

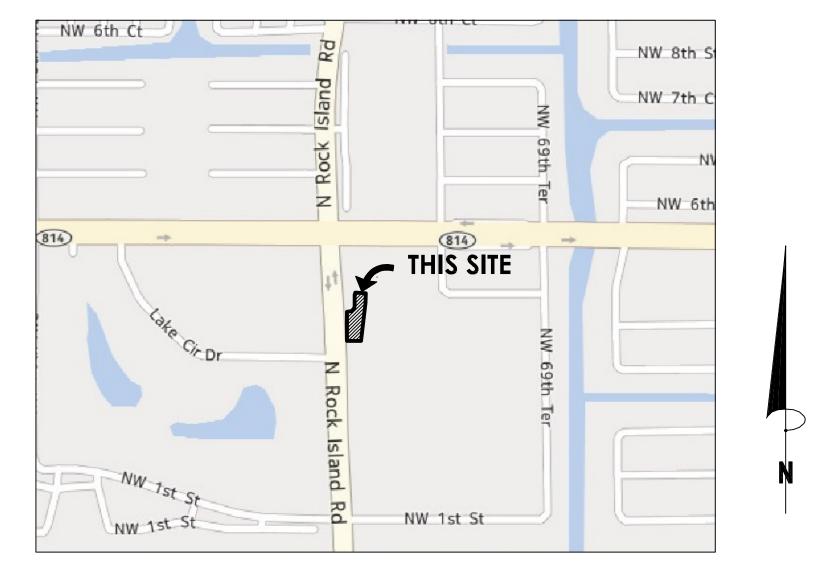
ROCK ISLAND PLAZA MARGATE, BROWARD COUNTY, FLORIDA

GENERAL NOTES:

- 1. THE LOCATION OF ALL EXISTING UTILITIES ON THE PLAN IS APPROXIMATE. THE CONTRACTOR SHALL LOCATE AND EXPOSE ALL EXISTING UTILITIES TO BE CONNECTED SUFFICIENTLY AHEAD OF CONSTRUCTION TO ALLOW REDESIGN BY THE ENGINEER IF SUCH UTILITIES ARE FOUND TO BE DIFFERENT THAN SHOWN ON THESE PLANS.
- 2. THE CONTRACTOR SHALL PROTECT ALL UTILITIES AND OTHER IMPROVEMENTS SHOWN ON THESE PLANS AND OTHER UTILITIES AND OTHER IMPROVEMENTS NOT SHOWN. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR REPAIRS OF UTILITIES AND OTHER IMPROVEMENTS DAMAGED DURING CONSTRUCTION, AND SHALL MAINTAIN SUFFICIENT PROTECTION TO ALL UTILITIES REQUIRED TO PROTECT THEM FROM DAMAGE AND TO PROTECT THE PUBLIC DURING CONSTRUCTION.
- 3. CONTRACTOR SHALL CONTACT THE CITY OF MARGATE ENGINEERING DEPARTMENT 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- 4. THE CONTRACTOR SHALL NOTIFY FLORIDA POWER & LIGHT CO., SOUTHERN BELL TELEPHONE CO., THE LOCAL WATER AND SEWER UTILITY COMPANIES AND ANY OTHER UTILITY COMPANY WHICH MAY HAVE THEIR UTILITIES WITHIN THE CONSTRUCTION AREAS BEFORE BEGINNING CONSTRUCTION.
- 5. A PRE-CONSTRUCTION MEETING IS TO BE HELD BETWEEN THE CITY OF MARGATE, THE UTILITY COMPANIES, ENGINEER OF RECORD AND CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 6. THE CONTRACTOR MUST NOTIFY THE CITY OF MARGATE UTILITIES DEPARTMENT 48 HOURS PRIOR TO TYING INTO ANY EXISTING STRUCTURES AND HAVE AN INSPECTOR PRESENT.
- 7. PLANS AND SPECIFICATIONS REQUIRE THAT COMPACTED BACKFILL BE PLACED ALONG SIDE OF AND OVER ALL UTILITIES.
 THE ENGINEER MAY REQUIRE THAT COMPACTION TESTS BE TAKEN TO VERIFY BACKFILL COMPACTION. THE COSTS OF SUCH COMPACTION TESTS WILL BE BORNE BY THE CONTRACTOR.
- 8. ELEVATIONS SHOWN HEREON ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
- 9. THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND (INCLUDING SPRINKLERS) SHALL BE PLACED BENEATH THE PAVEMENT AND ITS EDGE PRIOR TO THE CONSTRUCTION OF PAVEMENT. THE PAVEMENT SHALL NOT BE CUT WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- 10. ALL LABOR, MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE CITY OF MARGATE UTILITIES DEPARTMENT AND THE PLANS AND CONSTRUCTION SPECIFICATIONS. WHERE CONFLICTS OR OMISSIONS EXIST, THE CITY OF MARGATE UTILITIES DEPARTMENT STANDARDS SHALL DICTATE. SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
- 11. CONSTRUCTION INSPECTION WILL BE PERFORMED BY THE ENGINEER AND IS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION, AND AT LEAST 48 HOURS BEFORE REQUIRING INSPECTION OF EACH AND EVERY PHASE OF WORK.
- 12. CONSTRUCTION SURVEYING WILL BE PERFORMED BY THE ENGINEER OR SURVEYORS DESIGNATED BY THE OWNER. THE CONTRACTOR SHALL CONTACT THE SURVEYOR NOT LESS THAN 48 HOURS BEFORE THE SURVEYORS ARE NEEDED ON—SITE TO STAKE OUT ANY PHASE OF WORK. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF PROTECTING ALL SURVEY STAKES AND MONUMENTS. REPLACEMENT COSTS OF ALL STAKES SHALL BE BORNE BY THE CONTRACTOR.
- 13. THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE DURING ALL PHASES OF CONSTRUCTION.
- 14. SHOP DRAWINGS OF ALL MATERIALS BEING USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. THE DRAWINGS WILL THEN BE FORWARDED TO THE CITY OF MARGATE UTILITIES DEPARTMENT AND ENGINEERING DEPARTMENT.
- 15. CONTRACTOR TO MAINTAIN THE TRAFFIC DURING THE CONSTRUCTION OF OFF-SITE UTILITIES AND KEEP STREET OPEN EVERYDAY AFTER DAILY CONSTRUCTION IS COMPLETED, AS REQUIRED BY THE CITY OF MARGATE.
- 16. THE CONTRACTOR IS NOT ALLOWED TO CLOSE STREET TRAFFIC DURING VERTICAL CONSTRUCTION (BUILDINGS)
 PER CITY OF MARGATE.
- 17. MAINTENANCE OF TRAFFIC FOR PUBLIC STREETS SHALL BE PROPERLY COORDINATED WITH THE CITY OF MARGATE AS REQUIRED BY THE CITY.
- 18. THE PUBLIC ROADWAY(S) INDICATED IN THESE PLANS HAS BEEN DESIGNED IN ACCORDANCE WITH THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS STATE OF FLORIDA."
- 19. THE PUBLIC ROADWAYS INDICATED IN THESE PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH FDOT
- 20. ALL WORK DONE WITHIN THE RIGHT OF WAY OF ROCKISLAND ROAD SHALL BE IN ACCORDANCE WITH THE BROWARD COUNTY MINIMUM STANDARDS.

LEGAL DESCRIPTION:

THAT PART OF PARCEL C, ORIOLE-MARGATE SECTION 3, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 74, PAGE 45, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID PARCEL C; THENCE NORTH 05°07'13" EAST, ALONG THE EAST LINE OF SAID PARCEL C, A DISTANCE OF 725.10 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 88°20'22" WEST, A DISTANCE OF 107.61 FEET TO A POINT ON THE WEST LINE OF SAID PARCEL C; THENCE NORTH 01°39'38" WEST, ALONG SAID WEST LINE, A DISTANCE OF 223.69 FEET; THENCE NORTH 83°32 '32" EAST, A DISTANCE OF 16.49 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE TO THE NORTHWEST; THENCE EASTERLY AND NORTHERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 45.67 FEET, A CENTRAL ANGLE OF 85°12'10", AN ARC DISTANCE OF 67.91 FEET TO A POINT OF TANGENCY; THENCE NORTH 01°39'38" WEST, A DISTANCE OF 83.48 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE TO THE EAST; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 38.97 FEET, A CENTRAL ANGLE OF 25°09'25", AN ARC DISTANCE OF 17.11 FEET TO A POINT ON THE WESTERLY EXTENSION OF THE NORTH LINE OF PARCEL A, SAID PLAT OF ORIOLE-MARGATE SECTION 3; THENCE SOUTH 88°56'25" EAST, ALONG SAID WESTERLY EXTENSION, A DISTANCE OF 82.71 FEET TO THE NORTHWEST CORNER OF SAID PARCEL A; THENCE SOUTH 00°06'56" WEST, ALONG THE EAST LINE OF SAID PARCEL C, A DISTANCE OF 75.20 FEET; THENCE SOUTH 05°07'13" WEST, ALONG THE EAST LINE OF SAID PARCEL C, A DISTANCE OF 293.60 FEET TO THE POINT OF BEGINNING. SAID LANDS LYING IN THE CITY OF MARGATE, BROWARD COUNTY, FLORIDA, CONTAINING 0.908 ACRES, MORE OR LESS.



