

CERTIFICATE OF
OCCUPANCY PHASING PLAN

CERTIFICATE OF OCCUPANCY SEQUENCE

GENERAL NOTES: (applies to all Phases of Project)

- The Clubhouse & Pool (including all related foundation plantings and the sidewalk along the eastern Clubhouse & Pool boundary) will be completed prior to Building 2 Certificate of Occupancy (CO) issuance.
- The preserve area exotic removal required by the PAMP shall be completed prior to any CO.
- Apartment building construction sequence shall be Building No. 1, 2, 3, 4, 5, 9, 6, 7, and 8.
- Paving shall be installed in two lifts of asphalt. Sequence of 1st Lift Paving shall be completed in three (3) separate mobilizations/phases. Temporary Striping shall be installed on 1st Lift to provide ample parking per MC LDR requirements for Certificate of Occupancy (CO) issuance purposes. The 2nd Lift of asphalt and Final Striping will be installed prior to the Building 8 CO.
- The Pinelake Village watermain extension will be completed prior to the Building 8 CO.
- All buffers within a phase shall be installed prior to any Building CO within the phase.
- With the exception of the adjacent foundation plantings around each building which can be phased by building, all parking lot landscaping shall be installed and certified with the development of the associated phase parking lot infrastructure and prior to CO of any building within the phase. Landscaping within the entire phase must be inspected and approved by Martin County prior to the first CO issuance of the phase.
- Foundation landscaping and irrigation shall be installed on a building by building basis for each respective Building CO. As each building is constructed, landscaping and irrigation will be installed in the surrounding area after the fine grading, paving and sidewalks are completed. The foundation landscaping and irrigation will be completed in the sequence listed above in General Note #3 for the nine (9) apartment buildings.
- The 7 ft. opaque perimeter fence within Phase I and II shall be installed 10 ft. off the property line prior to the issuance of any building permits.

PHASE 1 – CORE INFRASTRUCTURE REQUIREMENTS FOR CLUBHOUSE, POOL & BLDG 1

- Construct stabilized access and turn around area for emergency vehicles along NE Reserve Trail to temporary trailer location and to Warner Creek
- Install temporary bridge across Warner Creek to provide full site access for protected species work, erosion & sediment control BMP installation, exotic vegetation removal, and Timber Bridge construction
- Construct Warner Creek Timber Bridge, Abutments, and Wingwalls
- Construct By-Pass drainage pipe system from Savannah Road to Warner Creek, consisting of Structures SD-1 through SD-5, HW-1, and Control Structure CS-1
- Install stabilized access for emergency vehicles on NE Reserve Trail to Dry Retention Area 5
- Perform mass grading of entire site, including perimeter berms
- Construct Dry Detention Areas 1 - 5 and Warner Creek expansion, sod and plant vegetation areas per construction plan details and regulatory requirements (MC, SFWMD & NPDES)
- Construct infrastructure within the Phase 1 boundary limits:
 - Construct drainage pipe systems consisting of Structures SD-8 through SD-13
 - Construct Lift Station #1, force main, and sewer services to Clubhouse & Building 1
 - Construct water main, fire hydrants and water services to Clubhouse & Building 1
 - Install horizontal directional drill utilities under Warner Creek on north side of Timber Bridge
 - Construct dry utilities, FPL, cable, phone, internet to Clubhouse & Building 1

PHASE 1 – CO INFRASTRUCTURE REQUIREMENTS FOR CLUBHOUSE, POOL & BLDG 1

- Construct curb, sidewalks, roadway and parking lots between Savannah Road and the Timber Bridge
- Construct Clubhouse, Pool, Building 1, Dumpster Enclosure and Emergency Access with Knox Box
 - Life safety / fire suppression system
 - Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
 - Water / sewer / lift station connections
 - Dry utility connections, (electrical, phone, cable TV & Internet)
- Install First Lift of Asphalt with temporary striping & signage for Phase 1 area
- Complete Warner Creek grading, access turnouts, sodding, Rip Rap, guardrail, curbing, sidewalks, paving, and remove Warner Creek Construction temporary BMP/erosion control measures
- Install landscaping for Building 1 & Clubhouse / Pool areas
- Install Common Area Sidewalks and Bike Racks serving Phase 1
- Install Street Lighting for main roadway and parking lot
- Install perimeter fence and landscape buffers for Phase 1 & Phase 2
- Install United States Postal Service mailboxes
- Certification from SFWMD / FDEP / Martin County Health Department
- Martin County Certificate of Occupancy for Building 1 & Clubhouse / Pool
- Demobilization of Temporary Leasing Trailer within 30 days after receipt of Clubhouse CO

PHASE 2 – CORE INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 2, 3 & 4

- Construct infrastructure within the Phase 2 boundary limits:
 - Construct drainage pipe systems, consisting of Structures SD-14 through SD-31 and Control Structure CS-2 (Structure SD-27 may be delayed to Phase 3)
 - Construct force main, Lift Station #2 and sewer services to Buildings 2, 3 & 4
 - Construct water main, fire hydrants and water services to Buildings 2, 3 & 4
 - Construct dry utilities, FPL, cable, phone, internet services to Buildings 2, 3 & 4

PHASE 2 – CO INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 2, 3 & 4

- Construct curb, sidewalks, roadway and parking lots to STA 28+80
- Construct Buildings 2, 3 & 4
 - Life safety / fire suppression system
 - Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
 - Water / sewer / lift station connections
 - Dry utility connections, (electrical, phone, cable TV & Internet)
- Construct Parking Garages and Dumpster Enclosure
- Install First Lift of Asphalt with temporary striping & signage
- Install landscaping serving each Building in Phase 2
- Install Common Area Sidewalks and Bike Racks serving Phase 2
- Install Street Lighting serving main roadway and parking lots
- Install United States Postal Service mailboxes
- Certification from FDEP / Martin County Health Department
- Martin County Certificates of Occupancy (Building by Building) for Bldgs. 2, 3 & 4

PHASE 3 – CORE INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 5 – 9

- Construct stabilized access for emergency vehicles to STA 37+70
- Construct infrastructure within the Phase 3 boundary limits:
 - Construct drainage pipe systems consisting of Structures SD-32 through SD-37
 - Construct gravity sewers and sewer services to Buildings 5 thru 9
 - Construct water main, fire hydrants and water services to Buildings 5 thru 9
 - Construct dry utilities, FPL, cable, phone, internet to Buildings 5 thru 9

PHASE 3 – CO INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 5 – 9

- Construct Retaining Wall behind Buildings 5 and 6
- Construct Pinelake Village watermain extension
- Construct curb, sidewalks, and parking lots serving Buildings 5 thru 9 (phased building by building)
- Construct Buildings, in the following order 5, 9, 6, 7 and 8
 - Life safety / fire suppression system
 - Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
 - Water / sewer / lift station connections
 - Dry utility connections, (electrical, phone, cable TV & Internet)
- Construct Parking Garages, Dumpster Enclosures, & Entry Features
- Install First Lift of Asphalt with temporary striping & signage (phased building by building)
- Install landscaping serving each Building in Phase 3 (phased building by building)
- Install Common Area Sidewalks and Bike Racks serving Phase 3 building by building
- Install Street Lighting serving main roadway and parking lots building by building
- Install perimeter fence and landscape buffers serving Phase 3.
- Install the railroad landscape buffer (area between the retention pond and the property line/FEC ROW)
- Install United States Postal Service mailboxes
- Certification from FDEP / Martin County Health Department
- Martin County Certificates of Occupancy (Building by Building) for Bldgs. 5, 9, 6 & 7

FINAL CLOSE-OUT

- Demobilization of Construction Trailer
- Final Lift of Asphalt on NE Reserve Trail (all project areas prior to Building 8 CO)
- Final Lift of Asphalt on all parking lots (prior to Building 8 CO)
- Final signage and striping on all parking lots (prior to Building 8 CO)
- Pinelake Village watermain completion and certification
- Final Project close-out per Martin County requirements
- Certificate of Occupancy from Martin County for Bldg. 8



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 10-31-19
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 160'
VERT. SCALE:

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TO ONE INCH ON
ORIGINAL DRAWING.
ADJUST ALL SCALED
DIMENSIONS
ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-05-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

CERTIFICATE OF OCCUPANCY PHASING PLAN

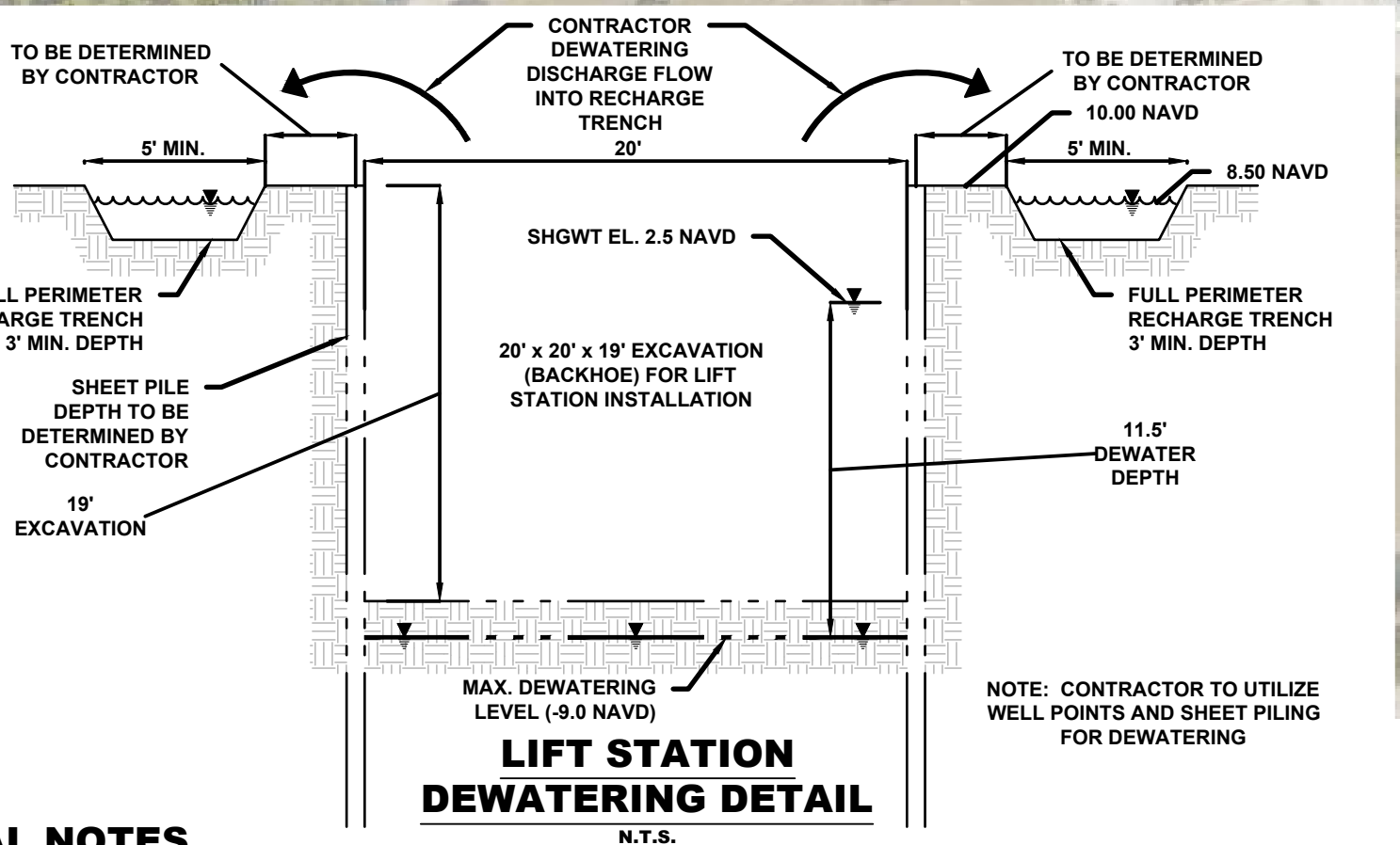
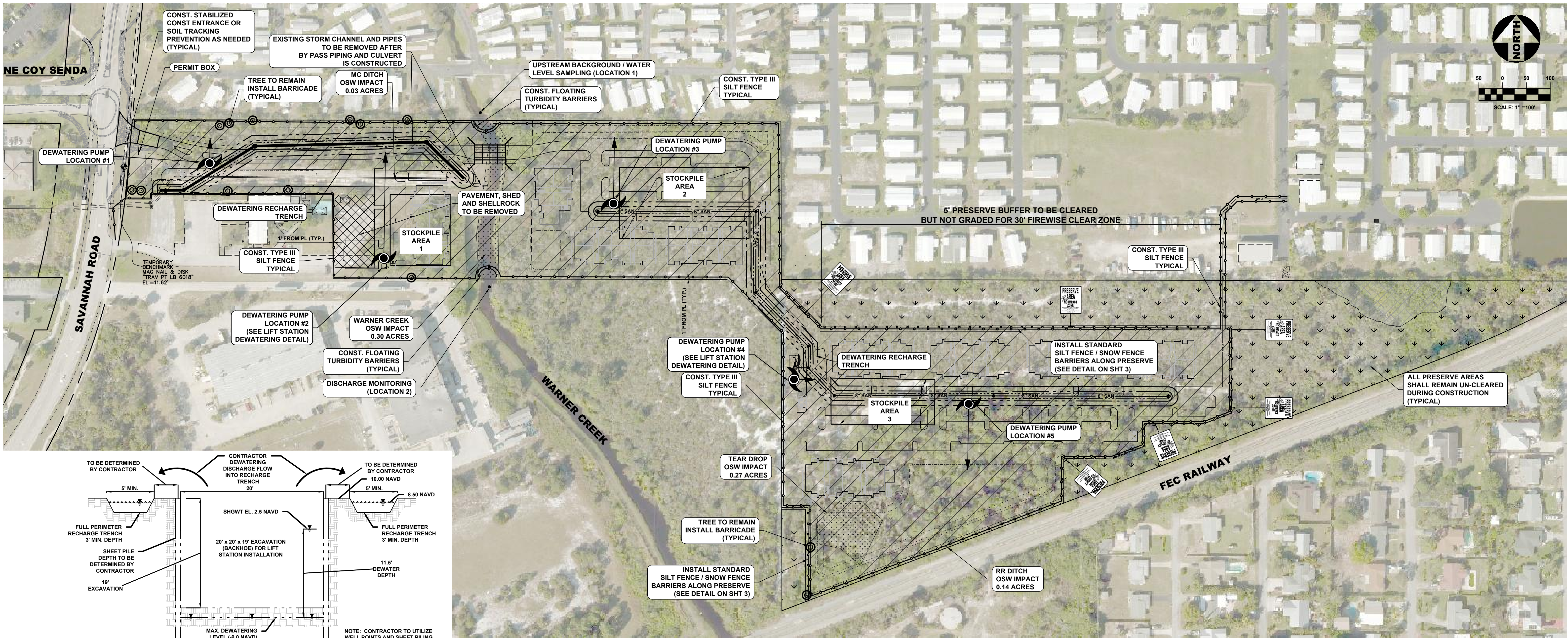


Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

1329.2 PHASE
CADD FILE:

SHEET
IDENTIFICATION
JOB No.: 1329.2

SHEET
4 OF 28



GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO MARTIN COUNTY, SFWMD, FDEP AND FDOT STANDARD SPECIFICATIONS AND REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
- ELEVATIONS SHOWN HEREON REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). PER MARTIN COUNTY BENCHMARKS "SAV-3", ELEVATION = 13.244 FEET (NGVD 29) AND "D-30", ELEVATION = 9.771 FEET (NGVD 29) CONVERTED TO NAVD 88 BY SUBTRACTING 1.50 FEET.
- PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE MARTIN COUNTY ENGINEERING DEPT PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
- AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ONSITE IN THE PERMIT BOX, ITS LOCATION IS SHOWN IN THE PLAN VIEW ON THIS PAGE AT THE PROJECT ENTRANCE ON SAVANNAH ROAD.
- NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.
- CLEARING LIMITS ARE APPROXIMATE AND WILL BE ADJUSTED ON SITE TO PRESERVE EXISTING PROTECTED TREES.
- ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND SHALL BE MONITORED FOR COMPLIANCE BY THE PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
- SOIL STABILIZATION SHALL BE COMPLETED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION ACTIVITIES CAUSING VEGETATION REMOVAL. TEMPORARY SEED AND MULCH AND/OR SOD SHALL BE APPLIED TO ALL CLEARED AREAS.
- THE PROPOSED LAND CLEARING DEBRIS METHOD SHALL BE CHIPPED ON SITE FOR OFF-SITE DISPOSAL.
- CONTRACTOR WILL MAKE EVERY EFFORT TO UTILIZE EXISTING DISTURBED AND/OR CLEARED AREAS ON SITE.
- ANY PROTECTED TREES WILL BE IDENTIFIED AND MITIGATED FOR ON THE LANDSCAPE PLANS PREPARED BY LUCIDO & ASSOCIATES.
- ALL EXOTIC VEGETATION SHALL BE REMOVED FROM THE SITE PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR EACH PHASE.
- PRIOR TO SCHEDULING A FINAL ENVIRONMENTAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- CONTRACTOR SHALL OBTAIN A MARTIN COUNTY RIGHT-OF-WAY USE PERMIT FOR ALL WORK PERFORMED WITHIN NE SAVANNAH ROAD RIGHT-OF-WAY.

CLEARING AND GRUBBING

THE CONTRACTOR WILL NOT CLEAR AND GRUB ANY SITE WITHOUT PRIOR CONFIRMATION OF WETLAND AND UPLAND PRESERVATION REQUIREMENTS. ALL PRESERVATION AREAS WILL BE FENCED TO AVOID ENCRoACHMENT AND WILL BE STRICTLY ENFORCED. CAPTEC ENGINEERING INC. WILL NOT BE RESPONSIBLE FOR ENCRoACHMENT BY CONTRACTOR WITHIN UPLAND PRESERVE AREAS. CONTRACTOR IS CAUTIONED TO REVIEW ALL PERMITS AND CONSTRUCTION DOCUMENTS PRIOR TO THE CLEARING/GRUBBING PHASE.

TURBIDITY MONITORING PLAN:

- TURBIDITY SHALL BE EXPRESSED IN NEPHELOMETRIC TURBIDITY UNITS (NTU); BACKGROUND SAMPLES SHALL BE TAKEN AT LEAST 100 FEET UPSTREAM OF ANY CONSTRUCTION ACTIVITY WITHIN THE ADJACENT WARNER CREEK. COMPLIANCE SAMPLES SHALL BE TAKEN IN THE LOCATIONS SHOWN. SAMPLES SHALL BE TAKEN TWICE DAILY, WITH AT LEAST A FOUR-HOUR INTERVAL, DURING ALL WORK AUTHORIZED BY THE SFWMD DEWATERING PERMIT.
- MONITORING SHALL BEGIN ON THE FIRST DAY OF DEWATERING ACTIVITIES FOR ALL DRAINAGE AND UTILITIES INSTALLATION WITHIN THE PROJECT LIMITS. MONITORING SHALL CEASE WHEN ALL DEWATERING ACTIVITIES ARE COMPLETED. THE MONITORING DATA MUST DEMONSTRATE THAT TURBIDITY NO MORE THAN 100 FEET DOWNSTREAM OF ALL PROPOSED ACTIVITIES IS LESS THAN OR EQUAL TO 29 NTU'S ABOVE NATURAL BACKGROUND TURBIDITY AND 50 FEET UPSTREAM OF EACH PROPOSED ACTIVITY DURING CONSTRUCTION AND FOR A PERIOD OF 7 CONSECUTIVE DAYS AFTER COMPLETION OF CONSTRUCTION. IF MONITORING SHOWS SUCH LEVELS TO BE EXCEEDED, CONSTRUCTION SHALL CEASE AND DISTRICT COMPLIANCE STAFF SHALL BE NOTIFIED IMMEDIATELY. WORK SHALL NOT RESUME UNTIL DISTRICT STAFF IS SATISFIED THAT ADEQUATE CORRECTIVE MEASURES HAVE BEEN TAKEN AND TURBIDITY HAS RETURNED TO ACCEPTABLE LEVELS.
- ALL MONITORING DATA SHALL BE MAINTAINED ON SITE AND BE AVAILABLE TO SFWMD STAFF DURING REGULAR BUSINESS HOURS. THE CONTENT FOR THE DATA SHALL INCLUDE:
 - PERMIT AND APPLICATION NUMBER;
 - DATES OF SAMPLING AND ANALYSIS;
 - STATEMENT DESCRIBING THE METHODS USED IN COLLECTION, HANDLING, STORAGE AND ANALYSIS OF THE SAMPLES;
 - A MAP INDICATING THE SAMPLING LOCATIONS; AND
 - A STATEMENT BY THE INDIVIDUAL RESPONSIBLE FOR IMPLEMENTATION OF THE SAMPLING PROGRAM CONCERNING THE AUTHENTICITY, PRECISION, LIMITS OF DETECTION AND ACCURACY OF THE DATA.
- MONITORING REPORTS SHALL ALSO INCLUDE THE FOLLOWING INFORMATION FOR EACH SAMPLE THAT IS TAKEN:
 - TIME OF DAY SAMPLES TAKEN;
 - DEPTH OF WATER BODY;
 - DEPTH OF SAMPLES;
 - ANTECEDENT WEATHER CONDITIONS;
 - WIND DIRECTION AND VELOCITY.

DEWATERING PUMPING OPERATIONS:

AVERAGE DAILY PUMPAGE
SINGLE (1) 2,500 GPM, 8" DISCHARGE PUMP OPERATING AT 40% MAXIMUM CAPACITY FOR AN AVERAGE PUMPING RATE OF 2,500 GPM x 40% x 1 PUMP = 1,000 GPM
TOTAL AVERAGE DAILY PUMPING RATE = 1,000 GPM = 1,440,000 GPD

MAXIMUM DAILY PUMPAGE
SINGLE (1) 2,500 GPM, 8" DISCHARGE PUMP OPERATING AT 80% MAXIMUM CAPACITY FOR A MAXIMUM PUMPING RATE OF 2,500 GPM x 80% x 1 PUMP = 2,000 GPM
TOTAL MAXIMUM DAILY PUMPING RATE = 2,000 GPM = 2,880,000 GPD

TOTAL PUMPAGE = AVG DAILY x 180 DAYS
= 1.44 MGD x 180 DAYS
= 259,200,000 GALLONS

DEWATERING NOTES:

- PRIOR TO DEWATERING ALL SILT FENCE/TURBIDITY BARRIERS, ORANGE SAFETY FENCE SHALL BE CONSTRUCTED. CONTACT SFWMD REPRESENTATIVE (GUY BOISCLAIR @ (863) 462-5260 ext. 3613) PRIOR TO TURNING ON PUMPS.
- IN THE EVENT OF A SIGNIFICANT STORM, ALL DEWATERING ACTIVITIES SHALL CEASE AND ALL PIPE PLUGS/DITCH BLOCKS SHALL BE REMOVED.
- DISCHARGE DEWATERING INTO ADJACENT DITCH/DIY RETENTION AREAS TO THE MAXIMUM EXTENT FEASIBLE PRIOR TO DISCHARGING OFF-SITE. REFER TO TURBIDITY MONITORING NOTES AND SAMPLING LOCATIONS PLAN ON THIS SHEET.

ORDER OF EXCAVATION

- INSTALL SILT FENCES AND ORANGE SAFETY FENCES AFTER THE PRE-CONSTRUCTION MEETING.
- BEGIN CLEARING AND GRUBBING, MASS GRADING & INSTALL BRIDGE.
- CONSTRUCT RETENTION AREAS AND CONTROL STRUCTURES AND SOD ALL SIDE SLOPES.
- INSTALL WELL POINTS OR UNDERGROUND SOCK DRAINS AS NEEDED.
- SET DEWATERING PUMPS AS NEEDED FOR UTILITY AND DRAINAGE SYSTEM TRENCH EXCAVATION AND INSTALLATION.

LEGEND

- AREA OF CLEARING
- UPLAND PRESERVE
- OSW (OTHER SURFACE WATERS)
- PROPOSED SILT FENCE
- PROPOSED FLOATING TURBIDITY BARRIERS
- PROPOSED SNOW FENCE PRESERVE BARRICADE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PRESERVE SIGN LOCATIONS
- TREE TO REMAIN INSTALL BARRICADE



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 100'
VERT. SCALE:

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ADJUST ALL SCALED
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REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH
MARTIN COUNTY, FLORIDA
EROSION CONTROL, CLEARING & DEWATERING PLAN

Joseph W. Capra
301 N.W. Flagler Ave.
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P.E. No. 37638

1329.2 CLEARING SWPPP
CADD FILE:

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SHEET
1 OF 1

Construction Plans and Specifications
Of
THE RESERVE AT JENSEN BEACH
MULTI-FAMILY APARTMENTS

Lying In
**Section 27, Township 37 South,
Range 41 East**
Martin County, Florida



Location Map

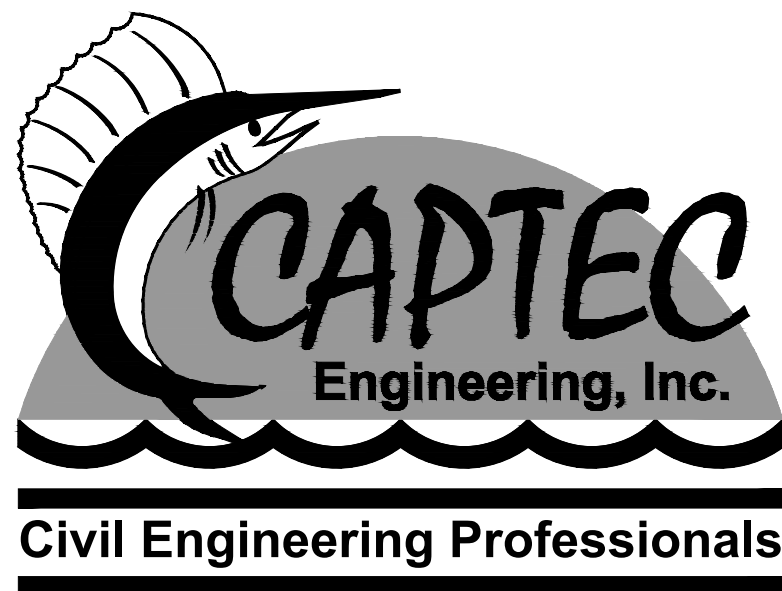
NOTES:
THESE PLANS ARE IN ENGLISH UNITS
ALL ELEVATIONS HEREIN REFERENCE N.A.V.D.
1988 DATUM. ADD 1.50 FEET TO CONVERT TO
N.G.V.D. 1929 DATUM. ALL CONSTRUCTION IS TO
BE IN ACCORDANCE WITH FLORIDA DEPARTMENT
OF TRANSPORTATION STANDARDS AND
SPECIFICATIONS.

DEVELOPER

STEPHEN COHEN
JENSEN CAP INVESTMENTS, LLC
1054 GATEWAY BLVD, STE 107
BOYNTON BEACH, FLORIDA 33426
PHONE: (561) 789-5558

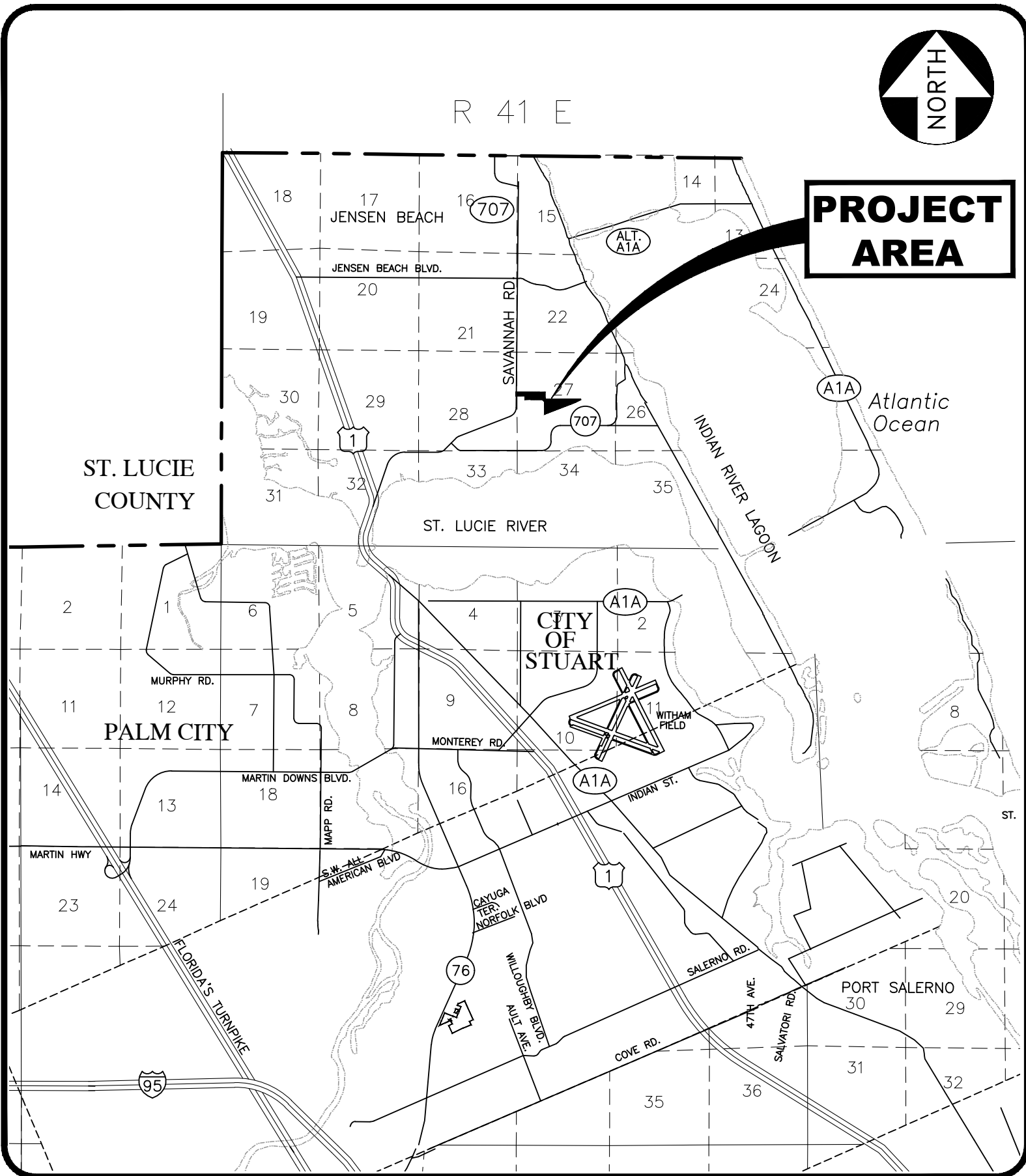
ENGINEER

JOSEPH W. CAPRA, P.E. #37638
CAPTEC ENGINEERING, INC.
301 N.W. FLAGLER AVENUE
STUART, FLORIDA 34994
PHONE: (772)-692-4344
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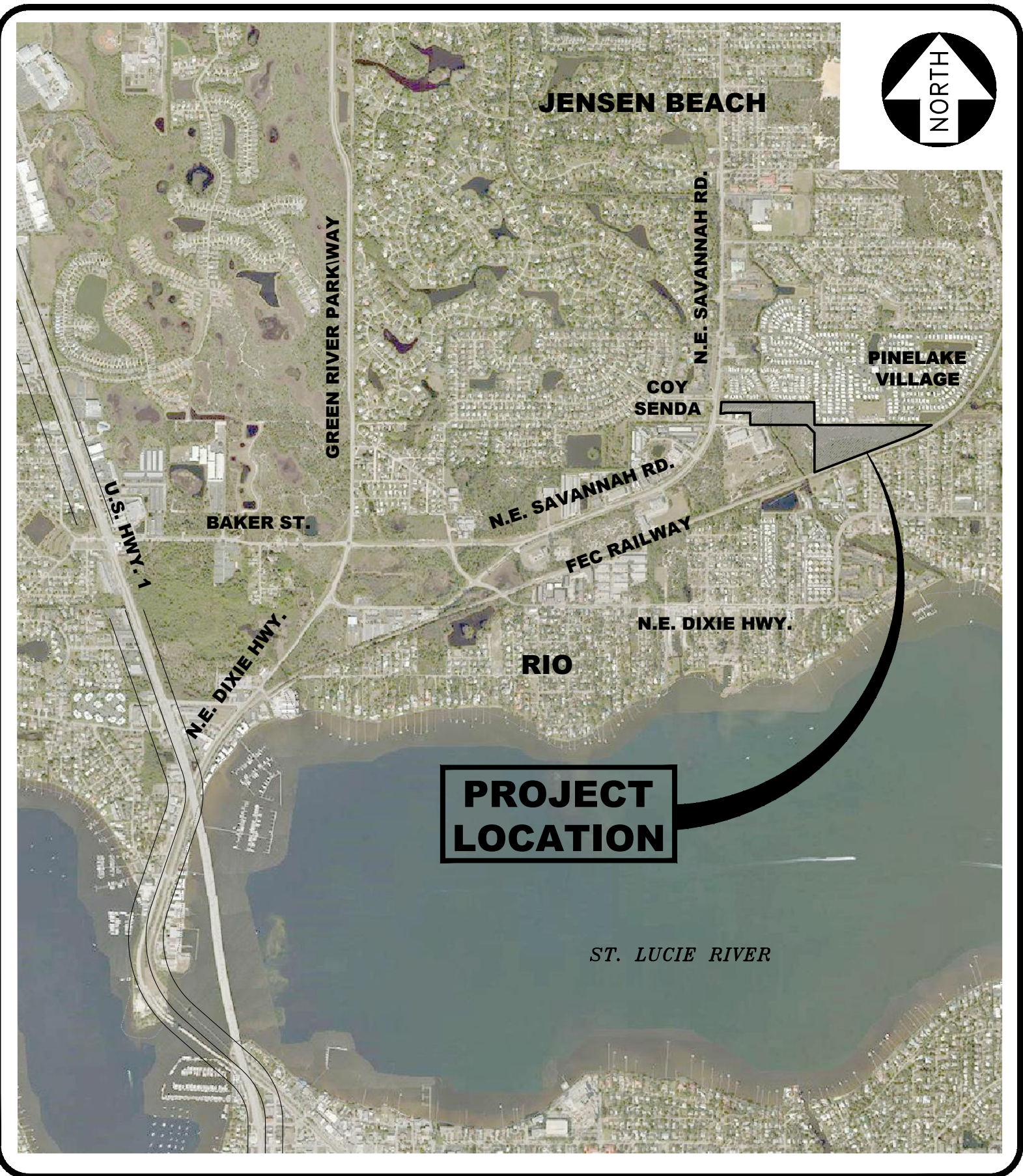


Civil Engineering
Professionals

301 N.W. Flagler Avenue
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341



Vicinity Map
N.T.S.

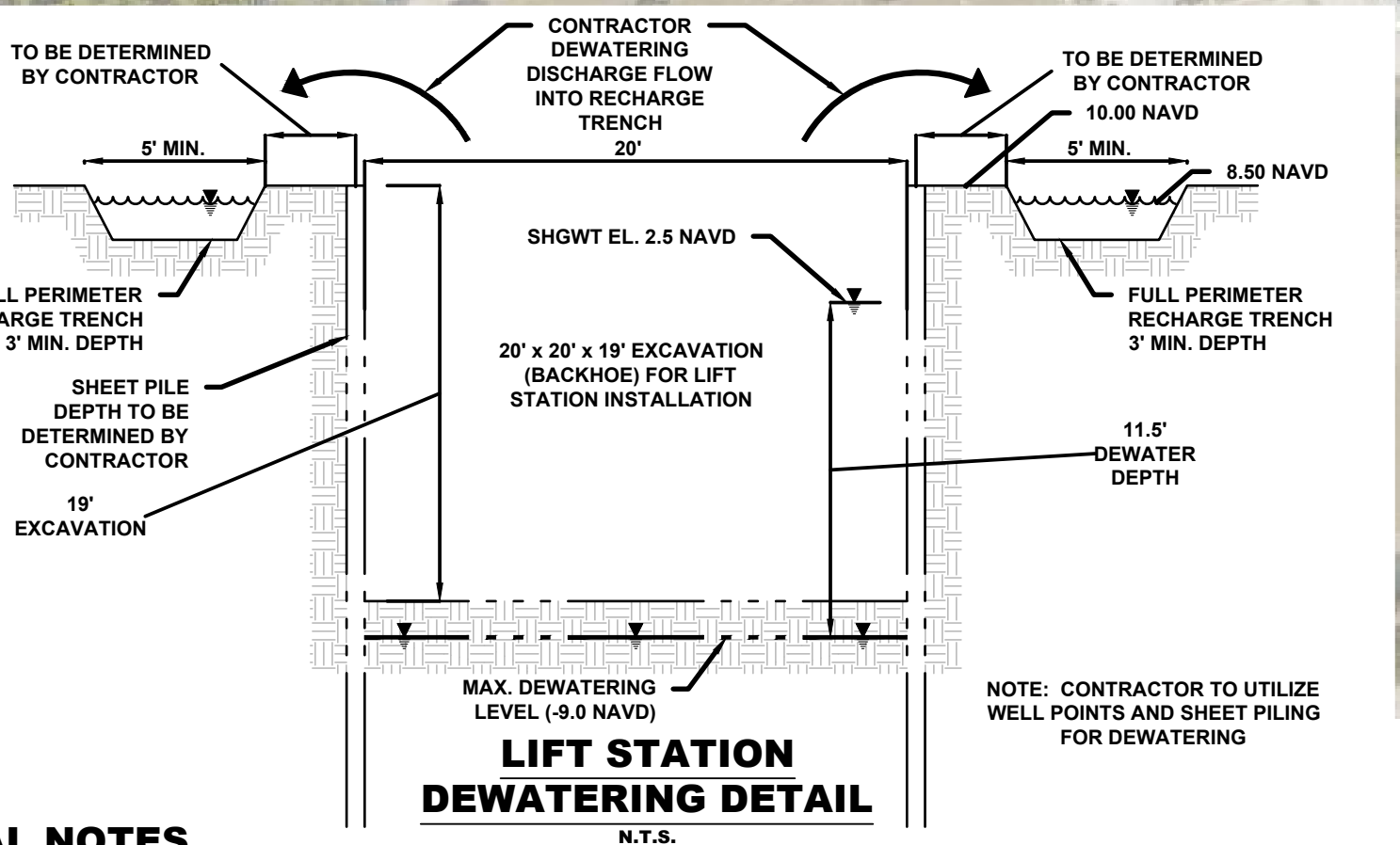
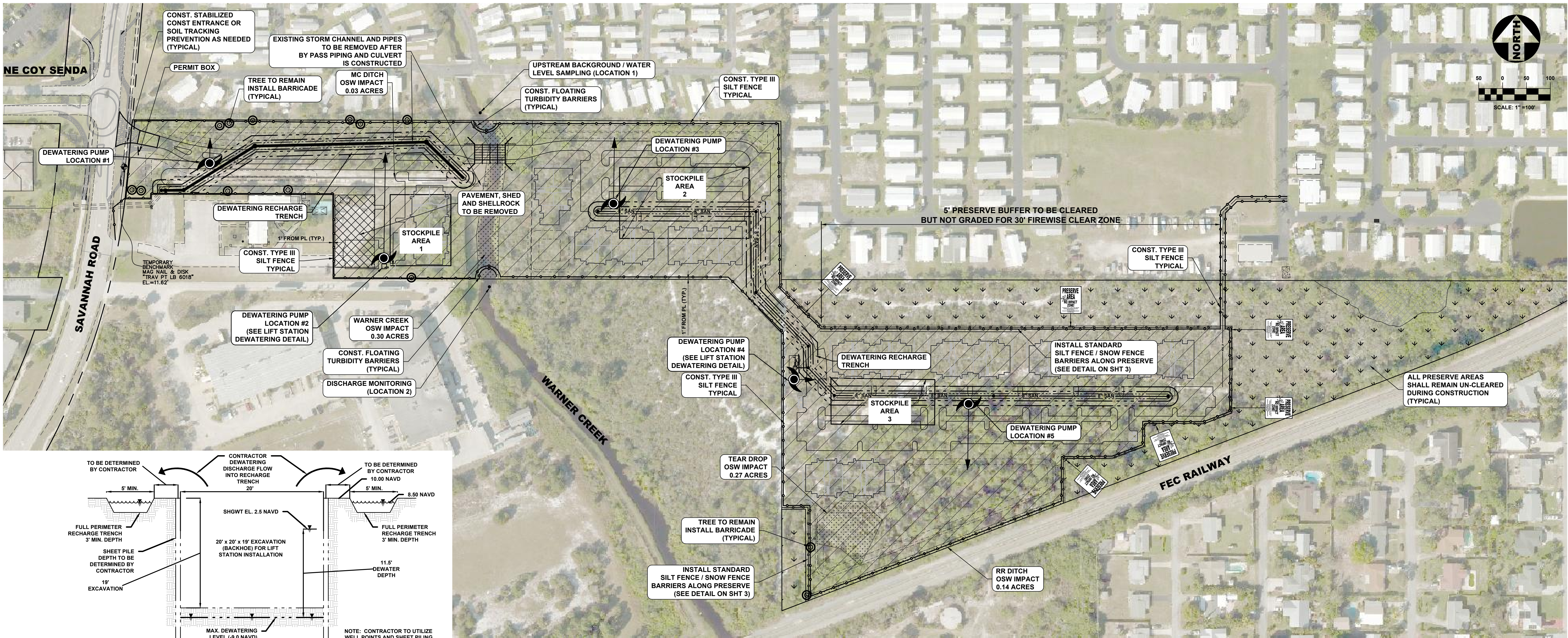


Site Map
N.T.S.

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6 - OVERALL DRAINAGE AND UTILITY
7 - PAVING, GRADING AND DRAINAGE PLAN
8 - PAVING, GRADING AND DRAINAGE PLAN
9 - PAVING, GRADING AND DRAINAGE PLAN
10 - BRIDGE PLAN VIEW
11 - SECTIONS
12 - TYPICAL SECTIONS AND CONTROL STRUCTURES
13 - UTILITY - PLAN VIEW
14 - UTILITY - PLAN VIEW
15 - UTILITY - PLAN VIEW
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17 - WARNER CREEK UTILITY CROSSING
18 - UTILITY PROFILE
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22 - PAVING AND GRADING DETAILS
23 - PAVING AND GRADING DETAILS
24 - GENERAL NOTES
25 - WATER STANDARD DETAILS
26 - SANITARY STANDARD DETAILS
27 - SANITARY STANDARD DETAILS 2
28 - NOTES

PERMIT PLANS
03-27-2020



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 - WIND DIRECTION AND VELOCITY.

