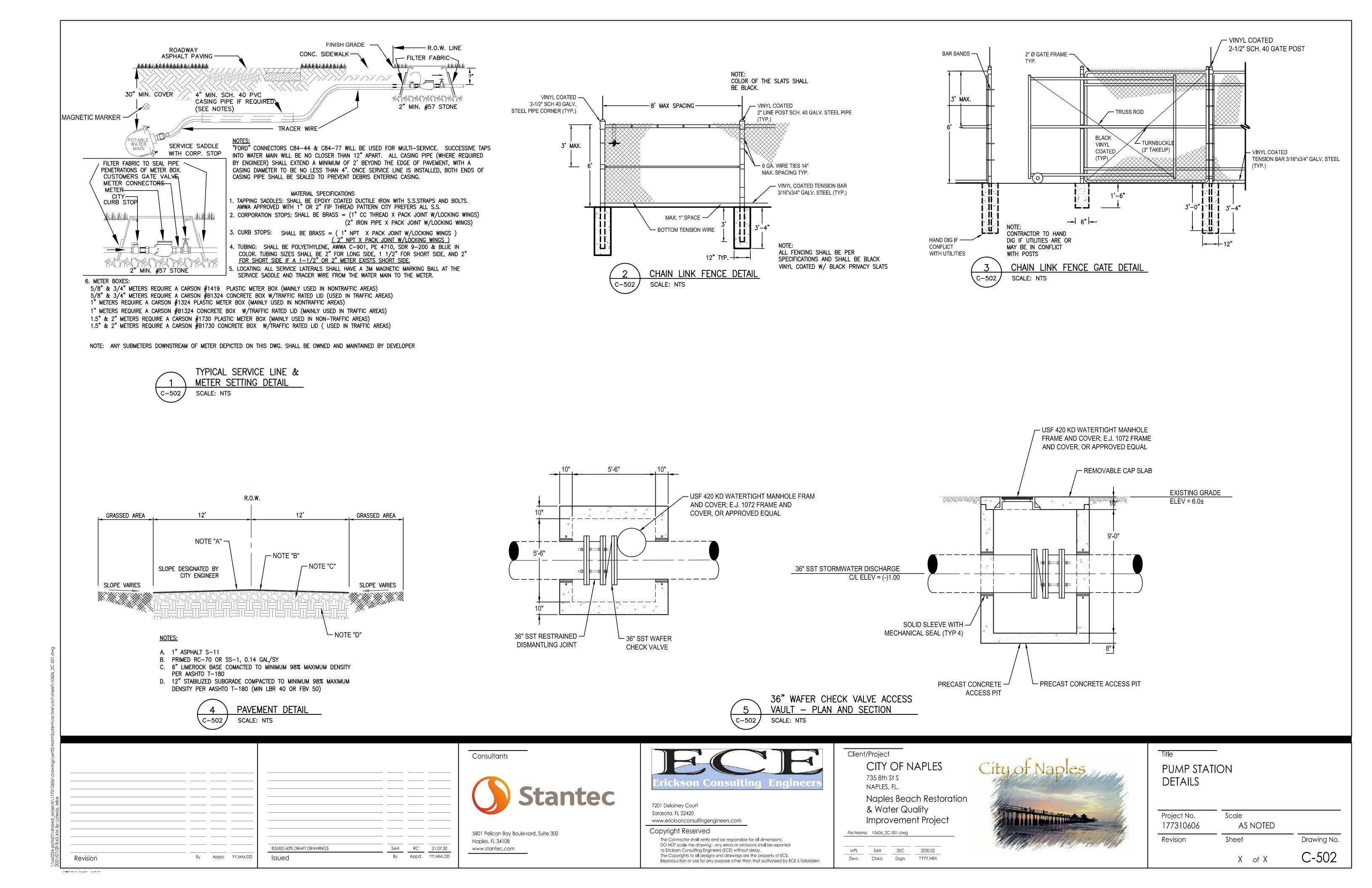
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Dwn. Chkd. Dsgn. YYYY.MM



GENERAL NOTES

BEGINNING CONSTRUCTION.

- 1. THE SYMBOLS AND ABBREVIATIONS ON THIS SHEET IS A COMPREHENSIVE STANDARD GUIDE FOR GENERAL USE ON ALL PROJECTS, THEREFORE NOT ALL THE SYMBOLS AND ABBREVIATIONS CONTAINED IN THIS LIST ARE NECESSARILY USED FOR THIS PARTICULAR PROJECT AND SHOULD BE USED FOR CLARIFICATION ONLY.
- 2. QUALITY OF CONSTRUCTION REQUIRED, PERFORMANCE LEVELS OF WORKMANSHIP MANUFACTURING AND INDUSTRY STANDARDS, STRENGTH AND PHYSICAL REQUIREMENTS OF MATERIALS, CONFORMANCE TO CODES AND REGULATIONS, GUARANTEES AND OTHER PROJECT REQUIREMENTS ARE SPECIFIED IN THE PROJECT MANUAL
- 3. IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED, OR NOTED SHALL BE
- 4. PERFORM ALL WORK IN COORDINATION WITH ALL DRAWINGS AND INFORMATION RELATED TO STRUCTURAL WORK. ANY CHANGES TO THE EQUIPMENT REQUIRING CHANGES TO SYSTEMS SHALL BE REDESIGNED BY A PROFESSIONAL ENGINEER AT NO COST TO THE OWNER AND SUBMITTED TO THE ENGINEER. SUBMITTAL SHALL BE ACKNOWLEDGED IN WRITING BEFORE
- 5. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT
- 6. FACILITIES HAVE BEEN DESIGNED FOR DESIGN LOADS SHOWN OR SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FACILITIES SUBJECT TO CONSTRUCTION LOADS EXCEEDING THE DESIGN LOADS AND SHALL NOTIFY THE ENGINEER OF ANY SUCH ADDITIONAL LOADS.
- 7. CRITICAL NOTE: DURING CONSTRUCTION, STRUCTURE MAY BE BUOYANT WHEN EMPTY. IN THE EVENT THAT THE EXCAVATION BECOMES FLOODED OR THE SURROUNDING GROUND BECOMES SATURATED ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT FLOTATION OF THE STRUCTURE.
- 8. ALL DIMENSIONS AND ELEVATIONS NOTED THUS (*) ON STRUCTURES SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD OR WITH THE EQUIPMENT MANUFACTURER AND SHALL CONFORM TO THOSE SHOWN ON OTHER
- 9. ALL LOADS SHOWN ON THE DRAWINGS ARE SERVICE LOADS AND ARE TO BE CONSIDERED MINIMUM MEMBER DESIGN FORCES.
- 10. DESIGN LOADS: BASED ON THE 6TH EDITION, 2017 FLORIDA BUILDING CODE. 11. PUMP STATION AND SCREENING CHAMBER TOP SLAB LIVE LOAD: H20 VEHICLE
- 12. DESIGN FLOOD ELEVATION: 11 FEET PER FEMA MAP (ZONE AE-11).
- 13. ALL STRUCTURES TO RESIST BUOYANCY WITH VESSEL EMPTY AND GROUNDWATER AT
- GROUND SURFACE. STRUCTURES ASSUMED FLOODED WHEN WATER SURFACE IS ABOVE
- 14. WALLS OF THE PUMP STATION AND THE SCREENINGS TO RESIST SOIL, HYDROSTATIC PRESSURE AND SURCHARGE PRESSURES AS OUTLINED IN THE GEOTECHNICAL REPORT.

SOIL FOUNDATION PREPARATION

A GEOTECHNICAL REPORT FOR THIS PROJECT HAS BEEN PREPARED BY ARDAMAN & ASSOCIATES ON AUGUST 21, 2019 AND BY YPC CONSULTING GROUP ON APRIL 11, 2017. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE REPORT FOR THE PREPARATION OF THE SUB-BASE AND BASE FOR THE PUMPING STATION.

DUE TO THE DEPTHS OF THE PROPOSED STRUCTURES AT THIS SITE EXCAVATION SUPPORT MEASURES INCLUDING DEWATERING SHALL BE EMPLOYED. REFER TO THE PROJECT SPECIFICATIONS AND NOTE THAT THE EXCAVATION SUPPORT SYSTEM SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA.

ALSO, THE CONTRACTOR SHALL HIRE A GEOTECHNICAL ENGINEER TO OBSERVE, INSPECT, AND TEST THE PREPARATION OF THE SUB-BASE AND BASE. THE GENERAL REQUIREMENTS FOR THE SUB-BASE AND BASE PREPARATION ARE OUTLINED BELOW:

- 2. STRIP SITE WHILE REMOVING ANY STRATUM 6 SOILS.
- . EXCAVATE TO FOUNDATION BEARING DEPTH. INSTALL BRACING/SHEETING AS NEEDED TO PREVENT SETTLEMENT OF THE EXISTING FOUNDATIONS.
- 4. PROOF ROLL THE EXPOSED SUBGRADE TO EVALUATE FOR ANY SOFT YIELDING SUBGRADE THAT WILL NEED TO BE REPLACED.
- 5. REMOVE ANY UNSUITABLE MATERIALS AND THEN BACKFILL WITH SUITABLE FILL TO THE SUBGRADE ELEVATION. ADDED BACKFILL AND SUBGRADE TO BE COMPACTED TO A MINIMUM DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.
- 6. BACKFILL AREA TO BOTTOM OF FOUNDATION ELEVATION IN LIFTS NOT EXCEEDING TWELVE (12) INCHES IN THICKNESS AND COMPACT TO A MINIMUM DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. BACKFILL SHALL NOT CONTAIN ANY UNSUITABLE MATERIALS.

FOUNDATIONS

- 1. NO CONCRETE SHALL BE PLACED IN WATER OR ON SATURATED GROUND.
- 2. IN GENERAL, EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN A MINIMUM OF 2'-0" BELOW FINISHED EXTERIOR GRADE.
- 3. ALL FOUNDATIONS SHALL BEAR ON 12" OF COMPACTED STRUCTURAL FILL ON UNDISTURBED SOIL WITH A BEARING CAPACITY OF NOT LESS THAN 2500 PSF.
- 4. ALL FINISHED EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE ENGINEER OR HIS
- DESIGNEE BEFORE ANY CONCRETE IS PLACED. 5. ALL BACKFILL UNDER OR ADJACENT TO ANY PORTION OF THE STRUCTURES SHALL BE
- COMPACTED IN 12" LIFTS. SEE SPECIFICATIONS.
- 6. PROVIDE 6" STRUCTURAL FILL, COMPACTED TO 90% MODIFIED PROCTOR DENSITY, UNDER ALL SLABS ON GRADE AND WHERE INDICATED ON THE DRAWINGS OVER WELL COMPACTED STRUCTURAL FILL.

CONCRETE

- 1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE LATEST EDITION OF THE ACI BUILDING CODE (ACI 318) AND ACI 301. SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, AND TO THE FLORIDA BUILDING CODE. IN CASE OF CONFLICT, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
- 2. ALL CONCRETE SHALL BE READY-MIXED IN ACCORDANCE WITH ASTM C94
- 3. VERTICAL CONSTRUCTION JOINTS AND STOPS IN THE CONCRETE WORK SHALL BE MADE AT MIDSPAN. PROVIDE DOWELS AT CONSTRUCTION JOINTS OF AREA EQUAL TO 0.5% OF THE VERTICAL CONCRETE AREA. SEE SPECIFICATIONS. PROVIDE BEVELED KEYWAYS AT ALL CONSTRUCTION JOINTS.
- 4. AT LEAST 48 HOURS SHALL ELAPSE BEFORE DEPOSITING NEW CONCRETE AGAINST PREVIOUSLY PLACED CONCRETE
- 5. All CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS AGE: FOOTINGS AND INTERIOR CONCRETE SLABS - 4,000 PSI., CONCRETE EXPOSED TO THE ELEMENTS (EXTERIOR SLABS) CONCRETE EXPOSED TO STORMWATER - 4,000 PSI. REFER TO SPECIFICATIONS AND ACI 301 FOR DESIGN STRENGTHS REQUIRED FOR SELECTING MIX

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6. ALL SLABS ON GRADE SHALL BE PLACED IN ALTERNATE PANELS NOT EXCEEDING 900 S.F.

REINFORCING

- 1. ALL REINFORCING BAR DETAILS SHALL CONFORM TO THE LATEST ACI CODE AND DETAILING MANUAL, EXCEPT AS OTHERWISE SPECIFIED.
- ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND SHALL BE PROVIDED IN FLAT SHEETS. LAPS SHALL BE STAGGERED AND SHALL BE 1-1/2 FULL MESH MIN.
- 3. SCHEDULE WITH THE SHOP DRAWINGS ALL NECESSARY ACCESSORIES TO HOLD REINFORCING SECURELY IN POSITION. MINIMUM REQUIREMENTS SHALL BE: HIGH CHAIRS - 4 FEET ON CENTERS; SLAB BOLSTERS - 3'-6" ON CENTERS; SUPPORT BARS FOR HIGH
- 4. ALL BARS, EXCEPT AS OTHERWISE NOTED, SHALL BE CONTINUOUS AND SHALL BE RUN CONTINUOUSLY AROUND CORNERS, LAPPED AT NECESSARY SPLICES, AND HOOKED AT DISCONTINUOUS ENDS. LAPS SHALL BE 48-BAR DIAMETER MINIMUM, UNLESS OTHERWISE
- 5. THE CONCRETE PROTECTIVE COVERING FOR MAIN REINFORCEMENT SHALL BE, UNLESS SHOWN OTHERWISE:
 - A. FOOTING BOTTOMS...3 INCHES.
 - B. COLUMNS, BEAMS AND FORMED SURFACES IN DIRECT CONTACT WITH SOIL OR EXPOSED TO THE WEATHER (EXCEPT SLABS)...2 INCHES.
 - C. SLABS EXPOSED TO THE WEATHER...1 INCH. D. INTERIOR SLABS...3/4 INCH.
- 6. ALL CONCRETE, UNLESS SPECIFICALLY NOTED TO BE PLAIN CONCRETE, SHALL BE
- 7. ALL REINFORCING SHALL BE INSPECTED AND APPROVED BY THE ENGINEER OR HIS DESIGNEE BEFORE CONCRETE IS PLACED.

MISCELLANEOUS

- 1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE JOB SITE.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING AND SHALL DISCUSS HIS METHODS WITH THE ENGINEER PRIOR TO THE START OF WORK.
- 3. CONSULT THE MECHANICAL AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATION AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, WASHES, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS.
- ALL EQUIPMENT PENETRATIONS TO BE VERIFIED BY THE CONTRACTOR.
- 5. DO NOT SCALE FROM DRAWINGS.

