PROJECT TEAM:

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941-708-7450 EXT. 7338

KIMLEY-HORN AND ASSOCIATES, INC. 100 2ND AVENUE SOUTH, SUITE 105-N ST. PETERSBURG, FL 33701 CONTACT: MICHAEL A. SEMAGO, P.E. 727-498-3633

SURVEY:

HYATT SURVEY SERVICES, INC. 2012 LENA ROAD BRADENTON, FL 34211 CONTACT: JOHN MATTHEWS, PM 491-812-2805

GEOTECH:

ARDAMAN & ASSOCIATES, INC. 78 SARASOTA CENTER BOULEVARD SARASOTA, FL 34240 CONTACT: JERRY H. KUEHN, P.E. 941-922-3526

CONSTRUCTION PLANS FOR BRADENTON BEACH GRAVITY SEWER

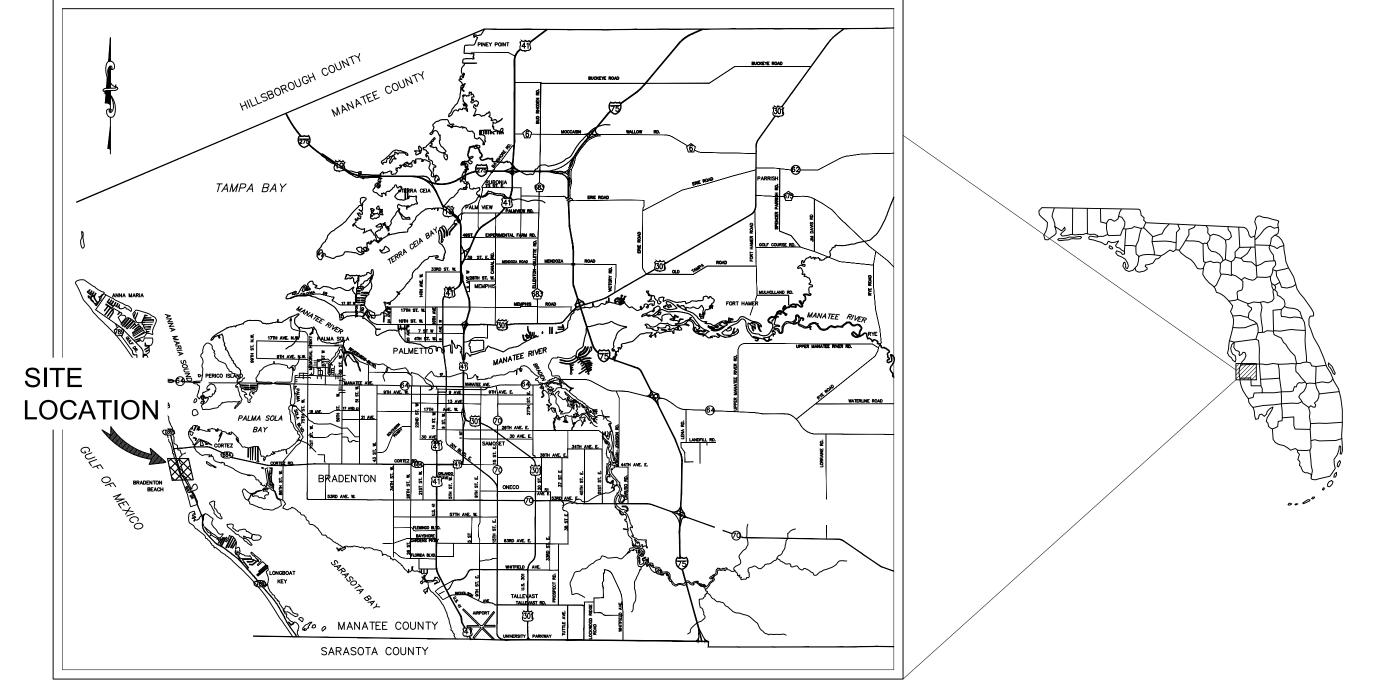
MANATEE COUNTY, FLORIDA

February 2021

MANATEE COUNTY PROJECT #6105280



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PROJECT VICINITY MAP

BID SUBMITTAL

PREPARED BY © 2021 KIMLEY-HORN AND ASSOCIATES, INC. 100 2ND AVENUE SOUTH, SUITE 105-N ST. PETERSBURG, FL 33701 PHONE (727) 547-3999

UTILITY CONTACTS:

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MANATEE COUNTY

KATHY MCMAHON

813-275-3783

FLORIDA POWER & LIGHT GREG COKER 941-704-9087

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

DATE DATE: BY

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REVISIONS

PROJECT NO. 148400056 SHEET NUMBER G-01

FEB 2021

<u>GENERAL</u>

1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: ALEX GONZALEZ, P.E. AND CAN BE REACHED AT (941) 708-7450 X7338

CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.

- 2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS PRIOR TO SUBMITTING ANY OFFICIAL BIDS. THESE SITE VISITS CAN BE
- ARRANGED THROUGH THE PROJECT MANAGER. 3. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.

UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE

- 5. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
- 6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
- 7. THE CONTRACTOR SHALL NOTIFY SUNSHINE 811 (1-800-432-4770) AT LEAST 2 FULL BUSINESS DAYS PRIOR TO CONSTRUCTION OPERATIONS. 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. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING UTILITIES FROM DAMAGE. EXPLORATORY EXCAVATION MAY BE REQUIRED PRIOR TO CONNECTION TO EXISTING UTILITIES.
- 8. NO WORK, EXCEPT FOR EMERGENCY TYPE, SHALL BE PERFORMED AFTER 7:00 PM AND BEFORE 7:00 AM. FOR ADDITIONAL PROJECT RESTRAINTS, REFER TO SECTION 01310 OF THE SPECIFICATIONS.
- 9. THE CONTRACTOR SHALL PROVIDE CERTIFIED RECORD DRAWINGS AS OUTLINED IN THE SPECIFICATIONS. RED-LINE DRAWINGS SHALL BE CURRENT WITH EACH PAY APPLICATION SUBMITTED AND WILL BE CHECKED AS PART OF THE PAY APPLICATION REVIEW PROCESS. PAYMENT WILL NOT BE MADE TO CONTRACTOR WITHOUT APPROVED RED-LINE DRAWINGS. THE MOST CURRENT SET OF RED-LINE DRAWINGS SHALL ALSO BE BROUGHT TO EACH MONTHLY PROGRESS
- 10. THE CONTRACTOR SHALL INCLUDE IN HIS BID: BY-PASS PUMPING FACILITIES, PUMPS, FITTINGS, LABOR, ETC. AS NECESSARY, BASED ON METHOD AND SEQUENCE OF CONSTRUCTION TO COMPLETE ALL WORK WHILE MAINTAINING SEWER SERVICE OPERATIONS AT ALL TIMES.
- 11. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH A DETAILED CONSTRUCTION PHASING PLAN BASED ON THE CONNECTION SEQUENCING ON SHEET G-05, FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. EXISTING FORCE MAIN AND GRAVITY SEWER SHALL REMAIN IN SERVICE UNTIL ALL CONNECTIONS TO THE EXISTING LIFT STATION
- 12. ALL PROPOSED WORK SHALL BE COORDINATED WITH MANATEE COUNTY UTILITIES DEPARTMENT AT LEAST TWO WEEKS IN ADVANCE OF PROPOSED CONSTRUCTION.
- 13. THE CONTRACTOR SHALL FURNISH SHOP DRAWINGS CONFORMING TO MANATEE COUNTY'S LATEST STANDARDS, TO THE ENGINEER FOR REVIEW OF ALL PIPE CONNECTIONS, TRANSITIONS, AND SPECIAL APPURTENANCES PRIOR TO FABRICATION OR DELIVERY TO THE JOB SITE.
- 14. UNLESS OTHERWISE INDICATED OR APPROVED, ALL BELOW GROUND DUCTILE IRON PIPE SHALL HAVE PUSH-ON OR MECHANICAL JOINTS. AND ALL ABOVE GROUND DUCTILE IRON PIPE SHALL HAVE FLANGED JOINTS. ALL JOINTS SHALL BE FULLY RESTRAINED PER THE DETAILS IN THESE PLANS.
- 15. SANITARY SEWERS AND FORCEMAINS CROSSING OVER OR UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER OR FORCE MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10' BETWEEN ANY TWO JOINTS. AS AN ALTERNATIVE, THE SEWER OR FORCE MAIN MAY BE PLACED IN A WATERTIGHT CASING PIPE, CONSISTENT WITH F.A.C. RULE 62-555.314.
- 16. ALL BELOW-GRADE FITTINGS 4-INCHES AND GREATER IN DIAMETER SHALL BE MECHANICAL JOINT DUCTILE IRON WITH PROTECTO 401 LINING FOR THEIR INTERIOR SURFACES AND COAL TAR ENAMEL COATING ON EXTERIOR SURFACES, AS NOTED IN SECTION 02615 OF SPECIFICATIONS.
- 17. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SECURE PROPERTY FOR STAGING MATERIALS AND EQUIPMENT.
- 18. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE, OR ENTER INTO AGREEMENTS, FOR LANDS FOR LAY DOWN AREAS AND STAGING. THE COUNTY WILL COORDINATE AND ADVISE, TO HELP IDENTIFY POSSIBLE PARCELS. IT IS FINALLY THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE NEEDED AREAS, AND THE COUNTY TAKE NO RESPONSIBILITY FOR DELAYS IN THIS REGARD.
- 19. COORDINATION AND PUBLIC INFORMATION FOR AND WITH AREA RESIDENTS ARE OF THE UTMOST IMPORTANCE. CONTRACTOR WILL INSURE ADHERENCE TO THE COUNTY'S NOISE ORDINANCE, HAZARD AND SAFETY, AND NUISANCE ABATEMENT DIRECTIONS, PLANS, OBJECTIONS AND ORDINANCES. THE ENGINEER WILL HAVE THE FINAL DISCRETION IN THIS REGARD, AS REPRESENTED ONSITE BY THE COUNTY INSPECTOR AND ENGINEER'S STAFF.

20. ALL ELEVATIONS ARE NAVD88 DATUM

- 19. 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 1926.650, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
- 18. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
- 19. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
- 20. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

- 21. CONTRACTOR SHALL COMPLY TO ALL REQUIREMENT OF THE COASTAL CONSTRUCTION CONTROL LINE PERMIT (CCCL). COMPLIANCE INCLUDES BUT NOT LIMITED TO PROTECTING BEACH EROSION, SAND DUNES AND UPLAND PROPERTIES. CONSTRUCTION SHALL NOT INTERFERE WITH SEA TURTLE AND DUNE PLANT HABITATS. CONSTRUCTION SHALL NOT INTERFERE WITH PUBLIC ACCESS. ANY QUESTIONS SHALL BE DIRECTED TO FDEP (850-245-8570).
- 22. WHEN A BENTONITE SPILL OR FRACK-OUT OCCURS OR THERE IS A LOSS OF RETURN INDICATING EXCESSIVE SEEPAGE OR LOSS OF DRILLING FLUID, DRILLING MUST BE STOPPED UNTIL THE LOCATION OF THE SPILL IS IDENTIFIED. UNDER NO CIRCUMSTANCES WILL DRILLING CONTINUE WHEN A SPILL IS APPARENT.
- 23. ONCE LOCATED, THE BENTONITE SPILL MUST BE ISOLATED AND SEEPAGE INTO ANY NEARBY WATER BODIES WILL BE BLOCKED DEPENDING ON THE DEGREE OF THE SPILL, THE ISOLATED BENTONITE MUST BE REMOVED MANUALLY OR MECHANICALLY AND DISPOSED OF BY APPROPRIATE MEANS OR REUSED.
- 24. 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.
- 25. 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.
- 26. 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.
- 27. 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

DATE BY

REVISIONS

DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.

- 28. 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.
- 29. 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,
- 30. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
- 31. 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.
- 32. CONTRACTOR SHALL PROVIDE PROTECTIVE MATTING, FUEL CONTAINMENT AND ALL OTHER MATERIALS, EQUIPMENT AND LABOR TO PROTECT THE STAGING AREA DURING CONSTRUCTION.
- 33. CONTRACTOR SHALL, PRIOR TO BEGINNING CONSTRUCTION, SUBMIT A "FUELING SPILL PREVENTION PLAN" THAT SHALL CLEARLY INDICATE HOW FUEL SPILLS WILL BE PREVENTED WHEN FUELING BOTH WITHIN AND OUTSIDE OF THE STAGING

RIGHT-OF-WAY

- 34. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE BRADENTON BEACH/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
- 35. 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.
- 36. THE CONTRACTOR, PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHT-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.
- 37. 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.
- 38. 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.
- 39. 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
- 40. A RIGHT OF ENTRY AGREEMENT SHALL BE OBTAINED BY THE CONSTRUCTION MANAGER FROM THE PROPERTY OWNER BEFORE ANY CONSTRUCTION IS DONE OUTSIDE OF THE RIGHT-OF-WAY OR EASEMENT.

- 41. 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 CONNECTED TO 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.
- 42. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, 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 OWNER.
- 43. THE CONTRACTOR SHALL USE APPROPRIATE TECHNIQUES, AS APPROVED, RECOMMENDED OR OFFERED BY 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 ALL RELATED COSTS.
- 44. ANY TEMPORARY SHUTDOWNS FOR MODIFICATIONS OF EXISTING UTILITY SYSTEMS THAT MUST REMAIN IN SERVICE DURING CONSTRUCTION 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.
- 45. 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.
- 46. ALL MAINS TO BE ABANDONED IN PLACE SHALL BE GROUTED PER THE SPECIFICATIONS.
- 47. THE ELEVATIONS OF THE UTILITY SERVICES AND LATERALS HAVE BEEN ASSUMED ON THE BASIS OF TYPICAL ANTICIPATED SOIL COVERAGE. CONTRACTOR SHALL NOT RELY ON THIS INFORMATION FOR CONSTRUCTION, BUT SHALL BE RESPONSIBLE FOR FIELD LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL UTILITIES CROSSING THE PROPOSED FORCE MAIN. CONTRACTOR SHALL INCLUDE IN THE UNIT COST OF THE SUBJECT FORCE MAIN CONSTRUCTION, THE COST OF UTILITY ADJUSTMENTS NECESSARY TO ATTAIN DESIGN MINIMUM SEPARATION FOR UTILITIES CONFLICTING WITH THE CONSTRUCTION OF THE PROPOSED FORCE MAIN. INTERRUPTIONS OF ANY EXISTING UTILITY SERVICES SHALL BE NOTICED TO AFFECTED CUSTOMERS A MINIMUM OF 48 HOURS IN ADVANCE AND SHALL NOT EXCEED 4 HOURS IN

RESTORATION

- 48. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
- 49. ALL DISTURBED GRASSED AREAS SHALL BE SODDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.
- 50. 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.
- 51. ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513.
- 52. CONCRETE DRIVEWAYS OR SIDEWALKS THAT ARE CUT SHALL BE RESTORED TO MATCH EXISTING ACCORDING TO THE CURRENT EDITIONS OF THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN, SECTION 522, AND SECTION 310 OF THE F.D.O.T. DESIGN STANDARDS.
- 53. WHENEVER A PERMANENT ROADWAY SURFACE IS NOT REPLACED 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.
- 54. 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,
- 55. ALL EXISTING FENCES DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AND REINSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER UNLESS SHOWN TO BE REMOVED ON CONSTRUCTION
- 56. WHERE CONCRETE REPAIRS ARE NECESSARY AND EXPANSION OR CONTRACTION JOINTS ARE PRESENT, CONTRACTOR SHALL REMOVE AND REPLACE CONCRETE UP TO THE NEXT EXPANSION OR CONTRACTION JOINT.
- 57. ALL EXISTING WATER/WASTEWATER INFRASTRUCTURE INCLUDING, BUT NOT LIMITED TO, WATER METER BOXES, FIRE HYDRANTS, AND VALVE BOXES SHALL BE ADJUSTED TO FINAL GRADE

