STORM WATER POLLUTION PREVENTION PLAN

STORAGE AREA FOR EMERGNECY EFFLUENT LAGOON

Stanton, Tennessee

Prepared for:

Brasfield & Gorrie, LLC
3021 7th Avenue S, Birmingham, AL 35233

Prepared by:

McCARTY
GRANBERRY
ENGINEERING

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I. INTRODUCTION

This document is the Storm Water Pollution Prevention Plan (SWPPP) for the construction activities of STORAGE AREA FOR EMERGNECY EFFLUENT LAGOON in Stanton, Tennessee, hereinafter referred to as the Project. A Vicinity Map showing the limits of proposed construction is provided in Appendix A to this Plan.

This SWPPP has been prepared to meet the requirements of the State of Tennessee NPDES Permit No. TNR 100000, which regulates Storm Water Discharges from Construction Sites that disturb 1 acre or greater. The TNR 100000 authorizes the discharge of storm water from sites that are under construction provided that the permit provisions are adhered to and the State of Tennessee receives formal application from the parties responsible for the construction. Under this general permit both the owner/developer of the property and the contractors performing the construction activities are responsible to comply with the permit.

As indicated on the NOI, the "Operators" for this Project are as follows:

- Brasfield & Gorrie, LLC has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications.

- The Contractor has not been selected yet.

II. PURPOSE AND SCOPE

The United States Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) have developed programs to regulate the discharge of storm water runoff from certain types of construction activity. As a result, the construction activities at the Project require an NPDES General Permit for Storm Water Discharges from Construction Activity. One of the requirements of the General Permit is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce the pollution of surface waters resulting from the construction activity.

The purpose of this SWPPP is to identify potential sources of pollution reasonably expected to affect the quality of storm water discharges from the construction site. This SWPPP also provides the control measures and describes the implementation practices, which will be used to reduce the pollutants in storm water discharges associated with this construction to enable compliance with the requirements of TNR 100000.

This SWPPP has been prepared in accordance with the requirements of Part II of TNR 100000 and in accordance with good engineering practices to address only storm water discharges from the construction and support activities. There will be no discharges of storm water that are mixed with sources of non-storm water. There will be no storm water discharges associated with these construction activities that have been issued an individual permit.

Storm water discharges from construction activities for this Project should not cause violations of water quality standards or contribute to the impairment of a Section 303(d)-Listed Water. Furthermore, it is believed that storm water discharges from construction of the Project will not impact legally protected listed or proposed threatened or endangered aquatic fauna in the receiving stream, and will not negatively affect a property that is listed or is eligible for listing in the National Historic Register maintained by the Secretary of Interior.

This SWPPP does not address storm water discharges that originate from the construction site after construction activities have been completed, the site has undergone final stabilization, and a Notice of Termination has been received.

III. PROJECT DESCRIPTION

A. General Description of Project Construction

This project will take place on a 21.3-acre parcel of land (Parcel 136 012.12) in Haywood County, TN. The purpose of this project is to provide 14.8 acres of storage (all of which may/may not be utilized) for a project that is taking place directly to the west of the subject parcel. The adjacent project (CGP Permit No. TNR121984) is the construction of an emergency effluent lagoon for the Memphis Regional Megasite. Construction materials and soil will be stored on the subject parcel.

B. Description of Project Site

1. Existing Predeveloped Conditions – The predeveloped site is an agricultural field that sits on relatively high ground with no considerable runoff coming onto the site from neighboring property. The northern 1/3rd of the property drains off-site to the north while the southern 2/3rds drains south.

   a. *Pre-Developed Outfall 1*

   This outfall drains basins EC1 (4.97 Ac) and is composed of open field. Runoff in this basin flows overland to the south and exits the site. The runoff then flows another 1.4 miles before entering East Beaver Creek (TN08010209016_0300).

b. *Pre-Developed Outfall 2*

c. This outfall drains basins EC2 (4.55 Ac) and is composed of open field. Runoff in this basin flows overland to the west and exits the site. The runoff then flows another 1.4 miles before entering East Beaver Creek (TN08010209016_0300).

d. *Pre-Developed Outfall 3*

This outfall drains basin EC3 (8.20 Ac). Runoff from this basin drains overland to the northwest and exits the site. It then flows through a wastewater treatment plant (WWTP) that is being constructed before entering an unnamed tributary of East Beaver Creek (TN08010209016_0320).

2. Proposed Post-Developed Conditions – The post-developed site will consist of grassed area, stored construction material, fill (soil) removed from the neighboring parcel, and two trailers that will be used as office space.

a. *Post-Developed Outfall 1*

This outfall drains basins EC1 (4.97 Ac) and will be composed of grassed area, stored construction material, and fill (soil) removed from the neighboring parcel. Runoff in this basin flows overland to the south and exits the site. The runoff then flows another 1.4 miles before entering East Beaver Creek (TN08010209016_0300).

b. *Post-Developed Outfall 2*

This outfall drains basins EC2 (4.55 Ac) and will be composed of grassed area, stored construction material, and fill (soil) removed from the neighboring parcel. Runoff in this basin flows overland to the west and exits the site. The runoff then flows another 1.4 miles before entering East Beaver Creek (TN08010209016_0300).

c. *Post-Developed Outfall 3*

This outfall drains basin EC3 (8.20 Ac) and will be composed of grassed area, stored construction material, two trailer, and fill (soil) removed from the neighboring parcel. Runoff from this basin drains overland to the northwest and exits the site. It then flows through a wastewater treatment plant (WWTP) that is being constructed before entering an unnamed tributary of East Beaver Creek (TN08010209016_0320).

3. Disturbed Area – The total area of the subject property that is to be permitted by this SWPPP is 14.8 acres. Portions of this area will be used for storing construction material and soil from the adjacent construction project.

4. Site Map – A USGS quad map indicating the location of the Project in relation to major roadways, drainage ways, surface waters, receiving stream, and other significant structures within the area is provided in Appendix B of this Plan.

5. Erosion & Sediment Control Plan – The Erosion Control Plan for this Project which indicates the location of major structural and nonstructural erosion and sediment controls, the location of areas where stabilization will occur and locations where storm water is discharged to a surface water is also provided in Appendix C to this Plan.

6. Storm Water Outfalls – The outfall points for all storm water discharges exiting this construction site intended for coverage under the General Permit are indicated on the Erosion Control Plan, which is provided in Appendix C to this Plan.

7. Non-Storm Water Discharges – Potential sources of non-storm water that may be combined with storm water discharges associated with this Project include watering of seeded areas.

8. Receiving Waters – The receiving body of water for outfalls 1 & 2 is East Beaver Creek (TN08010209016_0300), which is already impaired due to sedimentation; however, the creek is 1.4 miles to the south of the disturbed area. The receiving body of water for outfall 3 is an unnamed tributary to East Beaver Creek (TN08010209016_0320), which has not been assessed.

