

CONSTRUCTION PLANS FOR

SAINT LUCIE COUNTY PSL BRANCH LIBRARY

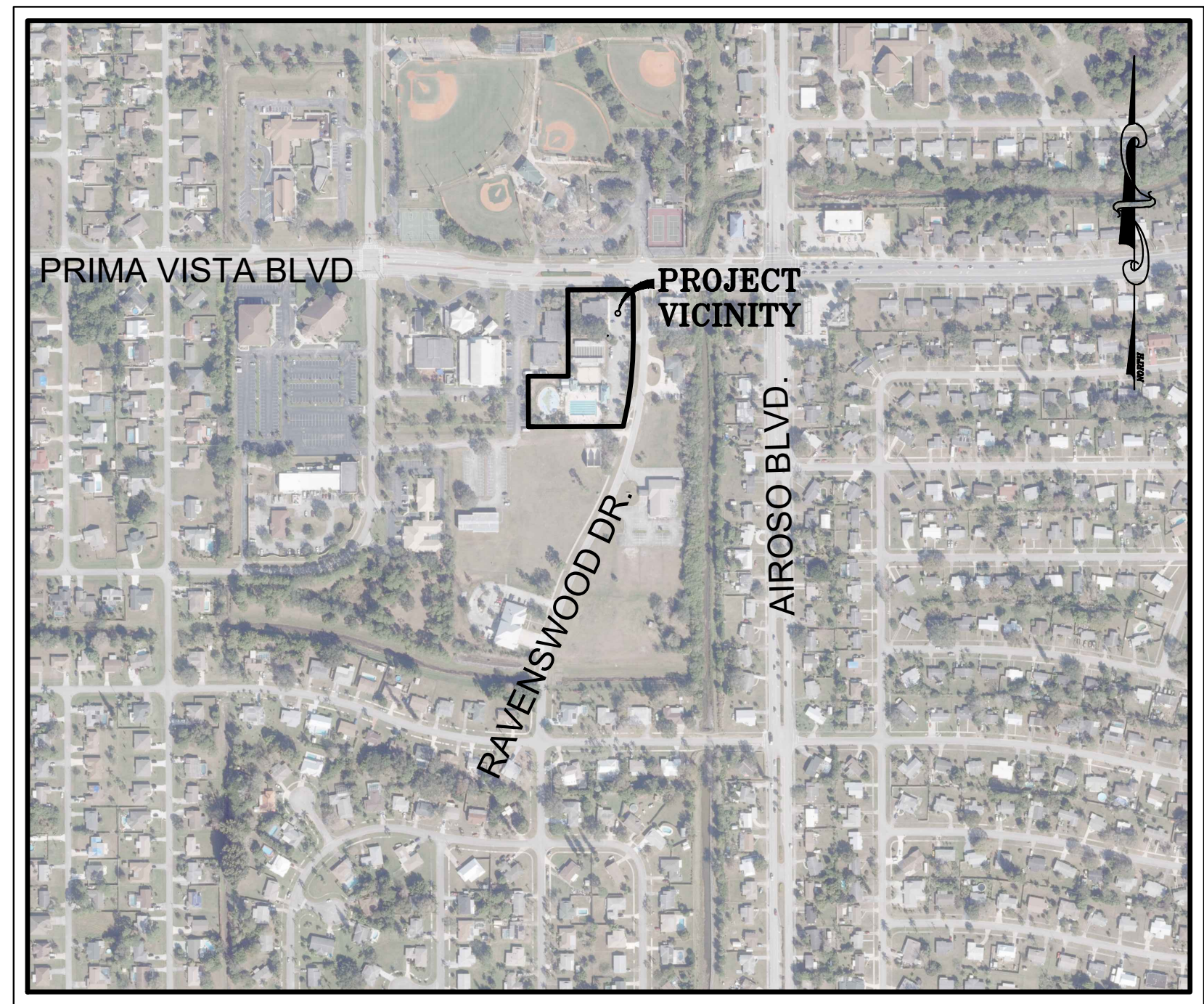
IN

SECTION 29, TOWNSHIP 36 SOUTH, RANGE 40 EAST

SAINT LUCIE COUNTY, FLORIDA

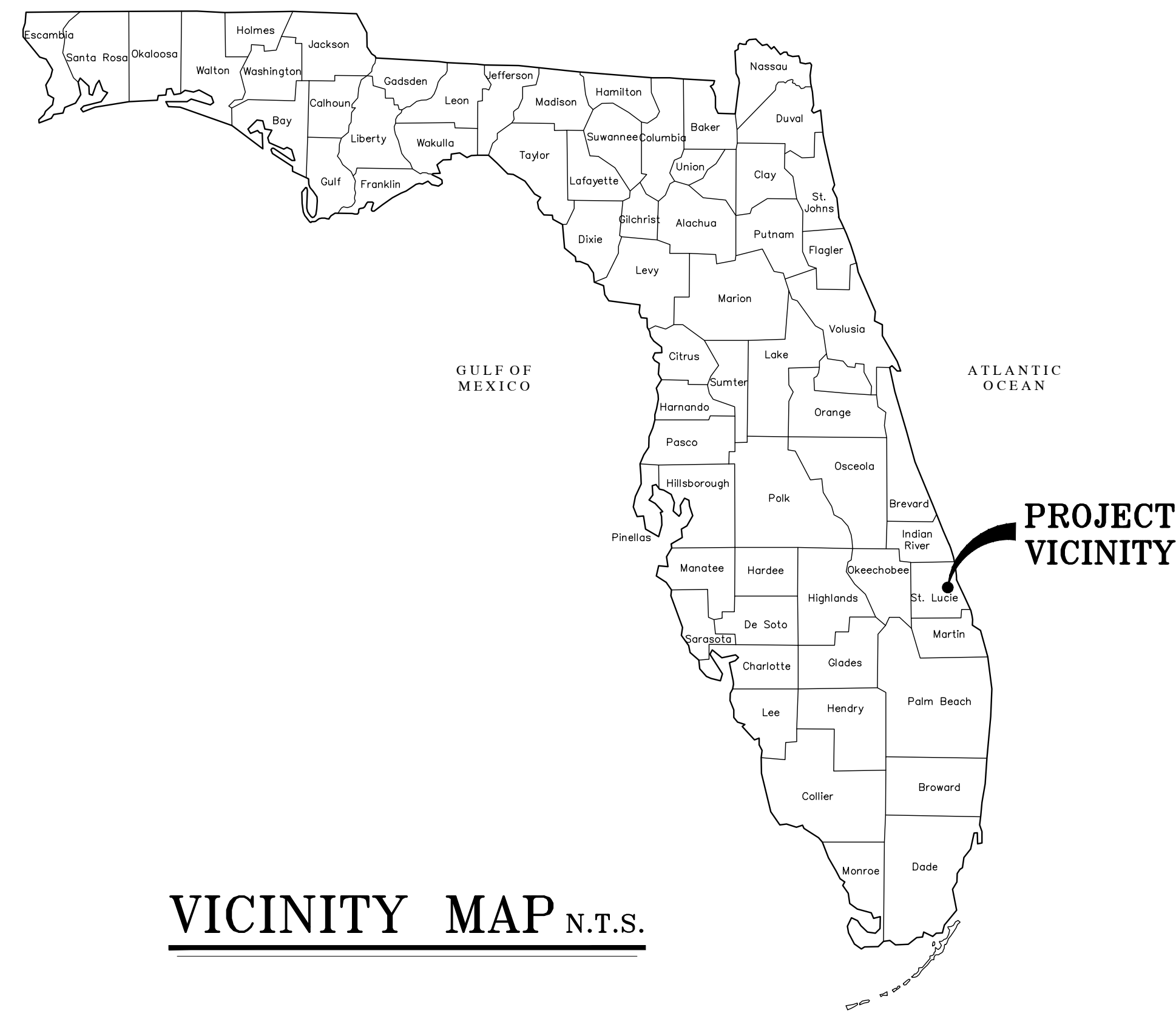
PREPARED FOR

SONG & ASSOCIATES




LOCATION MAP N.T.S.

SECTION 29 TOWNSHIP, 39 SOUTH, RANGE 40 EAST



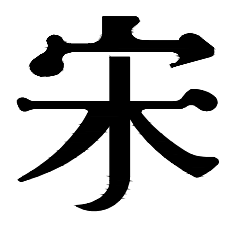
VICINITY MAP N.T.S.



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STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

CITY OF PORT ST. LUCIE PROJECT NO. P80-033-A1
PSLUSD PROJECT NO. 5007-01



Song + Associates

Architecture • Planning • Interior Design


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West Palm Beach, Florida 33401
Telephone: 561-655-2423
Fax: 561-655-1482

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Seal :

Name : _____
License # : _____

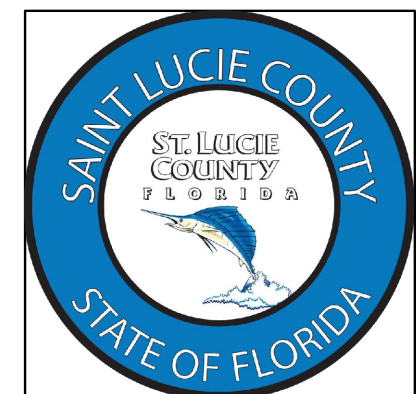
Consultants :



CULPEPPER & TERPENING IN

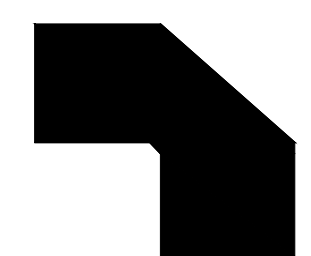
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ST. LUCIE COUNTY - PORT ST. LUCIE BRANCH LIBRARY



180 NW PRIMA VISTA BLVD,
PORT ST. LUCIE, FL 34983

Key Plan :



REVISION	DATE
CITY COMMENTS	2/28/23
NEW HARDSCAPE	3/15/23

Date : 02/28/24
S+A Project No : 22026
Owner Project No :
Drawn By : EAC
Checked By : X
Phase :

