2022 TOWN OF LILLINGTON REQUIRED UTILITY NOTES

The following utility notes should be added to the coversheet of utility plans for projects located in the Town of Lillington(TOL):

WATER

A. The Town of Lillington Fire Department shall approve all hydrant types and locations in new subdivisions. Hydrants Specifications:
Hydrants shall be Mueller Centurion or approved equal, and conform to the AWWA C502 with a minimum valve opening of 5-1/4- inches. Hydrants shall be furnished with a 4-1/2- inch steamer and double 2-1/2- inch hose connections with caps and chains, National Standard Threads, mechanical joint, 1-1/2-inch pentagonal operating nut, open left, painted fire hydrant red, bronze-to-bronze seating, a minimum 3-V2 foot bury depth with a breakaway ground line flange and breakaway rod coupling

*All fire hydrants listed above must have "American National Fire Hose Connection Screw Threads" NST/NH hose threads.

B. Fire hydrants are installed at certain elevations. Any grade change near any fire hydrant, which impedes its operation, shall become the responsibility of the Utility Contractor for correction.

C. The Professional Engineer (PE) shall obtain and provide the NCDEQ "Authorization to Construct" permit to the Utility Contractor before the construction of the water line shall begin.
The Utility Contractor must post a copy of the NCDEQ "Authorization to Construct" permit issued by the North Carolina Department of Environmental Quality (NCDEQ) on site prior to the start of construction. The permit must be maintained on site throughout the entire construction process of the proposed water lines that will serve this project.

D. The Utility Contractor shall notify The Town of Lillington and the Professional Engineer (PE) at least two days prior to construction commencing. The Utility Contractor must schedule a pre-construction conference with The Engineer of Record, Town Engineer, and Public Works Director (2) days before construction will begin and the Utility Contractor must coordinate with The Engineer of Record and the Town of Lillington for regular inspection visitations and acceptance of the water system(s). Construction work shall be performed only during the normal working hours of the TOL which is 8:00 am – 5:00 pm Monday through Friday. Holiday and weekend work is not permitted by TOL.

E. The Professional Engineer (PE) shall provide TOL and the Utility Contractor with a set of NCDEQ approved plans marked

"Released for Construction" The Registered Land Surveyor (RLS) should stake out all lot corners and the grade stakes for the proposed finish grade for each street before the Utility Contractor begins construction of the water line(s). The grade stakes should be set with a consistent offset from the street centerline so as not to interfere with the street grading and utility construction.

F. The Utility Contractor shall provide the TOL with material submittals and shop drawings for all project materials prior to the construction of any water line extension(s), and associated water services in the Town of Lillington. The materials to be used on the project must meet the established specifications of TOL, Approved Plans, and approved by the Engineer of Record prior to construction. All substandard materials or materials not approved for use in the Town of Lillington found on the project site must be removed immediately when notified by the Town of Lillington

G. The water main(s), fire hydrants, service lines, meter setters and all associated appurtenances shall be constructed in strict in accordance with the standard specifications of the TOL. The Utility Contractor shall be responsible to locate the newly installed water main(s), water service lines and all associated meter setters and meter boxes for other utility companies and their contractors until the new water main(s) have been approved by the North Carolina Department of Environmental Quality, Division of Environmental Health, Public Water Supply Section (NCDEQ, DEH, PWS) and accepted by the TOL.

H. Prior to acceptance, all services will be inspected to ensure that they are installed at the proper depth. All meter boxes must be flush with the ground level at finish grade and the meter setters must be a minimum of 8" below the meter box lid. Meter setters shall be centered in the meter box and supported by brick, block or stone.

I. The Utility Contractor shall provide the Professional Engineer (PE) and the Town of Lillington with a set of red line drawings identifying the complete water system installed for each project. The red line drawings should identify the materials, pipe sizes and approximate depths of the water lines as well as the gate valves, fire hydrants, meter setters, blow off assemblies and all associated appurtenances for all water line(s) constructed in the Town of Lillington. The red line drawings should clearly identify any deviations from the NCDEQ approved plans. All change orders must be approved by the TOL and the

Professional Engineer (PE) in writing and properly documented in the red line field drawings.