9. Threatened or Endangered Aquatic Fauna – No legally protected state or federally listed threatened or endangered aquatic fauna and/or critical habitat has been identified at this construction site.

C. Construction Sequencing

The following construction sequence will be followed in order to reduce erosion and prevent sediment from leaving the construction site:

Phase 1

1. Construct temporary construction exit/entrance as shown. Construction entrance location may be modified according to ingress/egress of the contractor as approved by engineer.

2. Install rain gauge near construction exit/entrance or location that is easily accessible by a vehicle.

3. Furnish and install all silt fencing, check dams, pipes, structures, and inlet/outlet protection as shown on this sheet.

4. Maintain all erosion control measures as necessary.

5. Stormwater inspection and reporting will be required of all sediment and erosion control measures in accordance with TDEC.

6. Dust shall be controlled during construction by adequate use of water.

7. Transition to phase 2.

Phase 2

1. Maintain all erosion control measures as necessary.

2. Proceed with installment of fence, office, and trailer.

3. Stormwater inspection and reporting will be required of all sediment and erosion control measures in accordance with TDEC.

4. When practical, stabilize soil areas with seeding.

5. Dust shall be controlled during construction by adequate use of water.

A critical component of the successful control of erosion from a construction site is the sequencing of the construction activities. Therefore, the Contractor will be instructed within this Plan to sequence the installation/construction of erosion and sediment controls, performance of land disturbance activities, stabilization of disturbed areas, and removal of temporary controls so as to minimize the exposure time of graded areas.

IV. STORM WATER CONTROL PLAN

This section provides a site-specific plan to minimize the erosion of soil and the discharge of silt and other pollutants into waters of the State of Tennessee resulting from construction activities at the Project. This Plan was developed through a systematic process consisting of the following components:

- Control Selection and Plan Design – Based on the evaluation and assessment of site conditions for this Project, various types of erosion and sediment controls were evaluated and selected to minimize and control the pollution of storm water runoff from the construction site. The types of erosion and sediment controls considered for implementation during construction to minimize the loss of soil into receiving waters included stabilization (e.g., sodding of

disturbed areas) and structural controls (e.g., silt fence, sediment traps, etc.). In addition to erosion and sediment controls, methods of controlling other sources of pollution resulting from construction were defined and evaluated. Other sources evaluated included construction debris, sanitary wastes, fuels and oils, offsite tracking of sediments, generation of dust, and contamination of non-storm water discharges. The location and type of erosion and sediment controls and storm water management control are indicated on the Erosion Control Plan provided in Appendix C to this Plan.

- Construction/Implementation – The Owner, contractors, and subcontractors (i.e., the Operators) performing the construction of the Project are responsible for implementation of this SWPPP. Implementation of this SWPPP includes certification of this Plan; filing of the required notices with appropriate regulatory agencies; construction/installation of erosion and sediment controls as specified in the Construction Documents and in this Plan; inspecting and maintaining the controls; keeping records of control inspections and maintenance; amending the Plan to keep it current; and making the Plan and records accessible as described in TNR 100000.

- Final Stabilization and Termination – Upon completion of the construction of the Project including final stabilization (as defined in 3.1 of the TNR 100000) of all disturbed areas in accordance with the Construction Documents, the Operator of the construction site can be relieved of the requirements of the General Permit for Storm Water Discharges from Construction Activities and this SWPPP by completing and submitting a Notice of Termination (NOT):

The following subsections describe the storm water runoff controls that will be the Contractor's responsibility to implement during the construction of this Project. The technical basis for selection of the controls and practices used to minimize the pollution of storm water runoff from the Project include the Tennessee Erosion & Sediment Control Handbook and good engineering practices proven in past experience to be effective when properly maintained.

A. Erosion and Sediment Controls

1. General Criteria and Requirements

   The construction-phase erosion and sediment controls for this Project have been designed to retain sediment on site. Erosion and sediment controls have been designed according to the size and slope of disturbed or drainage areas to detain runoff and trap sediment. The controls have been designed to handle a 5-year 24-hour rainfall event. All control measures have been properly selected, and will be installed and maintained in accordance with the manufacturer's specifications and good engineering practices. If

periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the control will be replaced or modified based on the site-specific conditions.
Pre-construction vegetative ground cover will not be destroyed, removed or disturbed more than 10 days prior to grading unless the area is seeded and/or mulched or other temporary cover is installed. Clearing and grubbing has been held to the minimum necessary for grading and equipment operation. There are no offsite material storage areas (also including overburden and stockpiles of dirt, etc.) used solely for this Project.

Erosion and sediment control measures will be in place and functional before clearing and grubbing operations begin, and will be constructed and maintained throughout the construction period.

Prior to construction commencing, a professional licensed as a PE or LA, or CPESC or TDEC Level II shall perform a Quality Assurance Site Assessment at each outfall involving drainage totaling 10 or more acres or 5 or more acres if draining to an impaired or exceptional quality waters, within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. As a minimum, site assessment should be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. The site assessment should be performed with the inspector, and should include a review and update (if applicable) of the SWPPP. Modifications of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 (see part 10 below) and the rules of the Tennessee Board of Architectural and Engineering Examiners. The site assessment findings shall be documented and the documentation kept with the SWPPP at the site. At a minimum, the documentation shall include information included in the inspection form provided in Appendix C of this permit. The documentation must contain the printed name and signature of the individual performing the site assessment and the following certification:

"I certify under penalty of law that this report and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Litter, construction debris, and construction fuels, oils, and chemicals exposed to storm water will be relocated prior to anticipated storm events,

or otherwise prevented from becoming a pollutant source for storm water discharges. After use, silt fences will be removed or otherwise prevented from becoming a pollutant source for storm water discharges.

2. Stabilization Practices

This subsection includes a description of the temporary and permanent stabilization practices for areas of land disturbance for this Project. Existing vegetation has been preserved to the extent possible and disturbed areas will be stabilized as soon as practicable after completion of the land disturbance activity in a given area.

The primary stabilization methods used for this Project include the following:

- Seeding, mulching of any disturbed areas that will not be covered by the new slag/aggregate surface and sod stabilization of the proposed ditches;
- Protection and preservation of trees and mature vegetation to the extent practicable; and
- Stabilization of lay down/storage area with slag/aggregate base.

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within 15 days, then stabilization measures do not have to be initiated on that portion of the site by the 14th day after construction activity temporarily ceased.

Permanent stabilization with perennial vegetation or other permanently stable, non-eroding surface will replace any temporary measures as soon as practicable.

3. Structural Practices

This subsection describes the measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This Plan does not address the ultimate operation and maintenance of the storm water management controls after the construction activities have been completed and the site has undergone final stabilization.

The primary storm water management controls for this Project are as follows:

- Installing silt fence along disturbed areas and behind curbs
- Inlet Protection
- Construction Exit
- Seeding of disturbed areas.

