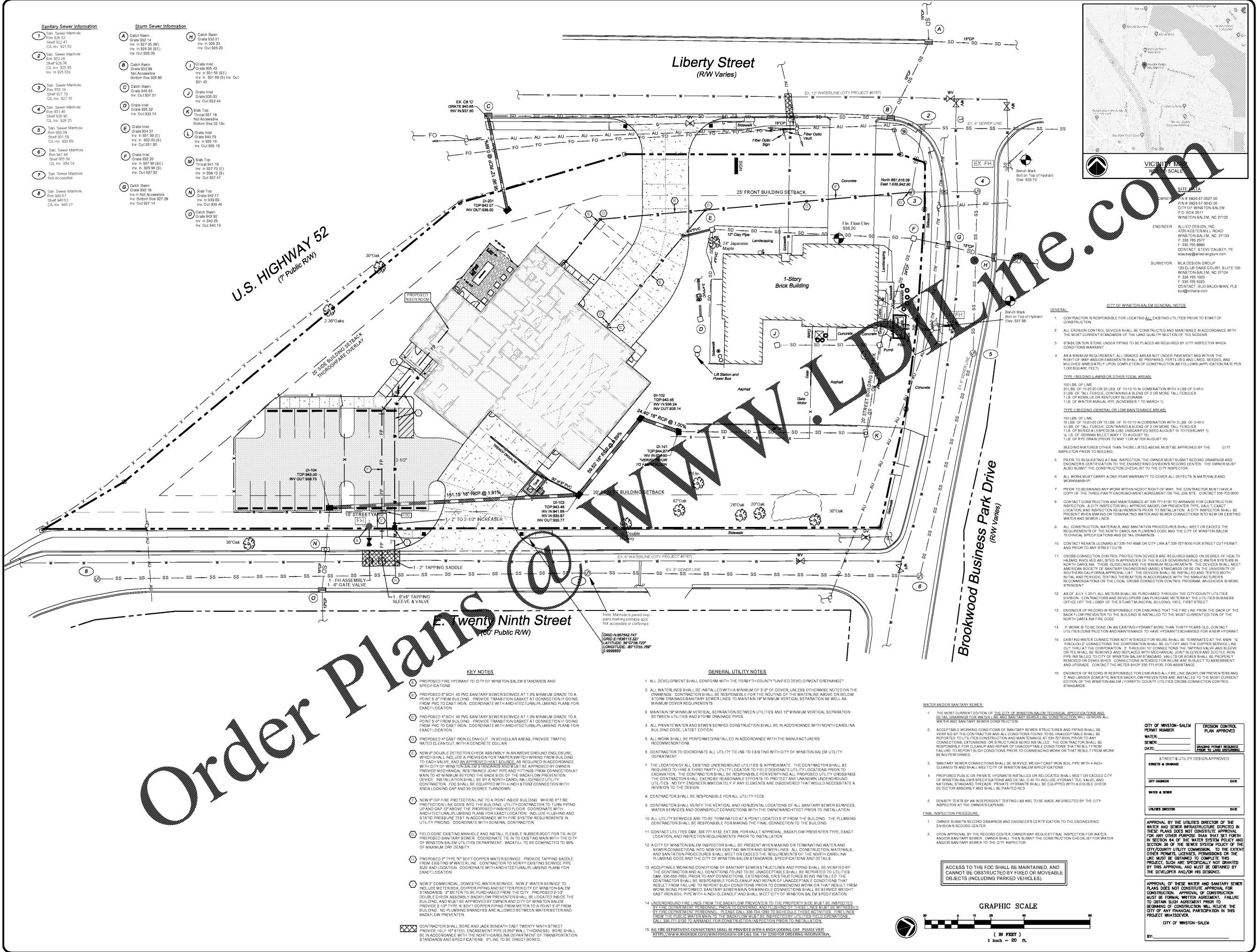


Sanitary Sewer Information		
1	San. Sewer Manhole Rim 920.57 Sheet 921.47 CL Inv. 921.82	
2	San. Sewer Manhole Rim 920.29 Sheet 921.39 CL Inv. 925.92	
3	San. Sewer Manhole Rim 923.29 Sheet 921.79 CL Inv. 927.15	
4	San. Sewer Manhole Rim 931.46 Sheet 928.30 CL Inv. 928.25	
5	San. Sewer Manhole Rim 939.09 Sheet 931.59 CL Inv. 930.89	
6	San. Sewer Manhole Rim 941.44 Sheet 935.34 CL Inv. 934.74	
7	San. Sewer Manhole Not Accessible	
8	San. Sewer Manhole Rim 946.67 Sheet 940.62 CL Inv. 940.27	