J. Potable water mains crossing other utilities must comply with Section 14, o. of the Town of Lillington Water Specifications. .

K. Potable water mains installed parallel to other utilities must comply with Section 14, o. of the Town of Lillington Water Specifications.

L. Meter setters shall be installed in pairs on every other lot line where possible to leave adequate space for other utilities to be installed at a later time. The meter setters shall be installed at least one (1') foot inside the right-of-way and at least three (3') to five (5') feet from the property line between the lots.

All meter boxes shall be constructed of cast iron with cast iron lids. Fiberglass or ABS plastic meter boxes may be used with approval of the Public Works Director. Town of Lillington Detailed Water Specifications Page 18

Meter boxes shall not be placed within the sidewalk or asphalt unless no other alternatives are available and approval is obtained by the Public Works Director

Meter boxes installed in locations exposed to vehicular traffic shall be H-20 traffic rated.

M. Master meters must be installed in concrete vaults sized for the meter assembly and associated appurtenances so as to provide at least eighteen (18") inches of clearance between the bottom of

the concrete vault and the bottom of the meter setter. The master meter must be provided test ports if the meter is not equipped with test ports from the manufacturer in accordance with the TOL established standard specifications and details. Ductile iron pipe must be used for the master meter vault piping and valve vault piping. The Utility Contractor must provide shop drawings for the meter vaults to the Town of Lillington prior to ordering the concrete vaults.

N. The Utility Contractor will install water service pipe for 3/4 - to 2-inch connections shall be CTS Poly Tubing or type "K" soft copper with no joints or couplings in the right-of-way. On these water services, the fittings shall be NL-brass compression type fittings. Service lines that cross under the pavement inside a schedule 40 PVC conduit to allow for removal and replacement in the future. Two (2) independent ¾" water service lines may be installed inside one (1) – two (2") inch schedule 40 PVC conduit or two (2) independent 1" water service lines may be installed inside one
(1) – three (3") inch schedule 40 PVC conduit, but each water service shall be tapped directly to the water main. Split services are not allowed by TOL. If sidewalks are proposed, the conduit must extend past the sidewalk.

O. The water main(s), fire hydrants, gate valves, service lines, meter setters and associated appurtenances must be rated for 200 psi and hydrostatically pressure tested to 200 psi. The hydrostatic pressure test(s) must be witnessed by the Town Engineer or Public Works Director. The Utility Contractor must notify the TOL when they are ready to begin filling in lines and coordinate with the TOL to witness all pressure testing.

P. The Utility Contractor shall conduct a pneumatic pressure test using compressed air or other inert gas on the stainless steel tapping sleeve(s) prior to making the tap on the existing water main. When a tapping sleeve and valve are being used, the valve, sleeve and machine assembly shall be air tested to hold at 200 psi for a five-minute duration in the presence of the inspector prior to drilling or tapping the main. All tap coupons shall be given to the Town of Lillington inspector. The valve shall be in the closed position during the testing. All new water line extensions must begin with a resilient wedge type gate valve sized equal to the diameter of the new water line extension in order to provide a means of isolation between the Town of Lillington's existing water mains and the new water line extensions under construction.

Q. All water mains shall be pressure class or thickness class of either ductile iron, or PVC pipe designed in accordance with AWWA Standards C-150 and C-151(ductile iron) or AWWA Standards C-900 and C-905 (PVC). Design shall be done for external and internal pressures separately, using the larger of the two for the design thickness. Ductile iron pipe shall be designed and manufactured in accordance with AWWA C150 and C151. . All pipes must be protected during loading, transport, unloading, staging, and installation. PVC pipe must be protected from extended exposure to sunlight prior to installation.