LOCATION MAP

NOT TO SCALE

SHEET INDEX

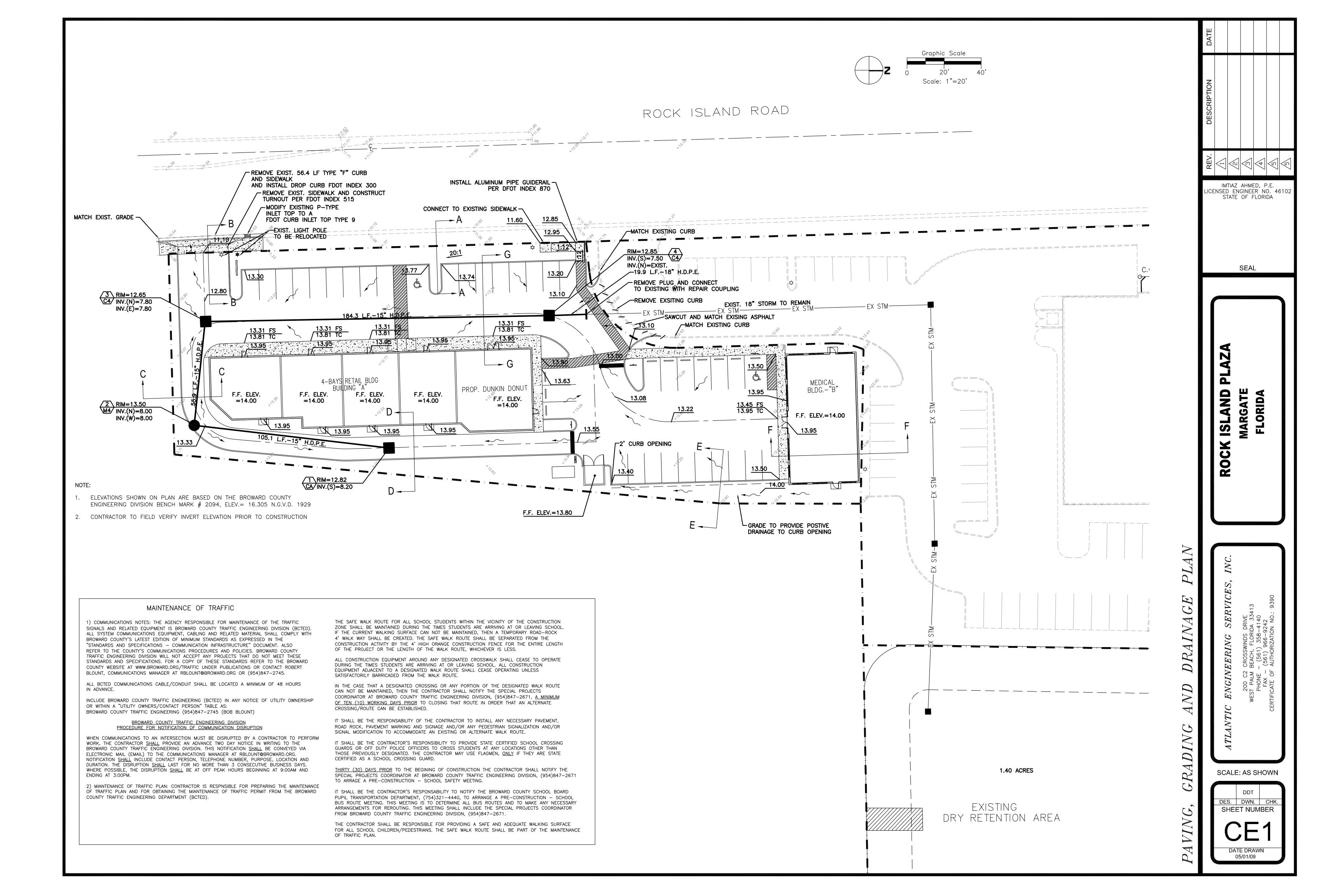
COVER SHEET

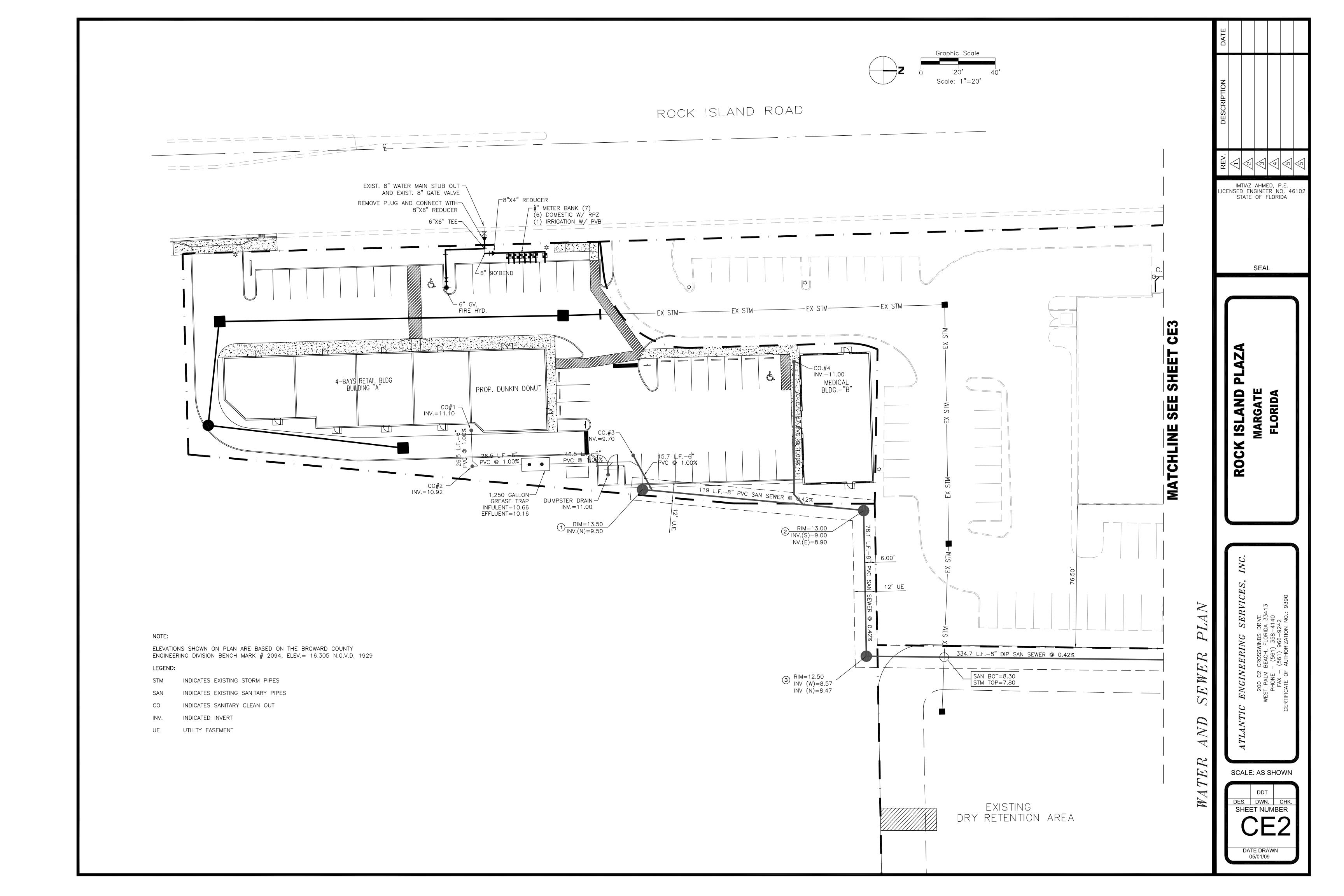
CE1 PAVING GRADING AND DRAINAGE PLAN
CE2-CE3 WATER AND SEWER PLAN
CE4 SANITARY SEWER PROFILE
CE5-CE6 PAVING GRADING AND DRAINAGE DETAILS
CE7-CE8 WATER AND SEWER DETAILS

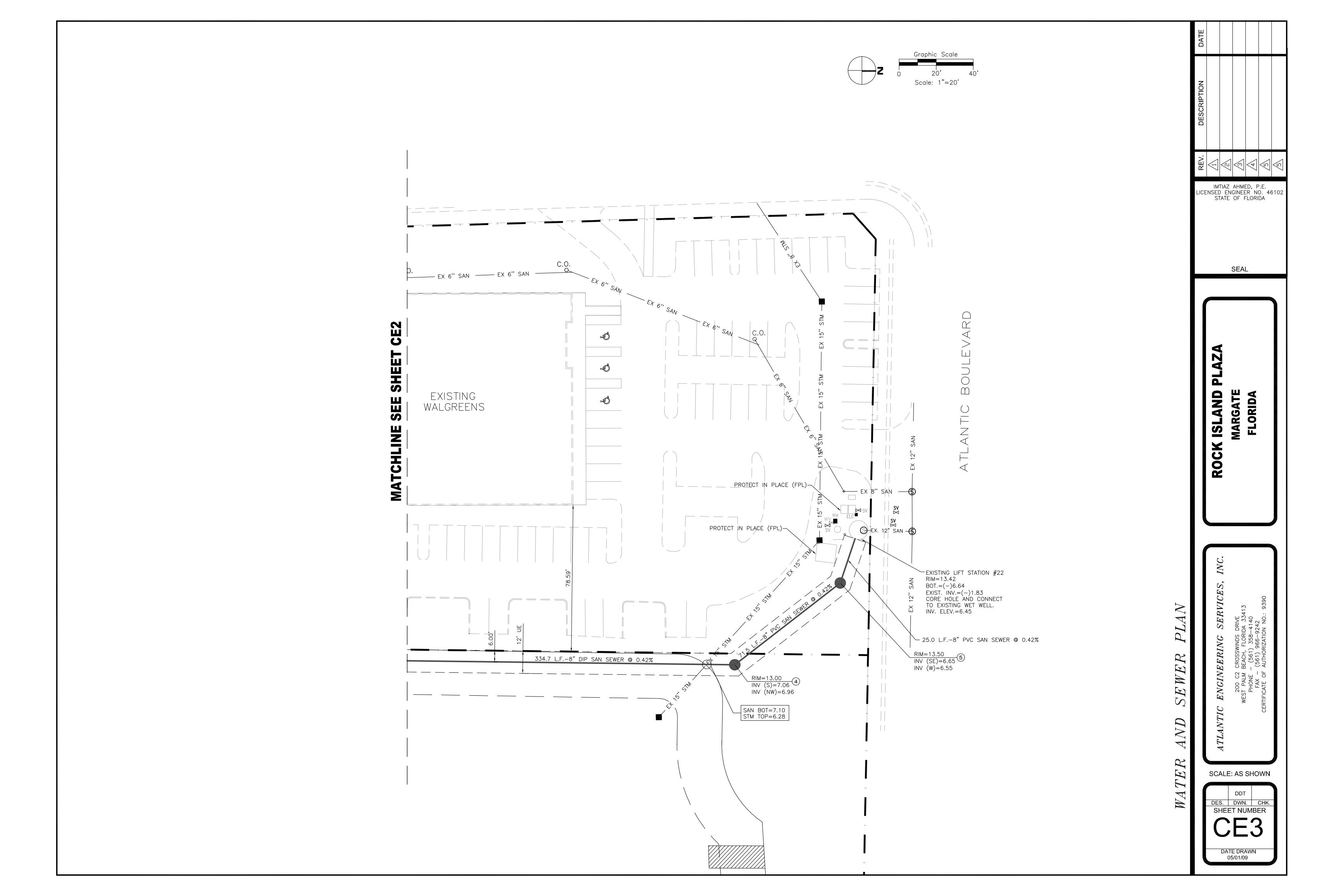
L1 LANDSCAPE PLAN
P1-P2 POLLUTION PREVENTION PLAN

