



§401 WATER QUALITY CERTIFICATION

Aquatic Resource Alteration Permit NRS24.030

Pursuant to §401 of *The Federal Clean Water Act* (33 U.S.C. 1341), any applicant for a federal license or permit to conduct any activity which may result in any discharge into the waters of the U.S. shall provide the federal licensing or permitting agency a certification from the state in which the discharge originates or will originate. Accordingly, the Division of Water Resources requires reasonable assurance that the activity will not violate provisions of *The Tennessee Water Quality Control Act of 1977* (T.C.A. §69-3-101 et seq.) or provisions of §§301, 302, 303, 306 or 307 of *The Clean Water Act*.

Subject to conformance with accepted plans, specifications and other information submitted in support of the application, pursuant to 33 U.S.C. 1341 the State of Tennessee hereby certifies the activity described below. This shall serve as authorization under T.C.A. §69-3-101 et seq.

PERMITTEE: Dennis Malone – City Engineer
City of Chattanooga
1250 Market Street
Chattanooga, TN 37402

AUTHORIZED WORK: Nine open-cut stream crossings for gravity sewer line upgrades and other utility installations, vegetation clearing and stream pump-arounds for construction access and trenching, installation of a temporary span bridge and a permanent reinforced concrete pipe resulting in eight feet of stream loss for sewer line and equalization basin upgrades, removal of 20 feet of culvert and associated headwall to offset stream length loss.

LOCATION: Friar Branch and unnamed tributary to Friar Branch
Chattanooga, Hamilton County
Latitude 35.049639, Longitude -85.154884

EFFECTIVE DATE: June 30, 2024

EXPIRATION DATE: June 30, 2029

A handwritten signature in cursive script, appearing to read "Claire Warrick".

for April Grippo, Interim Director
Division of Water Resources

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PART I

Authorized Impacts:

Nine open-cut trench crossings of streams and temporary water diversions (coffer dams and/or pump-arounds as needed) for installation of gravity sewer lines and other utilities.

Removal of approximately 70 feet of vegetation for temporary construction access.

Installation of a 45-foot temporary span bridge for construction access.

Installation of a permanent 114-foot reinforced concrete pipe (RCP) for construction access and future right-of-way access resulting in eight feet of stream loss (6.4 functional feet of stream loss).

Removal of 20 feet of culvert and associated headwall resulting in 8 functional feet of stream gain.

Specific impacts will occur at:

- Friar Branch (North and South Lee Highway work areas, SLEQ work area)

Open-cut crossing for sewer line and other utility installations

-85.122699, 35.068659 (Stream 1a)

-85.157187, 35.050510 (Stream 1b)

-85.155749, 35.051644 (Stream 1b)

-85.157471, 35.049985 (Stream 1c)

Installation of a 45-foot temporary-access span bridge on Friar Branch

-85.154056, 35.048842 (Stream 1c)

Construction Access – 70 feet of vegetation clearing and stream pump-around

-85.129064, 35.064958 (Stream 1a)

Removal of 20-foot culvert and headwall (generates 8 functional feet of stream)

-85.152860, 35.048826

- Unnamed Tributary to Friar Branch (Stream 2)

Open-cut crossing for sewer line and other utility installations

-85.152407, 35.048646

-85.152415, 35.048667

-85.152386, 35.048662

-85.152363, 35.048479

-85.152135, 35.048121

Installation of a 114-foot RCP for site access and permanent right-of-way access (results in eight feet of stream loss, 6.4 functional foot loss)

-85.152358, 35.048523

Special Conditions:

1. Activities that may significantly alter the hydraulics of the stream (e.g., impound or divert water at stream crossings or promote loss of water to trenched crossings) are not covered.
2. Non-erodible fill and cover such as concrete or flowable fill and trench plugs must be placed at each end of all stream crossings and flowable fill or concrete must be placed under the stream at all stream crossings.
3. **At crossings on Stream 1b and 1c** (Friar Branch): Due to the presence of the state-listed Chickamauga crayfish within one mile of these sites, the applicant must perform sweeps, and removal and relocation of the Chickamauga crayfish following procedures in the TWRA-approved work plan submitted with ARAP application NRS24.030.
4. Blasting within 50 feet of a stream is not allowed.
5. Bank stabilization will be accomplished by filling trenches with compact soil and covering with native excavated soil from that location. Temporary stabilization via seeding of bare soils may be done with fast-establishing annual grasses, and permanent vegetative stabilization must be with native grasses.
6. All trenching will be conducted in the dry and stabilization techniques in place within 14 days of pipe installation.
7. The top of trenches shall be covered with native material to current stream bed elevation in a manner that allows natural substrate to reestablish.
8. The length and width of the fill associated with the permitted activities shall be limited to the minimum necessary for the permitted activity.
9. Representative photographs of all stream conditions following project completion must be submitted to TDEC within three months of project completion and submitted to: Scott Hall, TDEC Division of Water Resources, Davy Crockett Tower, 500 James Robertson Parkway – 9th Floor, Nashville, TN 37423.

General Conditions:

1. All activities must be accomplished in conformance with the approved plans, specifications, data and other information submitted in support of NRS24.030 and subsequent modification, and the limitations, requirements and conditions set forth herein. Failure to comply with the terms and conditions of this permit is a violation of the *Tennessee Water Quality Control Act of 1977* (the *Act*) and is subject to penalty in accordance with T.C.A. §69-3-115.
2. Activities, either individually or cumulatively, that may result in greater than de minimis degradation to waters of the state are not covered.
3. This activity may not result in a disruption or barrier to the movement of fish or other aquatic life.
4. Activities that directly impact wetlands or impair surface water flow into or out of any wetland areas are not covered.
5. Activities located in a component of the National Wild and Scenic River System or waters designated as Outstanding National Resource Waters are not covered.
6. Activities occurring in known or likely habitat of state or federally listed threatened, endangered, or a species deemed in need of management may not be authorized without prior coordination with the Tennessee Wildlife Resources Agency (TWRA) and TDEC Division of Natural Areas (DNA) to determine if the activities will or will not likely result in take, harassment, or destruction of the species or render the habitat unsuitable. Adverse effects to federal threatened and endangered

species are not permitted without prior authorization from the United States Fish and Wildlife Service (USFWS) as required by Section 7 or Section 10 under the Endangered Species Act.

