

SITE/UTILITY NOTES:

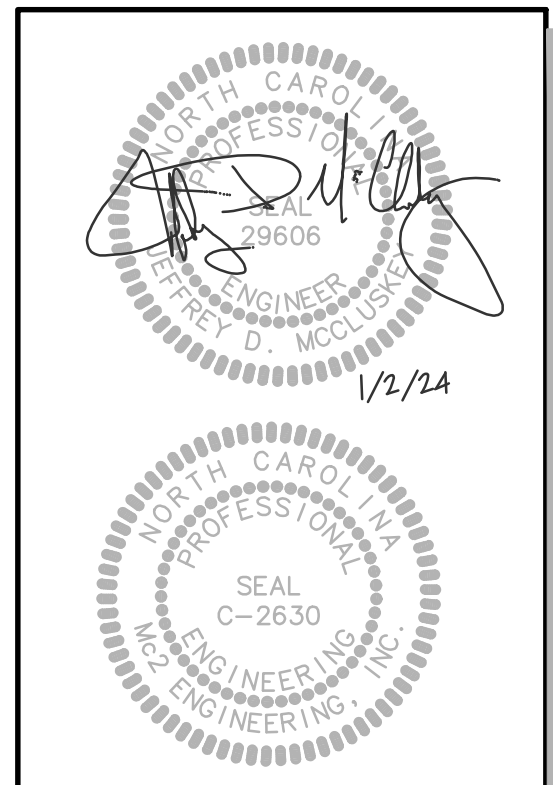
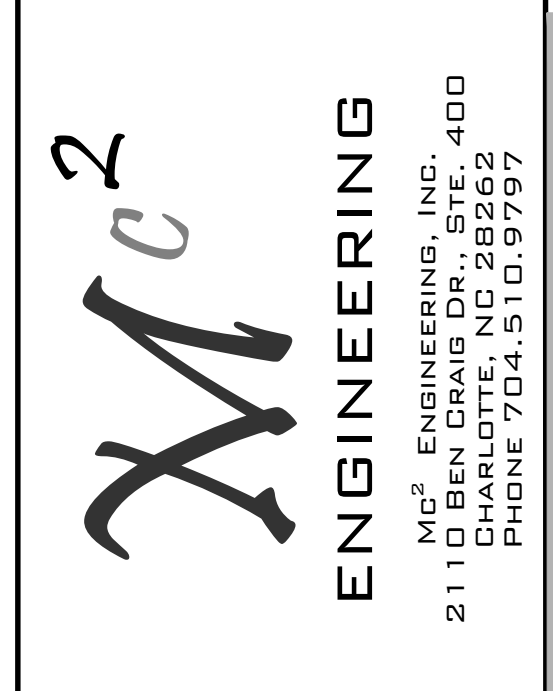
1. MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER LINE AND OTHER UTILITY LINES.
2. CONTRACTOR TO LOCATE BUILDING TIE-INS PER PLUMBING PLANS.
3. ALL BACKFLOW PREVENTERS SHALL BE IN ACCORDANCE WITH APPENDIX B OF THE NORTH CAROLINA "RULES GOVERNING PUBLIC WATER SYSTEMS"
4. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BY-PASS HYDRANTS, FIRE DEPARTMENT CONNECTION POINTS OR OTHER WATER USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND THE REQUIRED BACKFLOW ASSEMBLY.
5. REQUIRED BACKFLOW PREVENTER SHALL BE TESTED BY AN APPROVED CERTIFIED TESTER PRIOR TO PLACING WATER SYSTEM IN SERVICE.
6. WATER SERVICE TO BE INSTALLED PER CITY OF MONROE REQUIREMENTS.
7. NO PERMANENT INSULATION MAY BE INSTALLED ON THE BP ASSEMBLY.
8. WATERLINE SHALL BE INSTALLED WITH A MINIMUM OF 36" OF COVER.
9. CONTRACTOR SHALL INSTALL A COPPER TRACER WIRE WITH PROPOSED PVC WATERLINE FOR FUTURE LOCATING. CONTRACTOR SHALL PROVIDE EXTRA LOOP OF WIRE IN VALVE BOXES.
10. CONTRACTOR SHALL FURNISH TRAFFIC BEARING SANITARY SEWER CLEANOUT COVERS IN ALL TRAFFIC BEARING LOCATIONS AND SIDEWALKS.
11. ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND

CITY OF MONROE UTILITY NOTES:

1. THE WATER MAINS ALONG US HWY 74 ARE ASBESTOS CEMENT. NO SIGNIFICANT GRADING SHALL OCCUR OVER THE WATER MAINS. NO LARGE/HEAVY EQUIPMENT SHALL BE PARKED OVER THE WATER MAINS. PLEASE CONTACT CHARLES DERRICK AT 704.282.4610 WITH ANY QUESTIONS.
2. SHOP DRAWINGS OF ALL CONTRACTOR INSTALLED METERS, BACKFLOW DEVICES AND VAULTS MUST BE SUBMITTED TO THE WATER RESOURCES ENGINEERING DIVISION FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. A CITY OF MONROE WATER RESOURCES DEPARTMENT STAMPED APPROVAL OF THE SHOP DRAWINGS SUBMITTALS SHALL BE SENT TO THE CONTRACTOR. ALL INSTALLED METERS, BACKFLOW DEVICES AND VAULTS NOT MEETING THE REQUIREMENTS OF THE CITY OF MONROE WATER RESOURCES DEPARTMENT STAMPED APPROVED SHOP DRAWINGS SHALL BE REJECTED. FAILURE TO SUBMIT SHOP DRAWINGS OF ALL METERS, BACKFLOW DEVICES AND VAULTS WILL RESULT IN A DELAY IN THE INSPECTION OF THE INSTALLATION AND A DELAY IN OBTAINING THE BUILDING'S CERTIFICATE OF OCCUPANCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPLACE UNAPPROVED INSTALLATION OR INSTALLATIONS NOT MEETING ALL REQUIREMENTS.
3. PLEASE CONTACT CHARLES DERRICK, WATER RESOURCES MAINTENANCE SUPERINTENDENT, AT 704.282.4610 TO CONDUCT AN ONSITE INSPECTION OF THE METER AND BACKFLOW INSTALLATION AND VERIFY THE RADIO READ SIGNAL OF THE METER ARE FUNCTIONING PROPERLY. THE APPLICANT MUST INSTALL THE METERS AND BACKFLOWS IN ACCORDANCE WITH THE CITY OF MONROE STANDARD SPECIFICATIONS AND DETAILS AND THEN SHALL CONTACT THE WATER RESOURCES DEPARTMENT 72 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION OF ALL CONTRACTOR INSTALLED METERS. FAILURE TO CONTACT THE WATER RESOURCES MAINTENANCE SUPERINTENDENT WILL RESULT IN A DENIAL OF THE RELEASE OF CERTIFICATE OF OCCUPANCY.
4. SEE DETAIL 3 ON SHEET C9.3 FOR THE CITY OF MONROE STANDARD DETAILS FOR METERS.
5. CONTRACTOR SHALL INSTALL AND TEST A REDUCED DETECTOR PRESSURE ZONE ASSEMBLY BACKFLOW PREVENTION DEVICE APPROVED BY CITY ON FIRE LINE SERVICE BETWEEN CITY METER BOX AND FIRST BRANCH TAP. DEVICE SHALL BE TESTED BY A CERTIFIED BACKFLOW TECHNICIAN.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING BUILDING SEWER ELEVATIONS SATISFACTORY TO MEET CITY'S TAP LOCATION AND DEPTH AS WELL AS SATISFY NO PLUMBING CODE. IF NECESSARY, CONTRACTOR SHALL FURNISH A LIFT PUMP AS PART OF THE BUILDING SEWER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE ON-OBSITE INSPECTION WITH THE CITY OF MONROE IF THERE ARE QUESTIONS ABOUT THE LOCATION OR DEPTH LIMITS ON THE CITY'S SEWER TAP.
7. CONTRACTOR SHALL REQUIRE HIS/HER PLUMBER TO DETERMINE IF A BACKWATER IN ACCORDANCE WITH THE NC STATE BUILDING CODE, VOLUME II OR VOLUME VII. IF REQUIRED, A BACKWATER VALVE CERTIFICATION TO PLUMBING INSPECTOR THAT PLUMBER HAS DETERMINED ELEVATION OF CLOSEST UPSTREAM MANHOLE OF PUBLIC SEWER IS BELOW THE ELEVATION OF ALL PLUMBING FIXTURES INSTALLED. APPROXIMATE LOCATION OF CLOSEST UPSTREAM MANHOLE ON CITY OF MONROE PUBLIC SEWER IS ON CIVIL PLANS. PLUMBER SHOULD CALL 704.282.4601 IF ASSISTANCE FROM CITY IN LOCATING MANHOLE IS REQUIRED.
8. PURSUANT TO NORTH CAROLINA GS 143-355.4, ALL NEW NEW IN-GROUND IRRIGATION SYSTEM INSTALLED IN THE CITY OF MONROE SHALL BE CONNECTED TO A SEPARATE WATER METER.
9. DRIVEWAYS SHALL BE LOCATED SIX (6) FEET AWAY FROM FIRE HYDRANTS IF LOCATED ON PROPERTY.
10. ANY GRADING RESULTING IN GRADE CHANGES AROUND FIRE HYDRANTS OR WATER VALVES SHALL REQUIRE FIRE HYDRANTS OR WATER VALVES TO BE ADJUSTED AT THE CONTRACTOR'S EXPENSE.
11. NO METER BOX OR SEWER CLEANOUT SHALL BE LOCATED WITHIN THE DRIVEWAY. ANY CONFLICTS SHALL REQUIRE THE CONTRACTOR TO PAY FOR THE SERVICES TO BE RELOCATED BY THE WATER RESOURCES DEPARTMENT.
12. SEWER CLEANOUTS SHALL BE LOCATED OUTSIDE OF ANY LOW LYING AREAS NOT SUBJECT TO RUNOFF.
13. NO PERMANENT STRUCTURES, FENCES, EXTENSIVE LANDSCAPING OR TREES SHALL BE PLACED WITHIN 10' OF A WATER MAIN OR WITHIN 15' OF A SANITARY SEWER MAIN.
14. ANY GRADING RESULTING IN DEPTH OF COVER OVER EXISTING WATER OR SEWER MAINS SHALL REQUIRE WRITTEN APPROVAL FROM WATER RESOURCES DEPARTMENT.
15. ANY CONFLICTS WITH EXISTING MAINS OR APPURTENANCES SHALL BE BROUGHT TO THE ATTENTION OF THE WATER RESOURCES ENGINEER FOR REVIEW AND APPROVAL AND RESOLVED AT THE DEVELOPER'S EXPENSE.
16. WATER AND SEWER TAPS ARE TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR. SEWER TAPS FOR A 8" SERVICE MUST BE MADE TO A MANHOLE. THE WATER AND SEWER TAPS MUST BE INSTALLED UNDER THE SUPERVISION OF THE WATER RESOURCES MAINTENANCE SUPERINTENDENT OR AUTHORIZED REPRESENTATIVE. TAPS MUST BE SCHEDULED A MINIMUM OF 72-HOURS IN ADVANCE. CONTACT CHARLES DERRICK AT (704) 282-4610 TO SCHEDULE TAPS.
17. THE SEWER SERVICE INSTALLATION MAY RESULT IN RE-GRADING OVER TOP OF THE EXISTING 8" AC WATER MAIN ALONG US HWY 74. CONTRACTOR IS TO PROTECT ALL UTILITY FEATURES IN PLACE AND ADJUST THEM FLUSH WITH FINAL GRADE. A MINIMUM OF 3" OF COVER IS REQUIRED FOR WATER MAINS.
18. AN ENCROACHMENT AGREEMENT WITH NCDOT IS REQUIRED FOR THE WATER SERVICE INSTALLED BY A UTILITY CONTRACTOR WITHIN THE US HWY 74 RIGHT-OF-WAY.
19. PLEASE CONTACT THE PRETREATMENT COORDINATOR, KEVIN KEESLER, AT 704-282-4632 WITH ANY QUESTIONS BEFORE ORDERING THE TRAP TO SCHEDULE AN ONSITE INSPECTION OF THE GREASE TRAP. GREASE TRAP MUST BE INSPECTED PRIOR TO BACKFILLING.
20. 72 HOURS ADVANCE NOTICE IS REQUIRED PRIOR TO INSPECTION VISIT. GREASE TRAP MUST BE CLEANED PRIOR TO THE INSPECTION UNLESS IT IS A NEW UNIT.
21. CONTRACTOR SHALL INSTALL AND TEST A REDUCED PRESSURE ZONE ASSEMBLY BACKFLOW PREVENTION DEVICE APPROVED BY CITY ON BUILDING WATER SERVICE BETWEEN CITY METER BOX AND FIRST BRANCH TAP. DEVICE SHALL BE TESTED BY A CERTIFIED BACKFLOW TECHNICIAN.

