

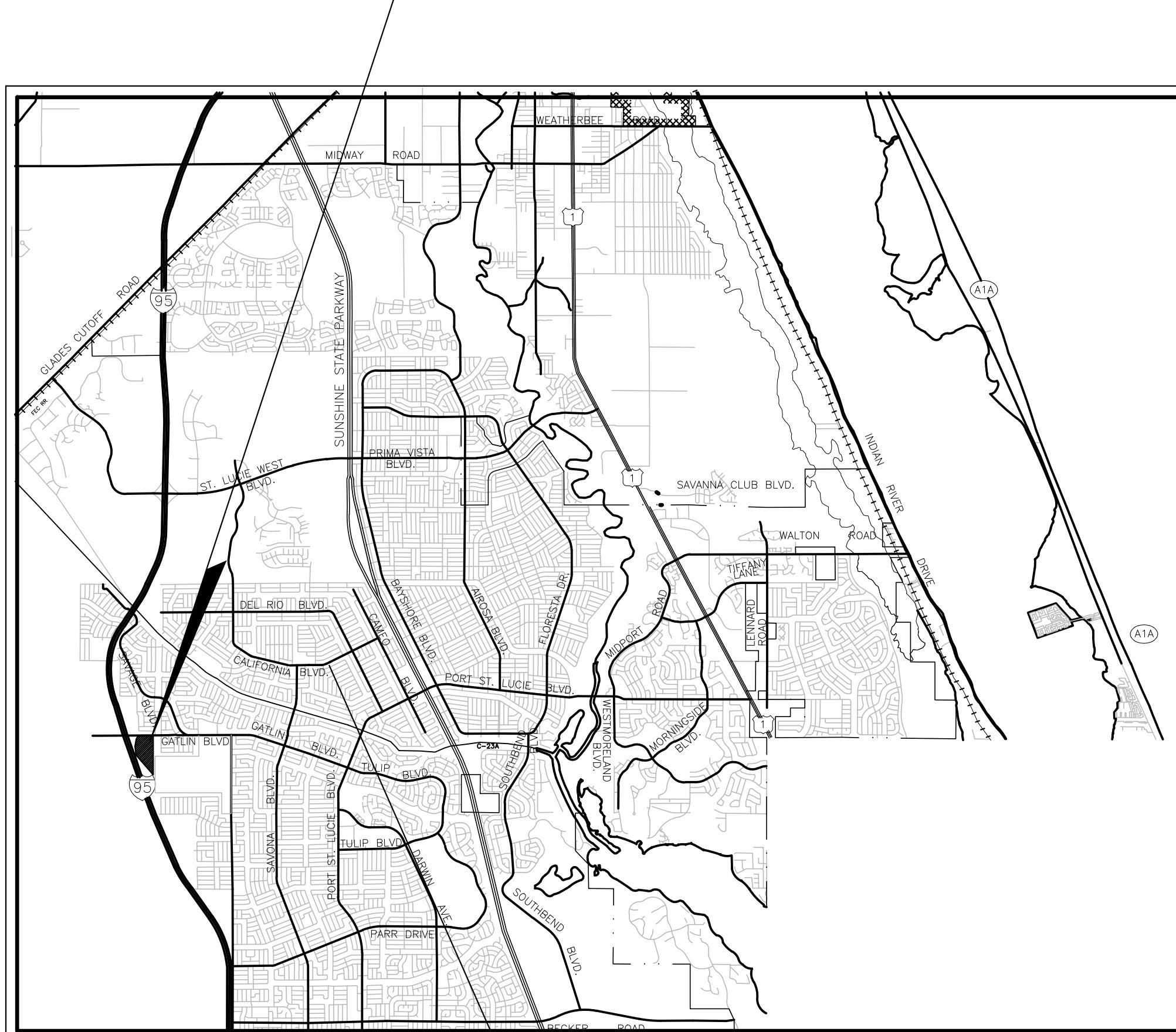
CONSTRUCTION PLANS FOR
GATLIN PLAZA—GOLF GALAXY

IN
SECTION 15, TOWNSHIP 37 SOUTH, RANGE 39 EAST
ST. LUCIE COUNTY, FLORIDA

PREPARED FOR

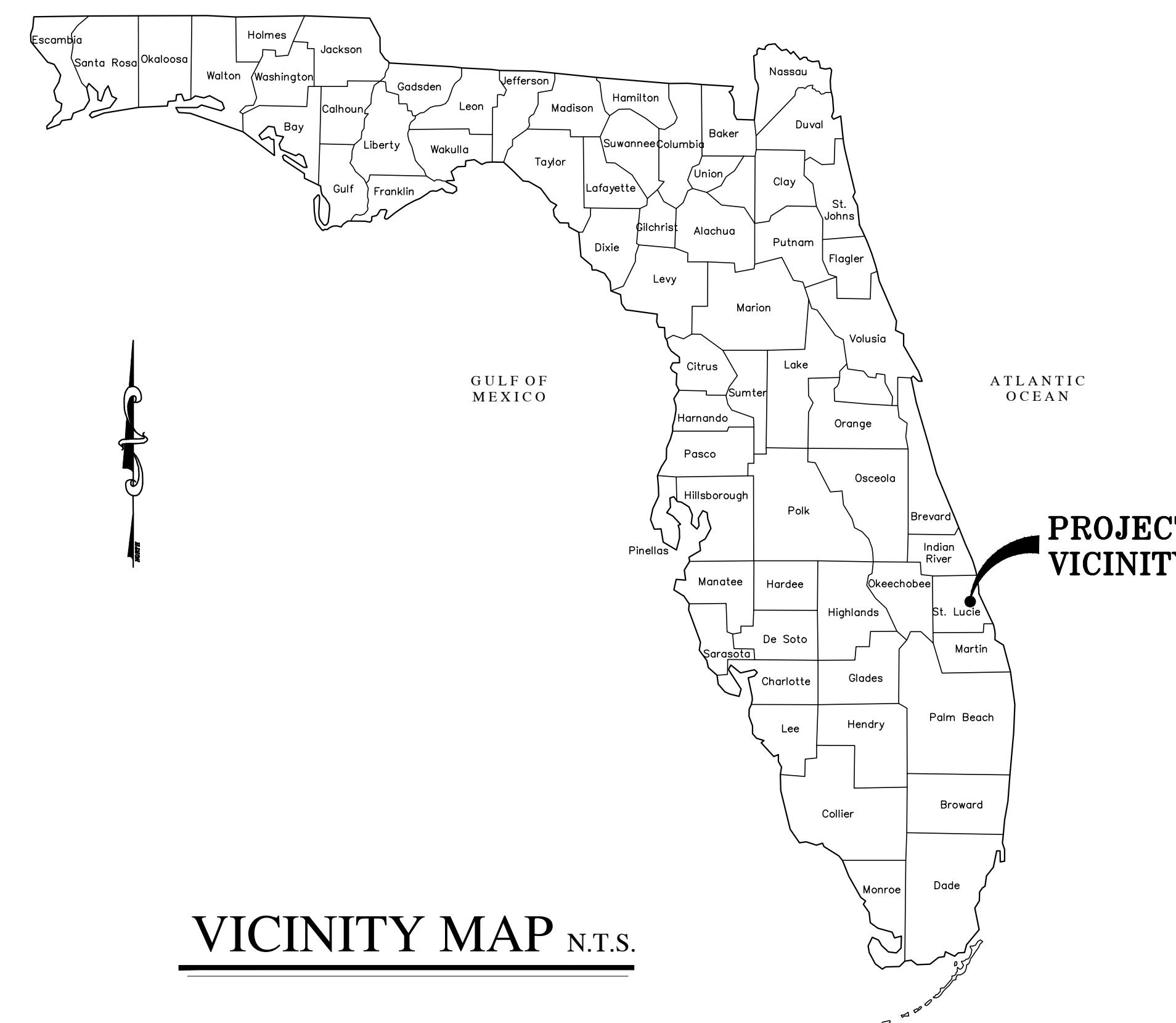


PROJECT LOCATION



LOCATION MAP N.T.S.

SECTION 15, TOWNSHIP 37 SOUTH, RANGE 39 EAST



VICINITY MAP N.T.S.

INDEX TO SHEETS	
SHEET NO.	DESCRIPTION
1	COVER
2	HORIZONTAL CONTROL & STRIPING PLAN
3	PAVING, GRADING, & DRAINAGE PLAN
4	UTILITY PLAN
5	STORMWATER POLLUTION PREVENTION PLAN
6	PAVING, GRADING, & DRAINAGE DETAILS
7-8	UTILITY DETAILS
9	SWPP DETAILS
10	SPECIFICATIONS

REVISIONS	
SHEET NO.	DATE

SUBMITTAL DATE: 23/03/2021

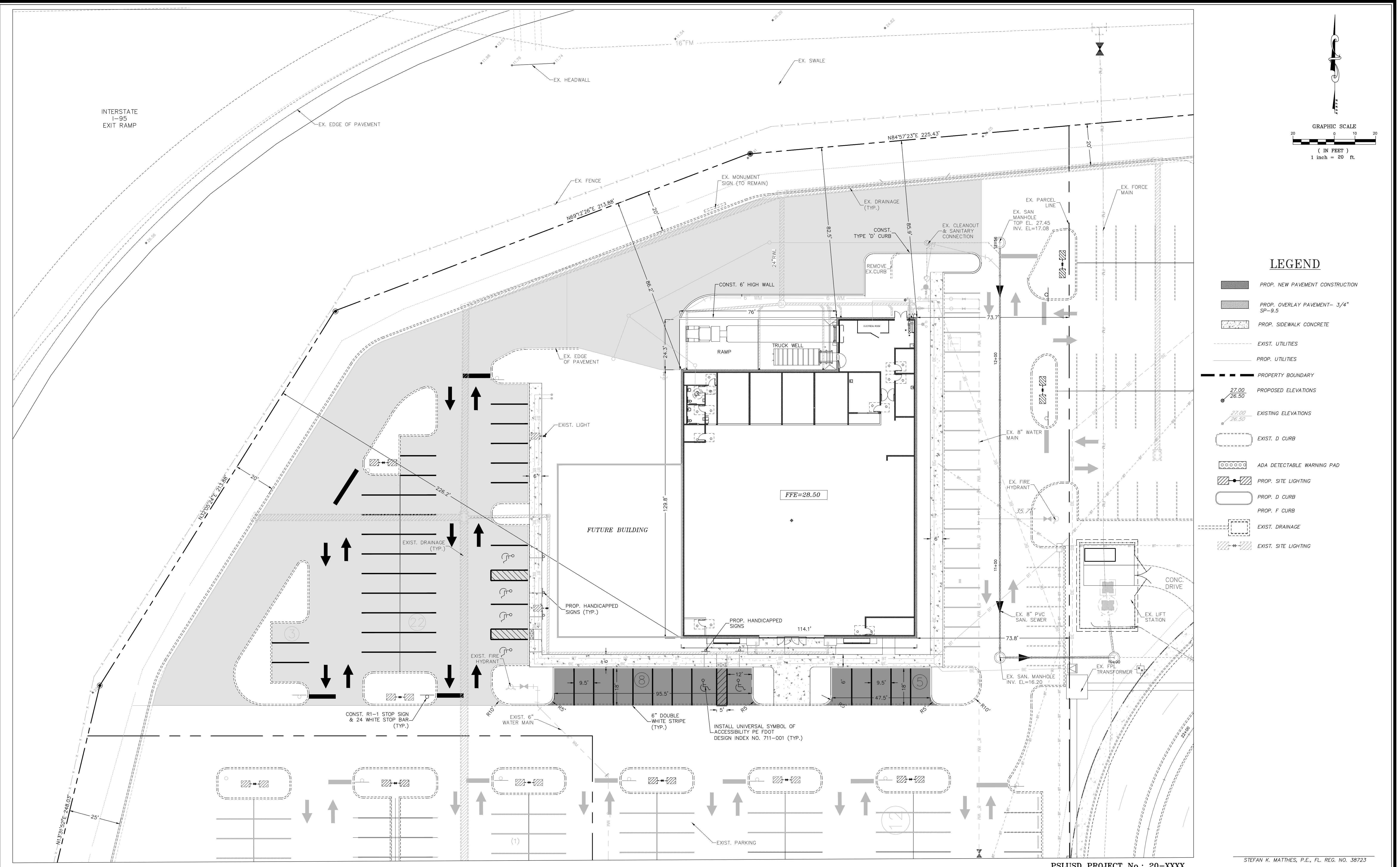
CULPEPPER & TERPENING INC
CONSULTING ENGINEERS | LAND SURVEYORS



2980 SOUTH 25TH STREET * FORT PIERCE, FLORIDA 34981 * (772) 464-3537
151 S.W. FLAGLER AVE * STUART, FLORIDA 34994 * (772) 220-3376
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

STEFAN K. MATTHES, P.E. FL. REG. NO. 38723

GOLF GALAXY PROJECT C&T PROJECT NO. 20-233 SHEET 1 OF 10
CITY OF PORT ST. LUCIE PROJECT NO.20-XXXX



NOTES:
1) ALL ELEVATIONS AND BENCHMARKS SHOWN
HEREON ARE RELATIVE TO THE NORTH AMERICAN
VERTICAL DATUM (N.A.V.D.) OF 1988.



