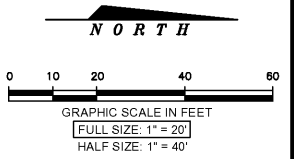


0 1 2 3 4  
Inches

**LEGEND**

- EXISTING SANITARY SEWER
- EXISTING ELECTRIC (UNDERGROUND)
- EXISTING FORCE MAIN
- EXISTING TELECOMM LINE
- EXISTING CATV
- EXISTING WATER
- EXISTING STORMWATER
- PROPOSED BACKFLOW PREVENTER & METER
- PROPOSED STORM WATER PIPES
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED WATERMAIN (SEE OFFSITE UTILITY SHEET)
- LATERAL PIPE CROSSING UNDER STORM
- SEE SECTIONS, SHEET CFG07.7
- PROPOSED FORCE MAIN
- PROPOSED TEE FITTINGS/BEND FITTINGS (WATER)
- PROPOSED PLUG
- PROPOSED REDUCER
- PROPOSED GATE VALVE AND BOX
- PROPOSED CLEANOUT (C.O.) AND WYE FITTINGS (SEWER)
- PROPERTY LINE
- PROPOSED FIRE HYDRANT
- PROP. CABLE SERVICE
- PROP. TELEPHONE SERVICE
- PROP. ELECTRICAL TRANSFORMER PAD



- ABBREVIATIONS:**
- BFP - BACKFLOW PREVENTER
  - AHJ - AUTHORITY HAVING JURISDICTION
  - T.O.P. - TOP OF PIPE
  - TYP. - TYPICAL
  - C.O. - CLEANOUT
  - C.N.C. - CONCRETE
  - D.I.P. - DUCTILE IRON PIPE
  - PGD - PAVING, GRADING & DRAINAGE
  - NFV - NOT FIELD VERIFIED

**BREVARD COUNTY FIRE RESCUE NOTES:**

- HYDRANTS ARE PROVIDED WITHIN THE DEVELOPMENT. EXISTING HYDRANT WITHIN AN OVERLAPPING FIRE PROTECTION RADIUS AND ADJACENT OF THE DEVELOPMENT.
- NEW HYDRANTS SHALL BE POSITIONED NOT MORE THAN 12 FEET OR LESS THAN 6 FEET OFF THE EDGE OF PAVEMENT. THE CENTER LINE OF THE STEAMER CONNECTION (12" SEPARATION) SHALL BE POSITIONED BETWEEN 18"-24" ABOVE FINISH GRADE (IE. SODDED OR MULCHED). ALSO, ALL HYDRANTS SHALL BE READILY ACCESSIBLE WITHOUT THE NEED TO TRAVERSE SWALES, DITCHES, ETC.
- WATER FOR FIRE FIGHTING PURPOSES SHALL BE AVAILABLE AT THE TIME COMBUSTIBLES ARE BROUGHT ON SITE.
- FIRE DEPARTMENT ACCESS ROADS SHALL BE UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET. THE DRIVING SURFACE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION AND MUST BE AN ALL-WEATHER DRIVING SURFACE CAPABLE OF SUPPORTING A FIRE DEPARTMENT FIRE FIGHTING EMERGENCY VEHICLE.
- A FIRE DEPARTMENT ACCESS ROAD SHALL EXTEND TO WITHIN 50 FEET OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE INSIDE OF THE BUILDING THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING.
- FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13 FEET 6 INCH.
- FIRE DEPARTMENT ACCESS ROADS SHALL BE PROVIDED SUCH THAT ANY PORTION OF THE FACILITY OR ANY PORTION OF AN EXISTING WALL OF THE FIRST STORY OF THE BUILDING IS LOCATED NOT MORE THAN 150 FEET FROM FIRE DEPARTMENT ACCESS ROADS AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY.
- LANDSCAPING OR ANY OTHER OBSTRUCTION, SHALL NOT BE LOCATED WITHIN 7.5 FEET TO THE FRONT AND 4.5 FEET TO THE REAR OF ANY FIRE HYDRANT.
- TRUSS & FRAME TYPES ARE REQUIRED TO BE SUPPLIED DURING BUILDING DEPARTMENT REVIEW TO ASSURE FIRE PROVISION REQUIREMENTS.
- BREVARD COUNTY FIRE RESCUE IS THE FIRE DEPARTMENT FOR THIS SERVICE AREA.