This subsection includes a description of structural controls and practices used for the Project to divert flows from exposed soils, store flows, or otherwise limits runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. The Erosion Control Plan provided in Appendix C addresses the initial encapsulation of the site and controls after final grades are established. Interim structural controls may be required to be installed by the Operator due to changing conditions during construction of the site work. The structural controls used for this Project may include one or more of the following as indicated on the Erosion Control Plan:

1. Silt fences: A temporary sediment control measure, composed of woven geotextile fabric supported by steel or wood posts, used to intercept sediment transported from areas where runoff occurs as sheet flow. Its purpose is to prevent sediment carried by sheet flow from leaving the site and entering natural drainage ways or storm drainage systems by slowing storm water runoff, causing ponding and the deposition of sediment at the structure. Silt fence does not filter sediment.

2. Construction Entrance/Exit: A stone pad on geotextile fabric or a rumble strip located at any point where traffic will be moving from a construction site onto a public roadway or other paved area. Its purpose is to reduce or eliminate the transport of material from the construction area onto a public roadway by providing an area where mud and soil can be removed from the tires of construction vehicles.

3. Inlet Protection: A temporary protective device formed around a storm drain drop inlet to trap sediment. Its purpose is to prevent sediment from entering the storm drainage system, prior to temporary or permanent stabilization of the disturbed area.

4. Sediment Basin: A temporary basin created by an embankment constructed across a drainage way, or by an excavation that creates a basin, or by a combination of both, suitably located to capture

sediment. A sediment basin consists of an embankment (dam), a sediment storage area, a sediment forebay, a dewatering mechanism, a principal (or primary) spillway and emergency spillway system, a permanent pool, and scour protection at the outlet of the principal spillway pipe.

Any muddy waters that are pumped from excavations and work areas will be allowed to settle or will be filtered prior to its discharge into surface waters. This water will be discharged through a pipe, well grassed, or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation.

B. Other Items Needing Control

This subsection describes the management practices and controls utilized to minimize the exposure and reduce the risk of exposure of other materials to storm water runoff.

1. Off-site Vehicle and Dust Minimization – The off-site vehicle tracking of sediments and the generation of dust will be minimized due to access of pavement along projects. The paved streets adjacent to the site entrance will be swept or cleaned as necessary to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

2. Solid Wastes and Construction Debris – All waste materials will be accumulated in storage containers such as securely lidded metal dumpster or roll-off box rented from a licensed solid waste management company. All trash and construction debris from the site will be deposited in the containers. The containers will be emptied as often as necessary to prevent accidental spillage or release and exposure to storm water. No construction waste material will be buried onsite. All construction personnel will be instructed regarding the correct procedures for waste disposal. Notices stating these practices will be posted in the construction office trailer.

3. Sanitary Wastes – Sanitary waste will be collected from the portable units a minimum of three times per week by a licensed sanitary waste management contractor, as required by local regulation.

4. Discharge to Surface Waters – No solid materials, including building materials, will be discharged to waters of the United States, except as authorized by a Section 404 Permit.

C. Storm Water Discharges from Support Activities

This Plan recognizes that storm water discharges from construction support activities (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) may be necessary. To minimize the risk of the contamination or adverse impact on storm water discharges from this site, the support activity will meet the following requirements:

1. The support activity will be primarily related to this construction site that is covered under the General Permit and the owner/operator of this construction site will be the owner/operator of the support activity.

2. The support activity will not be a commercial operation serving multiple unrelated construction projects by different operators, and will not operate beyond the completion of the construction activity at the last phase of construction it supports.

3. Appropriate erosion and sediment controls and measures are identified in this SWPPP and will be implemented, inspected, and maintained to cover discharges from the support activity areas.

4. Process wastewater discharges from these support activities will not be allowed. If process wastewaters must be discharged from this construction site, an individual permit or other appropriate general permit will be obtained.

D. Spill Prevention

This subsection describes the management practices and controls utilized to minimize the exposure and reduce the risk of spills or other accidental release of hazardous materials and wastes to storm water runoff.

1. Inventory of Hazardous Materials – The materials and substances listed below are expected to be present at the construction site:

    a. Petroleum Fuels and Oils
    b. Fertilizers

2. Good Housekeeping – The following good housekeeping practices will be followed onsite during construction of the Project:

    a. An effort will be made to store only enough product required to do the job.

b. All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.

c. Products will be kept in their original containers with the original manufacturer's label.

d. Substances will not be mixed with one another unless recommended by the manufacturer.

e. Whenever possible, all of a product will be used up before disposing of the container.

f. Manufacturer's recommendations for proper use and disposal will be followed.

g. The site construction superintendent will inspect daily to ensure proper use and disposal of materials onsite.

3. Hazardous Products - The following practices will be used to reduce the risk of spills associated with hazardous materials:

a. Products will be kept in original containers unless they are not resealable.

b. Original labels and material safety data will be retained to allow access to important product information.

c. If surplus product must be disposed of, manufacturer's or local and State recommended methods for proper disposal will be followed.

4. Product Specific Practices – The following product specific practices will be followed at the construction site:

a. Petroleum Products – All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

b. Fertilizers - Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm

water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

5. Spill Control Practices – In addition to the good housekeeping and material management practices described above, the following practices will be followed for spill prevention and cleanup:

   a. The manufacturer's recommended methods for spill cleanup will be clearly posted, and site construction personnel will be made aware of the procedures and the location of the information and cleanup supplies.

   b. The location of materials and equipment necessary for spill cleanup will be clearly posted, and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

   c. Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include, but not be limited to, brooms, dust pans, mops, rags, gloves, goggles, absorbent, sand and plastic and metal trash containers specifically designed for this purpose.

   d. All spills will be cleaned up immediately upon discovery.

   e. The spill area will be kept well ventilated, and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

These practices should be effective in reducing the release of hazardous material and minimizing exposure of the material to storm water. Additionally, these practices should minimize the discharge of hazardous substances or oil into the stormwater runoff of the site.

V. INSPECTIONS AND MAINTENANCE

This subsection describes the procedures to ensure that vegetation, erosion and sediment control measures and other protective measures identified in this SWPPP are inspected and maintained in good and effective operating condition. All erosion and sediment controls, storm water management controls, and related appurtenances which are installed or used to achieve compliance with the conditions of the General Permit and with the requirements of this SWPPP will be properly operated and maintained until final stabilization of the construction site is achieved and the Notice of Termination has been accepted by TDEC.

A. Inspection Procedures and Schedules

1. Inspection procedures for specific types of erosion and sediment controls and storm water management controls are as follows:

    a. Structural Controls:

        (1) Silt fence will be inspected for depth of sediment, tears, security of fabric attachment to the posts, security of fence posts in the ground, and to determine if the fabric is properly trenched into the soil.

        (2) Drainage swales will be inspected to ensure that they are not silted in and are properly diverting storm water runoff water excessive erosion occurring.

        (3) Earth dikes will be inspected to ensure that they are not silted in and are properly impounding storm water runoff.

        (4) Check dams will be inspected for depth of sediment.

