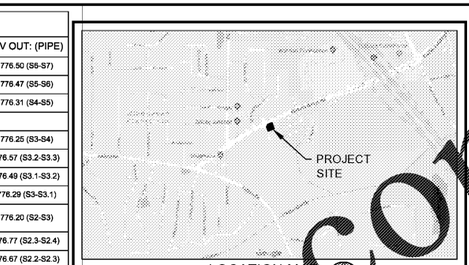
AS-BUILT NOTE:
CONTRACTOR SHALL PROVIDE THE NECESSARY SIGNED/SEALED AS-BUILT SURVEY(S) TO ENGINEER AS REQUIRED FOR FINAL APPROVAL BY THE LOCAL JURISDICTION AT LEAST 30 DAYS PRIOR TO PROJECT COMPLETION. AS-BUILT SURVEY(S) SHALL INCLUDE ALL RIM ELEVATIONS, INVERTS, PIPE SIZES & MATERIALS, AND PIPE SLOPES FOR ALL STORM AND SANITARY SEWERS. IN JURISDICTIONS WHERE AN AS-BUILT HYDROLOGY ANALYSIS OR STORMWATER "CERTIFICATION" IS REQUIRED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL ALSO SUPPLY ALL NECESSARY DOCUMENTATION REQUIRED FOR THE ENGINEER TO DETERMINE UNDERGROUND POND(S). IF APPLICABLE, PROVIDE THE ADEQUATE STORAGE VOLUMES. SUCH DOCUMENTATION MAY INCLUDE, BUT SHALL NOT BE LIMITED TO, PHOTOGRAPHS OF SYSTEM INSTALLATION, COMPACTION REPORTS UNDER AND ABOVE THE SYSTEM, DELIVERY TICKETS, SHOP DRAWINGS, ELEVATIONS OF STONE BEDDING (TOP AND BOTTOM), AS WELL AS THE HORIZONTAL LIMITS OF STONE.

UTILITY LEGEND:
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING NATURAL GAS
- EXISTING OVERHEAD POWER
- EXISTING UNDERGROUND POWER
- EXISTING FIBER OPTIC
- EXISTING STORMWATER PIPE
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED NATURAL GAS
- PROPOSED UNDERGROUND POWER
- PROPOSED TELEPHONE/DATE LINE
- PROPOSED STORMWATER PIPE

HENRY COUNTY WATER AUTHORITY NOTES:
1.) PRE-CONSTRUCTION CONFERENCE IS REQUIRED WITH THE HENRY COUNTY WATER AUTHORITY PRIOR TO WATER/SEWER LINE CONSTRUCTION.
2.) CONTRACTOR FOR THE WATER/SEWER LINE MUST HAVE A STATE APPROVED LICENSE AND BE ON THE APPROVED LIST FOR HENRY COUNTY WATER AUTHORITY.
3.) A COMPLETED METER APPLICATION ALONG WITH ANY FEES DUE HCWA MUST BE RECEIVED PRIOR TO PRE-CONSTRUCTION CONFERENCE.
4.) ALL FIRE LINE METERS SHALL BE NEW, SENSUS BRAND, AND INSTALLED PER HCWA STANDARDS. (REFER TO HCWA STANDARDS AND SPECIFICATIONS FOR APPROVED MODELS).
5) WATER SERVICE SHALL NOT BE ACTIVATED UNTIL ALL LINES, METERS, AND BACKFLOW PREVENTION DEVICES ARE PRESSURE TESTED, DISINFECTED, AND CERTIFIED WITH ALL PUBLIC LINES AND METERS BEING DEEDED OVER TO HCWA. THIS INCLUDES BOTH FIRE AND DOMESTIC WATER SERVICE.