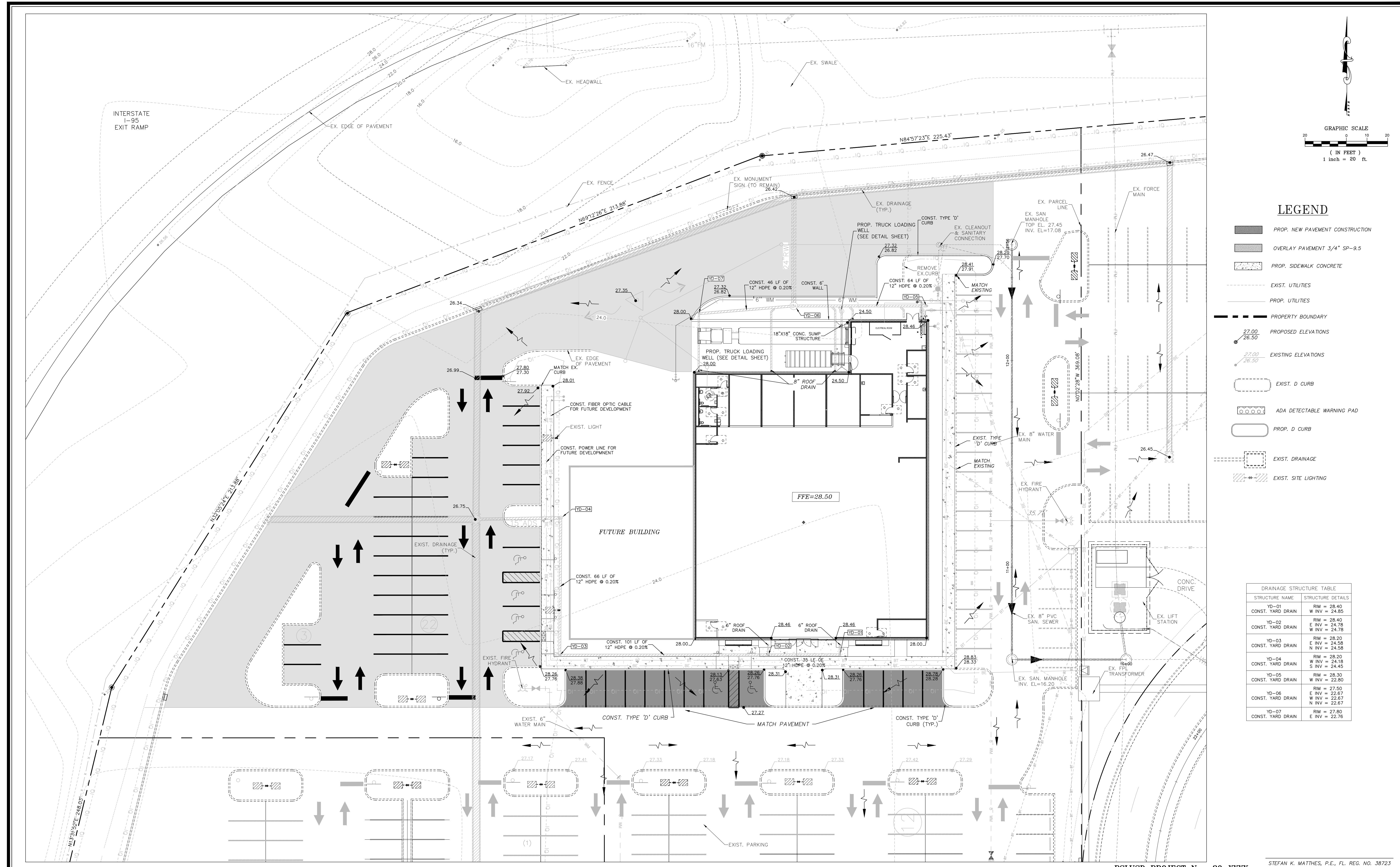
COMPUTER FILE REF. FIELD BK./PG.

CULPEPPER & TERPENING INC
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA BOARD OF PROFESSIONAL
ENGINEERS AUTHORIZATION NO. 4286

- REVISIONS -		
BY	DATE	
DESIGNED	3/26/21	
CALCS.		
DRAWN	3/26/21	
DETAILED	SKM	
CHECKED	SKM	3/30/21
APPROVED	SKM	3/30/21

GATLIN PLAZA - GOLF GALAXY
HORIZONTAL CONTROL &
STRIPING PLAN

DATE: 3/10/21
HORIZ. SCALE: 1"=20'
VERT. SCALE: N/A
JOB No. 20-233
SHEET 2 of 10



NOTES:
1) ALL ELEVATIONS AND BENCHMARKS SHOWN
HEREON ARE RELATIVE TO THE NORTH AMERICAN
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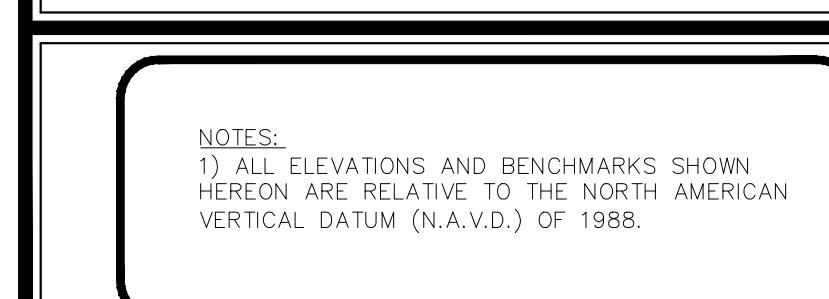
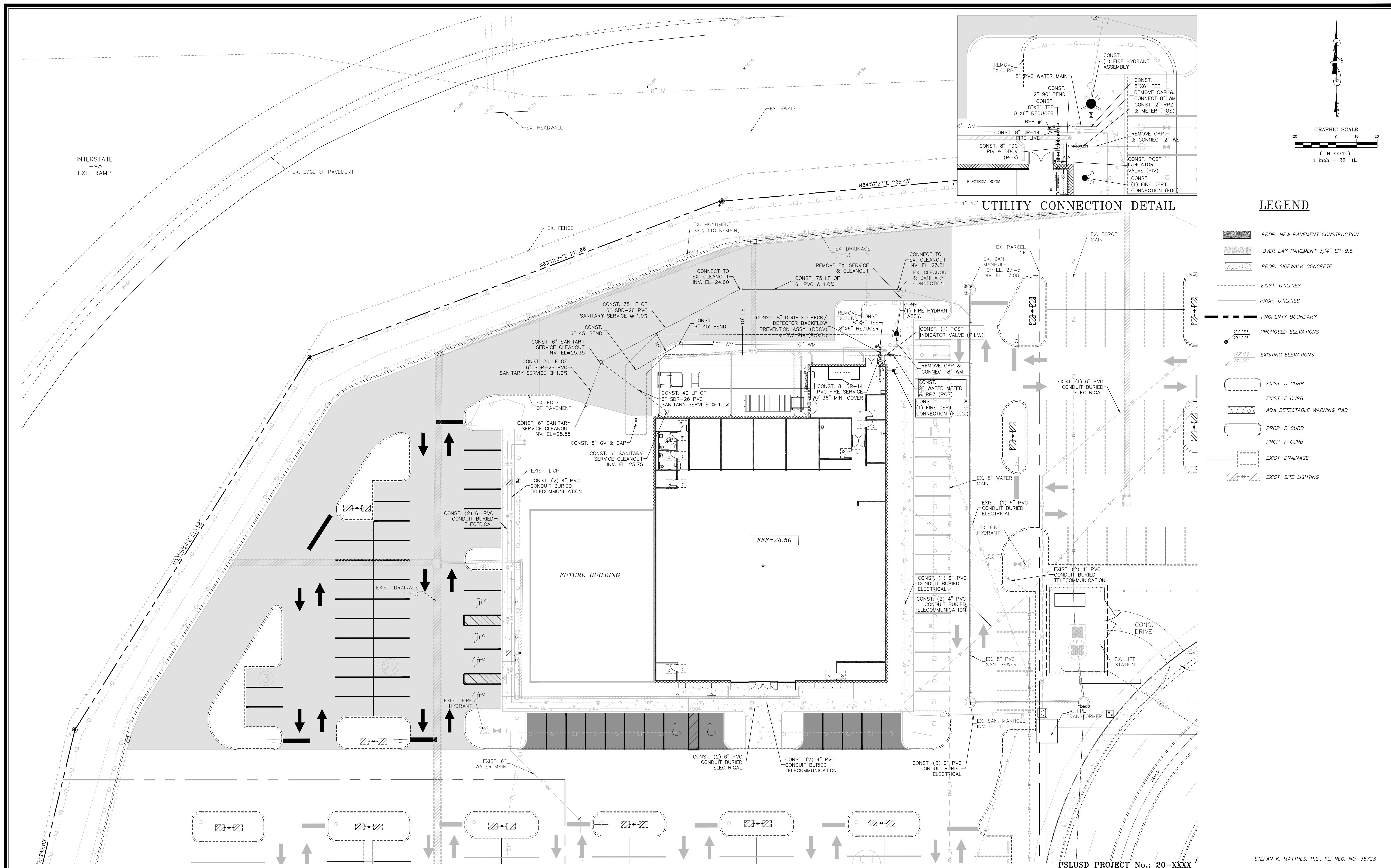
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REVISI ONS		BY	DATE
DESIGNED	SKM	2/26/21	
CALCS.	KU	-----	
DRAWN	-----	2/26/21	
DETAILED	SKM	-----	
CHECKED	SKM	3/10/21	
APPROVED	SKM	3/10/21	

GATLIN PLAZA-GOLF GALAXY
PAVING, GRADING & DRAINAGE
PLAN

DATE: 3/10/21
HORIZ. SCALE: 1"=20'
VERT. SCALE: N/A
JOB No. 20-233
SHEET 3 of 10



COMPUTER FILE REF.	FIELD BK./PG.
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REVISED	
BY	DATE
DESIGNED	SKM 2/26/21
CALCS.	-----
DRAWN	KU 2/26/21
DETAILED	SKM -----
CHECKED	SKM 3/10/21
APPROVED	SKM 3/10/21

DATE: 3/10/21
HORIZ. SCALE: 1"=20'
VERT. SCALE: N/A
JOB No. 20-233
SHEET 4 of 10



PSLUSD PROJECT No.: 20-xxxx STEFAN K. MATTHES, P.E., FL. REG. NO. 38723

NOTES:

1) ALL ELEVATIONS AND BENCHMARKS SHOWN
HEREON ARE RELATIVE TO THE NORTH AMERICAN
VERTICAL DATUM (N.A.V.D.) OF 1988.



Know what's below.
Call before you di

COMPUTER FILE REF.	FIELD BK./P



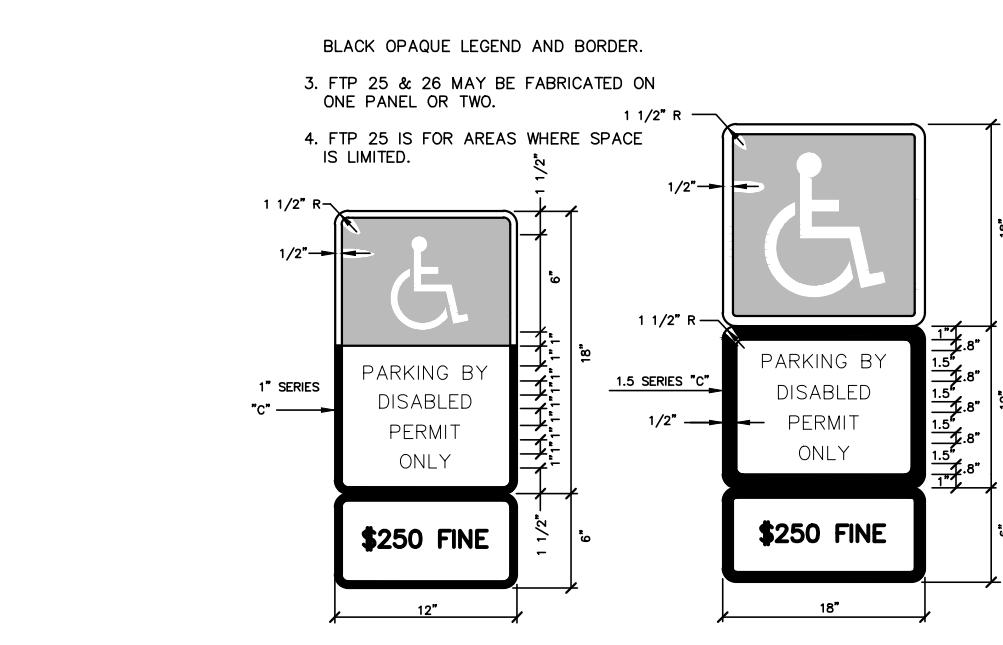


CULPEPPER & TERPENING INC.

