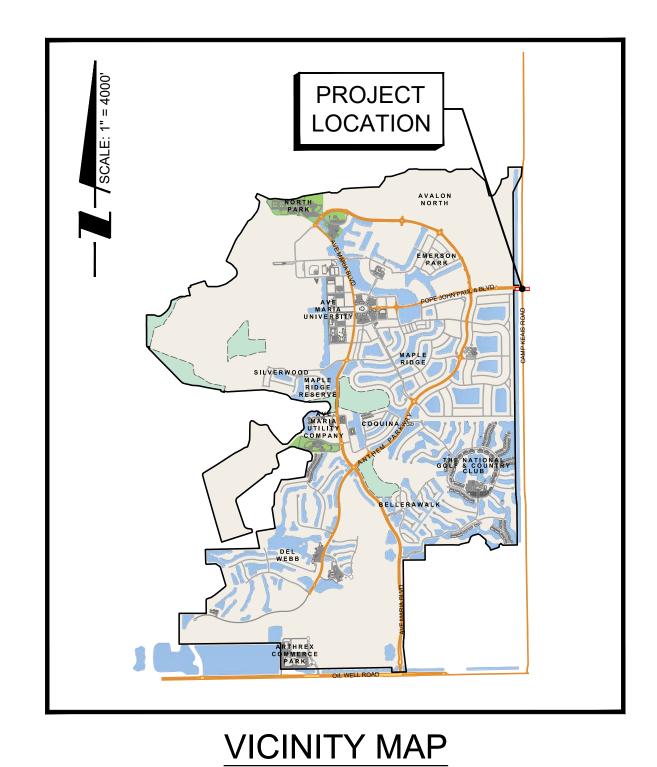
CONSTRUCTION PLANS FOR

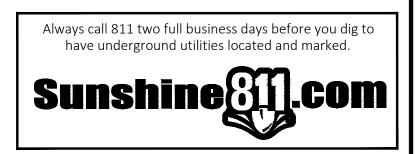
POPE JOHN PAUL II BLVD WATER MAIN EXTENSION

PART OF SECTION 33, 34, TOWNSHIP 47 SOUTH, RANGE 29 EAST, COLLIER COUNTY, FLORIDA



LOCATION MAP

OWNER/DEVELOPER AVE MARIA UTILITY COMPANY, LLLP 5076 ANNUNCIATION CIRCLE, SUITE 102 AVE MARIA, FL 34142 (239) 348-0248



OLIDA (EV	DENINIOU
SURVEY	PENINSULA ENGINEERIN
DATUM NOTE: ALL INVERTS AND ELEVATION	ONS ARE BASED ON NAVD 88

JECT INFORMATION:	DESIG
umber: N/A	PROJEC
22671200686, 22671200709, 00138680101, 00138601041, O Number: 0013864002	PROJEC
Name: N/A	PROJEC
MD ERP Number: N/A	DRAWIN
Ordinances Number: SRA AR-6896, RES. 2005-23A, AS AMENDED	PROJEC
ng: SRA	PROJE
ng (North): SRA	FILE DA
ng (South): SRA	FILE NAI
ng (East): ROW / SRA	PROJE



Naples, FL 34105

239.403.670 Pen-Eng.con

POPE JOHN PAUL II BLVD WATER MAIN EXTENSION

CONSTRUCTION PLANS

COVER SHEET

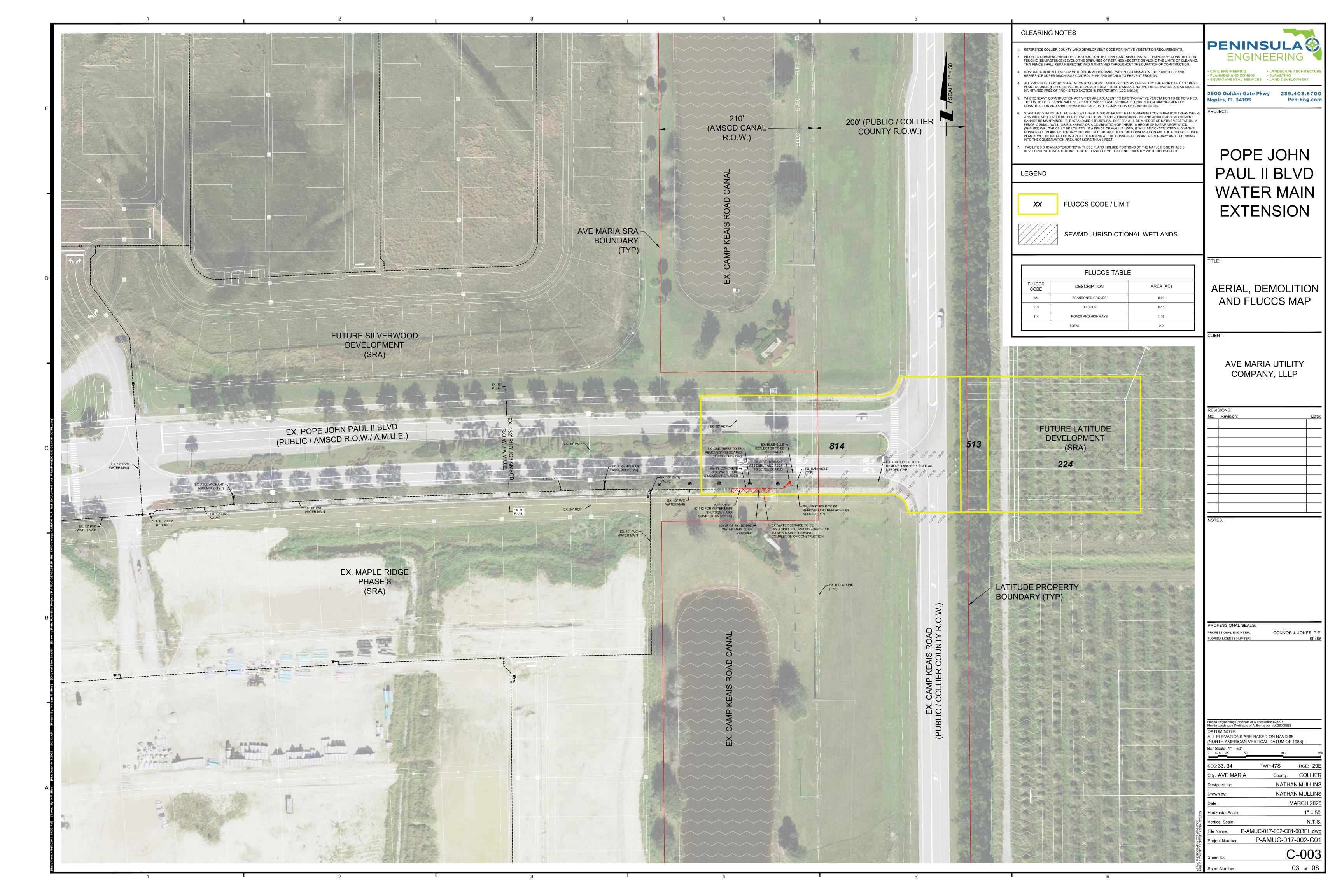
SHEET INDEX				
SHEET NO.	ISHEET TILLE			
01	C-001	COVER SHEET	0	
02	C-002	NOTE SHEET	0	
03	C-003	AERIAL, DEMOLITION AND FLUCCS MAP	0	
04	C-112	MASTER PLAN	0	
05	C-201	PLAN AND PROFILE - WATER MAIN HDD (STA 1+00 - STA 6+50)	0	
06	C-511	STANDARD AMUC GENERAL DETAILS	0	
07	C-521	STANDARD AMUC WATER MAIN DETAILS	0	
08	C-701	NPDES DISCHARGE CONTROL PLAN AND DETAILS	0	

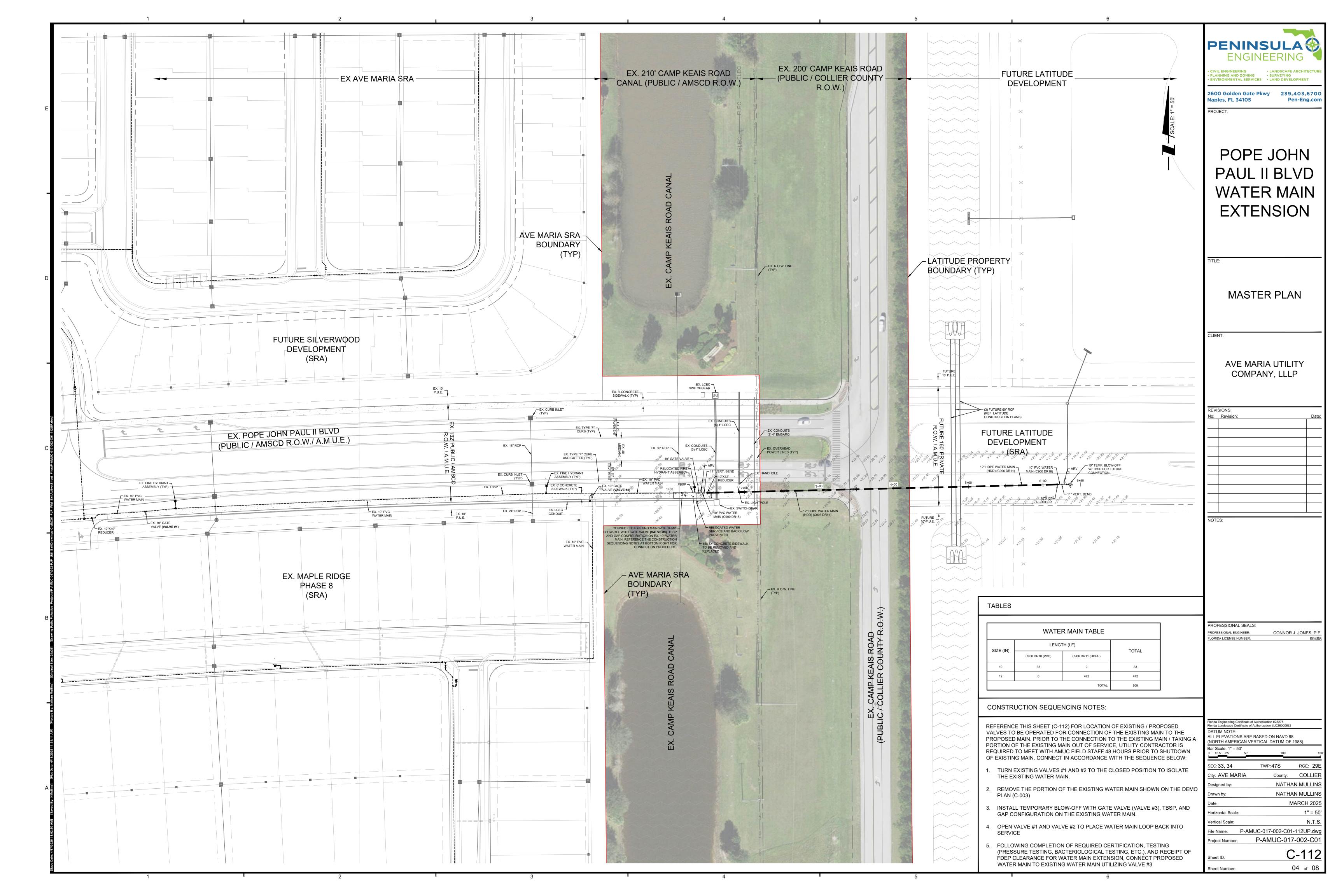
	REV. NO.	DESCRIPTION		SHEETS AFFECTED	DAT
ı					
П					
П					
П					
П					
П					
IJ					
•	DESIGN TE	AM:	PROFESSIONAL SEALS:		
<u>4</u>	PROJECT MAN	AGER: DANIEL F. WATERS, P.E.	PROFESSIONAL ENGINEER: CO	ONNOR J. JON	NES,
l, 2	PROJECT ENG	INEER: CONNOR J. JONES, P.E.	FLORIDA LICENSE NUMBER:		99
Δ	PROJECT DES	IGNER: NATHAN MULLINS			
	· · · · · · · · · · · · · · · · · · ·	·			

