

SEWER UTILITY NOTES:

1. ALL SEWER CONSTRUCTION SHALL CONFORM TO CITY OF GREENSBORO AND NCDEQ STANDARDS AND SPECIFICATIONS INCLUDING THE MINIMUM VERTICAL SEPARATIONS SHOWN IN AS-BUILT SURVEY REQUIREMENTS ON THIS PAGE.
2. ALL SANITARY AND WATER SERVICE MATERIALS AND INSTALLATION SHALL CONFORM WITH THE NC PLUMBING CODE.
3. TREES ARE NOT ALLOWED WITHIN 10-FEET OF ANY WATER OR SANITARY SEWER MAINS.
4. G.C. IS RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITIES.
5. G.C. IS RESPONSIBLE FOR OBTAINING ALL ENCROACHMENT AGREEMENTS PRIOR TO ANY CONSTRUCTION ACTIVITIES.
6. G.C. TO SECURE CONSTRUCTION AREA PER OSHA STANDARDS.
7. G.C. IS RESPONSIBLE FOR LOCATION AND VERIFYING EXISTING ELEVATIONS OF UTILITIES FOR PROPER TIE-INS PRIOR TO ANY CONSTRUCTION.
8. G.C. TO CONTACT ALL UTILITY COMPANIES TO INSURE THE EXISTING UTILITIES ARE PROPERLY SHUT DOWN PRIOR TO THE BEGINNING OF ANY DEMOLITION AND/OR SITE WORK - TYPICAL.
9. G.C. TO VERIFY INVERTS OF EX. SANITARY SEWER SYSTEM AND INVERTS PRIOR TO CONST. RUCTION.
10. PRIOR TO BEGINNING WORK ON THE SANITARY SEWER CONSTRUCTION, THE CONDITION OF THE EXISTING MANHOLE THAT WILL BE TIED INTO SHALL BE EVALUATED TO DETERMINE WHETHER IT IS SUITABLE TO REMAIN AS IS OR NEED TO BE REPLACED.
11. MANHOLE RIM ELEVATIONS ARE TO EXTEND 18 TO 24" ABOVE ADJACENT GRADE PER CITY OF GREENSBORO SEWER SPECIFICATIONS.

INSPECTION SCHEDULE:

THIS PROJECT HAS A CITY PERMITTED PUBLIC SEWER EXTENSION THAT WILL REQUIRE ENGINEER CERTIFICATION AND AS-BUILT DOCUMENTATION PRIOR TO THE RELEASE OF SITE CO. IT IS CRITICAL THAT SUBMITTALS, INSPECTIONS AND AS-BUILT INFORMATION BE PRESENTED/SCHEDULED AT THE APPROPRIATE TIMES DURING CONSTRUCTION TO ENSURE PROPER CLOSE OUT DOCUMENTATION INFORMATION IS ON FILE. DESIGN ENGINEER OR REPRESENTATIVE SHALL DETERMINE THE APPROPRIATE INSPECTOR AND SCHEDULE PER EACH ITEM BELOW DURING PRE-CONSTRUCTION MEETING. THE PRE-CONSTRUCTION MEETING MUST BE HELD PRIOR TO GROUND BREAK. CONTRACTOR SHALL ASK QUESTIONS DURING PRE-CONSTRUCTION MEETING ON ANY OF THE FOLLOWING ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER AT LEAST 2 DAYS PRIOR TO BEGINNING WORK ON THESE ITEMS DURING CONSTRUCTION TO SCHEDULE INSPECTIONS. ANY ITEMS CONSTRUCTED AND COVERED UP PRIOR TO OBSERVATION WILL BE UNCOVERED OR TESTING WILL BE PROVIDED AS APPROPRIATE AT THE CONTRACTOR'S EXPENSE. THE ITEMS ARE AS FOLLOWS:

1. INSTALLATION OF SEWER MAIN
2. INSTALLATION OF MANHOLES
3. SEWER MANHOLE VACUUM TESTING
4. SEWER MAIN LOW PRESSURE TESTS
5. SEWER MAIN MANHOLE TESTS

CITY OF GREENSBORO NOTES:

1. REFER TO SHEET C-4.01 FOR ADDITIONAL PROJECT RELATED NOTES.
2. ALL CONSTRUCTION TO COG/NCDEQ STANDARDS.
3. TERMINATE EXISTING, UNUSED WATER/SEWER TO THE MAIN TO COG STANDARDS.
4. CLEANOUTS IN LOAD BEARING AREAS TO BE PER GSO-224.
5. ALL STANDARD NCDEQ/COG REQUIRED UTILITY SEPARATIONS MUST BE PROVIDED.
6. SERVICES THAT TIE INTO MANHOLES MUST DO SO AT THE SHELF UNLESS MANHOLE IS GREATER THAN 10' THEN USE A RELINER INSIDE DROP.
7. NO WELLS WITHIN 200' OF SEWER PROJECT.
8. DUCTILE IRON PIPE REQUIRED WHERE COVER IS LESS THAN 4'.
9. ALL ONSITE PRIVATE SEWER TO BE MAINTAINED BY OWNER.