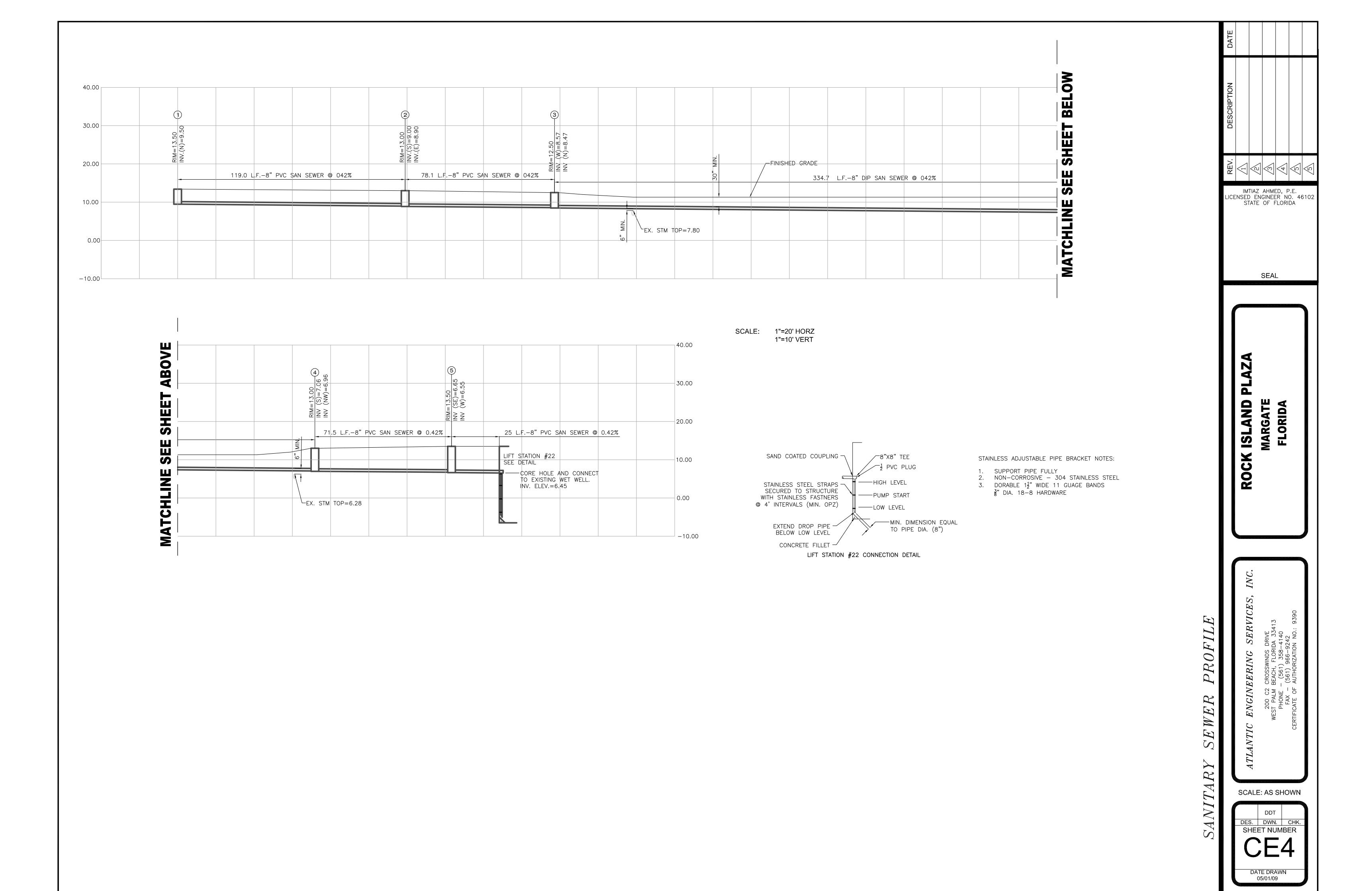
ATLANTIC ENGINEERING SERVICES, INC.

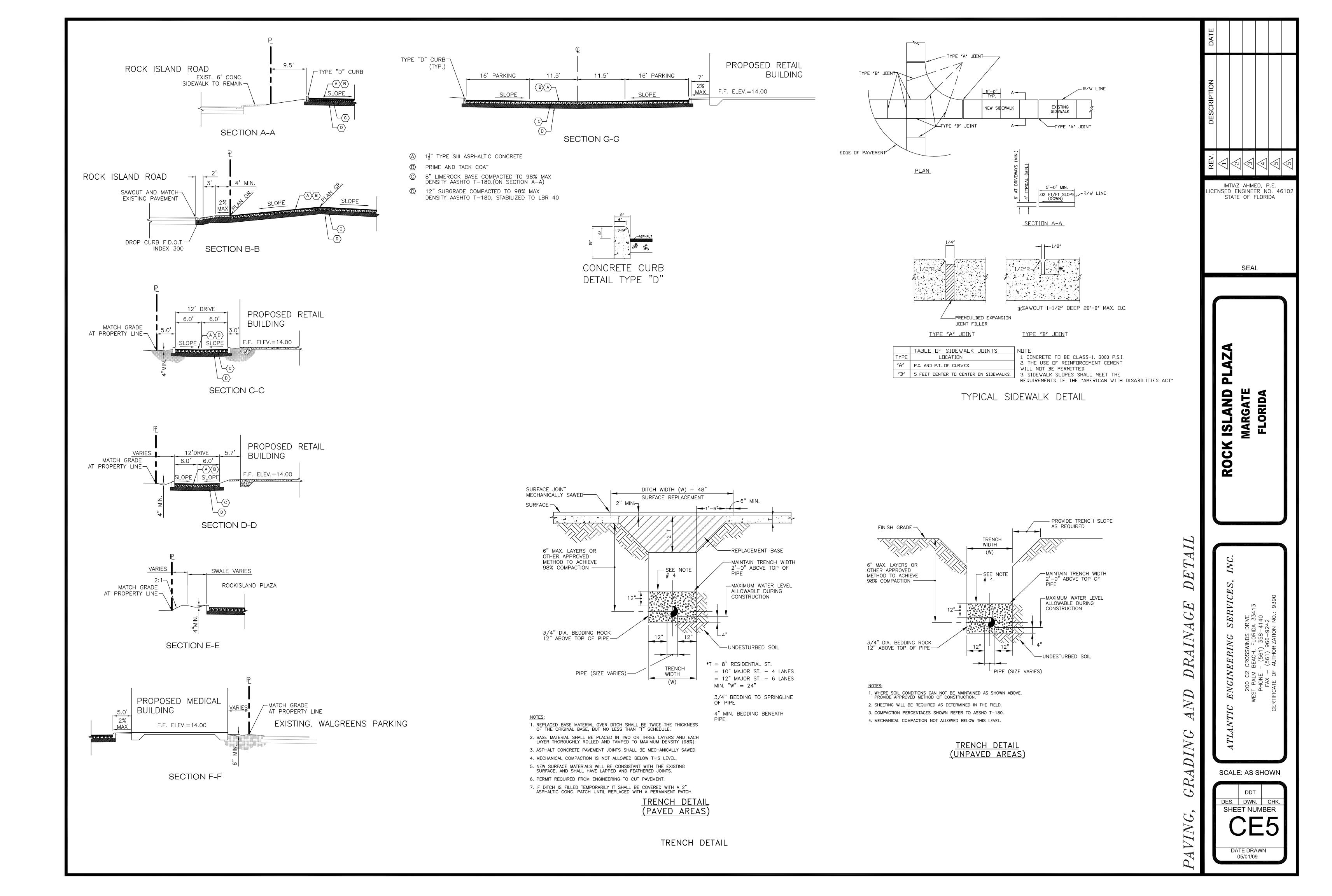
200 C2 CROSSWINDS DRIVE WEST PALM BEACH, FL 33413 PH:(561) 358-4140 FAX:(561) 966-9242 CA#00009390

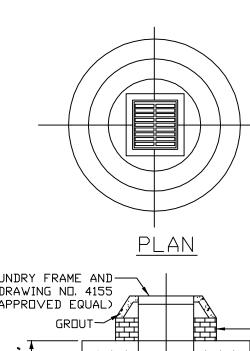


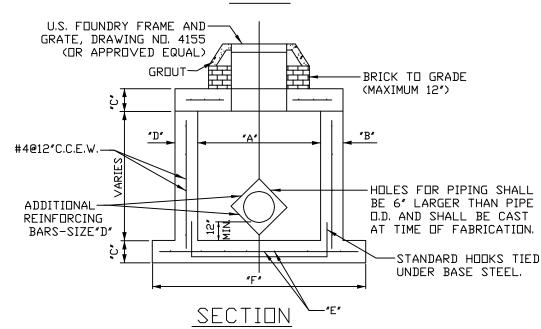








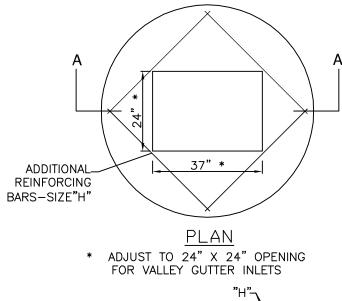




NOTE: SQUARE STRUCTURES MAY BE USED AS AN ALTERNATE EXCEPT FOR CURB INLETS UNLESS STRUCTURE CONTAINS A POLLUTION RETARDENT BAFFLE SQUARE STRUCTURES MUST BE USED FOR POLLUTION RETARDENT STRUCTURES

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	TYPE	"A"	"B"	"C"	"D"	"E"	"F"
	C-4	4'-0"	8"	8"	#4@12"CCEW	#4@12"CCEW	6'−4" Ø
	C-5	5'-0"	8"	8"	#5@12"CCEW	#5@12"CCEW	7'-4" Ø
	C-6	6'-0"	8"	8"	#5@12"CCEW	#5@6"CCEW	8'-4" Ø
	C-7	7'-0"	8"	8"	#5@12"CCEW	#5@6"CCEW	9'-4" Ø
	C-8	8'-0"	10"	10"	2-W.W.M. w/#4 © 12" C.C. VERT.	#5@6"CCEW	10'-4" Ø