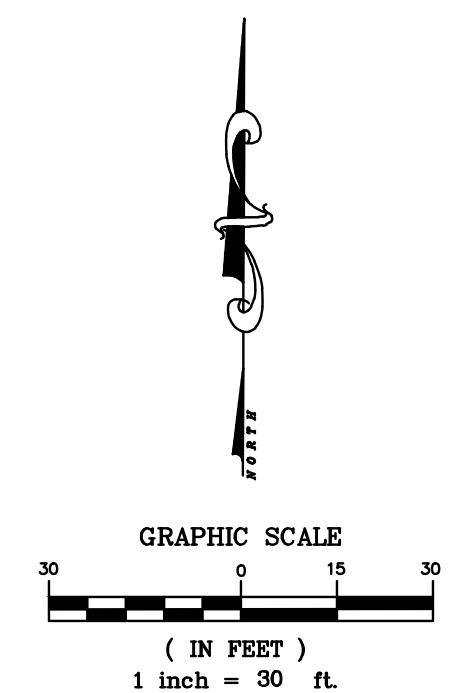
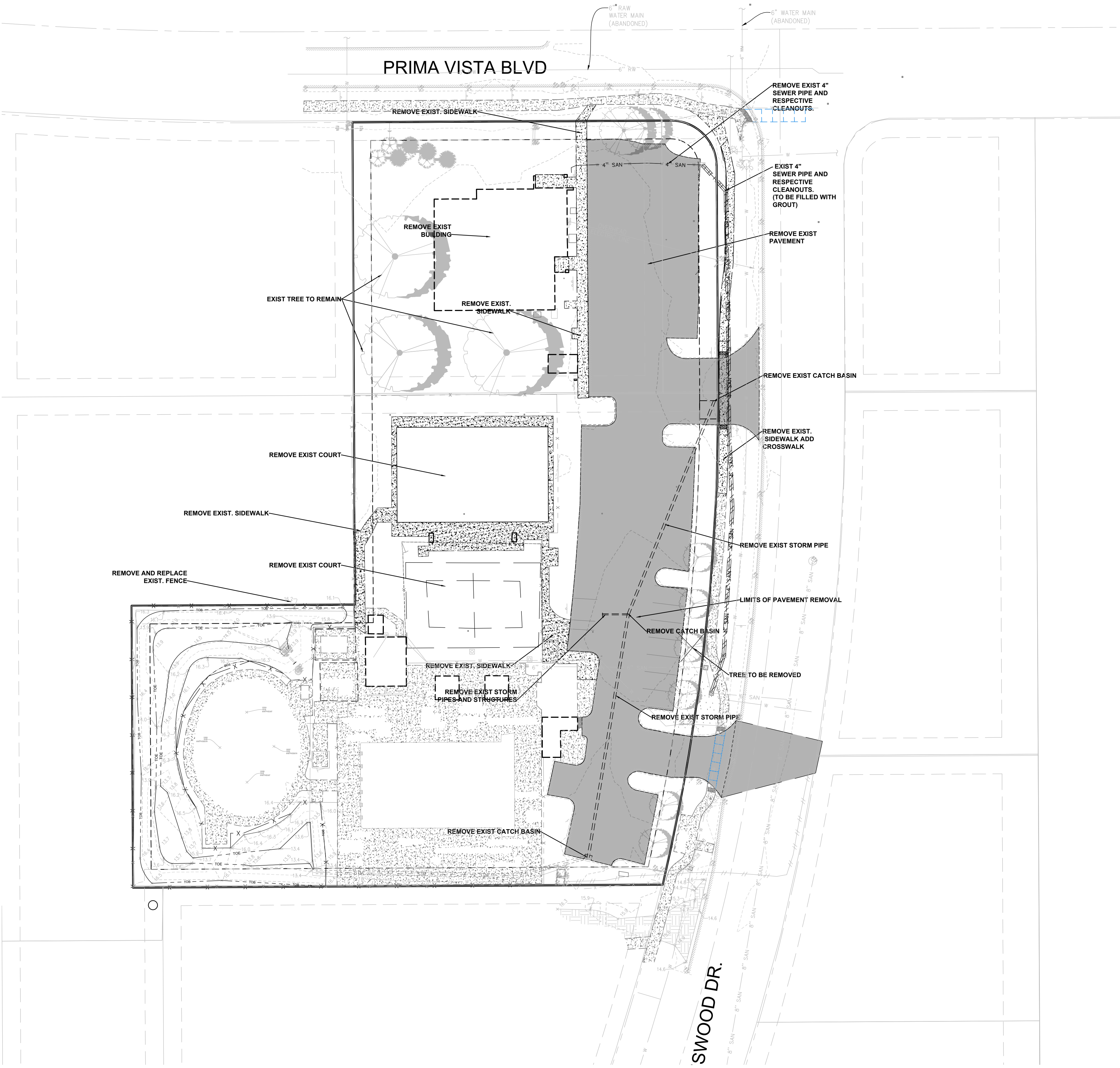
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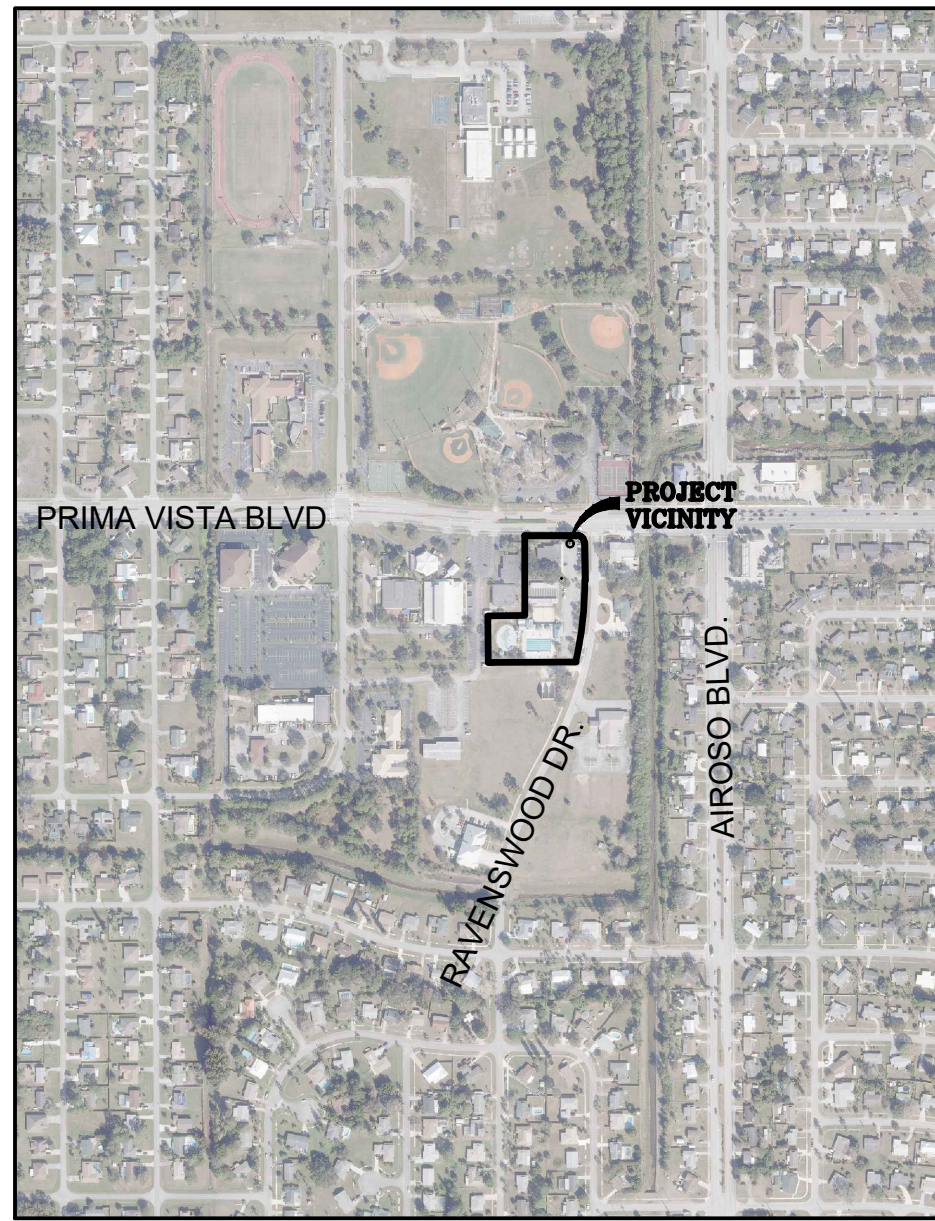
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LEGEND	
	PROPERTY BOUNDARY
	CURB
	BOUNDARY OF REMOVAL
	SIDEWALK TO BE REMOVED
	PAVED DRIVEWAY TO BE REMOVED



LOCATION MAP

- NOTES**
- SAWCUT ALL LIMITS OF PAVEMENT REMOVAL

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ST. LUCIE COUNTY
FLORIDA

180 NW PRIMA VISTA BLVD.
PORT ST. LUCIE, FL 34983

Key Plan :

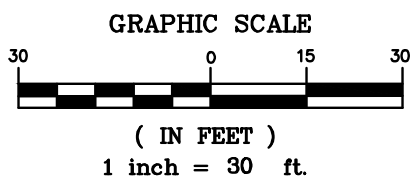
REVISION	DATE

Date : 2/28/24
S+A Project No : 22026
Owner Project No :
Drawn By : EAC
Checked By : X
Phase :
BID DOCUMENTS

Sheet Title :

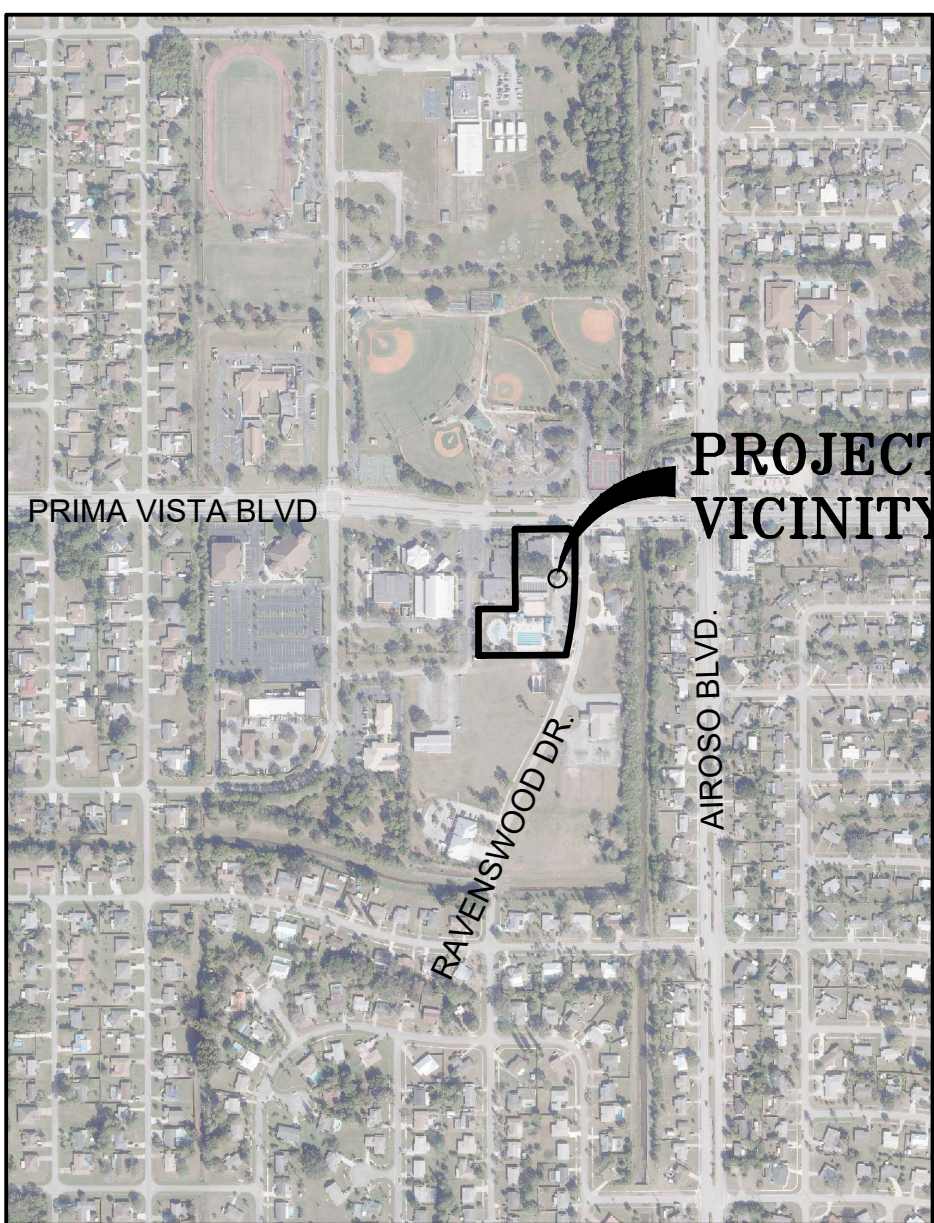
DEMOLITION PLANS

Sheet # :
C-2



LEGEND

	PROPERTY BOUNDARY
	CURB
	TOB OF WATER
	EXISTING SIDEWALK
	PROPOSED SIDEWALK
	HEAVY DUTY PAVED DRIVEWAY
	STANDARD DUTY DRIVEWAY
	PALM TREE
	OAK TREE