DEWATERING PUMPING OPERATIONS:

AVERAGE DAILY PUMPAGE
SINGLE (1) 2,500 GPM, 8" DISCHARGE PUMP OPERATING AT 40% MAXIMUM CAPACITY FOR AN AVERAGE PUMPING RATE OF 2,500 GPM x 40% x 1 PUMP = 1,000 GPM
TOTAL AVERAGE DAILY PUMPING RATE = 1,000 GPM = 1,440,000 GPD

MAXIMUM DAILY PUMPAGE
SINGLE (1) 2,500 GPM, 8" DISCHARGE PUMP OPERATING AT 80% MAXIMUM CAPACITY FOR A MAXIMUM PUMPING RATE OF 2,500 GPM x 80% x 1 PUMP = 2,000 GPM
TOTAL MAXIMUM DAILY PUMPING RATE = 2,000 GPM = 2,880,000 GPD

TOTAL PUMPAGE = AVG DAILY x 180 DAYS
= 1.44 MGD x 180 DAYS
= 259,200,000 GALLONS

DEWATERING NOTES:

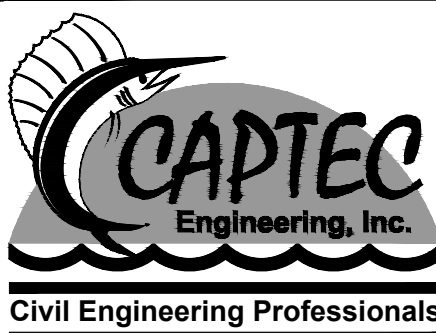
- PRIOR TO DEWATERING ALL SILT FENCE/TURBIDITY BARRIERS, ORANGE SAFETY FENCE SHALL BE CONSTRUCTED. CONTACT SFWMD REPRESENTATIVE (GUY BOISCLAIR @ (863) 462-5260 ext. 3613) PRIOR TO TURNING ON PUMPS.
- IN THE EVENT OF A SIGNIFICANT STORM, ALL DEWATERING ACTIVITIES SHALL CEASE AND ALL PIPE PLUGS/DITCH BLOCKS SHALL BE REMOVED.
- DISCHARGE DEWATERING INTO ADJACENT DITCH/DIARY RETENTION AREAS TO THE MAXIMUM EXTENT FEASIBLE PRIOR TO DISCHARGING OFF-SITE. REFER TO TURBIDITY MONITORING NOTES AND SAMPLING LOCATIONS PLAN ON THIS SHEET.

ORDER OF EXCAVATION

- INSTALL SILT FENCES AND ORANGE SAFETY FENCES AFTER THE PRE-CONSTRUCTION MEETING.
- BEGIN CLEARING AND GRUBBING, MASS GRADING & INSTALL BRIDGE.
- CONSTRUCT RETENTION AREAS AND CONTROL STRUCTURES AND SOD ALL SIDE SLOPES.
- INSTALL WELL POINTS OR UNDERGROUND SOCK DRAINS AS NEEDED.
- SET DEWATERING PUMPS AS NEEDED FOR UTILITY AND DRAINAGE SYSTEM TRENCH EXCAVATION AND INSTALLATION.

LEGEND

- AREA OF CLEARING
- UPLAND PRESERVE
- OSW (OTHER SURFACE WATERS)
- PROPOSED SILT FENCE
- PROPOSED FLOATING TURBIDITY BARRIERS
- PROPOSED SNOW FENCE PRESERVE BARRICADE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PRESERVE SIGN LOCATIONS
- TREE TO REMAIN INSTALL BARRICADE



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT NO.: 1329.2
HORZ. SCALE: 1" = 100'
VERT. SCALE:

SCALE
VERIFICATION
0 1
SOLID BAR IS EQUAL
TO ONE INCH ON
ORIGINAL DRAWING.
ADJUST ALL SCALED
DIMENSIONS
ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

EROSION CONTROL, CLEARING & DEWATERING PLAN

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

1329.2 CLEARING SWPPP
CADD FILE:

SHEET
IDENTIFICATION
JOB No.: 1329.2

SHEET
2 OF 28

GENERAL NOTES EROSION CONTROL

THE FOLLOWING NARRATIVE OF THE STORMWATER POLLUTION PREVENTION PLAN CONTAINS REFERENCES TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE STANDARD PLANS, AND OTHER SHEETS OF THESE CONSTRUCTION PLANS. (THE COVER SHEET CONTAINS AN INDEX TO THE OTHER SHEETS). THE COMPLETE STORMWATER POLLUTION PREVENTION PLAN INCLUDES SEVERAL ITEMS: THIS NARRATIVE DESCRIPTION, THE DOCUMENTS REFERENCED IN THIS NARRATIVE, THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN REQUIRED BY SPECIFICATION SECTION 104, AND REPORTS OF INSPECTIONS MADE DURING CONSTRUCTION.

1.0 SITE DESCRIPTION

1.A. NATURE OF CONSTRUCTION ACTIVITY

CONSTRUCTION ACTIVITIES CONSIST OF THE CONSTRUCTION OF NINE (9) MULTI-FAMILY RESIDENTIAL APARTMENT BUILDINGS ALONG WITH ASSOCIATED PAVEMENT, SIDEWALKS, UTILITIES, LANDSCAPING, ETC. ON 23.01 ACRES WITHIN MARTIN COUNTY, FLORIDA.

1.B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

THE FOLLOWING SEQUENCES OF MAJOR ACTIVITIES SHALL BE FOLLOWED UNLESS THE CONTRACTOR CAN PROPOSE AN ALTERNATIVE THAT IS EQUAL OR EXCEEDS THE EROSION AND SEDIMENT CONTROL PRACTICES DESCRIBED IN THIS DOCUMENT, AND APPROVED BY THE ENGINEER. THE DETAILED SEQUENCE FOR THE ENTIRE PROJECT CAN VARY SIGNIFICANTLY FROM CONTRACTOR TO CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A DETAILED SEQUENCE OF CONSTRUCTION FOR ALL CONSTRUCTION ACTIVITIES.

1. PLACEMENT OF ALL EROSION CONTROL DEVICES
2. CLEARING AND GRUBBING, EARTHWORK AND EXCAVATION OF PONDS
3. SANITARY AND STORM SEWER CONSTRUCTION; ALL STORM SEWERS SHALL BE CONSTRUCTED IN THE UPSTREAM DIRECTION.
4. EARTHWORK ASSOCIATED WITH CURB, SUBGRADE, BASE AND PAVEMENT.
5. FINAL SODDING OF THE UNPAVED PROJECT AREAS NOTED IN THE PLANS

1.C. AREA ESTIMATED

TOTAL SITE AREA: 23.01± ACRES
TOTAL AREA TO BE DISTURBED: 16.58± ACRES

1.D. RUNOFF DATA:

RUNOFF COEFFICIENTS: BEFORE: 0.15
DURING: 0.20-0.60
AFTER: 0.70

SOILS DATA:
THE SOILS ARE FINE SAND TO CLEAN SANDS. THE SMALL SAND PARTICLE SIZE WILL MAKE THE POTENTIAL FOR EROSION HIGH.

DRAINAGE AREAS FOR EACH OUTFALL:
THE PROJECT HAS 2 OUTFALLS INTO WARNER CREEK

1.E. SITE MAP:

THE CONSTRUCTION PLANS WILL SUBSTITUTE AS SITE MAPS. LOCATIONS OF THE REQUIRED INFORMATION ARE DESCRIBED BELOW.

DRAINAGE PATTERNS:
THE DRAINAGE FLOW DIRECTIONS ARE SHOWN ON THE OVERALL DRAINAGE PLAN AND PAVING GRADING & DRAINAGE PLAN SHEETS.

APPROXIMATE SLOPES:
THE SLOPES OF THE SITE CAN BE SEEN IN THE THE OVERALL DRAINAGE PLAN, PAVING, GRADING & DRAINAGE PLAN SHEETS AND SECTIONS.

AREAS OF SOIL DISTURBANCE:
THE AREAS TO BE DISTURBED ARE INDICATED ON THE THE OVERALL DRAINAGE PLAN, PAVING GRADING & DRAINAGE PLAN SHEETS AND SECTIONS.

AREAS NOT TO BE DISTURBED:
PRESERVE AREAS AND PRESERVE BUFFERS (UNLESS REQUIRED FOR FIRE WISE SETBACK)

LOCATION CONTROLS:
THESE ARE SHOWN ON THE HORIZONTAL CONTROL PLAN SHEETS.

AREAS TO BE STABILIZED:
TEMPORARY STABILIZATION PRACTICES ARE ALSO SHOWN ON THE PLANS, IF APPLICABLE. AREAS OF PERMANENT STABILIZATION ARE SHOWN ON THE OVERALL DRAINAGE PLAN, PAVING GRADING & DRAINAGE PLAN SHEETS AND SECTIONS.

SURFACE WATERS:
SURFACE WATER DISCHARGE IS SHOWN ON THE OVERALL DRAINAGE PLAN, PAVING GRADING & DRAINAGE PLAN SHEETS AND SECTIONS. THE SURFACE WATER OF THE PROJECT WILL DISCHARGE TO THE ON-SITE DETENTION AREAS DURING CONSTRUCTION, AND WILL DISCHARGE TO WARNER CREEK FOLLOWING CONSTRUCTION COMPLETION.

1.F. RECEIVING WATERS:

THE SURFACE WATERS OF THE PROJECT WILL DISCHARGE DIRECTLY INTO WARNER CREEK FOLLOWING CONSTRUCTION. WARNER CREEK OUTFALLS INTO THE ST. LUCIE RIVER.

2.0 CONTROLS:

2.A. EROSION AND SEDIMENT CONTROLS:

THE FOLLOWING DEFINES GENERAL QUANTITIES FOR THE SEQUENCE OF CONSTRUCTION AND THE STABILIZATION AND STRUCTURAL PRACTICES. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP. THE CONSTRUCTION OF THIS PROJECT IS EXPECTED TO LAST EIGHTEEN TO TWENTY FOUR MONTHS.

INSTALL STABILIZED CONSTRUCTION ENTRANCES AT ALL AREAS WHERE CONSTRUCTION VEHICLES WILL BE ENTERING AND EXITING THE CONSTRUCTION SITE.

INSTALL SILT FENCE, TYPE III, AROUND ALL DITCH BOTTOM INLETS ON THE PROJECT, AND THE PROJECT PERIMETER. FILTER CLOTH UNDER THE GRATES ON CATCH BASINS MAY BE USED IN LIEU OF SILT FENCE AROUND INLETS.

2.A.1 STABILIZATION PRACTICES:

TEMPORARY:
SEED AND MULCH, AND SOD IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 104.

PERMANENT:
ALL STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARY OR PERMANENTLY CHANGED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY CEASED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP.

2.A.2 STRUCTURAL PRACTICES:

TEMPORARY:
SILT FENCE PER DETAIL
STAKED TURBIDITY BARRIER PER DETAIL
SOIL TRACKING PREVENTION DEVICE PER DETAIL
A STABILIZED CONSTRUCTION ENTRANCE TO BE CONSTRUCTED PER DETAIL. ALL SEDIMENT CONTROLS SHALL BE IN PLACE PRIOR TO ANY SOIL DISTURBING ACTIVITY UPSTREAM OF THE CONTROL.

2.B STORMWATER MANAGEMENT:

STORMWATER WILL BE CONVEYED IN STORM SEWER SYSTEM, CROSS DETAILS, AND SWALES TO STORMWATER RETENTION/DETENTION PONDS.

2.C OTHER CONTROLS:

2.C.1 WASTE DISPOSAL:

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP.

2.C.2 OFF-SITE VEHICLE TRACKING:

THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION IF THE SWPP.

2.C.3 STATE AND LOCAL REGULATION FOR WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS:

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP.

2.D STATE AND LOCAL PERMIT

THIS PROJECT REQUIRES A SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD) SURFACE WATER MANAGEMENT ENVIRONMENTAL RESOURCE PERMIT.

3.0 MAINTENANCE:

ITEM	MAINTENANCE	PROPOSED REPLACEMENT INTERVAL
SILT FENCE	IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 104	6 MONTHS
PONDS	REMOVE SEDIMENT WHEN IT BECOMES 0.15M (6") DEEP.	
SYNTHETIC BALES	REMOVE SEDIMENT WHEN IT REACHES 1/2 HEIGHT OF BALES.	3 MONTHS

THE CONTRACTOR SHALL MAINTAIN RAIN GAUGES ON-SITE AND RECORD DAILY RAINFALL. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE FDOT STANDARD SPECIFICATIONS SECTION 104 EROSION CONTROL PLAN.

4.0 INSPECTIONS:

QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEASE ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. INSPECTION LOCATIONS INCLUDE (AT A MINIMUM):

POINTS OF DISCHARGE TO WATERS OF THE UNITED STATES.

POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM DRAIN SYSTEMS.

DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.

AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.

STRUCTURAL CONTROLS.

STORMWATER MANAGEMENT SYSTEMS.

LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

5.0 NON-STORMWATER DISCHARGES:

THE CONTRACTOR IS REQUIRED TO SUBMIT A DEWATERING PLAN TO SFWMD FOR APPROVAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES THAT REQUIRE DEWATERING. THIS PLAN SHALL INCLUDE ANY STOCKPILE AREAS AND EXCAVATION AREA.SEE SFWMD RULE 40 D2 CONSUMPTION USE OF WATER, RULE 40 D-3 REGULATION WELLS SPECIFYING REQUIREMENTS FOR DEWATERING AND ERP APPLICATION SECTION E, SUBSECTION D CONSTRUCTION SCHEDULE AND TECHNIQUES.

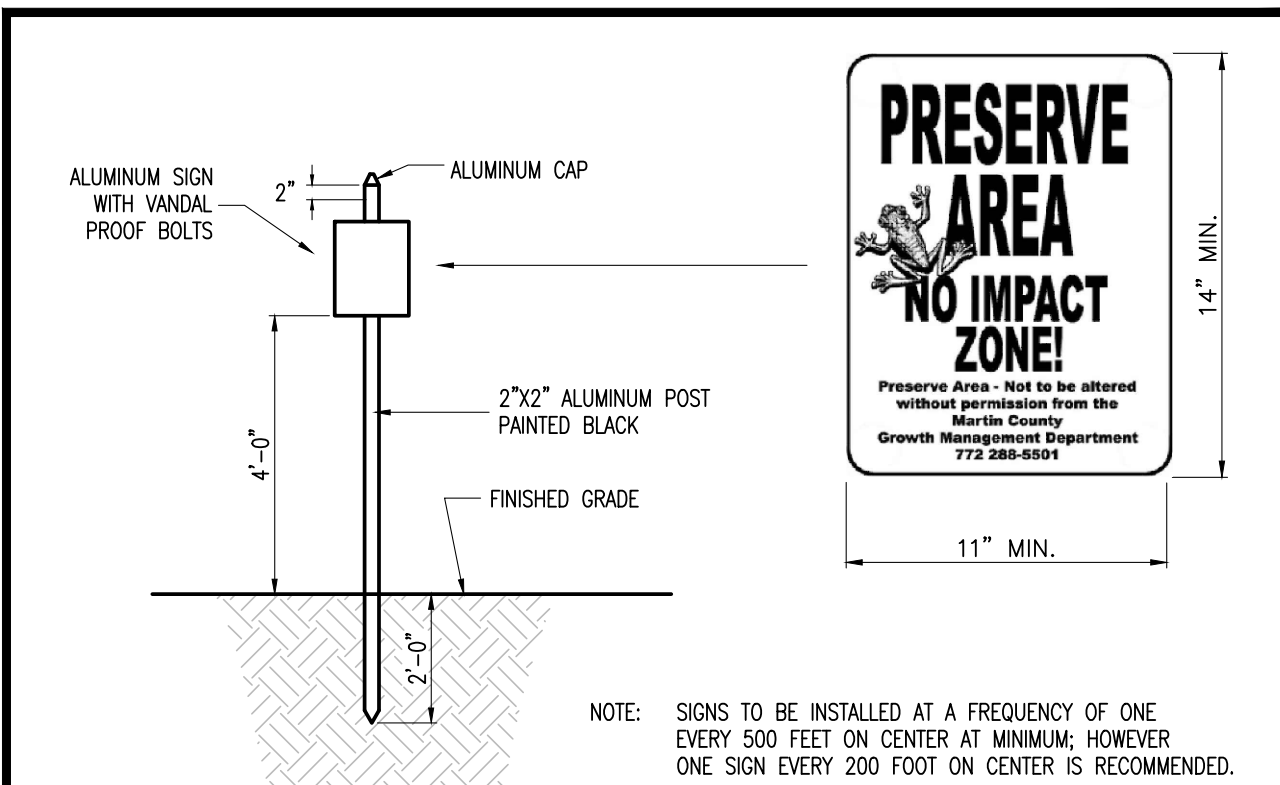
THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP. IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, CONTACT THE DISTRICT HAZARDOUS MATERIALS COORDINATOR.

6.0 RESPONSIBLE ENTITIES

THIS SWPP MUST CLEARLY IDENTIFY, FOR EACH MEASURE IDENTIFIED WITHIN THE SWPP, THE CONTRACTOR (S) OR SUBCONTRACTOR (S) THAT WILL IMPLEMENT EACH MEASURE. ALL CONTRACTOR (S) AND SUBCONTRACTOR (S) THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF THE MEASURES IDENTIFIED IN THE SWPP MUST SIGN THE FOLLOWING CERTIFICATION:

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THERE UNDER."

NAME AND TITLE	COMPANY NAME, ADDRESS, AND PHONE NUMBER	RESPONSIBLE ITEMS	DATE

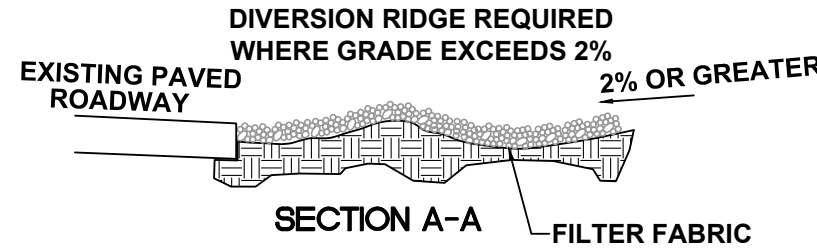


NOTE: SIGNS TO BE INSTALLED AT A FREQUENCY OF ONE EVERY 500 FEET ON CENTER AT MINIMUM; HOWEVER ONE SIGN EVERY 200 FOOT ON CENTER IS RECOMMENDED.

NOTES:

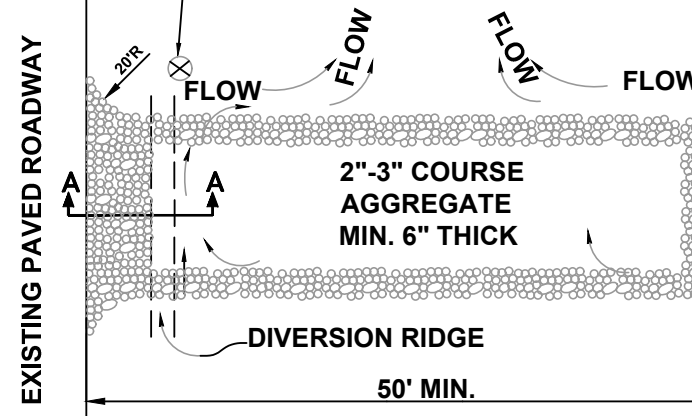
1. THE STRUCTURAL INTEGRITY OF THE SIGNS SHALL BE THE RESPONSIBILITY OF THE SIGN MANUFACTURER.
2. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR FABRICATION.
3. FASTENERS AND ATTACHMENTS SHALL BE NON-CORROSIVE AND NON-CONDUCTIVE AND INSULATED WHEN JOINING NON-COMPATIBLE MATERIALS.
4. COLORS SHALL BE SELECTED BY THE OWNER.
5. ALL SIGNS AND COMPONENTS SHALL BE OF TOP QUALITY WORKMANSHIP AND MATERIALS, AND BE FREE OF DEFECTS. DEFECTIVE IS DEFINED TO INCLUDE DELAMINATION, ABNORMAL DETERIORATION, FADING AND DISCOLORATION, WEATHERING, FAILURE OF SECURING TO SUBSTRATES, CRACKING, CORROSION, OR COATING DAMAGE, OR VISIBLE SCRATCHES ON THE SURFACE.
6. SIGNAGE SHALL NOT BEAR MANUFACTURER'S CODE OR OTHER IDENTIFYING MARKS ON ANY AREA OR PART WHICH MAY BE VISIBLE TO THE NORMAL POSITION, ATTITUDE, OR USE OF THE SIGN ITEM.
7. PROVIDE SCALED DRAWINGS OF ALL ELEMENTS AND ACTUAL PAINTED SAMPLES OF ALL MATERIALS FOR APPROVAL.
8. ALL SIGNS SHALL BE CONSTRUCTED OF VANDAL-RESISTANT CONSTRUCTION MATERIALS, METHODS, AND ATTACHMENTS.

	MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL
	PRESERVE AREA SIGN	P-40
		DATE: 12/05/18



SEDIMENT BARRIER (STRAW BALE TYPE SHOWN)

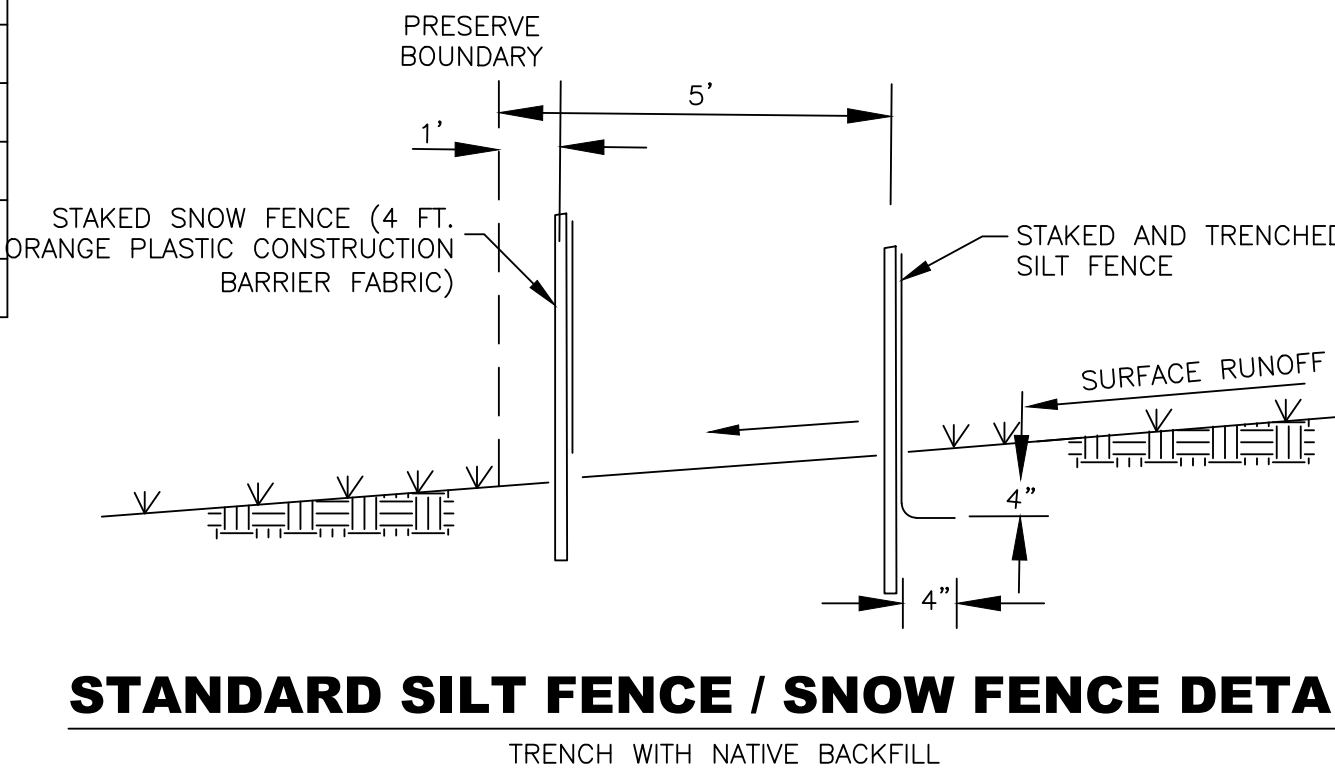
SUPPLY WATER TO WASH WHEELS IF NECESSARY



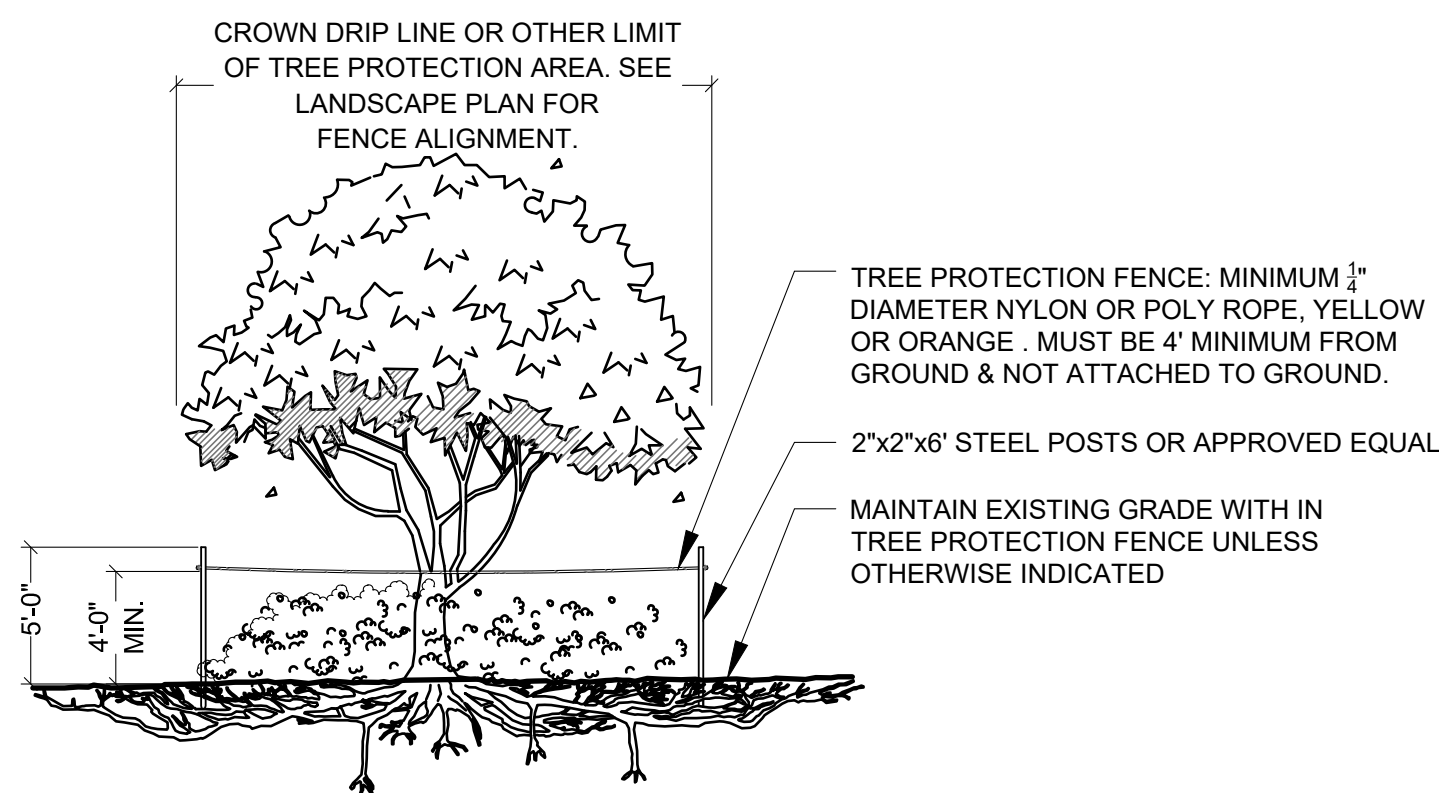
NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT BASIN.

STABILIZED CONSTRUCTION ENTRANCE



STANDARD SILT FENCE / SNOW FENCE DETAIL

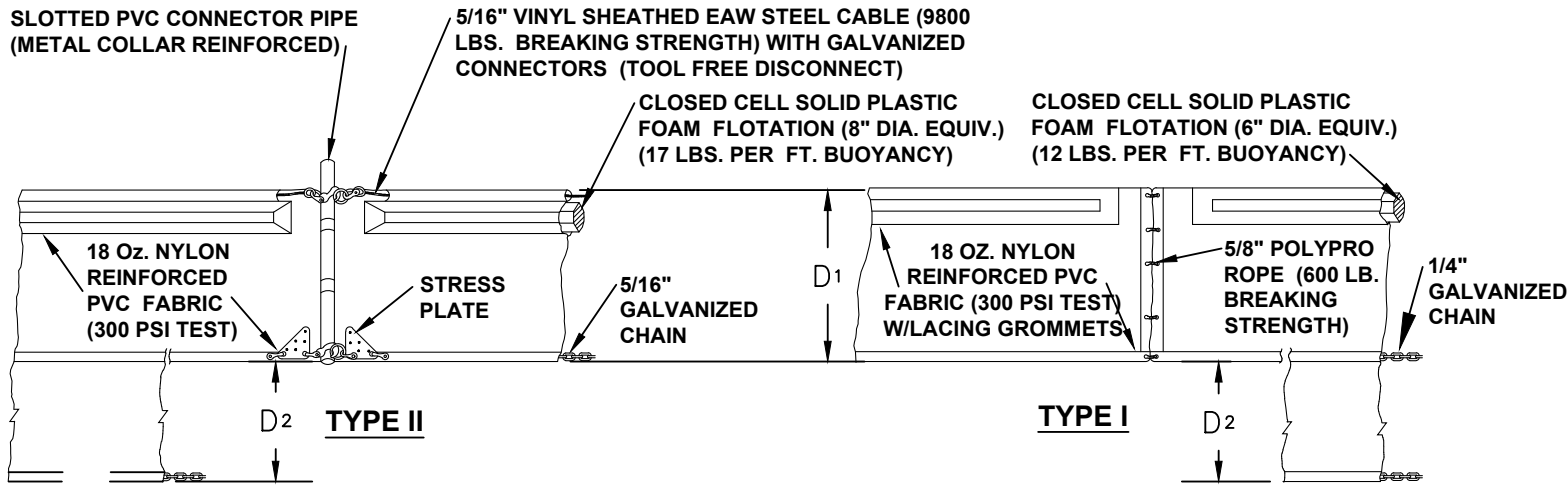


TREE PROTECTION BARRICADE

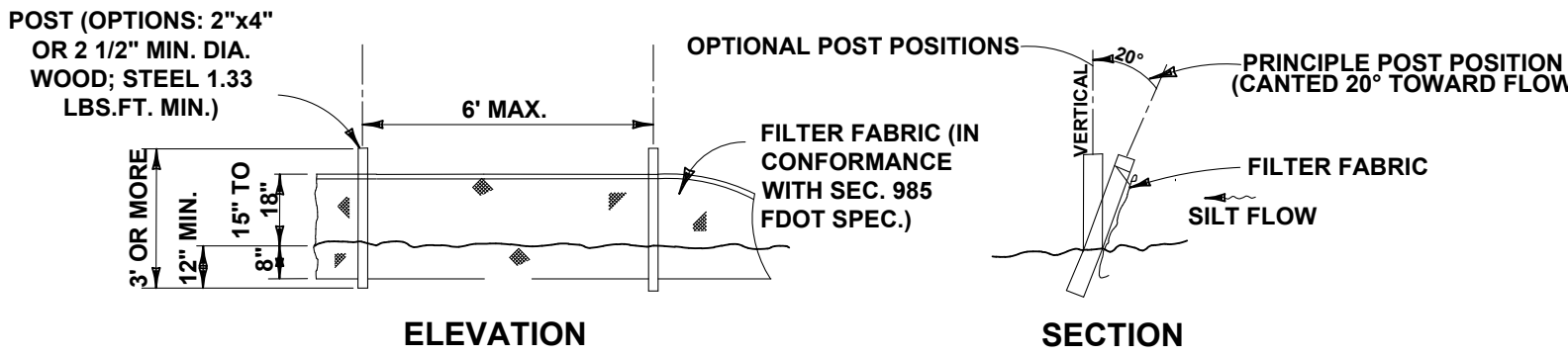
NOT TO SCALE

NOTES:

- 1- SEE LANDSCAPE PLAN FOR FENCE ALIGNMENT.
- 3- NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
- 4- NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.



FLOATING TURBIDITY BARRIER

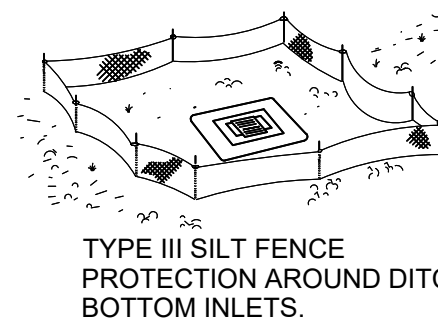


ELEVATION

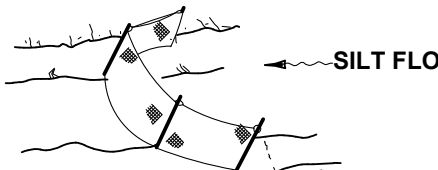
SECTION

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

TYPE III SILT FENCE

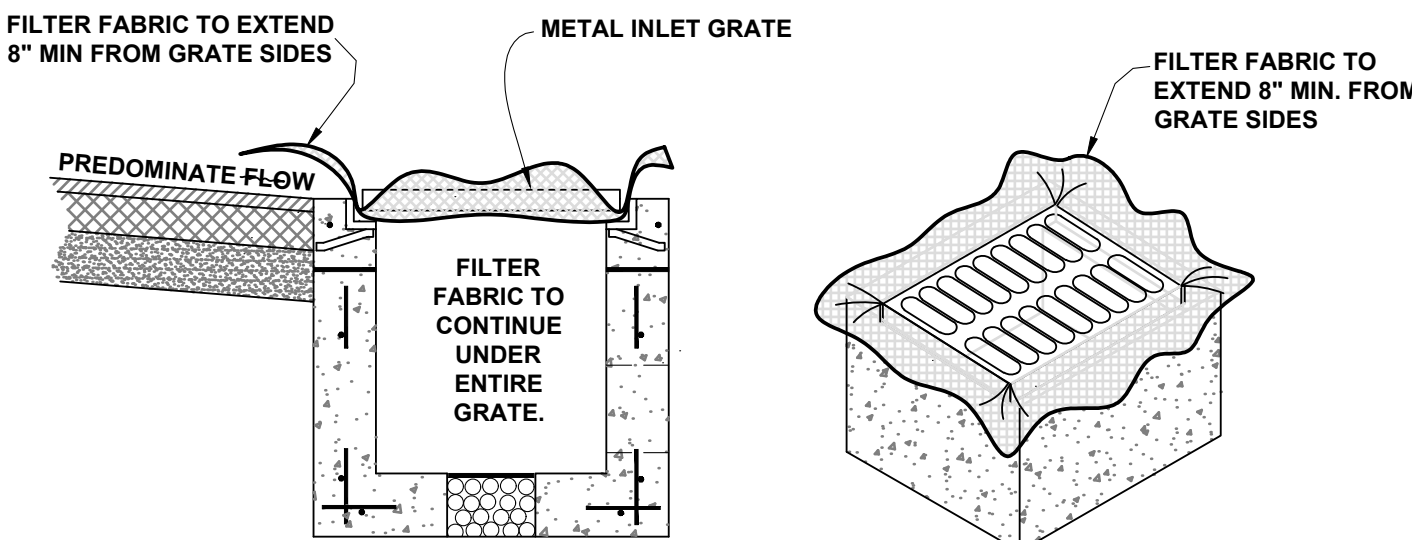


SILT FENCE APPLICATIONS



NOTE: SPACING FOR TYPE III FENCE TO BE IN ACCORDANCE WITH CHART 1, SHEET 1 OF 3 AND DITCH INSTALLATIONS AT DRAINAGE STRUCTURES SHEET 2 OF 3.

TYPE III SILT FENCE APPLICATIONS



GENERAL NOTES

1. THIS INLET PROTECTION IS DESIGNED WITH FILTER FABRIC PROTRUDING 8" FROM SIDES FOR GRIPPING WHEN SEDIMENT NEEDS TO BE CLEARED AFTER FINAL CONSTRUCTION.
2. FILTER FABRIC TO BE INSTALLED AND TRIMMED BEFORE GRATE IS SET.

FILTER FABRIC DETAIL

INLET PROTECTION



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: NA
VERT. SCALE:

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

EROSION CONTROL DETAILS

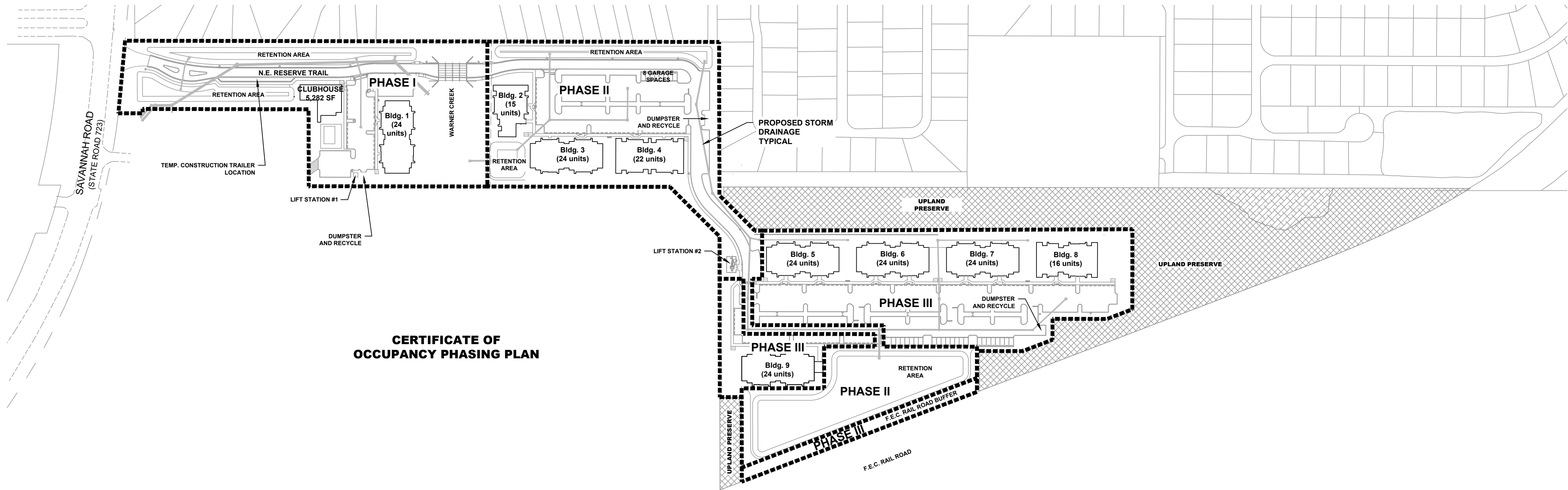
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1329.2 CLEARING SWPPP
CADD FILE:

SHEET IDENTIFICATION
JOB No.: 1329.2

SHEET

3 OF 28



CERTIFICATE OF
OCCUPANCY PHASING PLAN

CERTIFICATE OF OCCUPANCY SEQUENCE

GENERAL NOTES: (applies to all Phases of Project)

- The Clubhouse & Pool (including all related foundation plantings and the sidewalk along the eastern Clubhouse & Pool boundary) will be completed prior to Building 2 Certificate of Occupancy (CO) issuance.
- The preserve area exotic removal required by the PAMP shall be completed prior to any CO.
- Apartment building construction sequence shall be Building No. 1, 2, 3, 4, 5, 9, 6, 7, and 8.
- Paving shall be installed in two lifts of asphalt. Sequence of 1st Lift Paving shall be completed in three (3) separate mobilizations/phases. Temporary Striping shall be installed on 1st Lift to provide ample parking per MC LDR requirements for Certificate of Occupancy (CO) issuance purposes. The 2nd Lift of asphalt and Final Striping will be installed prior to the Building 8 CO.
- The Pinelake Village watermain extension will be completed prior to the Building 8 CO.
- All buffers within a phase shall be installed prior to any Building CO within the phase.
- With the exception of the adjacent foundation plantings around each building which can be phased by building, all parking lot landscaping shall be installed and certified with the development of the associated phase parking lot infrastructure and prior to CO of any building within the phase. Landscaping within the entire phase must be inspected and approved by Martin County prior to the first CO issuance of the phase.
- Foundation landscaping and irrigation shall be installed on a building by building basis for each respective Building CO. As each building is constructed, landscaping and irrigation will be installed in the surrounding area after the fine grading, paving and sidewalks are completed. The foundation landscaping and irrigation will be completed in the sequence listed above in General Note #3 for the nine (9) apartment buildings.
- The 7 ft. opaque perimeter fence within Phase I and II shall be installed 10 ft. off the property line prior to the issuance of any building permits.