R. All water mains will be flushed and disinfected in strict accordance with the standard specifications of the TOL. All water samples collected for bacteria testing

will be collected by the TOL and tested in the HRW Laboratory.

S. All fittings larger than two (2") inches diameter shall be ductile iron.. PVC pipe used for water mains shall be connected by slip joint or mechanical joint with restrained mechanical glands. Glued pipe joints are not allowed on PVC pipe used for water mains in the TOL.

T. The TOL requires that the Utility Contractor install tracer wire in the trench with all water lines. The tracer wire shall be 12 ga. insulated, solid copper conductor and it shall be terminated at the top of the valve boxes,manholes, and service boxes. No spliced wire connections shall be made underground on tracer wire installed in the TOL. The tracer wire may be secured with duct tape to the top of the pipe before backfilling.

U. The Utility Contractor will provide Professional Engineer (PE) and the TOL with a set of red line field drawings to identify the installed locations of the water line(s) and all associated services. All change orders must be pre-approved by the TOL and the Professional Engineer (PE) in writing and properly documented in the red line field drawings.

V. The Utility Contractor shall spot dig to expose each utility pipe or line which may conflict with construction of proposed water line extensions well in advance to verify locations of the existing utilities. The Utility Contractor shall provide both horizontal and vertical clearances to the Professional Engineer (PE) to allow the PE to adjust the water line design in order to avoid conflicts with existing underground utilities. The Utility Contractor shall coordinate with the utility owner and be responsible for temporary relocation and/or securing existing utility poles, pipes, wires, cables, signs and/or utilities including services in accordance with the utility owner requirements during water line installation, grading and street construction.

W. Prior to the commencement of any work within established utility easements or NCDOT right-of-ways the Utility Contractor is required to have a signed NCDOT encroachment agreement posted on site and notify all concerned utility companies in accordance with G.S. 87-102. The Utility Contractor must call the NC One Call Center at 811 to verify the location of existing utilities prior to the beginning of construction. The Utility Contractor will be responsible to repair any and all damages to the satisfaction of the related utility company.

X. The Utility Contractor shall provide the TOL with at least one (1) fire hydrant wrench and one (1) break-away flange kit for every subdivision with fire hydrants developed in the Town of Lillington. These items must be provided to TOL before the final inspection will be scheduled by the TOL. In addition, the Utility Contractor shall install a 4" x 4" concrete valve marker at the edge of the right-of-way to identify the location of each gate valve installed in the new water system with the exception of the fire hydrant isolation valves. The contractor shall measure the distance from the center of the concrete marker to the center of the valve box. This distance (in linear feet) shall be stamped on the brass plate located on the top of the concrete valve marker. In lieu of installing the concrete valve markers, the Utility Contractor may provide at least two measurements from two independent permanent above ground structures to the Professional Engineer (PE) in the red line drawings to identify the valve locations. The Professional Engineer (PE) must include these measurements in the As-Built Record Drawings submitted to the TOL.

Y. The Utility Contractor will be responsible for any and all repairs due to leakage damage from poor workmanship during the one
(1) year warranty period once the water system improvements have been accepted by the TOL. The TOL will provide maintenance and repairs when

requested and bill the Developer and/or Utility Contractor if necessary due to lack of response within 48 hours of notification of warranty work. The Utility Contractor will be responsible for any and all repairs due to damages resulting from failure to locate the new water lines and associated appurtenances for other utilities and their contractors until the water lines have been approved by NCDEQ and accepted by the TOL. The final inspection of water system improvements cannot be scheduled with the TOL until the streets have been paved; the rights-of-way and utility easements have been seeded and stabilized with an adequate stand of grass in place to prevent erosion issues on site.