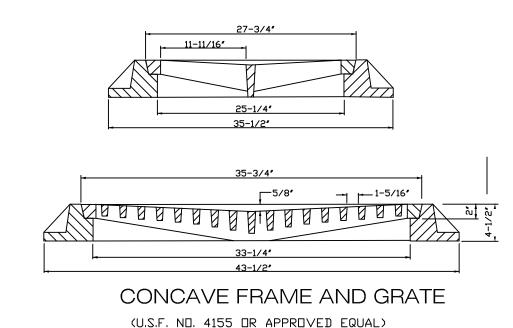
PRECAST CIRCULAR CATCH BASIN

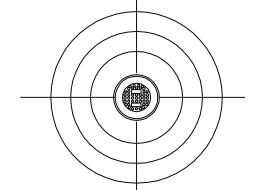


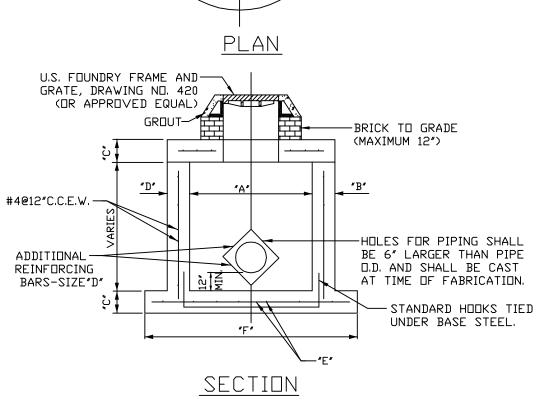
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6'-0"ø	10"	7'-4"ø	#5	@	6"CCEW
7'-0"ø	10"	8'-4"ø	#5	@	6"CCEW
8'-0"ø	10"	9'-8"ø	#5	0	6"CCEW
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PRECAST CONCRETE - TOP SLAB FOR CATCH BASIN

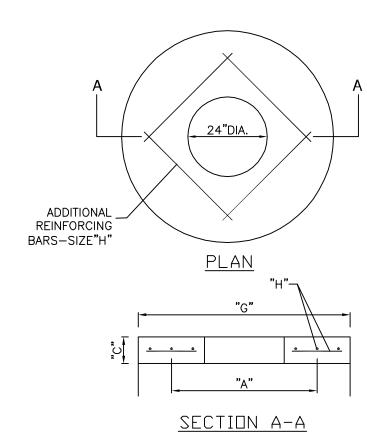






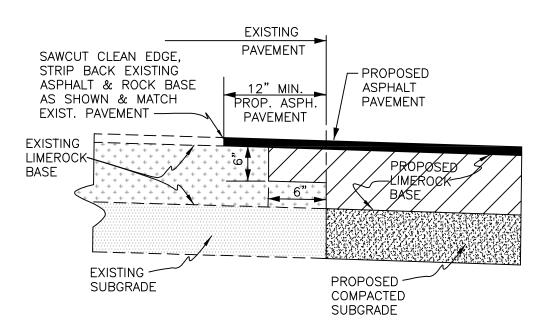
TYPE	"A"	"B"	"C"	"D"	"E"	"F"
M-4	4'-0"	8"	8"	#4@12"CCEW	#4@12"CCEW	6'−4" Ø
M-5	5'-0"	8"	8"	#5@12"CCEW	#5@12"CCEW	7'-4" Ø
M-6	6'-0"	°8	8"	#5@12"CCEW	#5@6"CCEW	8'-4" Ø
M - 7	7'-0"	°	8"	#5@12"CCEW	#5@6"CCEW	9'-4" Ø
M-8	8'-0"	10"	10"	2-W.W.M. w/#4 @ 12" C.C. VERT.	#5@6"CCEW	10'-8" Ø

PRECAST DRAINAGE MANHOLE N.T.S.

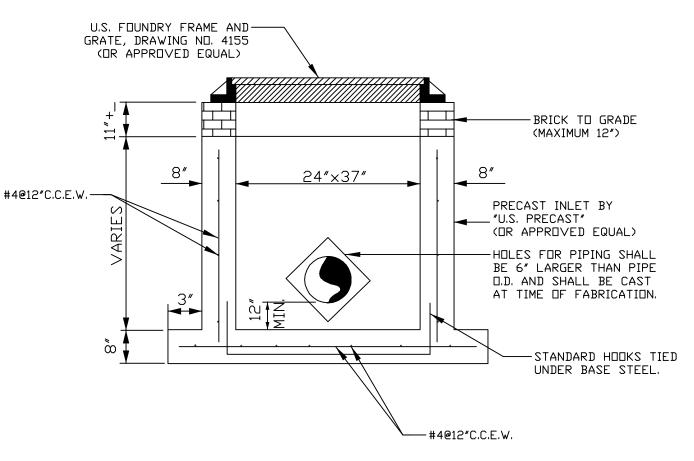


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"A"	"C"	"G"	"H"
4'-0"ø	8"	5'-4"ø	#4 @ 6"CCE
5'-0"ø	8"	6'-4"ø	#5 @ 8"CCE
6'-0"ø	10"	7'-4"ø	#5 @ 6"CCE
7'-0"ø	10"	8'-4"ø	#5 @ 6"CCE
8'-0"ø	10"	9'-8"ø	#5 @ 6"CCE

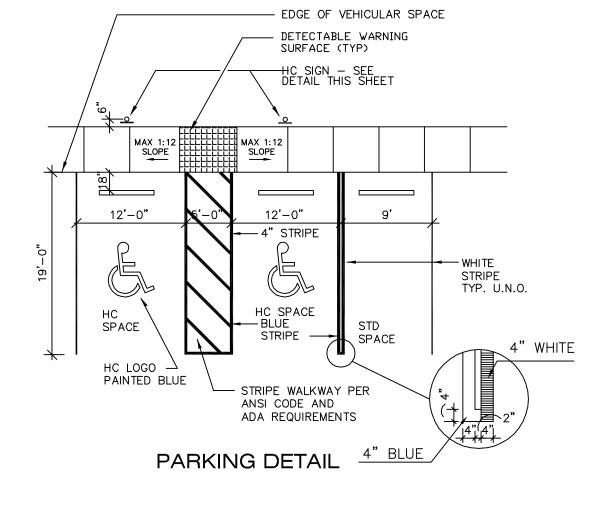
PRECAST CONCRETE TOP SLAB FOR MANHOLE

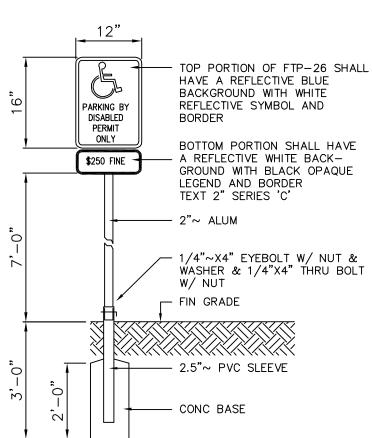


SAWCUT DETAIL



TYPE "C-A" DITCH BOTTOM INLET





HANDICAP SIGN DETAIL

ON-SITE PAVING AND DRAINAGE SPECIFICATIONS:

- 1. ALL ORGANIC OR DELETERIOUS MATERIAL SHALL BE REMOVED FROM WITHIN 5 FEET OF ANY EDGE OF PAVEMENT. ANY SUCH MATERIAL SHALL BE REPLACED BY APPROVED GRANULAR FILL WHICH SHALL BE PLACED AND IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT FOR THE SITE.
- 2. STABILIZED SUBGRADE SHALL HAVE A LIMEROCK BEARING RATIO (LBR) OF 40 AND SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
- 3. LIMEROCK BASE COURSE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 311 OF FLORIDA D.O.T. STANDARD SPECIFICATIONS. THE MINIMUM PERCENTAGE OF CARBONATES OF CALCIUM AND MAGNESIUM SHALL BE 70%, LIQUID LIMIT 35
- PLASTICITY 6, MIN LBR 100 OR ACCEPTABLE FDOT PRODUCT APPROVAL

 4. ASPHALTIC CONCRETE TYPE S-3 SHALL CONFORM TO THE REQUIREMENTS OF SECTION 331 OF FLORIDA D.O.T. STANDARD SPECIFICATIONS.
- PRIME COAT AND TACK COAT FOR BASE COURSES SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS 300-1 THROUGH 300-7 OF FLORIDA D.O.T. STANDARD SPECIFICATIONS. PRIME COAT SHALL BE APPLIED AT A RATE OF 0.25 GALLONS PER SQUARE YARD AND TACK COAT AT A RATE OF 0.08 GALLONS PER SQUARE YARD UNLESS A VARIATION RATE IS APPROVED BY THE ENGINEER.
- 6. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, EXCEPT DRAINAGE STRUCTURES.
- 7. PRECAST CONCRETE MANHOLES AND CATCH BASINS SHALL MEET THE REQUIREMENTS OF A.S.T.M. SPECIFICATIONS C-478 AND 64T.
- 8. CONCRETE FOR PRECAST MANHOLES AND CATCH BASINS SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- 9. REINFORCING STEEL FOR MANHOLES AND CATCH BASINS SHALL CONFORM TO A.S.T.M.
 SPECIFICATIONS A-615 AND A-305, LATEST REVISION. GRADE 60 STEEL SHALL BE USED
 FOR TOP AND BOTTOM SLABS.
- 10. ALL RE-BAR SPLICES IN CONCRETE STRUCTURES SHALL HAVE A MINIMUM LAP OF 24 BAR DIAMETERS.
- 11. ALL JOINTS IN CONCRETE STRUCTURES SHALL BE FINISHED WATER TIGHT.
- 12. ALL SPACES AROUND PIPING ENTERING OR LEAVING MANHOLES AND CATCH BASINS SHALL BE COMPLETELY FILLED WITH 2:1 WATERPROOF, NON-SHRINKING CEMENT
- 13. REINFORCED CONCRETE PIPE (RCP) SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. SPECIFICATION C-76, FOR CLASS III, WALL THICKNESS "B" REINFORCED CONCRETE PIPE, AND AS MODIFIED IN SECTION 941 OF FLORIDA D.O.T. STANDARD
- 14. CORRUGATED METAL PIPE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 945 OF FLORIDA D.O.T. STANDARD SPECIFICATIONS.
- 15. PVC DRAINAGE PIPE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 945 OF FLORIDA D.O.T. STANDARD SPECIFICATIONS.
- 16. HDPE PIPE SHALL BE ADS N-12 OR APPROVED EQUAL.
- 17. ALL LABOR, MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY CITY OF MARGATE AND THE PLANS AND CONSTRUCTION SPECIFICATIONS. WHERE CONFLICTS OR OMISSIONS EXIST, THE CITY OF MARGATE STANDARDS SHALL DICTATE.

 SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
- 18. THE EXISTING ELEVATIONS SHOWN ON THE GRADING PLAN INDICATES THE ELEVATION AT THE POINT DEPICTED ONLY, AND SHOULD NOT BE INTERPRETED AS INDICATING THE ELEVATIONS OF ANY OTHER POINT. THESE EXISTING ELEVATIONS ARE IN NO WAY AN INDICATOR OF SURFACE OR SUBSURFACE SOIL CONDITIONS.
- INDICATOR OF SURFACE OR SUBSURFACE SOIL CONDITIONS. 19. BITUMINOUS COATING REQUIRED FOR ALL CORRUGATED METAL PIPE (CMP).
- 20. MATERIAL BENEATH SIDEWALKS AND SWALES SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY, PER AASHTO T-180.

PAVEMENT MARKING AND SIGNAGE SPECIFICATIONS:

- I. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH BROWARD COUNTY PUBLIC WORKS TRAFFIC ENGINEERING STANDARDS.
- 2. ALL THERMOPLASTIC PAVEMENT MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH FLORIDA DEPARTMENT OF
- TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 3. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED DESIGN SHALL BE REMOVED. METHOD OF REMOVAL TO BE APPROVED BY THE ENGINEER PRIOR TO ANY WORK IN THIS AREA.
- TO EACH FIRE HYDRANT.
- 5. PROVIDE FOR ONE (1) BLUE REFLECTIVE PAVEMENT MARKER IN THE CENTER OF THE DRIVE LANE ADJACENT TO EACH GATE VALVE.

PROVIDE FOR TWO (2) BLUE REFLECTIVE PAVEMENT MARKERS IN THE CENTER OF THE DRIVE LANE ADJACENT

- 6. ALL EXISTING SIGNS (STOP, SPEED LIMIT, STREET NAMES, SCHOOL, ETC) SHALL BE RELOCATED WHERE CONFLICTING WITH PROPOSED DESIGN.
- 7. PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH OF MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND BROWARD COUNTY STANDARDS.
- ON-SITE GRADING SPECIFICATIONS
 - SITE GRADING TO INCLUDE ROUGH GRADING, PAD GRADING, FINE GRADING AND FINAL LANDSCAPE AREA GRADING.

FROSION CONTROI

1. STABILIZATION PRACTICES

- LAKE BANKS AND FILL STOCKPILES WHERE ADJACENT CONSTRUCTION ACTIVITY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED BY SEEDING AND MULCHING IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2000, SECTION 570. SEED AND MULCH SHALL BE APPLIED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THE AREA.
- 2. PERMANENT STABILIZATION
- ALL LANDSCAPING, INCLUDING SODDING, SHALL BE INSTALLED ON THE PERIMETER LANDSCAPE BERMS IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN WITHIN 14 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THE LANDSCAPE BUFFER AREAS.

3. STRUCTURAL PRACTICES

TEMPORARY SWALES SHALL BE CONSTRUCTED AT THE TOP OF BANK OF THE LAKE AND AT THE SITE PERIMETER TO PREVENT DIRECT RUNOFF FROM THE SITE. A SILTATION FENCE SHALL BE INSTALLED ALONG ALL PROPERTY LINES AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. A WINDSCREEN SHALL BE INSTALLED ALONG ALL PROPERTY LINES AS DEEMED NECESSARY BY THE OWNER DURING THE CONSTRUCTION PROCESS TO REDUCE WINDBLOWN EROSION.

4. OFF-SITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF MINIMUM 4" COMPACTED LIMEROCK BASE WILL BE CONSTRUCTED AS SOON AS CONSTRUCTION STARTS TO REDUCE THE AMOUNT OF VEHICLE TRACKING FROM THE SITE. THE PAVED STREET ADJACENT TO THE CONSTRUCTION ENTRANCE WILL BE SWEPT ON A REGULAR BASIS TO REMOVE ANY ACCUMULATION OF DIRT OR ROCKS WHICH HAVE BEEN TRACKED FROM THE SITE. ALL DUMP TRUCKS BRINGING MATERIAL TO, OR LEAVING THE SITE WILL BE COVERED WITH A TARPAULIN.

- 5. EROSION AND SEDIMENT CONTROL, INSPECTION AND MAINTENANCE PRACTICES
- * ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE WEEKLY
- AND FOLLOWING ANY STORM EVENT GREATER THAN 1/2".

 * REPAIRS WILL BE COMPLETED WITHIN 24 HOURS.
- * THE LAKE BANK AND PERIMETER SWALES WILL BE INSPECTED REGULARLY AND REGRADED AS NECESSARY TO REMOVE THE BUILT UP SEDIMENT.
- * TEMPORARY SEED AND MULCH AREAS AND PERMANENT SOD AREAS WILL BE
- INSPECTED REGULARLY FOR BARE SPOTS AND TO ENSURE ADEQUATE GROWTH.

 * TURBIDITY SCREENS AND WINDSCREENS SHALL BE INSPECTED REGULARLY,
 AND REPAIRED AS NECESSARY.
- * INSTALL SILT FENCE ALONG THE PERIMETER OF THE SITE

 * WRAP INLET TOPS IN FILTER FABRIC FOR ALL INLETS IN THE IMMEDIATE VICINITY OF SITE OR AS IDENTIFIED BY ENGINEER.

IMITAZ AHMED, P.E. LICENSED ENGINEER NO. 4610 STATE OF FLORIDA

SEAL

OCK ISLAND PLAZ MARGATE

FERING SERVICES, INC.

CROSSWINDS DRIVE
BEACH, FLORIDA 33413
(561) 358-4140

LAIVIIC EINCIINEERIIN
200 C2 CROSSWIN
WEST PALM BEACH, FL
PHONE - (561) 3
FAY - (561) 96

SCALE: AS SHOWN

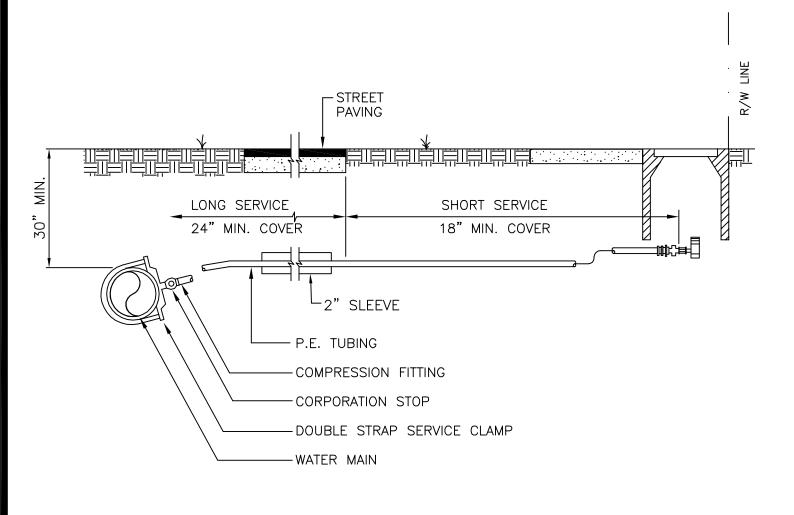
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DES. DWN. CHK

SHEET NUMBER

CE6

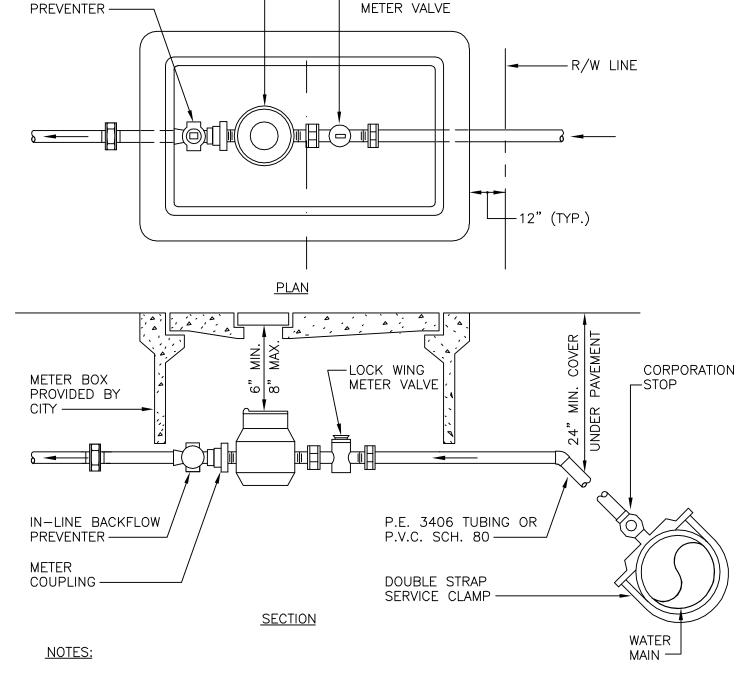
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NOTES:

- 1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED NOT LESS THAN 18" ON CENTER.
- TAPS INTO CAST IRON WATER MAINS DO NOT REQUIRE A SERVICE CLAMP.
 SERVICE PIPE SHALL BE SAME SIZE AS THE WATER METER USED EXEPT THAT NO SERVICE PIPE SHALL BE SMALLER THAN 1".
- 4. APPROVED TYPE COPPER TUBING MAY BE USED IN PLACE OF PLASTIC.
- 5. FOR 1" SERVICE LINES, THE MINIMUM RADIUS SHALL BE 14" FOR 1 1/2" OR 2" SERVICE LINES, THE MINIMUM RADIUS SHALL BE 21"

WATER SERVICE CONNECTION



LOCK WING

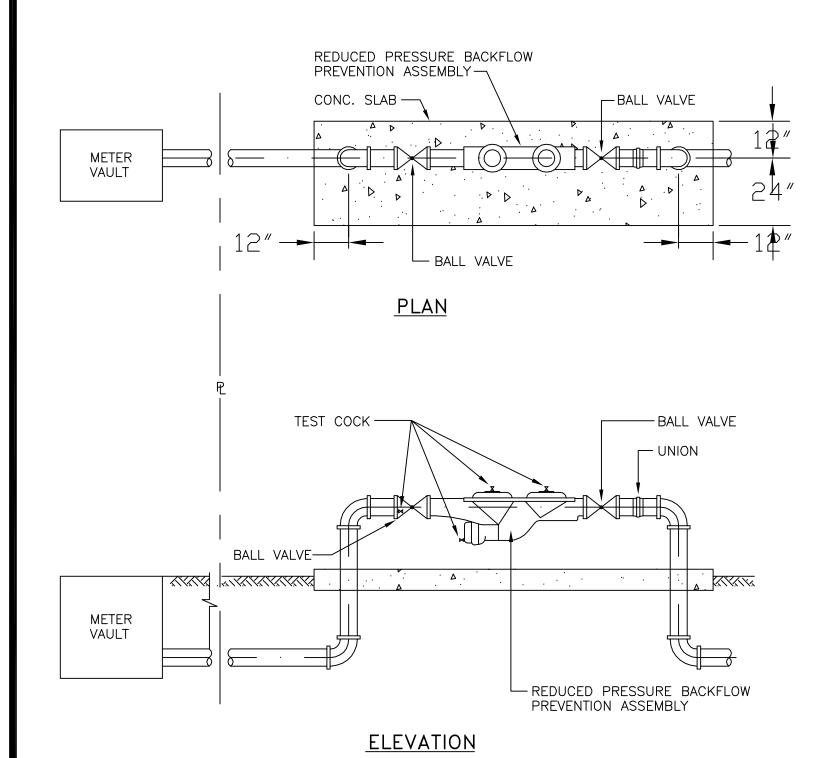
1. LOCATE BOX 12" OUTSIDE OF STREET R/W LINE.

