NORTH CAROLINA BROWNFIELDS REDEVELOPMENT SECTION
ENVIRONMENTAL MANAGEMENT PLAN

This form is to be used to prepare an Environmental Management Plan (EMP) for projects in the North Carolina Brownfields Redevelopment Section at the direction of a Brownfields project manager.

The EMP is a standard requirement of a Brownfields Agreement (BFA). Its purpose is to clarify actions to be taken during demolition and construction at Brownfields properties in an effort to avoid delays in the event of the discovery of new contamination sources or other environmental conditions. The EMP provides a means to document redevelopment plans and environmental data for each applicable environmental medium to inform regulatory-compliant decision-making at the site. As much detail as possible should be included in the EMP, including contingency planning for unknowns. Consult your project manager if you have questions.

Prospective Developers and/or their consultants must complete and submit this form and all pertinent attachments, see checklist below, to their Brownfields project manager prior to any earthmoving or other development-related activities that have the potential to disturb soil at the Brownfields Property, including demolition. For the EMP to be valid for use, it must be completed, reviewed by the Section, signed by all parties working on the project, and approved by the Brownfields project manager. Failure to comply with the requirements of the EMP could jeopardize project eligibility, or in the event of a recorded agreement, be cause for a reopener.

The EMP is valid only for the scope of work described herein and must be updated to be applicable for new phases of redevelopment or after significant changes in applicable regulatory guidance. Risk characterization of a Brownfields Property to DEQ's written satisfaction is required prior to EMP approval.

Voluntary Metrics Tab

The NC Brownfields Redevelopment Section updates estimated capital investment (from the Brownfields Property Application) and estimated jobs created (from the Brownfields Agreement) whenever possible. As a voluntary measure, you may opt to complete the below information for capital investment and jobs created as estimated by your final redevelopment plans for the Brownfields Property:

1. Estimated capital investment in redevelopment project: Estimated at $20 million
2. Estimated jobs created:
    a. Construction Jobs: Unknown
    b. Full Time Post-Redevelopment Jobs: 40

Table of Contents

So that the EMP provides value in protecting Brownfields eligibility and public health, the preparer shall ensure that the following steps have been completed prior to submitting the EMP for review. **Any EMP prepared without completing all of the following is premature and may be returned without comment.**

☒ Site sampling and assessment that meets Brownfields' objectives is complete and has been reviewed and approved by the Brownfields project manager.

☒ Specific redevelopment plans, even if conceptual, have been developed for the project, submitted and reviewed by the Brownfields project manager.

Please submit, along with the completed EMP form, the following attachments, as relevant and applicable to the proposed redevelopment:

☒ A set of redevelopment plans, including architectural/engineering plans, if available; if not, conceptual plans may suffice if updated when detailed plans are drafted.

☐ A figure overlaying redevelopment plans on a map of the extent of contamination for each media.

☒ Site grading plans that include a cut and fill analysis.

☐ A figure showing the proposed location and depth of impacted soil that would remain onsite after construction grading.

☐ Any necessary permits for redevelopment (i.e. demolition, etc.).

Note: Local permits are unknown at this time, any demolition or other permits will be provided if they are required.

☐ A detailed construction schedule that includes timing and phases of construction.

☒ Tabulated data summaries for each impacted media (i.e. soil, groundwater, soil gas, etc.) applicable to the proposed redevelopment.

☒ Figures with the sampling locations and contamination extents for each impacted media applicable to the proposed redevelopment.

☐ A full final grade sampling and analysis plan, if the redevelopment plan is final.

☐ If known, information about each proposed potential borrow soil source, such as aerial photos, historic site maps, historic Sanborn maps, a site history, necessary for Brownfields approval.

☐ Information and, analytical data if required, for quarries, or other borrow sources, detailing the type of material proposed for import to the Brownfields Property.

☐ A work plan for the sampling and analysis of soil to be brought onto the Brownfields Property. Refer to Issue Resolution 15 in Brownfields Redevelopment Section Guidelines.

☐ A map of the Brownfields Property showing the location of soils proposed for export and sampling data from those areas.

☐ If a Vapor Intrusion Mitigation System (VIMS) is required by the Brownfields Redevelopment Section, the VIMS plan will be signed and sealed by a NC Professional Engineer. The VIMS Plan may also be submitted under separate cover.

GENERAL INFORMATION

Date: 10/2/2025 **Revision Date (if applicable)**: 5/15/2026

Brownfields Assigned Project Name: Lauren Fleming

Brownfields Project Number: 28063-24-041

Brownfields Property Address: 1 Metals Drive, 5818 West Gate City Boulevard, & 5820 West Gate City Boulevard, Greensboro, North Carolina 27407

Brownfields Property Area (acres): 18.71

Is Brownfields Property Subject to RCRA Permit?.....☐ **Yes** ☒ **No**
If yes enter Permit No.: Click or tap here to enter text.
Is Brownfields Property Subject to a Solid Waste Permit.....☐ **Yes** ☒ **No**
If yes, enter Permit No.: Click or tap here to enter text.

COMMUNICATIONS

A copy of this EMP shall be distributed to all the parties below as well as any contractors or site workers that may be exposed to site vapors, soil, groundwater, and/or surface water. Additionally, a copy of the EMP shall be maintained at the Brownfields Property during redevelopment activities in an area that is prominently accessible to site workers. NOTE, THE EMP DOES NOT TAKE THE PLACE OF A SITE-SPECIFIC HEALTH AND SAFETY PLAN.

Prospective Developer (PD): Riverside Construction Materials, Inc.
Contact Person: James Graf

Phone Numbers: Office: 215-295-0777 **Mobile:** 484-576-0663
Email: jgraf@silvi.com

Contractor for PD: TBD
Contact Person: TBD
Phone Numbers: Office: TBD **Mobile:** TBD
Email: TBD

Environmental Consultant: ECS Southeast, LLC
Contact Person: Emery Lovekamp
Phone Numbers: Office: 704-525-5152 **Mobile:** 980-506-7986
Email: elovekamp@ecslimited.com

Brownfields Redevelopment Section Project Manager: Lauren Fleming
Phone Numbers: Office: 919-707-8294 **Mobile:** Click or tap here to enter text.
Email: lauren.fleming@deq.nc.gov

Other DEQ Program Contacts (if applicable, i.e., UST Section, Inactive Hazardous Site Branch, Hazardous Waste, Solid Waste):

Per information found in the NCDEQ Site Locator Tool, the site is listed in IHSB database; however, contact information was not found in this source.

NOTIFICATIONS TO THE BROWNFIELDS REDEVELOPMENT SECTION

Written advance Notification Times to Brownfields project manager: Check each box to accept minimum advance notice periods (in calendar days) for each type of onsite task:

On-site assessment or remedial activities:..... **10 days Prior** ☒

Construction or grading start:..... **10 days Prior** ☒

Discovery of stained soil, odors, USTs, buried drums or waste, landfill, or other signs of previously unknown contamination: ..... **Within 48 hours** ☒

Implementation of emergency actions (e.g. dewatering, flood or soil erosion control measures in area of contamination, ventilation of work zones):..... **Within 48 hours** ☒

Installation of mitigation systems:..... **10 days Prior** ☒

Other notifications as required by local, state or federal agencies to implement redevelopment activities: (as applicable): ..... **Within 30 days** ☒

REDEVELOPMENT PLANS

1) **Type of Redevelopment (check all that apply):**
☐Residential ☐Townhomes (Prior written DEQ approval REQUIRED regardless of ownership structure) ☐Recreational ☐Institutional ☒Commercial ☐Office ☐Retail ☒Industrial ☐Other specify:
Rail transload facility and concrete plant

2) **Check the following activities that will be conducted prior to commencing earth-moving activities at the site:**
☒ Review of historic maps (Sanborn Maps, facility maps)
☐ Conducting geophysical surveys to evaluate the location of suspect UST, fuel lines, utility lines, etc.
☒ Interviews with employees/former employees/facility managers/neighbors

3) **Summary of Redevelopment Plans (MANDATORY: attach detailed plans or conceptual plans, if detailed plans are not available. EMP review without such information would be premature)**: **Provide brief summary of redevelopment plans, including demolition, removal of building slabs/pavement, grading plans and planned construction of new structures:**
Redevelopment of the site is currently planned to consist of a rail transload facility and concrete plant. Structures include an elevated office space/scale house (construction trailer), a maintenance building, rail unloading shed, cement silos, skimmer basins, truck parking areas, and additional parking areas for employees. New rail track will be added to the existing rail track that adjoins the property to the north. The rail track will extend from north to south on the eastern portion of the site. Demolition plans currently include the removal of concrete pillars on the western portion of the site, two concrete building slabs, two existing buildings, two concrete walls, one culvert, and multiple stormwater drains/pipes.

4) **Do plans include demolition of structure(s)?:**
☒ Yes ☐ No ☐ Unknown
☒ **If yes**, please check here to confirm that demolition will be conducted in accordance with applicable legal requirements, including without limitation those related to lead and asbestos abatement that are administered by the Health Hazards Control Unit within the Division of Public Health of the North Carolina Department of Health and Human Services. If available, please provide a copy of your demolition permit.

5) **Are sediment and erosion control measures required by federal, state, or local regulations?**
S&EC requirements can be found at: https://deq.nc.gov/about/divisions/energy-mineral-and-land-resources/erosion-and-sediment-control/erosion-and-sediment-control-laws-and-rules
☒ Yes ☐ No ☐ Unknown
☒ **If yes**, please check here to confirm that earth-work will be conducted in accordance with applicable legal requirements. If soil disturbance is necessary to install sediment and erosion control measures, they may not begin until this EMP is approved.

6) **Which category of risk-based screening level is used or is anticipated to be specified in the Brownfields Agreement?** Note: If children frequent the property, residential screening levels shall be cited in the Brownfields Agreement for comparison purposes.
☐ **Residential** ☒ **Non-Residential or Industrial/Commercial**

7) **Schedule for Redevelopment (attach construction schedule):**
   a) **Construction start date:** 3Q26

   b) **Anticipated duration (specify activities during each phase):**
   Redevelopment activities are planned to last approximately 9 months.

   c) **Additional phases planned?** ☐ **Yes** ☒ **No**

   If yes, specify the start date and/or activities if known**:**

   Start Date: Click or tap to enter a date.
   Planned Activity:
   Click or tap here to enter text.

   Start Date: Click or tap to enter a date.
   Planned Activity:
   Click or tap here to enter text.

   Start Date: Click or tap to enter a date.
   Planned Activity:
   Click or tap here to enter text.

   d) **Provide the planned date of occupancy for new buildings:** 1Q27

CONTAMINATED MEDIA

Please fill out the sections below, using detailed site plans, if available, or estimate using known areas of contaminated soil and a conceptual redevelopment plan. Provide a figure overlaying new construction onto figure showing contaminated soil and groundwater locations.

1) **Contaminated Media on the Brownfields Property**

Part 1. Soil:	☒ **Yes**	☐ **No**	☐ **Suspected**	☐ **Unknown**	
Part 2. Groundwater:	☒ **Yes**	☐ **No**	☐ **Suspected**	☐ **Unknown**	
Part 3. Surface Water:	☒ **Yes**	☐ **No**	☐ **Suspected**	☐ **Unknown**	☐ **N/A**
Part 4. Sediment:	☒ **Yes**	☐ **No**	☐ **Suspected**	☐ **Unknown**	☐ **N/A**
Part 5. Soil Vapor:	☒ **Yes**	☐ **No**	☐ **Suspected**	☐ **Unknown**	
Part 6. Sub-Slab Soil Vapor:	☐ **Yes**	☐ **No**	☐ **Suspected**	☒ **Unknown**	
Part 7. Indoor Air:	☐ **Yes**	☐ **No**	☐ **Suspected**	☒ **Unknown**	

2) For the Area of Proposed Redevelopment on the Brownfields Property, attach tabulated data summaries for each impacted media and figure(s) with sample locations.

PART 1. SOIL

1) Known or suspected contaminants in soil (list general groups of contaminants):

Benzene in sample B-6 was detected at a concentration greater than its Protection of Groundwater Preliminary Soil Remediation Goal (PSRG). Tetrachloroethene (PCE) in samples B-6, B-8, and B-DUP were detected at concentrations greater than its Protection of Groundwater PSRG. Arsenic in samples B-1, B-3, B-4, B-4-C, B-4-D, B-5-C, B-6, B-14, B-DUP and WC-1 was detected at concentrations greater than its Industrial/Commercial PSRG. Arsenic in samples B-1, B-3, B-4, B-4-D, B-5-C, and B-14 was also detected at concentrations greater than its Protection of Groundwater PSRG. Cadmium in samples B-1, B-3, B-4-C, B-4-D, and B-6 was detected at concentrations greater than its Protection of Groundwater PSRG. Hexavalent chromium in sample B-9 was detected a concentration greater than its Protection of Groundwater PSRG. Copper in sample B-4-D was detected a concentration greater than its Protection of Groundwater PSRG. Lead in samples B-1, B-3, B-4-C, B-4-D, and B-6 was detected at concentrations greater than its Protection of Groundwater PSRG. Lead in sample B-4-D was detected at a concentration greater than its Industrial/Commercial PSRG. Selenium in samples B-3, B-4, and B-9 was detected at concentrations greater than its Protection of Groundwater PSRG. Zinc in samples B-1, B-3, B-4-D, and B-6 was detected at concentrations greater than its Protection of Groundwater PSRG. PFOS in samples B-1-P, B-3-P, B-6-P, B-8-P, B-10-P, B-11-P, B-13-P, and B-DUP was detected at concentrations greater than its Protection of Groundwater PSRG. PFOA in samples B-1-P, B-11-P, B-13-P, B-14-P, and B-DUP was detected at concentrations greater than its Protection of Groundwater and Industrial/Commercial PSRGs.