7. Work shall not commence until the permittee has obtained all necessary authorizations pursuant to applicable provisions of §10 of The Rivers and Harbors Act of 1899; §404 of The Clean Water Act and §26a of The Tennessee Valley Authority Act, as well as any other federal, state or local laws.
8. This permit does not authorize impacts to cultural, historic or archaeological features or sites.
9. This permit does not authorize access to private property. Arrangements concerning the use of private property shall be made with the landowner.
10. All activities must be carried out in such a manner as to prevent violations of water quality criteria as stated in TDEC Rule 0400-40-03. This includes, but is not limited to, the prevention of any discharge or use of materials that may be harmful to humans, terrestrial or aquatic life, or causes a condition in which visible solids, bottom deposits or turbidity impairs the designated uses of waters of the state.
11. The permittee is responsible for obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) *General Permit for Storm Water Discharges from Construction Activities* where clearing, grading or excavation results in an area of disturbance of one or more acres, or activities that result in the disturbance of less than one acre if it is part of a larger common plan of development or sale.
12. For gravity sewer line installations, as-builts or record drawings of the line installation will be submitted to the division 45 days after completion of the project.
13. The alignment of new utility line crossings shall intersect the stream channel as close to 90 degrees or as perpendicular as possible. Alignment shall be no less than 45 degrees angle from the centerline of the stream.
14. New utility line crossings shall be located such as to avoid permanent alteration or damage to the integrity of the stream channel. Large trees, steep banks, rock outcroppings etc., should be avoided.
15. The crossing shall be designed to prevent the impoundment or loss of normal or base flows. Base flow is the usual or normal flow of the stream that is supplied primarily by groundwater from springs and seeps, but not affected by rapid runoff during and after rainfall. In the case of streams with bedrock streambeds, special provisions shall be made to prevent the loss of stream flow due to fracturing of the bedrock.
16. The excavation and fill activities associated with the utility line crossing of non-navigable streams shall be kept to a minimum and shall be separated from flowing waters. The crossing shall be constructed in the dry to the maximum extent practicable, by diverting flow utilizing cofferdams, berms, temporary channels or pipes. Temporary diversion channels shall be protected by non-erodible material and lined to the expected high-water level. For navigable streams as defined by §10 of the *Rivers and Harbors Act of 1899*, the excavation and fill activities associated with utility line crossing may be accomplished within the flowing water.

PART II

Reopener Clause

This permit may be revoked, suspended, or modified for cause, including:

1. Violation of any of the terms or conditions of this permit or of T.C.A § 69-3-101 et. seq.;
2. Obtaining the permit by misrepresentation or failing to disclose fully all relevant facts;
3. A change in any condition that requires either a temporary or permanent change in the conditions of this permit.

Duty to Reapply

If any portion of the permitted activities, including the authorized impacts to water resources, compensatory mitigation requirements, or post-project monitoring is not completed before the expiration date of this permit **the applicant must apply for permit re-issuance**. The permittee shall submit such information and forms as are required to the director of the Division of Water Resources at least ninety (90) days prior to its expiration date. Such applications must be properly signed and certified.

Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, and/or local laws and/or regulations.

Other Information

If the permittee becomes aware that he/she failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, then he/she shall promptly submit such facts or information.

Changes Affecting the Permit

Transfer/Change of Ownership

This permit may be transferred to another party, provided there are no activity or project modifications, no pending enforcement actions, or any other changes which might affect the permit conditions contained in the permit, by the permittee if:

The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date;

The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and contractual liability between them; and

The Director does not notify the current permittee and the new permittee, within 30 days, of his/her intent to modify, revoke, reissue, or terminate the permit, or require that a new application be filed rather than agreeing to the transfer of the permit.

The permittee must provide the following information to the division in their formal notice of intent to transfer ownership:

Permit number of the subject permit;

Effective date of the proposed transfer;

Name and address of the transferor;

Name and address of the transferee;

Name of the responsible parties for both the transferor and transferee;

Statement that the transferee assumes responsibility for the subject permit;

Statement that the transferor relinquishes responsibility for the subject permit;

Signatures of the responsible parties for both the transferor and transferee, and;

Statement regarding any proposed modifications to the permitted activities or project, its operations, or any other changes which might affect the permit conditions contained in the permit.

Change of Mailing Address

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice the original address of the permittee will be assumed to be correct.

Noncompliance

Effect of Noncompliance

All discharges shall be consistent with the terms and conditions of this permit. Any permit noncompliance constitutes a violation of applicable State and Federal laws and is grounds for enforcement action, permit termination, permit modification, or denial of permit reissuance.

Reporting of Noncompliance

24-Hour Reporting

In the case of any noncompliance which could cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the required notice of non-compliance shall be provided to the Division of Water Resources in the appropriate Environmental Field Office within 24-hours from the time the permittee becomes aware of the circumstances. (The Environmental Field Office should be contacted for names and phone numbers of environmental response personnel);

A written submission must be provided within five (5) days of the time the permittee becomes aware of the circumstances unless this requirement is waived by the Director on a case-by-case basis. The permittee shall provide the Director with the following information;

Description of the discharge and cause of noncompliance;

Period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and

Steps being taken to reduce, eliminate, and prevent recurrence of the non-complying discharge.

Scheduled Reporting

For instances of noncompliance which are not reported under subparagraph above, the permittee shall report the noncompliance by contacting the permit coordinator, and provide all information concerning the steps taken or planned to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including but not limited to, accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Liabilities

Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of pollutants to any surface or subsurface waters. Additionally, notwithstanding this Permit, it shall be the responsibility of the permittee to conduct its discharge activities in a manner such that public or private nuisances or health hazards will not be created.

