SUWANNEE COUNTY SCHOOL BOARD

LEGEND

EXISTING		PROPOSED	
CONCRETE MONUMENT FOUND	■	TELEPHONE POLE	
IRON PIPE FOUND	●	TELEPHONE MANHOLE	
ELECTRIC METER		ELECTRIC MANHOLE	
ELECTRIC MANHOLE		ELECTRIC METER	
LIGHT STANDARD		LIGHT	
POWER POLE		STANDARD POWER POLE	
SHARED POWER POLE W/ TRANSFORMER		POWER POLE SHARED	
SHARED POWER POLE		POWER POLE SHARED W/ TRANSFORMER	
TELEPHONE POLE		GAS METER	
REDUCER		GAS VALVE	
WATER METER		WATER METER	
WATER VALVE		WATER VALVE	
FIRE HYDRANT		WATER REDUCER	
BACKFLOW PREVENTER		WATER TEE	
SANITARY SEWER VALVE		WATER 90° BEND	
SANITARY MANHOLE		SINGLE WATER SERVICE	
STORMWATER MANHOLE		DOUBLE WATER SERVICE	
FDOT STROMWATER MANHOLE		FIRE HYDRANT	
GROUND CONTOUR		BACKFLOW PREVENTER	
D.O.T. MARKER FOUND		SANTARY MANHOLE	
GAS METER		SANITARY VALVE	
GAS VALVE		SANITARY SINGLE SERVICE	
SOIL BORING LOCATION		SANITARY DOUBLE SERVICE	
SINGLE POST SIGN		GROUND CONTOUR	25
BENCH MARK		DITCH BLOCK	
SECTION CORNER		STORMWATER MANHOLE	
		FLOW ARROW	
		HANDICAP PARKING	
		MITERED END	
		SIGN	

ABBREVIATIONS

℄	PROPERTY LINE	IP	IRON PIPE
℄	CENTER LINE	MH	MANHOLE
℄	BASE LINE	G	GAS
SAN	SANITARY SEWER	UC	UNDERGROUND CABLE
ST	STORM SEWER	OC	OVERHEAD CABLE
E	ELECTRIC	W	WATER LINE
OHE	OVERHEAD ELECTRIC	HDPE	HIGH-DENSITY POLYETHYLENE
UG	UNDERGROUND ELECTRIC	RCP	REINFORCED CONCRETE PIPE-ROUND
OHT	OVERHEAD TELEPHONE	RCPA	REINFORCED CONCRETE PIPE-ARC
UT	UNDERGROUND TELEPHONE	RCPE	REINFORCED CONCRETE PIPE-ELLIPTICAL
R	RADIUS	CMP	CORRUGATED METAL PIPE-ROUND
CO	CLEANOUT	CMPA	CORRUGATED METAL PIPE-ARC
BM	BENCH MARK	BCCMP	BITUMINOUS COATED CORRUGATED METAL PIPE
IE	INVERT ELEVATION	BCCSP	BITUMINOUS COATED CORRUGATED STEEL PIPE
LF	LINEAR FEET		

PRIMARY SCHOOL
LIFT STATION

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Chadwick W. Williams, PE 63144
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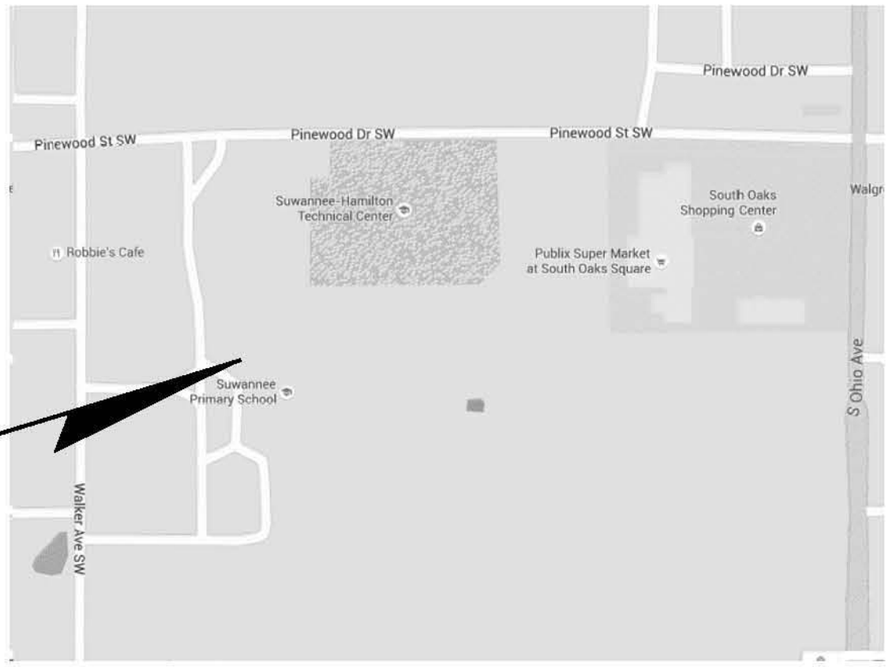
SHEET INDEX