- 58. 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
- 59. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEPT DAILY AS PART OF DAILY CLEAN UP.
- 60. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
- 61. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
- 62. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OR TRIMMING OF ANY TREE WITHIN THE CONSTRUCTION AREA.
- 63. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM.
- 64. 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.
- 65. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS. 66. 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. 67. 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. 68. 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
- 69. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES AND PUMP STATIONS ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS.
- 70. CONSTRUCTION DEWATERING SHALL BE CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS INCLUDING BUT NOT LIMITED TO CHAPTERS 62-621.300 AND 62-620 OF THE FLORIDA ADMINISTRATIVE
- 71. 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 PLUG SHALL BE INSTALLED AND THE CORPORATION STOP SHALL REMAIN IN PLACE.
- 72. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.
- 73. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION FROM THE MANATEE COUNTY UTILITIES DEPARTMENT (MCUD) OFFICE OF INDUSTRIAL COMPLIANCE PRIOR TO DEWATERING, COMPLETION OF A CONSTRUCTION DEWATERING AUTHORIZATION TO DISCHARGE APPLICATION IS REQUIRED. FILL OUT FORM AS COMPLETELY AS POSSIBLE AS MISSING INFORMATION DELAYS THE APPROVAL PROCESS.
- 74. THE MCUD OFFICE OF INDUSTRIAL COMPLIANCE WILL DETERMINE WHETHER A LETTER OF APPROVAL, A DISCHARGE AUTHORIZATION, OR A DISCHARGE PERMIT IS REQUIRED.
- 75. FOR SITES SUSPECTED OF CONTAMINATED GROUNDWATER MANATEE COUNTY WILL REQUIRE AN APPLICANT TO DEMONSTRATE THAT THE DISCHARGE MEETS THE MANATEE COUNTY SEWER USE ORDINANCE.
- 76. IF ANY RECLAIMED OR WATER MAINS INCLUDING SERVICE LINES ARE DAMAGED DURING CONSTRUCTION, THEY SHALL BE REPLACED FROM THE VALVE TO THE OTHER POINT OF CONNECTION OUTSIDE OF THE ROADWAY PER MANATEE COUNTY'S STANDARDS.

ALL WORK PERFORMED WITHIN THE FDOT R/W SHALL CONFORM TO:

LARGER THAN TWO INCH DIAMETER.

- FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION (2016) (A.K.A. STANDARD SPECS). FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND OPERATIONS ON THE STATE HIGHWAY
- SYSTEM, 2016, (A.K.A. STANDARD INDEX). COMPLIANCE WITH ALL APPLICABLE INDICES IS REQUIRED. FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY PLANS PREPARATION MANUAL, VOLUME 1, CHAPTERS 2 AND
- 25. (REVISED 2013). FLORIDA DEPARTMENT OF TRANSPORTATION FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND
- PAVEMENT REHABILITATION, JANUARY 2015. ALL TRAFFIC STRIPES AND MARKINGS ARE TO BE LEAD FREE, NON-SOLVENT BASED THERMOPLASTIC. THE PERMITTEE
- SHALL FURNISH THE DEPARTMENT WITH THE MANUFACTURER'S CERTIFICATION THAT THE THERMOPLASTIC IS "LEAD
- 6. LANE CLOSURE MAY NEED TO BE ALTERED DEPENDING ON THE AREA THE WORK IS TAKING PLACE.

TRAFFIC CONTROL NOTES

- TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARDS INDICES NO. 600, 603, 605, 611, 612, 613, 616, AND 660 DEPENDING ON THE OPERATION BEING PERFORMED. FOR ALL TWO-LANE WORK, TWO-WAY, WORK WITHIN TRAVEL LANE UTILIZE INDEX 603. FOR ALL TWO-LANE WORK. TWO-WAY. WORK NEAR INTERSECTION UTILIZE INDEX 605.
- FOR ALL MULTILANE WORK OUTSIDE SHOULDER UTILIZE INDEX NO. 611. FOR ALL MULTILANE WORK ON SHOULDER UTILIZE INDEX NO. 612. FOR ALL MULTILANE WORK WITHIN TRAVEL WAY MEDIAN OR OUTSIDE LANE UTILIZE INDEX NO. 613. FOR ALL MULTILANE WORK NEAR INTERSECTION MEDIAN OR OUTSIDE LANE UTILIZE INDEX NO. 616.
- 2. CONTRACTOR TO COORDINATE WITH FDOT FOR ALL WORK DONE ON A STATE FACILITY.

FOR PEDESTRIAN CONTROL FOR CLOSURE OF SIDEWALK, UTILIZE FDOT INDEX NO. 660.

TO AVOID DISRUPTION DUE TO INCLEMENT WEATHER, THE CONTRACTOR SHOULD PERFORM ANY MILLING AND PAVING OPERATIONS DURING THE SAME WORK PERIOD.

4. ALL EXISTING PAVEMENT MARKINGS OUTSIDE THE CONSTRUCTION LIMITS THAT HAVE BEEN ALTERED

- BECAUSE OF CONSTRUCTION OPERATIONS SHALL BE REPLACED UPON THE COMPLETION OF THE PROJECT AT THE CONTRACTORS EXPENSE
- LANE CLOSURES SHALL OCCUR BETWEEN 9:00 P.M. AND 5:00 A.M., UNLESS LANE CLOSURE CALCULATIONS ARE PROVIDED AND APPROVED OR APPROVAL IS GRANTED BY THE DISTRICT PERMIT
- THE CONTRACTOR SHALL SCHEDULE WORK OPERATIONS SO THAT ALL LANES CAN BE RE-OPENED TO TRAFFIC WITHIN A PERIOD OF 24 HOURS IN CASE OF AN EMERGENCY. PEDESTRIANS, BICYCLES, AND WHEELCHAIRS:
- AT THE END OF EACH WORKDAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. ANY DROP-OFF ADJACENT TO A SIDEWALK SHALL BE BACKFILLED AT A SLOPE NOT TO EXCEED 1:4, OR SHALL BE PROTECTED IN ACCORDANCE WITH STANDARD INDEX 600
- 7. PEDESTRIAN AND WHEELCHAIR TRAFFIC SHALL BE ACCOMMODATED UTILIZING STANDARD INDEX 660. ONE PORTABLE VARIABLE MESSAGE SIGN SHALL BE USED IN ADVANCE OF EACH LANE CLOSURE. THE FOLLOWING ARE SUGGESTED MESSAGES TO USE IN THE APPROPRIATE SITUATIONS:

"CENTER" "LEFT" "RIGHT" OR OR "LANE" "LANE" "LANE" "CLOSED" "CLOSED" "CLOSED"

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF STORMWATER FROM ROADWAYS UTILIZED FOR TRAFFIC CONTROL IN A MANNER APPROVED BY THE ENGINEER.
- 10. AT THE END OF EACH WORKING DAY'S ACTIVITY, TEMPORARY PAVEMENT MARKINGS AND TEMPORARY RPM'S SHALL BE INSTALLED PRIOR TO OPENING THE LANES UP FOR TRAFFIC.
- 11. ALL PAVEMENT MARKINGS, SIGNS, MARKERS, CHANNELIZATION REQUIRED TO PHASE WORK OR SHIFT TRAFFIC, SHALL UTILIZE INDICES FOR PLACEMENT.

- 12. THE CONTRACTOR SHALL RESTRICT THE OPERATIONS SO THAT THE FIRST LIFT OF ASPHALT IS PLACED ON THE SAME DAY THAT THE LANES ARE MILLED, BEFORE OPENING THE LANES TO TRAFFIC. INSTALL TEMPORARY PAVEMENT MARKINGS AFTER THE FIRST LIFT AND PRIOR
- 13. MILLING AND RESURFACING SHALL BE ACCOMPLISHED DURING THE OFF-PEAK HOURS.
- 14. THE CONTRACTOR IS RESPONSIBLE TO RETIME THE TRAFFIC SIGNALS WITHIN THE PROJECT LIMITS (INCLUDING LIMITS OF WORK ZONE TRAFFIC CONTROL) THAT ARE POTENTIALLY AFFECTED DURING VARIOUS PHASES OF CONSTRUCTION, COÓRDINATE ALL SIGNAL RETIME EFFORTS WITH VISHAD KAKKAD, P.E., PTOE, COUNTY TRAFFIC ENGINEER, AT 941-749-3500,
- 15. CONTRACTOR TO MAINTAIN VEHICLE DETECTION IN OPERATION FOR LANES THAT WILL REMAIN OPEN. CONTRACTOR TO COORDINATE ALL VEHICLE DETECTION ISSUES WITH PAUL VILLALUZ OF MANATEE COUNTY AT 941-749-3500, EXT. 7859 OR PAUL.VILLALUZ@MYMANATEE.ORG
- 16. MAINTENANCE OF TRAFFIC AND ANY SIGNAL RETIMING WILL BE THE RESPONSIBILITY OF THE
- 17. ANY SIGNAL RETIMING REQUIRED FOR THE INTERSECTIONS IMPACTED BY THE PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, SIGNAL TIMING MODIFICATIONS TO BE SUBMITTED TO MANATEE COUNTY TRAFFIC DESIGN, ATTENTION MR. MUKUNDA GOPALAKRISHNA FOR REVIEW AND APPROVAL AT LEAST 15 WORKING DAYS BEFORE PROPOSED CHANGES. THIS DOES NOT GOVERN EMERGENCY SITUATIONS, PENDING THE APPROVAL OF THE ENGINEER.
- 18. A DETAILED MAINTENANCE OF TRAFFIC PLANS ARE TO BE SUBMITTED TO MANATEE COUNTY AND THE ENGINEER, BY THE CONTRACTOR, FOR REVIEW AND APPROVAL A MINIMUM OF 21 WORKING DAYS PRIOR TO PROPOSED IMPLEMENTATION.

WORK SCHEDULE COORDINATION

- COORDINATE ALL LIFT STATION SHUT DOWNS WITH NICK WAGNER, 941-792-8811 X 5377 OR NICK.WAGNER@MYMANATEE.ORG
- CONTRACTOR SHALL ABIDE BY ALL CITY OF BRADENTON BEACH REGULATIONS AND RULES TO INCLUDE, BUT NOT LIMITED TO, WORK HOURS, CITY HOLIDAYS, NOISE REGULATIONS, TRAFFIC CONTROL, AND PROPERTY ACCESS. ANY VARIATION FROM THESE STANDARDS MUST BE APPROVED IN WRITING BY THE CITY OF BRADENTON BEACH IN ADVANCE. CONTRACTOR SHALL APPLY FOR A RIGHT-OF-WAY PERMIT WITH THE CITY OF BRADENTON BEACH PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN VEHICULAR/PEDESTRIAN TRAFFIC ACCESS TO COMMERCIAL PROPERTIES AND ASSOCIATED PARKING LÓTS, AND TO RESIDENTIAL PROPERTIES DURING
- CONTRACTOR SHALL COORDINATE DIRECTLY WITH THE COUNTY PUBLIC OUTREACH MANAGER AND APPROVED COUNTY CONSULTANTS TO ADDRESS ANY COMPLAINTS.
- DOOR HANGERS SHALL BE PROVIDED TO ALL NEIGHBORS/BUSINESSES AFFECTED BY CONSTRUCTION AT LEAST 48 HOURS IN ADVANCE. DOOR HANGERS SHALL PROVIDE INFORMATION ON ESTIMATED DAYS OF IMPACT AND MITIGATION EFFORTS.

ABBREVIATIONS

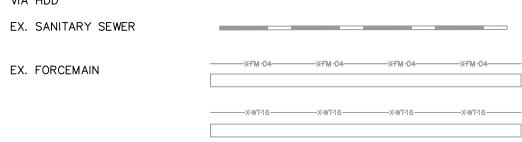
RJ - RESTRAINED JOINT EXISTING BURIED TELEPHONE R/W - RIGHT-OF-WAY HDD - HORIZONTAL DIRECTIONAL DRILL SANITARY SEWER FM FORCE MAIN RCP - REINFORCED CONCRETE PIPE WATER MAIN ARV - AIR RELEASE VALVE RW - RECLAIM WATER MAIN HDPE - HIGH DENSITY POLYETHYLENE ECP - ELLIPTICAL CONCRETE PIPE PVC - POLYVINYL CHLORIDE

KIMLEY HORN LEGEND

PROPOSED SERVICE LATERAL

PROPOSED GRAVITY SEWER MAIN INSTALLED VIA OPEN CUT PROPOSED GRAVITY SEWER MAIN INSTALLED VIA HDD

EX. FORCEMAIN



STORM DRAIN

PROPOSED MANHOLE EXISTING MANHOLE EXISTING SERVICE LATERAL

EX. BURIED TELEPHONE/FIBER EX. AERIAL ELECTRIC EX. FIBER OPTICS EX. BURIED ELECTRIC —— X BE ——— X BE ——— X BE ——— X BE ———

LEGEND:

EX. TV

EX. GAS

SIDEWALK/CONCRETE RESTORATION BRICK DRIVEWAY RESTORATION SHELL DRIVEWAY RESTORATION

MILL AND OVERLAY

RESTORATION

+ + RECORDED EASEMENT

EWATERING NOTE THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR THIS ISSUE. WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS.

ROUNDWATER



GENERAL NOTES

SHEET NUMBER

© 2021 KIMLEY-HORN AND ASSOCIATES, INC. 100 2ND AVE S, UNIT 105N, ST. PETERSBURG, FL 33701 PHONE: 727-547-3999

WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT 148400056 DATE JAN 2021 SCALE AS SHOW ESIGNED BY M⊅

DRAWN BY

BRADENTON BEACH GRAVITY REPLACEMENT

CHECKED BY WEW MANATEE COUNTY

FL DATE:

LICENSED PROFESSIONAL

MICHAEL A. SEMAGO, P.

FL LICENSE NUMBER

87501

GENERAL NOTES

- 1. THE FOLLOWING NGS VERTICAL CONTROL MONUMENTS WERE RECOVERED AND UTILIZED FOR THE ELEVATIONS INDICATED HEREIN: "GIS 103" NAVD 1988 ELEVATION 4.27' "J 254" NAVD 1988 ELEVATION 13.48'
- 2. THIS SURVEY IS REFERENCED TO A PROJECTION OF THE FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE NAD 1983/2011 ADJUSTMENT).
- 3. RIGHT-OF-WAY AND PARCEL LOCATION INDICATED HEREIN IS THE RESULT OF FOUND BOUNDARY MONUMENTATION TOGETHER WITH AVAILABLE PUBLIC RECORD INFORMATION. TITLE WORK WAS NOT PROVIDED.
- 4. THIS SURVEY IS SUBJECT TO PERTINENT EASEMENTS, RIGHTS-OF-WAY AND RESTRICTIONS OF RECORD, IF ANY.
- 5. THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN HYATT SURVEY SERVICES, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM HYATT SURVEY SERVICES, INC. IS STRICTLY PROHIBITED AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO HYATT SURVEY SERVICES, INC.

