

GENERAL

- ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: ALEJANDRO GONZALEZ, P.E. AND CAN BE REACHED AT 941.708.7450 x7338.
- SITE VISITS ARE MANDATORY FOR ALL BIDDERS.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

- 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.
- THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
- 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.
- FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.

RIGHT-OF-WAY

- ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

- ALL WATER SERVICES TO BE INSTALLED OR MODIFIED ON PRIVATE PROPERTY SHALL REQUIRE A PLUMBING PERMIT.
 - 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.
 - 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 80 PSI. CONTRACTOR SHALL COORDINATE WITH COUNTY CROSS CONNECTION CONTROL STAFF AS REQUIRED.
 - 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.
 - ALL BPA SHALL BE INSTALLED 4-5 FEET FROM THE EDGE OF DRIVEWAYS OR ANY OTHER ITEMS/FEATURES THE BPA MAY CREATE AN OBSTRUCTION.
 - VACUUM BREAKERS SHALL BE INSTALLED ON ALL EXTERNAL HOSE BIBBS.
 - 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

- 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.
- ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.
- 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.
- ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513 OF THE INFRASTRUCTURE ENGINEERING STANDARD SPECIFICATION.
- 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.
- 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.
- 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.
- 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

- 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.
- 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.
- THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
- 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.
- PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.
- THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM.
- 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.
- ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.
- ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.
- 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.
- 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.
- 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.
- 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.
- ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS.
- 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.
- 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.
- 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.
- 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.
- 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.
- FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.
- 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.
- 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.

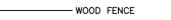
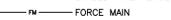
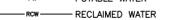
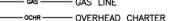
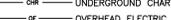
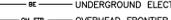
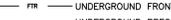
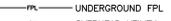
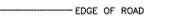
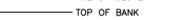
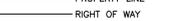
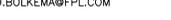
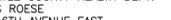
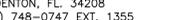
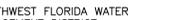
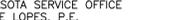
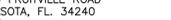
EXISTING UTILITY LOCATIONS

- 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

- 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.
- 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.
- 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.
- 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.
- MOTORIZED AND MECHANICAL EQUIPMENT SHALL BE EFFECTIVELY SHIELDED, PADDED, OR LOCATED TO MINIMIZE NOISE.
- 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.
- ACCESS TO ALL SIDE STREETS AND DRIVEWAYS MUST BE PROVIDED AND MAINTAINED DURING CONSTRUCTION.
- 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.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO WORKING NEAR THEIR EXISTING FACILITIES.
- CONSTRUCTION SEQUENCES SHALL BE COORDINATED TO PROVIDE POSITIVE DRAINAGE OF THE TRAVELWAYS AT ALL TIMES.
- 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.
- THE MAXIMUM SPACING BETWEEN WARNING DEVICES USED FOR DELINEATION BETWEEN THE TRAVELWAY(S) AND CONSTRUCTION AREA SHALL BE AS PER FDOT STANDARD INDEX 600.
- 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.

LEGEND

EXISTING		LEGEND	
CM	BENCH MARK • CONCRETE MONUMENT		BUSH
	• IRON PIPE		TREE
	• IRON ROD		OAK TREE
	Δ HUB		PALM TREE
	⊙ NAIL & DISK		PINE TREE
	ELEVATION		EDGE OF VEGETATION
	PARCEL ID NO.		CHAIN LINK FENCE
	LOT NO.		WOOD FENCE
	GUY WIRE		BARBED WIRE FENCE
	POWER POLE		FORCE MAIN
	LIGHT POLE		POTABLE WATER
	MAIL BOX		RECLAIMED WATER
	SIGN		SANITARY SEWER
	REF		STORM DRAIN
	SPRINKLER		GAS LINE
	GAS MARKER		OVERHEAD CHARTER
	BACKFLOW PREVENTER		UNDERGROUND ELECTRIC
	BLOW OFF VALVE		UNDERGROUND ELECTRIC
	FIRE HYDRANT		UNDERGROUND ELECTRIC
	WATER VALVE		UNDERGROUND FRONTIER
	AIR RELEASE VALVE		UNDERGROUND FRONTIER
	WATER METER		UNDERGROUND FRONTIER
	SANITARY SEWER MANHOLE		UNDERGROUND PRECO
	SANITARY SEWER CLEAN OUT		UNDERGROUND FFL
	SOIL BORING LOCATION		UNDERGROUND UTILITY
	TELEPHONE SERVICE BOX		RAIL ROAD TRACKS
	UTILITY BOX		EDGE OF CONCRETE
	UTILITY RISER		EDGE OF ROAD
	FLOW DIRECTION		TOE OF SLOPE
	GI		TOP OF BANK
	MITERED END SECTION		PROPERTY LINE
	STORM SEWER MANHOLE		RIGHT OF WAY

EMERGENCY CONTACTS

MANATEE COUNTY PUBLIC WORKS DEPT. UTILITY ENGINEERING JIM RENNEBERG, P.E. 1022 26TH AVENUE EAST BRADENTON, FL 34208 (941) 708-7450 EXT. 7220	FLORIDA POWER & LIGHT TODD BOLKEMA 1253 12TH AVENUE EAST PALMETTO, FL 34221 (941) 927-4262 EMERGENCY: 1-800-4-OUTAGE TODD.BOLKEMA@FPL.COM	FLORIDA GAS TRANSMISSION JOHN LUDLOW 7804 ANDERSON RD. TAMPA, FL 33634 (813) 470-5875 PHONE: (813) 466-3327 E-MAIL: CHAD.HARRELL@SUG.COM	PEACE RIVER ELECTRIC COOPERATIVE, INC. P.O. BOX 1310 WACHULA, FL 33873 KENDALL COKER (863) 767-4660 KENDALL.COKER@PRECO.COOP
TECO/PEOPLES GAS CO. ALEX MCFARLANE 8261 VICO COURT SARASOTA, FL 34240 (813) 275-3762 EMERGENCY: 1-877-832-6911	MANATEE COUNTY HEALTH DEPT. HANS ROSE 410 6TH AVENUE EAST BRADENTON, FL 34208 (941) 748-0747 EXT. 1355	FDEP, SOUTHWEST DISTRICT ED WATSON 13051 N. TELECOM PKWY TEMPLE TERRACE, FL 33637 (813) 470-5875	MANATEE COUNTY PUBLIC WORKS DEPT./TRAFFIC ENGINEERING/ ATMS 2101 47TH TERRACE EAST BRADENTON, FL 34203 VISHAL KAKKAD, P.E. (941) 749-3500 EXT. 7812 VISHAL.KAKKAD@MYMANATEE.ORG.
FRONTIER JOHN PLOTT 1701 RINGLING BLVD. SARASOTA, FL 34236 (941) 906-6707 JOHN.PLOTT@FTR.COM	MANATEE COUNTY HEALTH DEPT. STEVE LOPES, P.E. 6750 FRUITVILLE ROAD SARASOTA, FL 34240 (941) 377-3722	CHARTER COMMUNICATIONS TOM WRIGHT 5413 E. STATE ROAD 64 BRADENTON, FL 34208-5535 (941) 748-3816 EXT. 21348 TOM.WRIGHT@CHARTER.COM	CITY OF BRADENTON 1411 9TH ST. W. BRADENTON, FL 34205 JIM MCLELLAN JIM.MCLELLAN@CITYOFBRADENTON.COM PHONE: (941) 708-6300

NO.	REVISION DESCRIPTION	BY	DATE

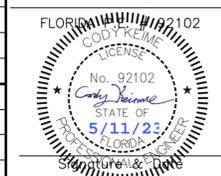
AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53

ANNA MARIA ISLAND

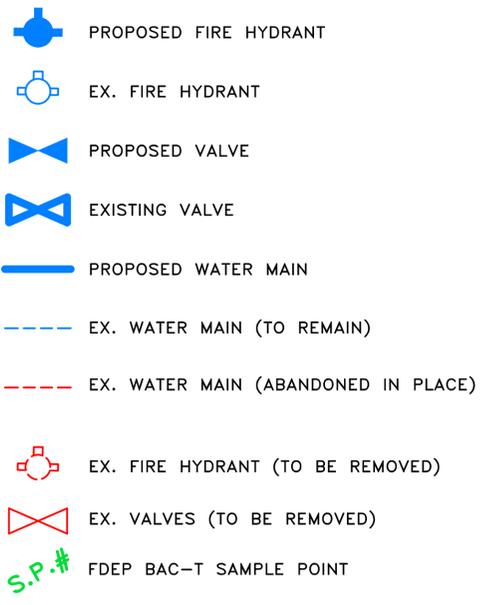
GENERAL NOTES



PROJECT #	402-6002870	CODY KEIME, P.E.
SURVEY #	21-0192	
SEC./TWN./RGE	20/34S/16E	
SCALE	N.T.S.	
SURVEYED	PCS	01/2022
DESIGNED	CAK	05/2022
DRAWN	CAK	09/2022
CHECKED	CAK	10/2022

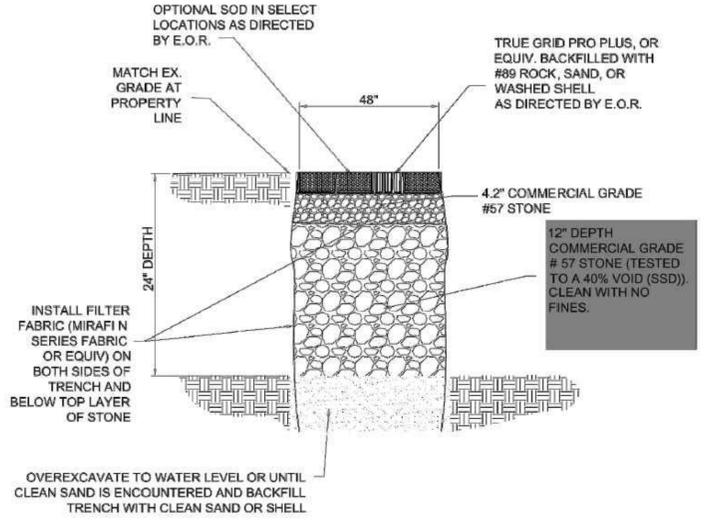
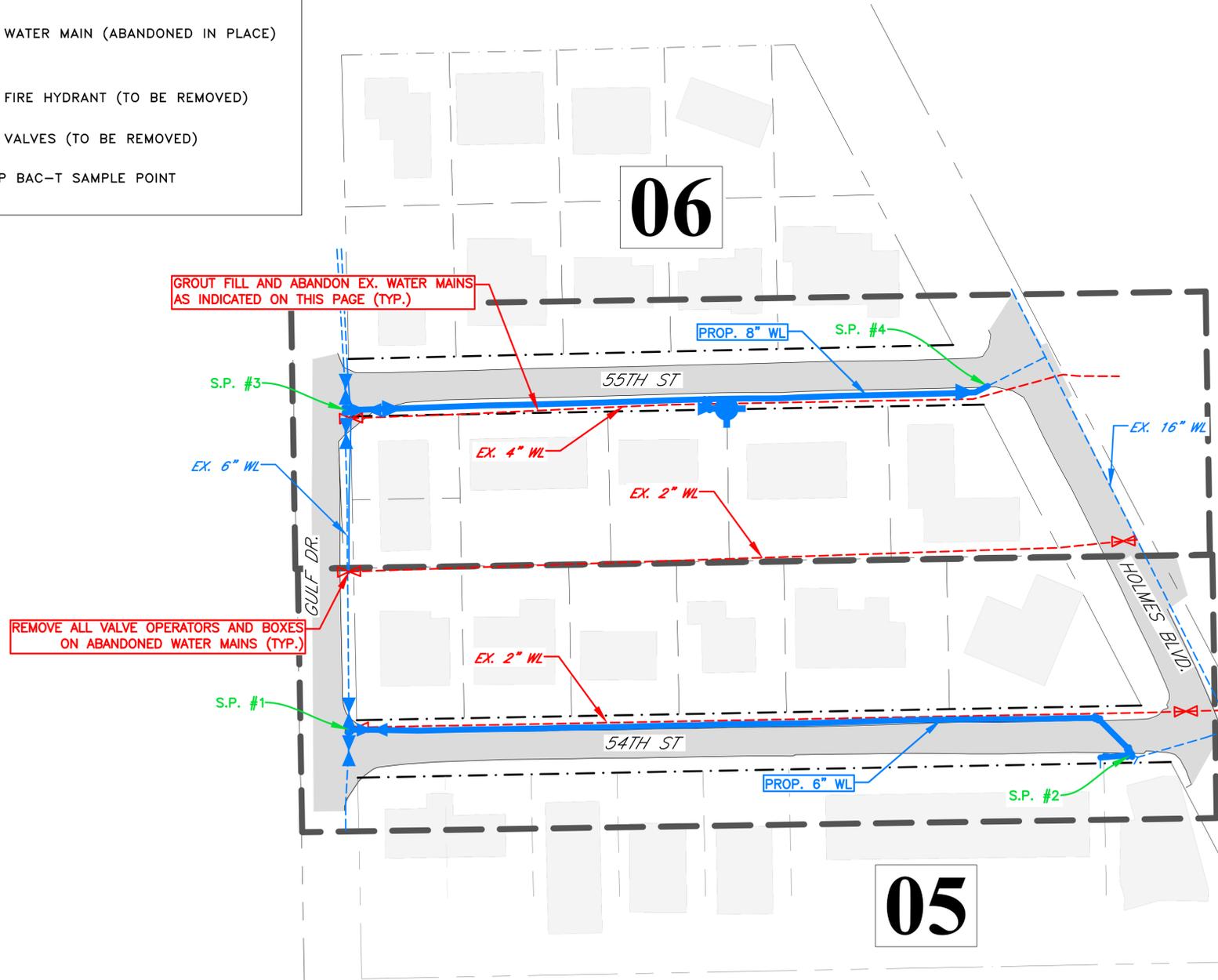
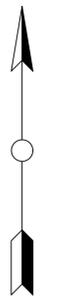


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DIAMETER OF PIPE	LINEAL FEET OF PIPE	CUBIC YARDS OF GROUT	VALVES TO BE REMOVED
2"	1100	0	4
4"	494	1.80	1
TOTAL	1594	1.80	5

- NOTES:**
1. THIS IS A GRAPHICAL/SCHEMATIC REPRESENTATION OF EXISTING AND PROPOSED UTILITIES.
 2. THE LOCATION AND DATA FOR ALL ITEMS SHOULD BE CONSIDERED APPROXIMATE.
 3. FOR PROPOSED WATER MAIN REFER TO THE CONSTRUCTION DRAWINGS.
 4. FOR CURRENT EXISTING UTILITY SYSTEM INFORMATION, REFER TO THE COUNTY PUBLIC GIS WEBSITE: <https://www.mymanatee.org/gisapps/mobile/index.html?type=utilities-public>
 5. GROUT FILL AND ABANDON ALL WATER MAINS THAT ARE 3" DIAMETER & GREATER AS INDICATED ON THIS SHEET.
 6. CUT, CAP, AND ABANDON IN PLACE ALL WATERMAIN INDICATED ON THIS SHEET.
 7. FOR WATER MAINS TO BE ABANDONED, REMOVE ALL VALVE STEMS AND VALVE BOXES.
 8. 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.
 9. HEAVY DUTY INFILTRATION TRENCH MAY BE IN PROJECT AREA, ADDITIONAL RESTORATION MAY BE REQUIRED (SEE DETAIL BELOW).



