

VICINITY MAP
NTS

UTILITY KEYNOTES:

- 1 1/2" DOMESTIC WATER METER, CONTRACTOR SHALL COORDINATE WITH CITY
- 2 1/2" DOMESTIC REDUCED PRESSURE BACKFLOW PREVENTER IN ABOVE GRADE HEATED, INSULATED ENCLOSURE, CONTRACTOR SHALL COORDINATE WITH CITY
- 3 1/2" DOMESTIC WATER SERVICE, CONTRACTOR SHALL COORDINATE WITH CITY
- 4 4" PVC SANITARY SEWER LINE @ 1/4" PER LF SLOPE (MINIMUM), CONTRACTOR SHALL COORDINATE WITH CITY
- 5 SADDLE WITH 1/2" CORPORATION STOP, CONTRACTOR SHALL FIELD VERIFY SIZE & LOCATION OF EXISTING WATER MAIN PRIOR TO ANY CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH CITY.
- 6 SANITARY SEWER CLEANOUT, SEE DETAIL SHEET.
- 7 TRAFFIC RATED SANITARY SEWER CLEANOUT, SEE DETAIL SHEET.
- 8 EXISTING FIRE HYDRANT, TO BE RELOCATED.
- 9 PROPOSED NEW LOCATION OF FIRE HYDRANT
- 10 TRANSFORMER PAD, CONTRACTOR SHALL COORDINATE LOCATION AND SIZE WITH ELECTRIC UTILITY.
- 11 1500 GALLON GREASE TRAP, COORDINATE WITH OWNER & MANUFACTURER
- 12 IRRIGATION WATER METER, CONTRACTOR SHALL COORDINATE WITH IRRIGATION CONTRACTOR
- 13 IRRIGATION REDUCED PRESSURE BACKFLOW PREVENTER IN ABOVE GRADE HEATED, INSULATED ENCLOSURE, CONTRACTOR SHALL COORDINATE WITH CITY
- 14 POLE MOUNTED AREA LIGHT, SEE LIGHTING PLAN
- 15 BUILDING MOUNTED AREA LIGHT, SEE LIGHTING PLAN
- 16 COORDINATE IRRIGATION CONNECTION WITH IRRIGATION CONTRACTOR
- 17 UNDERGROUND ELECTRIC SERVICE, CONTRACTOR SHALL COORDINATE WITH ELECTRIC UTILITY.
- 18 UNDERGROUND TELEPHONE SERVICE, CONTRACTOR SHALL COORDINATE WITH TELEPHONE COMPANY.
- 19 GAS SERVICE, CONTRACTOR SHALL COORDINATE WITH GAS COMPANY.
- 20 OPEN CUT AND REPAIR ASPHALT PAVEMENT PER CITY STANDARDS TO MAKE UTILITY CONNECTION.
- 21 PROFESSIONALLY CORE DRILL AND RUBBER BOOT EXISTING SANITARY SEWER MANHOLE PER CITY STANDARDS, CONTRACTOR SHALL FIELD VERIFY SIZE, LOCATION AND ELEVATION OF EXISTING SANITARY SEWER PRIOR TO ANY CONSTRUCTION TO ENSURE REQUIRED PIPE SLOPE, COVER AND CLEARANCES CAN BE ACHIEVED AND COORDINATE ALL WORK WITH CITY.
- 22 PROVIDE 3/4" WATER SERVICE WITH HOSE BIB PER STARBUCKS STANDARDS COORDINATE WITH PLUMBING PLANS AND OWNER.

NOTE TO CONTRACTOR:
GENERAL CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES FOR VERIFICATION OF EXACT LOCATION AND DEPTH PRIOR TO ANY CONSTRUCTION.