LEGEND

lacktriangle	SITE CONTROL POINT	R/W	RIGHT-OF WAY
0	IRON PIPE FOUND	ND	NAIL W/ DISC
•	IRON ROD FOUND	IRC	IRON ROD W/
	CONCRETE MONUMENT FOUND	¥	
•	SUBSURFACE INVESTIGATION	AND THE STATE OF T	PINE
O	SIGN	7 7	_
Ø	WOOD UTILITY POLE		PALM
Ø	CONCRETE UTILITY POLE		
\leftarrow	GUY WIRE		
	WATER METER	200 mg	TDEE
\bowtie	WATER VALVE	气厂	TREE
S	SANITARY MANHOLE		
	FIRE HYDRANT		

SITE CONTROL

DESIGNATION	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP# 1	1137931.14	429909.29	4.95'	ND (LB 7203)
CP #2	1137704.01	429981.50	4.59'	ND (LB 7203)
CP #3	1137472.22	430057.81	4.89'	IRC (LB 7203)
CP #4	1137248.25	430129.02	4.88'	IRC (LB 7203)
CP #5	1137016.55	430201.71	4.49'	IRC (LB 7203)
CP #6	1136765.91	430274.86	4.64'	IRC (LB 7203)
CP #7	1136538.30	430330.18	4.85'	IRC (LB 7203)
CP #8	1136302.38	430398.82	5.73'	IRC (LB 7203

VVH TABLE							
VVH NUMBER	UTILITY	SIZE	MATERIAL	DEPTH OF COVER	COLOR	SURFACE TYPE	TRACER FOUND
1	FORCE MAIN	4"	PVC	3.99'	GREEN	SAND	METAL TAPE
2	GAS	4"	POLY	2.99'	YELLOW	SAND	WIRE
3	WATER MAIN	4"	PVC	3.37'	BLUE	GRASS	WIRE
4	BURIED ELECTRIC	2"	PVC	3.94'	BLACK	GRASS	NONE
5	FORCE MAIN	4"	PVC	2.41'	GREEN	ASPHALT	NONE
6	WATER MAIN	16"	DIP	3.04'	BLACK	ASPHALT	NONE
7	BURIED FIBER	4"	PVC	1.64'	PEACH	ASPHALT	NONE
8	WATER MAIN	16"	DIP	3.60'	BLACK	CONCRETE	NONE
9	BURIED TEL.	4"	PVC	1.83'	PEACH	ASPHALT	NONE
10	WATER MAIN	16"	DIP	3.20'	BLACK	ASPHALT	NONE
11	BURIED TEL.	1.25"	DBC	1.08'	BLACK	DIRT	NONE
12	WATER MAIN	16"	DIP	3.23'	BLACK	ASPHALT	NONE
13	2 BURIED FIBER	4"	POLY	1.81'	BLACK	ASPHALT	NONE
14	WATER MAIN	16"	DIP	2.93'	BLACK	ASPHALT	NONE
I '1	2 BURIED TEL.	4"	PVC	2.93'	PEACH	ASPHALI	NONE
15 (16)	2 BURIED TEL.	4"	PVC	2.26'	PEACH	ASPHALT	NONE
13 (10)	WATER MAIN	16"	DIP	2.65'	BLACK	ASPHALI	NONE
17	WATER MAIN	16"	DIP	3.30'	BLACK	ASPHALT	NONE
1 /	BURIED TEL.	1.25"	DBC	2.90'	BLACK	ASPHALI	NONE
18	BURIED TEL.	4"	PVC	3.20'	PEACH	ASPHALT	NONE
10	BURIED TEL.	1.25"	DBC	3.20'	BLACK	ASFIALI	NONE
19	GAS	4"	POLY	5.34'	YELLOW	DIRT	WIRE
20	GAS	4"	POLY	3.24'	YELLOW	SHELL	WIRE
21	GAS	4"	POLY	3.74'	YELLOW	SHELL	WIRE
22	GAS	4"	POLY	3.56'	YELLOW	SHELL	WIRE
23	GAS	4"	POLY	3.25'	YELLOW	SHELL	WIRE
24	GAS	4"	POLY	3.40'	YELLOW	SHELL	WIRE
25	WATER MAIN	16"	DIP	3.11'	BLACK	ASPHALT	NONE
26	UNKNOWN	4"	PVC	3.17'	GRAY	ASPHALT	NONE
27	BURIED TEL.	1.25"	DBC	2.34'	BLACK	ASPHALT	NONE

This				
No.	REVISIONS	DATE	BY	

-O- BACKFLOW PREVENTER

ELECTRIC SERVICE BOX

UTILITY BOX

MAILBOX(ES)

⊙ WOOD POST

O CLEANOUT

G GAS MARKER

UTILITY RISER

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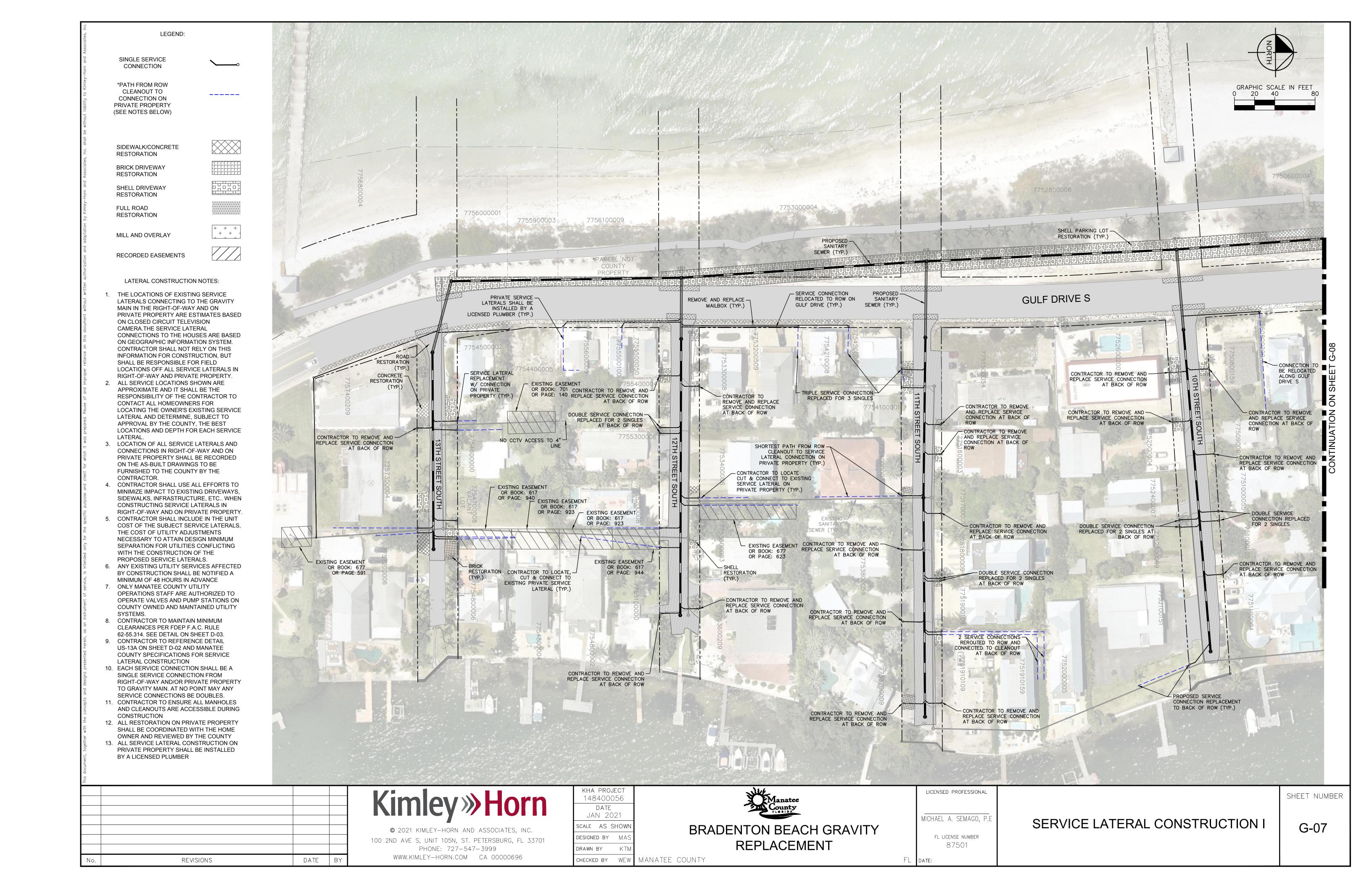
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MICHAEL A. SEMAGO, P.E
FL LICENSE NUMBER
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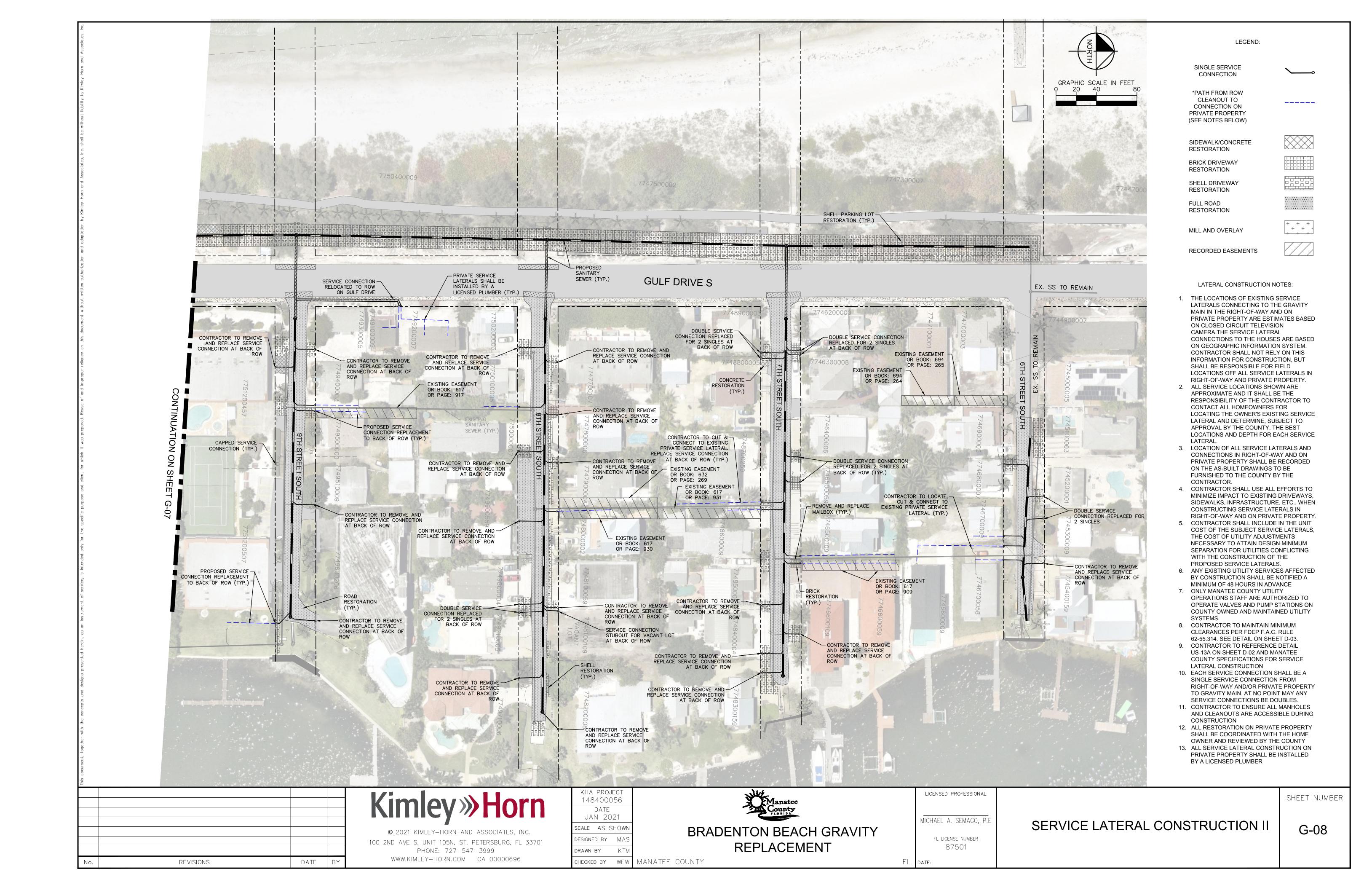
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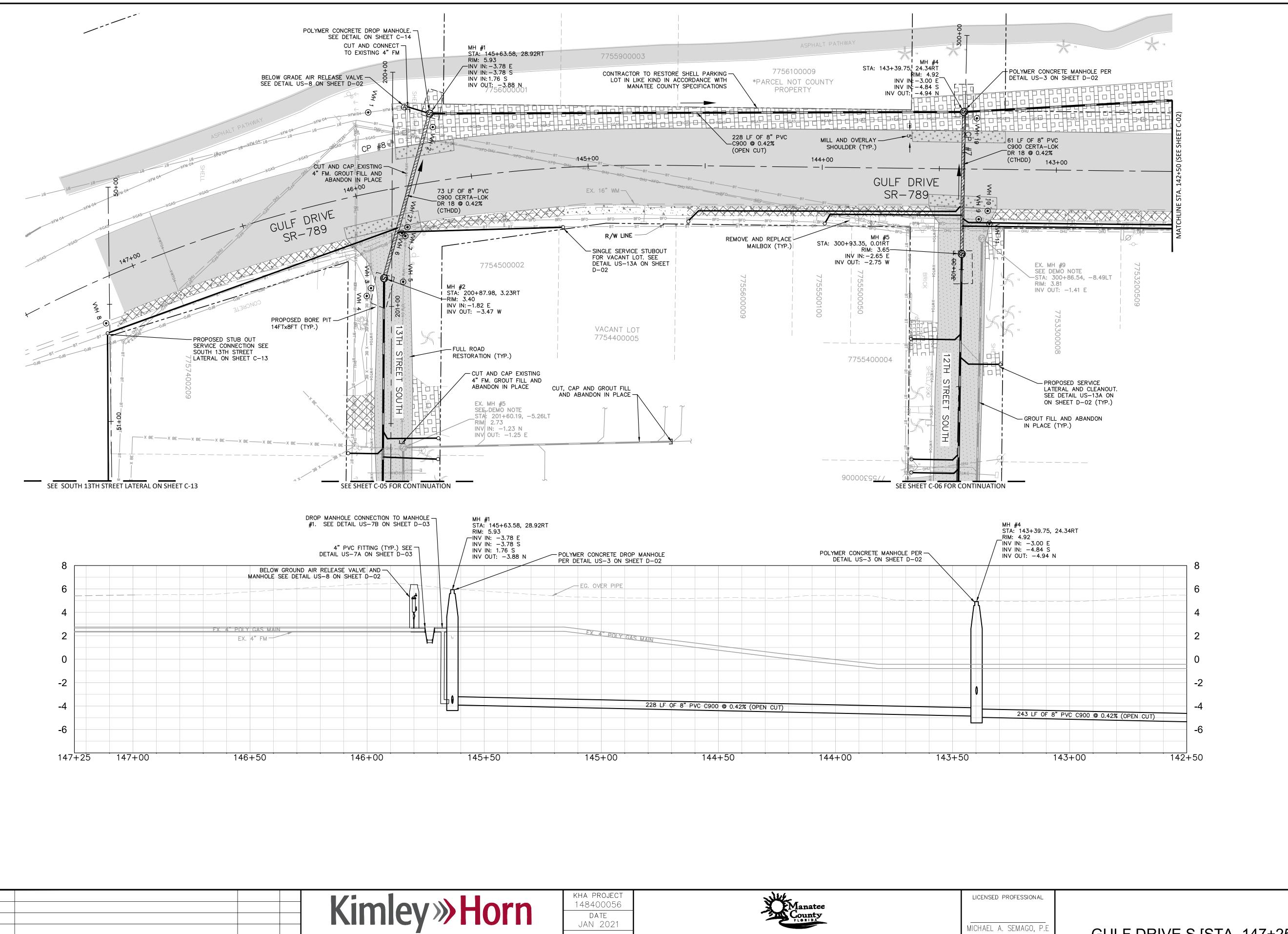