2) Depth of known or suspected contaminants (feet):

0-2 feet below grade

3) Area of soil disturbed by redevelopment (square feet):

Approximately 392,040 square feet (9 acres). See the attached cut and fill analysis.

4) Depths of soil to be excavated (feet):

The maximum depth of soil to be excavated is approximately less than five feet for the installation of utilities.

5) Estimated volume of soil (cubic yards) to be excavated (attach grading plan):

11,020.82 cubic yards. Based on the attached cut and fill analysis, the estimated volume of soil anticipated for fill is greater than the estimated volume of excavated soil at this time.

6) Estimated volume of excavated soil (cubic yards) anticipated to be impacted by contaminants:

Unknown. Based on the attached cut and fill analysis and Figure 3 (*Soil Sampling Location Map*), the soil to be excavated is approximately located in the B-4, B-5, and B-7 sampling grids.

Compounds of concern detected above applicable PSRGs in soil samples collected from sampling grids B-4 and B-5 were previously stated in this section. Compounds of concern were not detected above applicable PSRGs in soil samples collected from sampling grid B-7.

7) Estimated volume of contaminated soil expected to be disposed of offsite, if applicable:

Based on the attached cut and fill analysis, the estimated volume of soil anticipated for fill is greater than the estimated volume of excavated soil at this time. The excavated soil is anticipated to be used as fill for site grading.

Lead in sample B-4-D was detected at a concentration greater than its Industrial/Commercial PSRG. If soil in the approximate area of sample B-4-D cannot be reused onsite under impervious cap or clean fill cap material (2-foot minimum thickness), the soil will be disposed offsite at a Subtitle D landfill. The specific landfill is to be determined.

PART 1.A. MANAGING ONSITE SOIL

If soil is anticipated to be excavated from the Brownfield Property, relocated on the Brownfields Property, or otherwise disturbed during site grading or other redevelopment activities, please provide a grading plan that clearly illustrates areas of cut and fill (approximate areas & volumes are acceptable, if only preliminary data available).

1) HAZARDOUS WASTE DETERMINATION:

a) Does the soil contain a LISTED WASTE as defined in the North Carolina Hazardous Waste Section under 40 CFR Part 261.31-261.35?..... ☐**Yes** ☒**No**

☐ **If yes, explain why below, including the level of knowledge regarding processes generating the waste (include pertinent analytical results as needed)**.

Click or tap here to enter text.

☐ **If yes, do the soils exceed the "Contained-Out" levels in Attachment 1 of the North Carolina Contained-In Policy?**..... ☐ **Yes** ☐ **No**

b) NOTE: IF SOIL MEETS THE DEFINITION OF A LISTED HAZARDOUS WASTE AND EXCEEDS THE CONTAINED-OUT LEVELS IN ATTACHMENT 1 TO THE NORTH CAROLINA CONTAINED-IN POLICY, THE SOIL MAY NOT BE RE-USED ONSITE AND MUST BE DISPOSED OF IN ACCORDANCE WITH DEQ HAZARDOUS WASTE SECTION RULES AND REGULATIONS.

c) Does the soil contain a CHARACTERISTIC WASTE?..... ☐ **Yes** ☒ **No**

☐ **If yes**, mark reason(s) why below (and include pertinent analytical results).

☐ **Ignitability** Click or tap here to enter text.

☐ **Corrosivity** Click or tap here to enter text.

☐ **Reactivity** Click or tap here to enter text.

☐ **Toxicity** Click or tap here to enter text.

☐ **TCLP results** Click or tap here to enter text.

☐ **Rule of 20 results** (20 times total analytical results for an individual hazardous constituent on TCLP list cannot, by test method, exceed regulatory TCLP standard)

Click or tap here to enter text.

☒ **If no,** explain rationale:

TCLP results for select soil samples are included in the attached Table 2. TCLP RCRA 8-Metals concentrations were detected below their respective EPA Title 40 Maximum Concentration of Contaminants (MCCs) for Toxicity Characteristic in soil samples B-1-TCLP, B-3-TCLP, B-6-TCLP, B-12-TCLP, DUP-TCLP, B-1-A, B-4-C, B-4-D, B-5-C, and B-8-C.

d) NOTE: IF SOIL MEETS THE DEFINITION OF A CHARACTERISTIC HAZARDOUS WASTE, THE SOIL MAY NOT BE RE-USED ONSITE AND MUST BE DISPOSED OF IN ACCORDANCE WITH DEQ HAZARDOUS WASTE SECTION RULES AND REGULATIONS.

2) Screening criteria by which soil disposition decisions will be made (e.g., left in place, capped in place with low permeability barrier, removed to onsite location and capped, removed offsite):

☐ **Preliminary Health-Based Residential SRGs**

☒ **Preliminary Health-Based Industrial/Commercial SRGs**

☒ **Division of Waste Management Risk Calculator (For Brownfields Properties Only)**

☐ **Site-specific risk-based cleanup level. Please provide details of methods used for determination/explanation.**

Click or tap here to enter text.

Additional comments:

Click or tap here to enter text.

3) If known impacted soil is proposed to be reused within the Brownfields Property boundary, please check the measures that will be utilized to ensure safe placement and documentation of same. Please attach a proposed location diagram/site map.

☒ **Provide documentation of analytical report(s) to Brownfields project manager.**

☒ **Provide documentation of final location, thickness and depth of relocated soil onsite map to Brownfields project manager once known.**

☒ **Geotextile to mark depth of fill material.**

Provide description of material:

Geotextile, if necessary, will be considered as part of impacted soil management; however, details on potential geotextile products is unknown at this time.

☒ **Manage soil under impervious cap ☒ or clean fill ☒**

☒ **Describe cap or fill:**

If contaminated soil is encountered and reused onsite, it will either be:

1.) Located underneath impervious cap such as asphalt/concrete parking, and/or drive areas; or,
2.) Place below two (2) feet of demonstrably clean fill cap material. A witness barrier will be positioned above contaminated soil in these capped areas.

Lead in sample B-4-D was detected at a concentration greater than its Industrial/Commercial PSRG. If soil in the approximate area of sample B-4-D cannot be reused onsite under impervious cap or clean fill cap material (2-foot minimum thickness), the soil will be disposed offsite at a Subtitle D landfill.

☒ **Confer with NC BF project manager if Brownfield Plat must be revised (or re-recorded if actions are Post-Recordation).**

☐ **GPS the location and provide site map with final location.**

☒ **Other. Please provide a description of the measure**:

The above options are provided in the event unknown impacted soil management is needed.

4) Please describe the following action(s) to be taken during and following excavation and management of site soils:

☒ **Check to confirm that management of fugitive dust from site activities will be handled in accordance with applicable local, state, and federal requirements.**

<u>Field screening of site soil</u>

At a minimum, contractors shall be made aware of protocols should impacted soils (e.g. staining, unusual odors, fill materials) be identified.

Describe the field screening method, frequency of field screening, person conducting field screening:

During soil disturbance, the workers or contractors will observe soils for evidence of distinct unnatural color, strong odor, or fill materials of concern (i.e., chemicals, tanks, drums, subsurface piping, etc.). Should the above be noted during site work, the contractor will contact the project's environmental consultant to observe the suspect condition. If the environmental consultant confirms material may be impacted by using field observations and/or screening with Photoionization Detector or Flame Ionization Detector (PID/FID), then the soils will be managed in accordance with this EMP and the NCDEQ, BF Project Manager will be contacted within 48 hours to advise that person of the condition.

<u>Soil sample collection</u>

☐ **Yes**

☒ **Not anticipated - In order to avoid delays in construction, a plan shall be in place for sampling of suspect soils should they be encountered during redevelopment. If soil sample collection is not anticipated but the need to do so is identified during redevelopment, notify the Brownfields project manager of the anticipated sample and report dates for scheduling purposes.**

Describe the sampling method (e.g., in-situ grab, composite, stockpile, etc.) and confirm that all procedures outlined in applicable DEQ guidance for assessment shall be followed Typically, at least one representative sample (per 500 yd^3 for residential and 1,000 yd^3 for commercial) consisting of a 3 to 5-point composite sample with grab sample for VOCs based on the highest PID reading is required to determine soil management options**:**

If suspected soil impact is encountered during construction or removal of site structures, excavation will proceed only as far as needed to allow construction of the structure to continue and/or only as far as needed to allow alternate corrective measures described below. Suspect impacted soil excavated during structure construction or removal may be stockpiled and covered in a secure area to allow construction to progress. Stockpiling must be conducted in a manner consistent with the guidance provided herein. The NCBP Diagram for Temporary Containment of Impacted or Potentially Impacted Soil is attached. If soil stockpiling occurs and samples are required, the stockpile will be gridded off in approximately 1,000 cubic yard (CY) cells for the collection of approximately one 5-point composite sample for every 1,000 CY and in general accordance with the most current Inactive hazardous Sites Branch (IHSB) Guidelines for Assessment and Cleanup of Contaminated Sites. One grab sample for VOCs will be collected from every 1,000 CY cell, based upon PID screening results, with the composite sample collected from each 1,000 CY cell submitted for analysis for SVOCs, RCRA 8-Metals, hexavalent chromium, and PFAS. Construction debris such as asphalt and concrete will be segregated from soil and disposed of as construction debris. This debris will be required to shaken, tumbled, etc., if necessary, in order to ensure no soil is adhered to the construction debris prior to disposal.

Check applicable chemical analytes for soil samples:

☒ **Minimum Sample Requirements:** Volatile organic compounds (VOCs) by EPA Method 8260*;* Semi-volatile organic compounds (SVOCs) by EPA Method 8270; and Metals RCRA List + Hexavalent Chromium by EPA Method 6020/7199

☐ **Pesticides:** Specify Analytical Method Number(s):
Click or tap here to enter text.

☐ **PCBs:** Specify Analytical Method Number(s):
Click or tap here to enter text.

☒ **Other Constituents & Respective Analytical Method(s)** (e.g. Herbicides):
PFAS by EPA Method 1633

☒ **Check to confirm that by the owner's signature and the North Carolina Professional**

Engineer/Geologist sealing this EMP the consultant understands that no work plan for suspect soil sample collection will be submitted beyond this EMP, and that it is the responsibility of the sealing professional and property owner to ensure that all applicable guidelines and methodologies are followed and reported to DEQ for determination and approval of soil placement prior to final relocation.

If impacted soils above applicable PSRGs and/or site specific risk thresholds are proposed to be relocated on-site, prior to final placement on-site, the following shall be submitted for DEQ review/approval

- Analytical data that has been sampled in accordance with the above referenced frequency and following procedures outlined in the most recent Brownfields Redevelopment Section *Environmental Site Assessment Work Plan Minimum Requirements Checklist (Checklist)* and in accordance with DEQ IHSB *Guidelines for Assessment and Cleanup of Contaminated Sites (Guidelines)*
- Figure outlining planned soil placement and any future site features including buildings/hardscape/open areas
- A North Carolina PE/PG recommendation of placement

Impacts	Options	
	Onsite Placement without conditions	**Onsite placement under 2 ft of cap or clean fill[1, 2]**
All Constituents below applicable PSRGs	**X**	
Constituents[3] below applicable PSRGs; Metals below background but above PSRGs	**X**	
Constituents[3] below applicable PSRGs; Metals above Background /PSRGs		**X**
Constituents above Applicable PSRGs		**X**

1: Requires Prior Written DEQ Approval

2: VOC impacted soils above applicable PSRGs shall not be placed directly beneath building footprints without prior written DEQ approval.

3: Constituents indicate any samples evaluated for other than metals.

☒ Check to confirm that stockpiling of known or suspected impacted soils will be conducted in accordance with Figure 1 of this EMP. Stockpile methodology should provide erosion control, prohibiting contact between surface water/precipitation and contaminated soil, and preventing contaminated runoff. Explain any variances or provide additional details as needed:

Upon excavation of soils that appear impacted, the potentially impacted soils will be segregated, stockpiled on plastic, and covered to protect from runoff. The NCDEQ, BF Project Manager will be notified within 48 hours and the stockpiled soils will be sampled as described above. Upon receipt of laboratory results, the NCDEQ BF Project Manager will be notified, and should soils be approved by the Brownfields Program for reuse on site as fill material as outlined in Item 2 and 3 above, the soils will be transported and placed at final fill location under asphalt/concrete parking and/or drive areas

or in landscaped area and covered with demonstrably clean fill. Analytical results and a summary table will be provided to DEQ for review and soil will be managed in accordance with managing on-site soil, as outlined in Item 3 above. Analytical results and methodologies for sampling, along with final disposition of the soils, will be summarized in the Redevelopment Summary Report.