Liability under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or the Federal Water Pollution Control Act, as amended.

This permit does not preclude requirements of other federal, state or local laws. This permit also serves as a State of Tennessee Aquatic Resource Alteration Permit (ARAP) pursuant to the Tennessee Water Quality Control Act of 1977 (T.C.A. §69-3-101 et seq.).

The State of Tennessee may modify, suspend or revoke this permit or seek modification or revocation should the state determine that the activity results in more than an insignificant violation of applicable water quality standards or violation of the act. Failure to comply with permit terms may result in penalty in accordance with T.C.A. §69-3-115.

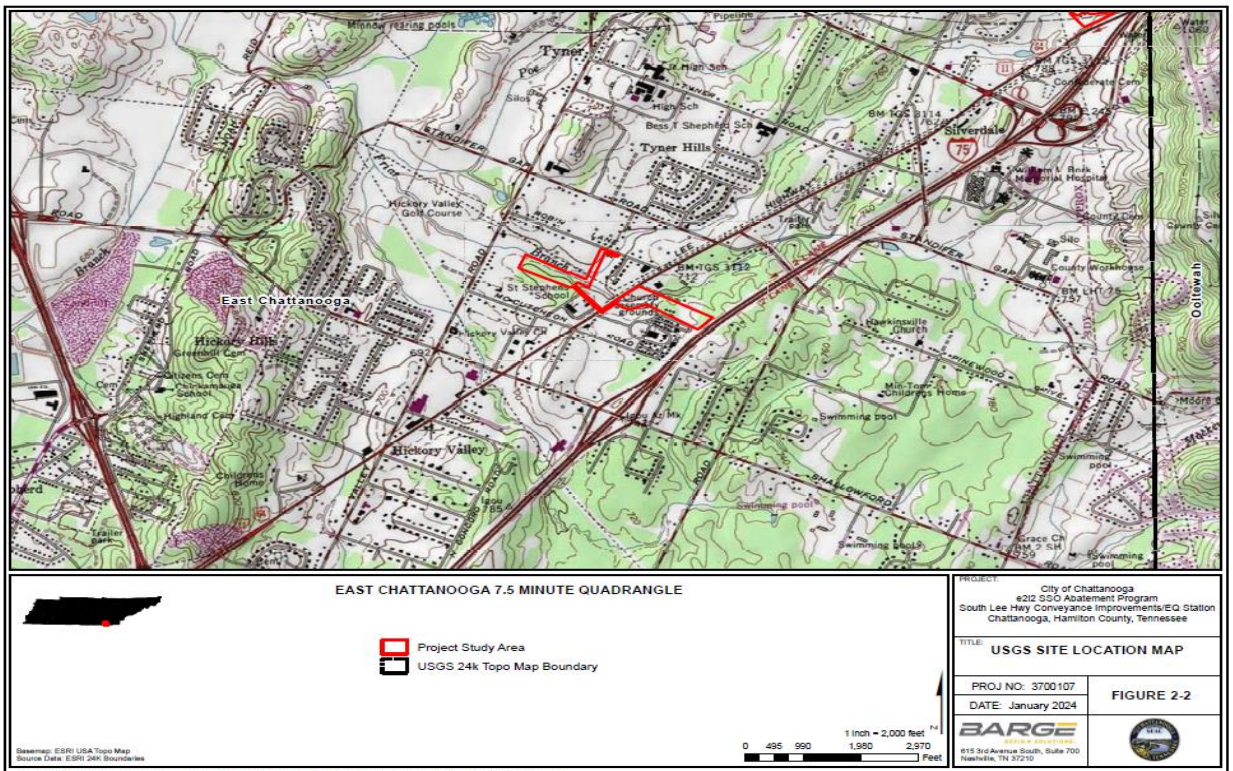
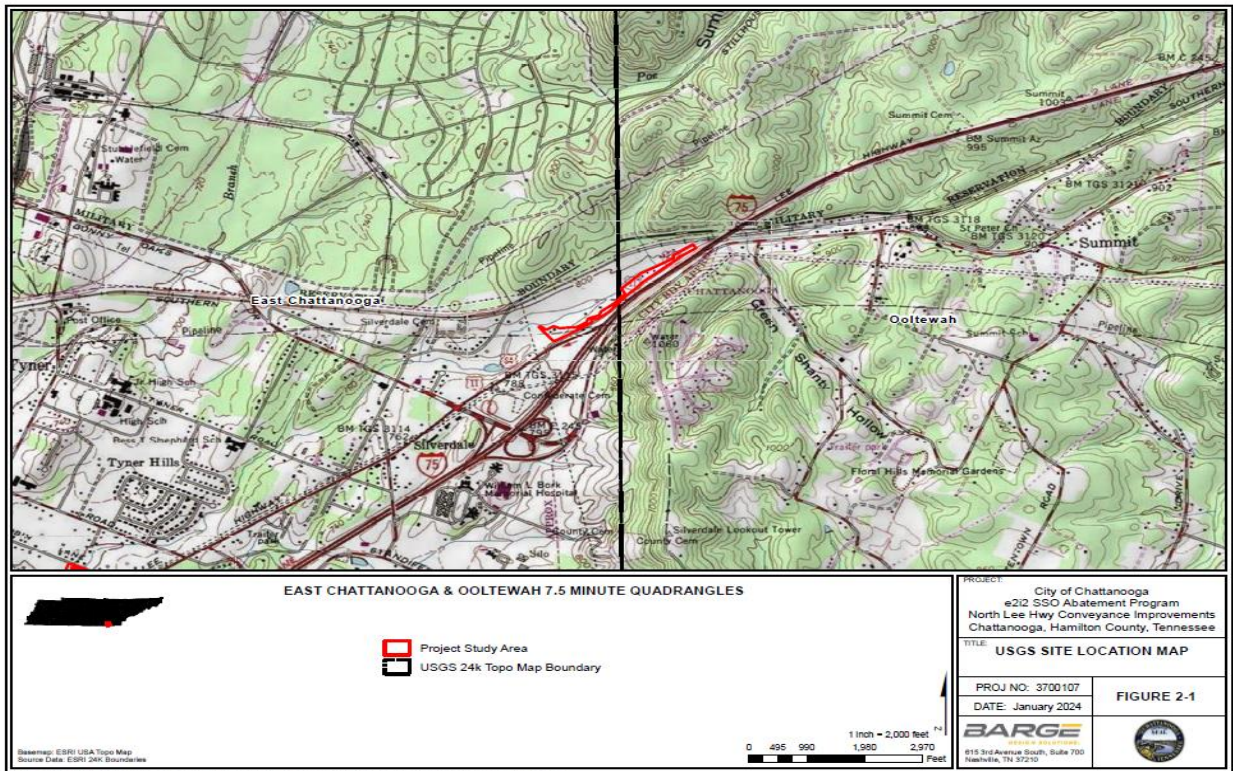
An appeal of this action may be made as provided in T.C.A. §69-3-105(i) and Rule 0400-40-03-.12 by submitting a petition for appeal. This petition must be filed within THIRTY (30) DAYS after public notice of the issuance of the permit. The petition must specify what provisions are being appealed and the basis for the appeal. It should be addressed to the technical secretary of the Tennessee Board of Water Quality, Oil and Gas at the following address:

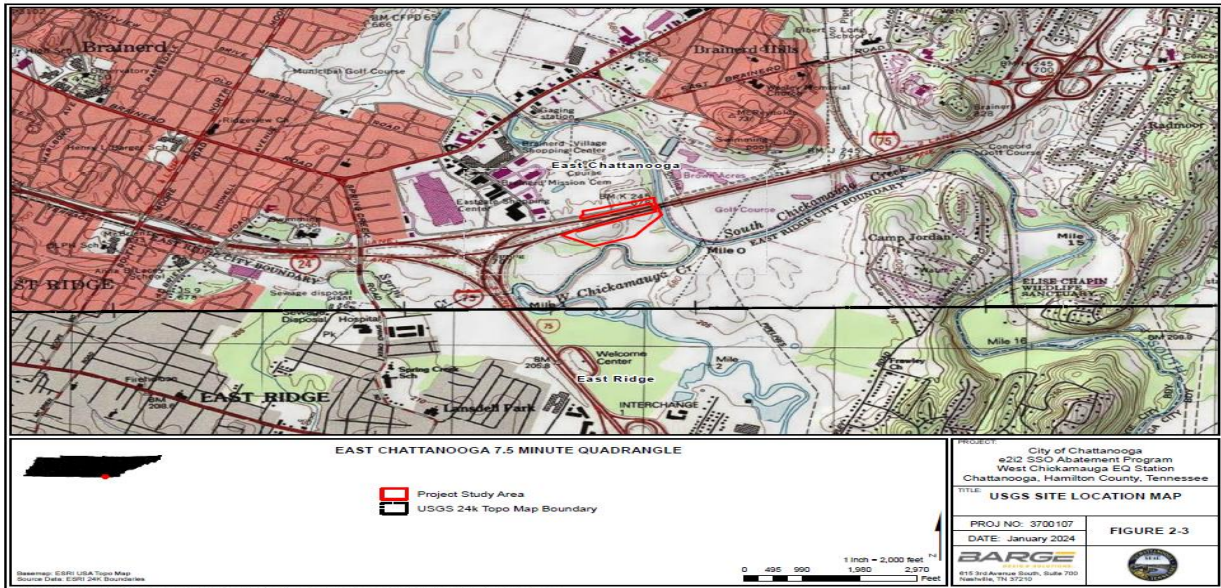
April Grippo, Interim Director
TDEC - Davy Crockett Tower
500 James Robertson Parkway – 9th Floor
Nashville, Tennessee 37243

Any hearing would be in accordance with T.C.A. §§69- 3-110 and 4-5-301 et seq.

Appendix 1. Maps and Drawings

Project Alignment





Representative Resource Locations



Photo 1: HD 1 (Friar Branch) facing the northeastern site boundary.



Photo 2: HD 1 (Friar Branch) has heavy incising through the soil profile and sediment sorting in the thalweg.



Photo 3: HD 1 (Friar Branch) flowing water in Channel after 7 days with no significant rain event.