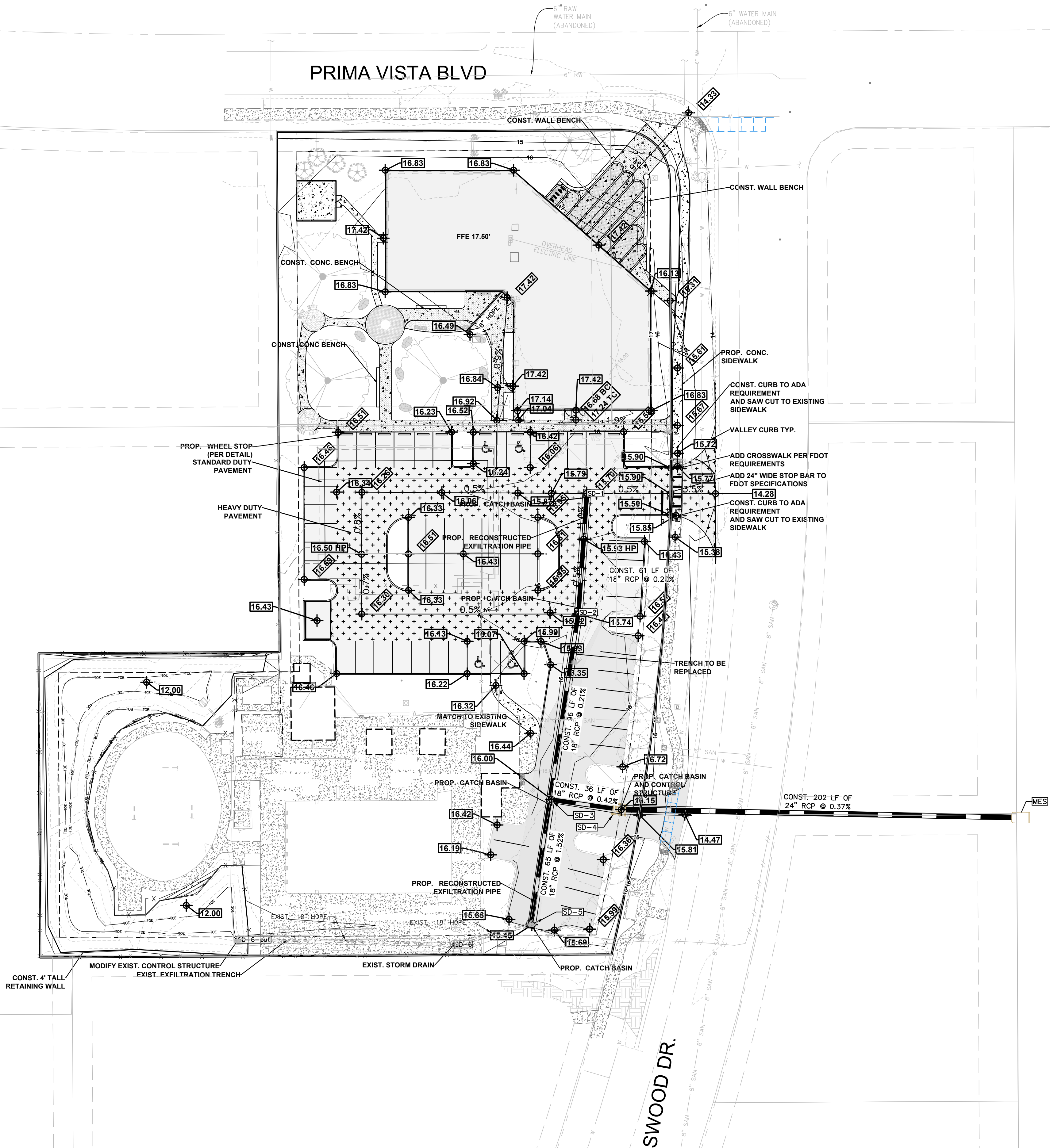


LOCATION MAP

DRAINAGE STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
MES Cross Drain MES with 1:4 Slope - 24 in. Single Round Concrete Pipe	RIM = 11.25 W INV = 9.00
SD-1 TYPE-C INLET	RIM = 15.70 S INV = 10.22
SD-2 TYPE-C INLET	RIM = 15.74 N INV = 10.10 S INV = 10.10
SD-3 TYPE-C INLET	RIM = 15.86 N INV = 9.90 S INV = 9.90 E INV = 9.90
SD-4 TYPE-C INLET	RIM = 16.15 W INV = 9.75 E INV = 9.75
SD-5 TYPE-C INLET	RIM = 15.56 N INV = 10.88 W INV = 12.22

NOTES

- ALL SPOT ELEVATIONS ARE TAKEN AT BOTTOM OF CURB WHEN APPLICABLE





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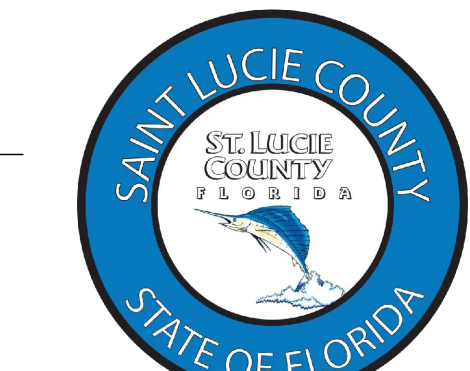
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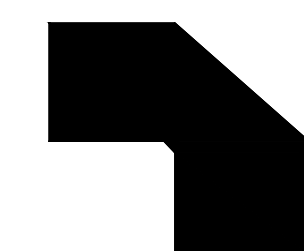
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180 NW PRIMA VISTA
BLVD,
PORT ST. LUCIE, FL
34983

Key Plan : 

[illegible]

Date : 2/28/24

S+A Project No : 22026

Owner Project No :

Drawn By : EAC

Checked By : _____ X

Phase :

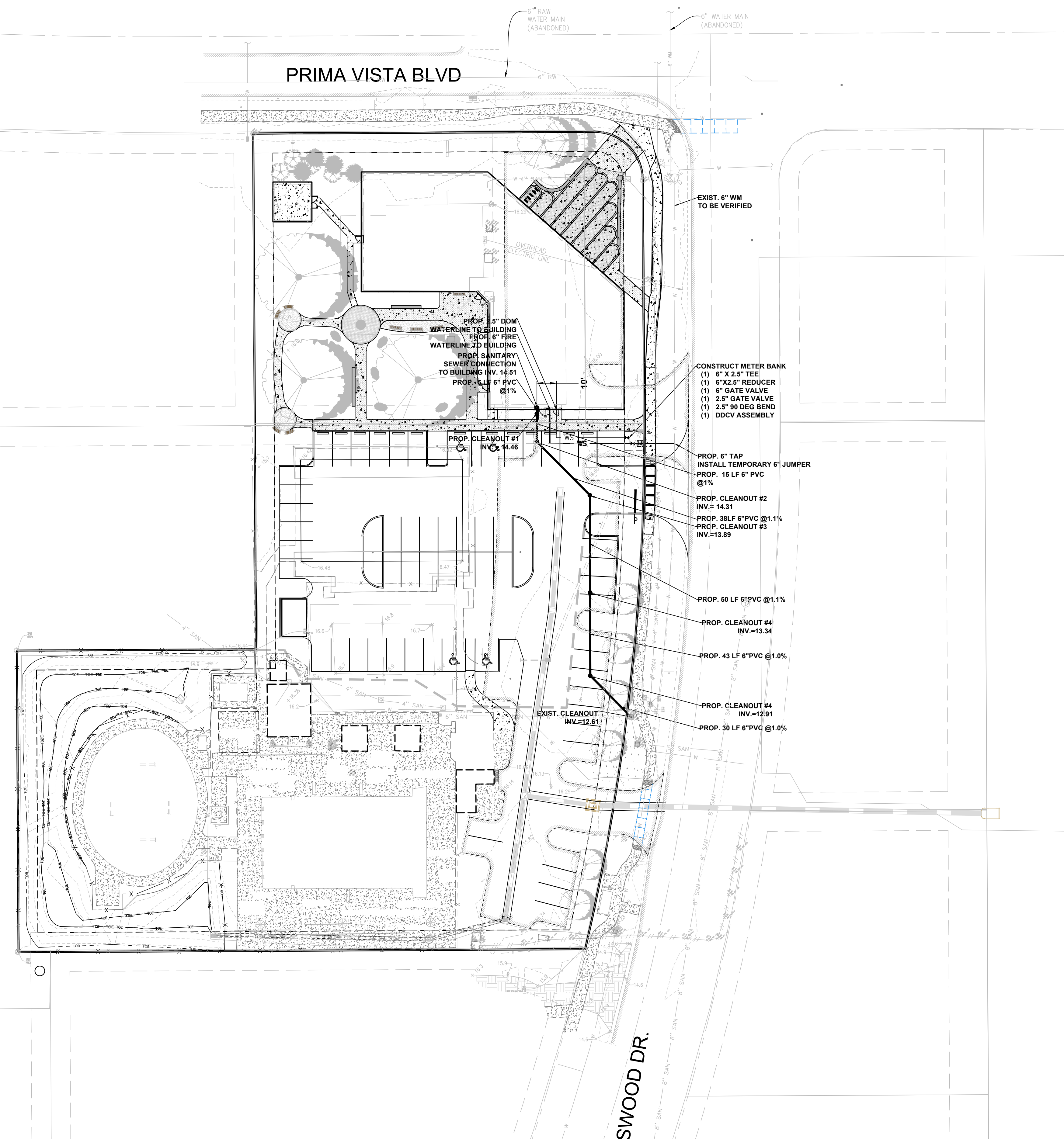
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UTILITY PLAN