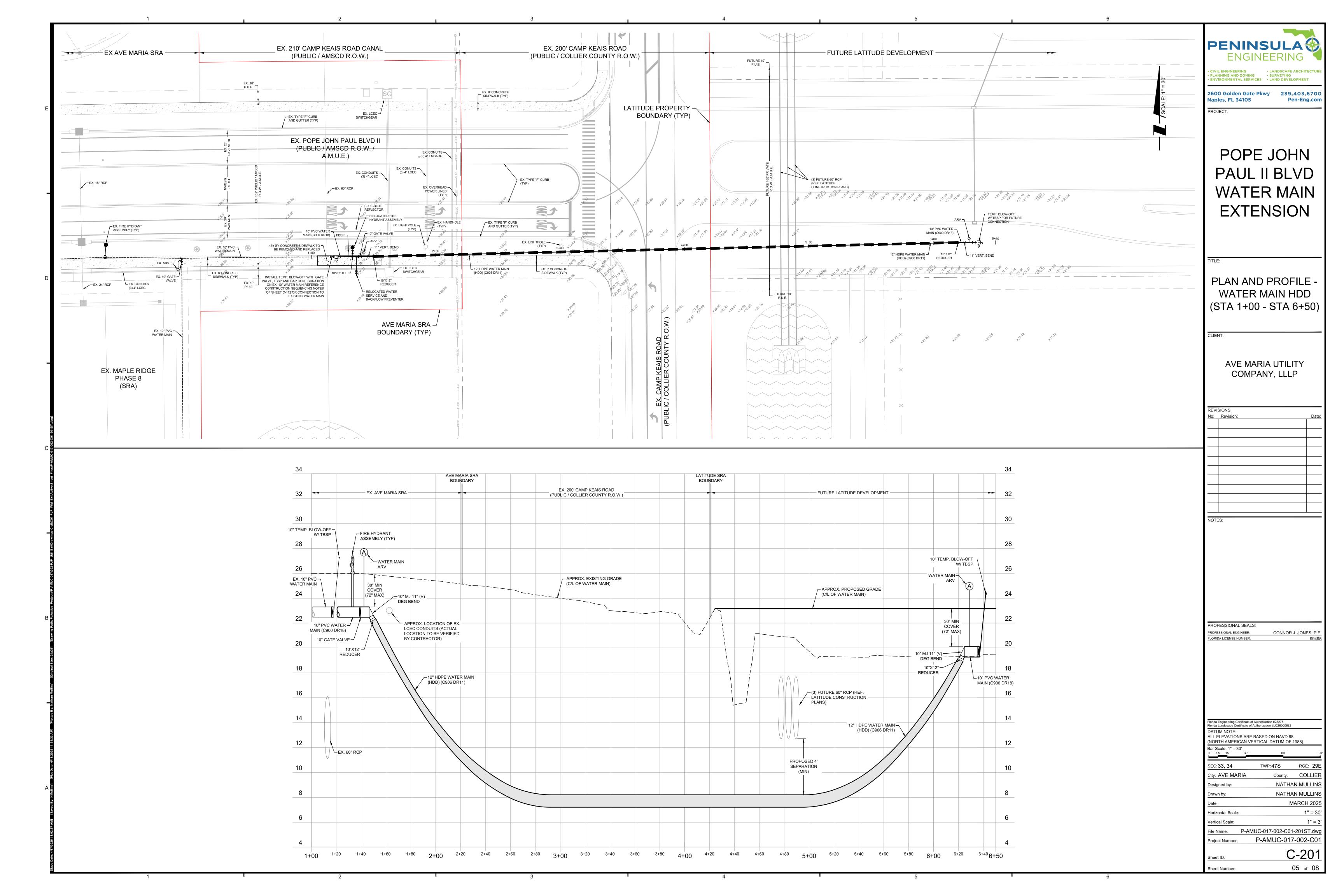
MARCH 202

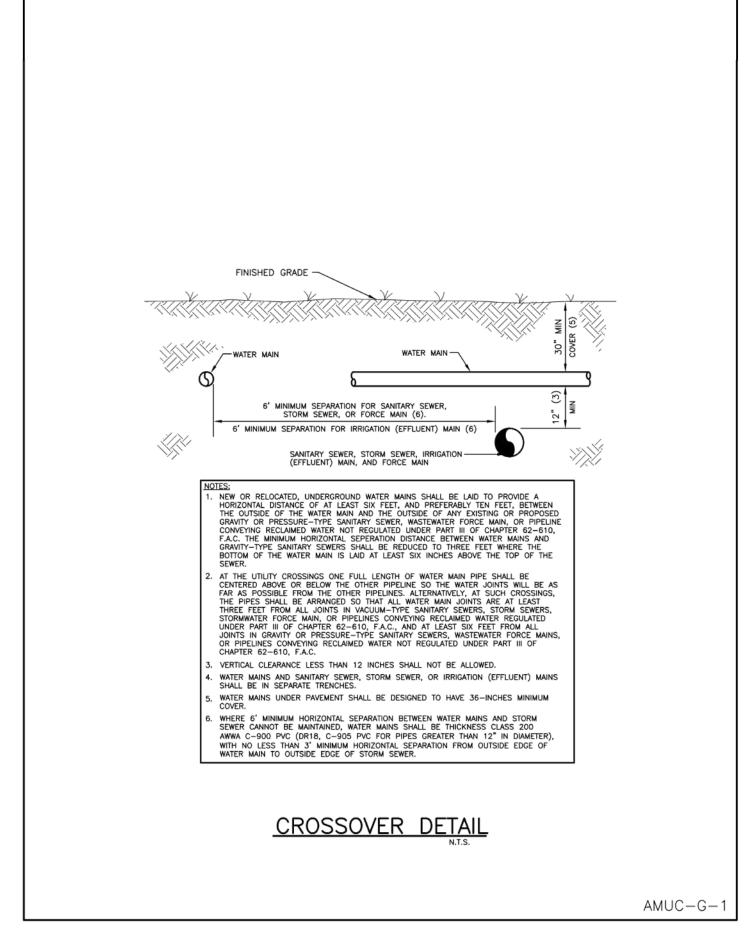
SRA |P-AMUC-017-002-C01 | C-001

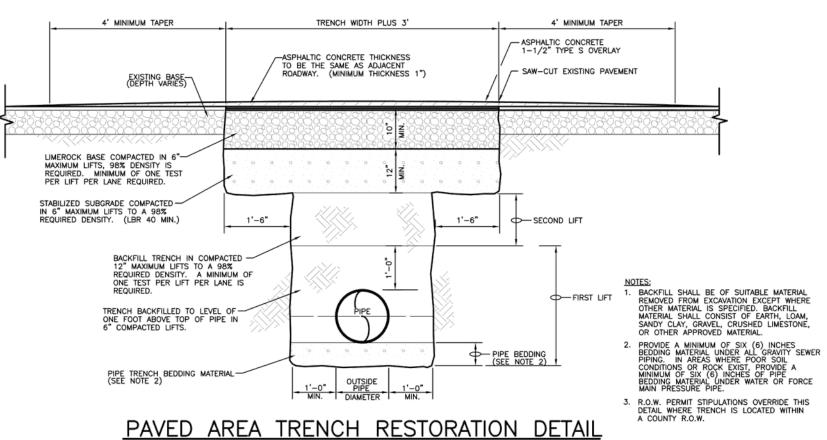
	DEFINITIONS	GENERAL NOTES	UTILITY NOTES	ROADWAY AND PARKING LOT SIGNING AND MARKING NOTES	
	OWNER - AVE MARIA UTILITY COMPANY, LLLP PROJECT - POPE JOHN PAUL II BLVD WATER MAIN EXTENSION DEVELOPMENT SERVICES / BUILDING DEPARTMENT - COLLIER COUNTY COUNTY - COLLIER COUNTY UTILITY - AVE MARIA UTILITY COMPANY, LLLP	1. ALL INVERTS AND ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988). 2. THE INFORMATION PROPOSED IN THIS PLAN IS BASED ON THE LATEST FIELD INFORMATION AND AVAILABLE RECORD DRAWING INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THIS INFORMATION PRIOR TO COMMENCEMENT OF CONSTRUCTION AND PROVIDE IN WRITING ANY DISCREPANCIES TO THE ENGINEER. 3. THIS PLAN IS NOT INTENDED TO BE ALL INCLUSIVE OF EXISTING FACILITIES OR MATERIALS TO BE	1. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TECHNICAL STANDARDS OF THE UTILITY AND FDEP. 2. POTABLE WATER SYSTEM UP TO THE METER/BACKFLOW DEVICE SHALL BE OWNED AND MAINTAINED BY THE UTILITY. 3. ON-SITE WASTEWATER COLLECTION SYSTEM SHALL BE OWNED AND MAINTAINED BY OWNER, ITS SUCCESSORS OR ASSIGNS.	 ROADWAY SIGNAGE AND PAVEMENT MARKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FDOT DESIGN STANDARDS. ALL STOP BARS, IN ROADWAYS AND PARKING LOTS, SHALL BE THERMOPLASTIC. IF PARKING LOT PAVEMENT OCCURS IN TWO LIFTS, FIRST LIFT MAY BE PAINTED AT OWNER'S DISCRETION. PARKING STALL STRIPING MAY BE PAINT, OR THERMOPLASTIC, AT <u>OWNER'S</u> DISCRETION. 	PENINSULA ENGINEERING • CIVIL ENGINEERING • PLANNING AND ZONING • SURVEYING
	UNDERGROUND CONTRACTOR - THE UNDERGROUND UTILITY CONTRACTOR AND ALL UTILITY SUBCONTRACTORS. ENGINEER - OWNER'S ENGINEER RESPONSIBLE FOR INSPECTION AND CERTIFICATION (PENINSULA ENGINEERING)	REMOVED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS WITH REGARDS TO SITE MODIFICATIONS NECESSARY TO ACCOMMODATE THE PROPOSED IMPROVEMENTS. ALL ITEMS TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED AT THE EXPENSE OF THE CONTRACTOR, INCLUDING ALL DUMPING FEES, UNLESS OTHERWISE NOTED. 4. ALL MATERIALS AND CONSTRUCTION METHODS USED FOR THE PROPOSED IMPROVEMENTS SHALL	4. IRRIGATION DISTRIBUTION SYSTEM SHALL BE OWNED AND MAINTAINED BY <u>OWNER</u> , ITS SUCCESSORS OR ASSIGNS. 5. UTILITY MATERIALS, COLORS, AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE TECHNICAL STANDARDS OF THE <u>UTILITY</u> AND FDEP.		2600 Golden Gate Pkwy Naples, FL 34105 Pen-
	<u>SURVEYOR</u> - OWNER'S SURVEYOR RESPONSIBLE FOR CONSTRUCTION STAKE-OUT AND VERIFICATION OF RECORD DRAWING INFORMATION. (PENINSULA ENGINEERING) <u>FIRE DISTRICT</u> - IMMOKALEE FIRE DISTRICT	CONFORM TO THE APPROVED TECHNICAL SPECIFICATIONS, AND ALL FEDERAL, STATE AND LOCAL REGULATIONS. 5. THE REVIEW AND APPROVAL OF THESE IMPROVEMENT PLANS DOES NOT AUTHORIZE THE CONSTRUCTION OF REQUIRED IMPROVEMENTS WHICH ARE INCONSISTENT WITH EXISTING EASEMENTS OF RECORD.	6. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATION. THE <u>CONTRACTOR</u> SHALL FIELD VERIFY ALL ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND FAMILIARIZE HIMSELF WITH THE SITE AND THE CONTRACT DOCUMENTS. ALL WORK SHALL BE CONDUCTED IN STRICT ACCORDANCE WITH ALL PERMITS AND APPROVALS OBTAINED FOR THIS PROJECT.	FIRE PROTECTION NOTES	PROJECT:
	GENERAL PROCEDURES 1. CONTRACTOR SHALL BE RESPONSIBLE IN COORDINATING WITH THE FOLLOWING RESPECTIVE UTILITY	 ALL SOLID WASTE FOR THE <u>PROJECT</u> IS TO BE PICKED UP AND DISPOSED OF BY WASTE PRO VIA CURB SIDE PICKUP. ALL PROJECT SIGNS SHALL BE IN ACCORDANCE WITH THE P.U.D. (IF APPLICABLE) AND THE <u>DEVELOPMENT SERVICES / BUILDING DEPARTMENT</u> LAND DEVELOPMENT CODE. OWNER HAS THE DISCRETION OF USING CONCRETE PAVER BRICKS IN PLACE OF CONCRETE SIDEWALK. <u>PAVING CONTRACTOR</u> SHALL REFERENCE <u>LANDSCAPE ARCHITECT</u>, <u>ARCHITECT</u> PLANS, OR <u>OWNER</u>, FOR 	 CONTRACTOR SHALL MARK LOCATIONS OF ALL PRESSURE PIPES IN ACCORDANCE WITH THE TECHNICAL STANDARDS OF THE <u>UTILITY</u>. THE <u>CONTRACTOR</u> SHALL PROVIDE 48 HOURS WRITTEN NOTICE TO THE <u>ENGINEER</u>, <u>CITY</u>, <u>COUNTY</u>, <u>UTILITY</u> AND <u>FIRE DISTRICT</u> PRIOR TO THE FOLLOWING: COMMENCEMENT CHANGES TO APPROVED SCHEDULES, SUBCONTRACTORS, OR RESIDENT SUPERINTENDENT GENERAL 	 ALL BACKFLOW PREVENTER ASSEMBLIES/DEVICES SHALL BE IN ACCORDANCE WITH 62-555.360, F.A.C., AND THE AWWA MANUAL M-14, PRACTICE FOR BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL. ALL WATER METERS SHALL CONFORM TO AWWA C-700 OR NSF 61 STANDARDS. FIRE HYDRANTS SHALL BE IN ACCORDANCE WITH THE <u>UTILITY</u> STANDARDS OR NFPA REGULATIONS, LATEST REVISION, WHICHEVER IS MORE RESTRICTIVE, AND MEET THE APPROVAL OF THE LOCAL FIRE CONTROL DISTRICT. RAISED BLUE PAVEMENT REFLECTORS SHALL BE LOCATED AT THE CENTERLINE OF 	POPE JOH
	COMPANIES AND AGENCIES FOR COORDINATION OF SERVICES AND CONNECTIONS FOR THE PROJECT. ADDITIONALLY, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCY OR UTILITY COMPANY PRIOR TO COMMENCING WORK WITHIN ANY AGENCY OR UTILITY COMPANY'S DISTRICT. AMUC: JASON VOGEL (239) 348-0248 COLLIER COUNTY: JOE BIANCHI (239) 252-2391 LCEC: KEITH LANMAN (239) 656-2413 COMCAST: XAVIER MEDINA (239) 574-2020	PAVER BRICK FINAL LOCATIONS, THICKNESS, SIZE, COLOR, PATTERN, AND SPECIFICATIONS. CONCRETE PAVER BRICK SEALANT OR REPELLENT MAY BE USED AT <u>OWNER'S</u> DISCRETION. IF THERE ARE ANY DISCREPANCIES BETWEEN PLANS AND SPECIFICATIONS AND <u>ENGINEER'S</u> PLANS, <u>CONTRACTOR</u> SHALL REPORT DISCREPANCY TO <u>ENGINEER</u> . 9. ALL PVC STORM DRAIN PIPES SHALL BE COLOR WHITE SDR 26, OR APPROVED EQUAL, UNLESS OTHERWISE NOTED IN THE PLANS	C.1. COMPACTION C.2. TRENCH DENSITY C.3. FINAL INSPECTIONS C.4. CONFLICT BOX INSTALLATION C.5. WATER MAIN OR FORCE MAIN CASING INSTALLATION D. POTABLE AND IRRIGATION SYSTEMS D.1. CONNECTION TO EXISTING POTABLE WATER FACILITIES (INCLUDING HOT TAPS)	THE FINISHED TRAVEL LANE, PER THE FIRE DISTRICT, OPPOSITE EACH HYDRANT IN ACCORDANCE WITH FDOT SPECIFICATIONS. 3. UNLESS OTHERWISE APPROVED, ALL FIRE HYDRANT CONNECTIONS, SERVICE CONNECTIONS TO THE CURB STOP AT THE METER, AND ALL JOINTS, CONFLICTS AND THRUST BLOCKS IN THE MAINS SHALL REMAIN UNCOVERED FOR VISUAL INSPECTION BY AN INSPECTOR FOR THE UTILITY OR ENGINEER. THE CONTRACTOR SHALL ONLY BACKFILL AFTER APPROVAL BY INSPECTION.	PAUL II BLV