        (5) Subsurface drains will be inspected to ensure that they are not obstructed and that storm water runoff is being properly intercepted by the system.

        (6) Diversion dikes will be inspected for any breaches.

    b. Stabilization Practices:

        (1) Sod will be inspected for healthy growth and areas of washout.

(2) Protected and preserved trees and mature vegetation will be inspected to ensure that any protective barrier is in place and that the vegetation is not being encroached upon.

(3) Seeding & mulched areas will be inspected to insure healthy growth and for areas of washout.

2. The inspections described herein will be performed at least twice every calendar week and at least 72 hours apart. Inspections shall be performed within 24 hours of the end of a storm event of 0.5 inches or greater.

3. Qualified personnel will inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site. Personnel selected for inspection and maintenance responsibilities will be trained in the appropriate inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

4. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures will be observed to ensure that they are operating correctly.

5. Outfall points (where discharges from the site enter streams or wet weather conveyances) will be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations will be inspected if possible. Locations where vehicles enter or exit the site will be inspected for evidence of offsite sediment tracking.

6. If the results of an inspection reveal that the storm water pollution prevention measures provided in this Plan are deficient, the Plan shall be revised as appropriate, but in no case later than 7 calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to this Plan within 7 calendar days following the inspection.

7. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and actions taken in shall be made and retained as part of the SWPPP for at least three (3) years from the date the site is finally stabilized. This report shall be signed in accordance with Section 5 of TNR 100000.

8. Depth of rainfall, approximate volume of discharge, interval between rain events, total drainage area, and estimated disturbed area shall be logged in a Discharge Monitoring Report.

B. Maintenance Procedures and Schedules

1. Maintenance needs identified by inspections or other means will be accomplished before the next storm event if possible, but in no case more than seven (7) days after the need is identified. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

2. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the control will be replaced or modified based on the site-specific conditions.

3. If sediment escapes the construction sites, off-site accumulations of sediment that have not reached a stream will be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in the street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets).

4. Sediment will be removed from silt fences, rock silt screens, and other sediment controls as necessary, but at least when the design capacity of the control has been reduced by 40%.

VI. TOTAL MAXIMUM DAILY LOADS (TMDL)

The receiving body of water for outfalls 1 & 2 is East Beaver Creek (TN08010209016_0300), which is already impaired due to sedimentation; however, the creek is 1.4 miles to the south of the disturbed area. The receiving body of water for outfall 3 is an unnamed tributary to East Beaver Creek (TN08010209016_0320), which has not been assessed.

The disturbed area for this project is 14.8 acres.

VII. NON-STORM WATER DISCHARGES

Potential sources of non-storm water that may be combined with storm water discharges associated with construction activities for this Project include the following:

- Discharge of non-storm water from the dewatering of work areas of collected storm water and ground water;

- Waters used to wash vehicles of dust and soil (not process materials such as concrete) to minimize off-site vehicle tracking of sediments where detergents are not used and detention and/or filtering is provided before the water leaves site;

- Water used to control dust generated by vehicular traffic; potable water sources including waterline flushings;

- Routine external building washdown which does not use detergents; uncontaminated ground water or spring water; and

- Foundation or footing drains where flows are not contaminated with process materials such as solvents.

This SWPPP includes appropriate erosion/sediment control and pollution prevention measures for the non-storm water component(s) of the discharge from this Project. All non-storm water discharges will be made through stable discharge structures.

VIII. RECORDKEEPING

This section provides a description of the records that will be produced and maintained with regards to complying with the requirements of this SWPPP and the General Permit.

- This Plan will be made available upon request to the TDEC or to the local agency approving sediment and erosion plans, grading plans, or storm water management plans.

- A copy of this SWPPP (including a copy of the permit language) will be maintained at the construction site (or other local location accessible to the Director and the public) from the date construction commences to the date of final stabilization. A copy of this Plan will be available at a central location onsite for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site.

- If the site is inactive or does not have an onsite location adequate to store this Plan, the location of the SWPPP, along with a contact number, will be posted onsite. If the Plan is located offsite, reasonable local access to the Plan, during normal working hours, will be provided.

- A notice will be posted near the main entrance of the construction site with the following information:

    1) The Storm Water Construction General Permit Certificate, a copy of the NOI confirmation letter;

    2) The name and telephone number of a local contact person;
    3) A brief description of the Project (shall include permit number); and

    4) The location of the SWPPP if the site is inactive or does not have an onsite location to store the Plan.

If posting this information near a main entrance is infeasible due to safety concerns, the notice will be posted in a local public building. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary.

- The following records will be maintained on site:

    1) The dates when major grading activities occur;

    2) The dates when construction activities temporarily or permanently cease on a portion of the site; and

3) The dates when stabilization measures initiated.

- A rain gauge is maintained at the site to measure and record rainfall moments.

- Any information, which is requested to determine compliance with the General Permit or other information, will be furnished to the Director or an authorized representative of the Director upon request.

- When an Operator on this Project becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the TDEC, such facts or information will be promptly submitted to the TDEC.

- Upon the presentation of credentials and other documents as required by law, authorized representatives of the EPA or TDEC will be allowed:

    1) To enter the construction site or location where records are maintained for this Project in accordance with the requirements of this SWPPP or the General Permit;

    2) To have access to and copy, at reasonable times, any records maintained for this Project in accordance with the requirements of this SWPPP or the General Permit; and

    3) To inspect any controls or equipment implemented and maintained for this Project in accordance with the requirements of this SWPPP or the General Permit.

- Records of inspections, maintenance, and repairs of erosion and sediment controls will be maintained on site or at a nearby office.
- Copies of this Storm Water Pollution Prevention Plan and all reports and records required by the SWPPP and the General Permit and records of all data used to complete the Notice of Intent to be covered by the General Permit, will be maintained for a period of at least three (3) years from the date the Notice of Termination is filed.

IX. AMENDMENT OF PLAN

This section provides the conditions upon which this SWPPP shall be amended to keep it current and to reflect changes in site conditions or control practices.

- Change in Scope – Whenever there is a change in the scope of the Project, which is expected to have a significant effect on the discharge of pollutants to the waters of the State and which has not otherwise been addressed in this Plan.

- Deficiencies – Whenever inspections or investigations by site operators, local, State and Federal officials indicate this SWPPP is proving ineffective in eliminating, significantly minimizing, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharge associated with the construction activity for this Project.

- New or Additional Operator – To identify any new construction and/or subcontractor that will implement a measure of the storm water pollution prevention plan.

- Aquatic Fauna – To include measures necessary to prevent a negative impact to legally protected state of federal listed or proposed threatened or endangered aquatic fauna. The State of Tennessee and EPA may review amendments to the plan.

- Request of TDEC – If notified by the Director of the TDEC or an authorized representative that this SWPPP does not meet one or more of the minimum requirements of the conditions of the General Permit, then within forty-eight (48) hours, unless additional time is provided by the Director, after such notifications sediment and erosion control will be modified to prevent the discharges of sediment from the site and this SWPPP will be amended to reflect these modifications within seven (7) days.