LIST OF ABBREVIATIONS

| & | AND | DIA/Ø | DIAMETER | Н | HORIZONTAL | TOC | TOP OF CONCRETE |
|------|----------------|--------------|------------------|-------|----------------|-----|--------------------|
| @ | AT | DWG | DRAWING | HP | HIGH POINT | TOF | TOP OF FOOTING |
| AL | ALUMINUM | EF | EACH FACE | LP | LOW POINT | TOS | TOP OF SLAB |
| ARCH | ARCHITECTURAL | EL | ELEVATION | MAX | MAXIMUM | TYP | TYPICAL |
| В | BOTTOM | EMBED | EMBEDMENT | MIN | MINIMUM | V | VERTICAL |
| BM | BEAM | ETC. | ETCETERA | NTS | NOT TO SCALE | W/ | WITH |
| CL | CENTER LINE | EX | EXISTING | OC | ON CENTER | WWF | WELDED WIRE FABRIC |
| CJ | CONTROL JOINT/ | EXP | EXPANSION | PL | PLATE | WS | WATERSTOP |
| | CONSTRUCTION | EXT | EXTERIOR | REINF | REINFORCING | | |
| | JOINT | EW | EACH WAY | REQ'D | REQUIRED | | |
| CLR | CLEAR | FNDN | FOUNDATION | SPECS | SPECIFICATIONS | | |
| COL | COLUMN | FT | FEET | STD | STANDARD | | |
| CONC | CONCRETE | FTG | FOOTING | STL | STEEL | | |
| CONT | CONTINUOUS | SOG | SLAB ON GRADE | Τ | TOP | | |

FLOOD DESIGN CRITERIA

- 1. THIS PROJECT IS LOCATED WITHIN FIRM ZONE: AE11
- 2. LOCAL STILLWATER ELEVATION PER ASCE 7: 3.25 FEET ABOVE GROUND (THIS EQUATES TO
- 3. BREAKING WAVE HEIGHT PER ASCE 7: 2.54 FEET. 4. DYNAMIC PRESSURE COEFFICIENT (CP): 3.5 FOR STRUCTURE CATEGORY IV PER ASCE 7.
- FLOOD DESIGN CLASS: 4 PER ASCE 24
- MINIMUM ELEVATION OF UTILITIES, EQUIPMENT AND PLATFORMS: BFE(BASE FLOOD ELEVATION) + 2 FEET = 11+2 FEET= 13' PER ASCE 24.

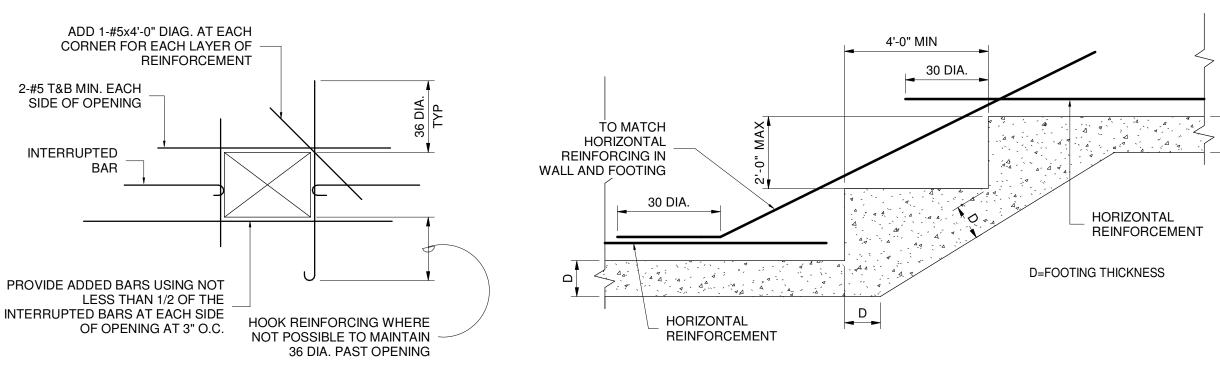
LATERAL EARTH PRESSURE DESIGN DATA

UNIT WEIGHT

ABOVE GROUNDWATER 130 PCF BELOW GROUNDWATER: 70 PCF AT REST COEFFICIENT (KO): 0.50 ACTIVE COEFFICIENT (KA): 0.33 PASSIVE COEFFICIENT (KP): 3.0

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SURCHARGE: 200 PSF



TYP. REINF. AT SLAB OPENINGS 3/4" = 1'-0"

TYP. ELEVATION OF CONT. STEPPED WALL FOOTING 1/2" = 1'-0"

Client/Project

LAPS, HOOKS AND

EMBEDMENTS

PLAN OF HORIZONTAL REINF. AT CORNERS, INTERSECTIONS, AND ENDS

CONTINUOUS KEY

HORIZONTAL BAR

DOWELS TO BE SAME

SIZE AS HORIZONTAL

1/2" = 1'-0"

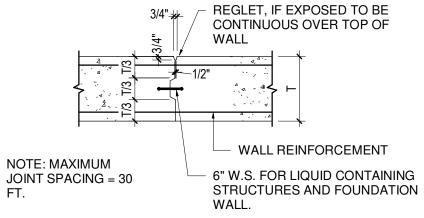
LAP OUTSIDE BARS OR

PROVIDE CORNER BARS AS

SAME SIZE AS HORIZONTAL

SHOWN. CORNER BARS TO BE

48 DIA.



BARS

TYP. WALL AND SLAB CONSTRUCTION JOINT

SYMMETRIC ABOUT CENTERLINES 2 BAR EACH FACE, EACH SIDE FOR > 3'-0" NORMAL REINFORCEMENT ADDITIONAL BAR As₂ 1 VAR EACH FACE, EACH SIDE FOR ≤ 3'-0" DIA. (SEE NOTE 5) As = AREA OF REINFORCEMENT LAPS, HOOKS AND **EMBEDMENTS** SEE DIAGONAL BAR **ARRANGEMENT** DETAIL (BEND AS REQUIRED AT CONSTRUCTION JOINTS OR OTHER OBSTRUCTIONS ADDITIONAL BAR As₂ **DIAGONAL BAR ARRANGEMENT**

REGLET DETAIL

ELASTOMERIC

SEALANT

BACKER ROD

12" = 1'-0" 3/4" CHAMFER BROOM FINISH -#5@12 T&B EW FINISH GRADE COMPACTED STRUCT. FILL

> SEE SITE PLANS FOR LOCATION AND SIZE OF PADS. COORDINATE WITH SUBCONTRACTORS AS REQUIRED.

TYP. CONC. PAD ON GROUND

NOT TO SCALE

U-BARS AT

OPENINGS AND

DISCONTINUOUS

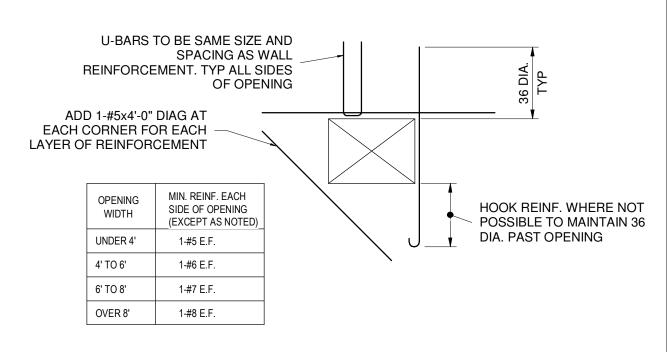
ENDS OF WALLS

- 1. THIS DETAIL TO BE USED AT ALL CIRCULAR OPENINGS EXCEPT WHEN OTHER DETAILING IS INDICATED ON THE DRAWINGS.
- 2. CUT NORMAL REINFORCEMENT 2" CLEAR OF OPENING.
- 3. CUT NORMAL REINFORCEMENT AT OPENINGS: A. As_1 AND $As_2 = 1/2$ AREA OF TOTAL CUT BARS TO BE ADDED ON EACH SIDE OF
- OPENING. 4. PLACEMENT OF DIAGONAL AND ADDITIONAL BARS As₁ AND As₂ SHALL BE AS
- A. AT CENTERLINE OF WALLS OR SLABS WHERE ONE LAYER OF
- REINFORCEMENT IS PROVIDED (I.E. AT WALLS / SLABS LESS THAN 10" THICK) B. AT EACH FACE OF WALLS OR SLABS WHERE TWO LAYERS OF
- REINFORCEMENT ARE PROVIDED (I.E. AT WALLS / SLABS 10" THICK OR 5. UNLESS OTHERWISE NOTED, SIZE OF DIAGONAL BARS SHALL BE THE SIZE OF THE
- LARGEST NORMAL REINFORCING BAR CUT. 6. INCREASE SIZE OF ADDITIONAL BARS AS NEEDED TO FIT WITHIN A DISTANCE OF
- 2X WALL/ SLAB THICKNESS FROM OPENING, PROVIDE 2" MIN CLEAR BETWEEN 7. WHERE A SLAB OR INTERSECTING WALL CONNECTS WITHIN ONE WALL
- THICKNESS OF THE OPENING, ADDITIONAL BARS ON THAT SIDE OF THE OPENING MAY BE OMITTED.
- 8. WHEN THE LAP LENGTH OF THE ADDITIONAL BARS CANNOT BE ACHIEVED DUE TO AN ADJACENT WALL OR SLAB, ADDITIONAL CORNER BARS OR SLAB DOWELS. REPECTIVELY, MATCHING THE CUT BARS, ARE TO BE INCLUDED IN THE ADJACENT WALL OR SLAB TO LAP WITH THE ADDITIONAL BARS.

ADDITIONAL REINFORCEMENT AT ROUND OPENINGS

3/4" = 1'-0"

ADDITIONAL BAR As₁



TYP. REINF. AT OPENINGS IN WALLS 3/4" = 1'-0"

Revision

Issued

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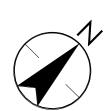
STRUCTURAL GENERAL NOTES AND TYPICAL DETAILS