	LUMEN: KENNETH STINNETT (239) 920-5935 IMMOKALEE FIRE DEPT: MICHAEL CHOATE (239) 657-2700 NORTH COLLIER FIRE DEPT: SEAN LINTZ (230) 597-9227 AMSCD ROW ENGINEER: TED TRYKA (239) 597-3111 2. A PRE-CONSTRUCTION MEETING IS TO BE HELD PRIOR TO DELIVERY OF MATERIALS AND INITIATION OF	10. THE LIGHTING POLES AND LUMINARIES SHOWN ON THESE DRAWINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION. FINAL LIGHTING POLE LOCATION AND LUMINARY TYPE MAY VARY AND WILL BE COORDINATED WITH <u>OWNER'S</u> ELECTRICAL ENGINEER. POLE LOCATIONS SHOULD MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF FIVE FEET FROM UNDERGROUND UTILITY MAINS.	D.2. MASTER METER AND BYPASS PIPING D.3. PRESSURE TESTS D.4. FLUSHING D.5. CHLORINATION D.6. BACTERIOLOGICAL TESTS D.7. JACK AND BORE INSTALLATIONS D.8. FIRE FLOW TESTING	 IN ACCORDANCE WITH THE <u>FIRE DISTRICT</u>, DISTANCES BETWEEN INSTALLED FIRE HYDRANTS SHALL NOT EXCEED THOSE SHOWN IN THE APPROVED PLANS. FIRE HYDRANT SHALL BE MARKED IN A UNIFORM MANNER APPROVED BY THE <u>FIRE DISTRICT</u>. FIRE HYDRANTS SHALL BE INSTALLED WITHIN 3 FEET OF THE CURB LINE OF A FIRE LANE, STREET, OR 	WATER MA
	ANY WATER AND SEWER CONSTRUCTION. THE MEETING SHALL BE ATTENDED BY THE <u>UTILITY</u> , <u>DEVELOPMENT SERVICES / BUILDING DEPARTMENT</u> , THE <u>CONTRACTOR</u> , THE <u>UNDERGROUND CONTRACTOR</u> , <u>PAVING CONTRACTOR</u> , <u>ENGINEER</u> AND OTHER INTERESTED PARTIES. 3. THREE (3) OR MORE COPIES OF THE CURRENT APPROVED PRODUCT LIST AND ALL NECESSARY SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO SCHEDULING OF THE PRE-CONSTRUCTION MEETING. 4. ALL MATERIALS SUPPLIED SHALL CONFORM TO PRODUCT LIST AND SHOP DRAWINGS AS APPROVED BY	 SIGN AND FLAG POLE PERMITS MUST BE APPLIED FOR SEPARATELY FROM THIS SDP, AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL SIDEWALKS AND SIDEWALK CROSSINGS FOR ROADSIDE SIDEWALKS AND ACCESSIBLE ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX #522-001 AND # 522-002, THE AMERICANS WITH DISABILITIES ACT (ADA), AND THE FLORIDA ACCESSIBILITY CODE AT CURBS, GUTTERS, SIDEWALKS, INTERSECTIONS, ETC. 	E. WASTEWATER SYSTEMS E.1. CONNECTION TO EXISTING SANITARY SEWER FACILITIES (INCLUDING HOT TAPS) E.2. PRESSURE TESTS E.3. INFILTRATION TEST E.4. LIFT STATION INSTALLATION (PRIOR TO COVER UP) E.5. LIFT STATION STARTUP E.6. LAMPING TO SEWER AND MANHOLES E.7. FLUSHING E.8. VIDEOTAPING OF GRAVITY MAINS	PRIVATE STREET WHEN INSTALLED ALONG SUCH ACCESS WAYS. 7. FIRE HYDRANTS SHALL NOT BE OBSTRUCTED VISUALLY OR FUNCTIONALLY BY VEGETATION. A CLEARING OF 3 FEET TO EACH SIDE, REAR AND TO THE STREET SHALL BE MAINTAINED. 8. FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH LATEST NFPA SECTION No. 1 REVISION STANDARDS AND THE FIRE DISTRICT LATEST HYDRANT SPECIFICATIONS AND INSTALLATION REQUIREMENTS.	EXTENSIO
	THE <u>ENGINEER</u> PRIOR TO CONSTRUCTION. SUBSTITUTE MATERIALS SHALL NOT BE APPROVED AFTER DELIVERY TO THE JOB SITE. ALL REQUESTS FOR MATERIAL SUBSTITUTION SHALL BE APPROVED PRIOR TO DELIVERY OF THESE MATERIALS TO THE JOB SITE. 5. ALL APPLICABLE PERMITS MUST BE OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION (FDEP, THE <u>COUNTY</u> , THE <u>CITY</u> , RIGHT-OF-WAY, BLASTING, DEWATERING, ETC.)	OWNER RESPONSIBILITY NOTES	E.9. JACK AND BORE INSTALLATIONS F. OTHERS AS MAY BE REQUIRED BY OWNER, AND ENGINEER. G. OTHERS AS MAY BE REQUIRED BY UTILITY AT THE TIME OF CONSTRUCTION DOCUMENT APPROVAL. 9. WATER MAINS SHALL BE SEPARATED FROM STORM SEWER, SANITARY SEWER, NON-POTABLE IRRIGATION	 THE FIRE PROTECTION WATER SUPPLY, INCLUDING FIRE HYDRANTS, SHALL BE INSTALLED AND IN-SERVICE PRIOR TO PLACING COMBUSTIBLE BUILDING MATERIALS ON-SITE. <u>CONTRACTOR</u> MAY UTILIZE ALTERNATE METHODS (I.E. TANKS WITH FIREPUMP), BUT SHALL OBTAIN APPROVAL FROM THE <u>FIRE DISTRICT</u> PRIOR TO IMPLEMENTATION. 	TITLE:
	 SEQUENCE OF CONSTRUCTION - UNLESS OTHERWISE NOTED, SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO ROADWAY CONSTRUCTION. ALL <u>CONTRACTORS</u> SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION PLANS ON-SITE. THE <u>CONTRACTORS</u> SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS FOR ALL EXISTING PUBLIC AND PRIVATE UTILITY FACILITIES. 	1. AVE MARIA STEWARDSHIP COMMUNITY DISTRICT, ITS SUCCESSORS OR ASSIGNS, SHALL BE RESPONSIBLE FOR PERPETUAL MAINTENANCE OF ALL FEATURES OF THE SURFACE WATER MANAGEMENT SYSTEM AS OUTLINED BY THE DESIGN ENGINEER ON THESE DRAWINGS. 2. THE PROPERTY OWNER IS RESPONSIBLE FOR THE REPLACEMENT OF ALL DEAD LANDSCAPE MATERIAL AND FOR THE MAINTENANCE OF THE REQUIRED IRRIGATION SYSTEM.	MAINS, AND FORCE MAINS BY A MINIMUM CLEAR VERTICAL AND HORIZONTAL DISTANCES AS REQUIRED BY THE UTILITY AND FDEP 10. WATER MAINS CROSSING ANY TYPE OF SANITARY SEWER, INCLUDING FORCE MAIN, OR STORM SEWER SHALL HAVE ONE FULL LENGTH OF WATER MAIN CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THAT THE WATER JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM	CERTIFICATION / SUBSTANTIAL COMPLIANCE NOTES:	NOTE SHEET