PHASE 1 – CORE INFRASTRUCTURE REQUIREMENTS FOR CLUBHOUSE, POOL & BLDG 1

- Construct stabilized access and turn around area for emergency vehicles along NE Reserve Trail to temporary trailer location and to Warner Creek
- Install temporary bridge across Warner Creek to provide full site access for protected species work, erosion & sediment control BMP installation, exotic vegetation removal, and Timber Bridge construction
- Construct Warner Creek Timber Bridge, Abutments, and Wingwalls
- Construct By-Pass drainage pipe system from Savannah Road to Warner Creek, consisting of Structures SD-1 through SD-5, HW-1, and Control Structure CS-1
- Install stabilized access for emergency vehicles on NE Reserve Trail to Dry Retention Area 5
- Perform mass grading of entire site, including perimeter berms
- Construct Dry Detention Areas 1 - 5 and Warner Creek expansion, sod and plant vegetation areas per construction plan details and regulatory requirements (MC, SFWMD & NPDES)
- Construct infrastructure within the Phase 1 boundary limits:
 - Construct drainage pipe systems consisting of Structures SD-6 through SD-13
 - Construct Lift Station #1, force main, and sewer services to Clubhouse & Building 1
 - Construct water main, fire hydrants and water services to Clubhouse & Building 1
 - Install horizontal directional drill utilities under Warner Creek on north side of Timber Bridge
 - Construct dry utilities, FPL, cable, phone, internet to Clubhouse & Building 1

PHASE 1 – CO INFRASTRUCTURE REQUIREMENTS FOR CLUBHOUSE, POOL & BLDG 1

- Construct curb, sidewalks, roadway and parking lots between Savannah Road and the Timber Bridge
- Construct Clubhouse, Pool, Building 1, Dumpster Enclosure and Emergency Access with Knox Box
 - Life safety / fire suppression system
 - Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
 - Water / sewer / lift station connections
 - Dry utility connections, (electrical, phone, cable TV & Internet)
- Install First Lift of Asphalt with temporary striping & signage for Phase 1 area
- Complete Warner Creek grading, access turnouts, sodding, Rip Rap, guardrail, curbing, sidewalks, paving, and remove Warner Creek Construction temporary BMP/erosion control measures
- Install landscaping for Building 1 & Clubhouse / Pool areas
- Install Common Area Sidewalks and Bike Racks serving Phase 1
- Install Street Lighting for main roadway and parking lot
- Install perimeter fence and landscape buffers for Phase 1 & Phase 2
- Install United States Postal Service mailboxes
- Certification from SFWMD / FDEP / Martin County Health Department
- Martin County Certificate of Occupancy for Building 1 & Clubhouse / Pool
- Demobilization of Temporary Leasing Trailer within 30 days after receipt of Clubhouse CO

PHASE 2 – CORE INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 2, 3 & 4

- Construct infrastructure within the Phase 2 boundary limits:
 - Construct drainage pipe systems, consisting of Structures SD-14 through SD-31 and Control Structure CS-2 (Structure SD-27 may be delayed to Phase 3)
 - Construct force main, Lift Station #2 and sewer services to Buildings 2, 3 & 4
 - Construct water main, fire hydrants and water services to Buildings 2, 3 & 4
 - Construct dry utilities, FPL, cable, phone, internet services to Buildings 2, 3 & 4

PHASE 2 – CO INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 2, 3 & 4

- Construct curb, sidewalks, roadway and parking lots to STA 28+80
- Construct Buildings 2, 3 & 4
 - Life safety / fire suppression system
 - Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
 - Water / sewer / lift station connections
 - Dry utility connections, (electrical, phone, cable TV & Internet)
- Construct Parking Garages and Dumpster Enclosure
- Install First Lift of Asphalt with temporary striping & signage
- Install landscaping serving each Building in Phase 2
- Install Common Area Sidewalks and Bike Racks serving Phase 2
- Install Street Lighting serving main roadway and parking lots
- Install United States Postal Service mailboxes
- Certification from FDEP / Martin County Health Department
- Martin County Certificates of Occupancy (Building by Building) for Bldgs. 2, 3 & 4

PHASE 3 – CORE INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 5 – 9

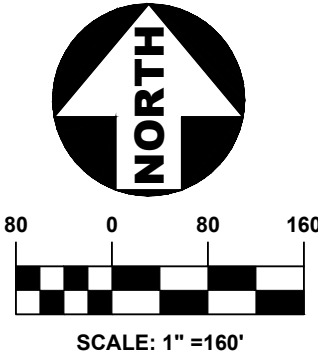
- Construct stabilized access for emergency vehicles to STA 37+70
- Construct infrastructure within the Phase 3 boundary limits:
 - Construct drainage pipe systems consisting of Structures SD-32 through SD-37
 - Construct gravity sewers and sewer services to Buildings 5 thru 9
 - Construct water main, fire hydrants and water services to Buildings 5 thru 9
 - Construct dry utilities, FPL, cable, phone, internet to Buildings 5 thru 9

PHASE 3 – CO INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 5 – 9

- Construct Retaining Wall behind Buildings 5 and 6
- Construct Pinelake Village watermain extension
- Construct curb, sidewalks, and parking lots serving Buildings 5 thru 9 (phased building by building)
- Construct Buildings, in the following order 5, 9, 6, 7 and 8
 - Life safety / fire suppression system
 - Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
 - Water / sewer / lift station connections
 - Dry utility connections, (electrical, phone, cable TV & Internet)
- Construct Parking Garages, Dumpster Enclosures, & Entry Features
- Install First Lift of Asphalt with temporary striping & signage (phased building by building)
- Install landscaping serving each Building in Phase 3 (phased building by building)
- Install Common Area Sidewalks and Bike Racks serving Phase 3 building by building
- Install Street Lighting serving main roadway and parking lots building by building
- Install perimeter fence and landscape buffers serving Phase 3
- Install the railroad landscape buffer (area between the retention pond and the property line/FEC ROW)
- Install United States Postal Service mailboxes
- Certification from FDEP / Martin County Health Department
- Martin County Certificates of Occupancy (Building by Building) for Bldgs. 5, 9, 6 & 7

FINAL CLOSE-OUT

- Demobilization of Construction Trailer
- Final Lift of Asphalt on NE Reserve Trail (all project areas prior to Building 8 CO)
- Final Lift of Asphalt on all parking lots (prior to Building 8 CO)
- Final signage and striping on all parking lots (prior to Building 8 CO)
- Pinelake Village watermain completion and certification
- Final Project close-out per Martin County requirements
- Certificate of Occupancy from Martin County for Bldg. 8



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE:	10-31-19
DRAWN BY:	MDB
DESIGNED BY:	SPM
CHECKED BY:	JWC
PROJECT No.:	1329.2
HORZ. SCALE:	1" = 160'
VERT. SCALE:	

SCALE
VERIFICATION
0 1
SOLID BAR IS EQUAL
TO ONE INCH ON
ORIGINAL DRAWING.
ADJUST ALL SCALED
DIMENSIONS
ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

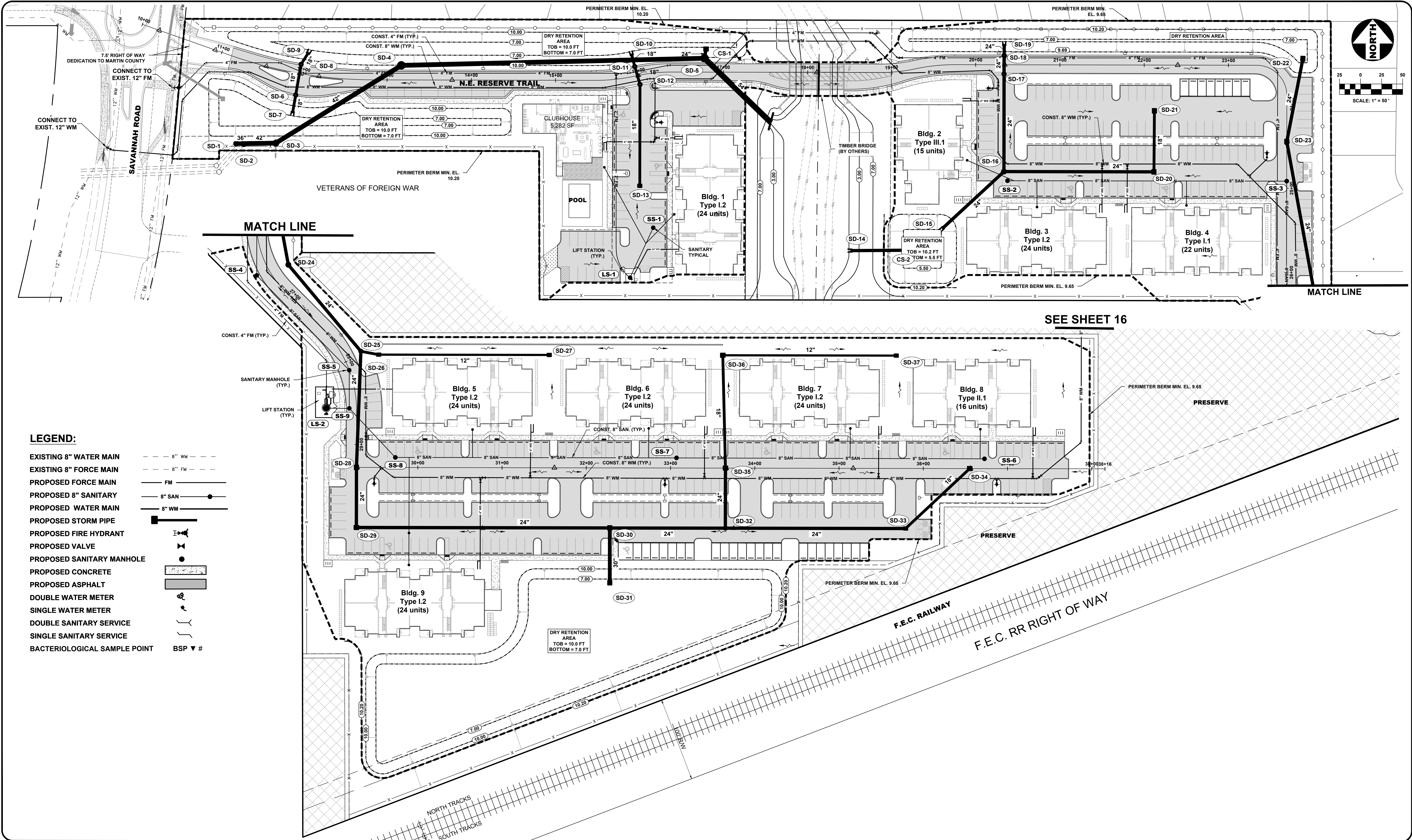
CERTIFICATE OF OCCUPANCY PHASING PLAN


Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

1329.2 PHASE
CADD FILE:

SHEET
IDENTIFICATION
JOB No.: 1329.2

SHEET
4 OF 28





301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 10-31-19

DRAWN BY: MDB

DESIGNED BY: SPM

CHECKED BY: JWC

PROJECT No.: 1329.2

HORZ. SCALE: 1" = 50'

VERT. SCALE:

SCALE VERIFICATION

0 1

SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

OVERALL DRAINAGE AND UTILITY

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

SHEET IDENTIFICATION

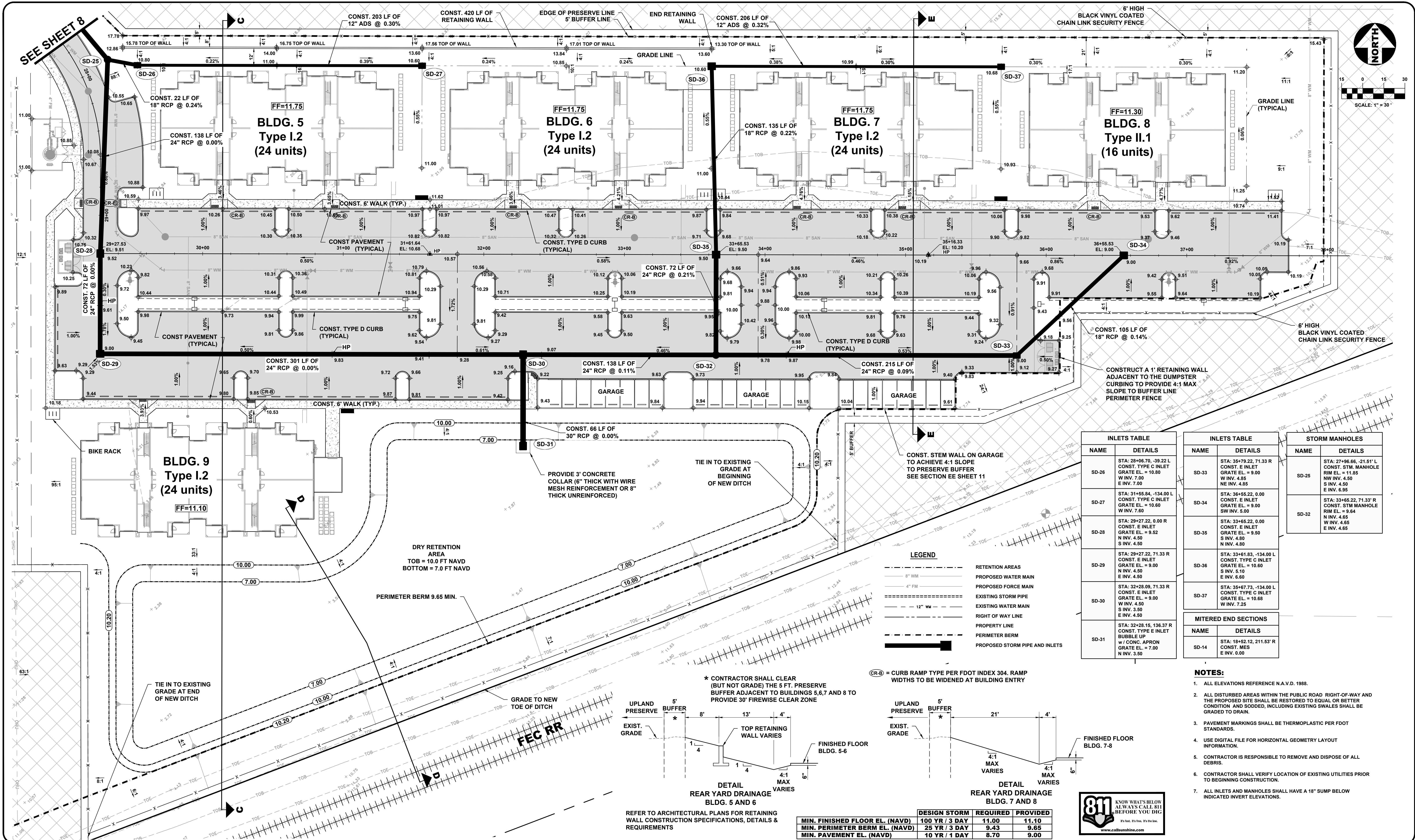
JOB No.: **1329.2**

SHEET

6 OF 28

1329.2 OVERALL DR-UTIL
CADD FILE:

P:\13001\1329.2 - Reserve at Jensen Beach\Drawings\1329.2 OVERALL DR-UTIL.dwg, 3/27/2020 12:18:09 PM, DWS To PDF.pc3



CAPTEC
Engineering, Inc.
Civil Engineering Professionals

301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT NO.: 1329.2
HORZ. SCALE: 1" = 30'
VERT. SCALE:

SCALE VERIFICATION

0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

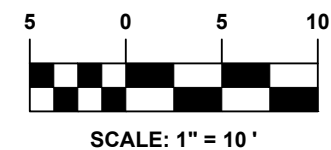
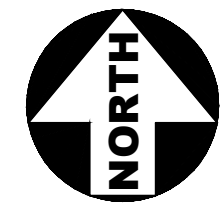
THE RESERVE AT JENSEN BEACH
MARTIN COUNTY, FLORIDA

PAVING, GRADING AND DRAINAGE PLAN

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

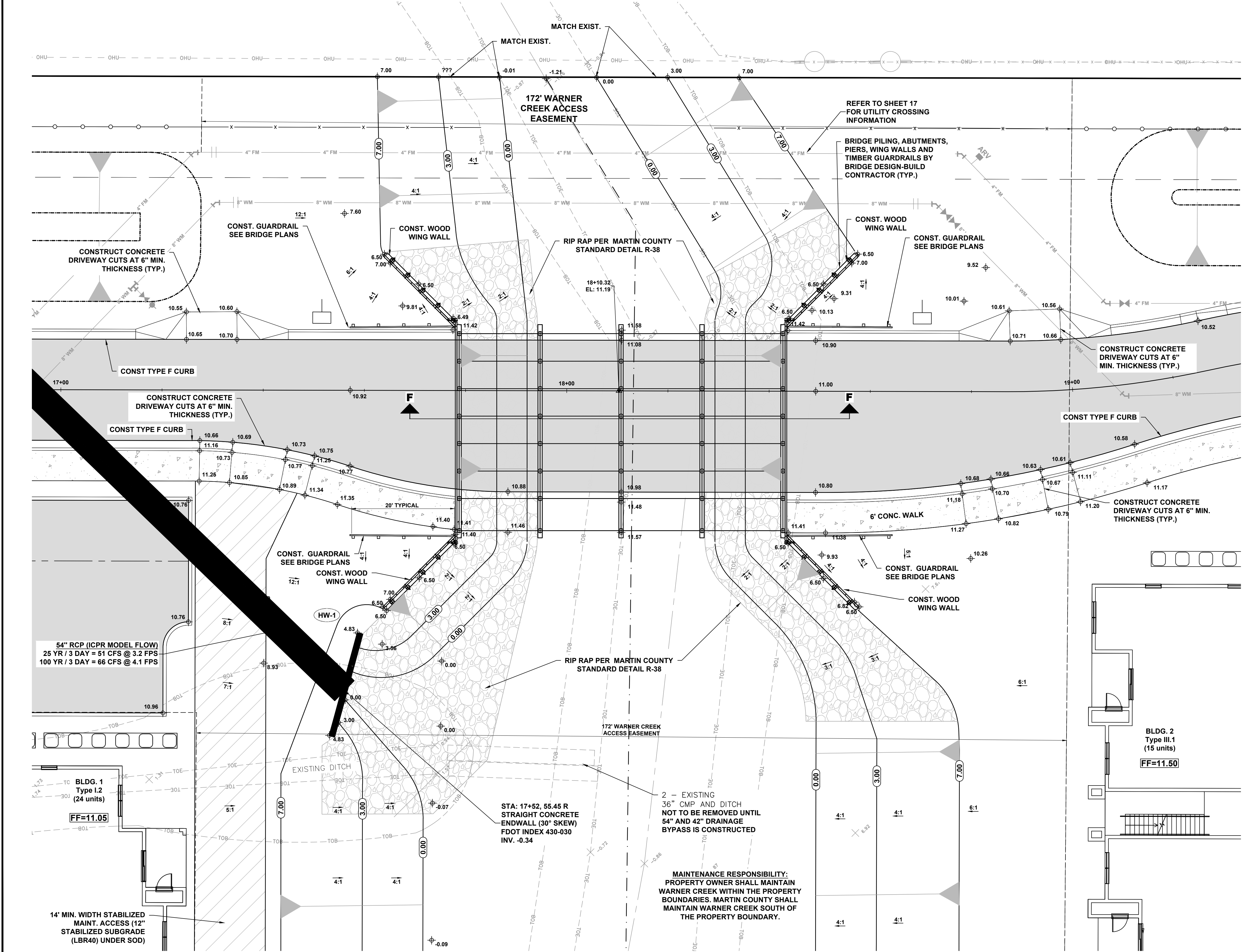
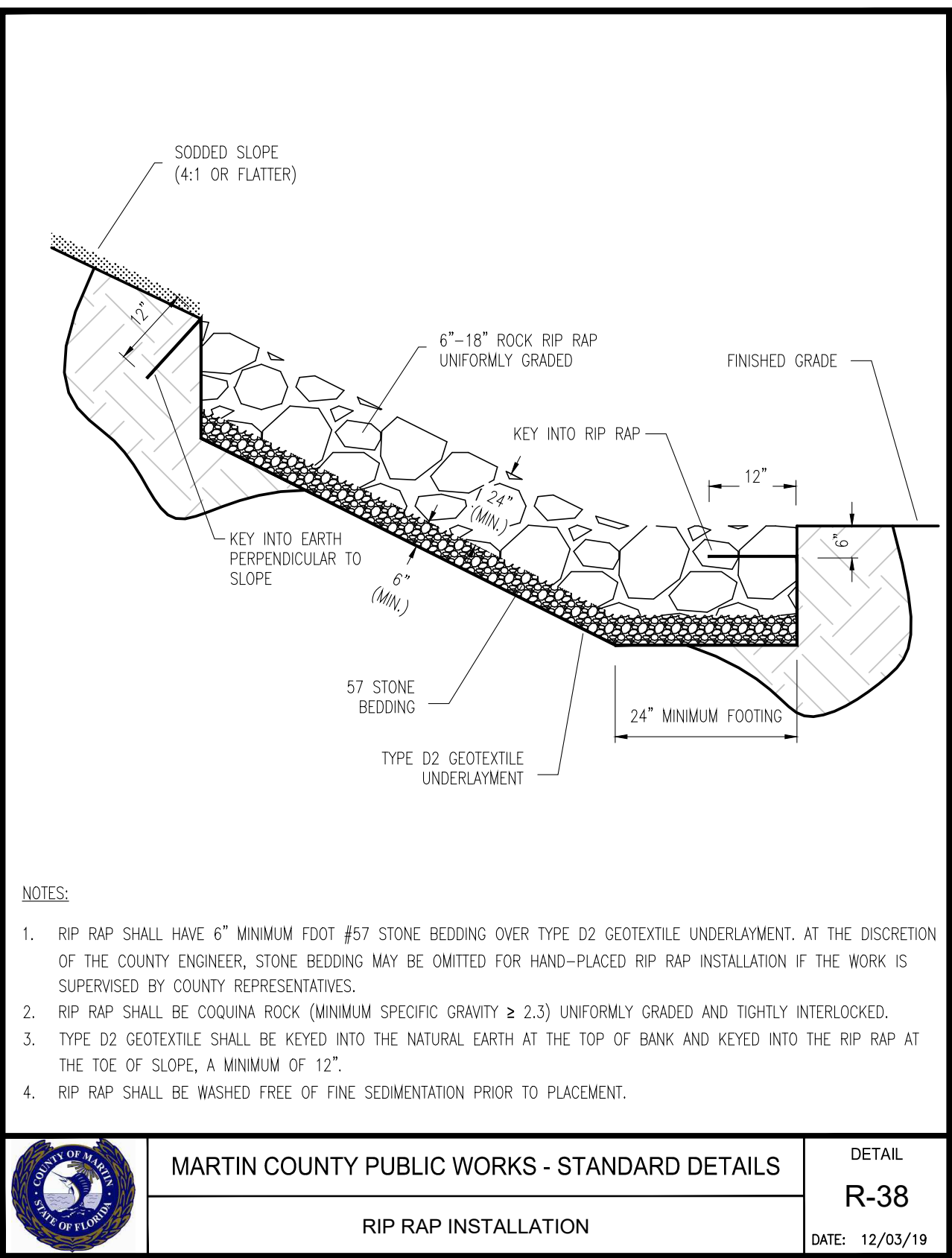
SHEET IDENTIFICATION
JOB No.: **1329.2**

SHEET
9 OF **28**



NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING THAT WARNER CREEK BASEFLOWS AND STORM WATER FLOWS THROUGH THE PROJECT SITE ARE MAINTAINED AT ALL TIMES. WARNER CREEK SERVES A BASIN AREA IN EXCESS OF 5,000 ACRES, AND GENERATES STORM WATER FLOWS GREATER THAN 600 CFS FOR THE 25 YEAR, 3 DAY STORM EVENT AT THE PROPOSED BRIDGE.
2. EXISTING DRAINAGE CAPACITY IS TO BE MAINTAINED AT ALL TIMES VIA OPEN CHANNEL AND OR PUMPS. A SINGLE PUMP WILL NOT BE PERMITTED TO MAINTAIN HIGH STORM FLOWS BY ITSELF. A HIGH WATER OVER FLOW MUST BE PROVIDED AT ALL TIMES.
3. IN CASE OF HEAVY RAINS, ALL DEWATERING SHALL CEASE AND DITCH BLOCKS SHALL BE REMOVED.
4. PRIOR TO DEWATERING CONSTRUCTION, ALL SILT FENCES AND TURBIDITY BARRIERS SHALL BE CONSTRUCTED.
5. CONTRACTOR MAY ALSO UTILIZE DEWATERING BAGS, GEOTEXTILE TUBES, SEDIMENT BAGS, OR PROPERLY CONSTRUCTED ABOVE GROUND IMPOUNDMENTS, AS NECESSARY, TO MAINTAIN DEWATERING EFFLUENT ON-SITE.
6. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL DEWATERING OPERATIONS AND SEQUENCE WILL BE SUITABLE TO CONSTRUCT THE PROPOSED IMPROVEMENTS. IF TIMING OF CONSTRUCTION, WEATHER, GROUNDWATER, OR CONSTRUCTION SCHEDULE REQUIRES ADJUSTMENT TO THE PLAN, THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH MODIFYING THE SFWMD DEWATERING PERMIT AND IMPLEMENTATION OF ALTERNATIVE PLANS.
7. TIMBER BRIDGE, PILING, ABUTMENTS, BRIDGE BARRIERS & TIMBER GUARDRAILS, WING WALLS AND BRIDGE PIERS BY YORK BRIDGE CONCEPTS, INC. (YBC). (PLEASE REFER TO Y.B.C. PLANS AND SPECS)



CAPTEC Engineering, Inc.
Civil Engineering Professionals

301 N.W. Flagler Ave
Stuart, Florida 34994
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Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020

DRAWN BY:	MDB
DESIGNED BY:	SPM
CHECKED BY:	JWC
PROJECT NO.:	1329.2
HORZ. SCALE:	1" = 10'
VERT. SCALE:	

SCALE VERIFICATION

0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

BRIDGE PLAN VIEW

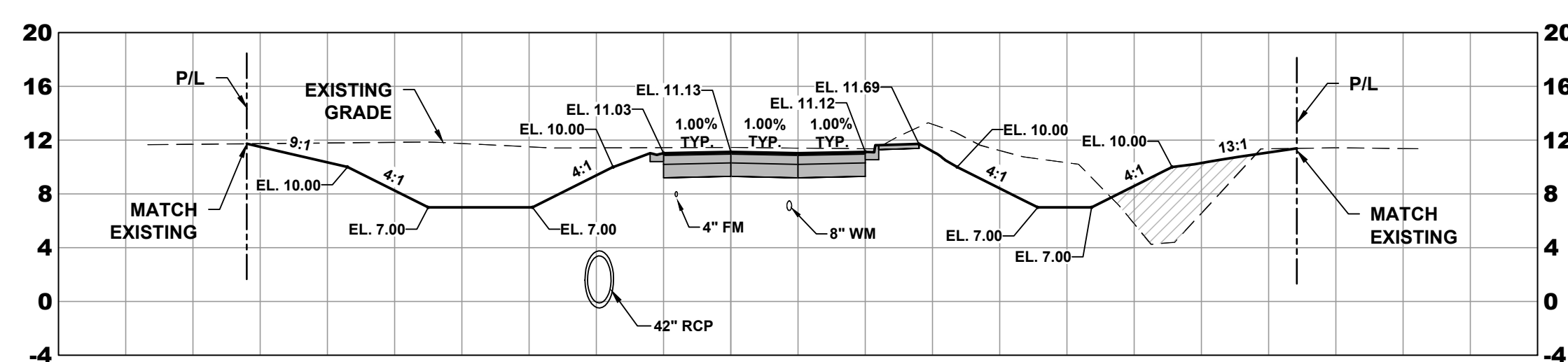
Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

SHEET IDENTIFICATION

JOB No.: **1329.2**

SHEET

10 OF 28

[illegible]

Profile view of the proposed drainage system. The vertical axis shows elevation in feet (0 to 24). The horizontal axis represents the stationing of the system. Key features include:

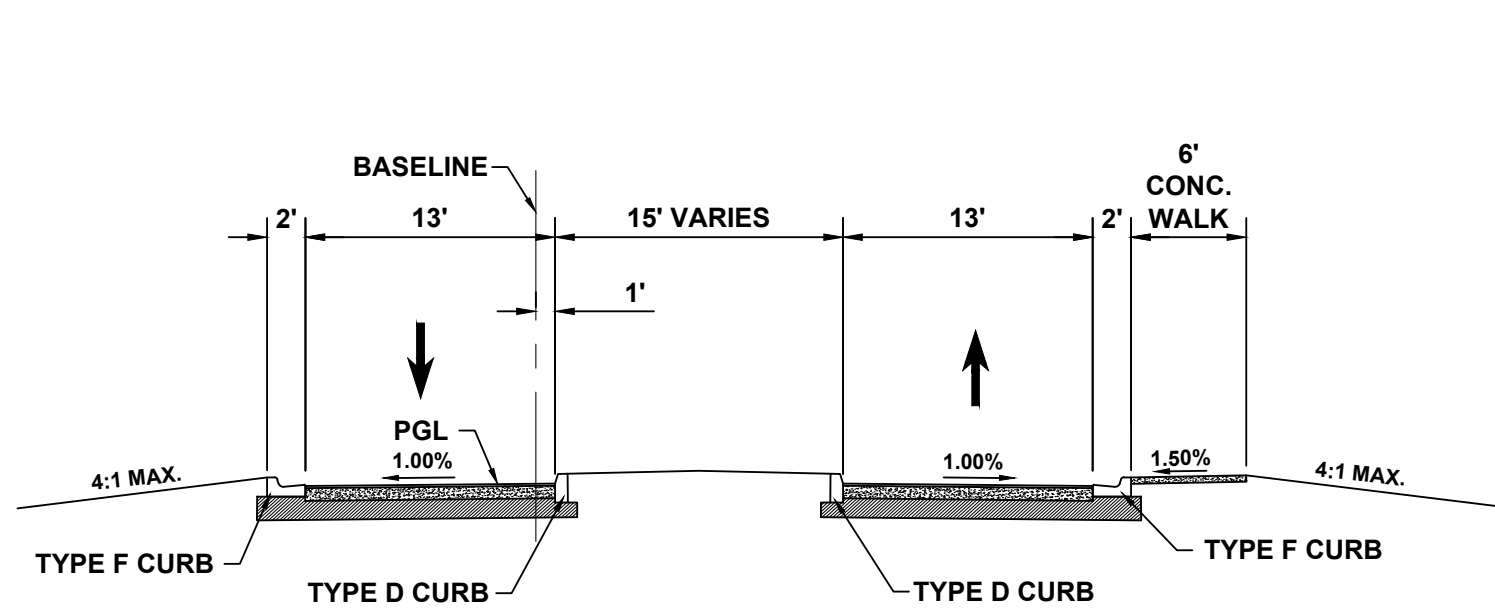
- RETAINING WALL SEE ARCHITECTURAL PLANS**: Located at the left end of the profile.
- 5' BUFFER** and **FENCE**: Indicated at the top left.
- EXISTING GRADE**: Shown as a dashed line.
- PROPOSED GRADE**: Shown as a solid line.
- PROPOSED DRAINAGE STRUCTURES**:
 - 8" ADS** (Access Driveway Structure) at station 12+00.
 - 8" SAN** (Sanitary Sewer) at station 10+00.
 - 8" WM** (Wastewater Main) at station 10+00.
 - 24" RCP** (Rigid Concrete Pipe) at station 10+00.
- ELEVATIONS**: Various points are labeled with elevations, including EL. 11.90, EL. 10.77, EL. 10.26, EL. 10.00 TYP., EL. 10.25, EL. 10.75, EL. 9.74, EL. 9.44, EL. 9.76, EL. 10.38, EL. 11.10, EL. 10.60, EL. 10.00, EL. 7.00, EL. 10.00, EL. 10.20, EL. 4.22, and EL. 11.40.
- GRADES**: Various slopes are indicated, including 12'-1, 9'-1, 1.00% TYP., 3.03%, 4'-1, and 5'-1.
- MATCH EXISTING**: Indicated at the right end of the profile.

Profile view of the proposed road section. The vertical axis shows elevation in feet, ranging from 0 to 20. The horizontal axis represents the road alignment. Key features include:

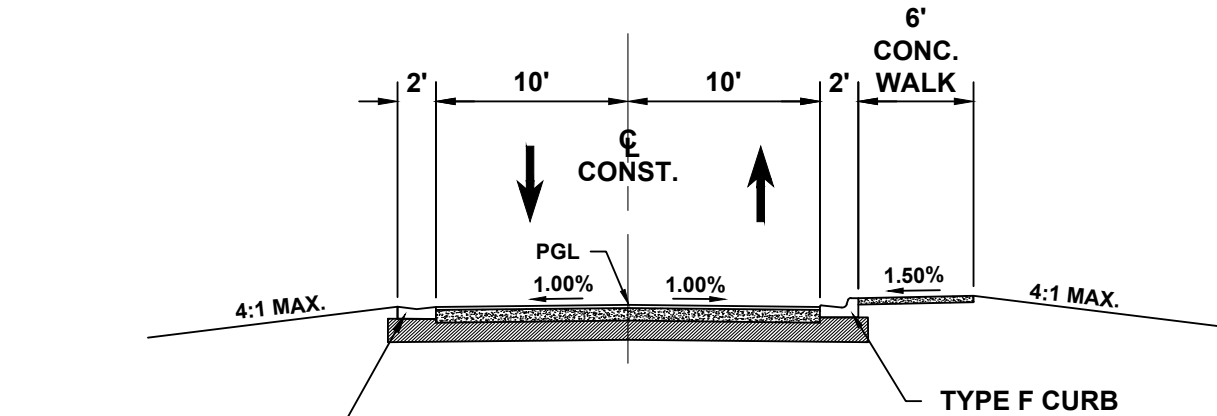
- Proposed Road Profile:** A solid line showing the proposed road grade. It starts at an elevation of 11.10, descends at a 2.87% grade to an elevation of 10.60, then continues at a 4:1 slope to an elevation of 10.00. It then descends at a 4:1 slope to an elevation of 7.00, continues at a 4:1 slope to an elevation of 10.00, and finally descends at a 5:1 slope to an elevation of 3.56.
- Existing Ground Profile:** A dashed line showing the existing ground surface. It is generally below the proposed road profile, with a notable dip to an elevation of 3.56 at the right end.
- Match Existing:** A label indicating the point where the proposed road profile meets the existing ground profile.
- Other Features:** A vertical dashed line labeled "FENCE" and "P/L" (Property Line) is located at the right end of the section. A 5' dimension is shown between the proposed road profile and the fence line.

[illegible]

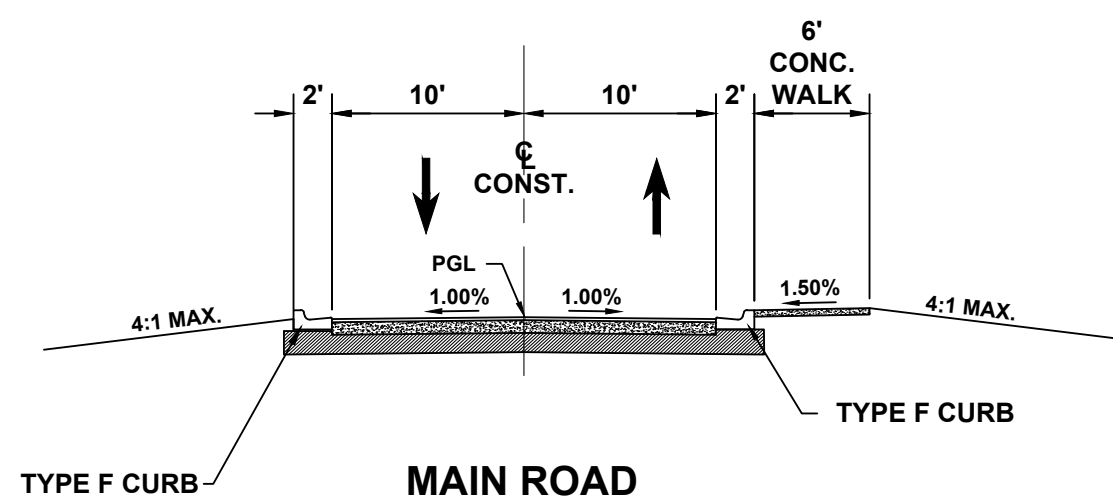
c:\1300\1329.2 - reserve at jensen beach\1329.2 PAVING AND DRAINAGE.dwg, 3/27/2020 12:23:56 PM, DWG To PDF.pc3



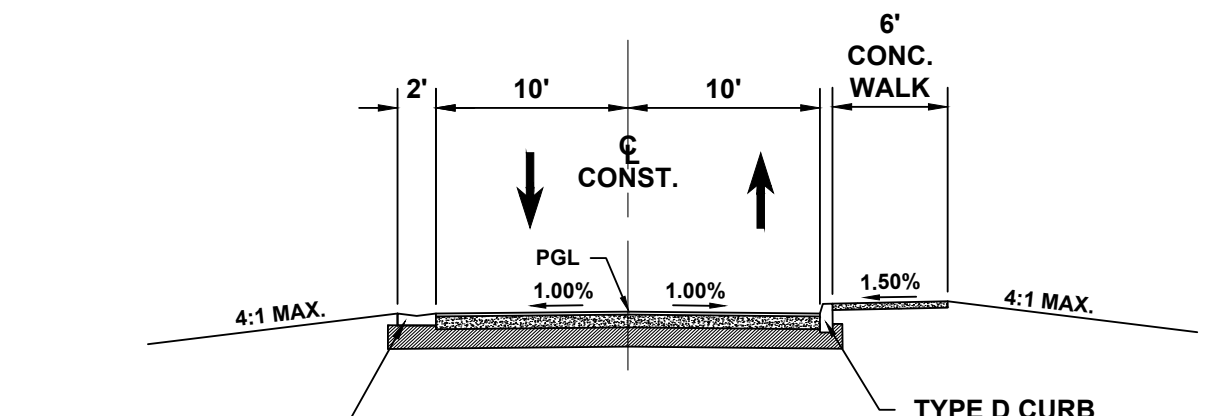
**ENTRANCE MAIN ROAD
STA: 11+50 TO 12+50**



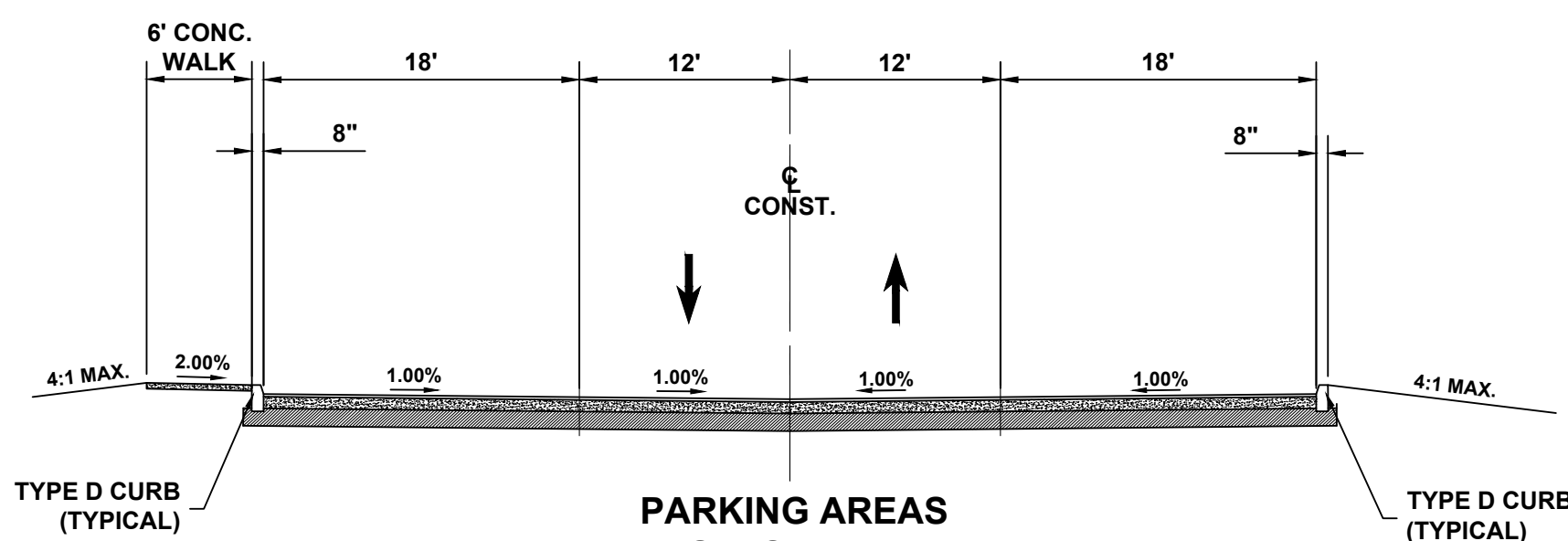
**MAIN ROAD
STA: 12+50 TO 15+42
19+25 TO 20+55**



**MAIN ROAD
STA: 15+42 TO 19+25**



**MAIN ROAD
STA: 20+55 TO 23+70**



**PARKING AREAS
BEGIN STA. 23+31**

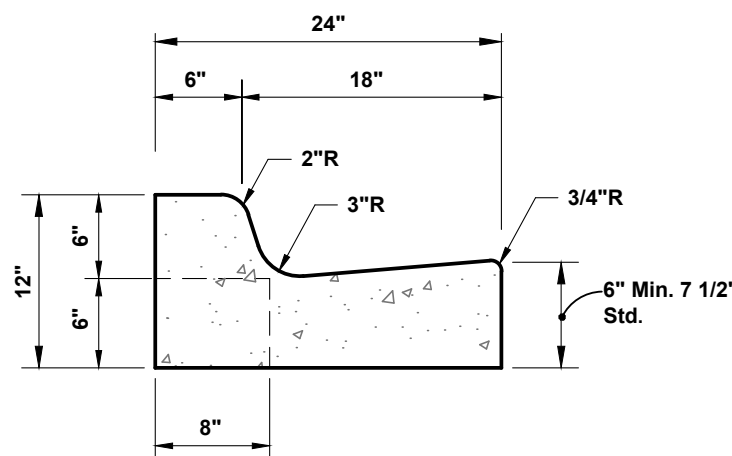
TYPICAL SECTIONS

LOCAL RESIDENTIAL (SN-3.0 MIN.)

MIN. E.O.P. ELEVATION > PEAK STAGE OF 10-YR / 24-HR STORM EVENT

- SURFACE COURSE: 1 1/2" TYPE SP-9.5 ASPHALTIC CONCRETE
- BASE COURSE: OPTIONAL BASE GROUP 6 PER FDOT FLEXIBLE PAVEMENT DESIGN MANUAL TABLE 5.6
- SUBGRADE: 12" COMPACTED OR STABILIZED SUBGRADE (LBR-40)

PER MARTIN COUNTY ENGINEERING STANDARD DETAIL R-10 SEE SHEET 22

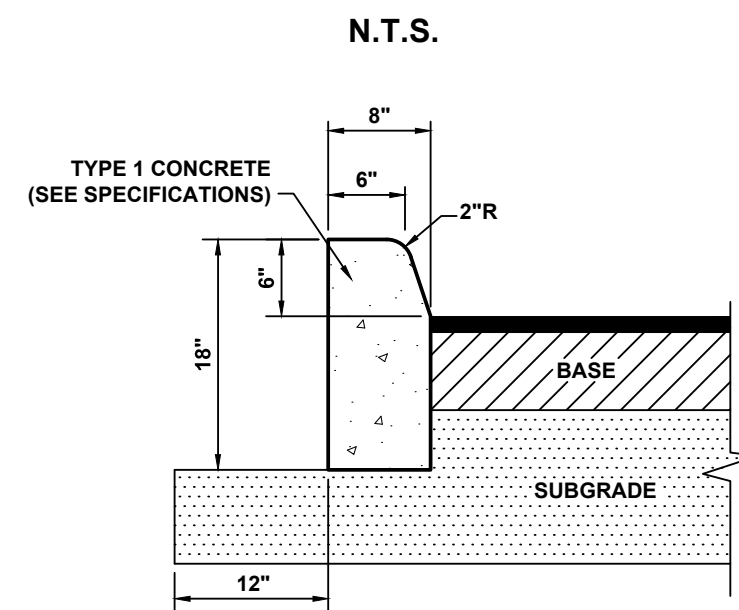


SECTION VIEW

NOTES:

- SAW CUT CONTRACTION JOINTS ON 10' CENTERS MAX. WITHIN 48 HOURS AFTER POURING CURB.
- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 520 AND FDOT ROADWAY & TRAFFIC DESIGN STANDARDS
- WHEN USED ON HIGH SIDE OF ROAD, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

TYPE F CURB & GUTTER

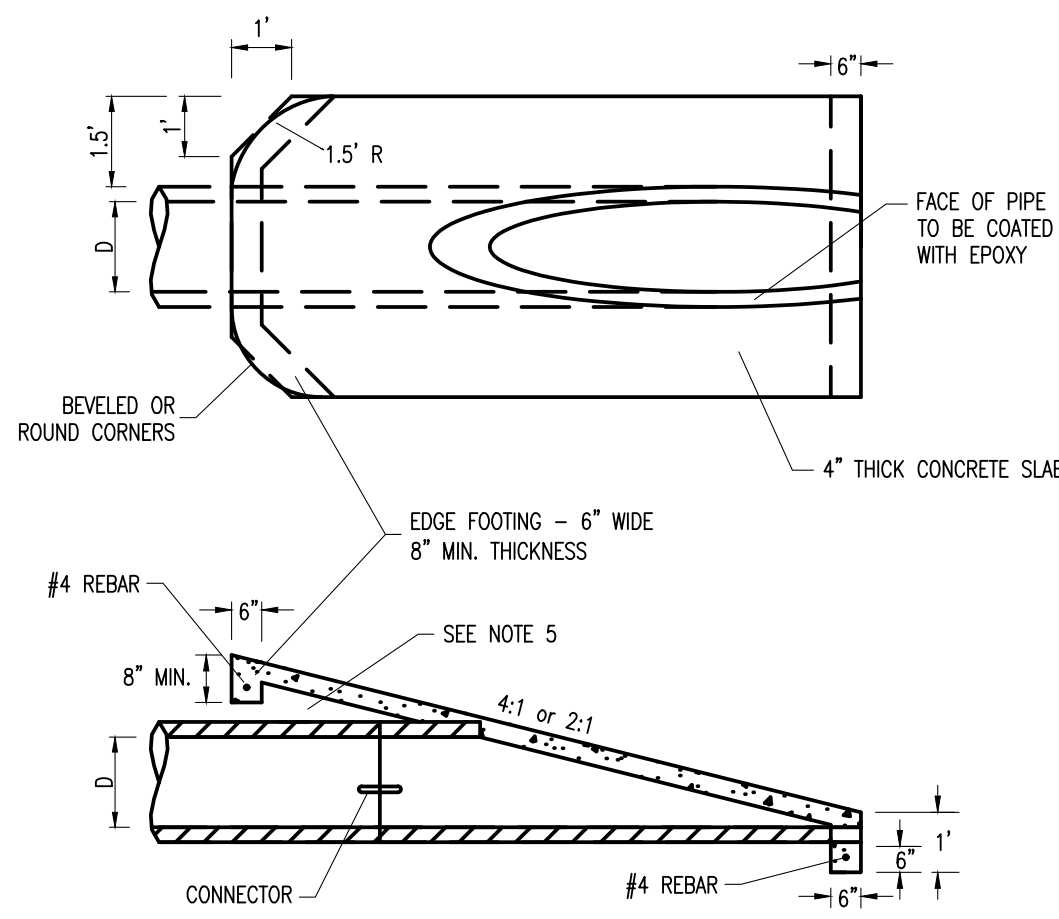


SECTION VIEW

NOTES:

- SAW CUT CONTRACTION JOINTS ON 10' CENTERS MAX. WITHIN 48 HOURS AFTER POURING CURB.
- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 520 AND FDOT ROADWAY & TRAFFIC DESIGN STANDARDS

TYPE "D" CURB



NOTES:

- SLAB CONCRETE SHALL BE STRUCTURAL 3000 PSI
- SLAB SHALL CONSIST OF W/6-W/1.4 THERMAL REINFORCEMENT TIED INTO BOTTOM FOOTER OR FIBERMESH
- TOP AND BOTTOM EDGES SHALL HAVE 6" WIDE THICKENED FOOTER PER SPECIFIED DIMENSIONS WITH #4 REBAR
- THE MITRED/CUT FACE OF THE PIPE SHALL BE COATED WITH A HIGH-BUILD, PROTECTIVE, SOLVENT-FREE, COLORED EPOXY COATING (Sika Sikagard 62 EPOXY COATING OR EQUIVALENT APPROVED BY THE COUNTY ENGINEER).
- TOP EDGE FOOTING SHALL BE A MINIMUM OF 8" THICK WITH #4 REBAR IN BOTTOM 4" OF FOOTING. THE CAVITY BETWEEN PIPE AND SLAB/FOOTING SHALL BE FILLED WITH CLEAN BACKFILL, COMPACTED TO A MINIMUM 100% DENSITY AS DETERMINED BY AASHTO T-180, METHOD "C". WHEN BOTTOM OF 8" EDGE FOOTING IS ON PIPE, FILL CAVITY BETWEEN PIPE AND SLAB/FOOTING WITH CONCRETE.