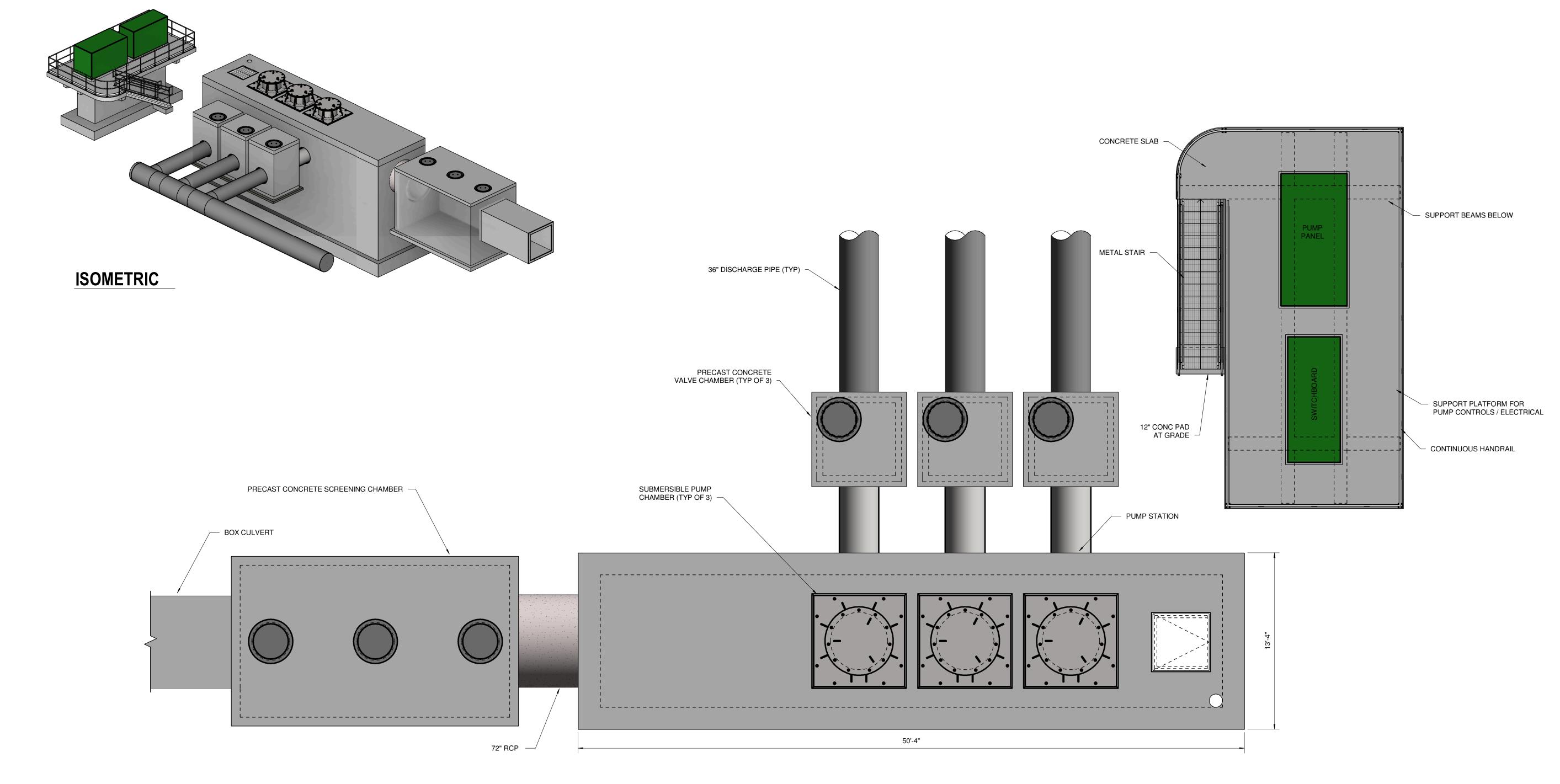
Scale Project No. 177310606 AS SHOWN

Sheet Drawing No. S-001

of 6

Revision

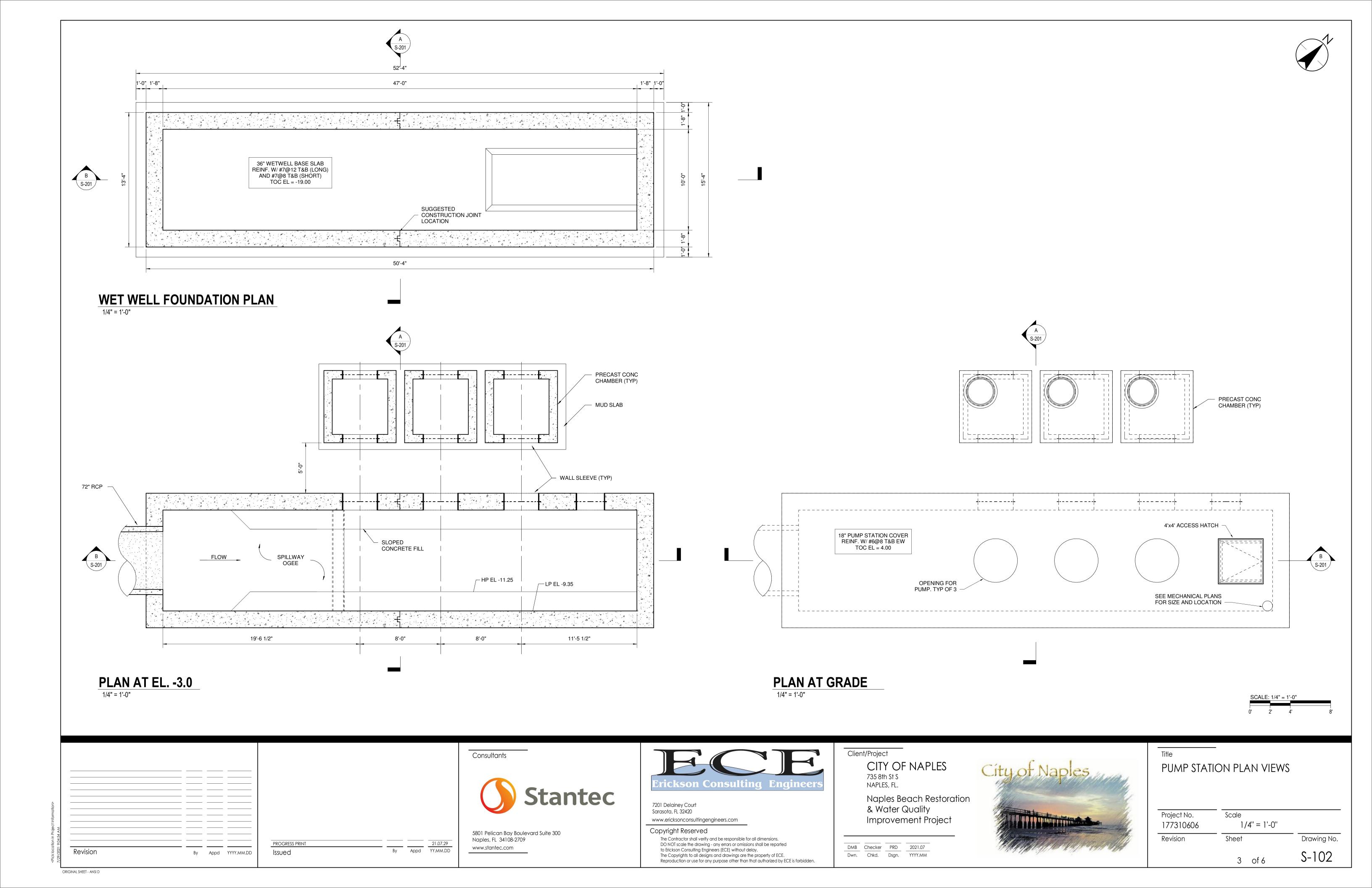




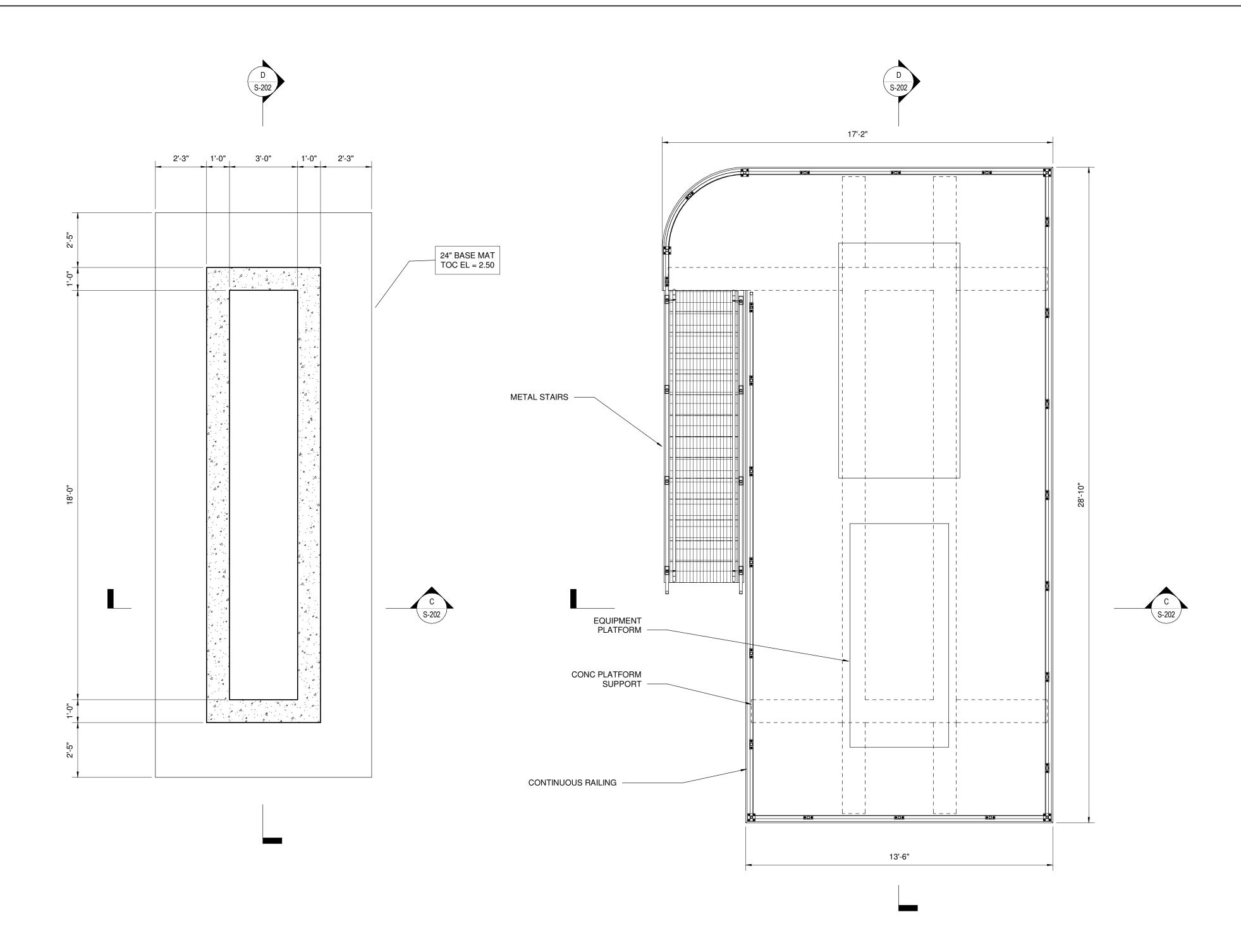
PUMP STATION OVERALL PLAN

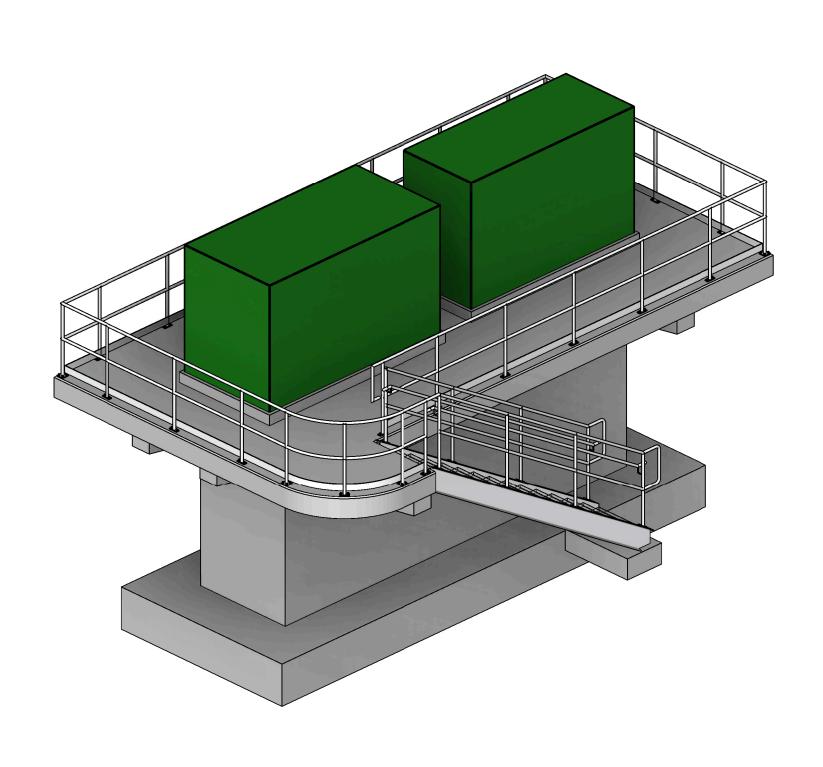
SCALE: 1/4" = 1'-0"







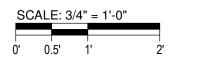


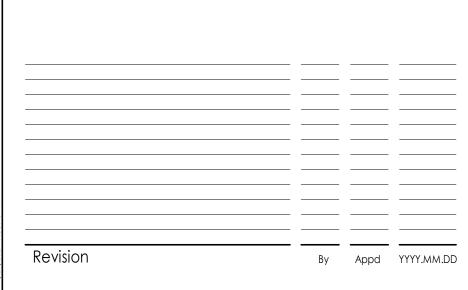


ISOMETRIC

ELECTRICAL PLATFORM FOUNDATION PLAN

PLAN AT ELECTRICAL PLATFORM





By Appd 21.07.29
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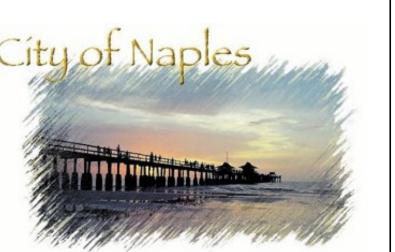
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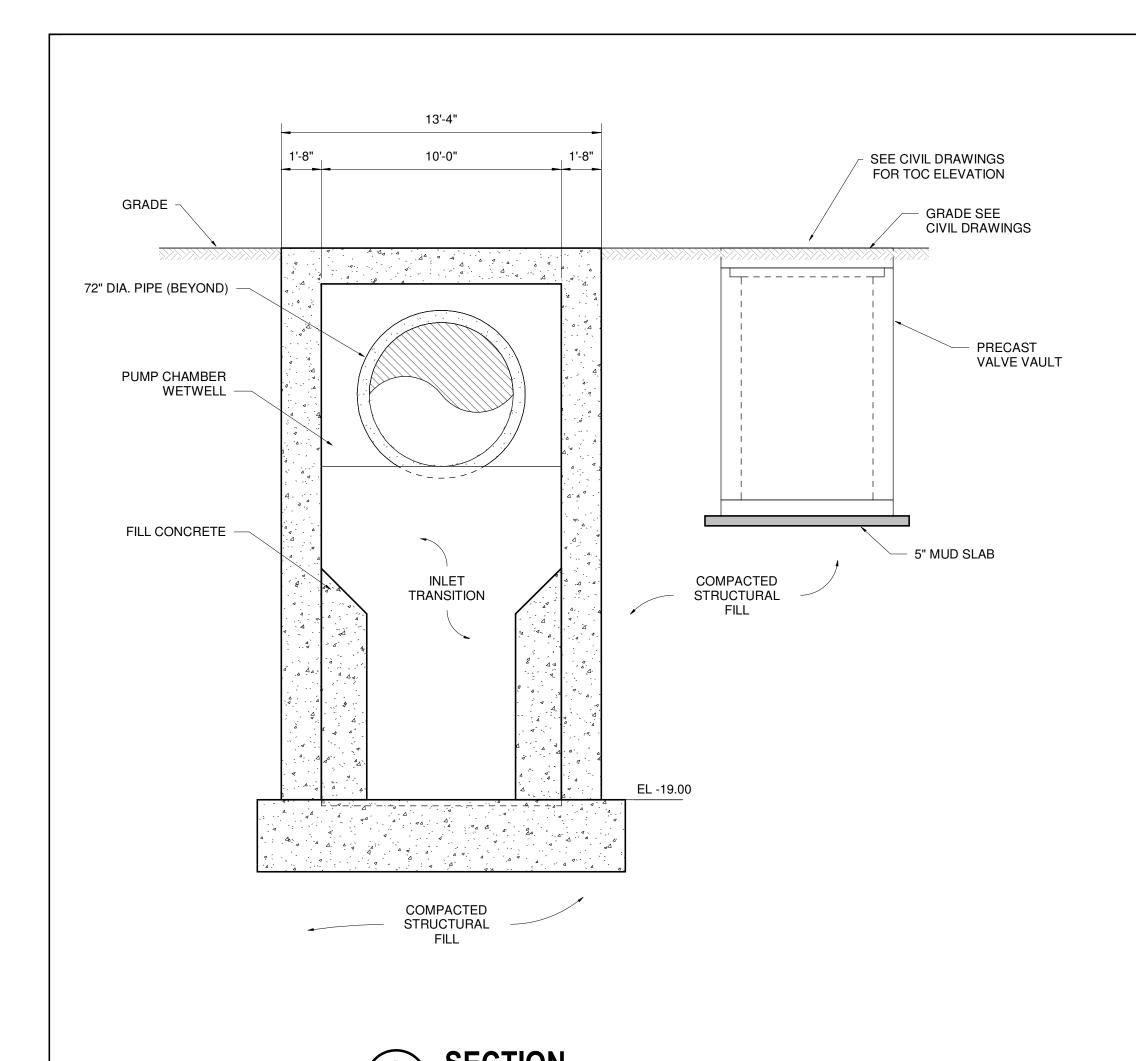
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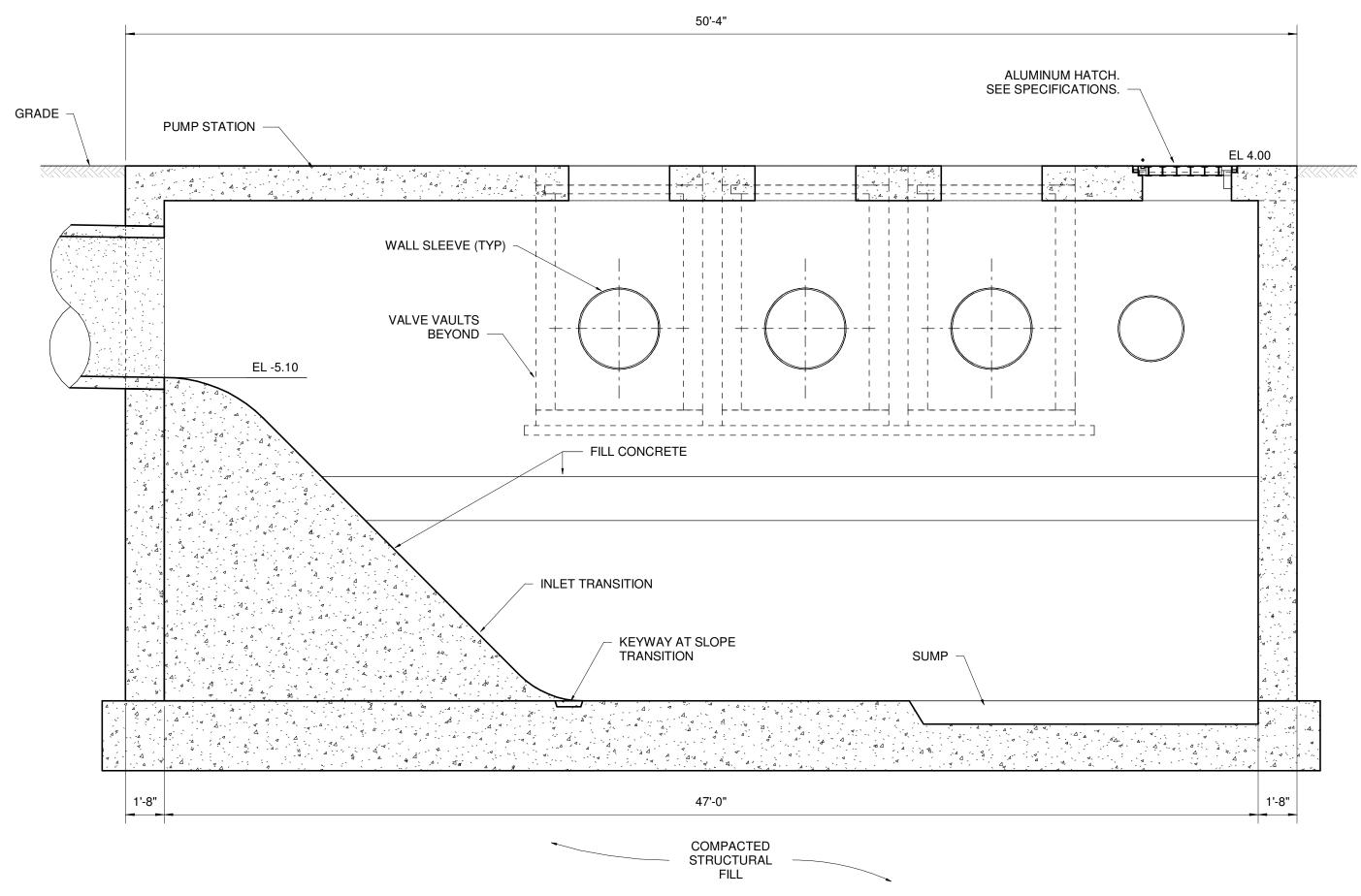


ELECTRICALPLATFORM

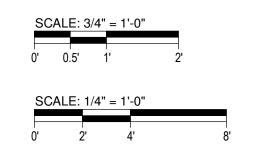
Project No. Scale 177310606 3/8" = 1'-0" Drawing No. Revision Sheet S-103

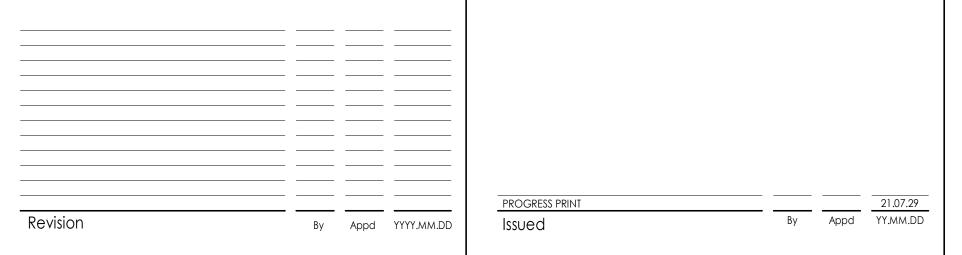
4 of 6





REFER TO GEOTECHNICAL REPORT FOR SUBGRADE PREPARATION REQUIREMENTS.





