

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 CONSTRUCTION.
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:

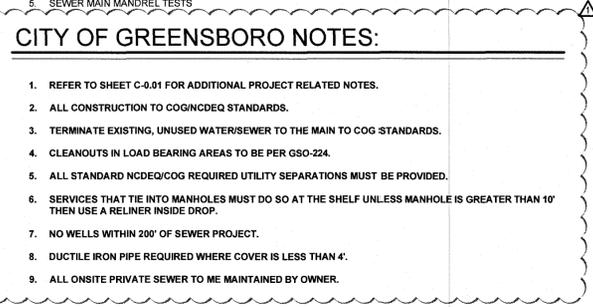
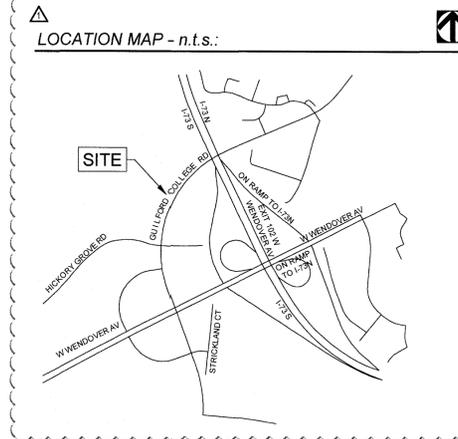
- A. SEWER MAIN PIPING
- B. MANHOLES (IF PRECAST)

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.



PIN: 7823697433
 MARTIN MARIETTA MATERIALS INC
 DB 4164 PG 1160
 ZONED: HI (HEAVY INDUSTRIAL)

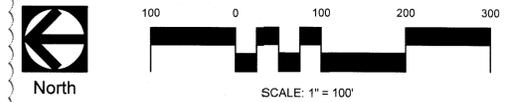
PROPOSED TRANSITION FROM 30' TO 25' PUBLIC UTILITY EASEMENT
 LOT 2
 PIN: 7823799859
 GUILFORD COUNTY, NC
 DB&P: 008017-00267
 ZONED: RS-40-RESIDENTIAL

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.



CONTRACT SHEET OF

SENSITIVE INFORMATION
 Not to be copied or distributed without the express written permission of the City of Greensboro.

ALL CONSTRUCTION MUST CONFORM TO THE UNDERGROUND UTILITY PROTECTION ACT

NEVER FORGOT THIS! CONTACT ONE-CALL CENTER 1-800-633-6969

City of Greensboro Underground Locates Information/Requests

COG Meter Resources Dept. 373-2033
 8007 Traffic Signal 373-2606
 COG/Guilford Co. Telecom 373-2084
 COG Meter Supply 373-5955
 Tanks/Treatment Plants
 800 Storm Water 373-2668

NCBEES 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
	ROADWAY						DESIGNED	BY KAB	SANITARY SEWER MAIN EXTENSION OVERALL UTILITY LAYOUT	SHEET NO. C-4.10
△	CITY COMMENTS				10/18/2019		CONST. SURVEY	BY		
	WATER						CHECKED	BY		
	SIDEWALK						SCALE: AS SHOWN			