

GENERAL

- 1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: MARCENAL JOSEPH, P.E. AND CAN BE REACHED AT 941.708.7450 x7329.
2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS.
3. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND TRANSPORTATION STANDARDS, FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND/OR THE FLORIDA BUILDING CODE. ALL WORK ON PRIVATE PROPERTY SHALL BE PERFORMED BY A LICENSED PLUMBER REGISTERED IN MANATEE COUNTY, UNLESS OTHERWISE INDICATED ON THE PLANS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.
5. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
7. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 OR THE NATIONAL 811 ONE CALL NUMBER WHEN APPLICABLE FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITIES FOR THE POSSIBLE RELOCATION OR THE TEMPORARY MOVEMENT OF ANY EXISTING UTILITIES WITHIN THE RIGHTS-OF-WAY.
8. NO WORK, EXCEPT FOR EMERGENCY TYPE, SHALL BE PERFORMED AFTER 7:00 PM AND BEFORE 7:00 AM. FOR ADDITIONAL PROJECT RESTRAINTS, REFER TO SECTION 01310 OF THE SPECIFICATIONS.

SAFETY

- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90-96, LAWS OF FLORIDA EFFECTIVE OCTOBER 1, 1990 AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.850, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
10. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
11. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
12. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.
ENVIRONMENTAL
13. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDEP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.
14. STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.
15. STORM WATER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. THIS WILL BE MAINTAINED TO PREVENT DEGRADATION OF THE WATERS OF THE COUNTY AND STATE.
16. SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF WATER, MUST BE INSTALLED, CONSTRUCTED, OR IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.
17. ALL SWALES, DITCHES, AND CHANNELS LEADING FROM THE SITE SHALL BE PROTECTED FROM SILTATION AND EROSION DURING CONSTRUCTION AND BE SODDED WITHIN THREE (3) DAYS OF EXCAVATION.
18. SOIL DISPLACED BY CONSTRUCTION WILL BE REMOVED. EROSION CONTROL SHALL BE IMPLEMENTED IN AREAS WHICH ARE CONSIDERED ENVIRONMENTALLY SENSITIVE. EROSION CONTROL SYSTEMS SHALL BE REQUIRED FOR ALL WORK WITHIN JURISDICTIONAL AREAS. THESE SYSTEMS MAY INCLUDE STAKED HAY BALES, SILT SCREENS, FILTER FABRIC, AND TURBIDITY SCREENS.
19. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
20. THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER WETLAND AREAS THAT MAY BE ON OR NEAR THE CONSTRUCTION SITE. ALL WORK IN THE VICINITY OF OPEN WATER AND/OR WETLANDS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL REGULATIONS AND/OR PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES RESULTING FROM HIS VIOLATION OF ANY REGULATIONS OR PERMIT CONDITIONS.
21. FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.

RIGHT-OF-WAY

- 22. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
23. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
24. THE CONTRACTOR PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHTS-OF-WAY USE PERMIT AND A TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM OTHER GOVERNMENTAL AGENCIES HAVING RELEVANT JURISDICTION. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES". A TRAFFIC CONTROL PLAN SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED STORM WATER STRUCTURES, PIPING, ENTRANCE PIPE AND HEADWALLS WHETHER SHOWN ON THE PLANS OR NOT. THE HEADWALLS SHALL BE REPLACED IN ACCORDANCE WITH F.D.O.T. STANDARDS.
26. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH IN THE FIELD THE RIGHT-OF-WAY LINES, BASE LINES, BENCH MARKS (ELEV.), CENTER LINES, AND STATIONING AS REQUIRED TO CONSTRUCT THIS PROJECT.
27. THE CONTRACTOR SHALL COORDINATE THE CUTTING OF DRIVEWAYS WITH THE PROPERTY OWNER PRIOR TO CUT. ALL DRIVEWAYS WILL BE IN PASSABLE CONDITION AT THE END OF THE WORK DAY AND FULLY RESTORED PER SECTION 02575.
28. A RIGHT OF ENTRY AGREEMENT SHALL BE OBTAINED BY THE PROJECT MANAGER FROM THE PROPERTY OWNER BEFORE ANY DRIVEWAY CONSTRUCTION WORK IS DONE OUTSIDE OF THE RIGHT-OF-WAY OR EASEMENT.

UTILITIES

- 29. ALL EXISTING FACILITIES IN THE PROJECT AREA SHALL REMAIN OPERATIONAL AND ACCESSIBLE BY COUNTY PERSONNEL AT ALL TIMES, I.E. VALVES, MANHOLE COVERS, SEWER CLEAN-OUTS, ETC. ALL SHALL BE ADJUSTED TO FINISHED GRADE.
30. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED, MAY NOT BE IN THE EXACT LOCATION SHOWN OR RELOCATED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) THAT MAY AFFECT HIS WORK. ALL EXISTING UTILITIES TO BE EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATION. ANY DISCREPANCIES OR CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.
31. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER/RECLAIM/SEWER LINES, STORM DRAINS, OTHER UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAIL BOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED ITEM DUE TO HIS CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE COUNTY. ALL EXISTING AND PROPOSED VALVE COVERS, RIMS, ETC., SHALL BE BROUGHT TO FINAL GRADE OF THE PROJECT AREA.
32. THE CONTRACTOR SHALL USE APPROPRIATE TECHNIQUES, AS APPROVED, RECOMMENDED, OR OFFERED BY AN EXISTING UTILITY, (I.E. FLORIDA POWER AND LIGHT) TO PREVENT UNDERMINING OF POWER POLES DURING CONSTRUCTION. IF HOLDING OF POWER POLES IS RECOMMENDED OR REQUIRED BY THE UTILITY, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH THE UTILITY AND BEAR ANY RELATED COSTS.
33. ANY TEMPORARY SHUTDOWNS FOR MODIFICATIONS OF EXISTING UTILITY SYSTEMS THAT MUST REMAIN IN SERVICE DURING CONSTRUCTIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE COORDINATED WITH AND APPROVED BY THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IT IS NOTED THAT TEMPORARY SHUTDOWNS MAY BE RESTRICTED TO CERTAIN HOURS AT ANY TIME OF THE DAY OR NIGHT AND WILL BE COMPLETED AT NO ADDITIONAL COST TO THE OWNER.
34. FOR WORK BEING DONE ON EXISTING SANITARY SEWER LINES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE FLOW OF ALL SEWAGE DURING CONSTRUCTION, WHICH MAY REQUIRE BY-PASS PUMPING AND/OR PUMPER TRUCKS. THE CONTRACTOR SHALL SUBMIT A DETAILED BY-PASS PUMPING PLAN PER SECTION 02720.

- 35. ALL WATER SERVICES TO BE INSTALLED OR MODIFIED ON PRIVATE PROPERTY SHALL REQUIRE A PLUMBING PERMIT;
A. THE CONTRACTOR'S PLUMBER SHALL INSTALL A REDUCED PRESSURE (RP) TYPE BACKFLOW PREVENTION ASSEMBLIES (BPA'S) EQUIPPED WITH A PRESSURE RELIEF VALVE AT THE POTABLE WATER METER WHENEVER ANY OF THE FOLLOWING CONDITIONS EXIST AT A PROPERTY:
• SWIMMING POOL,
• IN-GROUND IRRIGATION SYSTEM OR UNDERGROUND SPRINKLERS,
• SECONDARY SOURCE OF WATER (I.E. RECLAIMED WATER OR WELL),
• PROPERTY THAT ABUTS A BODY OF WATER, INCLUDING RIVER, BAY, LAKE OR POND ON THE PROPERTY OR BORDERING THE PROPERTY,
• FLOOD ZONE DESIGNATION, (IF ONLY FLOOD ZONE, INSTALL A DOUBLE CHECK BPA),
• SOLAR WATER HEATING SYSTEM,
• COMMERCIAL, INDUSTRIAL, MULTISTORY OR MULTIFAMILY RESIDENTIAL FACILITY,
• CROSS CONNECTION IS FOUND,
• FOUNTAIN WITH A DEDICATED FILL PIPE,
• FIRE SPRINKLER SYSTEM.
B. A LICENSED PLUMBER SHALL INSTALL THE BPA'S IN ACCORDANCE WITH THE CURRENT FLORIDA PLUMBING CODE AND MANATEE COUNTY CODE OF ORDINANCES, AND SHALL SELECT A PRESSURE RELIEF VALVE WITH AN APPROPRIATE PRESSURE SET POINT TO PROTECT THE CUSTOMERS' PLUMBING AND NOT ALLOW EXCESSIVE LEAKAGE DUE TO SYSTEM SUPPLY PRESSURE. A PRESSURE REDUCING VALVE MAY BE NECESSARY UPSTREAM OF THE PRESSURE RELIEF VALVE, WHERE NORMAL SUPPLY PRESSURE EXCEEDS 90 PSI. CONTRACTOR SHALL COORDINATE WITH COUNTY CROSS CONNECTION CONTROL STAFF AS REQUIRED.
C. IF IN-GROUND IRRIGATION SYSTEM IS CONNECTED TO THE POTABLE WATER LINE, AN ADDITIONAL REDUCED PRESSURE (RP) BPA SHALL BE INSTALLED AT THE POINT OF CONNECTION.
D. ALL BPA SHALL BE INSTALLED 4-5 FEET FROM THE EDGE OF DRIVEWAYS OR ANY OTHER ITEMS/FEATURES THE BPA MAY CREATE AN OBSTRUCTION.
E. VACUUM BREAKERS SHALL BE INSTALLED ON ALL EXTERNAL HOSE BIBBS.
F. CONTRACTOR SHALL COORDINATE WITH COUNTY CROSS CONNECTION STAFF & PRIVATE PROPERTY OWNER AS REQUIRED. CROSS CONNECTION STAFF SHALL DETERMINE WHICH PROPERTIES REQUIRE A BPA AND TYPE OF BPA TO BE INSTALLED.

RESTORATION

- 34. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE. ALL RESTORATION LIMITS ARE APPROXIMATE AND SUBJECT TO THE DIRECTION OF THE COUNTY FIELD REPRESENTATIVE.
35. ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.
36. ALL CONCRETE THRUST BLOCKS INSTALLED FOR TESTING PURPOSES AND NOT REQUIRED FOR THE OPERATION OF THE PIPELINE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE, AT NO ADDITIONAL COST TO THE OWNER.
37. ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513 OF THE INFRASTRUCTURE ENGINEERING STANDARD SPECIFICATION.
38. CONCRETE DRIVEWAYS OR SIDEWALKS THAT ARE CUT SHALL BE RESTORED TO MATCH EXISTING ACCORDING TO THE CURRENT EDITIONS OF THE MANATEE COUNTY PUBLIC WORKS STANDARDS PART 3, HIGHWAY & TRAFFIC STANDARDS MANUAL DATED JUNE 2015, SECTION 3.7 DRIVEWAYS AND SECTION 3.8 SIDEWALKS AND/OR THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN AND THE F.D.O.T. DESIGN STANDARDS. CONCRETE WITH A 3,000 PSI @ 28 DAYS SHALL BE USED.
39. WHENEVER A PERMANENT ROADWAY SURFACE IS NOT PLACED IMMEDIATELY AFTER BACKFILLING AND COMPACTION OF THE NEWLY INSTALLED PIPE LINE IN AREAS WHERE TRAFFIC MUST PASS, THE CONTRACTOR SHALL INSTALL A TEMPORARY SURFACE CONSISTING OF NINE INCHES OF COMPACTED LIME ROCK BASE AND A COAT OF ASPHALT EMULSION. PERMANENT ROADWAY REPAIR SHALL BE PERFORMED A MAXIMUM OF TWENTY-ONE CALENDAR DAYS AFTER THE INITIAL OPEN CUTTING. LIME ROCK BASE SHALL COME FROM AN APPROVED FDOT PIT.
40. ALL EXISTING SIGNING, THERMOPLASTIC PAVEMENT MARKINGS, ETC... SHALL BE RESTORED/PROVIDED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MUTCD, FDOT DESIGN STANDARDS AND THE MANATEE COUNTY PUBLIC WORKS DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS, AND/OR AS DIRECTED BY THE COUNTY.

- 41. RESTORATION OF CURBS, DRIVEWAYS, SIDEWALKS, AND PLACEMENT OF SOD SHALL BE COMPLETED WITHIN FORTY-FIVE CALENDAR DAYS OF INITIAL DISTURBANCE, OR TWENTY-ONE CALENDAR DAYS OF SUBSTANTIAL COMPLETION, WHICHEVER OCCURS FIRST. RESTORATION EFFORTS SHALL BE INCLUDED IN THE PROJECT SCHEDULING AND PHASING PLAN TO DEMONSTRATE HOW THE RESTORATION WILL BE ACHIEVED.

CONSTRUCTION

- 42. THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT Baffles POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.
43. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEEP DAILY AS PART OF DAILY CLEAN UP.
44. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
45. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
46. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.
47. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM.
48. ALL PIPING AND FITTINGS USED ON THIS PROJECT SHALL BE AS NOTED ON THE PLANS AND IN THE CONTRACT DOCUMENT AND SHALL BE INSTALLED TO THE LINES AND GRADES SHOWN ON THE PLANS AND PROFILES. MODIFICATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD.
49. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.
50. ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.
51. ALL FITTINGS FOR PRESSURE CLASS-RATED PIPE SHALL BE RESTRAINED DUCTILE IRON. RESTRAINED LENGTHS OF PIPE SHALL ADHERE TO THE REQUIREMENTS AS SHOWN ON THE DETAIL SHEETS.
52. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S MAXIMUM ALLOWABLE RECOMMENDED DEFLECTION.
53. ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES OR FITTINGS.
54. ALL ROCKS OR STONES LARGER THAN SIX INCH DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO INCH DIAMETER.
55. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS.
56. ALL PENETRATIONS OF EXISTING STRUCTURES SHALL BE BY MECHANICAL ROTARY CORE DRILLING METHOD. ALL CONCRETE PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.
57. THE CONTRACTOR, PRIOR TO ANY TEMPORARY WATER SHUT-OFFS DURING WATER MAIN TIE-IN, ETC., SHALL NOTIFY THE AFFECTED RESIDENTS BY POSTING INFORMATIONAL SIGNS IN THE NEIGHBORHOOD AT LEAST TWO DAYS (48 HRS) PRIOR TO THE WATER SHUT-OFF. REFERENCE SECTION 01580, PARAGRAPH 1.03 OF THE SPECIFICATIONS. WHEN FEASIBLE, "DOOR HANGERS" SHALL BE DELIVERED TO AFFECTED RESIDENCES AT LEAST TWO DAYS (48 HRS) PRIOR TO WATER SHUT-OFF. FOR LARGE PROJECTS WITH HUNDREDS OF HOMES AFFECTED, THE CONTRACTOR SHALL ALSO MAKE EXTENSIVE USE OF THE MEDIA AND SHALL HAVE PRIOR CONTACT WITH HOMEOWNER'S ASSOCIATIONS. WRITTEN NOTIFICATIONS SHALL ALSO BE FAXED TO THE TAMPA TRIBUNE, BRADENTON HERALD, SARASOTA HERALD TRIBUNE, WBRD RADIO, EMERGENCY COMMUNITY CENTERS, INSPECTIONS, WATER TREATMENT PLANT, WATER MANAGER, HELPLINE, CUSTOMER SERVICE, AND THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT.
58. ALL NEW PIPE LINES SHALL BE PIG CLEANED (4" AND LARGER), FLUSHED, PRESSURE TESTED, DISINFECTED AND CERTIFIED PRIOR TO TIE-INS TO EXISTING FACILITIES. THE CONTRACTOR WILL BE ALLOWED TO USE TEMPORARY PLUGS FOR PIG CLEANING AND PRESSURE TESTING.
59. ALL TEST POINT PIPING SHALL BE CUT LOOSE FROM THE CORPORATION STOP AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. A CORPORATION STOP BRASS PLUG SHALL BE INSTALLED AND THE CORPORATION STOP SHALL REMAIN IN PLACE.
60. WATER MAINS CROSSING OVER OR UNDER SANITARY SEWERS, FORCE MAINS, AND RECLAIMED WATER LINES SHALL BE LAID PER CURRENT EDITION OF "10 STATE STANDARDS" AND MANATEE COUNTY UTILITY STANDARDS UNLESS NOTED OTHERWISE ON THE PLANS.
61. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.
62. CONTRACTOR SHALL PROVIDE RECORD DRAWINGS IN ACCORDANCE WITH SECTION 1.15 AND/OR 1.16 IN THE CURRENT MANATEE COUNTY UTILITY STANDARDS AT NO COST TO THE OWNER. RECORD DRAWINGS SHALL BE SIGNED & SEALED BY A SURVEYOR CURRENTLY LICENSED BY THE STATE OF FLORIDA. ALL RECORD DRAWING INFORMATION REQUIREMENTS IN SECTION 1.15 AND/OR 1.16 SHALL BE STRICTLY ENFORCED. A COPY OF SECTION 1.15 AND 1.16 CAN BE PROVIDED UPON REQUEST.
63. THE CONTRACTOR SHALL MAINTAIN AS-BUILT DRAWINGS OF THE WORK AS CONSTRUCTED. AS-BUILT DRAWINGS SHALL INCLUDE THE LOCATION OF ABANDONED MAINS CUT AND PLUG POINTS. AS-BUILT DRAWINGS SHALL BE ANNOTATED EACH DAY AS THE WORK PROCEEDS AND SHALL BE AVAILABLE TO THE COUNTY PROJECT MANAGER AND/OR FIELD INSPECTOR FOR REVIEW ON AN ONGOING BASIS. AS-BUILT DRAWINGS SHALL PROVIDE THE HORIZONTAL AND VERTICAL INSTALLED LOCATION OF ALL NEW PIPELINE, FITTINGS, VALVES AND APPURTENANCES REFERENCED TO FIXED SURFACE FEATURES THAT ARE SHOWN ON THE CONSTRUCTION DRAWINGS AND/OR RIGHT-OF-WAY LINES, PROPERTY CORNERS OR OTHER SURVEYED POINTS. THE CONTRACTOR SHALL BE ABLE TO PRESENT THE RECORD DRAWINGS TO THE COUNTY PROJECT MANAGER AND/OR INSPECTOR ON DEMAND AS THE WORK PROGRESSES. SEE SECTION 01720 FOR FURTHER

DETAILED REQUIREMENTS OF THE DAILY RECORD DRAWING DOCUMENTATION.

EXISTING UTILITY LOCATIONS

- 64. THE FOLLOWING IDENTIFIES THE QUALITY LEVEL OF EXISTING UTILITY LINEWORK ON PLANS.
LEVEL "A" - VISUALLY LOCATED OR SOFT DIGS (HORIZONTAL AND VERTICAL)
LEVEL "B" - DESIGNATED BY GPR OR FLAGGING (HORIZONTAL)
LEVEL "C" - SURFACE VISIBLE FEATURES SURVEY
LEVEL "D" - EXISTING RECORDS OR GIS
REFERENCE 2010 EDITION OF FDOT UTILITY ACCOMMODATION MANUAL (UAM)