* SOD TYPE AND LOCATION SHALL BE DIRECTED BY E.O.R.
 * IN PLACES WHERE SOD IS UTILIZED THE DEPTH OF COMMERCIAL GRADE #57 SHALL BE REDLINED FROM 4.2" TO 3.0"

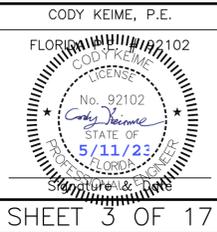
HEAVY DUTY INFILTRATION TRENCH WITH TRUE GRID OVERLAY
 NTS

NOTE: TRUE PRO PLUS COST FOR MATERIAL AND INSTALLATION IS INCLUDED AS PART OF CONTRACT VALUES ITEM 7 ON ATTACHMENT D

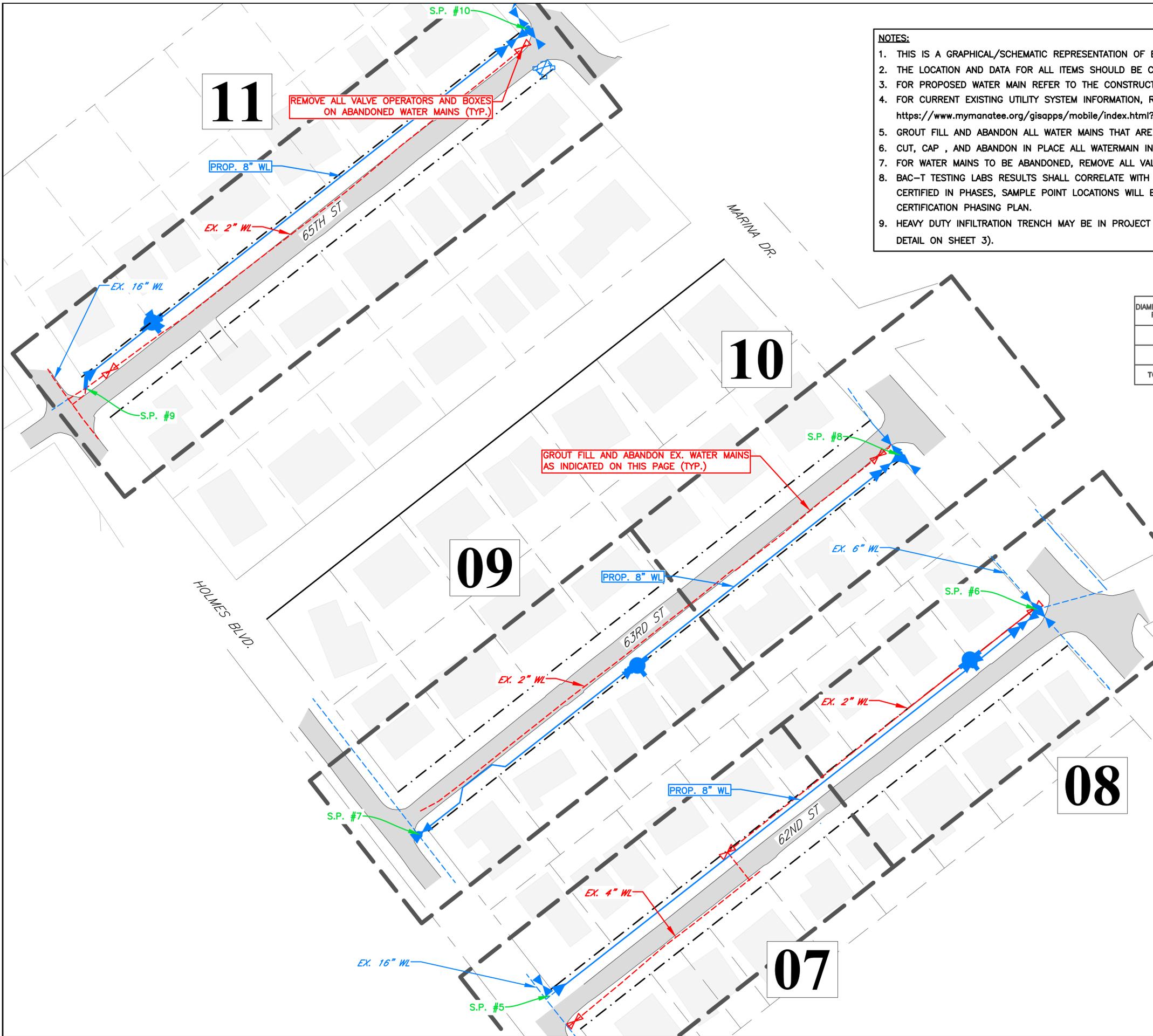
AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53 ANNA MARIA ISLAND KEY SHEET SOUTH



PROJECT #	402-6002870	CODY KEIME, P.E.	
SURVEY #	21-0192	FLORIDA PROFESSIONAL ENGINEER LICENSE No. 92102	
SEC./TWN./RGE	20/34S/16E	DATE 5/11/23	
SCALE	1" = 50'	DRAWN CAK 09/2022	
SURVEYED	PCS 01/2022	CHECKED CAK 10/2022	
DESIGNED	CAK 05/2022		
DRAWN	CAK 09/2022		
CHECKED	CAK 10/2022		



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NOTES:

1. THIS IS A GRAPHICAL/SCHEMATIC REPRESENTATION OF EXISTING AND PROPOSED UTILITIES.
2. THE LOCATION AND DATA FOR ALL ITEMS SHOULD BE CONSIDERED APPROXIMATE.
3. FOR PROPOSED WATER MAIN REFER TO THE CONSTRUCTION DRAWINGS.
4. FOR CURRENT EXISTING UTILITY SYSTEM INFORMATION, REFER TO THE COUNTY PUBLIC GIS WEBSITE:
<https://www.mymanatee.org/gisapps/mobile/index.html?type=utilities-public>
5. GROUT FILL AND ABANDON ALL WATER MAINS THAT ARE 3" DIAMETER & GREATER AS INDICATED ON THIS SHEET.
6. CUT, CAP, AND ABANDON IN PLACE ALL WATERMAIN INDICATED ON THIS SHEET.
7. FOR WATER MAINS TO BE ABANDONED, REMOVE ALL VALVE STEMS AND VALVE BOXES.
8. 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.
9. HEAVY DUTY INFILTRATION TRENCH MAY BE IN PROJECT AREA, ADDITIONAL RESTORATION MAY BE REQUIRED (SEE DETAIL ON SHEET 3).

DIAMETER OF PIPE	LINEAL FEET OF PIPE	CUBIC YARDS OF GROUT	VALVES TO BE REMOVED
2"	1752	0	4
4"	286	1.00	2
TOTAL	2038	1.00	6

- PROPOSED FIRE HYDRANT
- EX. FIRE HYDRANT
- PROPOSED VALVE
- EXISTING VALVE
- PROPOSED WATER MAIN
- EX. WATER MAIN (TO REMAIN)
- EX. WATER MAIN (ABANDONED IN PLACE)
- EX. FIRE HYDRANT (TO BE REMOVED)
- EX. VALVES (TO BE REMOVED)
- FDEP BAC-T SAMPLE POINT

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53 ANNA MARIA ISLAND KEY SHEET NORTH

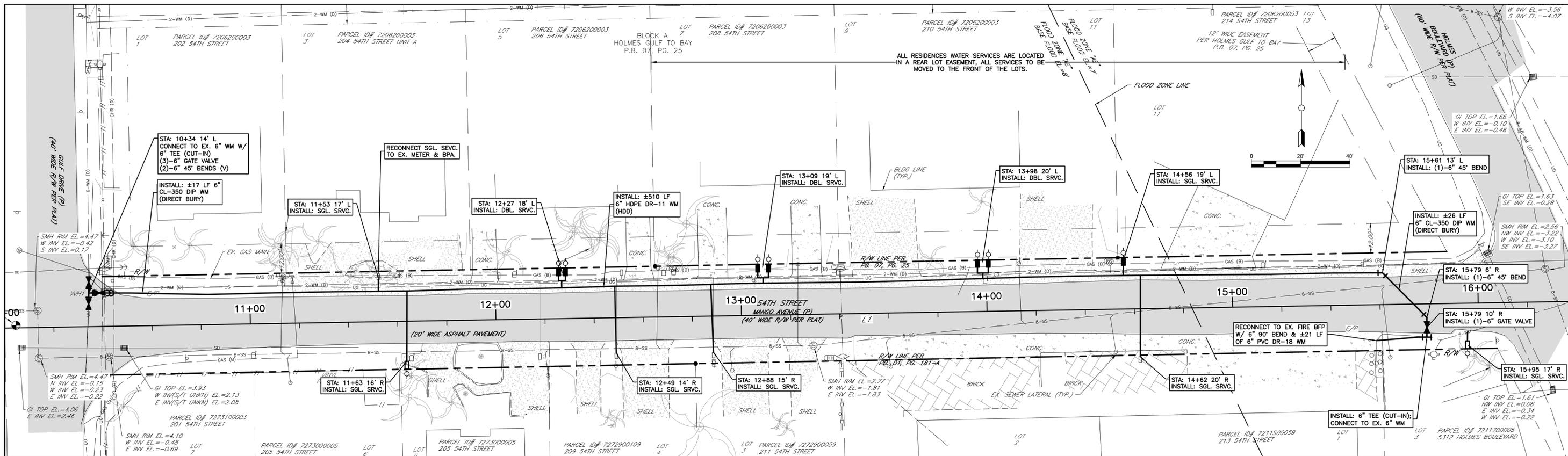
Manatee County
FLORIDA

PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

PROJECT #	402-6002870	CODY KEIME, P.E.
SURVEY #	21-0192	FLORIDA LICENSE No. 92102
SEC./TWN./RGE	20/34S/16E	CODY KEIME
SCALE	1" = 50'	STATE OF FLORIDA
SURVEYED	PCS 01/2022	DATE
DESIGNED	CAK 05/2022	BY
DRAWN	CAK 09/2022	DATE
CHECKED	CAK 10/2022	BY

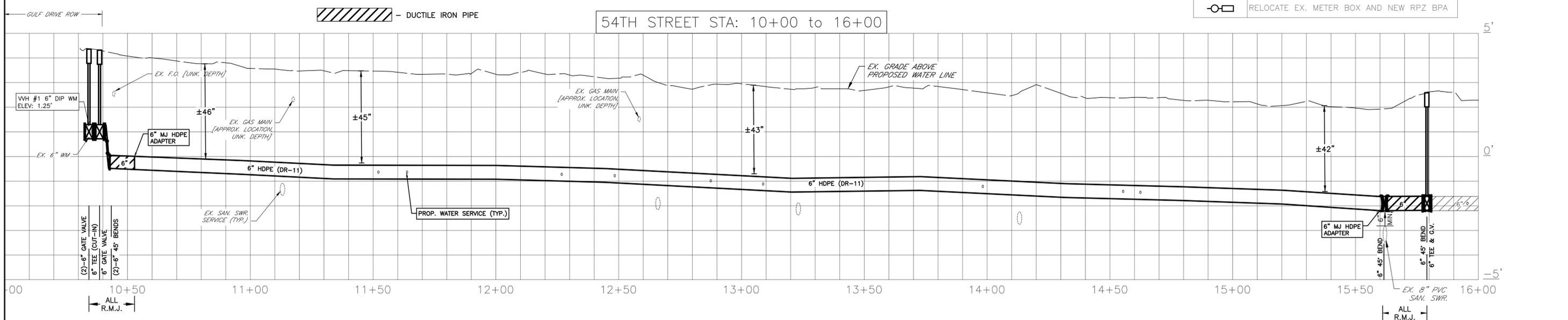
SHEET 4 OF 17

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GENERAL NOTES:
 1. SEE SHEET 7 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.

METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	INSTALL NEW METER BOX AND NEW DC BPA
	INSTALL NEW METER BOX AND NEW RPZ BPA
	RELOCATE EX. METER BOX AND NEW DC BPA
	RELOCATE EX. METER BOX AND NEW RPZ BPA



NO.	REVISION DESCRIPTION	BY	DATE

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53

ANNA MARIA ISLAND

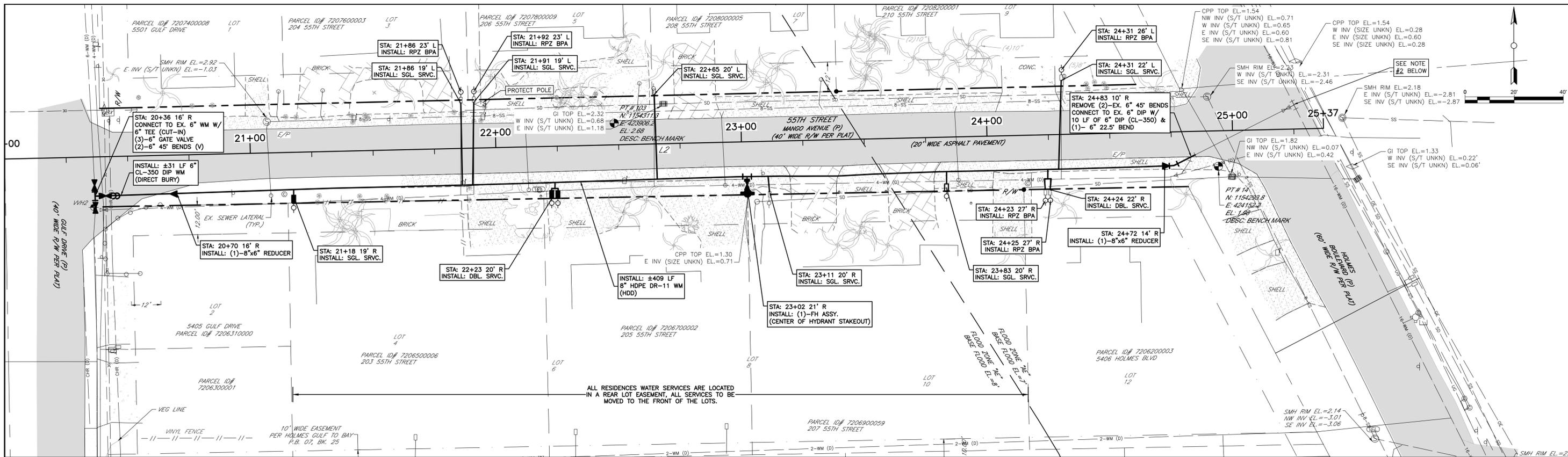
54TH ST



PROJECT #	402-6002870
SURVEY #	21-0192
SEC./TWN./RGE	20/34S/16E
SCALE	SEE PLAN
SURVEYED	PCS 01/2022
DESIGNED	CAK 05/2022
DRAWN	CAK 09/2022
CHECKED	CAK 10/2022

CODY KEIME, P.E.
 FLORIDA PROFESSIONAL ENGINEER
 No. 92102
 5/11/23
 STATE OF FLORIDA

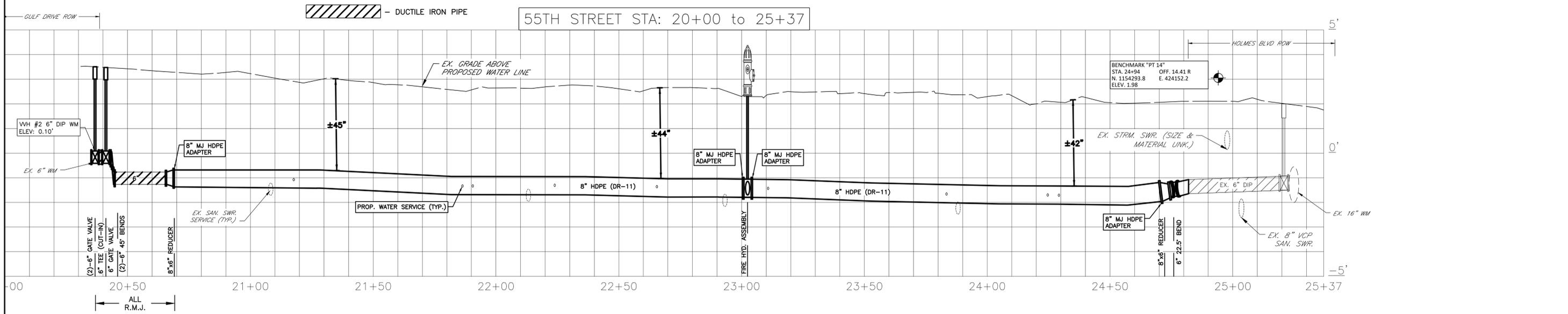
SHEET 5 OF 17



GENERAL NOTES:

- SEE SHEET 7 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.
- 6" STUB-OUT PER PROJECT #6041587 UNDER CONSTRUCTION; CONTRACTOR TO COORDINATE SCHEDULING TO ENSURE PROPOSED PIPE IS READY FOR CONNECTION.

METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	INSTALL NEW METER BOX AND NEW DC BPA
	INSTALL NEW METER BOX AND NEW RPZ BPA
	RELOCATE EX. METER BOX AND NEW DC BPA
	RELOCATE EX. METER BOX AND NEW RPZ BPA



NO.	REVISION DESCRIPTION	BY	DATE

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53
ANNA MARIA ISLAND
55TH ST

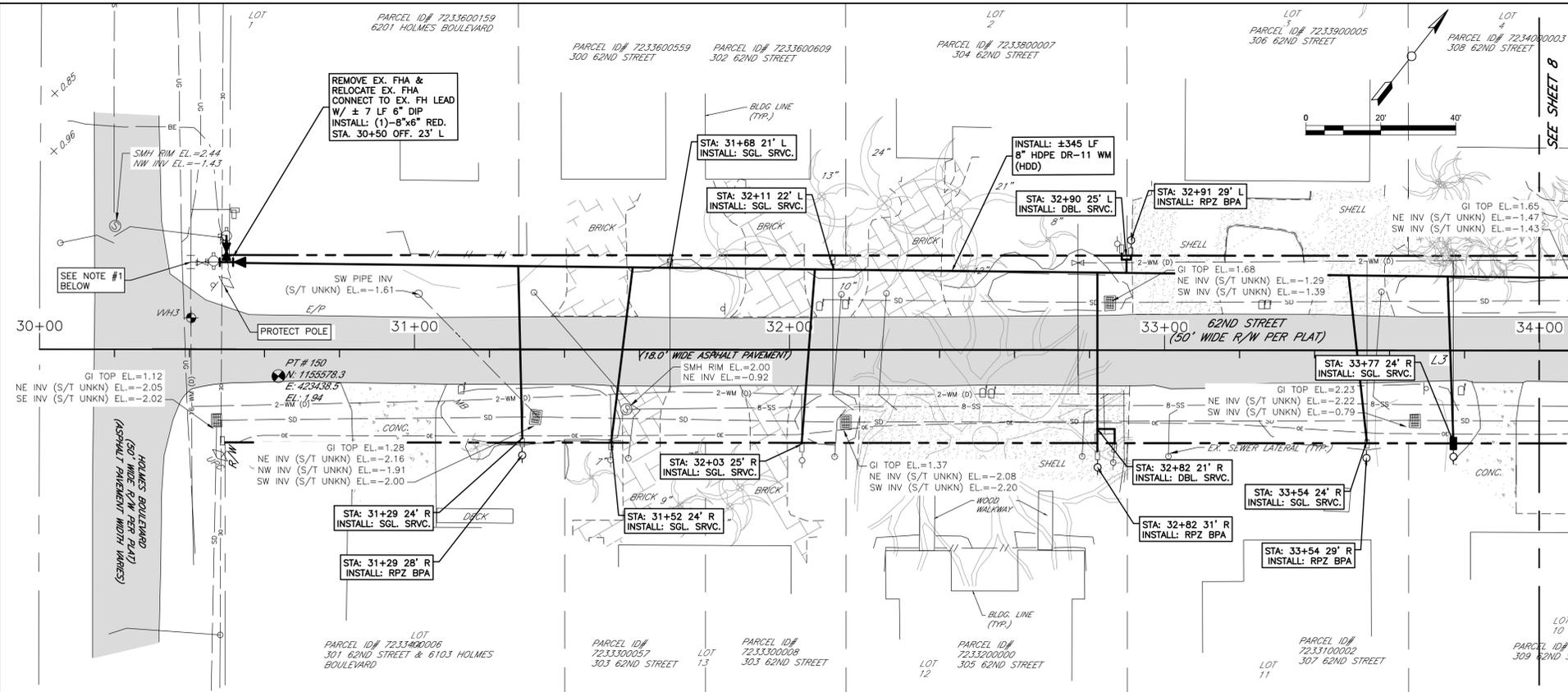


PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES
 1022 26th Avenue East, Bradenton, FL 34208

PROJECT #	402-6002870	CODY KEIME, P.E.
SURVEY #	21-0192	FLORIDA LICENSE NO. 92102
SEC./TWN./RGE	20/34S/16E	CODY KEIME
SCALE	SEE PLAN	LICENSE
SURVEYED	PCS 01/2022	No. 92102
DESIGNED	CAK 05/2022	DATE
DRAWN	CAK 09/2022	5/11/23
CHECKED	CAK 10/2022	STATE OF FLORIDA
		REGISTERED PROFESSIONAL ENGINEER

CONSTRUCTION NOTES (APPLICABLE TO ALL PLAN AND PROFILE SHEETS):

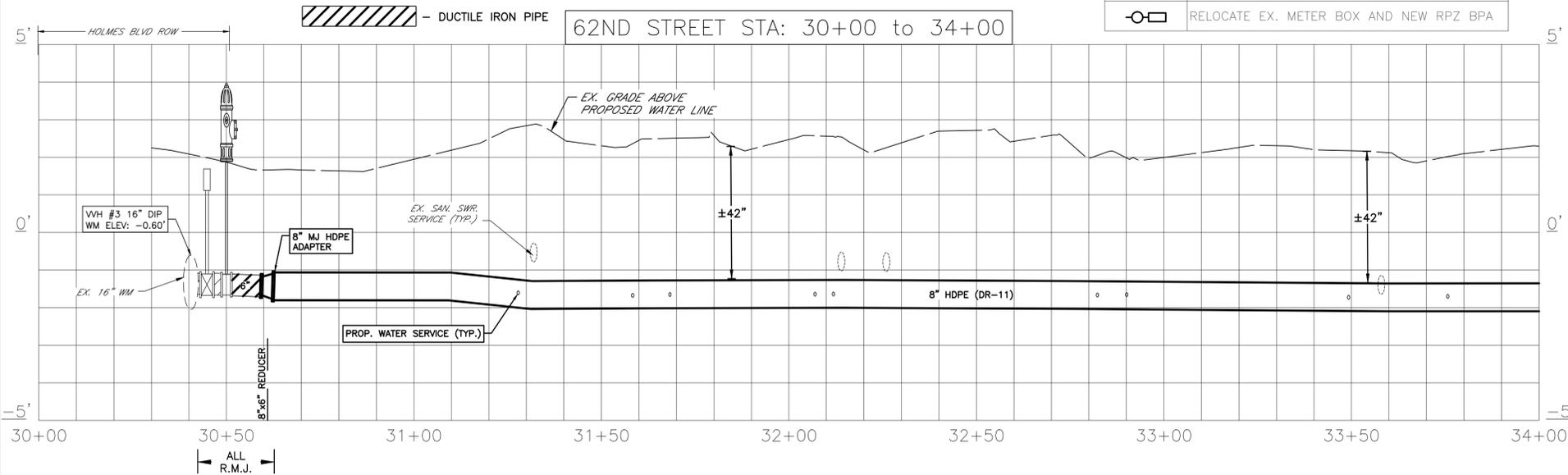
1. GAS MAINS ARE LOCATED WITH THE PROJECT AREA.
2. WATER CONNECTIONS TO THE EXISTING RESIDENCES ARE UNKNOWN. THE CONTRACTOR/PLUMBER MAY SHIFT LOCATIONS OF THE PROPOSED WATER METER TO OPPOSITE PROPERTY CORNER TO CREATE A MORE EFFICIENT ALIGNMENT TO THE EXISTING WATER SERVICE CONNECTION AT THE RESIDENCE.
3. ALL METER BOXES PROPOSED AND/OR RELOCATED SHALL BE INSTALLED PER UW-21, UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL COORDINATE ALL WATER SERVICE LINE INSTALLATIONS WITH THE UTILITY DEPARTMENT (JAMES LEE @ 941-792-8811 x5055) PRIOR TO INSTALLATION. THE CONTRACTOR SHALL INSTALL 3/4-INCH REDUCE PRESSURE BACKFLOW PREVENTION ASSEMBLIES (BPA'S) (WILKINS 975XL2, APOLLO VALVE RPL44, OR WATTS MODEL LFD07 SERIES) WITH VACUUM BREAKERS ON ALL EXTERIOR HOSE BIBBS, UNLESS OTHERWISE NOTED.
5. ALL WORK SHALL MEET MANATEE COUNTY UTILITY STANDARDS AND THE FLORIDA BUILDING CODE. WORK ON PRIVATE PROPERTY SHALL BE PERFORMED BY A LICENSED PLUMBER REGISTERED IN MANATEE COUNTY.
6. WATER SERVICE TAPS SHALL NOT BE LOCATED UNDER DRIVEWAYS.
7. INSTALLATION OF THE PROPOSED PIPE SHALL BE AS SHOWN IN THE PLAN AND PROFILE VIEWS, UNLESS REVISIONS ARE APPROVED BY THE COUNTY. THE DEPTH OF BURY OR TOP OF PIPE ELEVATION ARE TO BE AS INDICATED BY THE ELEVATION GRID, UNLESS OTHERWISE STATED ON THE PLANS BY ELEVATION CALLOUTS OR SPOT GRADES. IT IS EXPECTED THE INSTALLATION OF THE PIPE OR APPURTENANCES SHALL MATCH THE ELEVATIONS SHOWN IN THE CONSTRUCTION PLANS.
8. ALL NECESSARY DEVIATIONS BEYOND THE ACCEPTED TOLERANCES WILL NOT BE ACCEPTED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE COUNTY.
9. INSTALLATION VERTICAL AND HORIZONTAL TOLERANCES SHALL BE AS STATED IN THE SPECIFICATION DOCUMENT, SECTION 02617, 1.01.J. PIPE PLACED OUT OF TOLERANCE IS SUBJECT TO REMOVAL AND REPLACEMENT AT NO COST TO THE COUNTY.
10. CONTRACTOR SHALL EXPOSE AND SURVEY THE EXISTING TOP OF "PIPE" ELEVATION AT ALL PROPOSED UTILITY CROSSINGS. THIS INFORMATION SHALL BE PROVIDED ON THE RECORD DRAWINGS.
11. CONTRACTOR SHALL USE A TAPE MEASURE AND PROVIDE PHOTOGRAPHIC EVIDENCE THAT ALL MINIMUM REQUIRED HORIZONTAL OR VERTICAL DISTANCES HAVE BEEN PROVIDED. THESE PHOTOS SHALL BECOME PART OF THE PROJECT FILE. PHOTOS SHALL BE LABELED WITH THE BASELINE STATION NUMBERING AND UPLOADED TO A BUILDER WITHIN 1 TO 2 DAYS OF THE CROSSING INSTALLATIONS. THESE REQUIREMENTS SHALL APPLY TO ALL CROSSINGS. THESE PHOTOS SHALL BE USED TO SUPPORT THE AS-BUILT RECORD INFORMATION.
12. ALL EXISTING, UNDAMAGED, ROME 1910 CAST IRON METER BOXES MAY BE REUSED. REPLACE ALL OTHERS WITH CURRENT STANDARD.
13. CONTRACTOR SHALL NOT USE LEVERAGE OR MECHANICAL MEANS TO ALIGN THE PIPE AND/OR FITTINGS FOR ATTACHMENT. THE PIPE SHALL NOT BE "SPRING-LOADED".
14. ALL DISTURBED EX. DRAINAGE DITCHES/SWALES SHALL BE RE-GRADED TO ORIGINAL CONDITION TO PROVIDE POSITIVE DRAINAGE.
15. ALL COST TO RESTORE PROPERTY IN THE ROW DURING PIPE INSTALLATION SHALL BE INCLUDED IN THE COST OF THE PIPE BID ITEM, IF NOT SPECIFICALLY ADDRESSED BY OTHER BID ITEMS.
16. THERE SHALL BE 3-FOOT MINIMUM HORIZONTAL SEPARATION BETWEEN THE PROPOSED WATER MAIN AND EXISTING/PROPOSED STRUCTURES.
17. ANY PROPOSED AIR RELEASE VALVES (ARV) SHALL BE INSTALLED AFTER THE FIRST DRAFT OF THE RECORD DRAWINGS ARE REVIEWED TO ENSURE THE ARVS ARE INSTALLED AT THE ACTUAL HIGH POINTS OF THE NEW INSTALLED MAINS.
18. LOCATION OF SEWER SERVICE LATERALS ARE APPROXIMATE. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL SEWER SERVICE LATERAL LOCATIONS BOTH HORIZONTALLY AND VERTICALLY ALONG THE PROPOSED WATER MAIN ALIGNMENT AND MARK THEIR LOCATION (HORIZ. & VERT.) ON THE PLANS AND NOTIFY THE COUNTY OF ANY CONFLICTS WITH THE PLAN ELEVATIONS IMMEDIATELY. 6-INCH MIN. VERTICAL CLEARANCE IS REQUIRED FROM THE WATER MAIN. THE REDLINE DRAWINGS SHALL BE SUBMITTED TO THE COUNTY FOR RECORD. ALL SEWER SERVICE LATERALS SHALL BE REFLECTED IN THE RECORD DRAWINGS OF THE PROJECT. THE SEWER SERVICE LINES ILLUSTRATED IN THE PROFILES ARE DRAWN AT THE ELEVATION OF THE SEWER MAIN, THE ELEVATION THAT THEY CROSS THE PROPOSED WATER MAIN IS UNKNOWN.
19. THE VERTICAL ALIGNMENT OF THE WATER MAIN MAY BE SLIGHTLY VARIED BY ALLOWABLE JOINT DEFLECTIONS BASED ON THE PIPE MANUFACTURER'S RECOMMENDATIONS. FITTINGS SHALL NOT BE USED TO DEFLECT AROUND THE SEWER LATERALS.
20. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS BOTH HORIZONTALLY AND VERTICALLY ALONG THE PROPOSED WATER MAIN ALIGNMENT AND MARK THEIR LOCATION (HORIZ. & VERT.) ON THE PLANS AND NOTIFY THE COUNTY OF ANY CONFLICTS WITH THE PLAN ELEVATIONS IMMEDIATELY. 6-INCH MIN. VERTICAL CLEARANCE IS REQUIRED FROM THE WATER MAIN. THE REDLINE DRAWINGS SHALL BE SUBMITTED TO THE COUNTY FOR RECORD. ALL EXISTING UTILITIES SHALL BE REFLECTED IN THE RECORD DRAWINGS OF THE PROJECT.
21. THE VERTICAL ALIGNMENT OF THE WATER MAIN MAY BE SLIGHTLY VARIED BY ALLOWABLE JOINT DEFLECTIONS BASED ON THE PIPE MANUFACTURER'S RECOMMENDATIONS. FITTINGS SHALL NOT BE USED TO DEFLECT AROUND THE EXISTING UTILITIES. IF A CONFLICT CANNOT BE AVOIDED BY UTILIZING PIPE JOINT DEFLECTIONS, THEN THE EXISTING UTILITIES SHALL BE RELOCATED TO ALLOW CLEARANCE FOR THE WATER MAIN TO PASS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE EXISTING UTILITY PRIOR TO RELOCATION.
22. HEAVY DUTY INFILTRATION TRENCH MAY BE IN PROJECT AREA, ADDITIONAL RESTORATION MAY BE REQUIRED (SEE DETAIL ON SHEET 3).