IN-LINE BACKFLOW

- 2. CITY RESPONSIBILITY ENDS AT CUSTOMER SIDE OF METER.
- 3. METERS UP TO 2" SHALL BE FURNISHED AND INSTALLED BY CITY. (ALL OTHER WORK BY CUSTOMER)
- 4. MINIMUM RADIUS OF TUBING CURVE SHALL BE 14".

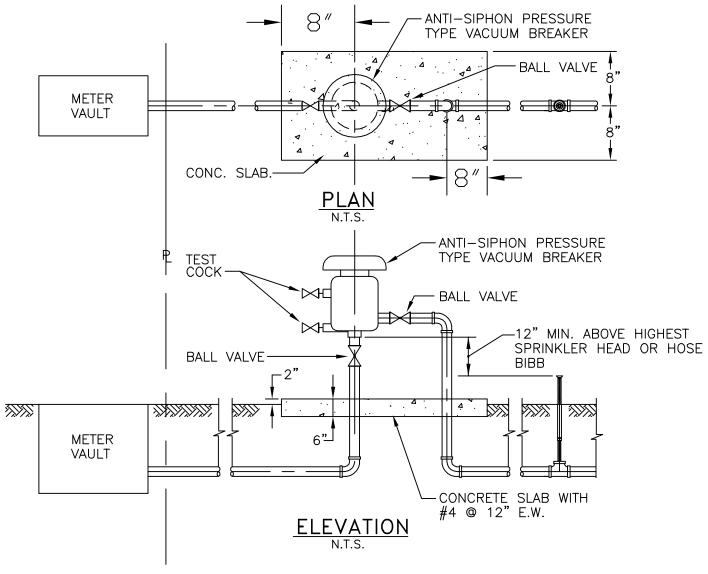
METER INSTALLATION FOR UP TO 1" METER

STANDARD WATER AND SEWER DETAILS



STANDARD WATER AND SEWER DETAILS

WATER SERVICE SIZES 3/4" THRU 2"



NOTES:

- 1. THE ASSEMBLY SHALL BE INSTALLED WITH MINIMUM HORIZONTAL CLEARANCES OF 30 INCHES FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.
- 2. GUARD POSTS SHALL BE INSTALLED IF THE ASSEMBLY IS EXPOSED TO POSSIBLE DAMAGE FROM VEHICULAR TRAFFIC, AS DETERMINED BY THE DEPARTMENT AND THE WASAD INSPECTOR.
- 3 THE ASSEMBLY SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION, APPROVED BY THE DEPARTMENT AND THE WASAD INSPECTOR.
- 4. PIPING SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE WITH GALVANIZED MALLEABLE IRON THREADED FITTINGS IN ACCORDANCE WITH WASAD "CONSTRUCTION SPECIFICATIONS FOR DONATION WATER MAINS".
- 5. ALL EXPOSED METALLIC THREADS SHALL BE PAINTED WITH BITUMASTIC PAINT.
- THE DEPARTMENT SHALL HAVE UNRESTRICTED AND CONTINUOUS ACCESS TO THE VACUUM BREAKER ASSEMBLY.

STANDARD WATER AND SEWER DETAILS

PRESSURE VACUUM BREAKER SD-22 (IRRIGATION SYSTEM ONLY)

GENERAL NOTES

- 1. ALL CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY OF MARGATE, WATER AND WASTE WATER SPECIFICATIONS.
- 2. P.V.C. WATER MAIN TO BE 1120 S.D.R. 18 CONFORMING TO A.N.S.I. / A.W.W.A. C-900-07 WITH A MINIMUM COVER OF 36". D.I.P. WATER MAIN SHOULD BE MINIMUM CLASS 50

*TESTING / WATER MAIN

WATER MAINS SHALL BE TESTED IN ACCORDANCE WITH A.N.S.I. / A.W.W.A. STANDARDS C-600-05

- 1. HYDROSTATIC TESTS SHALL BE CONDUCTED AS FOLLOWS:

 AFTER A NEW PRESSURE MAIN HAS BEEN LAID AND BACKFILLED, IT SHALL BE PUMPED TO A PRESSURE OF 150 P.S.I. AND SHALL NOT VERY BY MORE THAN ±5 P.S.I. FOR THE DURATION OF THE TEST. ALL VISIBLE LEAKS SHALL BE STOPPED BY APPROVED METHODS.
- A LEAKAGE TEST SHALL THEN BE CONDUCTED AT THE ABOVE MENTIONED PRESSURE AND NO INSTALLATION WILL BE ACCEPTABLE BY THE ENGINEER UNTIL THE LEAKAGE IS LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FOLLOWING FORMULA:

 $Q = \frac{LD / P}{148,000}$ A.N.S.I./ A.W.W.A. C600 - 05 STANDARDS

- IN WHICH Q EQUAL THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR: L = LENGTH OF LINES IN FEET: D = DIAMETER OF LINES IN INCHES: AND P IS THE AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, IN POUNDS PER SQUARE INCH. THE TEST SHALL BE MAINTAINED FOR A TWO (2) HOUR DURATION, BUT IT MAY BE CONTINUED FOR ONE (1) ADDITIONAL HOUR IF IT BECOMES APPARENT THAT THE LEAKAGE IS EQUAL TO OR GREATER THAN THE AMOUNT ALLOWABLE. WATER SUPPLIED TO THE MAIN DURING THE TEST TO MAINTAIN THE REQUIRED PRESSURE SHALL BE MEASURED BY A 5/8 INCH METER INSTALLED. ON THE DISCHARGE SIDE OF THE TEST PUMP, OR BY PUMPING FROM A CALIBRATED CONTAINER. A HOSE BIBB CONN—ECTION WILL BE PROVIDED TO ACCEPT THE TEST GAUGE SUPPLIED BY THE CITY OF MARGATE. THE SECTION OF THE MAIN BEING TESTED SHALL BE LIMITED TO A MAXIMUM LENGTH OF 2000 FEET, OR THE DISTANCE BETWEEN THE TWO (2) CLOSEST VALVES. WHICHEVER IS GREATER. WHEN TESTING AGAINST CLOSED METAL—SEATED VALVES, AND ADDITIONAL LEAKAGE PER CLOSED VALVE OF 0.00078 GAL/HR/IN OF NOMINAL VALVE SIZE SHALL BE ALLOWED. ANY QUESTIONS PERTAINING TO PROCEDURES USED DURING THE TEST SHALL BE DIRECTED BY THE ENGINEER.
- 2. STERILIZATION SHALL BE PERFORMED AFTER THE WATER MAINS HAVE SATISFIED THE LEAKAGE REQUIREMENTS. THE WATER MAINS SHALL BE FLUSHED THROUGH OPENINGS OF THE REQUIRED SIZE AS DETAILED IN A.N.S.I. / A.W.W.A. STANDARD C-651-05. THE MAIN SHALL THEN BE STERILIZED IN ACCORDANCE WITH THE PROVISIONS OF THE APPLICABLE SECTIONS OF THE ABOVE NAMED SPECIFICATIONS, ON MAIN BREAKS, CUT-INS, ETC. A LIBERAL APPLICATION OF CALCIUM HYPROCHLORITE SHALL BE MADE.
- MAINS SHALL NOT BE PUT INTO DOMESTIC SERVICE UNTIL AFTER THE NECESSARY BACTERIOLOGICAL SAMPLES HAVE BEEN APPROVED BY THE APPLICABLE REGULATORY AGENCIES.

TESTING / WATER SERVICE

- 1. HYDROSTATIC TESTING: HYDROSTATIC TESTING OF WATER SERVICE LINES SHALL BE DONE IN CONJUNCTION WITH THE TESTING OF THE LATERAL OR MAIN LINE. NO ADDITIONAL LEAKAGE ALLOWANCE WILL BE MADE FOR SERVICE LINES.
- 2. STERILIZATION: STERILIZATION OF SERVICE LINES SHALL BE DONE IN CONJUNCTION WITH THE STERILIZATION OF THE LATERAL OR THE MAIN LINE. SUFFICIENT SAMPLING POINTS SHALL BE TAKEN FROM SERVICE LINE CONNECTIONS TO ASSURE UNIFORM RESULTS THROUGHOUT THE SYSTEM BEING TESTED.
- ALL FIRE LINES TO BE INSTALLED AND TESTED PER N.F.P.A. 24 CODE. CONTRACTOR TO TAKE NOTE THAT PRESSURE TEST ON THIS LINE WILL BE AT 250 P.S.I., AND PIPE AND VALVES SHOULD MEET THIS REQUIREMENT.

NOTES ON WATER - SEWER SEPARATION:

- 1. SANITARY SEWERS AND FORCE MAINS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS AND FORCE MAINS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.
- 2. WHERE SANITARY SEWERS OR FORCE MAINS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (D.I.P.) AT THE CROSSING. SUFFICIENT LENGTHS OF D.I.P. MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSING.
- ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON CROSSING).
- 4. WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 18 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.
- 5. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- 6. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
- 7. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF D.I.P. AND THE SANITARY SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF D.I.P. WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
- 8. ALL D.I.P. SHALL BE CLASS 50 OR HIGHER, ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN.