MAINTENANCE OF TRAFFIC

- 65. THE CONTRACTOR IS RESPONSIBLE FOR ANY TRAFFIC CONTROL PLAN (TCP) IMPLEMENTED. THE TCP SHALL BE PREPARED BY AN INDIVIDUAL CERTIFIED TO PREPARE A TCP IN THE STATE OF FLORIDA THAT MEETS OR EXCEEDS THE REQUIREMENTS OF THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS LATEST EDITION (SERIES 600). ANY DEVIATIONS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA AND SUBMITTED TO COUNTY (AND FDOT) FOR APPROVAL AT LEAST FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COUNTY (AND FDOT) APPROVAL PRIOR TO IMPLEMENTATION AND FAILURE TO OBTAIN APPROVAL SHALL NOT BE GROUNDS FOR ANY DELAY CLAIM FOR TIME OR ADDITIONAL COMPENSATION.
66. THE CONTRACTOR PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHT-OF-WAY USE PERMIT AND A TRAFFIC CONTROL PLAN (TCP). THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM OTHER GOVERNMENTAL AGENCIES HAVING RELEVANT JURISDICTION. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES". A TCP SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.
67. THE CONTRACTOR SHALL USE, BUT ARE NOT LIMITED TO, FDOT INDICES 415, 600, 615, 616, AND 621. THE RECOMMENDED FDOT DESIGN STANDARD INDICES ARE CONCEPTUAL.
68. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY DRAINAGE. THERE WILL BE NO DIRECT PAY FOR THIS WORK. COSTS SHALL BE INCLUDED IN THE COST OF PIPE.
69. MOTORIZED AND MECHANICAL EQUIPMENT SHALL BE EFFECTIVELY SHIELDED, PADDED, OR LOCATED TO MINIMIZE NOISE.
70. THE CONTRACTOR WILL NOTIFY ALL EMERGENCY AND RESCUE AGENCIES LOCATED IN THE PROJECT VICINITY 24 HOURS IN ADVANCE OF ANY PROPOSED LANE CLOSURES OR DETOURS.
71. ACCESS TO ALL SIDE STREETS AND DRIVEWAYS MUST BE PROVIDED AND MAINTAINED DURING CONSTRUCTION.
72. USE FDOT INDEX NO. 619 FOR TRAFFIC CONTROL MEASURES WHEN CONSTRUCTION EQUIPMENT IS DRIVEN ON OPEN TRAVEL LANES. THE REGULATORY SPEED IN WORK ZONES SHOULD BE AS CLOSE TO NORMAL CONDITIONS AS POSSIBLE, UNLESS NOTED ON THE TRAFFIC CONTROL PLANS.
73. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO WORKING NEAR THEIR EXISTING FACILITIES.
74. CONSTRUCTION SEQUENCES SHALL BE COORDINATED TO PROVIDE POSITIVE DRAINAGE OF THE TRAVELWAYS AT ALL TIMES.
75. ANY MOT ITEM NOT SPECIFICALLY LISTED UNDER A PARTICULAR PAY ITEM SHALL BE CONSIDERED SUBSIDIARY TO OTHER BID ITEMS. THERE SHALL BE NO SEPARATE PAYMENT.
76. THE MAXIMUM SPACING BETWEEN WARNING DEVICES USED FOR DELINEATION BETWEEN THE TRAVELWAY(S) AND CONSTRUCTION AREA SHALL BE AS PER FDOT STANDARD INDEX 600.
77. ALL DETOURS, IF APPROVED BY THE COUNTY, SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D. LATEST EDITION) AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION (600 SERIES). ANY DETOUR RECOMMENDED BY THE CONTRACTOR MUST BE SUBMITTED TO THE COUNTY (AND FDOT) FOR APPROVAL AT LEAST FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COUNTY (AND FDOT) APPROVAL PRIOR TO IMPLEMENTATION AND FAILURE TO OBTAIN APPROVAL SHALL NOT BE GROUNDS FOR ANY DELAY CLAIM FOR TIME OR ADDITIONAL COMPENSATION.
78. ENSURE RESIDENT ACCESS MAINTAINED AT ALL TIMES. SINGLE LANE ALTERNATING TRAFFIC PERMITTED AS LONG AS FLAGGED OR AUTOMATED SIGNAL CONTROLLED. NO FULL CLOSURE WITHOUT AT LEAST TWO WEEK ADVANCED NOTICE WITH TIME TO REVIEW DETOUR PLAN.
FIBER
79. INSTALL A FIBER OPTIC ROUTE MARKER AT THE PROPOSED PULL BOX AND RESTORE THE FIBER OPTIC LOCATION SYSTEM (I.E., ROUTE MARKERS AND TRACER WIRE).
80. ALL MATERIAL REMOVED SHALL BE REPLACED WITH LIKE KIND TYPE AND SPECIFICATION.
81. NEW ADVANCED TRAFFIC MANAGEMENT SYSTEM (ATMS) INFRASTRUCTURE SHOULD BE PLACED WHILE LEAVING EXISTING ATMS INFRASTRUCTURE IN PLACE AND INTACT AS LONG AS FEASIBLE TO LIMIT THE DURATION OF SYSTEM DOWN TIME.
82. THE DEVELOPER WILL NEED TO HIRE A CERTIFIED CONTRACTOR THAT IS LICENSED TO PERFORM THIS WORK TO RELOCATE THE ATMS INFRASTRUCTURE AT THEIR COST.
83. AT LEAST FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MUKUNDA GOPALAKRISHNA, P.E., PTOE OF THE MANATEE COUNTY TRAFFIC ENGINEERING DIVISION AT (941) 749-3500, EXT. 7813 TO INFORM HIM OF CONSTRUCTION OPERATIONS.
84. THE CONTRACTOR MUST PROVIDE A SPLICE DIAGRAM FOR THE PROPOSED SPLICE ENCLOSURE AT THIS TIME.
85. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS OF ANY EXCAVATION OR DEMOLITION ACTIVITY THROUGH SUNSHINE ONE CALL OF FLORIDA INC. (811) AND SHALL ALSO NOTIFY THOSE UTILITY OWNERS/AGENCIES LISTED WITHIN OR IMPACTED BY THESE PLANS, NOT LESS THAN TWO (2) FULL BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE.
86. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RIGHT-OF-WAY USE PERMITS WITH MATT MERUCCI, MANATEE COUNTY PUBLIC WORKS INFRASTRUCTURE INSPECTION OFFICER, AT (941) 708-7450, EXT. 7342.
87. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING BOND REQUIREMENTS WITH BRANDY WILKINS, MANATEE COUNTY PUBLIC WORKS SENIOR ADMINISTRATIVE SPECIALIST, AT (941) 708-7450, EXT. 7215.
88. DELIVER THREE HARD-COPY SETS OF AS-BUILT RECORDS DRAWINGS THAT ARE SIGNED AND SEALED BY THE ENGINEER OF RECORD, AND ONE COMPACT DISC OF RECORD DRAWINGS IN ADOBE ACROBAT (.PDF) AND AUTOCAD (.DWG) FORMAT TO THE MANATEE COUNTY TRAFFIC ENGINEERING DIVISION (ATTN: MR. MUKUNDA GOPALAKRISHNA, P.E., PTOE) AT 2101 47TH TERRACE EAST BRADENTON, FL 34203. RECORD DRAWINGS MUST BE DELIVERED TO THE COUNTY AT LEAST TWO (2) BUSINESS DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION.
89. UPON PASSING THE FINAL INSPECTION, THE CONTRACTOR SHALL SEND A WRITTEN REQUEST TO THE MANATEE COUNTY TRAFFIC OPERATIONS DIVISION, 2904 12TH STREET COURT EAST, BRADENTON, FLORIDA 34208 (ATTN: MR. AARON BURKETT) REQUESTING TO TRANSFER MAINTENANCE FROM THE CONTRACTOR TO MANATEE COUNTY. MANATEE COUNTY WILL RESPOND WITHIN 5 WORKING DAYS TO ESTABLISH A TIME TABLE FOR THE TRANSFER OF MAINTENANCE RESPONSIBILITY.

SEE LEGEND ON SHEET 16 "SURVEY CONTROL SHEET"

EMERGENCY CONTACTS

Table with 4 columns: Agency Name, Address, Phone/Fax, and Email. Includes Manatee County Public Works Dept., Florida Power & Light, Florida Gas Transmission, TECO/Peoples Gas Co., Manatee County Health Dept., Frontier, and City of Bradenton.

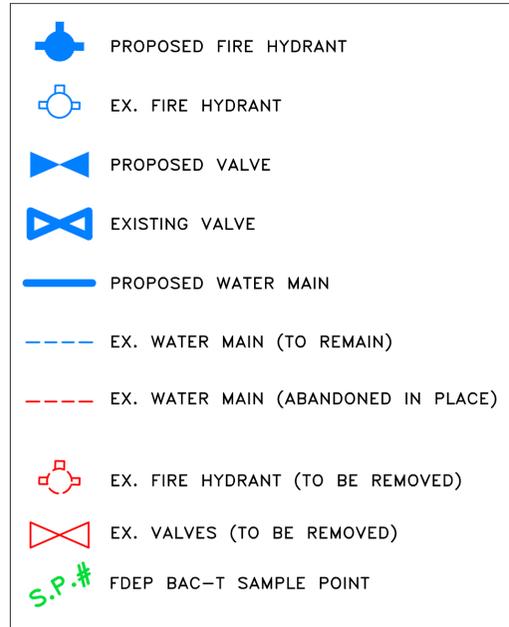
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SUMMER PLACE CONDO WATER MAIN REPLACEMENT
BRADENTON, FL
NOTES

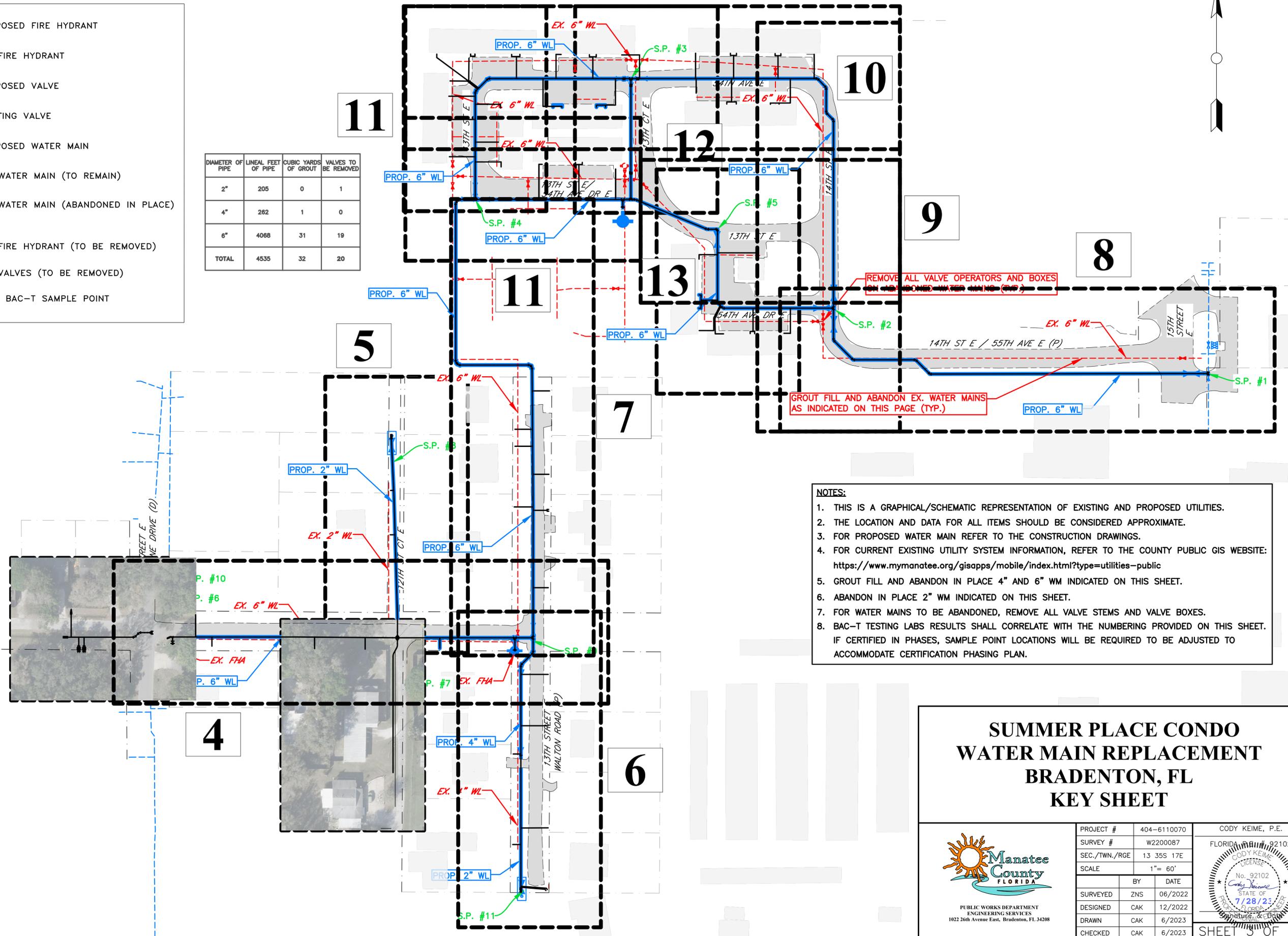


Table with 2 columns: PROJECT #, SURVEY #, SEC./TWN./RGE, SCALE, SURVEYED, DESIGNED, DRAWN, CHECKED. Includes project details and a circular seal for Cody Keime, No. 92102, State of Florida, dated 7/28/23.

Vertical text on the right edge: 11: 10/20/23 10:53 AM cody.keime@manatee.gov



DIAMETER OF PIPE	LINEAL FEET OF PIPE	CUBIC YARDS OF GROUT	VALVES TO BE REMOVED
2"	205	0	1
4"	282	1	0
6"	4068	31	19
TOTAL	4535	32	20



- NOTES:**
- THIS IS A GRAPHICAL/SCHEMATIC REPRESENTATION OF EXISTING AND PROPOSED UTILITIES.
 - THE LOCATION AND DATA FOR ALL ITEMS SHOULD BE CONSIDERED APPROXIMATE.
 - FOR PROPOSED WATER MAIN REFER TO THE CONSTRUCTION DRAWINGS.
 - FOR CURRENT EXISTING UTILITY SYSTEM INFORMATION, REFER TO THE COUNTY PUBLIC GIS WEBSITE: <https://www.mymanatee.org/gisapps/mobile/index.html?type=utilities-public>
 - GROUT FILL AND ABANDON IN PLACE 4" AND 6" WM INDICATED ON THIS SHEET.
 - ABANDON IN PLACE 2" WM INDICATED ON THIS SHEET.
 - FOR WATER MAINS TO BE ABANDONED, REMOVE ALL VALVE STEMS AND VALVE BOXES.
 - BAC-T TESTING LABS RESULTS SHALL CORRELATE WITH THE NUMBERING PROVIDED ON THIS SHEET. IF CERTIFIED IN PHASES, SAMPLE POINT LOCATIONS WILL BE REQUIRED TO BE ADJUSTED TO ACCOMMODATE CERTIFICATION PHASING PLAN.

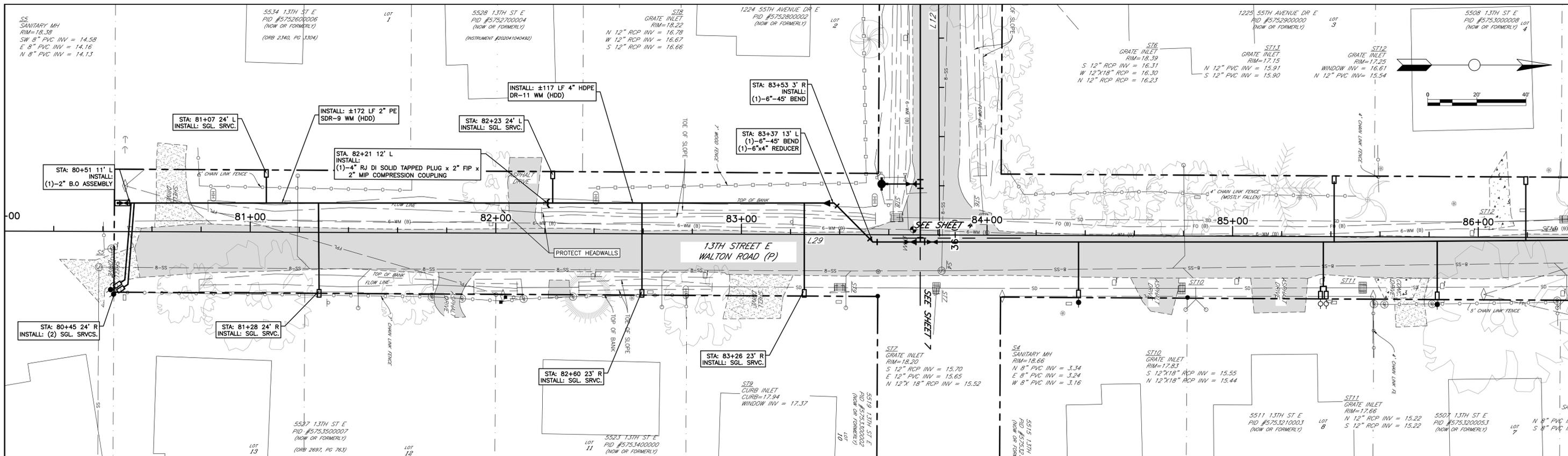
SUMMER PLACE CONDO WATER MAIN REPLACEMENT BRADENTON, FL KEY SHEET



PROJECT #	404-6110070	CODY KEIME, P.E.
SURVEY #	W2200087	FLORIDA LICENSE NO. 92102
SEC./TWN./RGE	13 35S 17E	DATE: 7/28/23
SCALE	1" = 60'	BY: ZNS
SURVEYED	ZNS 06/2022	DESIGNED: CAK 12/2022
DRAWN	CAK 6/2023	CHECKED: CAK 6/2023

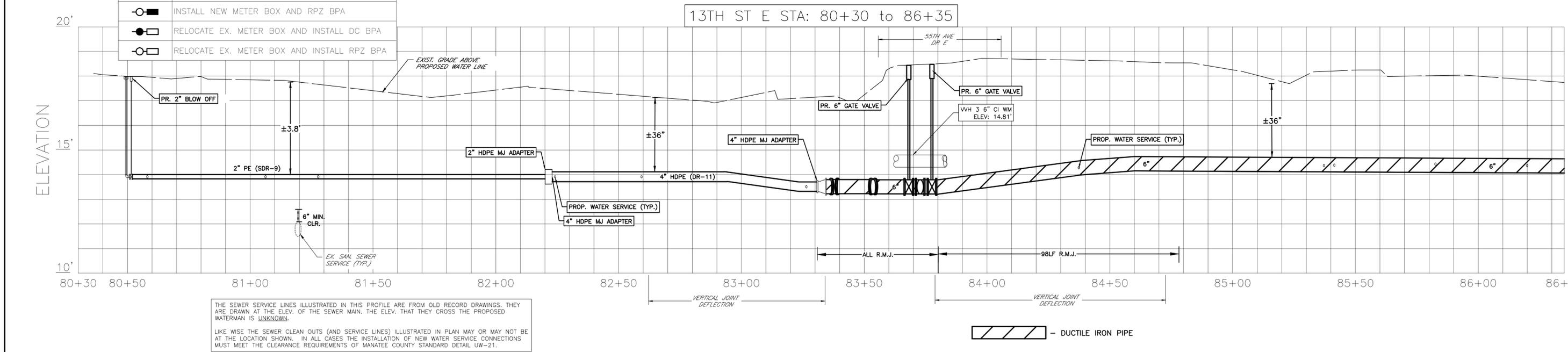
CODY KEIME, P.E.
FLORIDA LICENSE NO. 92102
DATE: 7/28/23
STATE OF FLORIDA
Professional Engineer

P:\Users\Eng Design\PROJ\WIR LINE Proj\WIR-Summer Place Condo\DWGS\Key Sheet.dwg, 03/17/23 10:37 AM, Cody Keime, 1:1, ANSI full bleed D (34.00 x 22.00 inches), MC-2016518



METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	RELOCATE EX. METER BOX (NO BPA)
	INSTALL NEW METER (NO BPA)
	INSTALL NEW METER BOX AND DC BPA
	INSTALL NEW METER BOX AND RPZ BPA
	RELOCATE EX. METER BOX AND INSTALL DC BPA
	RELOCATE EX. METER BOX AND INSTALL RPZ BPA

- GENERAL NOTES**
- SEE SHEET 5 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.
 - SEE SHEET 15 FOR MORE BENCHMARK INFORMATION.



THE SEWER SERVICE LINES ILLUSTRATED IN THIS PROFILE ARE FROM OLD RECORD DRAWINGS. THEY ARE DRAWN AT THE ELEV. OF THE SEWER MAIN. THE ELEV. THAT THEY CROSS THE PROPOSED WATERMAN IS UNKNOWN.

LIKE WISE THE SEWER CLEAN OUTS (AND SERVICE LINES) ILLUSTRATED IN PLAN MAY OR MAY NOT BE AT THE LOCATION SHOWN. IN ALL CASES THE INSTALLATION OF NEW WATER SERVICE CONNECTIONS MUST MEET THE CLEARANCE REQUIREMENTS OF MANATEE COUNTY STANDARD DETAIL UW-21.

NO.	REVISION DESCRIPTION	BY	DATE

SUMMER PLACE CONDO WATER MAIN REPLACEMENT

BRADENTON, FL

13TH ST E SOUTH



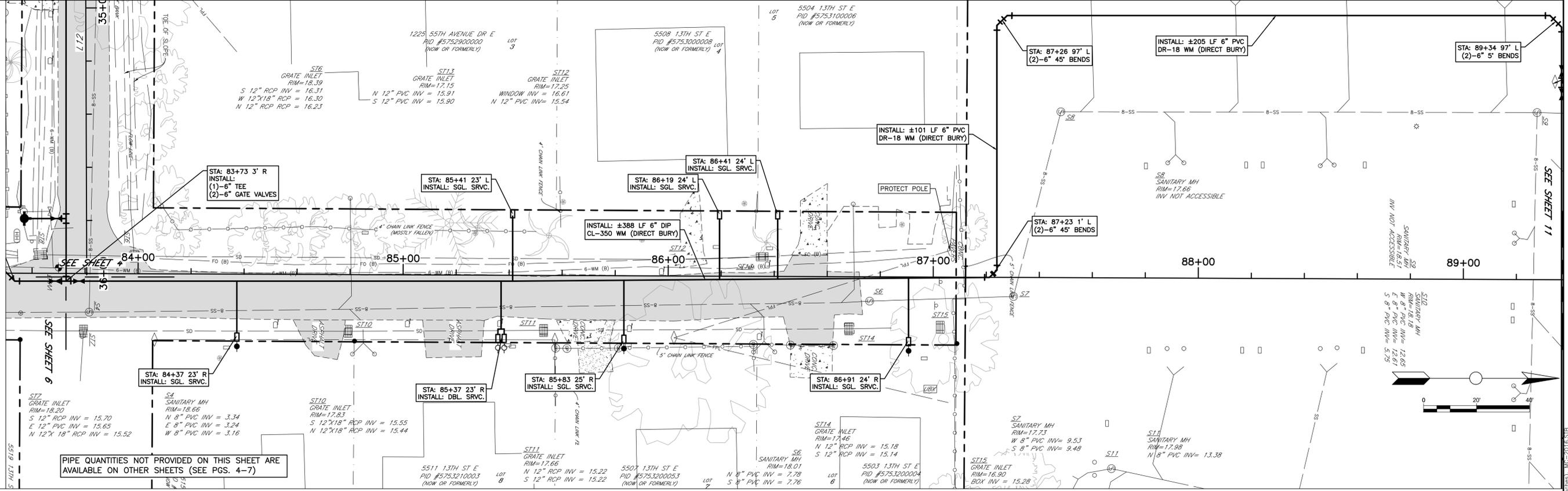
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SURVEY #	W2200087
SEC./TWN./RGE	13 35S 17E
SCALE	SEE PLAN
SURVEYED	ZNS 06/2022
DESIGNED	CAK 12/2022
DRAWN	CAK 6/2023
CHECKED	CAK 6/2023

CODY KEIME, P.E.