Storm Sewer Information		
A	Catch Basin Grate 932.41 Inv. In 927.05 (W) Inv. Out 926.09 (E)	
B	Catch Basin Grate 932.86 Not Accessible Bottom Box 926.85	
C	Catch Basin Grate 945.85 Inv. Out 937.01	
D	Catch Basin Grate 935.32 Not Accessible Bottom Box 933.19	
E	Grate Inlet Grate 934.27 Inv. In 937.01 (E) Inv. In 935.19 Inv. Out 935.19	
F	Grate Inlet Grate 932.26 Inv. In 937.01 (E) Inv. In 938.12 (S) Inv. Out 937.92	
G	Catch Basin Grate 932.19 Inv. Not Accessible Bottom Box 927.29 Inv. Out 927.14	
H	Catch Basin Grate 932.01 Inv. In 926.23 Inv. Out 925.23	
I	Grate Inlet Grate 933.43 Inv. In 931.58 (E) Inv. In 931.69 (S) Inv. Out 931.43	
J	Grate Inlet Grate 935.00 Inv. Out 932.44	
K	Slab Top Throat 937.18 Not Accessible Bottom Box 933.19	
L	Grate Inlet Grate 942.70 Inv. In 935.19 Inv. Out 935.19	
M	Slab Top Throat 941.16 Inv. In 937.01 (E) Inv. In 938.12 (S) Inv. Out 937.47	
N	Slab Top Grate 942.77 Inv. In 938.69 Inv. Out 939.46	
O	Catch Basin Grate 942.93 Inv. In 940.25 Inv. Out 940.19	

Sanitary Sewer Information		
1	San. Sewer Manhole Rim 920.57 Sheet 921.47 CL Inv. 921.82	
2	San. Sewer Manhole Rim 920.29 Sheet 921.39 CL Inv. 925.92	
3	San. Sewer Manhole Rim 923.29 Sheet 921.79 CL Inv. 927.15	
4	San. Sewer Manhole Rim 931.46 Sheet 928.30 CL Inv. 928.25	
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7	San. Sewer Manhole Not Accessible	
8	San. Sewer Manhole Rim 946.67 Sheet 940.62 CL Inv. 940.27	