☒ **Final grade sampling of exposed native soil (i.e., soil that will not be under buildings or permanent hardscape).** Select chemical analyses for final grade samples with check boxes below (Check all that apply):

☒ **Minimum Sample Requirements:** Volatile organic compounds (VOCs) by EPA Method 8260; Semi-volatile organic compounds (SVOCs) by EPA Method 8270; and Metals RCRA List + Hexavalent Chromium by EPA Method 6020/7199

☐ **Pesticides:** Specify Analytical Method Number(s):
Click or tap here to enter text.

☐ **PCBs:** Specify Analytical Method Number(s):
Click or tap here to enter text.

☒ **Other Constituents & Respective Analytical Method(s)** (e.g. Herbicides):
PFAS by EPA Method 1633

Please provide a scope of work for final grade sampling, including a diagram of soil sampling locations, number of samples to be collected, and brief sampling methodology. Samples should be collected from 0-2 ft below ground surface, with the exception of VOCs which should be taken from 1-2 ft below ground surface. Alternatively, indicate if a work plan for final grade sampling may be submitted under separate cover.

Final grade sampling will be performed for areas not covered by expansion foundations, or impervious surfaces. Following completion of soil disturbance for future site development (i.e., after grading and utility construction), an environmental professional will be contacted to assess the site for areas that are not covered with a minimum of 2 feet of demonstrably clean fill soil or topsoil from a landscaping company, expansion foundations, sidewalks, asphalt or concrete parking areas (including the parking deck), driveways or other impervious surfaces.

A Work Plan for final grade sampling will be prepared for DEQ review and approval. If no such area exists, documentation will be provided to the NCDEQ.

Any final grade sampling activities will be completed following construction of the expansions and prior to occupancy of the expansions.

☐ ***If final grade sampling was NOT selected, please explain rationale:***
Click or tap here to enter text.

PART 1.B. IMPORTED FILL SOIL

NO SOIL MAY BE BROUGHT ONTO THE BROWNFIELDS PROPERTY WITHOUT PRIOR APPROVAL FROM THE BROWNFIELDS REDEVELOPMENT SECTION. According to the Brownfields IR 15, "Documenting imported soil (by sampling, analysis, and reporting in accordance with review and written approval in advance by the Brownfields Redevelopment Section), will safeguard the liability protections provided by the brownfields agreement and is in the best interest of the prospective developer/property owner."

Requirements for importing fill:

☒ **Check to confirm that the import volumes outlined below have been confirmed based on geotechnical evaluations.**

1) **Will fill soil be imported to the site?**..... ☐ **Yes** ☐ **No** ☒ **Unknown**

2) **If yes, what is the estimated volume of fill soil to be imported?**

Unknown. Based on the attached cut and fill analysis, the fill volume exceeds the excavated soil volume by a nominal amount of approximately 289 cubic yards. The excavated soil is anticipated to be used as fill for site grading.

If necessary, imported fill soil will come from a NCDEQ Brownfields pre-approved quarry or North Carolina Division of Energy, Mineral, and Land Resources (DEMLR) landfill. The Martin Marietta – Salem Quarry in Kernersville, North Carolina is currently the closest NCDEQ pre-approved quarry. Virgin material from the Martin Marietta – Salem Quarry does not require sampling based on pre-approval from the Brownfields program. Source material from the Martin Marietta – Salem Quarry must be virgin, undisturbed land and not apart of a recycling program. If fill soil is imported from a DEMLR landfill, a minimum of one sample for VOCs, SVOCs, RCRA metals, hexavalent chromium, and PFAS will be collected per site, per phase of work. The sample will be collected from the material in the area of property planned for export. Additional sampling requirements for imported fill soil are listed in the *Guidelines for Beneficial Reuse of Excess of Soils from Regulated Properties* (September 2025).

Bulk landscape material from a commercial vendor does not require sampling. Soil import sampling requirements for various sources are listed in the table below.

3) **If yes, what is the anticipated depth that fill soil will be placed at the property? (*If a range of depths, list the range*.)**

If necessary, approximately 0-5 feet below grade

PRIOR TO SOIL PLACEMENT AT THE BROWNFIELDS PROPERTY, a *Soil Import Request* must be submitted for DEQ Brownfields review and approval. The request shall consist of a data package that details:

- Fill source location/history (Phase I if available, current aerials, etc.)
- Analytical data that has been sampled in accordance with the below frequency and

following procedures outlined in the most recent Brownfields Redevelopment Section *Environmental Site Assessment Work Plan Minimum Requirements Checklist (Checklist)* and in accordance with DEQ IHSB *Guidelines for Assessment and Cleanup of Contaminated Sites (Guidelines)*

- A table comparing the import soil to existing site concentrations
- A PE/PG recommendation of import
- All relevant attachments listed in the *Checklist*

Soil Import Sampling Requirements:

Source	Sample Frequency	Sample Analysis
Virgin Material from DEQ Brownfields Pre-approved Quarry	None (Contact Brownfields project manager for list of pre-approved Quarries	
DEQ Permitted Quarry (Not Brownfields Pre-approved)	At least one representative sample from area of planned import	VOCs, SVOCs, RCRA Metals, any site specific COCs (e.g. pesticides, PCBs, etc.)
Other NC DEQ Brownfields Property	At least one representative sample per 1,000 yd^3 consisting of a 3-point composite sample with grab sample for VOCs based on the highest PID reading	VOCs, SVOCs, RCRA Metals, any site specific COCs (e.g. pesticides, PCBs, etc.)
Off-site unpermitted/regulated property		
Bulk Landscape Material from Commercial Vendor (i.e. topsoil)	No Sampling Required	

If other special considerations apply, discuss:

Import soil sampling from a DEQ Permitted Quarry (not Brownfields pre-approved) will also include hexavalent chromium using EPA Method 7199 and PFAS using EPA Method 1633.

☒ Check to confirm that by the owner's signature and the North Carolina Professional Engineer/Geologist sealing this EMP the consultant understands that no work plan for suspect soil sample collection will be submitted beyond this EMP, and that it is the responsibility of the sealing professional and property owner to ensure that all applicable guidelines are followed and reported in the *Soil Import Request* for DEQ approval. Failure to meet these requirements could result in resampling and/or failure to approve import.

PART 1.C. SOIL EXPORT

NO SOIL MAY LEAVE THE BROWNFIELDS PROPERTY WITHOUT APPROVAL FROM THE BROWNFIELDS REDEVELOPMENT SECTION. Failure to obtain approval may violate a brownfields agreement causing a reopener or jeopardizing eligibility in the Section, endangering liability protections and making said action possibly subject to enforcement. Justifications provided below must be approved by the Section in writing prior to completing transport activities. Refer

to Brownfields IR 15 for additional details.

1) **If export from the Brownfields Property is anticipated, export soil must be sampled at a frequency of one sample per 1,000 yd^3 consisting of a 3-point composite sample with a grab sample for VOCs based on the highest PID reading. Samples shall be analyzed at a minimum for VOCs, SVOCs, and RCRA metals plus any site specific COCs.**

PRIOR TO EXPORT FROM THE BROWNFIELDS PROPERTY, a *Soil Export Request* must be submitted for DEQ Brownfields review and approval. The request shall consist of a Data Package that details:

- Proposed Receiving Facility
- Analytical data that has been sampled in accordance with the above referenced frequency and following procedures outlined in the most recent Brownfields Redevelopment Section *Environmental Site Assessment Work Plan Minimum Requirements Checklist (Checklist)* and in accordance with DEQ IHSB *Guidelines for Assessment and Cleanup of Contaminated Sites (Guidelines)*
- A table comparing the export soil to concentrations on the receiving site concentrations including risk comparison (Note that calculated risk cannot be increased on the receiving site)
- A North Carolina PE/PG recommendation of export
- Written approval from the receiving site property owner representative for export
- All relevant attachments listed in the *Checklist*

Soil Export Options

Impacts	**Options**			
	Use as Beneficial Fill	**Off-site disposal at other Brownfields Property[2,6,7]**	**Off-site disposal at LCID/CD Landfill[1, 3]**	**Off-site disposal at Subtitle D MSW/Permitted Landfarm[4]**
All Constituents below applicable PSRGs	**X**	**X**	**X**	**X**
Constituents[5] below applicable PSRGs; Metals below background but above PSRGs		**X**	**X**	**X**
Constituents[5] below applicable PSRGs; Metals above Background /PSRGs		**X**	**X**	**X**
Constituents above Applicable PSRGs		**X**		**X**

1: Requires Prior Written DEQ Approval

2: VOC impacted soils above applicable PSRGs shall not be placed directly beneath building footprints without prior written DEQ approval.

3: Requires comparison to site specific metals concentrations.

4: Facility to determine if they can accept soil within their permit.

5: Constituents indicate any samples evaluated for other than metals.

6: Requires written approval from receiving site property owner representative.

7. Site COCs must be in comparable concentrations to receiving site and not significantly raise risk of

the receiving site.

☒ **Check to confirm that by the owner's signature and the North Carolina Professional Engineer/Geologist sealing this EMP the consultant understands that no work plan for suspect soil sample collection will be submitted beyond this EMP, and that it is the responsibility of the sealing professional and property owner to ensure that all applicable guidelines are followed and reported in the *Soil Export Request* for DEQ approval. Failure to meet these requirements could result in resampling and/or failure to approve export.**

If other special considerations apply, discuss:

If necessary, soil export will be transported to a Subtitle D landfill for disposal. The specific landfill is to be determined. Depending on the facility, export soil sampling may be analyzed for additional compounds.

PART 1.D. MANAGEMENT OF UTILITY TRENCHES

☐ **Install liner between native impacted soils and base of utility trench before filling with clean fill (Preferred)**

☒ **Last out, first in principle for impacted soils (if soil can safely be reused onsite and is not a hazardous waste), i.e., impacted soils are placed back at approximately the depths they were removed from such that impacted soil is not placed at a greater depth than the original depth from which it was excavated.**

☐ **Evaluate whether necessary to install barriers in conduits to prevent soil vapor transport, and/or degradation of conduit materials due to direct impact with contaminants.**

☐ **If yes,** provide specifications on barrier materials or provide the results of this evaluation in the Vapor Mitigation Plan. **Note** that if vapor mitigation is planned for site buildings, utility corridors will need to be evaluated as part of mitigation designs:

Click or tap here to enter text.

☒ **If no**, include rationale here:

Updated predevelopment site plans include three enclosed buildings with new slab construction. Based on soil vapor sampling results and the NCDEQ Risk Calculator, one building is being considered for the installation of a soil vapor barrier. This building is associated with soil vapor sample SV-2. Further details are included in Part 5 of this EMP.

☐ **Unknown**, details to be provided in the Vapor Mitigation Plan for site buildings

Other comments regarding managing impacted soil in utility trenches:

The environmental professional will remain on call on an as-needed-basis during redevelopment activities at the Site. In the event suspected contaminated soil and/or vapors are encountered in utility trenches during redevelopment activities (based on observed soil staining or discoloration, unusual and/or strong odors, or physical effects such as dizziness, lightheadedness, coughing,

difficulty breathing, etc.), the trench will be evacuated, and the environmental professional will be called to perform appropriate safety screening of the soil/vapors. Safety screening activities include screening the soil using a PID and monitoring the worker breathing zone with a multi-gas monitor (or similar instrument[s] capable of detecting VOCs and combustible gases). If the environmental professional confirms that the material may be impacted, then the procedures outlined in Part 1.A. Managing On-Site Soil above will be implemented, and appropriate engineering controls (such as the use of industrial fans) will be implemented. In addition, the environmental professional will contact the DEQ Brownfields project manager within 48 hours to advise that person of the condition.

PART 2. GROUNDWATER

1) What is the depth to groundwater at the Brownfields Property?

Depth to groundwater is approximately 1 to 22 feet based upon depth to water measurements collected on June 6, 2025, from onsite permanent monitoring wells GW-1 through GW-10. Depth to groundwater at monitoring wells GW-8 and GW-9 was measured at 1.06 and 1.49 feet, respectively. It should be noted that wells GW-8 and GW-9 are believed to be under artesian conditions.

2) What is the maximum depth of soil disturbance onsite?

Soil disturbance is not expected to exceed 5 feet in depth. Soil disturbance is not expected in the areas of monitoring wells GW-8 and GW-9.

3) Is groundwater known to be contaminated by ☐onsite ☐offsite ☐both or ☒unknown sources? Describe source(s):

PCE in sample GW-10 was detected at a concentration greater than its North Carolina 2L Groundwater Quality Standards (NC2LGWQS). Cadmium in sample GW-2 was detected at a concentration greater than its NC2LGWQS. Chromium in samples GW-7 and duplicate sample DUP-1 was detected at concentrations greater than its NC2LGWQS. PFOS was detected in groundwater samples GW-1-P, GW-2-P, GW-3-P, GW-5-P, and GW-10-P at a concentration greater than its respective NC2LGWQS. PFOA was detected in groundwater samples GW-1-P, GW-2-P, GW-3-P, GW-5-P, and GW-10-P at a concentration greater than its respective NC2LGWQS. For non-naturally occurring substances for which numeric groundwater standards have not been established, detections above the laboratory reporting limit (RL) are considered to be a violation of the North Carolina Groundwater Standards per 15A NCAC 02L. 0202. PFBS was detected in groundwater samples GW-2-P through GW-5-P and DUP-2-P at a concentration greater than its respective laboratory RL. PFHxA was detected in groundwater samples GW-3-P and GW-5-P at a concentration greater than its respective laboratory RL. PFBA, PFPeA, and PFPeS were detected in groundwater sample GW-5-P at concentrations greater than their respective laboratory RL. PFHpA and PFHxS were detected in groundwater samples GW-2-P, GW-3-P, and GW-5-P at concentrations greater than their respective laboratory RLs. Additional PFAS compounds were detected at concentrations greater than the laboratory method detection limits but less than their respective laboratory RLs in groundwater samples GW-1-P through GW-4-P and GW-10-P. However, estimated concentrations (J-flag qualifier) are not considered to be a violation of the NC2LGWQS.