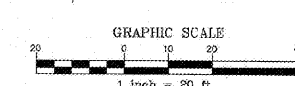
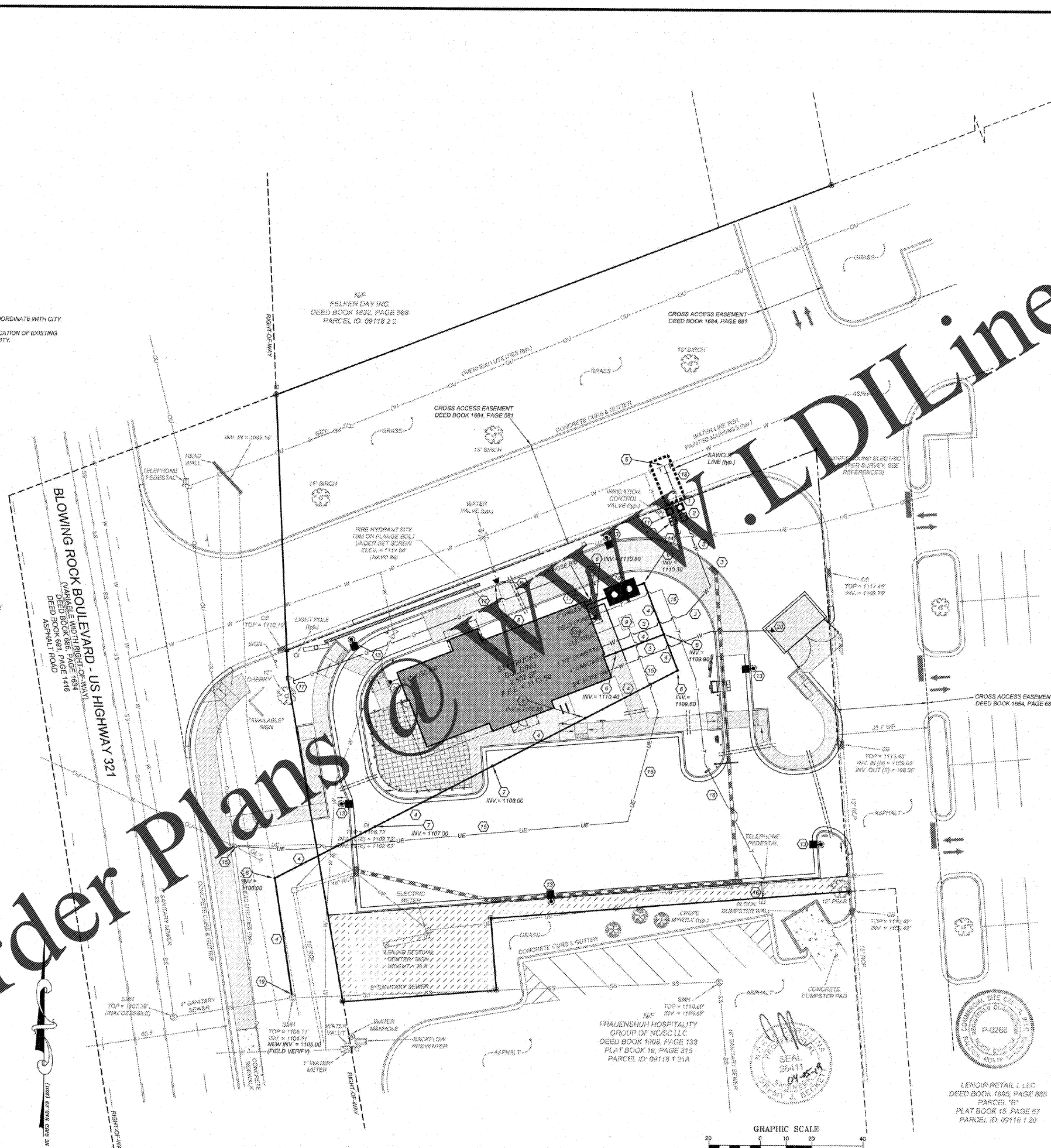
UTILITY INFORMATION SHOWN IS A COMBINATION OF SURVEY AND COUNTY AS-BUILTS.



Know what's below.
Call before you dig.
nc811.org or 1-800-632-4949

UTILITY LEGEND

- | | | | |
|-----------|--|---|-------------------------|
| --- O --- | OVERHEAD UTILITIES | ● | SEWER CLEAN OUT |
| --- S --- | SANITARY SEWER | ● | FIRE HYDRANT ASSEMBLY |
| --- U --- | UNDERGROUND ELECTRIC | ● | SANITARY SEWER MANHOLE |
| --- T --- | TELEPHONE LINE | ● | POLE MOUNTED AREA LIGHT |
| --- G --- | GAS LINE | ● | WATER METER |
| --- W --- | WATER LINE | ● | BACKFLOW PREVENTER |
| --- I --- | IRRIGATION SLEEVE
(2" 4" PVC, COORDINATE
WITH IRRIGATION CONTRACTOR) | ● | SIAMESE CONNECTION |
| ● | UTILITY POLE | ● | WATER VALVE |
| | | ● | GREASE TRAP |