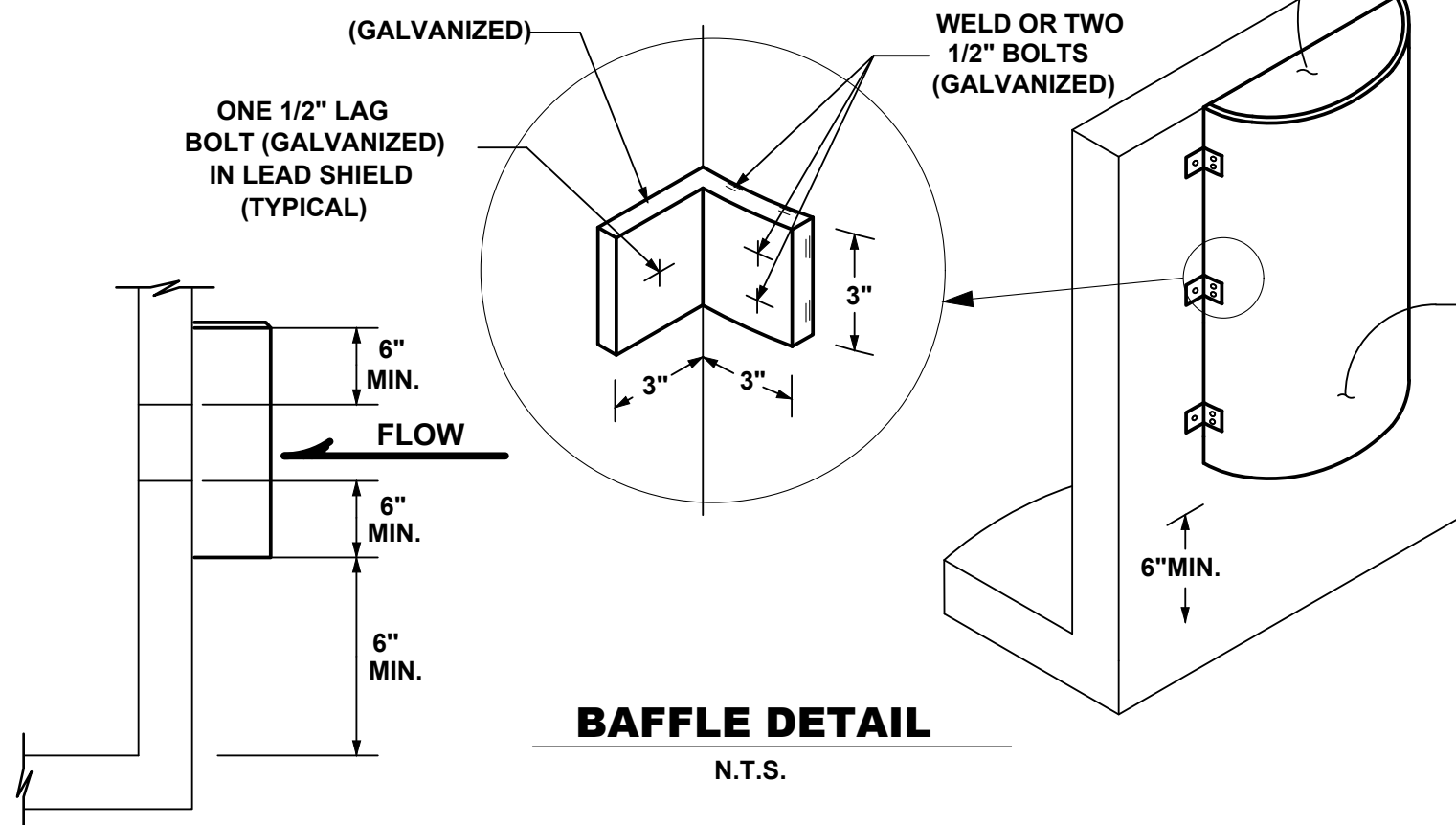
MARTIN COUNTY ENGINEERING - STANDARD DETAILS

MITERED END SECTION

DETAIL

R-35

DATE: 12/03/19

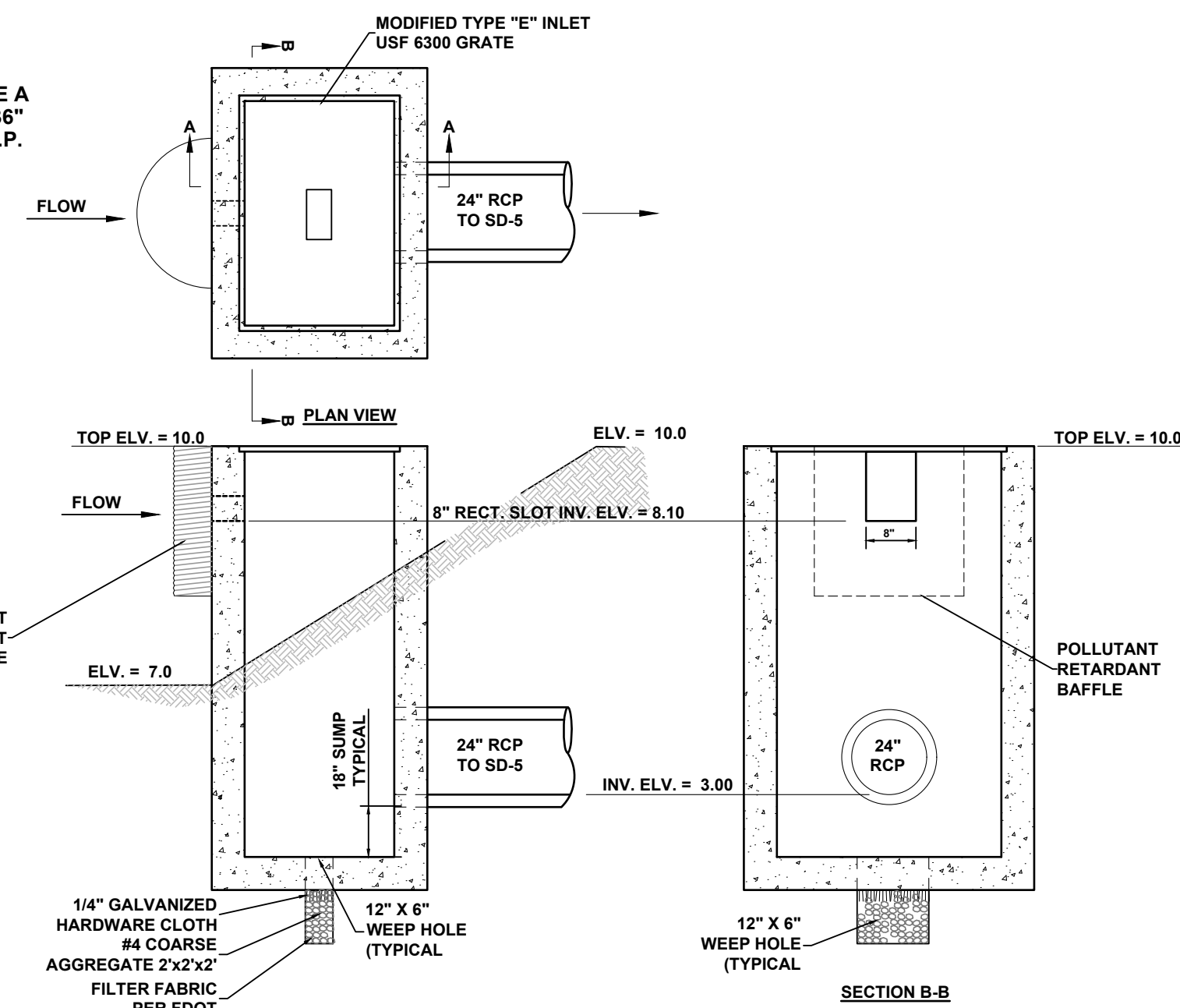


BAFFLE DETAIL

N.T.S.

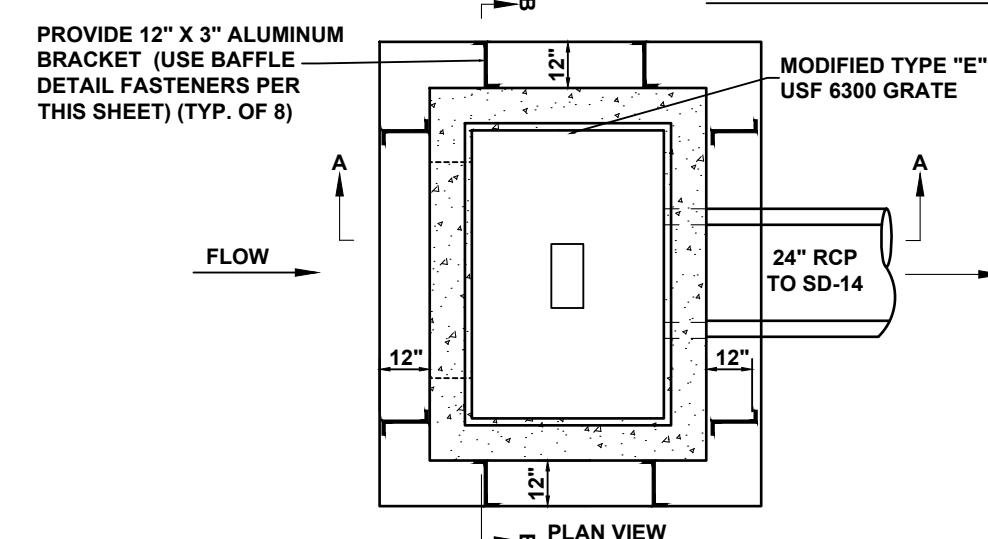
BAFFLE TO BE OPEN AT THE TOP TO ALLOW FOR DEBRIS REMOVAL

BAFFLE TO BE A SECTION OF 36" LONG 36" C.A.P. CUT IN HALF



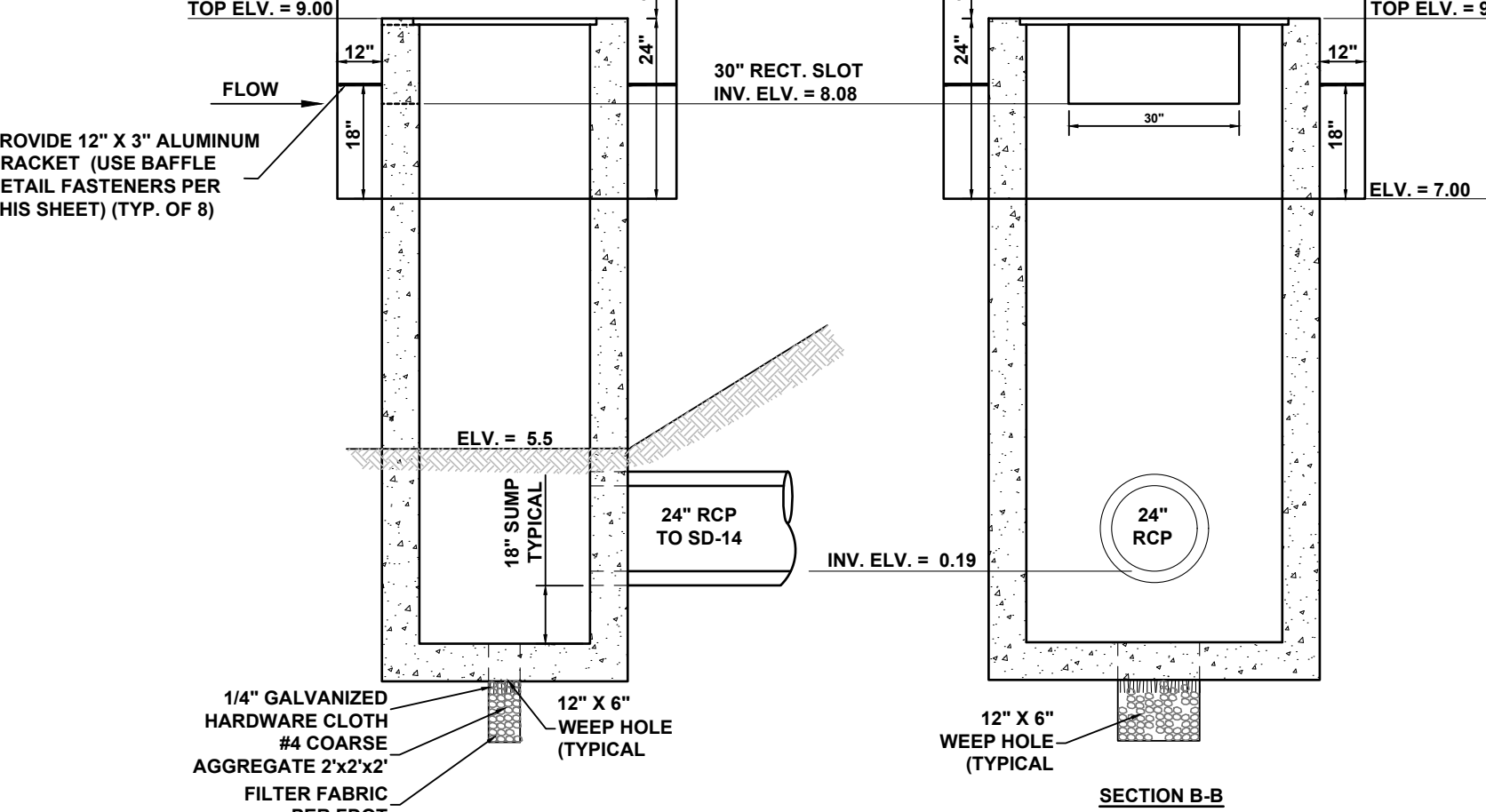
SECTION A-A

CS-1 CONTROL STRUCTURE



SECTION A-A

CS-2 CONTROL STRUCTURE



SECTION A-A

CS-2 CONTROL STRUCTURE

NOTE: CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR BLADE SKIMMER MOUNTING BRACKETS & HARDWARE. SKIMMER CAN BE 2" THICK ALUMINUM OR FIBER GLASS TO THE DIMENSION SHOWN



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 5'
VERT. SCALE:

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

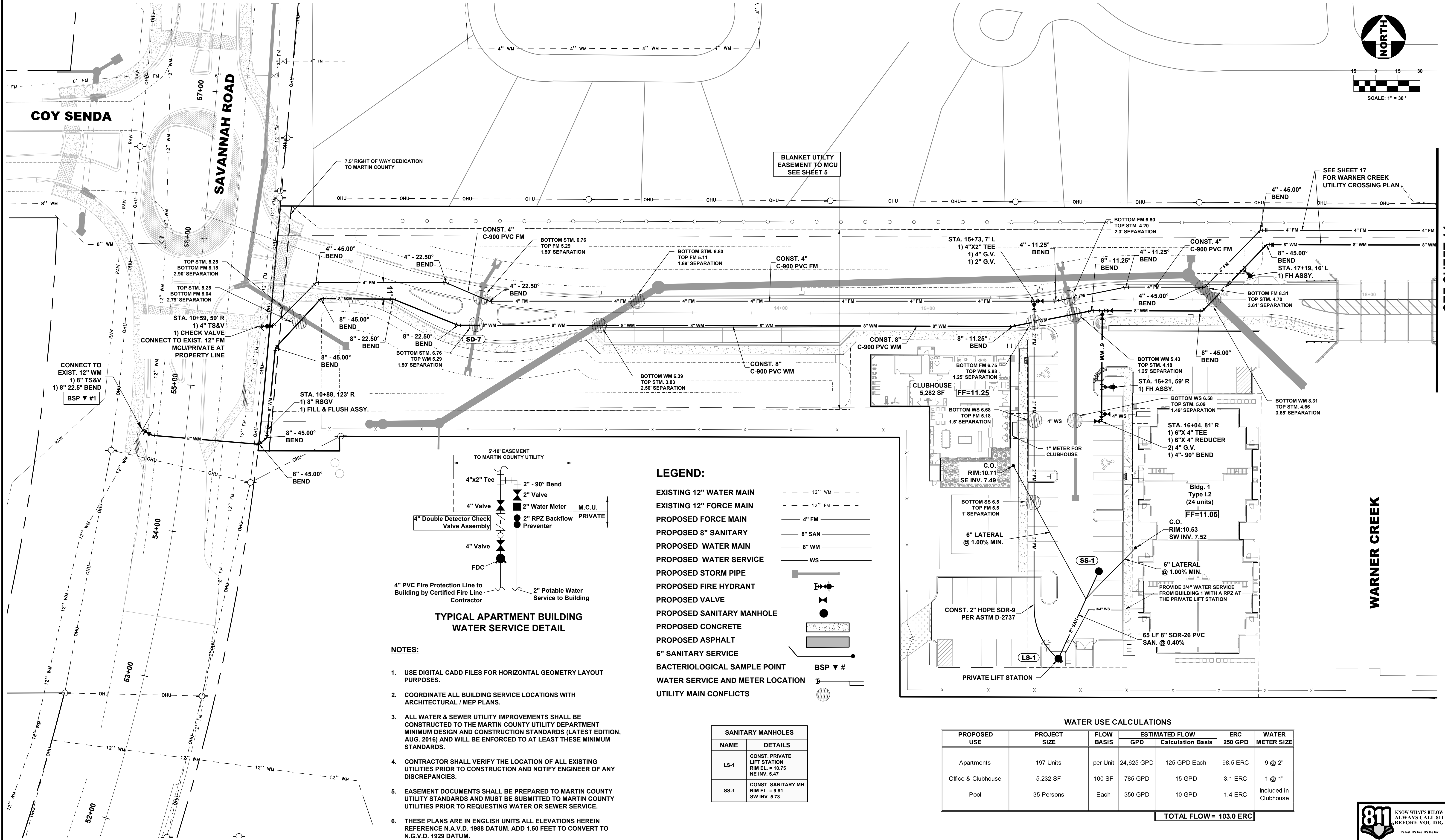
TYPICAL SECTIONS AND CONTROL STRUCTURES

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

1329.2 NOTES - DETAILS
CADD FILE:

SHEET IDENTIFICATION
JOB No.: 1329.2

SHEET
12 OF 28



CAPTEC
Engineering, Inc.
Civil Engineering Professionals

301 N.W. Flagler Ave
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Engineering Business
No. EB-0007657

DATE: 03-27-2020

DRAWN BY: MDB
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CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 30'
VERT. SCALE:

SCALE VERIFICATION

0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
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THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

UTILITY - PLAN VIEW

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

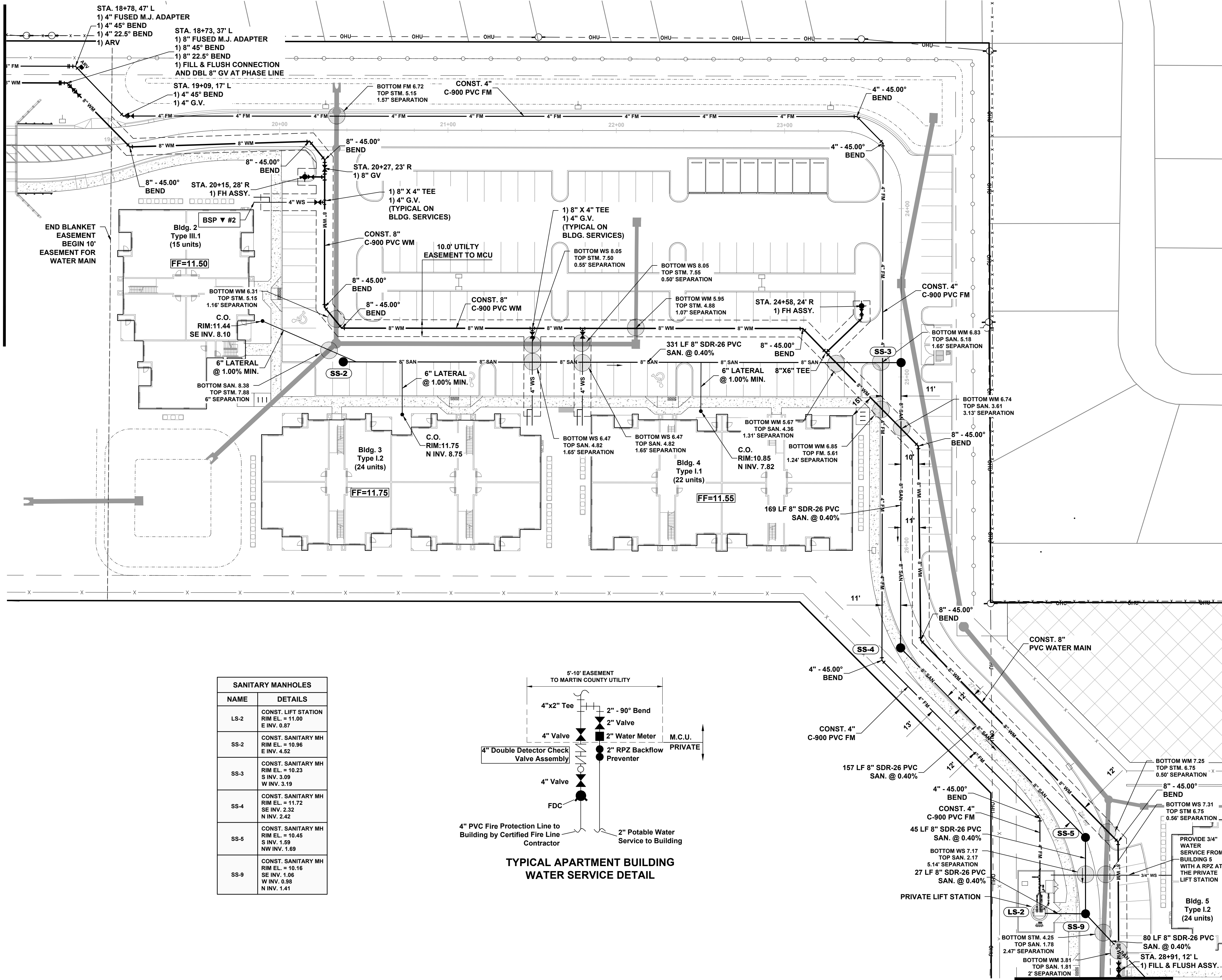
1329.2 UTILITY
CADD FILE:

SHEET IDENTIFICATION
JOB No.: 1329.2

SHEET
13 OF 28



SEE SHEET 13
SEE SHEET 17 FOR BRIDGE CROSSING



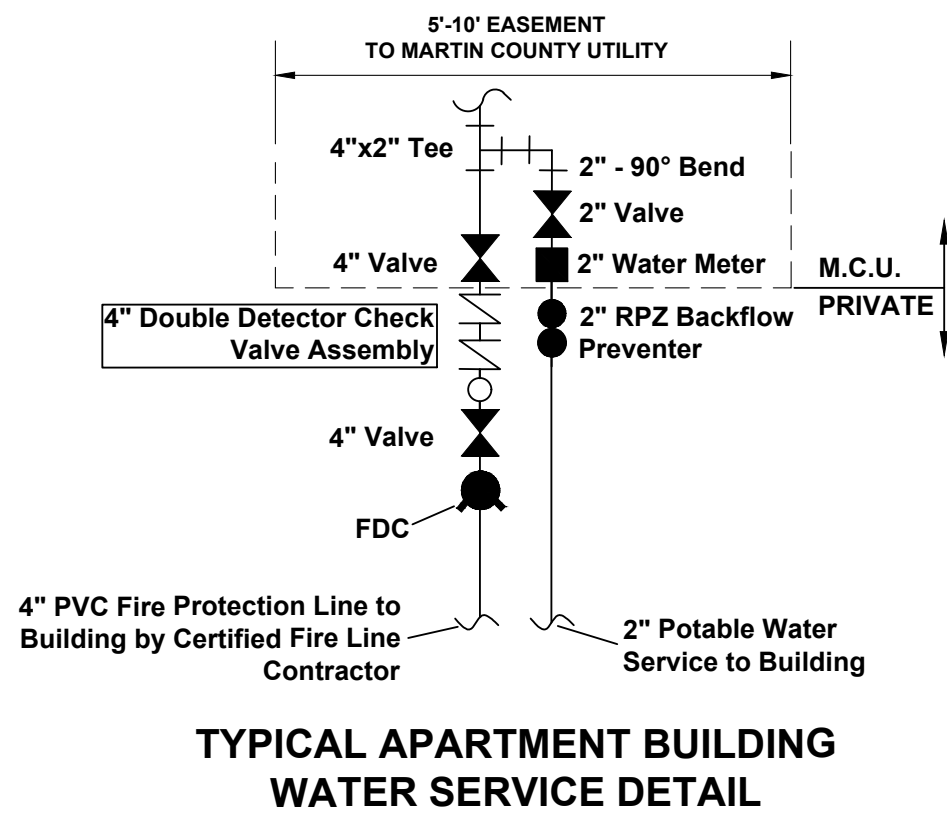
LEGEND:

- EXISTING 12" WATER MAIN --- 12" WM ---
EXISTING 12" FORCE MAIN --- 12" FM ---
PROPOSED FORCE MAIN --- 4" FM ---
PROPOSED 8" SANITARY --- 8" SAN ---
PROPOSED WATER MAIN --- 8" WM ---
PROPOSED WATER SERVICE --- WS ---
PROPOSED STORM PIPE ---
PROPOSED FIRE HYDRANT ---
PROPOSED VALVE ---
PROPOSED SANITARY MANHOLE ---
PROPOSED CONCRETE ---
PROPOSED ASPHALT ---
6" SANITARY SERVICE ---
BACTERIOLOGICAL SAMPLE POINT --- BSP # ---
WATER SERVICE AND METER LOCATION ---
UTILITY MAIN CONFLICTS ---

NOTES:

- USE DIGITAL CADD FILES FOR HORIZONTAL GEOMETRY LAYOUT PURPOSES.
- COORDINATE ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL / MEP PLANS.
- ALL WATER & SEWER UTILITY IMPROVEMENTS SHALL BE CONSTRUCTED TO THE MARTIN COUNTY UTILITY DEPARTMENT MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION, AUG. 2016) AND WILL BE ENFORCED TO AT LEAST THESE MINIMUM STANDARDS.
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- EASEMENT DOCUMENTS SHALL BE PREPARED TO MARTIN COUNTY UTILITY STANDARDS AND MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO REQUESTING WATER OR SEWER SERVICE.
- THESE PLANS ARE IN ENGLISH UNITS ALL ELEVATIONS HEREIN REFERENCE N.A.V.D. 1988 DATUM. ADD 1.50 FEET TO CONVERT TO N.G.V.D. 1929 DATUM.

SANITARY MANHOLES	
NAME	DETAILS
LS-2	CONST. LIFT STATION RIM EL. = 11.00 E INV. 0.87
SS-2	CONST. SANITARY MH RIM EL. = 10.96 E INV. 4.52
SS-3	CONST. SANITARY MH RIM EL. = 10.23 S INV. 3.09 W INV. 3.19
SS-4	CONST. SANITARY MH RIM EL. = 11.72 SE INV. 2.32 N INV. 2.42
SS-5	CONST. SANITARY MH RIM EL. = 10.45 S INV. 1.59 NW INV. 1.69
SS-9	CONST. SANITARY MH RIM EL. = 10.16 SE INV. 1.06 W INV. 0.98 N INV. 1.41



SEE SHEET 15

SEE SHEET 15



301 N.W. Flagler Ave
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Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 30'
VERT. SCALE:

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MOB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

UTILITY - PLAN VIEW

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

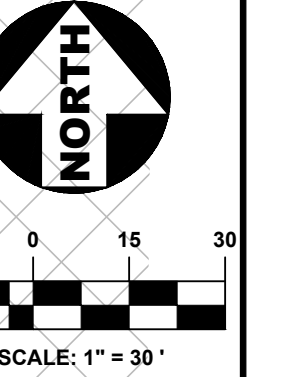
SHEET IDENTIFICATION
JOB No.: **1329.2**

SHEET

SHEET **14** OF **28**

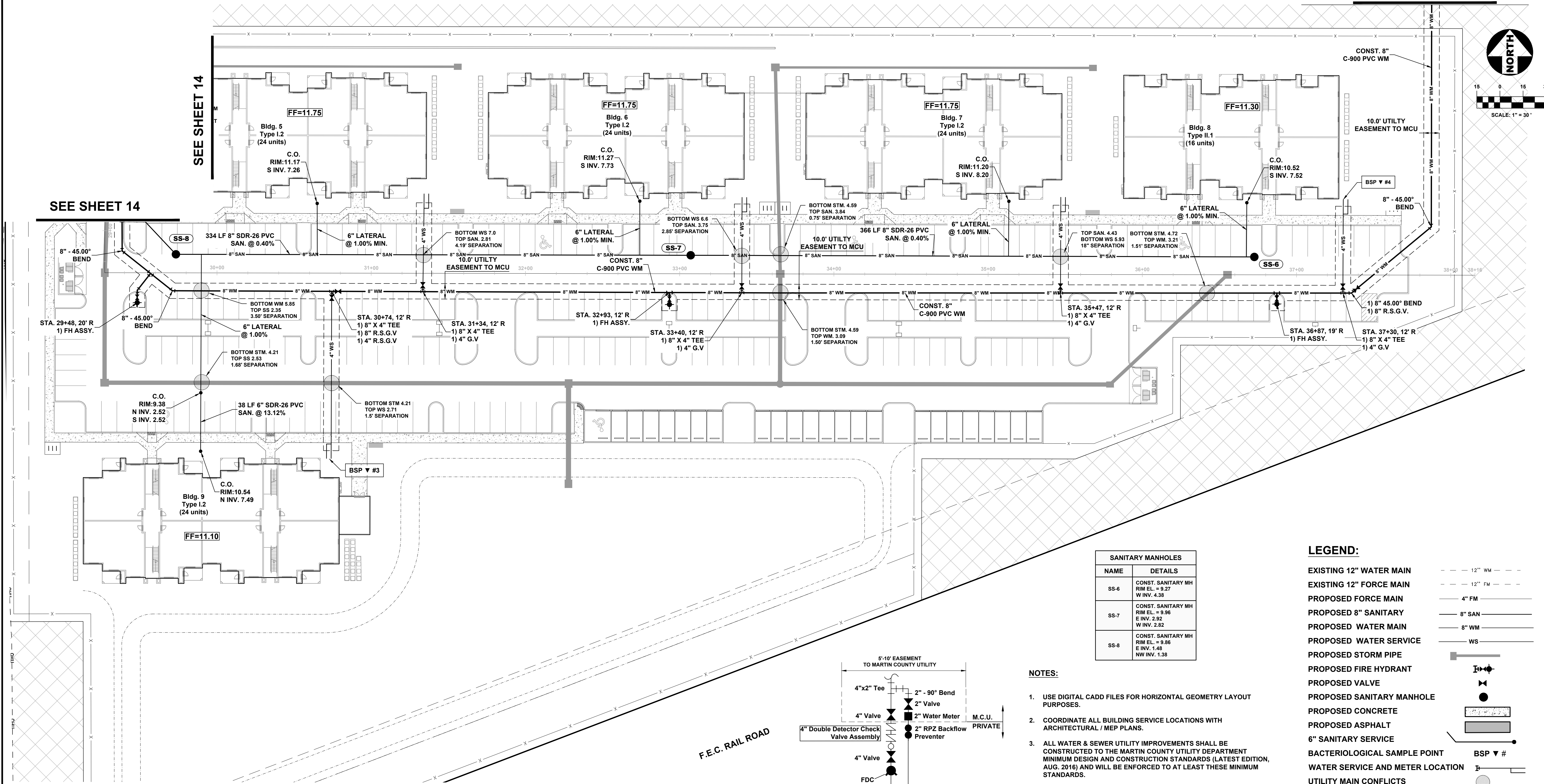
1329.2 UTILITY
CADD FILE:

SEE SHEET 16



SEE SHEET 14

SEE SHEET 14



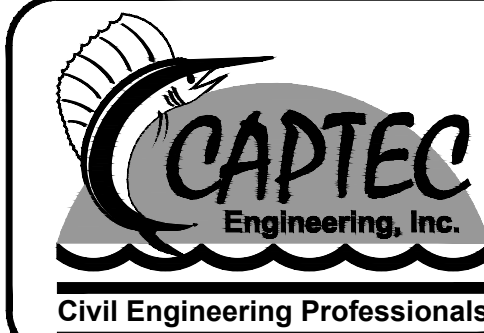
SANITARY MANHOLES	
NAME	DETAILS
SS-6	CONST. SANITARY MH RIM EL. = 9.27 W INV. 4.38
SS-7	CONST. SANITARY MH RIM EL. = 9.96 E INV. 2.92 W INV. 2.82
SS-8	CONST. SANITARY MH RIM EL. = 9.86 E INV. 1.48 NW INV. 1.38

NOTES:

- USE DIGITAL CADD FILES FOR HORIZONTAL GEOMETRY LAYOUT PURPOSES.
- COORDINATE ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL / MEP PLANS.
- ALL WATER & SEWER UTILITY IMPROVEMENTS SHALL BE CONSTRUCTED TO THE MARTIN COUNTY UTILITY DEPARTMENT MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION, AUG. 2016) AND WILL BE ENFORCED TO AT LEAST THESE MINIMUM STANDARDS.
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- EASEMENT DOCUMENTS SHALL BE PREPARED TO MARTIN COUNTY UTILITY STANDARDS AND MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO REQUESTING WATER OR SEWER SERVICE.
- THESE PLANS ARE IN ENGLISH UNITS ALL ELEVATIONS HEREIN REFERENCE N.A.V.D. 1988 DATUM. ADD 1.50 FEET TO CONVERT TO N.G.V.D. 1929 DATUM.

LEGEND:

EXISTING 12" WATER MAIN	--- 12" WM ---
EXISTING 12" FORCE MAIN	--- 12" FM ---
PROPOSED FORCE MAIN	--- 4" FM ---
PROPOSED 8" SANITARY	--- 8" SAN ---
PROPOSED WATER MAIN	--- 8" WM ---
PROPOSED WATER SERVICE	--- WS ---
PROPOSED STORM PIPE	--- 4" ST ---
PROPOSED FIRE HYDRANT	--- FH ---
PROPOSED VALVE	--- V ---
PROPOSED SANITARY MANHOLE	--- SM ---
PROPOSED CONCRETE	--- C ---
PROPOSED ASPHALT	--- A ---
6" SANITARY SERVICE	--- 6" SS ---
BACTERIOLOGICAL SAMPLE POINT	BSP #
WATER SERVICE AND METER LOCATION	--- WSM ---
UTILITY MAIN CONFLICTS	--- X ---



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4344
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 30'
VERT. SCALE:

SCALE
VERIFICATION
0 1
SOLID BAR IS EQUAL
TO ONE INCH ON
ORIGINAL DRAWING.
ADJUST ALL SCALED
DIMENSIONS
ACCORDINGLY

REVISIONS	
NO.	DESCRIPTION
1	MDB PERMIT PLANS
DATE	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

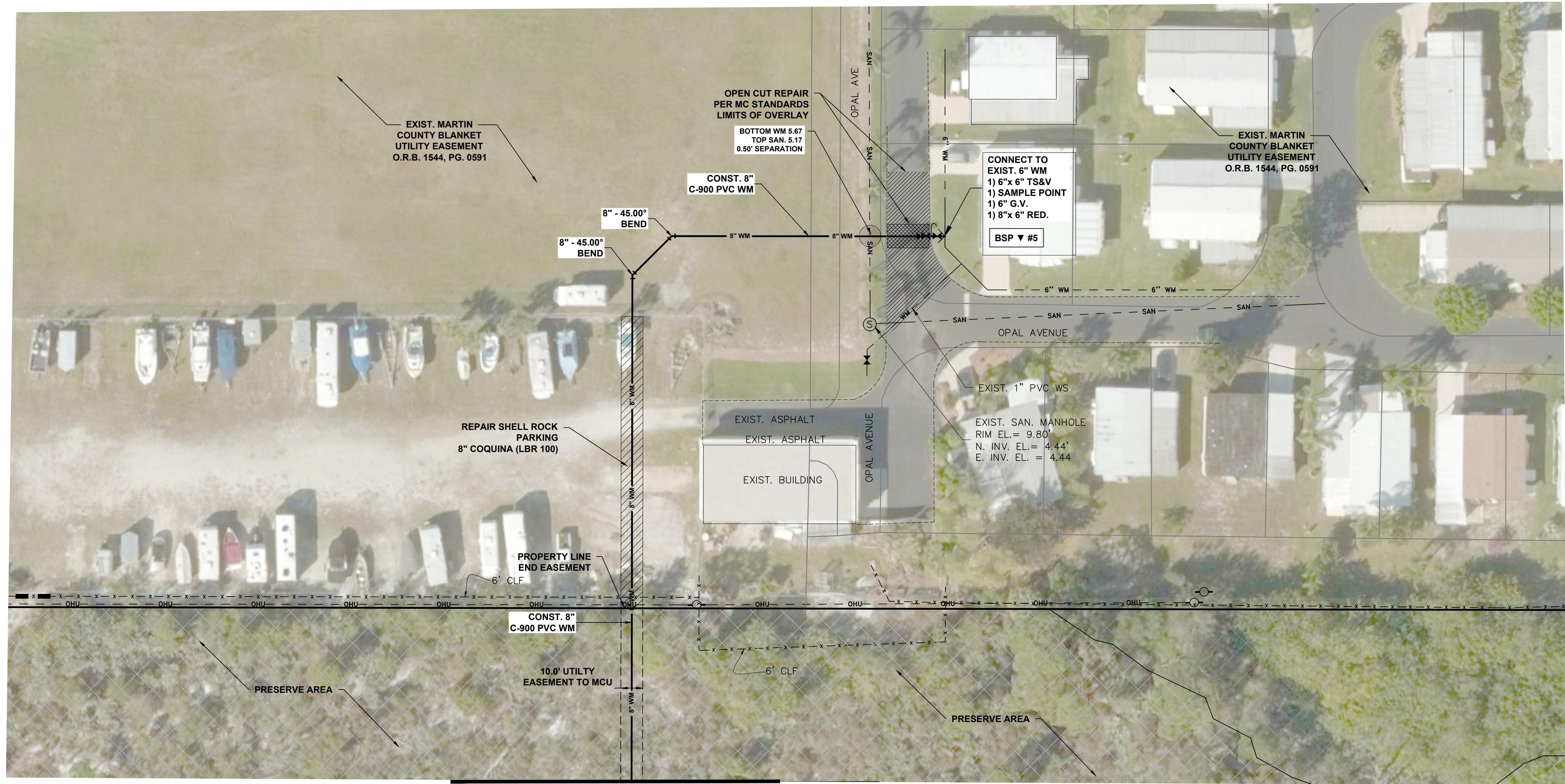
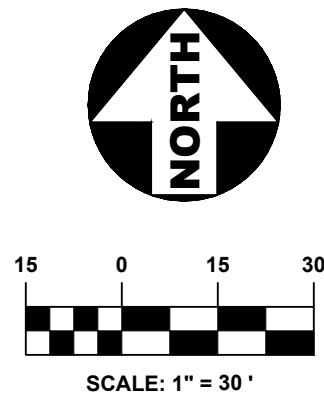
UTILITY - PLAN VIEW

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

1329.2 UTILITY
CADD FILE:

SHEET
IDENTIFICATION
JOB No.: 1329.2

SHEET
15 OF 28

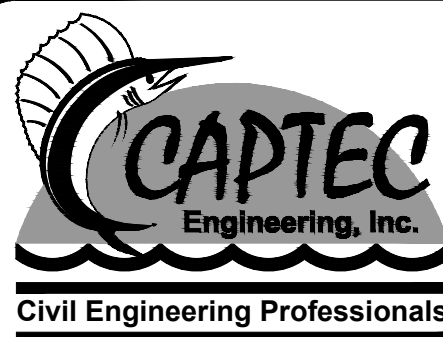


LEGEND:

EXISTING 12" WATER MAIN	--- 12" WM ---
EXISTING 12" FORCE MAIN	--- 12" FM ---
PROPOSED FORCE MAIN	--- 4" FM ---
PROPOSED 8" SANITARY	--- 8" SAN ---
PROPOSED WATER MAIN	--- 8" WM ---
PROPOSED WATER SERVICE	--- WS ---
PROPOSED STORM PIPE	---
PROPOSED FIRE HYDRANT	⊕
PROPOSED VALVE	⊙
PROPOSED SANITARY MANHOLE	⊙
PROPOSED CONCRETE	▨
PROPOSED ASPHALT	▩
6" SANITARY SERVICE	---
BACTERIOLOGICAL SAMPLE POINT	BSP ▼ #
WATER SERVICE AND METER LOCATION	⊕
UTILITY MAIN CONFLICTS	⊙

NOTES:

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Engineering Business
No. EB-0007657