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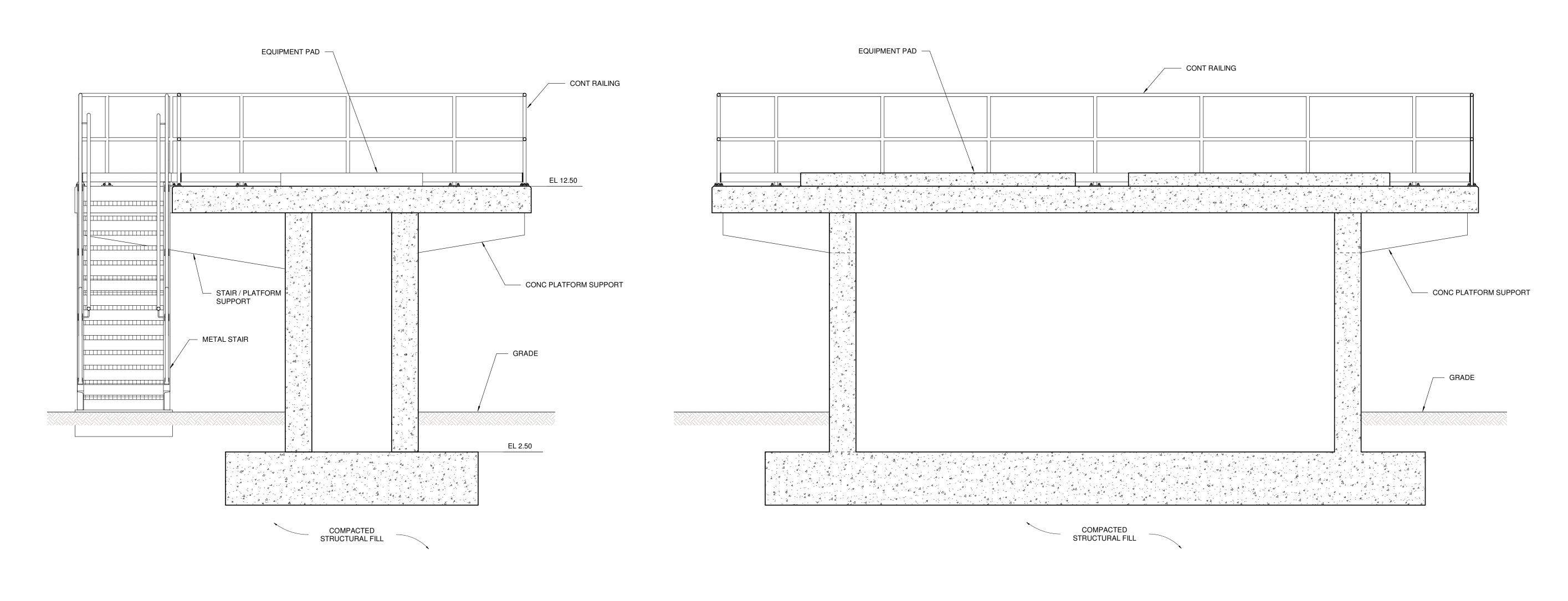
City of Naples

Title
PUMP STATION SECTIONS

Project No. Scale
177310606

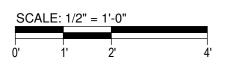
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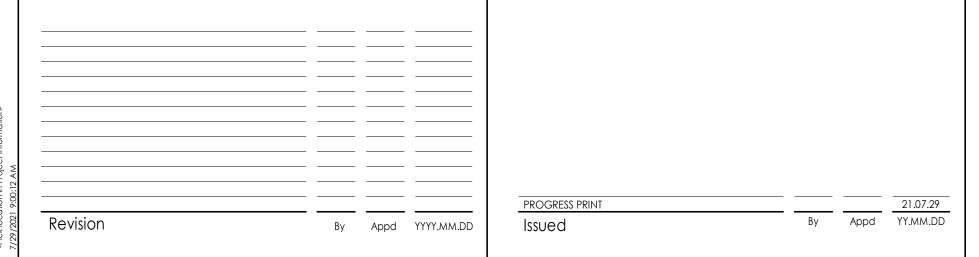
5 of 6 S-201











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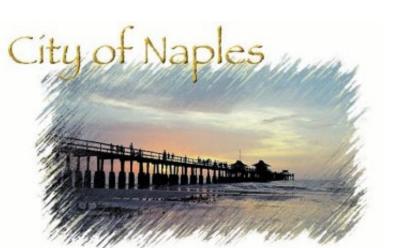
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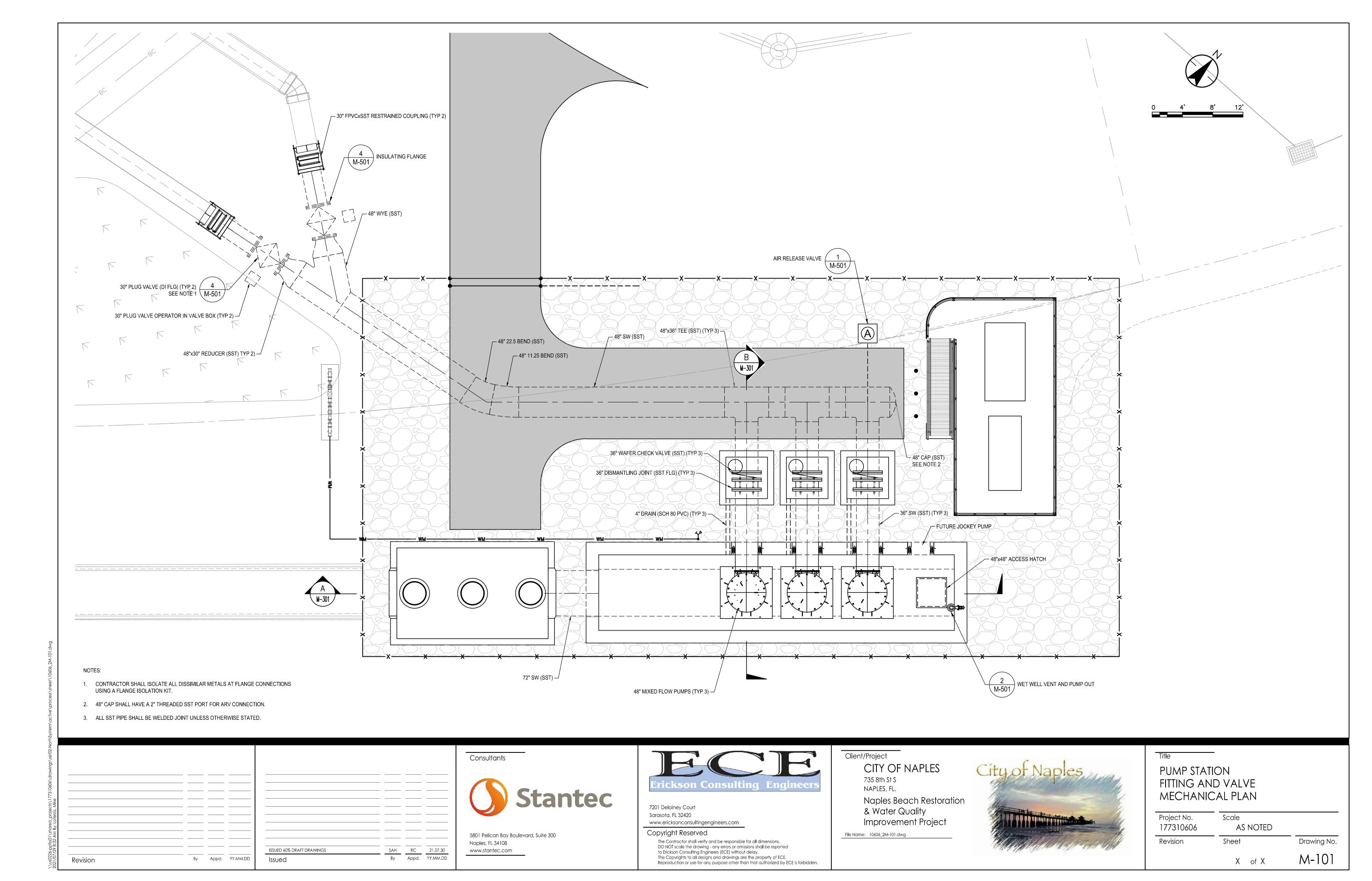
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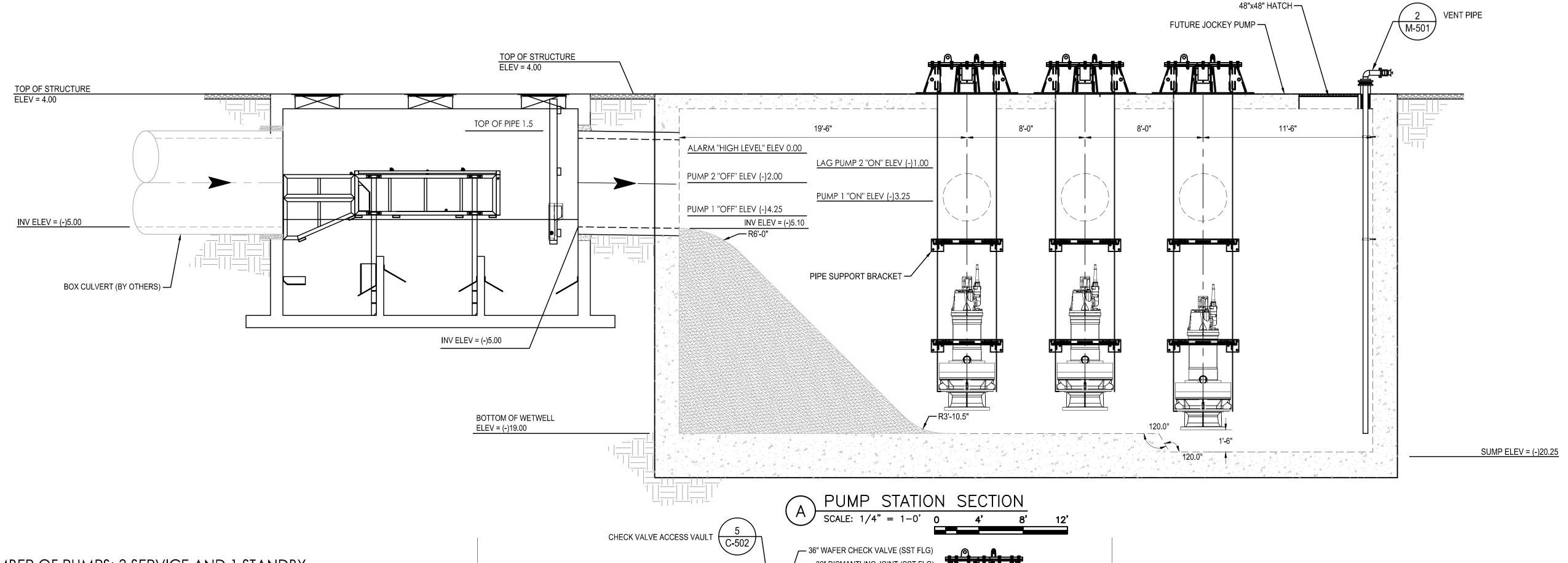
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ELECTRICAL PLATFORM SECTIONS

| | Project No. 177310606 | Scale | |
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| | Revision | Sheet | Drawing No |
| In Old | | 6 of 6 | S-202 |