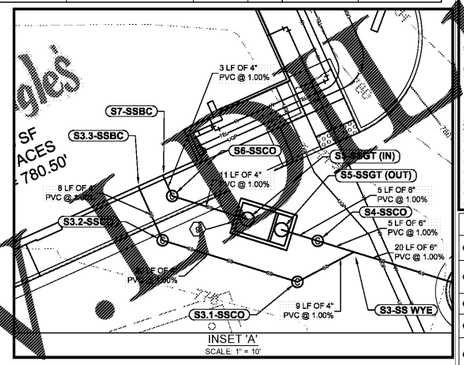
SANITARY SEWER STRUCTURES

NAME:	TYPE:	STATION:	RIM:	INV IN: (PIPE)	INV OUT: (PIPE)
S7-SSBC	BUILDING CONNECTION	1+11.34	780.50		776.50 (S6-S7)
S6-SSCO	CLEANOUT	1+08.50	780.37	776.47 (S6-S7)	776.47 (S5-S6)
S5-SSGT (OUT)	GREASE TRAP (OUT)	0+92.03	779.53		776.31 (S4-S5)
S5-SSGT (IN)	GREASE TRAP (IN)	0+97.20	779.62	776.36 (S5-S6)	
S4-SSCO	CLEANOUT	0+86.58	779.52	776.25 (S4-S5)	776.25 (S3-S4)
S3.3-SSBC	BUILDING CONNECTION	0+37.61	780.50		776.57 (S3.2-S3.3)
S3.2-SSCO	CLEANOUT	0+29.50	779.73	776.49 (S3.2-S3.3)	776.49 (S3.1-S3.2)
S3.1-SSCO	CLEANOUT	0+09.20	779.45	776.29 (S3.1-S3.2)	776.29 (S3-S3.1)
S3-SS WYE	WYE CONNECTION	0+81.12	779.55	776.20 (S3-S4) 776.20 (S3-S3.1)	776.20 (S2-S3)
S2.4-SSDD	DUMPSTER DRAIN	0+77.77	779.01		776.77 (S2.3-S2.4)
S2.3-SSCO	CLEANOUT	0+67.63	779.21	776.67 (S2.3-S2.4)	776.67 (S2.2-S2.3)
S2.2-SS O/W (OUT)	OIL/WATER SEPARATOR (OUT)	0+13.35	779.81		776.13 (S2.1-S2.2)
S2.2-SS O/W (IN)	OIL/WATER SEPARATOR (IN)	0+18.52	779.95	776.18 (S2.2-S2.3)	
S2.1-SSCO	CLEANOUT	0+08.78	779.46	776.08 (S2.1-S2.2)	776.08 (S2-S2.1)
S2-SS WYE	WYE CONNECTION	0+60.71	779.55	775.99 (S2-S3) 775.99 (S2-S2.1)	775.99 (S1-S2)
S1-SSCO	CLEANOUT	0+48.27	780.90	775.67 (S1-S2)	775.12 (S0-S1)



GENERAL UTILITY NOTES:
1) CONTRACTOR TO NOTIFY OWNER/DEVELOPER AND ENGINEER IMMEDIATELY IF FIELD CONDITIONS VARY FROM DESIGN ASSUMPTIONS.
2) LOCATION OF UNDERGROUND UTILITIES SHOWN IS BASED ON A SURVEY BY LoCRAW ENGINEERING, INC. DATED JULY 2, 2018. APPROPRIATE UTILITY COMPANIES SHOULD BE CONTACTED FOR VERIFICATION OF LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITY. MAINTAIN 10' HORIZONTAL SEPARATION BETWEEN WATER AND SEWER LINES.
3) REFER TO ARCHITECTURAL PLANS FOR ON SITE UTILITY CONDUITS FOR SITE LIGHTING, ETC. AND UTILITY ENTRY AND EXIT LOCATIONS.
4) VERTICAL DEPTH OF ALL DRY AND PRESSURIZED UTILITIES IS UNKNOWN. CONTRACTOR TO FIELD VERIFY AND ENGINEER IMMEDIATELY IF ANY CONFLICTS ARE FOUND.
6) CLEANOUT(S) IN PAVEMENT AREAS ARE TO HAVE A TRAFFIC RATED COVER.
7) CONTRACTOR TO REFERENCE MEP PLANS FOR ALL GREASE TRAP SIZING, DETAILS, CLEANOUTS, SAMPLE WELLS, AND VENT PIPING. GREASE TRAPS SHOWN ON CIVIL DRAWINGS ARE FOR REFERENCE ONLY.