The source(s) of the contaminants detected in groundwater at the subject property is (are) unknown. Potential sources may include, but are not necessarily limited to:

- The historic use of the subject property as an apparent metal scrap yard and smelting facility.
- The historic use of the subject property as a wood treatment facility.
- The historic operation of the former eastern adjoining furniture finishing facility.
- The current and historic operation of two southeastern adjoining automotive repair facilities.

4) What is the direction of groundwater flow at the Brownfields Property?

Based upon the surveyed elevations of the top-of-casing of each monitoring well and the depth to water measurements collected on June 10, 2025, groundwater flows approximately to the west.

5) Will groundwater likely be encountered during planned redevelopment activities (e.g. footer/utility construction or helical pilings?)

☐**Yes** ☒**No**

If yes, describe these activities:

Click or tap here to enter text.

In the event that groundwater is encountered during redevelopment activities (even if no is checked above), list activities for contingent management of groundwater (e.g., dewatering of groundwater from excavations or foundations, containerizing, offsite disposal, discharge to sanitary sewer, NPDES permit, or sampling procedures).

If groundwater is encountered during redevelopment activities, appropriate worker safety measures will be undertaken and groundwater will be allowed to re-infiltrate for approximately 24 hours (if it does not affect the construction schedule). If accumulated water remains, samples of the accumulated water will be collected and analyzed for VOCs, SVOCs, RCRA 8-metals, and PFAS to determine if contaminants are present. Accumulated water that contains contaminants above NC2LGWQS will be containerized and disposed at an off-site permitted facility in accordance with regulatory requirements. Accumulated water that does not contain contaminants above NC2LGWQS will be managed on the site by allowing to re-infiltrate to the ground or discharged to the storm sewer in accordance with municipal, state and federal requirements.

6) Are monitoring wells currently present on the Brownfields Property?.....☒**Yes** ☐**No**

<u>If yes</u>, are any monitoring wells routinely monitored through DEQ or other agencies?.....☐**Yes** ☒**No**

7) Please check methods to be utilized in the management of known and previously unidentified wells.

☒ **Abandonment of site monitoring wells in accordance with all applicable regulations. It is the Brownfields Redevelopment Section's intent to allow proper abandonment of well(s) as specified in the Brownfields Agreement, except if required for active monitoring through another section of DEQ or the EPA.**

☒ **Location of existing monitoring wells marked**

☒ **Existing monitoring wells protected from disturbance**

☒ **Newly identified monitoring wells will be marked and protected from further disturbance until notification to DEQ Brownfields can be made and approval for abandonment is given.**

8) Please provide additional details as needed:

The existing permanent monitoring wells will be abandoned in accordance with applicable regulations prior to pre-development activities.

Please note, disturbance of existing site monitoring wells without approval by DEQ is not permissible. If monitoring wells are damaged and/or destroyed, DEQ may require that the PD be responsible for replacement of the well.

PART 3. SURFACE WATER

1) Is surface water present at the property? ☒ Yes ☐ No

2) If yes, attach a map showing the location of surface water at the Brownfields Property

3) Is surface water at the property known to be contaminated? ☒ Yes ☐ No ☐ Unknown

Copper was detected in surface water samples SW-2, SW-3, and SW-DUP at a concentration greater than its calculated North Carolina 2B Surface Water Standard (NC2BSWS). Lead was detected in surface water samples SW-3 and SW-DUP at a concentration greater than its calculated NC2BSWS.

4) Will workers or the public be in contact with surface water during planned redevelopment activities or as part of the final redevelopment? ☐ Yes ☒ No

5) In the event that contaminated surface water is encountered during redevelopment activities, or clean surface water enters open excavations, list activities for management of such events (e.g. flooding, contaminated surface water run-off, stormwater impacts):

See Sheet No. C1-01 in the provided preliminary civil construction drawings for onsite surface water features. Additionally, Figure 6 depicts the approximate location of an onsite stream in the southern portion of the property. The stream is located in a wooded area outside of the development area.

If surface water run-off gathers in an open excavation within an area determined to be impacted during construction activities, appropriate worker safety measures will be undertaken. The accumulated water will be allowed to evaporate/infiltrate to the extent time for dissipation does not disrupt the construction schedule. Should the time needed for natural dissipation of accumulated water be deemed inadequate, the water will be analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, RCRA 8-Metals by EPA Methods 6020 and 7470, and PFAS by EPA Method 1633 and will be properly managed if impacted. Options for water disposal include 1) containerizing, characterizing and disposing of the water at a permitted treatment facility; 2) discharging in accordance with a NPDES General Permit NCG01 for Construction Stormwater; 3) discharging to the storm sewer if below NCAC 2B Surface Water Standards and after appropriate sediment control in accordance with the sedimentation and erosion control permit; and 4) using for on-Site dust control if significant VOC or SVOC concentrations are not present.

PART 4. SEDIMENT

1) Are sediment sources present on the property? ☒ Yes ☐ No

2) If yes, is sediment at the property known to be contaminated? ☒ Yes ☐ No ☐ Unknown

Arsenic was detected in sediment sample SS-1 at a concentration greater than its Industrial/Commercial PSRG. PFOA was detected in sediment samples SS-3-P and SS-DUP-P greater than its respective Industrial/Commercial PSRG.

3) Will workers or the public be in contact with sediment during planned redevelopment activities? ☐ Yes ☒ No

4) Attach a map showing the location of known contaminated sediment at the property.

5) In the event that contaminated sediment is encountered during redevelopment activities, list activities for management of such events (stream bed disturbance):

See Sheet No. C1-01 in the provided preliminary civil construction drawings for onsite surface water features. Additionally, Figure 6 depicts the approximate location of an onsite stream in the southern portion of the property. The stream is located in a wooded area outside of the development area.

If sediment is encountered and determined to be impacted during construction activities, appropriate worker safety measures will be undertaken. The sediment will be analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, RCRA 8-Metals by EPA Methods 6020 and 7471, and PFAS by EPA Method 1633 and will be properly managed if impacted. Sediment will be managed by the same criteria as outlined in *Part 1.A. Managing Onsite Soil*.

PART 5. SOIL VAPOR

1) Do concentrations of volatile organic compounds at the Brownfields property exceed the vapor intrusion screening levels (current version) in the following media:

	Groundwater	Exterior Soil Vapor	Sub-Slab Soil Vapor
Residential	☒ Yes ☐ No ☐ Unknown	☒ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☒ Unknown
Commercial	☐ Yes ☒ No ☐ Unknown	☒ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☒ Unknown

Vinyl chloride was detected in soil vapor sample SV-2 at a concentration greater than its respective Residential and Non-Residential VISL. Benzene and TCE were detected in soil vapor sample SV-2 at concentrations greater than their respective Residential VISL. Dichlorodifluoromethane was detected in soil vapor sample SV-3 at a concentration greater than its respective Residential VISL.

2) <u>Attach a map</u> showing the locations of all soil vapor samples including any soil vapor contaminants that exceeds screening levels and overlays planned site development features.

3) If applicable, at what depth(s) is exterior soil vapor known to be contaminated?

6 feet below grade

4) If applicable, at what depth(s) is sub-slab soil vapor known to be contaminated?

☐**0-6 inches** ☐**Other, please describe**:

Unknown

5) Will workers encounter contaminated exterior or sub-slab soil vapor during planned redevelopment activities? ☒ Yes ☐ No ☐ Unknown

In the event that apparent contaminated soil vapor is encountered (based on elevated PID readings, unusual odors, etc.) during redevelopment activities (trenches, manways, basements or other subsurface work,) list activities for management of such contact, INCLUDING notification to DEQ within 48 hours of identification of the issue for determination of additional requirements:

Updated predevelopment site plans include three enclosed buildings with new slab construction. Figure 6 depicts the locations of the proposed enclosed buildings and the soil vapor sampling locations. Vinyl chloride was detected in soil vapor sample SV-2 at a concentration greater than its respective Residential and Non-Residential VISL.

If contaminated soil vapors are detected via olfactory observations made, contractors/workers will stop work, take appropriate measures and contact ECS to mobilize to the site for observation and documentation. The Brownfields Program Project Manager will be notified within 48 hours of the observation, and additional assessment will be discussed with Brownfields. If the vapors are field screened and indicate conditions such that immediate danger to life and health are of concern, the area shall be evacuated, and the local Fire Department contacted. ECS will then assist in documenting the conditions and assist in determining engineering controls for the vicinity of concern.

PART 6. INDOOR AIR

1) Are indoor air data available for the Brownfields Property? ☐ Yes ☒ No

2) If applicable, attach a map showing the location(s) where indoor air contaminants exceed site screening levels.

3) If the structures where indoor air has been documented to exceed risk-based screening levels will not be demolished as part of redevelopment activities, will workers encounter contaminated indoor air during planned redevelopment activities? ☐ Yes ☐ No ☐ Unknown ☒ N/A

☐ **If no**, include rationale here:

Click or tap here to enter text.

4) In the event that contaminated indoor air is encountered during redevelopment activities, list activities for management of such contact:

If there are sub-slab/utility trench vapor contamination issues, indoor air will be periodically monitored using a calibrated PID/FID. In the event that contaminated indoor air is encountered based upon olfactory observations made by contractors/workers, indoor air quality will be ventilated using blowers and fans to circulate air throughout the redevelopment process.

VAPOR INTRUSION MITIGATION SYSTEM

1) Is a vapor intrusion mitigation system (VIMS) proposed for this Brownfields Property?
☐ Yes ☐ No ☒ Unknown

☒ **If no or unknown**, include rationale here as well as plans for pre-occupancy sampling, as necessary:

Based on the Hazard Index for vapor intrusion in the NCDEQ Risk Calculator results, a VIMS will be considered for the enclosed building associated with soil vapor sample SV-2 as shown on Figure 6. Vinyl chloride was detected in SV-2 at a concentration greater than its respective Residential and Non-Residential VISL as described above. Building plans that include a VIMS have not been finalized at this time. Pre-Occupancy and Non-Residential Post-Occupancy sampling will be conducted in accordance with the *Minimum Mitigation and Sample Requirements for Reuse* Matrix 2 document (May 2024).

If yes, ☐ VIMS Plan Attached or ☐ VIMS Plan to be submitted separately
If submitted separately provide date:
Not applicable

VIMS Plan shall be signed and sealed by a NC Professional Engineer and follow the DEQ Brownfields Redevelopment Section's *Vapor Intrusion Mitigation System Design Submittal Requirements*.

Note that approval of this EMP does not imply approval with any vapor intrusion mitigation land use restrictions or requirements of the recorded or draft Brownfields Agreement and that separate approval of mitigation measures will be required.

CONTINGENCY PLAN

In this section, please provide actions that will be taken to identify or manage unknown potential new sources of contamination. During redevelopment activities, it is not uncommon that unknown tanks, drums, fuel lines, landfills, or other waste materials are encountered. Notification to DEQ Brownfields project manager, UST Section, Fire Department, and/or other officials, as necessary and appropriate, is required when new potential source(s) of contamination are discovered. These Notification Requirements were outlined on Page 1 of this EMP.

Should potentially impacted materials be identified that are inconsistent with known site impacts, the DEQ Brownfields project manager will be notified, and a sampling plan will be prepared based on the EMP requirements and site-specific factors. Samples will generally be collected to document the location of the potential impacts.

Check the following chemical analysis that are to be conducted on newly identified releases:

☒ **Minimum Sample Requirements:** Volatile organic compounds (VOCs) by EPA Method 8260*;*

Semi-volatile organic compounds (SVOCs) by EPA Method 8270; and Metals RCRA List + Hexavalent Chromium by EPA Method 6020/7199

☐ **Pesticides:** Specify Analytical Method Number(s):
Click or tap here to enter text.

☐ **PCBs:** Specify Analytical Method Number(s):
Click or tap here to enter text.

☒ **Other Constituents & Analytical Method(s)** (e.g. Herbicides)
Please note, if field observations indicate the need for additional analyses, they should be conducted, even if not listed here.
PFAS by EPA Method 1633

Please provide details on the proposed methods of managing the following commonly encountered issues during redevelopment of Brownfields Properties.