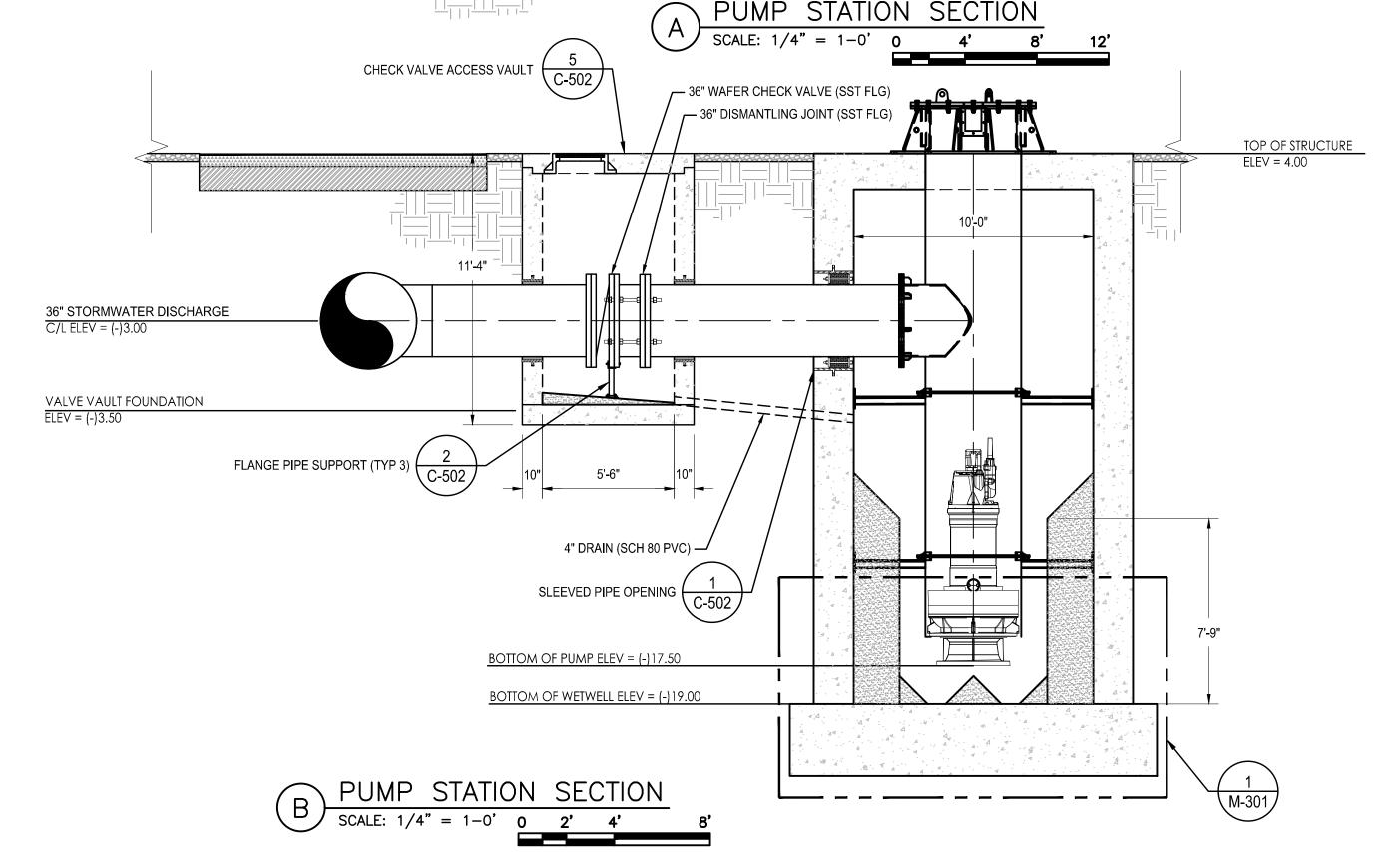


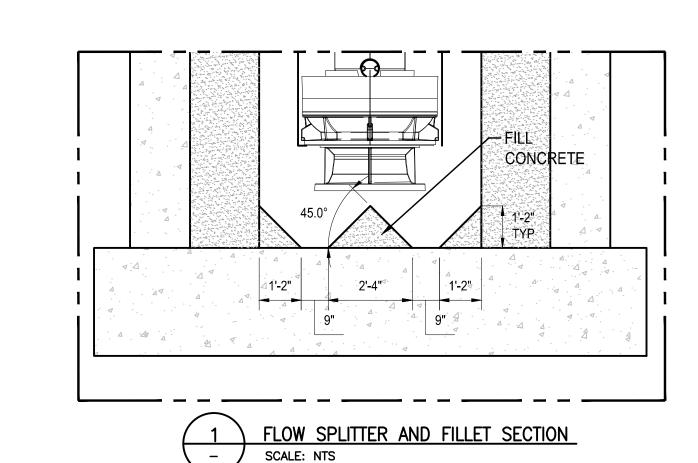
NUMBER OF PUMPS: 3 SERVICE AND 1 STANDBY

| PUMP DATA | | | | | | | | |
|---|---------------------------------|--|--|--|--|--|--|--|
| PUMP MANUFACTURER | FLYGT | | | | | | | |
| TYPE | MIXED FLOW PROPELLER PUMP | | | | | | | |
| MODEL | LL 3602 / 835 3~ 1240 | | | | | | | |
| QUANTITY OF PUMPS | 3 (2 PUMPS, 1 STANDBY CAPACITY) | | | | | | | |
| HP | 240 / 3 PHASE | | | | | | | |
| AXIAL FLOW TUBE DIA, IN | 48" O.D. | | | | | | | |
| DISCHARGE FLANGE, IN | 36" | | | | | | | |
| PUMP, FLOW TUBE, WALL BRACKET MATERIAL | 316 SS | | | | | | | |
| RATED SPEED | 590 RPM | | | | | | | |
| MAXIMUM OPERATING SPEED | 590 RPM | | | | | | | |

NOTES:

- 1. REFER TO SPECIFICATIONS FOR STAINLESS STEEL STORMWATER PIPE AND FITTING MATERIAL REQUIREMENTS.
- 2. ALL STAINLESS STEEL STORMWATER PIPE AND FITTINGS SHALL BE WELDED UNLESS OTHERWISE SHOWN.
- 3. CONTRACTOR SHALL PROVIDE FLANGE ISOLATION KITS TO ISOLATE DISSIMILAR METALS AS REQUIRED.





Revision

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Naples Beach Restoration & Water Quality Improvement Project

 File Name: 10606_2M-301.dwg

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PUMP STATION MECHANICAL DETAILS

Project No.
177310606

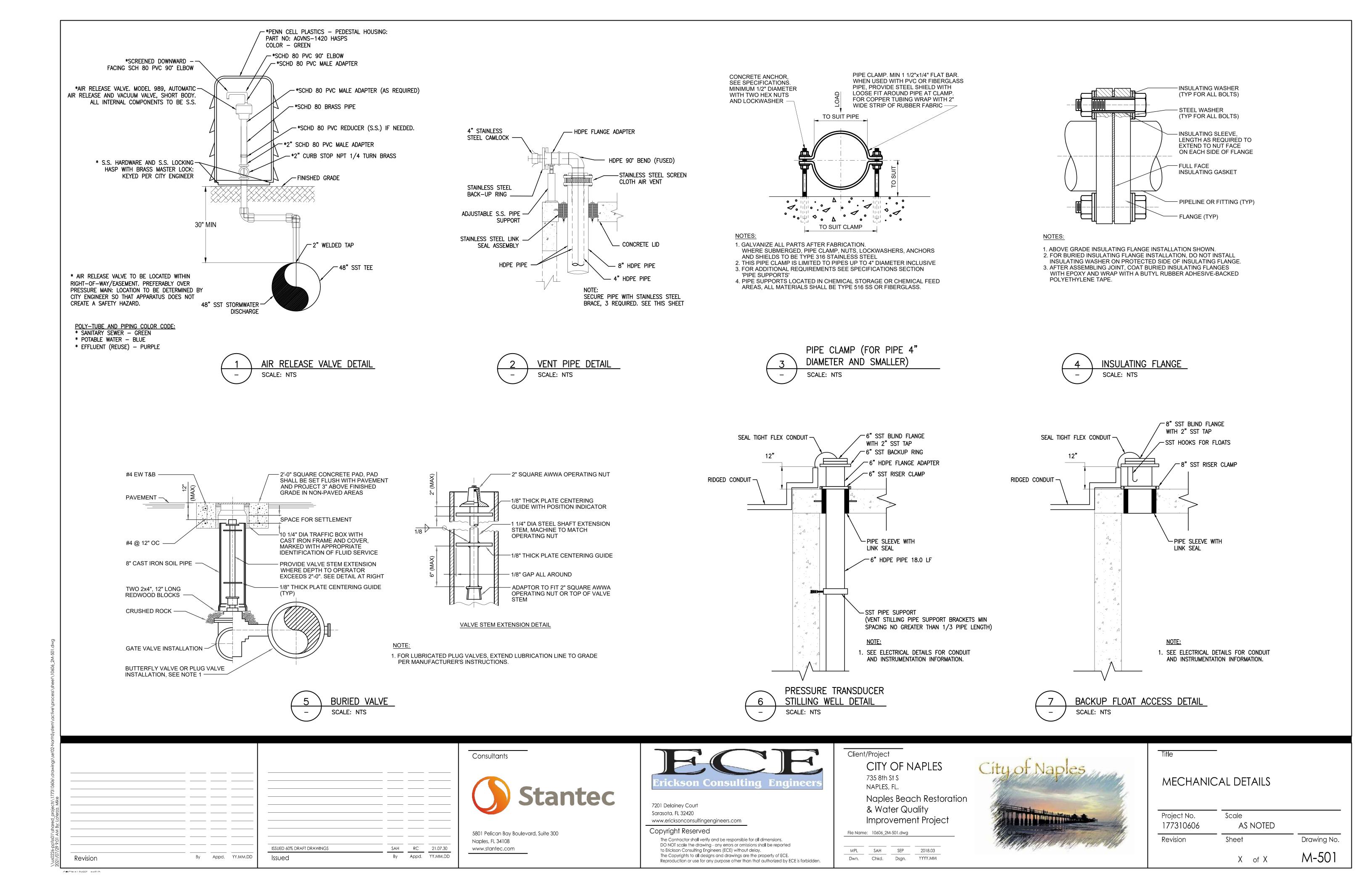
Revision

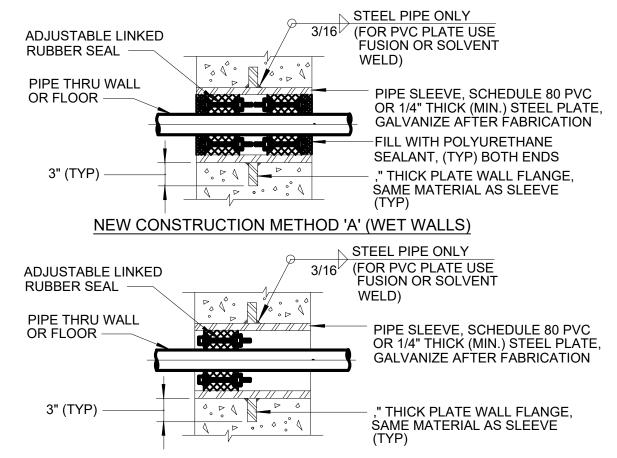
X of X

Scale
AS NOTED

Drawing No.

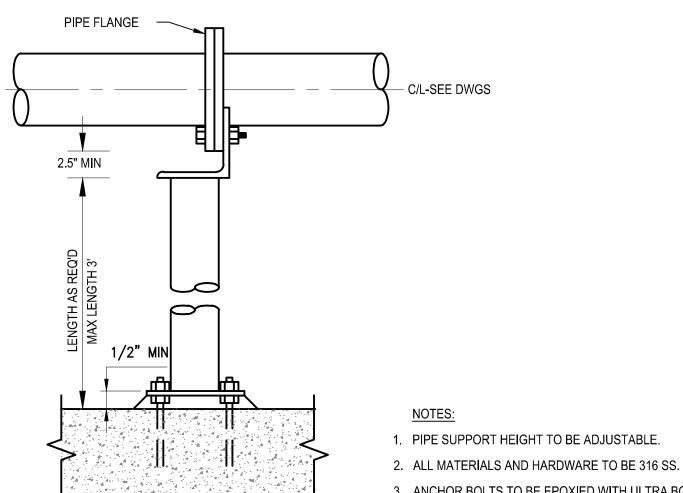
\\us0226-ppfss01\shared_projects\177310606\drawings\set02-NorthSystem\active\process\st 2021/07/29 4:08 PM Bv: Loterzo, Mike





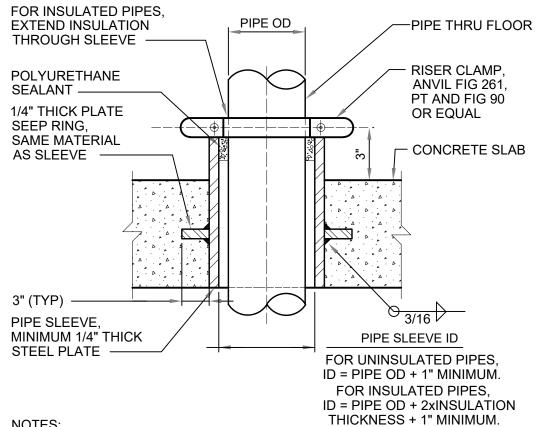
NEW CONSTRUCTION METHOD 'B' (DRY WALLS)



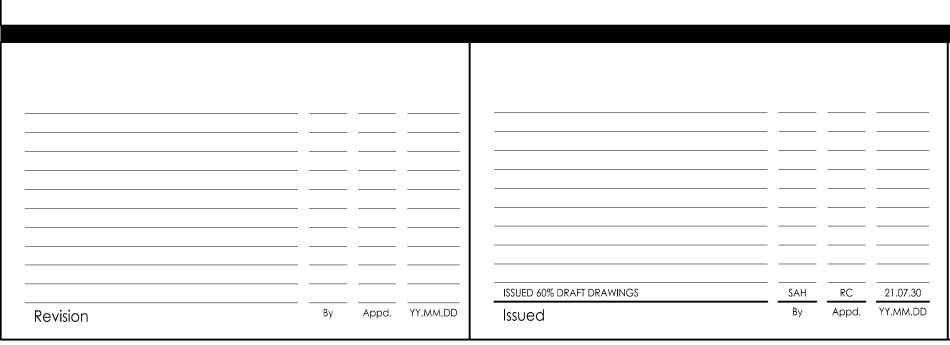


- 1. PIPE SUPPORT HEIGHT TO BE ADJUSTABLE.
- 3. ANCHOR BOLTS TO BE EPOXIED WITH ULTRA BOND 2 ADHESIVES TECHNOLOGY OR APPROVED EQUAL.





- 1. HOT DIP GALVANIZE ALL PARTS AFTER FABRICATION. 2. THIS SLEEVED PIPE OPENING DETAIL SHALL BE USED IN DRY AREAS ONLY AND SHALL NOT BE USED FOR AREAS WITH WATER ON ONE OR BOTH SIDES.
- VERTICAL PIPE SUPPORT SLEEVE



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> NAPLES, FL. Naples Beach Restoration & Water Quality Improvement Project

File Name: 10606_2M-501.dwg
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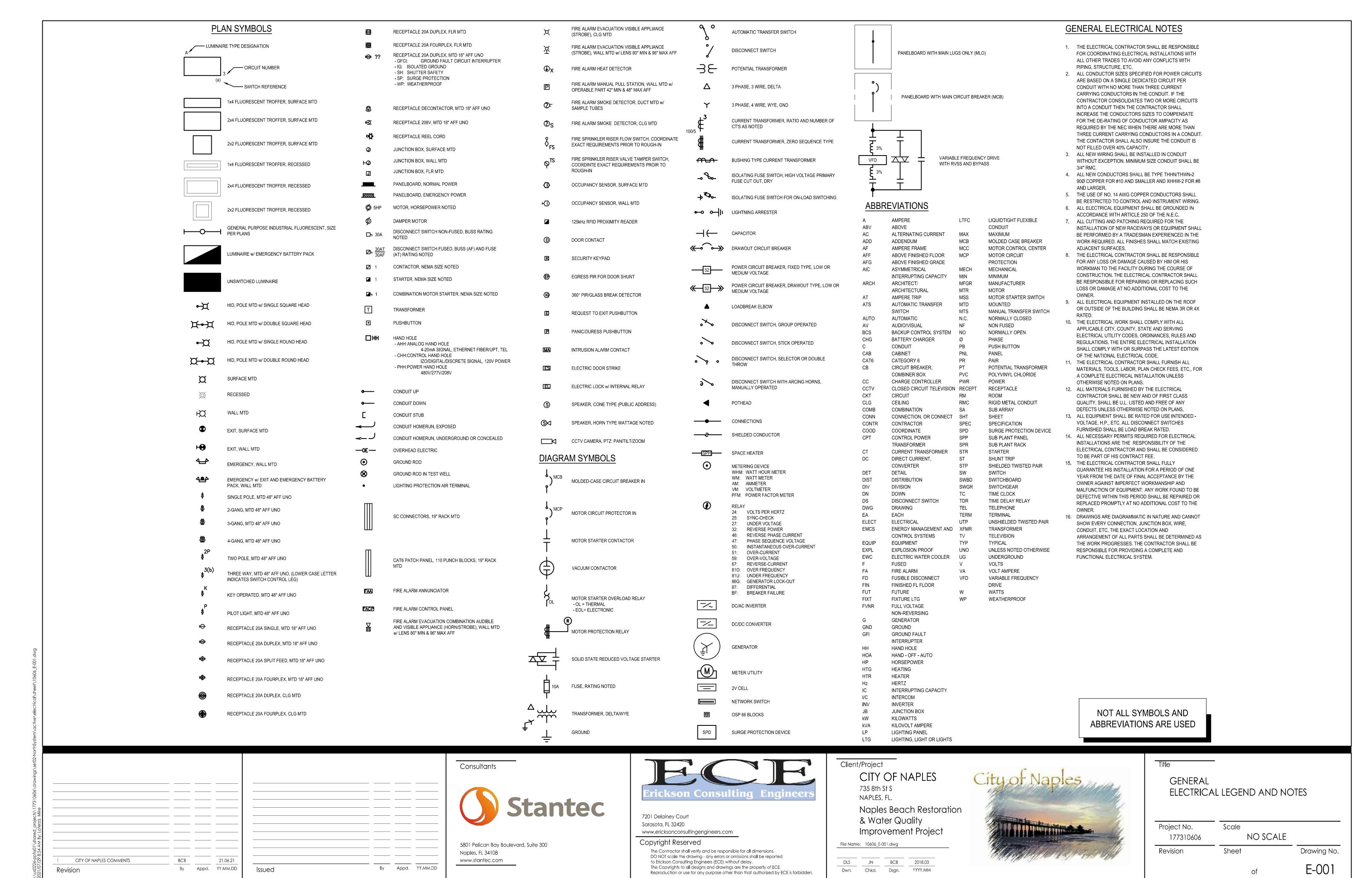