SANITARY SEWER CONSTRUCTION NOTES:

1. G.C. SHALL ESTABLISH A TRAFFIC CONTROL PLAN AND PROVIDE VISIBLE WARNING OF OBSTACLES TO ROADWAY TRAFFIC AND PEDESTRIANS.
2. EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES ON THE SITE.
3. ALL OPEN TRENCHES AND CONSTRUCTION DITCHES IN THE ROADWAY SHALL BE BLOCKED OFF DURING CONSTRUCTION AND A VISIBLE WARNING DEVICE SHALL BE INSTALLED FOR EACH OBSTACLE.
4. ALL TRENCHES AND CONSTRUCTION DITCHES SHALL BE COMPLETELY FILLED AND/OR PROPERLY COVERED AT THE END OF EACH WORKING DAY.
5. ANY ROADWAY PAVEMENT, CONCRETE CURB & GUTTER, SIDEWALK, STRUCTURES AND UTILITIES DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE.

REQUIRED SUBMITTALS:

CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL THREE COPIES BEARING THE CONTRACTOR'S SHOP DRAWING REVIEW STAMP AND SIGNATURE OF ALL PRODUCTS, MATERIALS, AND STRUCTURES THAT WILL BE USED IN THE CONSTRUCTION OF THE SANITARY SEWER SYSTEM. NO PRODUCT SUBSTITUTIONS WILL BE ALLOWED. SUBMITTALS ARE REQUIRED FOR THE FOLLOWING BUT NOT LIMITED TO:

- A. SEWER MAIN PIPING
- B. MANHOLES (IF PRECAST)

