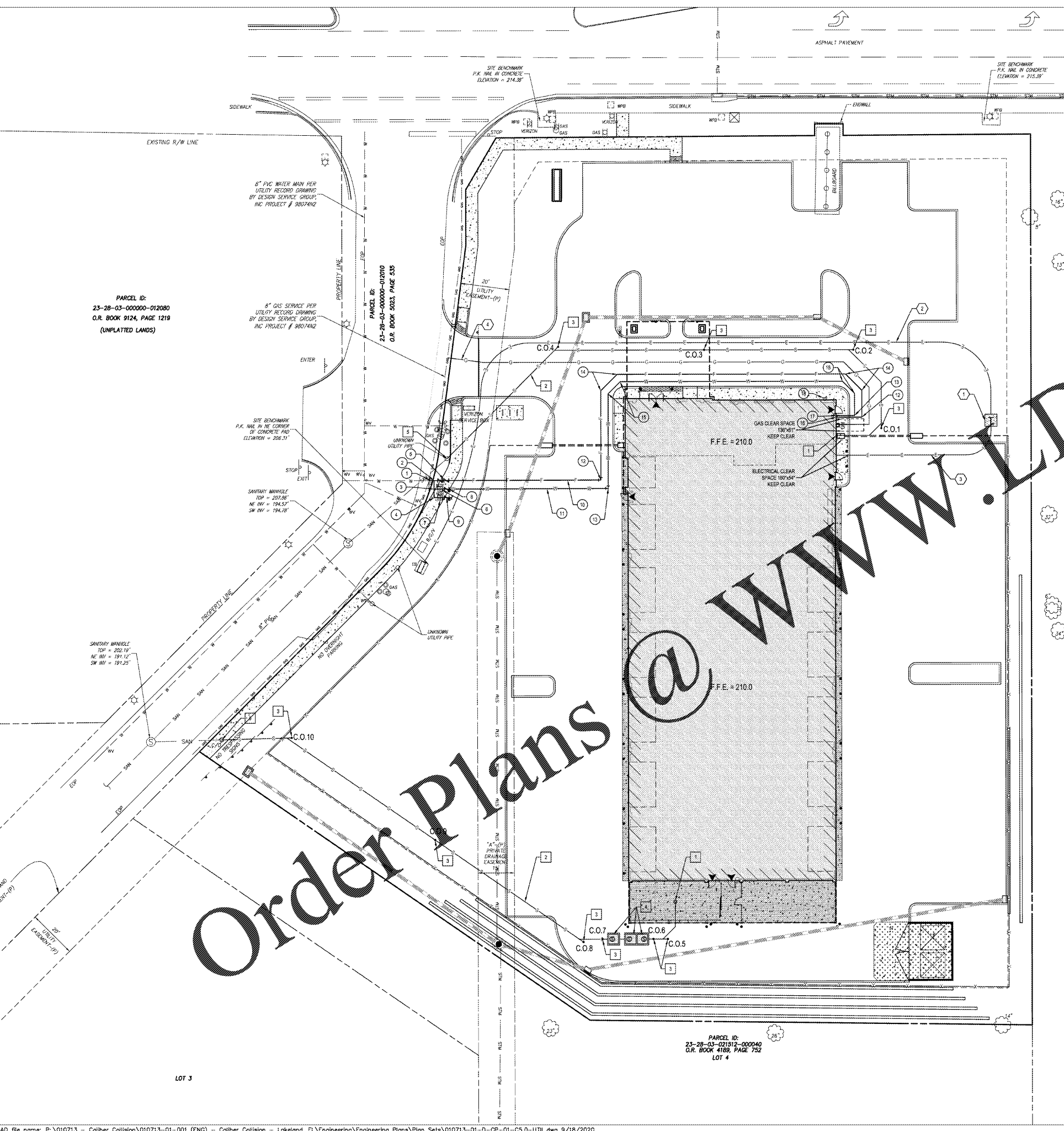


THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.