	 THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THE APPROVED PLANS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTORS. APPROVAL OF DEVELOPMENT PLANS BY THE UTILITY IN NO WAY IMPLIES VERIFICATION OF THE ACCURACY OF THOSE PLANS OR FEATURES DEPICTED THEREON. ANY DISCREPANCY IN OR VARIATION FROM THE APPROVED PLANS IS TO BE BROUGHT TO THE ATTENTION OF THE UTILITY BY THE ENGINEER AND CONTRACTORS. THE CONTRACTORS SHALL BE RESPONSIBLE AT ALL TIMES THROUGH THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES FROM DAMAGE OR DISRUPTION OF 	3. AVE MARIA STEWARDSHIP COMMUNITY DISTRICT, ITS SUCCESSORS OR ASSIGNS SHALL BE RESPONSIBLE FOR ANNUAL EXOTIC VEGETATION REMOVAL, AS DEFINED BY THE DEVELOPMENT SERVICES ORDINANCE UPON COMPLETION AND ACCEPTANCE OF WORK REQUIREMENT IN THIS CONTRACT.	FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. 11. HORIZONTAL AND VERTICAL DEFLECTION OF THE PRESSURE MAINS SHALL NOT EXCEED THE PIPE MANUFACTURER'S SPECIFICATIONS. BENDS SHALL BE USED WHERE DEFLECTIONS EXCEED THE MANUFACTURER'S SPECIFICATIONS.	IN ACCORDANCE WITH <u>UTILITY</u> TECHNICAL STANDARDS MANUAL AND <u>DEVELOPMENT SERVICES / BUILDING DEPARTMENT</u> , THE CONTRACTOR SHALL PROVIDE THE FOLLOWING REQUIRED ITEMS TO THE ENGINEER OF RECORD: 1. TEST REPORTS (BY <u>CONTRACTOR</u>) A. DENSITY REPORTS	
	SERVICE. THE <u>CONTRACTORS</u> SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE. 11. THE <u>CONTRACTORS</u> SHALL SCHEDULE INSPECTIONS AND TESTS WITH THE <u>DEVELOPMENT SERVICES</u> , THE <u>CITY</u> AND THE <u>COUNTY</u> . AS REQUIRED, A MINIMUM OF 48 HOURS IN ADVANCE AND NOTIFY ENGINEER 48 HOURS IN ADVANCE.	CONTRACTOR RESPONSIBILITY NOTES 1. THE <u>CITY</u> , <u>COUNTY</u> , <u>UTILITY</u> , <u>DRY UTILITIES</u> , AND FDOT MAY HAVE EXISTING UTILITIES ADJACENT TO THIS	12. COVER FOR MAINS SHALL BE MEASURED FROM FINISHED GRADES. IT IS THE <u>CONTRACTOR'S</u> RESPONSIBILITY TO INSURE MINIMUM COVER, REGARDLESS OF EXISTING GRADE. 13. <u>CONTRACTOR</u> SHALL CONSTRUCT ALL WATER, IRRIGATION AND SEWER APPURTENANCES INCLUDING METER BOXES, BLOW-OFFS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, ETC. TO FINISHED GRADE. <u>CONTRACTOR</u> SHALL COORDINATE DURING THE CONSTRUCTION STAKE-OUT AND PRIOR TO CONSTRUCTION OF SAID APPURTENANCES WITH <u>OWNER</u> AND <u>ENGINEER</u> REGARDING FINISHED GRADE. IT	A.1. COMPACT FILL (FOR BUILDING PADS, PIPE BEDDING AND BACKFILL) A.2. STABILIZED SUBGRADE A.3. LIMEROCK BASE A.4. TRENCH B. ROADWAY CORE SAMPLES, EVERY 300 LF B.1. LIMEROCK BASE B.2. ASPHALT	CLIENT:
	 NO CONNECTION TO, OR ANY OTHER CONSTRUCTION SHALL BE PERFORMED ON AN EXISTING UTILITY MAIN OR STRUCTURE WITHOUT THE PRESENCE OF A <u>THE DEVELOPMENT SERVICES</u> UTILITY INSPECTOR. FACILITIES PROPOSED HEREIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS, THE <u>UTILITY</u>, AND THE <u>DEVELOPMENT SERVICES / BUILDING DEPARTMENT</u> TECHNICAL STANDARDS AND SPECIFICATIONS. CONFLICTS BETWEEN THE PRECEDING DOCUMENTS SHOULD BE CALLED TO THE ATTENTION OF THE <u>UTILITY</u> FOR RESOLUTION. DEVIATIONS FROM THE APPROVED PLANS MUST BE APPROVED IN ADVANCE BY THE <u>UTILITY</u>. 	 THE <u>CITY, COUNTY, UTILITY, DRY UTILITIES</u>, AND FDOT MAY HAVE EXISTING UTILITIES ADJACENT TO THIS PROPOSED CONSTRUCTION. <u>CONTRACTOR</u> SHALL CONTACT THE RESPECTIVE UTILITIES TO LOCATE THEIR FACILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. <u>CONTRACTOR</u> SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DEVIATION IN PLAN INFORMATION SHALL BE REPORTED TO <u>ENGINEER</u> IMMEDIATELY. THE <u>CONTRACTOR</u> SHALL BE RESPONSIBLE FOR OBTAINING COPIES OF AND COMPLYING WITH ALL PERMITS OBTAINED BY THE <u>OWNER</u>. 	IS THE <u>CONTRACTOR'S</u> RESPONSIBILITY TO INSURE CONSTRUCTION OF SAID APPURTENANCES TO FINISHED GRADE. 14. PRIOR TO COMPACTION OF SUBGRADE AND ROADWAY CONSTRUCTION, ALL SUBSURFACE CONSTRUCTION SUCH AS WATER LINES, SEWER LINES, PUBLIC UTILITIES, AND STORM DRAINAGE MUST BE COMPLETED. COMPACTION UNDER ALL AREAS SHALL BE TO 98% DENSITY. 15. APPROVED FITTINGS SHALL BE USED TO MAINTAIN PLAN ALIGNMENT OF POTABLE, FORCE, AND IRRIGATION MAINS. DEVIATION FROM PLAN ALIGNMENT SHALL BE NOT MORE THAN 12±" FROM PLAN	C. CONCRETE CYLINDER TESTING 2. TEST REPORTS (BY CONTRACTOR): A. BACTERIOLOGICAL B. BACKFLOW DEVICE C. LIFT STATION START-UP D. LIFT STATION ELECTRICAL SERVICE WIRING AND VOLTAGE DROP E. SEWER VIDEO	AVE MARIA UTILI COMPANY, LLLI
	 ANY DEVIATIONS FROM THE APPROVED PLANS MUST HAVE PRIOR WRITTEN APPROVAL FROM <u>OWNER</u>, <u>ENGINEER</u> AND APPROVING AGENCY. RECORD DRAWINGS - THE <u>SURVEYOR</u> SHALL PROVIDE A COMPLETE SET OF "AS-BUILT" INFORMATION RELATIVE TO LOCATION OF THE STORM INLETS AND SANITARY MANHOLES AS WELL AS INVERTS AND RIM ELEVATIONS, AND ANY OTHER CHANGES. 	4. CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER WRITTEN APPROVAL FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS. 5. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE COUNTY GROUNDWATER PROTECTION ORDINANCE. 6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE APPROVED DEWATERING PERMIT	CENTERLINE OF MAIN. A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, SHALL PREPARE RECORD DRAWINGS OF ALL FITTINGS AND DEFLECTIONS. 16. BEDDING FOR WATER AND SEWER LINES SHALL BE AS SHOWN ON TYPICAL TRENCH RESTORATION DETAIL. SUITABLE BACKFILL MATERIAL SHALL BE PLACED IN 6" MAXIMUM COMPACTED LAYERS TO 12" ABOVE THE TOP OF PIPE.	3. AGENCY APPROVALS: A. <u>FIRE DISTRICT</u> A.1. FIRE LINE CONSTRUCTION, IF APPLICABLE. A.2. FIRE HYDRANT AND THRUST BLOCK INSPECTION, IF APPLICABLE. 4. RECORD DRAWINGS: THE CONTRACTOR SHALL PROVIDE A FINAL SET OF RECORD DRAWINGS TO <u>ENGINEER</u> . RECORD	REVISIONS:
	 UPON COMPLETION OF CONSTRUCTION, A FINAL INSPECTION SHALL VERIFY PROPER ADHERENCE TO ALL FACETS OF THE PLANS AND SPECIFICATIONS. GUARANTEE - ALL MATERIAL AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTORS UNDER THEIR CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF AT LEAST ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE COMPER OF FAILURE OF ANY PART OF THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTY PERIOD. THE AFFECTED PART, PARTS, OR MATERIALS SHALL BE REPLACED PROMPTLY WITH NEW PARTS OR MATERIALS BY THE CONTRACTOR, 	FROM SOUTH FLORIDA WATER MANAGEMENT DISTRICT AS REQUIRED. 7. THE <u>CONTRACTOR</u> IS RESPONSIBLE FOR OBTAINING A BLASTING PERMIT, IF REQUIRED. 8. THE <u>CONTRACTOR</u> IS RESPONSIBLE FOR OBTAINING A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FROM THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. ACCORDINGLY, THE <u>CONTRACTOR</u> IS ALSO RESPONSIBLE FOR CREATING, IMPLEMENTING AND MAINTAINING A STORM WATER POLLUTION PREVENTION PLAN AS PER THE REQUIREMENTS OF THE NPDES	 ALL VALVES MUST BE PLACED OUTSIDE OF PAVED AREAS, UNLESS OTHERWISE INDICATED IN THE APPROVED CONSTRUCTION DOCUMENTS. PER ASTM STANDARDS, NO GRAVITY SEWER LINE SHALL EXCEED A DEFLECTION OF 5%. A DEFLECTION TEST SHALL BE PERFORMED BY ADVANCING A MANDREL, WITH A DIAMETER OF NO LESS THAN 95% OF THE INSIDE PIPE DIAMETER AND MOUNTED ON THE FRONT OF THE SEWER VIDEOTAPING DEVICE, THROUGH ALL GRAVITY SANITARY MAINS WITHIN THE SYSTEM. ALL 8" PVC GRAVITY SANITARY SEWER MAINS SHALL CONFORM TO ASTM D-3034 SDR 26 AND SHALL HAVE 	DRAWINGS SHALL BE CERTIFIED BY A REGISTERED LAND <u>SURVEYOR</u> AND ACCURATELY SHOW ALL ABOVE-GROUND HORIZONTAL LOCATIONS, AND BELOW-GROUND HORIZONTAL AND VERTICAL LOCATIONS AT AREAS EXPOSED OR MARKED BY THE UTILITY CONTRACTOR FOR THE FOLLOWING. PLEASE NOTE NOT ALL ITEMS ARE APPLICABLE TO THIS CONSTRUCTION PLAN. <u>CONTRACTOR</u> SHALL COORDINATE WITH <u>ENGINEER</u> FOR FINAL VERIFICATION. A. POTABLE WATER, IRRIGATION, AND WASTEWATER RECORD INFORMATION PROVIDED SHALL MEET THE REQUIREMENTS OF THE <u>UTILITY</u> AND <u>DEVELOPMENT SERVICES / BUILDING DEPARTMENT</u> TECHNICAL STANDARDS MANUAL, AND SHALL INCLUDE, BUT NOT BE LIMITED TO:	No: Revision:
	AT NO EXPENSE TO THE <u>OWNER</u> . IN THE EVENT THE <u>CONTRACTOR</u> FAILS TO MAKE THE NECESSARY REPLACEMENT OR REPAIRS WITHIN SEVEN DAYS AFTER NOTIFICATION BY THE <u>OWNER</u> . THE <u>OWNER</u> MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE <u>CONTRACTOR</u> . 18. ANY WELLS DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE OWNER AND ENGINEER WITHIN 24 HOURS AFTER DISCOVERY IS MADE.	GENERAL PERMIT. 9. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT. ALL TRAFFIC MAINTENANCE CONTROLS SHALL BE IN ACCORDANCE WITH FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS. 10. THE CONTRACTOR SHALL REPAIR AND REPLACE ALL AREAS DISTURBED BY CONSTRUCTION TO EXISTING CONDITIONS	20. ALL PVC SEWER LATERALS SHALL BE 6", CONFORM TO ASTM D-3034 SDR 26 AND SHALL FLAVE A 0.40% MINIMUM SLOPE UNLESS OTHERWISE NOTED. 20. ALL PVC SEWER LATERALS SHALL BE 6", CONFORM TO ASTM D-3034 SDR 26 AND CONSTRUCTED AT 1.04% MINIMUM SLOPE PER THE PLUMBING CODE. 21. ALL PVC PIPES 14" TO 36" IN DIAMETER SHALL MEET THE REQUIREMENTS OF AWWA C-900. 22. ALL DUCTILE IRON PIPE (DIP) SHALL MEET THE REQUIREMENTS OF AWWA C-151	 A.1. LOCATIONS AND ELEVATIONS OF ALL PRESSURE PIPE LINES AT EVERY 100 LF ALONG PIPE LINE AND AT EACH PIPE ELBOW AND FITTING LOCATION. A.2. LOCATIONS OF ALL METER AND VALVE BOXES, AIR RELEASE VALVES, BLOW-OFFS, FIRE HYDRANTS AND BACTERIAL SAMPLE POINTS, ETC. A.3. INVERTS, RIM ELEVATIONS AND LOCATIONS FOR ALL LIFT STATIONS. A.4. LOCATIONS FOR ALL LIFT STATION ELECTRICAL CONTROL PANELS AND TRANSFORMERS. A.5. INVERTS, PIPE SLOPES, RIM ELEVATIONS, RUN LENGTHS AND LOCATIONS FOR ALL 	
	1. CURRENT ZONING: SRA	11. THE <u>CONTRACTOR</u> SHALL PROVIDE 48 HOURS WRITTEN NOTICE TO THE <u>ENGINEER</u> , <u>OWNER</u> AND <u>COUNTY</u> PRIOR TO THE FOLLOWING: A. COMMENCEMENT. B. CHANGES TO APPROVED SCHEDULES, SUBCONTRACTORS, OR RESIDENT SUPERINTENDENT C. GENERAL C.1. COMPACTION	 23. ALL WATER SERVICES UNDER PAVEMENT SHALL BE INSTALLED IN A 4" SCH. 40 PVC CONDUIT AND EXTEND 5' PAST THE EDGE OF PAVEMENT ON BOTH SIDES OR WATER SERVICE CONDUITS SHALL BE PLUGGED, MARKED AT GRADE, AND HAVE 3M BRAND MARKERS, OR APPROVED EQUAL, AT EACH END. 24. ALL CONDUITS UNDER ROADWAYS (<u>DRY UTILITIES</u>) SHALL BE A MINIMUM OF 18" UNDER WATER MAINS AND FORCE MAINS. 	MANHOLES. A.6. INVERTS (AT BOTH ENDS), PIPE SLOPES, RUN LENGTHS AND LOCATIONS FOR ALL SEWER MAIN STUB-OUTS. A.7. LOCATIONS OF SEWER LATERALS. A.8. INVERTS AND LOCATIONS FOR ALL CLEANOUTS B. PAVING AND DRAINAGE: B.1. ROADWAY CENTERLINE ELEVATIONS AT ALL INTERSECTIONS AND AT A MINIMUM AT ALL	
	2. ADJACENT ZONING: NORTH = SRA SOUTH = SRA EAST = ROW / SRA WEST = SRA	C.2. TRENCH DENSITY C.3. ROADWAY STRINGLINE C.4. PAVING (INCLUDING SIDEWALK AND CURBING) C.5. PRELIMINARY AND FINAL INSPECTIONS D. OTHERS AS MAY BE REQUIRED BY <u>OWNER</u> , COUNTY AND <u>ENGINEER</u> . 12. <u>CONTRACTOR</u> SHALL REFERENCE PLANS FOR ADDITIONAL SHOP DRAWINGS REQUESTS, PARTICULARLY FOR STRUCTURES REQUIRING SPECIAL DETAILS AND SPECIFICATIONS WHICH ARE TO BE PROVIDED BY A STRUCTURAL ENGINEER.	 POTABLE WATER MAINS 3 INCHES OR SMALLER SHALL MEET THE REQUIREMENTS OF ASTM D-2241 OR D-1785, LATEST REVISION. PIPE JOINTS SHALL BE PUSH-ON OR SOLVENT WELDED TYPE. ALL POLYETHYLENE PIPES 1/2" TO 3" IN DIAMETER SHALL BE PE3408, AWWA C-901 AND SDS 9-220 COMPLIANT. ALL BACKFLOW PREVENTER ASSEMBLIES/DEVICES SHALL BE IN ACCORDANCE WITH 62-555.360, F.A.C., AND THE AWWA MANUAL M-14, PRACTICE FOR BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL. 	PVI'S ALONG THE ROADWAY CENTERLINE. B.2. INVERT, GRATE AND INLET ELEVATIONS OF ALL WATER MANAGEMENT STRUCTURES, INCLUDING ALL CONTROL STRUCTURES, CATCH BASINS, JUNCTION BOXES, HEADWALLS, MITERED ENDS, AND THE LIKE. WEIR AND BLEEDDOWN DIMENSIONS AND ELEVATIONS SHALL BE INCLUDED FOR ALL CONTROL STRUCTURES. B.3. CENTERLINE ELEVATIONS ON ALL OPEN SWALES AT HIGH AND LOW POINTS AND AT EVERY 100 LF ALONG SWALE CENTERLINE.	NOTES:
	WATER MANAGEMENT INFORMATION	13. THE <u>CONTRACTOR</u> SHALL RETAIN THE SERVICES OF A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO STAKE-OUT THE LOCATION OF ALL PROPOSED WATER, AND SEWER LINES AND INFRASTRUCTURE SHOWN ON THE DRAWINGS. THE <u>CONTRACTOR</u> SHALL OBTAIN A COPY OF THE FINAL UTILITY DRAWINGS, IN CAD FORMAT, FROM THE <u>ENGINEER</u> AND PROVIDE THAT DOCUMENTATION TO THE <u>SURVEYOR</u> . THE DIMENSIONAL INFORMATION OBTAINED FROM THE CAD DRAWINGS SHALL BE USED IN DEVELOPING THE STAKE-OUT PLAN FOR UTILITIES.	ALL WATER METERS SHALL CONFORM TO AWWA C-700 OR NSF 61 STANDARDS. 28. LOCATING DIMENSIONS FOR SEWER LATERALS & WATER CROSSINGS ARE TAKEN FROM THE NEXT DOWNSTREAM MANHOLE ALONG THE CENTERLINE OF THE SEWER, AND PERPENDICULAR TO THE SERVICE LINE. 29. A TEMPORARY BACKFLOW PREVENTER MAY BE REQUIRED BY FIRE DISTRICT IF CONSTRUCTION WITH	5. <u>CONTRACTOR</u> SHALL COORDINATE AND VERIFY PROCEDURES IN ACCOMMODATING REQUIRED RECORD DRAWING INFORMATION WITH <u>ENGINEER</u> AND <u>SURVEYOR</u> PRIOR TO CONSTRUCTION.	
	WATER MANAGEMENT PERMIT: SFWMD ERP PERMIT No. N/A	14. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE <u>CONTRACTOR</u> SHALL INSTALL TEMPORARY CONSTRUCTION FENCING (SUCH AS SILT FENCE) BEYOND THE DRIPLINES OF RETAINED VEGETATION ALONG THE LIMITS OF CLEARING. THIS FENCE SHALL REMAIN ERECTED AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION. 15. ENTRY/SIGN FEATURES, SITE WALLS AND FLAG POLE LOCATIONS AND CONFIGURATIONS ARE	29. A LEMPORARY BACKERIAL COMMENCES PRIOR TO THE ACCEPTANCE OF THE WATER MAIN BY <u>UTILITY</u> . 30. ALL TEMPORARY BACTERIAL SAMPLE POINTS ARE TO BE REMOVED AFTER SATISFACTORY BACTERIAL TESTING IS COMPLETED AND THE CONNECTION IS MADE TO THE EXISTING WATER MAIN. 31. ALL WATER MAINS MUST BE FLUSHED AND DETERMINED TO BE BACTERIOLOGICAL CLEARED BEFORE CONNECTIONS ARE MADE TO THE PROPOSED WATER DISTRIBUTION SYSTEM.	LEGEND SYMBOLS	_
		APPROXIMATE AND ARE SUBJECT TO CHANGE, CONTRACTOR SHALL REFERENCE LANDSCAPE ARCHITECT'S OR ARCHITECT'S PLANS FOR ENTRY/SIGN FEATURES, SITE WALLS AND FLAG POLE MATERIALS AND DESIGN SPECIFICATIONS. IF THERE ARE ANY DISCREPANCIES BETWEEN LANDSCAPE ARCHITECT'S PLANS AND SPECIFICATIONS AND ENGINEER'S PLANS, CONTRACTOR IS REQUIRED TO OBTAIN FROM ENGINEER WRITTEN APPROVAL FOR ANY DEVIATIONS. SHOWN ON THE STAMPED APPROVED SITE DEVELOPMENT PLANS. CONTRACTOR SHALL APPLY SEPARATELY FOR THE APPROPRIATE BUILDING PERMITS, WHERE APPLICABLE, AS OUTLINED IN THE COUNTY BUILDING CODE AND LDC.	CONNECTIONS ARE MADE TO THE PROPOSED WATER DISTRIBUTION STSTEM.	REVISION SYMBOL WATER METER POST INDICATOR VALVE SWALE & DIRECTION OF FLOW PLUG VALVE	
		 16. CONTRACTOR SHALL REFERENCE ELECTRICAL ENGINEER'S PLANS FOR STREET/SITE LIGHTING FINAL LOCATIONS, COLOR, MATERIAL AND SPECIFICATIONS. IF THERE ARE ANY DISCREPANCIES BETWEEN LANDSCAPE ARCHITECT'S PLANS AND SPECIFICATION AND ENGINEER'S PLANS, CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER WRITTEN APPROVAL FOR ANY DEVIATIONS. STREET/SITE LIGHTING SHALL BE LOCATED TO AVOID CONFLICTS WITH PROPOSED VEGETATION. 17. ALL MATERIALS, DEBRIS, UNSUITABLE EARTH, ETC. OF NO SALVAGE VALUE SHALL BECOME THE PROPERTY OF THE CONTRACTOR. 		EXISTING ELEVATION EXISTING ELEVATION HANDICAPPED PARKING SPACE CHECK VALVE IN-LINE VALVE W/ BOX BACTERIAL SAMPLE POINT	PROFESSIONAL SEALS: PROFESSIONAL ENGINEER: CONNOTE FLORIDA LICENSE NUMBER:
		UNDERGROUND CONTRACTOR RESPONSIBILITY NOTES	LEGEND HATCH	SIGN — REDUCER O— LIGHT POLE — YARD DRAIN	
		1. <u>UNDERGROUND CONTRACTOR</u> SHALL MINIMIZE THE WORK AREA AND WIDTH OF TRENCHES TO AVOID DISTURBANCES OF NATURAL VEGETATION. SPOIL FROM TRENCHES SHALL BE PLACED ONLY ON PREVIOUSLY CLEARED AREAS OR AS DIRECTED BY THE <u>OWNER. UNDERGROUND CONTRACTOR</u> SHALL NOT REMOVE AND/OR DISTURB ANY TREES AND/OR SHRUBS WITHOUT PRIOR APPROVAL BY <u>OWNER</u> . 2. ALL UNDERGROUND UTILITIES AND INFRASTRUCTURE LOCATED BENEATH THE STABILIZED PORTION OF THE ROAD BED SHALL BE INSTALLED PRIOR TO COMPACTION OF THE SUBGRADE OR AS OTHERWISE	BRICK PAVERS LITTORAL ZONE	EXISTING LIGHT POLE SANITARY SEWER MANHOLE / STORM SEWER JUNCTION BOX REGULAR PARKING SANITARY SEWER MANHOLE / STORM SEWER JUNCTION BOX SANITARY SEWER LATERAL & CLEAN-OUT CONTROL STRUCTURES	
		DIRECTED BY OWNER. CAUTION: STORM DRAINAGE PIPES MAY EXTEND INTO STABILIZED SUBGRADE AND/OR BASE. PAVING CONTRACTOR SHALL ADJUST STABILIZER MIXER TO PREVENT CONTACT AND DAMAGE TO PIPING. 3. ALL CONDUITS UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE BACK OF CURB AND/OR BACK OF SIDEWALK AT EACH END AND SHALL BE A MINIMUM OF 18" UNDER WATER MAINS AND FORCE MAINS.	BUILDING RIP-RAP EXISTING BUILDING SAND	 ★ LOADING ZONE PARKING ★ DRIVE THRU STACKING PARKING ★ AIR RELEASE VALVE ★ HEADWALL 	Florida Engineering Certificate of Authorization #28275 Florida Landscape Certificate of Authorization #LC26000632 DATUM NOTE: ALL ELEVATIONS ARE BASED ON NAVD 8 (NORTH AMERICAN VERTICAL DATUM OF
			COMPACTED LIMEROCK STABILIZED SUBGRADE CONCRETE UPLAND BUFFER ZONE	TEMPORARY BLOW-OFF E	Bar Scale: 1" = ### 0 #### ### ### ### SEC: 33, 34 TWP: 47S
			DETECTABLE SURFACE	FIRE HYDRANT ASSEMBLY STORM SEWER & STRUCTURE WITH SIDE INLETS PUMP STATION TEMPORARY BLOW-OFF	City: AVE MARIA County: Designed by: NATH. Drawn by: NATH. Date:
			GEOWEB WATER WATER WETLANDS ZONE	ARC REFERENCE ARCHITECT'S PLAN FOR SIZE, LOCATION, DETAILS, & SPECIFICATIONS. FIRE SERVICE INFRASTRUCTURE FROM PIV TO THE BUILDING SHALL BE PER THE FIRE SPRINKLEF CONTRACTOR OR MECHANICAL ENGINEERS DETAILS AND SPECIFICATIONS (INCLUDING PIV, FDC, AND CHECK VALVES) LA REFERENCE LANDSCAPE ARCHITECT'S PLAN FOR SIZE, LOCATION, DETAIL, & SPECIFICATIONS.	Horizontal Scale: Vertical Scale:
			GRAVEL CONTROL WADING BIRD AREA	ELEC REFERENCE ELECTRIC UTILITY DESIGN FOR DETAILS, MATERIALS, & SPECIFICATIONS. MEP REFERENCE MECHANICAL, ELECTRICAL, OR PLUMBING ENGINEER'S PLAN FOR SIZE, LOCATION, DETAILS, & SPECIFICATIONS. POC BUILDING CONTRACTOR'S POINT OF CONNECTION.	Project Number: P-AMUC-017-002-CC Project Number: P-AMUC-01
 2	2	1	<u></u>	SE REFERENCE STRUCTURAL ENGINEER'S PLAN FOR SIZE, LOCATION, DETAILS, & SPECIFICATIONS.	Sheet Number:



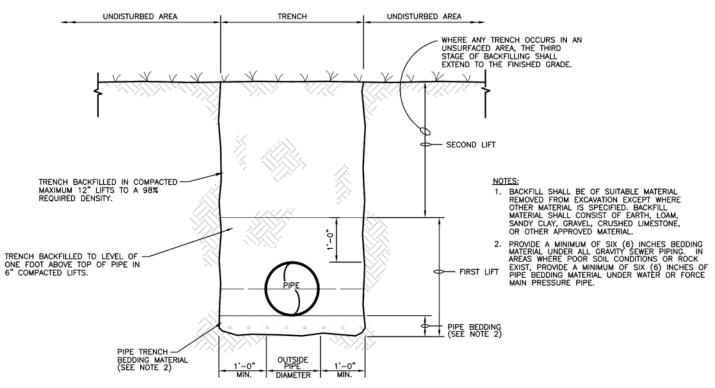








AMUC-G-3REVISED: MARCH 10, 2011



UNPAVED AREA TRENCH RESTORATION DETAIL

GENERAL NOTES

- THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED PERMITS ARE IN HAND BEFORE COMMENCEMENT OF CONSTRUCTION. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH AVE MARIA UTILITY COMPANY LLLP (AMUC) STANDARDS AND LOCAL, STATE AND FEDERAL PERMITS. THE CONTRACTOR SHALL COORDINATE ALL
- CONTRACTOR MUST NOTIFY AVE MARIA UTILITY COMPANY LLLP (AMUC) AT (239) 348-0248 WITHIN SEVENTY-TWO (72) HOURS PRIOR TO STARTING CONSTRUCTION. ALL ELEVATIONS ARE BASED ON NAVD; NORTH AMERICAN VERTICAL DATUM 1988.
- THE CONTRACTOR SHALL NOTIFY FIBEROPTICS COMPANIES SEVEN (7) WORKING DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY IN THEIR AREA. EXTREME CAUTION SHALL BE USED IN AREAS WHERE FIBEROPTIC CABLE IS LOCATED ADJACENT TO CONSTRUCTION ACTIVITY.
- ALL WORK SHALL BE PERFORMED INSIDE THE RIGTH OF WAY (R.O.W.) OR DESIGNATED EASEMENT.
- ALL MAINS SHALL BE INSTALLED WITH A MINIMUM OF 30-INCHES (2.5 FT) OF COVER, EXCEPT UNDER PAVEMENT. ALL MAINS UNDER PAVEMENT SHALL BE INSTALLED WITH A MINIMUM OF 36-INCHES (3.0 FT) OF COVER. MAXIMUM ALLOWABLE COVER SHALL BE 72-INCHES (6 FT). ALL BURIED PIPING SPECIFIED FOR PRESSURE SERVICES SHALL BE PROVIDED WITH RESTRAINING DEVICES AT ALL DIRECTIONAL CHANGES, UNLESS NOTED OTHERWISE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, DEPTH AND CHARACTER OF ALL UTILITIES PRIOR TO EXCAVATION IN ORDER TO PROTECT THESE UTILITIES DURING CONSTRUCTION. IN THE EVENT OF ANY DISCREPANCY CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER AND AMUC.
- THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AT ALL INTERSECTIONS OF PROPOSED WORK AND EXISTING UTILITIES. THE EXPLORATORY EXCAVATIONS SHALL BE MADE FORTY-EIGHT (48) HOURS IN ADVANCE OF THE PROPOSED WORK. IF THERE IS A CONFLICT, THE CONTRACTOR SHALL NOTIFY AMUC (239) 348-0248 IMMEDIATELY. INFORMATION OF THE OBSTRUCTION SHALL BE FURNISHED BY THE CONTRATOR AND SHALL INCLUDE: LOCATION, ELEVATION, UTILITY TYPE,
- LOCATIONS AND DIMENSIONS OF EXISTING R.O.W. AND EASEMENTS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY ALL THE LIMITS
- THE CONTRACTOR SHALL REPLACE BUT NOT BE LIMITED TO PAVING, STABILIZED EARTH, DRIVEWAYS OR ANY ITEMS DISTURBED OR DAMAGED BY THE CONSTRUCTION OR ITS RELATED ACTIVITIES. THE CONTRACTOR SHALL REPLACE WITH EQUAL MATERIAL OR AS DIRECTED BY AMUC. THE DISPOSAL OF ANY EXCESS EARTHWORK MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS WORK WITH THE WORK SCHEDULE OF ADJACENT CONTRACTORS AS WELL AS AMUC
- ALL PIPELINE MATERIAL AND INSTALLATION SHALL CONFORM TO AMUC STANDARDS (LATEST EDITION), CONTRACT DOCUMENTS AND ALL APPLICABLE LOCAL AND STATE REQUIREMENTS.
- WHERE MINIMUM SEPARATION BETWEEN UTILITIES IS REQUIRED, THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF

PIPE. REFER TO AMUC (LATEST EDITION) CROSSOVER DETAIL (AMUC-G-1) FOR MINIMUM SEPARATION.