FLORIDA LICENSE NO. 92102

SHEET 6 OF 19

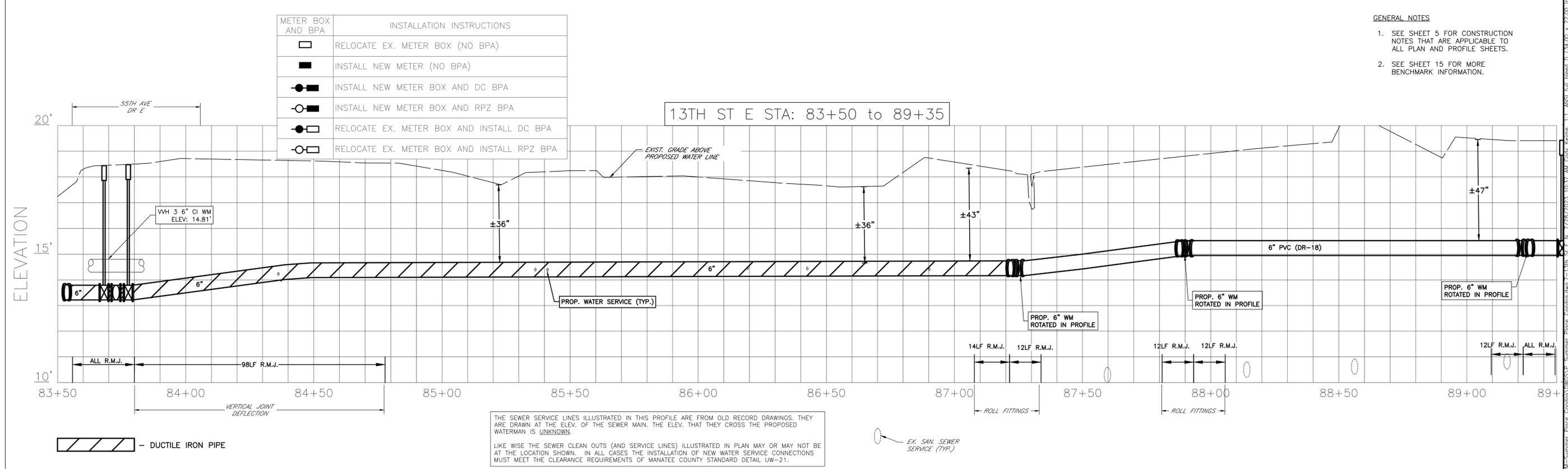
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PIPE QUANTITIES NOT PROVIDED ON THIS SHEET ARE AVAILABLE ON OTHER SHEETS (SEE PGS. 4-7)

METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	RELOCATE EX. METER BOX (NO BPA)
	INSTALL NEW METER (NO BPA)
	INSTALL NEW METER BOX AND DC BPA
	RELOCATE EX. METER BOX AND INSTALL DC BPA
	RELOCATE EX. METER BOX AND INSTALL RPZ BPA

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NO.	REVISION DESCRIPTION	BY	DATE

SUMMER PLACE CONDO WATER MAIN REPLACEMENT

BRADENTON, FL

13TH ST E NORTH



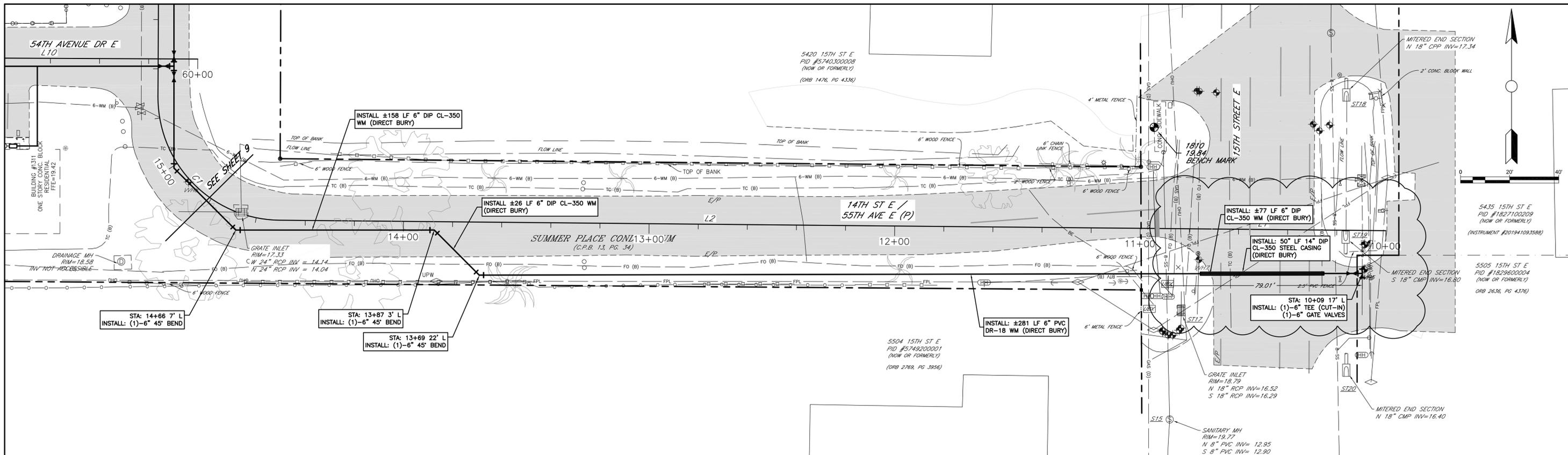
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SURVEY #	W2200087
SEC./TWN./RGE	13 35S 17E
SCALE	SEE PLAN
BY	DATE
SURVEYED	ZNS 06/2022
DESIGNED	CAK 12/2022
DRAWN	CAK 6/2023
CHECKED	CAK 6/2023

CODY KEIME, P.E.

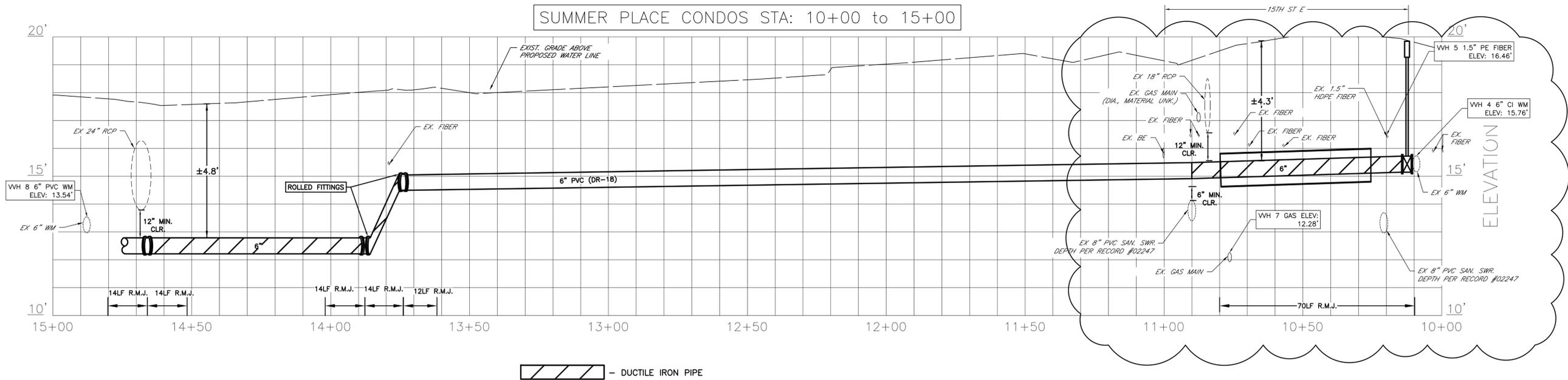
FLORIDA REG. NO. 92102

SHEET 7 OF 19

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- GENERAL NOTES**
- SEE SHEET 5 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.
 - SEE SHEET 15 FOR MORE BENCHMARK INFORMATION.

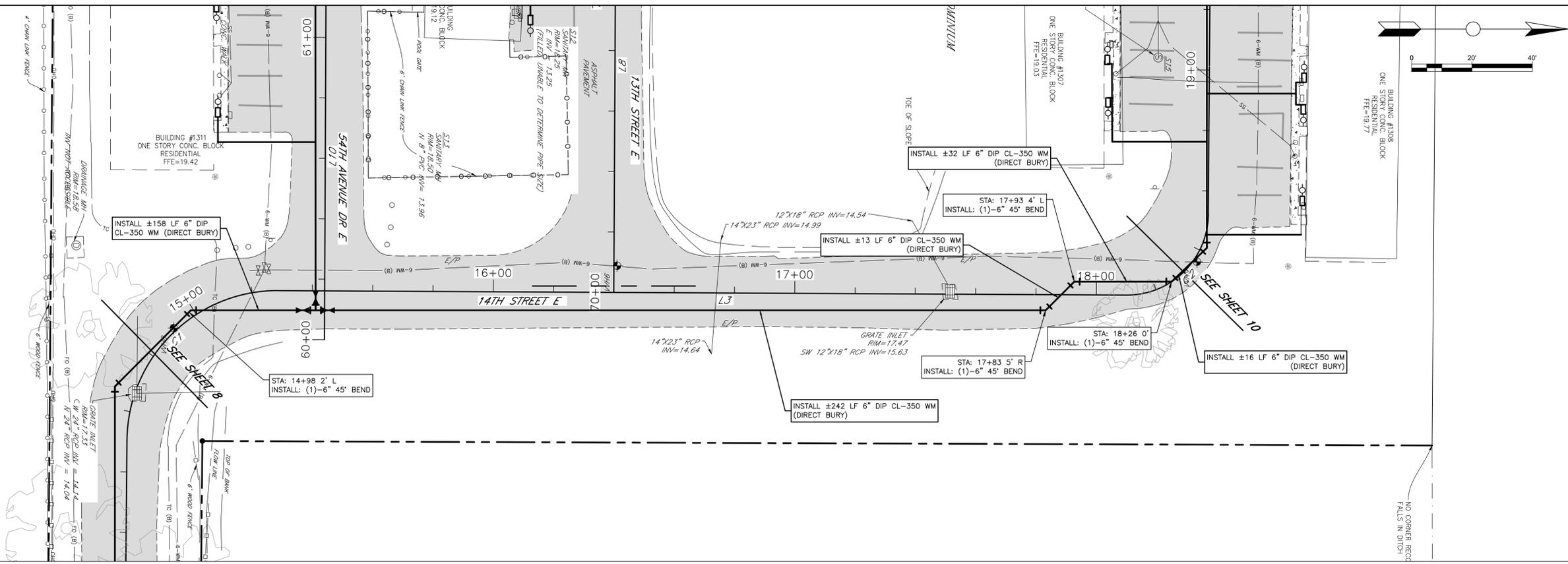


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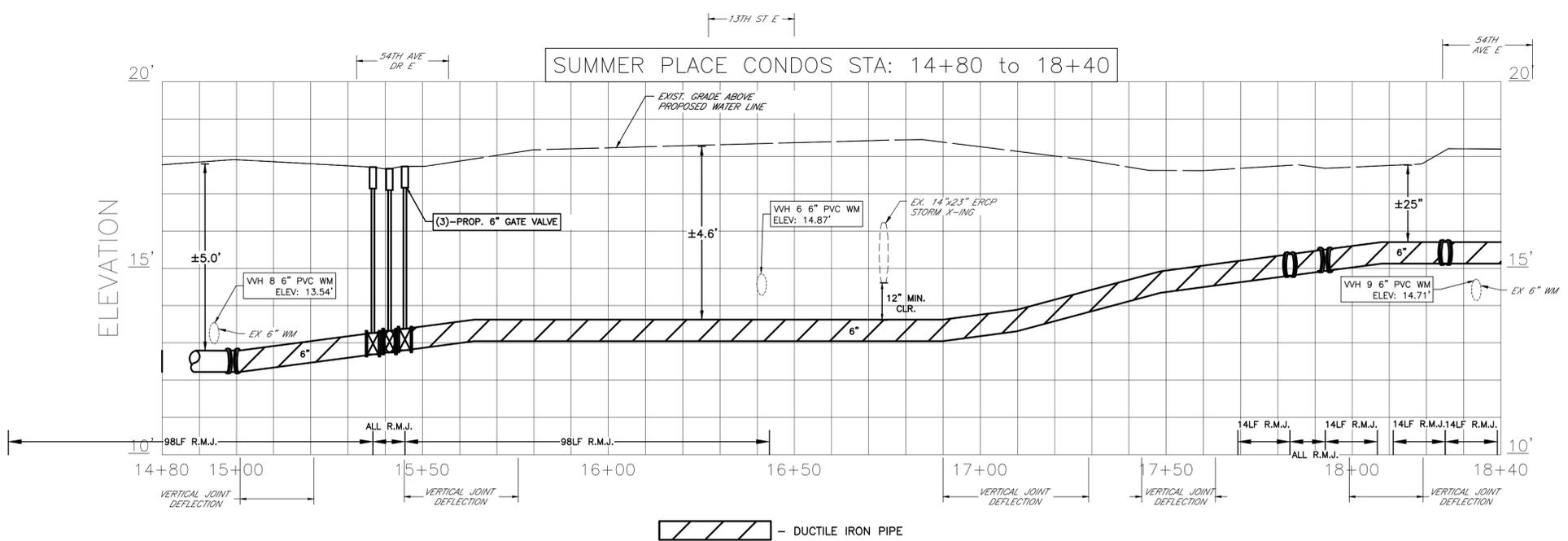
SUMMER PLACE CONDO WATER MAIN REPLACEMENT
BRADENTON, FL
15TH ST E



PROJECT #	404-6110070	CODY KEIME, P.E.
SURVEY #	W2200087	FLORIDA PROFESSIONAL ENGINEER LICENSE No. 92102
SEC./TWN./RGE	13 35S 17E	STATE OF FLORIDA
SCALE	SEE PLAN	DATE 9/26/23
SURVEYED	ZNS 06/2022	
DESIGNED	CAK 12/2022	
DRAWN	CAK 6/2023	
CHECKED	CAK 6/2023	



- GENERAL NOTES**
- SEE SHEET 5 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.
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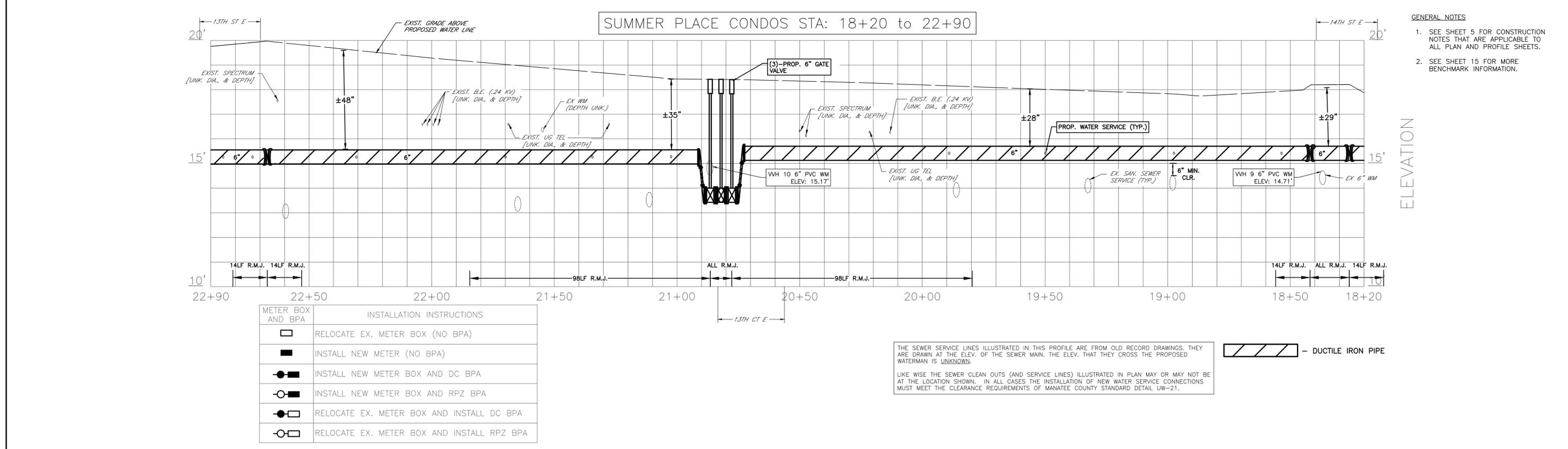
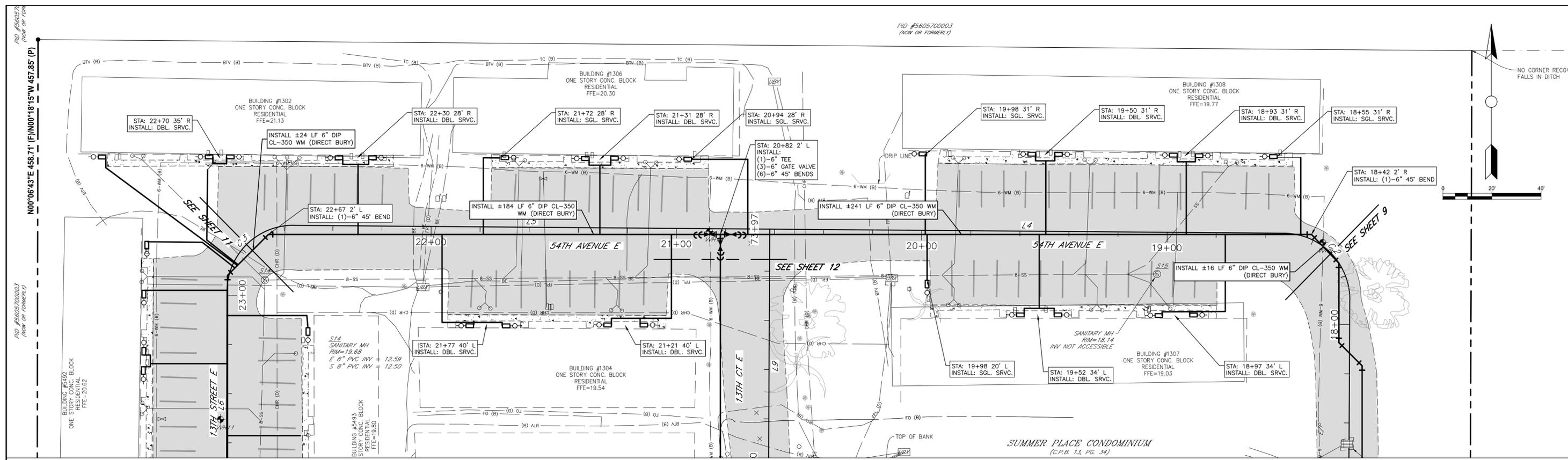
NO.	REVISION DESCRIPTION	BY	DATE

SUMMER PLACE CONDO WATER MAIN REPLACEMENT BRADENTON, FL 14TH ST E



PROJECT #	404-6110070	CODY KEIME, P.E.
SURVEY #	W2200087	FLORIDA LICENSE NO. 92102
SEC./TWN./RGE	13 35S 17E	7/28/23
SCALE	SEE PLAN	
SURVEYED	ZNS 06/2022	
DESIGNED	CAK 12/2022	
DRAWN	CAK 6/2023	
CHECKED	CAK 6/2023	

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METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	RELOCATE EX. METER BOX (NO BPA)
	INSTALL NEW METER (NO BPA)
	INSTALL NEW METER BOX AND DC BPA
	INSTALL NEW METER BOX AND RPZ BPA
	RELOCATE EX. METER BOX AND INSTALL DC BPA
	RELOCATE EX. METER BOX AND INSTALL RPZ BPA

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NO.	REVISION DESCRIPTION	BY	DATE