PROJECT LOCATION



GENERAL NOTES

1. The contractor shall verify all existing conditions and dimensions at the job site to insure that all new work will fit in the manner intended on the plans. Should any conditions exist that are contrary to those shown on the plans, the contractor shall notify the engineer and the City of Jasper, Florida (Department of Growth Management) of such differences immediately & prior to proceeding with the work.

2. The contractor shall maintain the construction site at all times in a secure manner. All open trenches and excavated areas shall be protected from access by the general public.

3. Boundary and topographical information shown was obtained from a survey performed by J. Sherman Frier & Associates, Inc., P.S.M. Florida Certificate #6332.

4. Any public land corner within the limits of construction is to be protected. If a corner monument is in danger of being destroyed and has not been properly referenced, the contractor should notify the engineer.

5. All disturbed areas not sodded shall be seeded with a mixture of long-term vegetation and quick-growing short-term vegetation for the following conditions. For the months from September through March, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of winter rye. For the months of April through August, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of millet.

6. The location of the utilities shown in the plans is approximate only. The exact location shall be determined by the contractor during construction.

7. The contractor shall waste all excess earth on site as directed by the engineer.

8. Contractor shall provide an as-built survey meeting the requirements of Chapter 61G17 F.A.C. for the stormwater management systems. Include horizontal and vertical dimensional data so that improvements are located and delineated relative to the boundary. Provide sufficient detailed data to determine whether the improvements were constructed in accordance with the plans. Submit the survey to the engineer on reproducible 20 lb. Vellum.

9. Contractor shall review and become familiar with all required utility connections prior to bidding. Contractor shall provide all work and materials required to complete connection to the existing utilities. This includes, but is not limited to, manhole coring, wet taps, pavement repairs and directional boring.

10. Contractor shall coordinate all work with other contractors within project limits.

11. All swales, depression areas and retention ponds shall be inspected monthly for sinkhole occurrence. Should a sinkhole occur, the area should be repaired as soon as possible. If a solution pipe sinkhole does form in the stormwater system, then the sinkhole shall be repaired by backfilling with a lower permeability material. A 2-foot cap that extends 2 feet beyond the perimeter of the sinkhole shall be constructed with clayey soils. The clayey soil should have at least 20% passing the number 200 sieve, compacted to 95% of Standard Proctor, and compacted in a wet condition with moisture 2%-4% above optimum. The clay soil cap shall be re-graded to prevent ponding and re-vegetated.

12. A copy of the As-Built plans (in paper & digital AutoCAD format) must be submitted to the GTC Design Group, LLC. As-Builts shall be in state plane coordinates (NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet).

13. Contractor shall excavate existing manhole locations to verify connection invert. Contractor shal contact GTC Design Group, LLC to verify elevaton.

General Requirements:

1. The collection/transmission system must remain in operation during construction.

2. All components shall be located on public right-of-ways, land owned by the permittee, or easements & to be located no closer than 100 feet from a public drinking water supply well & no closer than 75 feet from a private drinking water supply well.

3. No physical connections will occur between a public or private potable water supply system & a sewer or force main & with no water pipes passing through or coming into contact with any part of a sewer manhole.

4. All new or relocated, buried sewers & force mains, will be located in accordance with the separation requirements from water mains & reclaimed water lines of Rules 62-604.400(2)(g)(h) & (i) & (3), F.A.C.

5. All construction methods & materials shall be in accordance with Rule 62, F.A.C., ASTM & RSWF.

Gravity Sewers:

1. Sewers on 20% slopes or greater are to be anchored securely with concrete, or equal, anchors spaced as follows: not over 36 feet center to center on grades 20% & up to 35%; not over 24 feet center to center on grades 35% & up to 50%; & not over 16 feet center to center on grades 50% & over.