In addition, when one or more of the operators changes during the course of a construction project, new operators will submit a new NOI for their roles at the site.

X. TERMINATION OF COVERAGE

A Notice of Termination (NOT) shall be submitted on the TDEC's NOT form provided in Appendix C of this plan within thirty (30) days after one of the following events:

- The Project site has been finally stabilized and all storm water discharges from construction activities that are authorized by the General Permit have been eliminated; or

- The operator of all storm water discharges at a facility changes and another operator has taken over all of their responsibilities at the site.

Elimination of storm water discharges associated with construction activity means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time to ensure final stabilization is maintained, or that all storm water discharges associated with construction activities from the identified site that are authorized by the General Permit have otherwise been eliminated from the portion of the construction site where the operator had control.

XI. CERTIFICATION

This section provides the certification(s) from all Operators for this Project site in accordance with the requirements of Part VII.G of the General Permit.

A. **Certification of Parties with operational control cover construction plans and specifications** – In providing the following certification, the party with operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (i.e., normally the Owner or Developer), is attesting that it is responsible for the following:

1. Ensuring the project specifications developed meet the minimum requirements of Part IV (Storm Water Pollution Prevention Plans (SWPPP)) and all other applicable conditions of the General Permit.

2. Ensuring that the SWPPP indicates the areas of the Project where they have operational control over project specifications (including the ability to make modifications in specifications), and ensuring all other parties implementing portions of the SWPPP impacted by any charges they make to the plan are notified of such modifications in a timely manner.

3. If parties with day-to-day operational control of the construction site (i.e., normally the General Contractor) is not identified below, the party with operational control over project specifications is the responsible party until such time as the authority is transferred to another party and this Plan updated.

OWNER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Ben Ham	6-23-22
Signature	Date
BEN HARRIS	VICE PRESIDENT / DIVISION MANAGER
Printed Name	Title
BRASFIELD & GORRIE, LLC	(205) 714-1288
Owner	Phone Number

3021 7TH AVENUE SOUTH - BIRMINGHAM, AL 35233

Address

B. **Certification of Parties with Day-to-Day Operational Control** – In providing the following certification, the party or parties with day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other conditions of the General Permit (i.e., normally the General Contractor), is attesting that they are responsible for the following:

1. Ensuring that the SWPPP, for portions of the Project where they are Operators, meets the minimum requirements of Part IV (Storm Water Pollution Plan) of the General Permit and identifying the parties responsible for implementation of control measures identified in the Plan.

2. Ensuring that the SWPPP indicates the areas of the Project where they have operational control day-to-day activities.

CONTRACTOR CERTIFICATION

I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with the permit requirements.

Ben Harris — 6-23-22

Signature — Date

BEN HARRIS — VICE PRESIDENT / DIVISION MANAGER

Printed Name — Title

BRASFIELD & GORRIE, LLC — (205) 714-1288

Company Name — Phone Number

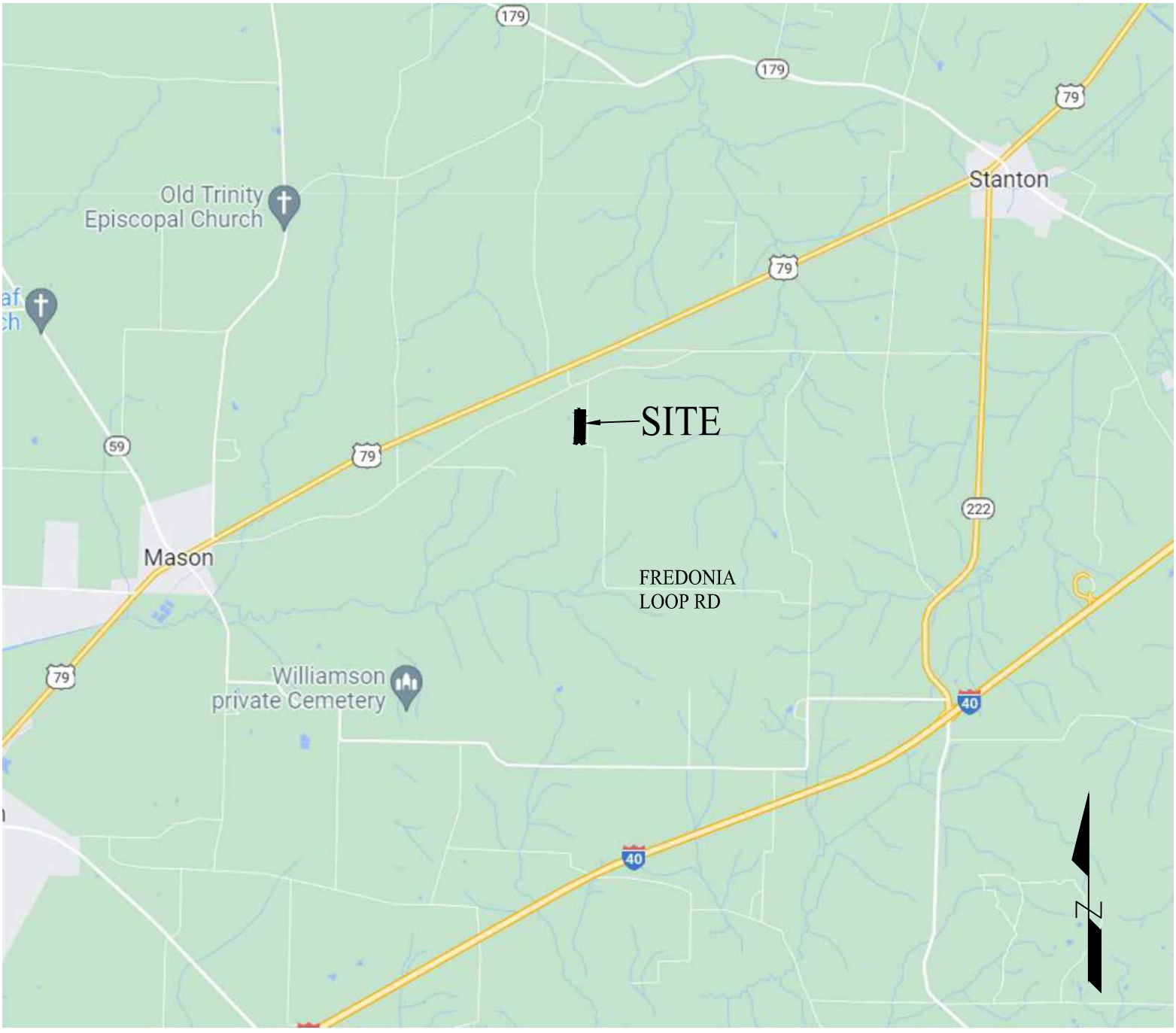
3021 7TH AVENUE SOUTH - BIRMINGHAM, AL 35233