SUMMER PLACE CONDO WATER MAIN REPLACEMENT

BRADENTON, FL

54TH AVE E



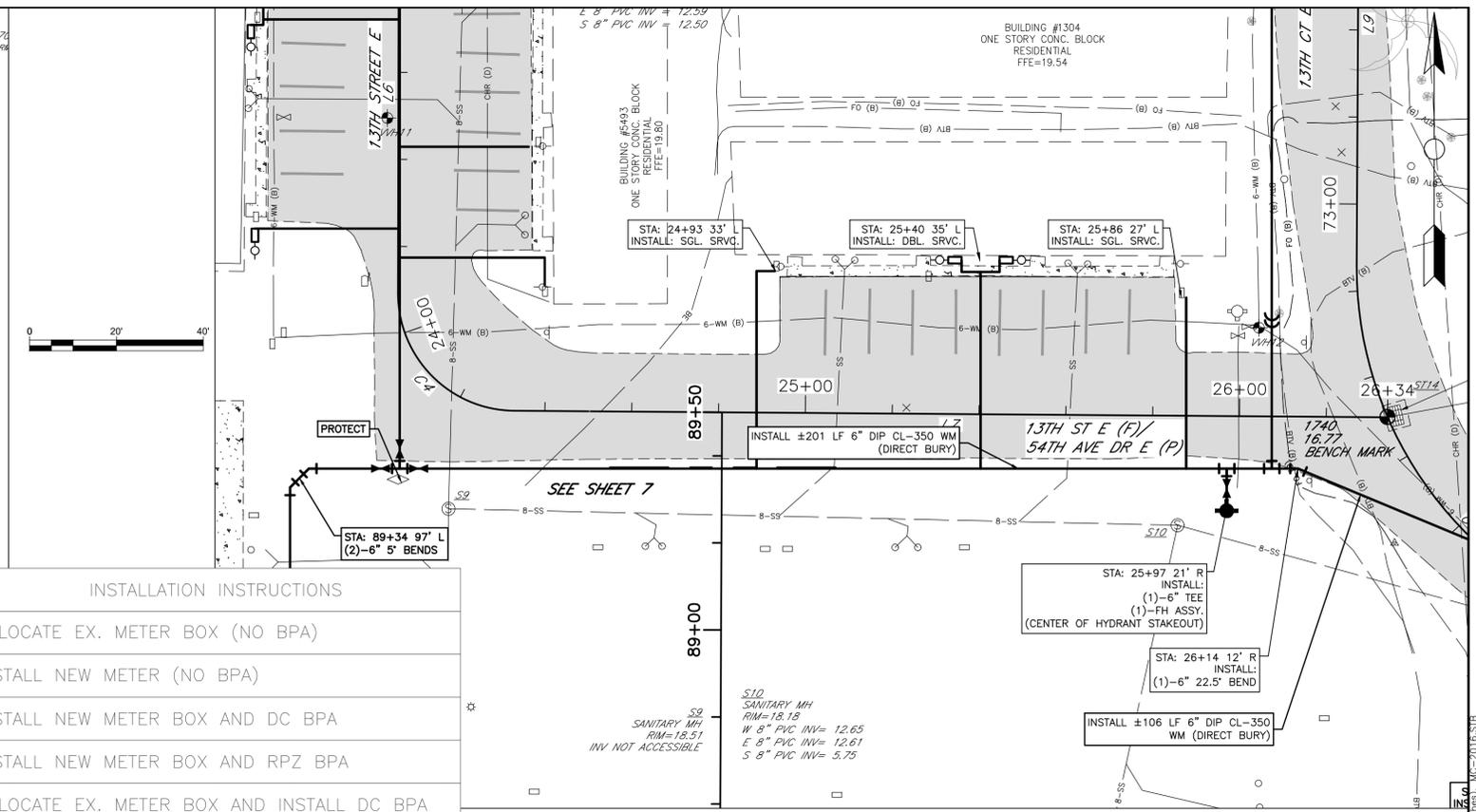
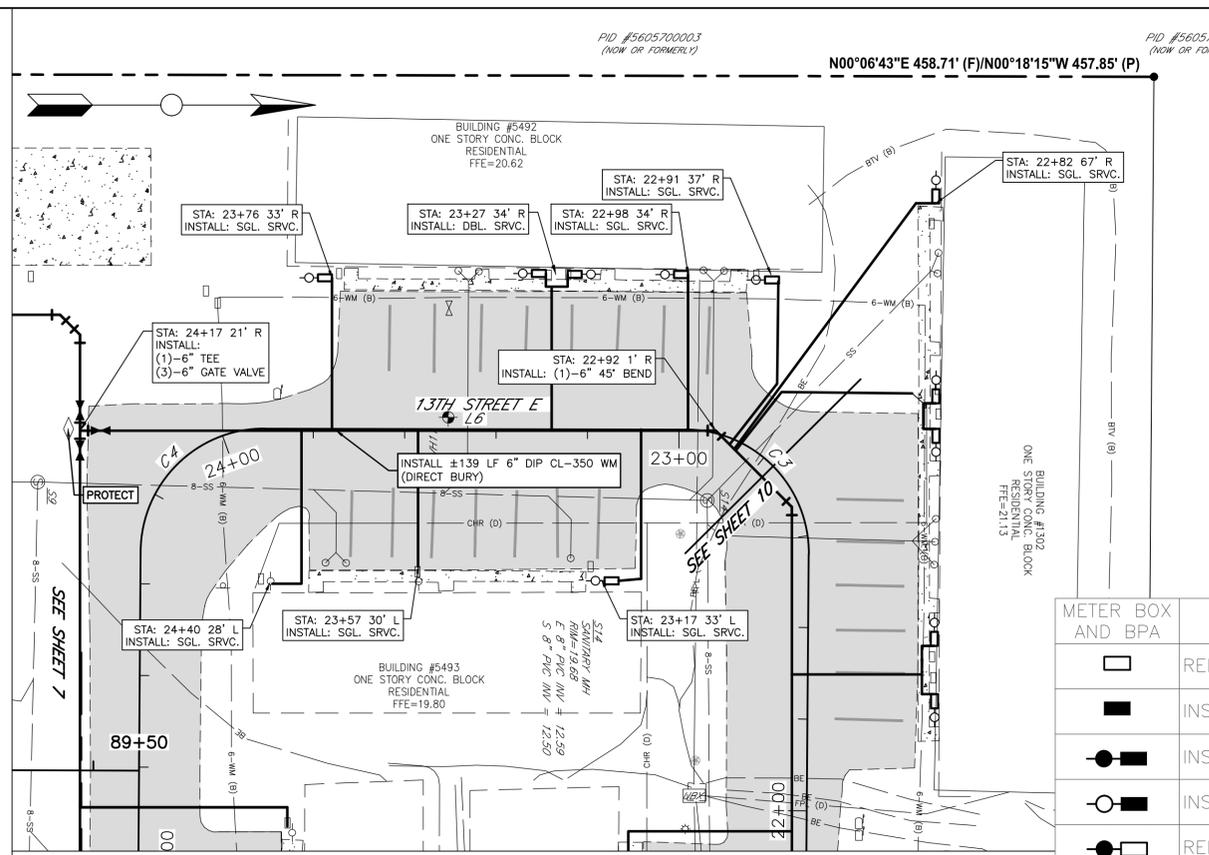
PROJECT #	404-6110070
SURVEY #	W2200087
SEC./TWN./RGE	13 35S 17E
SCALE	SEE PLAN
SURVEYED	ZNS 06/2022
DESIGNED	CAK 12/2022
DRAWN	CAK 6/2023
CHECKED	CAK 6/2023

CODY KEIME, P.E.

FLORIDA LICENSE NO. 92102

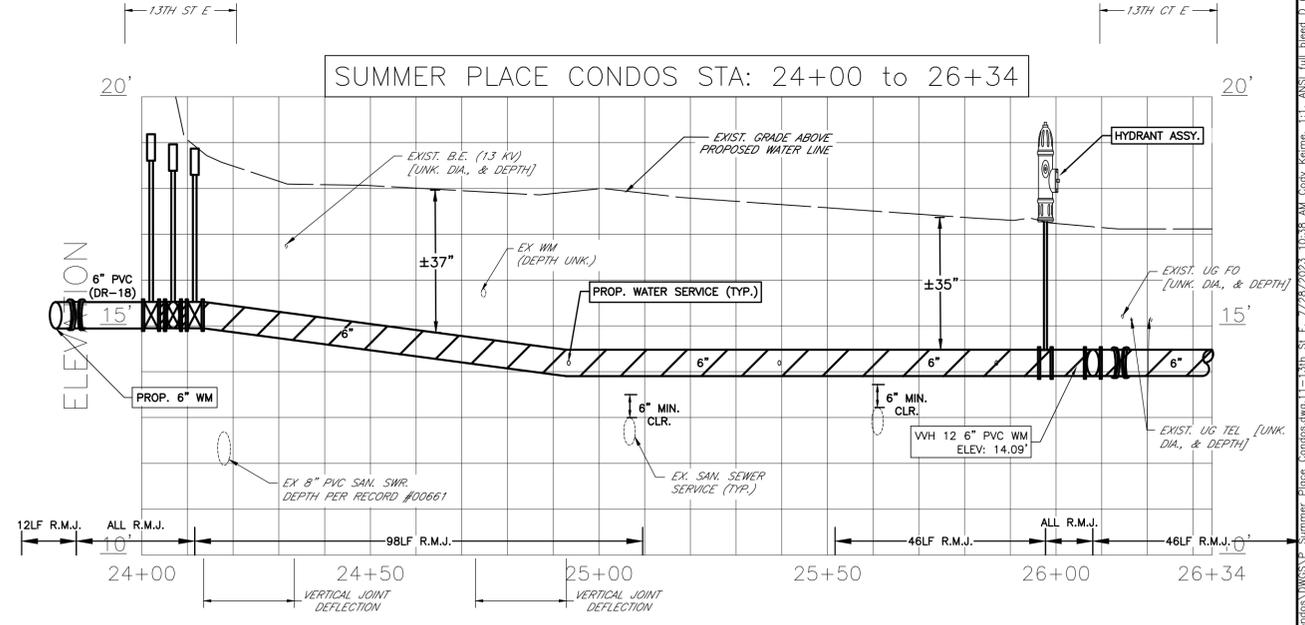
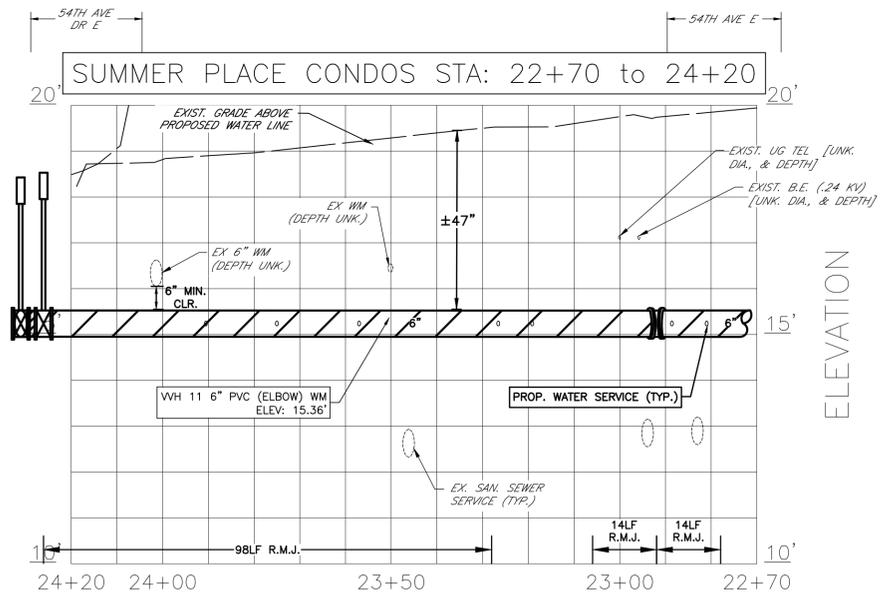
SHEET 10 OF 19

10-54th Ave E, 7/28/2023, 10:38 AM, cody keime, P.E., ANSI Toll Base D (34.00 x 22.00 inches), MC-2018.018



METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	RELOCATE EX. METER BOX (NO BPA)
	INSTALL NEW METER (NO BPA)
	INSTALL NEW METER BOX AND DC BPA
	INSTALL NEW METER BOX AND RPZ BPA
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- GENERAL NOTES**
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NO.	REVISION DESCRIPTION	BY	DATE

SUMMER PLACE CONDO WATER MAIN REPLACEMENT

BRADENTON, FL

13TH ST E

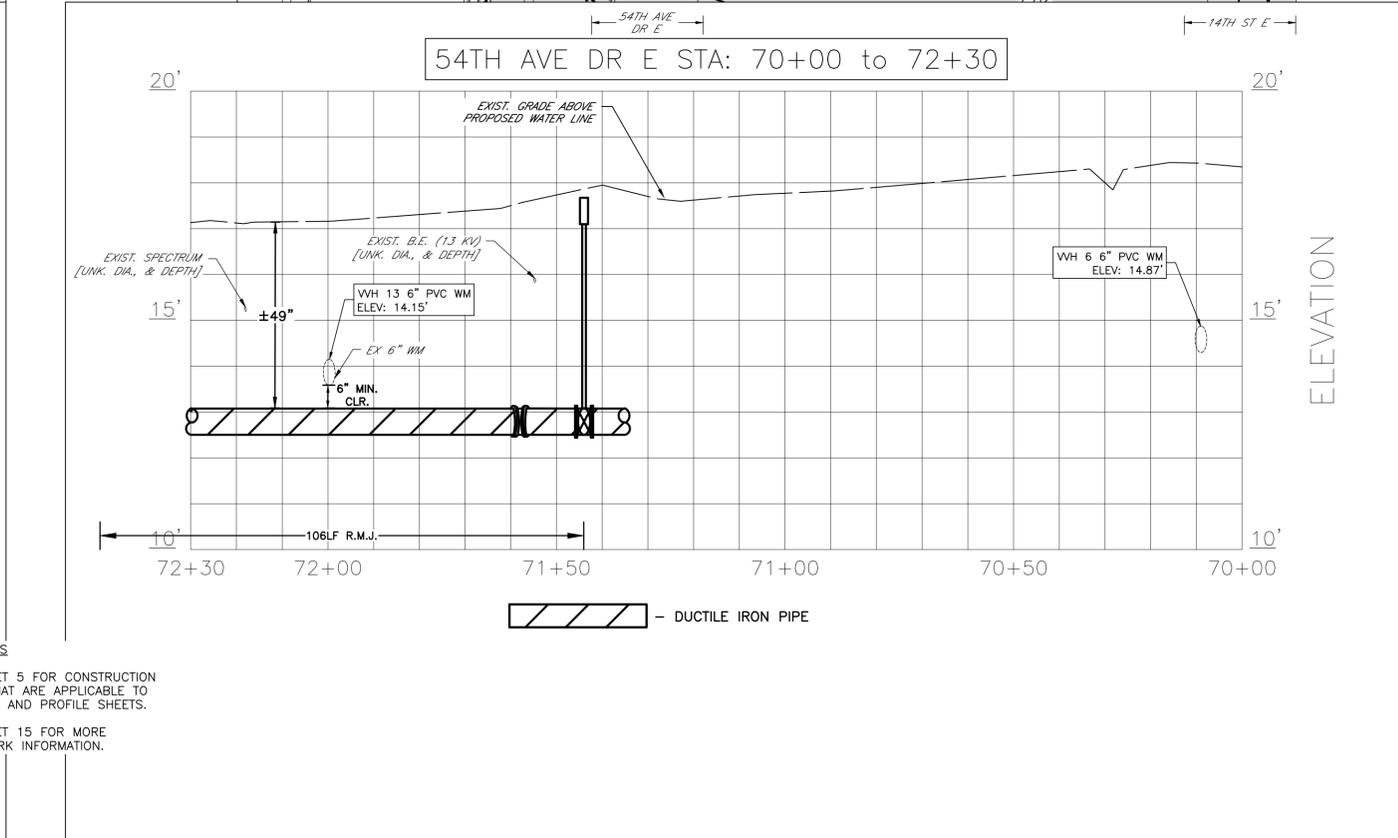
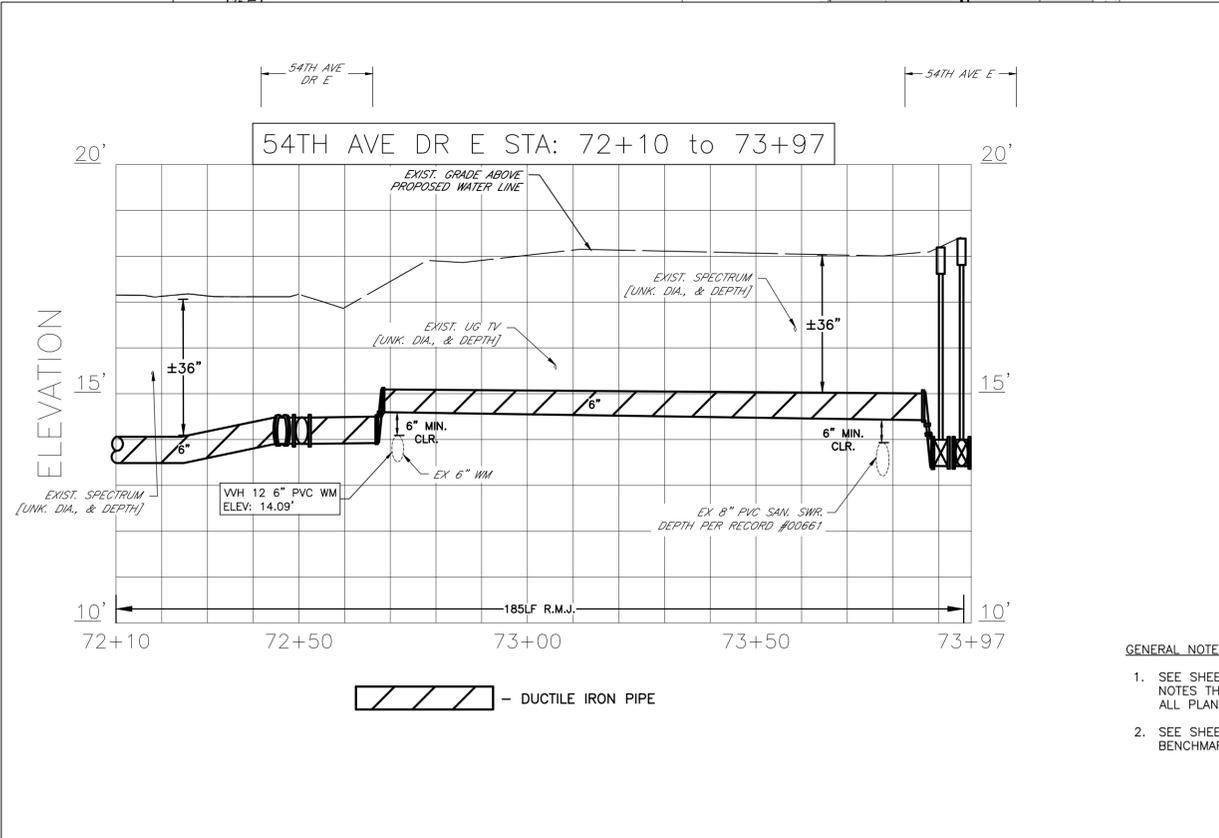
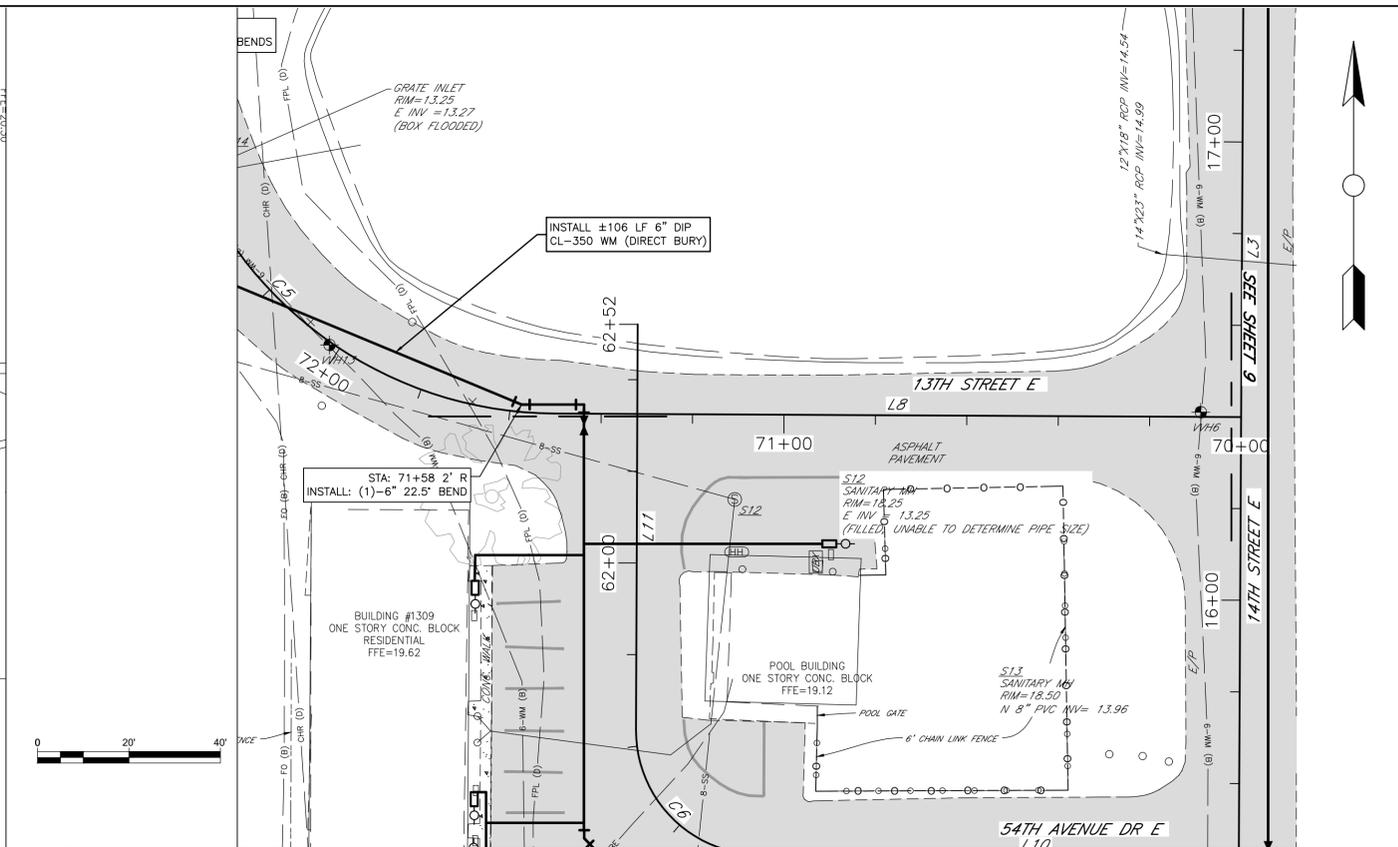
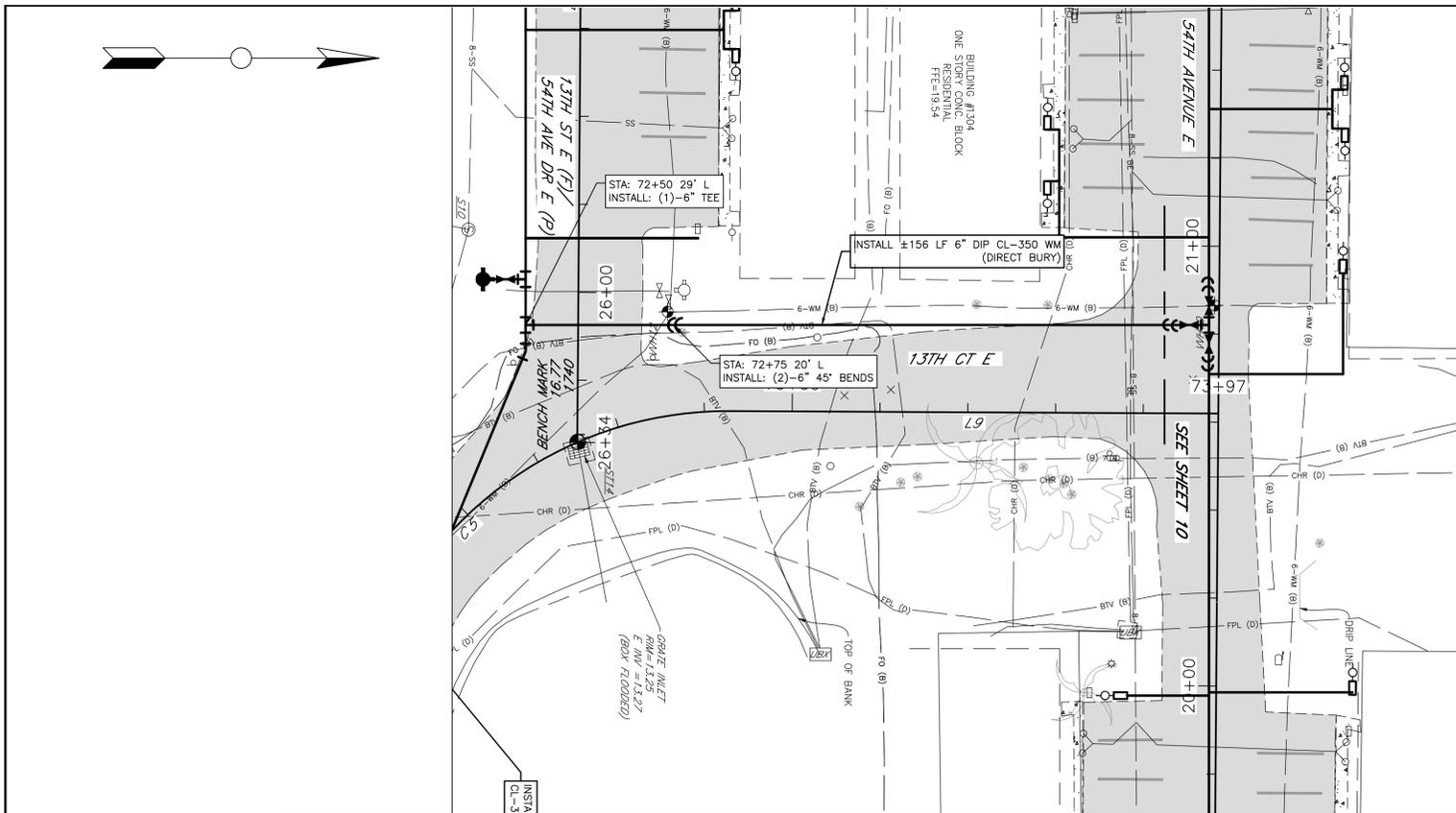