2. Suitable couplings complying with ASTM specifications are required for joining dissimilar materials.

3. The pipe & methods of bedding & backfilling shall be performed so as not to damage the pipe or its joints, impede cleaning operations & future tapping, nor create excessive side fill pressures & ovalation of the pipe, nor seriously impair flow capacity.

4. Testing is required after the final backfill has been in place at least 30 days to permit stabilization of the soil-pipe system. Testing will:
   1) prove no pipe shall exceed a deflection of 5%
   2) use a rigid ball or mandrel for the deflection test with a diameter not less than 95% of the base inside diameter or average inside diameter of the pipe, depending on which is specified in the ASTM specification, including the appendix, to which the pipe is manufactured
   3) be performed without mechanical pulling devices

5. Leakage tests will:
   1) prove the leakage exfiltration or infiltration does not exceed 200 gallons per inch of pipe diameter per mile per day for any section of the system
   2) be performed with a minimum positive head of 2 feet
   3) as a minimum, conform to the test procedure described in ASTM C-828 for clay pipe, ASTM C 924 for concrete pipe, ASTM F-1417 for plastic pipe, & for other materials appropriate test procedures

6. All inverted siphons will have:
   1) at least two barrels;
   2) a minimum pipe size of 6 inches
   3) necessary appurtenances for maintenance, convenient flushing, & cleaning equipment
   4) inlet & discharge structures having adequate clearances for cleaning equipment, inspection, & flushing. The inlet & outlet will be constructed so that the design average flow may be diverted to one barrel, & that either barrel may be cut out of service for cleaning.

Manholes:

1. Drop pipes shall be provided for sewers entering manholes at elevations of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer & the manhole invert is less than 24 inches, the invert shall be constructed with a fillet to prevent solids deposition. Inside drop connections (when ecessary) shall be constructed to be secured to the interior wall of the manhole & provide access for cleaning. The entire outside drop connection be shall encased in concrete.

2. A bench shall be provided on each side of any manhole channel when the pipe diameter(s) are less than the manhole diameter & that no lateral sewer, service connection, or drop manhole pipe discharges onto the surface of the bench.

3. Manhole lift holes & grade adjustment rings shall be sealed with non-shrinking mortar or other appropriate material.

4. Inlet & outlet pipes shall be joined to the manhole with a gasketed flexible watertight connection or another watertight connection arrangement that allows differential settlement of the pipe & manhole wall.

5. Watertight manhole covers shall be used wherever the manhole tops may be flooded by street runoff or high water.

6. Manhole inspection & testing for water tightness or damage prior to placing into service shall be performed. Air testing for concrete sewer manholes conforms to the test procedures described in ASTM C-1244.