Company Address

APPENDIX A

Vicinity Map

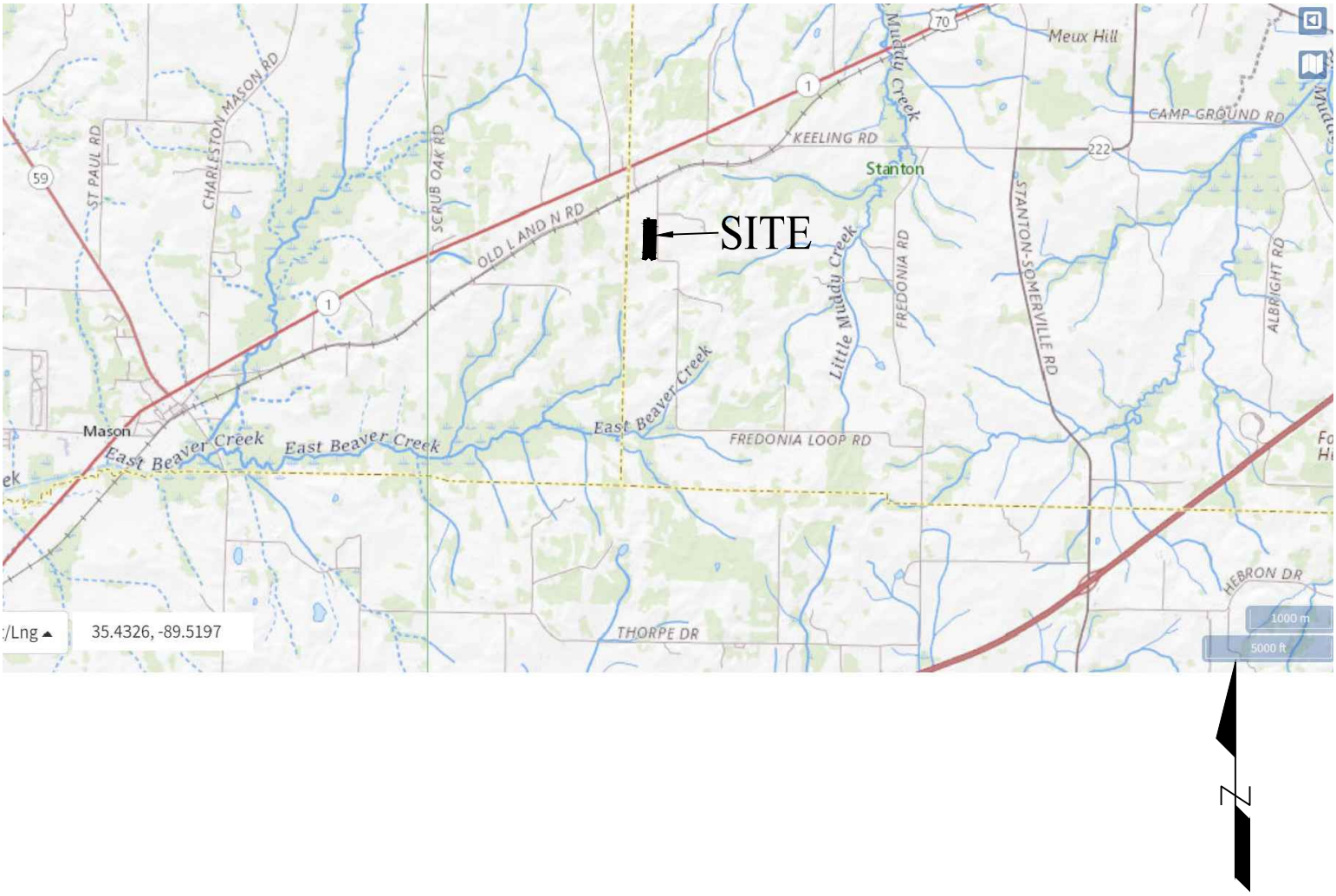
VICINITY MAP



APPENDIX B

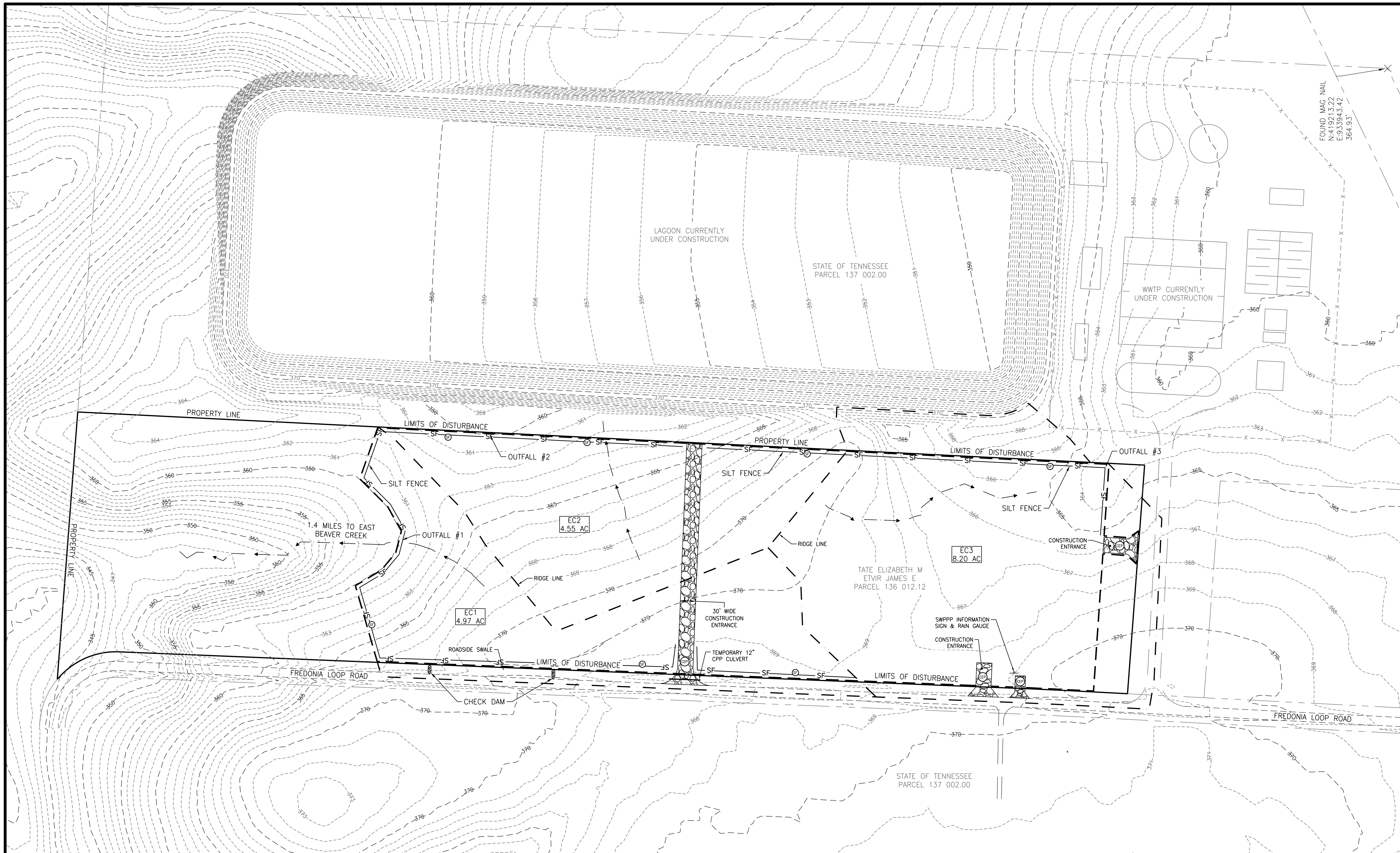
Site Map (USGS Quad)