MECHANICAL DETAILS

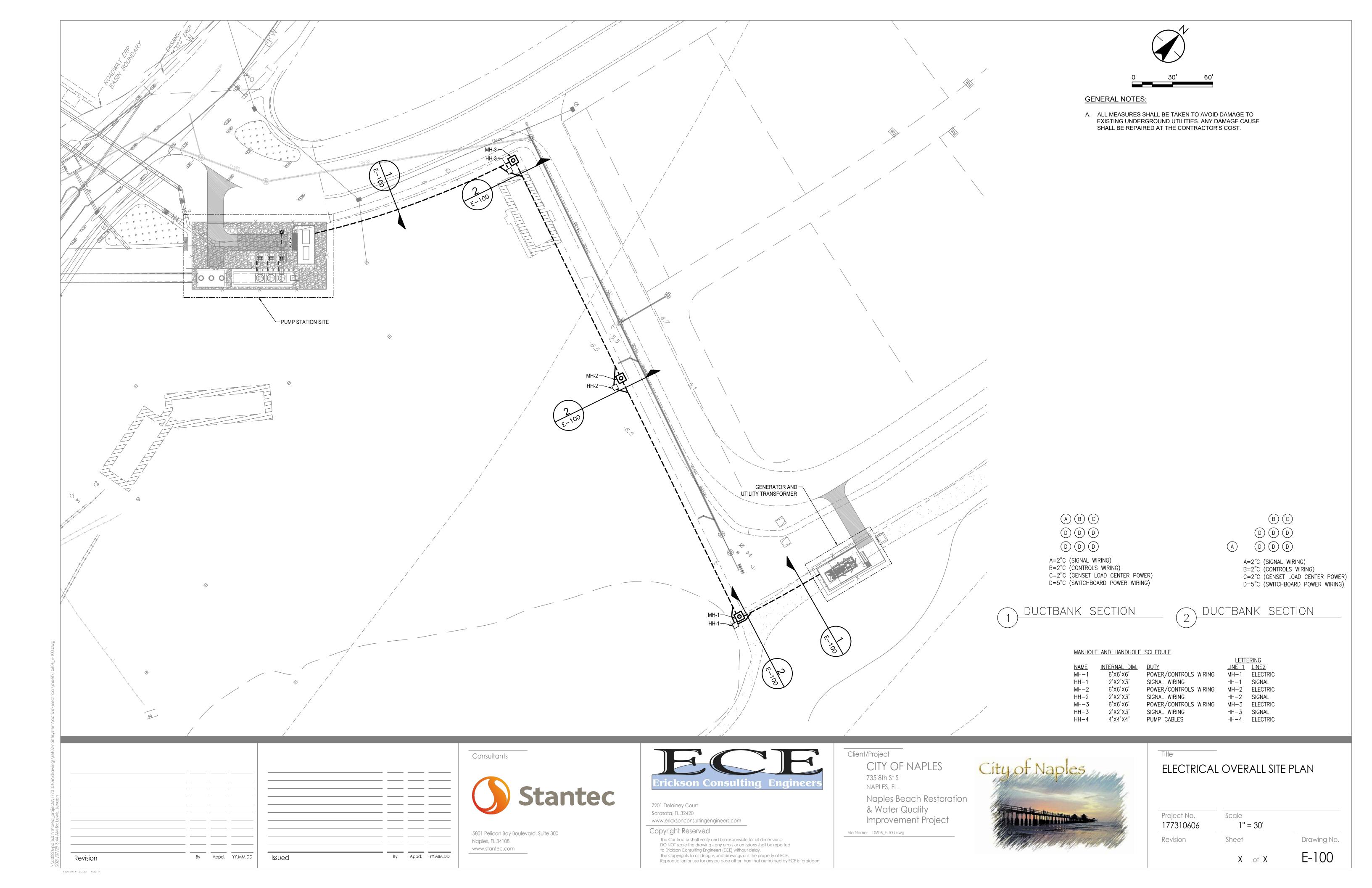
Scale Project No. 177310606 **AS NOTED**

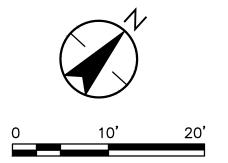
Drawing No. Revision Sheet M-502 X of X

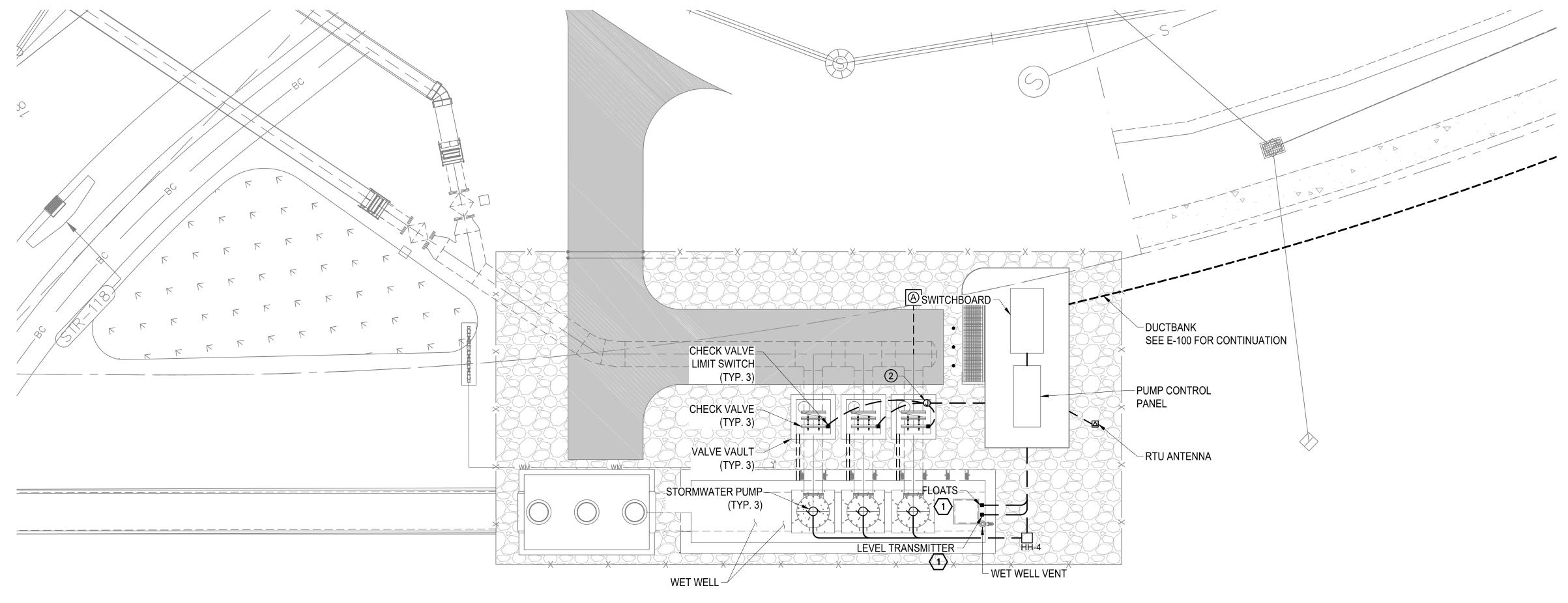
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GENERAL NOTES:

- A. THIS DRAWING IS DIAGRAMMATIC IN NATURE TO CONVEY DESIGN INTENT. MULTIPLE CONDUITS IN THE SAME TRENCH/DUCTBANK ARE REPRESENTED AS SINGLE LINE. COORDINATE REQUIREMENTS WITH ONE-LINE, AND INSTRUMENTATION DIAGRAMS. THE CONTRACTOR SHALL COORDINATE WITH OTHER DISCIPLINES TO ENSURE NO CONFLICTS BEFORE INSTALLING CONDUIT.
- CONDUITS INSTALLED UNDER ROADWAYS AND DRIVEWAYS SHALL BE ENCASED IN
- C. USE APPROPRIATE MATERIALS AND WIRING METHODS FOR ALL WORK IN CLASSIFIED AREAS.

KEYED NOTES:

- 1. REFER TO CIVIL DETAIL FOR INSTRUMENT PORT.
- 2. FURNISH AND INSTALL WALL MOUNTED JUNCTION BOX IN VALVE VAULT. JUNCTION BOX SHALL BE RATED FOR SUBMERSION.

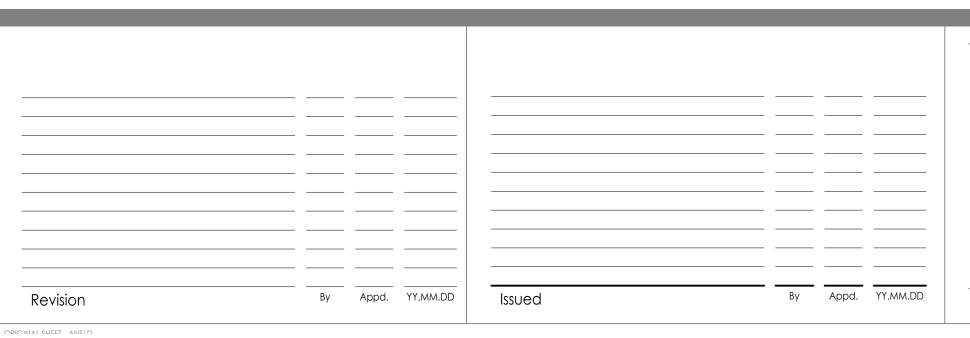
HAZARDOUS AREA CLASSIFICATION:

HAZARDOUS AREA CLASSIFICATIONS HAVE BEEN ASSIGNED AS LISTED BELOW IN ACCORDANCE WITH 2020 NFPA 820.

- CLASS 1, DIVISION 1, GROUP D: NOT APPLICABLE
- CLASS 1, DIVISION 2, GROUP D:
- ENTIRE WET WELL INTERIOR SPACE (TABLE 4.2.2, ROW 4)
- VAULT VAULT INTERIOR SPACE (TABLE 4.2.2, ROW 29, LINE a)
- 3-FOOT RADIUS AROUND WET WELL VENT (FIGURE A.4.2(a))

UNCLASSIFIED:

- ALL LOCATIONS NOT COVERED ABOVE.



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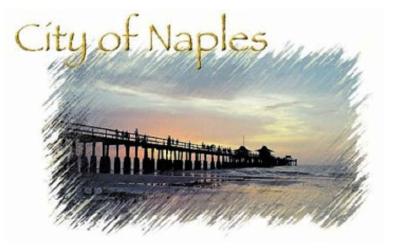
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Naples Beach Restoration & Water Quality Improvement Project

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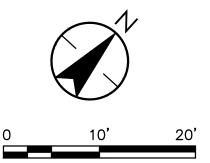


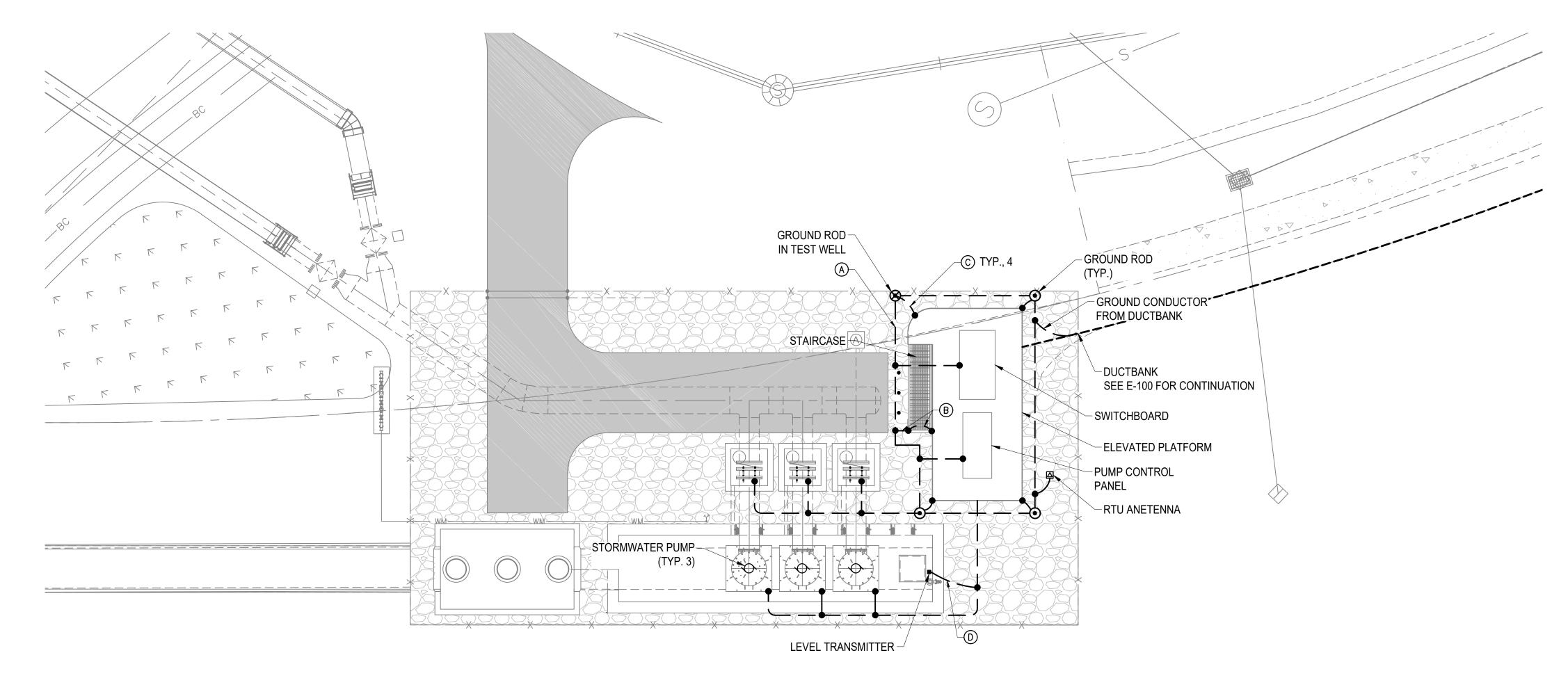
ELECTRICAL PUMP STATION SITE PLAN

| Project No. | | |
|-------------|----------|---------|
| 177310606 | 1" = 10' | |
| Revision | Sheet | Drawing |

E-101

 X of X



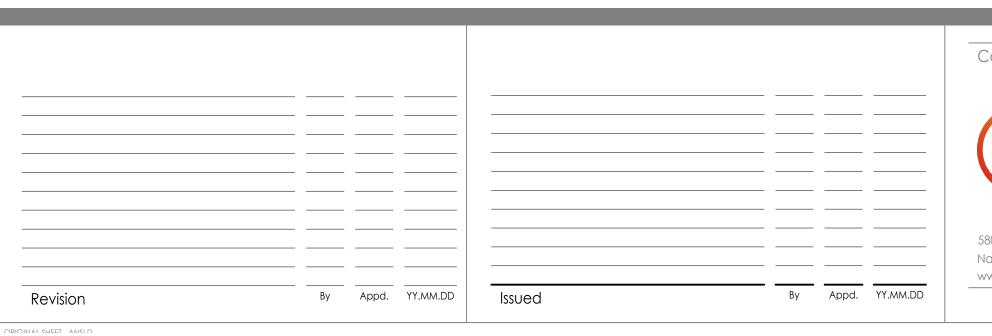


GENERAL NOTES

- 1. ALL METALLIC PARTS SHALL BE BONDED TO GROUND IN ACCORDANCE WITH THE NEC.
- 2. ALL GROUNDING AND BONDING CONDUCTORS SHALL BE #2/0 AWG BARE, STRANDED, THINNED COPPER WIRE UNLESS OTHERWISE INDICATED.
- CONCRETE-EMBEDDED PORTIONS OF ALL GROUND CONNECTIONS SHALL BE ROUTED IN 1" PVC CONDUIT.