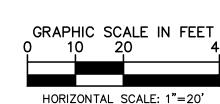












VERTICAL SCALE: 1"=4'
ALL ELEVATIONS PER NAVD88

SIDEWALK/CONCRETE

LEGEND:

RESTORATION

BRICK DRIVEWAY RESTORATION SHELL DRIVEWAY

+ +

+ +

RESTORATION FULL ROAD

RESTORATION

MILL AND OVERLAY

GENERAL NOTES:

- 1. CONSTRUCTION DEWATERING SHALL BE CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS INCLUDING BUT NOT LIMITED TO CHAPTERS 62-621.300 AND 62-620 OF THE FLORIDA ADMINISTRATIVE CODE (FAC).
- CONTRACTOR TO MAINTAIN MINIMUM PIPE SLOPES PER "MANATEE COUNTY STANDARDS":

8-INCH MIN SLOPE = 0.42%10-INCH MIN SLOPE = 0.28% 12-INCH MIN SLOPE = 0.22%

- CONTRACTOR TO MAINTAIN MINIMUM CLEARANCES PER FDEP F.A.C. RULE 62-55.314. SEE DETAIL ON SHEET D-03 4. CONTRACTOR TO VERIFY EXISTING FIELD CONDITIONS BEFORE THE BEGINNING ANY
- CONSTRUCTION ACTIVITIES CONTRACTOR TO REMOVE ANY UNSUITABLE FILL MATERIALS AND BACKFILL WITH APPROVED MATERIAL PER MANATEE COUNTY
- ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES AND PUMP STATIONS ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS
- 7. ALL ELEVATIONS PER NAVD88

EX. MANHOLE DEMOLITION NOTE:

1. CONTRACTOR TO CUT AND REMOVE EXISTING MANHOLE CONE, RING, AND COVER. CONTRACTOR TO FILL WITH COMPACTED SOIL TO 98% DENSITY, AASHTO T-180 AND ABANDON REMAINING MANHOLE IN PLACE. SEE MANHOLE DEMOLITION DETAIL MD-01

THE ELEVATIONS OF THE UTILITIES MARKED WITH AN ASTERISK (*) HAVE BEEN ASSUMED ON THE BASIS OF TYPICAL ANTICIPATED SOIL COVERAGE. CONTRACTOR SHALL NOT RELY ON THIS INFORMATION FOR CONSTRUCTION, BUT SHALL BE RESPONSIBLE FOR FIELD LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL UTILITIES CROSSING THE PROPOSED SEWER MAIN. CONTRACTOR SHALL INCLUDE IN THE UNIT COST OF THE SUBJECT GRAVITY SEWER CONSTRUCTION, THE COST OF UTILITY ADJUSTMENTS NECESSARY TO ATTAIN DESIGN MINIMUM SEPARATION FOR UTILITIES CONFLICTING WITH THE CONSTRUCTION OF THE PROPOSED SANITARY SEWER. INTERRUPTIONS OF ANY EXISTING UTILITY SERVICES SHALL BE NOTICED TO EFFECTED CUSTOMERS A MINIMUM OF 48 HOURS IN ADVANCE AND SHALL NOT EXCEED

WHERE CONCRETE REPAIRS ARE NECESSARY AND EXPANSION JOINTS ARE PRESENT, CONTRACTOR TO REMOVE AND REPLACE CONCRETÉ UP TO THE NEXT EXPANSION JOINT; OTHERWISE, REPLACE CONCRETE AS NECESSARY.

4 HOURS IN DURATION.

<u>GROUNDWATER</u> DEWATERING NOTE THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR THIS ISSUE. WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE
DEWATERING, DRAINAGE AND GROUND
WATER MANAGEMENT TO CONTROL



DATE BY

REVISIONS

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100 2ND AVE S, UNIT 105N, ST. PETERSBURG, FL 33701

PHONE: 727-547-3999

WWW.KIMLEY-HORN.COM CA 00000696

SCALE AS SHOWN ESIGNED BY MA DRAWN BY

CHECKED BY WEW

MANATEE COUNTY

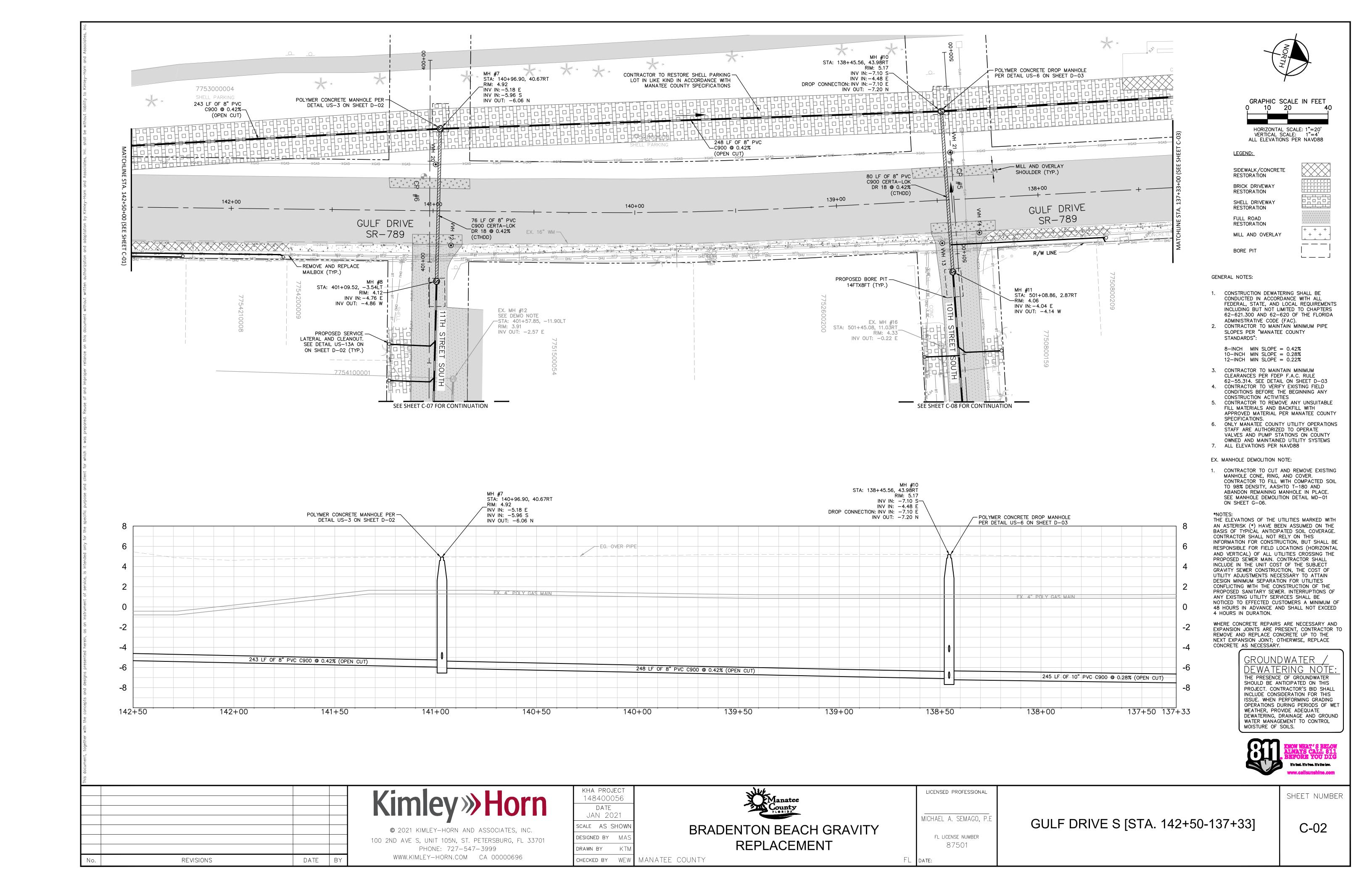
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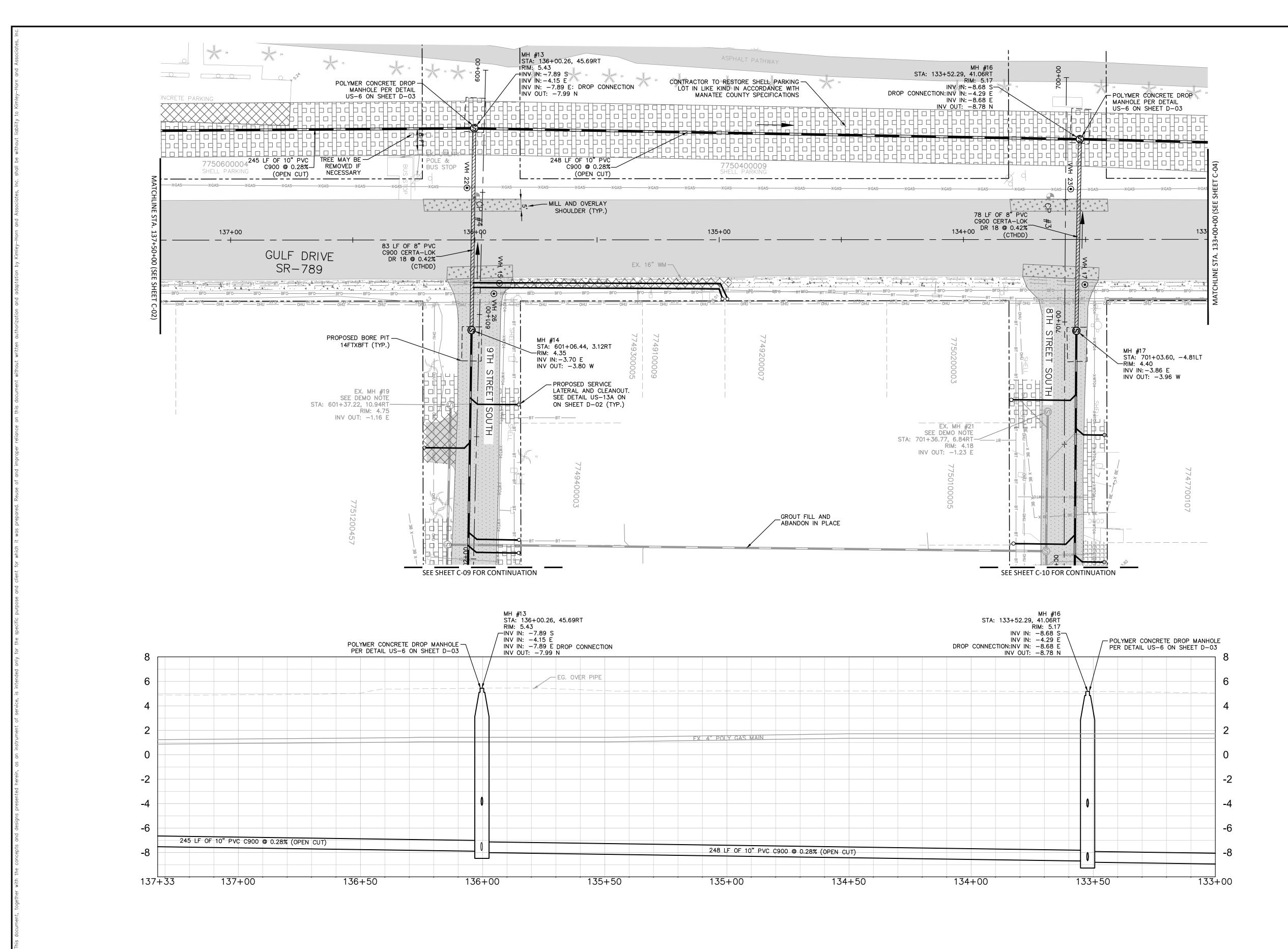
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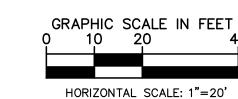
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C-01









VERTICAL SCALE: 1"=4'
ALL ELEVATIONS PER NAVD88

LEGEND:

SIDEWALK/CONCRETE RESTORATION

BRICK DRIVEWAY

RESTORATION SHELL DRIVEWAY

RESTORATION FULL ROAD

RESTORATION MILL AND OVERLAY

+ + BORE PIT

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CONSTRUCTION ACTIVITIES

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WHERE CONCRETE REPAIRS ARE NECESSARY AND EXPANSION JOINTS ARE PRESENT, CONTRACTOR TO REMOVE AND REPLACE CONCRETÉ UP TO THE NEXT EXPANSION JOINT; OTHERWISE, REPLACE CONCRETE AS NECESSARY.

> GROUNDWATER DEWATERING NOTE THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR THIS ISSUE. WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE
> DEWATERING, DRAINAGE AND GROUND
> WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS.



No.	REVISIONS	DATE	BY



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MANATEE COUNTY

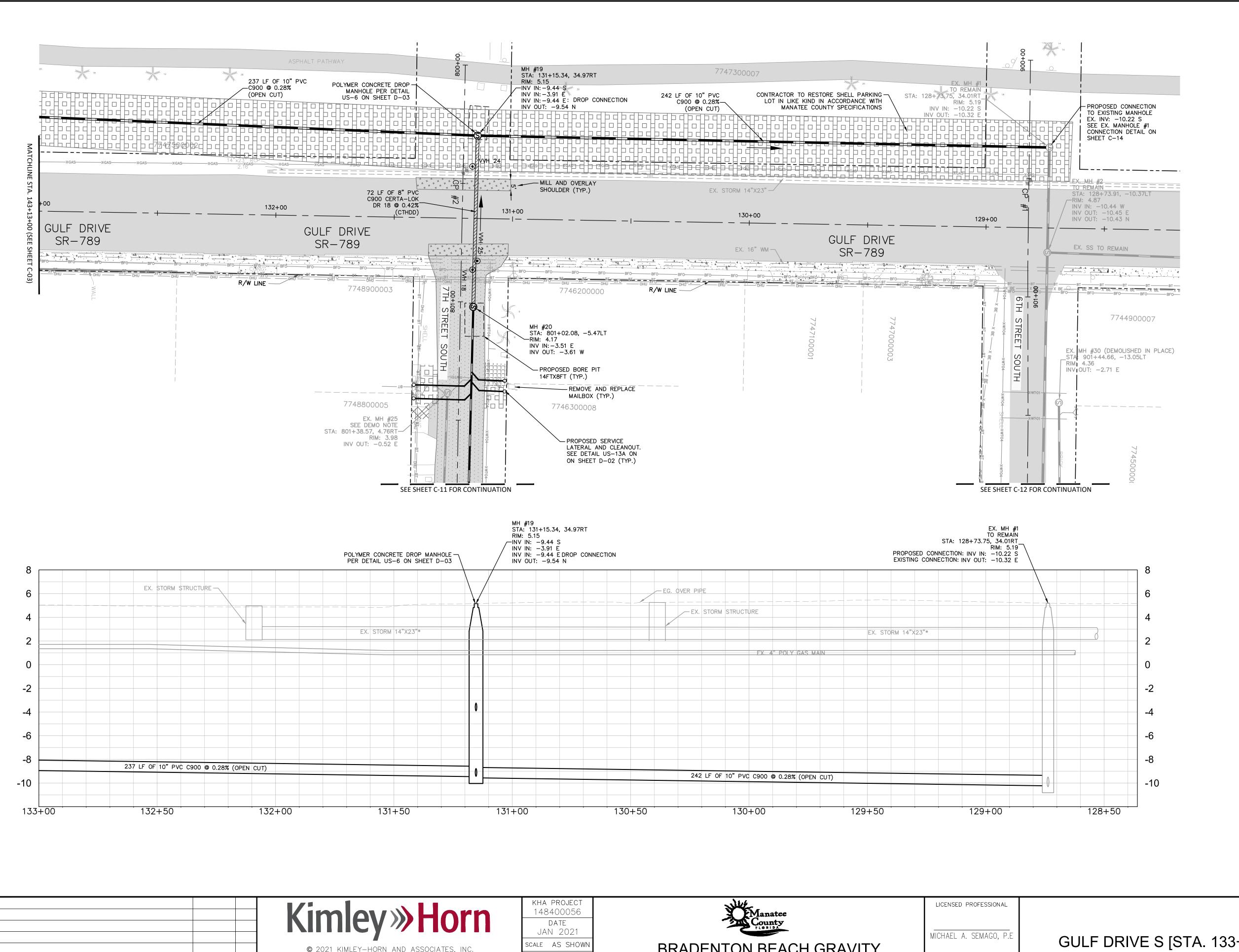


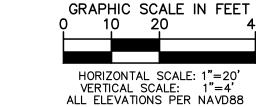
LICENSED PROFESSIONAL MICHAEL A. SEMAGO, P.E FL LICENSE NUMBER 87501

FL DATE:

GULF DRIVE S [STA. 137+33-133+00]

C-03





LEGEND:

SIDEWALK/CONCRETE RESTORATION

BRICK DRIVEWAY RESTORATION

SHELL DRIVEWAY RESTORATION FULL ROAD

RESTORATION

MILL AND OVERLAY

+ + +

+ +

GENERAL NOTES:

- 1. CONSTRUCTION DEWATERING SHALL BE CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS INCLUDING BUT NOT LIMITED TO CHAPTERS 62-621.300 AND 62-620 OF THE FLORIDA ADMINISTRATIVE CODE (FAC).
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8-INCH MIN SLOPE = 0.42%10-INCH MIN SLOPE = 0.28% 12-INCH MIN SLOPE = 0.22%

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EX. MANHOLE DEMOLITION NOTE:

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> DEWATERING, DRAINAGE AND GROUND
> WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS.