VICINITY MAP



APPENDIX C

Erosion Protection & Sediment Control Plan



0 100' 200'
1" = 100'

LEGEND

These standard symbols may be found in the drawing.

- PROPERTY LINES
- ADJOINING PROP. LINES
- DRAINAGE BASIN
- LIMITS OF DISTURBANCE
- EASEMENT
- TREES TO REMAIN
- TREES TO BE REMOVED
- SILT FENCE
- SILT FENCE WITH WIRE BACKING
- INLET PROTECTION
- CHECK DAM
- WATTLES
- SEDIMENT TRAP
- SEDIMENT BASIN
- OUTLET PROTECTION
- CONSTRUCTION EXIT
- PERMANENT SEEDING
- EROSION CONTROL MAT
- EX / PR: SEWER MANHOLE
- EX / PR: DRAINAGE MANHOLE
- HYDRAULIC FLOW ARROWS (DIRECTION OF WATER FLOW)

CONSTRUCTION SEQUENCE – PHASE 1

1. CONSTRUCT TEMPORARY CONSTRUCTION EXIT/ENTRANCE AS SHOWN. CONSTRUCTION ENTRANCE LOCATION MAY BE MODIFIED ACCORDING TO INGRESS/EGRESS OF THE CONTRACTOR AS APPROVED BY ENGINEER.
2. INSTALL RAIN GAUGE NEAR CONSTRUCTION EXIT/ENTRANCE OR LOCATION THAT IS EASILY ACCESSIBLE BY A VEHICLE.
3. FURNISH AND INSTALL ALL SILT FENCING, CHECK DAMS, PIPES, STRUCTURES, AND INLET/OUTLET PROTECTION AS SHOWN ON THIS SHEET.
4. MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY.
5. STORMWATER INSPECTION AND REPORTING WILL BE REQUIRED OF ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH TDEC.
6. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF WATER.

F.E.M.A. NOTE:

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENTS AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS NOT LOCATED IN ANY TYPE OF FLOOD ZONE, MAP NO. 47075C0315D, EFFECTIVE DATE: APRIL 16, 2008.

EPSC NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL DURING CONSTRUCTION BY THE PLACEMENT OF SILT FENCES OR WATTLES WHERE NECESSARY TO PREVENT DOWNSTREAM SILTATION OF ANY DITCHES, PIPES, DRAINAGE STRUCTURES, OR ADJACENT PROPERTIES. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL AS NEEDED OR AS DIRECTED BY THE ENGINEER.
2. ALL NEW CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED MULCHED, SEEDED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. TOTAL DISTURBED AREA IS APPROXIMATELY 14.78 ACRES.
4. DURING EXCAVATION PHASES OF STEEP SLOPES, WATTLES WITH SILT FENCE BACKING SHALL BE REQUIRED TO ELIMINATE SILTATION TRANSFER ONTO ADJACENT LANDOWNERS PROPERTY AND PUBLIC STREETS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL WATTLES WITH SILT FENCE BACKING AS NEEDED ALONG EXPOSED SLOPES.
5. ALL NEW CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED MULCHED, SEEDED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
6. SEDIMENT WILL BE REMOVED FROM SILT FENCES, ROCK SILT SCREENS, AND OTHER SEDIMENT CONTROLS AS NECESSARY, BUT AT LEAST WHEN THE DESIGN CAPACITY OF THE CONTROL HAS BEEN REDUCED BY 50%.
7. MAINTENANCE NEEDS IDENTIFIED BY INSPECTIONS OR OTHER MEANS WILL BE ACCOMPLISHED BEFORE THE NEXT STORM EVENT IF POSSIBLE, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE NEED IS IDENTIFIED.
8. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
9. NEAREST RECEIVING WATER (EC1–1 & EC1–2): EAST BEAVER CREEK, (SEGMENT ID: TN08010209016_0300). ACCORDING TO THE TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION (TDEC) DIVISION OF WATER RESOURCES, THE WATER QUALITY OF THIS CREEK IS LISTED AS IMPAIRED DUE TO SEDIMENTATION/SILTATION.
9. NEAREST RECEIVING WATER (EC1–3): UNNAMED TRIBUTARY OF EAST BEAVER CREEK, (SEGMENT ID: TN08010209016_0320). ACCORDING TO THE TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION (TDEC) DIVISION OF WATER RESOURCES, THE WATER QUALITY OF THIS CREEK HAS NOT BEEN ASSESSED.
10. DRAINAGE BASIN AREAS SHOWN WITH BOXES AND OUTFALL LOCATIONS OF CORRESPONDING BASINS ARE NOTED.