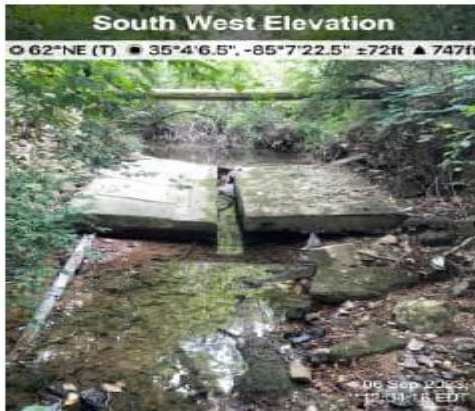
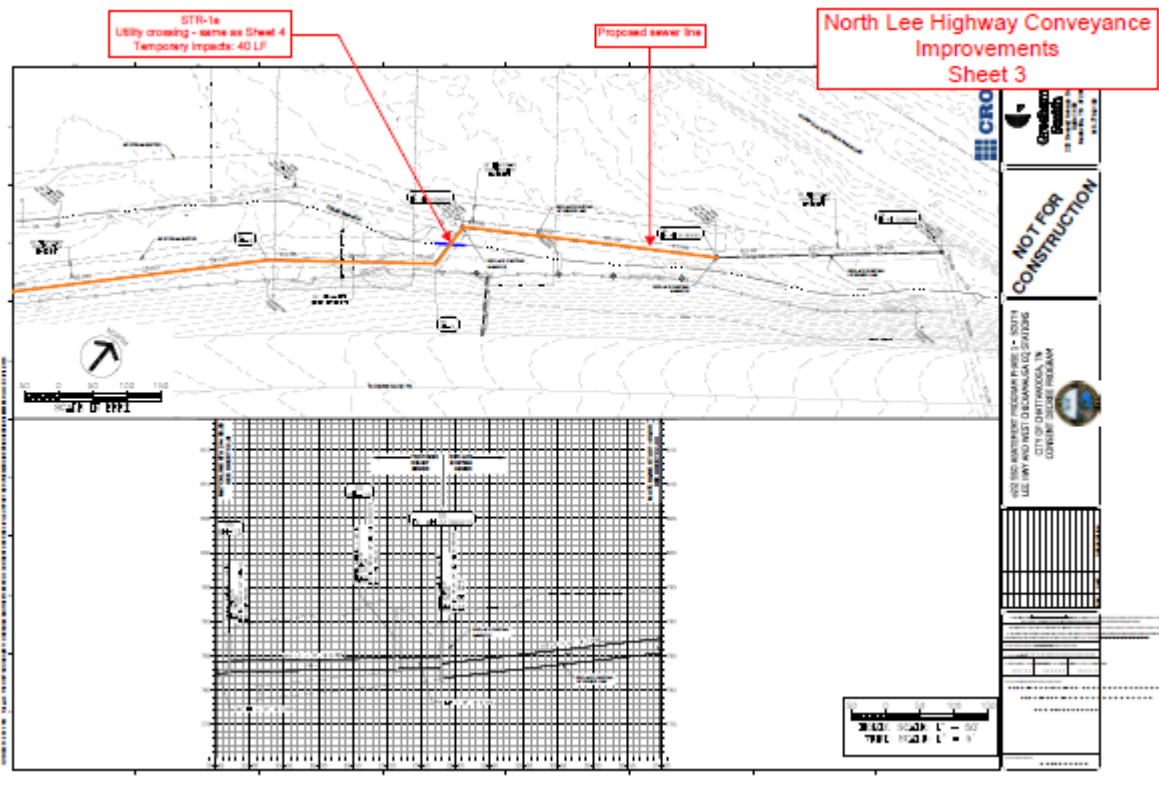
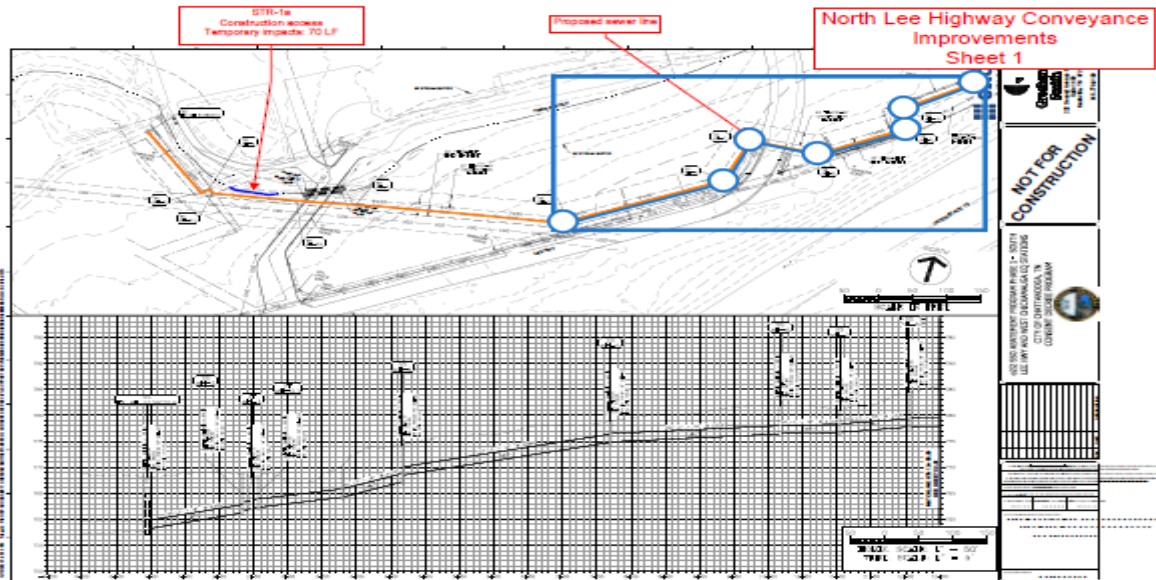
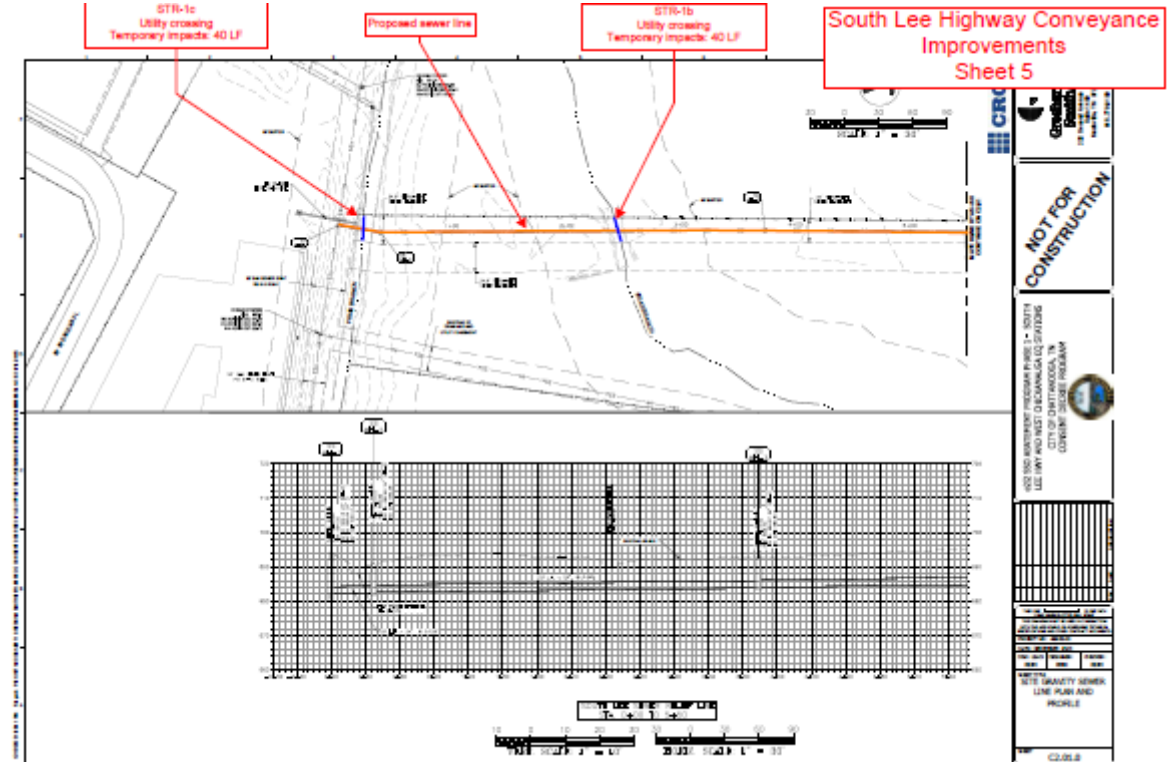