GENERAL NOTE:

1. 6" FIRE HYDRANT LEAD PER PROJECT #6041587 UNDER CONSTRUCTION; CONTRACTOR TO COORDINATE SCHEDULING TO ENSURE PROPOSED PIPE IS READY FOR CONNECTION.

METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	INSTALL NEW METER BOX AND NEW DC BPA
	INSTALL NEW METER BOX AND NEW RPZ BPA
	RELOCATE EX. METER BOX AND NEW DC BPA
	RELOCATE EX. METER BOX AND NEW RPZ BPA



NO.	REVISION DESCRIPTION	BY	DATE

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53

ANNA MARIA ISLAND

62ND ST STA. 30+00 TO 34+00



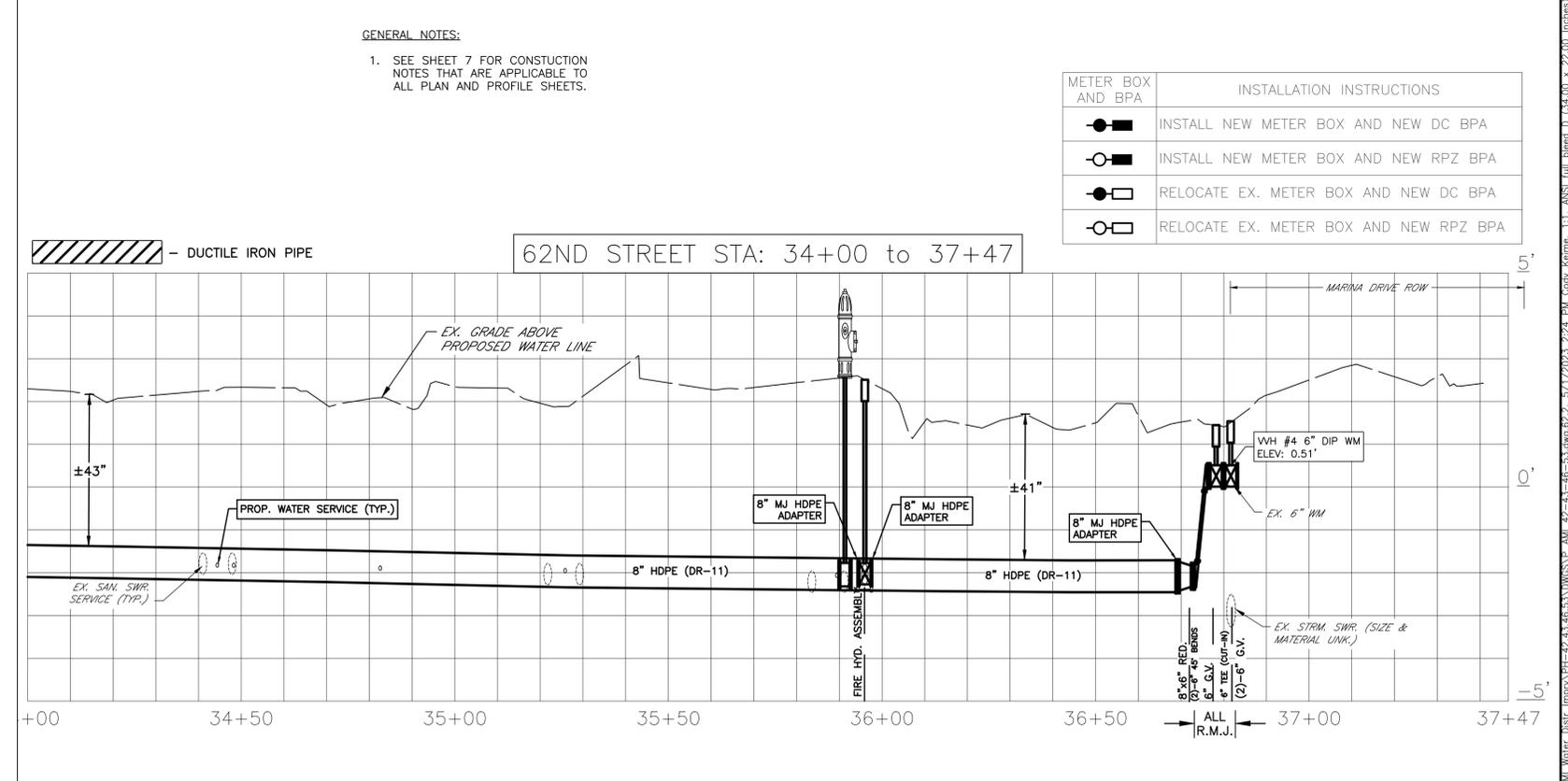
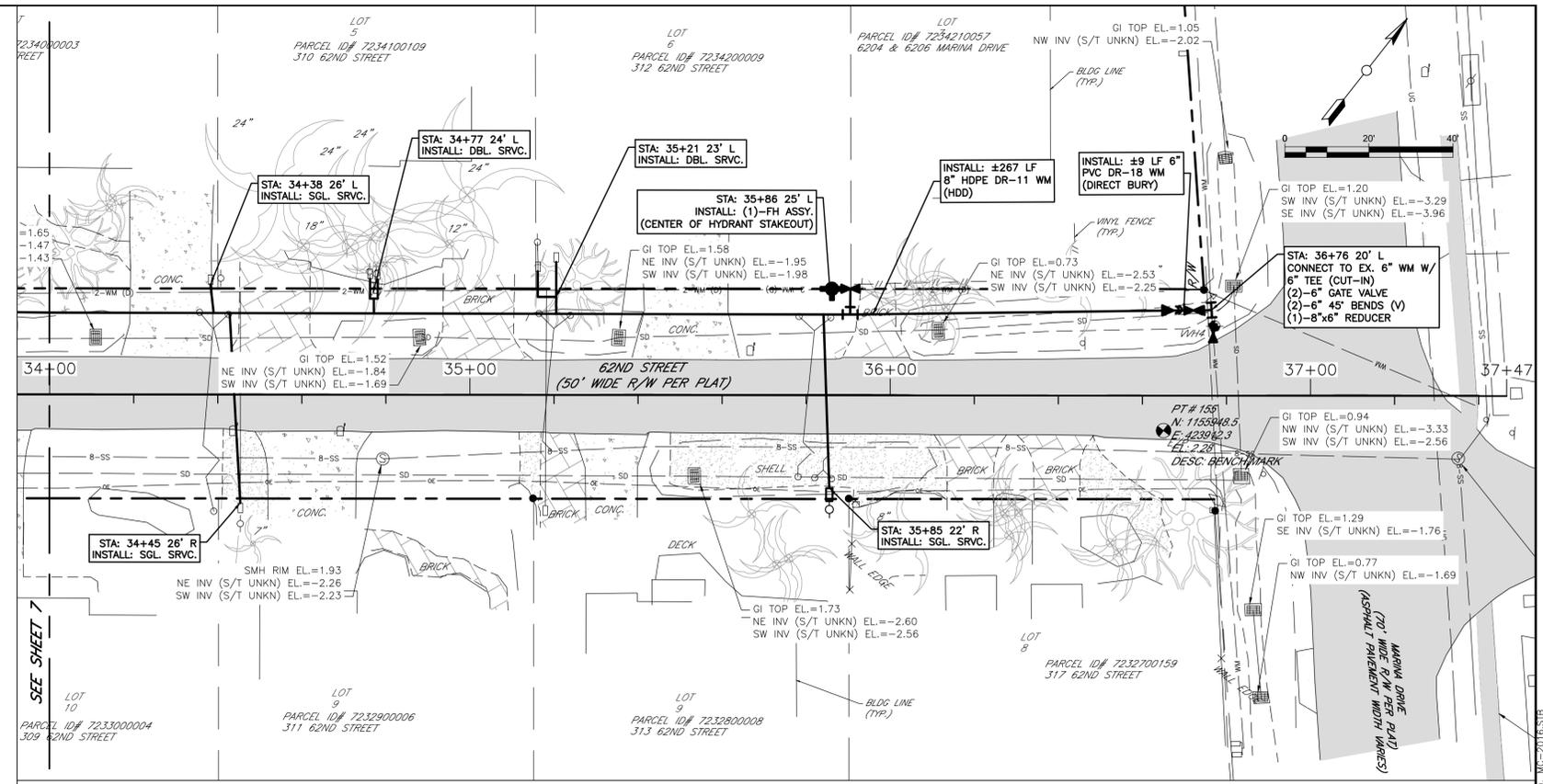
PROJECT #	402-6002870
SURVEY #	21-0192
SEC./TWN./RGE	20/34S/16E
SCALE	SEE PLAN
SURVEYED	PCS 01/2022
DESIGNED	CAK 05/2022
DRAWN	CAK 09/2022
CHECKED	CAK 10/2022

CODY KEIME, P.E.