TENNESSEE N.P.D.E.S. PERMIT
FOR
STORM WATER DISCHARGE

EFFECTIVE DATE____________________

TRACKING N.O.____________________

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

JOSHUA W. BURNETTE · REGISTERED ENGINEER · STATE OF TENNESSEE
PRELIMINARY PLANS SUBJECT TO CHANGE

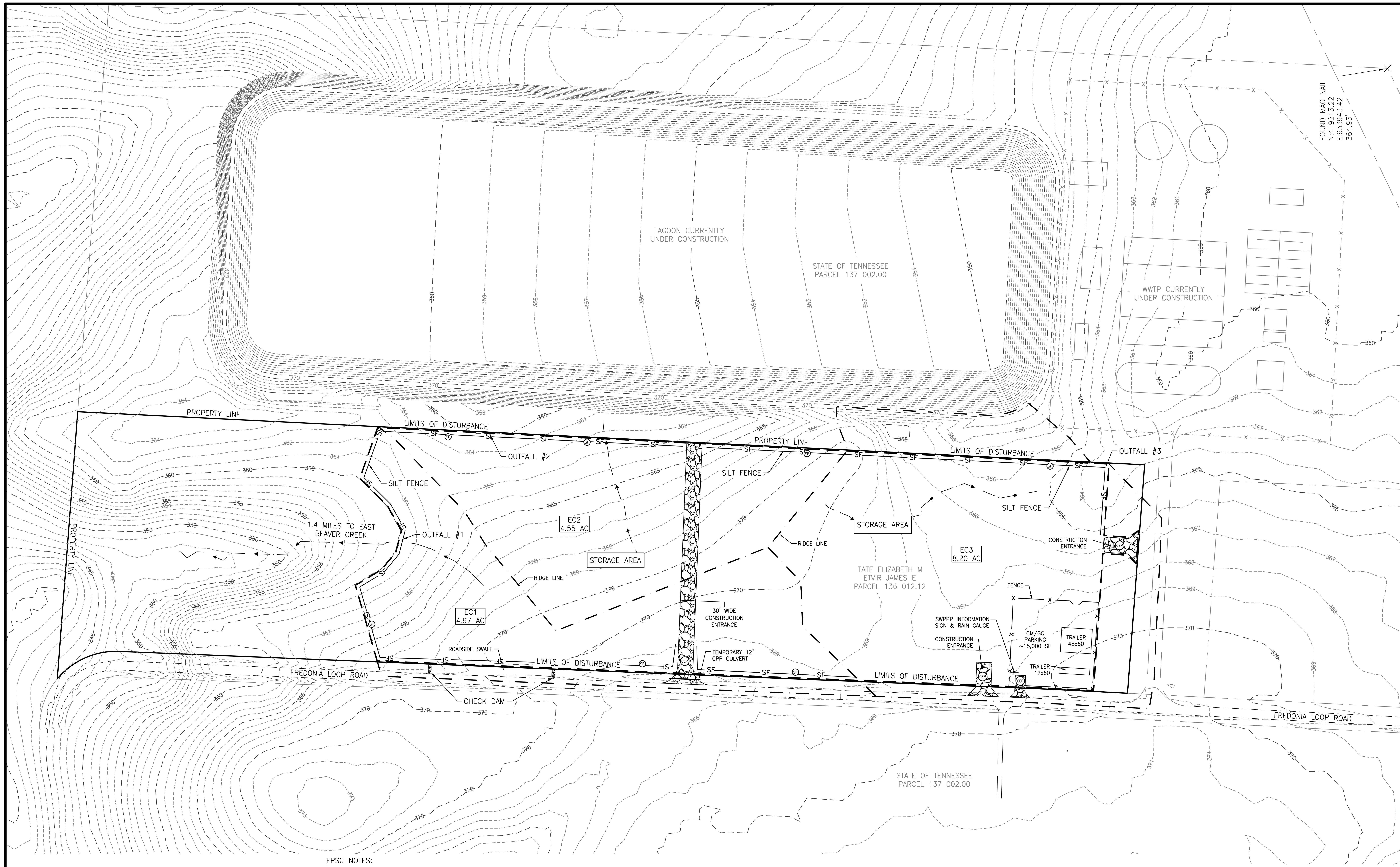
LAYDOWN AREA
OWNER: *BRASFIELD & GORRIE*
ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM

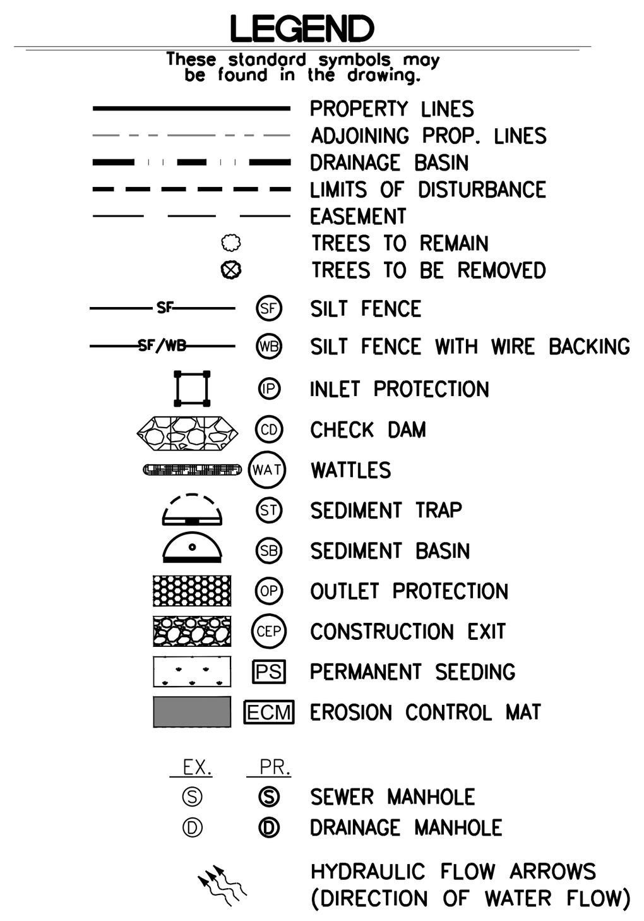
DIVISION OF ENGINEERING

EPSC 1

HAYWOOD COUNTY, TN

SURVEY:	DATE:	PROJECT NO.:
DESIGN BY: *J. BURNETTE, P.E.*	DATE: *6/8/2022*	BOOK:
DRAWN BY: *P. DUNGAN, E.I.*	DATE: *6/8/2022*	SCALE: 1" = 100'





CONSTRUCTION SEQUENCE – PHASE 2

1. MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY.
2. PROCEED WITH INSTALLMENT OF FENCE, OFFICE, AND TRAILER.
3. STORMWATER INSPECTION AND REPORTING WILL BE REQUIRED OF ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH TDEC.
4. WHEN PRACTICAL, STABILIZE SOIL AREAS WITH SEEDING
5. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF WATER.

F.E.M.A. NOTE:

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENTS AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS NOT LOCATED IN ANY TYPE OF FLOOD ZONE, MAP NO. 47075C0315D, EFFECTIVE DATE: APRIL 16, 2008.

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2. ALL NEW CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED MULCHED, SEEDED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. TOTAL DISTURBED AREA IS APPROXIMATELY 14.78 ACRES.
4. DURING EXCAVATION PHASES OF STEEP SLOPES, WATTLES WITH SILT FENCE BACKING SHALL BE REQUIRED TO ELIMINATE SILTATION TRANSFER ONTO ADJACENT LANDOWNERS PROPERTY AND PUBLIC STREETS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL WATTLES WITH SILT FENCE BACKING AS NEEDED ALONG EXPOSED SLOPES.
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TENNESSEE N.P.D.E.S. PERMIT
FOR
STORM WATER DISCHARGE

EFFECTIVE DATE____________________

TRACKING N.O.____________________

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

LAYDOWN AREA
OWNER: *BRASFIELD & GORRIE*
ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM

DIVISION OF ENGINEERING
EPSC 2
HAYWOOD COUNTY, TN

SURVEY:		DATE:	PROJECT NO.:
DESIGN BY:	*J. BURNETTE, P.E.*	DATE: *6/8/2022*	BOOK:
DRAWN BY:	*P. DUNGAN, E.I.*	DATE: *6/8/2022*	SCALE: 1" = *100'*