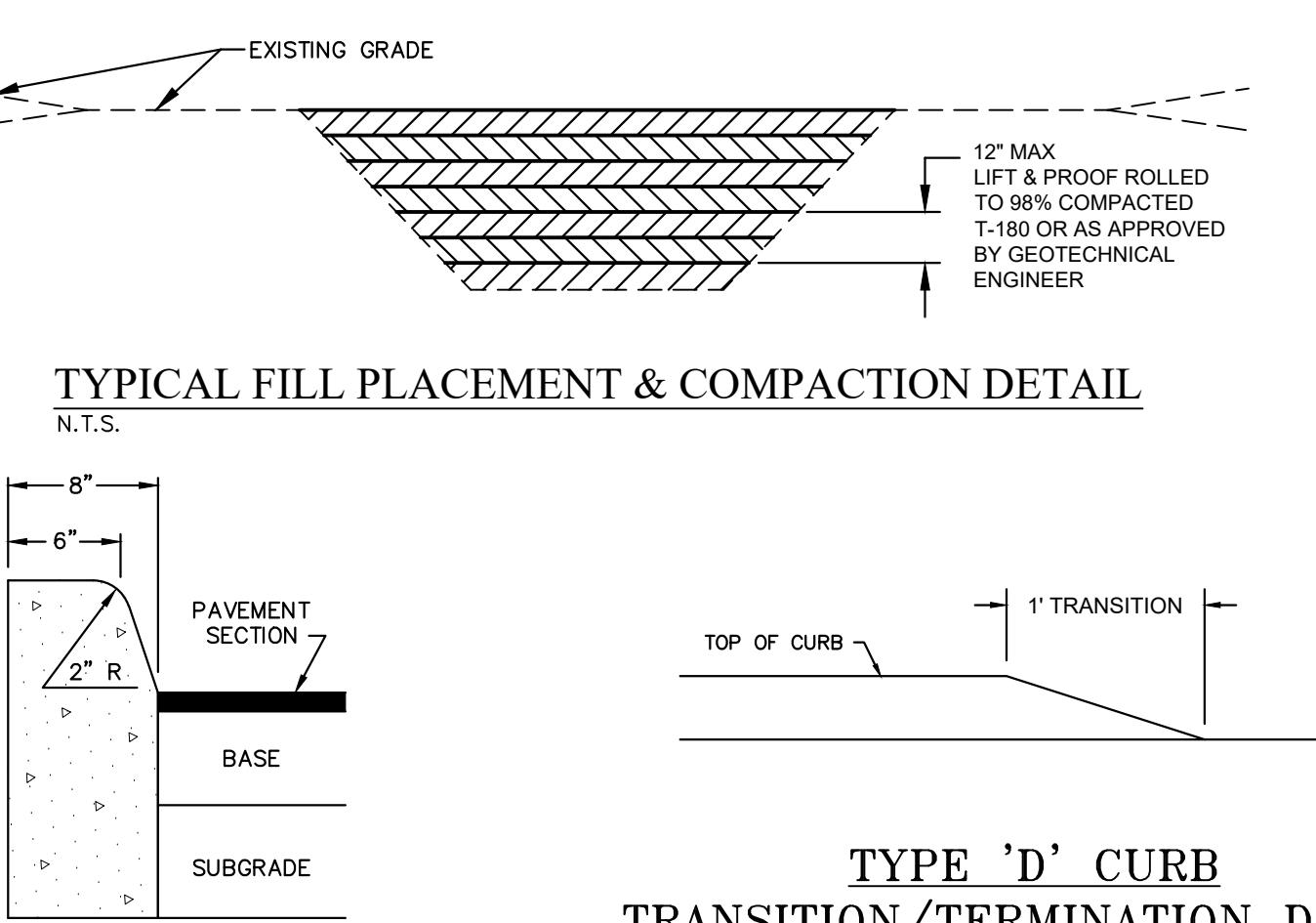
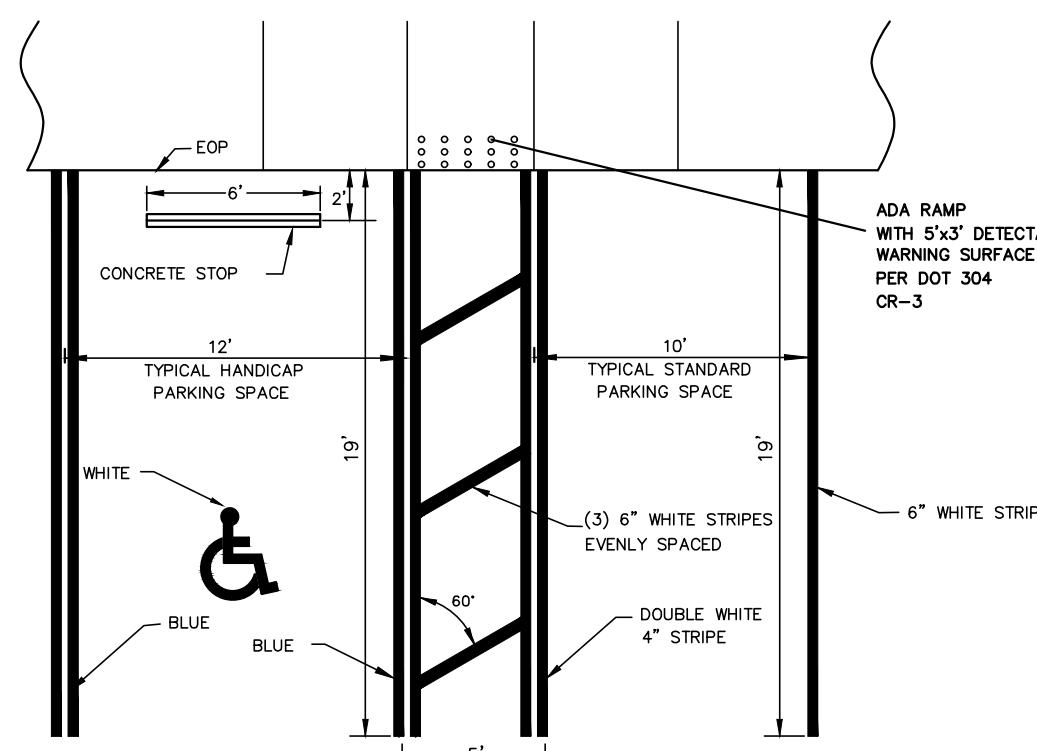
GATLIN PLAZA–GOLF GALAXY

SWPP PLAN

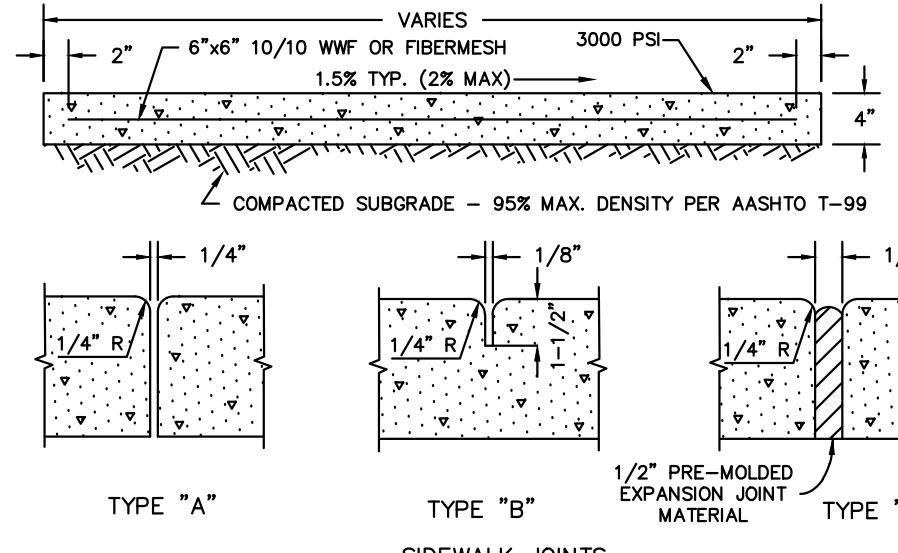
DATE: 3/10/21
HORIZ. SCALE: 1"=20'
VERT. SCALE: N/A
JOB No. 20-233
SHEET 5 of 10



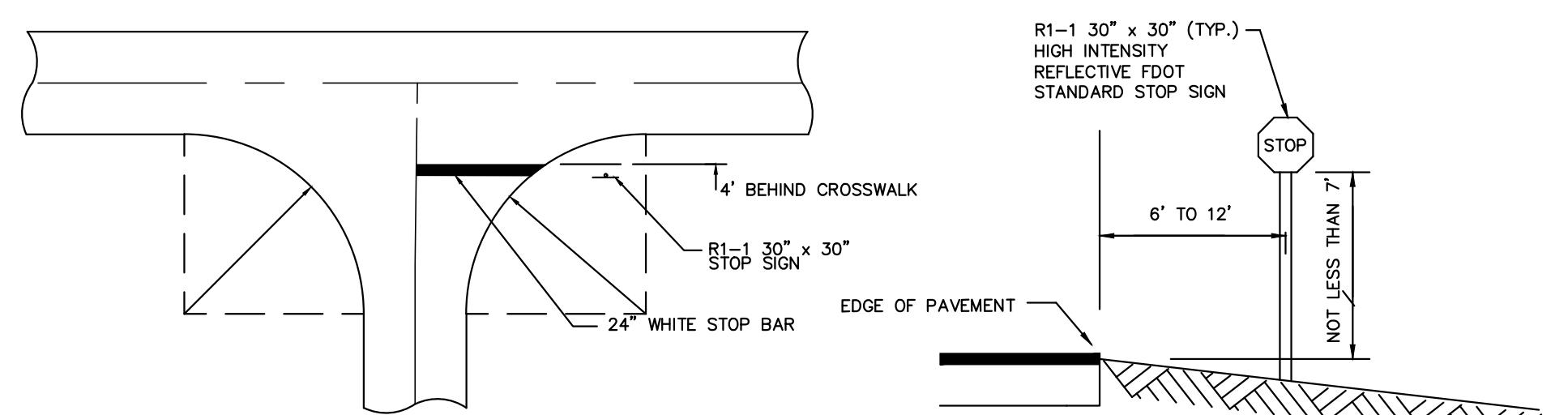
HANDICAP & STANDARD PARKING DETAIL
N.T.S.



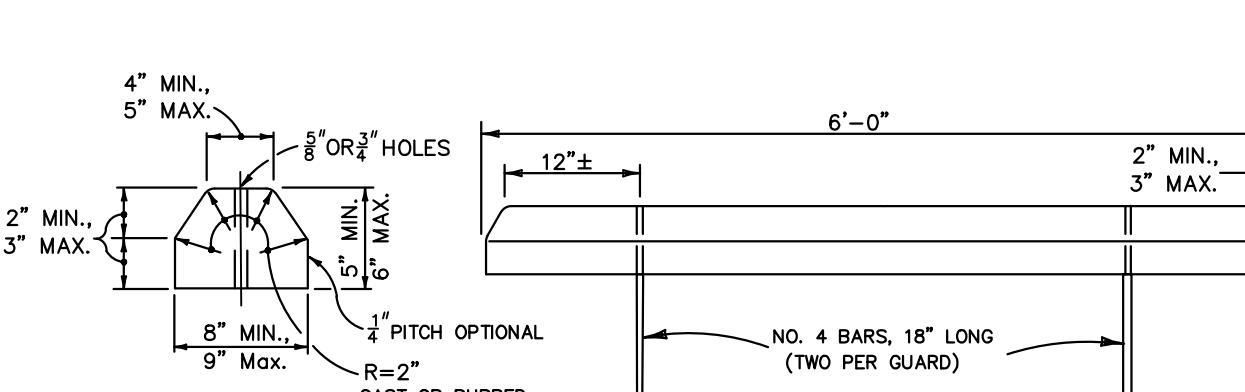
TYPICAL FILL PLACEMENT & COMPACTION DETAIL



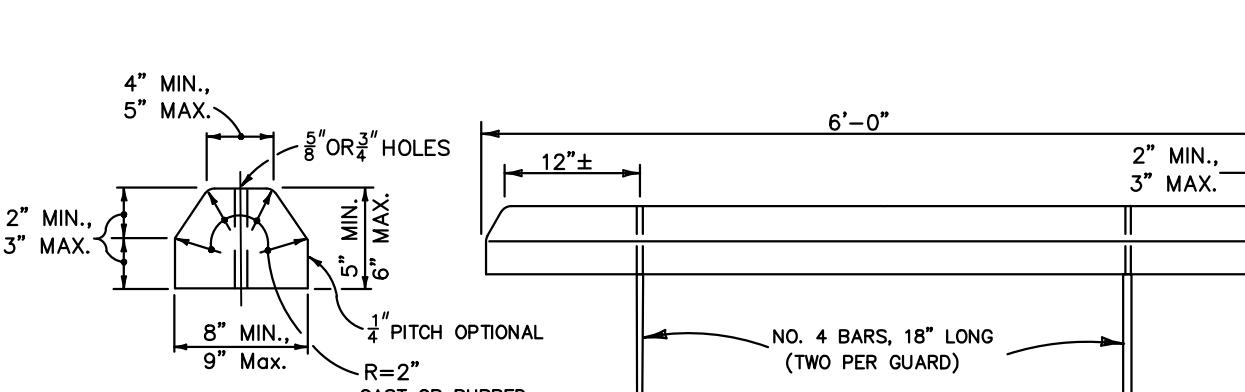
SIDEWALK CONSTRUCTION
SIDEWALK CONSTRUCTION DETAILS



STOP SIGN & STOP BAR DETAIL
N.T.S.

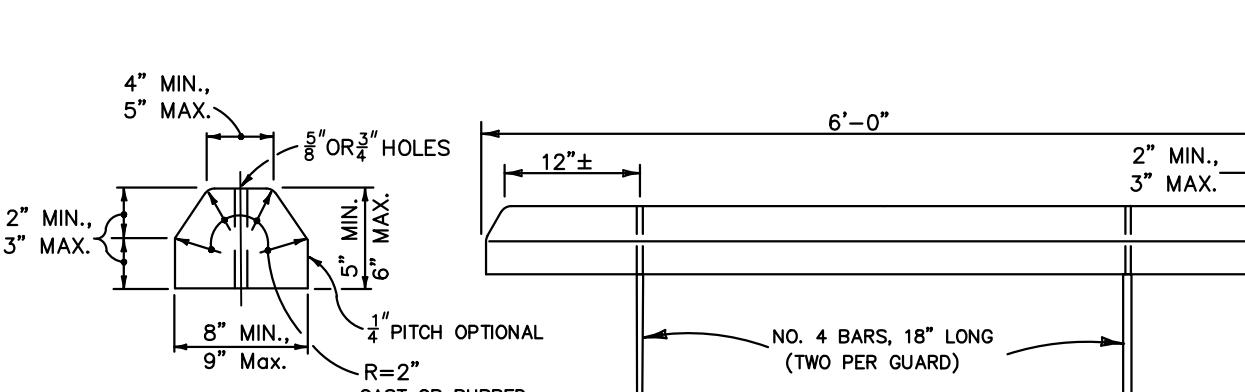


TYPE 'D' CURB
TRANSITION/TERMINATION DETAIL
N.T.S.



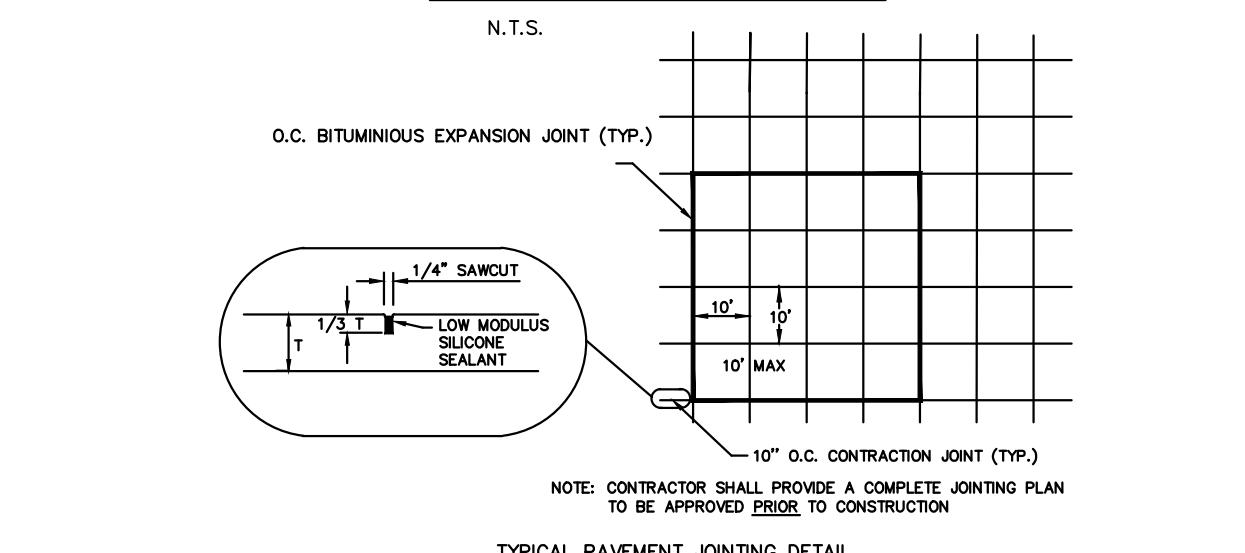
TYPE "D" CURB

N.T.S.