**NOTES:**

- ALL EXISTING UTILITIES TO BE FIELD VERIFIED.
- THERE MAY BE UNDERGROUND CONDUIT FOR TRAFFIC SIGNAL SERVICES IN THIS AREA AS WELL AS OTHER TRAFFIC EQUIPMENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT SUNSHINE STATE ONE CALL SYSTEM AT 1-800-432-4779 FOR LOCATIONS OF THIS EQUIPMENT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL NOT DISRUPT EXISTING SERVICES.
- ALL PRESSURE PIPING FITTINGS/JOINTS SHALL BE RESTRAINED AS REQUIRED. REFER TO RESTRAINING SCHEDULE DETAIL.
- HYDRANTS IDENTIFIED PROVIDE FIRE FLOW REQUIREMENTS WITH A 500' COVERAGE RADIUS.
- ALL CONSTRUCTION SHALL CONFORM TO THE CRITERIA FOR WATER AND SANITARY SEWERAGE SYSTEMS WITHIN BREVARD COUNTY (LATEST EDITION).
- WATER MAINS/SERVICE LATERAL SHALL BE OVER STORM/SEWER PIPES WHERE POSSIBLE, WITH 12" VERTICAL CLEARANCE AND 30"/36" OF COVER. IF THE POTABLE PRESSURE PIPE MUST BE UNDER, THE CONTRACTOR SHALL PROVIDE 4x4" BENDS AND 12" CLEARANCE OR IN A MANNER CONSISTENT WITH AHJ PROTOCOLS AND DETAILS. IT IS THE CONTRACTOR'S RESPONSIBILITY EVEN IF NOT EXPRESSLY SHOWN TO AVOID AND DEFLECT AROUND OTHER UTILITIES AS APPROPRIATE.
- DEFLECT WATER PIPING AT JOINTS HORIZONTALLY OR USE 45° BENDS WHEN NECESSARY TO AVOID CONFLICTS. CONTRACTOR SHALL MEET THE MANUFACTURERS REQUIREMENT FOR DEFLECTIONS.
- IRRIGATION HAS BEEN DESIGNED BY ATKINS. IRRIGATION INSTALLATION SHALL BE THROUGH GENERAL CONTRACTOR SCOPE. CONTRACTOR SHALL COORDINATE LOCATIONS, NECESSITY, AND INSTALLATION OF IRRIGATION SLEEVES AND CHASE TUBES PRIOR TO PAVEMENT INSTALLATION.
- CONTRACTOR TO VERIFY UTILITY CROSSING CLEARANCES IN AREA INDICATED. THE USE OF THE PERTINENT CROSSING CONFLICT METHODS SHALL BE INCLUDED IN THE BID PRICING (CONCRETE ENCASEMENT, EQUIVALENT PIPE SIZE SUBSTITUTIONS, ETC.).
- PROPOSED STORM PIPES ARE SHOWN FADED BACK ON THESE UTILITY PLANS FOR CLARITY PURPOSES ONLY. REFER TO PGD PLAN FOR STORM PIPE CONSTRUCTION.
- UTILITY COVERS WITHIN DISTURBED AREAS SHALL BE ADJUSTED TO MEET EXISTING OR PROPOSED GRADES RESPECTIVELY.
- UTILITY MATERIALS AND PROCEDURES SHALL MEET THE AHJ REQUIREMENTS AND CRITERIA AND BE IN ACCORDANCE WITH BREVARD COUNTY STANDARDS.
- CUMBERLAND FARMS HAS LOCAL ACCESS AND EASEMENT AGREEMENT TO AN OFFSITE FIREWELL LOCATED 5675 MICCO RD. (TAX ACCOUNT #3006861)
- POTABLE WATER SERVICES SHALL BE FLUSHED, SWABBED, AND BACTERIOLOGIC TESTED PRIOR TO USE. RESULTS SHALL BE PROVIDED TO THE ENGINEER. TEMPORARY SERVICES AND INSTALLATIONS SHALL MEET THE SAME CRITERIA AND NOT BE CONSTRUCTED AS TO RESTRICT THE CONTRACTOR IN THEIR MEANS AND METHODS OR CONFLICT WITH AHJ REQUIREMENTS.
- FIRE HYDRANT ASSEMBLY SHALL CONSIST OF: HYDRANT TEE (PLACED AT HYDRANT TEE), GATE VALVE, AND FIRE HYDRANT.
- 2" COPPER SERVICE LINE SHALL CONSIST OF: BRONZE SERVICE SADDLE, CORPORATION STOP, TYPE "K" COPPER, & FLARE/FLANGE CURB STOP.
- WATER MAIN SHALL BE SWABBED.
- GREASE TRAP IS SHOWN FOR REFERENCE ONLY. GREASE TRAP SIZING CALCULATIONS AND SHOP DRAWINGS ARE TO BE SUBMITTED AS PART OF THE BUILDING PERMIT APPLICATION PROCESS.
- CONTRACTOR IS TO COORDINATE WITH BREVARD COUNTY UTILITIES BEFORE CONNECTING TO WATER SOURCE.
- ALL CLEANOUT COVERS LOCATED IN THE SIDEWALK SURROUNDING THE BUILDING SHALL BE FLUSHED WITH THE GROUND TO MEET A.D.A. REQUIREMENTS.