AA The Engineer of Record is responsible to ensure that construction is, at all times, in compliance with accepted sanitary engineering practices and approved plans and specifications. No field changes to the approved plans are allowed without prior written approval by the TOL. A copy of each engineer's field report is to be submitted to the TOL as each such inspection is made on system improvements or testing is performed by the contractor. Water and sewer infrastructure must pass all tests required by the TOL specifications

and those of all applicable regulatory agencies. These tests include, but are not limited to: air test, vacuum test, mandrel test, visual test, pressure test, bacteriological test, etc. The TOL must be present during testing and all test results shall be submitted to the TOL. All tests must be satisfied before the final inspection will be scheduled with the TOL. The Engineer of Record must request in writing to schedule the final inspection once all construction is complete. The Developer's Engineer of Record and the TOL shall prepare a written punch list of any defects or deficiencies noted during the final inspection, should any exist. Upon completion of the punch list, the Developer's Engineer of Record will schedule another inspection. In the event the number of inspections performed by the TOL exceeds two, additional fees may be assessed to the Developer.

SANITARY SEWER

A. The Professional Engineer (PE) shall obtain and supply a copy of the sewer permit for the construction and operation of the wastewater collection system to the Utility Contractor before the construction of the sanitary sewer line, sewer lift station and associated force main shall begin. The Utility Contractor must post a copy of the sewer permit issued by the North Carolina Department of Environmental Quality (NCDEQ) on site prior to the start of construction. The permit must be maintained on site during the construction of the sewer system improvements.

B. The Utility Contractor shall notify The Town of Lillington (TOL) and the Professional Engineer (PE) at least two days prior to construction commencing. The Utility Contractor must schedule a pre-construction conference with the Engineer of Record, Town Engineer, and Public Works Director at least two (2) days before construction will begin and the Utility Contractor must coordinate with TOL for regular inspection visitations and acceptance of the wastewater system(s). Construction work shall be performed only during the normal working hours of TOL which is 8:00 am – 5:00 pm Monday through Friday. Holiday and weekend work is not permitted by TOL.

C. The Professional Engineer (PE) shall provide TOL with a set of NCDEQ approved plans marked "Released for Construction" at least two days prior to construction commencing. TOL will stamp plans as approved once final approvals have been received from all applicable agencies.

D. The Registered Land Surveyor (RLS) shall stake out all lot corners and establish grade stakes for the proposed finish grade for each street and sewer line before the Utility Contractor begins construction or

installation of the manholes, sanitary sewer gravity line(s), sewer lift stations and/or sanitary sewer force main(s). The grade stakes should be set with a consistent offset from the street centerline so as not to interfere with the street grading or utility construction.

E. The Utility Contractor shall provide the TOL with material submittals and shop drawings for all project materials prior to the construction of any gravity sewer line(s), manhole(s), sewer lift station(s) and associated force main(s) in the Town of Lillington. The materials to be used on the project must meet the established specifications of the TOL and be approved by the Engineer of Record prior to construction. All substandard materials or materials not approved for use in the TOL found on the project site must be removed immediately when notified by the TOL

F. The sanitary sewer lateral connections should be installed 90° (perpendicular) to the sanitary sewer gravity lines with schedule 40 PVC pipe unless C-900 DR-18 specified due to depths exceeding 12ft. The TOL requires the Utility Contractor to provide the Professional Engineer (PE) with accurate measurements for locating sanitary sewer service lateral and associated each sanitary sewer clean-out. These measurements should be taken from the nearest downstream manhole up along the sanitary sewer main to the in-line wye fitting (or tapping saddle) and then another measurement from the in-line wye fitting (or tapping
saddle) to the 4" x 4" long sweep combination wye fitting at the bottom of the sewer clean-out stack. These field measurements must be provided to the Professional Engineer (PE) in the red line drawings from the Utility Contractor for proper documentation in the As-Built Record Drawings submitted to the TOL.