WHEEL STOP DETAIL

N.T.S.

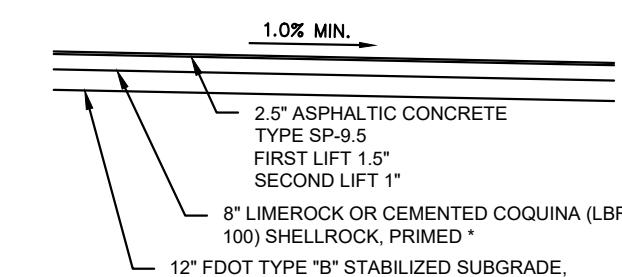


TYPICAL PAVEMENT JOINTING DETAIL

N.T.S.

HEAVY DUTY PAVEMENT SECTION

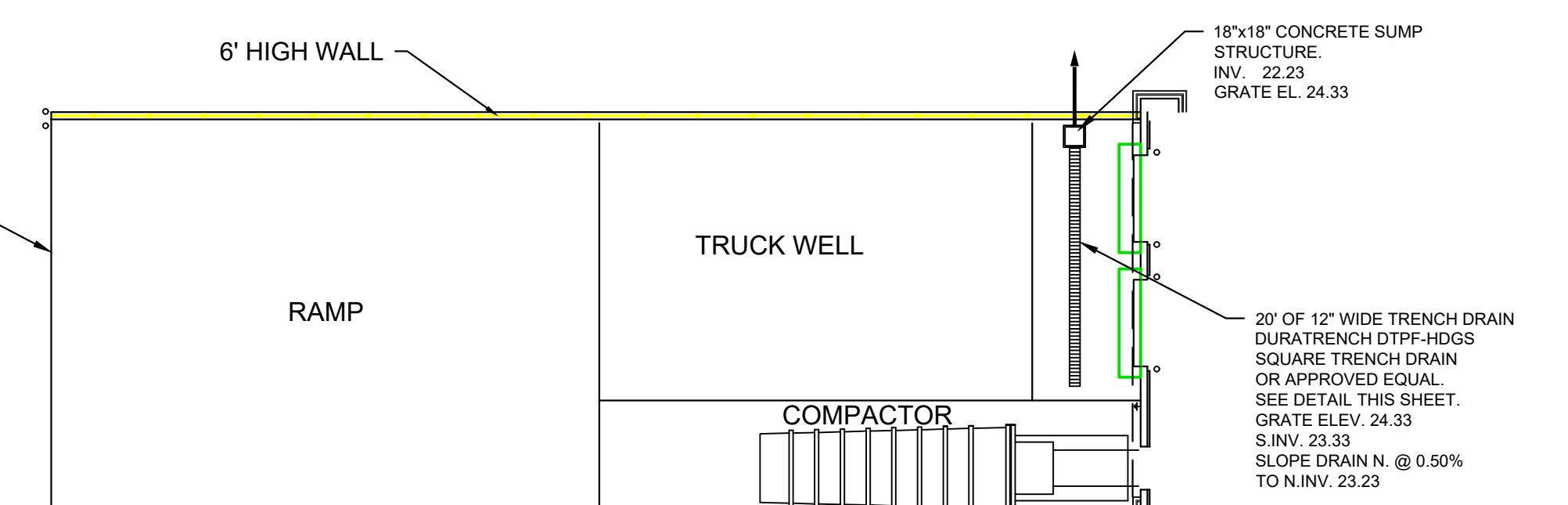
N.T.S.



* COMPACTED TO A MINIMUM OF 98% OF THE MODIFIED PROCTOR (ASTM D1557, AASHTO T-180) MAXIMUM DRY DENSITY.

TYPICAL CONCRETE PAVING PLAN

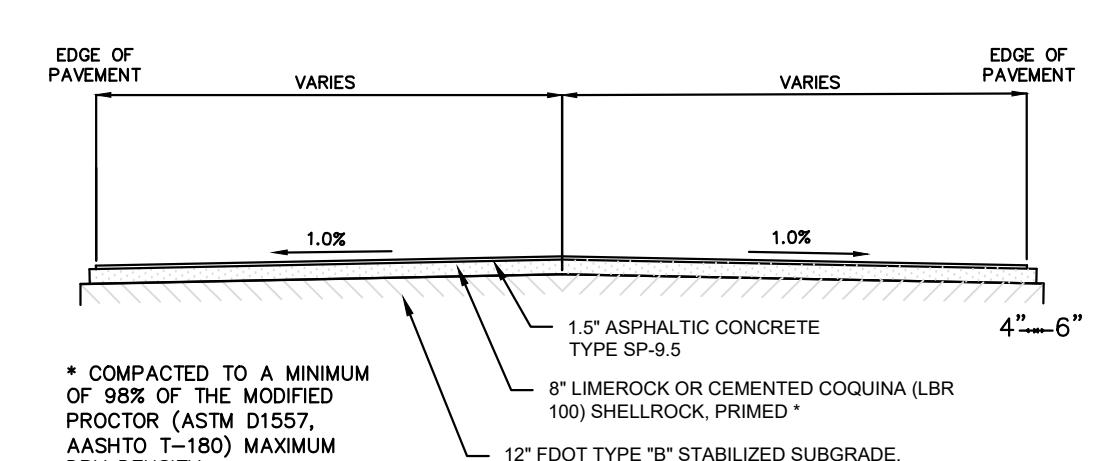
1) CONTRACTOR TO PROVIDE JOINTING PLAN FOR APPROVAL BY ENGINEER OF RECORD.
2) CONTRACTOR SHALL VERIFY EXPANSION JOINTS HAVE BITUMINOUS MATERIAL AND ALL CONTRACTION (SAW-CUT) JOINTS HAVE LOW MODULUS SILICONE SEALANT.



TRUCK WELL/DOCK HIGH FACILITY

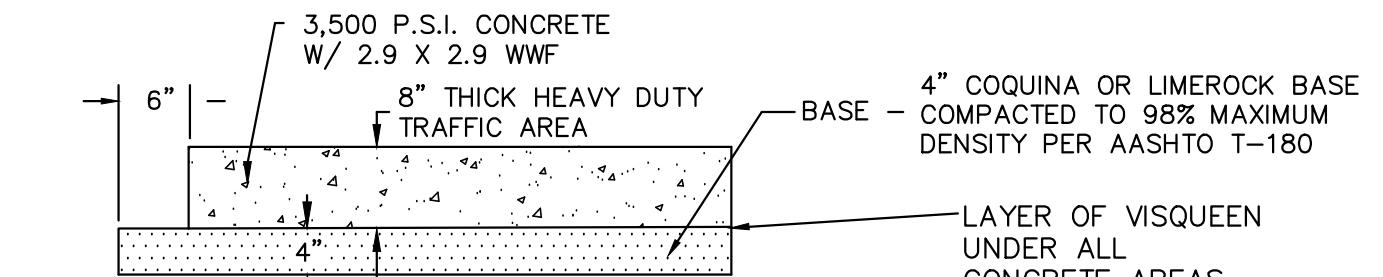
SEE ARCHITECTURAL PLANS FOR FACILITY DETAILS

N.T.S.



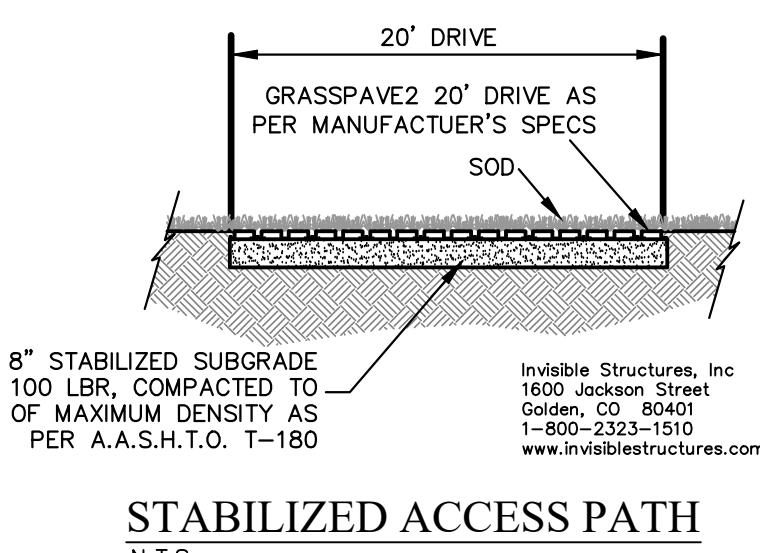
TYPICAL PARKING / DRIVE AREA
ASPHALT PAVEMENT SECTION

N.T.S.



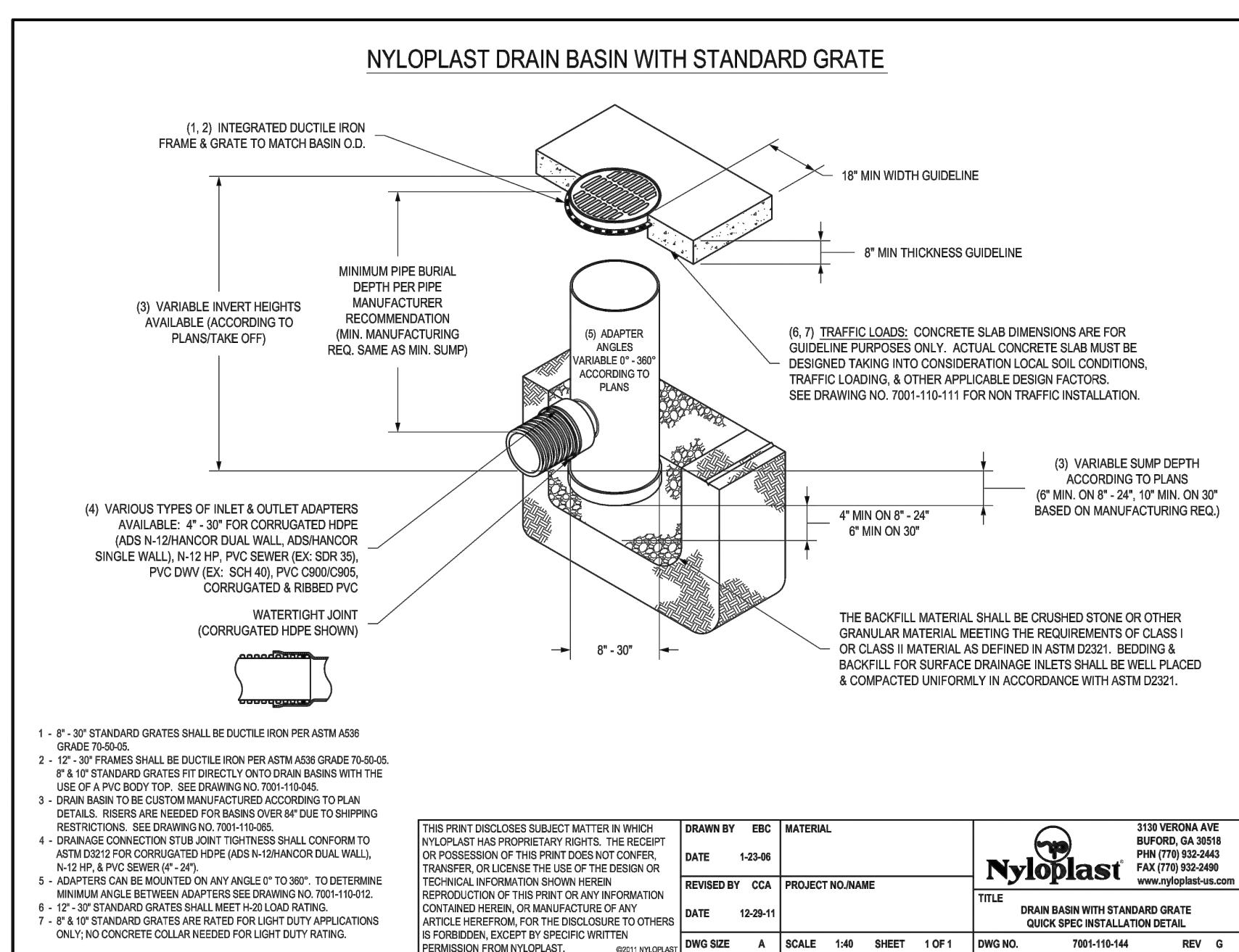
HEAVY DUTY PAVEMENT SECTION

N.T.S.



STABILIZED ACCESS PATH

N.T.S.