**BREVARD COUNTY FIRE PREVENTION BUREAU**

FIRE FLOW CALCULATIONS  
(PER FFPC-1-18.3 / TABLE 18.4.5.1.2)

PROJECT NAME: CUMBERLAND FARMS - MICCO (US 1 & MICCO RD.)

PROJECT DESCRIPTION / BASIS OF DETERMINATION: NEW CONVENIENCE STORE OF 1 STORY, TYPE VB CONSTRUCTION FUELING CANOPY, TYPE IB CONSTRUCTION

EFFECTIVE FIRE AREA: CONVENIENCE STORE - 4,771 SF (1 FLOOR)

OCCUPANCY (CONVENIENCE STORE): COMBUSTIBLE, UNPROTECTED, CONSTRUCTION TYPE VB [V0.0.0.0]

OCCUPANCY CLASSIFICATION: MERCANTILE

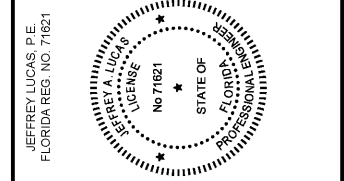
FIRE FLOW (TABLE 18.4.5.1.2)(4,801 - 4,771 SF) = 2,000 GPM (2 HOUR DURATION) (BASE DEMAND REQUIRED)

NEEDED FIRE FLOW (NF): 2,000 GPM (BASE)

NUMBER OF HYDRANTS REQUIRED: 2, BASED ON 2,000 GPM

NUMBER OF HYDRANTS EXISTING WITHIN 500 FT: 0

NUMBER OF HYDRANTS PROPOSED WITHIN 500 FT: 2



**NOTICE**

The information in this document was prepared by ATKINS, Inc. While ATKINS has taken all reasonable steps to ensure the accuracy of the information contained in this document, it does not guarantee that changes or alterations to this document will not be made by anyone other than ATKINS personnel after the document leaves the possession of ATKINS. Changes or alterations may be made on a case-by-case basis and may be made by computer or other electronic means unless it is that compared to the original. ATKINS makes no warranties, express or implied, concerning the accuracy of the information contained in any document transmitted or reviewed by computer or other electronic means.

Rev.	Date	Description	By	Checked
1	11/17/18	BREVARD COUNTY COMMENTS	CP	ME
2	12/10/18	BREVARD COUNTY COMMENTS	CP	ME
3	03/04/19	BREVARD COUNTY COMMENTS	CP	ME
4	03/24/19	BREVARD COUNTY COMMENTS	CP	ME
5	09/30/19	PER CLIENT COMMENTS	CP	ME
6	10/17/19	PER POST 1005 CLIENT COMMENTS	CP	ME

Rev.	Date	Description	By	Checked

**ATKINS** CORPORATION OFFICE: 4030 W. BOY SCOUT BLVD TAMPA, FLORIDA 33607  
 LOCAL OFFICE: 7175 MURRELL ROAD FORT WORTH, TEXAS 76116  
 150 FLORISS ROAD MELBOURNE, FL 32940  
 TEL. 321.242.4942 FAX. 321.242.6101 www.atkinsglobal.com