Order Plans

KEY NOTES

- PROPOSED FIRE HYDRANT TO CITY OF WINSTON-SALEM STANDARDS AND SPECIFICATIONS.
- PROPOSED 8" SCH. 40 PVC SANITARY SEWER SERVICE AT 1% MINIMUM GRADE TO A POINT 5'-0" FROM BUILDING. PROVIDE TRANSITION CASKET AT CONNECTION GOING FROM PVC TO CAST IRON. COORDINATE WITH ARCHITECTURAL/LANDSCAPING PLANS FOR EXACT LOCATION.
- PROPOSED 4" SCH. 40 PVC SANITARY SEWER SERVICE AT 1% MINIMUM GRADE TO A POINT 5'-0" FROM BUILDING. PROVIDE TRANSITION CASKET AT CONNECTION GOING FROM PVC TO CAST IRON. COORDINATE WITH ARCHITECTURAL/LANDSCAPING PLANS FOR EXACT LOCATION.
- PROPOSED 4" CAST IRON CLEAN OUT. IN VEHICULAR AREAS, PROVIDE TRAFFIC RATED CLEAN OUT WITH A CONCRETE COLLAR.
- NEW 4" DOUBLE DETECTION CHECK ASSEMBLY IN AN ABOVE GROUND ENCLOSURE. PRICE SHALL INCLUDE A PROVIDER FOR TAMPERS SWITCH WIRING FROM BUILDING TO EACH VALVE, AND AN APPROVED HEAT SOURCE, AS REQUIRED IN ACCORDANCE WITH CITY OF WINSTON-SALEM STANDARDS AND SPECIFICATIONS. PROVIDER SHALL PROVIDE MECHANICAL NES TRAINED JOINT PIPE AND FITTINGS FROM CONNECTION AT POINT TO 4" MINIMUM BEYOND THE BACK SIDE OF THE BACKFLOW PREVENTION DEVICE. INSTALLATION SHALL BE BY A NORTH CAROLINA LICENSED UTILITY CONTRACTOR. FDC SHALL BE EQUIPPED WITH 4" INCH 5" STORAGE CONNECTION WITH KNOCK LOCK CAP AND 32 DECIBEL TURN DOWN.
- NEW 4" FIP FIRE PROTECTION LINE TO A POINT INSIDE BUILDING. WHERE 4" FIP FIRE PROTECTION LINE GOES INTO THE BUILDING, UTILITY CONTRACTOR TO TURN PIPING UP AND CAP 12" ABOVE THE PROPOSED FINISHED FLOOR. COORDINATE WITH ARCHITECTURAL/LANDSCAPING PLANS FOR EXACT LOCATION. INCLUDE FLUSHING AND STATIC PRESSURE TEST IN ACCORDANCE WITH FIRE SYSTEM REQUIREMENTS IN UTILITY PRINTING. COORDINATE WITH GENERAL CONTRACTOR.
- FIELD CORE EXISTING MANHOLE AND INSTALL FLEXIBLE RUBBER BOOT FOR TIE-IN OF PROPOSED SANITARY SEWER. COORDINATE TIE-IN TO EXISTING MAN WITH THE CITY OF WINSTON-SALEM UTILITIES DEPARTMENT. BACKFILL TO BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY.
- PROPOSED 2" TYPE "K" SOFT COPPER WATER SERVICE. PROVIDE TAPPING SADDLE FROM EXISTING 8" WATER LINE. CONTRACTOR TO VERIFY EXISTING SERVICE PIPE SIZE AND LOCATION. COORDINATE WITH ARCHITECTURAL/LANDSCAPING PLANS FOR EXACT LOCATION.
- NEW 2" COMMERCIAL DOMESTIC WATER SERVICE. NEW 2" WATER SERVICE TO INCLUDE METERS, COPPER PIPING AND SETTER PER CITY OF WINSTON-SALEM STANDARDS. 2" WATER SERVICE TO BE APPROVED BY CITY OF WINSTON-SALEM. DOUBLE CHECK ASSEMBLY BACKFLOW PREVENTER SHALL BE LOCATED INSIDE THE BUILDING, AND MUST BE APPROVED BY OWNER AND CITY OF WINSTON-SALEM. PROVIDE 2" TYPE "K" SOFT COPPER PIPING FROM METER TO A POINT 5'-0" FROM BUILDING. NO PLUMBING BRANCHES ARE ALLOWED BETWEEN WATER METER AND BACKFLOW PREVENTER.
- CONTRACTOR SHALL BORE AND JACK BENEATH EAST TWENTY NINTH STREET. PROVIDE 1/4" X 1/2" STEEL ENCASMENT PIPE 18" DIAMETER. THICKNESS, SIZES SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. 2" LINE TO BE DIRECT BORED.

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LATITUDE 36°07'34.722"
LONGITUDE -80°17'30.789"
0.99998925