KEYED NOTES

- A. #2/0 AWG GROUNDING RING. INSTALL 30" BELOW GRADE, MIN.
- B. GROUND STAIRCASE AS SHOWN. PROVIDE BONDING JUMPERS AT DISCONTINUITIES IN THE STAIRCASE RAILING SYSTEM AS REQUIRED FOR A COMPLETELY BONDED STAIRCASE/RAILING INSTALLATION.
- C. GROUNDING CONNECTION TO LOWERMOST REBAR IN PLATFORM FOOTER. USE EXOTHERMIC CONNECTION.
- D. #6 AWG GROUNDING CONNECTION.



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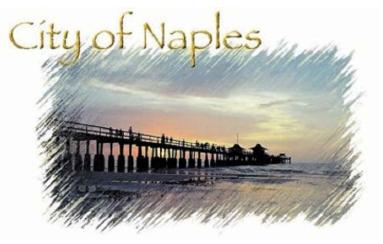
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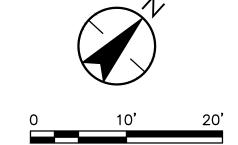
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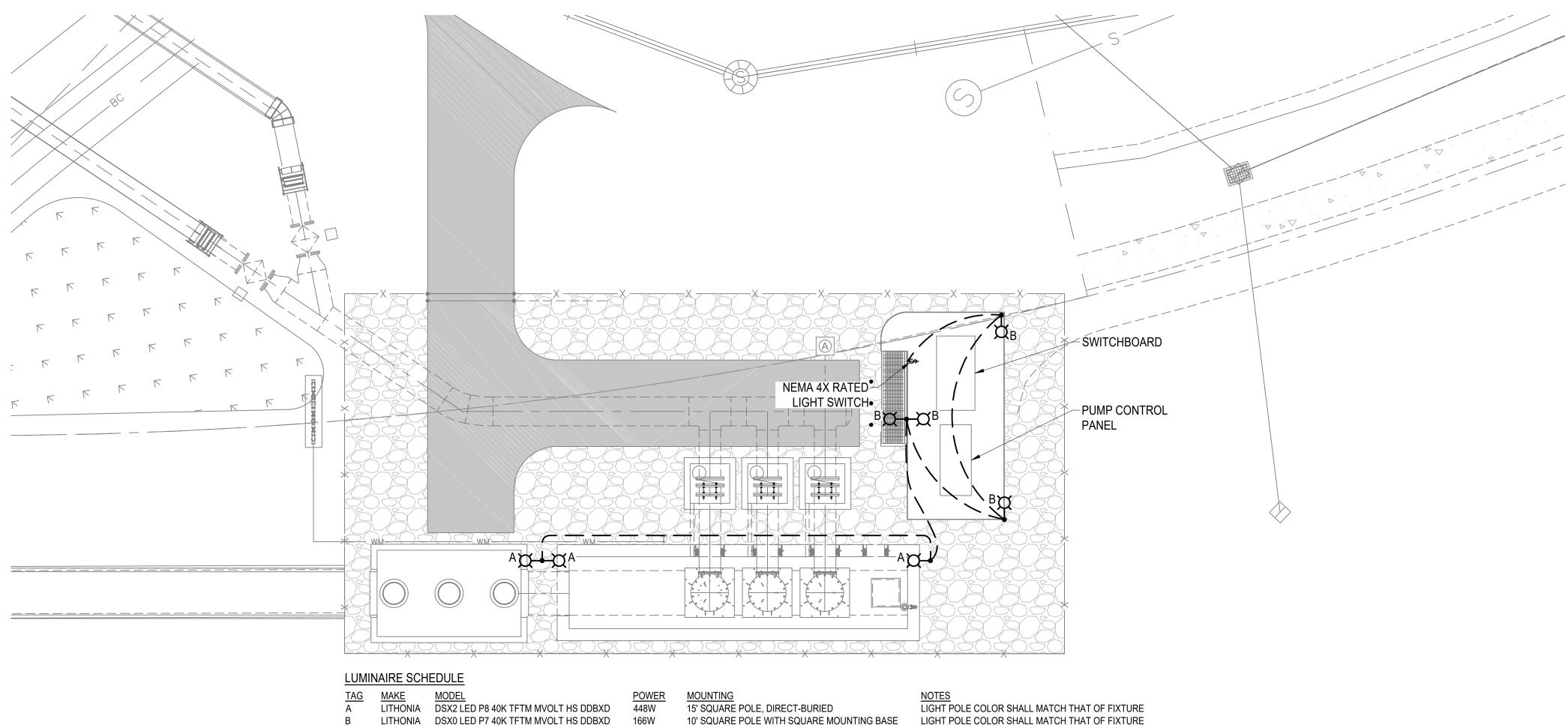


ELECTRICAL PUMP STATION GROUNDING PLAN

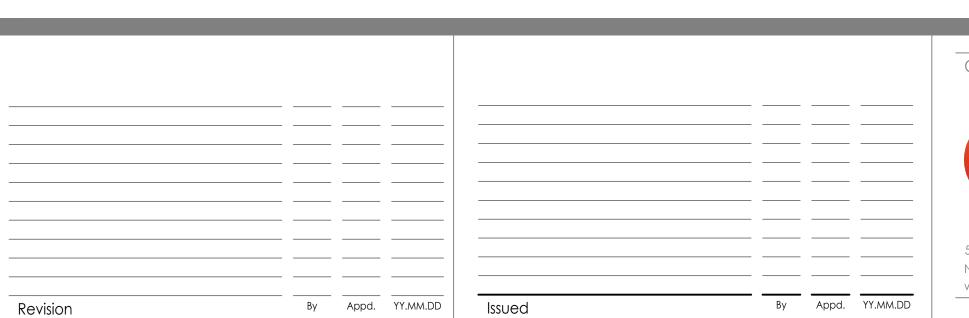
Scale Project No. 177310606 1" = 10' Drawing No. Revision Sheet E-102

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MOUNTING 15' SQUARE POLE, DIRECT-BURIED 10' SQUARE POLE WITH SQUARE MOUNTING BASE LIGHT POLE COLOR SHALL MATCH THAT OF FIXTURE



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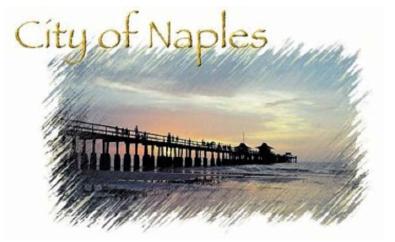
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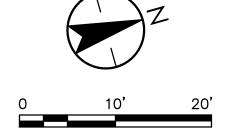
Naples Beach Restoration & Water Quality Improvement Project

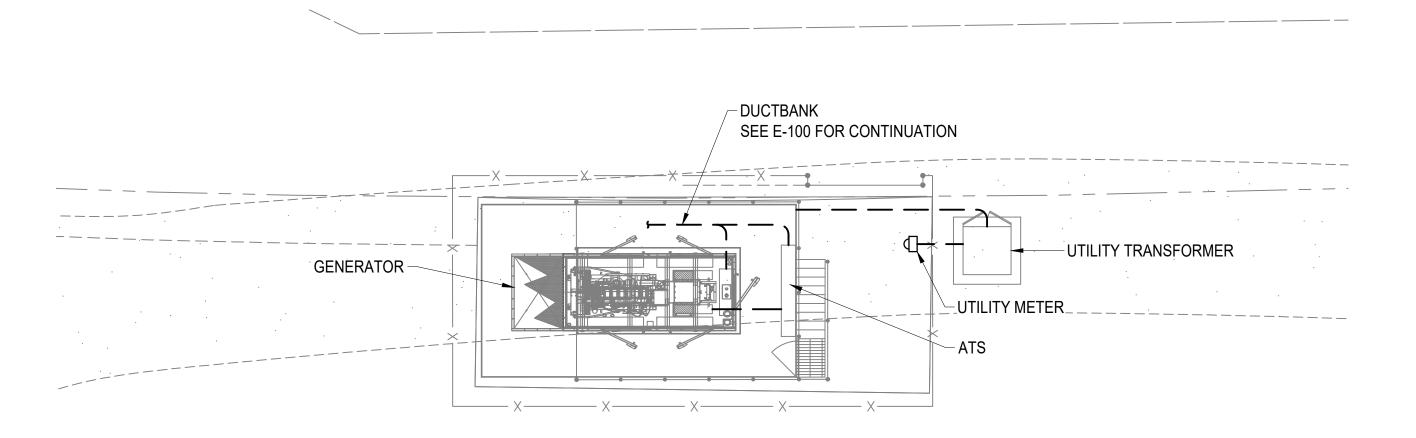
File Name: 10606_E-103.dwg



ELECTRICAL PUMP STATION LIGHTING PLAN

Scale Project No. 177310606 1" = 10' Drawing No. Revision Sheet E-103 X of X

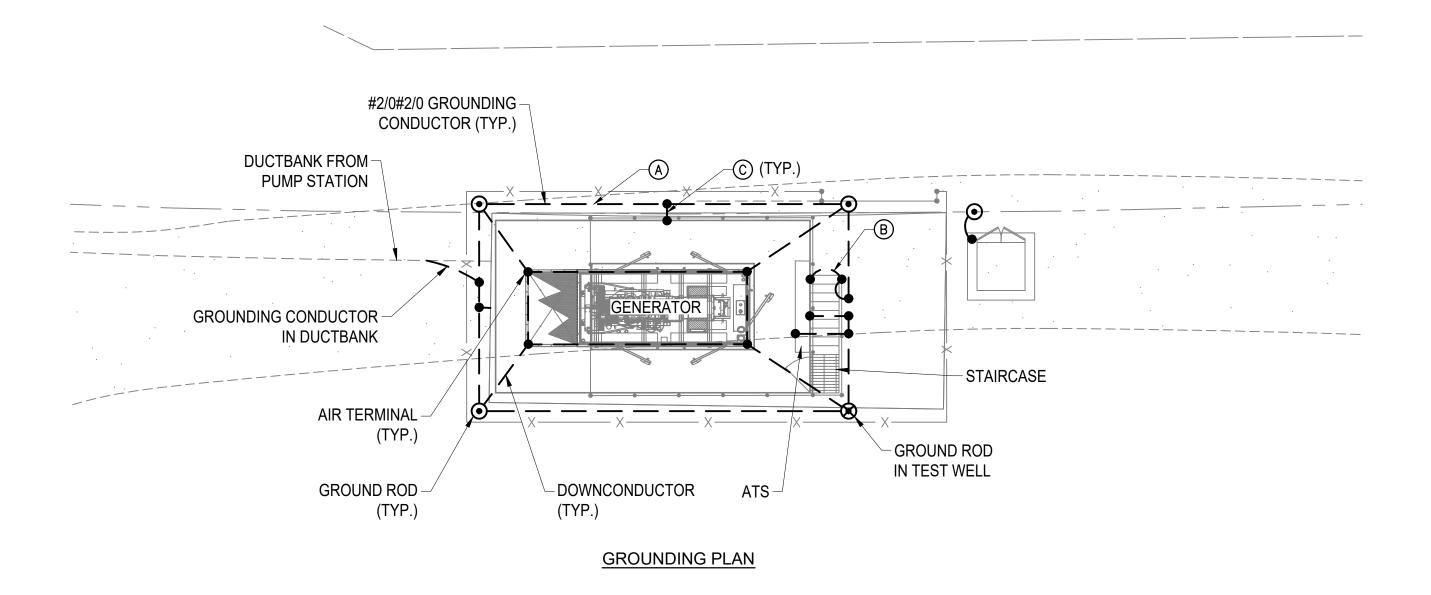




GENERAL NOTES:

- A. THIS DRAWING IS DIAGRAMMATIC IN NATURE TO CONVEY DESIGN INTENT.
 MULTIPLE CONDUITS IN THE SAME TRENCH/DUCTBANK ARE REPRESENTED AS
 SINGLE LINE. COORDINATE REQUIREMENTS WITH ONE-LINE, AND
 INSTRUMENTATION DIAGRAMS. THE CONTRACTOR SHALL COORDINATE WITH
 OTHER DISCIPLINES TO ENSURE NO CONFLICTS BEFORE INSTALLING CONDUIT.
- B. FURNISH AND INSTALL PRIMARY ELECTRICAL CONDUIT IN ACCORDANCE WITH FP&L STANDARDS. FP&L WILL FURNISH, INSTALL, AND TEMRINATE PRIMARY
- C. FP&L WILL FURNISH TRANSFORMER PAD FOR CONTRACTOR TO INSTALL. FP&L WILL FURNISH AND INSTALL TRANSFORMER.

POWER PLAN



GENERAL NOTES

- 1. FURNISH AND INSTALL LIGHTNING PROTECTION SYSTEM, PER SPECIFICATIONS.
- 2. ALL METALLIC PARTS SHALL BE BONDED TO GROUND IN ACCORDANCE WITH THE NEC.
- 3. ALL GROUNDING AND BONDING CONDUCTORS SHALL BE #2/0 AWG BARE, STRANDED, THINNED COPPER WIRE UNLESS OTHERWISE INDICATED.
- 4. CONCRETE-EMBEDDED PORTIONS OF ALL GROUND CONNECTIONS SHALL BE ROUTED IN 1" PVC CONDUIT.