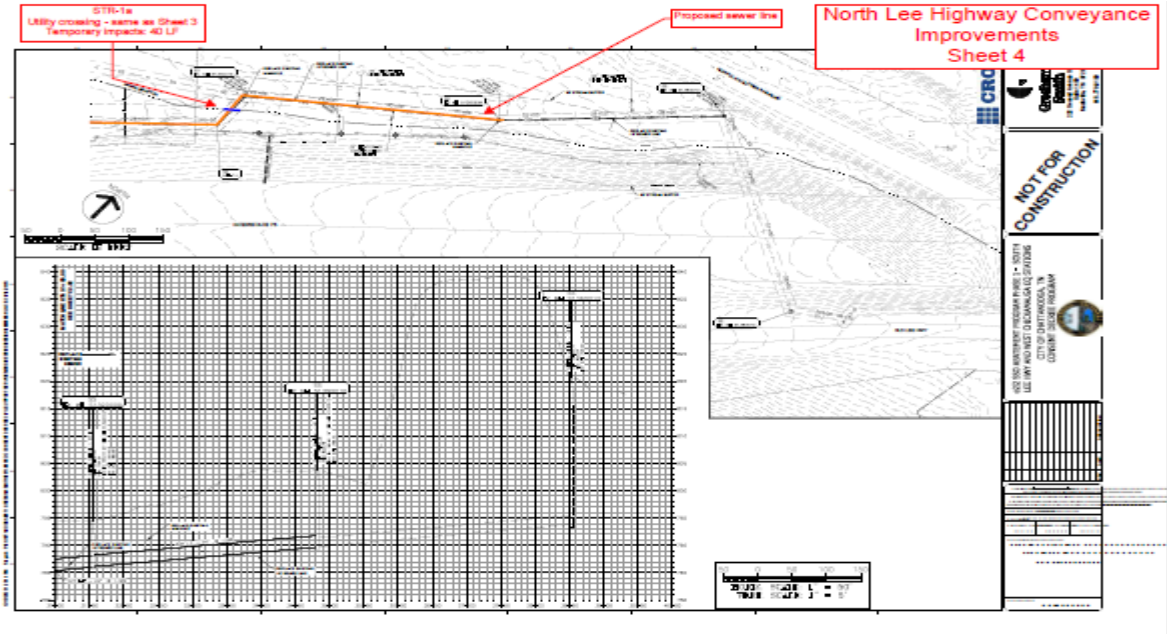
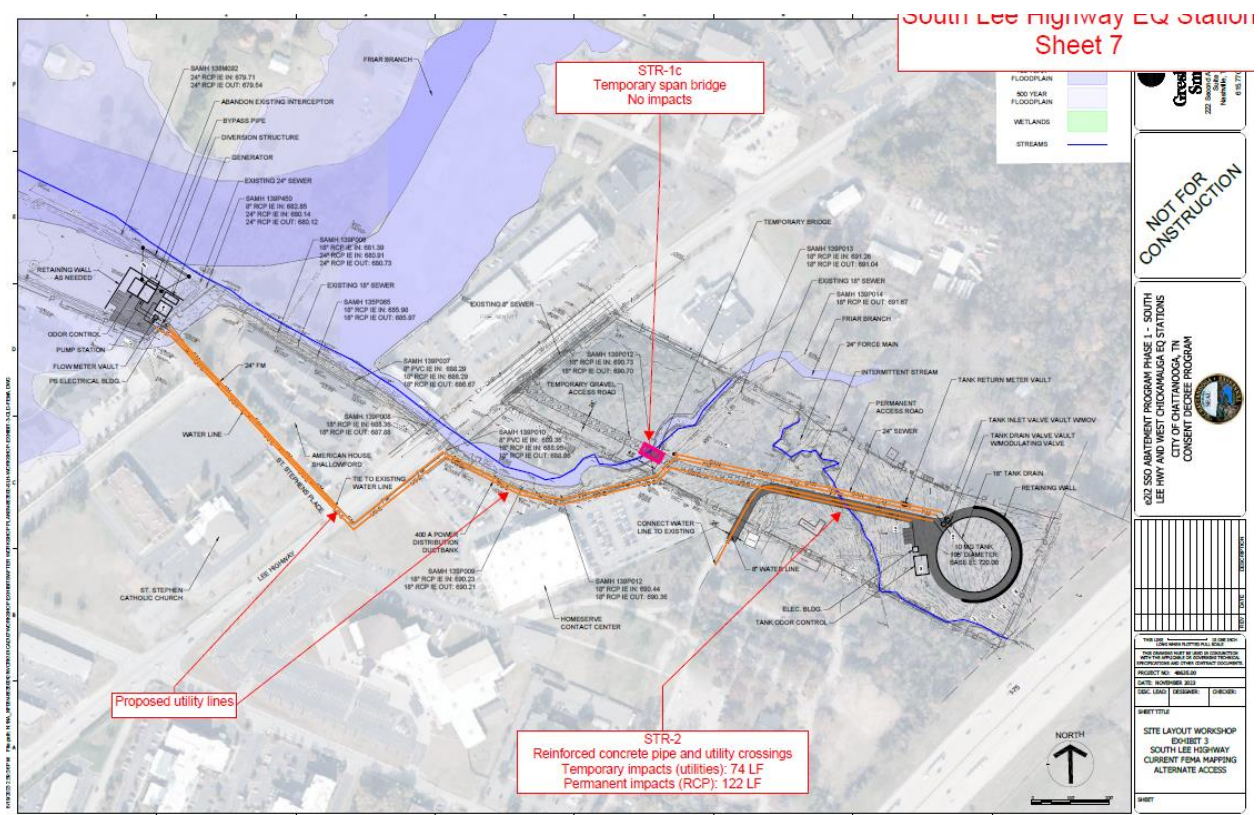
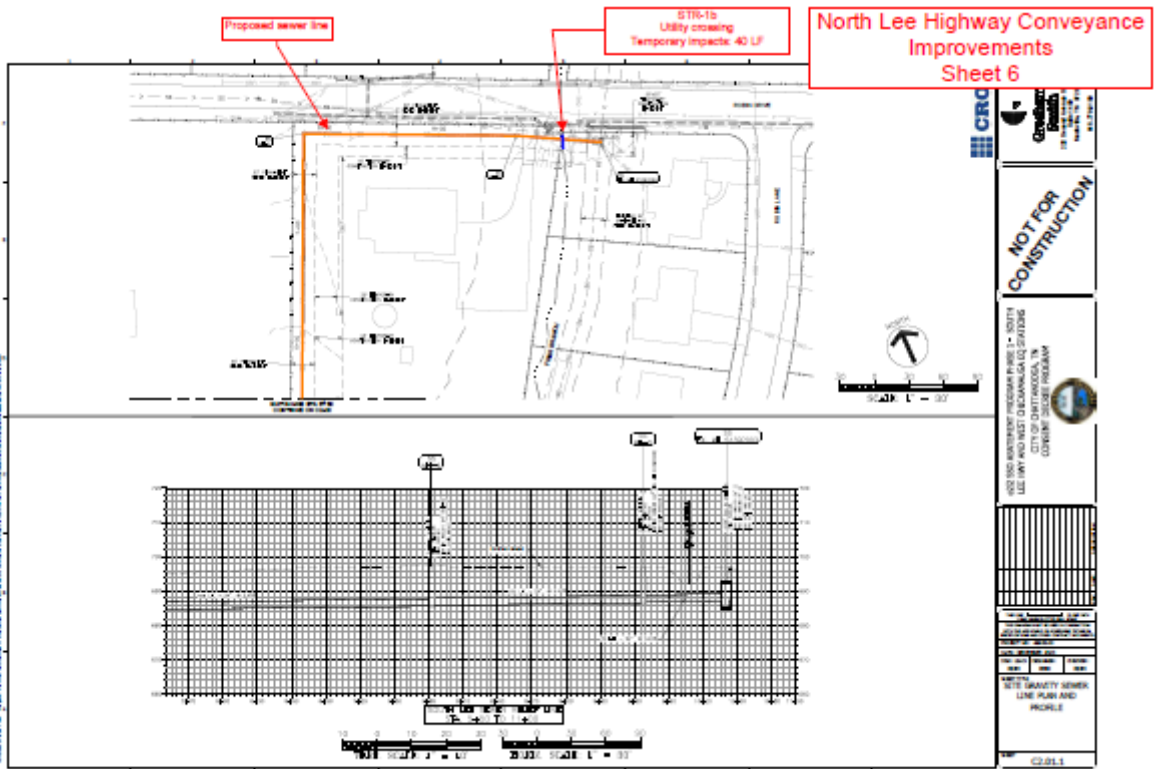