G. The Utility Contractor shall be responsible to locate the newly installed sanitary sewer gravity line(s), sanitary sewer force main(s), sanitary sewer service lateral(s) and all associated sewer clean-out(s) in the proposed sanitary sewer system for other utility companies and their contractors until the new sanitary sewer line(s) and associated appurtenances have been approved by the North Carolina Department of Environmental Quality (NCDEQ) and accepted by the TOL. All new sanitary sewer lines must have at least three (3 ft.) feet of cover and extend under all existing water main and storm water lines with a least 24" of vertical clearance below the bottom of the existing water main and storm water lines. ALL ductile iron sewer piping must be 401 epoxy coated or approved equal.

H. The sanitary sewer gravity line(s), manhole(s), sanitary sewer service lateral(s) and associated clean-out(s) shall be

constructed in strict accordance with the standard specifications of the TOL. The sanitary sewer gravity line(s) must pneumatically pressure tested with compressed air at 5 psi for the required time based on pipe diameter and length. The Sanitary sewer force main(s) must hydrostatically pressure tested with water or air at 200 psi. Sanitary sewer manholes must be vacuum tested to 10 inches of mercury and cannot drop below 9 inches in 60 seconds for 4 ft. diameter manholes, 75 seconds for 5 ft. diameter manholes. The test must be in accordance with the following standards: For ductile iron pipelines test in accordance with the applicable requirements of ASTM C924. For PVC pipelines test in accordance with ASTM F1417-98 and UBPPA UNI-B-6. Vacuum testing shall be performed in accordance with ASTM C1244. The TOL Utility Construction Inspector and Engineer(EOR) must witness all tests mentioned above.

I. Prior to acceptance, all sewer service laterals will be inspected to ensure that they are installed at the proper depth.. The sewer cleanouts shall have a four (4")
schedule 40 PVC pipe stubbed up from both ends of the 4" x 4" long sweep combination wye to be at least two (2') feet above the finish grade and cover each end with a four (4") inch temporary cap to keep out dirt, sand, rocks, water and construction debris. The vertical stack on each clean-out must be provided with a concrete donut for protection.

J. Once the sanitary sewer gravity line(s) have been installed, pneumatically pressure tested and in place for at least 30 days, the Utility Contractor must contact the TOL to witness the mandrel test on each PVC sanitary sewer gravity line. The Utility Contractor will notify the TOL to schedule the mandrel testing. The mandrel and proving ring must be supplied by the Utility Contractor. The sanitary sewer lines should be flushed clean using a sewer ball of the proper diameter before any mandrel testing can be performed. The Utility Contractor is responsible to remove all dirt, sand, silt, gravel, mud and debris from the newly constructed sewer lines exercising care to keep the TOL existing sanitary sewer systems clean.

K. Prior to final acceptance all sanitary sewer mains shall be camera inspected at the Contractor/Developers expense and 3 copies provided in digital format to the Town of Lillington Public Works Department. A copy of the aforementioned video shall be supplied to the Town of Lillington in a DVD format prior to final acceptance. Sanitary sewer force main(s) shall be pressure tested to 200 psi for at least 2 hours like water lines.

L. The Utility Contractor shall be responsible to locate the newly installed sanitary sewer system(s) for other utility companies and their contractors until the new sanitary sewer system(s) have been approved by the North Carolina Department of Environmental Quality (NCDEQ) and accepted by the TOL.

M. The TOL requires that the Utility Contractor install tracer wire in the trench with all sanitary sewer force mains, gravity sewer mains, and service laterals. The tracer wire shall be 12 ga. insulated, solid copper conductor and it shall be terminated at the top of the valve boxes or manholes. No spliced wire connections shall be made underground on tracer wire installed in the Town of Lillington. The tracer wire may be secured with duct tape to the top of the pipe before backfilling.

N. The Utility Contractor shall provide the Professional Engineer (PE) and the TOL with a set of red line drawings identifying the complete sewer system installed for each project. The red line drawings should identify the materials, pipe sizes and approximate depths of the sewer lines as well as the installed locations of the manhole(s), sanitary sewer gravity line(s), sanitary sewer service laterals, clean-outs, sewer lift station(s) and associated force main(s). The red line drawings should clearly identify any deviations from the NCDEQ approved plans.