GENERAL UTILITY NOTES

- ALL DEVELOPMENT SHALL COMPLY WITH THE FORTY-FIFTH COUNTY UNIFIED DEVELOPMENT ORDINANCE.
- ALL WATER LINES SHALL BE INSTALLED WITH A MINIMUM OF 3'-0" OF COVER, UNLESS OTHERWISE NOTED ON THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESULTING UTILITY ABOVE OR BELOW STORM DRAINAGE/SANITARY SEWER LINES TO MAINTAIN 18" MINIMUM VERTICAL SEPARATION AS WELL AS MINIMUM COVER REQUIREMENTS.
- MAINTAIN 18" MINIMUM VERTICAL SEPARATION BETWEEN UTILITIES AND 12" MINIMUM VERTICAL SEPARATION BETWEEN UTILITIES AND STORM DRAINAGE PIPES.
- ALL PRIVATE WATER AND SEWER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH NORTH CAROLINA BUILDING CODE, LATEST EDITION.
- ALL WORK SHALL BE PERFORMED/INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- CONTRACTOR TO COORDINATE ALL UTILITY TIES TO EXISTING WITH CITY OF WINSTON-SALEM UTILITY DEPARTMENT.
- THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL BE REQUIRED TO HIRE A THIRD PARTY UTILITY LOCATOR TO FIELD DETERMINE UTILITY LOCATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL PROPOSED UTILITY CROSSINGS. THE CONTRACTOR SHALL EXERCISE REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND UTILITIES. NOTIFY ENGINEER IMMEDIATELY IF ANY ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE A REVISION TO THE DESIGN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY FEES.
- CONTRACTOR SHALL VERIFY THE VERTICAL AND HORIZONTAL LOCATIONS OF ALL SANITARY SEWER SERVICES, WATER SERVICES AND DOWNPOUT CONNECTIONS WITH THE OWNERS/ARCHITECT PRIOR TO INSTALLATION.
- ALL UTILITY SERVICES ARE TO BE TERMINATED AT A POINT LOCATED 5'-0" FROM THE BUILDING. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE FINAL CONNECTION TO THE BUILDING.
- CONTACT UTILITIES DEPT. 336-774-1332, EXT. 209, FOR VOLT APPROVAL, BACKFLOW PREVENTING TYPE, EXACT LOCATION AND INSPECTION REQUIREMENTS PRIOR TO INSTALLATION.
- A CITY OF WINSTON-SALEM INSPECTOR SHALL BE PRESENT WHEN MAKING OR REMOVING WATER AND SEWER CONNECTIONS INTO NEW OR EXISTING WATER AND SEWER LINES. ALL CONSTRUCTION MATERIALS, AND SANITATION PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NORTH CAROLINA BUILDING CODE AND THE CITY OF WINSTON-SALEM STANDARDS, SPECIFICATIONS AND DETAILS.
- ACCEPTABLE WORKING CONDITIONS OF SANITARY SEWER STRUCTURES AND PIPING SHALL BE VERIFIED BY THE CONTRACTOR AND ALL CONDITIONS FOUND TO BE UNACCEPTABLE SHALL BE REPORTED TO UTILITIES DEPT. 336-774-1332 PRIOR TO ANY CONNECTIONS, EXTENSIONS, OR STRUCTURES BEING INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REPAIR OF UNACCEPTABLE CONDITIONS THAT RESULT FROM FAILURE TO REPORT SUCH CONDITIONS PRIOR TO COMMENCING WORK OR THAT RESULT FROM WORK BEING PERFORMED. SANITARY SEWER MAIN OR MANHOLE CONNECTIONS SHALL BE SERVICE WEIGHT CAST IRON SLOPE PIPE WITH 4" INCH CLEANOUT AND SHALL MEET CITY OF WINSTON-SALEM SPECIFICATION.
- UNDERGROUND FIRE LINES FROM THE BACKFLOW PREVENTER TO THE PROPERTY SIDE MUST BE INSPECTED BY FIRE DEPARTMENT PERSONNEL PRIOR TO ANY CONNECTIONS. AND LISTING OF THESE LINES MUST BE OBTAINED BY FIRE DEPARTMENT PERSONNEL. PLEASE CALL 336-774-1332 TO SCHEDULE THESE ACTIVITIES. FIRE LINES FROM THE PUBLIC WATER MAIN TO THE BACKFLOW PREVENTER SHALL BE 2" TYPE "K" UTILITY SERVICE. FIRE CONNECTIONS SHALL 336-774-1332 TO ASSURE PROPER INSPECTION PRIOR TO INSTALLATION.
- ALL FIRE DEPARTMENT CONNECTIONS SHALL BE PROVIDED WITH A KNOX LOCKING CAP. PLEASE VISIT <https://www.knoxco.com/winston-salem/> OR CALL 336-734-1200 FOR ORDERING INFORMATION.