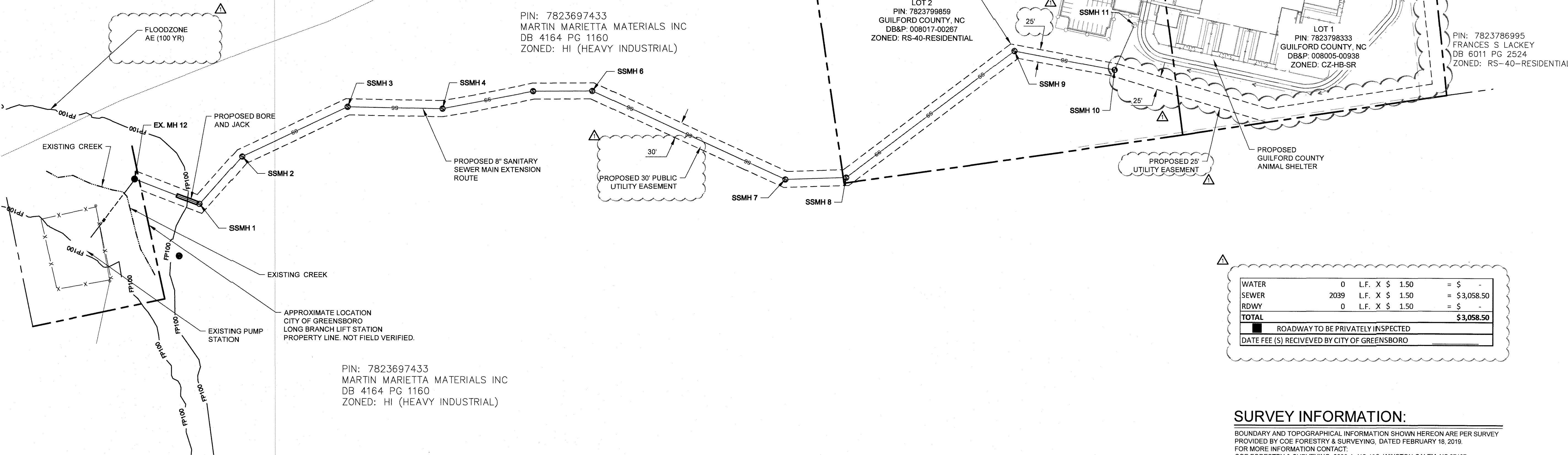
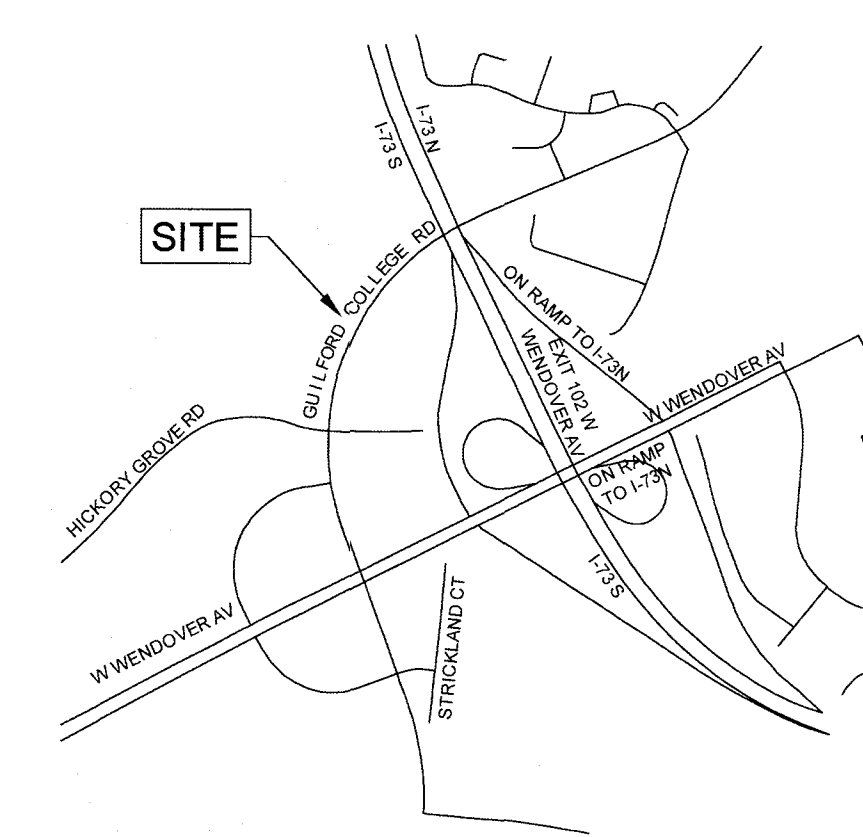
AS-BUILT SURVEY REQUIREMENTS:

1. CONTRACTOR SHALL PROVIDE SEWER AS-BUILTS TO THE ENGINEER IN AUTOCAD FORMAT ALONG WITH SIGNED AND SEALED DRAWINGS BY A PROFESSIONAL LAND SURVEYOR IN SUFFICIENT TIME TO MAKE NECESSARY AS-BUILT REVISIONS AND SUBMITTAL TO THE REGULATORY AGENCIES FOR APPROVAL PRIOR TO THE CERTIFICATE OF OCCUPANCY, SEWER OPERATION PERMIT, OR RECORDING OF PLATS. IT IS RECOMMENDED THAT THE AS-BUILT INFORMATION BE CHECKED THROUGHOUT CONSTRUCTION. THE INFORMATION REQUIRED ON THE AS-BUILTS IS AS FOLLOWS: RIM LOCATIONS AND ELEVATIONS, INVERTS (INCLUDING TIE-IN MANHOLE INVERT), SIZE OF PIPES AND SLOPE OF PIPES. SEE NOTES BELOW FOR ADDITIONAL AS-BUILT INFORMATION.
2. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY ELEVATIONS AND SEPARATIONS OF SANITARY SEWER LINES AT CROSSINGS WITH WATER AND STORM DRAINAGE PIPES TO THE ENGINEER DOCUMENTING THAT ALLOWABLE SEPARATION IS PROVIDED.