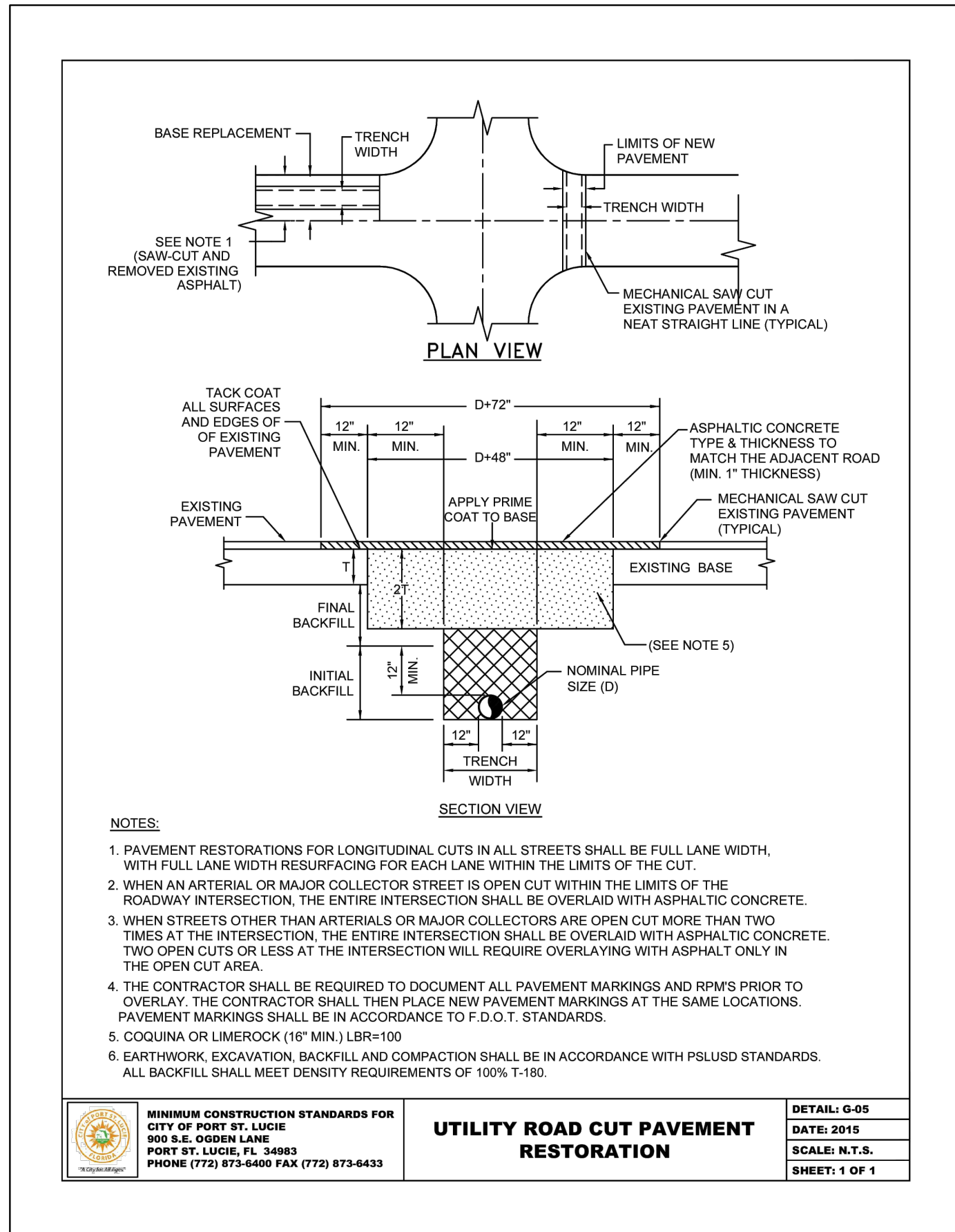
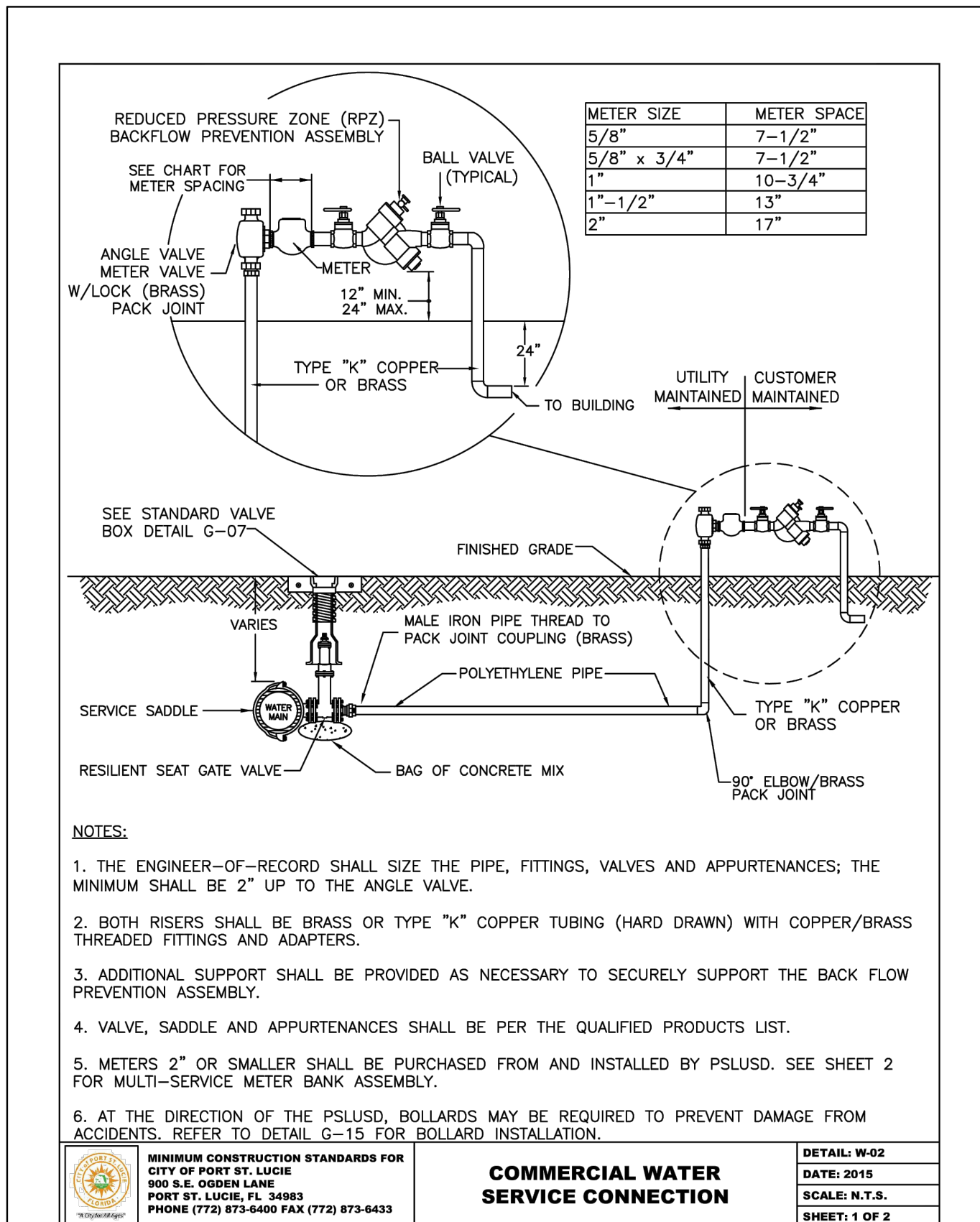
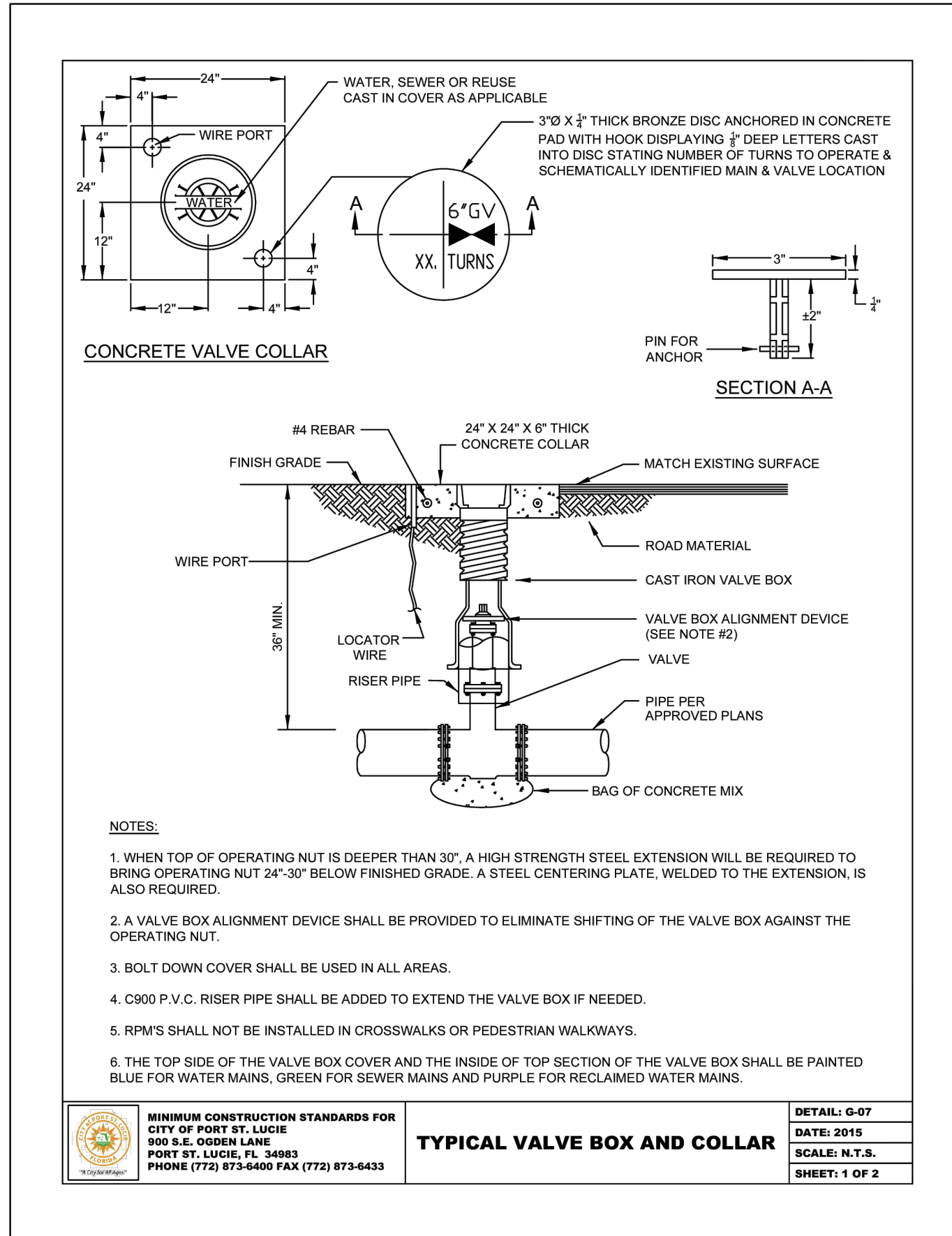
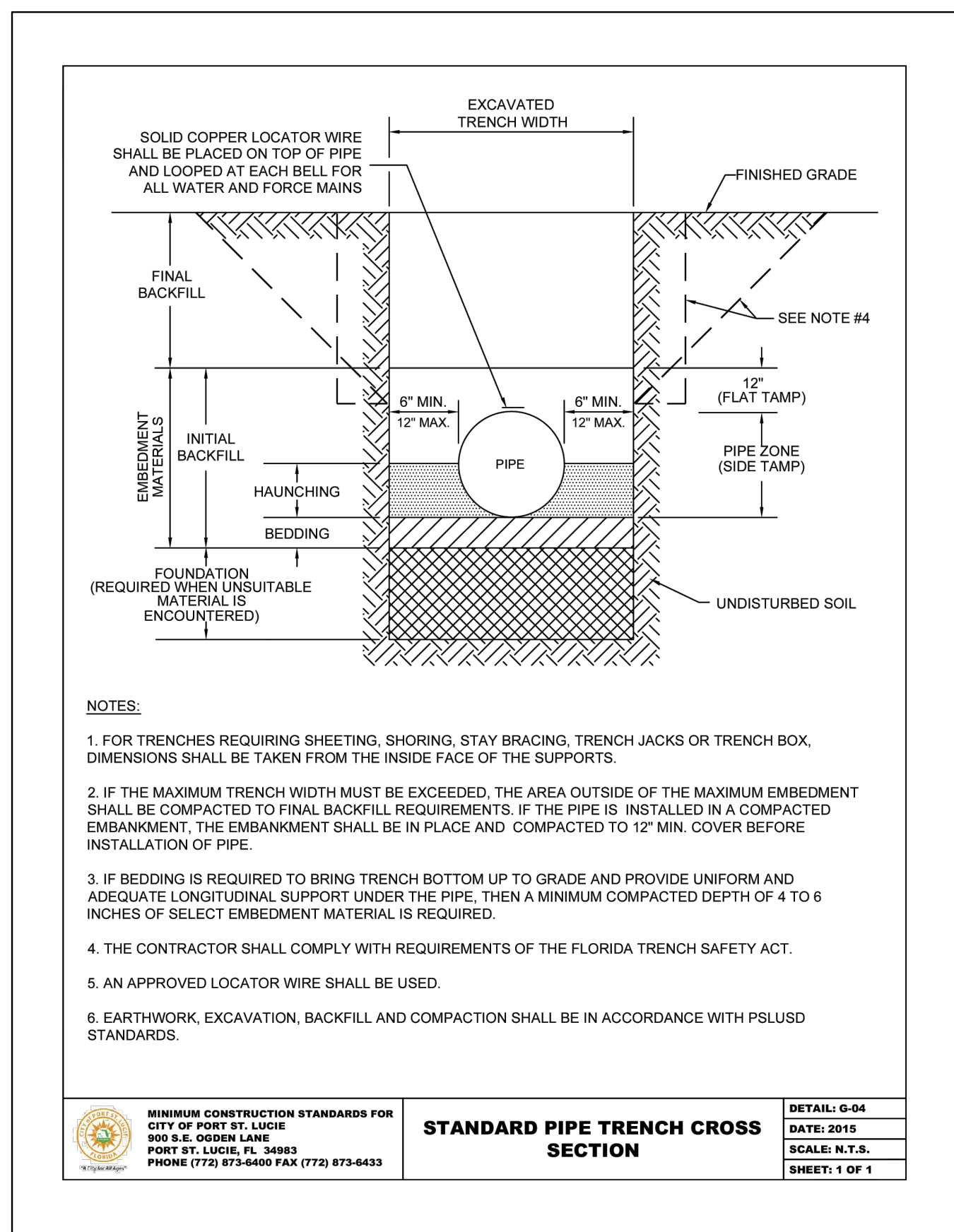
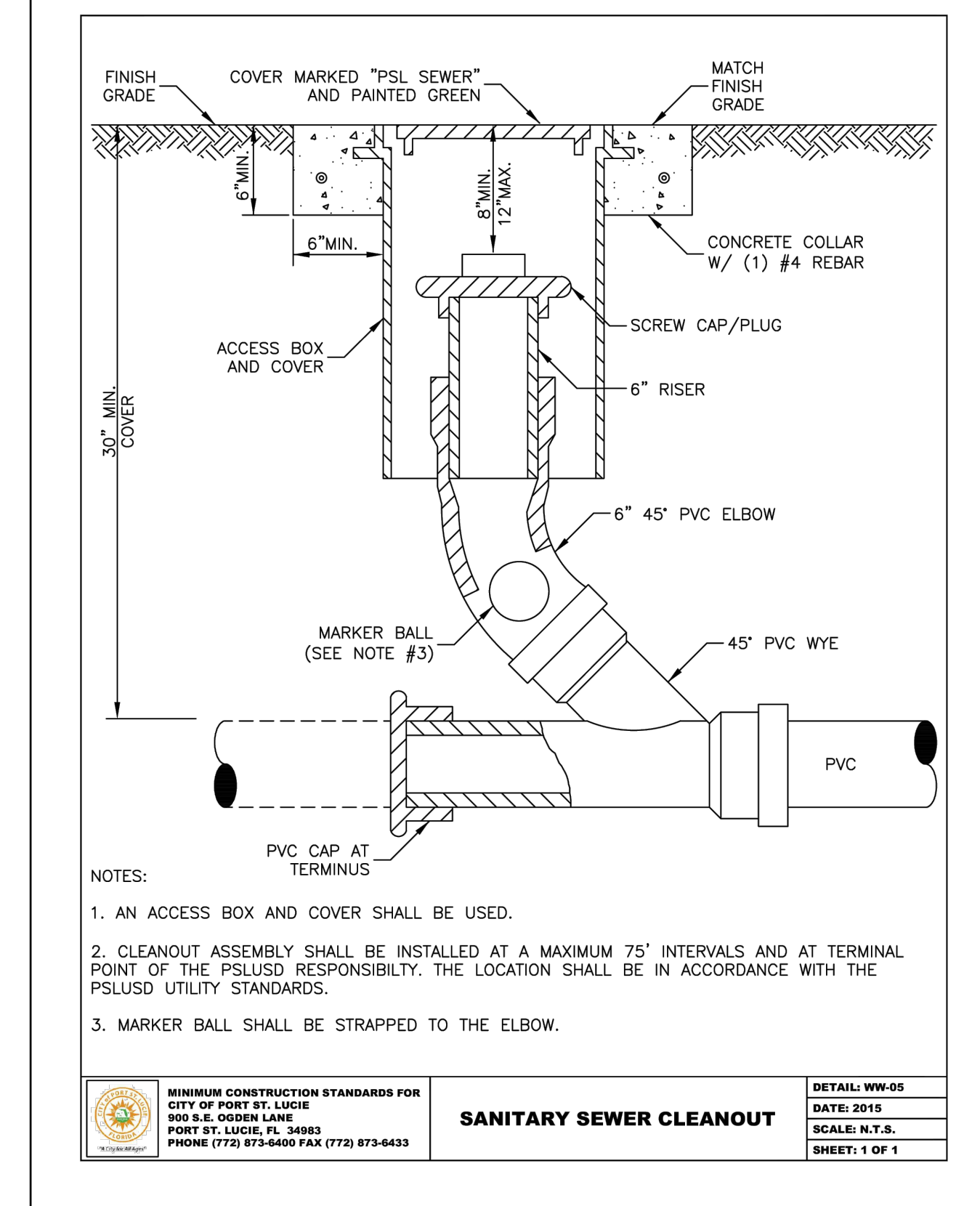
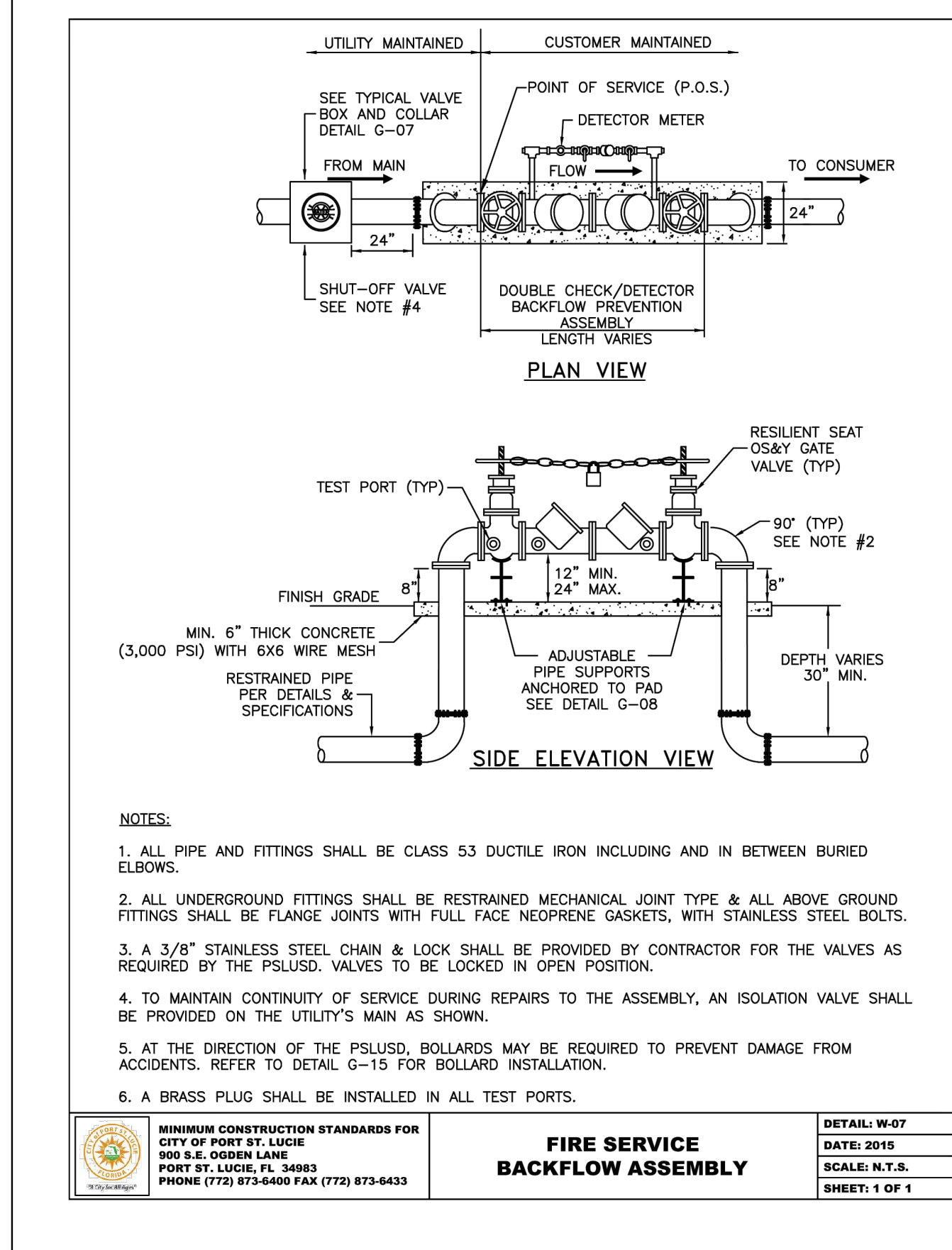