- UTILITY NOTES:**
1. UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXACT LOCATIONS OF EXISTING UTILITIES AND IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITIES, EITHER PUBLIC OR PRIVATE, SHOWN HEREON OR NOT SHOWN HEREON. ANY REPAIRS SHALL BE DONE TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY.
 2. THE GENERAL CONTRACTOR SHALL CONFIRM ALL NEW UTILITY TAP LOCATIONS WITH THE UTILITY OWNERS. ALL FEES SHALL BE THE RESPONSIBILITY OF DEVELOPER.
 3. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.
 4. NEW LOT LIGHT FOUNDATION BASES, CONDUIT AND WIRING ARE BY THE GENERAL CONTRACTOR. POLES, FIXTURES, ANCHOR BOLTS & HARDWARE SHALL BE COORDINATED WITH THE OWNER AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
 5. ALL NEW LOT LIGHTS AND THE MAIN IDENTIFICATION SIGN SHALL HAVE A MINIMUM 10 FEET CLEARANCE FROM ALL OVERHEAD UTILITIES.
 6. GENERAL CONTRACTOR IS RESPONSIBLE FOR PERMITS AND/OR APPROVALS NECESSARY FOR ANY WORK IN ROADWAY OR RIGHT-OF-WAY.
 7. ALL TRENCH EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH TRENCH BACKFILL DETAIL SHOWN ON THESE PLANS.
 8. MINIMUM COVER DEPTHS SHALL BE 36" UNLESS OTHERWISE SHOWN OR NOTED ON THESE PLANS.
 9. ALL MANHOLE VALVES AND ANCHORMENT FRAMES SHALL BE SET TO FINISH GRADE AFTER PAVING.
 10. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS. TRENCHES SHALL BE SHORED IN ACCORDANCE WITH OSHA.
 11. THE MINIMUM SLOPE FOR SANITARY SEWER LINES SHALL BE AS FOLLOWS: 1) 1/4" PER 4' FOR 4" LINES AND 2) 1/8" PER 4' FOR 6" LINES. CLEANOUTS SHALL BE PLACED AT 7' INTERVALS.
 12. ALL WATER LINES SHALL HAVE A FINAL COVER DEPTH OF 3'-0" IN NON-TRAFFIC AREAS AND 4'-0" MINIMUM IN TRAFFIC AREAS UNLESS SPECIFICALLY NOTED OTHERWISE.
 13. ALL SEWER LINES SHALL HAVE A FINAL COVER DEPTH 4'-0" IN NON-TRAFFIC AREAS AND 5'-0" MINIMUM IN TRAFFIC AREAS UNLESS SPECIFICALLY NOTED OTHERWISE.
 14. SANITARY SEWER SERVICES SHALL BE PVC SDR 35 TO RW, THEN PVC SCH. 40 TO BUILDING WATER SERVICE SHALL BE TYPE "K" COPPER.
 15. CABLE TV SERVICE ROUTING IS NOT PART OF THIS PLAN, CONTRACTOR TO COORDINATE WITH CABLE COMPANY.
 16. EXISTING MANHOLES SHOULD BE FIELD VERIFIED FOR RIMS AND INVERTS.
 17. ALL WORK SHALL BE GOVERNED BY THE LATEST EDITIONS OF THE STATE MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, BUILDING CODE, ENERGY CONSERVATION, HANDICAP ACCESSIBILITY, NATIONAL ELECTRICAL CODES AND NATIONAL FIRE PROTECTION ASSOCIATION CODES AND AS ADOPTED BY THE AUTHORITIES HAVING JURISDICTION.
 18. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED.
 19. CONTRACTOR SHALL GUARANTEE, FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF SYSTEMS BY OWNER, EACH AND EVERY PIECE OF APPARATUS WHICH HAS BEEN INSTALLED UNDER THIS CONTRACT.
 20. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANSMETHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
 21. OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS, FINAL RULE 29CFR PART 1926, SUBPART "F" APPLIES TO ALL EXCAVATIONS EXCEEDING 3 FEET IN DEPTH.
 22. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
 23. EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED PRIOR APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONTRACTOR SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO THE SUBSTITUTION OF ALTERNATE EQUIPMENT.
 24. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
 25. ONLY SEWAGE NOT CONTAINING GREASE IS ALLOWED TO BYPASS THE GREASE TRAP.
 26. ALL SANITARY SEWER SERVICES AND STORM DRAIN PIPING 8" IN DIAMETER OR SMALLER SHALL BE SCH. 40 PVC WITH ADHESIVE WELDED JOINTS, UNLESS SPECIFIED OTHERWISE OR REQUIRED BY LOCAL GOVERNING MUNICIPALITY. MINIMUM SLOPES ON SANITARY SEWER SERVICES: 4" - 1/4" PER 4' - 1/8" PER 4'.