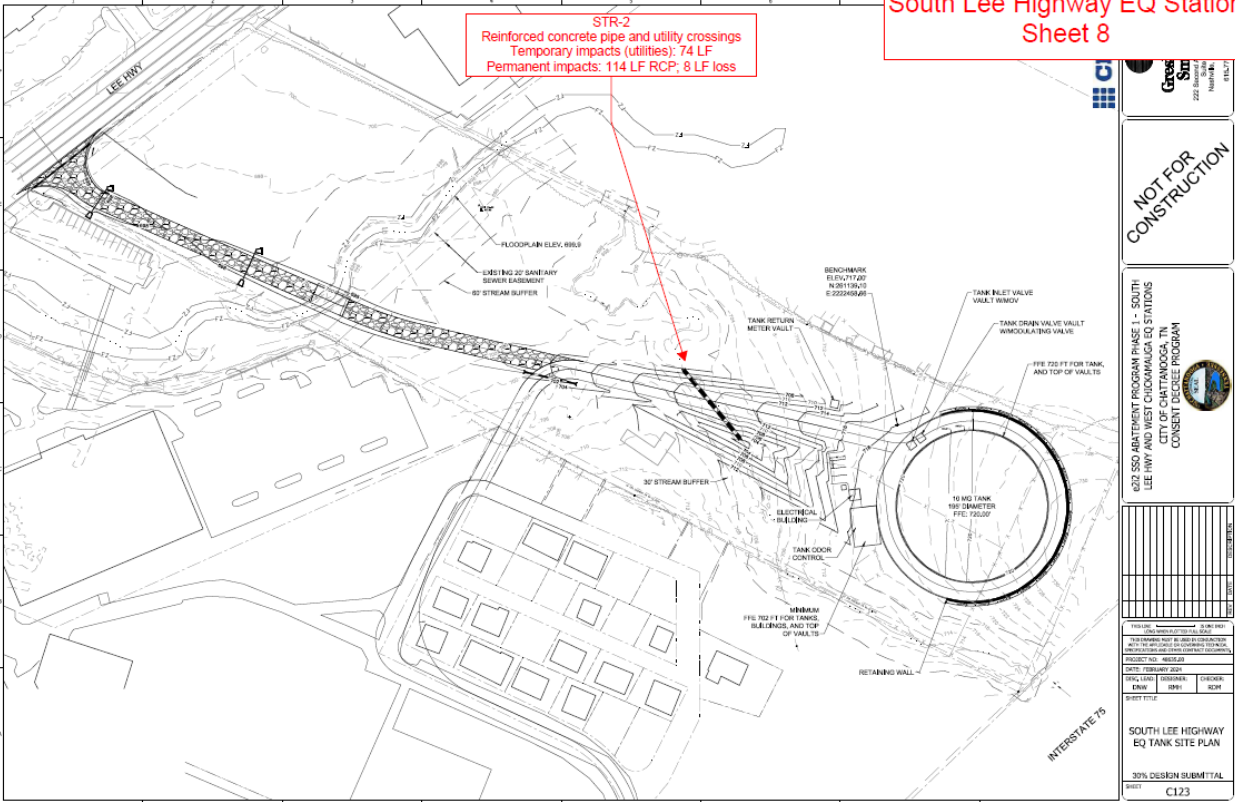
Photo 4: HD 1(Friar Branch) looking toward the northern site boundary.