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DATE BY

REVISIONS

100 2ND AVE S, UNIT 105N, ST. PETERSBURG, FL 33701 PHONE: 727-547-3999 WWW.KIMLEY-HORN.COM CA 00000696

ESIGNED BY MA DRAWN BY

CHECKED BY WEW

MANATEE COUNTY

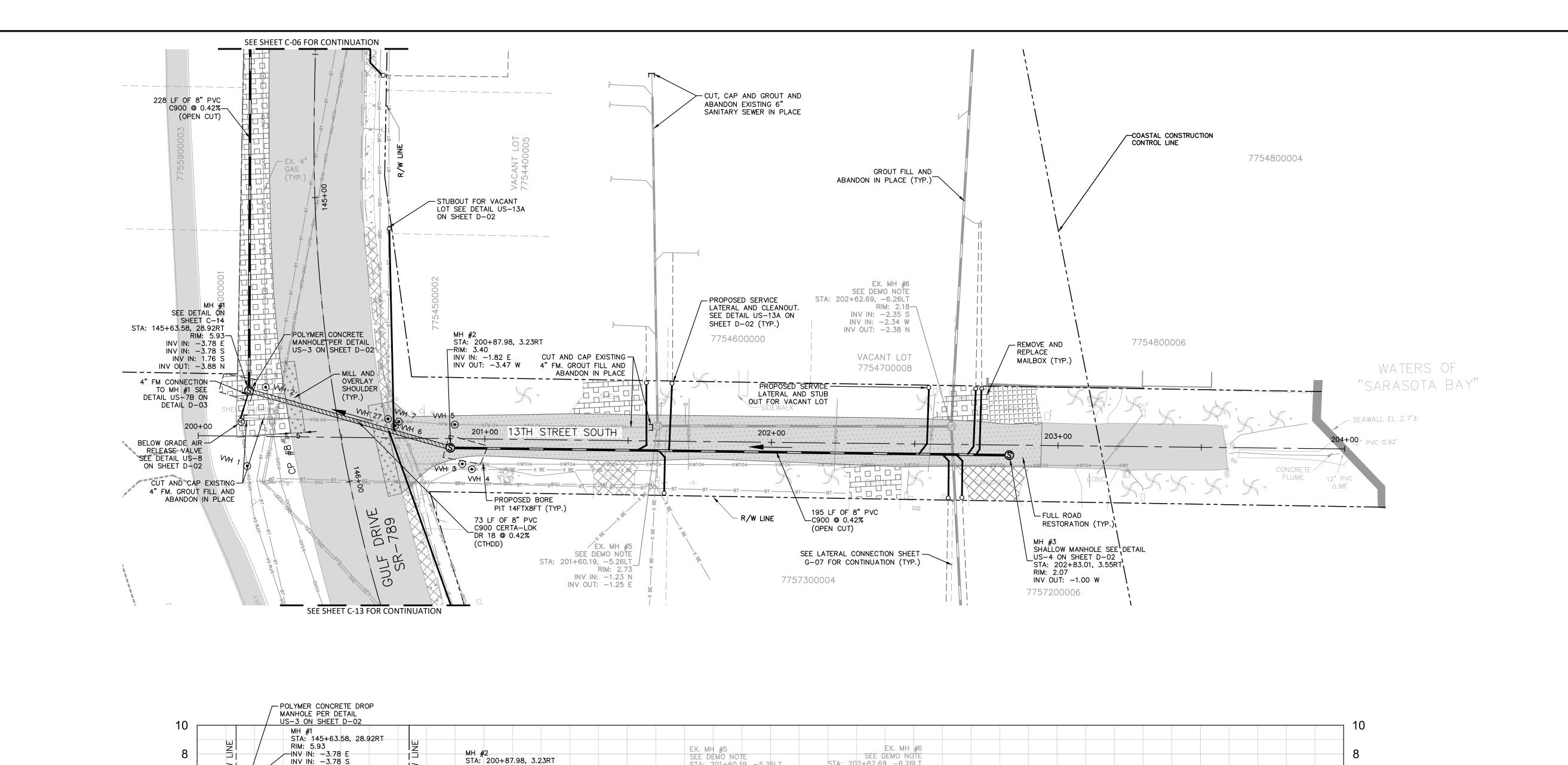


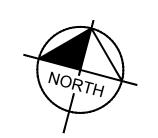
FL LICENSE NUMBER 87501

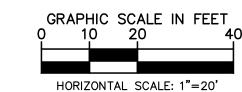
FL DATE:

GULF DRIVE S [STA. 133+00-128+36]

C-04







VERTICAL SCALE: 1"=4'
ALL ELEVATIONS PER NAVD88

LEGEND:

SIDEWALK/CONCRETE RESTORATION

BRICK DRIVEWAY RESTORATION

SHELL DRIVEWAY

RESTORATION FULL ROAD

RESTORATION

MILL AND OVERLAY

BORE PIT

+ + + + ___

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DEWATERING, DRAINAGE AND GROUND
WATER MANAGEMENT TO CONTROL



드			
No.	REVISIONS	DATE	BY

200+00

INV IN: -3.78 S

INV IN: 1.76 \$

EX. GAS

INV OUT: -3.88 N

EX. 16" WM

EX. BT—

73 LF OF 8" PVC C900 CERTA-LOK DR 18 @ 0.42%

200+50

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—RIM: |3.40

201+00

INV IN: -1.82 E

INV QUT: −3,47 W

4" FORCE MAIN

GROUT FILL AND ABANDON IN PLACE



CHECKED BY WEW

MANATEE COUNTY

STA: 201+60.19, -5.26LT RIM: 2.73

EX. WM SERVICE*

CONTRACTOR TO

202+00

RELOCATE AS

NECES\$ARY

INV IN: -1.23 N

- EG. OVER PIPE

201+50

INV OUT: -1.25 E

/--**EX. SS LATERAL

195 UF OF 8" PVC C900 @ 0.42% (OPEN CUT)



SEE DEMO NOTE

INV IN: -2.35 S INV IN: -2.34 W

INV OUT: -2.38 N

STA: 202+62.69, -6.26LT

EX. WM SERVICE*
CONTRACTOR TO —
RELOCATE

EX. WM SERVICE*
CONTRACTOR TO

GROUT FILL AND ABANDON IN PLACE

202+50

RELOCATE

LICENSED PROFESSIONAL MICHAEL A. SEMAGO, P. FL LICENSE NUMBER

FL DATE:

87501

203+50

EX SEAWALL -

--+--

204+00

SHALLOW MANHOLE SEE DETAIL

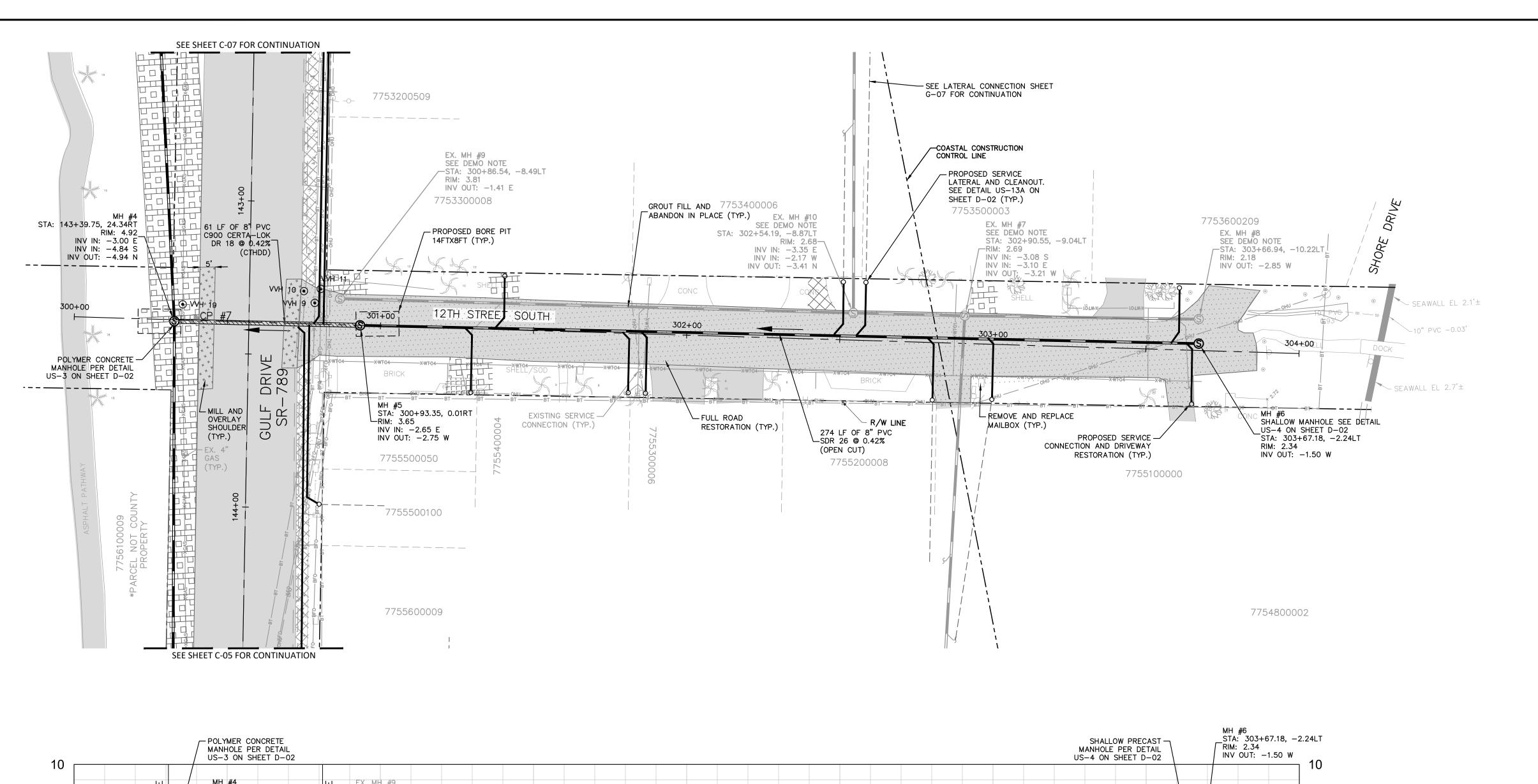
US-4 ON SHEET D-02 STA: 202+83.01, 3.55RT RIM: 2.07

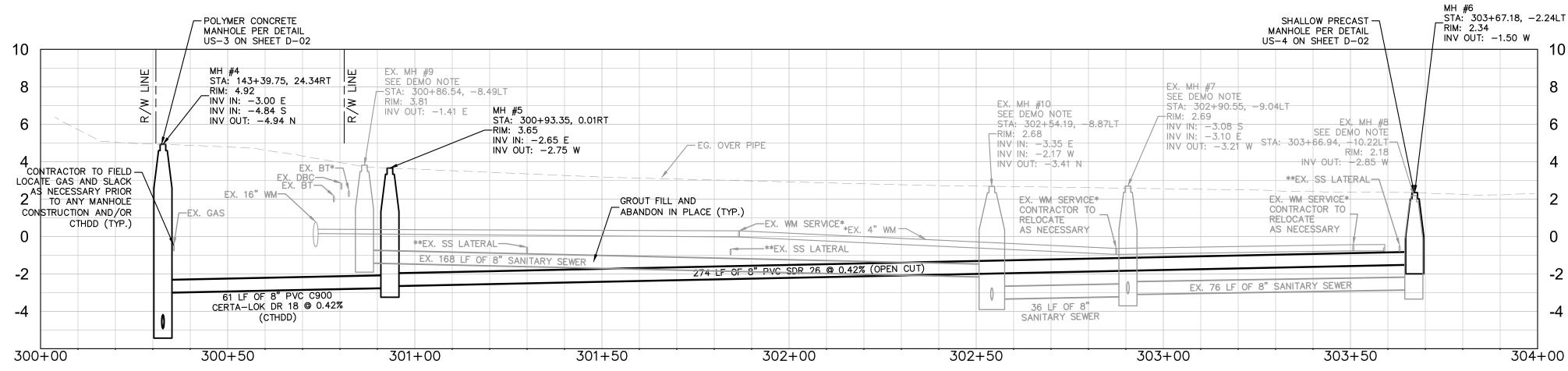
INV OUT: -1.00 W

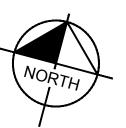
203+00

13TH STREET S [STA. 200+00-204+00]

C-05

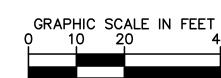






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+ + -



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=4'
ALL ELEVATIONS PER NAVD88

LEGEND:

SIDEWALK/CONCRETE RESTORATION

BRICK DRIVEWAY RESTORATION

SHELL DRIVEWAY RESTORATION

FULL ROAD RESTORATION

MILL AND OVERLAY

BORE PIT

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GROUNDWATER /
DEWATERING NOTE
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DATE BY

REVISIONS

Kimley Morn

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100 2ND AVE S, UNIT 105N, ST. PETERSBURG, FL 33701
PHONE: 727-547-3999
WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT
148400056