FLORIDA LICENSE NO. 92102

Cody Keime
STATE OF FLORIDA
5/11/23

SHEET 7 OF 17



NO.	REVISION DESCRIPTION	BY	DATE

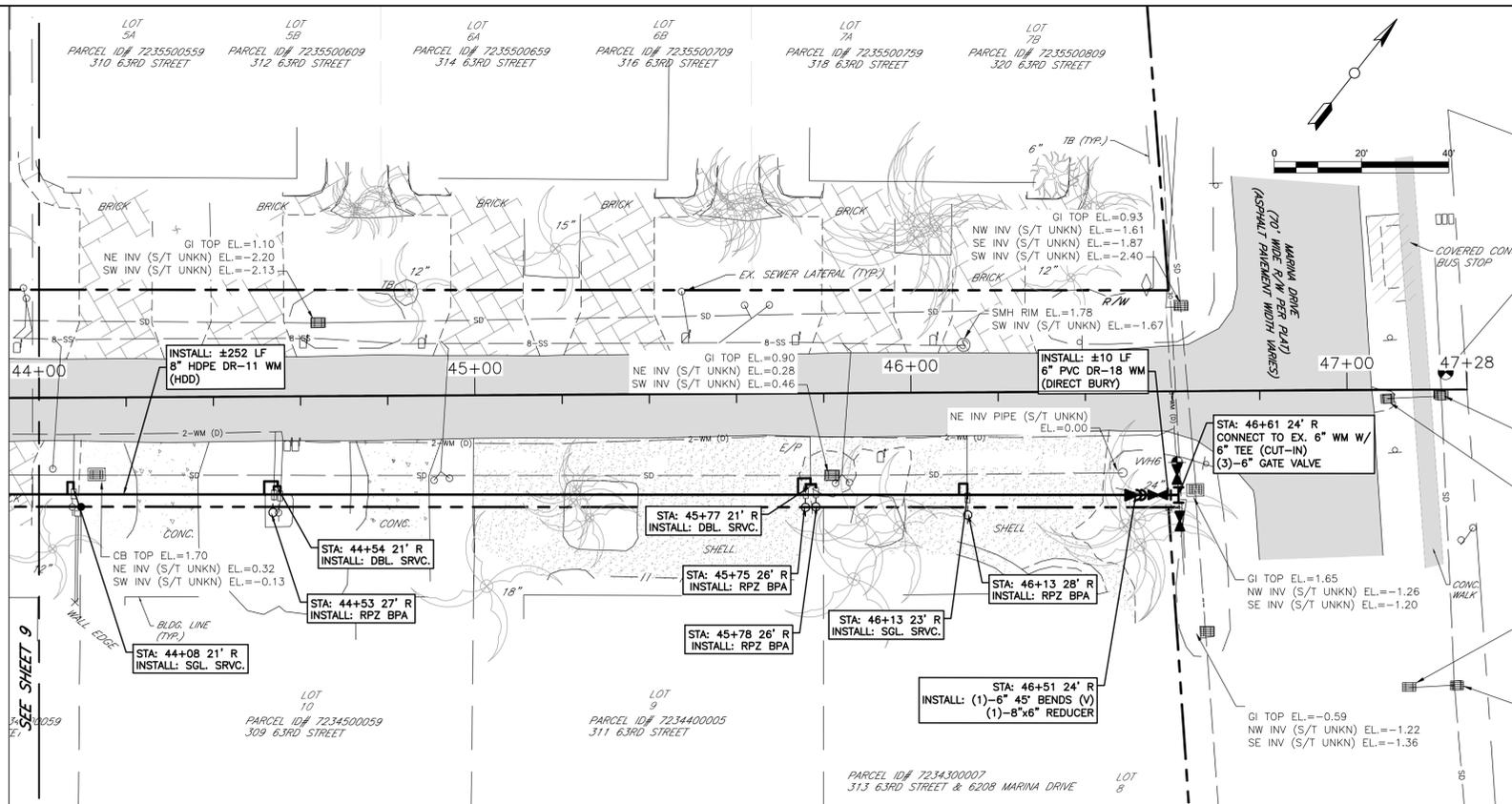
AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53
ANNA MARIA ISLAND
62ND ST STA. 34+00 TO 37+47



PROJECT #	402-6002870
SURVEY #	21-0192
SEC./TWN./RGE	20/34S/16E
SCALE	SEE PLAN
SURVEYED	PCS 01/2022
DESIGNED	CAK 05/2022
DRAWN	CAK 09/2022
CHECKED	CAK 10/2022

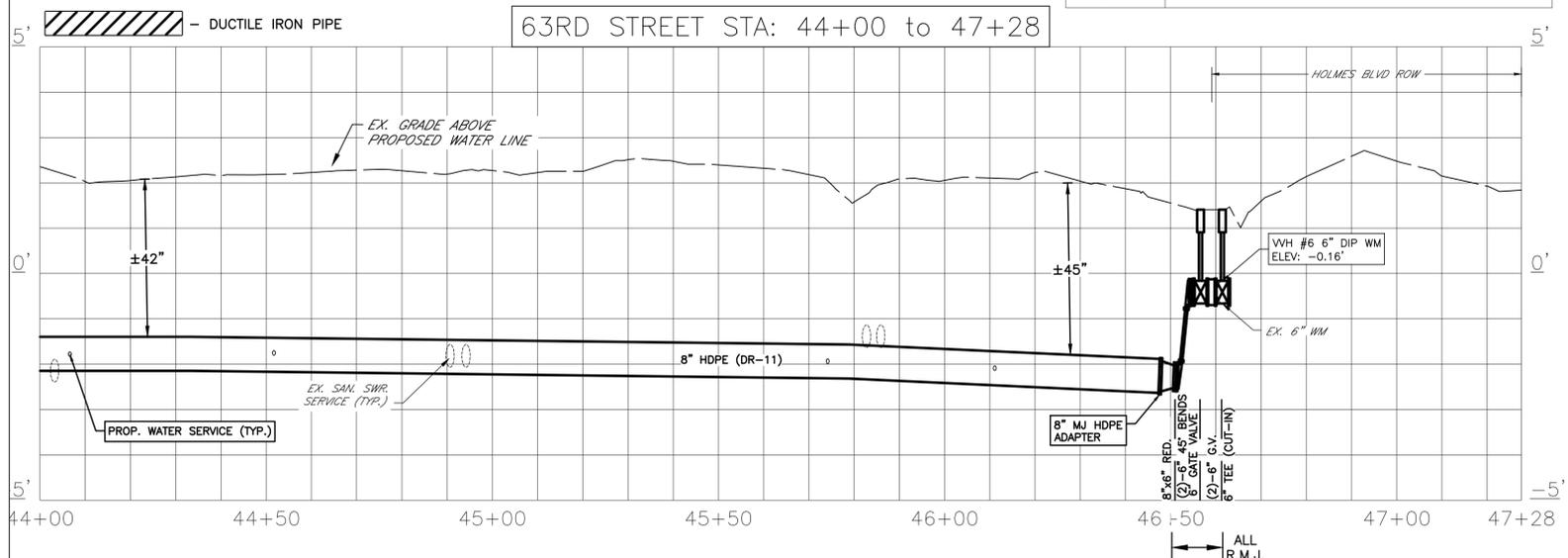
CODY KEIME, P.E.
 FLORIDA PROFESSIONAL ENGINEER
 No. 92102
 STATE OF FLORIDA
 5/11/23
SHEET 8 OF 17

I:\Projects\2023\42-43-46-53\42-43-46-53.dwg 5/17/2023 2:24 PM Cady Keime, P.E. ANS Full Sheet D (34.00 x 22.00) Inches, MC-20161818



GENERAL NOTES:
 1. SEE SHEET 7 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.

METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	INSTALL NEW METER BOX AND NEW DC BPA
	INSTALL NEW METER BOX AND NEW RPZ BPA
	RELOCATE EX. METER BOX AND NEW DC BPA
	RELOCATE EX. METER BOX AND NEW RPZ BPA



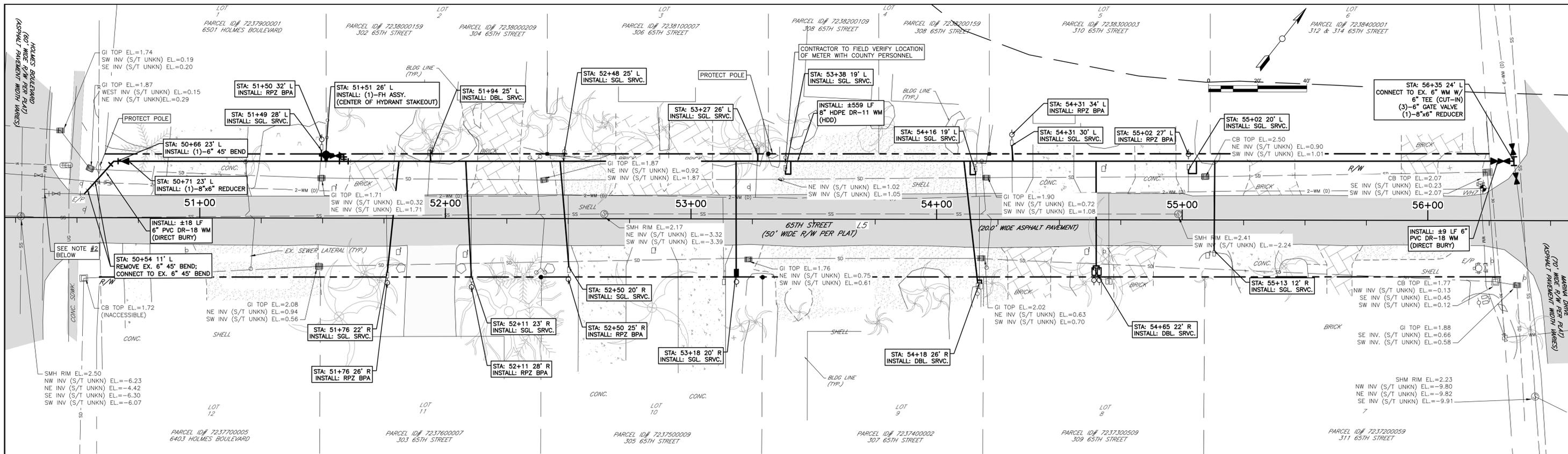
NO.	REVISION DESCRIPTION	BY	DATE

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53
ANNA MARIA ISLAND
63RD ST STA. 44+00 TO 47+57



PROJECT #	402-6002870
SURVEY #	21-0192
SEC./TWN./RGE	20/34S/16E
SCALE	SEE PLAN
SURVEYED	PCS 01/2022
DESIGNED	CAK 05/2022
DRAWN	CAK 09/2022
CHECKED	CAK 10/2022

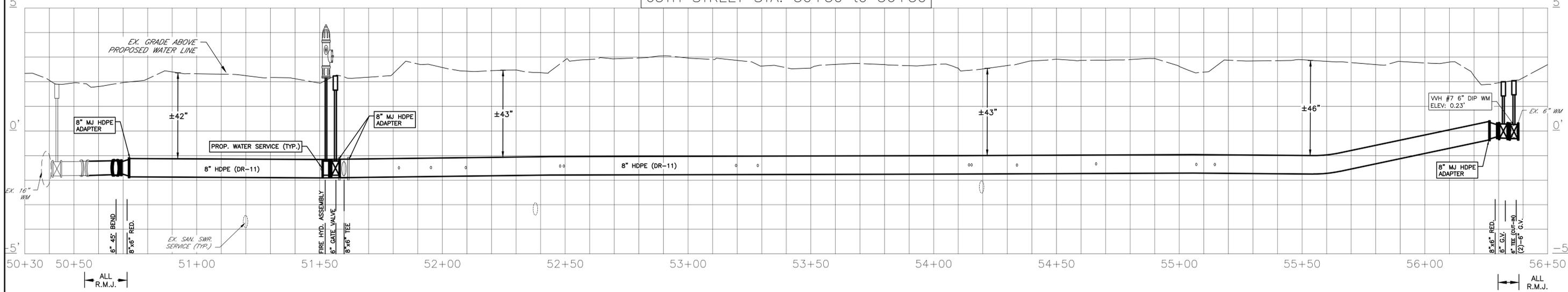
CODY KEIME, P.E.
 FLORIDA LICENSE NO. 92102
 STATE OF FLORIDA
 5/11/23
 SHEET 10 OF 17



- GENERAL NOTES:**
- SEE SHEET 7 FOR CONSTRUCTION NOTES THAT ARE APPLICABLE TO ALL PLAN AND PROFILE SHEETS.
 - 6" STUB-OUT PER PROJECT #6041587 UNDER CONSTRUCTION; CONTRACTOR TO COORDINATE SCHEDULING TO ENSURE PROPOSED PIPE IS READY FOR CONNECTION.

METER BOX AND BPA	INSTALLATION INSTRUCTIONS
	INSTALL NEW METER BOX AND NEW DC BPA
	INSTALL NEW METER BOX AND NEW RPZ BPA
	RELOCATE EX. METER BOX AND NEW DC BPA
	RELOCATE EX. METER BOX AND NEW RPZ BPA

65TH STREET STA: 50+30 to 56+50



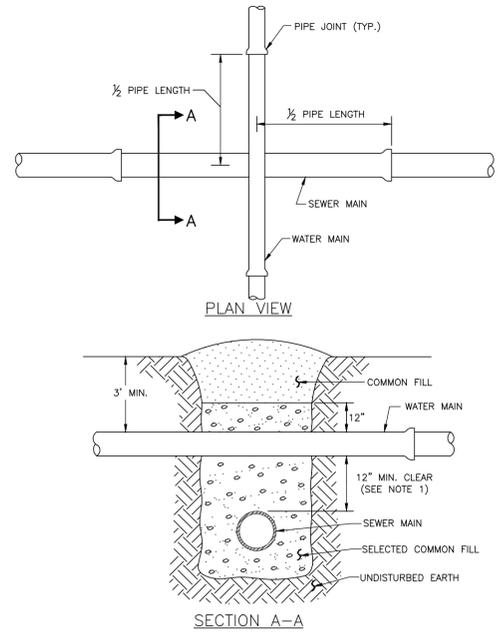
NO.	REVISION DESCRIPTION	BY	DATE

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53
ANNA MARIA ISLAND
65TH ST



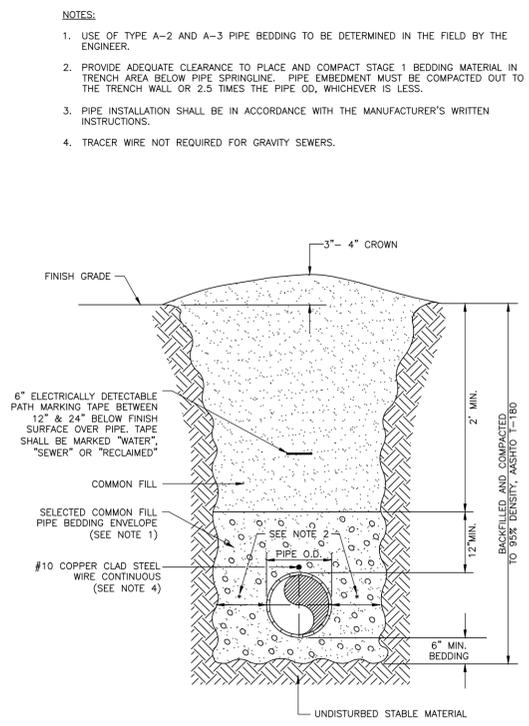
PROJECT #	402-6002870
SURVEY #	21-0192
SEC./TWN./RGE	20/34S/16E
SCALE	SEE PLAN
BY	DATE
SURVEYED	PCS 01/2022
DESIGNED	CAK 05/2022
DRAWN	CAK 09/2022
CHECKED	CAK 10/2022

CODY KEIME, P.E.
 FLORIDA LICENSE # 92102
 CODY KEIME
 LICENSE
 No. 92102
 Cody Keime
 STATE OF
 5/11/23
 FLORIDA
 PROFESSIONAL ENGINEER & SURVEYOR

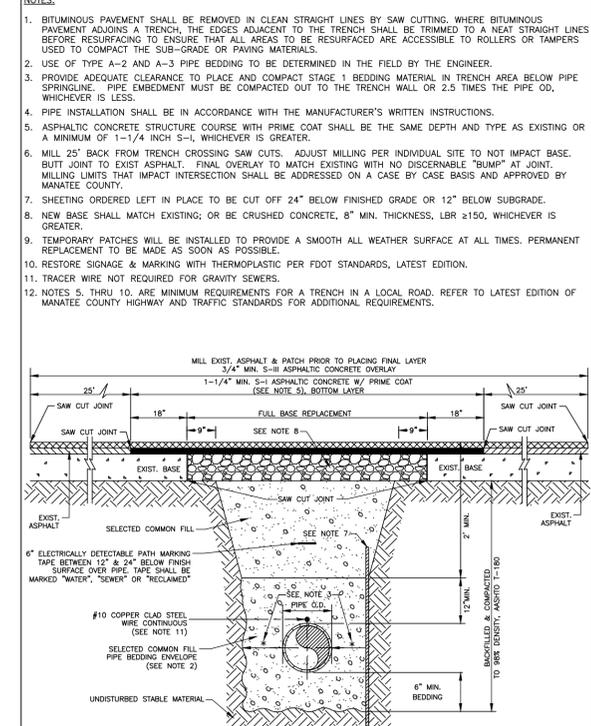


NOTES:
 1. CLEARANCE MAY BE REDUCED TO 6" FOR GRAVITY SEWER WHERE WATER MAIN IS DUCTILE IRON.
 2. PIPE SECTIONS SHALL BE FULL-LENGTH AND SHALL BE ADJUSTED HORIZONTALLY, SO THAT THE CROSSING IS AT EACH PIPE SECTION'S MIDPOINT REGARDLESS OF THE VERTICAL CLEARANCE.