Underground Storage Tanks – Note that UST Section guidelines must be followed for sample frequency during UST closure. Unless damage to onsite structures to remain as part of redevelopment would occur, USTs shall be removed from the Brownfields Property:

In the event that an unknown UST or impacts associated with an unknown UST release are discovered at the Site during redevelopment activities, the UST and/or UST-related impacts will be addressed through the Brownfields Program. If encountered, the contents of an UST will be evaluated, and based on the contents, the UST will be removed and transported offsite for disposal/recycling. Fluids within a discovered UST will be removed using a vacuum truck, tested, and properly disposed. Impacted soil in the vicinity of the UST will be managed in accordance with the "Managing On-Site Soil" section outlined above in the EMP. Following UST removal or closure in place, closure soil sampling will be performed in general accordance with the DEQ UST Section guidelines. In addition, to the target analytes in UST Section guidelines, samples will also be analyzed for VOCs, SVOCs, and RCRA metals.

If a UST is encountered that cannot be removed or does not require removal for geotechnical or construction purposes, it may be abandoned in-place with prior DEQ approval and construction will proceed. Where appropriate, the bottom may be penetrated before abandonment to prevent fluid accumulation. The Brownfields Program Project Manager will be notified within 48 hours of the discovery of the UST.

Sub-Grade Feature/Pit:

If sub-grade features, pits, etc. are encountered, the contractor will be instructed to stop work and contact ECS to evaluate the feature. If the pit has waste in it, the waste will be set aside in a secure area and will be sampled for waste disposal purposes for TCLP VOCs, TCLP SVOCs, and TCLP metals and disposed of off-site at a permitted facility or the waste will be managed in accordance with the Managing On-Site Soil section outlined above in the EMP, whichever is most applicable based on the type of waste present. If the pit must be removed and the observed waste characteristics

indicate the concrete may potentially be contaminated to a significant degree, the concrete will be sampled and analyzed by methods specified by the disposal facility.

In the event that an unknown sub-grade feature, pit or associated impacts from a release are discovered at the site during redevelopment activities, the feature and /or related impacts will be addressed through the Brownfields Redevelopment Section. The Brownfields Project Manager will be notified within 48 hours of the discovery.

<u>Buried Waste Material –</u> Note that if buried waste, non-native fill, or any obviously filled materials is encountered, the DEQ Brownfields Redevelopment Section must be notified to determine if investigation of landfill gases is required:

If buried waste material is encountered, the contractor will be instructed to stop work and contact ECS to evaluate. Following evaluation, if confirmed, the waste will be removed, characterized, and disposed of off-site. Soil samples will be collected from the base and sidewalls (one for every 10 feet of base/sidewall) of the excavated material and submitted for laboratory analysis as referenced above.

If the buried materials or soil do not require removal for geotechnical or construction purposes and based on the sample results (as discussed in Part 1.A. above), they will remain in-place and construction will proceed. If the fill material is to be removed, confirmation sampling will be conducted at representative locations in the base and the sidewalls of the excavation after the waste or significantly impacted media is removed. The confirmation samples will be analyzed for VOCs, SVOCs, RCRA metals plus hexavalent chromium, and PFAS. Areas of suspected contaminated soil that remain at the Site after excavation is complete above the non-residential PSRGs will be managed pursuant to this plan and incorporated into the final Brownfields Plat.

In the event that buried waste material is encountered at the site during redevelopment activities, the material and/or related impacts will be addressed through the Brownfields Redevelopment Section. The Brownfields Project Manager will be notified within 48 hours of the discovery to determine whether landfill gases on site need to be evaluated. Following evaluation, if confirmed, the waste will be removed, characterized, and disposed of offsite or, with the Brownfields Project Manager's prior approval, managed onsite.

<u>Re-Use of Impacted Soils Onsite:</u>

If impacted soil is encountered during redevelopment activities and is able to be reused onsite based on geotechnical characteristics and nature of soil contaminant impacts, we will confer with the Brownfields Project Manager to determine if the location(s) of the reused soil need(s) to be surveyed and the plat be updated.

If unknown, impacted soil is identified onsite, management onsite can be considered after the project team provides the necessary information, outlined in Part 1.A. Item 11, for Brownfields project manager approval prior to final placement onsite.

If other potential contingency plans are pertinent, please provide other details or scenarios as needed below:

Not applicable

POST-REDEVELOPMENT REPORTING

☒ Check this box to acknowledge that a Redevelopment Summary Report will be required for the project. If the project duration is longer than one year, an annual update is required and will be due by January 31 of each year, or 30 days after each one-year anniversary of the effective date of this EMP (as agreed upon with the project manager). These reports will be required for as long as physical redevelopment of the Brownfields Property continues, except that the final Redevelopment Summary Report will be submitted within 90 days after completion of redevelopment. Based on the estimated construction schedule, the first Redevelopment Summary Report is anticipated to be submitted on 1/31/2027

The Redevelopment Summary Report shall include environment-related activities since the last report, with a summary and drawings, that describes:

1. actions taken on the Brownfields Property;
2. soil grading and cut and fill actions;
3. methodology(ies) employed for field screening, sampling and laboratory analysis of environmental media;
4. stockpiling, containerizing, decontaminating, treating, handling, laboratory analysis and ultimate disposition of any soil, groundwater or other materials suspected or confirmed to be contaminated with regulated substances; and
5. removal of any contaminated soil, water or other contaminated materials (for example, concrete, demolition debris) from the Brownfields Property (copies of all legally required manifests shall be included).

☒ Check box to acknowledge consent to provide a NC licensed P.G. or P.E. sealed, Redevelopment Summary Report in compliance with the site's Brownfields Agreement.

APPROVAL SIGNATURES

Brownfields Project Number: 28063-24-041

Brownfields Project Name: Fortress Wood Products II

James Graf 5/15/2026

Prospective Developer: Riverside Construction Materials, Inc. **Date:** 5/15/2026
Printed Name/Title/Company: James Graf/Director of Real Estate/Riverside Construction Materials, Inc.

Joseph P. Nestor

Consultant: ECS Southeast, LLC **Date:** ~~5/15/2026~~ 05-18-2026
Printed Name/Title/Company: Joseph P. Nestor, P.G./Environmental Principal/ECS Southeast, LLC
PE/PG Professional License #: 1027
Firm PE/PG License #: C-553

NORTH CAROLINA LICENSED SEAL 1027 GEOLOGIST JOSEPH P. NESTOR

Joseph P. Nestor 05-18-2026

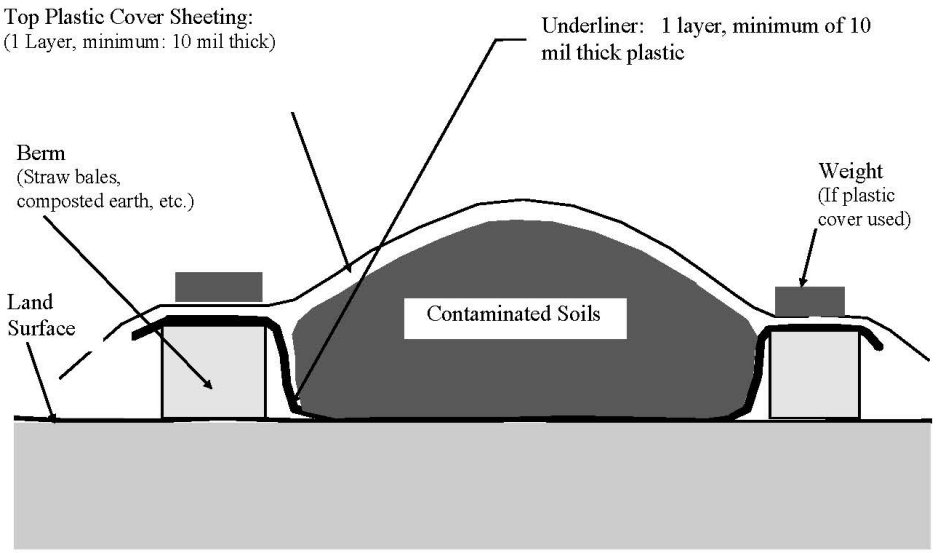
Insert PE/PG Seal Above

Lauren Fleming 5/27/2026

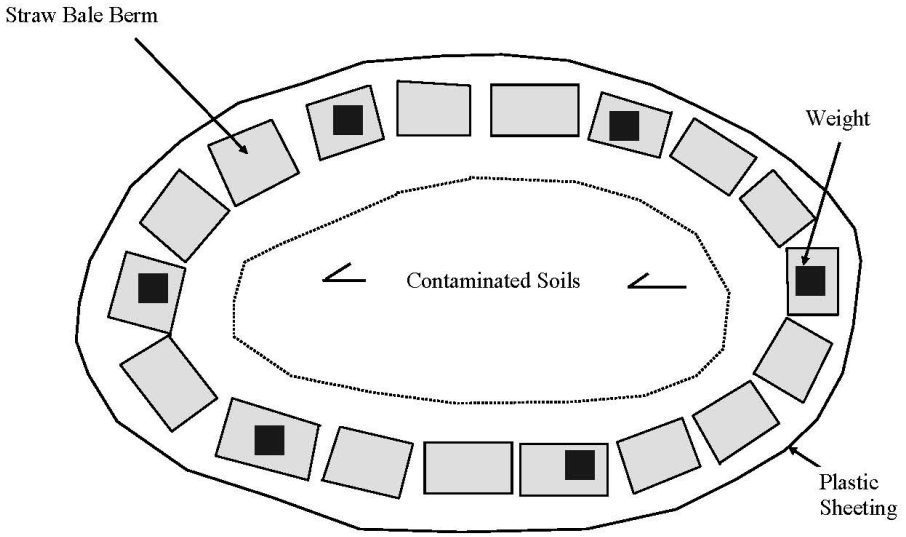
Brownfields Project Manager: Lauren Fleming **Date:** Click or tap to enter a date.

NCBP Diagram for Temporary Containment of Impacted or Potentially Impacted Soil

Cross-Section View

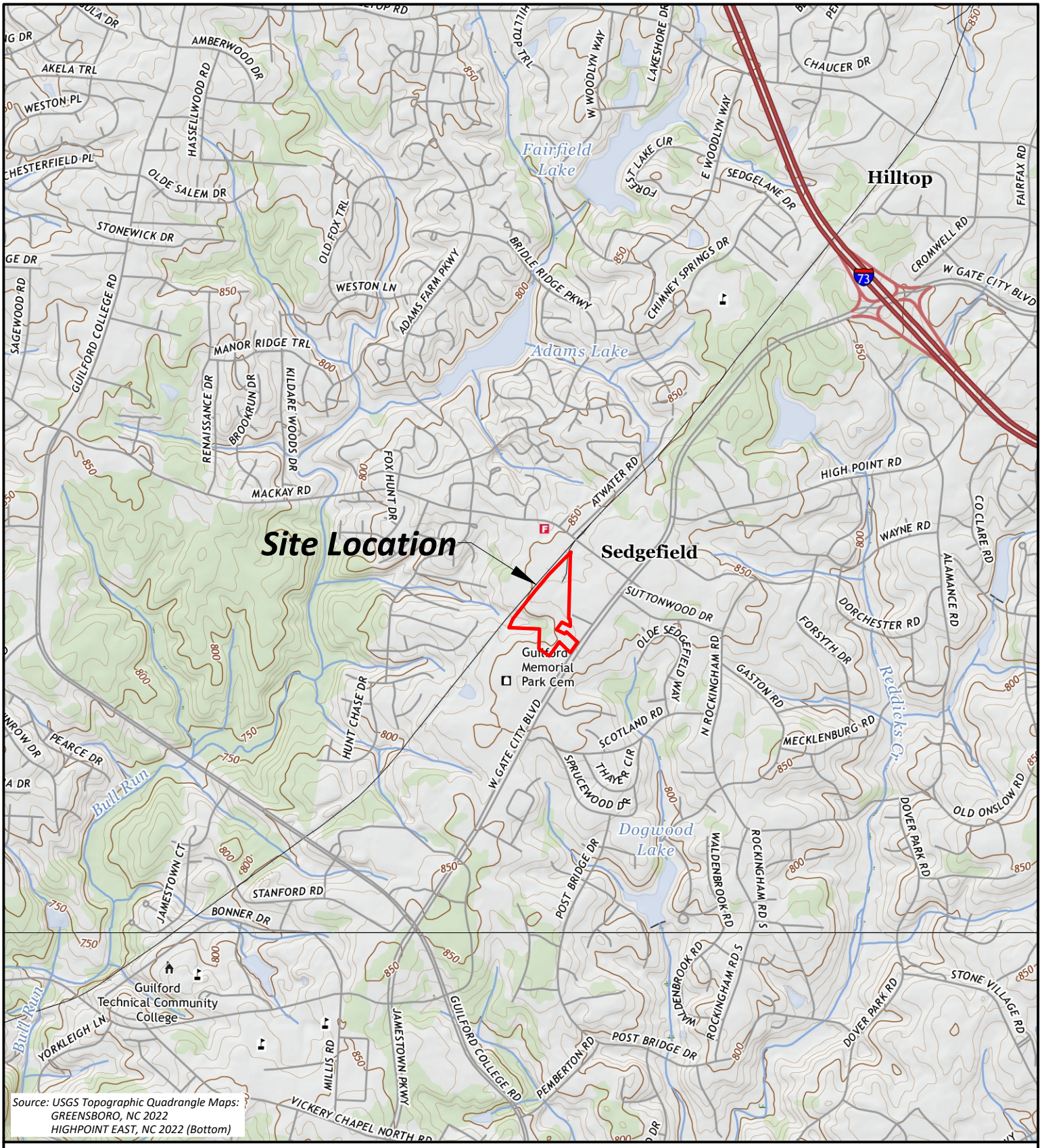


Map View



Note: Adapted from NC DEQ UST Section "Guidelines for Ex Situ Petroleum Contaminated Soil Remediation" dated December, 1, 2013