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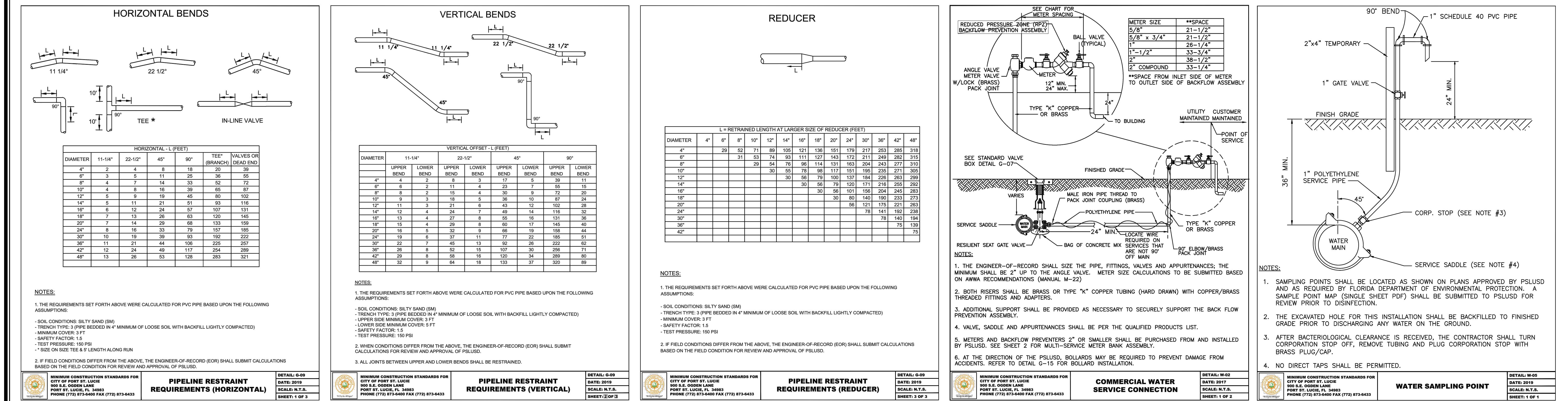
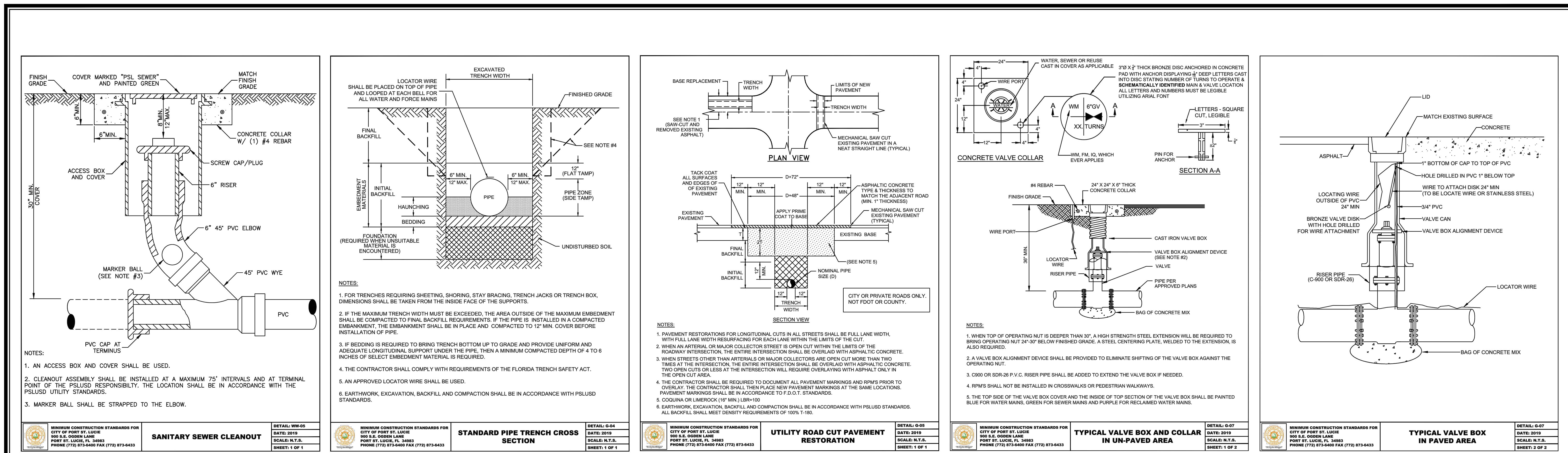
1 - 8' - 3" STANDARD GRATES SHALL BE DUCTILE IRON PER ASTM A36 GRADE 30-50.

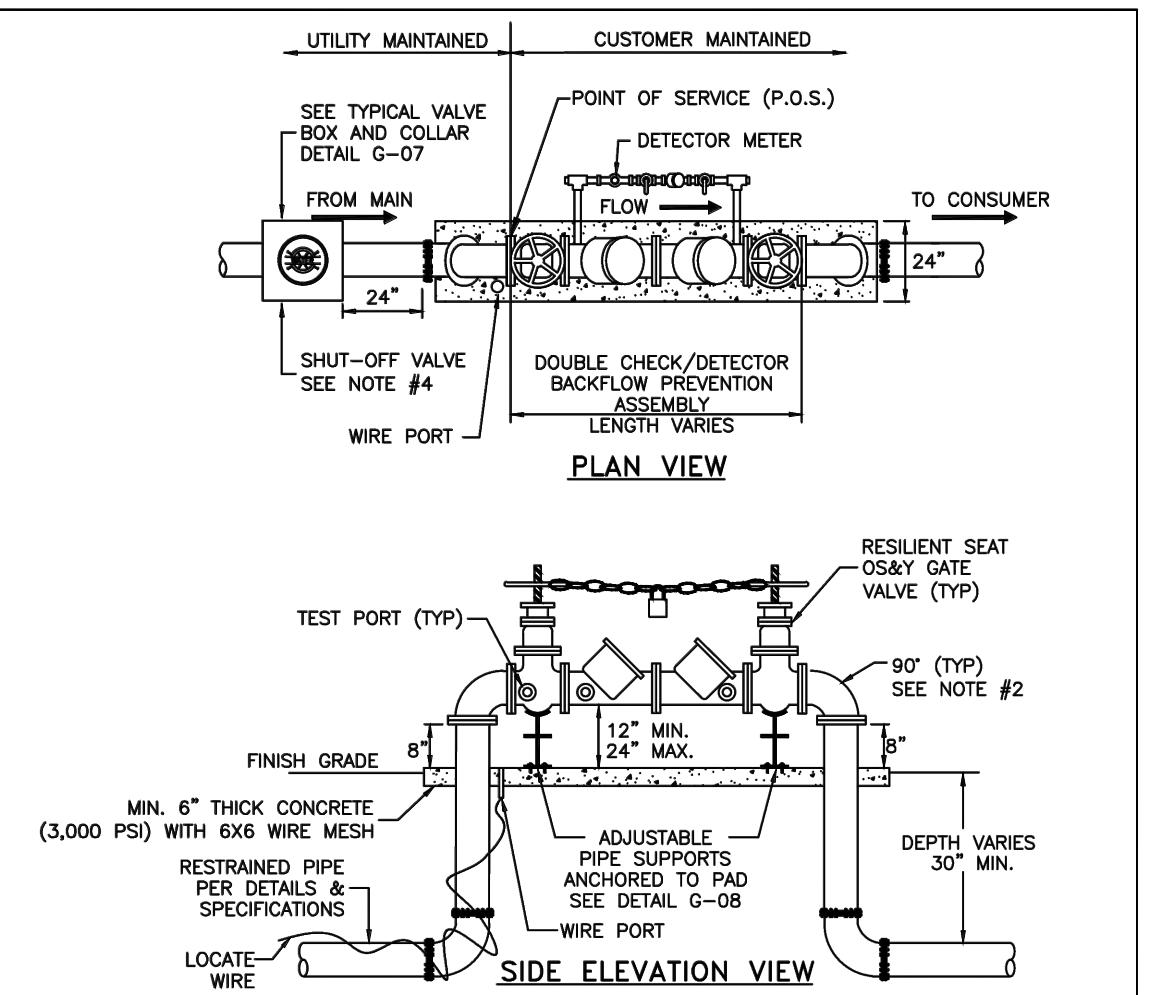
2 - 12' - 0" DRAINS SHALL BE DUCTILE IRON PER ASTM A36 GRADE 30-50.

3 - 8' - 10" STANDARD GRATES FIT DIRECTLY ONTO DRAIN BASINS WITH THE USE OF ADAPTERS SEE DRAWING NO. 7001-110-111.

4 - DRAINAGE CONNECTION STUD JOINT TIGHTNESS SHALL COMPLY TO THE REQUIREMENT OF THE DRAINAGE CONNECTION STUD JOINT TEST PER ASTM A36 GRADE 30-50.

5 - ADAPTERS BEING MOVED ANY ANGLE 45°, 60°, 75°, 90°, 105°, 120°, 135°, 150°, 165°, 180°, 195°, 210°, 225°, 240°, 255°, 270°, 285°, 300°, 315°, 330°, 345°, 360°, 375°, 390°, 405°, 420°, 435°, 450°, 465°, 480°, 495°, 510°, 525°, 540°, 555°, 570°, 585°, 600°, 615°, 630°, 645°, 660°, 675°, 690°, 705°, 720°, 735°, 750°, 765°, 780°, 795°, 810°, 825°, 840°, 855°, 870°, 885°, 900°, 915°, 930°, 945°, 960°, 975°, 990°, 1005°, 1020°, 1035°, 1050°, 1065°, 1080°, 1095°, 1110°, 1125°, 1140°, 1155°, 1170°, 1185°, 1200°, 1215°, 1230°, 1245°, 1260°, 1275°, 1290°, 1305°, 1320°, 1335°, 1350°, 1365°, 1380°, 1395°, 1410°, 1425°, 1440°, 1455°, 1470°, 1485°, 1500°, 1515°, 1530°, 1545°, 1560°, 1575°, 1590°, 1605°, 1620°, 1635°, 1650°, 1665°, 1680°, 1695°, 1710°, 1725°, 1740°, 1755°, 1770°, 1785°, 1800°, 1815°, 1830°, 1845°, 1860°, 1875°, 1890°, 1905°, 1920°, 1935°, 1950°, 1965°, 1980°, 1995°, 2010°, 2025°, 2040°, 2055°, 2070°, 2085°, 2100°, 2115°, 2130°, 2145°, 2160°, 2175°, 2190°, 2205°, 2220°, 2235°, 2250°, 2265°, 2280°, 2295°, 2310°, 2325°, 2340°, 2355°, 2370°, 2385°, 2400°, 2415°, 2430°, 2445°, 2460°, 2475°, 2490°, 2505°, 2520°, 2535°, 2550°, 2565°, 2580°, 2595°, 2610°, 2625°, 2640°, 2655°, 2670°, 2685°, 2700°, 2715°, 2730°, 2745°, 2760°, 2775°, 2790°, 2805°, 2820°, 2835°, 2850°, 2865°, 2880°, 2895°, 2910°, 2925°, 2940°, 2955°, 2970°, 2985°, 2995°, 3010°, 3025°, 3040°, 3055°, 3070°, 3085°, 3095°, 3110°, 3125°, 3140°, 3155°, 3170°, 3185°, 3195°, 3210°, 3225°, 3240°, 3255°, 3270°, 3285°, 3295°, 3310°, 3325°, 3340°, 3355°, 3370°, 3385°, 3395°, 3410°, 3425°, 3440°, 3455°, 3470°, 3485°, 3495°, 3510°, 3525°, 3540°, 3555°, 3570°, 3585°, 3595°, 3610°, 3625°, 3640°, 3655°, 3670°, 3685°, 3695°, 3710°, 3725°, 3740°, 3755°, 3770°, 3785°, 3795°, 3810°, 3825°, 3840°, 3855°, 3870°, 3885°, 3895°, 3910°, 3925°, 3940°, 3955°, 3970°, 3985°, 3995°, 4010°, 4025°, 4040°, 4055°, 4070°, 4085°, 4095°, 4110°, 4125°, 4140°, 4155°, 4170°, 4185°, 4195°, 4210°, 4225°, 4240°, 4255°, 4270°, 4285°, 4295°, 4310°, 4325°, 4340°, 4355°, 4370°, 4385°, 4395°, 4410°, 4425°, 4440°, 4455°, 4470°, 4485°, 4495°, 4510°, 4525°, 4540°, 4555°, 4570°, 4585°, 4595°, 4610°, 4625°, 4640°, 4655°, 4670°, 4685°, 4695°, 4710°, 4725°, 4740°, 4755°, 4770°, 4785°, 4795°, 4810°, 4825°, 4840°, 4855°, 4870°, 4885°, 4895°, 4910°, 4925°, 4940°, 4955°, 4970°, 4985°, 4995°, 5010°, 5025°, 5040°, 5055°, 5070°, 5085°, 5095°, 5110°, 5125°, 5140°, 5155°, 5170°, 5185°, 5195°, 5210°, 5225°, 5240°, 5255°, 5270°, 5285°, 5295°, 5310°, 5325°, 5340°, 5355°, 5370°, 5385°, 5395°, 5410°, 5425°, 5440°, 5455°, 5470°, 5485°, 5495°, 5510°, 5525°, 5540°, 5555°, 5570°, 5585°, 5595°, 5610°, 5625°, 5640°, 5655°, 5670°, 5685°, 5695°, 5710°, 5725°, 5740°, 5755°, 5770°, 5785°, 5795°, 5810°, 5825°, 5840°, 5855°, 5870°, 5885°, 5895°, 5910°, 5925°, 5940°, 5955°, 5970°, 5985°, 5995°, 6010°, 6025°, 6040°, 6055°, 6070°, 6085°, 6095°, 6110°, 6125°, 6140°, 6155°, 6170°, 6185°, 6195°, 6210°, 6225°, 6240°, 6255°, 6270°, 6285°, 6295°, 6310°, 6325°, 6340°, 6355°, 6370°, 6385°, 6395°, 6410°, 6425°, 6440°, 6455°, 6470°, 6485°, 6495°, 6510°, 6525°, 6540°, 6555°, 6570°, 6585°, 6595°, 6610°, 6625°, 6640°, 6655°, 6670°, 6685°, 6695°, 6710°, 6725°, 6740°, 6755°, 6770°, 6785°, 6795°, 6810°, 6825°, 6840°, 6855°, 6870°, 6885°, 6895°, 6910°, 6925°, 6940°, 6955°, 6970°, 6985°, 6995°, 7010°, 7025°, 7040°, 7055°, 7070°, 7085°, 7095°, 7110°, 7125°, 7140°, 7155°, 7170°, 7185°, 7195°, 7210°, 7225°, 7240°, 7255°, 7270°, 7285°, 7295°, 7310°, 7325°, 7340°, 7355°, 7370°, 7385°, 7395°, 7410°, 7425°, 7440°, 7455°, 7470°, 7485°, 7495°, 7510°, 7525°, 7540°, 7555°, 7570°, 7585°, 7595°, 7610°, 7625°, 7640°, 7655°, 7670°, 7685°, 7695°, 7710°, 7725°, 7740°, 7755°, 7770°, 7785°, 7795°, 7810°, 7825°, 7840°, 7855°, 7870°, 7885°, 7895°, 7910°, 7925°, 7940°, 7955°, 7970°, 7985°, 7995°, 8010°, 8025°, 8040°, 8055°, 8070°, 8085°, 8095°, 8110°, 8125°, 8140°, 8155°, 8170°, 8185°, 8195°, 8210°, 8225°, 8240°, 8255°, 8270°, 8285°, 8295°, 8310°, 8325°, 8340°, 8355°, 8370°, 8385°, 8395°, 8410°, 8425°, 8440°, 8455°, 8470°, 8485°, 8495°, 8510°, 8525°, 8540°, 8555°, 8570°, 8585°, 8595°, 8610°, 8625°, 8640°, 8655°, 8670°, 8685°, 8695°, 8710°, 8725°, 8740°, 8755°, 8770°, 8785°, 8795°, 8810°, 8825°, 8840°, 8855°, 8870°, 8885°, 8895°, 8910°, 8925°, 8940°, 8955°, 8970°, 8985°, 8995°, 9010°, 9025°, 9040°, 9055°, 9070°, 9085°, 9095°, 9110°, 9125°, 9140°, 9155°, 9170°, 9185°, 9195°, 9210°, 9225°, 9240°, 9255°, 9270°, 9285°, 9295°, 9310°, 9325°, 9340°, 9355°, 9370°, 9385°, 9395°, 9410°, 9425°, 9440°, 9455°, 9470°, 9485°, 9495°, 9510°, 9525°, 9540°, 9555°, 9570°, 9585°, 9595°, 9610°, 9625°, 9640°, 9655°, 9670°, 9685°, 9695°, 9710°, 9725°, 9740°, 9755°, 9770°, 9785°, 9795°, 9810°, 9825°, 9840°, 9855°, 9870°, 9885°, 9895°, 9910°, 9925°, 9940°, 9955°, 9970°, 9985°, 9995°, 10010°, 10025°, 10040°, 10055°, 10070°, 10085°, 10095°, 10110°, 10125°, 10140°, 10155°, 10170°, 10185°, 10195°, 1