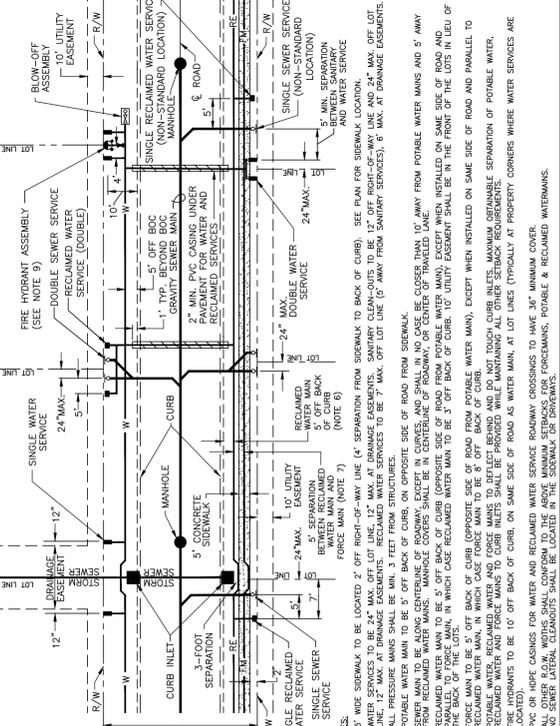
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	TYPICAL NEW WATER & SEWER LINE CROSSING	UG-2
REV. BY	DATE	DATE OF APPROVAL
	February 25, 2020	



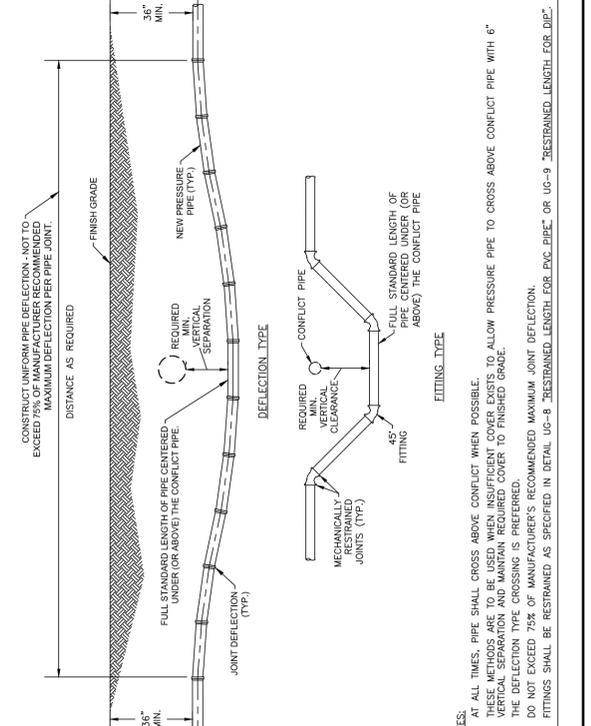
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	TRENCH WITH UNIMPROVED SURFACE TYPE A-1 PIPE BEDDING	UG-11
REV. BY	DATE	DATE OF APPROVAL
	February 25, 2020	



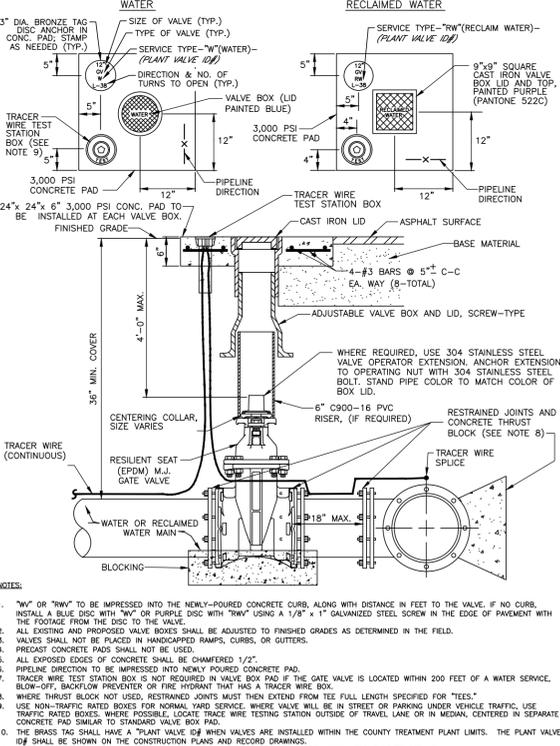
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING (CROSSING)	UG-12
REV. BY	DATE	DATE OF APPROVAL
	February 25, 2020	



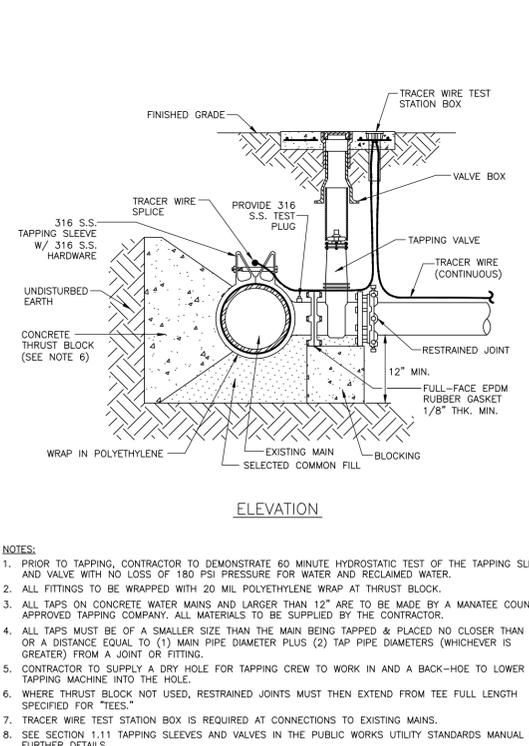
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	UTILITY LAYOUT FOR 50' R/W	UG-17
REV. BY	DATE	DATE OF APPROVAL
	February 25, 2020	



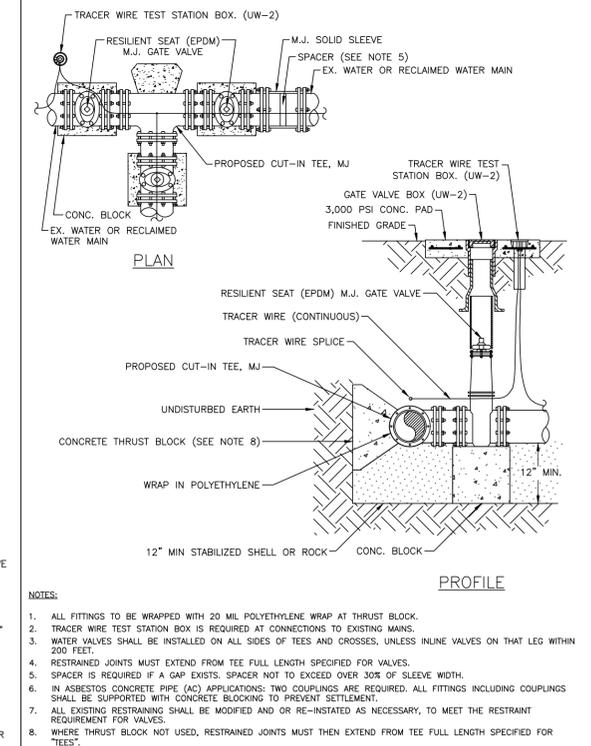
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	PRESSURE PIPE DEFLECTION AT UTILITY CROSSING	UG-18
REV. BY	DATE	DATE OF APPROVAL
	February 25, 2020	



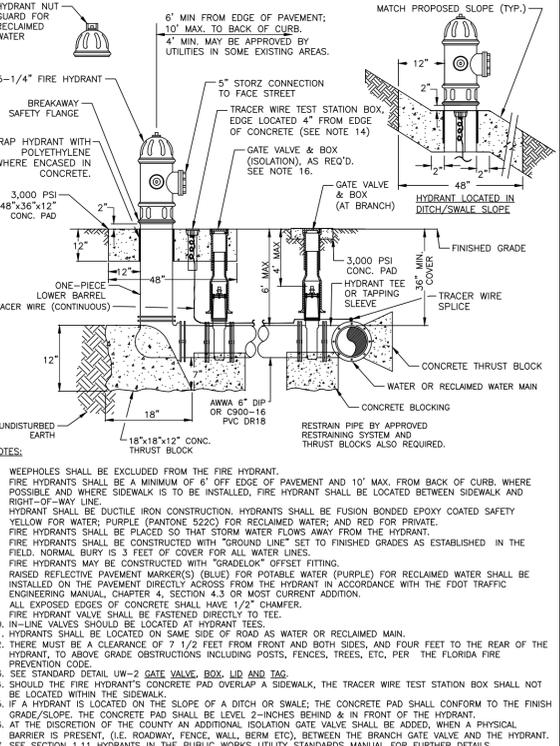
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	GATE VALVE, BOX, LID AND TAG	UW-2
REV. BY	DATE	DATE OF APPROVAL
	February 25, 2020	



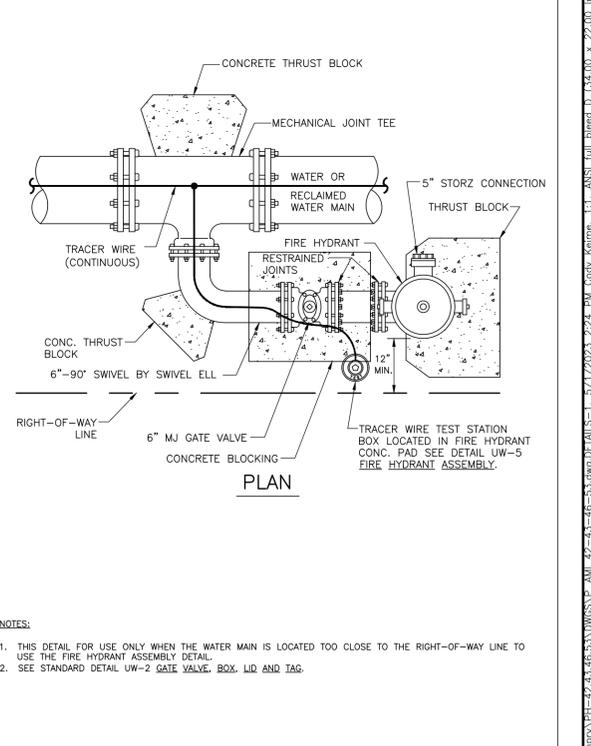
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	TAPPING SLEEVE AND VALVE (WATER/RECLAIM)	UW-3
REV. BY	DATE	DATE OF APPROVAL
	February 25, 2020	



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



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



MANATEE COUNTY PUBLIC WORKS DEPARTMENT	FIRE HYDRANT WITH LOCKED 90° BEND	UW-7
REV. BY	DATE	DATE OF APPROVAL
	February 25, 2020	

NO.	REVISION DESCRIPTION	BY	DATE

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53

ANNA MARIA ISLAND

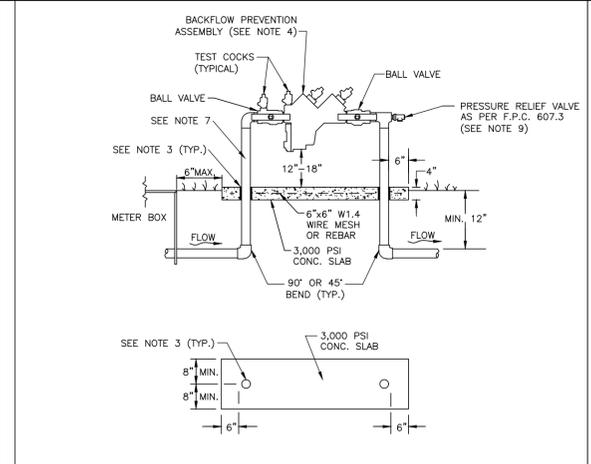
DETAILS

MANATEE COUNTY
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

PROJECT # 402-6002870
 SURVEY # 21-0192
 SEC./TWN./RGE 20/34S/16E
 SCALE N.T.S.
 SURVEYED PCS 01/2022
 DESIGNED CAK 05/2022
 DRAWN CAK 09/2022
 CHECKED CAK 10/2022

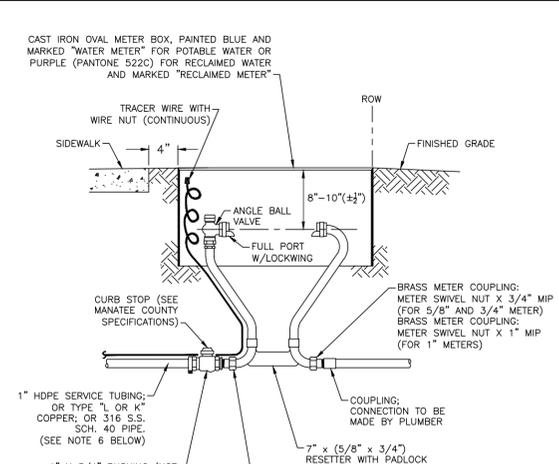
CODY KEIME, P.E.
 FLORIDA LICENSE NO. 92102
 No. 92102
 Cody Keime
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