 27. BELOW GRADE WATER SERVICE PIPING SHALL BE TYPE "K" HARD DRAWN COPPER TUBING WITH SILVER SOLDER JOINTS. SOLDER CONTAINING LEAD SHALL NOT BE USED FOR ANY PURPOSE ON THIS PROJECT, WHERE PIPING IS REQUIRED TO RUN BELOW BUILDING SLAB, IT SHALL BE INSTALLED WITHOUT JOINTS BELOW SLAB.
 28. WATER PIPING SHALL BE CONNECTED TO BUILDING STUBS, VERIFY LOCATIONS PRIOR TO BEGINNING WATER PIPE INSTALLATION.
 29. WASTE PIPING SHALL BE CONNECTED TO BUILDING STUBS, VERIFY LOCATIONS AND INVERTS PRIOR TO BEGINNING ANY WASTE PIPE INSTALLATION.
 30. CONTRACTOR SHALL NOTIFY NORTH CAROLINA "ONE CALL" AT 800-632-4949 AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE UTILITIES LOCATED. CONTRACTOR SHALL NOTIFY ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENTLY.
 31. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF LENOIR PUBLIC UTILITIES AND CROSS CONNECTION CONTROL REGULATIONS AND STANDARDS.
 32. SITE UTILITY CONTRACTOR TO PROVIDE WATER, SANITARY SEWER, AND ROOF DRAIN LEADERS TO WITHIN 5 FEET OF THE BUILDING. CONTRACTOR SHALL COORDINATE SITE PLAN CONNECTIONS WITH THE ARCHITECTURAL BUILDING PLANS.
 33. SANITARY CLEANOUTS SHALL BE PLACED NO MORE THAN 75 FEET APART. CLEAN OUTS LOCATED IN PAVEMENT AREAS SHALL HAVE HEAVY DUTY TRAFFIC RATED CONSTRUCTION.
 34. CONNECTION OF SANITARY SEWER SERVICE TO AN EXISTING MANHOLE SHALL COMPLY WITH THE CITY OF LENOIR STANDARDS, INCLUDING CORE DRILL FOR OPENING INTO MANHOLE AND INSTALL WITH FLEXIBLE BOOT. IF PAVEMENT CUT IS REQUIRED, CONTRACTOR SHALL PATCH PAVEMENT WITH A SECTION TO MATCH EXISTING PAVEMENT: 3" x 2'-8" ABC OR BETTER.
 35. RELATION OF WATER MAINS TO SEWERS:
 - A. LATERAL SEPARATION OF SEWER AND WATER MAINS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10 FOOT LATERAL SEPARATION. IN WHICH CASE:
 1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, OR
 2. THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER LINE WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND ABOVE THE TOP OF THE SEWER.
 - B. CROSSING A WATER MAIN OVER A SEWER MAIN: 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 18 INCHES ABOVE THE TOP OF THE SEWER MAIN, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 18 INCH VERTICAL SEPARATION. IN WHICH CASE BOTH THE WATER MAIN AND SEWER MAIN 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.
 - C. CROSSING A WATER MAIN UNDER A SEWER MAIN: WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER MAIN BOTH THE WATER MAIN AND SEWER MAIN 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.
 - D. CROSSING A SEWER LINE OVER OR UNDER A STORM DRAIN: WHENEVER IT IS NECESSARY FOR A SEWER LINE TO CROSS A STORM DRAIN PIPE, THE SEWER LINES SHALL BE LAID AT SUCH AN ELEVATION THAT THE OUTSIDE OF THE SEWER LINE NEAREST TO THE CURB SIDE OF THE STORM DRAIN PIPE SHALL MAINTAIN A 12 INCH CLEAR SEPARATION DISTANCES, OR ENCASED IN EITHER CONCRETE OR DUCTILE IRON PIPE FOR AT LEAST 5 FEET ON EITHER SIDE OF THE CROSSING.
 36. UNDERGROUND CONDUITS TO SIGNS, LOT LIGHTS, ETC., SHALL BE PLACED IN GRASS OR LANDSCAPE AREAS WHENEVER POSSIBLE. THE LOCATION OF THE CONDUIT AS SHOWN ON THESE PLANS SHALL BE CONSIDERED TO BE SCHEMATIC WITH ACTUAL LOCATION TO BE VERIFIED BY THE GENERAL CONTRACTOR, PVC SCH. 40 SLEEVES SHALL BE INSTALLED FOR ALL CONDUIT CROSSING UNDER PAVED AREAS.
 37. SEE ELECTRICAL SHEETS FOR SIZE OF CONDUIT AND WIRE ON ALL ELECTRICAL SERVICE.
 38. TRANSFORMER BY ELECTRIC COMPANY, GENERAL CONTRACTOR TO PROVIDE PAD, REFER TO ELECTRIC COMPANY SPECIFICATIONS FOR PAD CONSTRUCTION.

PROJECT NO.	GEM-1806
FILENAME:	GEM1806-UP
DRAWN BY:	RCN
SCALE:	1" = 20'
DATE:	11-13-18
SHEET NO.	C-4

REV	DATE	DESCRIPTION
1	04-01-2019	CITY COMMENTS #1

CLIENT:	GENCAP DEVELOPMENT 210 WEST FOURTH STREET SUITE 200 WINSTON-SALEM, NC 27101 PHONE: (336) 724-0163
STARBUCKS	350 BLOWING ROCK BOULEVARD LENOIR, CALDWELL COUNTY NORTH CAROLINA
UTILITY PLAN	

COMMERCIAL SITE DESIGN

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