NOTES:

- ALL PIPE AND FITTINGS SHALL BE CLASS 53 DUCTILE IRON INCLUDING AND IN BETWEEN BURIED ELBOWS.
- ALL UNDERGROUND FITTINGS SHALL BE RESTRAINED MECHANICAL JOINT TYPE & ALL ABOVE GROUND FITTINGS SHALL BE FLANGE JOINTS WITH FULL FACE NEOPRENE GASKETS, WITH STAINLESS STEEL BOLTS.
- A 3/8" STAINLESS STEEL CHAIN & LOCK SHALL BE PROVIDED BY CONTRACTOR FOR THE VALVES AS REQUIRED BY THE PSLUD. VALVES TO BE LOCKED IN OPEN POSITION.
- TO MAINTAIN CONTINUITY OF SERVICE DURING REPAIRS TO THE ASSEMBLY, AN ISOLATION VALVE SHALL BE PROVIDED ON THE UTILITY'S MAN AS SHOWN.
- AT THE DIRECTION OF THE PSLUD, BOLLARDS MAY BE REQUIRED TO PREVENT DAMAGE FROM ACCIDENTS. REFER TO DETAIL G-15 FOR BOLLARD INSTALLATION.
- A BRASS PLUG SHALL BE INSTALLED IN ALL TEST PORTS.

	MINIMUM CONSTRUCTION STANDARDS FOR CITY OF PORT ST. LUCIE PORT ST. LUCIE, FL 34983 PHONE (772) 875-6400 FAX (772) 875-6453	FIRE SERVICE BACKFLOW ASSEMBLY	DETAIL: W-07 DATE: 2019 SCALE: N.T.S. SHEET: 1 OF 1
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MINIMUM SEPARATION BETWEEN PSLUD FACILITIES AND OTHER UTILITIES			
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
GRAVITY OR PRESSURE SANITARY SEWER, SEWAGE, RECLAIMED WATER MAIN, RECLAIMED WATER (2), O.I., VACUUM SANITARY SERVICE, STORM SEWER, STORM SEWER FORCE MAIN	WATER MAIN 10' MINIMUM	WATER MAIN 18" MINIMUM	WATER MAIN 6' MINIMUM
ALL OTHER FACILITIES, INCLUDING BUT NOT LIMITED TO: TELEPHONE, CABLE TV, POWER, ETC.	PSLUD FACILITY (4) 5' MINIMUM	PSLUD FACILITY (4) 18" MINIMUM	WATER MAIN 3' MINIMUM
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM	10' MINIMUM	-----	-----

(1) WATER MAIN SHOULD CROSS OVER OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 18".
(2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
(3) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
(4) A PSLUD FACILITY INCLUDES MAINS AND STRUCTURES FOR POTABLE WATER, WASTEWATER AND RECLAIMED WATER.

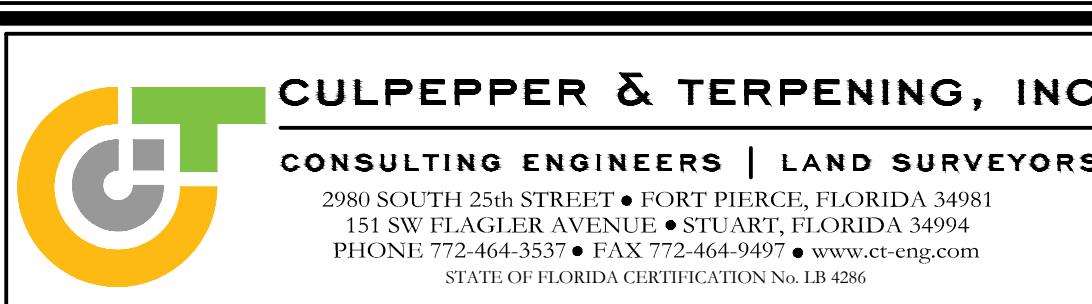
STEFAN K. MATTHES, P.E. FL. REG. NO. 38723

NOTES: 1) ALL ELEVATIONS AND BENCHMARKS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) OF 1988.



Know what's below.
Call before you dig.

COMPUTER FILE REF.	FIELD BK./PG.



- R E V I S I O N S -		
BY	DATE	
DESIGNED	SKM	2/26/21
CALCS.	---	---
DRAWN	KU	2/26/21
DETAILED	SKM	----
CHECKED	SKM	3/10/21
APPROVED	SKM	3/10/21

GATLIN PLAZA-GOLF GALAXY

UTILITY DETAILS

DATE: 3/10/21
HORIZ. SCALE: N/A
VERT. SCALE: N/A
JOB No. 20-233
SHEET 8 of 10

Project Name and location information:	Gatlin Plaza; Golf Galaxy; Section 15, Township 37 South , Range 39 East, Port St. Lucie, Florida
Describe the nature of the construction activity:	Const. of Utility Services, Roof Drain Collection System, Pavement Overlay, Pavement Reconstruction, Curbing and Sidewalks for Retail Facilities
Describe the intended sequence of major soil disturbing activities:	<ul style="list-style-type: none"> • 0-2 days, site prep and stabilized construction entrance; • 3-6 days, install sediment and erosion controls; • 7-10 days, clearing/grubbing over all areas except those that are designated as buffers/conservation easements; • 11-90 days, site grading; • 90-150 days, install storm sewer and utilities • 150-180 days, stabilize site.
Total area of the site:	2.01 Acres
Total area of the site to be disturbed:	2.01 Acres
Existing data describing the soil or quality of any stormwater discharge from the site:	Existing soil type is Wabasso Sand HSG C/D Winder Sand, depressional HSG C/D
Estimate the drainage area size for each discharge point:	Golf Galaxy: 2.01 Acres
Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	Floor & Décor: Lat: N27° 15' 37" Long: W80° 25' 09" Miller's Ale House: Lat: N27° 15' 49" Long: W80° 25' 03"
Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented.	
NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater controls set forth in s. 62-40-432, F.A.C., the applicable Stormwater Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP (2007) and any subsequent amendments.	
• Prior to construction activities the existing parking lot inlet shall be protected from sediments by the use of filter fabric and/or sediment containment inserts and properly installed geohay inlet filters. Disturbed portions of the site where construction activities have permanently ceased shall be stabilized with sod or other permanent stabilization methods (if other methods are used, this SWPPP will be modified) no later than 14 days after the last construction activity. Seeding shall be the same as in temporary seeding.	
• These inlet locations are as depicted on the paving, grading and drainage plan sheet.	
Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc.	
• Temporary seeding shall be rye grass or other appropriate ground covers depending upon season of installation that is applied at manufacturer's recommendations to any disturbed areas that are inactive more than 14 days. Permanent stabilization includes sod and landscape materials.	
• Filter fabric shall be placed under the rock entrance/exit.	
Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include: silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.	
• A silt fence (with the same installation as indicated under the Best Management Practices heading) shall be placed around the entire perimeter.	
• Inlet(s)/outfalls shall be protected with filter fabric and properly installed geohay inlet filters (with the same installation as indicated under the Best Management Practices heading).	
Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres.	
No temporary sedimentation basins are proposed. No dewatering activities are anticipated. Both sites are part of the existing Gatlin Plaza Surface Water Management System.	
Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.	
• Both sites are part of the existing Gatlin Plaza Surface Water Management System.	
Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site.
Offsite vehicle tracking from construction entrances/exits:	Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, street sweeping and the use of water to keep dust down.

The proper application rates of all fertilizers, herbicides and pesticides used at the construction site:	Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates. No fertilizers and pesticides will be stored on site.
The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Other:	<p>Port-a-lels will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of polluted runoff. A small-vegetated berm shall be placed around the washdown area.</p> <p>Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition.</p> <p>Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent:</p> <ul style="list-style-type: none"> • Silt fence shall be inspected at least weekly. Any required repairs shall be made immediately. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier. • Maintenance shall be performed on the rock entrance when any void spaces are full of sediment. • Inlet(s)/outfalls shall be inspected immediately after each rain event and any required repairs to the geohay filter inlet, silt fence, or filter fabric shall be performed immediately. • Bare areas of the site that were previously seeded shall be reseeded per manufacturer's instructions. • Mulch and sod that has been washed out shall be replaced immediately. • Maintain all other areas of the site with proper controls as necessary. <p>Inspections: Describe the inspection and inspection documentation procedures, as required by Part V.D.4. of the permit. Inspections must occur at least once a week and within 24 hours of the end of a storm event that is 0.50 inches or greater (see attached form).</p> <p>Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days or within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed.</p> <p>Identify and describe all sources of non-stormwater discharges as allowed in Part IV.A.3. of the permit. Flows from fire fighting activities do not have to be listed or described.</p> <p>It is expected that the following non-stormwater discharges may occur from the site during construction period: wash water (where no spills or leaks of toxic or hazardous materials have occurred), and uncontaminated groundwater (from dewatering excavation). Dewatering shall be done in accordance with the requirements of the SWWMD Water Use Permit (should dewatering be required). If said discharges do occur, they will be directed to the temporary sediment basin prior to discharge. Any pumped water shall be treated so as to not allow a discharge of polluted stormwater. Treatment can include silt fences, setting ponds, the proper use of flocculating agents or other appropriate means.</p> <p>All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification:</p> <p>"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 thereunder."</p>