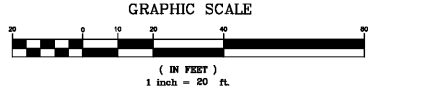
WATER AND/OR SANITARY SEWER

- THE MOST CURRENT EDITION OF THE CITY OF WINSTON-SALEM TECHNICAL SPECIFICATIONS AND DETAILS DRAWINGS FOR WATER LINE AND SANITARY SEWER LINE CONSTRUCTION WILL GOVERN ALL WATER AND SANITARY SEWER CONSTRUCTION.
- ACCEPTABLE WORKING CONDITIONS OF SANITARY SEWER STRUCTURES AND PIPING SHALL BE VERIFIED BY THE CONTRACTOR AND ALL CONDITIONS FOUND TO BE UNACCEPTABLE SHALL BE REPORTED TO UTILITIES CONSTRUCTION AND MAINTENANCE AT 336-774-1332 PRIOR TO ANY CONNECTIONS, EXTENSIONS, OR STRUCTURES BEING INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REPAIR OF UNACCEPTABLE CONDITIONS THAT RESULT FROM FAILURE TO REPORT SUCH CONDITIONS PRIOR TO COMMENCING WORK OR THAT RESULT FROM WORK BEING PERFORMED.
- SANITARY SEWER CONNECTIONS SHALL BE SERVICE WEIGHT CAST IRON SLOPE PIPE WITH 4" INCH CLEANOUTS AND SHALL MEET CITY OF WINSTON-SALEM SPECIFICATIONS.
- PROPOSED PRIVATE HYDRANTS INSTALLED OR RELOCATED SHALL MEET OR EXCEED CITY OF WINSTON-SALEM SPECIFICATIONS AND DETAIL C-40 TO INCLUDE HYDRANT TIE, VALVE, AND NATIONAL STANDARD THREADS. PRIVATE HYDRANTS SHALL BE EQUIPPED WITH A DOUBLE CHECK DETECTOR ASSEMBLY AND SHALL BE PAINTED RED.
- DESIGN TESTS BY AN INDEPENDENT TESTING LAB ARE TO BE MADE AS DIRECTED BY THE CITY INSPECTOR AND SHALL BE AT THE OWNERS EXPENSE.

FINAL INSPECTION PROCEDURE

- OWNER SUBMITS RECORD DRAWINGS AND ENGINEERS CERTIFICATION TO THE ENGINEERING DIVISION'S RECORD CENTER.
- UPON APPROVAL BY THE RECORD CENTER, OWNER MAY REQUEST AN INSPECTION FOR WATER AND/OR SANITARY SEWER. OWNER SHALL THEN SUBMIT THE CONSTRUCTION CHECKLIST FOR WATER AND/OR SANITARY SEWER TO THE CITY INSPECTOR.

ACCESS TO THE FDC SHALL BE MAINTAINED, AND CANNOT BE OBSTRUCTED BY FIXED OR MOVABLE OBJECTS (INCLUDING PARKED VEHICLES).

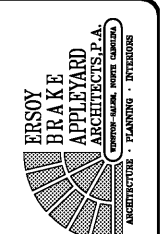


CITY OF WINSTON-SALEM		EROSION CONTROL PLAN APPROVED	
PERMIT NUMBER		DATE	
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APPROVAL BY THE UTILITIES DIRECTOR OF THE WATER AND SEWER INFRASTRUCTURE DEPARTMENT IN THESE CASES DOES NOT CONSTITUTE APPROVAL FOR ANY OTHER PURPOSE. THAT SET FORTH IN SECTION 64 OF THE WATER SYSTEM POLICY OF THE CITY/COUNTY UTILITY COMMISSION. TO THE EXTENT OTHER PERMITS, LICENSES, PERMISSIONS OR THE LIKE MUST BE OBTAINED TO COMPLETE THIS PROJECT, SUCH ARE SPECIFICALLY NOT GRANTED BY THIS APPROVAL AND MUST BE OBTAINED BY THE DEVELOPER AND/OR HIS DESIGNEE.

APPROVAL OF THESE WATER AND SANITARY SEWER PLANS DOES NOT CONSTITUTE APPROVAL FOR CONSTRUCTION. APPROVAL OF CONSTRUCTION MUST BE FORMAL WRITTEN AGREEMENT. FAILURE TO OBTAIN SUCH AGREEMENT PRIOR TO COMMENCING OF CONSTRUCTION WILL HOLD THE CITY OF WINSTON-SALEM PARTICIPATION IN THIS PROJECT.

CITY OF WINSTON-SALEM



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Phone: (336) 760-8886
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http://www.allieddesign.com
PRO LICENSE C-1691



City of Winston-Salem
FIRE STATION 3
WINSTON-SALEM • NORTH CAROLINA

SITE UTILITY PLAN

THESE DRAWINGS AND REQUIREMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT UNLESS OTHERWISE SPECIFIED. THESE DRAWINGS ARE NOT TO BE USED FOR ANY OTHER PROJECT OR FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

DATE: 02-12-21
REVISION: 03-12-21

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