DATE:	03-27-2020
DRAWN BY:	MDB
DESIGNED BY:	SPM
CHECKED BY:	JWC
PROJECT No.:	1329.2
HORZ. SCALE:	1" = 30'
VERT. SCALE:	

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

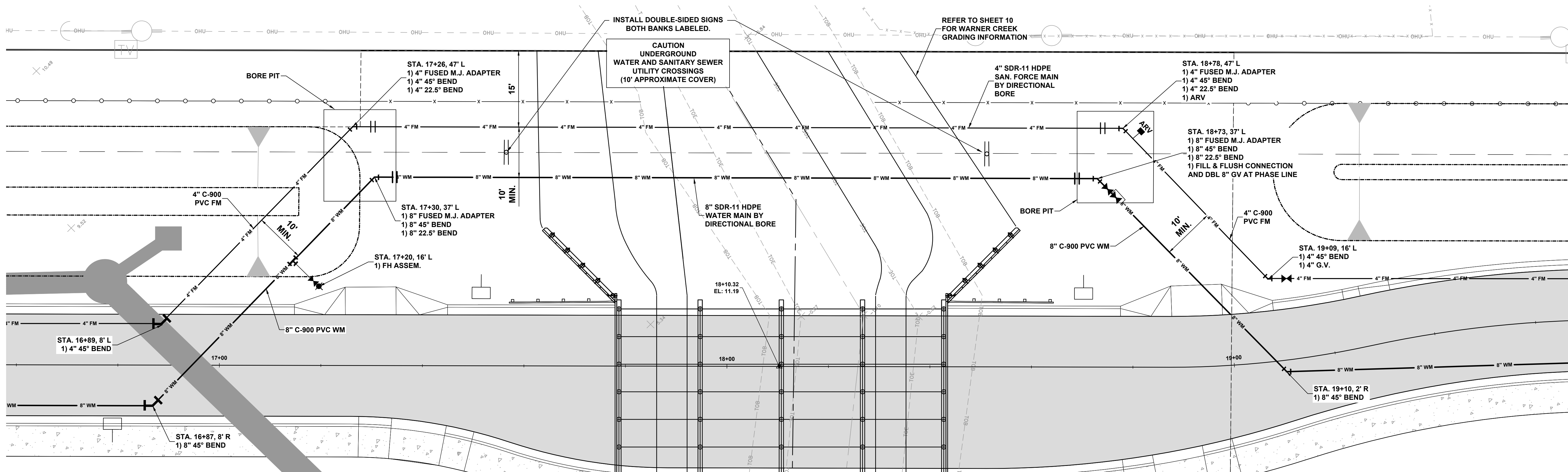
PINELAKE VILLAGE WATER MAIN CONNECTION

Joseph W. Capra
301 N.W. Flagler Ave.
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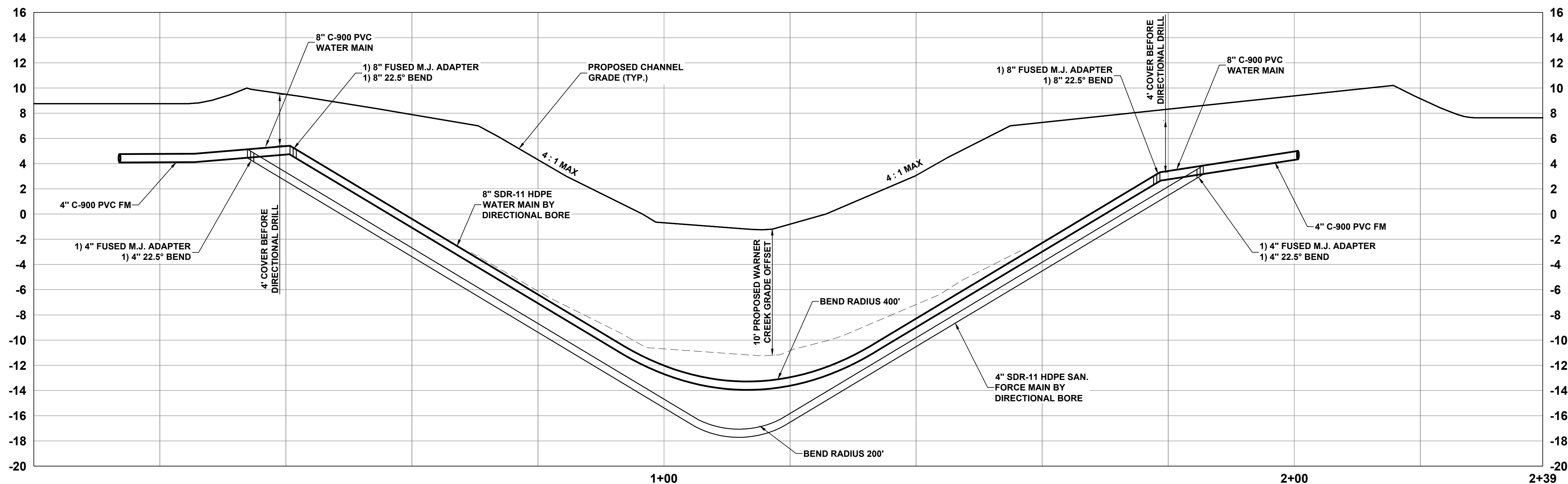
1329.2 UTILITY
CADD FILE:

SHEET IDENTIFICATION
JOB No.: **1329.2**

SHEET
SHEET **16** OF **28**



PLAN
1" = 10'



PROFILE
HORIZONTAL 1" = 10'
VERTICAL 1" = 5'



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DATE: 03-27-2020
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DESIGNED BY: SPM
CHECKED BY: JWC
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VERT. SCALE: 1" = 5'

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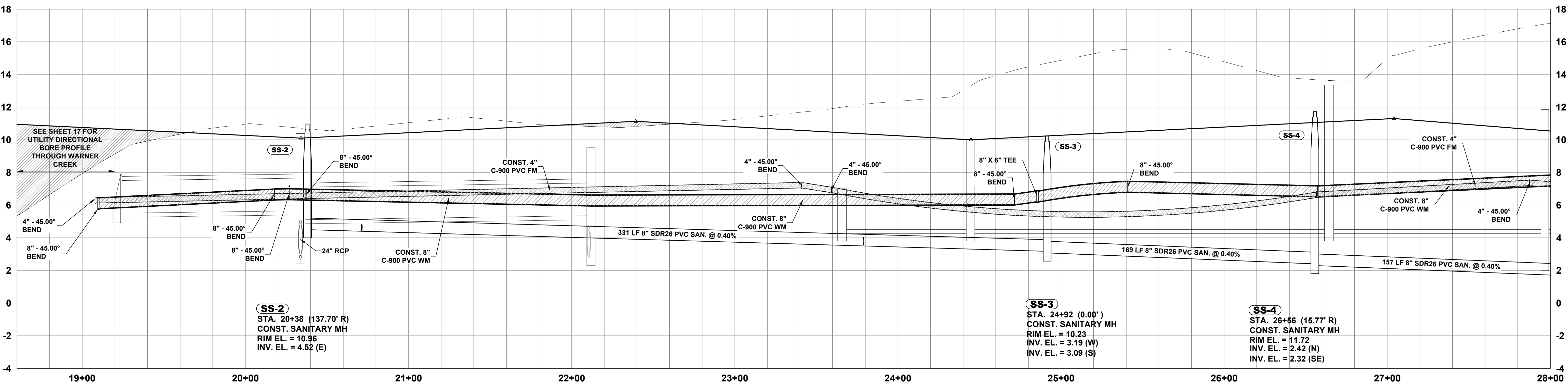
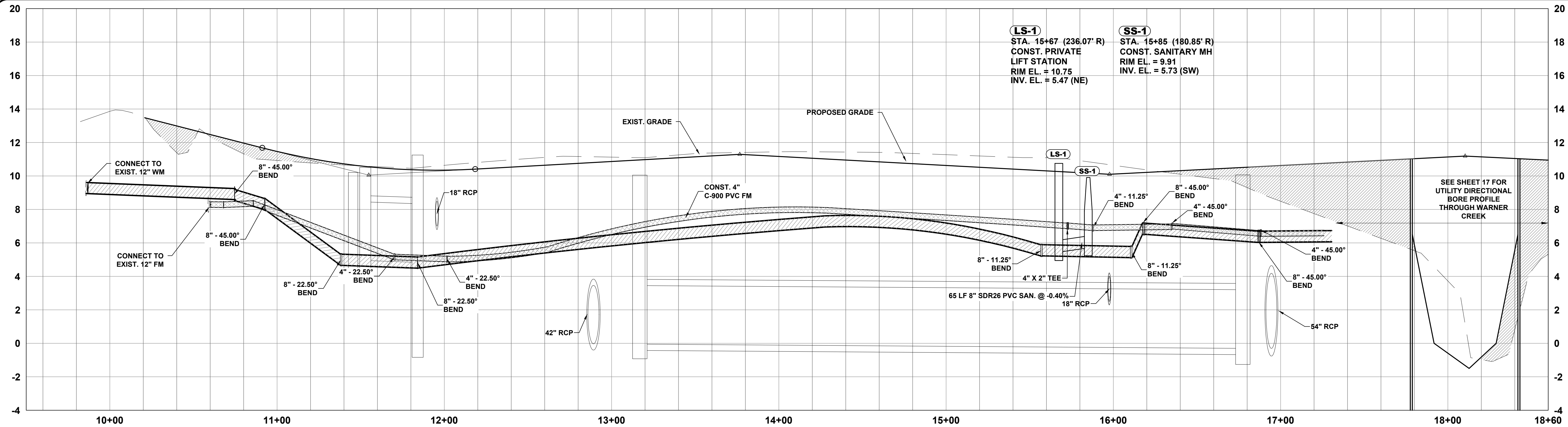
MARTIN COUNTY, FLORIDA

WARNER CREEK UTILITY CROSSING PLAN & PROFILE

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

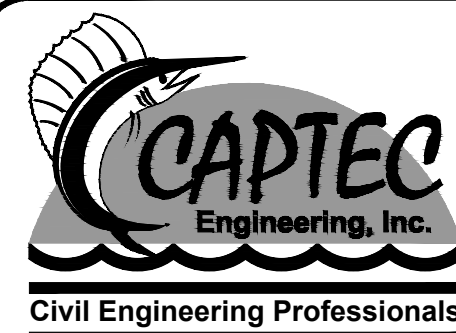
SHEET
IDENTIFICATION
JOB No.: 1329.2

SHEET
17 OF 28



NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO MARTIN COUNTY, SPWMD, FDEP AND FOOT STANDARD SPECS AND REQUIREMENTS WHICH EVER IS MORE STRINGENT.
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VERT. SCALE: 1" = 3'

SCALE VERIFICATION
0 1
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REVISIONS			
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THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

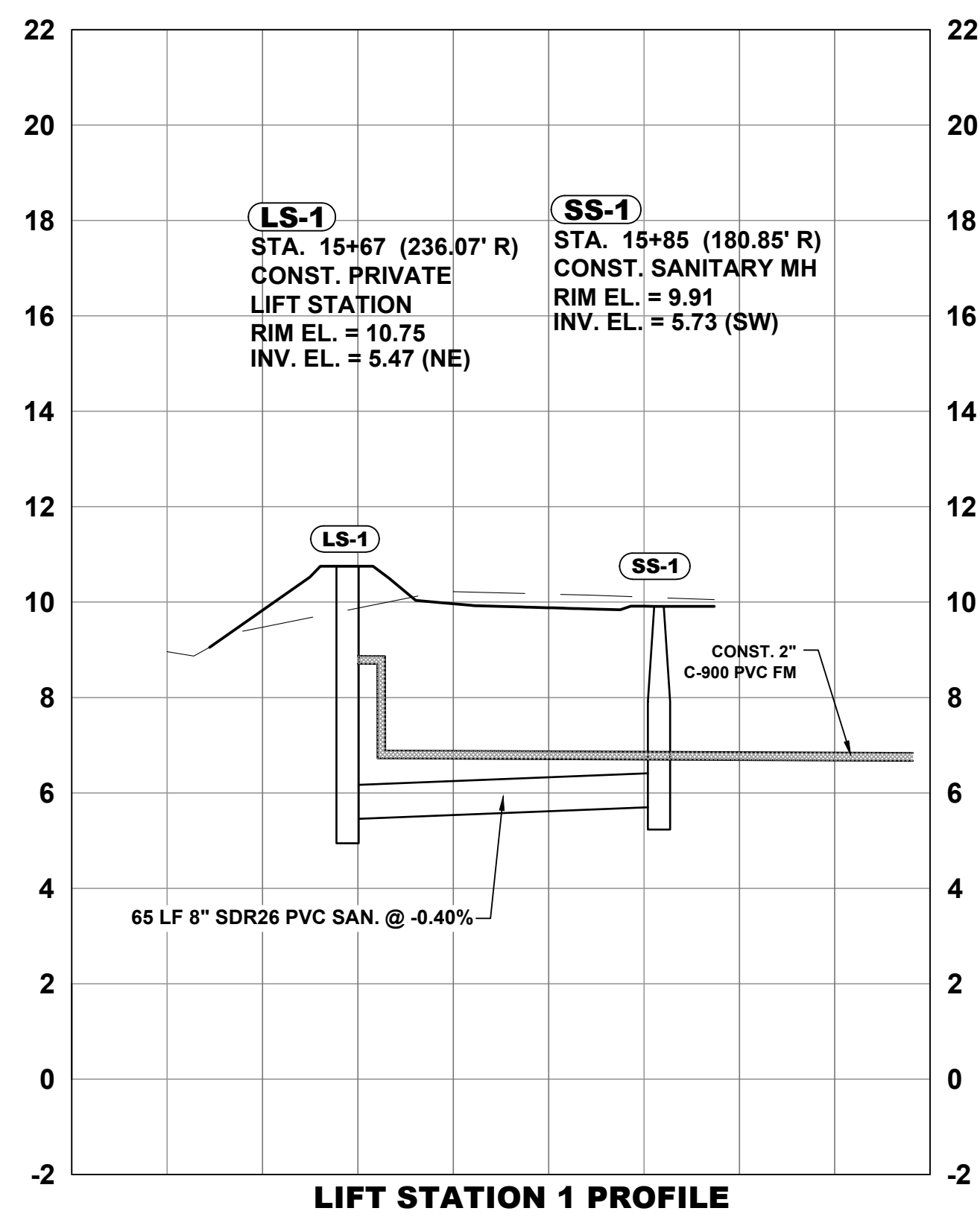
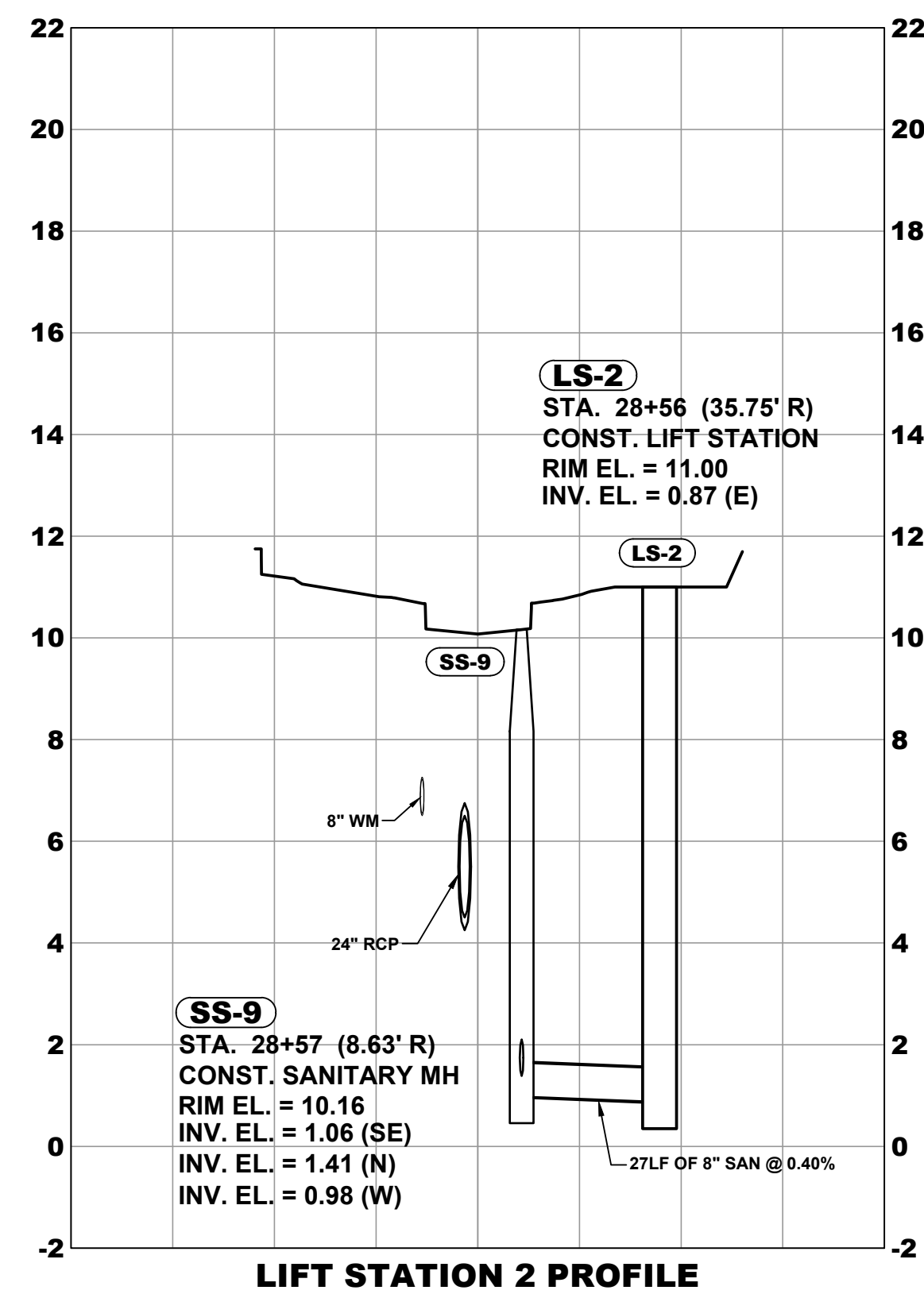
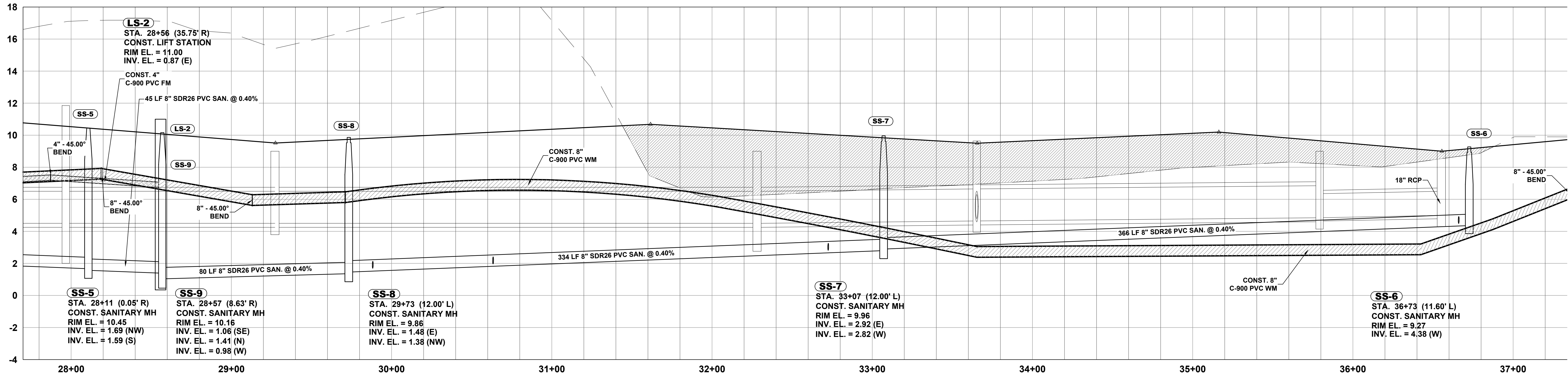
UTILITY PROFILE

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P.E. No. 37638

1329.2 UTILITY
CADD FILE:

SHEET IDENTIFICATION
JOB No.: **1329.2**

SHEET
SHEET **18** OF **28**



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THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

UTILITY PROFILE

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

1329.2 UTILITY
CADD FILE:

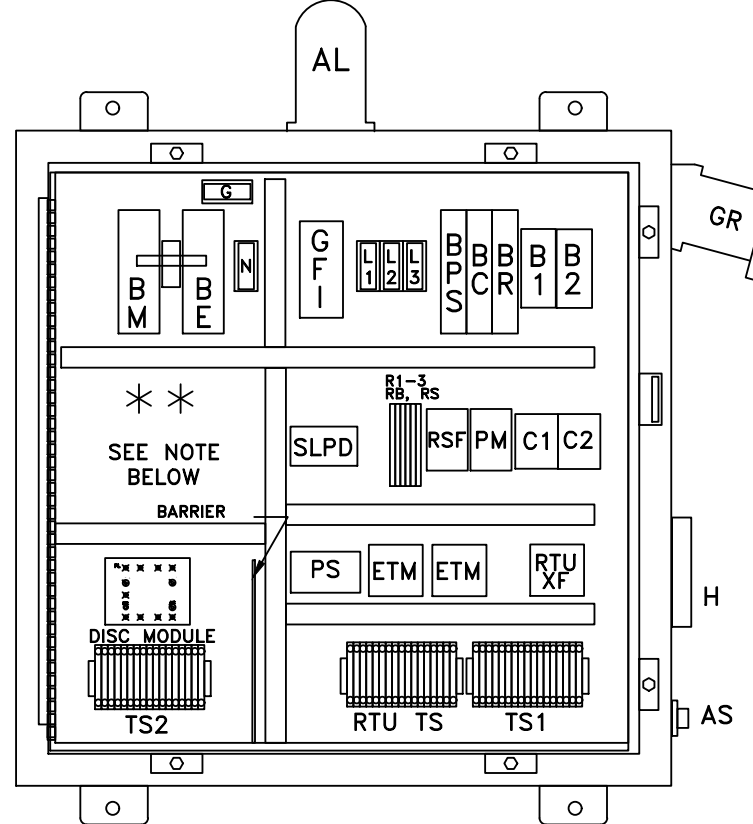
SHEET IDENTIFICATION
JOB No.: **1329.2**

SHEET
SHEET **19** OF **28**

CONTROL CENTER DESIGNED
& MANUFACTURED TO MEET
ALL D.E.P. REQUIREMENTS

MOPS CONTROL CENTER

SEE SCHEDULE FOR
ELECTRICAL SERVICE REQUIREMENTS



INTERIOR LAYOUT
(DOOR NOT SHOWN FOR CLARITY)

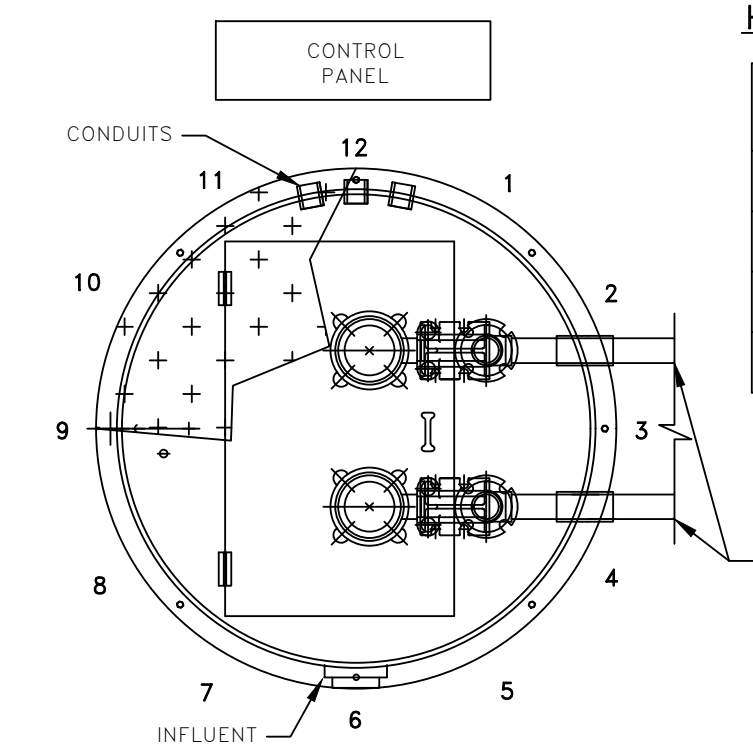
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NEU	120V	RTU	PUMP	MOTOR	MT1	MT2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

TS1 TERMINAL SCHEDULE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

TS2 TERMINAL SCHEDULE

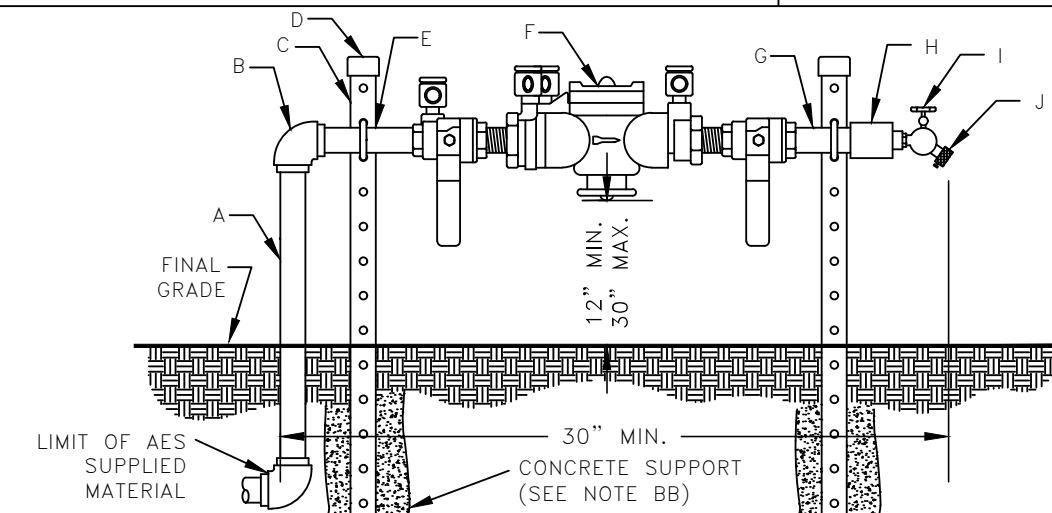
THIS SPACE AVAILABLE FOR CAPACITORS FOR SINGLE PHASE OR TRANSFORMER FOR 460V.



HUB AND INVERT LOCATION

ITEMS	CLOCK POSITION
DISCHARGE LINES	3:00
PRIMARY INVERT	6:00
SECONDARY INVERT	N/A
LOCATION OF CONTROL PANEL	12:00

NOTE: BACKFILL AROUND LIFT STATION FROM ANTI-FLOATATION RING UP TO FINISHED GRADE SHALL BE COMMON FILL COMPACTED IN 12-INCH MAX. LIFTS TO 98% DENSITY PER AASHTO T-180. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE WETWELL DURING COMPACTION.



MATERIALS

ITEM	QTY.	DESCRIPTION
A	1	3/4" x 24" S.S. NIPPLE
B	2	3/4" x 1" S.S. 90° ELBOW
C	2	1"x1"x40" S.S. SUPPORT BRACKET
D	2	SUPPORT BRACKET CAPS P/N 1156
E	2	3/4" S.S. PIPE BOLTS

MATERIALS

ITEM	QTY.	DESCRIPTION
F	1	3/4" APP. BACKFLOW PREVENTER
G	1	3/4" x 4" S.S. NIPPLE
H	1	3/4" x 3/4" S.S. COUPLING
I	1	3/4" BRONZE HOSE BIB
J	1	3/4" VACUUM BREAKER

DETAIL B

R.P.Z. BACKFLOW PREVENTER ASSEMBLY DETAIL

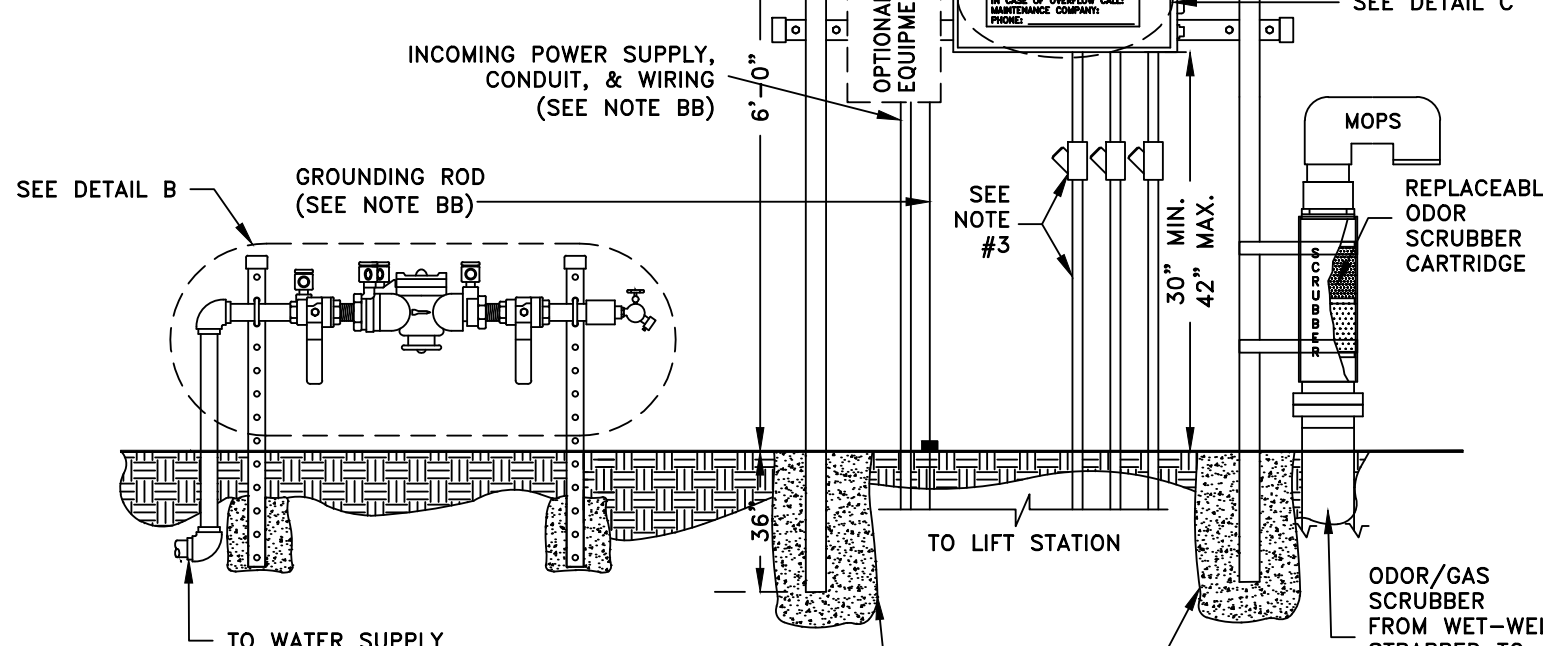
U.S.C. AND A.S.S.E. APPROVED

N.T.S.

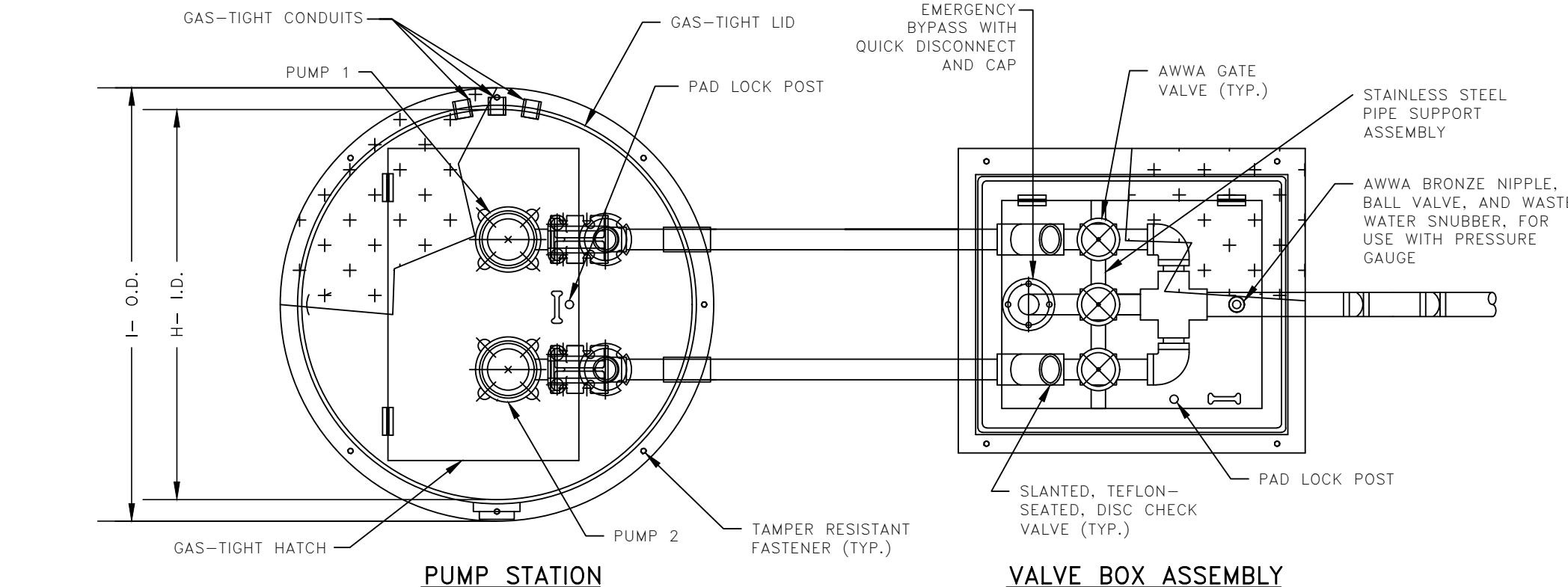
IN CASE OF EMERGENCY CALL
OWNER:
PHONE:
IN CASE OF OVERFLOW CALL
MAINTENANCE COMPANY:
PHONE:

DETAIL C

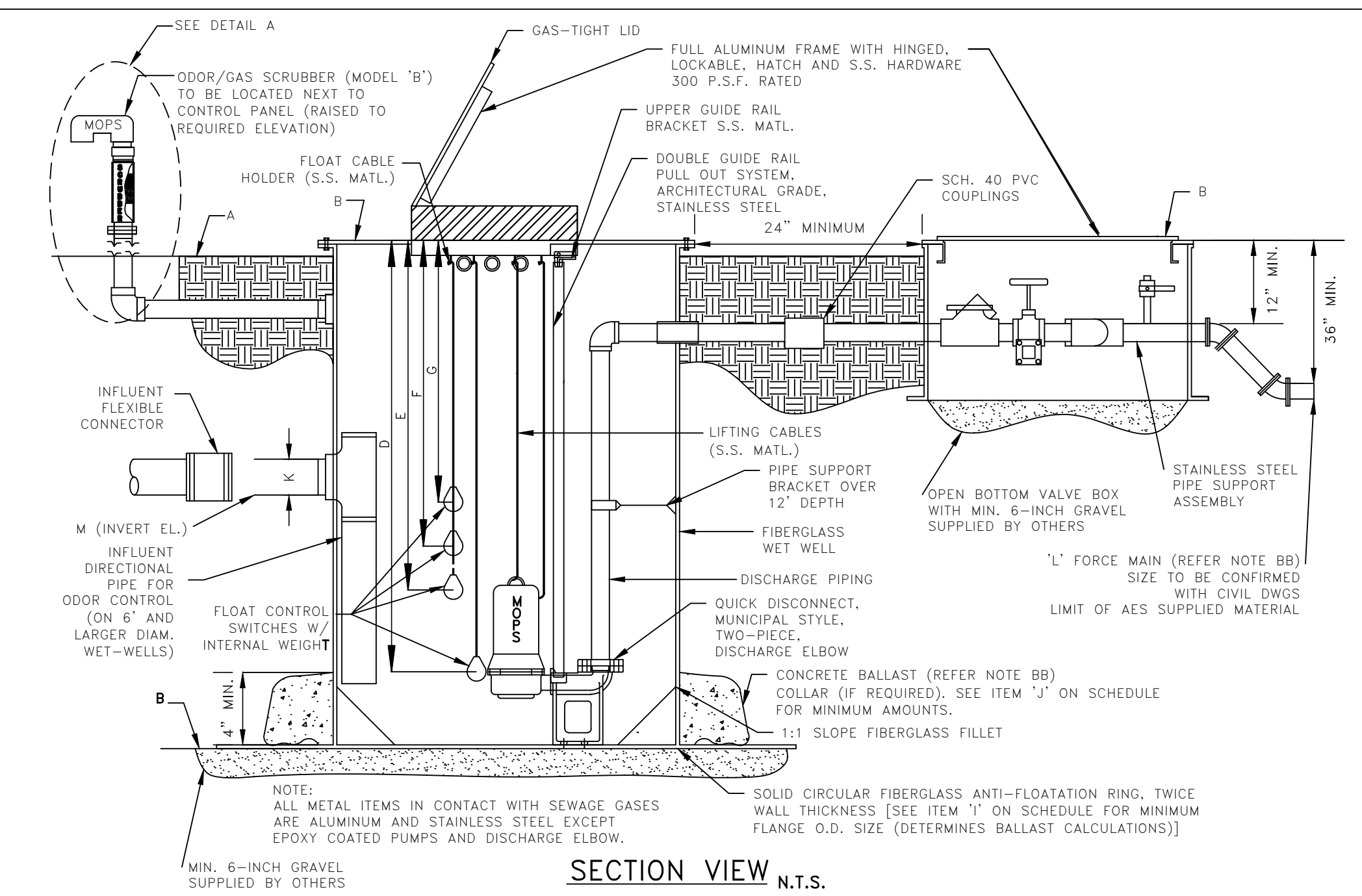
(SUPPLIED BY MAINT. COMPANY)



CONTROL CENTER ASSEMBLY AND INSTALLATION N.T.S.



TOP VIEW N.T.S.



SECTION VIEW N.T.S.

MOPS

MANUFACTURED ODORLESS PUMP STATION
ATLANTIC ENVIRONMENTAL SYSTEMS, INC.
LAKE WORTH, FL 33461
PH: (561) 547-8080 FAX: (561) 547-3999 ©2000

PRIVATE SERIES

THIS DRAWING AND THE DESIGN CONTAINED HEREIN IS PROPRIETARY AND IS AND SHALL REMAIN THE PROPERTY OF ATLANTIC ENVIRONMENTAL SYSTEMS, INC. THIS DRAWING AND DESIGN SHOULD BE USED ONLY FOR THE PURPOSE FOR WHICH IT IS INTENDED, AND ONLY WITH WRITTEN AUTHORIZATION FROM ATLANTIC ENVIRONMENTAL SYSTEMS, INC. ANY REPRODUCTION, IN WHOLE OR IN PART, MUST CLEARLY SHOW THE ATLANTIC ENVIRONMENTAL NAME AND ADDRESS IN THE REPRODUCTION.

MOPS PUMP STATION SCHEDULE

MOPS SERIES	ITEM DESCRIPTION
INITIAL DESIGN FLOW (G.P.M.)	20
INITIAL DESIGN HEAD (T.D.H.)	89'
SECONDARY DESIGN FLOW (G.P.M.)	29
SECONDARY DESIGN HEAD (T.D.H.)	71'
RATED PERFORMANCE SPEED	3450 RPM
RATED MOTOR HORSEPOWER	3.0
SUBMERSIBLE PUMP TYPE (P-1,P-2)	GRINDER
PUMP MODEL NUMBER	MOPS
SERVICE ENTRANCE VOLTAGE	230
SERVICE ENTRANCE PHASE	3
CONTROL CENTER FULL LOAD AMPS	29
NEMA 3R PAINTED STEEL DISCONNECT SWITCH, RATED AMPS	30
WET WELL SCOURER SYSTEM	N/A
REMOTE STATION MONITOR (TELEMETRY)	W/SA
ON-SITE GENERATOR SYSTEM	N/A
100 YEAR FLOOD ELEVATION	10.75'
25 YEAR FLOOD ELEVATION	9.64'
A GRADE ELEVATION	10.75'
B TOP ELEVATION OF WET WELL	10.75'
C BOTTOM ELEVATION OF WET WELL	-1.25'
D ALL PUMPS OFF ELEVATION	2.75'
E LEAD PUMP ON ELEVATION	3.50'
F LAG PUMP ON ELEVATION	4.00'
G HIGH ALARM ELEVATION	4.50'
H INSIDE DIAMETER OF WET-WELL	48"
I OUTSIDE DIAMETER OF ANTI-FLOATATION RING	84"
J MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU YDS)	000/(0)
K INVERT PIPE DIAMETER	8"
L FORCE MAIN DIAMETER	2"
M PRIMARY INVERT ELEVATION	5.47'
N SECONDARY INVERT ELEVATION	N/A

MOPS EQUIPMENT IDENTIFICATION	QTY.	MODEL DESIGNATION
MOPS PUMP STATION	1	B22-48144-C-3.0
MOPS VALVE BOX ASSEMBLY (VBA)	1	VBA-22
MOPS ODOR/GAS SCRUBBER (OGS)	1	OGS-B
MOPS R.P.Z. ASSEMBLY	1	75
MOPS CONTROL CENTER	1	PSC-222-3.0
MOPS DISCONNECT SWITCH	1	FDS-30-3-2-PS
MOPS CONTROL CENTER MOUNTING ASSEMBLY	1	CCMA-32AL
MOPS WET WELL SCOURER SYSTEM	0	N/A
MOPS REMOTE STATION MONITOR	1	PROVIDED WITH SERVICE AGREEMENT
1st YEAR SERVICE/MAINTENANCE CONTRACT	1	LEVEL 1 WITH REMOTE MONITOR
MOPS ON-SITE GENERATOR SYSTEM	0	N/A
MOPS FIELD SERVICE WORK	1	CONTROL INSTALLATION & START-UP

MOPS PUMP STATION COMPLIANCE NOTES:

THIS PUMP STATION DESIGN COMPLIES WITH THE FOLLOWING REQUIRED STANDARDS:

- STATE OF FLORIDA ENVIRONMENTAL PROTECTION STANDARDS
- FLORIDA ADMINISTRATIVE CODE (F.A.C.): 62-640.400- COLLECTION AND TRANSMISSION SYSTEMS
- NATIONAL ELECTRIC CODE (NEC) CLASS 1, DIVISION 1, GROUP D- HAZARDOUS LOCATIONS
- UNDERWRITER'S LABORATORIES (U.L.) 508A-MOTOR CONTROL CENTERS AND U.L. 698A-INTRINSICALLY SAFE CONTROL CENTERS
- RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (1997 EDITION).

- PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED BY NEC.
- THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A INTRINSICALLY SAFE FOR CLASS 1, DIVISION 1 ATMOSPHERES.
- THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS-SEAL-OFFS, ARE RATED FOR CLASS 1, DIVISION 1 LOCATIONS.
- THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION AND NOTIFICATION SYSTEM.
- THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP ALARM SYSTEM TO OPERATE ON POWER FAILURE.
- THE PUMP STATION INCORPORATES AN ODORLESS DESIGN WITH A SCRUBBER SYSTEM TO CONTROL TOXIC GASES AND ODORS FOR COMPLIANCE TO F.A.C. 62-604.400.
- THE BOTTOM OF THE TOP RIM ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL ENGINEER.
- THE BOTTOM ELEVATION OF THE MOPS CONTROL CENTER MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL ENGINEER.