KEYED NOTES

- A. #2/0 AWG GROUNDING RING. INSTALL 30" BELOW GRADE, MIN.
- B. GROUND STAIRCASE AS SHOWN. PROVIDE BONDING JUMPERS AT DISCONTINUITIES IN THE STAIRCASE RAILING SYSTEM AS REQUIRED FOR A COMPLETELY BONDED STAIRCASE/RAILING INSTALLATION.
- C. GROUNDING CONNECTION TO LOWERMOST REBAR IN PLATFORM FOOTER. USE EXOTHERMIC CONNECTION.



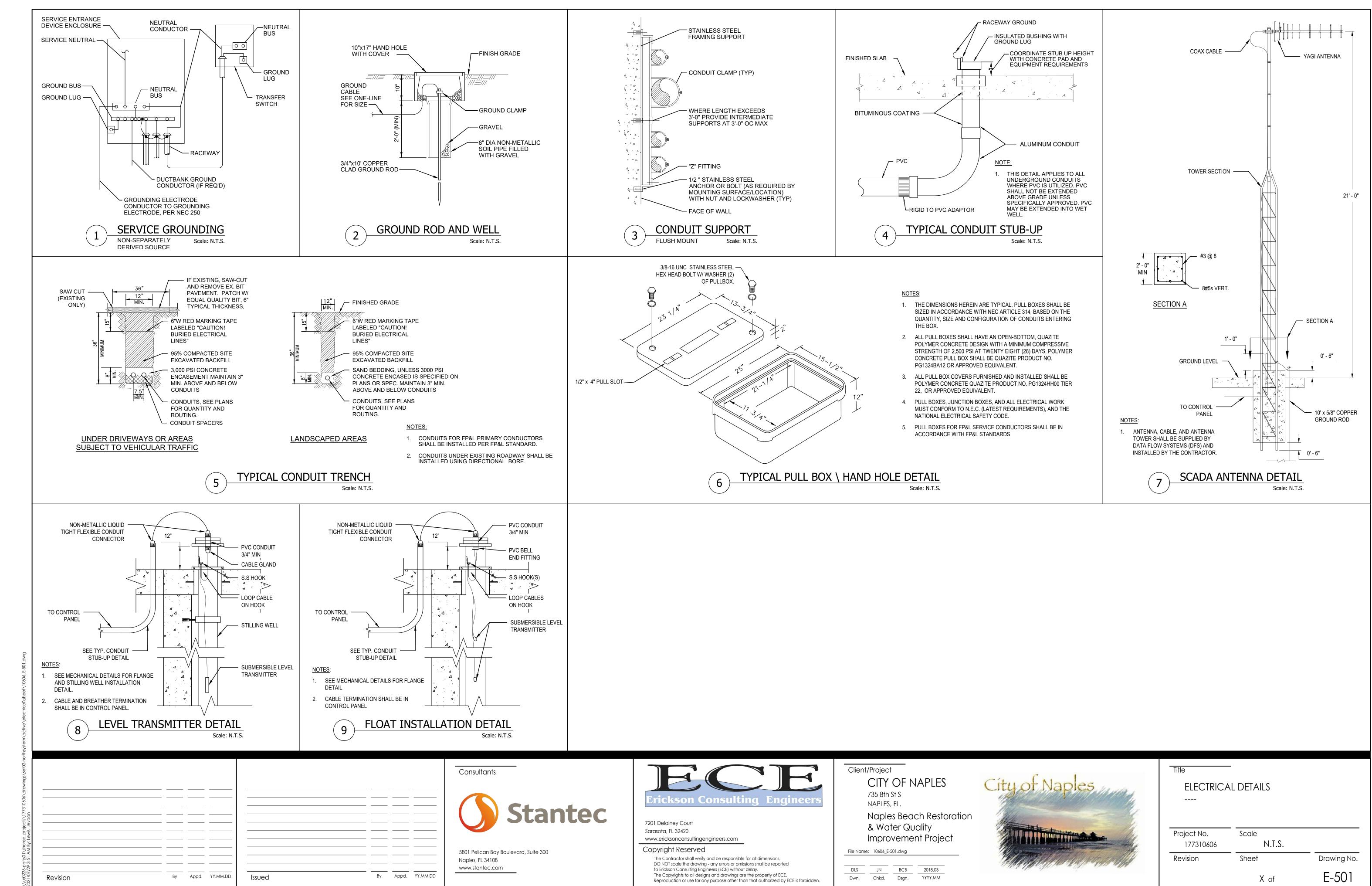
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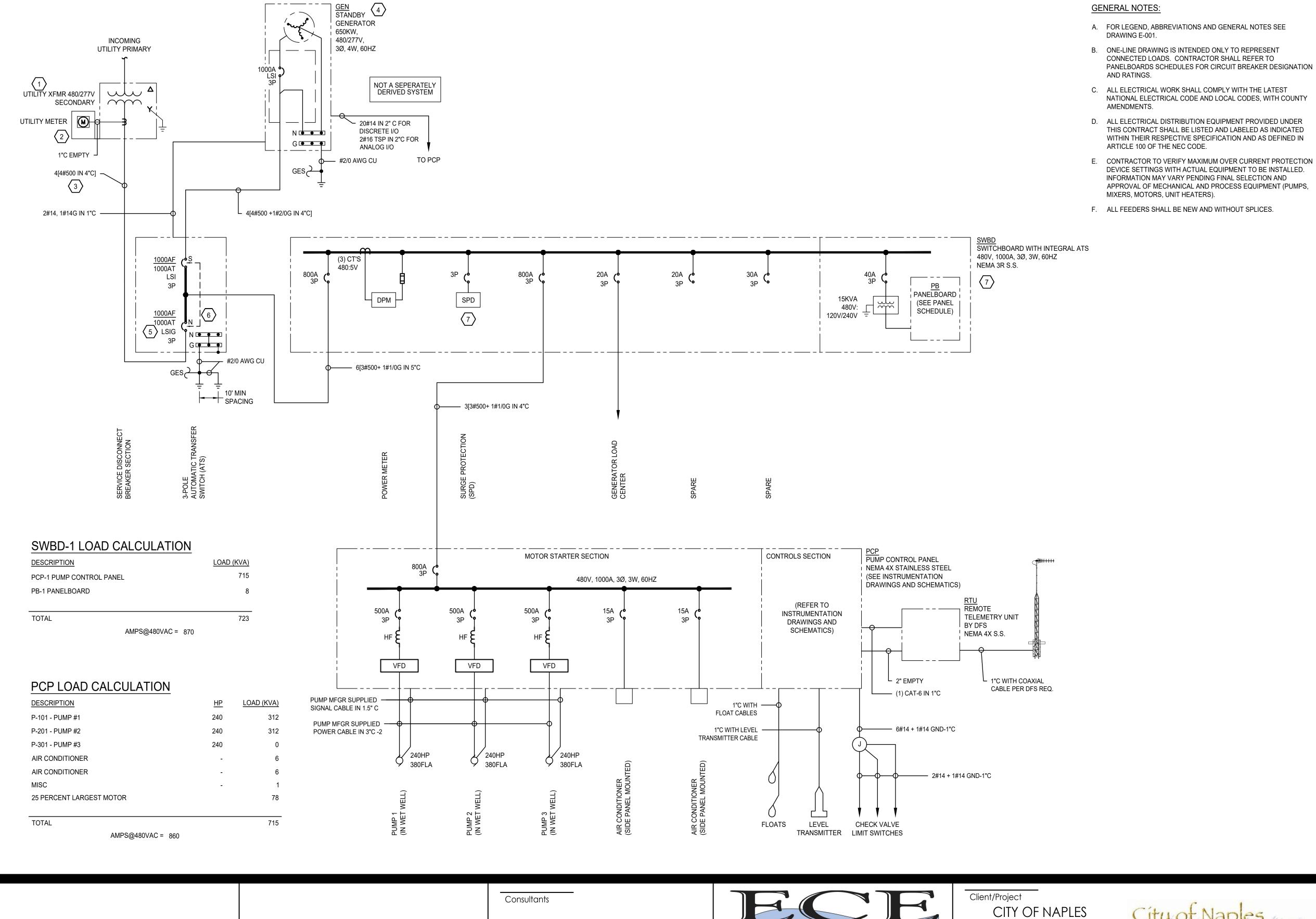
ELECTRICAL GENERATOR SITE PLAN

| Project No. 177310606 | Scale 1" = 10' | |
|--------------------------|-------------------|-----------|
| Revision | Sheet | Drawing 1 |

x of x E-104



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KEY NOTES:

- 1. UTILITY TRANSFORMER, PAD AND TRANSFORMER GROUNDING TO BE PROVIDED BY UTILITY COMPANY AND INSTALLED BY THE CONTRACTOR.
- 2. THE CONTRACTOR SHALL FURNISH AND INSTALL METER SOCKET. PROVIDE METER SOCKET COORDINATE ALL WORK WITH UTILITY COMPANY.
- 3. SERVICE FEEDER. CONTRACTOR SHALL PROVIDE SECONDARY CONDUIT AND CONDUCTORS. UTILITY TO TERMINATE CONDUCTORS IN TRANSFORMER.
- 4. FURNISH AND INSTALLED GENERATOR IN SOUND ATTENUATED ENCLOSURE.
- 5. BREAKER SHALL INCLUDE GROUND FAULT PROTECTION FOR AND MAINTENANCE MODE FOR FAULT CURRENT REDUCTION.
- 6. MECHANICAL INTERLOCK BETWEEN NORMAL AND STANDBY CIRCUIT BREAKERS IN ATS.
- 7. SWITCHBOARD LINE-UP, AUTOMATIC TRANSFER SWITCH AND PUMP CONTROL PANEL SHALL BE RATED NEMA 3R (MIN), CONSTRUCTED OF STAINLESS STEEL. ASSEMBLIES BE CAPABLE OF WITHSTANDING HURRICANE FORCE WINDS AS REQUIRED BY RISK CATEGORY IV STRUCTURES, PER 2020 FLORIDA BUILDING

ELECTRICAL ONE-LINE DIAGRAM

Project No. Scale 177310606 Revision

NO SCALE Sheet Drawing No.

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E-601

Revision

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CITY OF NAPLES COMMENTS BCB APPROVED 21.06.21 www.stantec.com By Appd. YY.MM.DD By Appd. YY.MM.DD Issued

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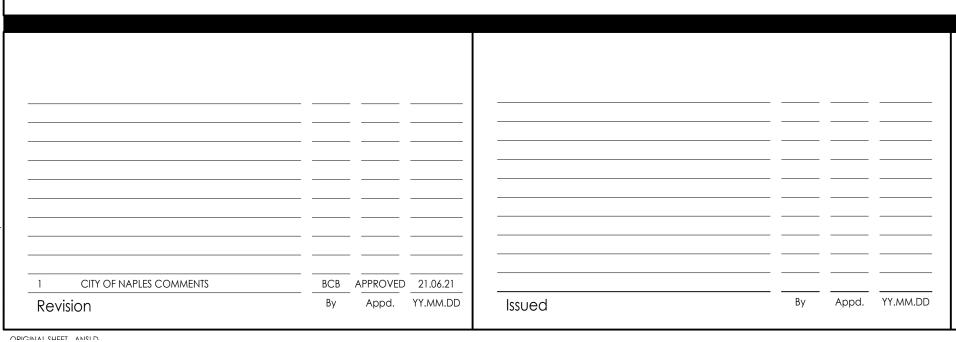
JN BCB 2021.03 Dwn. Chkd. Dsgn. YYYY.MM

& Water Quality

Improvement Project

Naples Beach Restoration

| | | | | | P | PAN | EL S | CHE | DU | ILE | | | | | |
|--|--------------|-----------------------|--------------|------|------|------|-------------------|----------|----------|------------|---------|--------------|-------------|-----------------------|--|
| PANEL: | PB-1 | AMPERE RATING: | | | | | | 100 A MC | | | | | MOUNT | ING: IN SWBD-1 | |
| VOLTS: | 120 /240 | BUS MATERIAL: | | | | | | COPPER E | | | | | ENCLO | SURE: N/A | |
| PHASE: | SINGLE-PHASE | MAIN DEVICE: | | | | | 80 A | | | | | | BREAKI | ERS: BOLT-ON | |
| WIRE: | 3-WIRE | SHORT CIRCUIT RATING: | | | | | | | kAIC | | | | | | |
| LOAD DESCRIPTION | | CON SIZE | WIRE SIZE | BKR | # | | PHASE LOAD KVA | | | DEM | BKR | WIRE SIZE | CON SIZE | LOAD DESCRIPTION | |
| | | | | 1 | DI | EM | A | В | # | | 1 | | | | |
| | | | | | - | 1 | 0.00 | | | 100% | | | | | |
| | SPD | - | - | _ | 10 | 0% | 0.00 | | 2 | | 30A | #10 | 1" | GENERATOR LOAD CENTER | |
| | | | | | - 3 | | | 0.00 | 100% | | | | | | |
| | | | | | | 0% | | 0.00 | 4 | | | | | | |
| PCP-1 C | ONTROL POWER | 1" | #12 | 20A | N | 5 | 0.50 | | - | 100% | 20A | #12 | 3/4" | RECEPTACLES | |
| | | | | | 10 | 0% | 0.36 | | 6 | | | | | (GFI) | |
| | | | | | N | 7 | | 1.50 | | 125% | 20A | #12 | 3/4" | LIGHTING | |
| | | | | | 10 | 0% | | 0.50 | 8 | | | | | (GFI) | |
| | | | | | N | 9 | 1.50 | | <u> </u> | 100% | 20A | | 3/4" | IRRIGATION CONTROLLER | |
| | | | | | 10 | 0% | 0.10 | | 10 | | | | | (GFI) | |
| | | | | | N | 11 | | 1.50 | | 100% | 20A | | | SCADA RTU (DATA FLOW) | |
| | | | | | 10 | 0% | | 0.50 | 12 | ! N | | | | | |
| | | | | | N | 13 | 1.50 | | 1 | 100% | | | | | |
| | | | | | 10 | 0% | 0.00 | | 14 | | | | | | |
| | | | | | | 15 | | 0.00 | 1 | 100% | | | | | |
| | | | | | 10 | 0% | | 0.00 | 16 | ; <u> </u> | | | | | |
| | | | | | | 17 | 0.00 | | 1 | 100% | | | | | |
| | | | | | | 10 | 0% | 0.00 | | 18 | } | | | | |
| | | | | | | 19 | | 0.00 | 1 | 100% | | | | | |
| | | | | | 10 | 0% | | 0.00 | 20 | | | | | | |
| | | | | | | 21 | 0.00 | | , | 100% | | | | | |
| | | | | | 10 | 0% | 0.00 | | 22 | 2 | | | | | |
| | | | | | | 23 | | 0.00 | 1 | 100% | | | | | |
| | | | | | 10 | 0% | | 0.00 | 24 | | | | | | |
| TOTAL CONNECTED LOAD | | | | | 3.96 | 4.00 | • | • | | | | | | | |
| DESIGN AND NEC DEMAND (25% CONT. LOADS NEC 210.20a, 25% LARGEST MOTOR NEC 220.14) | | | 0.00 | 0.13 | | | | TOT 4 | 1.1045 | 0.00 13/4 | | | | | |
| TOTAL CALCULATED NEC LOAD | | | | | 3.96 | 4.13 | | | | IUIA | L LOAD: | 8.08 kVA | | | |
| PHASE AMPS | | | | | | | 33.0 | 34.4 | | | | | | | |



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Naples Beach Restoration Water QualityImprovement Project

File Name: 10606_E-601-602.dwg

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ELECTRICAL PANEL SCHEDULE

Project No. Scale NO SCALE 177310606 Sheet Drawing No. Revision

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