GENERAL NOTES:

ALL ON-SITE WATER & SEWER DISTRIBUTION/COLLECTION LINES MAINS TO BE PRIVATELY OWNED & MAINTAINED UNLESS OR UNTIL A UTILITY EASEMENT IS DESCRIBED & APPROVED BY ALL INVOLVED PARTIES.

SANITARY SEWER NOTES:

- GENERAL:**
 - DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.
 - PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR TO TELEVISION EXISTING SANITARY SEWER LINE FROM POINT OF CONNECTION THROUGH THE NEXT SEGMENTAL DOWNSTREAM RUN OF PIPE. ADDITIONALLY, PRIOR TO COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL TELEVISION THE NEWLY INSTALLED SANITARY SEWER MAIN TO ENSURE NO DIPS OR DEBRIS WITHIN LINE.
 - EXISTING SERVICES WITHIN MANHOLES SHALL BE RELOCATED TO NEW SEWER.
 - BYPASS PUMPING MAY BE REQUIRED AND SANITARY SERVICE MAINTAINED WHILE EXISTING SEWER IS BEING REPLACED.
 - CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH CITY WITH MAKING CONNECTION TO PUMP STATION / MANHOLE.
 - CONTRACTOR MUST COORDINATE WITH CITY AND SHOPPING CENTER AND PROVIDE AT LEAST 48-HOURS NOTICE PRIOR TO REPLACING SERVICES.
 - IF REQUIRED, THE CONTRACTOR SHALL RECONSTRUCT THE BENCH IN THE EXISTING MANHOLE TO ACCOMMODATE THE NEW FLOW DIRECTION.
 - WASTEWATER FLOW IN THE EXISTING SEWER MUST BE MAINTAINED DURING THE INSTALLATION OF THE LATERAL. IF A BYPASS IS REQUIRED, THE CONTRACTOR MUST SUBMIT DETAILS OF THE SYSTEM FOR THE CITY AND APPROVAL TO THE CITY OF LAKELAND PUBLIC WORKS DEPARTMENT PRIOR TO STARTING CONSTRUCTION.
- MATERIALS:**
 - ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-FLAMMABLE, UNPLASTICIZED, CHLORIDE (PVC) PIPE CONFORMING TO ASTM D3034, SDR 35, WITH PUSH-ON RUBBER GASKET JOINTS.
 - ALL FITTINGS AND ACCESSORIES SHALL BE MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
 - SANITARY MANHOLES WITH MANHOLE SHALL HAVE A LID THAT IS HOLODOME.
- INSTALLATION:**
 - SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2221, AND THE UNI-BELL PLASTICS PIPE ASSOCIATION'S RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE. THE BEDDING AND INITIAL BACKFILL OF 6" OVER EXISTING MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. PEA ROCK OR 3/4" WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.
 - CLEANOUTS:**
 - CLEANOUTS SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM CLEAN SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
 - ALL OPENINGS AND JOINTS SHALL BE SEALED WATER-TIGHT.
 - SERVICE:**
 - MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE 1.00%.
 - EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED PLUG.
 - CONNECTION OF SERVICES TO BUILDING'S PLUMBING SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
 - TESTING:**
 - AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
 - AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER.
 - SEWER PIPE LEAKAGE ALLOWABLE SHALL NOT EXCEED 150 GALLONS PER DAY PER INCH DIAMETER PER MILE IN A TWO HOUR TEST PERIOD FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED.
 - CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO THE CERTIFICATION TO ANY AGENCY.
 - GENERAL CONTRACTOR SHALL EMPLOY AN INDEPENDENT INSPECTOR FOR 1-1/2 CONJUGIOUS INSPECTION OF THE BEDDING AND BACKFILL OPERATION. COMPACTION TEST SHALL BE TAKEN AT THE BOTTOM OF TRENCH AND AT EACH LIFT OF BACKFILL.
 - GENERAL CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR AS-BUILT TOP OF PIPE ELEVATIONS TAKEN WHEN BEDDING OPERATIONS IS 75% COMPLETE. THESE ELEVATIONS SHALL BE TAKEN AT POINTS OF CONNECTION, CHANGES IN DIRECTION AND AT MINIMUM 20' INTERVALS ALONG THE LENGTH OF THE PIPE. THESE ELEVATIONS SHALL BE RECORDED AS AS-BUILT DIMENSIONS ON SITE PLAN REVIEW BY PROJECT ENGINEER.
 - ALL SANITARY LINES ARE TO BE FLUSHED PRIOR TO CONTRACTOR TURN-OVER OF THE FACILITY.