SHEET 12 OF 17



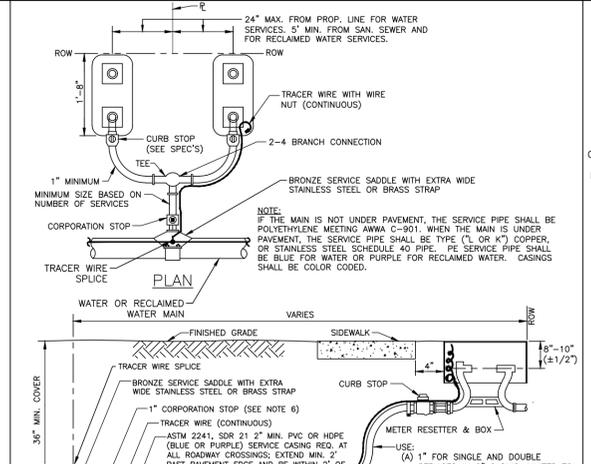
- NOTES:**
- BACKFLOW PREVENTION ASSEMBLY MUST BE INSTALLED IMMEDIATELY DOWNSTREAM OF METER, AS SHOWN ABOVE.
 - COPPER PIPE TYPE "L" (OR "K") OR BRASS PIPE MINIMUM SCHEDULE 40 SHALL BE USED TO A MINIMUM DEPTH OF 12" BELOW GRADE.
 - PIPES PASSING THROUGH CONCRETE SLAB SHALL BE PROPERLY PROTECTED; POLYETHYLENE WRAPPED OR PVC SLEEVED. COPPER SHALL NOT COME IN CONTACT WITH THE CONCRETE.
 - THE SYSTEM MUST MEET ALL REQUIREMENTS OF THE FLORIDA PLUMBING CODE (LATEST EDITION) AND CHAPTER 2-31, ARTICLE X OF THE MANATEE COUNTY CODE OF ORDINANCES.
 - ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".
 - BACKFLOW PREVENTER SHALL BE TESTED AT THE TIME OF INSTALLATION.
 - PRESSURE REDUCING VALVE IS REQUIRED UPSTREAM OF BACKFLOW PREVENTION ASSEMBLY, IF SYSTEM PRESSURE EXCEEDS 80 PSI.
 - 3" MINIMUM CLEARANCE FROM LANDSCAPING PLANTS AND 10' MIN. CLEARANCE FROM TREES TO EDGE OF CONCRETE SLAB AND CLEAR OPENING FOR ACCESS FROM STREET.
 - IN ADDITION TO THE PRIVY, THE BUILDING DEPT. MAY REQUIRE AN APPROVED DEVICE FOR THERMAL EXPANSION CONTROL DOWNSTREAM OF THE ASSEMBLY.
 - FITTINGS AND CONNECTIONS FOR ABOVE-GROUND INSTALLATIONS SHALL NOT ALLOW ANY MOVEMENT OR ROTATION OF BACKFLOW PREVENTION ASSEMBLY.
 - REFER TO DETAIL UG-15 WATER METER & BACKFLOW PREVENTER FOR LIFT STATIONS FOR WATER SERVICE AT SEWAGE PUMPING STATION.
 - BACKFLOW PREVENTION ASSEMBLY USED FOR POTABLE APPLICATIONS SHALL BE LEAD FREE AS DEFINED IN THE REDUCTION OF LEAD IN DRINKING WATER ACT, SECTION 1417 OF THE SAFE DRINKING WATER ACT, 42 U.S.C. 3000-5, AS MAY BE AMENDED, AND IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		3/4" & 1" BACKFLOW PREVENTION ASSEMBLY	UW-13
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



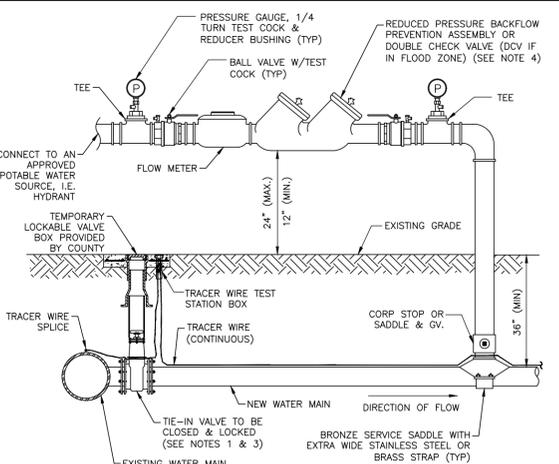
- NOTES:**
- METER BOX AND RESETTER ARE TO BE INSTALLED BY THE INFRASTRUCTURE CONTRACTOR AND SHALL NOT BE SET IN DRAINAGE SWALES, SIDEWALKS OR DRIVEWAYS. WITH PRIOR APPROVAL BY COUNTY, METER BOXES WITH LOCKABLE LIDS MAY BE LOCATED IN SIDEWALKS.
 - THE METER RESETTER SHALL BE INSTALLED IN SUCH A MANNER AS TO ALLOW REMOVAL AND REPLACEMENT WITHOUT DISTURBING THE STRUCTURAL INTEGRITY OF THE PIPING SYSTEM, THE SHUTOFF VALVES, OR THE RESETTER.
 - FOR COMPLETE SERVICE CONNECTION ASSEMBLY, SEE DETAIL UW-21 TYPICAL SERVICE CONNECTION.
 - 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.
 - 3" MINIMUM CLEARANCE FROM LANDSCAPING PLANTS AND 10' MIN. CLEARANCE FROM TREES TO EDGE OF METER, CLEAR ACCESS OPENING TO STREET.
 - SERVICE TUBING SHALL NOT BE CRIMPED OR KINKED TO RE-ADJUST CURB STOP LOCATION.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		METER BOX ASSEMBLY FOR 5/8" X 3/4"; 3/4"; AND 1" METERS	UW-18
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



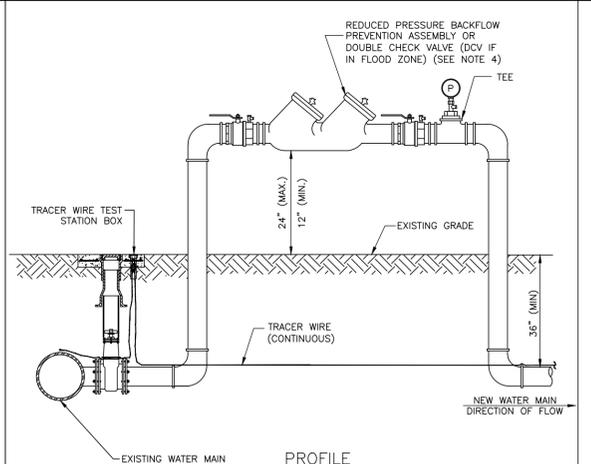
- NOTES:**
- ALL SERVICE TAPS TO BE LOCATED IN THE FIELD. TAPS SHALL BE NO CLOSER THAN 2'-0" STAGGERED INTERVALS OR WITHIN 2'-0" FROM BELL OR SPIGOT ENDS.
 - METER BOXES & RESETTERS ARE TO BE INSTALLED BY THE INFRASTRUCTURE CONTRACTOR AND SHALL NOT BE SET IN DRAINAGE SWALES, SIDEWALKS OR DRIVEWAYS. WITH PRIOR APPROVAL BY COUNTY, METER BOXES WITH LOCKABLE LIDS MAY BE LOCATED IN SIDEWALKS.
 - "WM" OR "TRW" TO BE IMPRESSED INTO THE NEWLY POURED CONCRETE CURB ALONG WITH DISTANCE IN FEET TO THE METER. IF CURB, INSTALL A BLUE DISC WITH "WM" OR "TRW" AND A 1/8" X 1" GALVANIZED STEEL STRAP IN THE EDGE OF PAVEMENT WITH THE DISTANCE (IN FEET) FROM THE DISC TO THE METER.
 - COLOR CODED TRACER WIRE SHALL BE INSTALLED WITH WATER AND RECLAIMED MAIN AND ALL SERVICES; SERVICE WIRE SHALL BE CONNECTED TO THE TRACER WIRE ALONG THE MAIN ON DOUBLE SERVICES. WHEN SECOND METER IS OVER 8 FT APART, TWO TRACER WIRES SHALL BE INSTALLED; ONE FOR EACH METER.
 - WATER AND RECLAIMED WATER SERVICE LINES TO BE 5' MINIMUM FROM SEWER SERVICE PIPES.
 - FOR 2" SERVICES REPLACE CORPORATION STOP WITH 2" RESILIENT WEDGE PIPE GATE W/BOX, LID & TAG.
 - WHEN THE DISTANCE BETWEEN THE EDGE OF THE SIDEWALK AND THE ROW 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.
 - TEMPORARY RESIDENTIAL USE CAN BE PROVIDED BY CONTACTING THE UTILITY CUSTOMER SERVICE. SEE DETAIL UW-19.
 - SERVICE TUBING SHALL NOT BE CRIMPED OR KINKED TO RE-ADJUST CURB STOP LOCATION.

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



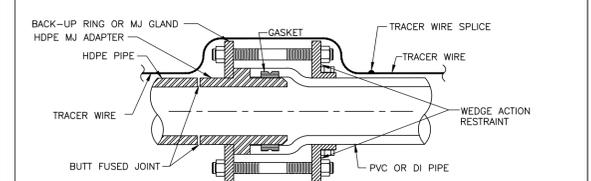
- NOTES:**
- FOR TIE-IN VALVE, SEE DETAIL UW-3 FOR TAPPING SLEEVE VALVE AND UW-2 FOR GATE VALVE.
 - CORPORATION STOP CONNECTIONS TO WATER MAINS SHALL BE AT A SUFFICIENT DISTANCE FROM NEW TAPPING SLEEVE & VALVE (TIE-IN VALVE). ALL CORPORATION STOP TAPS SHALL BE PLACED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO (1) MAIN PIPE DIAMETER PLUS (2) TAP DIAMETERS (WHICHEVER IS LARGER) FROM THE NEW TIE-IN VALVE (TAPPING VALVE & SLEEVE). SIZE-ON-SIZE TAPS ARE NOT ALLOWED. A CUT-IN TEE SHALL BE USED.
 - IF THE EXISTING WATER MAIN IS LOCATED UNDER PAVEMENT OR CLOSE TO THE ROADWAY, BOTH JUMPER CORPORATION STOPS MAY CONNECT TO THE NEW WATER MAIN LOCATED OUTSIDE OF THE PAVEMENT. AN ADDITIONAL GATE VALVE SHALL BE INSTALLED AND THE VALVE MAY BE LOCATED AT THE ROW LINE. PIPING AND APPURTENANCES BETWEEN THE EXISTING MAIN AND ISOLATION VALVE AND JUMPER SHALL BE DISINFECTED BY SPRAYING OR SWABBING.
 - BACKFLOW PREVENTION ASSEMBLY SHALL BE STRUCTURALLY SUPPORTED.
 - THE TIE-IN VALVE SHALL REMAIN CLOSED AND THE LOCKABLE VALVE BOX SHALL BE LOCKED BY MANATEE COUNTY. THE TIE-IN VALVE SHALL REMAIN CLOSED AND LOCKED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY THE FDEP AND ALL OTHER PERTINENT AGENCIES. AFTER CLEARANCE IS OBTAINED, THE LOCKABLE VALVE BOX SHALL BE REMOVED, RETURNED TO THE COUNTY, AND REPLACED WITH A STANDARD VALVE BOX.
 - IN THE EVENT THE LOCKED TIE-IN VALVE MUST BE OPENED, THE VALVE SHALL ONLY BE OPERATED BY MANATEE COUNTY PERSONNEL.
 - SEE DETAIL UW-24 FOR ADDITIONAL JUMPER CONNECTION NOTES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION-HYDRANT AVAILABLE	UW-23A
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL

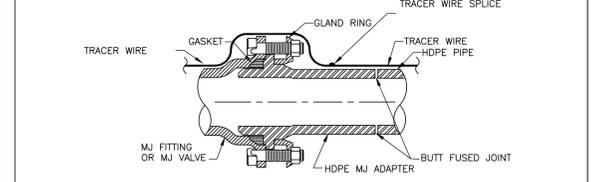


- NOTES:**
- FOR TIE-IN VALVE, SEE DETAIL UW-3 FOR TAPPING SLEEVE VALVE AND UW-2 FOR GATE VALVE.
 - CORPORATION STOP CONNECTIONS TO WATER MAINS SHALL BE AT A SUFFICIENT DISTANCE FROM NEW TAPPING SLEEVE & VALVE (TIE-IN VALVE). ALL CORPORATION STOP TAPS SHALL BE PLACED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO (1) MAIN PIPE DIAMETER PLUS (2) TAP DIAMETERS (WHICHEVER IS LARGER) FROM THE NEW TIE-IN VALVE (TAPPING VALVE & SLEEVE). SIZE-ON-SIZE TAPS ARE NOT ALLOWED. A CUT-IN TEE SHALL BE USED.
 - IF THE EXISTING WATER MAIN IS LOCATED UNDER PAVEMENT OR CLOSE TO THE ROADWAY, BOTH JUMPER CORPORATION STOPS MAY CONNECT TO THE NEW WATER MAIN LOCATED OUTSIDE OF THE PAVEMENT. AN ADDITIONAL GATE VALVE SHALL BE INSTALLED AND THE VALVE MAY BE LOCATED AT THE ROW LINE. PIPING AND APPURTENANCES BETWEEN THE EXISTING MAIN AND ISOLATION VALVE AND JUMPER SHALL BE DISINFECTED BY SPRAYING OR SWABBING.
 - BACKFLOW PREVENTION ASSEMBLY SHALL BE STRUCTURALLY SUPPORTED.
 - SEE DETAIL UW-24 FOR ADDITIONAL JUMPER CONNECTION NOTES.

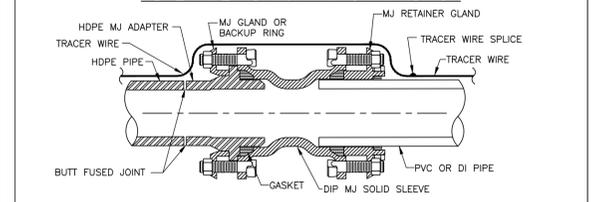
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION - NO HYDRANT AVAILABLE	UW-23B
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL



HDPE PIPE TO PVC PIPE / SPIGOT TO BELL CONNECTION



HDPE PIPE TO MJ FITTING TRANSITION



HDPE PIPE TO PVC PIPE SPIGOT TO SPIGOT CONNECTION

- NOTE:**
- ONE TRACER WIRE SHALL BE SECURED TO THE PIPE FOR ALL TYPES OF PIPELINE INSTALLATIONS.