DATE	REVISION NOTES

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SUWANNEE PRIMARY

GENERAL NOTES

DRAWN BY CW

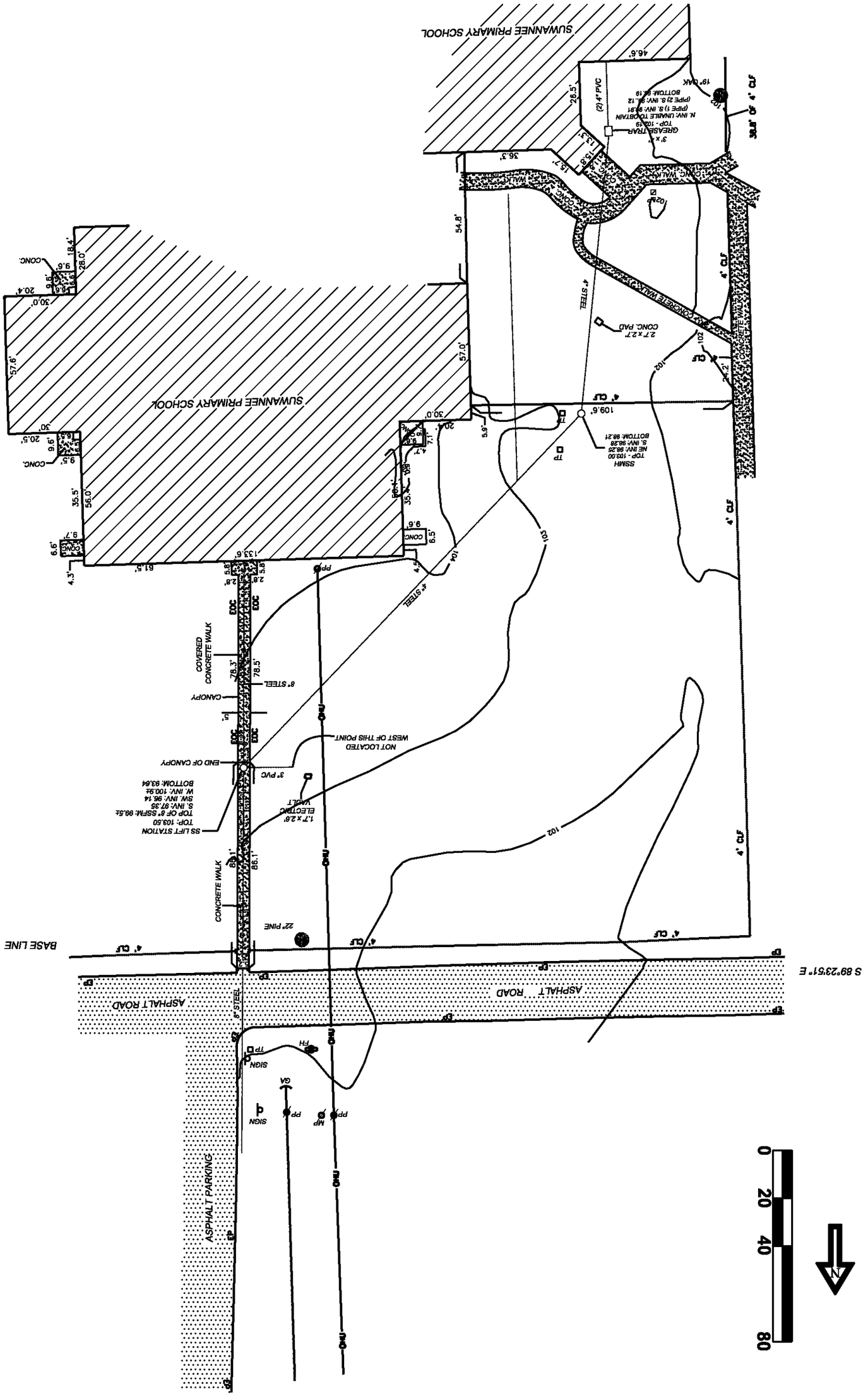
CHECKED BY CW

PROJECT NUMBER

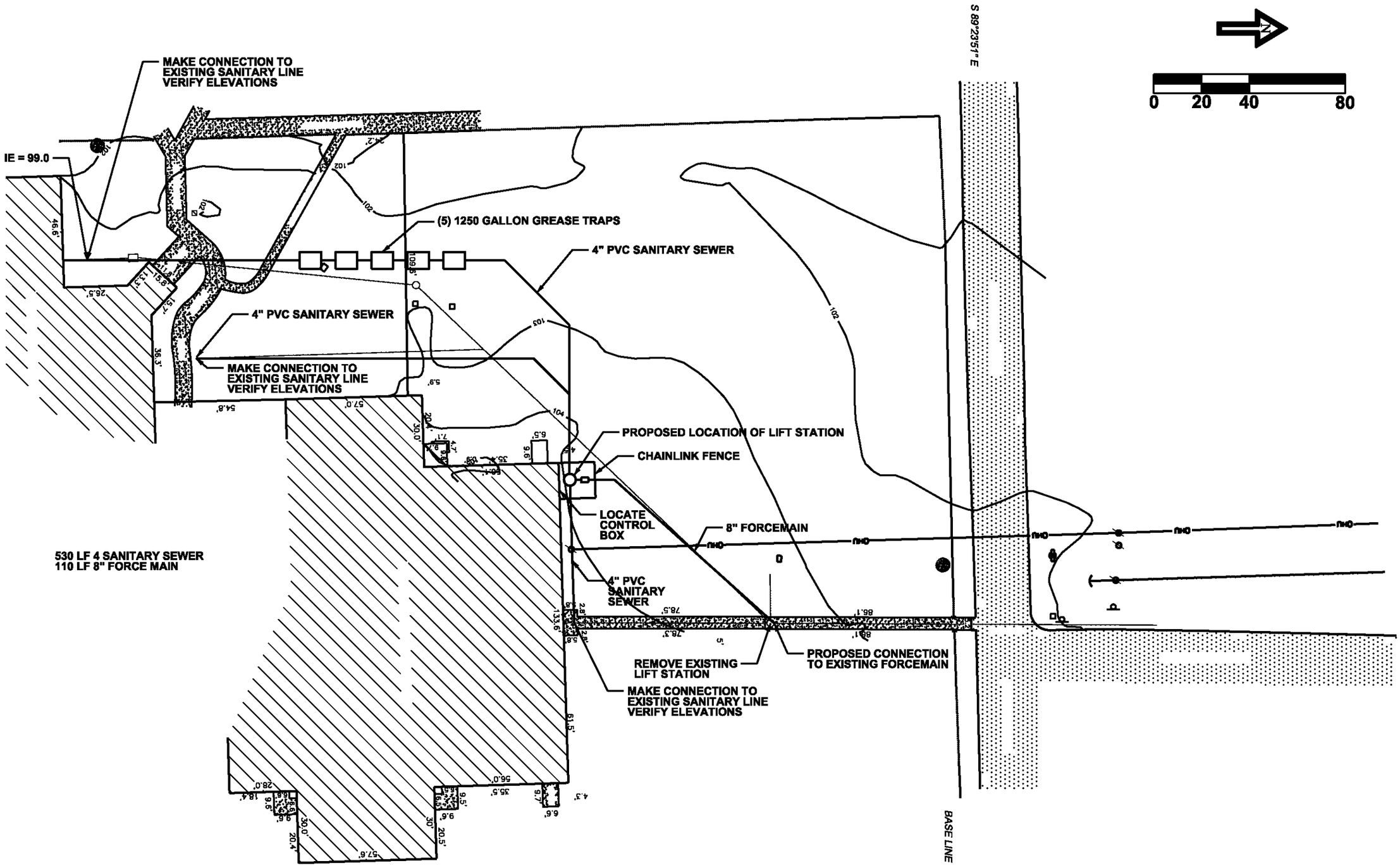
PF15-992

SHEET

02



SHEET 03	PROJECT NUMBER PF15-992	DRAWN BY CW / CHECKED BY CW	**SUWANNEE PRIMARY** **EXISTING CONDITIONS**	GTC Design Group, LLC. Auth. # 9461 Structural / Civil Engineers www.gtcdesigngroup.com P.O. BOX 187 130 W HOWARD ST LIVE OAK FL, 32064 PHONE: (386) 362-3678 FAX: (386) 362-6133 176 NW LAKE JEFFREY RD LAKE CITY, FL 32055 Phone: (386) 719-9985 Fax: (386) 719-8828	DATE / REVISION NOTES