FIGURES



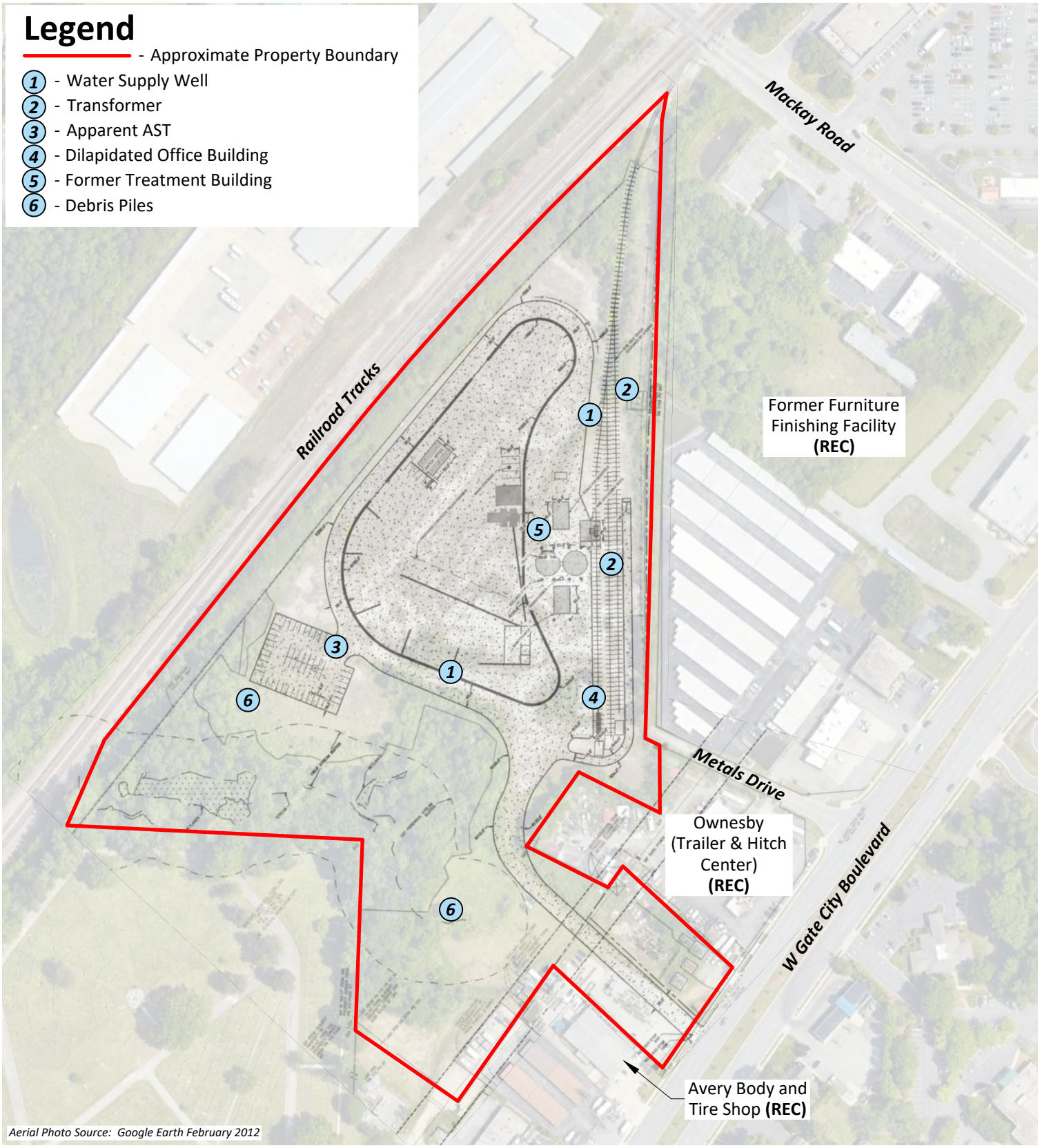
Source: USGS Topographic Quadrangle Maps:
GREENSBORO, NC 2022
HIGHPOINT EAST, NC 2022 (Bottom)

Scale
0 1000 2000
1 inch = 2000 ft.

Figure 1
USGS Topographic Map

Fortress Wood Products II
1 Metals Drive
Greensboro, Guilford County, NC 27407

NC Brownfields ID No. 28063-24-041
ECS Project No. 49:24413-C



N

Scale

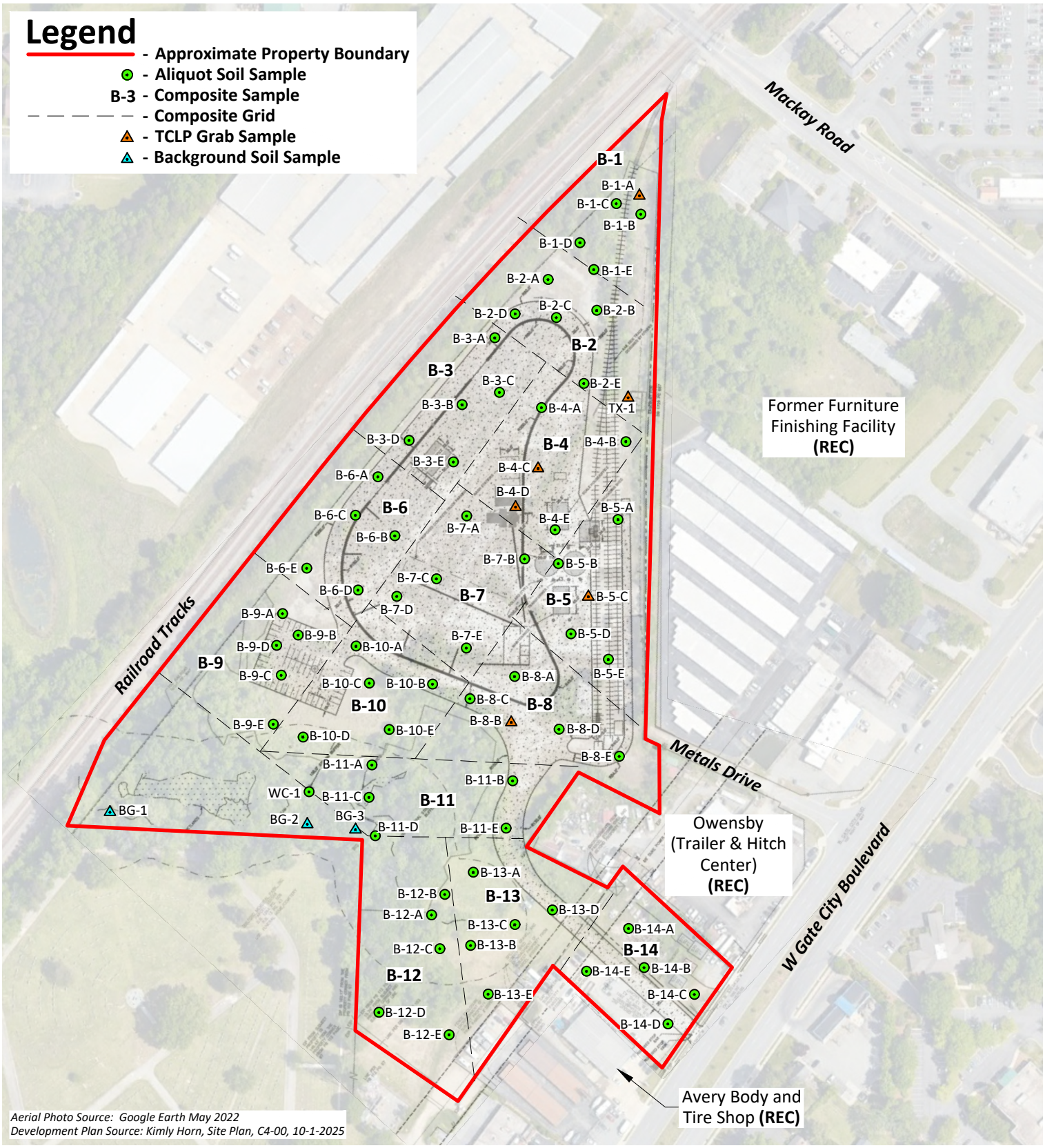
0 110 220

1 inch = 220 ft.

Figure 2
Site Aerial Map

Fortress Wood Products II
1 Metals Drive
Greensboro, Guilford County, NC 27407

NC Brownfields ID No. 28063-24-041
ECS Project No. 49:24413-C

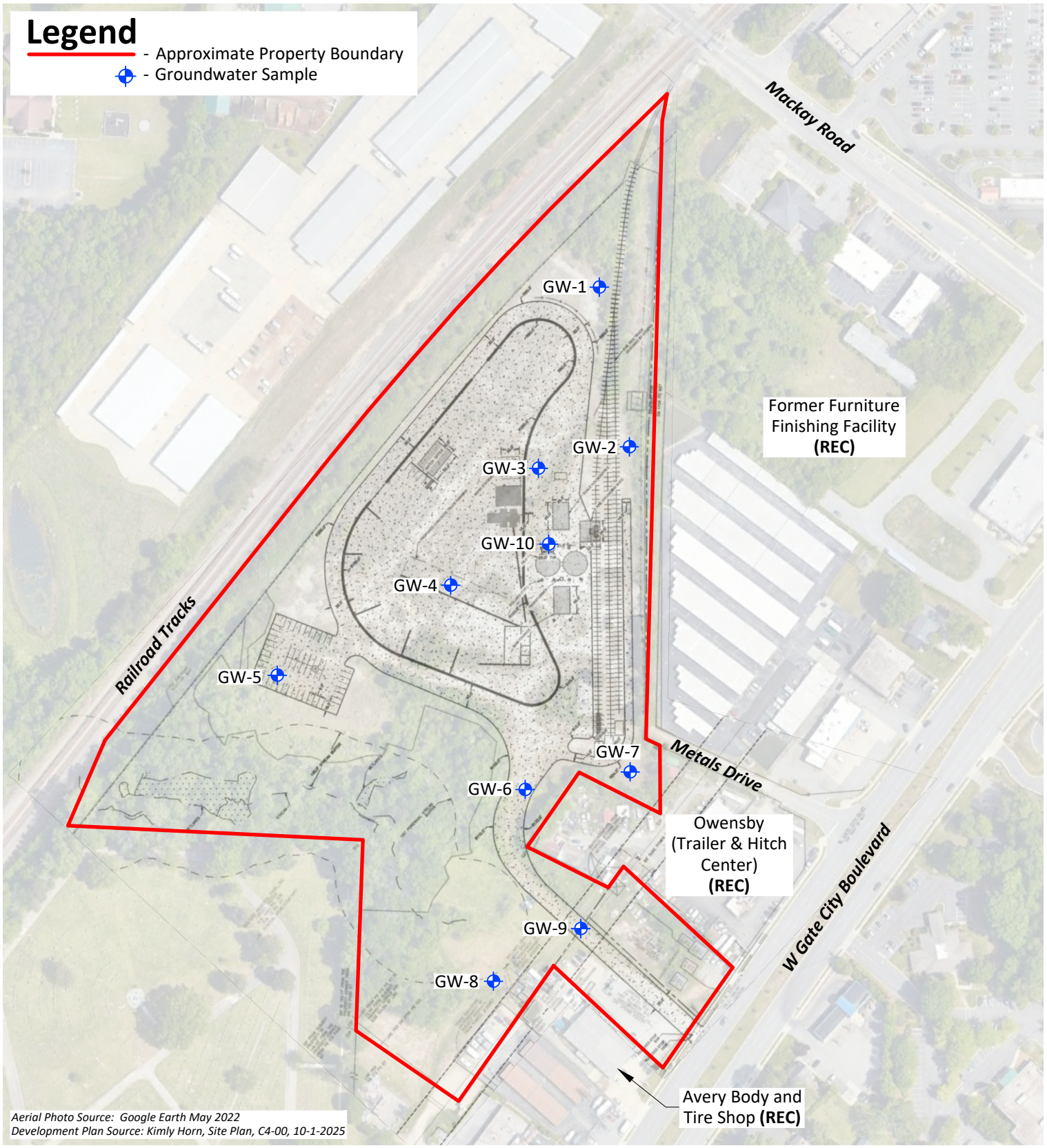


Scale
0 110 220
1 inch = 220 ft.

Figure 3
Soil Sampling Location Map

Fortress Wood Products II
1 Metals Drive
Greensboro, Guilford County, NC 27407

NC Brownfields ID No. 28063-24-041
ECS Project No. 49:24413-C



N

Scale

0 110 220

1 inch = 220 ft.