PROJECT #	404-6110070
SURVEY #	W2200087
SEC./TWN./RGE	13 35S 17E
SCALE	SEE PLAN
SURVEYED	ZNS 06/2022
DESIGNED	CAK 12/2022
DRAWN	CAK 6/2023
CHECKED	CAK 6/2023

CODY KEIME, P.E.

FLORIDA PROFESSIONAL ENGINEER
No. 92102
7/28/23

SHEET 11 OF 19



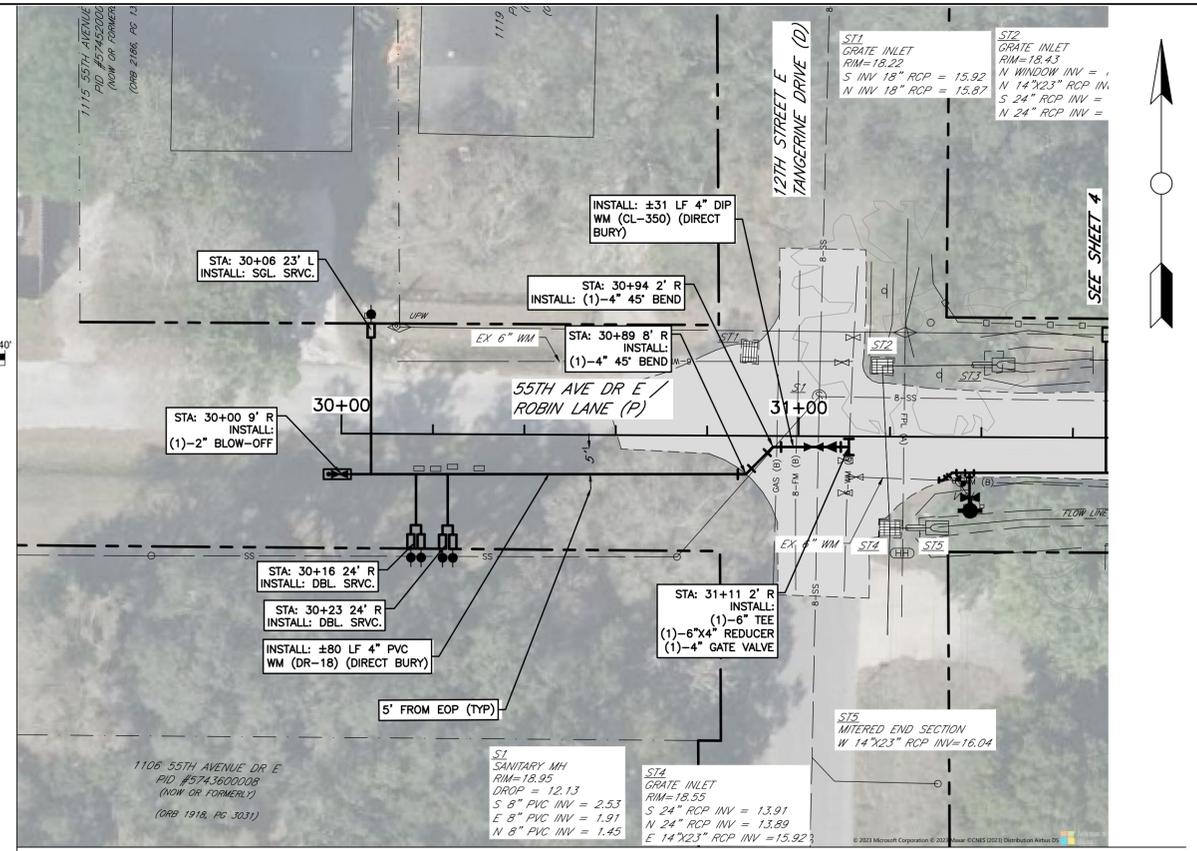
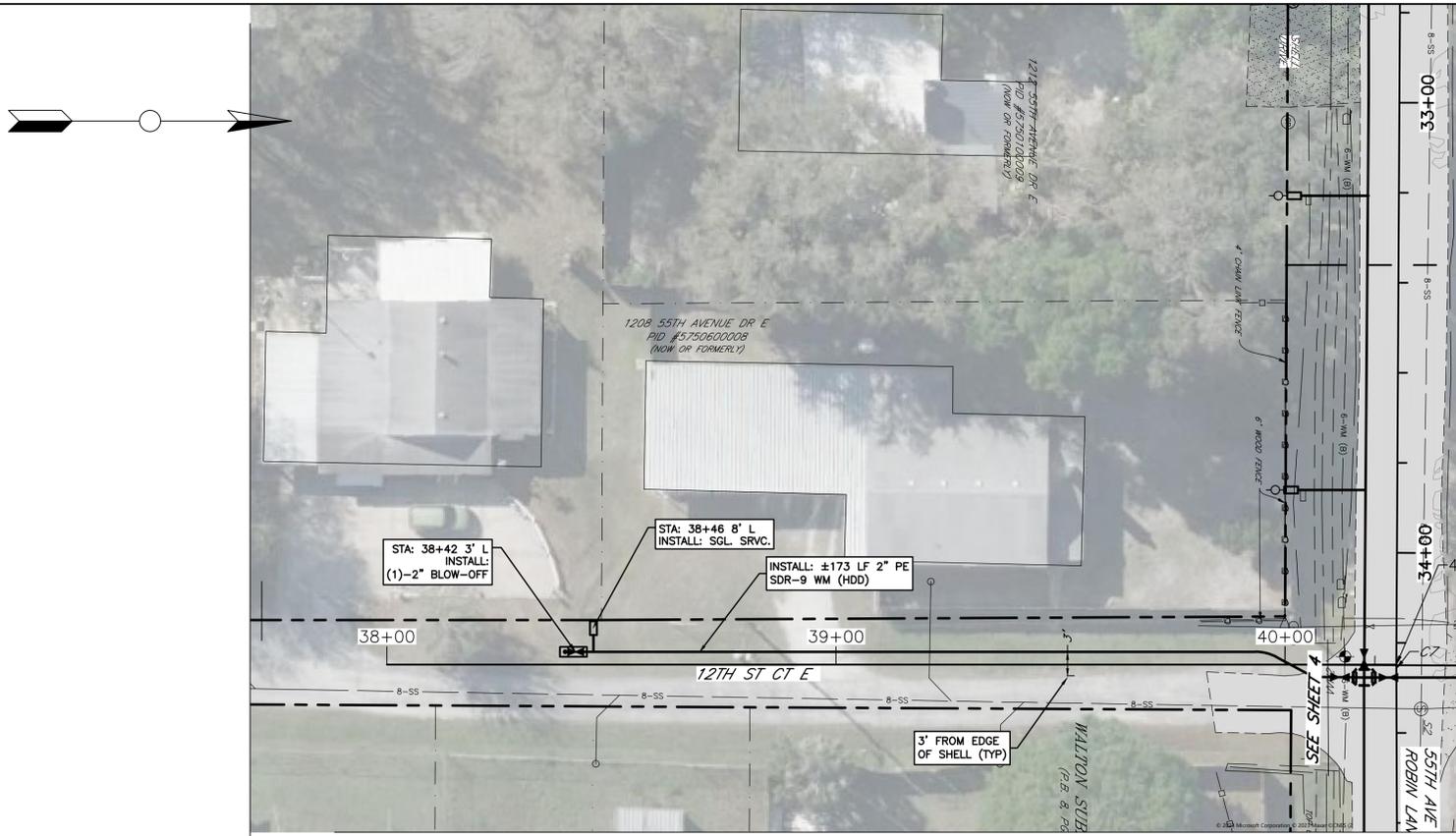
- GENERAL NOTES**
- SEE SHEET 5 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.
 - SEE SHEET 15 FOR MORE BENCHMARK INFORMATION.

NO.	REVISION DESCRIPTION	BY	DATE

**SUMMER PLACE CONDO WATER MAIN REPLACEMENT
BRADENTON, FL
13TH CT E**



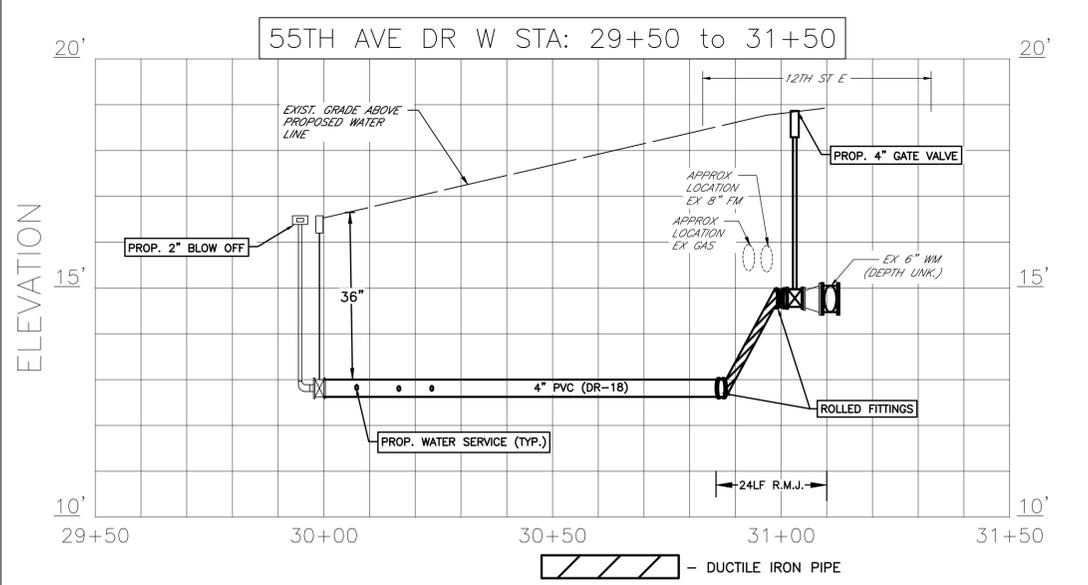
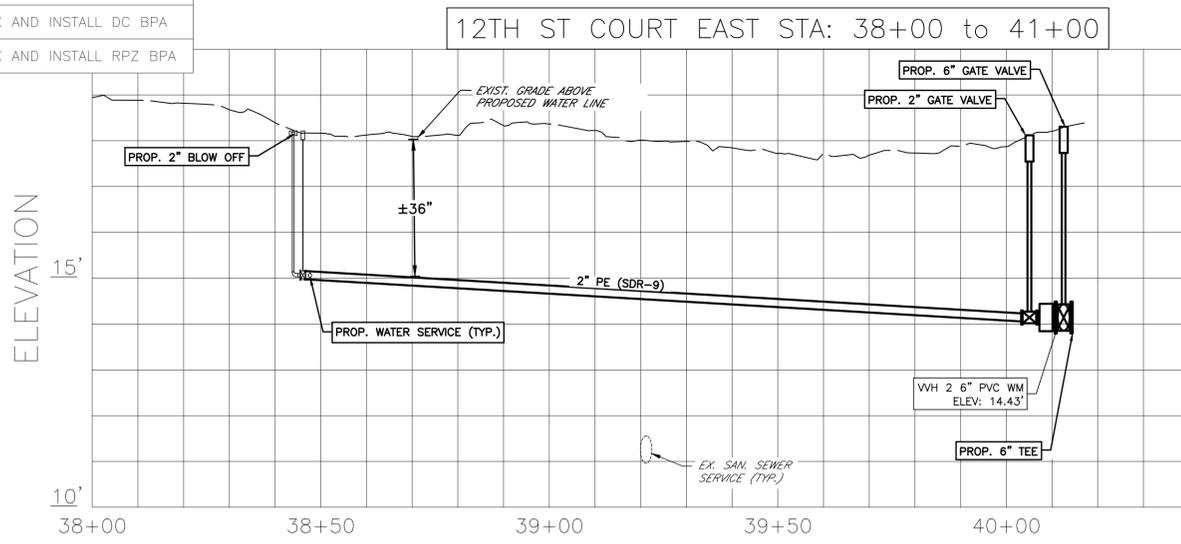
PROJECT #	404-6110070	CODY KEIME, P.E.
SURVEY #	W2200087	FLORIDA LICENSE NO. 92102
SEC./TWN./RGE	13 35S 17E	
SCALE	SEE PLAN	
SURVEYED	ZNS 06/2022	
DESIGNED	CAK 12/2022	
DRAWN	CAK 6/2023	
CHECKED	CAK 6/2023	



METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	RELOCATE EX. METER BOX (NO BPA)
	INSTALL NEW METER (NO BPA)
	INSTALL NEW METER BOX AND DC BPA
	INSTALL NEW METER BOX AND RPZ BPA
	RELOCATE EX. METER BOX AND INSTALL DC BPA
	RELOCATE EX. METER BOX AND INSTALL RPZ BPA

GENERAL NOTES
 1. SEE SHEET 5 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.
 2. SEE SHEET 15 FOR MORE BENCHMARK INFORMATION.

NOTE:
 1. ALL INFORMATION ON THIS PAGE WAS DERIVED FROM GEOGRAPHICAL INFORMATION SYSTEM (GIS), RECORD DRAWINGS AND AERIAL LIDAR. THEREFORE, ALL DIMENSIONS AND ELEVATIONS ARE TO BE CONSIDERED APPROXIMATE.



NO.	REVISION DESCRIPTION	BY	DATE

SUMMER PLACE CONDO WATER MAIN REPLACEMENT

BRADENTON, FL

55TH AVE DR E & 12TH ST CT E



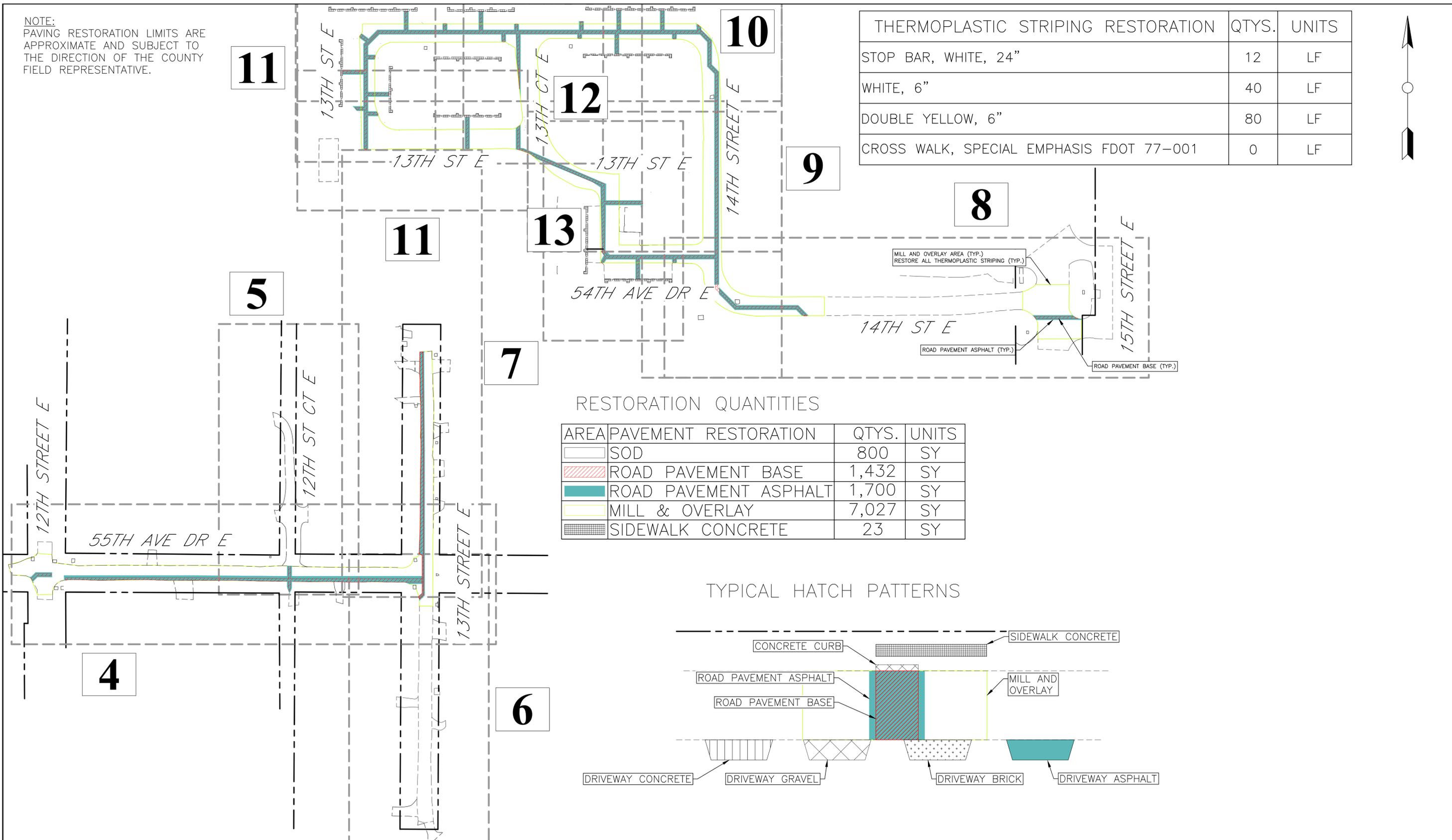
PROJECT #	404-6110070
SURVEY #	W2200087
SEC./TWN./RGE	13 35S 17E
SCALE	SEE PLAN
SURVEYED	ZNS 06/2022
DESIGNED	CAK 12/2022
DRAWN	CAK 6/2023
CHECKED	CAK 6/2023

CODY KEIME, P.E.
 FLORIDA LICENSE NO. 92102

 SHEET 14 OF 19

11/20/21 Eng Design PROJ: 404-6110070-Summer Place Condo Water Main Replacement, 14-55th & 12th, 7/28/2023 (06:36 AM) Cody Keime, P.E. ANSI Full Sheet D (34x40) x 22.00 (inches), W2-2018.018

NOTE:
PAVING RESTORATION LIMITS ARE APPROXIMATE AND SUBJECT TO THE DIRECTION OF THE COUNTY FIELD REPRESENTATIVE.