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SUWANNEE PRIMARY

SITE PLAN

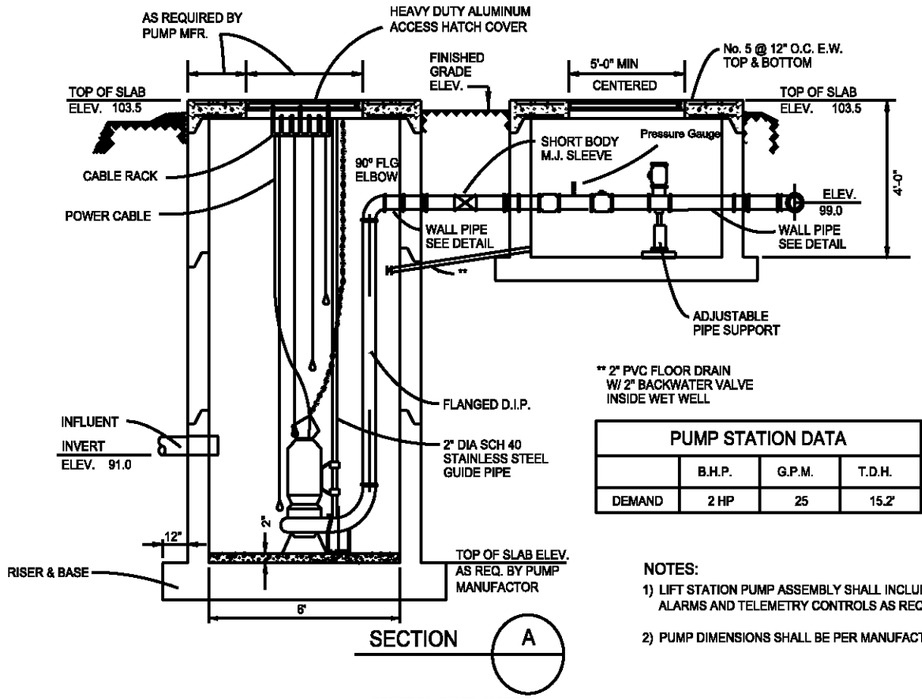
DRAWN BY	CHECKED BY
CW	CW

PROJECT NUMBER

PF15-992

SHEET

04



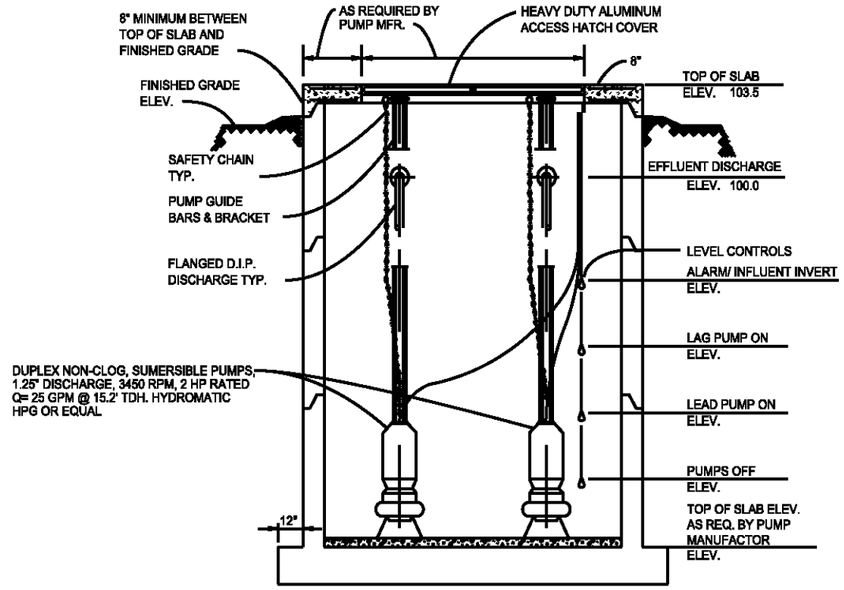
** 2" PVC FLOOR DRAIN W/ 2" BACKWATER VALVE INSIDE WET WELL

PUMP STATION DATA			
	B.H.P.	G.P.M.	T.D.H.
DEMAND	2 HP	25	15.2'

NOTES:

1) LIFT STATION PUMP ASSEMBLY SHALL INCLUDE ALL ELECTRICAL CONTROLS, ALARMS AND TELEMETRY CONTROLS AS REQUIRED.

2) PUMP DIMENSIONS SHALL BE PER MANUFACTURE'S RECOMMENDATIONS.