Figure 4
Groundwater Sampling Location Map

Fortress Wood Products II
1 Metals Drive
Greensboro, Guilford County, NC 27407

NC Brownfields ID No. 28063-24-041
ECS Project No. 49:24413-C

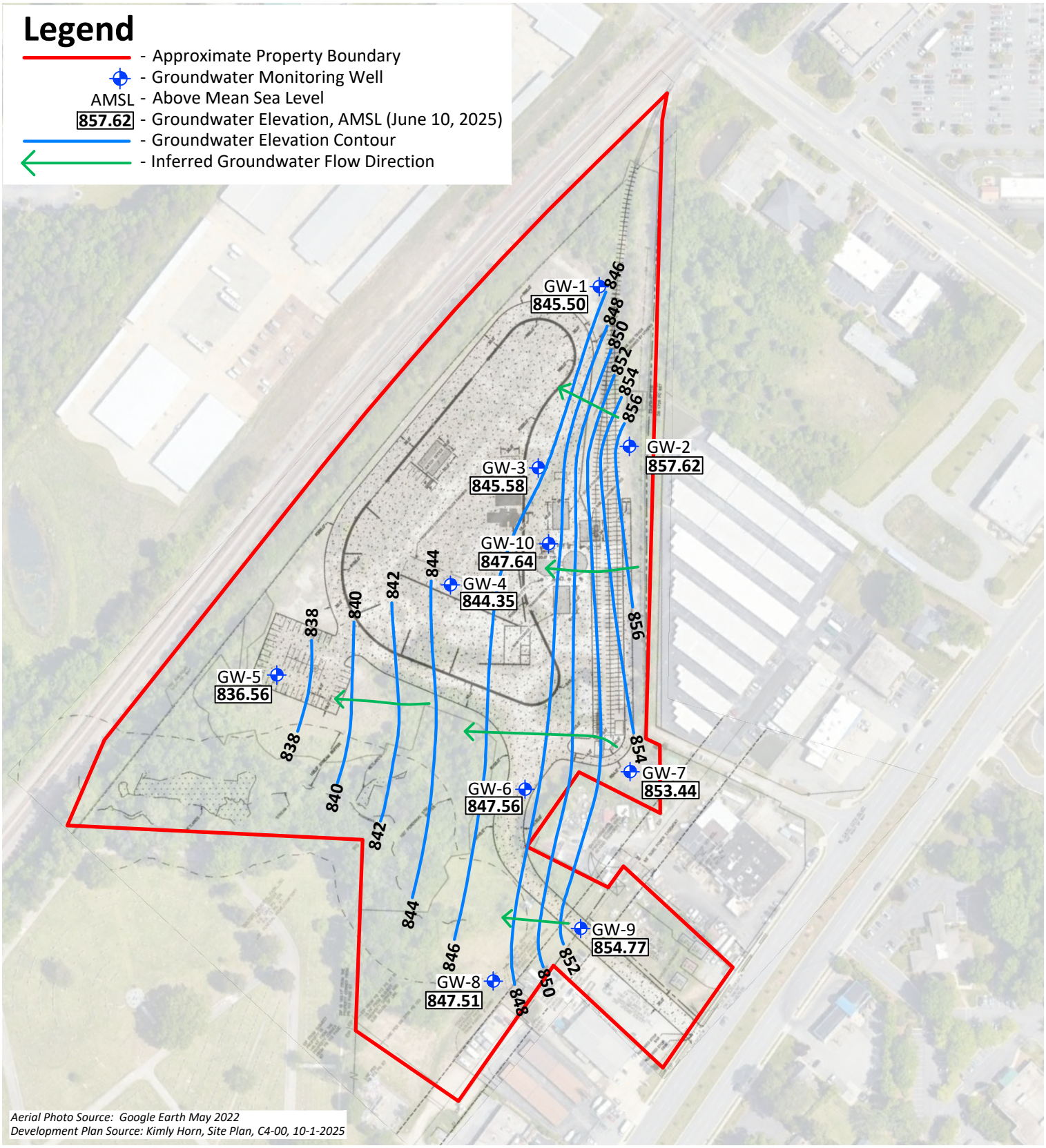
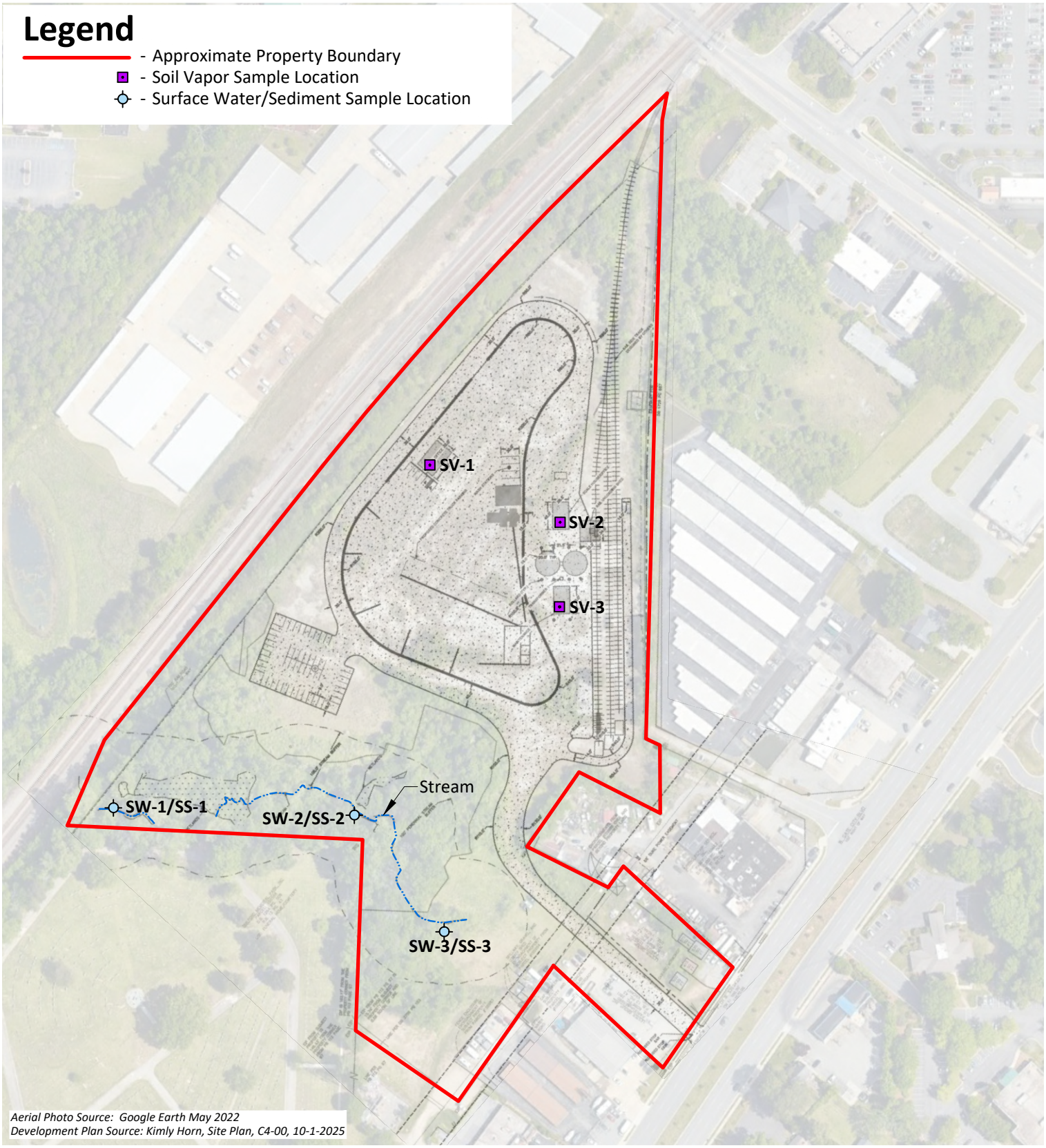


Figure 5
Groundwater Flow Direction Map

Scale
0 110 220
1 inch = 220 ft.

Fortress Wood Products II
1 Metals Drive
Greensboro, Guilford County, NC 27407

NC Brownfields ID No. 28063-24-041
ECS Project No. 49:24413-C



Scale

0 110 220

1 inch = 220 ft.

Figure 6
Additional Sampling Location Map

Fortress Wood Products II
1 Metals Drive
Greensboro, Guilford County, NC 27407

NC Brownfields ID No. 28063-24-041
ECS Project No. 49:24413-C

TABLES

TABLE 1: SUMMARY OF SOIL ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment Services
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