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IMTIAZ AHMED, P.E. ICENSED ENGINEER NO. 4610 STATE OF FLORIDA

SEAL

SOCK ISLAND PLAZ

NGINEERING SERVICES, INC 200 C2 CROSSWINDS DRIVE ST PALM BEACH, FLORIDA 33413 PHONE - (561) 358-4140 FAX - (561) 966-9242

SCALE: AS SHOWN

DDT

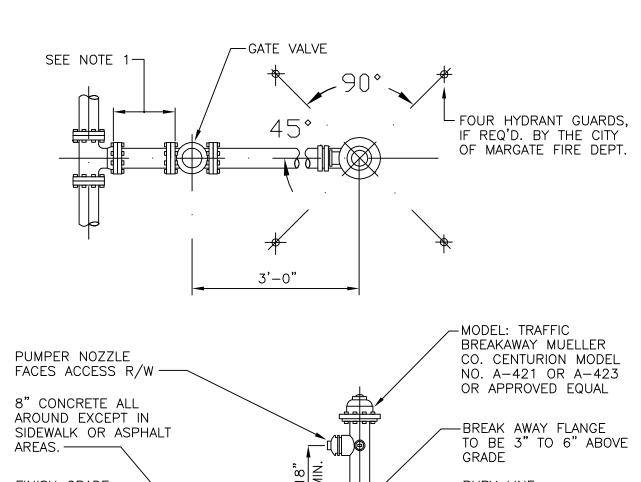
DES. DWN. CHK
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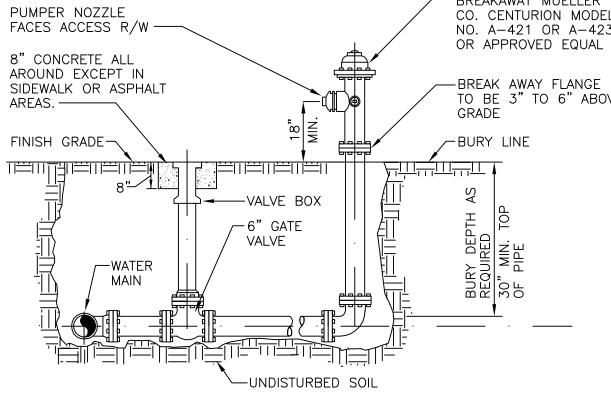
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DATE DRAWN

05/01/09

AND SEWER DETAILS

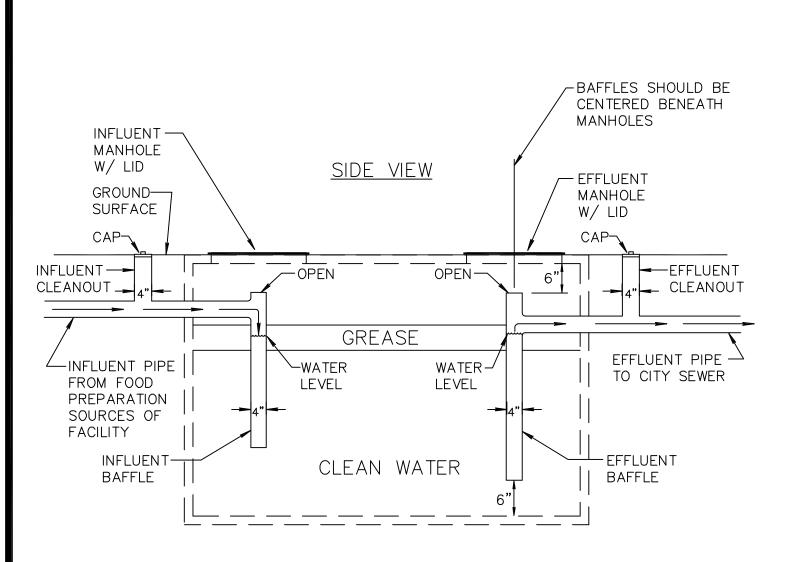




- 1. ALL FIRE HYDRANTS SHALL BE DIRECTLY CONNECTED TO FIRE HYDRANT SERVICE LINES HAVING A STANDARD INSIDE DIA. OF NOT LESS THAN 6 INCHES.
- 2. MAX. 500' DISTANCE BETWEEN FIRE HYDRANTS IN A SINGLE FAMILY RESIDENCE ZONING DISTRICTS OR RECREATIONAL AND OPEN SPACE DISTRICTS. MAX. 300' DISTANCE IN ALL OTHER ZONING DISTRICTS.
- 3. USE RESTRAINT JOINTS FOR ENTIRE ASSEMBLY SHOWN.

STANDARD WATER AND SEWER DETAILS

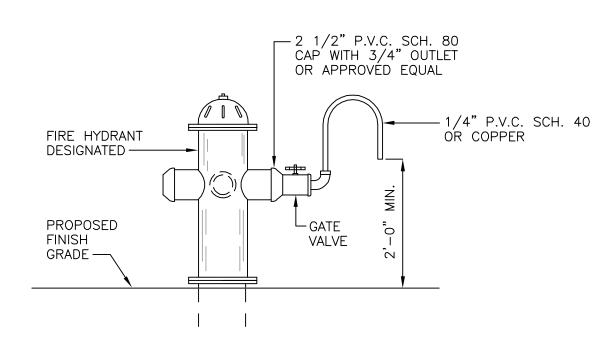
FIRE HYDRANT



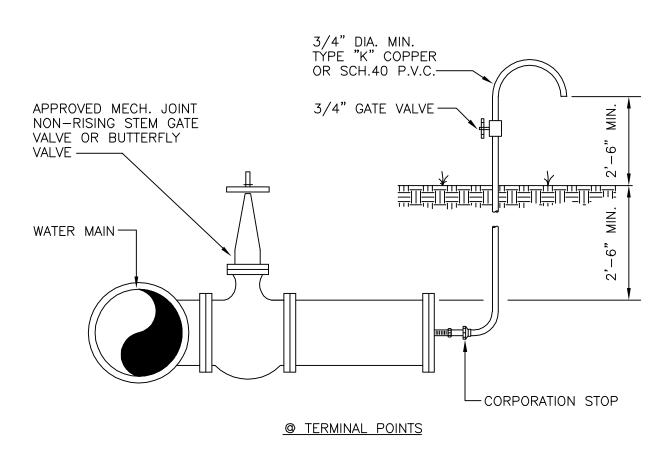
NOTES:

- 1. NO DOMESTIC EFFLUENT SHALL BE ALLOWED TO DISCHARGE THROUGH THE OIL/GREASE SEPARATOR AS STATED IN THE STANDARD PLUMBING CODE OF THE SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL (SBCCI), CHAPTER 8, SECTION 801.3 "TYPES OF WASTE" WHICH IS ADOPTED BY THE CITY OF DELRAY BEACH.
- 2. ALL SIDES OF IN-GROUND OIL/GREASE SEPARATOR UNITS (EXCEPT ACCESS DOORS AND MANHOLES) ARE REQUIRED TO BE CONSTRUCTED OF 1/8" INCH (OR GREATER) STEEL OR 4" REINFORCED CONCRETE (OR GREATER).
- GREASE INTERCEPTORS SHALL BE PUMPED OUT COMPLETELY AT A MINIMUM FREQUENCY ONCE EVERY NINETY 90 (DAYS), OR MORE FREQUENCY AS NEEDED TO PREVENT CARRY OVER OF GREASE INTO COLLECTION SYSTEM. SECTION 53.057 OIL & GREASE MANAGEMENT.

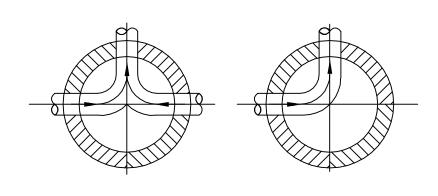
OIL/GREASE INTERCEPTOR

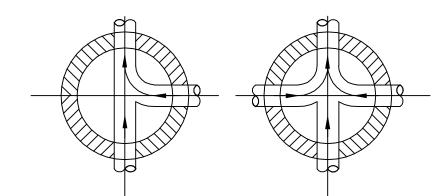


@ FIRE HYDRANTS

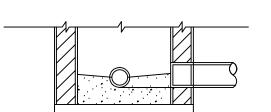


STANDARD WATER AND SEWER DETAILS TYPICAL BACTERIOLOGICAL SAMPLING POINTS





PLAN OF BOTTOM & FLOW CURVES



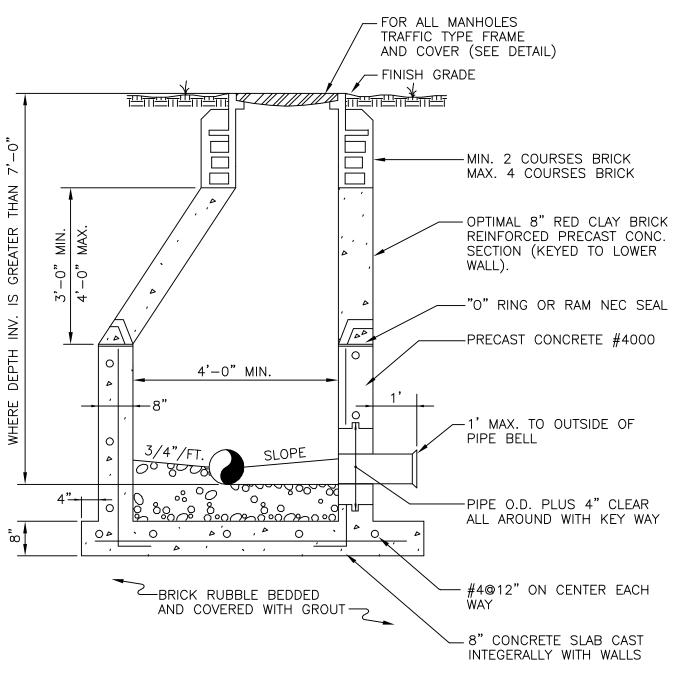
TYPICAL SECTION

- NOTES:
- 1. PROVIDE SPILLWAY FOR SMOOTH FLOW BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS.
- 1" DROP/FT. FROM MAINTENANCE ACCESS STRUCTURE WALL TO CHANNEL. 3. INVERT CHANNEL TO BE CONSTRUCTED FOR SMOOTH

2. SLOPE MAINTENANCE ACCESS STRUCTURE SHELF WITH

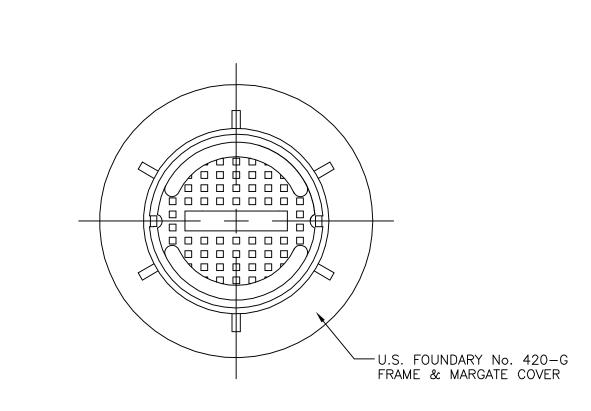
- FLOW WITH NO OBSTRUCTIONS. 4. CHANNEL FOR FUTURE CONNECTIONS SHALL BE FILLED WITH SAND AND WITH 1" OF MORTAR.
- 5. ALL CONCRETE SHALL USE TYPE II CEMENT ONLY.