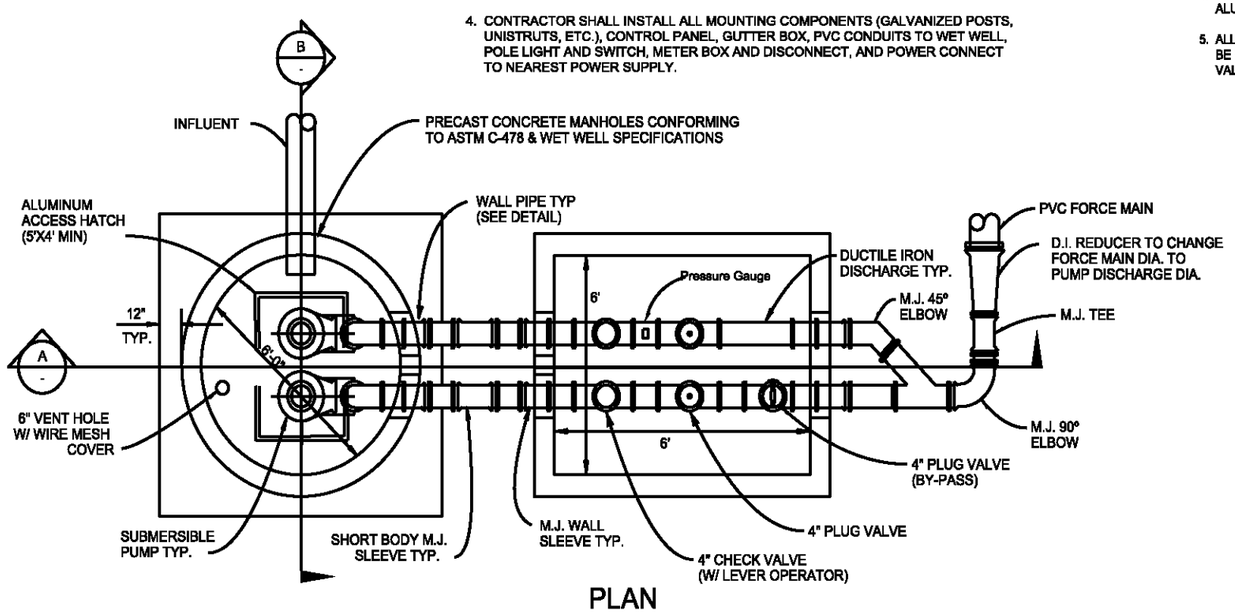


CONTROL PANEL NOTES:

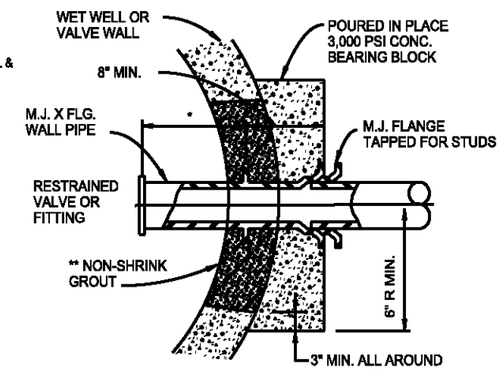
1. CONTROL PANEL ASSEMBLY SHALL BE LOCATED AT PUMP STATION SITE.
2. PUMP CONTROL PANEL SHALL BE SUPPLIED BY PUMP MANUFACTURER AND GENERALLY CONSIST OF A 30"WX36"H NEMA TYPE 4X ENCLOSURE CONSTRUCTED OF 304 STAINLESS STEEL AND UL LISTED.
3. A 12"x 12"x 30" 304 STAINLESS STEEL GUTTER BOX SHALL BE ATTACHED TO THE CONTROL PANEL BY COMPRESSION CORD CONNECTORS ONLY (SIZED FOR THE PUMP, SEAL, AND CONTROL LEADS). NO SEAL OFF FITTINGS SHALL BE INSTALLED IN THE CONDUITS. AN EFFECTIVE SEAL SHALL BE MADE BETWEEN THE CONTROL PANEL AND THE GUTTER BOX, BY THE CORD CONNECTOR GROMETS.
4. CONTRACTOR SHALL INSTALL ALL MOUNTING COMPONENTS (GALVANIZED POSTS, UNISTRUTS, ETC.), CONTROL PANEL, GUTTER BOX, PVC CONDUITS TO WET WELL, POLE LIGHT AND SWITCH, METER BOX AND DISCONNECT, AND POWER CONNECT TO NEAREST POWER SUPPLY.

LIFT STATION NOTES:

1. WET WELL AND VALVE VAULT SHALL BE COATED WITH "FARBERTITE" OR COAL TAR EQUIVALENT INSIDE AND OUT (TWO COATS, 9 MILS EACH).
2. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL OR VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE "BOOT" OR FILLED WITH NON-SHRINK GROUT.
3. THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN THE WET WELL.
4. WET WELL AND VALVE VAULT COVERS SHALL BE 5'X4' "HEAVY DUTY" ALUMINUM WITH 316 S.S. HARDWARE AND LOCK BRACKET.
5. ALL PIPE FITTINGS INSIDE OF THE WET-WELL AND VALVE BOX SHALL BE FLANGE x FLANGE, ALL MJ PIPE FITTINGS OUTSIDE OF THE WETWELL & VALVE BOX SHALL BE RESTRAINED WITH MEG-A-LUG COLLARS



PLAN



* VARIES-CONTRACTOR TO ORDER WALL PIPE WITH DIMENSIONS NECESSARY TO CENTER COLLAR IN WALL & PLACE FLANGE AT DESIRED LOCATION.

** BREAK OUT EXIST. CONC. WALL, REMOVING MIN. NECESSARY REINF. STEEL TO INSTALL PIPE. APPLY APPROVED WATER-PROOF BONDING AGENT TO EXIST. CONC. SURFACE BEFORE PLACING NON-SHRINK GROUT. DRY PACK FROM EARTH SIDE.

RESTRAINING WALL PIPE

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SUWANNEE PRIMARY LIFT STATION

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CW	CW

PROJECT NUMBER

PF15-992

SHEET

05