Name	Title	Copy Name, Address and Phone Number	Date

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

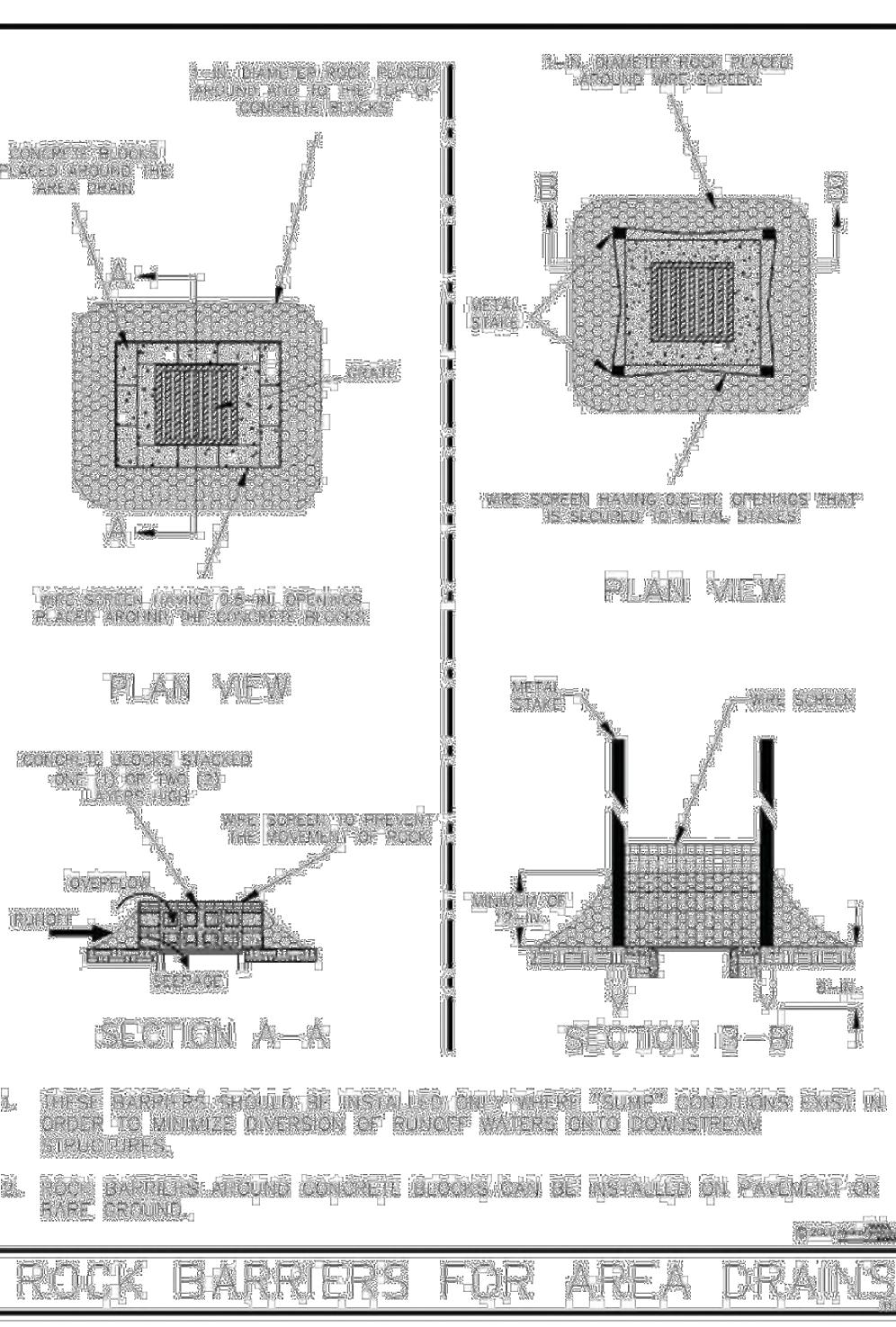


Figure V-13: Illustration of Rock Barriers around Area Drains

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V-32

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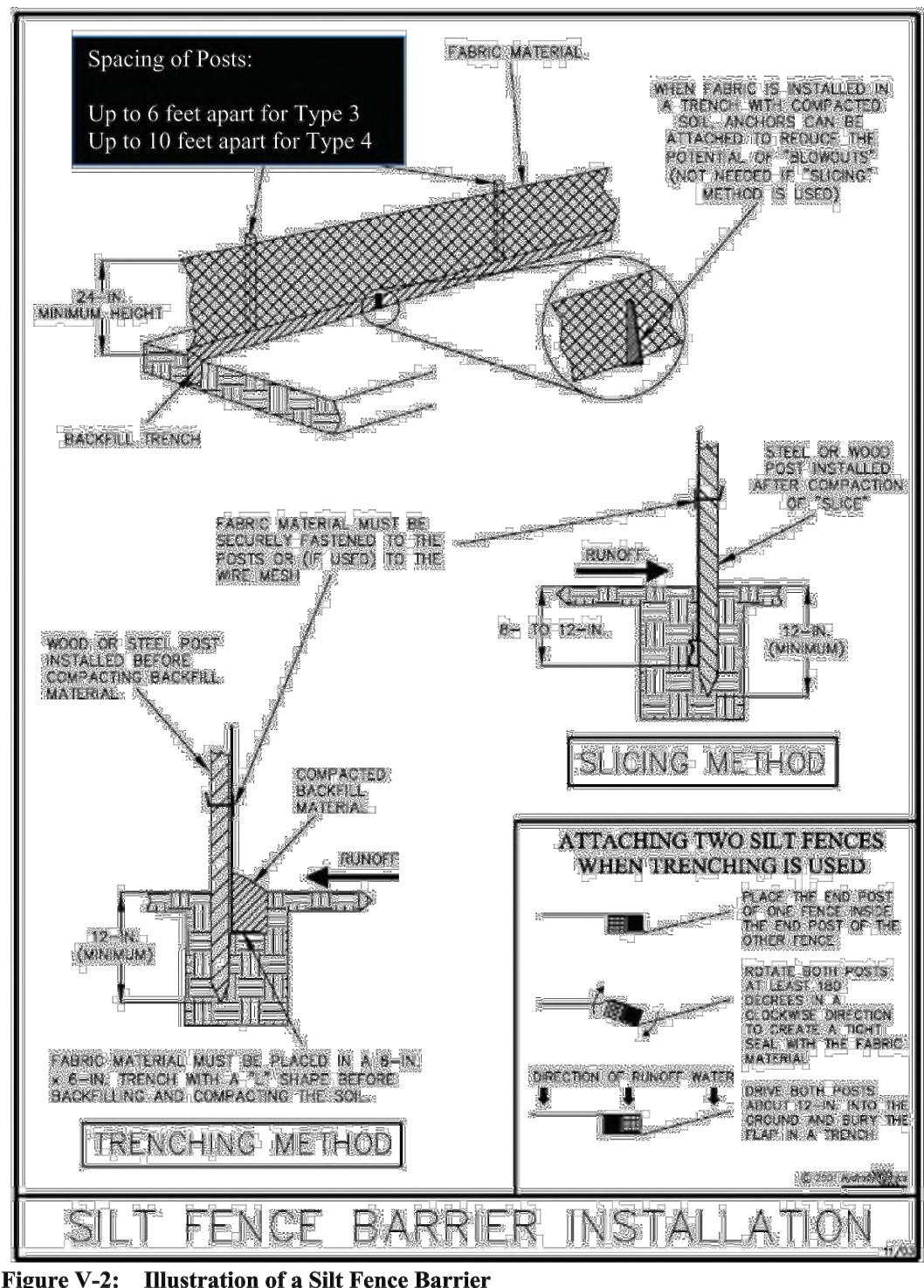


Figure V-2: Illustration of a Silt Fence Barrier

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V-7

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL; LATEST EDITION: JULY 2013

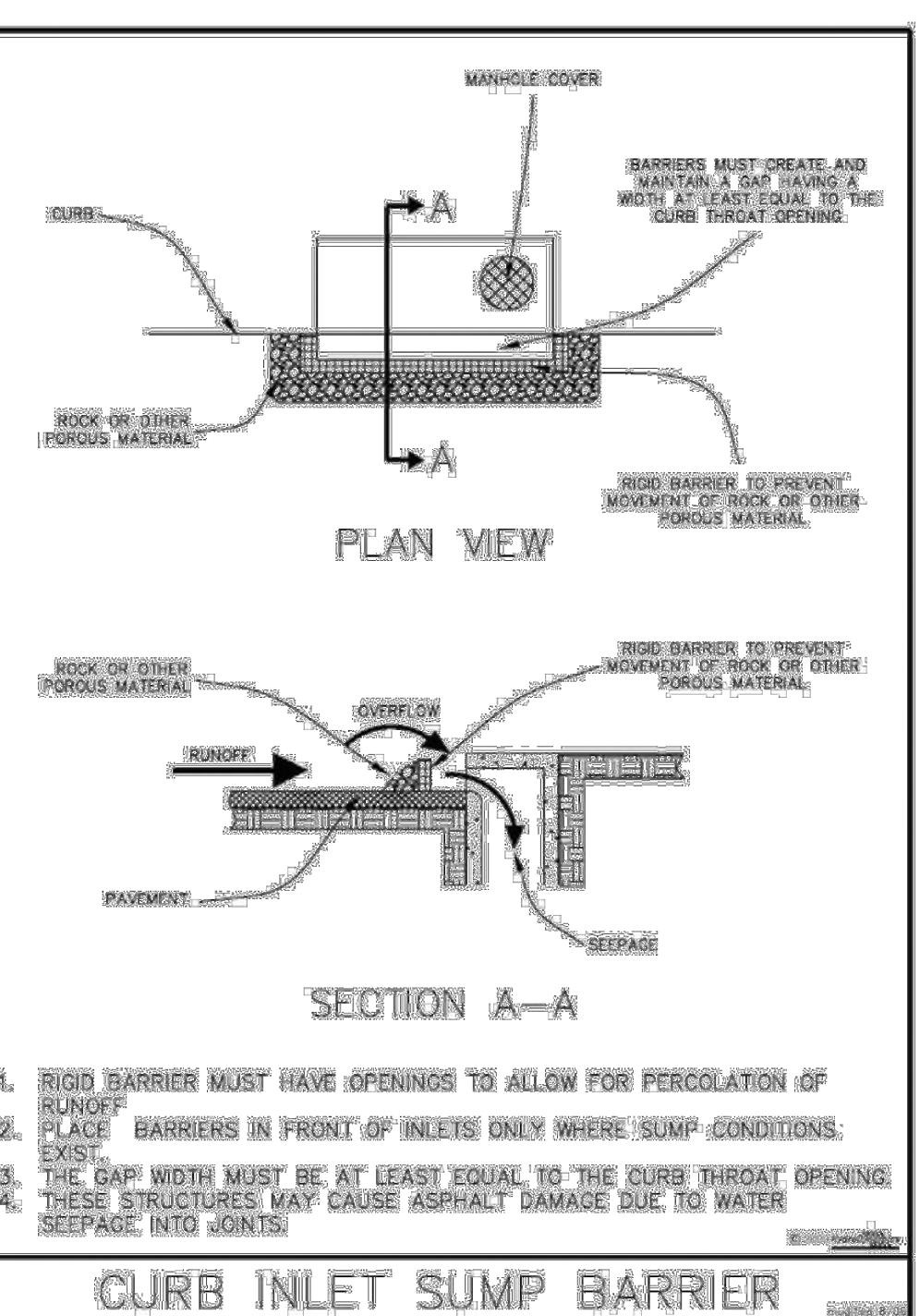
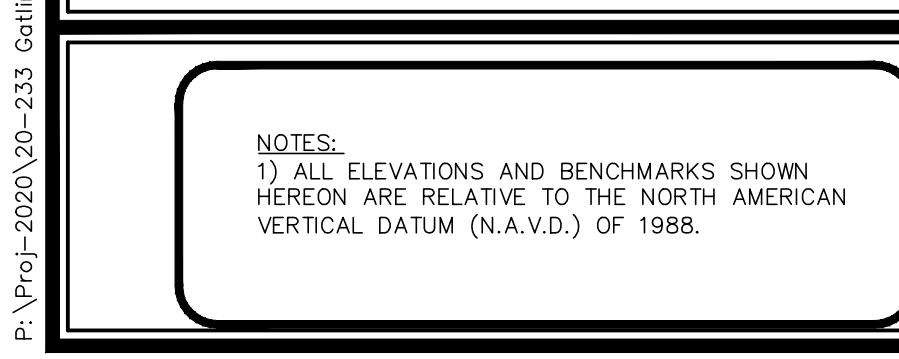


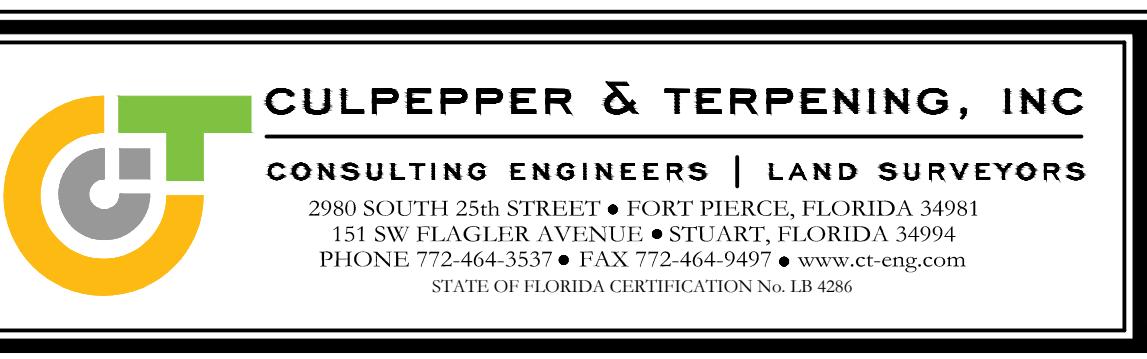
Figure V-15: Illustration of a Curb Inlet "Sump" Barrier

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V-36



COMPUTER FILE REF.	FIELD BK./PG.



- R E V I S I O N S -	
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BY	DATE
DESIGNED	SKM 2/26/21
CALCULATED	-----
DRAWN	KU 2/26/21
DETAILED	SKM -----
CHECKED	SKM 3/10/21
APPROVED	SKM 3/10/21

GATLIN PLAZA-GOLF GALAXY	
SWPPP DETAILS	

DATE: 3/10/21
HORIZ. SCALE: N/A
VERT. SCALE: N/A
JOB No. 20-233
SWPPP 9 of 10

1. GENERAL

- A. Mobilization: Mobilization shall meet the requirements of FDOT Section 101. This work shall include, but is not limited to, operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site, including the establishment of temporary offices, dormitory, equipment and first aid supplies, laundry and other facilities, as required by State and local laws and regulations. The costs of bonds and any required insurance, and any other preconstruction expense necessary for the start of work, excluding the cost of construction materials, shall also be included in this section. This section also includes any and all work related to the final cleanup.
- B. Construction Surveying: The Owner shall provide horizontal control consisting of four control points. The Owner shall also provide vertical benchmarks and elevations on the plans. This work shall be provided one time only. The Contractor is responsible for all other construction surveying. The Contractor is responsible to protect these reference points and the construction staking throughout the job. The Contractor shall bear the cost of any necessary restaking.
- C. Soil Testing: Soil Testing shall be performed by a certified testing laboratory. The contractor shall be responsible for payment of any failed tests and inspections.

2. EARTHWORK AND GRADING

Materials and construction methods for earthwork, excavation, embankment, and grading shall meet the requirements of FDOT Section 120 and shall be performed to achieve final grades, elevations and typical sections as shown on the plans for the proposed work.

- A. Clearing and Grubbing: Clearing and grubbing shall meet the requirements of FDOT Section 10. This work shall be performed within the limits of the proposed work. This work shall include, but is not limited to, the removal of existing trees, brush, stumps, roots and other objectionable material to a depth of 18 inches below the natural ground or design grade, whichever is lower. The areas to be cleared and grubbed generally consist of the areas within the project site. The Contractor shall confirm with the Owner the removal of any trees for possible preservation. All material shall be removed from the site of the project and shall be disposed of in accordance with local, regional, State and Federal laws, regulations and ordinances.

- B. Rough Grade: The Contractor shall grade the project to meet the requirements of FDOT Sections 110 and 120 and shall conform to the lines, grades, and typical sections as shown on the plans.

- C. Fine Grade: The Contractor shall fine grade the roadway to meet the requirements of FDOT Sections 110 and 120 and shall conform to the lines, grades and typical sections as shown on the plans.

- D. Sod: Sod shall meet the requirements of FDOT Section 570, 575, and 981.

- E. Seed and Mulch: Seed and mulch shall meet the requirements of FDOT Sections 570, 575, and 981 and shall be placed in all disturbed areas not otherwise addressed in plans provided by the owner.

3. DRAINAGE IMPROVEMENTS

Materials, trench excavation, pipe laying and backfilling operations for drainage improvements shall meet the requirements of FDOT Sections 125 and 425. Pipes shall be laid in true alignment in a single trench with or adequate supporting value and "bedded" to the detail shown in the plans and FDOT Section 430. All backfill shall be compacted to a minimum density of 95 percent of the maximum density as determined by AASHTO T-180, unless otherwise shown on the plans.

The Contractor shall provide all materials and labor to complete the work for drainage improvements at the locations, sizes, and types shown on the plans for the following items:

- A. Reinforced Concrete Pipe: Reinforced concrete pipe shall meet the requirements of Class III of ASTM C-70, Wall Thickness 2". Latest Revision as modified by FDOT Section 941. Gaskets for pipe joints shall be round rubber gaskets and shall meet the requirements of FDOT Section 942.