DATE
JAN 2021

SCALE AS SHOWN

DESIGNED BY MAS

CHECKED BY WEW MANATEE COUNTY

DRAWN BY



MICHAEL A. SEMAGO, P.E

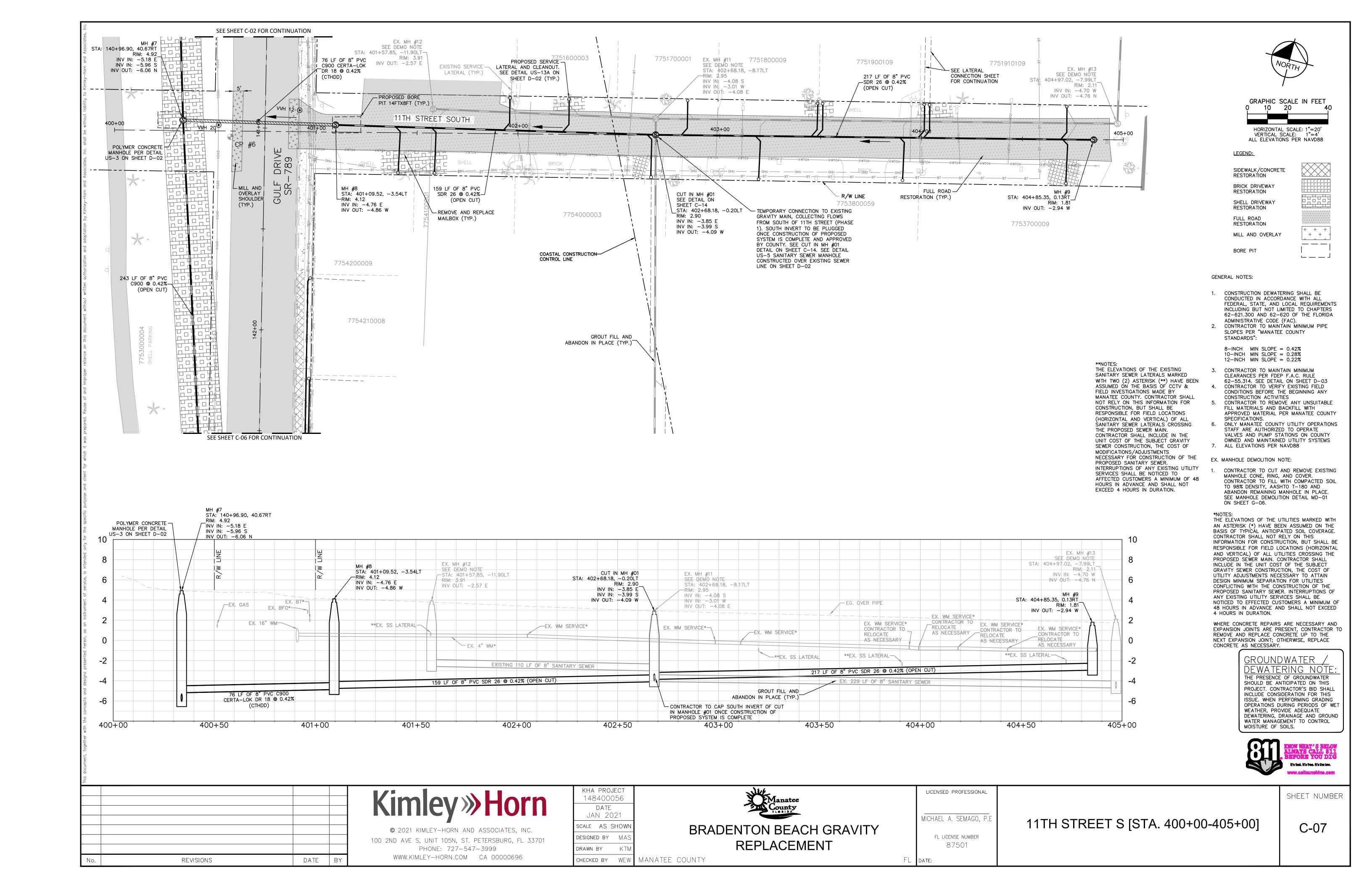
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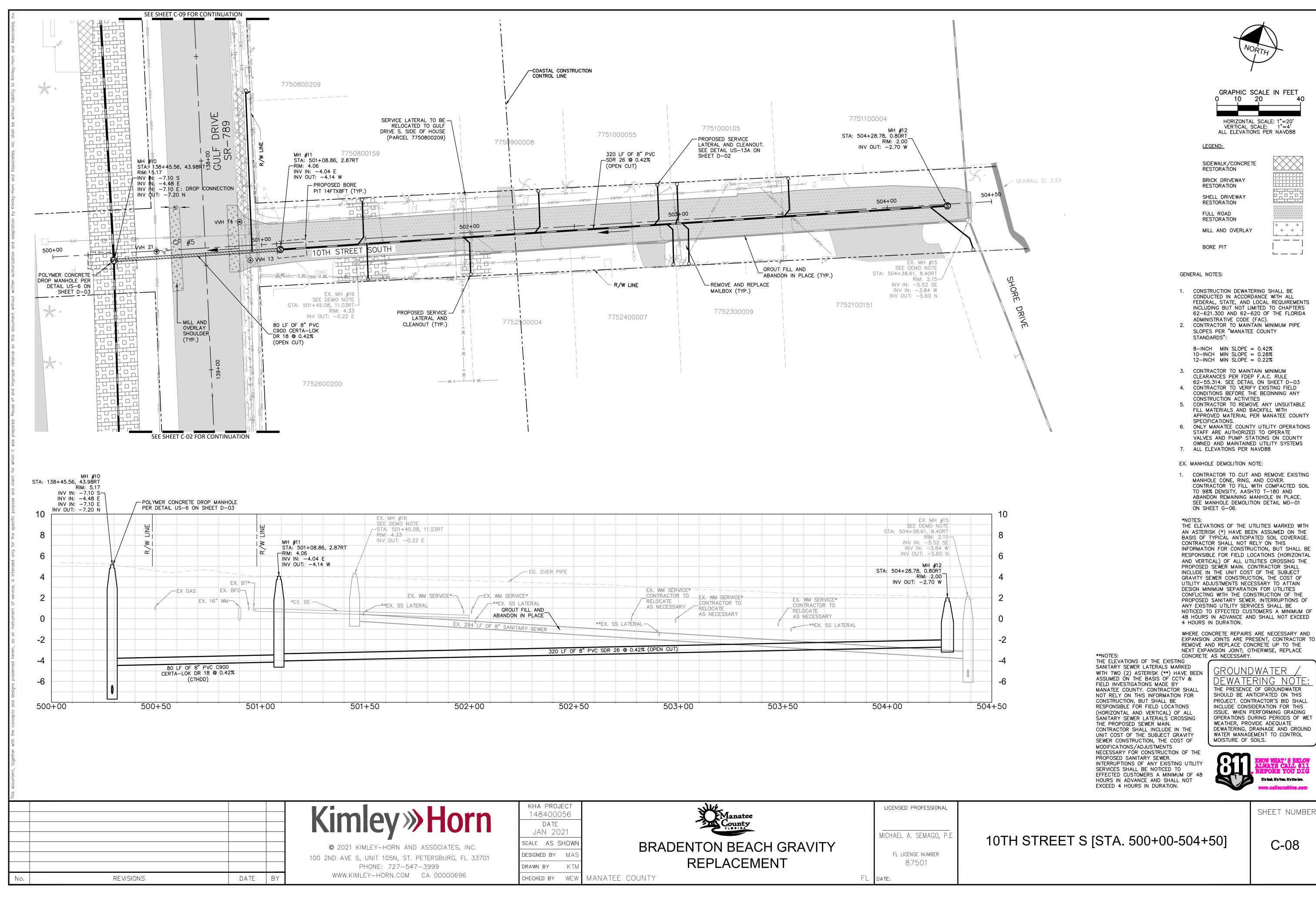
FL DATE:

LICENSED PROFESSIONAL

12TH STREET S [STA. 300+00-304+00]

C-06





GRAPHIC SCALE IN FEET

- + +

+ + ____

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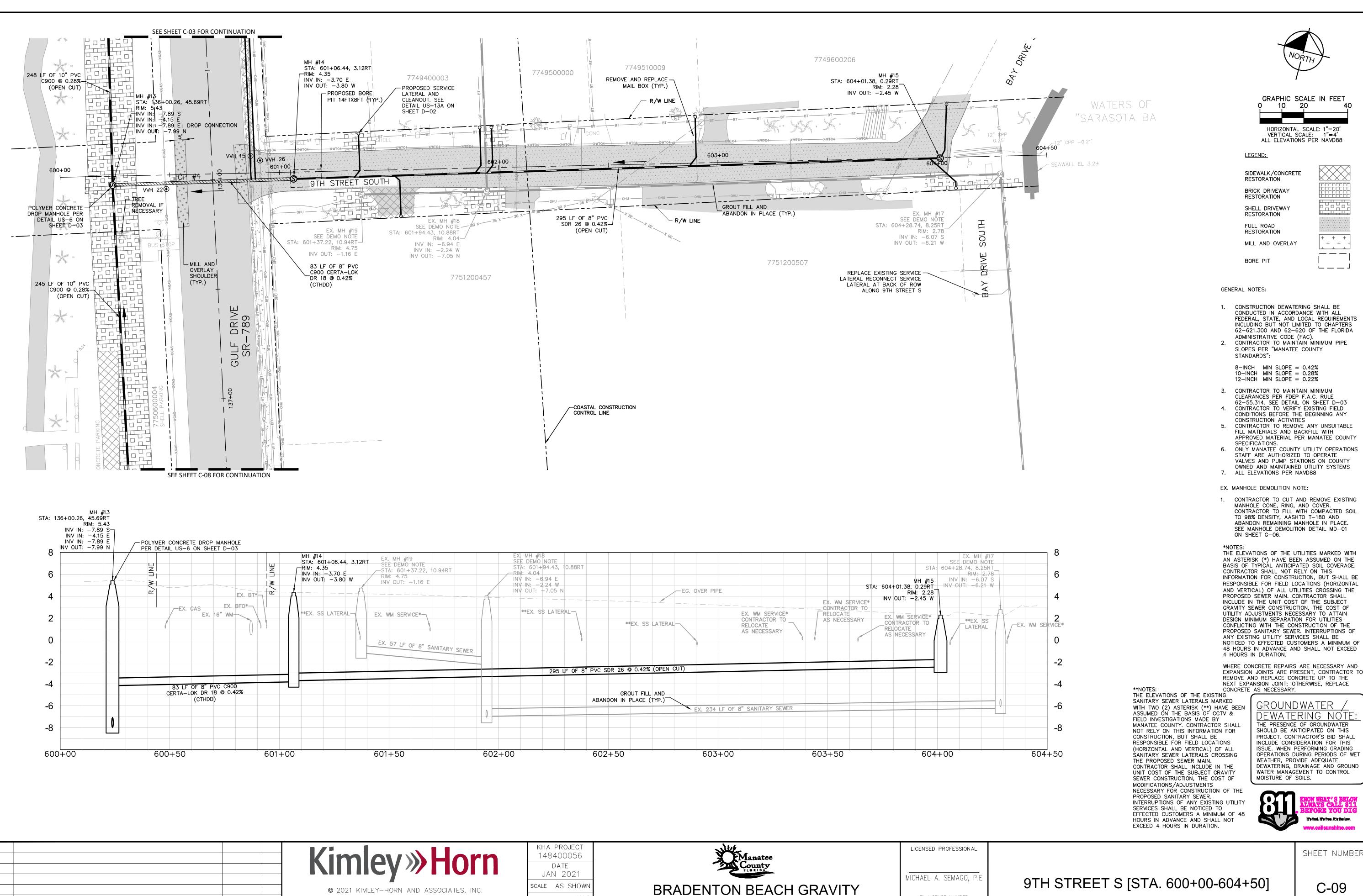
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DEWATERING, DRAINAGE AND GROUND
WATER MANAGEMENT TO CONTROL



C-08



ESIGNED BY MA

CHECKED BY WEW

MANATEE COUNTY

DRAWN BY

100 2ND AVE S, UNIT 105N, ST. PETERSBURG, FL 33701

PHONE: 727-547-3999

WWW.KIMLEY-HORN.COM CA 00000696

REVISIONS

DATE BY

it's fast. It's free. It's the law.

SHEET NUMBER

GROUNDWATER

DEWATERING NOTE

THE PRESENCE OF GROUNDWATER

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WEATHER, PROVIDE ADEQUATE

MOISTURE OF SOILS.

OPERATIONS DURING PERIODS OF WET

DEWATERING, DRAINAGE AND GROUND

WATER MANAGEMENT TO CONTROL

GRAPHIC SCALE IN FEET

HORIZONTAL SCALE: 1"=20'

- + +

+ + ____

VERTICAL SCALE: 1"=4" ALL ELEVATIONS PER NAVD88

10 20

LEGEND:

SIDEWALK/CONCRETE RESTORATION

BRICK DRIVEWAY RESTORATION

SHELL DRIVEWAY

MILL AND OVERLAY

RESTORATION

RESTORATION

FULL ROAD

BORE PIT

9TH STREET S [STA. 600+00-604+50]