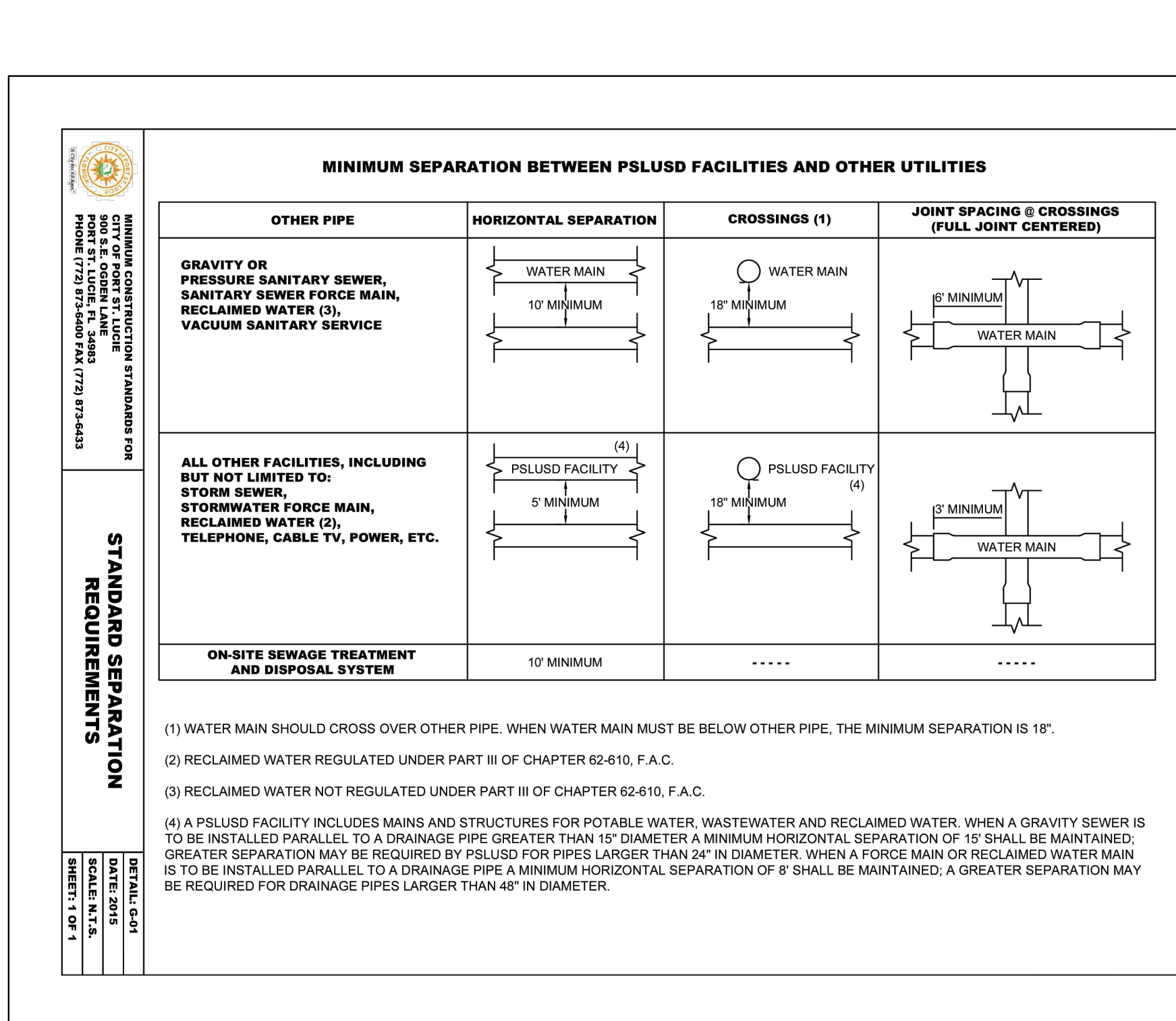
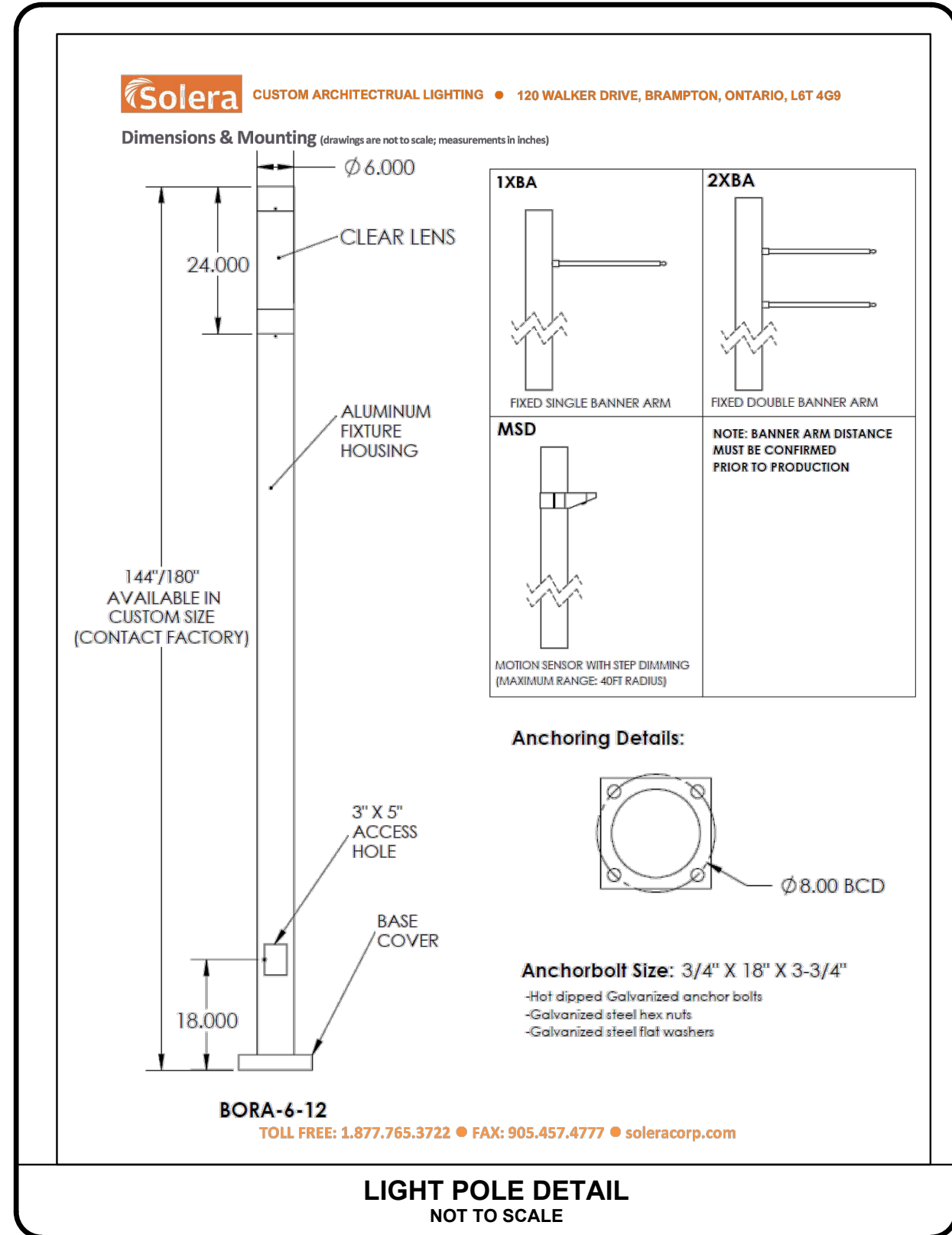
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Valve table								
Plan ID	Size(in)	Type	Fluid	Manufacturer	Model	Date Set	# Turns	PSLUS
water	1.5	GATE	WATER					
fire	6	GATE	WATER					