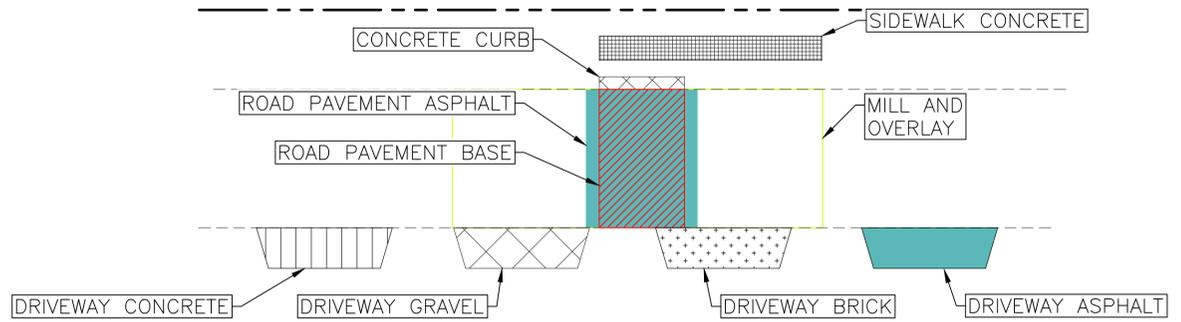


THERMOPLASTIC STRIPING RESTORATION	QTYS.	UNITS
STOP BAR, WHITE, 24"	12	LF
WHITE, 6"	40	LF
DOUBLE YELLOW, 6"	80	LF
CROSS WALK, SPECIAL EMPHASIS FDOT 77-001	0	LF

RESTORATION QUANTITIES

AREA	PAVEMENT RESTORATION	QTYS.	UNITS
	SOD	800	SY
	ROAD PAVEMENT BASE	1,432	SY
	ROAD PAVEMENT ASPHALT	1,700	SY
	MILL & OVERLAY	7,027	SY
	SIDEWALK CONCRETE	23	SY

TYPICAL HATCH PATTERNS



NO.	REVISION DESCRIPTION	BY	DATE

**SUMMER PLACE CONDO WATER MAIN REPLACEMENT
BRADENTON, FL
RESTORATION PLAN**



PROJECT #	404-6110070
SURVEY #	W2200087
SEC./TWN./RGE	13 35S 17E
SCALE	1"=60'
BY	DATE
SURVEYED	ZNS 06/2022
DESIGNED	CAK 12/2022
DRAWN	CAK 6/2023
CHECKED	CAK 03/2022

CODY KEIME, P.E.
FLORIDA LICENSE NO. 92102
7/28/23
SHEET 15 OF 19

P:\2023\7-28-2023\10538 AM Cody Keime, P.E. ANS1 Full Block D (3400 x 2200 inches), MC-2018.S16
 P:\2023\7-28-2023\10538 AM Cody Keime, P.E. ANS1 Full Block D (3400 x 2200 inches), MC-2018.S16

THE INFORMATION BELOW IS EXTRACTED FROM THE SURVEYORS REPORT FOR THE PURPOSE OF CONSTRUCTION. THE FULL SURVEYORS REPORT AND CAD DELIVERABLES ARE AVAILABLE UPON REQUEST, FROM THE MANATEE COUNTY, PUBLIC WORKS DEPARTMENT, UTILITY ENGINEERING DIVISION.

BASELINE HORIZONTAL CONTROL TABLE

Topographic Survey

In Section 13, Township 35 South, Range 17 East
Manatee County, Florida

SURVEY CREATED BY: ZNS ENGINEERING LC

SURVEYOR NOTES:

- BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, AS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (2011), CONTROL FOR THIS SURVEY WAS ESTABLISHED USING REAL TIME KINEMATIC - GLOBAL POSITIONING SYSTEM (RTK GPS) OBSERVATIONS WITH CORRECTION SIGNALS PROVIDED BY FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) VIRTUAL REFERENCE STATIONS (VRS) NETWORK, WITH SUBSEQUENT CHECKS TO PUBLISHED HORIZONTAL CONTROL STATIONS UTILIZING THE SHARED SOLUTION RESULTS FOR NGS BENCHMARK BREVARD (PID#D05094) AND SWEET GUM (PID#DM6225). THE SOUTH BOUNDARY OF THE HEREON DESCRIBED PROPERTY BEARS N89°34'16"W.
- UNLESS NOTED, LOCATIONS LIMITED TO - OBSERVABLE, ABOVE GROUND IMPROVEMENTS. NO UNDERGROUND IMPROVEMENTS HAVE BEEN LOCATED EXCEPT THOSE SHOWN HEREON. SOME FEATURES MAY BE EXAGGERATED FOR CLARITY. DIMENSIONS SHOWN SUPERSEDE SCALED DIMENSIONS.
- THIS SURVEY DOES NOT CERTIFY OR WARRANTY: TITLE, ZONING, EASEMENTS, OR FREEDOM FROM ENCUMBRANCES.
- THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT OR ABSTRACT AND THEREFORE DOES NOT NECESSARILY INDICATE ALL THE ENCUMBRANCES ON THE PROPERTY.
- THIS SKETCH IS NOT VALID IF WITHOUT THE ORIGINAL SIGNATURE AND RAISED SEAL OF A LICENSED FLORIDA PROFESSIONAL SURVEYOR & MAPPER. AN ELECTRONIC COPY MUST HAVE A VERIFIED INDEPENDENT AUTHENTICATED SEAL AFFIXED.
- ADDITIONS OR DELETIONS TO THIS SKETCH OF SURVEY BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY.
- ALL MEASUREMENTS SHOWN HEREON ARE FIELD MEASURED UNLESS SPECIFICALLY ANNOTATED, NOTED OR OTHERWISE STATED ON THIS SKETCH OF SURVEY.
- PARCEL INFORMATION SHOWN ON THIS SURVEY WAS TAKEN FROM THE MANATEE COUNTY PROPERTY APPRAISERS WEB SITE AND IS SUBJECT TO VERIFICATION.
- THE INTENDED DISPLAY SCALE OF THIS 24"x36" PAPER SKETCH OF SURVEY IS 1"=20'. THE REDUCTION OF THIS SURVEY TO FIT A DIFFERENT SIZE MEDIA WILL RESULT IN A NON SCALEABLE DRAWING. AN ELECTRONIC DATA FILE OF THIS SURVEY IN MODEL SPACE IS TO BE AT A SCALE OF 1 UNIT TO 1 UNIT.
- ELEVATIONS SHOWN ON HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AND ARE BASED ON NGS BENCH MARKS GIS 080 (PID-AG9185) WHICH HAS A PUBLISHED ELEVATION OF 14.45 FEET; SWEET GUM (PID-DM6225), WHICH HAS A PUBLISHED ELEVATION OF 5.49 FEET (NAVD88); AND BREVARD (PID-D05094), WHICH HAS A PUBLISHED ELEVATION OF 20.20 FEET (NAVD88).
- PARCEL IDENTIFICATION NUMBERS (PID) SHOWN HEREON WERE OBTAINED FROM THE MANATEE COUNTY PROPERTY APPRAISER WEBSITE IN FEBRUARY 2022 AND ARE NOW OR FORMERLY.

SITE CONTROL:

DESIGNATION	NORTHING	EASTING	ELEVATION	DESCRIPTION
PT #2580	1130632.572	477897.181	17.63'	BENCHMARK
PT #1810	1131007.281	478816.308	19.84'	BENCHMARK
PT #1740	1131183.810	478182.258	16.77'	BENCHMARK

LEGEND

EXISTING	BUSH	ABBREVIATIONS
<ul style="list-style-type: none"> CM CONCRETE MONUMENT IRON PIPE IRON ROD HUB NAIL & DISK ELEVATION PARCEL ID NO. PARCEL ID NO. LOT NO. GUY WIRE PP POWER POLE LIGHT POLE MAIL BOX SIGN REF REFLECTOR SPRINKLER GAS MARKER BACKFLOW PREVENTER BLOW OFF VALVE FH FIRE HYDRANT WV WATER VALVE ARV AIR RELEASE VALVE WM WATER METER SANITARY SEWER MANHOLE SANITARY SEWER CLEAN OUT SB#1 SOIL BORING LOCATION TEL TELEPHONE SERVICE BOX UTILITY BOX UTILITY RISER FLOW DIRECTION GI GRATE INLET MITERED END SECTION STORM SEWER MANHOLE 	<ul style="list-style-type: none"> OAK TREE PALM TREE PINE TREE EDGE OF VEGETATION CHAIN LINK FENCE WOOD FENCE BARBED WIRE FENCE FORCE MAIN POTABLE WATER RECLAIMED WATER SANITARY SEWER STORM DRAIN GAS LINE OVERHEAD CHARTER UNDERGROUND CHARTER OVERHEAD ELECTRIC UNDERGROUND ELECTRIC OVERHEAD FRONTIER UNDERGROUND FRONTIER UNDERGROUND PRECO UNDERGROUND FPL OVERHEAD UTILITY RAIL ROAD TRACKS EDGE OF CONCRETE EDGE OF ROAD TOE OF SLOPE TOP OF BANK PROPERTY LINE RIGHT OF WAY 	<ul style="list-style-type: none"> R/W RIGHT OF WAY CONC CONCRETE ASPH ASPHALT DRWY DRIVEWAY SWK SIDEWALK EP EDGE OF PAVEMENT BOC BACK OF CURB FLOW ARROW

13TH ST E PLAN										
SEGMENT	LINE/CHORD BEARING	LINE LENGTH	CHORD LENGTH	ARC LENGTH	RADIUS	START TANGENT	START STATION	END STATION	START NORTHING EASTING	END NORTHING EASTING
L29	N00°14'24.02"E	950.00'					80+00.00	89+50.00	1,130,234.8834 478,025.0206	1,131,184.8760 478,029.0000

12TH ST CT E										
SEGMENT	LINE/CHORD BEARING	LINE LENGTH	CHORD LENGTH	ARC LENGTH	RADIUS	START TANGENT	START STATION	END STATION	START NORTHING EASTING	END NORTHING EASTING
L15	N00°17'06.86"E	353.80'					40+00.00	43+53.80	1,130,590.1075 477,851.4720	1,130,943.9001 477,853.2333

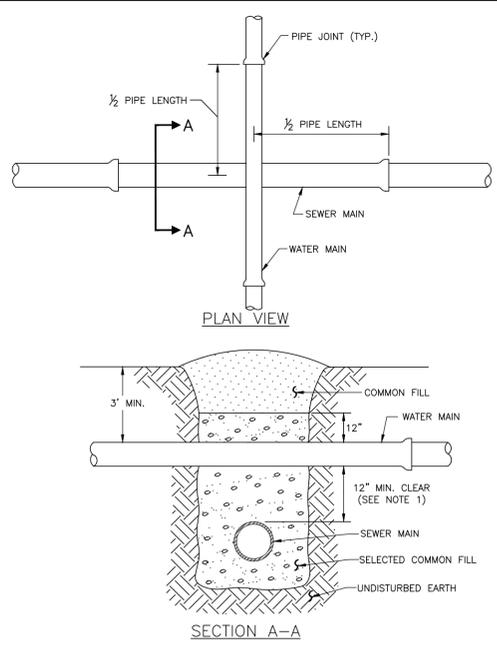
13TH CT E										
SEGMENT	LINE/CHORD BEARING	LINE LENGTH	CHORD LENGTH	ARC LENGTH	RADIUS	START TANGENT	START STATION	END STATION	START NORTHING EASTING	END NORTHING EASTING
L17	N89°44'18.36"W	121.13'					60+00.00	61+21.13	1,131,035.0360 478,426.9247	1,131,035.5890 478,305.7924
L10	N89°44'18.36"W	121.13'					60+00.00	61+21.13	1,131,035.0360 478,426.9247	1,131,035.5890 478,305.7924
L16	N89°44'18.36"W	121.13'					60+00.00	61+21.13	1,131,035.0360 478,426.9247	1,131,035.5890 478,305.7924
C14	N44°41'53.98"W	38.18'	42.41'	27.00'	N89°41'53.64"W		61+21.13	61+63.54	1,131,035.5890 478,305.7924	1,131,035.5890 478,305.7924
C6	N44°41'53.98"W	38.18'	42.41'	27.00'	N89°41'53.64"W		61+21.13	61+63.54	1,131,035.5890 478,305.7924	1,131,035.5890 478,305.7924
L18	N00°14'05.95"E	88.51'					61+63.54	62+52.05	1,131,062.7307 478,278.9350	1,131,151.2381 478,279.2980
L11	N00°14'05.95"E	88.51'					61+63.54	62+52.05	1,131,062.7307 478,278.9350	1,131,151.2381 478,279.2980

SUMMER PLACE CONDOS										
SEGMENT	LINE/CHORD BEARING	LINE LENGTH	CHORD LENGTH	ARC LENGTH	RADIUS	START TANGENT	START STATION	END STATION	START NORTHING EASTING	END NORTHING EASTING
L1	N89°27'32.78"W	100.00'					10+00.00	11+00.00	1,130,965.3040 478,810.6630	1,130,966.2480 478,810.6600
L2	N89°27'32.93"W	350.44'					11+00.00	14+50.44	1,130,966.2480 478,810.6600	1,130,969.5560 478,460.2353
L24	N89°27'32.93"W	350.44'					11+00.00	14+50.44	1,130,966.2480 478,810.6600	1,130,969.5560 478,460.2353
L23	N89°27'32.93"W	350.44'					11+00.00	14+50.44	1,130,966.2480 478,810.6600	1,130,969.5560 478,460.2353
C1	N44°34'43.70"W	70.56'	78.33'	50.00'	N89°27'32.93"W		14+50.44	15+28.77	1,130,969.5560 478,460.2353	1,130,969.5560 478,460.2353
C9	N44°34'43.70"W	70.56'	78.33'	50.00'	N89°27'32.93"W		14+50.44	15+28.77	1,130,969.5560 478,460.2353	1,130,969.5560 478,460.2353
L22	N00°18'05.53"E	281.22'					15+28.77	18+09.99	1,131,019.8169 478,410.7080	1,131,301.0318 478,412.1880
L28	N00°18'05.53"E	281.22'					15+28.77	18+09.99	1,131,019.8169 478,410.7080	1,131,301.0318 478,412.1880
L3	N00°18'05.53"E	281.22'					15+28.77	18+09.99	1,131,019.8169 478,410.7080	1,131,301.0318 478,412.1880
C2	N44°37'17.07"W	38.13'	42.34'	27.00'	N00°18'05.53"E		18+09.99	18+52.33	1,131,301.0318 478,412.1880	1,131,301.0318 478,412.1880
C10	N44°37'17.07"W	38.13'	42.34'	27.00'	N00°18'05.53"E		18+09.99	18+52.33	1,131,301.0318 478,412.1880	1,131,301.0318 478,412.1880
L4	N89°32'39.68"W	209.62'					18+52.33	20+61.95	1,131,328.1730 478,385.4031	1,131,329.8400 478,175.7890
L26	N89°32'39.68"W	209.62'					18+52.33	20+61.95	1,131,328.1730 478,385.4031	1,131,329.8400 478,175.7890
L25	N89°32'38.58"W	194.02'					20+61.95	22+55.97	1,131,329.8400 478,175.7890	1,131,331.3840 477,981.7708
L5	N89°32'38.58"W	194.02'					20+61.95	22+55.97	1,131,329.8400 478,175.7890	1,131,331.3840 477,981.7708
C11	S45°17'02.15"W	38.30'	42.57'	27.00'	N89°32'38.58"W		22+55.97	22+98.55	1,131,331.3840 477,981.7708	1,131,331.3840 477,981.7708
C3	S45°17'02.15"W	38.30'	42.57'	27.00'	N89°32'38.58"W		22+55.97	22+98.55	1,131,331.3840 477,981.7708	1,131,331.3840 477,981.7708
L6	S00°06'42.89"W	92.15'					22+98.55	23+90.70	1,131,304.4376 477,954.3760	1,131,212.2852 477,954.3760
L27	S00°06'42.89"W	92.15'					22+98.55	23+90.70	1,131,304.4376 477,954.3760	1,131,212.2852 477,954.3760
C4	S44°43'46.47"E	38.08'	42.26'	27.00'	S00°06'42.89"W		23+90.70	24+32.96	1,131,212.2852 477,954.3760	1,131,212.2852 477,954.3760
C12	S44°43'46.47"E	38.08'	42.26'	27.00'	S00°06'42.89"W		23+90.70	24+32.96	1,131,212.2852 477,954.3760	1,131,212.2852 477,954.3760
L7	S89°34'15.83"E	201.17'					24+32.96	26+34.13	1,131,185.2340 477,981.1730	1,131,183.7280 478,182.3350

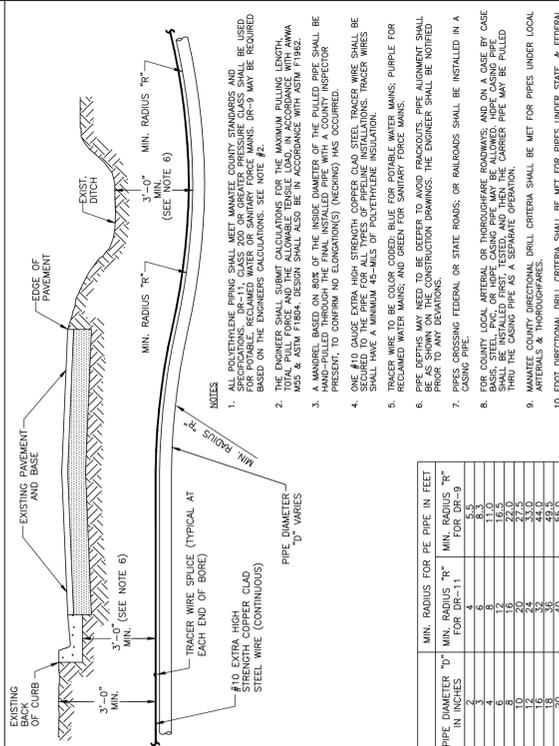
54TH AVE DR E										
SEGMENT	LINE/CHORD BEARING	LINE LENGTH	CHORD LENGTH	ARC LENGTH	RADIUS	START TANGENT	START STATION	END STATION	START NORTHING EASTING	END NORTHING EASTING
L20	N89°41'53.67"W	150.26'					70+00.00	71+50.26	1,131,131.0000 478,411.2930	1,131,131.7913 478,261.0393
L21	N89°41'53.67"W	150.26'					70+00.00	71+50.26	1,131,131.0000 478,411.2930	1,131,131.7913 478,261.0393
L8	N89°41'53.67"W	150.26'					70+00.00	71+50.26	1,131,131.0000 478,411.2930	1,131,131.7913 478,261.0393
C13	N44°41'53.74"W	122.04'	135.55'	86.29'	N89°41'53.67"W		71+50.26	72+85.80	1,131,131.7913 478,261.0393	1,131,131.7913 478,261.0393
C5	N44°41'53.74"W	122.04'	135.55'	86.29'	N89°41'53.67"W		71+50.26	72+85.80	1,131,131.7913 478,261.0393	1,131,131.7913 478,261.0393
L19	N00°18'06.19"E	111.30'					72+85.80	73+97.11	1,131,218.5367 478,175.2029	1,131,329.8400 478,175.7890
L9	N00°18'06.19"E	111.30'					72+85.80	73+97.11	1,131,218.5367 478,175.2029	1,131,329.8400 478,175.7890

55TH AVE DR W										
SEGMENT	LINE/CHORD BEARING	LINE LENGTH	CHORD LENGTH	ARC LENGTH	RADIUS	START TANGENT	START STATION	END STATION	START NORTHING EASTING	END NORTHING EASTING
L13	S89°41'10.20"E	423.94'					30+00.00	34+23.94	1,130,617.2240 477,426.6400	1,130,614.9019 477,850.5720
C7	S89°56'38.42"E	1.80'	1.80'	200.00'	S89°41'10.20"E		34+23.94	34+25.74	1,130,614.9019 477,850.5720	1,130,614.9019 477,850.5720
L12	N89°47'53.37"E	174.24'					34+25.74	35+99.98	1,130,614.9002 477,852.3720	1,130,615.5140 478,026.6150

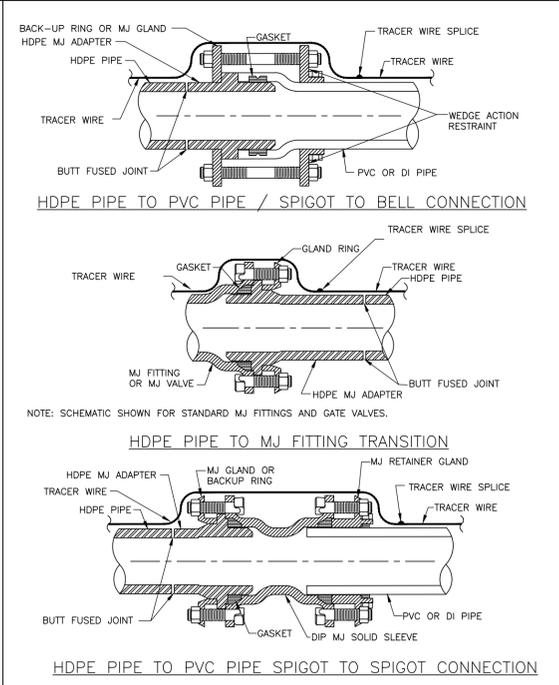
SUMMER PLACE CONDOS										
SEGMENT	LINE/CHORD BEARING	LINE LENGTH	CHORD LENGTH	ARC LENGTH	RADIUS	START TANGENT	START STATION	END STATION	START NORTHING EASTING	END NORTHING EASTING
L22	N00°18'05.53"E	281.22'					15+28.77	18+09.99	1,131,019.8169 478,410.7080	1,131,301.0318 478,412.1880
C2	N44°37'17.07"W	38.13'	42.34'	27.00'	N00°18'05.53"E		18+09.99	18+52.33	1,131,301.0318 478,412.1880	1,131,301.0318 478,412.1880
C10	N44°37'17.07"W	38.13'	42.34'	27.00'	N00°18'05.53"E		18+09.99	18+52.33	1,131,301.0318 478,412.1880	1,131,301.0318 478,412.1880
L4	N89°32'39.68"W	209.62'					18+52.33	20+61.95	1,131,328.1730 478,385.4031	1,131,329.8400 478,175.7890
L26	N89°32'39.68"W	209.62'					18+52.33	20+61.95	1,131,328.1730 478,385.4031	1,131,329.8400 478,175.7890
L25	N89°32'38.58"W	194.02'					20+61.95	22+55.97	1,131,329.8400 478,175.7890	1,131,331.3840 477,981.7708
L5	N89°32'38.58"W	194.02'					20+61.95	22+55.97	1,131,329.8400 478,175.7890	1,131,331.3840 477,981.7708
C11	S45°17'02.15"W									



NOTES:
 1. CLEARANCE MAY BE REDUCED TO 6" FOR GRAVITY SEWER WHERE WATER MAIN IS DUCTILE IRON.
 2. PIPE SECTIONS SHALL BE FULL-LENGTH AND SHALL BE ADJUSTED HORIZONTALLY, SO THAT THE CROSSING IS AT EACH PIPE SECTION'S MIDPOINT REGARDLESS OF THE VERTICAL CLEARANCE.



MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 DIRECTIONAL BORE ROADWAY CROSSING
 UG-4



NOTES:
 1. ONE TRACER WIRE SHALL BE SECURED TO THE PIPE FOR ALL TYPES OF PIPELINE INSTALLATIONS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 HDPE TO PVC OR DI PIPE ADAPTER
 UG-6

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR C900-16 PVC PIPE (DR-18)

MAIN PIPE SIZE	HORIZ. BENDS	TEES				REDUCERS	PLUGS & VALVES
		90°	45°	22.5°	SIZE		
36	142	59	28			453	
30	124	51	25			391	
24	106	44	21			327	
20	92	36	18			280	
16	77	32	15			231	
12	61	25	12			181	
10	52	22	10			153	
8	44	18	9			128	
6	34	14	7			98	
4	24	10	5			69	

NOTES:
 1. RESTRAIN 11.25" BENDS 50% OF LENGTH FOR 22.5° BENDS.
 2. ALL VALVES AND FITTINGS SHALL BE RESTRAINED TO THE CONNECTING SECTIONS OF PIPE.
 3. ALL ISOLATION VALVES MUST BE PROPERLY ANCHORED OR RESTRAINED TO RESIST A 180 PSI TEST PRESSURE IN EITHER DIRECTION.
 4. PIPE SIZES ARE GIVEN IN INCHES.
 5. RESTRAINED PIPE LENGTHS ARE GIVEN IN FEET.
 6. LENGTHS SHOWN ARE FOR A TEST PRESSURE OF 180 PSI.
 7. THE RESTRAINED LENGTHS SHOWN IN THESE TABLES ARE BASED ON SOIL CLASSIFICATION SP WITH AWWA TYPE 3 TRENCH CONDITIONS, 180 PSI TEST PRESSURE, 3 FEET OF COVER AND 1.5 FACTOR OF SAFETY. ACTUAL BURY CONDITIONS MUST BE DETERMINED BY THE ENGINEER OF RECORD AND THE RESTRAINED LENGTHS MODIFIED ACCORDINGLY.
 8. RESTRAINED LENGTHS TO BE APPLIED TO PIPELINES PER DETAIL UG-10 RESTRAINED LENGTHS FOR PIPE.
 9. ALL RESTRAINED JOINT HARDWARE SHALL CONFORM TO 1.11.17 OF THE PUBLIC WORKS UTILITIES STANDARDS MANUAL.
 10. ALL THREE "LEGS" OF TEES SHALL BE RESTRAINED PER THE STATED LENGTH IN THE TABLE.

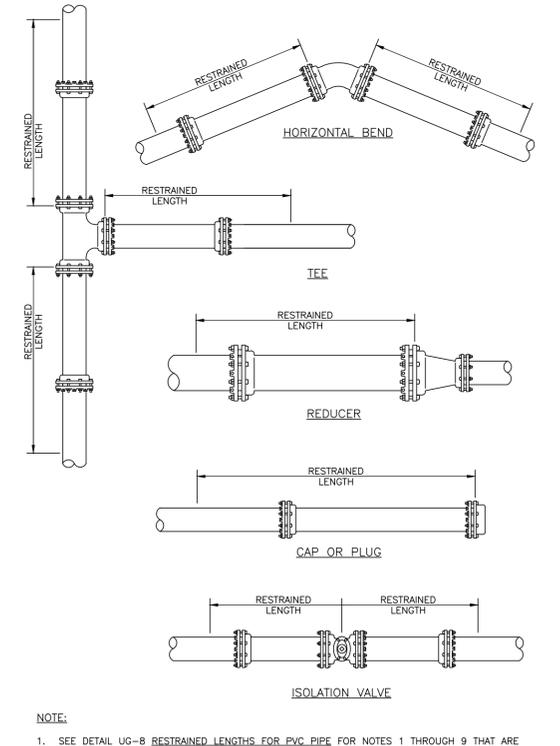
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 RESTRAINED LENGTHS FOR PVC PIPE
 UG-8

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (POLY-WRAPPED)

MAIN PIPE SIZE	HORIZ. BENDS	TEES				REDUCERS	PLUGS & VALVES
		90°	45°	22.5°	SIZE		
36	142	59	28			453	
30	124	51	25			391	
24	106	44	21			327	
20	92	36	18			280	
16	77	32	15			231	
12	61	25	12			181	
10	52	22	10			153	
8	44	18	9			128	
6	34	14	7			98	
4	24	10	5			69	

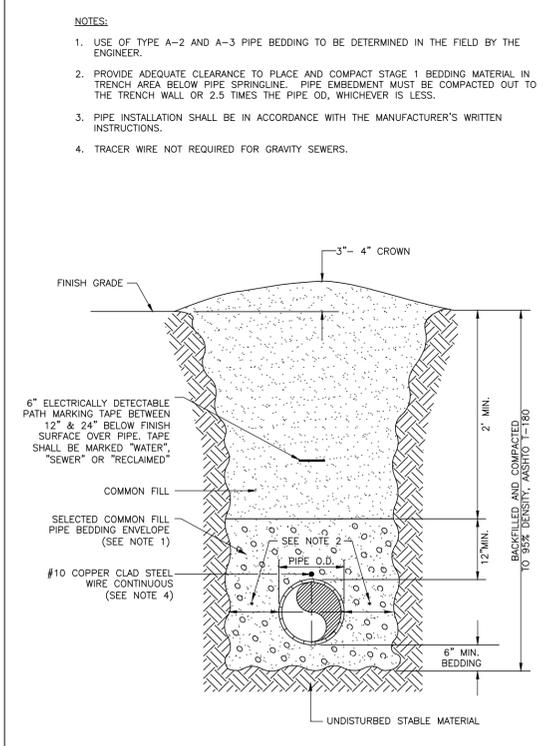
NOTE:
 1. SEE UG-8, RESTRAINED LENGTHS FOR PVC PIPE DETAIL FOR NOTES 1 THROUGH 9 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR DIP.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 RESTRAINED LENGTHS FOR DIP
 UG-9

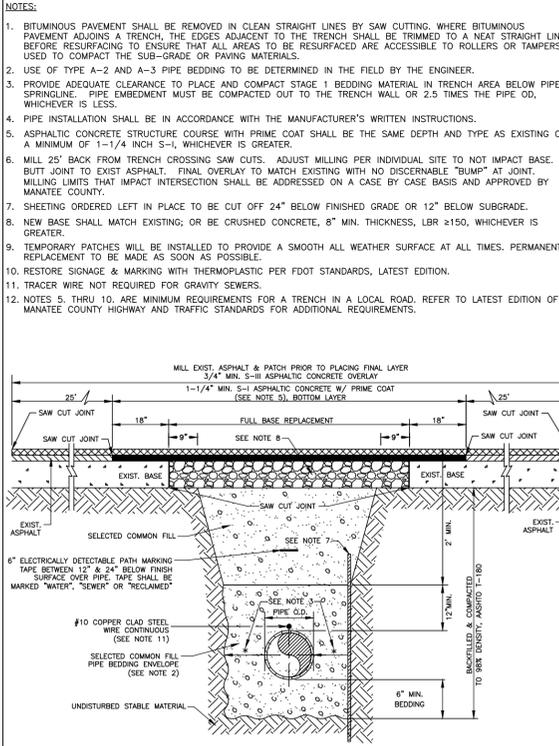


NOTE:
 1. SEE DETAIL UG-8 RESTRAINED LENGTHS FOR PVC PIPE FOR NOTES 1 THROUGH 9 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR PIPE.

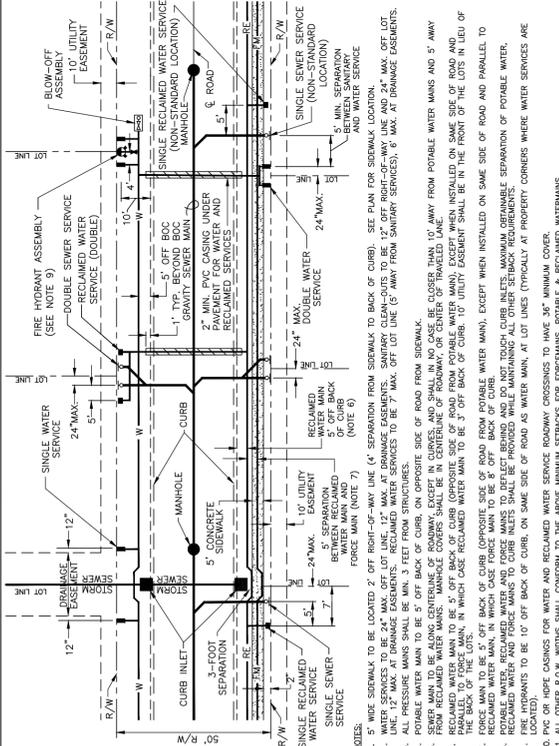
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 RESTRAINED LENGTHS FOR PIPE
 UG-10



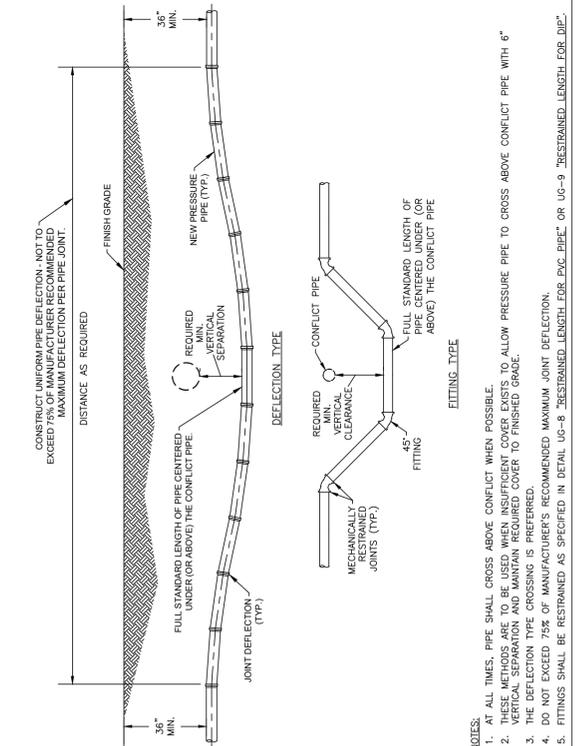
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 TRENCH WITH UNIMPROVED SURFACE TYPE A-1 PIPE BEDDING
 UG-11



MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING (CROSSING)
 UG-12



MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 UTILITY LAYOUT FOR 50' R/W
 UG-17



MANATEE COUNTY PUBLIC WORKS DEPARTMENT
 February 25, 2020
 DATE OF APPROVAL
 PRESSURE PIPE DEFLECTION AT UTILITY CROSSING
 UG-18

NO.	REVISION DESCRIPTION	BY	DATE

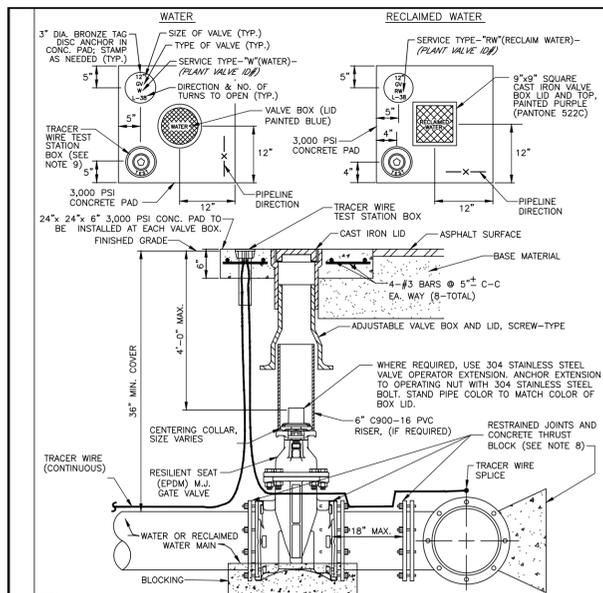
SUMMER PLACE CONDO WATER MAIN REPLACEMENT

BRADENTON, FL

DETAILS.

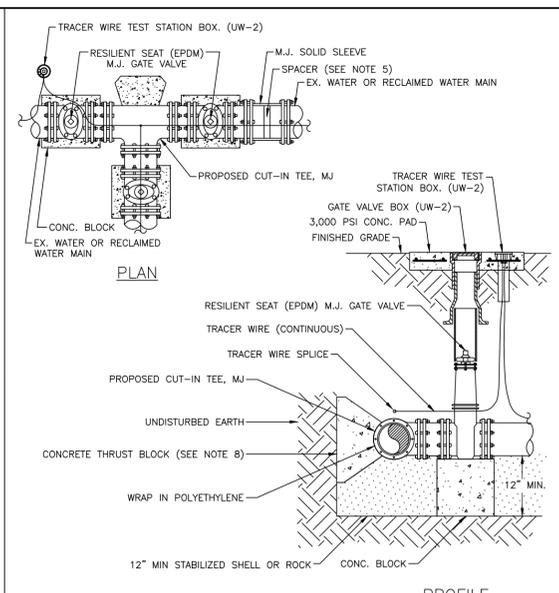


PROJECT #	404-6110070	CODY KEIME, P.E.
SURVEY #	W2200087	FLORIDA REG. NO. 92102
SEC./TWN./RGE	13 35S 17E	CODY KEIME
SCALE	N.T.S.	LICENSE
SURVEYED	ZNS 06/2022	No. 92102
DESIGNED	CAK 12/2022	7/28/23
DRAWN	CAK 6/2023	STATE OF FLORIDA
CHECKED	CAK 6/2023	REGISTERED PROFESSIONAL ENGINEER



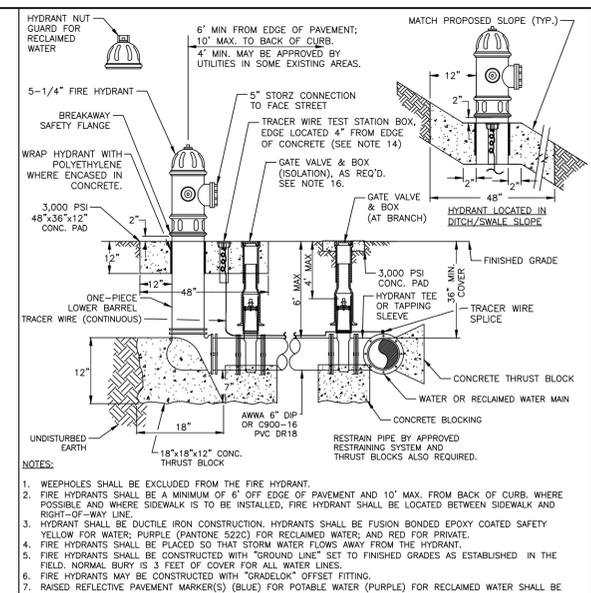
- NOTES:
1. "W" or "RW" to be impressed into the newly-poured concrete curb, along with distance in feet to the valve, if no curb.
 2. INSTALL A BLUE DISC WITH "W" OR "RW" USING A 1/4" x 1" GALVANIZED STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE DISC TO THE VALVE.
 3. ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS DETERMINED IN THE FIELD.
 4. VALVES SHALL NOT BE PLACED IN HANDICAPPED RAMPS, CURBS, OR GUTTERS.
 5. PRECAST CONCRETE PADS SHALL NOT BE USED.
 6. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".
 7. PIPELINE DIRECTION TO BE IMPRESSED INTO NEWLY Poured CONCRETE PAD.
 8. TRACER WIRE TEST STATION BOX IS NOT REQUIRED IN VALVE BOX PAD IF THE GATE VALVE IS LOCATED WITHIN 200 FEET OF A WATER SERVICE, BLOW-OFF, BACKFLOW PREVENTER OR FIRE HYDRANT THAT HAS A TRACER WIRE BOX.
 9. TRACER WIRE TEST STATION BOX IS NOT REQUIRED IN VALVE BOX PAD IF THE GATE VALVE IS LOCATED WITHIN 200 FEET OF A WATER SERVICE, BLOW-OFF, BACKFLOW PREVENTER OR FIRE HYDRANT THAT HAS A TRACER WIRE BOX.
 10. WHERE TRUST BLOCKS ARE POSSIBLE, LOCATE TRACER WIRE TESTING STATION OUTSIDE OF TRAVEL LANE OR IN MEDIAN, CENTERED IN SEPARATE CONCRETE PAD SIMILAR TO STANDARD VALVE BOX PAD.
 11. THE BRASS TAG SHALL HAVE A PLANT VALVE OF WHICH VALVES ARE INSTALLED WITHIN THE COUNTY TREATMENT PLANT LIMITS. THE PLANT VALVE OF WHICH SHALL BE SHOWN ON THE CONSTRUCTION PLANS AND RECORD DRAWINGS.
 12. REFER TO SECTION 1.1.1 GATE VALVES IN THE PUBLIC WORKS UTILITY STANDARDS MANUAL FOR FURTHER DETAILS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		GATE VALVE, BOX, LID AND TAG	UW-2
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



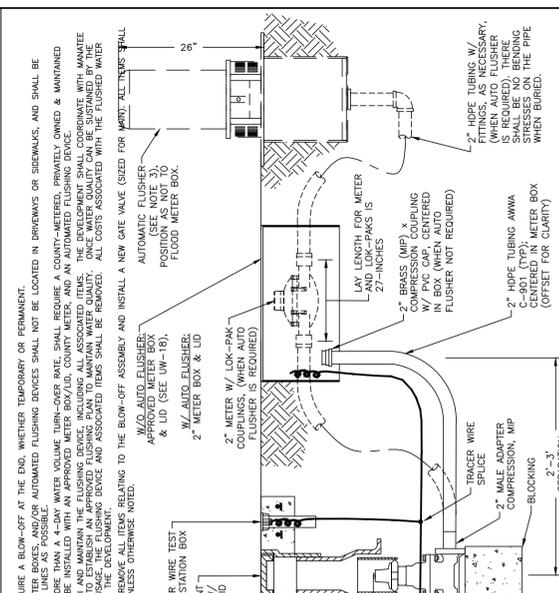
- NOTES:
1. ALL FITTINGS TO BE WRAPPED WITH 20 MIL POLYETHYLENE WRAP AT THRUST BLOCK.
 2. TRACER WIRE TEST STATION BOX IS REQUIRED AT CONNECTIONS TO EXISTING MAINS.
 3. WATER VALVES SHALL BE INSTALLED ON ALL SIDES OF TEES AND CROSSSES, UNLESS INLINE VALVES ON THAT LEG WITHIN 200 FEET.
 4. RESTRAINED JOINTS MUST EXTEND FROM TEE FULL LENGTH SPECIFIED FOR VALVES.
 5. SPACER IS REQUIRED IF A GAP EXISTS. SPACER NOT TO EXCEED OVER 30% OF SLEEVE WIDTH.
 6. IN ASBESTOS CONCRETE PIPE (AC) APPLICATIONS: TWO COUPLINGS ARE REQUIRED. ALL FITTINGS INCLUDING COUPLINGS SHALL BE SUPPORTED WITH CONCRETE BLOCKING TO PREVENT SETTLEMENT.
 7. ALL EXISTING RESTRAINING SHALL BE MODIFIED AND OR RE-INSTALLED AS NECESSARY, TO MEET THE RESTRAINT REQUIREMENT FOR VALVES.
 8. WHERE THRUST BLOCK NOT USED, RESTRAINED JOINTS MUST EXTEND FROM TEE FULL LENGTH SPECIFIED FOR TEES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		CUT-IN TEE	UW-4
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