- B. Corrugated Aluminum Pipe: Corrugated aluminum pipe shall meet the requirements of FDOT section 945, and shall be constructed as shown on the plans.

- C. High Density Polyethylene (H.D.P.E.) Pipe: H.D.P.E. Pipe shall meet the requirements of F.D.O.T. and A.S.T.M., latest revision, and shall be air chamber construction. H.D.P.E. shall be constructed as shown on the plans.

- D. Precast concrete catch basins shall meet the requirements of ASTM C-478 and 641 FDOT Section 425. Catch basins shall be Class I concrete and shall be constructed to the detail as shown on the plans. Grates shall meet the requirements of ASTM A-123.

- E. Storm Manholes: Storm manholes shall meet the requirements of ASTM C-478 and 641 FDOT Section 425. Storm manholes shall be Class I concrete and shall be constructed to the detail as shown on the plans.

4. PAVING IMPROVEMENTS

All paved areas shall meet the requirements of AASHTO Specifications and FDOT, and shall be constructed to the typical sections as shown on the plans.

The Contractor shall coordinate the services of an independent testing laboratory to conduct all required testing and retesting to comply with these Specifications. The Owner shall bear the cost of initial testing and the Contractor shall correct any deficient work at his own expense.

- A. Asphalt Concrete: Asphalt concrete materials and construction methods shall meet the requirements of FDOT Sections 300, 320, 330 and 334 and shall be as shown in the typical sections. Prime Coats shall meet the requirements of FDOT Sections 300-1 through 300-7 and shall have an application rate of 0.10 gallons per square yard, unless a variation rate is approved by the Engineer.

- B. Base: The base course shall be as shown on the typical sections on the plans. The base shall be compacted to 98 percent of the maximum density as determined by AASHTO T-180.

- C. Subgrade: The subgrade shall be as shown in the typical sections of the plans, and shall extend six inches beyond the edge of the base course within the limits shown on the plans. Subgrade shall be compacted to 95 percent of the maximum density as determined by AASHTO T-180. If normal compaction methods do not meet the required densities, the subgrade shall be stabilized as directed by the Engineer.

- D. Concrete Curb: Concrete curb shall meet the requirements of FDOT Section 520 and shall be constructed to the typical section as shown on the plans.

- E. Concrete Sidewalk: Concrete sidewalk shall meet the requirements of FDOT Section 522 and shall be constructed to the typical section shown on the plans.

- F. Striping: Striping shall meet the requirements of FDOT Section 711 (thermoplastic), and shall be as shown in the plans. (Crosswalks, Stop Bars and Parking)

- G. Signage: All signage shall meet the requirements of FDOT Section 700 and the Manual of Uniform Traffic Control Devices and shall be constructed in the locations as shown on the plans.

5. POTABLE WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEM

- A. The Contractor and/or construction surveyor shall verify the elevations and locations shown on construction plans. Verify oil elevations of existing pipes, stubouts, and structures before starting construction and notify the Engineer if any discrepancy in elevations exist.

- B. The Contractor is herein advised that "as-built drawings" will be performed on the project which will reflect the elevation and location of all structures and improvements on the project. These "as-built drawings" will be utilized by the Engineer to determine conformance of the project to required tolerances as set forth by permitting and/or approving public agencies. Tolerances shall be utilized by the Contractor in order to insure the project to be accepted for final certification and approval. As Bults shall be in accordance with the Port St. Lucie Utilities Systems Department Standards.

- C. All construction shall be in accordance with the City of Port St. Lucie Utility Systems Department's Technical Specifications and Construction Standards, latest revision, and with all applicable Florida Department of Environmental Protection Rules and Regulations.

- D. No field changes or deviations from design are to be made without prior written approval of the Engineer of Record and Port St. Lucie Utilities Systems Department.

- E. The contractor shall coordinate service grades and location with the Engineer.

- F. All materials, construction methods, testing and disinfection shall conform to the requirements of the City of Port St. Lucie Utility Systems Department and AWWA current standards.

- G. PVC Water Main: The Dimension Ratio (DR) and Pressure Rating shall be 2500, DR=18 (Pressure class 235) for 4" to 12" pipe and C 905, DR=8 (Pressure rating 235) for 14" to 24" pipe. Minimum cover shall be 36 inches, unless otherwise noted. Mains shall be blue in color.

- H. Ductile Iron Fittings: Ductile iron fittings shall be used on PVC water main. Fittings shall conform to AWWA/ANSI C153.06 with a minimum pressure rating of 350 psi. Fittings shall be coated as specified under c.(1) (d) Coating & Linings for DIP. Fittings shall be restrained with restrained joints as per the detail.

- I. Gate Valve with Box: Valves 2" and larger shall be gray or ductile iron body, conforming to AWWA C509 or C515, with mechanical joints or flanged ends, and shall be equipped with a 2" square gray or ductile iron wrench nut. Valves shall be rated for 250-psi working pressure.

- J. Water/Sewer lines shall be laid on undisturbed ground, compacted to 98% of maximum density in accordance with AASHTO T-180. Backfill shall be compacted to 98% of maximum density in accordance with AASHTO T-180. The contractor shall submit certified density tests on each 12" lift.

- K. The contractor shall contact the Engineer of Record, the appropriate governmental jurisdictional agency and all utility companies involved in the project to coordinate the start of construction for coordination of any utilities. The contractor shall schedule a pre-construction meeting with the Engineer, Port St. Lucie Utilities Systems Department and the City of Port St. Lucie Engineering Department a minimum of ten (10) working days prior to starting construction.

- L. Areas to be open cut shall be overlaid within the limits of the open cut as indicated in the plans.

- M. Minimum cover shall be 36" for water mains.

5. POTABLE WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEM

N. The contractor shall repair or replace any damage caused by construction activity. Disturbed areas shall be restored to their original condition. Any disturbed areas within Public rights-of-way shall be seeded and mulched. Undisturbed and unsodded areas disturbed during the construction shall be seeded and mulched in accordance with Section 570 of the Florida Department of Transportation specifications.

- O. Existing utilities shall be field verified and protected by the contractor.

- P. The contractor shall top existing lines under the supervision of Port St. Lucie Utilities Systems Department only after preliminary testing and disinfection has been completed and approved.

- Q. Water main shall be marked by the use of continuous Blue wire per the PSLUSD's Qualified Product List (QPL).

- R. Service tops (Bacterio Sample Points (BSP)) shall be placed approximately ten feet away from gate valves, as shown, for testing. Following testing and sterilization of waterline, the Contractor shall place a brass plug in all corporation stops which were used as BSP's and remove the tubing and curb stops.

- S. Mechanical restraints to be used on all fittings. No thrust blocks are to be utilized within the system.

- T. Hydrostatic and leakage tests shall be made between valves and/or connectors for each section tested using the procedure outlined in ANSI/AWWA C600 for DIP and C605 for PVC.

Allowable leakage formula:

$$L = \frac{SD}{148,000}$$

Where:

L = Allowable leakage in gallons per hour

S = Slope of pipe tested

D = Nominal diameter of the pipe in inches

P = Average test pressure maintained during test in pounds per square inch gauge

- U. Water main shall be disinfected and approved in accordance with the latest applicable Florida Department of Environmental Protection and AWWA requirements (AWWA C-651).

- V. All crossings will be inspected by the PSLUSD prior to backfilling.

- W. Materials, construction methods, required tests, testing methods and construction tolerances for the wastewater collection and transmission system shall meet the requirements of the current AWWA Specifications, FDEP, and PSLUSD.

Materials, trench excavation, pipe-laying and backfilling operations shall meet the requirements of FDOT Section 25 and 430. Pipe shall be laid in true alignment in a single trench with an adequate supporting value if manual dewatering efforts fail as specified in FDOT Section 430, a minimum six inch compacted rock bed shall be used. All backfill shall be compacted to a minimum density of 95 percent of the maximum density as determined by AASHTO T-180, unless otherwise shown on the plans. Pipe laying shall proceed upgrade with spigot ends pointing in the direction of the flow.

1. Service Connection: Sewer services shall meet the requirements of PSLUSD and shall be PVC Schedule 40 with a minimum slope of 1/8 per foot of run. The sewer service shall be marked with a treated stake and electronic marker. The Contractor is not responsible for installation of meters.

- X. All construction shall be in accordance with the city of Port St. Lucie Utility Systems Department, Utility Standards Manual 2015. All notes must meet the requirements of the latest PSLUSD Utility Standards Manual and Utility Standards.

6. IRRIGATION QUALITY WATER SYSTEM

Materials, construction methods, required tests, testing methods and construction tolerances for the potable water distribution system shall meet the requirements of the current AWWA Specifications, FDEP, Tradition Irrigation Company Construction Standards & Details.

Materials, trench excavation, pipe-laying and backfilling operations shall meet the requirements of FDOT Sections 125 and 430. Pipe shall be laid in true alignment in a dry pipe trench with an adequate supporting value and be backfilled to the detail as shown on the plans and FDOT Section 430. All backfill shall be compacted to a minimum density of 95 percent of the maximum density as determined by AASHTO T-180, unless otherwise shown on the plans.

1. Materials to meet the Tradition Irrigation Company Qualified products list. All materials to be submitted to the engineer for approval.

THE WORK

Existing Utilities and Structures:

Existing utilities, structures and facilities shown on the Drawings were located as accurately as possible from the records extant. No guarantee is made that all existing utilities or structures are entirely accurate. Contractor shall assure himself of the actual location of the utility structures, or facilities prior to performance of any work in the vicinity. The utility companies or utility agencies will co-operate with the Contractor's operations. Prior to start of the work, the Contractor shall request each utility agency to advise him of the location of their facilities in the vicinity. The Owner will assume no liability for damage, suspension, cost increase or removal of the Contractor's operations due to the action of existing utility or structures. The utility company or department affected should be contacted and their permission secured to the method used for any such work.

Restoration of Damaged Structures or Utilities:

It shall be the responsibility of the Contractor to repair, rebuild or restore to its former condition, any and all portions of existing utilities, structures, equipment, appurtenances or facilities, other than those to be paid for under this Contract, which may be disturbed or damaged during the construction operation, at no cost to the Owner.

Final Cleanup:

Upon completion of the work, but before final payment will be made, the Contractor shall clear and remove from the Project area, all falsework, equipment, surplus and discarded materials, rubbish and temporary structures which result from the work under this Agreement, and shall restore in an acceptable manner, all property which has been damaged during the prosecution of the work.

Record Information:

Upon completion of the work, but prior to submittal of the request for final payment, the Contractor shall obtain and submit record information to the Owner. This information shall include the following:

1. Water and Wastewater Systems:

As-built plans for water/sewer mains shall be provided by the Contractor/Engineer of Record and shall be comprised of three (3) copies of a certified survey. The copies shall bear the original signature and embossed seal of the surveyor who performed the as-built survey. The as-builds shall be submitted to the contractor for record retention or other uses, including inspection, prior to submittal to Port St. Lucie Utilities Systems Department. The as-built survey shall be prepared in plan and profile format by a professional land surveyor registered in the State of Florida, and shall comply with applicable provisions of the Florida Administrative Code and Chapter 472 of the Florida Statutes. The as-built drawings shall be the same scale and reference some survey as the drawings prepared by the Engineer of Record. The horizontal and vertical location of the mains and appurtenances shall be accurately depicted to scale and shall be identified relative to the baselines and relative to readily identifiable permanent reference points existing after the completion of the construction. Locations shall be shown for all fittings, valves, hydrants, manholes, service connections, etc. All horizontal and vertical locations of the mains at each baseline station as shown on the plans (100' feet maximum) both horizontal and vertical. Underground facilities (i.e. drainage, gas, electric, telephone, etc.) crossing the mains shall be accurately shown both horizontally and vertically and shall identify size, type, facility, material, and clearance. All information shall be based upon measurements and observations made in the field by the surveyor certifying the survey, or by personnel under his employment, direction and supervision. The cost for preparing and maintaining the as-built plans shall be incidental to the construction cost.

2. Drainage System:

- a. High points and low points of swales;
- b. Locations and grate and invert elevations of all structures;
- c. Location, size, type, length and invert of all culverts.

3. Paving and Grading:

Location and elevation of high and low points in roadway and any other changes in grade.

The record information shall be certified by a Florida Professional Land Surveyor. Location shall be given with reference to cornerline stationing and offset to other means acceptable to the Owner. Elevations shall be according to the North American Vertical Datum (NAVD).

Guaranteed: All materials and the installation thereof which are furnished and installed by the Contractor, under the terms of the Agreement, shall be guaranteed by the Contractor against defective workmanship, mechanical and physical defects, leakage, breakage, and other damages or failure until such time as the materials and installation have been paid in full and payment, said date to constitute the commencement of the one (1) year warranty period. All materials and installations proving to be defective within the specified period of the warranty shall be replaced, without cost to the Owner, by the manufacturer or the Contractor. The period of guarantee of each such replacement shall be from and after the date of installation thereof.

UTILITY CONTACTS

Company	Contact	Telephone Numbers
PSLUSD	Michele Holler	(772) 873-6424
Florida Power & Light	Bobby Pirson	(772) 223-4248
Hometown Communications	Sean Hayden	(772) 345-1000

GENERAL NOTES

1. Grassing shall be furnished and installed in conformance with the approved landscape plan. All disturbed areas not shown to be planted, mulched, etc. shall be sown.
2. Storm drain inlets shall be located so that the top of the grass is at the same elevation as the top of adjacent finish grade.
3. The location of existing utilities shown is approximate only and must be field verified by the Contractor prior to beginning work.
4. These plans shall not be used for construction unless they are marked "Approved for Construction" in the title block.
5. Contractor to obtain and review all permits prior to starting construction.
6. Drawing scale may change due to reproduction.
7. Maintenance of traffic must be in conformance with FDOT Specifications.
8. All invasive exotic vegetation on-site must be removed in conjunction with site development.
9. No trees or invasive root plantings shall be located within 10' feet of city utility mains. All other utilities shall be a minimum of 5' feet horizontally from city utility mains for parallel installations and a minimum of 18" inches below city utility mains.

STEFAN K. MATTHES, P.E. FL. REG. NO. 38723