MINIMUM VERTICAL SEPARATION REQUIREMENTS:
SANITARY - STORM: 24"
SANITARY - WATER: 18"
SANITARY - OTHER UTILITIES: 24"
WATER - STORM: 18"

NON-COMPLIANCE WITH THE MINIMUM VERTICAL SEPARATIONS LISTED ABOVE WILL REQUIRE THE CONTRACTOR TO RE-INSTALL THE UTILITY WITH DUCTILE IRON PIPE AND PERFORM A PRESSURE TEST.
3. SOME SANITARY SEWER PIPES ARE DESIGNED AT NEAR FLAT SLOPE. THE CONTRACTOR SHALL CONFIRM THE INSTALLED SLOPE OF ALL SANITARY SEWER PIPES DESIGNED WITH 0.75% SLOPE OR LESS IMMEDIATELY UPON INSTALLATION AS CONSTRUCTION PROGRESSES FROM MANHOLE TO MANHOLE. DOCUMENTATION OF THE INSTALLED SLOPES SHALL BE PROVIDED TO THE ENGINEER AS WORK PROGRESSES. SECTIONS OF SEWER INSTALLED AT SLOPES FLATTER THAN NCDEQ MINIMUM 0.40% FOR 8" LINES WILL REQUIRE REINSTALLATION.
4. IF THE AS-BUILT SURVEY DOES NOT COMPLY WITH THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR WILL BE REQUIRED TO CORRECT THE DEFICIENT ITEMS. THE CONTRACTOR WILL BE RESPONSIBLE FOR REVISING THE AS-BUILT SURVEY. IT IS ADVISED THAT CONTRACTOR SUBMIT PROGRESS SURVEY INFORMATION TO STIMMEL FOR REVIEW DURING CONSTRUCTION FOR REASSURANCE PRIOR TO ADVANCING TO NEXT PHASES OF CONSTRUCTION.

LOCATION MAP - n.t.s.:



WATER	0	L.F.	X	\$ 1.50	= \$ -
SEWER	2039	L.F.	X	\$ 1.50	= \$3,058.50
RDWY	0	L.F.	X	\$ 1.50	= \$ -
TOTAL					\$3,058.50
ROADWAY TO BE PRIVATELY INSPECTED					
DATE FEE (S) RECEIVED BY CITY OF GREENSBORO					

SURVEY INFORMATION:

BOUNDARY AND TOPOGRAPHICAL INFORMATION SHOWN HEREON ARE PER SURVEY PROVIDED BY COE FORESTRY & SURVEYING, DATED FEBRUARY 18, 2019. FOR MORE INFORMATION CONTACT: COE FORESTRY & SURVEYING, 6638-A, NC 109, WINSTON-SALEM, NC 27107, PHONE: 336-769-4673

CONSTRUCTION INSPECTION:
CONSTRUCTION INSPECTION REQUIRED FOR
8" SANITARY SEWER. CALL (336) 373-2377 TO
SCHEDULE INSPECTOR.

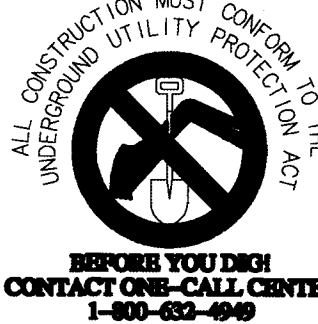


SCALE: 1" = 100'

CONTRACT SHEET
OF

SENSITIVE INFORMATION

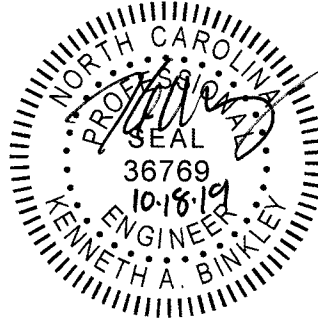
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City of Greensboro Underground
Locates Information/Requests

COG Meter Resources Dept. 373-2033
800 Traffic Signal 373-2606
COG/Guilford Co. Telecom 373-2054
COG Meter Supply 373-5955
Tanker/Treatment Plants
800 Storm Meter 373-2669

NCBEE'S CERT. NO.: C-1347



GIS DISCLAIMER

Objects on this map shown with a
dotted linestyle were not surveyed.
They were compiled by
photogrammetric methods,
available on the Geographic
Information System (GIS) software
used by the City of Greensboro.

GUILFORD COUNTY
ANIMAL SHELTER
SEWER EXTENSION

GUILFORD COUNTY, NC
980 GUILFORD COLLEGE RD., GREENSBORO, NC 27402

REVISIONS	TYPE	CONTRACT	CONTRACTOR	AS-BUILT	AUTH. DATE	BENCH MARKS	JOB NO.	P -	CITY OF GREENSBORO ENGINEERING DIVISION	K
△ CITY COMMENTS	ROADWAY				10/18/2019		DESIGNED	BY KAB	SANITARY SEWER MAIN EXTENSION	SHEET NO.
	SEWER						CONST. SURVEY	BY	OVERALL UTILITY LAYOUT	C-4.10
	WATER						CHECKED	BY		
	SIDEWALK						SCALE: AS SHOWN			