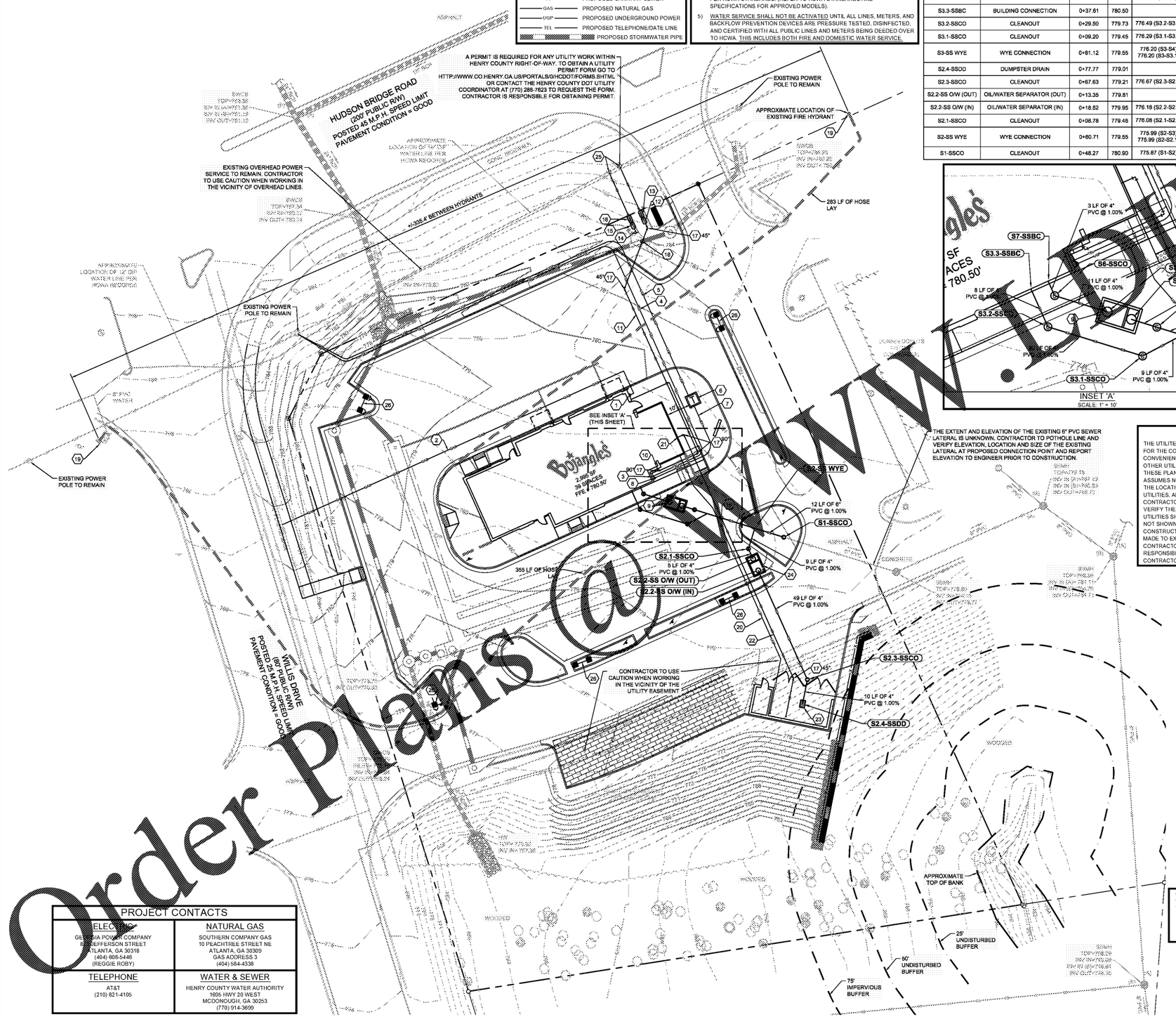
STRUCTURE TYPES:
SSBC: SANITARY SEWER BUILDING CONNECTION
SSCO: SANITARY SEWER CLEANOUT, SEE DETAIL SHEET C-7.1
SSMH: SANITARY SEWER MANHOLE
SSGT: SANITARY SEWER GREASE TRAP, SEE DETAIL SHEET C-7.3
SS O/W: SANITARY SEWER OIL/WATER SEPARATOR, SEE DETAIL SHEET C-7.4 (DETAIL S33)
SSDD: SANITARY SEWER DUMPSTER DRAIN, SEE DETAIL SHEET C-7.4
SS WYE: SANITARY SEWER WYE CONNECTION