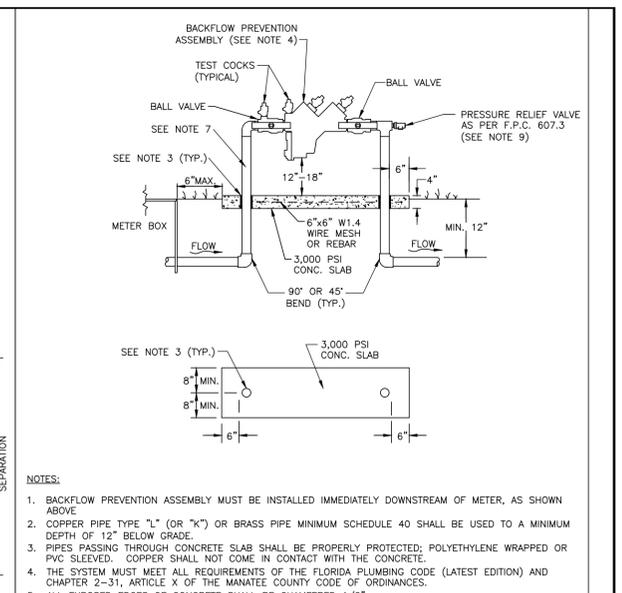
- NOTES:
1. WEEPHOLES SHALL BE EXCLUDED FROM THE FIRE HYDRANT.
 2. FIRE HYDRANTS SHALL BE A MINIMUM OF 6' OFF EDGE OF PAVEMENT AND 10' MAX. FROM BACK OF CURB, WHERE POSSIBLE AND WHERE SIDEWALK IS TO BE INSTALLED. FIRE HYDRANT SHALL BE LOCATED BETWEEN SIDEWALK AND RIGHT-OF-WAY LINE.
 3. HYDRANT SHALL BE DUCTILE IRON CONSTRUCTION. HYDRANTS SHALL BE FUSION BONDED EPOXY COATED SAFETY YELLOW FOR WATER; PURPLE (PANTONE 522C) FOR RECLAIMED WATER; AND RED FOR PRIVATE.
 4. FIRE HYDRANTS SHALL BE PLACED SO THAT STORM WATER FLOWS AWAY FROM THE HYDRANT.
 5. FIRE HYDRANTS SHALL BE CONSTRUCTED WITH "GROUND LINE" SET TO FINISHED GRADES AS ESTABLISHED IN THE FIELD. NORMAL BURY IS 3 FEET OF COVER FOR ALL WATER LINES.
 6. FIRE HYDRANTS MAY BE CONSTRUCTED WITH "GRADELOK" OFFSET FITTING.
 7. RAISED REFLECTIVE PAVEMENT MARKERS (BLUE) FOR POTABLE WATER (PURPLE) FOR RECLAIMED WATER SHALL BE INSTALLED ON THE PAVEMENT DIRECTLY ACROSS FROM THE HYDRANT IN ACCORDANCE WITH THE FDOT TRAFFIC ENGINEERING MANUAL, CHAPTER 4.3 OR MOST CURRENT ADDITION.
 8. ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 1/2" CHAMFER.
 9. FIRE HYDRANT VALVE SHALL BE FASTENED DIRECTLY TO TEE.
 10. IN-LINE VALVES SHOULD BE LOCATED AT HYDRANT TEES.
 11. HYDRANTS SHALL BE LOCATED ON SAME SIDE OF ROAD AS WATER OR RECLAIMED MAIN.
 12. THERE MUST BE A CLEARANCE OF 7 1/2 FEET FROM FRONT AND BOTH SIDES, AND FOUR FEET TO THE REAR OF THE HYDRANT, TO ABOVE GRADE OBSTRUCTIONS INCLUDING POSTS, FENCES, TREES, ETC., PER THE FLORIDA FIRE PREVENTION CODE.
 13. SEE STANDARD DETAIL UW-2 GATE VALVE, BOX, LID AND TAG.
 14. SHOULD THE FIRE HYDRANT CONCRETE PAD OVERLAP A SIDEWALK, THE TRACER WIRE TEST STATION BOX SHALL NOT BE LOCATED WITHIN THE SIDEWALK.
 15. IF A HYDRANT IS LOCATED ON THE SLOPE OF A DITCH OR SWALE, THE CONCRETE PAD SHALL CONFORM TO THE FINISH GRADE/SLOPE. THE CONCRETE PAD SHALL BE LEVEL 2-INCHES BEHIND & IN FRONT OF THE HYDRANT.
 16. AT THE DISCRETION OF THE COUNTY AN ADDITIONAL ISOLATION GATE VALVE SHALL BE ADDED, WHEN A PHYSICAL BARRIER IS PRESENT, (I.E. ROADWAY, FENCE, WALL, BERM ETC.) BETWEEN THE BRANCH GATE VALVE AND THE HYDRANT.
 17. SEE SECTION 1.1.1 HYDRANTS IN THE PUBLIC WORKS UTILITY STANDARDS MANUAL FOR FURTHER DETAILS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		FIRE HYDRANT ASSEMBLY	UW-5
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



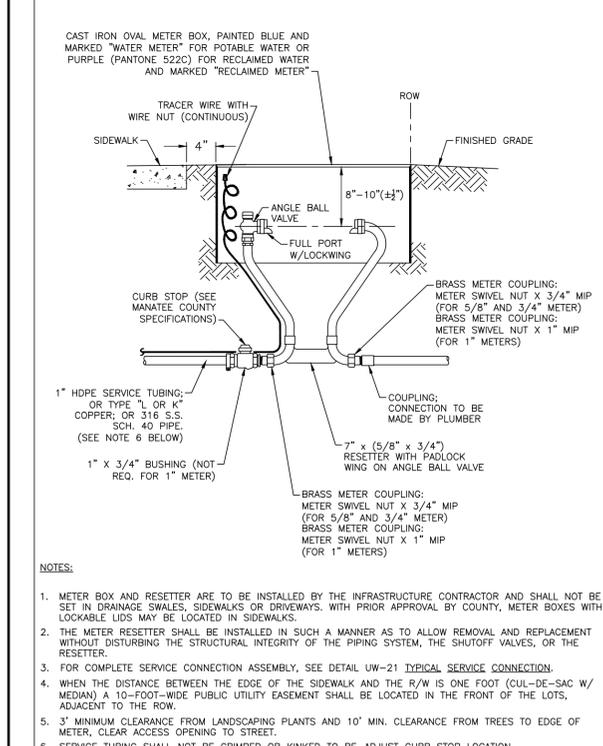
- NOTES:
1. ALL DEAD-END WATER MAINS REQUIRE A BLOW-OFF AT THE END, WHETHER TEMPORARY OR PERMANENT.
 2. BLOW-OFF VALVE ASSEMBLIES, METER BOXES, AND/OR AUTOMATED FLUSHING DEVICES SHALL NOT BE LOCATED IN DRIVEWAYS OR SIDEWALKS, AND SHALL BE LOCATED IN THE PUBLIC RIGHT-OF-WAY.
 3. AUTOMATED FLUSHING DEVICES SHALL BE INSTALLED WITH AN APPROVED METER BOX/LID, COUNTY METER, AND AN AUTOMATED FLUSHING DEVICE.
 4. THE DEVELOPMENT SHALL FURNISH AND MAINTAIN THE FLUSHING DEVICE, INCLUDING ALL ASSOCIATED ITEMS. THE DEVELOPMENT SHALL COORDINATE WITH MANATEE COUNTY TO OBTAIN THE NECESSARY PERMITS AND APPROVALS FOR THE FLUSHING DEVICE AND ASSOCIATED ITEMS. ALL COSTS ASSOCIATED WITH THE FLUSHING DEVICE SHALL BE THE RESPONSIBILITY OF THE DEVELOPER.
 5. WHEN RETURNING TO A WATER MAIN, BOWNS SHALL BE RETURNED TO THE COUNTY, UNLESS OTHERWISE NOTED.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		2\"/>	
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



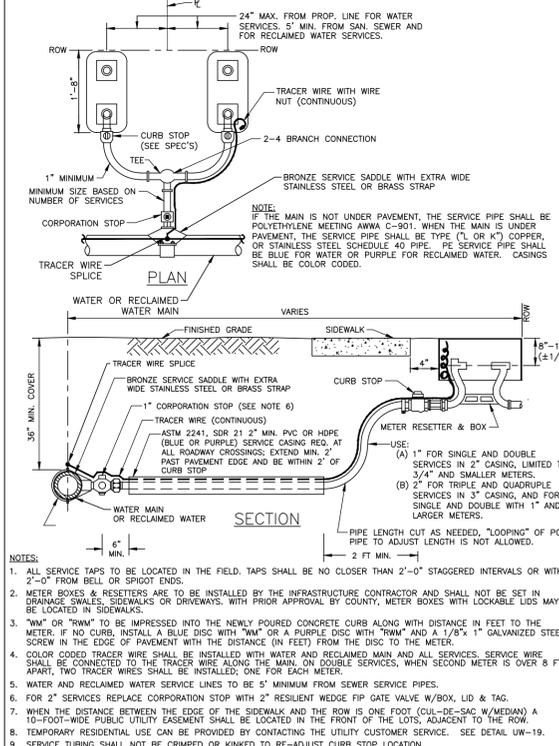
- NOTES:
1. BACKFLOW PREVENTION ASSEMBLY MUST BE INSTALLED IMMEDIATELY DOWNSTREAM OF METER, AS SHOWN ABOVE.
 2. COPPER PIPE TYPE "L" (OR "K") OR BRASS PIPE MINIMUM SCHEDULE 40 SHALL BE USED TO A MINIMUM DEPTH OF 12\"/>

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		3/4\"/>	
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



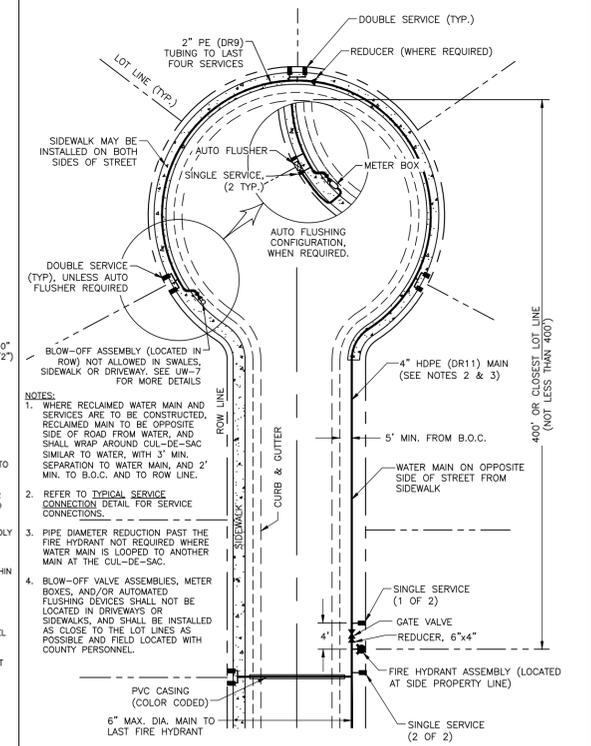
- NOTES:
1. METER BOX AND RESETTER ARE TO BE INSTALLED BY THE INFRASTRUCTURE CONTRACTOR AND SHALL NOT BE SET IN DRAINAGE SWALES, SIDEWALKS OR DRIVEWAYS, WITH PRIOR APPROVAL BY COUNTY. METER BOXES WITH LOCKABLE LIDS MAY BE LOCATED IN SIDEWALKS.
 2. THE METER RESETTER SHALL BE INSTALLED IN SUCH A MANNER AS TO ALLOW REMOVAL AND REPLACEMENT WITHOUT DISTURBING THE STRUCTURAL INTEGRITY OF THE PIPING SYSTEM, THE SHUTOFF VALVES, OR THE RESETTER.
 3. FOR COMPLETE SERVICE CONNECTION ASSEMBLY, SEE DETAIL UW-21 TYPICAL SERVICE CONNECTION.
 4. WHEN THE DISTANCE BETWEEN THE EDGE OF THE SIDEWALK AND THE R/W IS ONE FOOT (CUL-DE-SAC W/ MEDIAN) A 10-FOOT-WIDE PUBLIC UTILITY EASEMENT SHALL BE LOCATED IN THE FRONT OF THE LOTS, ADJACENT TO THE ROW.
 5. 3\"/>

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		METER BOX ASSEMBLY FOR 5/8\"/>	
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



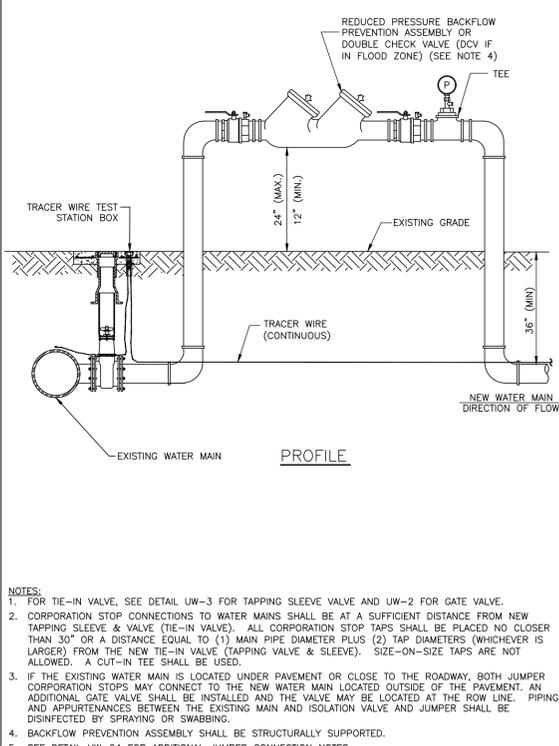
- NOTES:
1. ALL SERVICE TAPS TO BE LOCATED IN THE FIELD. TAPS SHALL BE NO CLOSER THAN 2'-0\"/>

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TYPICAL SERVICE CONNECTION	UW-21
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



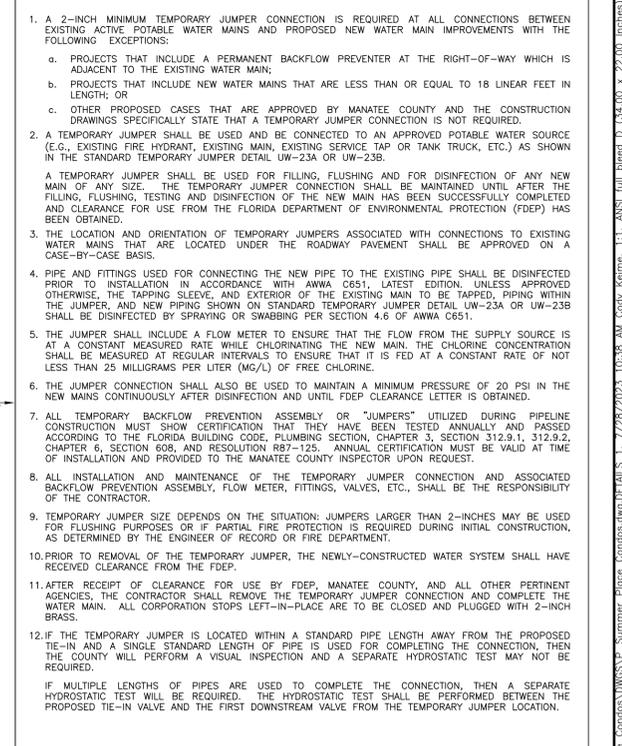
- NOTES:
1. WHERE RECLAIMED WATER MAIN AND SERVICES ARE TO BE CONSTRUCTED, RECLAIMED MAIN TO BE OPPOSITE SIDE OF ROAD FROM WATER, AND SHALL WRAP AROUND CUL-DE-SAC SIMILAR TO WATER, WITH 3\"/>

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		CUL-DE-SAC MAINS	UW-22
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



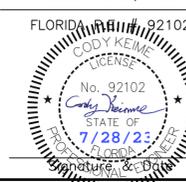
- NOTES:
1. FOR TIE-IN VALVE, SEE DETAIL UW-3 FOR TAPPING SLEEVE VALVE AND UW-2 FOR GATE VALVE.
 2. CORPORATION STOP CONNECTIONS TO WATER MAINS SHALL BE AT A SUFFICIENT DISTANCE FROM NEW TAPPING SLEEVE & VALVE (TIE-IN VALVE). ALL CORPORATION STOP TAPS SHALL BE PLACED NO CLOSER THAN 30\"/>

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION - NO HYDRANT AVAILABLE	UW-23B
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



- NOTES:
1. A 2-INCH MINIMUM TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING POTABLE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS WITH THE FOLLOWING EXCEPTIONS:
 - a. PROJECTS THAT INCLUDE A PERMANENT BACKFLOW PREVENTER AT THE RIGHT-OF-WAY WHICH IS ADJACENT TO THE EXISTING WATER MAIN;
 - b. PROJECTS THAT INCLUDE NEW WATER MAINS THAT ARE LESS THAN OR EQUAL TO 18 LINEAR FEET IN LENGTH; OR
 - c. OTHER PROPOSED CASES THAT ARE APPROVED BY MANATEE COUNTY AND THE CONSTRUCTION DRAWINGS SPECIFICALLY STATE THAT A TEMPORARY JUMPER CONNECTION IS NOT REQUIRED.
 2. A TEMPORARY JUMPER SHALL BE USED AND BE CONNECTED TO AN APPROVED POTABLE WATER SOURCE (E.G., EXISTING FIRE HYDRANT, EXISTING MAIN, EXISTING SERVICE TAP OR TANK TRUCK, ETC.) AS SHOWN IN THE STANDARD TEMPORARY JUMPER DETAIL UW-23A OR UW-23B.
 3. A TEMPORARY JUMPER SHALL BE USED FOR FILLING, FLUSHING AND FOR DISINFECTION OF ANY NEW MAIN OF ANY SIZE. THE TEMPORARY JUMPER CONNECTION SHALL BE MAINTAINED UNTIL AFTER THE FILLING, FLUSHING, TESTING AND DISINFECTION OF THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) HAS BEEN OBTAINED.
 4. THE LOCATION AND ORIENTATION OF TEMPORARY JUMPERS ASSOCIATED WITH CONNECTIONS TO EXISTING WATER MAINS THAT ARE LOCATED UNDER THE ROADWAY PAVEMENT SHALL BE APPROVED ON A CASE-BY-CASE BASIS.
 5. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH ANWA C651 LATEST EDITION, UNLESS APPROVED OTHERWISE, THE TAPPING SLEEVE, AND EXTERIOR OF THE EXISTING MAIN TO BE TAPPED, PIPING WITHIN THE JUMPER, AND NEW PIPING SHOWN ON STANDARD TEMPORARY JUMPER DETAIL UW-23A OR UW-23B SHALL BE DISINFECTED BY SPRAYING OR SWABING PER SECTION 4.6 OF ANWA C651.
 6. THE JUMPER SHALL INCLUDE A FLOW METER TO ENSURE THAT THE FLOW FROM THE SUPPLY SOURCE IS AT A CONSTANT MEASURED RATE WHILE CHLORINATING THE NEW MAIN. THE CHLORINE CONCENTRATION SHALL BE MEASURED AT REGULAR INTERVALS TO ENSURE THAT IT IS FED AT A CONSTANT RATE OF NOT LESS THAN 25 MILLIGRAMS PER LITER (MG/L) OF FREE CHLORINE.
 7. THE JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI IN THE NEW MAINS CONTINUOUSLY AFTER DISINFECTION AND UNTIL CLEARANCE LETTER IS OBTAINED.
 8. ALL TEMPORARY BACKFLOW PREVENTION ASSEMBLY OR "JUMPERS" UTILIZED DURING PIPELINE CONSTRUCTION MUST SHOW CERTIFICATION THAT THEY HAVE BEEN TESTED ANNUALLY AND PASSED ACCORDING TO THE FLORIDA BUILDING CODE, PLUMBING SECTION, CHAPTER 3, SECTION 312.9.1, 312.9.2, CHAPTER 6, SECTION 608, AND RESOLUTION R87-125. ANNUAL CERTIFICATION MUST BE VALID AT TIME OF INSTALLATION AND PROVIDED TO THE MANATEE COUNTY INSPECTOR UPON REQUEST.
 9. ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACKFLOW PREVENTION ASSEMBLY, FLOW METER, FITTINGS, VALVES, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 10. TEMPORARY JUMPER SIZE DEPENDS ON THE SITUATION: JUMPERS LARGER THAN 2-INCHES MAY BE USED FOR FLUSHING PURPOSES OR IF PARTIAL FIRE PROTECTION IS REQUIRED DURING INITIAL CONSTRUCTION, AS DETERMINED BY THE ENGINEER OF RECORD OR FIRE DEPARTMENT.
 11. PRIOR TO REMOVAL OF THE TEMPORARY JUMPER, THE NEWLY-CONSTRUCTED WATER SYSTEM SHALL HAVE RECEIVED CLEARANCE FROM THE FDEP.
 12. AFTER RECEIPT OF CLEARANCE FOR USE BY FDEP, MANATEE COUNTY, AND ALL OTHER PERTINENT AGENCIES, THE CONTRACTOR SHALL REMOVE THE TEMPORARY JUMPER CONNECTION AND COMPLETE THE WATER MAIN. ALL CORPORATION STOPS LEFT-IN-PLACE ARE TO BE CLOSED AND PLUGGED WITH 2-INCH BRASS.
 13. IF THE TEMPORARY JUMPER IS LOCATED WITHIN A STANDARD PIPE LENGTH AWAY FROM THE PROPOSED TIE-IN AND A SINGLE STANDARD LENGTH OF PIPE IS USED FOR COMPLETING THE CONNECTION, THEN THE COUNTY WILL PERFORM A VISUAL INSPECTION AND A SEPARATE HYDROSTATIC TEST MAY NOT BE REQUIRED.
 14. IF MULTIPLE LENGTHS OF PIPES ARE USED TO COMPLETE THE CONNECTION, THEN A SEPARATE HYDROSTATIC TEST WILL BE REQUIRED. THE HYDROSTATIC TEST SHALL BE PERFORMED BETWEEN THE PROPOSED TIE-IN VALVE AND THE FIRST DOWNSTREAM VALVE FROM THE TEMPORARY JUMPER LOCATION.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION NOTES	UW-24
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL

NO.	REVISION DESCRIPTION	BY	DATE	SUMMER PLACE CONDO WATER MAIN REPLACEMENT				BRADENTON, FL		DETAILS	
											
PROJECT #		404-6110070		CODY KEIME, P.E.		FLORIDA REG. # 92102				BY DATE	
SURVEY #		W2200087		N.T.S.		06/2022		DESIGNED		CAK 12/2022	
SCALE		N.T.S.		DRAWN		CAK 6/2023		CHECKED		CAK 6/2023	
SURVEYED		ZNS 06/2022		SHEET		18		OF		19	