O. Prior to the commencement of any work within established utility easements or NCDOT right-of-ways the Utility Contractor is required to notify all concerned utility companies in accordance with G.S. 87-102. The Utility Contractor must call the NC One Call Center at 811 to verify the location of existing utilities prior to the beginning of construction.

P. The Utility Contractor shall spot dig to expose each existing utility pipe or line which may conflict with construction of proposed sanitary sewer line extensions well in advance to verify locations of the existing utilities. The Utility Contractor shall provide both horizontal and vertical clearances to the Professional Engineer (PE) to allow the PE to adjust the sanitary sewer line design in order to avoid conflicts with existing underground utilities. The Utility Contractor shall coordinate with the utility owner and be responsible for temporary

relocation of existing utilities and/or securing existing utility poles, pipes, wires, cables, signs and/or utilities including
services in accordance with the utility owner's requirements during sanitary sewer line installation, grading and street construction.

Q. When making a tap on an existing sewer force main, the Utility Contractor must have a permit from the North Carolina Department of Environmental Quality (NCDEQ) prior to begin the tap work. The Utility Contractor shall conduct a pneumatic pressure test using compressed air or other inert gas on the stainless steel tapping sleeve and gate valve prior to making the tap on an existing sanitary sewer force main. This pneumatic pressure test must be witnessed by the TOL.

R. The Utility Contractor shall provide a grease trap for each sanitary sewer service lateral that will be connected to a restaurant, food processing facility and any other commercial or industrial facility as required by the Town of Lillington and Harnett County Fat, Oil & Grease Ordinance. The grease trap must be rated for a minimum capacity of at least 1,000 gallons unless otherwise approved in writing by the Town of Lillington and HRW Pre-Treatment Coordinator. Garbage disposals should not be installed in homes and businesses that discharge wastewater to the TOL Sanitary Sewer System as they are not approved by the TOL

S. Each sewer lift station must be provided with three phase power (at least 480 volts) and constructed to meet the minimum requirements of the latest version of the National Electrical Code (NEC) and the TOL standard specifications and details.

T. Where a new sanitary sewer force main is connected to an existing manhole in the TOL sewer collections system, the Utility Contractor must provide a protective coating (epoxy) for the interior surfaces of the manhole to protect it against corrosion, erosion and deterioration from the release of sewer gases such as methane and hydrogen sulfide.

U. The sewer lift station design and associated equipment must meet or exceed the MINIMUM REQUIREMENTS FOR THE TOL SEWER LIFT STATIONS. Each sanitary sewer lift station

must be constructed with an all-weather access road that is at least 20 feet wide. The lift station site must be covered with weed blocking material and at least six (6") inches of ABC stone (crush and run).

V. Once a sewer lift station has been installed, the Utility Contractor is responsible to schedule a draw down test with the TOL Engineering and Collections staff, the Professional Engineer (PE), the Electrician, the original equipment manufacturers (OEM) representatives [For both the Pumps and the Generator]. This draw down test must be completed with power supplied from the electrical utility company and with power supplied by the emergency generator with satisfactory results before final inspections are conducted by the TOL.

W. Once the Utility Contractor completes the installation of a sewer lift station, the Professional Engineer (PE) must submit the sewer permit certification and As-Built Record Drawings to the North Carolina Department of Environmental Quality (NCDEQ) and the TOL for final approval. The Utility Contractor must supply TOL Engineering staff with three original Operation & Maintenance (O&M) Manuals along with the associated pump curves and electrical schematics for the associated sewer lift station equipment including all warranty information and documentation.