RELATION OF WATER MAINS TO SEWERS (TAKEN FROM 15A NCAC 18C SECTION .0906 AND 15A NCAC 2T):

- LATERAL SEPARATION OF SEWERS AND WATER MAINS**
1. SEWER AND WATER MAINS SHALL HAVE AT LEAST A 10 FEET HORIZONTAL SEPARATION MEASURED FROM OUTSIDE EDGE TO OUTSIDE EDGE OF PIPE.
 2. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE OR ANYTIME THE SEWER IS OVER THE WATER MAIN, BOTH THE WATER MAIN AND SEWER MUST BE CONSTRUCTED OF FERROUS PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATERTIGHTNESS BEFORE BACKFILLING.
 3. A 24 INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER LINES OR FERROUS PIPE SPECIFIED.
- CROSSING A WATER MAIN OVER A SEWER**
4. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 24 INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 24 INCH VERTICAL SEPARATION IN WHICH CASE BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
- CROSSING A WATER MAIN UNDER A SEWER**
5. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.



THE GEODESIC AND DRAWINGS SHOWN ARE THE PROPERTY OF M2 ENGINEERING, INC. REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY M2 ENGINEERING, INC. IS PROHIBITED.

AY CARAMBA
FAMILY RESTAURANT
650 WEST ROOSEVELT BOULEVARD
MONROE, NC 28110

UTILITY PLAN

REVISIONS		
1	9/30/22	CITY COMMENTS
2	10/28/22	VARIOUS COMMENTS
3	2/6/23	VARIOUS COMMENTS
6	1/2/24	OWNER COMMENTS

CAD FILE: 22-008 BASE.DWG
 PROJECT NO.: 22-008
 DESIGNED BY: JDM
 REVIEWED BY: JDM
 DATE: AUGUST 30, 2022

C2.1