Impacts









Permit Rationale

PERMIT RATIONALE
Aquatic Resource Alteration Permit NRS24.030

Dennis Malone – City Engineer
City of Chattanooga
1250 Market Street
Chattanooga, TN 37402
June 30, 2024
Permit Writer: Scott Hall

Summary

Applicant:
City of Chattanooga

Contact:
Dennis Malone – City Engineer
1250 Market Street
Chattanooga, TN 37402

Activity Location: Chattanooga, Hamilton County

AUTHORIZED ACTIVITY: Construction access clearing on Friar Branch, nine open-cut stream crossings and associated stream pump-arounds on Friar Branch and an unnamed tributary to Friar Branch for installation of gravity sewer line and other utilities, installation of a temporary 45-foot span bridge on Friar Branch, installation of a 114-foot permanent reinforced concrete pipe on an unnamed tributary to Friar Branch, removal of 20-foot culvert and headwall from Friar Branch to offset stream loss associated with pipe installation.

Nature of Business: Stream crossings for gravity sewer line and other utilities installation.

Waterbody Name: Friar Branch and unnamed tributary to Friar Branch.

Permit Status

ARAP NRS24.030 issued:	June 30, 2024
ARAP NRS24.030 expires:	June 29, 2029
ARAP Application received:	February 6, 2024
Application Complete:	May 2, 2024

**Status of Affected Waters:
Friar Branch, TN06020001007_0100, Ecoregion 67f**

Designated Use	Use Support	Causes	Sources
Livestock watering & wildlife	Unassessed	N/A	N/A
Irrigation	Unassessed	N/A	N/A
Recreation	Unassessed	N/A	N/A
Fish and aquatic life	Unassessed	N/A	N/A
Domestic and industrial water supply	Unassessed	N/A	N/A

Assessment Date: Unassessed.

The affected waters have been determined to have available parameters for habitat alteration.

The affected waters are known Exceptional Tennessee Waters.

Authorized Alterations

70 feet of riparian clearing on Friar Branch for temporary construction access, installation of nine open-cut stream crossings on Friar Branch and an unnamed tributary to Friar Branch for installation of gravity sewer line and other utilities, installation of a temporary 45-foot span bridge on Friar Branch, installation of a 114-foot permanent reinforced concrete pipe on an unnamed tributary to Friar Branch. Culvert and headwall removal to offset stream length loss.

Due to the presence of the Chickamauga crayfish, sweeps and relocation of this species must be conducted prior to in-stream work at Streams 1b and 1c following the TWRA-approved methodology.

Alternatives Analysis and Selection of Least Impactful Practicable Alternative

The applicant has submitted an alternatives analysis that indicates no practicable alternative to the method of stream crossing given their locations in highly urbanized areas and the need for sewer line upgrades to improve capacity and minimize sewer overflow. Horizontal directional drilling is not feasible due to cost constraints and locations in urbanized areas. All impacts except pipe installation are temporary, and stream loss due to pipe installation is offset by culvert and headwall removal.

Based on the available information, the Division has made the determination that the applicant has demonstrated that the activity represents the least impactful practicable alternative to accomplish the project purpose.

Existing Conditions/Loss of Resource Values

Friar Branch and the unnamed tributary to Friar Branch that would be impacted by this work are small (generally 20 to 25 feet wide at impact sites, one site is up to 50 feet wide depending on flow). The streams are generally incised to heavily incised due to being located in a highly urbanized area. In addition to nutrient enrichment and habitat alteration, current impacts include sewer overflow and *E. coli* contamination. Improving sewer capacity and reducing overflow should help improve stream conditions. All stream crossings and span bridge impacts are temporary, and impacts associated with installation of a permanent reinforced concrete pipe will be offset by culvert and headwall removal, resulting in a net increase in stream functional foot length.

The Division has made the determination that these activities, if conducted in accordance with the submitted plans and permit conditions, will not result in an appreciable permanent loss of resource values.

Antidegradation

In accordance with the Tennessee Antidegradation Statement (Rule 0400-40-03-.06), the Division has made the determination that the activities will not result in an appreciable permanent loss of resource values, and will result in no more than de minimis degradation of Exceptional Tennessee Waters with available parameters for habitat.

For more information, please reference Tennessee's Antidegradation Statement which is found in Chapter 0400-40-03 of the Rules of the Tennessee Department of Environment and Conservation.