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

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	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH
24	90	38	18	X24	169	X20	132	X16	90	X12	38	X10	6
20	78	32	16	X20	141	X16	101	X12	33	X10	24	X8	1
16	66	27	13	X16	111	X12	67	X10	41	X8	12	X6	1
12	52	22	10	X12	60	X10	30	X8	31	X6	6	X4	1
10	44	18	9	X10	43	X8	20	X6	13	X4	4	X3	1
8	37	15	7	X8	29	X6	14	X4	8	X3	3	X2	1
6	29	12	6	X6	21	X4	11	X3	6	X2	2	X1	1
4	21	8	4	X4	12	X3	6	X2	4	X1	1	X1	1

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

- NOTES:**
- RESTRAIN 11.25' BENDS 50% OF LENGTH FOR 22.5' BENDS.
 - ALL VALVES AND FITTINGS SHALL BE RESTRAINED TO THE CONNECTING SECTIONS OF PIPE.
 - ALL ISOLATION VALVES MUST BE PROPERLY ANCHORED OR RESTRAINED TO RESIST A 180 PSI TEST PRESSURE IN EITHER DIRECTION.
 - PIPE SIZES ARE GIVEN IN INCHES.
 - RESTRAINED PIPE LENGTHS ARE GIVEN IN FEET.
 - LENGTHS SHOWN ARE FOR A TEST PRESSURE OF 180 PSI.
 - 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.
 - RESTRAINED LENGTHS TO BE APPLIED TO PIPELINES PER DETAIL UG-10 RESTRAINED LENGTHS FOR PIPE.
 - ALL RESTRAINED JOINT HARDWARE SHALL CONFORM TO 1.11.17 OF THE PUBLIC WORKS UTILITIES STANDARDS MANUAL.
 - ALL THREE "LEGS" OF TEES SHALL BE RESTRAINED PER THE STATED LENGTH IN THE TABLE.

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

1. A 2"-INCH MINIMUM TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE POTABLE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS WITH THE FOLLOWING EXCEPTIONS:
- PROJECTS THAT INCLUDE A PERMANENT BACKFLOW PREVENTER AT THE RIGHT-OF-WAY WHICH IS ADJACENT TO THE EXISTING WATER MAIN;
 - PROJECTS THAT INCLUDE NEW WATER MAINS THAT ARE LESS THAN OR EQUAL TO 18 LINEAR FEET IN LENGTH; OR
 - 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. 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.

4. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH AWWA 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 SWABBING PER SECTION 4.6 OF AWWA C651.

5. 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.

6. THE JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI IN THE NEW MAINS CONTINUOUSLY AFTER DISINFECTION AND UNTIL FDEP CLEARANCE LETTER IS OBTAINED.

7. 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 RBT-75 ANNUAL CERTIFICATION MUST BE VALID AT TIME OF INSTALLATION AND PROVIDED TO THE MANATEE COUNTY INSPECTOR UPON REQUEST.

8. 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.

9. 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.

10. PRIOR TO REMOVAL OF THE TEMPORARY JUMPER, THE NEWLY-CONSTRUCTED WATER SYSTEM SHALL HAVE RECEIVED CLEARANCE FROM THE FDEP.

11. 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.

12. 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.

- 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

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

MAIN PIPE SIZE	HORIZ. BENDS			TEES			REDUCERS			PLUGS & VALVES			
	90°	45°	22.5°	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH
36	142	59	28	X36	390	X30	230	X24	137	X20	84	X16	453
30	124	51	25	X30	333	X24	200	X18	110	X14	61	X10	391
24	106	44	21	X24	270	X18	161	X12	81	X10	48	X8	327
20	92	38	18	X20	228	X16	137	X12	67	X10	41	X8	280
16	77	32	15	X16	177	X12	101	X10	58	X8	31	X6	231
12	61	25	12	X12	127	X10	67	X8	43	X6	20	X4	181
10	52	22	10	X10	101	X8	54	X6	31	X4	14	X3	153
8	44	18	9	X8	78	X6	41	X4	24	X3	11	X2	128
6	34	14	7	X6	46	X4	24	X3	11	X2	8	X1	98
4	24	10	5	X4	19	X3	11	X2	8	X1	5	X1	69

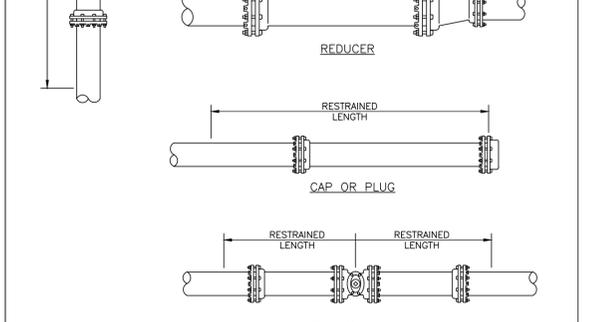
REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (POLY-WRAPPED)



- NOTE:**
- 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		RESTRAINED LENGTHS FOR DIP	UG-9
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL

REQUIRED LENGTHS FOR RESTRAINED JOINT PIPE FOR PVC PIPE



- NOTE:**
- 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		RESTRAINED LENGTHS FOR PIPE	UG-10
REV. BY	DATE	February 25, 2020	DATE OF APPROVAL

NO.	REVISION DESCRIPTION	BY	DATE

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53

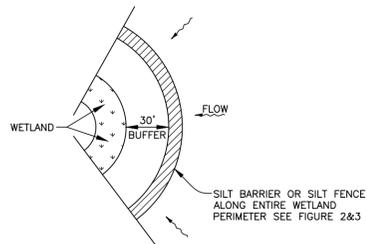
ANNA MARIA ISLAND

DETAILS

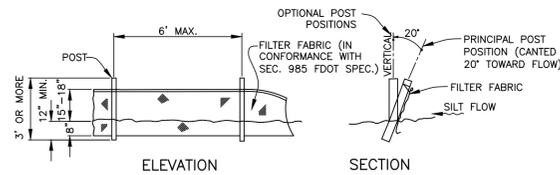
PROJECT #	402-6002870	CODY KEIME, P.E.
SURVEY #	21-0192	FLORIDA PROFESSIONAL ENGINEER NO. 92102
SEC./TWN./RGE	20/34S/16E	MANATEE COUNTY, FLORIDA
SCALE	N.T.S.	DATE: 5/11/23
SURVEYED	PCS	01/2022
DESIGNED	CAK	05/2022
DRAWN	CAK	09/2022
CHECKED	CAK	10/2022

SHEET 13 OF 17



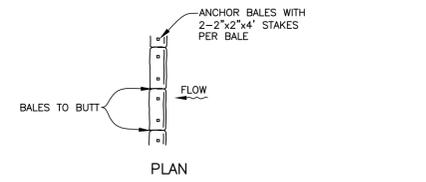


WETLAND BUFFER
FIGURE 1

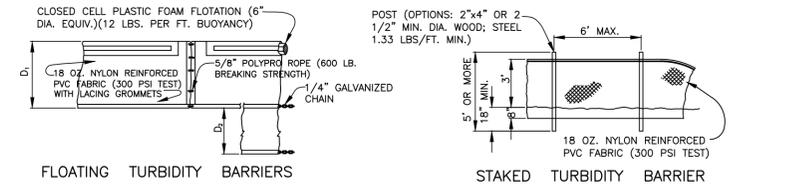


TYPICAL SILT FENCE
FIGURE 2

NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

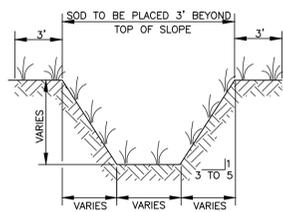


TYPICAL BALE SILT BARRIER
FIGURE 3

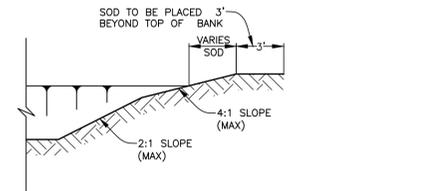


TURBIDITY BARRIERS
FIGURE 4

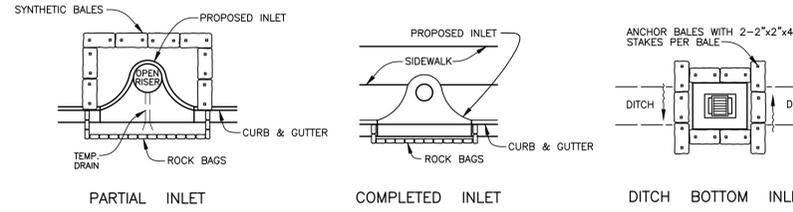
NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



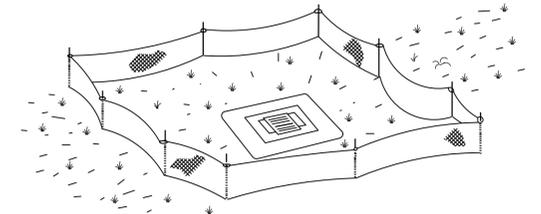
TYPICAL SWALE SECTION
FIGURE 5



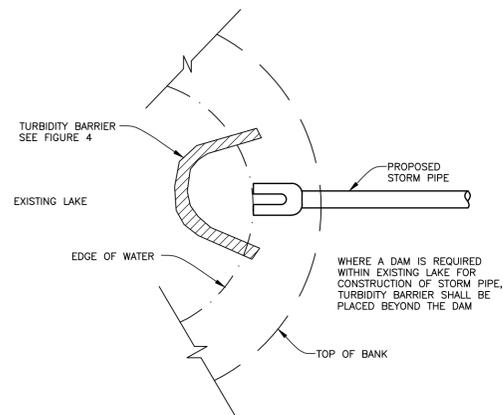
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



SYNTHETIC BALE PROTECTION AROUND
INLETS OR SIMILAR STRUCTURES
FIGURE 7

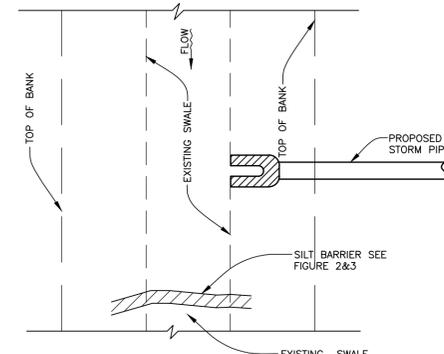


TYPE III SILT FENCE PROTECTION
AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE
PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8

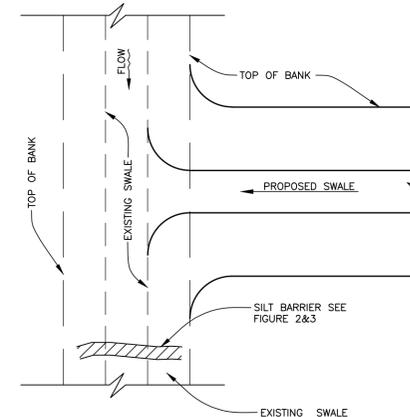


TURBIDITY BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING LAKE
FIGURE 9

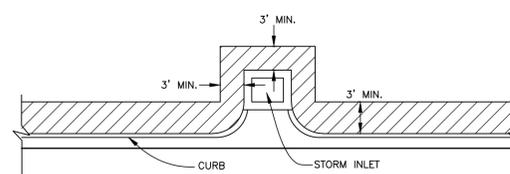
WHERE A DAM IS REQUIRED WITHIN EXISTING LAKE FOR CONSTRUCTION OF STORM PIPE, TURBIDITY BARRIER SHALL BE PLACED BEYOND THE DAM



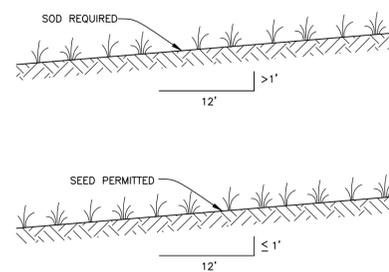
SILT BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING SWALE
FIGURE 10



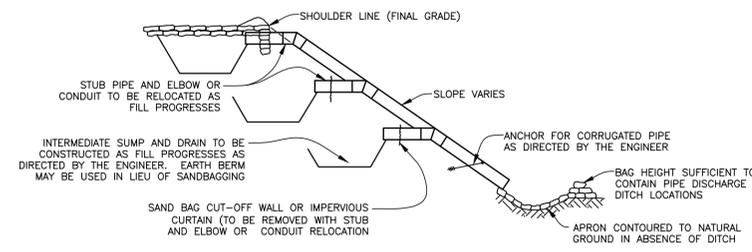
SILT BARRIER AT CONNECTION
OF SWALE TO EXISTING SWALE
FIGURE 11



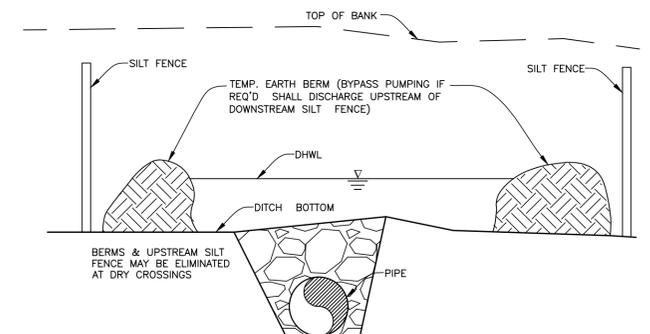
SOD ALONG CURB
AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



SECTION AA
TEMPORARY SLOPE DRAIN
FIGURE 15



UNDERGROUND PIPE CROSSING
FIGURE 12

SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION, FOR ALL TEMPORARY EROSION CONTROL MEASURES

NO.	REVISION DESCRIPTION	BY	DATE

AMI WATER MAIN REPLACEMENT PH. 42,43,46, & 53
ANNA MARIA ISLAND
EROSION CONTROL DETAILS



PROJECT #	402-6002870
SURVEY #	21-0192
SEC./TWN./RGE	20/34S/16E
SCALE	N.T.S.
SURVEYED	PCS 01/2022
DESIGNED	CAK 05/2022
DRAWN	CAK 09/2022
CHECKED	CAK 10/2022

CODY KEIME, P.E.
FLORIDA LICENSE NO. 92102
DATE 5/11/23
SHEET 17 OF 17