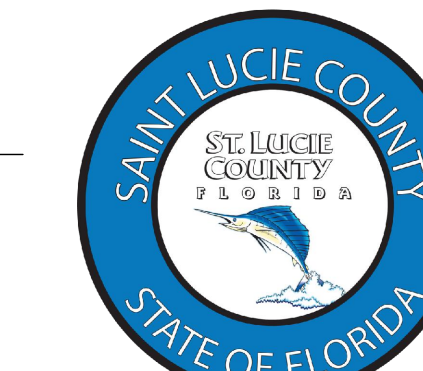
CITY OF PORT ST. LUCIE PROJECT NO. P80-033-A1
PSLUSD PROJECT NO. 5007-01





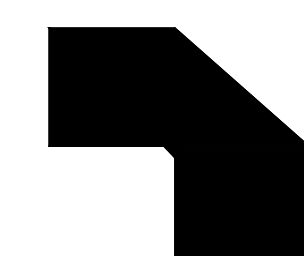
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180 NW PRIMA VISTA
BLVD,
PORT ST. LUCIE, FL
34983

Key Plan : 

[illegible]

Date : 2/28/24

S+A Project No : 22026

Owner Project No :

Drawn By : EAC

Checked By : X

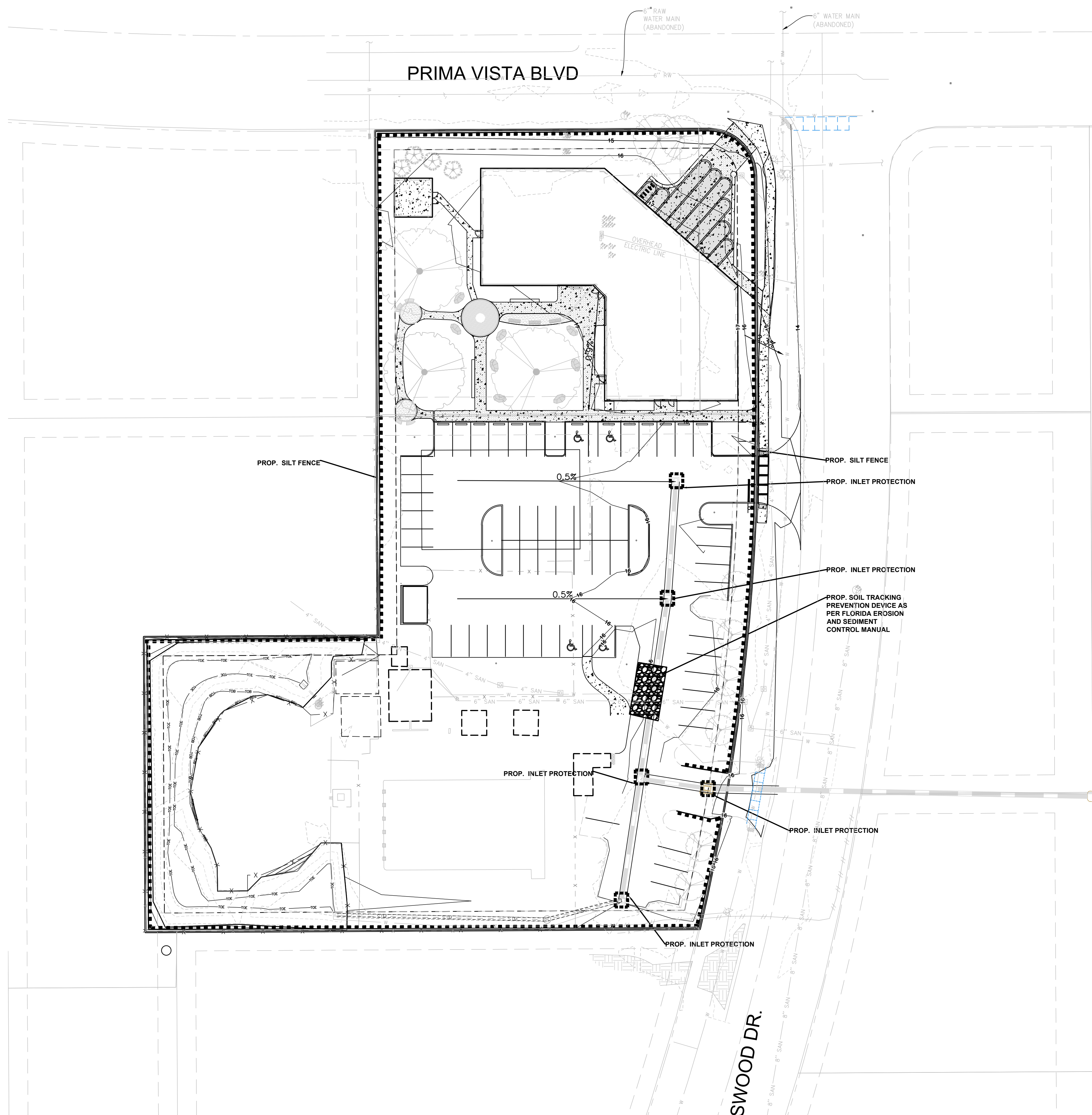
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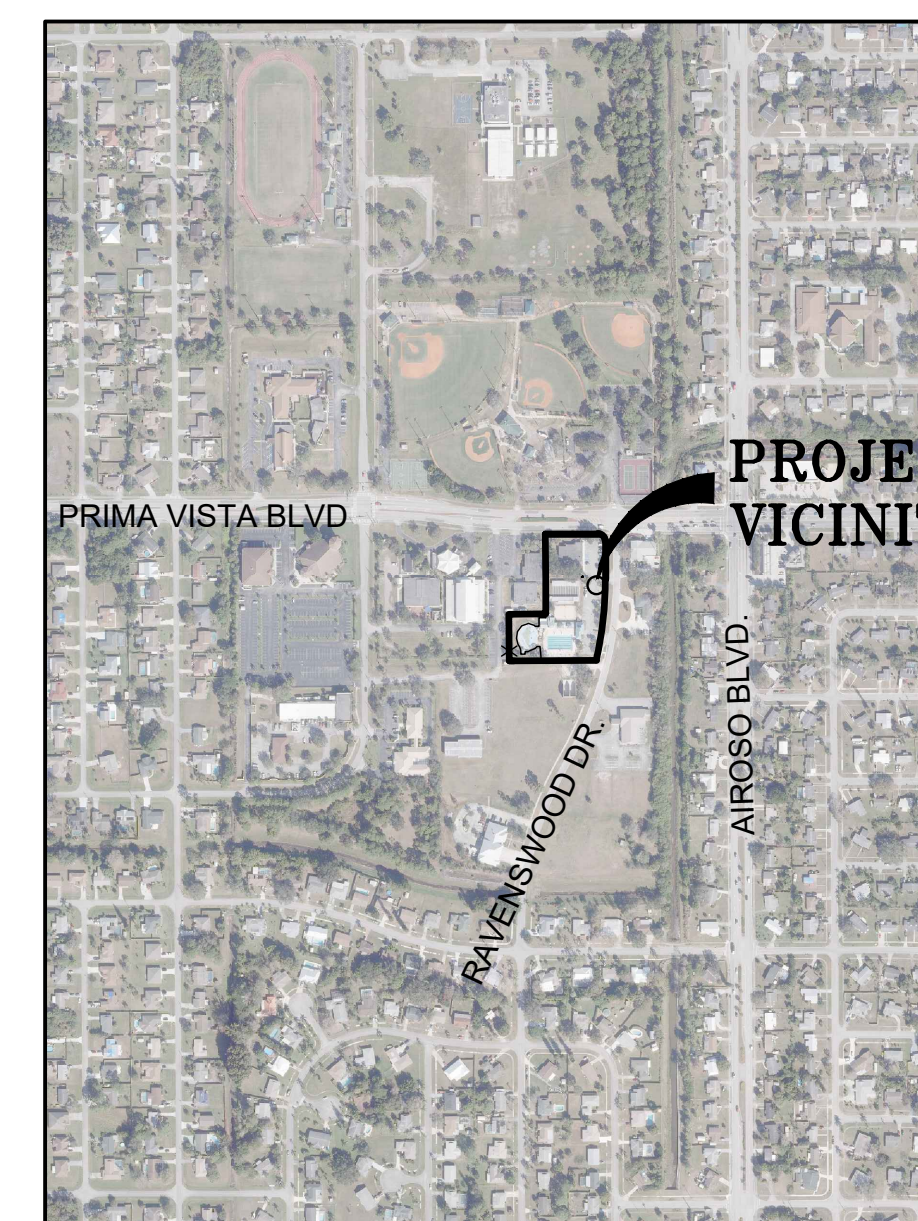
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SWPPP

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LOCATION MAP



LOCATION MAP

LEGEND

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

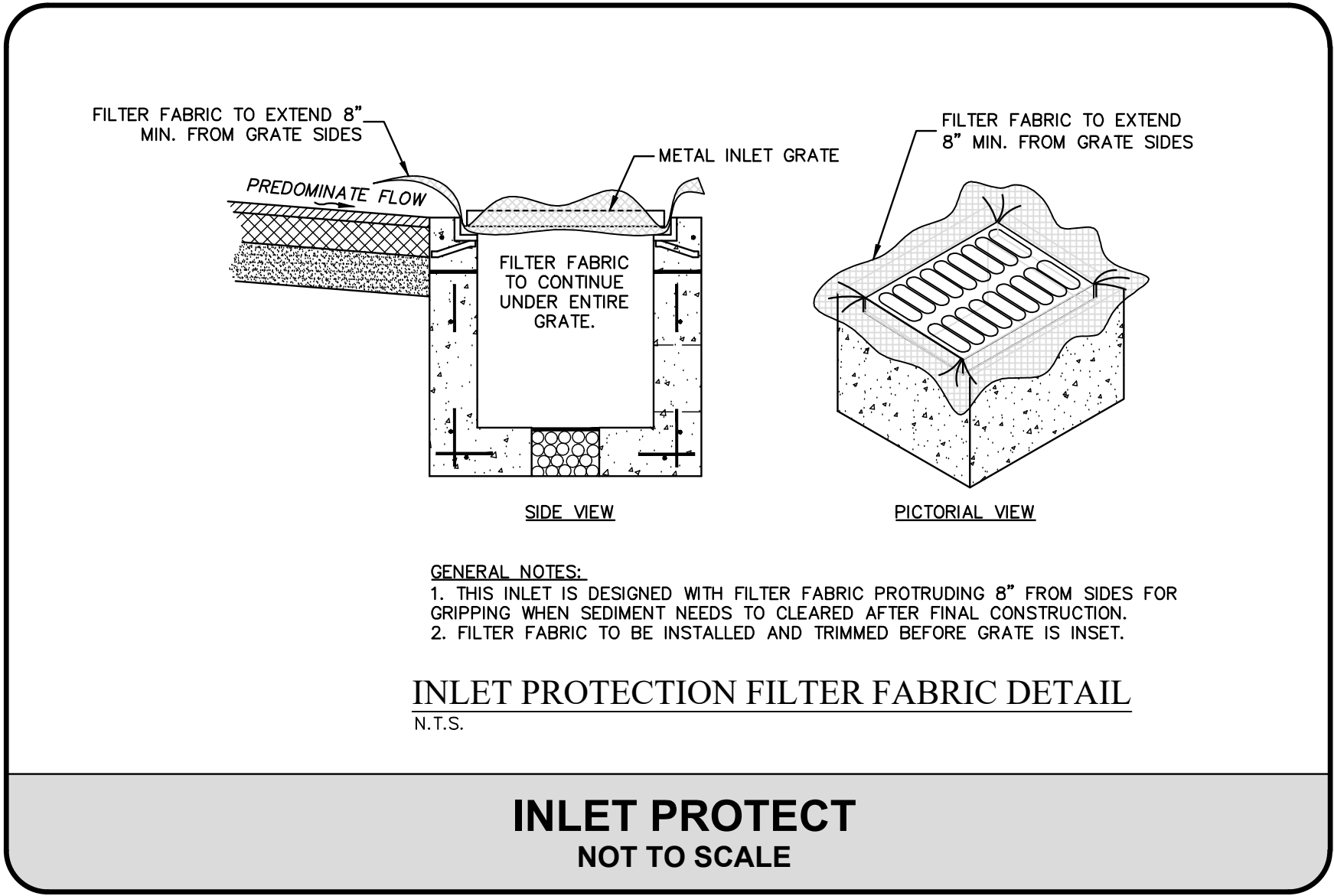
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CITY OF PORT ST. LUCIE PROJECT NO. P80-033-A1
PSLUSD PROJECT NO. 5007-01