- 4" 12" PVC PRESSURE MAINS SHALL CONFORM TO AWWA STANDARD C900 (DR18) PRESSURE CLASS 150; 14" 24" PVC PRESSURE MAINS SHALL CONFORM TO AWWA C905 (DR25) PRESSURE CLASS 165. EXCEPT FOR PVC INSTALLED UNDER PAVEMENT.
- PVC PIPE UNDER PAVEMENT SHALL MEET THE FOLLOWING REQUIREMENT: 4" 12" PVC PRESSURE MAINS SHALL CONFORM TO AWWA STANDARD C900 (DR14) PRESSURE CLASS 200; 14" - 24" PVC PRESSURE MAINS SHALL CONFORM TO AWWA C905 (DR18) PRESSURE CLASS 235.
- ALL PRESSURE MAINS LARGER THAN 24-INCH SHALL BE DUCTILE IRON PIPE (D.I.P). ALL D.I.P. SHALL HAVE A MINIMUM THICKNESS CONFORMING TO PRESSURE CLASS 250 IN ACCORDANCE WITH THE LATEST REVISION OF ANSI/AWWA C150/A21.50, SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C151/A21.51. PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR. PIPE SHALL ALSO HAVE DOUBLE THICK CEMENT-MORTAR LINING ON THE INTERIOR IN ACCORDANCE WITH ANSI/AWWA C104/A21.4 (LATEST REVISION). ALL FITTINGS SHALL BE MECHANICAL JOINT TYPE IN ACCORDANCE WITH AWWA C111 (LATEST
- DUCTILE IRON WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH LATEST REVISION OF ANSI/AWWA C651 PRIOR TO PLACING IN SERVICE. PIPE COLORS: POTABLE WATER MAINS SHALL BE COLORED BLUE; RAW WATER MAINS SHALL BE COLORED WHITE; NON-POTABLE IRRIGATION, RECLAIMED AND
- RE-USE WATER MAINS SHALL BE COLORED PURPLE; FORCE MAIN SHALL BE COLORED GREEN. ALL AERIAL CROSSINGS SHALL BE MADE USING PRESSURE CLASS 250, FLANGED DUCTILE IRON PIPE, AND SHALL BE COATED ON THE EXTERIOR USING APPROPRIATELY COLORED, FIELD APPLIED, EPOXY COATING. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
- PVC FIRE MAINS SHALL BE DR14 PIPE, AND HDPE FIRE MAINS SHALL BE DR11 PIPE.
- USE OF HDPE PIPE SHALL BE APPROVED BY AMUC PRIOR TO CONSTRUCTION. REFER TO AMUC STANDARDS SECTION 10.3.8 FOR EQUIVALENT PVC AND
- ALL WATER MAINS SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA C600 FOR DUCTILE IRON PIPE; AWWA C605 FOR PVC PIPE; ASTM F 2164 FOR HDPE PIPE. THE AMOUNT OF LEAKAGE, WHICH WILL BE PERMITTED, SHALL BE IN ACCORDANCE WITH AWWA C600 STANDARDS.
- ALL FORCE MAINS SHALL BE PRESSURE TESTED AT 100 PSI FOR NOT LESS THAT ONE HOUR IN ACCORDANCE WITH AMUC STANDARDS (SECTION
- PVC FITTINGS SHALL BE PRESSURE RATED 150 PSI AND HAVE HYDROSTATIC DESIGN BASIS OF 4000 PSI PER AWWA C907. ALL DUCTILE IRON FITTINGS SHALL BE MECHANICAL JOINT TYPE WITH THE MINIMUM PRESSURE RATING OF 250 PSI AND SHALL CONFORM TO THE REQUIREMENTS OF ANSI STANDARD A21.10. DUCTILE IRON FITTINGS SHALL BE FUSION BONDED EPOXY COATED ON THE INTERIOR IN ACCORDANCE WITH
- HDPE FITTINGS SHALL HAVE ELECTROFUSION JOINTS OR BUTT HEAT FUSION JOINTS. ALL ELECTROFUSION JOINT FITTINGS SHALL HAVE ISO 9001 CERTIFICATION, AND SHALL BE CENTRAL PLASTIC FITTINGS. ALL BUTT HEAT FUSION JOINT FITTINGS SHALL CONFORM TO AWWA C906 AND ASTM D3261.
- IN AREAS WHERE CONSTRUCTION ACTIVITIES RESTRICT NORMAL ACCESS TO PROPERTIES, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALTERNATE ACCESS ROUTES, WHICH ARE SUBJECT TO APPROVAL BY AMUC. ALL PRACTICAL AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT UNNECESSARY TREE REMOVAL. ALL EXISTING LANDSCAPING TO
- BE REMOVED FOR CONSTRUCTION PURPOSES SHALL BE REPLACED WITH NEW AND DIRECTED BY A SPECIALTY CONTRACTOR WHO WILL WARRANTY/GUARANTEE THE WORK.
- ALL FILL AND ROAD MATERIALS EXCAVATED SHALL BE LEGALLY DISPOSED OF IN ACCORDANCE WITH THE STANDARDS AND APPLICABLE LOCAL AND FEDERAL CODES AND REGULATIONS. ALL EXCAVATION SHALL BE BACKFILLED AT THE END OF EACH WORK DAY.
- FOR ALL SCHEDULED INTERRUPTION OF ANY MAIN FLOW, THE CONTRACTOR SHALL NOTIFY AMUC 72 HOURS IN ADVANCE.
- NECESSARY TO ACCOMPLISH THE SAME IN THE FORM OF, BUT NOT LIMITED TO THE FOLLOWING: POWER, PUMPS, PIPING, APPURTENANT VALVES AND FITTINGS AND/OR SEPTIC TANKER TRUCK PUMPING, HAULING AND DISPOSAL SERVICES.
- CONSTRUCTION SHALL NOT COMMENCE UNTIL AMUC HAS ISSUED A WRITTEN AUTHORIZATION TO CONSTRUCT, AND ALL APPLICABLE FEES HAVE BEEN PAID. CONVEYANCE OF THE UTILITIES SHALL BE IN COMPLIANCE WITH AMUC STANDARDS, SECTION 8.
- ALL CONNECTIONS TO EXISTING MAINS SHALL BE MADE BY THE CONTRACTOR ONLY ON THE AGREED UPON TIME AND DATE ESTABLISHED WITH AMUC STAFF AND AFTER THE CONNECTION PROCEDURE AND WORK SCHEDULE ARE REVIEWED AND APPROVED BY AMUC. LL MAINS SHALL HAVE LOCATOR TAPE INSTALLED CONTINOUSLY ALONG THE ENTIRE LENGTH. THE LOCATOR TAPE SHALL BE INSTALLED DURING
- BACKFILL AT A MINIMUM OF 12 INCHES BELOW FINISH GRADE DIRECTLY OVER THE PIPE AND BE CONTINUOSLY LABELED "WATER MAIN" OR "SEWER MAIN" AS APPROPRIATE. THE TAPE SHALL HAVE AN EMBEDDED METALLIC DETECTABLE STRIP.
- MARKERS SHALL BE PLACED: AT A MINIMUM OF EVERY 100-FEET; AT ALL FITTINGS; AT ANY CHANGE OF DIRECTION AND AT ALL SEWER SERVICES (CLEAN OUTS). MARKERS SHALL BE 3M BRAND, MN1257 FULL RANGE MARKERS FOR THE APPROPRIATE UTILITY OR APPROVED EQUAL. ALL BURIED UTILITIY PIPES TO BE ABANDONED IN PLACE SHALL BE CUT, PLUGGED AND FILLED WITH GROUT.
- WATER MAIN VALVES SHALL BE LOCATED AT ALL INTERSECTING MAINS (THREE PER TEE AND FOUR PER CROSS), AT THE END OF ALL LINES TO BE EXTENDED, AT ALL FIRE HYDRANTS, ON BOTH SIDES OF ALL WATER AND WETLAND CROSSING, AT BOTH ENDS OF ALL JACK AND JORE AND DIRECTIONAL DRILL, AT A MINIMUM OF 500 FEET FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENTS, AND 800 FEET ALONG WATER MAIN FOR ALL
- FORCE MAIN VALVES SHALL BE INSTALLED ON ALL SUBSIDIARY FORCE MAINS AT THE POINT OF CONNECTION TO THE MAJOR MAIN, AT THE END OF ALL LINES TO BE EXTENDED, AT FUTURE CONNECTION BRANCHES AND AT A MINIMUM OF 1,000 FEET ALONG FORCE MAIN "INLINE".
- AIR RELEASE VALVES (ARV) SHALL BE PLACED EVERY 1,500 FEET ON ALL PRESSURE MAINS AND ON BOTH SIDES OF A DIP WHERE DEFLECTION IS 4 TIMES THE DIAMETER OF PIPE OR GREATER.
- FOR WATER MAINS A TEMPORARY BLOW-OFF SHALL BE PROVIDED AT DEAD END LINES THAT WILL BE EXTENDED WITHIN TWO YEARS OTHERWISE A FIRE HYDRANT SHALL BE REQUIRED.
- HYDRANT SERVICES WILL BE SUBJECT TO BACTERIOLOGICAL TESTING. NO HYDRANT WILL BE TURNED ON UNTIL BACTERIOLOGICAL TESTS ARE SATISFIED IN ACCORDANCE WITH AMUC STANDARDS (SECTION 11.9).
- PROVIDE NOTE DEFINING WHO WILL OWN, OPERATE AND MAINTAIN THE WATER AND SEWER SYSTEMS.
- CONTRACTOR SHALL PROVIDE HORIZONTAL AND VERTICAL RECORD LOCATIONS OF IMPROVEMENTS. A REGISTERED LAND SURVEYOR SHALL BE USED TO PROVIDE AS—BUILD INFORMATION WHICH SHALL INCLUDE THE FOLLOWING, BUT NOT LIMITED TO:
- . MANHOLE CENTER COORDINATES FOR SANITARY SEWERS.
- D. ALL UNDERGROUND PIPING (INVERT OR CENTERLINE ELEVATIONS) INCLUDING VALVES, A.R.V., TEES AND FITTINGS.
 F. PIPE INVERT OR CENTERLINE AT CROSSING WITH OTHER PIPES AND EXISTING PIPE.
 G. OTHER HORIZONTAL AND VERTICAL RECORD DATA PERTINENT TO COMPLETED WORK.

AMUC-G-1A

PENINSULA ENGINEERING

PLANNING AND ZONING • SURVEYING

2600 Golden Gate Pkwy 239.403.670 Naples, FL 34105

Pen-Eng.con

POPE JOHN PAUL II BLVD **WATER MAIN EXTENSION**

STANDARD AMUC **GENERAL DETAILS**

AVE MARIA UTILITY COMPANY, LLLP

	ISIONS.	
No:	Revision:	Dat
NOT	FS:	

ROFESSIONAL SEALS:

ORIDA LICENSE NUMBER:

Florida Engineering Certificate of Authorization #28275 Florida Landscape Certificate of Authorization #LC26000632

ALL ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988)

CONNOR J. JONES, P.

TWP:47S SEC: 33, 34 RGE: 291 City: AVE MARIA County: COLLIER NATHAN MULLIN NATHAN MULLINS MARCH 202 Iorizontal Scale: File Name: P-AMUC-017-002-C01-511DT.dwg P-AMUC-017-002-C0

C-51

06 of 08

AMUC-G-4 REVISED: MARCH 10, 2011