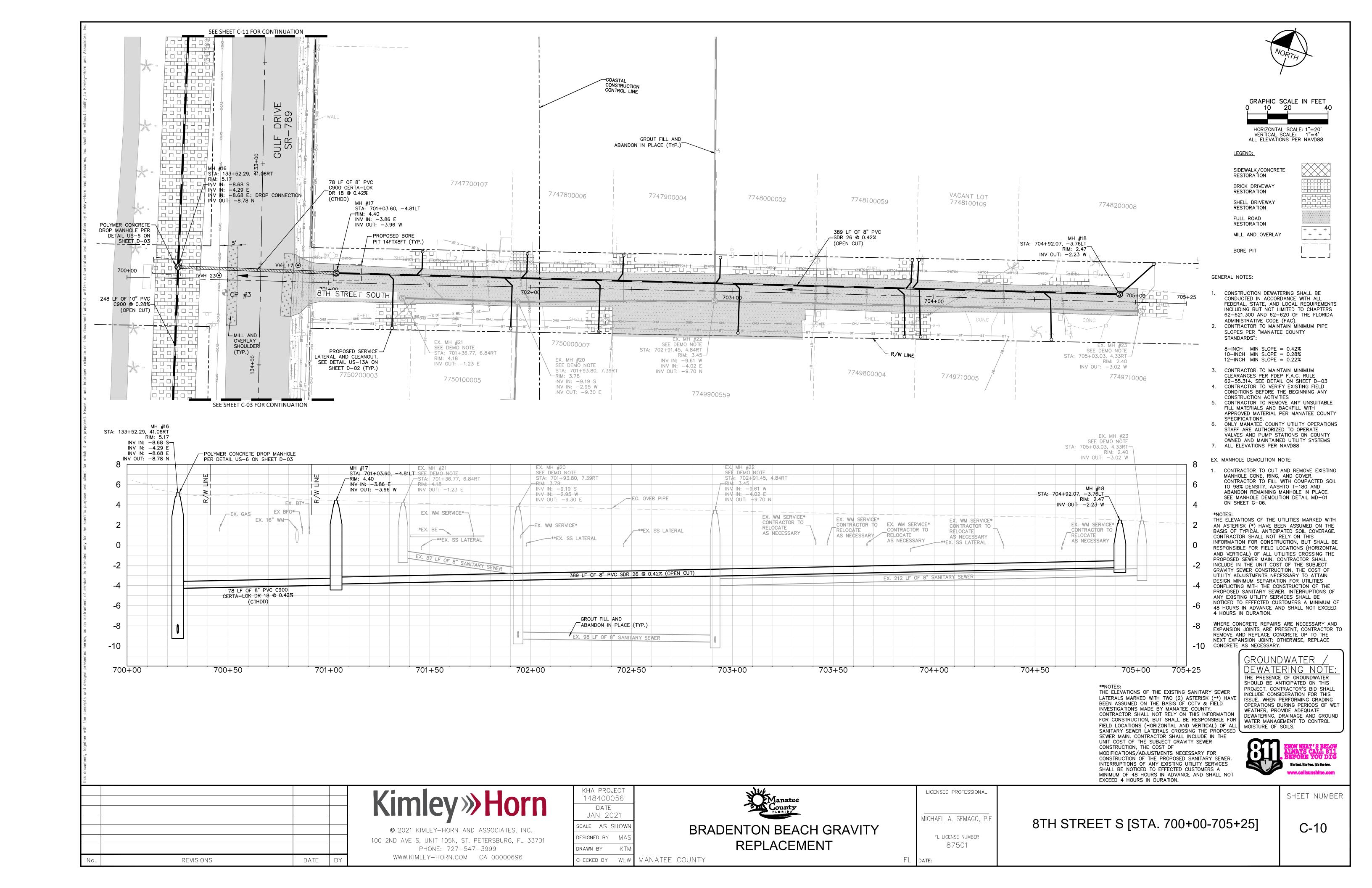
FL LICENSE NUMBER

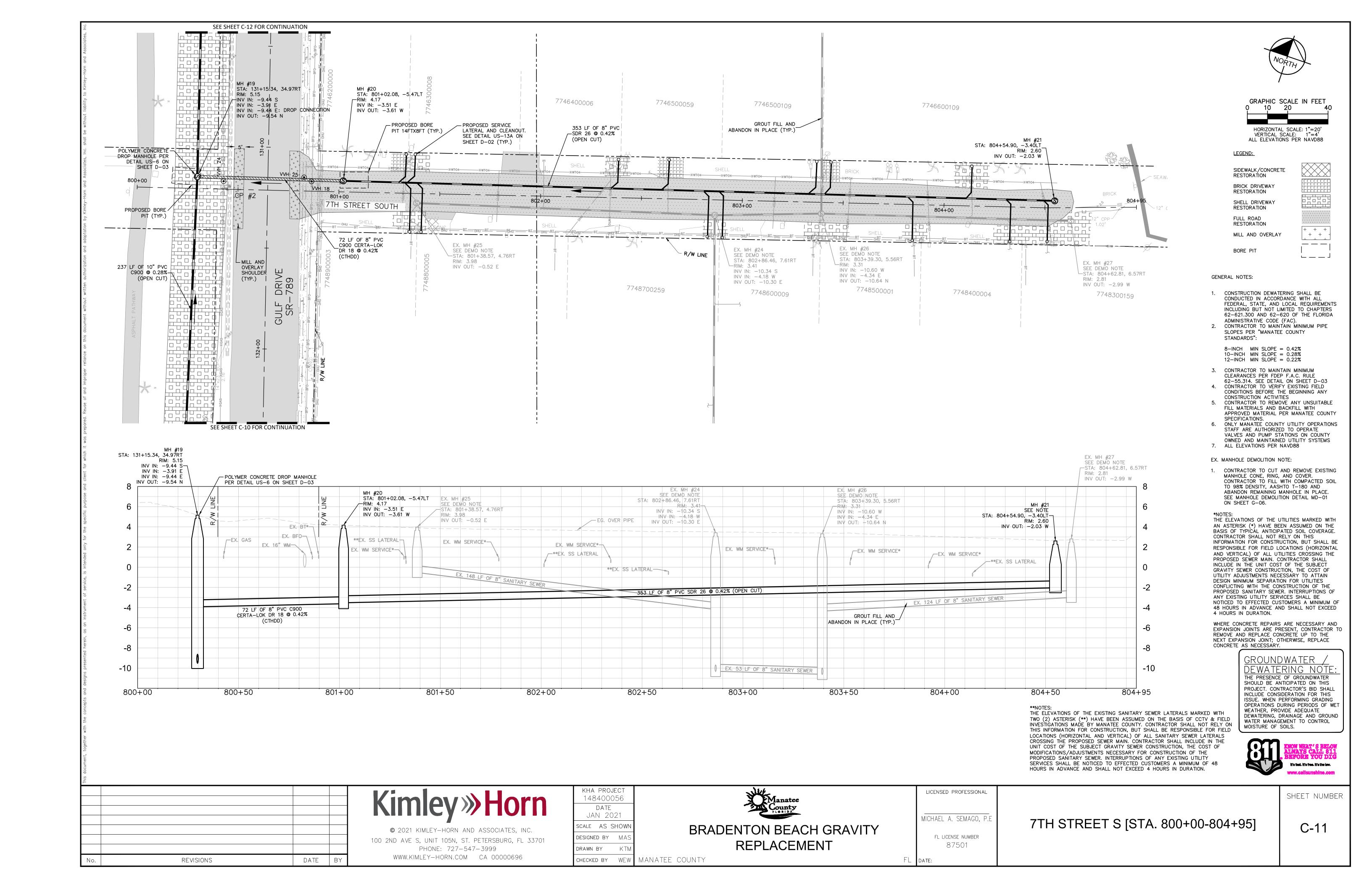
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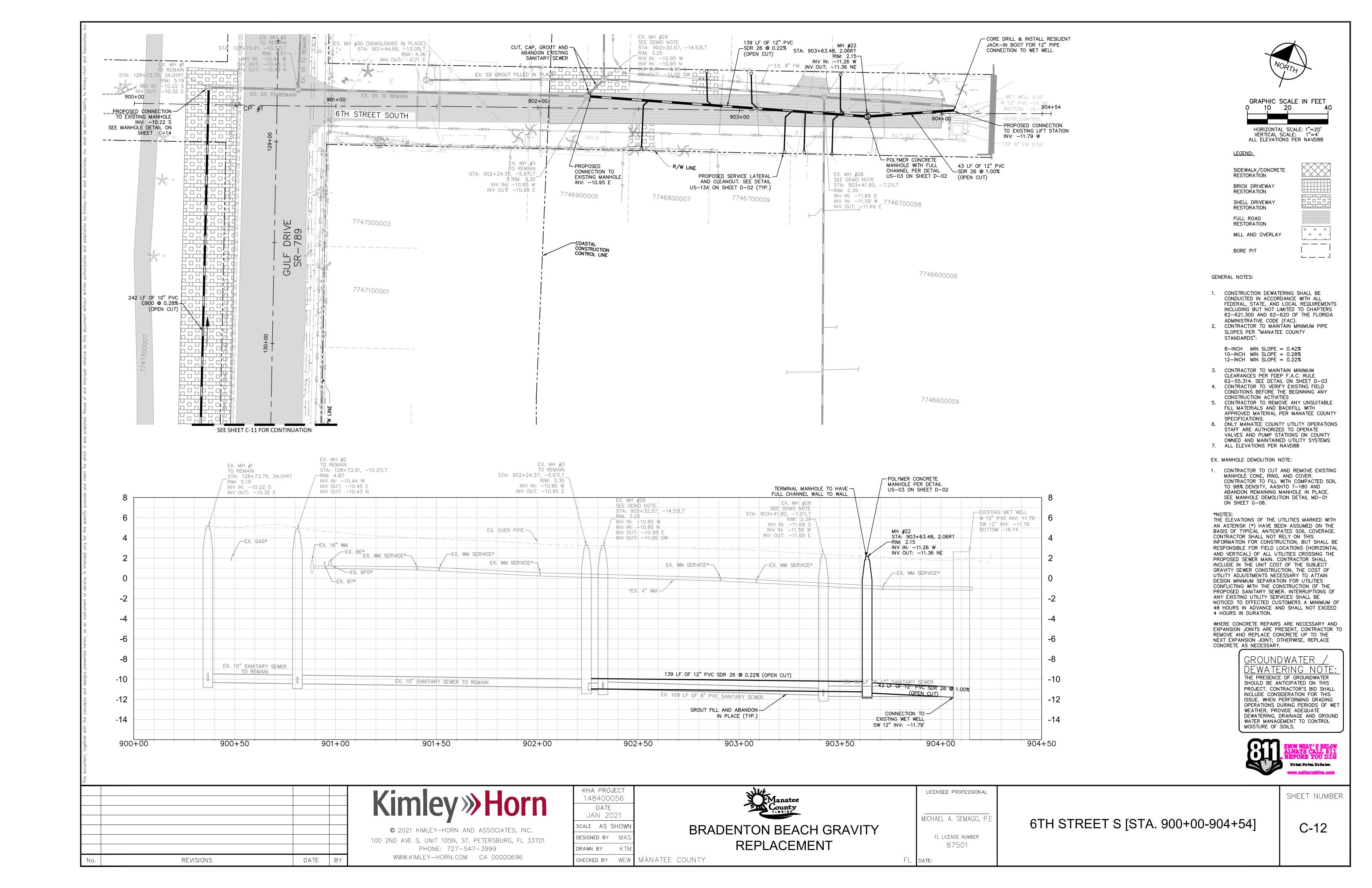
FL DATE:

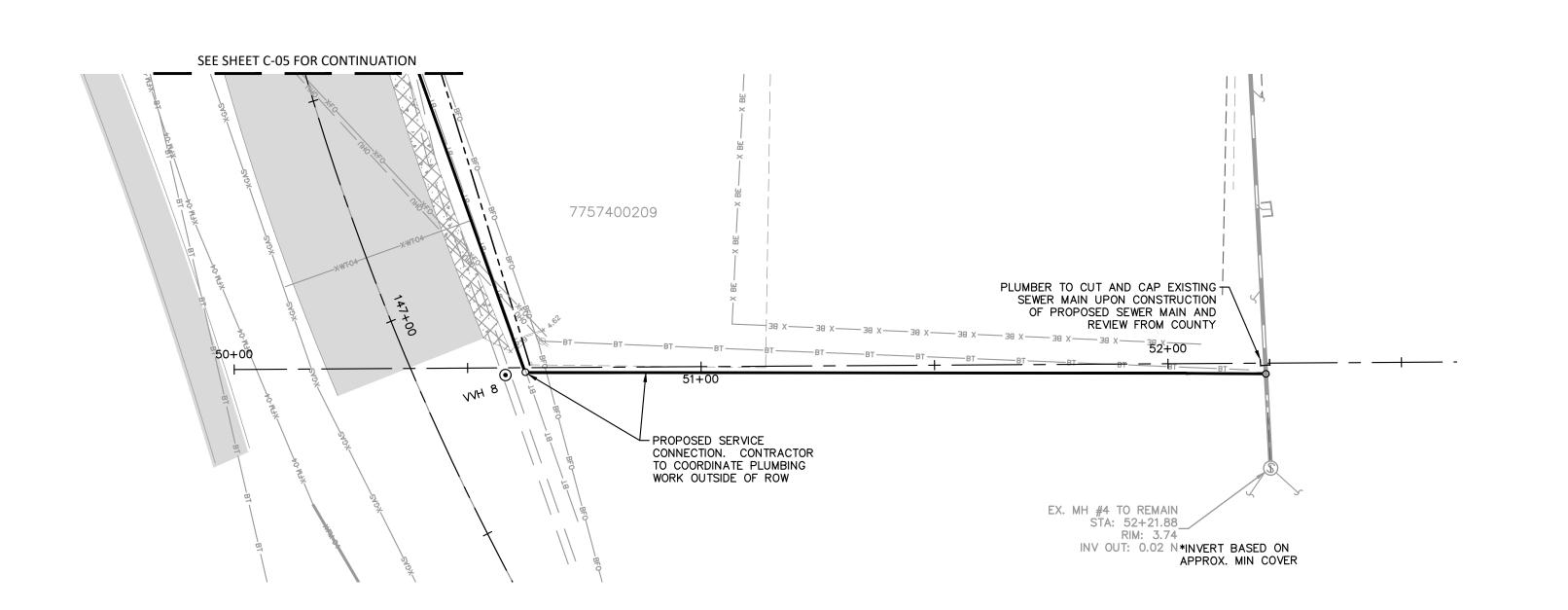
REPLACEMENT

C-09









PLUMBING DETAIL: SOUTH OF 13TH ST



GRAPHIC SCALE IN FEET
0 10 20 40

HORIZONTAL SCALE: 1"=20' VERTICAL SCALE: 1"=4' ALL ELEVATIONS PER NAVD88

LEGEND:

SIDEWALK/CONCRETE RESTORATION BRICK DRIVEWAY

RESTORATION
SHELL DRIVEWAY

SHELL DRIVEWAY RESTORATION FULL ROAD

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+ + +

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·			
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·			
No.	REVISIONS	DATE	BY

Kimley» Horn

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100 2ND AVE S, UNIT 105N, ST. PETERSBURG, FL 33701
PHONE: 727—547—3999
WWW.KIMLEY—HORN.COM CA 00000696