KEY NOTES

1	PROPOSED GAS LINE ENTRY AT BUILDING. SEE PLUMBING PLANS FOR MORE INFORMATION.
2	PROPOSED GAS LINE, CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION TO EXISTING GAS MAIN AND EXTENSION OF SERVICE LATERAL TO METER AT BUILDING
3	PROPOSED TELEPHONE/DATA LINE ENTRY
4	PROPOSED TELEPHONE/DATA LINE. CONTRACTOR RESPONSIBLE FOR TRENCH, CONDUIT, PULL STRING AND BACKFILL.
5	CONTRACTOR TO COORDINATE THE INSTALLATION OF PRIMARY UNDERGROUND POWER SERVICE TO TRANSFORMER WITH GA POWER. CONTRACTOR RESPONSIBLE FOR TRENCH, CONDUIT, PULL STRING AND BACKFILL.
6	CONTRACTOR TO COORDINATE THE EXACT SIZE AND LOCATION OF TRANSFORMER AND PAD WITH GA POWER
7	SECONDARY UNDERGROUND POWER SERVICE FROM TRANSFORMER TO METER CABINET ENTRY BY CONTRACTOR
8	PROPOSED ELECTRIC ENTRY WITH METER, CABINET AND DISCONNECT. SEE ELECTRICAL PLANS FOR MORE INFORMATION.
9	PROPOSED 3,000 GALLON GREASE TRAP, SEE SHEET C-7.3 FOR DETAIL
10	PROPOSED DOMESTIC WATER LINE ENTRY POINT. SEE PLUMBING PLANS FOR MORE INFORMATION.
11	PROPOSED 2" DOMESTIC WATER LINE TO BE SCHEDULE 40 PVC.
12	PROPOSED 2" DOUBLE CHECK VALVE BACKFLOW PREVENTOR FOR DOMESTIC SERVICE BY CONTRACTOR
13	PROPOSED 2" WATER METER FOR DOMESTIC SERVICE BY HCWA
14	PROPOSED 3/4" SCHEDULE 40 PVC IRRIGATION LINE
15	PROPOSED 3/4" RPZ BACKFLOW PREVENTOR FOR IRRIGATION LINE
16	PROPOSED 3/4" WATER METER FOR IRRIGATION LINE BY HCWA
17	HORIZONTAL BEND
18	BEND PIPE VERTICALLY AS NECESSARY TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION
19	EXISTING FIRE HYDRANT
20	PROPOSED POWER IN 1" CONDUIT FROM BUILDING TO DUMPSTER ENCLOSURE BY CONTRACTOR. SEE ARCHITECTURAL PLANS FOR DETAILS.
21	PROPOSED DUMPSTER WATER LINE BUILDING EXIT POINT. SEE PLUMBING PLANS FOR MORE INFORMATION.
23	PROPOSED 3/4" SCHEDULE 40 PVC WATER LINE FROM BUILDING TO HOSE BIBB IN DUMPSTER ENCLOSURE. SEE ARCHITECTURAL AND PLUMBING PLANS FOR DETAILS.
23	SANITARY SEWER DUMPSTER DRAIN, SEE DETAIL SHEET C-7.4
24	1,500 GALLON OIL/WATER SEPARATOR, SEE DETAILS SHEET C-7.4
25	PROPOSED WET TAP SADDLE AND VALVE PER HCWA DETAILS ON SHEET C-7.4
26	SITE LIGHTING, SEE PHOTOMETRIC PLAN (BY OTHERS) FOR DETAILS