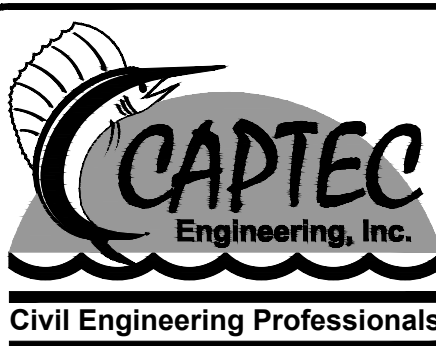
MOPS ENGINEERING NOTES:

- AA. THE HORSEPOWER SHOWN ON THE SCHEDULE IS A MINIMUM HORSEPOWER REQUIREMENT BASED ON THE STATION'S DESIGN CRITERIA AND THE REQUIRE TORQUE. (LOWER RATED HORSEPOWER EQUIPMENT WILL NOT BE ACCEPTABLE.)
- BB. THESE ITEMS ARE NOT SUPPLIED BY A.E.S. WITH THE MOPS STATION.
- CC. INVERT ELEVATIONS BASED ON INSIDE BOTTOM OF PIPE.
- DD. THE MOPS CONTROL ASSEMBLY CONSISTS OF THE FOLLOWING: CONTROL CENTER DISCONNECT SWITCH, MOUNTING ASSEMBLY, ELECTRICAL CONDUITS, AND SEAL-OFF. THESE ITEMS MUST BE SUPPLIED AND INSTALLED BY THE MOPS PUMP STATION MANUFACTURER TO VALIDATE MOPS WARRANTY PROGRAM.
- EE. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE TELEMETRY MONITORING UNIT AND A.E.S. MAINTENANCE SERVICE. THE R.T.U. ALLOWS FOR MONITORING OF LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHBIDGER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.
- THE MOPS WASTEWATER PUMP STATION DESIGN AND EQUIPMENT SHOWN ON THIS DRAWING HAS BEEN REVIEWED, PERMITTED, AND CERTIFIED AS COMPLYING WITH ALL THE STATE OF FLORIDA D.E.P. AND LOCAL REQUIREMENTS. ANY SUBSTITUTION FROM THIS DESIGN MAY REQUIRE NEW PERMITS, APPLICATION FEES, AND ENGINEERING SERVICES FOR RE-CERTIFICATION AND DESIGN REVIEW.

P.E. CERTIFICATION:

PRIVATE PUMP STATION

Bonnie McLeod, P.E., Lic # 70797 V.P. of Engineering
Atlantic Environmental Systems, Inc., Certificate # 26398
2244 4th Ave. North, Lake Worth, Florida 33461
Ph: 561-547-8080 Fax: 561-547-3999



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business
No. EB-0007657

DATE: 03-27-2020

DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
PROJECT NO.: _____
HORIZ. SCALE: _____
VERT. SCALE: _____

SCALE
VERIFICATION
0 1
SOLID BAR IS EQUAL
TO ONE INCH ON
ORIGINAL DRAWING.
ADJUST ALL SCALED
DIMENSIONS
ACCORDINGLY

NO.	BY	DESCRIPTION	DATE
1	MOB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

LIFT STATION NO. 1

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

SHEET
IDENTIFICATION
JOB No.: 1329.2

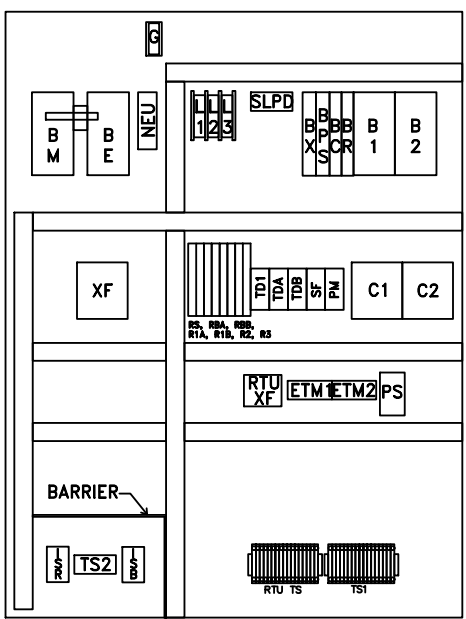
SHEET
20 OF 28

CADD FILE: 1329.2 UTILITY.dwg

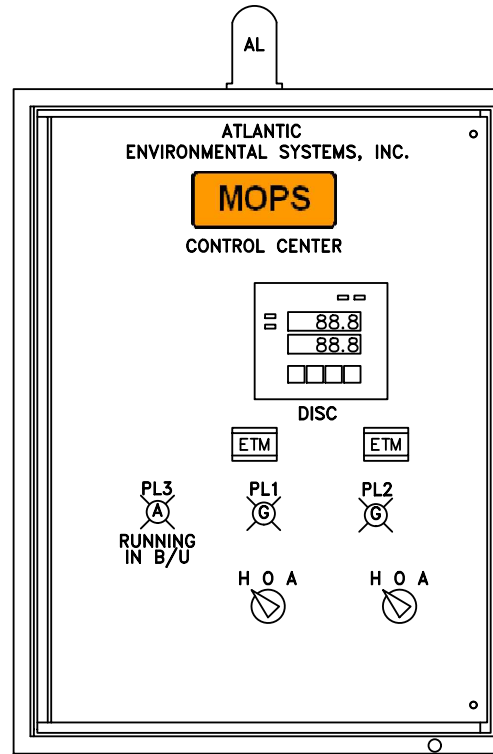
CONTROL CENTER DESIGNED
& MANUFACTURED TO MEET
ALL D.E.P. REQUIREMENTS

MOPS CONTROL CENTER

SEE SCHEDULE FOR
ELECTRICAL SERVICE REQUIREMENTS



INTERIOR LAYOUT



INNER DOOR
(OUTER DOOR NOT SHOWN FOR CLARITY)

PANEL COMPONENTS

ALT ALTERNATOR (N DISC)
AS ALARM SILENCE SWITCH
B1-2 MOTOR BREAKERS
BC CONTROL BREAKER
BE EMERGENCY BREAKER
BM MAIN BREAKER
BR GFI RECEPTACLE BREAKER
BPS POWER SUPPLY BREAKER
BX TRANSFORMER BREAKER
C1-2 MOTOR START CONTACTORS
CR GFI CONVENIENCE RECEPTACLE
DISC DUPLEX INTRINSICALLY-SC100
SAFE CONTROLLER
ETM ELAPSED TIME METER
G GROUND
GR GENERATOR RECEPTACLE
H HORN
HOA HAND-OFF-AUTO SWITCH- GE
(ON DISC)
NEU NEUTRAL
PL1,2,3 PILOT LIGHT (GE)
PM PHASE MONITOR
PS POWER SUPPLY
R2-3 RELAYS
RBA-BATTERY RELAYS
RS SILENCE RELAY
R1A-BRELAYS
RTUXF RTU TRANSFORMER
SF SEAL FAIL RELAY
SLPD SURGE/LIGHTNING PROTECTION DEVICE
TS1 TERMINAL STRIP FOR PUMPS
TS2 TERMINAL STRIP FOR I.S.
XF 50/60Hz 0.5KVA TRANSFORMER

ENCLOSURE

NEMA 4X STAINLESS STEEL
SINGLE DOOR w/PADLOCK HASP
ALUMINUM INNER (DEAD FRONT) DOOR
30"H x 30"W x 8"D OR
48"H x 36"W x 10"D
PANEL LABELED FOR U.L. 508A
"MOTOR CONTROL CENTERS" AND
U.L. 698A "HAZARDOUS LOCATION PANELS"

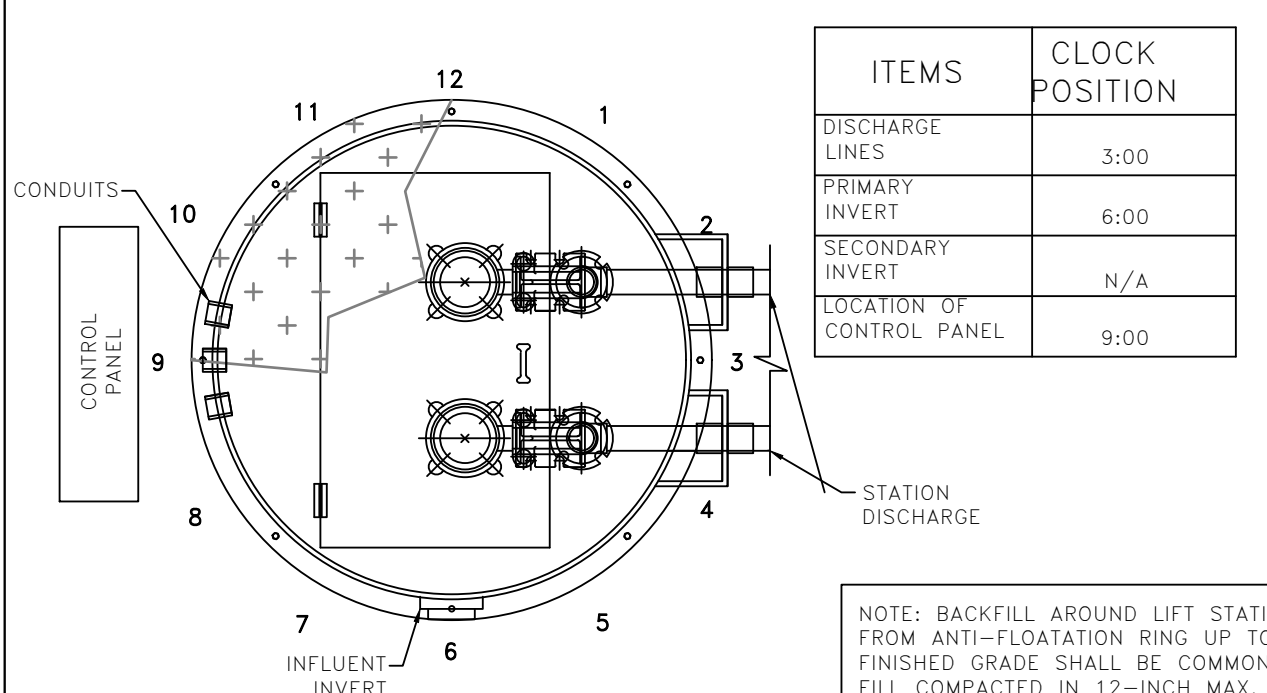
ITEM	QTY.	DESCRIPTION
27	1	NEUTRAL
28	1	120V
29	1	RTU
30	1	SCAL
31	1	FAIL
32	1	MOTOR
33	1	LEADS

TS1 TERMINAL SCHEDULE

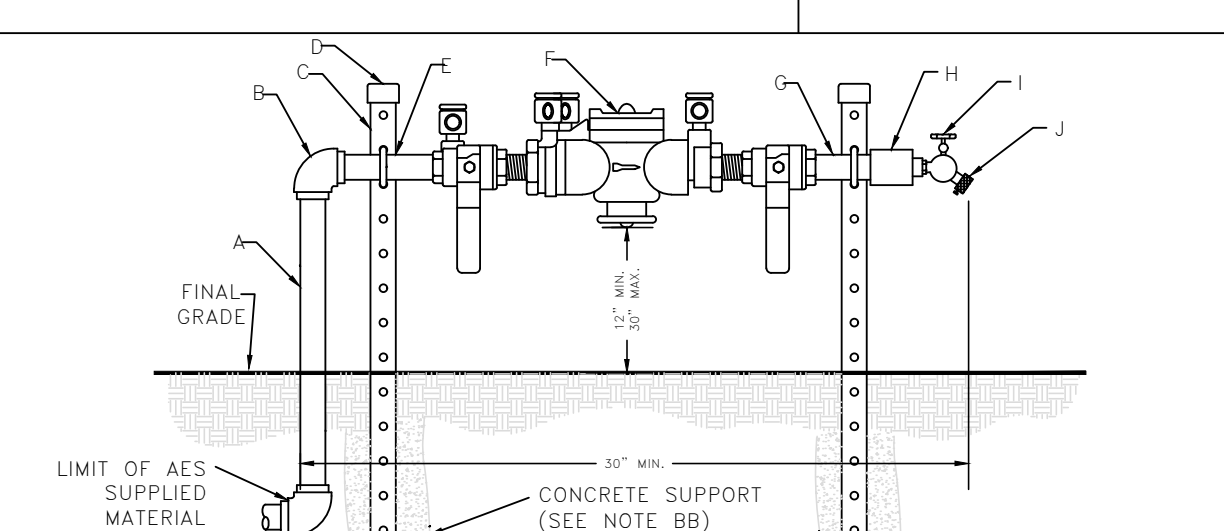
ITEM	QTY.	DESCRIPTION
15	1	PL1
16	1	PL2
17	1	PL3
18	1	PL4
19	1	PL5
20	1	PL6
21	1	PL7
22	1	PL8
23	1	PL9
24	1	PL10
25	1	PL11
26	1	PL12

TS2 TERMINAL SCHEDULE

HUB AND INVERT LOCATION



NOTE: BACKFILL AROUND LIFT STATION FROM ANTI-FLOATATION RING UP TO FINISHED GRADE SHALL BE COMMON FILL COMPACTED IN 12-INCH MAX. LIFTS TO 98% DENSITY PER AASHTO T-180. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE WETWELL DURING COMPACTION.



ITEM	QTY.	DESCRIPTION
A	1	3/4" x 24" S.S. NIPPLE
B	2	3/4" x 1" S.S. 90° ELBOW
C	2	1"x1"x40" S.S. SUPPORT BRACKET
D	2	SUPPORT BRACKET CAPS P/N 1157
E	2	3/4" S.S. PIPE BOLTS

DETAIL B

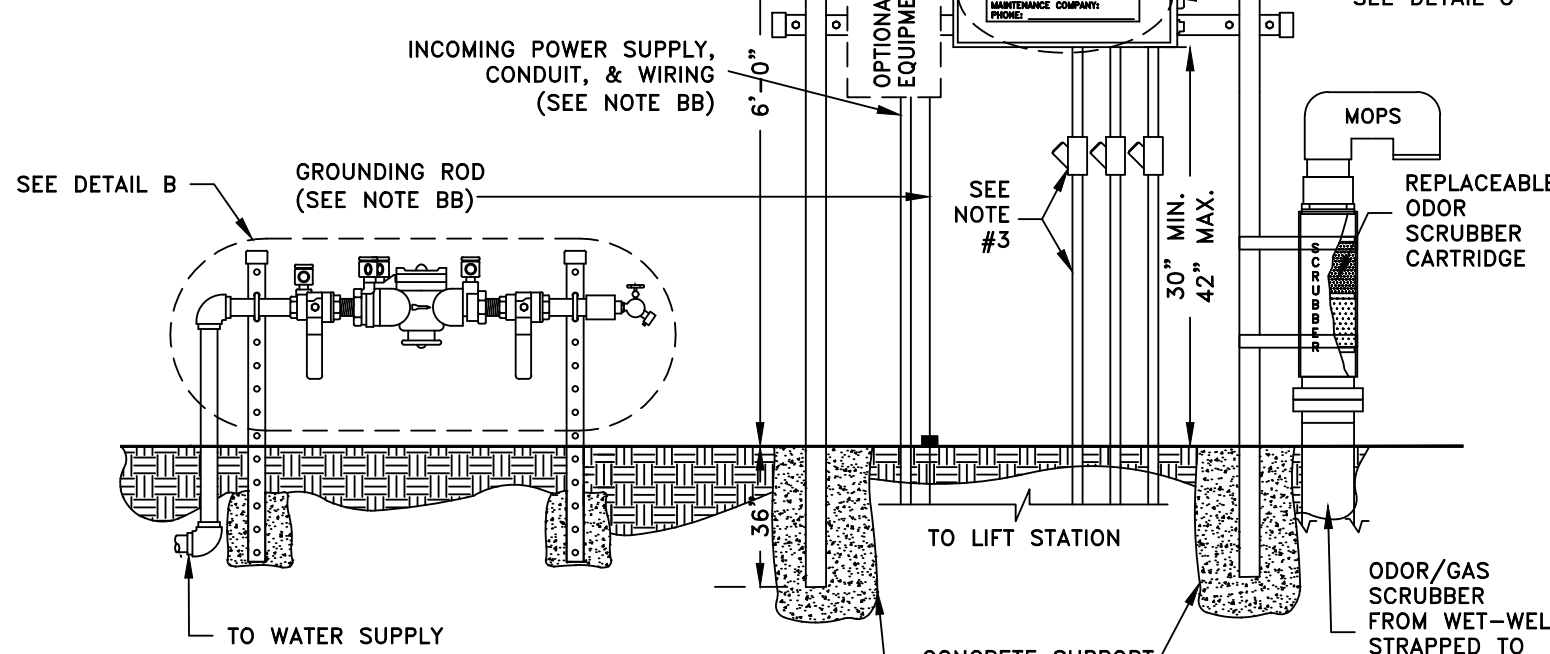
R.P.Z. BACKFLOW PREVENTER ASSEMBLY DETAIL

U.S.C. AND A.S.S.E. APPROVED

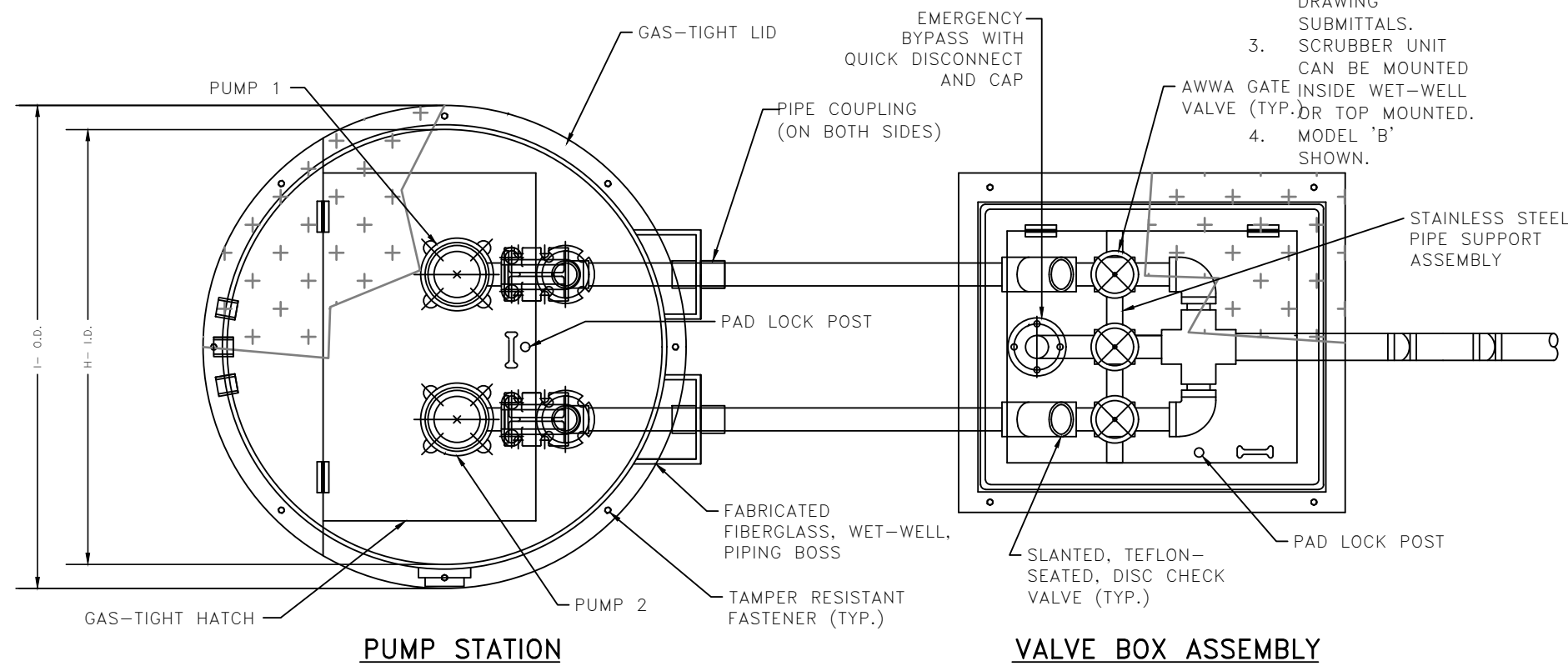
N.T.S.

IN CASE OF EMERGENCY CALL
OWNER:
PHONE:
IN CASE OF OVERFLOW CALL
MAINTENANCE COMPANY:
PHONE:

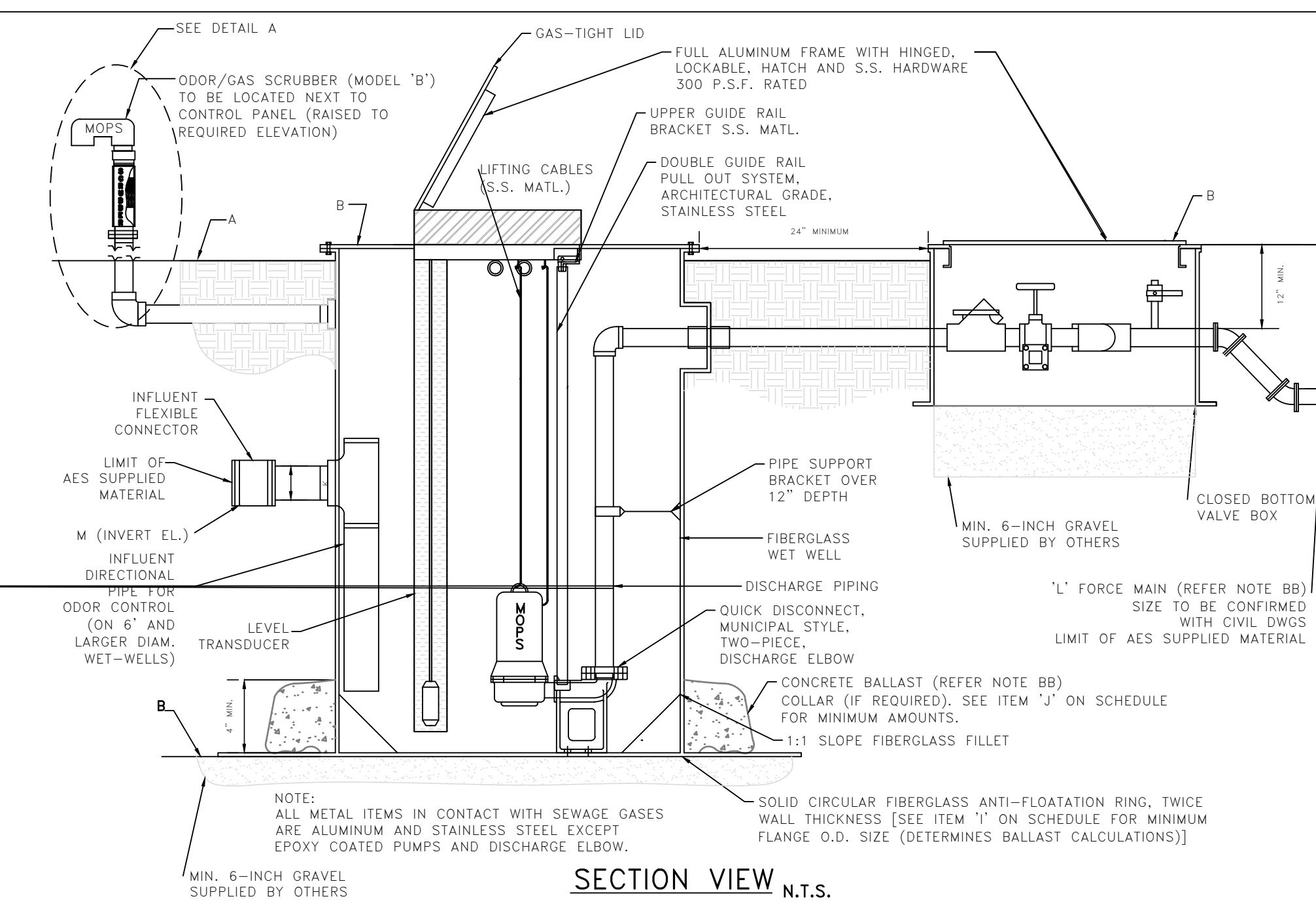
DETAIL C
(SUPPLIED BY MAINT.
COMPANY)



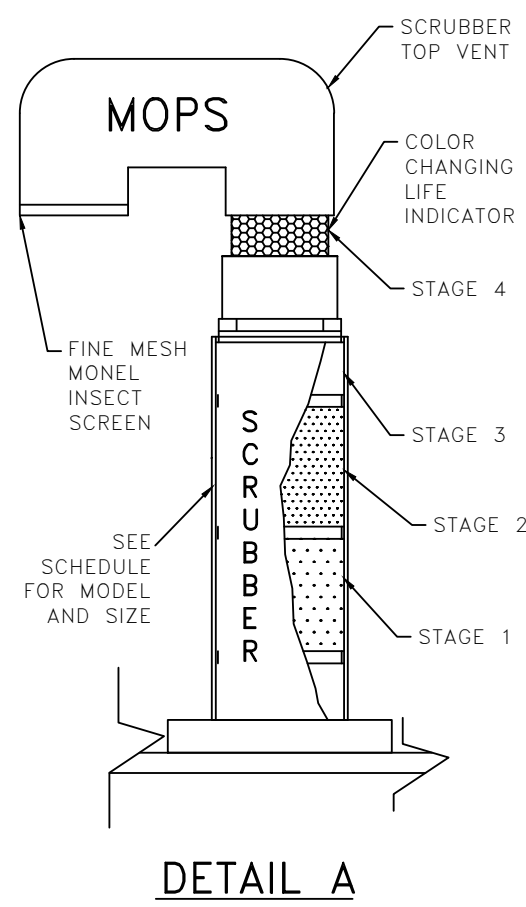
CONTROL CENTER ASSEMBLY AND INSTALLATION N.T.S.



TOP VIEW N.T.S.



SECTION VIEW N.T.S.



DETAIL A

MOPS ODOR/GAS SCRUBBER

NOTES:

1. SCRUBBER

DESIGNED TO

REMOVE TOXIC

SEWAGE GASES,

H2S, AND

OFFENSIVE ODORS

SUCH AS

SKATOLES AND

MERCAPTANS.

SCRUBBER'S LIFE

EXPECTANCY

CALCULATIONS ARE

INCLUDED IN SHOP

DRAWING

SUBMITTALS.

SCRUBBER UNIT

CAN BE MOUNTED

AWWA GATE INSIDE WET-WELL

VALVE (TYP. DR TOP MOUNTED).

4. MODEL 'B'

SHOWN.

MOPS

MANUFACTURED ODORLESS PUMP STATION
ATLANTIC ENVIRONMENTAL SYSTEMS, INC.
LAKE WORTH, FL 33461
PH: (561) 547-8080 FAX: (561) 547-3999 ©2000

PRIVATE SERIES

THIS DRAWING AND THE DESIGN CONTAINED HEREIN IS PROPRIETARY
AND IS AND SHALL REMAIN THE PROPERTY OF ATLANTIC ENVIRONMENTAL
SYSTEMS, INC. THIS DRAWING AND DESIGN SHOULD BE USED ONLY FOR
THE PURPOSE FOR WHICH IT IS INTENDED, AND ONLY WITH WRITTEN
AUTHORIZATION FROM ATLANTIC ENVIRONMENTAL SYSTEMS, INC. ANY
REPRODUCTION, IN WHOLE OR IN PART, MUST CLEARLY SHOW THE
ATLANTIC ENVIRONMENTAL NAME AND ADDRESS IN THE REPRODUCTION.

MOPS PUMP STATION SCHEDULE

MOPS SERIES	ITEM DESCRIPTION
INITIAL DESIGN FLOW (G.P.M.)	118
INITIAL DESIGN HEAD (T.D.H.)	113'
SECONDARY DESIGN FLOW (G.P.M.)	105
SECONDARY DESIGN HEAD (T.D.H.)	108'
RATED PERFORMANCE SPEED	3450 RPM
RATED MOTOR HORSEPOWER	20.0
SUBMERSIBLE PUMP TYPE (P-1,P-2)	NON-CLOG
PUMP MODEL NUMBER	MOPS
SERVICE ENTRANCE VOLTAGE	230
SERVICE ENTRANCE PHASE	3
CONTROL CENTER FULL LOAD AMPS	111
NEMA 3R PAINTED STEEL DISCONNECT SWITCH, RATED AMPS	200
WET WELL SCOURER SYSTEM	N/A
REMOTE STATION MONITOR (TELEMETRY)	W/SA
ON-SITE GENERATOR SYSTEM	N/A
100 YEAR FLOOD ELEVATION	11.00'
25 YEAR FLOOD ELEVATION	9.43'
GRADE ELEVATION	11.00'
TOP ELEVATION OF WET WELL	11.00'
BOTTOM ELEVATION OF WET WELL	-7.00'
ALL PUMPS OFF ELEVATION	-3.30'
LEAD PUMP ON ELEVATION	-2.00'
LAG PUMP ON ELEVATION	-1.00'
HIGH ALARM ELEVATION	0.00'
INSIDE DIAMETER OF WET-WELL	72"
OUTSIDE DIAMETER OF ANTI-FLOATATION RING	84"
MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU YDS)	351/(13)
INVERT PIPE DIAMETER	8"
FORCE MAIN DIAMETER	4"
PRIMARY INVERT ELEVATION	0.87'
SECONDARY INVERT ELEVATION	N/A

MOPS EQUIPMENT IDENTIFICATION	QTY.	MODEL DESIGNATION
MOPS PUMP STATION	1	A24-72216-C-20.0
MOPS VALVE BOX ASSEMBLY (VBA)	1	VBA-24
MOPS ODOR/GAS SCRUBBER (OGS)	1	OGS-B
MOPS R.P.Z. ASSEMBLY	1	75
MOPS CONTROL CENTER	1	PSC-222-20.0
MOPS DISCONNECT SWITCH	1	FDS-200-3-2-PS
MOPS CONTROL CENTER MOUNTING ASSEMBLY	1	CCMA-32AL
MOPS WET WELL SCOURER SYSTEM	0	N/A
MOPS REMOTE STATION MONITOR	1	PROVIDED WITH SERVICE AGREEMENT
1st YEAR SERVICE/MAINTENANCE CONTRACT	1	LEVEL 1 WITH REMOTE MONITOR
MOPS ON-SITE GENERATOR SYSTEM	0	N/A
MOPS FIELD SERVICE WORK	1	CONTROL INSTALLATION & START-UP

MOPS PUMP STATION COMPLIANCE NOTES:

THIS PUMP STATION DESIGN COMPLIES WITH THE FOLLOWING REQUIRED STANDARDS:

- STATE OF FLORIDA ENVIRONMENTAL PROTECTION STANDARDS
- FLORIDA ADMINISTRATIVE CODE (F.A.C.): 62-640.400- COLLECTION AND TRANSMISSION SYSTEMS
- NATIONAL ELECTRIC CODE (NEC) CLASS 1, DIVISION 1, GROUP D- HAZARDOUS LOCATIONS
- UNDERWRITER'S LABORATORIES (U.L.) 508A-MOTOR CONTROL CENTERS AND U.L. 698A-INSTRINSICALLY SAFE CONTROL CENTERS
- RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (1997 EDITION).

- PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED BY NEC.
- THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A INTRINSICALLY SAFE FOR CLASS 1, DIVISION 1 ATMOSPHERES.
- THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS-SEAL-OFFS, ARE RATED FOR CLASS 1, DIVISION 1 LOCATIONS.
- THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION AND NOTIFICATION SYSTEM.
- THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP ALARM SYSTEM TO OPERATE ON POWER FAILURE.
- THE PUMP STATION INCORPORATES AN ODORLESS DESIGN WITH A SCRUBBER SYSTEM TO CONTROL TOXIC GASES AND ODORS FOR COMPLIANCE TO F.A.C. 62-604.400.
- THE BOTTOM OF THE TOP RIM ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL ENGINEER.
- THE BOTTOM ELEVATION OF THE MOPS CONTROL CENTER MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL ENGINEER.

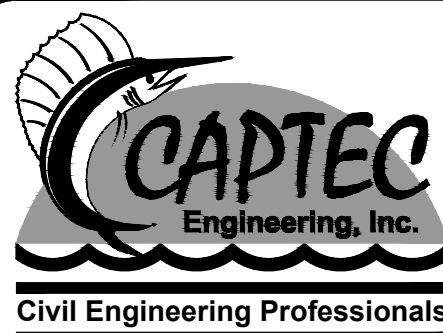
MOPS ENGINEERING NOTES:

- AA. THE HORSEPOWER SHOWN ON THE SCHEDULE IS A MINIMUM HORSEPOWER REQUIREMENT BASED ON THE STATION'S DESIGN CRITERIA AND THE REQUIRE TORQUE. (LOWER RATED HORSEPOWER EQUIPMENT WILL NOT BE ACCEPTABLE.)
- BB. THESE ITEMS ARE NOT SUPPLIED BY A.E.S. WITH THE MOPS STATION.
- CC. INVERT ELEVATIONS BASED ON INSIDE BOTTOM OF PIPE.
- DD. THE MOPS CONTROL ASSEMBLY CONSISTS OF THE FOLLOWING: CONTROL CENTER DISCONNECT SWITCH, MOUNTING ASSEMBLY, ELECTRICAL CONDUITS, AND SEAL-OFF. THESE ITEMS MUST BE SUPPLIED AND INSTALLED BY THE MOPS PUMP STATION MANUFACTURER TO VALIDATE MOPS WARRANTY PROGRAM.
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PRIVATE PUMP STATION

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Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY:
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PROJECT NO.:
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1	MOB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

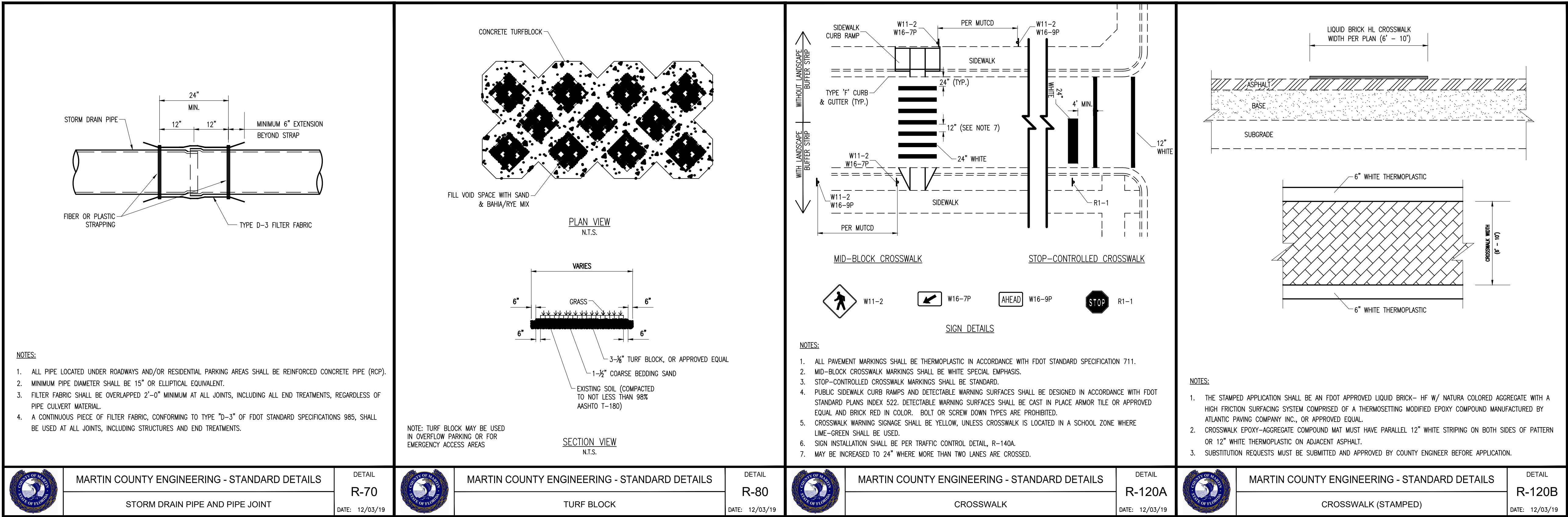
LIFT STATION NO. 2

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

SHEET
IDENTIFICATION
JOB No.: 1329.2

SHEET
21 OF 28

CADD FILE: 1329.2 UTILITY



General Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b), F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice" (October 1, 2013), <http://www.flrules.org/Gateway/reference.asp?No=Ref-02505>, incorporated by reference herein, indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C., and shall be submitted electronically or by mail to the Agency. However, for activities involving more than one acre of construction that also require a NPDES stormwater construction general permit, submittal of the Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, DEP Form 62-621.330(4)(b), shall also serve as notice of commencement of construction under this chapter and, in such a case, submittal of Form 62-330.350(1) is not required.
5. Unless the permit is transferred under rule 62-330.340, F.A.C., or transferred to an operating entity under rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms, and conditions of the permit for the life of the project or activity.
6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
- a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
- b. For all other activities, the "Construction Completion and Inspection Certification for Conversion to Operational Phase" [Form 62-330.310(1)].
7. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
8. If the final operation and maintenance entity is a third party:

- a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.4 of Volume I) as filed with the Florida Department of State, Division of Corporations, and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
- b. Within 30 days of submittal of the as-built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation and Maintenance Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.
8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.
9. This permit does not:
- a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
- b. Convey to the permittee or create in the permittee any interest in real property;
- c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
- d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal review execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
12. The permittee shall notify the Agency in writing:
- a. Immediately if any previously submitted information is discovered to be inaccurate; and
- b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and conveyed to the operating phase.
13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
14. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permittee project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from

the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05.

F.S. For project activities subject to prior consultation with the DHR and as an alternative to the above requirements, the permittee may follow procedures for unanticipated discoveries as set forth within a cultural resources assessment survey determined complete and sufficient by DHR and included as a specific permit condition herein.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.
18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

Special Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

1. The construction authorization for this permit shall expire on the date shown on page 2.
2. Operation and maintenance of the SWM system shall be the responsibility of Jensen CAP Investments, LLC. The permittee shall notify the Agency in writing within 30 days of any conveyance or division of ownership or control of the property or the system, and the new owner must request transfer of the permit in accordance with Rule 62-330.340, F.A.C.
3. Lake side slopes shall be no steeper than 4:1 (horizontal:vertical) to a depth of two feet below the control elevation. Side slopes shall be nurtured or planted from 2 feet below to 1 foot above control elevation to insure vegetative growth.
4. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on with the certification report.
5. Prior to any future construction, the permittee shall apply for and receive an Individual ERP. As part of the permit application, the applicant for that phase shall provide documentation verifying that the proposed construction is consistent with the design of the master stormwater management system, including the land use and site grading assessments.
6. Prior to initiating construction activities associated with this Environmental Resource Permit (ERP), the permittee is required to hold a pre-construction meeting with field representatives, consultants, contractors, District Environmental Resource Bureau (ERB) staff, and any other local government entities as necessary. The purpose of the pre-construction meeting is to discuss construction methods, sequencing, best management practices, identify work areas, staking and re-planting of preserves where applicable, and to facilitate coordination and assistance amongst relevant parties. To schedule a pre-construction meeting, please contact ERB staff from the Okechobee Service Center at (863) 462-5260 or via e-mail at: pre-con@fwmd.gov. When sending a request for a pre-construction meeting, please include the application number, permit number, and contact name and phone number.
7. This permit does not authorize the permittee to cause any adverse impact to or "take" of state listed species and other regulated species of fish and wildlife. Compliance with state laws regulating the take of fish and wildlife is the responsibility of the owner or applicant associated with this project. Please refer to Chapter 68A-27 of the Florida Administrative Code for definitions of "take" and a list of fish and wildlife species. If listed species are observed onsite, FWVC staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Most marine endangered and threatened species are statutorily protected and a "take" permit cannot be issued. Requests for further information or review can be sent to: FWVCConservationPlanningServices@MyFWVC.com.

GENERAL NOTES:

FOR THE PURPOSE OF THE GENERAL NOTES BELOW, THE TERM DEPARTMENT SHALL MEAN "MARTIN COUNTY UTILITIES & SOLID WASTE DEPARTMENT".

1. ALL CONNECTIONS TO EXISTING MAINS SHALL BE OBSERVED BY THE DEPARTMENT. VALVES ON EXISTING MAINS SHALL BE OPERATED BY DEPARTMENT PERSONNEL OR UNDER THEIR DIRECT SUPERVISION. TAPPING SLEEVE AND VALVE SHALL BE PRESSURE TESTED PRIOR TO TAPPING. IF SERVICE MUST BE CUT OFF TO EXISTING CUSTOMERS, THE DEPARTMENT MUST HAVE THREE DAYS NOTICE TO MAKE NECESSARY NOTIFICATIONS. THE CONTRACTOR MAY BE REQUIRED TO ASSIST IN NOTIFICATIONS. IN THIS EVENT, CONTRACTOR SHALL BE READY TO PROCEED WITH AS MUCH MATERIAL PREASSEMBLED AS POSSIBLE AT THE SITE TO MINIMIZE THE LENGTH OF SERVICE INTERRUPTION. THE DEPARTMENT WILL POSTPONE A SERVICE CUT OFF IF THE CONTRACTOR IS NOT READY TO PROCEED ON SCHEDULE. SUCH CONNECTIONS SHALL BE MADE AT NIGHT TO MINIMIZE EFFECTS UNLESS OTHERWISE AUTHORIZED BY THE DEPARTMENT. NO CUSTOMER SHOULD BE WITHOUT SERVICE FOR MORE THAN FOUR HOURS.
- LOCAL CHLORINATION WILL BE REQUIRED FOR ALL PIPE AND FITTINGS USED TO COMPLETE CONNECTIONS WITH POTABLE WATER.
2. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF MARTIN COUNTY UTILITIES MINIMUM DESIGN AND CONSTRUCTION STANDARDS, ONE COPY OF THE CONTRACT DOCUMENTS, INCLUDING PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
3. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
4. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHOD AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND DEPARTMENT PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
5. LOCATION OF PROPOSED FACILITIES WILL BE STAKED BY CONTRACTOR. CONTRACTOR MUST GIVE 48 HOURS NOTICE TO THE DEPARTMENT IN ADVANCE OF LAYOUT.
6. PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETINGS. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT BY LETTER PRIOR TO THE PRE-CONSTRUCTION MEETING APPOINTING THE SUPERINTENDENT FOR THIS PROJECT INCLUDING A FORMAL RESUME SHOWING QUALIFICATIONS. IN THE EVENT THE SUPERINTENDENT WILL NOT BE PRESENT FOR ANY PERIOD OF TIME DURING CONTRACT WORK, THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE IN WRITING TO THE DEPARTMENT, INCLUDING THE APPOINTMENT OF A QUALIFIED REPLACEMENT SUPERINTENDENT WHO WILL BE PRESENT DURING THE CONSTRUCTION. WORK SHALL NOT BE ALLOWED TO PROCEED UNLESS THE ASSIGNED SUPERINTENDENT IS PRESENT.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE.