KHA PROJECT
148400056

DATE
JAN 2021

SCALE AS SHOWN

DESIGNED BY MAS

DRAWN BY KTM

CHECKED BY WEW MANATEE COUNTY

BRADENTON BEACH GRAVITY
REPLACEMENT

LICENSED PROFESSIONAL

MICHAEL A. SEMAGO, P.E

FL LICENSE NUMBER

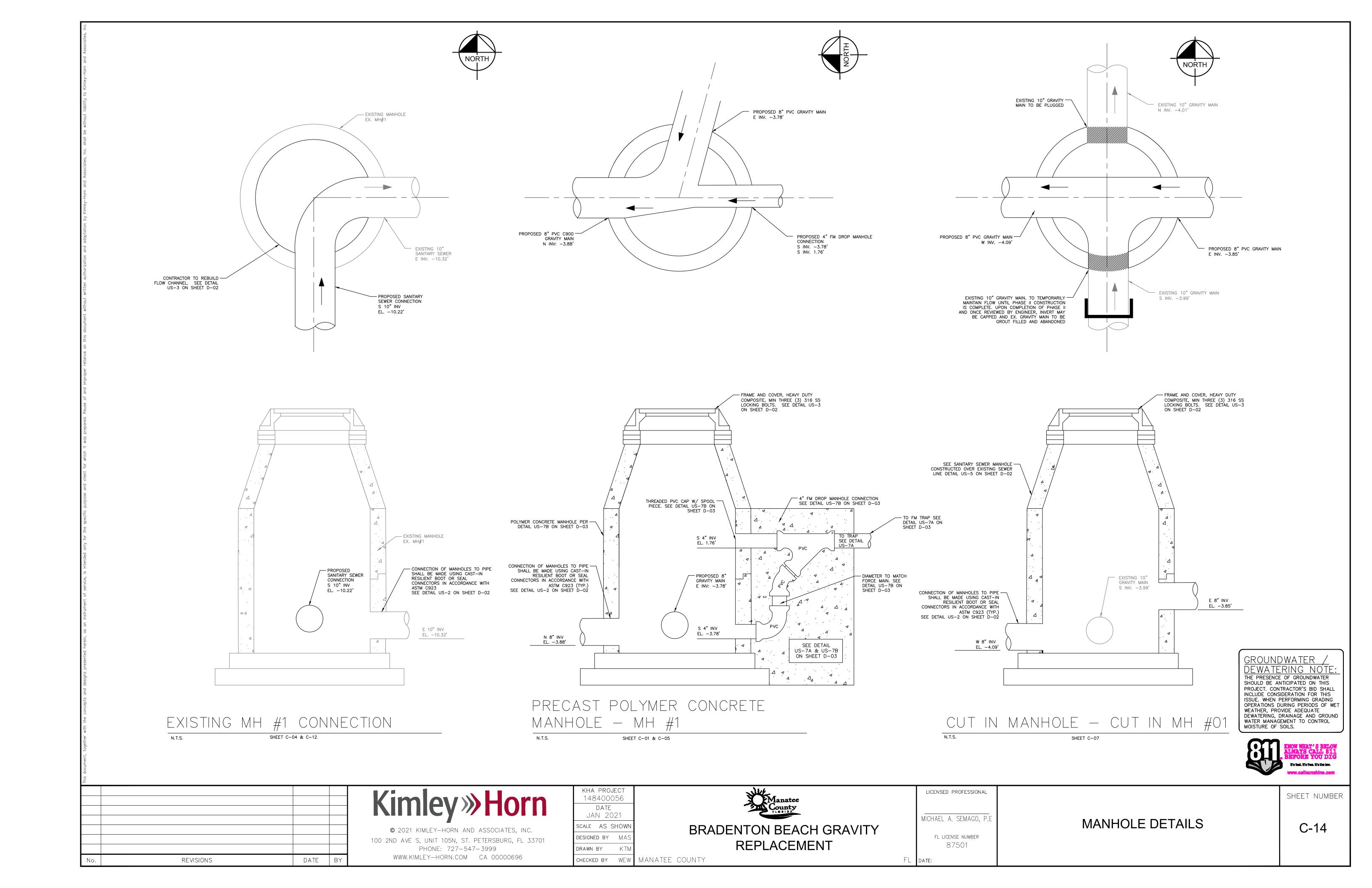
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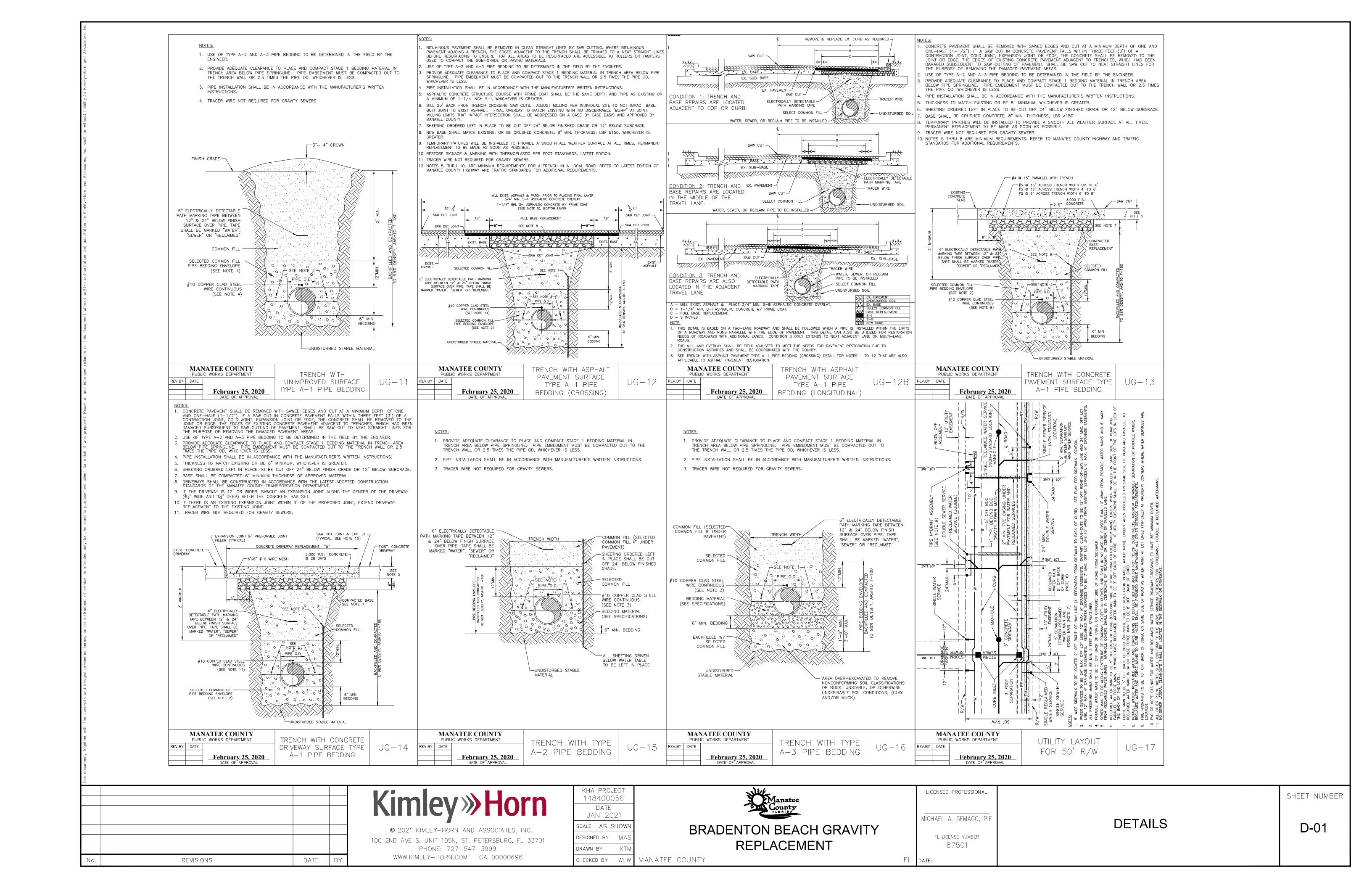
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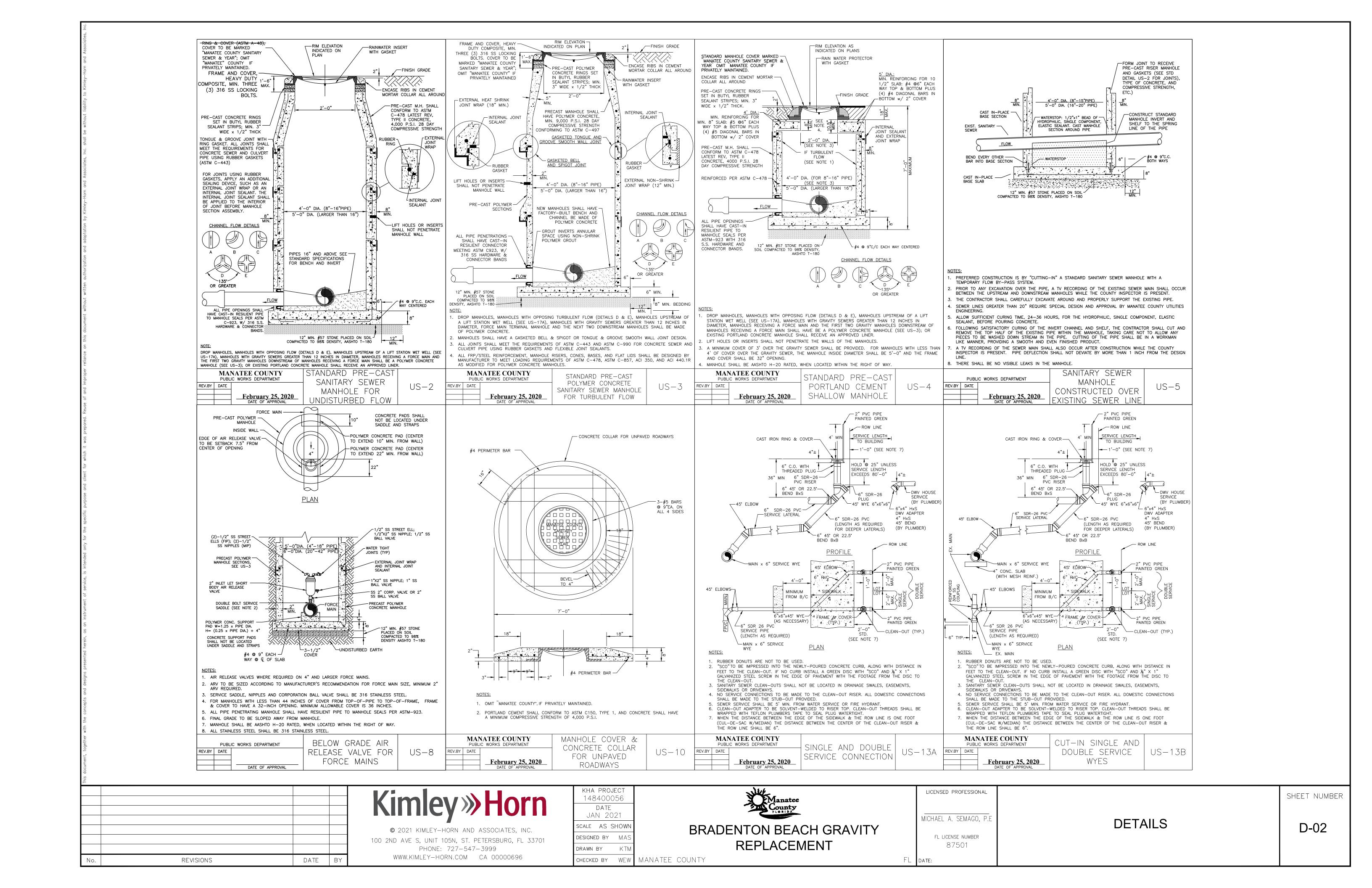
SOUTH 13TH STREET LATERAL

SHEET NUMBER

C-13







LOCATION OF PUBLIC WATER SYSYEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 3 ft. minimum Water Main
Vacuum Sanitary Sewer	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Alternate 3 ft. minimum Water Main
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 6 ft. minimum Water Main
On-Site Sewage Treatment & Disposal System	10 ft. minimum		

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.

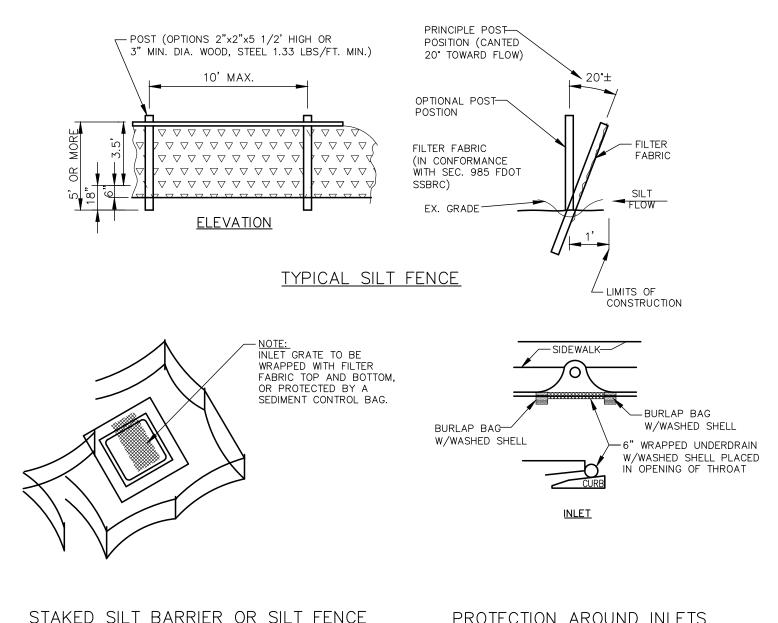
Disclaimer – This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.

(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

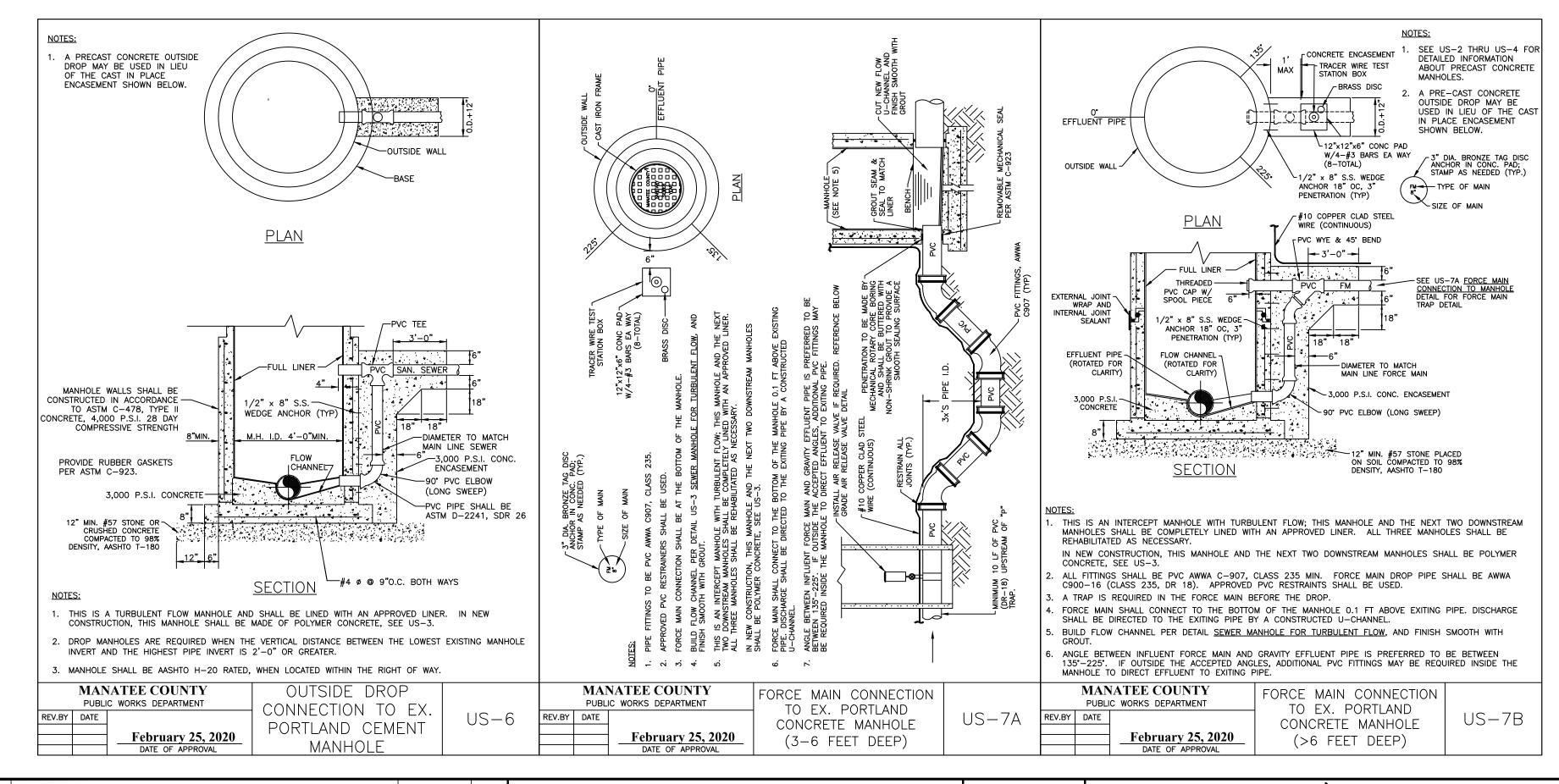
F.A.C. RULE 62-55.314 MAIN CLEARANCES DETAIL



STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND INLETS

PROTECTION AROUND INLETS

EROSION AND SEDIMENTATION CONTROL BEST MANAGEMENT PRACTICES



REVISIONS DATE BY

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KHA PROJECT 148400056 DATE JAN 2021 SCALE AS SHOWN ESIGNED BY MA DRAWN BY

CHECKED BY WEW

MANATEE COUNTY

BRADENTON BEACH GRAVITY REPLACEMENT

LICENSED PROFESSIONAL MICHAEL A. SEMAGO, P. FL LICENSE NUMBER 87501

FL DATE:

DETAILS