Section 1	Project Name and location information:	St. Lucie County PSL Branch library Southwest quadrant of the intersection of Prima Vista and Ravenswood Rd. Sections 29, Township 36 South , Range 40 East, Port St. Lucie, Florida
Section 2	Describe the nature of the construction activity:	Redevelopement of existing library and adjacent parking.
Section 3	Describe the intended sequence of major soil disturbing activities:	<ul style="list-style-type: none">• 0-2 days, install perimeter sediment and erosion controls;• 3-11 days, clearing and site prep• 12-32 days, Earthwork filling & grading• 33-48 days, install underground utilities and roadway• 49-56 days, site stabilization.
Section 4	Total area of the site:	2.30 Acres
Section 5	Total area of the site to be disturbed:	1.75 Acres
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site:	Soil types: Nettles and Oldsmar sands and Pineda sand, 0-2% slopes
Section 7	Estimate the drainage area size for each discharge point:	2.30 Acres
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	Lat: N27° 19' 01.87" Long: W80° 21' 04.20"
Section 9	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 treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or 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, and any subsequent amendments.	
		<ul style="list-style-type: none">• Prior to clearing, a silt fence (trenched 6 inches deep and backfilled on the uphill side), will be installed as required.• Disturbed portions of the site where construction activities have permanently ceased shall be stabilized with sod or other permanent stabilization methods no later than 60 days after the last construction activity.• All installation shall be commenced as depicted on the attached site map and installation "typical".
Section 10	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.	
		<ul style="list-style-type: none">• Grassing or mulch shall be used to stabilize all disturbed areas.
Section 11	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.	
		The site has been designed to minimize earthwork, therefore the contractor isn't required to widescale clearing and grading actives and thus reducing the disturbed areas.
Section 12	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 as runoff will be directed to permanent surface water management system.
Section 13	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.	
		<ul style="list-style-type: none">• The Project's vegetative natural buffers will be installed during the construction phase, to assist in the site water quality discharge management.
Section 14	Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No debris will be buried on site.
Section 15	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.
Section 16	The proper application rates of all fertilizers, herbicides and pesticides used at the construction site: Cogon grass will require multiple rounds of treatment.	Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates.
Section 17	The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Section 18	Other:	Port-o-lets 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.

Section 19	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.	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: <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 filter inlets, silt fence, or filter fabric shall be performed immediately.• Bare areas of the site that were previously seeded shall be reseeded per manufactures' 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.
Section 20	Inspections: Describe the inspection and inspection documentation procedures, as required by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	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 and 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.
Section 21	Identify and describe all sources of non-stormwater discharges as allowed by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	It is expected that no non-stormwater discharges will occur from the site during construction period.
Section 22	All contractor(s) and subcontractor(s) identified in the SWPPP 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 thereunder."

Name	Title	Company Name, Address and Phone Number	Date



STATE OF FLORIDA EROSION & SEDIMENT CONTROL - DESIGNER & REVIEWER MANUAL

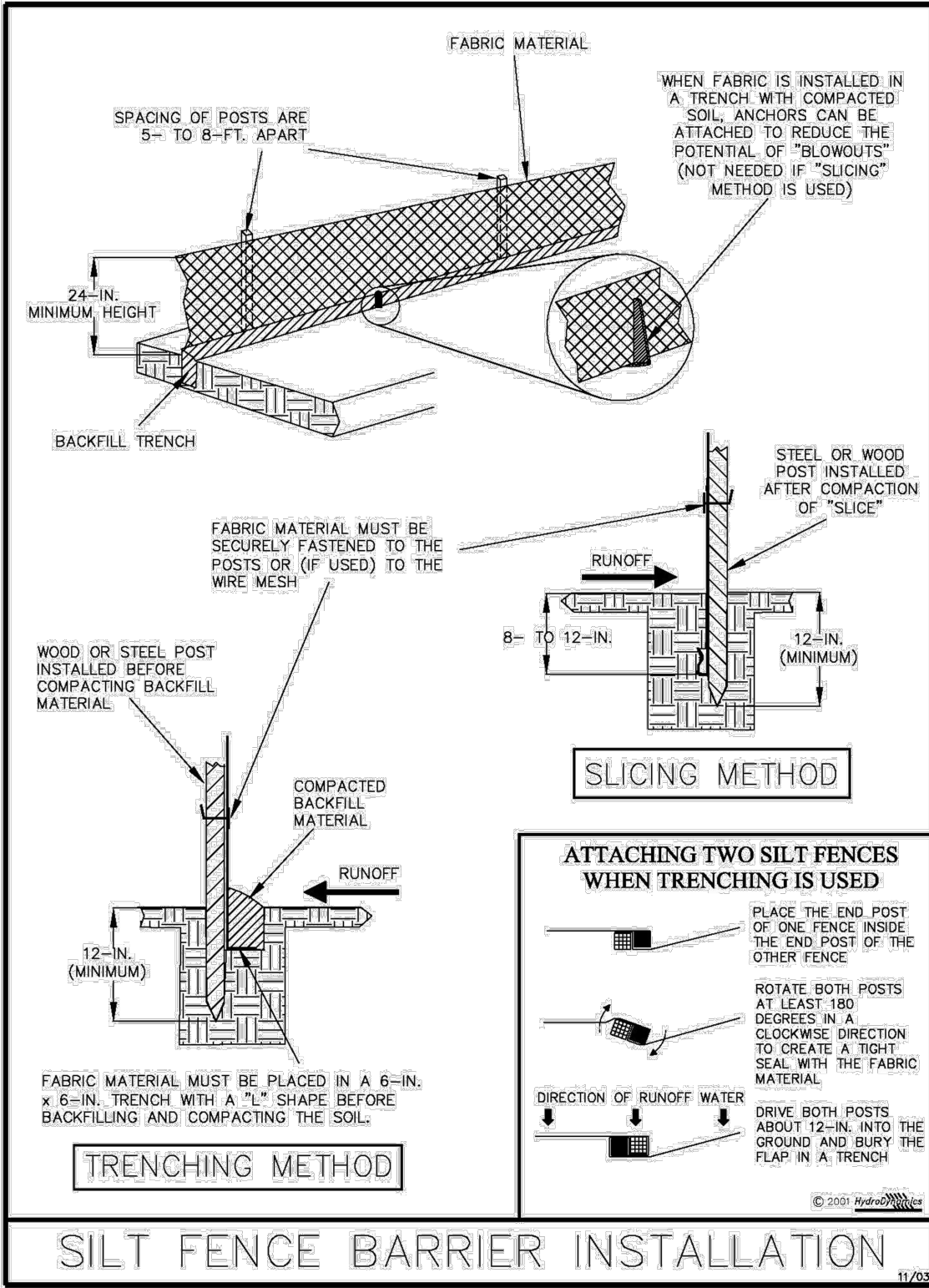


Figure V-40: Illustration of a Silt Fence Barrier

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V-7

STATE OF FLORIDA EROSION & SEDIMENT CONTROL - DESIGNER & REVIEWER MANUAL

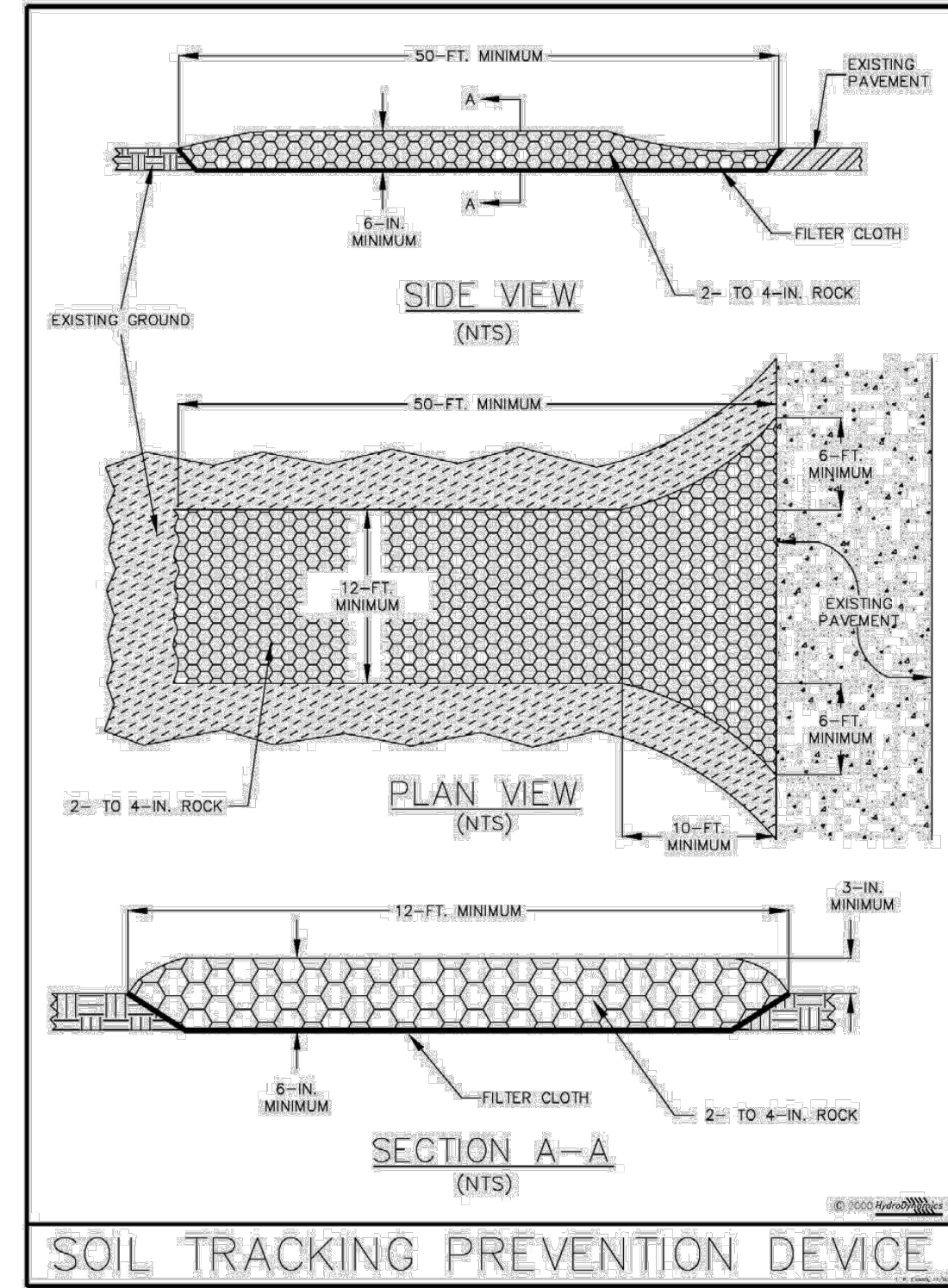


Figure V-14: Illustration of a Soil Tracking Prevention Device

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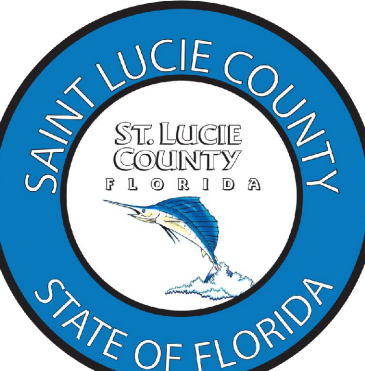
Consultants :