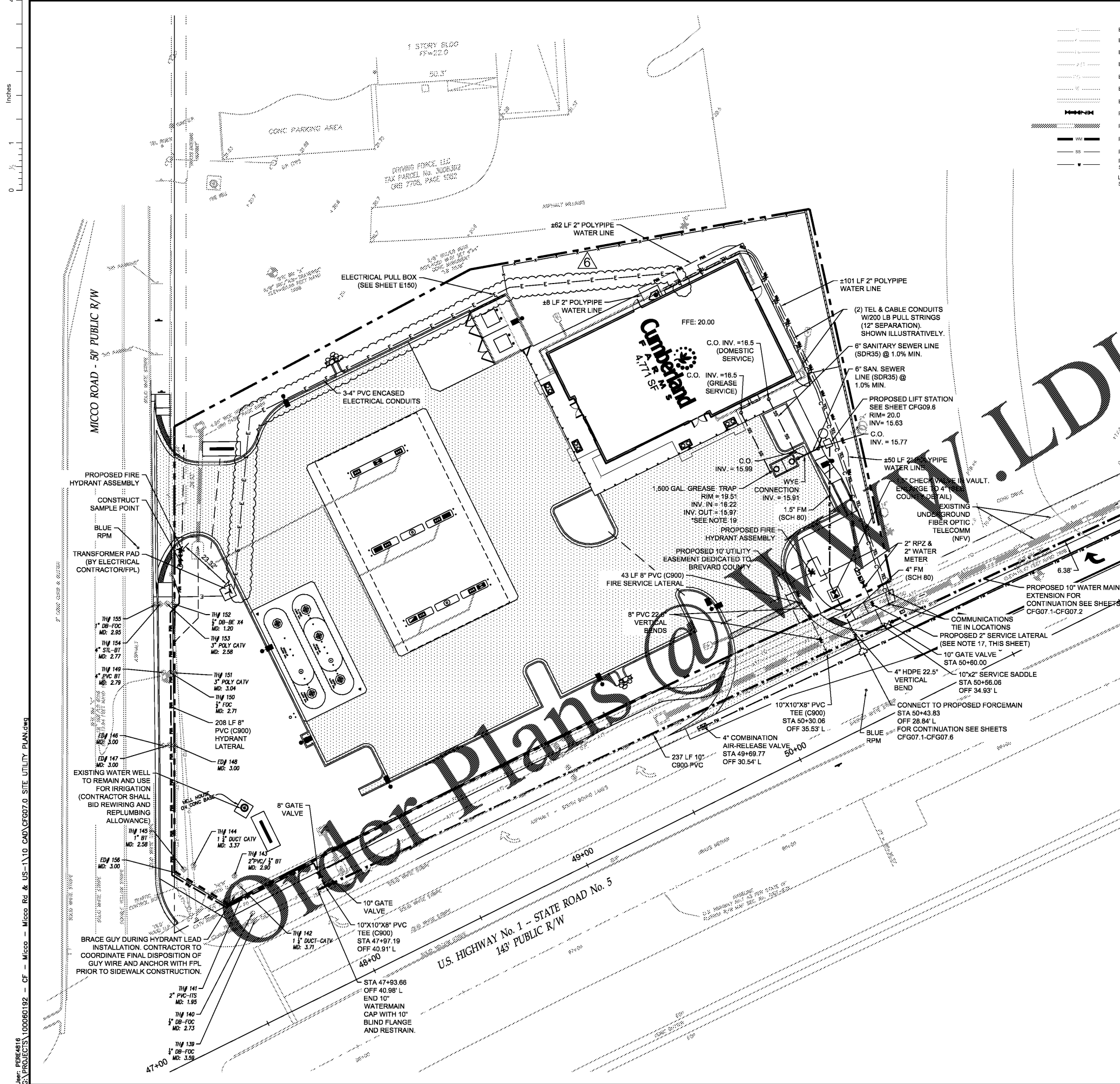
Copyright © Atkins Limited (2017)

**Cumberland FARMS**  
 CUMBERLAND FARMS INC.  
 150 FLORISS ROAD  
 WESTBOROUGH, MA 01581

Project Title: **MICCO ROAD & US-1 BREVARD COUNTY, FL**  
 100060192

Drawing Title: **SITE UTILITY PLAN**

Scale	Designed	Drawn	Checked	Authorized
Original Size	JL	DF		
ARCH D	Date	Date	Date	Date
Drawing Number	CFG07.0			Revision



User: PER04816  
 G:\PROJECTS\100060192 - CF - Micco - Micco Rd & US-1\1.D CAD\CFG07.0 SITE UTILITY PLAN.dwg