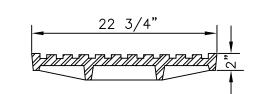
INVERT CHANNEL FLOW DIRECTION

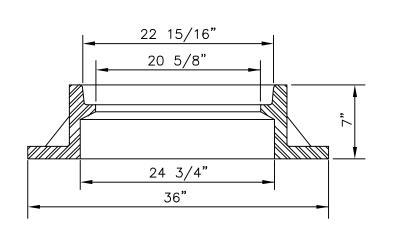


PRECAST MAINTENANCE ACCESS STRUCTURE

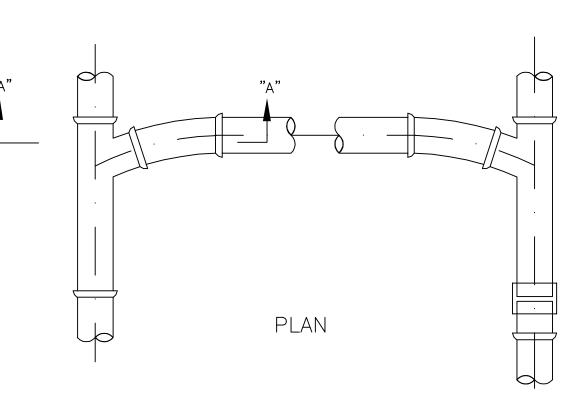
MANHOLE STRUCTURE TO BE COATED INSIDE AND OUTSIDE.

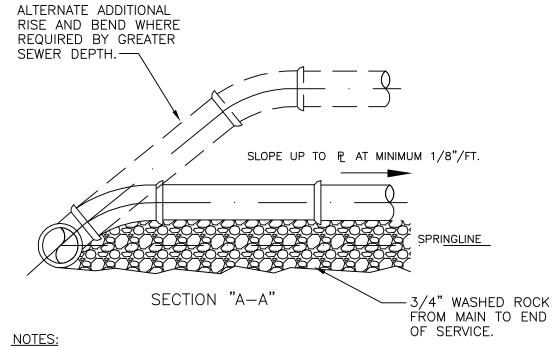






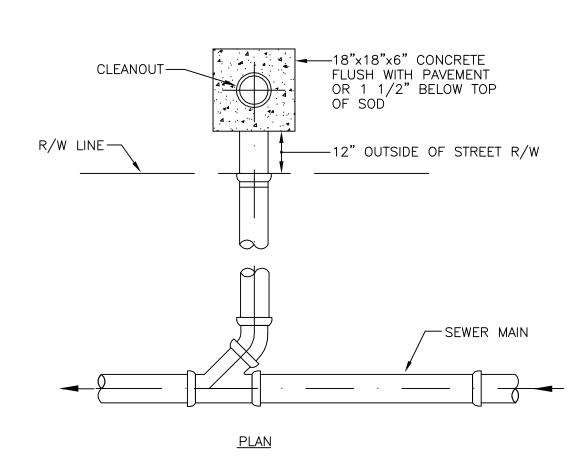
MANHOLE FRAME & COVER

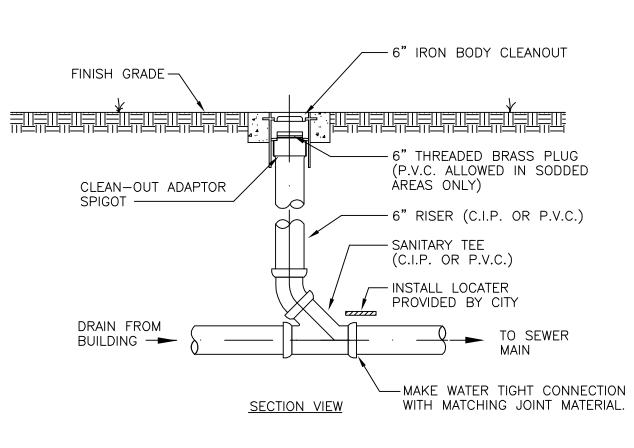




- 1. SINGLE SERVICE CONNECTIONS SHALL USE 6" PIPE AND FITTINGS.
- 2. DOUBLE SERVICE CONNECTIONS SHALL USE 6" PIPE AND FITTINGS.
- 3. USE RISER CONNECTION WHEN INV. OF SEWER IS MORE THAN 7'-0"

WYE SERVICE CONNECTION





BUILDING CONNECTION DETAIL

MARGATE AND SL C

IMTIAZ AHMED, P.E.

CENSED ENGINEER NO. 4610

STATE OF FLORIDA

SEAL

DDT DES. DWN. CHI SHEET NUMBER DATE DRAWN 05/01/09

SCALE: AS SHOWN

ymbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	Lum. Watts
0	9	sc	SINGLE	N.A.	0.800	LMC-30LU-5K-3-035	34.5

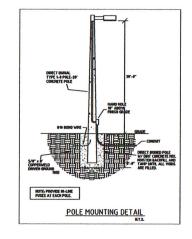
Calculation Summary							,
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
DRIVE SIDE PROPERTY LINE	Illuminance	Fc	1.84	2.8	0.4	4.60	7.00
DUNKIN-DOUGHNUTS DRIVE	Illuminance	Fc	1.96	3.2	1.0	1.96	3.20

PHOTOMETRIC

SCALE: 1" =20'-0"

Symbol	Label	Oty	Catalog Number	Description	Lamp	Lumens	LLF	Watts
Ф	SA	7	VISIONAIRE ARV- 2-T3-ILBH-VLFG- VB-VL	ARIA ARCHITECTURAL LUMINA/RE,400M-LINTER NAL HOUSE SIDE LOUVER,FLAT GLASS LENS - CONCRETE POLE MID - 30° A.G.	ONE VENTURE 400W UNI-FORM PULSE START LAMP, VERTICAL, WITH MATCHING BALLAST.	44000	0.78	400

POLE MTD - 3/F A.G.									
STATISTICS	-								
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Mn			
DUMPSTER AREA ENTRY	+	2.7 fc	3.1 fc	2.2 fc	1.4:1	1.2.1			
PARKING	+	3.2 fc	4.7 fc	20 tc	2.4:1	1.6:1			
PROPERTY LINE EAST	+	0.2 fc	0.5 fc	0.0 tc	N/A	N/A			
PROPERTY LINE WEST	+	0.4 fc	0,5 fc	0.1 fc	5.0:1	4.0.1			



IMTIAZ AHMED, P.E. LICENSED ENGINEER NO. 46102 STATE OF FLORIDA SEAL

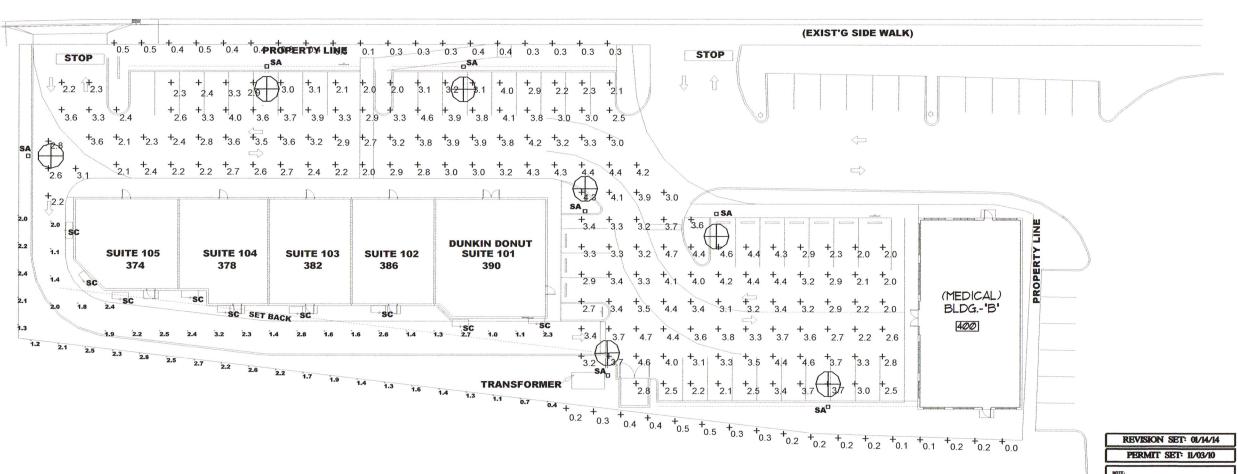
ROCK ISLAND PLAZA (BUILDING - "A") 374-390 ROCK ISLAND PLAZA MARGATE, FLORIDA

INC.

ATLANTIC ENGINEERING SERVICES,

200 C2 CROSSWINDS DRIVE WEST PALM BEACH, FLORIDA 33413 PHONE — (561) 358-440 FAX — (561) 966-9242 ERTIFICAE OF AUTHORIZATION NO.: 9390

ROCK ISLAND ROAD



NORTH

NOTE:
ANY DESIGN CHANGES, TO THE SYSTEM COVERED BY
THESE FLANS WITHOUT PROR APPROVAL, OF THE
ENGMEER WHO PREPARED THESE PLANS, WILL
NULL AND VOID THESE PLANS AND THE REVISED
RESTALLATION, AN ADOTTOM, ALL EXPENSES
ASSOCIATED WITH RETURNING THE SYSTEM TO ITS
ORIGINAL DESIGN WILL OF THE REVISIONS OF THE
COMPANY WINDOWN THE STATEMENT OF THE
COMPANY WINDOWN PROVIDED THESE CHANGES.
PRALE BOT TO RELIGIBLE PERMIT COMPENTS.



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Cartificate 800009818
Robort F. Formica, P.E. License #19733
E-mail: formica@formicaergineering.com

PROJ. NO. 210016A SCALE: AS SHOWN

CH/KP/NW R.F.F. /SB DES. DWN. CHK. SHEET NUMBER SL1.01

DATE DRAWN 11-03-10