CAUTION
THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTORS CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UNDERGROUND UTILITIES, AND IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES SHOWN AS WELL AS THOSE NOT SHOWN WITHIN THE CONSTRUCTION LIMITS. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.



WATER LINE MATERIAL NOTE:
1.) WATER LINES IN THE RIGHT-OF-WAY SHALL BE TYPE K COPPER. WATER LINES OUTSIDE OF THE RIGHT-OF-WAY SHALL BE SCHEDULE 40 PVC.

GREASE TRAP SIZING CALCULATIONS:
"CAPACITY OF GREASE TRAP SHALL BE THE LARGER OF THE TWO RESULTS"

EQUATION #1:
INTERCEPTOR CAPACITY (IN GALLONS) = (S)*(25)*(HR/12)
WHERE: S = # OF SEATS; HR = MAX. HOURS OF DAILY OPERATION

INTERCEPTOR CAPACITY = (62 SEATS)*(25)*(17.5 HOURS/12)
= 2,260 GALLON GREASE TRAP

EQUATION #2:
INTERCEPTOR CAPACITY (IN GALLONS) = (SUM OF FIXTURE FLOWS)*(20) = (145 GPM)*(20)
= 2,900 GALLON GREASE TRAP

GREASE INTERCEPTOR SIZE TO USE = 3,000 GALLON

INTERCEPTOR CAPACITY DATA (EQUATION #2)

TYPE OF FIXTURE:	FLOW RATE (GPM):	QUANTITY OF FIXTURES:	SUM OF FIXTURE FLOW (GPM):
SINGLE-COMPARTMENT SINK	20	2	40
THREE COMPARTMENT SINK	105	1	105
		TOTAL:	145

PROJECT CONTACTS

ELECTRIC	NATURAL GAS
GEORGIA POWER COMPANY 10 JEFFERSON STREET ATLANTA, GA 30318 (404) 608-5446 (REGGIE ROBY)	SOUTHERN COMPANY GAS 10 PEACHTREE STREET NE ATLANTA, GA 30309 GAS ADDRESS 3 (404) 584-4338
TELEPHONE	**WATER & SEWER**
AT&T (210) 821-4105	HENRY COUNTY WATER AUTHORITY 1695 HWY 20 WEST MCDONOUGH, GA 30253 (770) 914-3699

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PEF005768

REV #	COUNTY COMMENTS	DATE	DRAWN BY:	CHECKED BY:
A		08/09/18	FDE	TKS

PROJECT
BOJANGLES' - STOCKBRIDGE
HUDSON BRIDGE ROAD & WILLIS DRIVE
LAND LOT 21, DISTRICT 6, PARCEL 032-01012001
HENRY COUNTY, GA

SEAL:
GEORGIA REGISTERED No. PE036681 PROFESSIONAL ENGINEER TIMOTHY KYLE SHAFFE

DESIGN TEAM:

DRAWN BY:	FDE
DESIGNED BY:	FDE
REVIEWED BY:	TKS

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SCALE & NORTH ARROW:
NORTH ARROW
0' 10' 20' 40'
SCALE: 1"=20'

JOB #: 237002
DATE: JULY 30, 2018

UTILITY PLAN
C-5.0

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