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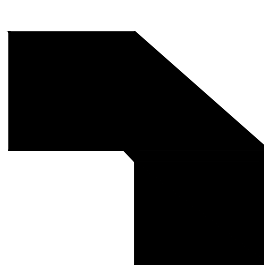
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180 NW PRIMA VISTA BLVD,
PORT ST. LUCIE, FL 34983

Key Plan :



REVISION	DATE

Date : 2/28/24

S+A Project No : 22026

Owner Project No :

Drawn By : EAC

Checked By : X

Phase :

BID DOCUMENTS

Sheet Title :

SWPP DETAILS

Sheet # :

C-9

CITY OF PORT ST. LUCIE PROJECT NO. P80-033-A1
PSLUSD PROJECT NO. 5007-01

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, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary 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 as shown on the plans. This control 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 110 and shall be performed within the limits of the project 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 rights-of-way, utility easements, water management tracts, and portions of the lots as detailed on the plans. 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 rights-of-way and lots 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 and shall be placed adjacent to the curbing for a minimum width of 24 inches.
- 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 430. Pipe shall be laid in true alignment in a pipe trench with an 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-76, Wall Thickness "B", 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. Polyvinyl Chloride (PVC) Pipe: PVC pipe shall meet the requirements of FDOT Section 948 and A.S.T.M. F-794, latest revision, and shall be constructed as shown on the plans.
- D. Concrete Collar: Concrete collars shall meet the requirements of F.D.O.T. Standard Index No. 280 and shall be constructed to the detail shown on the plans.
- E. Type "E" Inlet with Valley Gutter Top and Grate: Precast concrete catch basins shall meet the requirements of ASTM C-478 and 64T FDOT Section 425. Catch basins shall be Class I concrete and shall be constructed to the detail as shown on the plans. Valley gutter grates shall meet the requirements of ASTM A-123.
- F. Storm Manhole: Storm manholes shall meet the requirements of ASTM C-478 and 64T 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. Asphaltic Concrete: Asphaltic concrete materials and construction methods shall meet the requirements of FDOT Sections 300, 320, 330 and 331 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 98 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. 2' Valley Gutter Curb: Concrete 2' valley gutter curb shall meet the requirements of FDOT Section 520 and shall be constructed to the typical section as shown on the plans.
- E. 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.
- F. Concrete Sidewalk: Concrete sidewalk shall meet the requirements of FDOT Section 522 and shall be constructed to the typical section shown on the plans.
- G. Striping: Striping shall meet the requirements of FDOT Section 711, and shall be as shown in the plans. (Crosswalks , Stop Bars and Parking)
- H. Stop Sign and Bar: Stop signs and bars 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

1. The Contractor and/or construction surveyor shall verify the elevation of the benchmark shown on construction plans. Verify all elevations of existing power lines, easements, and structures before starting construction and notify the Engineer if any discrepancy in elevations exist.
2. The Contractor is herein advised that "asbuilt drawings" will be performed on the project which will reflect the elevation and location of all structures and improvements on the project. These "asbuilt 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 established by these agencies must be met in order for the project to be accepted for final certification and approval. As Builts shall be in accordance with the Port St. Lucie Utilities Systems Department Standards.
3. 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.
4. 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.
5. The contractor shall coordinate service grades and location with the Engineer.
6. 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.
7. PVC Water Main: The Dimension Ratio (DR) and Pressure Rating shall be C900, DR-18 (Pressure 6 class 235) for 4" to 12" pipe and C 905, DR-18 (Pressure rating 235) for 14" to 24" pipe. Minimum cover shall be 36 inches, unless otherwise noted. Water mains shall be blue in color.
8. Ductile Iron Fittings: Ductile iron fittings shall be used on all PVC C900 & C905 mains. Fittings shall conform to AWWA/ANSI C153/A21.53.06 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.
9. 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.
10. 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.
11. The contractor shall contact the Engineer of Record, the appropriate governmental jurisdictional agency and all utility companies at least 48 hours prior to commencement 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.
12. Areas to be open cut shall be overlaid within the limits of the open cut as indicated in the plans.
13. Minimum cover shall be 36" for water mains.

5. POTABLE WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEM

14. 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 sodded. All other unpaved and unsodded areas disturbed during the construction shall be seeded and mulched in accordance with Section 570 of the Florida Department of Transportation specifications.
15. Existing utilities shall be field verified and protected by the contractor.
16. The contractor shall tap existing lines under the supervision of Port St. Lucie Utilities Systems Department only after preliminary testing and disinfection has been completed and approved.
17. Water main shall be marked by the use of continuous Blue wire per the PSLUSD's Qualified Product list (QPL).
18. Service taps (Bacteria 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.
19. Mechanical restraints to be used on all fittings. No thrust blocks are to be utilized within the system.
20. Hydraulic 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:
- $$\frac{L}{148,000} = \frac{SD \sqrt{P}}{148,000}$$
- Where:
- L = Allowable leakage in gallons per hour
S = Length of pipe tested in feet
N = Nominal diameter of pipe in inches
P = Average test pressure maintained during test in pounds per square inch gauge
21. Water main shall be disinfected and approved in accordance with the latest applicable Florida Department of Environmental Protection and AWWA requirements (AWWA C-651).
22. All conflicts will be inspected by the PSLUSD prior to backfilling.

6. WASTEWATER COLLECTION AND TRANSMISSION SYSTEM

- 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 Sections 125 and 430. Pipe shall be laid in true alignment in a dry pipe trench with an adequate supporting value. If normal 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.
- A. 8" PVC Sanitary Sewer Main: 8" PVC sewer main shall meet the requirements of ASTM D-3212 for SDR 26. Minimum cover shall be 48 inches, unless otherwise noted. Sewer mains shall be green in color or marked as approved by the Owner.
- B. Sanitary Manhole:
- C. Manhole interior shall be lined as detailed and specified by the manufacturer. The minimum inside diameter of manholes shall be 48". Non-penetrating lift pin inserts shall be installed by pre-cast Fabricator. Pre-cast reinforced manholes shall be in accordance with ASTM C478, Class II, made with Type II acid resistant cement, shall attain a minimum compressive strength of 4000 psi in 28 days. The liner system shall be cast integrally into the manhole, pre-cast concrete surrounding it, with alignment/grade of channels/1 openings for connecting pipes matching drawing requirements. Liner integrally formed bell gaskets shall comply with ASTM F477 Standard Specification for Elastomeric Seal (Gaskets) for Joining Plastic Pipe. Installation of pre-cast manholes shall comply with the details shown in the Construction Standards and in accordance with the manufacturer's recommendations.
- D. Manhole frames and covers shall be ductile iron or gray cast iron traffic rated heavy duty conforming to ASTM Designation A48, Class 30 and on the Qualified Product List. Covers shall be marked with the word "SANITARY SEWER" in 2" raised letters. Frames and covers shall be set to the correct finish grade elevation.
- E. The base slab and first ring of the pre-cast manhole shall be cast monolithically.
- F. Lift holes shall be grouted once the manhole is in place.
- G. Sanitary Drop Manhole: Drop manholes shall meet the requirements of PSLUSD and shall be constructed in the locations, elevations, and dimensions as shown on the plans. Manholes shall be set plumb to line and grade and shall rest on a carefully graded, uniform bearing base.
- H. Service Connection: Sewer services shall meet the requirements of PSLUSD and shall be 6 inch PVC Schedule 40 with a minimum slope of 1/8" per foot of run. Sewer services shall terminate and be plugged water tight at the back of the right-of-way or utility easement line at a depth of three feet. The sewer service shall be marked with a treated stake and electronic marker. The Contractor is not responsible for installation of meters.
- I. PVC Force Main: PVC force main shall meet the same requirements as PVC water main. Minimum cover shall be 36 inches, unless otherwise noted. Force mains shall be white in color and marked with red tape or marked as approved by the Owner. The price of ductile iron fittings, meeting the requirements ANSI A21.10 (AWWA C-100), shall be included in this cost. Fittings shall be restrained with restrained joints and/or thrust blocks of poured in place concrete as per the water distribution details.
- J. Testing: The Contractor shall visually inspect all gravity sewer mains to verify conformance to the requirements of PSLUSD with the aid of mirrors and lights. This inspection shall be performed after the completion of all manholes, connection of all services and all compaction efforts, but prior to paving. A full pipe diameter shall be visible between all manholes. The Contractor shall repair or replace any portion that does not meet the specifications at his own expense.

7. REUSE WATER (IRRIGATION) 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, FDOT, and PSLUSD 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 "bedded" 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 PSLUSD Qualified products list. All materials to be submitted to the engineer for approval.
2. A minimum 10-foot horizontal separation shall be maintained between any type of sewer and water main in parallel installations.
3. Maximum obtainable separation of reclaimed water lines and domestic water lines shall be practiced. A minimum horizontal separation of five feet (outside to outside), shall be maintained between reclaimed water lines and sewage collection lines. A minimum vertical clearance of 18 inches must be maintained between reclaimed water lines and potable water mains or sewage collection lines. At crossings, provisions of FAC Rule 17-604 and 10 States Standards and PSLUSD Standard Specifications, whichever is more stringent apply.
4. All potable water, wastewater, and reclaimed water facilities shall be located a minimum 5 feet horizontal (from edge of facility) from other public utilities, privately owned irrigation mains, drainage lines, drainage structures, power poles, and light poles.
5. A minimum of 10 feet horizontal separation is also required from structures, buildings, walls, fountains, and fences unless specifically approved by the PSLUSD in writing.
6. TV cable, phone lines and irrigation lines shall cross Department's facilities with a minimum of 12 inches vertical clearance.
7. Gas mains and electric power cables shall cross PSLUSD facilities with a minimum of 18 inches vertical clearance.

8. PSLUSD SEPARATION NOTES: (SEE PSLUSD DET G-01 SHEET 13)

THE WORK

- Existing Utilities and Structures:
- Existing utilities, structures and facilities shown on the Drawings were located as accurately as possible from the records examined. No guarantee is made that all existing facilities are shown or that those shown are entirely accurate. The Contractor shall assure himself of the actual location of the utilities, 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 damages sustained or cost incurred because of the Contractor's operation in the vicinity of existing utilities or structures, or to the temporary brooding and shoring of some. In the event that it is necessary to shore, brace, or swing a utility, the utility company or department affected should be contacted and their permission secured as 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 due to this 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 a reproducible mylar copy and three (3) blue line copies of a certified survey. The blue line copies shall bear the original signature and embossed seal of the surveyor who performed the as-built survey. The as-builts shall be submitted after the completion of construction or as otherwise indicated herein, 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 drawing shall be at the same scale and reference the same baseline 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 baseline 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, sample points, air releases, etc., both horizontal and vertical, and the location of the main 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. Locations shall be made by reference to centerline stationing and offset or by other means acceptable to the Owner. Elevations shall be according to the North American Vertical Datum (NAVD).

Warranty: 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 and failure under normal operation for a period of one (1) year from the date of final 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	Laney Southerly, PE	(772) 807-4452
Florida Power & Light	Diana Villegas	(772) 337-7011
Comcast Cable	Rick Johnson	(561) 402-4513
AT&T	Ivan Arill	(772) 460-4441

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 sodded.
2. Sod shall be placed such 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 nuisance exotic vegetation on-site must be removed in conjunction with site development.
9. All separation between existing proposed sidewalk and pavement shall be sawcut.
- 10 Security gates must either be manned 24 hours/day or provide an access control key switch on the control panel to allow Fire Department entry in an emergency. Security gates must maintain a clear width of 12 ft when open and provide a means to open the gate upon loss of power.



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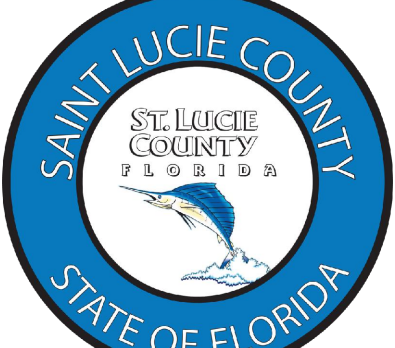
Consultants :



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180 NW PRIMA VISTA
BLVD.
PORT ST. LUCIE, FL
34983

Key Plan :



REVISION	DATE

Date : 2/28/24
S+A Project No : 22026
Owner Project No :
Drawn By : EAC
Checked By : X
Phase :

BID DOCUMENTS

Sheet Title :

SPECIFICATIONS