DATUM NOTE:

ELEVATIONS SHOWN ARE RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE BASED ON FLORIDA DEPARTMENT OF TRANSPORTATION BENCHMARKS POINT ELEVATION = 193.06' AND PNC1 ELEVATION = 199.97'. SAID BENCHMARKS ARE FROM A FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT ONE VERTICAL CONTROL SURVEYORS REPORT (ROADWAY SECTION ID: 16320-020, FINANCIAL PROJECT ID: 201217-8, S.R. NO. 400).

FEMA NOTE:

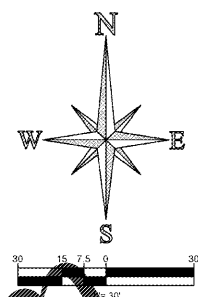
THE PROPERTY SHOWN HEREON APPEARS TO BE IN FLOOD ZONE "X" ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 1210500303G EFFECTIVE DATE: 12/22/2016.

WATER DISTRIBUTION NOTES:

- CONTRACTOR SHALL FOLLOW GUIDELINES AND PROCEDURES OUTLINED BY UTILITY PROVIDER, AND HAVE UTILITY PROVIDER'S MANUAL ON-SITE AT ALL TIMES. THIS POLICY MANUAL SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS AS IT PERTAINS TO APPROVED MATERIALS, INSTALLATION METHODS, INSPECTION NOTIFICATION AND AS-BUILT/PROJECT CLOSEOUT REQUIREMENTS.
- ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM F1181 - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.
- CONTRACTOR TO COORDINATE WITH COUNTY AND ADJACENT PROPERTY OWNERS AND BUSINESSES FOR ANY ANTICIPATED WATER INTERRUPTIONS FOR CONNECTION TO EXISTING WATER LINE.
- CONTRACTOR TO DEFLECT OR BEND WATER LINES AS NECESSARY TO MAINTAIN 12" VERTICAL SEPARATION FROM STORM SEWER PER FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

FIRE FLOW CALCULATIONS:

MINIMUM FIRE FLOW REQUIREMENTS (NFPA TABLE 18.4.5.2.1)
BUILDING CLASSIFICATION: V-8
GROSS BUILDING AREA: 16,900 SF
FIRE FLOW REQUIRED*: 675 GPM
FIRE FLOW PROVIDED: >875 GPM
*SPRINKLERED BUILDING REDUCES FIRE FLOW BY 75%



PERMITS D.W. LINE	---
ADJACENT PROPERTY LINE	---
EXIST ELECTRIC LINE	---
PROP ELECTRIC LINE	---
EXIST GAS LINE	---
PROP GAS LINE	---
EXIST SANITARY LINE	---
PROP SANITARY LINE	---
EXIST STORM SEWER	---
PROP STORM SEWER	---
EXIST WATER LINE	---
PROP WATER LINE (DOMESTIC)	---
PROP WATER LINE (FIRE)	---
EXIST SANITARY MANHOLE	⊙
PROP SANITARY CLEANOUT	⊙ C/O
PROP BACKFLOW PREVENTER	⊙
PROP WATER METER	⊙
PROP GATE VALVE	⊙
PROP GREASE TRAP	⊙

GENERAL UTILITY NOTES:

- CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND IS RESPONSIBLE TO REPAIR ANY DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
- ALL UTILITIES ARE SHOWN FROM INFORMATION GATHERED AND SHOULD NOT BE USED AS EXACT. CONTRACTOR SHALL VERIFY EXACT DEPTHS AND LOCATIONS PRIOR TO UTILITY INSTALLATION.
- CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY FOR INSTALLATION AND SPECIFICATION REQUIREMENTS.
- ALL PIPE MATERIALS SHALL COMPLY WITH LOCAL REGULATIONS.
- ALL TRENCHING AND BEDDING SHALL BE PER CITY STANDARDS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR ALL BUILDING UTILITY TIE INS.
- ALL CERTIFICATES AND SHOP DRAWINGS MUST BE SUBMITTED, REVIEWED AND APPROVED PRIOR TO STARTING CONSTRUCTION.
- THE CONTRACTOR WILL COORDINATE THE WORK WITH THE UTILITY COMPANIES AND WILL VERIFY ALL EXISTING PIPE INVERTS AND EXISTING ROAD ELEVATIONS PRIOR TO CONSTRUCTION.
- PROPOSED ELECTRIC UTILITY IMPROVEMENTS TO BE UNDERGROUND.

UTILITY KEY NOTES:

- ELECTRIC TRANSFORMER
- PROPOSED UNDERGROUND ELECTRIC LINE TO TRANSFORMER (BY OTHERS)
- PROPOSED SECONDARY UNDERGROUND ELECTRIC LINE. SEE ELECTRICAL PLAN FOR EXACT BUILDING CONNECTION LOCATION.
- PROPOSED UNDERGROUND GAS LINE TO METER AT BUILDING (BY OTHERS)

WATER:

- PROPOSED 6" TAPPING SADDLE (PER CITY STANDARDS)
- PROPOSED 8" x 2" TEE
- PROPOSED 2" TEE WITH 1-1/2" REDUCER (E) & 1" REDUCER (S)
- PROPOSED 1" BEND
- PROPOSED 6" DDVCA FOR FIRE SERVICE (PER CITY STANDARDS)
- PROPOSED 1-1/2" METER FOR DOMESTIC SERVICE (PER CITY STANDARDS)
- PROPOSED 1" METER FOR IRRIGATION (PER CITY STANDARDS)
- PROPOSED 1-1/2" RPZ FOR DOMESTIC SERVICE (PER CITY STANDARDS)
- PROPOSED 1" RPZ FOR IRRIGATION (PER CITY STANDARDS) SEE IRRIGATION PLANS FOR CONTINUATION.
- PROPOSED 6" WATER LINE FOR FIRE SERVICE
- PROPOSED 1-1/2" WATER LINE FOR DOMESTIC USE
- PROPOSED 6" 90° BEND
- PROPOSED 1-1/2" 90° BEND
- PROPOSED 6" 45° BEND
- PROPOSED 1-1/2" 45° BEND
- PROPOSED 6" FIRE SERVICE BUILDING CONNECTION. SEE PLUMBING PLANS FOR EXACT LOCATION.
- PROPOSED 1-1/2" WATER SERVICE BUILDING CONNECTION. SEE PLUMBING PLANS FOR EXACT LOCATION.
- FDC LOCATION

SEWER:

- 4" SANITARY SEWER BUILDING CONNECTION. SEE PLUMBING PLANS FOR EXACT LOCATION. INV. EL. = 206.50
- 4" PVC PIPE @ MIN 1.00%
- 4" CLEANOUT
- GREASE TRAP (BY OTHERS)
- CONNECT TO EXIST SAN CLEAN OUT INVERT TO MATCH EXIST



UTILITY PLAN
CALIBER COLLISION
2100 GRIFFIN ROAD
LAKELAND, FL 33810



NOT FOR CONSTRUCTION
OR BIDDING PURPOSES ONLY
9/28/2020

PLAN STATUS	
DATE	DESCRIPTION
PMP DESIGN	PMP DRAWN
SCALE	AS SHOWN
JOB No.	010713-01-001
DATE	
SHEET	C5.0

Order Plans @ www.dline.com

PARCEL ID:
23-28-03-021912-00040
O.R. BOOK 4189, PAGE 752
LOT 4

LOT 3