X. Remote monitoring equipment, that is compatible with the Town of Lillington's current system, shall be required. The Contractor/Developer shall be responsible for a radio site survey of the proposed pump station site to ensure compatibility with the Town of Lillington's existing system before submitting plans for final approval. The Contractor shall be responsible for providing all equipment including RTU's, PLC's, antennas, antenna pole, etc. This system will send and receive data using the existing telemetry network owned and operated by the Town of Lillington. The Contractor is required to provide the RTU SCADA cabinet and equipment compatible with the existing Lillington SCADA system as instructed by the Public Works Department Director or his designee. The Contractor shall be required to provide the appropriate programming at the main server and the testing of all communication points. The equipment must be equipped with minimum SCADA monitoring capability indicating pump run time, overload tripped, pump breaker tripped, priming failure, lag pump start, high wet well, low wet well, three phase power fail, standby power run/fail and control power fail. The TOL requires the Utility Contractor to provide all necessary equipment and devices for the testing and inspection of the sanitary sewer system. The equipment and devices may include but not limited to lamping with mirrors, mandrels, sewer balls, plugs, air compressors and associated compressed air lines.

Y. Any use of sewer plugs to temporarily block the TOL existing sanitary sewer lines must be coordinated with the TOL Collections Supervisor at least two (2) days in advance of installing the plugs. The sewer plugs must be removed as soon

as possible once the new sanitary sewer lines have been inspected, pressure tested, mandrel tested, approved by the North Carolina Department of Environmental Quality (NCDEQ) and accepted by the TOL to allow the sewer to flow as designed in the TOL existing sanitary sewer lines or when so ordered by the TOL Collections Supervisor to limit interruptions to the normal flow of the sanitary sewer collection system(s). The Utility Contractor must provide the pumps hoses and necessary connectors for a temporary pump around setup if required by the TOL Collections Supervisor. Mr. Skyler Russell, TOL Collections Supervisor may be contacted between 8:00 am and 5:00 pm Monday through Friday at (910) 893-2654

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Z. The Utility Contractor will be responsible for any and all repairs due to leakage or damage resulting from poor workmanship during the one (1) year warranty period once the sewer system improvements have been approved by the North Carolina Department of Environmental Quality (NCDEQ) and accepted by the TOL. The Utility Contractor will be responsible for any and all repairs due to damages resulting from failure to locate the new sanitary sewer lines and associated appurtenances for other utilities and their contractors until the sanitary sewer lines have been approved by NCDEQ and accepted by the TOL.

AA. In developments and projects that require utility easements to be established for future TOL right-of-way, the Registered Land Surveyor (RLS) must provide the TOL with an official copy of the recorded plat and legal description of the said easement as recorded with the Harnett County Register of Deeds. The recorded documents must be provided to the TOL before the utility improvements within the said easement can be placed into operation. Any and all easements that must be obtained from adjoining property owners must be provided to the TOL by the Developer at no cost to the TOL. The final inspection of all sanitary sewer system improvements cannot be scheduled with the TOL until the streets have been paved; the rights-of-way and utility easements have been seeded and stabilized with an adequate stand of grass in place to prevent erosion issues on site.

BB. The Engineer of Record is responsible to ensure that construction is, at all times, in compliance with accepted sanitary engineering practices and approved plans and specifications. No field changes to the approved plans are allowed without prior written approval

by the TOL. A copy of each engineer's field report is to be submitted to the TOL as each such inspection is made on system improvements or testing is performed by the contractor. Water and sewer infrastructure must pass all tests required by the TOL specifications and those of all applicable regulatory agencies. These tests include, but are not limited to: air test, vacuum test, mandrel test, visual test, pressure test, bacteriological test, etc. the TOL must be present during testing and all test results shall be submitted to the TOL. All tests must be satisfied before the final inspection will be scheduled with the TOL. The Engineer of Record must request in writing to schedule the final inspection once all construction is complete. The Developer's Engineer of Record and the TOL shall prepare a written punch list of any defects or deficiencies noted during the final inspection, should any exist. Upon completion of the punch list, the Developer's Engineer of Record will schedule another inspection. In the event the number of inspections performed by the TOL exceeds two, additional fees may be assessed to the Developer.