WARNING: EXACT LOCATION OF UNDERGROUND UTILITIES IS NOT KNOWN NOR IS THIS DRAWING TO BE CONSTRUED AS DEPICTING THE LOCATION OF ALL UNDERGROUND UTILITIES OR STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF LOCATION PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR IS RESPONSIBLE, THEREFORE, FOR ALL DAMAGE AND REPAIR COSTS.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	DWG No.
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GENERAL NOTES (Cont.):

36. WATER MAIN DISINFECTION SHALL BE IN ACCORDANCE WITH CURRENT AWWA, BULLETIN C-651.
37. WATER MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH CURRENT AWWA, FDP, AND NSF STANDARDS.
38. MINIMUM COVER TO FINISHED GRADE OVER WATER MAINS SHALL BE 30 INCHES UP TO 8" DIAMETER; 10" OR LARGER SHALL HAVE 36" COVER OR GREATER TO PROVIDE A MINIMUM 18" COVER OVER OPERATING NUT OF GATE VALVES.
39. ALL MAINS SHALL BE TESTED FOR LEAKAGE. WATER SHALL BE SUPPLIED TO THE MAIN AND PUMPED TO THE REQUIRED 150 PSI PRESSURE. THE MAIN TESTED SHALL EITHER BE ISOLATED FROM PRESENTLY POTABLE LINES OR PROTECTED FROM LEAKAGE BY A DOUBLE VALVE ARRANGEMENT.
40. NEWLY CONSTRUCTED FIRE HYDRANTS THROUGHOUT THE PROJECT SHALL HAVE A RED "OUT OF SERVICE" DISK (JOSEPH G. POLLARD CO. OR EQUAL) ATTACHED TO 4" PUMPER NOZZLE CAP. DISK TO BE REMOVED AFTER WATER SYSTEM HAS BEEN APPROVED FOR SERVICE BY THE DEPARTMENT.

THE DEPARTMENT SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY TESTING PROCEDURES. AFTER FLUSHING IS COMPLETED, LINE PRESSURE SHALL BE APPLIED TO THE WATER SYSTEM TO DETERMINE IF ANY MAJOR DEFECTS ARE PRESENT. THE COMPLETE WATER SYSTEM SHALL THEN BE TESTED AT A PRESSURE OF 150 PSI FOR A PERIOD OF NOT LESS THAN TWO HOURS. THE DEPARTMENT MAY, AT ITS DISCRETION, INCREASE THE PERIOD TO FOUR HOURS. MAXIMUM LENGTH OF LINE TO BE TESTED AT ONE TIME SHALL NOT EXCEED 1500 LINEAR FEET. AN OIL FILLED PRESSURE GAUGE UP TO 200 PSI AT 2 POUND INCREMENTS SHALL BE USED FOR ALL PRESSURE TESTS. NO VISIBLE MOVEMENT OF THE SYSTEM SHALL OCCUR AND LEAKAGE SHALL NOT EXCEED:

$$L=\frac{ND\sqrt{P}}{7400} \text{ PER HOUR}$$

WHERE:
L= LEAKAGE IN GALLONS
N= NUMBER OF JOINTS IN TEST SECTION
P= TEST PRESSURE IN PSI
D= DIAMETER OF PIPE IN INCHES

NOTE: MARTIN COUNTY UTILITIES DEPARTMENT'S MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION), ARE TO BE ADHERED TO AND WILL BE ENFORCED TO AT LEAST THESE MINIMUM STANDARDS.

48 HOURS BEFORE DIGGING

CALL TOLL-FREE

1-800-432-4770

SUNSHINE STATE ONE CALL

OF FLORIDA, INC

UNDERGROUND UTILITIES NOTIFICATION CENTER

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	DWG No.
AUGUST 2016		1D

GENERAL NOTES (Cont.):

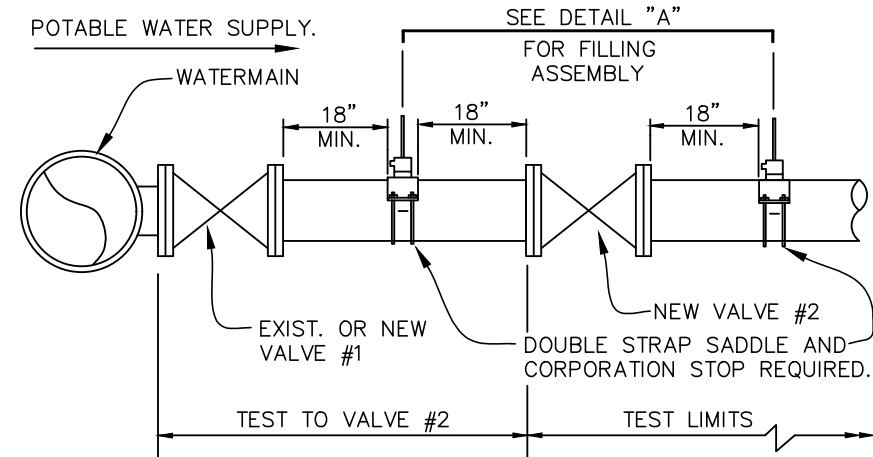
8. DENSITY TESTS OF TRENCH BACKFILL MATERIAL SHALL BE REQUIRED AT INTERVALS OF NOT MORE THAN 500 FEET. DENSITY TESTS OF PAVEMENT OPEN-CUT AREAS INCLUDING ROADS, TURNLANES, AND DRIVES SHALL BE REQUIRED AT EACH OPEN-CUT AT INTERVALS OF NOT MORE THAN 50 FEET. ALL TESTS SHALL COMMENCE AT THE TOP OF CONDUIT AND EVERY 12 INCHES TO THE FINISH GRADE. COMPACTION SHALL BE IN ACCORDANCE WITH MARTIN COUNTY UTILITIES CONSTRUCTION STANDARDS "TYPICAL TRENCH DETAIL" AND "FLEXIBLE PAVEMENT REPLACEMENT DETAIL". FLORIDA BEARING TESTS FOR THE STABILITY OF EXISTING SUBSOIL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 50 FEET, AND CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN THE STRATA. A CERTIFIED COPY OF THE TESTS SHALL BE PROVIDED TO THE DEPARTMENT AND THE FLORIDA DEPARTMENT OF TRANSPORTATION OR MARTIN COUNTY ENGINEERING DEPARTMENT. CONTRACTORS BID PRICE SHALL INCLUDE PAYMENT FOR ALL TESTS CONDUCTED BY AN INDEPENDENT TESTING LAB.
9. ANY LANDSCAPING DISTURBED, UNLESS OTHERWISE SHOWN ON THE PLANS, SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTORS EXPENSE.
10. ANY SIDEWALK, CURB AND GUTTER OR PAVEMENT DISTURBED, UNLESS OTHERWISE SHOWN ON PLANS, SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 psi AT 28 DAYS AND ALL CONCRETE WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE AND THE APPLICABLE BUILDING CODES HAVING JURISDICTION IN THE AREA. ALL CONSTRUCTION SHALL MEET ADA REQUIREMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, DETECTABLE WARNING SURFACES.
11. ALL SOD IS TO BE PLACED FOR THE FULL WIDTH DISTURBED AT THE PER LINEAR FOOT UNIT PRICE. FOR SOD, SOD SHALL BE REPLACED TO MATCH EXISTING KIDNED UNLESS OTHERWISE SHOWN ON PLANS.
12. CONTRACTOR SHALL PROVIDE PROPER BENDS TO MAINTAIN REQUIRED DEPTH AND ALIGNMENT OF PIPE. COST OF BENDS NOT DESIGNATED ON PLANS SHALL BE INCLUDED WITH THE UNIT PRICE FOR PIPE.
13. ANY TREES AND/OR SCRUB OR OTHER VEGETATION NOT TO BE REPLACED SHALL BE REMOVED FROM THE PROJECT AT THE CONTRACTOR'S EXPENSE.
14. ALL RUBBLE AND UNSUITABLE MATERIAL MUST BE REMOVED FROM THE PROJECT AND DISPOSED OF PROPERLY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
15. MAILBOXES MUST BE CAPABLE OF RECEIVING MAIL AT ALL TIMES.
16. DEFLECT PIPE AS NECESSARY TO OBTAIN THE REQUIRED ALIGNMENT. USE APPROPRIATE FITTINGS WHEN DEFLECTION EXCEEDS 75% OF MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION.
17. ALL FITTINGS SHALL BE MECHANICALLY RESTRAINED. REFER TO MARTIN COUNTY UTILITIES DEPARTMENT MINIMUM DESIGN & CONSTRUCTION STANDARDS (LATEST EDITION).
18. ALL CONSTRUCTION DOWATERING (WELL POINTS, SUMP, ETC.) WILL REQUIRE A DOWATERING PERMIT FROM SOLID WASTE MANAGEMENT DISTRICT. THIS SHALL BE OBTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE PRIOR TO BEGINNING OF CONSTRUCTION.
19. THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA TO BE IN EFFECT AS OF OCTOBER 1, 1990.
20. A U-2 PERMIT IS REQUIRED FOR ALL WORK WITHIN COUNTY RIGHT-OF-WAY. THIS PERMIT MUST BE OBTAINED BY THE CONTRACTOR FROM THE MARTIN COUNTY ENGINEERING DEPARTMENT. ALL COSTS PAYABLE BY THE CONTRACTOR. A COPY OF THIS PERMIT MUST BE MAINTAINED ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
21. ALL CONCRETE AND ASPHALT DRIVES MUST BE REPLACED FROM SAW CUT TO EDGE OF PAVEMENT.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	DWG No.
AUGUST 2016		1B

STANDARD WATER/SEWER SEPARATION STATEMENT

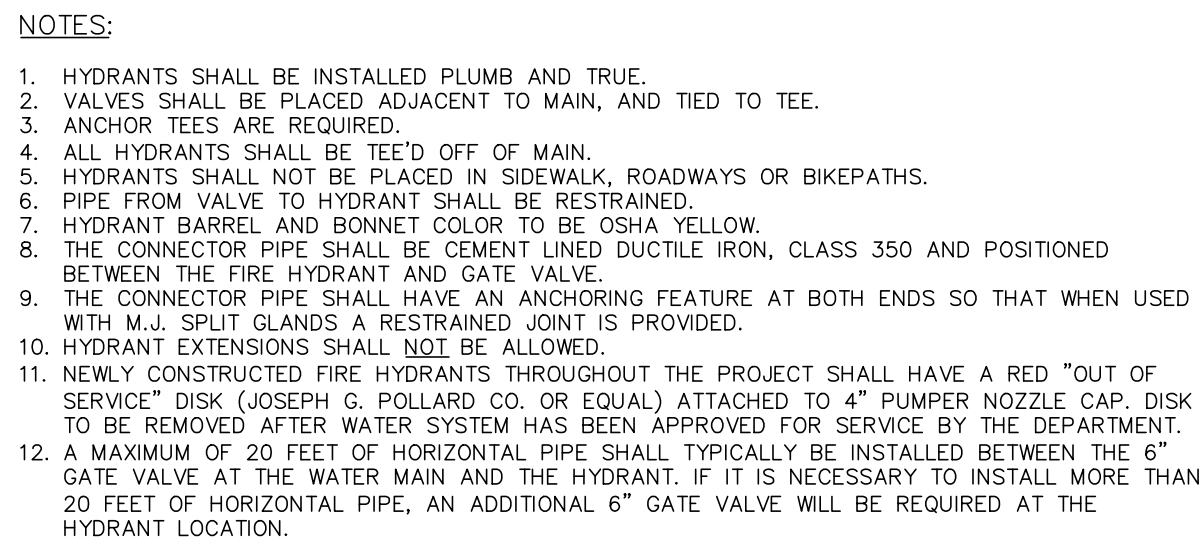
- 62-555.314 Location of Public Water System Mains.
- For the purpose of this section, the phrase "water mains" shall mean mains, including treatment plant process piping, conveying other raw, partially treated, or finished drinking water; fire hydrant mains, and service lines that are under the control of a public water system and that have an inside diameter of three inches or greater.
- (1) Horizontal Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On-Site Sewage Treatment and Disposal Systems.
- (a) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed storm sewer, stormwater force main, or pipeline conveying reclaimed water regulated under Part II of Chapter 62-610, F.A.C.
- (b) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed vacuum-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part II of Chapter 62-610, F.A.C. The minimum cover over the water main shall be as for as possible from the other pipeline. Alternatively, at such crossings, the pipe shall be sleeved as follows:
- (i) Where the water main is at least three feet above or below the other pipeline, a full length of water main pipe shall be sleeved above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipe shall be sleeved as follows:
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- (i) Where the water main is at least



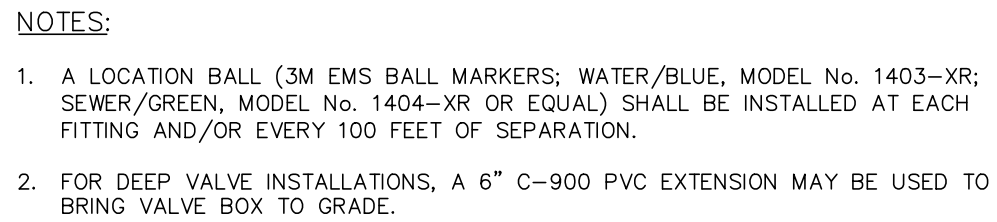
1. BOTH VALVES SHALL BE KEPT CLOSED EXCEPT FOR FILLING, FLUSHING AND BACTERIOLOGICAL TESTING PURPOSES.
2. DEPARTMENT SHALL BE NOTIFIED BEFORE FILLING AND FLUSHING.
3. PRESSURE TEST PUMP CONNECTS TO SERVICE LINE OR BLOWOFF. NO EXTRA TAPS OR UNLIMITED UNITS PRECEDING ARE NOT PRESENT IN TEST SECTION.
4. PRESSURE GAUGE TO BE LOCATED IN VICINITY OF TEST PUMP CONNECTION.
5. GAUGE AND RISER TO BE REMOVED AFTER PRESSURE TEST.
6. REMOVE TEMPORARY CONNECTION AT CORPORATION STOPS AFTER FILLING AND FLUSHING HAS BEEN COMPLETED.
7. INJECT CHLORINE ON PROJECT SIDE OF BACKFLOW PREVENTER.
8. CONTRACTOR TO PROVIDE AN RPZ CERTIFICATION (LESS THAN 1 YEAR) PRIOR TO INSTALLATION.

MATERIAL		
ITEM	QUANT.	DESCRIPTION
1	1	2", 4", 6", 8" DOUBLE CHECK DETECTOR BACKFLOW PREVENTER
2	2	2", 4", 6", 8" TEE (FLANGE-FLANGE)
3	2	2", 4", 6", 8" PIPE, DUCTILE IRON (CLASS 350)
4	2	2", 4", 6", 8" ADAPTER, FLANGE, D.I.P.
5	2	2", 4", 6", 8" PIPE
6	2	2", 4", 6", 8" GATE VALVE, C.I., (FLANGE-FLANGE) OS&Y
7	2	ADJUSTABLE PIPE SUPPORTS (316 SS)
8	1	6" CONCRETE SLAB
9	3	BEND - 90" (M.J-M.J)

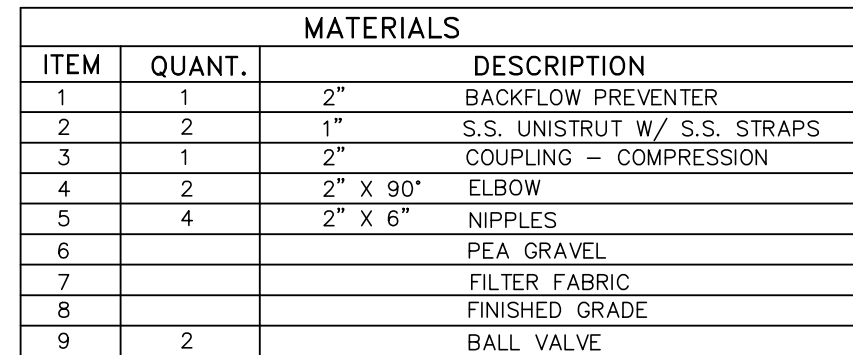
1. FIELD ADJUST AND CUT ITEM 3 TO PROPER LENGTH. THIS TYPE OF CONSTRUCTION IS DESIGNED FOR LIMITED WORKING AREA.
2. ALL EXPOSED DUCTILE IRON PIPES AND FITTINGS SHALL BE PAINTED "RED". PAINT SPECIFICATIONS MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO APPLICATION.
3. DETECTOR METER SHALL READ IN GALLONS AND SHALL BE 5/8" NEPTUNE MAGNETIC DRIVE, MODEL T-10.



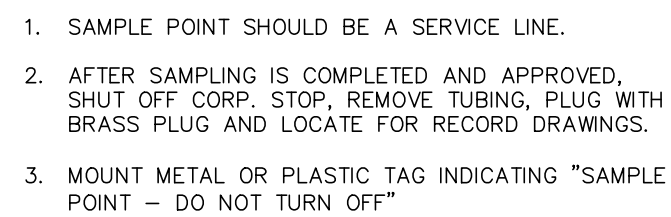
REVISION AUGUST 2016	FIRE HYDRANT INSTALLATION DETAIL AND NOTES	DWG No. 7
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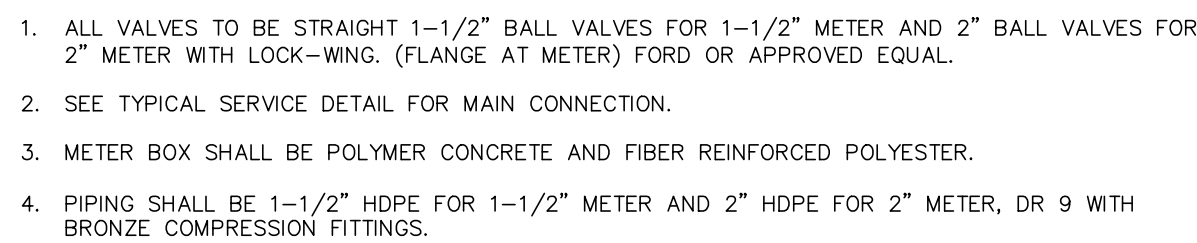
REVISION AUGUST 2016	VALVE SETTING DETAIL	DWG No. 18
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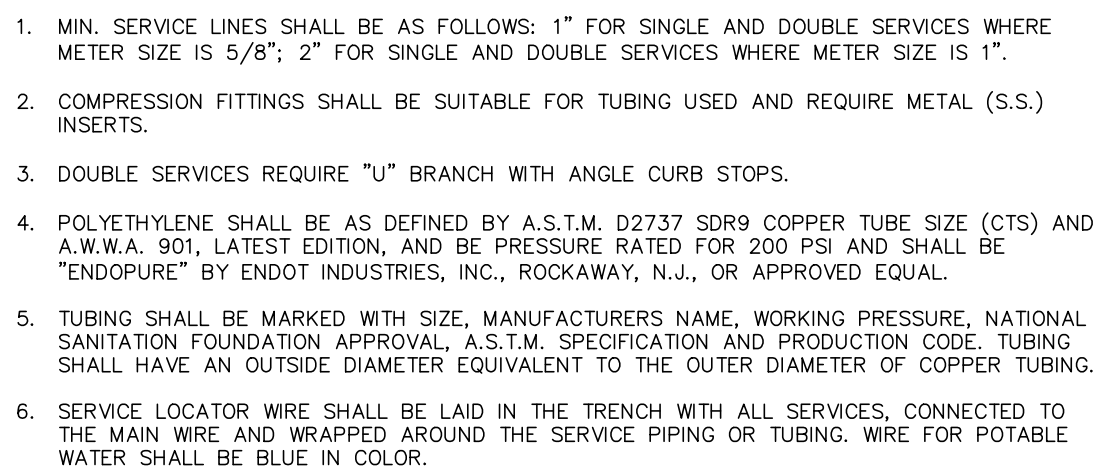
1. INSTALLATION SHOWN ABOVE IS FOR A 2" SERVICE. CHANGE PIPING MATERIALS ACCORDINGLY FOR SERVICE SIZE.
2. USE COPPER, BRASS OR STAINLESS STEEL FOR FITTINGS AND PIPE MATERIAL.



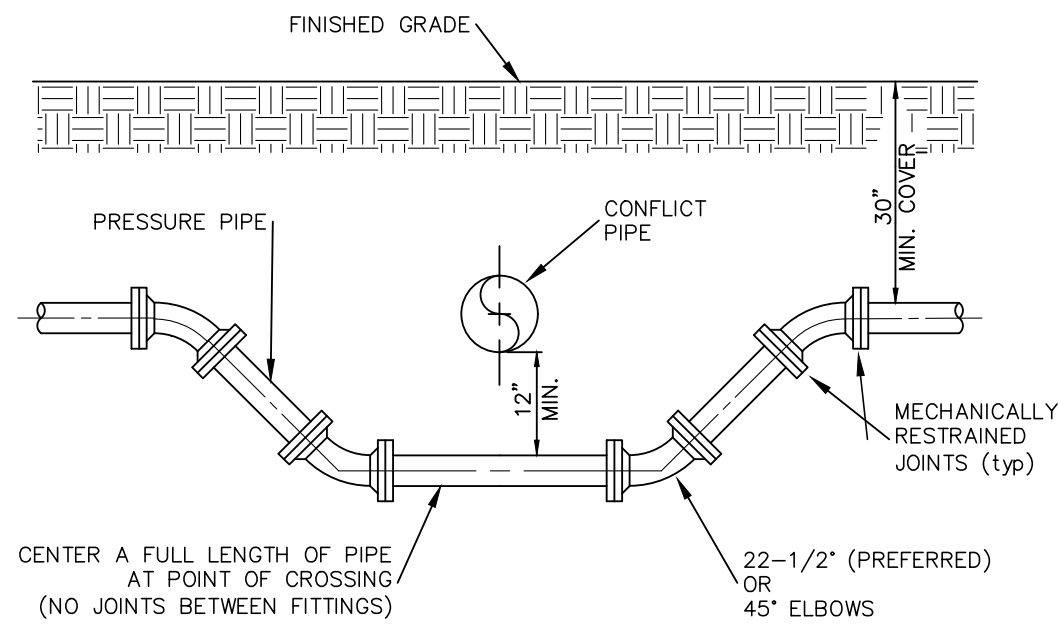
REVISION AUGUST 2016	SAMPLE POINT DETAIL	DWG No. 9
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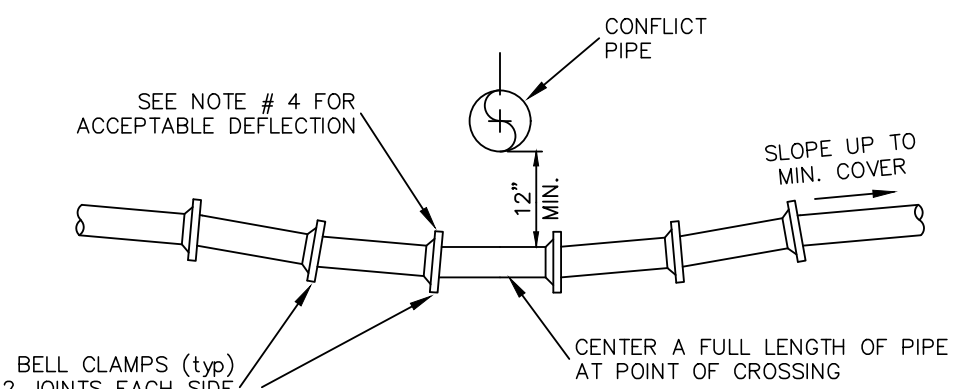
REVISION AUGUST 2016	1-1/2" AND 2" METER DETAIL	DWG No. 5
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REVISION AUGUST 2016	SERVICE CONNECTION DETAIL 5/8" OR 1" METER	DWG No. 2
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FITTING TYPE



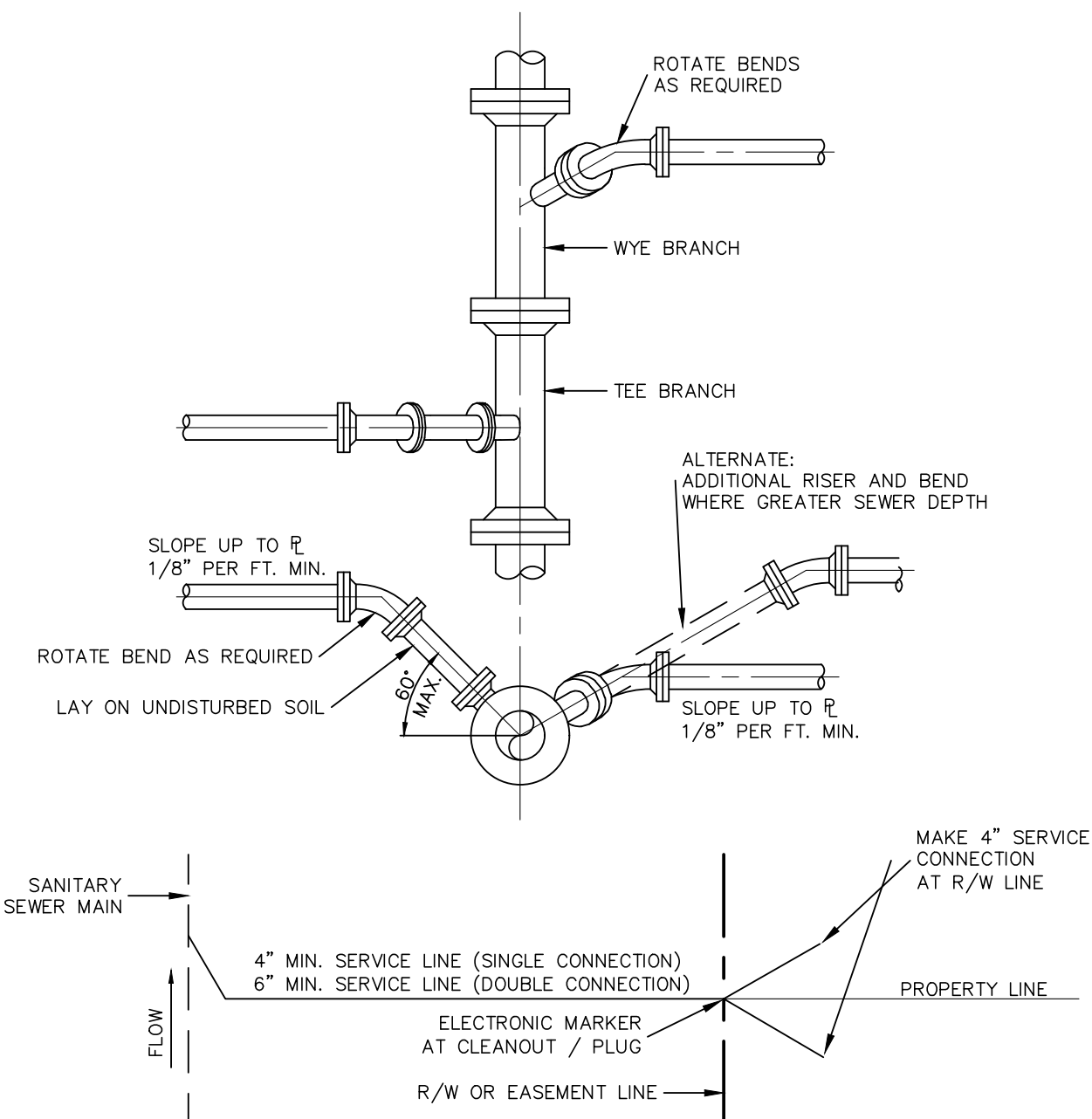
DEFLECTION TYPE

NOTES:

1. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS ABOVE CONFLICT PIPE WITH 6" VERTICAL SEPARATION AND MAINTAIN REQUIRED COVER TO FINISHED GRADE.
2. FITTINGS SHALL BE RESTRAINED WITH RETAINER GLANDS.
3. THE DEFLECTION TYPE CROSSING IS PREFERRED.
4. DO NOT EXCEED 50% OF MANUFACTURER'S RECOMMENDED MAXIMUM JOINT DEFLECTION.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	PRESSURE PIPE CONFLICT DETAIL	20



NOTES:

1. SERVICE LATERALS SHALL TERMINATE WITH A CLEANOUT AT R.
2. LATERAL DEPTH AT R SHALL BE (3) FEET MIN., PLUGGED WATERTIGHT AND MARKED WITH 2" x 2" TREATED STAKE AND ELECTRONIC MARKER.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	TYPICAL SEWER SERVICE CONNECTION	31

MIN. LENGTH (IN FEET) OF PIPE TO BE RESTRAINED
(SOURCES: EBAA IRON RESTRAINT LENGTH CALCULATION PROGRAM FOR PVC PIPE, RELEASE 3.1, AND DIPRA THRUST RESTRAINT FOR DUCTILE IRON PIPE, RELEASE 3.2)

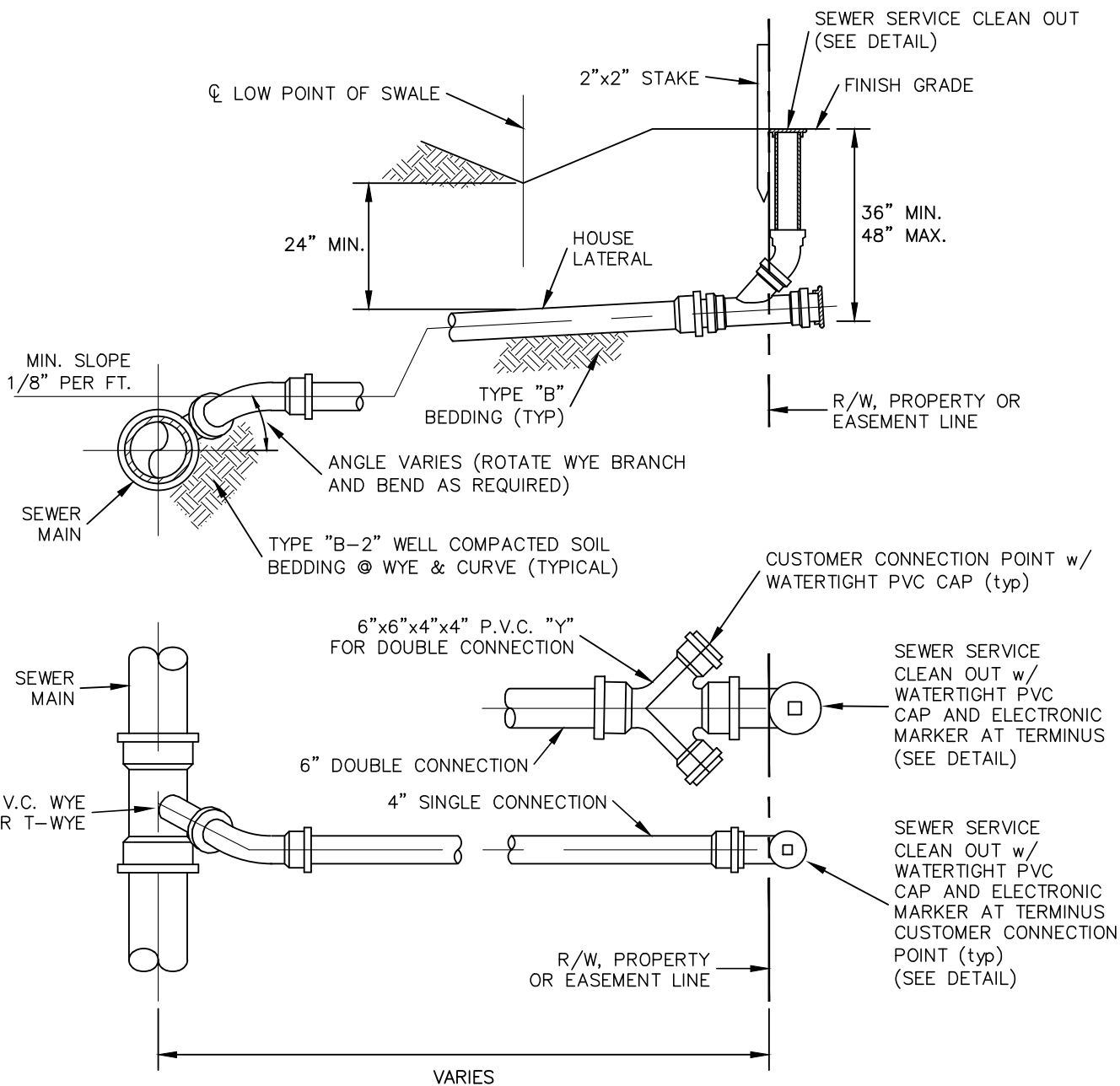
FITTING TYPE	PIPE SIZE							
	4"	6"	8"	10"	12"	16"	20"	24"
90° HORIZ. BEND	14	20	25	30	35	45	54	62
45° HORIZ. BEND	6	8	11	13	15	19	22	26
22.5° HORIZ. BEND	3	4	5	6	7	9	11	12
11.25° HORIZ. BEND	1	2	3	3	4	4	5	6
90° VERT. OFFSET	29	41	53	64	74	95	115	134
45° VERT. OFFSET	12	19	24	29	34	39	48	56
22.5° VERT. OFFSET	6	9	12	14	17	19	23	27
11.25° VERT. OFFSET	3	4	6	7	8	9	11	13
PLUG (DEAD END)	32	45	59	70	83	107	129	151
IN-LINE VALVE	32	45	45	45	45	55	65	80
TEE (BRANCH RESTRAINT)	4" x 8" 23	6" x 8" 21	8" x 8" 18	10" x 8" 16	12" x 8" 13	16" x 8" 7	20" x 8" 1	24" x 8" 1
REDUCER (LARGER PIPE RESTRAINT)	6" x 8" 23	8" x 8" 38	10" x 8" 57	12" x 8" 72	16" x 8" 99	20" x 8" 123	24" x 8" 146	

NOTES:

1. THE DATA IN THE ABOVE TABLE ARE BASED UPON THE FOLLOWING INSTALLATION CONDITIONS:
SOIL TYPE-SAND TEST PRESSURE-150 PSI DEPTH OF BURY-3"
TRENCH TYPE-3 SAFETY FACTOR-1.5 VERTICAL OFFSET-3"
MINIMUM PIPE LENGTH ALONG TEE RUN-5'
2. THE RESTRAINED PIPE LENGTHS APPLY TO DUCTILE IRON AND PVC PIPE.
3. ALL JOINTS BETWEEN UPPER AND LOWER BENDS SHALL BE RESTRAINED.
4. RESTRAINED PIPE LENGTHS APPLY TO PIPE ON BOTH SIDES OF VALVES AND FITTINGS.
5. DESIGN ENGINEER SHALL BE RESPONSIBLE FOR PROPERLY SIZING THE LENGTH OF PIPE TO BE RESTRAINED.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	MECHANICAL JOINT ANCHORING REQUIREMENTS	21

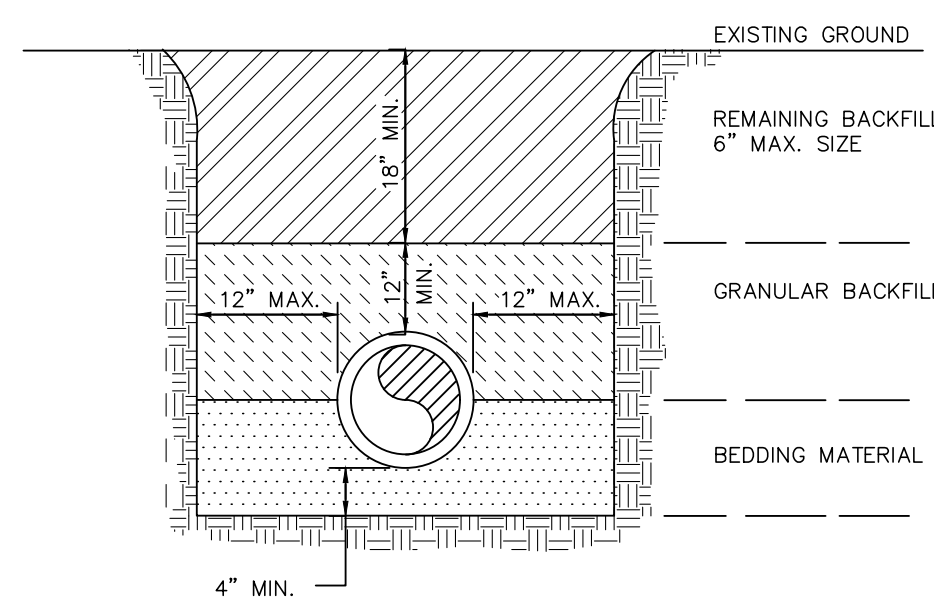


NOTES:

1. INVERT OF LATERAL TO BE 36" FROM FINISHED GRADE EXCEPT ON " WATER LINE SIDE " OF STREET R/W WHERE IT SHALL DROP TO 48" AS SOON AS DEPTH OF SEWER MAIN PERMITS.
2. THIS DETAIL TO BE USED WHEN TOP OF SEWER MAIN IS LESS THAN 7'-0" DEEP.
3. INSTALL MAGNETIC MARKERS AT THE END OF EACH SERVICE LINE OR OPPOSITE WYES AND RECORD LOCATION.
4. SERVICE LATERALS SHALL TERMINATE WITH A CLEANOUT AT R.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SANITARY SEWER LATERAL DETAIL	32

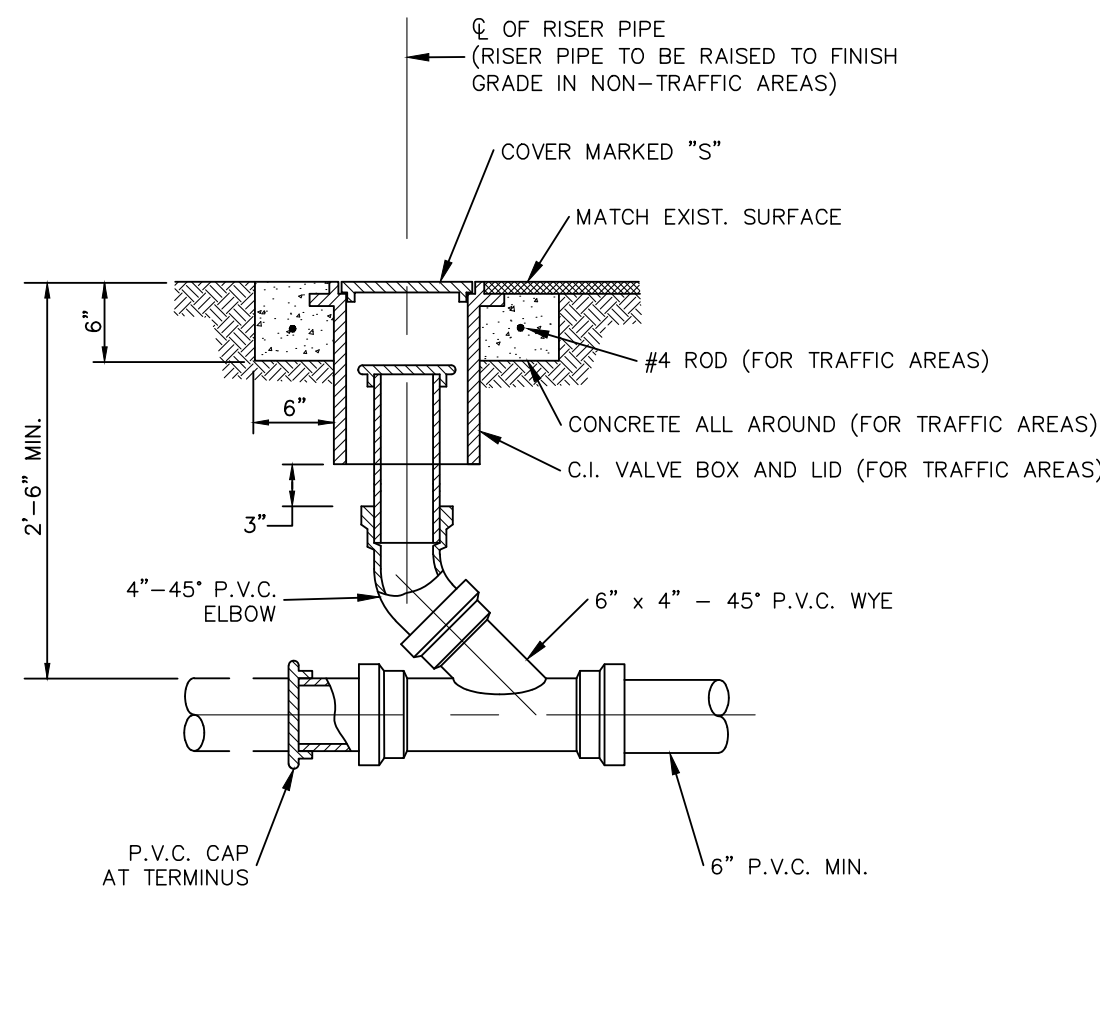


NOTES:

1. BEDDING MATERIAL SHALL BE HAND PLACED IN 6" LIFTS AND SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8"-7/8" SIZING. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE DONE WITH APPROVED MATERIAL, CLEAN AND FREE OF ROCKS, MUCK AND OTHER DELETERIOUS MATTER AND COMPACTED BENEATH THE HAUNCHES OF THE PIPE USING MECHANICAL TAMPERS TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
5. BACKFILL TO BE COMPACTED ALONG THE SIDES OF THE PIPE AND TO A POINT ONE FOOT ABOVE THE TOP OF THE PIPE TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
6. A. WHERE PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING BACKFILL SHALL BE COMPACTED IN 6 INCH LAYERS AND COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
B. WHERE "NO" PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING FILL SHALL BE COMPACTED IN 6 INCH LAYERS TO A DENSITY 90% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
7. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL TRENCH SAFETY REGULATIONS

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	TYPICAL TRENCH DETAIL	23



NOTES:

1. CONCRETE PAD w/ REBAR AND CAST IRON VALVE BOX TO BE INSTALLED IN TRAFFIC AREAS ONLY.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SEWER SERVICE CLEANOUT	33



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE:
VERT. SCALE:

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

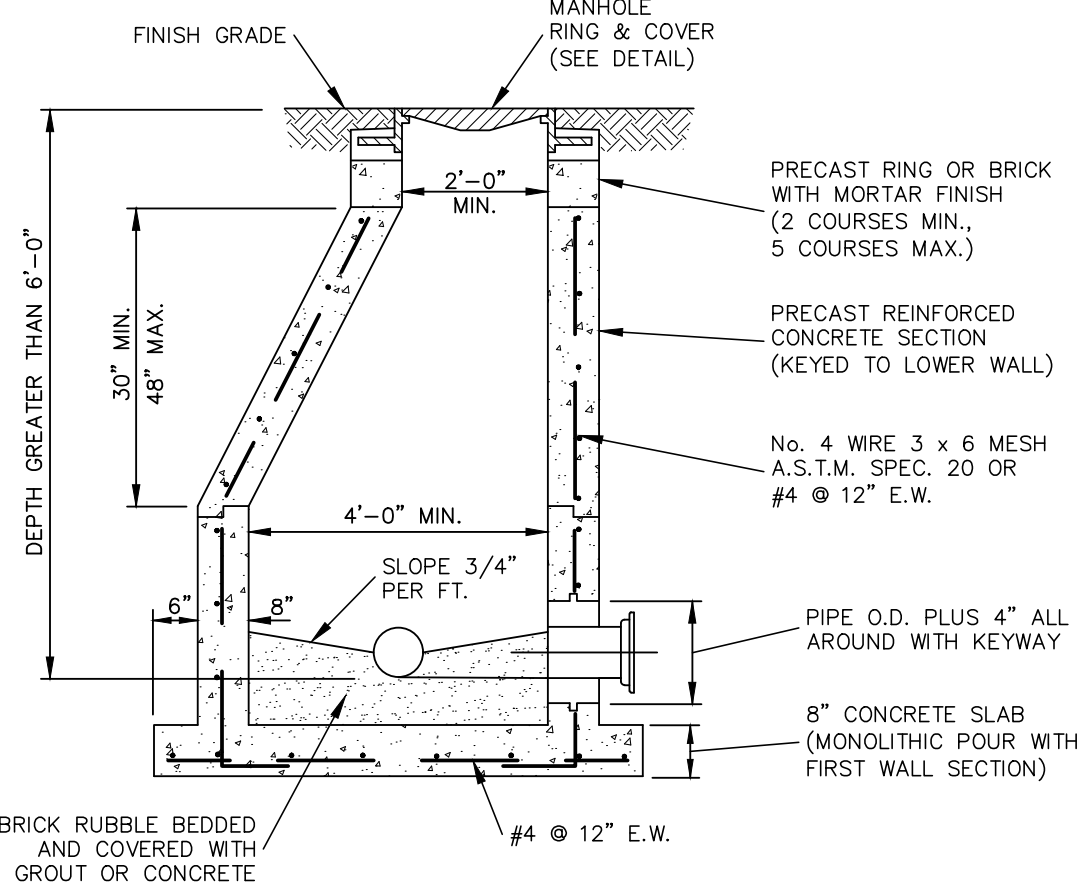
SANITARY STANDARD DETAILS

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

SHEET IDENTIFICATION
JOB No.: 1329.2

SHEET 26 OF 28

1329.2 NOTES - DETAILS
CADD FILE:

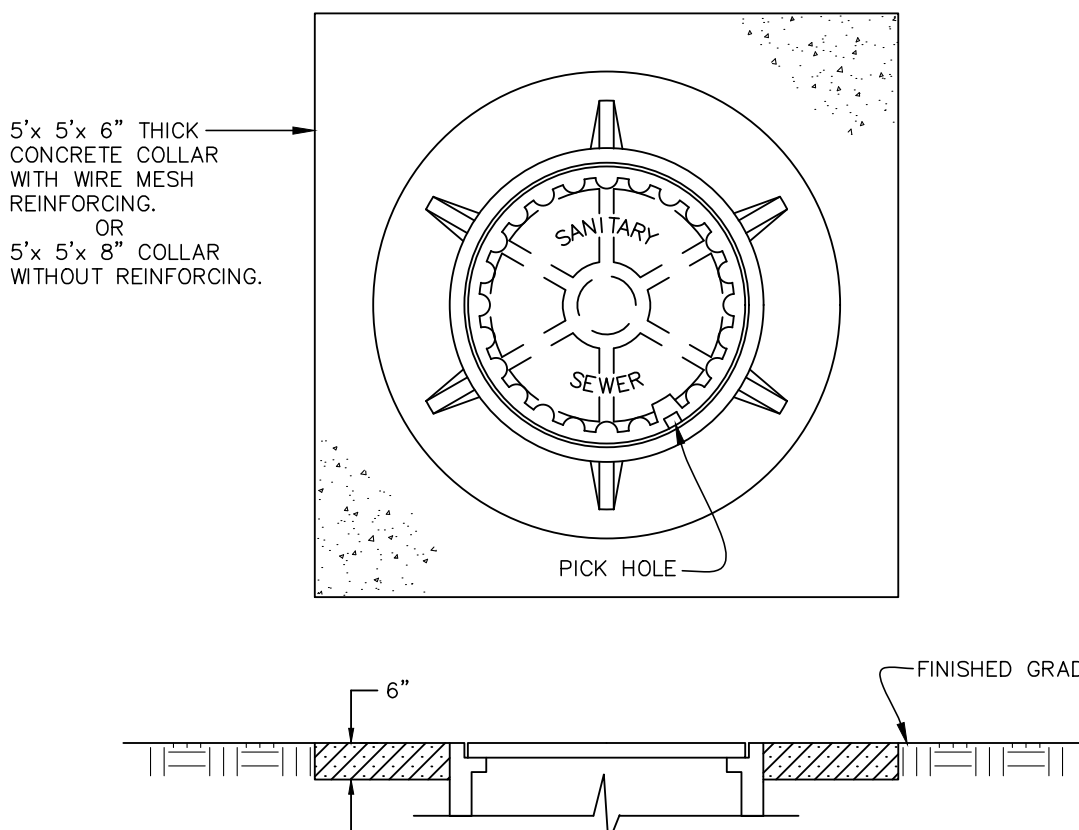


NOTES:

1. PROVIDE 0.1' DROP THROUGH MANHOLE.
2. PRECAST CONCRETE TYPE II, 4000 P.S.I.
3. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
4. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
5. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL)
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
8. SAND COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
9. MANHOLE TO RECEIVE 2 COATS WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL) ON THE INTERIOR AND EXTERIOR. TERMINAL MANHOLES, I.E. THE LAST MANHOLE PRIOR TO DISCHARGE TO A LIFT STATION, SHALL RECEIVE 2 COATS OF WATER BASED EPOXY ON THE EXTERIOR (PRO TECH EW-1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF REZCLAD E-125S AR OR MIN. 1/2" SEWPER COAT OR IET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 5-10 MILS FINISH COAT) OR MIN. 1/2" REFRATTA HAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION	STANDARD MANHOLE	DWG No.
AUGUST 2016		34

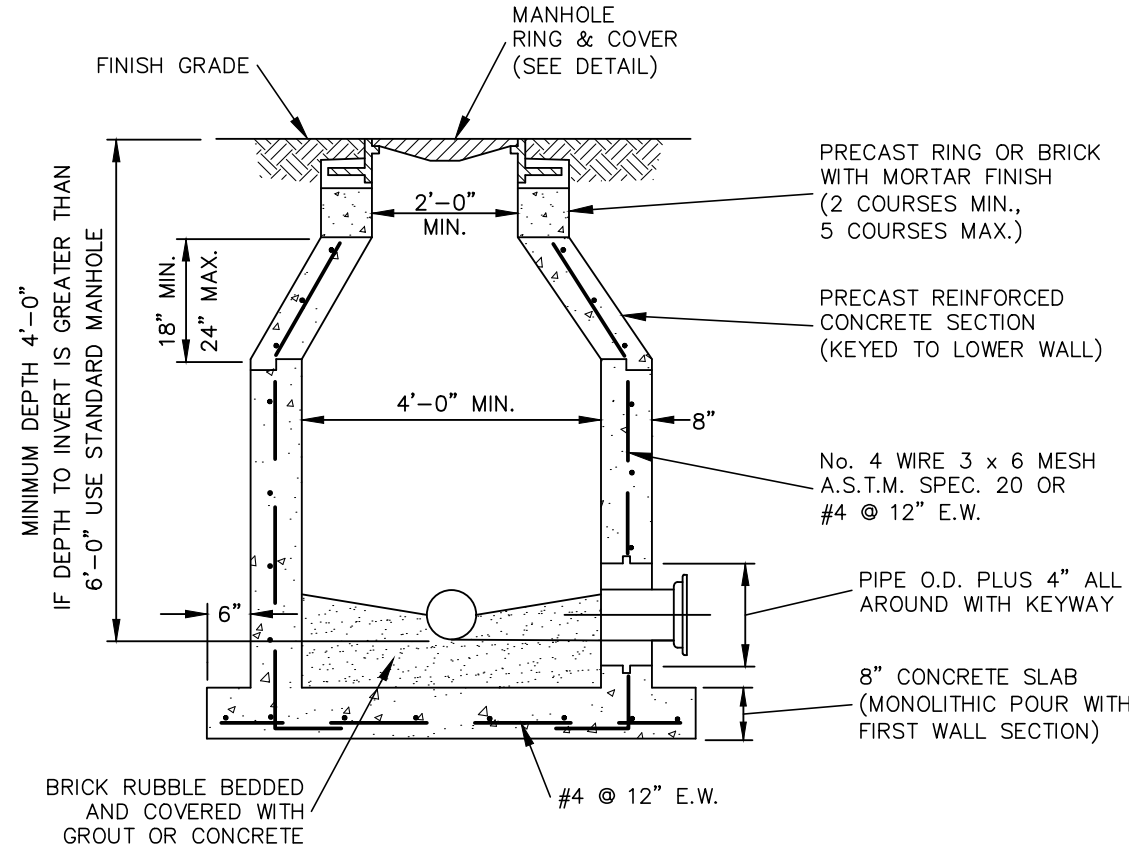


NOTES:

1. COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.
2. MINIMUM WEIGHTS: COVER - 160 LBS., FRAME - 240 LBS.
3. RING AND COVER SHALL BE U.S. FOUNDRY 420-C, VULCAN FOUNDRY V-101 OR APPROVED EQUAL.
4. MANHOLE COVER SHALL HAVE THE WORDS "SANITARY SEWER" CAST IN METAL.
5. MANHOLE COVER SHALL MEET H-20 TRAFFIC LOADING.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION	SANITARY SEWER MANHOLE RING AND COVER	DWG No.
AUGUST 2016		38

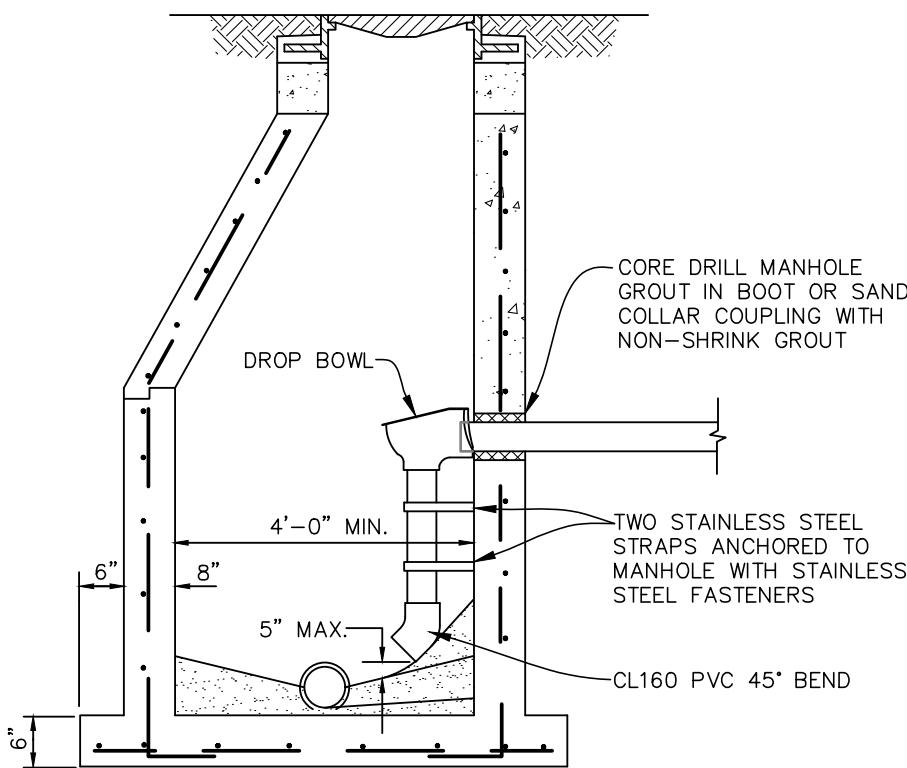


NOTES:

1. PROVIDE 0.1' DROP THROUGH MANHOLE.
2. PRECAST CONCRETE TYPE II, 4000 P.S.I.
3. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
4. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
5. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL)
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
8. SAND COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
9. MANHOLE TO RECEIVE 2 COATS WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL) ON THE INTERIOR AND EXTERIOR. TERMINAL MANHOLES, I.E. THE LAST MANHOLE PRIOR TO DISCHARGE TO A LIFT STATION, SHALL RECEIVE 2 COATS OF WATER BASED EPOXY ON THE EXTERIOR (PRO TECH EW-1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF REZCLAD E-125S AR OR MIN. 1/2" SEWPER COAT OR IET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 5-10 MILS FINISH COAT) OR MIN. 1/2" REFRATTA HAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION	SHALLOW MANHOLE	DWG No.
AUGUST 2016		35

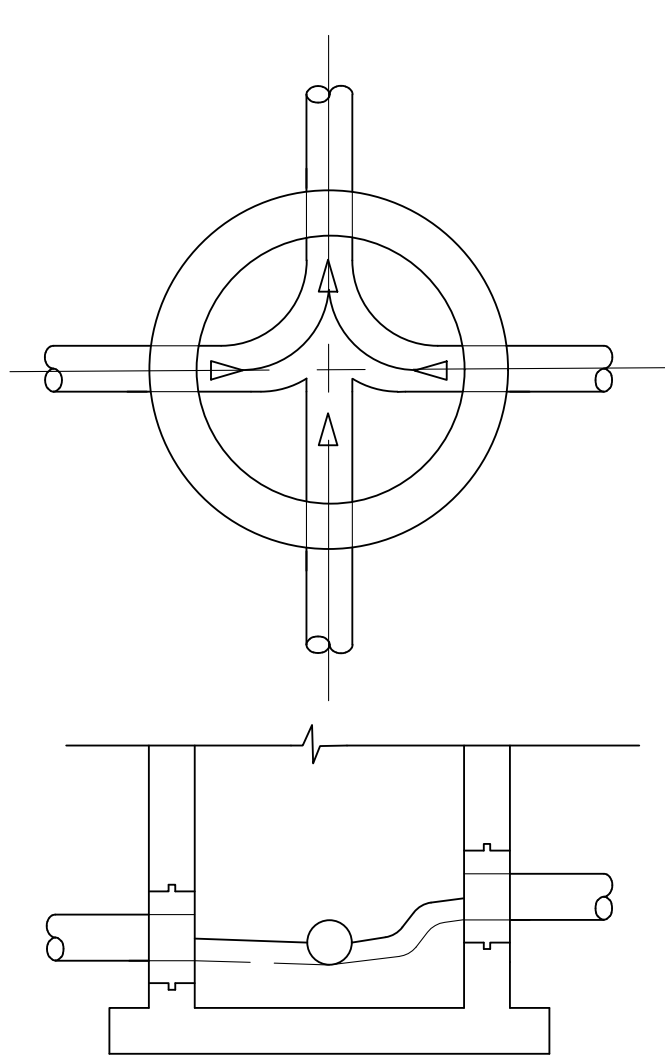


NOTES:

1. ALL DETAILS AND SPECIFICATIONS FOR STANDARD MANHOLES ARE APPLICABLE EXCEPT FOR REFERENCES TO DROP ASSEMBLY AND COATINGS.
2. THE PRECAST BASE SHALL EXTEND FULLY UNDER THE DROP ASSEMBLY.
3. MASONRY CONSTRUCTION ABOVE THE EXTENDED PRECAST BASE IS PERMISSIBLE IF FILLED WITH CONCRETE.
4. BRICK AND CONCRETE RUBBLE ARE PERMITTED AS FILLER IN DROP ENCASEMENT.
5. DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT INVERT IS LOCATED 2.0 FEET OR MORE ABOVE THE MAIN INVERT CHANNEL. DROP CONNECTIONS SHOULD NOT BE DESIGNED FOR LESS THAN A 24-INCH DROP.
6. SOLVENT TYPE JOINT P.V.C. FITTINGS MAY BE UTILIZED IN THE DROP ASSEMBLY ONLY.
7. THE EXTERIOR SHALL RECEIVE 2 COATS OF WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF REZCLAD E-125S AR OR MIN. 1/2" SEWPER COAT OR IET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 5-10 MILS FINISH COAT) OR MIN. 1/2" REFRATTA HAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION	DROP MANHOLE AND SERVICE DROP	DWG No.
AUGUST 2016		39

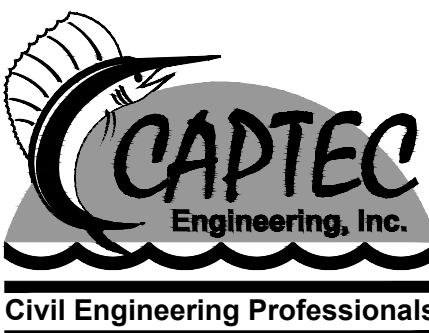


NOTES:

1. ALL INVERT CHANNELS ARE TO BE CONSTRUCTED FOR SMOOTH FLOW WITHOUT OBSTRUCTION.
2. PROPERLY SHAPED SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.
3. BRICK AND CONCRETE RUBBLE PERMITTED AS FLOW CHANNEL BUILDUP.
4. SIDEWALLS OF FLOW CHANNEL SHALL BE AT LEAST HALF OF PIPE HEIGHT AT ALL POINTS.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION	INVERT FLOW CHANNEL DETAIL	DWG No.
AUGUST 2016		37



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4344
E-mail: captecinfo@gocaptec.com
Engineering Business
No. EB-0007657

DATE: 03-27-2020
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DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE:
VERT. SCALE:

SCALE VERIFICATION
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SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	03-27-2020

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

SANITARY STANDARD DETAILS 2

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

1329.2 NOTES - DETAILS
CADD FILE:

SHEET IDENTIFICATION
JOB No.: 1329.2

SHEET
27 OF 28

GENERAL NOTES:

1.

ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGE OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR TO UTILIZE "APPROVED FOR CONSTRUCTION PLANS" ONLY.
2.

THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES 14 DAYS PRIOR TO CONSTRUCTION OPERATIONS ADJACENT TO THEIR FACILITIES. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.
3.

THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND THE OWNER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. ALL BELL SOUTH, FPL, LOCAL CABLE, AND ALL LOCAL UTILITY COMPANY (CITY, COUNTY, WATER AND SEWER) LOCATIONS SHOWN ARE TAKEN FROM INFORMATION PROVIDED BY THAT UTILITY COMPANY. THESE LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR TO EXPOSE ALL CROSSINGS WITH SOUTHERN BELL, CABLES/CATV AND FLORIDA POWER AND LIGHT CONDUITS PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF PRIVATE UTILITY FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVES PRESENCE DURING CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES. A PROFILE OF THE PRIVATE UTILITY FACILITIES ARE NOT PROVIDED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE APPROXIMATE LOCATION OF THESE FACILITIES. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.
4.

CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, LANDSCAPE FEATURES, TREES AND UTILITIES NOT SHOWN ON THE PLANS TO BE REMOVED BY CONSTRUCTION.
5.

PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE- CONSTRUCTION MEETING. THE CONTRACTOR SHALL NOTIFY THE LOCAL UTILITY COMPANY BY LETTER REQUESTING ATTENDANCE AT THE PRE-CONSTRUCTION MEETING THE SUPERINTENDENT FOR THIS PROJECT SHALL SUBMIT A FORMAL RESUME SHOWING QUALIFICATIONS PRIOR TO THE PRE-CONSTRUCTION MEETING. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.
6.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE. BY SUBMITTAL OF A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES HIS COMPLETE UNDERSTANDING AND RESPONSIBILITIES WITH RESPECT TO THE CONSTRUCTION ACTIVITIES REQUIRED UNDER THE SCOPE OF THIS PROJECT.
7.

THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA TO BE IN EFFECT AS OF OCTOBER 1, 1990.
8.

AS-BUILT RECORD DRAWINGS: UPON COMPLETION OF THE WORK, BUT PRIOR TO SUBMITTAL OF REQUEST FOR FINAL PAYMENT OR FINAL ACCEPTANCE, THE CONTRACTOR OR DEVELOPER'S ENGINEER SHALL OBTAIN AND SUBMIT RECORD INFORMATION CERTIFIED BY A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER PREPARED IN ACCORDANCE WITH MARTIN COUNTY UTILITIES AND SOLID WASTE DEPARTMENT MINIMUM CONSTRUCTION STANDARDS - SECTION 7 - RECORD DRAWINGS. TWO (2) PAPER PRINTS OF THE PLAN SHEETS, PROFILES, DETAILS AND LIFT STATION SHALL BE PROVIDED. THE PRINT SHALL BE SIGNED AND SEALED BY THE FLORIDA PROFESSIONAL SURVEYOR AND MAPPER AND THE FLORIDA PROFESSIONAL ENGINEER RESPONSIBLE FOR CERTIFYING THE PROJECT. ALL SHEETS MUST INCLUDE THE VERTICAL DATUM AND HORIZONTAL DATUM USED IN EASILY READABLE PRINT.
- THREE (3) ELECTRONIC RECORD DRAWING FILES SHALL ALSO BE PROVIDED AS FOLLOWS: ONE (1) DIGITAL RECORD DRAWING CAD FILE SAVED IN THE ORIGINAL FORMAT AS DESIGNED, BUT BEING AUTOCAD VERSION 2004 OR NEWER. ONE (1) DIGITAL RECORD DRAWING SAVED IN DWF FORMAT AS AN EXACT REPRODUCTION OF THE SIGNED AND SEALED RECORD DRAWING ON PAPER, WITHOUT SIGNATURE OR SEAL WITH A RESOLUTION OF 300 DOTS PER INCH (DPI). ONE (1) DIGITAL RECORD DRAWING SAVED IN PDF FORMAT AS AN EXACT REPRODUCTION OF THE SIGNED AND SEALED RECORD DRAWING ON PAPER, WITHOUT SIGNATURE OR SEAL WITH A RESOLUTION OF 300 DOTS PER INCH (DPI).

ALL RECORD DRAWING INFORMATION SHALL ACCURATELY DEPICT ALL SURVEYED INFORMATION WITH ALL HORIZONTAL VECTOR INFORMATION BEING SHOWN IN THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND IN THE FLORIDA EAST ZONE STATE PLANE COORDINATE SYSTEM OR THE LATEST NGS ADOPTED DATUM USING U.S. SURVEY FEET AS THE UNIT OF MEASUREMENT.

CAD FILES: THE DIGITAL RECORD DRAWING CAD FILE SHALL FOLLOW THESE GENERAL STANDARDS FOR INCLUSION IN THE UTILITY'S GEOGRAPHIC INFORMATION SYSTEM (GIS): ALL RECORD DRAWING PIPING INFORMATION SHALL BE PLACED ON SEPARATE LAYERS BY PIPING TYPE, DIAMETER AND MATERIAL. ALL RECORD DRAWING FIXTURE INFORMATION (FIRE HYDRANTS, VALVES, METERS, REDUCERS, TEES, WYES, CROSSES, CAPS, ETC.) SHALL BE PLACED ON SEPARATE LAYERS BY THE PIPING TYPE THEY ARE ATTACHED TO. ALL PIPING SHALL BE DRAFTED AS POLYLINES; SEPARATED ONLY AT JUNCTIONS OR CHANGES IN PIPE DIAMETER. ALL PIPING POLYLINES SHALL SNAP TO ONE ANOTHER AT EVERY JUNCTION AND CHANGE IN PIPE DIAMETER. A TEMPLATE FILE SHALL BE PROVIDED TO THE UTILITY DEPARTMENT WHICH CLEARLY DEPICTS RECORD DRAWING LAYERS AND BLOCKS TO BE USED IN FINAL RECORD DRAWING SUBMITTALS. ALL RECORD DRAWING CAD FILES SHALL ADHERE TO THE LAYER AND BLOCK STRUCTURE SUBMITTED IN THE TEMPLATE FILE.
9.

THE CONTRACTOR WILL SUBMIT FOR APPROVAL BY OWNER A PLAN SHOWING THE SCHEDULE OF WORK, INCLUDING A HIGHLIGHTED PLAN SHOWING THE ORDER OF CONSTRUCTION WHICH WILL FACILITATE MAINTAINING EXISTING SERVICES DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND COUNTY RULES AND REGULATIONS GOVERNING THE USE OF STREETS FOR PROTECTION OF THE WORK AND PUBLIC SAFETY. MAINTENANCE OF TRAFFIC SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - LATEST EDITION AND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
10.

ALL CONSTRUCTION IS TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS AND SPECIFICATIONS (2014), THE REQUIREMENTS OF MARTIN COUNTY CODES AND REGULATIONS AND MARTIN COUNTY UTILITIES AND SOLID WASTE DEPARTMENT SPECIFICATIONS AND STANDARDS (AUGUST 2016). IN ADDITION ALL ACTIVITIES ARE TO BE IN ACCORDANCE WITH F.D.P.E. STANDARDS AND ITEMS DESCRIBED IN THE TECHNICAL PROVISIONS OF THE CONSTRUCTION CONTRACT.

GENERAL NOTES (CONT.):

11.

ANY MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY,

GEODETIC INFORMATION CENTER
ATTN.: CHARLIE NOVICE
ATTN.: M/CG - 162
6001 EXECUTIVE BOULEVARD
ROCKVILLE, MARYLAND 20852
TELEPHONE: (301) 443-8319
12.

BENCH MARK DATA IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88).
13.

SHOP DRAWING SUBMITTAL APPROVALS ARE REQUIRED FOR ALL STRUCTURES AND SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING. THE ENGINEER REQUIRES FIVE (5) BUSINESS DAYS TO REVIEW SHOP DRAWINGS AFTER RECEIPT. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.
14.

ALL UNSUITABLE MATERIALS, SUCH AS MUCK, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIAL AS CLASSIFIED BY AASHTO M 145, FOUND SHALL BE REMOVED DOWN TO ROCK OR SUITABLE MATERIAL, AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM 12 INCH LIFTS COMPACTED TO NOT LESS THAN 98% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T-180. THICKNESS OF LAYERS MAY BE INCREASED, PROVIDED THAT THE EQUIPMENT AND METHODS USED ARE PROVEN BY FIELD DENSITY TESTING AND CAPABLE OF COMPACTING THICK LAYERS TO SPECIFIED DENSITIES.
15.

ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS CLEARING AND GRUBBING SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON, OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF ONE (1) FOOT. ITEMS DESIGNATED TO REMAIN, TO BE RELOCATED, OR TO BE ADJUSTED SHALL BE DESIGNATED ON THE DRAWINGS.
16.

FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO M-145. FILL SHOULD BE FREE FROM DEBRIS; VEGETATION, ORGANIC OR OTHER DELETERIOUS MATTER, AND SHOULD CONSIST OF CLEAN GRANULAR MATERIAL. IT SHOULD CONTAIN NOT MORE THAN 10 PERCENT PASSING THE U.S. STANDARD NUMBER 200 SIEVE, AND HAVE AN ORGANIC CONTENT LESS THAN ONE PERCENT. FILL SHOULD BE PLACED IN APPROXIMATELY LEVEL LIFTS OF LESS THAN 12 INCHES IN UNCOMPACTED THICKNESS, BE MOISTURE CONDITIONED AS NECESSARY, AND UNIFORMLY COMPACTED TO AT LEAST 98 PERCENT RELATIVE COMPACTION AS DETERMINED BY THE MODIFIED PROCTOR PROCEDURE (ASTM D1557). THE EXCAVATED SURFACE AND EACH LAYER OF BACKFILL SHOULD BE COMPACTED WITH A SELF-PROPELLED STEEL DRUM VIBRATORY ROLLER HAVING A MINIMUM TOTAL APPLIED FORCE OF 10 TONS. CONTRACTOR TO OVER EXCAVATE ALL DRY DETENTION AREAS TO FULLY REMOVE ANY SOILS THAT MAY LIMIT THE INFILTRATION OF STORM WATER LOCATED WITHIN 24" OF THE HARD PAN LAYER.
17.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO: DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS AND STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC. DENSITY TESTS SHALL BE PERFORMED AT THREE (3) LOCATIONS AROUND AND WITHIN 2' OF ALL STRUCTURES. TEST SHALL BE TAKEN IN THE FIRST FOOT ABOVE THE BOTTOM OF THE STRUCTURE AND THEN EVERY TWO FEET UP TO WITHIN TWO FEET OF THE FINISH GRADE.
18.

ALL DISTURBED AREAS SHALL BE SODDED UPON COMPLETION OF GRADING TO AVOID EROSION AFTER AS-BUILT GRADE ELEVATIONS ARE APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING OF THE WATER QUALITY MANAGEMENT SYSTEM.
19.

TRENCHES AND EXCAVATIONS SHOULD BE KEPT DRY WHILE WORK IS IN PROGRESS. EXCAVATED MATERIALS, SUCH AS BOULDERS AND LOGS THAT ARE NOT SUITABLE FOR BACKFILL, SHOULD BE REMOVED FROM SITE. THE PIPE BARREL SHALL BE UNIFORMLY SUPPORTED ALONG ITS ENTIRE LENGTH ON UNDISTURBED SOIL OR BEDDING MATERIAL. PROPER BEDDING SHALL BE SUPPLIED IF THE EXISTING MATERIAL INCLUDES ROCK, ORGANIC MATTER OR OTHER SHARP OR UNSTABLE MATERIAL.
20.

THE CONTRACTOR SHALL CONSTRUCT THE IMPROVEMENTS IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACTS OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES AND WATER QUALITY ON OR OFF-SITE. THE CONTRACTOR SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS. ALL WORK WITHIN THIS PROJECT WILL BE COMPLETED IN STRICT COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES).
21.

ALL EXISTING LINES THAT ARE ABANDONED SHALL BE CUT, PLUGGED AND GROUTED, OR REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER AND OWNER. SINCE EXISTING LINES WITHIN THE PROJECT ARE ASBESTOS CONCRETE PIPE THEY SHALL BE HANDLED BY F.D.E.P. RULES AND REGULATIONS.

EROSION AND SEDIMENT CONTROL / ENVIRONMENTAL PROTECTION

1.

THE CONTRACTOR SHALL MAINTAIN A COPY OF THE LATEST LOCAL WATER MANAGEMENT DISTRICT SURFACE WATER PERMIT, COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITIONS AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY DISTRICT REPRESENTATIVES. THE CONTRACTOR SHALL REVIEW THE COMPLETE PERMIT PRIOR TO COMMENCEMENT OF THE ACTIVITY AUTHORIZED BY THE PERMIT. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION STSTEM (NPDES) PERMIT ALONG WITH AN APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND THESE DOCUMENTS MUST REMAIN ON THE PROJECT SITE AT ALL TIMES. THROUGHOUT THE CONSTRUCTION OF THE PROJECT, THE CONTRACTOR COULD BE REQUIRED TO ENHANCE UPON THE SWPPP PLANS TO COMPLY WITH THE NPDES PERMIT AND THE STATE WATER QUALITY GUIDELINES. THESE ENHANCEMENTS ARE CONSIDERED INCIDENTAL TO THE COST OF EROSION AND SEDIMENT CONTROL.
2.

ALL ACTIVITIES SHALL BE IMPLEMENTED AS SET FORTH IN THE PLANS, SPECIFICATIONS, AND PERFORMANCE CRITERIA AS APPROVED BY LOCAL SURFACE WATER PERMIT. ANY DEVIATION FROM THE PERMITTED ACTIVITY AND THE CONDITIONS FOR UNDERTAKING THAT ACTIVITY SHALL BE CONSIDERED A VIOLATION OF THE PERMIT. PRIOR TO ANY WORK, A NOTICE OF PENDING CONSTRUCTION NEEDS TO BE SUBMITTED TO THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT.
3.

THE LOCAL WATER MANAGEMENT DISTRICT AUTHORIZED STAFF, UPON PROPER IDENTIFICATION, MUST BE GRANTED PERMISSION TO ENTER, INSPECT, AND OBSERVE THE SYSTEM TO INSURE CONFORMITY WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE PERMIT.
4.

PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES (BEST MANAGEMENT PRACTICES) REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. ALL PRACTICES MUST BE IN ACCORDANCE WITH THE GUIDELINES AND SPECIFICATIONS IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL. A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATIONS 1988), WHICH ARE HEREBY INCORPORATED BY REFERENCE, UNLESS A PROJECT SPECIFIC EROSION AND SEDIMENT CONTROL PLAN IS APPROVED AS PART OF THE SFWM PERMIT, IN WHICH CASE THE PRACTICES MUST BE IN ACCORDANCE WITH THE PLAN. IF SITE SPECIFIC CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION OR OPERATION TO PREVENT EROSION OR CONTROL SEDIMENT, BEYOND THOSE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY, IN ACCORDANCE WITH THE SPECIFICATIONS IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL. A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 1988). THE CONTRACTOR SHALL CORRECT ANY EROSION OR SHOALING THAT CAUSES ADVERSE IMPACTS TO THE WATER RESOURCES.
5.

STABILIZATION MEASURES UTILIZING SOO OR SEED AND MULCH SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. ALL WORK ON THIS PROJECT WILL BE CONSTRUCTED IN COMPLIANCE WITH THE APPROVED NPDES PERMIT.
6.

THE STORM WATER MANAGEMENT SYSTEM MUST BE COMPLETE IN ACCORDANCE WITH THE PERMITTED PLANS AND PERMIT CONDITIONS PRIOR TO THE INITIATION OF THE PERMITTED USE OF SITE INFRASTRUCTURE. THE SYSTEM MUST BE COMPLETE IN ACCORDANCE WITH THE PERMITTED PLANS AND PERMIT CONDITIONS PRIOR TO TRANSFER AND RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF THE STORM WATER MANAGEMENT SYSTEM TO A RESPONSIBLE ENTITY. THE OWNER WILL NOT RELEASE FINAL PAYMENTS AND ALLOW REDUCTION OF RETAINAGE UNTIL ALL ITEMS ARE COMPLETED AND ACCEPTED BY THE OWNER.
7.

NPDES PERMIT MONITORING MUST BE COMPLETED BY CONTRACTOR IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND MARTIN COUNTY.

GEOTECHNICAL NOTES

FILL PLACEMENT

NEW FILL MATERIALS MUST BE PLACED UNDER ENGINEERING SUPERVISION OF A GEOTECHNICAL ENGINEER. THE FILL SHOULD BE INORGANIC GRANULAR SOILS FREE FROM DELETERIOUS MATERIALS AND APPROVED BY OUR FIRM. THE FILL SHOULD BE PLACED IN LIFTS OF NO GREATER THAN 12 INCHES THICK, AND EACH LIFT SHOULD BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED COMPACTION TEST (ASTM 01 557). IN RESTRICTED AREAS WHERE A SMALL COMPACTOR MUST BE USED, THE LIFT THICKNESS SHOULD BE REDUCED TO 6 INCHES, AS DIRECTED BY THE INSPECTING GEOTECHNICAL ENGINEER. BACKFILL PLACED ADJACENT TO THE PILE CAPS AND GRADE BEAMS SHOULD BE COMPACTED TO AT LEAST 98 PERCENT OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

BACKFILL BEHIND WALLS SHOULD BE APPROVED SAND FILL AS INDICATED PREVIOUSLY AND SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING 12 INCHES IN THICKNESS AND SHOULD BE COMPACTED TO MINIMUM DRY DENSITY OF BETWEEN 92 PERCENT AND 95 PERCENT OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY USING SMALL VIBRATORY COMPACTION EQUIPMENT. OVER COMPACTION IN THESE AREAS SHOULD BE AVOIDED. THE WALLS SHOULD BE TEMPORARILY BRACED DURING COMPACTION TO PREVENT OVERSTRESSING OF THE WALLS. PRIOR TO INITIATING COMPACTION OPERATIONS, REPRESENTATIVE SAMPLES OF THE STRUCTURAL FILL MATERIAL TO BE USED AND ACCEPTABLE IN-PLACE SOILS SHOULD BE COLLECTED AND TESTED TO DETERMINE THEIR COMPACTION AND CLASSIFICATION CHARACTERISTICS. THE MAXIMUM DRY DENSITY, OPTIMUM MOISTURE CONTENT, GRADATION AND PLASTICITY CHARACTERISTICS SHOULD BE DETERMINED. THESE TESTS ARE NEEDED FOR COMPACTION QUALITY CONTROL OF THE STRUCTURAL FILL AND EXISTING SOILS, AND TO DETERMINE IF THE FILL MATERIAL IS ACCEPTABLE.

EXCAVATION REQUIREMENTS

EXCAVATIONS OF FIVE FEET OR MORE IN DEPTH SHOULD BE SLOPED OR SHORED IN ACCORDANCE WITH OSHA AND STATE OF FLORIDA REQUIREMENTS. MATERIALS REMOVED FROM ANY EXCAVATION SHOULD NOT BE STOCKPILED IMMEDIATELY ADJACENT TO THE OPEN EXCAVATION AS THIS LOAD MAY CAUSE A SUDDEN COLLAPSE OF THE SIDEWALLS.

IN OCTOBER OF 1989, AS PUBLISHED IN THE FEDERAL REGISTRAR, VOLUME 54, NO. 209, THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AMENDED ITS: "CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29CFR PART 1926, SUBPART P". IT IS MANDATED BY THIS FEDERAL REGULATION THAT ALL EXCAVATIONS, WHETHER THEY BE UTILITY TRENCHES, BASEMENT EXCAVATION OR FOOTING EXCAVATIONS, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW OSHA GUIDELINES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE, TEMPORARY EXCAVATIONS AND SHOULD SHORE, SLOPE, OR BENCH THE SIDES OF THE EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH THE EXCAVATION SIDES AND BOTTOM.

IF CONDITIONS ARE ENCOUNTERED WHICH ARE NOT CONSISTENT WITH THE FINDINGS PRESENTED IN THIS REPORT, OR IF PROPOSED CONSTRUCTION IS MOVED FROM THE LOCATION STUDIED, THIS OFFICE SHALL BE NOTIFIED IMMEDIATELY SO THAT THE CONDITION OR CHANGE CAN BE EVALUATED AND APPROPRIATE ACTION TAKEN.

PROPOSED POOL

WE CONSIDER THE EXISTING SOILS TO BE SUITABLE FOR SUPPORT OF THE PROPOSED POOL USING CONVENTIONAL CONSTRUCTION METHODS. THE CONTRACTOR SHOULD TAKE MEASURES TO ENSURE THAT THE SIDE SLOPES ARE PROTECTED, AND WILL NOT AFFECT THE EXISTING STRUCTURE. ANY BACKFILL PLACED WITHIN THE ZONE OF INFLUENCE OF FOUNDATIONS (2 HORIZONTAL TO 1 VERTICAL) SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557).

BASED ON THE LEVEL OF THE GROUNDWATER LEVEL AT THE TIME OF THE FIELD WORK, (NINE TO NINE AND A HALF FEET BELOW THE EXISTING GROUND SURFACE) TEMPORARY DEWATERING MAY BE NEEDED IN ORDER TO CONSTRUCT THE POOL. THE POOL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE BEST METHODS OF DEWATERING FOR THE PROJECT.

THE POOL DECK MAY BE CONSTRUCTED ON COMPACTED EXISTING SOILS OR APPROVED FILL. THE SOILS SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY TO A DEPTH OF 12 INCHES BELOW THE COMPACTED SURFACE.

PAVEMENT AREAS (UNLESS OTHERWISE MODIFIED BY MARTIN COUNTY STANDARDS)

PAVEMENT AREAS SHOULD BE COMPACTED TO A MINIMUM OF 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY TO A DEPTH OF AT LEAST 12 INCHES BELOW THE BOTTOM OF THE SUBGRADE LEVEL. WE RECOMMEND THAT STABILIZED SUBGRADE HAVING A MINIMUM LIMEROCK BEARING RATIO (LBR) OF 40 IS PLACED TO A DEPTH OF APPROXIMATELY ONE FOOT T BELOW THE BASE COURSE. THE BASE COURSE SHOULD BE AT LEAST 6 INCHES IN PARKING AREAS AND 8 INCHES IN ROADWAYS, AND SHOULD HAVE A MINIMUM LBR OF 100. THE PROJECT CIVIL ENGINEER SHOULD PROVIDE FINAL PAVEMENT RECOMMENDATIONS FOR THE PLANNED CONSTRUCTION.

WHERE CONCRETE PAVEMENT IS USED, A MINIMUM CONCRETE PAVEMENT THICKNESS OF 6 INCHES IS RECOMMENDED FOR THE STANDARD AND HEAVY DUTY PAVEMENT DESIGN. THE MINIMUM THICKNESS IS BASED UPON CONCRETE WITH A COMPRESSIVE STRENGTH OF 3,500 PSI, AND A MODULUS OF RUPTURE OF 550 PSI. THE PAVEMENT SECTION SHOULD BEAR ON PROPERLY COMPACTED SUBGRADE AS RECOMMENDED IN THIS REPORT.

ENVIRONMENTAL:
GFA INTERNATIONAL, INC.
607 NW COMMODITY COVE
PORT ST. LUCIE, FLORIDA 34986
(772) 924-3575

GEOTECHNICAL FIRM:
ECS FLORIDA, LLC
2000 AVENUE P
SUITE 3
WEST PALM BEACH, FLORIDA 33404
(561) 840-3667

PLANNER / LANDSCAPE ARCHITECT:
LUCIDO AND ASSOCIATES, INC.
701 SE OCEAN BOULEVARD
STUART, FLORIDA 34994
(772) 220-2100

10 DAYS PRIOR TO CROSSING EXISTING CONFLICTS, THE CONTRACTOR WILL POT HOLE THE LOCATION OF ALL EXISTING UTILITIES TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS. NO POT HOLES IN PAVEMENT AREA WILL BE ALLOWED.



301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com

Engineering Business
No. EB-0007657

DATE: 03-27-2020
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE:
VERT. SCALE:

SCALE
VERIFICATION
0 1
SOLID BAR IS EQUAL
TO ONE INCH ON
ORIGINAL DRAWING.
ADJUST ALL SCALED
DIMENSIONS
ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLANS	11-15-19

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

NOTES

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

SHEET
IDENTIFICATION
JOB No.: 1329.2

SHEET
28 OF 28

1329.2 NOTES - DETAILS
CADD FILE:

DOUG SMITH	DISTRICT 1
STACEY HETHERINGTON	DISTRICT 2
HAROLD JENKINS	DISTRICT 3
SARAH HEARD	DISTRICT 4
EDWARD CIAMPI	DISTRICT 5

4

PENSACOLA

TALLAHASSEE

JACKSONVILLE

GAINESVILLE

PALATKA

ORLANDO

SAFETY HARBOR

TAMPA

FT. MYERS

MIAMI

VERO BEACH

FT. PIERCE

JENSEN BEACH

STUART

JUPITER

WEST PALM BEACH

PROJECT LOCATION

The seal of the County of Martin, State of Florida, is a circular emblem. It features a central image of a palm tree with a sun rising behind it, set against a background of water. The words "COUNTY OF MARTIN" are inscribed in a circle around the top, and "STATE OF FLORIDA" is inscribed around the bottom. The entire seal is encircled by a decorative border of palm fronds.

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- LA-1- LA-3 - LANDSCAPE PLANS**
- E0.1- E1.2 - ELECTRICAL / LIGHTING PLANS**

The map shows the coastal area of Jensen Beach, Florida. The Indian River flows from the top right towards the bottom right. US Highway 1 runs vertically along the left side of the river. Jensen Beach is located to the north of the river. The map includes labels for Jensen Beach Blvd., Green River Pkwy., NE Savannah Rd., NE Coy Senda Rd., NW Baker Rd., and the Indian River. A scale bar is provided at the bottom left, indicating distances in miles (0 to 10) and kilometers (0 to 16). The map is divided into numbered sections (14-35) and includes a scale bar.

-THE MARTIN COUNTY PUBLIC WORKS STANDARD DETAILS FOR ROAD AND SITE CONSTRUCTION AND PUBLIC FACILITIES, 12/03/2020 EDITION.



CAPTEC
Engineering, Inc.
Civil Engineering Professionals

301 N.W. Flagler Avenue
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341

Joseph W. Capra, P.E.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638
(seal)

Signature

LENGTH OF PROJECT

	LINEAR FEET	MILES
ROADWAY IMPROVEMENTS	676	0.13
NET LENGTH OF PROJECT	676	0.13
GROSS LENGTH OF PROJECT	676	0.13



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REVISIONS			
01	PERMIT PLANS	3-27-2020	MDB
	DESCRIPTION	DATE	APPR.