Sample ID	B-1	B-2	B-3	B-4	B-4-C	B-4-D	B-5	B-5-C	B-6	B-7	B-8	B-8-B	B-9	B-10	B-11	B-12	B-13	B-14	B-DUP	BG-1	BG-2	BG-3	WC-1	TX-1	TX-DUP	Protection of Groundwater PSRG	Industrial/ Commercial PSRG
Sample Depth (ft bg)	0-2	0-2	0-2	0-2	0-1	0-1	0-2	0-1	0-2	0-2	0-2	0-1	0-2	0-2	0-2	0-2	0-2	0-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2		
Sample Type	Comp	Comp	Comp	Comp	Grab	Grab	Comp	Grab	Comp	Comp	Comp	Grab	Comp	Comp	Comp	Comp	Comp	Comp	Comp	Grab	Grab	Grab	Grab	Grab	Grab		
Collection Date	6/4/25	6/3/25	6/3/25	6/3/25	6/3/25	6/3/25	6/3/25	6/3/25	6/3/25	6/2/25	6/2/25	6/2/25	6/3/25	6/3/25	6/4/25	6/2/25	6/2/25	6/2/25	6/2/25	6/4/25	6/4/25	6/4/25	6/11/25	6/10/25	6/10/25		
VOCs by EPA 8260																											
Benzene	<0.0026	<0.0024	<0.0032	<0.0024	NA	NA	<0.0023	NA	**0.011**	<0.0024	<0.0021	NA	<0.0032	<0.0019	<0.0028	<0.0039	<0.0028	<0.0028	<0.0024	NA	NA	NA	NA	NA	NA	0.01	5.4
2-Butanone (MEK)	<0.031	<0.029	0.13 J	<0.029	NA	NA	<0.28	NA	<0.034	<0.029	<0.025	NA	<0.039	<0.023	<0.034	<0.047	<0.033	<0.034	<0.029	NA	NA	NA	NA	NA	NA	17	40,000
n-Butylbenzene	0.0049 J	<0.0038	<0.0050	<0.0038	NA	NA	<0.0037	NA	0.0055 J	<0.0039	<0.0033	NA	<0.0051	<0.0031	<0.0045	<0.0062	<0.0044	<0.0044	<0.0038	NA	NA	NA	NA	NA	NA	4.5	12,000
Chloroethane	<0.0050	<0.0047	<0.0062	<0.0046	NA	NA	0.0052 J	NA	<0.0055	<0.0047	<0.0040	NA	<0.0063	<0.0037	<0.0055	0.0077 J	<0.0053	<0.0054	<0.0046	NA	NA	NA	NA	NA	NA	17	4,800
Chloromethane	<0.0054	<0.0051	<0.0067	<0.0050	NA	NA	<0.0049	NA	<0.0060	<0.0051	<0.0043	NA	<0.0068	<0.0041	<0.0060	<0.0083	<0.0058	<0.0059	0.0056 J	NA	NA	NA	NA	NA	NA	0.015	99
Ethylbenzene	0.021	<0.0028	<0.0037	<0.0028	NA	NA	<0.0027	NA	0.018	<0.0028	<0.0024	NA	<0.0038	<0.0023	<0.0033	<0.0046	<0.0032	<0.0033	<0.0028	NA	NA	NA	NA	NA	NA	13	27
Isopropylbenzene (Cumene)	<0.0022	<0.0021	<0.0027	<0.0020	NA	NA	<0.0020	NA	0.0060 J	<0.0021	<0.0018	NA	<0.0028	<0.0017	<0.0024	<0.0034	<0.0023	<0.0024	<0.0020	NA	NA	NA	NA	NA	NA	2.3	2,100
p-Isopropyltoluene	0.0038 J	<0.0030	<0.0039	<0.0029	NA	NA	<0.0029	NA	<0.0035	<0.0030	<0.0025	NA	<0.0040	<0.0024	<0.0035	<0.0049	<0.0034	<0.0035	<0.0029	NA	NA	NA	NA	NA	NA	NE	NE
Methylene Chloride	<0.018	<0.017	<0.022	<0.016	NA	NA	<0.016	NA	<0.020	<0.017	<0.014	NA	<0.022	<0.013	<0.019	<0.027	<0.019	<0.019	<0.016	NA	NA	NA	NA	NA	NA	0.025	650
Naphthalene	0.019	<0.0032	<0.0042	<0.0031	NA	NA	<0.0031	NA	0.039	<0.0032	<0.0027	NA	<0.0043	<0.0026	<0.0037	<0.0052	<0.0036	<0.0037	<0.0032	NA	NA	NA	NA	NA	NA	0.39	8.8
Tetrachloroethene	<0.0020	<0.0019	<0.0025	<0.0019	NA	NA	<0.0018	NA	**0.011**	<0.0019	**0.025**	NA	<0.0026	<0.0015	<0.0022	<0.0031	<0.0022	<0.0022	**0.020**	NA	NA	NA	NA	NA	NA	0.0063	82
Toluene	0.049	<0.0042	<0.0055	<0.0041	NA	NA	<0.0040	NA	0.028	<0.0042	<0.0036	NA	<0.0056	<0.0033	<0.0049	<0.0068	<0.0048	<0.0048	<0.0041	NA	NA	NA	NA	NA	NA	8.3	9,700
1,2,4-Trimethylbenzene	0.028	<0.0036	<0.0047	<0.0035	NA	NA	<0.0034	NA	0.050	<0.0036	<0.0031	NA	<0.0048	<0.0029	<0.0042	<0.0059	<0.0041	<0.0042	<0.0036	NA	NA	NA	NA	NA	NA	12	370
1,3,5-Trimethylbenzene	0.029	<0.0020	<0.0027	<0.0020	NA	NA	<0.0019	NA	0.023	<0.0021	<0.0017	NA	<0.0027	<0.0016	<0.0024	<0.0033	<0.0023	<0.0042	<0.0020	NA	NA	NA	NA	NA	NA	11	320
Xylene (total)	0.18	<0.0034	<0.0046	<0.0034	NA	NA	<0.0033	NA	0.090	<0.0035	<0.0029	NA	<0.0046	<0.0028	<0.0040	<0.0056	<0.0039	<0.0040	<0.0034	NA	NA	NA	NA	NA	NA	9.9	530
m&p-Xylene	0.11	<0.0041	<0.0055	<0.0041	NA	NA	<0.0040	NA	0.061	<0.0042	<0.0035	NA	<0.0056	<0.0033	<0.0049	<0.0068	<0.0047	<0.0048	<0.0041	NA	NA	NA	NA	NA	NA	9.8	500
o-Xylene	0.066	<0.0027	<0.0035	<0.0026	NA	NA	<0.0026	NA	0.028	<0.0027	<0.0023	NA	<0.0036	<0.0021	<0.0031	<0.0044	<0.0031	<0.0031	<0.0026	NA	NA	NA	NA	NA	NA	9.8	590
SVOCs by EPA 8270																											
Benzo(b)fluoranthene	<0.13	<0.14	<0.15	0.15 J	NA	NA	0.17 J	NA	<0.13	<0.13	<0.12	NA	<0.16	<0.13	<0.14	<0.17	<0.15	<0.14	<0.12	NA	NA	NA	NA	NA	NA	1.2	21
Fluoranthene	<0.13	<0.14	0.16 J	0.14 J	NA	NA	0.20 J	NA	<0.13	<0.14	<0.12	NA	<0.16	<0.13	<0.14	<0.17	<0.15	<0.14	<0.12	NA	NA	NA	NA	NA	NA	670	6,000
Phenanthrene	<0.12	<0.13	<0.15	<0.11	NA	NA	0.29 J	NA	<0.13	<0.13	<0.12	NA	<0.15	<0.12	<0.14	<0.16	<0.14	<0.14	<0.12	NA	NA	NA	NA	NA	NA	NE	NE
Pyrene	<0.15	<0.17	<0.19	0.14 J	NA	NA	0.25 J	NA	<0.16	<0.16	<0.15	NA	<0.19	<0.15	<0.17	<0.20	<0.18	<0.17	<0.15	NA	NA	NA	NA	NA	NA	440	4,500
PPL Metals by EPA 6020/7471/7199																											
Antimony	<0.65	<0.66	<0.74	<0.58	<7.1	**25.4**	<0.74	<0.57	<0.72	<0.72	<0.67	<0.54	<0.89	<0.70	<0.74	<0.86	<0.61	<0.75	<0.67	<0.78	<0.73	<0.68	0.322 J	NA	NA	0.90	93
Arsenic	**18.7**	1.7	**4.4**	**6.3**	3.9	**10.4**	1.9	**93.8**	3.6	<0.22	2.1	1.0 J	2.9	1.6	2.40	<0.26	1.2	**6.8**	**4.6**	2.7	2.6	1.50	**39.9**	NA	NA	5.80	3.00
Beryllium	0.26	0.33	0.49	0.47	0.30	0.28	0.32	<0.064	0.19	0.27	0.25	0.13	0.82	0.25	0.30	0.41	0.65	0.22	0.20	0.34	0.26	0.30	0.464 J	NA	NA	63	470
Cadmium	**5.6**	<0.033	**5.2**	0.37	**5.6**	**13.2**	0.38	0.34	**5.7**	<0.036	0.16	<0.027	<0.044	<0.035	<0.037	<0.043	<0.030	<0.038	1.2	<0.039	<0.036	<0.034	0.381 J	NA	NA	3.0	20
Chromium	63.2	32.1	60.1	42.7	45.7	184	43.4	101	29.7	35.8	69.3	16.2	76.4	69.0	42.7	264	54.8	27.7	45.3	23.6	28.0	40.1	91.7	NA	NA	NE	NE
Hexavalent Chromium	<0.19	1.3	0.72 J	<0.17	NA	NA	1.6	NA	0.81 J	0.47 J	<0.18	NA	**3.9**	0.94 J	0.27J	1.5 J	1.30 J	1.4	<0.19	NA	NA	NA	NA	NA	NA	3.8	20
Trivalent Chromium	63.01	30.8	59.4	42.5	NA	NA	41.8	NA	28.9	35.33	69.12	NA	72.5	68.06	42.43	262.5	53.5	26.3	45.1	NA	NA	NA	NA	NA	NA	360,000	3,100,000
Copper	254	42.5	103	52.1	199	**826**	88.5	110	148	54.1	23.1	25.3	73.2	52.8	31.8	82.7	76.0	18.5	62.1	14.3	23.4	28.7	83.7	NA	NA	700	9,300
Lead	**468**	23.6	**427**	17.6	**439**	**2,070**	35.1	20.5	**331**	2.2	14.6	1.1	4.8	8.8	8.7	<0.60	8.4	42.3	58.1	19.2	22.9	8.7	32.3	NA	NA	270	800
Nickel	44.3	15.8	51.6	19.7	45.0	91.0	19.3	11.4	33.1	27.8	6.0	10.1	51.5	15.9	14.9	33.5	43.9	5.9	16.0	7.7	9.3	14.8	24.2	NA	NA	130	4,600
Selenium	<0.64	1.3	**2.1**	**2.2**	1.4	<0.70	<0.73	<0.56	<0.71	1.5	<0.66	<0.53	**7.6**	<0.69	<0.73	<0.85	<0.60	<0.74	<0.66	<0.77	<0.72	<0.68	0.414 J	NA	NA	2.1	1,200
Silver	0.18	<0.048	<0.054	<0.043	0.30	**5.1**	<0.054	<0.042	0.40	<0.053	<0.049	<0.039	<0.065	<0.051	<0.054	<0.063	<0.044	<0.055	<0.049	<0.057	<0.053	<0.050	<0.115	NA	NA	3.4	1,200
Zinc	**1,230**	<9.9	**1,940**	109	1,150	**2,790**	209	85.2	**1,260**	<10.8	<10.1	38.4 J	72.1	<10.5	<11.1	<12.8	<9.1	<11.3	255	<11.7	<10.9	<10.3	120	NA	NA	1,200	70,000
Thallium	<0.22	<0.22	<0.25	<0.20	<0.24	<0.24	<0.25	<0.19	<0.24	<0.24	<0.23	<0.18	<0.30	<0.24	<0.25	<0.29	<0.20	<0.25	<0.23	<0.26	<0.25	<0.23	0.142 J	<0.25	<0.25	2.8	2.3
Mercury	0.26	<0.0049	0.076	0.27	0.76	1.4	0.048	0.030	0.15	<0.0044	0.038	<0.0040	0.015	0.040	0.022	0.037	0.018	0.061	0.12	0.030	0.043	0.020	0.0623	NA	NA	NE	70
PCBs by EPA 8082																											
Targeted Compounds	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BMDL	BMDL	-	-

Notes:
Results presented in milligrams per Kilogram (mg/Kg)
Compounds not shown were not detected
ft bg = feet below grade
VOC samples were collected as grab samples from the 1-2 foot interval at one boring location within each sampling cell.
B-DUP collected from sample B-8
TX-DUP collected from TX-1
WC-1 collected for waste characterization purposes
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit
<0.00 = Below the laboratory method detection limit
BMDL = Below laboratory method detection limits
NA = Not Analyzed
NE = No Established Standard
Trivalent chromium concentrations were calculated by subtracting hexavalent chromium concentrations from total chromium concentrations. For purposes of calculation, J-flagged concentrations were assumed to be actual concentrations.
VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
PPL = Priority Pollutant
PCBs = Polychlorinated Biphenyls
PSRG = NCDEQ Preliminary Soil Remediation Goals, January 2025

VALUE	= concentration is greater than the laboratory method detection limits
VALUE	= concentration is greater than the Protection of Groundwater PSRG
VALUE	= concentration is greater than the Industrial/Commercial PSRG
VALUE	= concentration was selected for input into the NCDEQ Risk Calculator to represent "worst case" conditions at the subject property

TABLE 2: SUMMARY OF TCLP SOIL ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

Sample ID	B-1-TCLP	B-3-TCLP	B-6-TCLP	B-12-TCLP	DUP-TCLP	B-1-A	B-4-C	B-4-D	B-5-C	B-8-B	EPA Title 40 MCCs for Toxicity Characteristic
Sample Depth (ft bg)	0-2	0-2	0-2	0-2	0-2	0-1	0-1	0-1	0-1	0-1	
Sample Type	Comp	Comp	Comp	Comp	Comp	Grab	Grab	Grab	Grab	Grab	
Collection Date	7/9/25	7/9/25	7/9/25	7/9/25	7/9/25	6/4/25	7/9/25	7/9/25	7/9/25	7/9/25	
TCLP RCRA 8 Metals by EPA Method 6010/7470											
Arsenic	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	5
Barium	1.5	2.3	0.62	0.48	0.52	1.9	0.55	0.55	0.86	0.57	100
Cadmium	0.084	0.071	<0.010	<0.010	<0.010	0.072	<0.010	<0.010	<0.010	<0.010	1
Chromium	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	5
Lead	1.2	1.6	<0.10	<0.10	<0.10	0.33	<0.10	0.22	0.65	<0.10	5
Selenium	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	1
Silver	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	5
Mercury	0.0020	0.0021	0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0027	0.2

Notes:
Results presented in milligrams per liter (mg/L)
TCLP = Toxicity Characteristic Leaching Procedure
RCRA = Resource Conservation and Recovery Act
ft bg = feet below grade
DUP-TCLP collected from B-6-TCLP
<0.00 = Below the laboratory reporting limit
MCCs = Maximum Concentration of Contaminants
Analytical results compared to the EPA Title 40, Chapter I, Subchapter I, Part 261, Subpart C MCCs for the Toxicity Characteristic
VALUE = concentration is greater than the laboratory method detection limits

TABLE 3: SUMMARY OF PFAS SOIL ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

Sample ID	B-1-P	B-2-P	B-3-P	B-4-P	B-5-P	B-6-P	B-7-P	B-8-P	B-9-P	B-10-P	B-11-P	B-12-P	B-13-P	B-14-P	B-DUP	FB-1-P	FB-2-P	FB-3-P	Protection of Groundwater PSRG	Industrial/ Commercial PSRG
Sample Depth (ft bg)	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	-	-	-		
Collection Date	6/4/25	6/3/25	6/3/25	6/3/25	6/3/25	6/3/25	6/2/25	6/2/25	6/3/25	6/3/25	6/4/25	6/2/25	6/2/25	6/2/25	6/2/25	6/2/25	6/3/25	6/4/25		
PFAS by EPA Method 1633																				
PFDA (perfluorodecanoic acid)	0.000079 J	<0.000047	<0.000046	<0.000046	<0.000047	<0.000046	<0.000046	<0.00047	<0.000046	<0.000047	<0.000047	<0.000047	<0.000046	<0.000046	<0.000046	<0.39	<0.49	<0.48	NE	0.00033
PFDoA (perfluorododecanoic acid)	0.000079 J	<0.000045	<0.000044	<0.000044	<0.000045	<0.000044	<0.000044	<0.000045	<0.000044	<0.000045	<0.000045	<0.000045	<0.000044	<0.000044	<0.000044	<0.49	<0.49	<0.47	NE	8.2
PFNA (perfluorononanoic acid)	0.000073 J	<0.000056	<0.000056	<0.000055	<0.000056	<0.000056	<0.000055	<0.000057	<0.000056	<0.000056	<0.000056	<0.000056	<0.000056	<0.000056	<0.000056	<0.52	<0.52	<0.51	0.00014	0.49
PFOS (perfluorooctane sulfonic acid)	**0.0013**	<0.000040	**0.00040**	<0.000039	<0.000040	**0.00079**	<0.000039	**0.00029**	<0.000040	**0.00021**	**0.00025**	<0.000040	**0.00046**	<0.000039	**0.001**	<0.39	<0.39	<0.38	0.000013	0.016
PFOA (perfluorooctanoic acid)	**0.00018 J**	<0.000050	<0.000050	<0.000049	<0.000050	<0.000050	<0.000049	<0.000051	<0.000050	<0.000050	**0.00011 J**	<0.000050	**0.00021**	**0.00034**	**0.00027**	<0.48	<0.49	<0.47	0.0000000086	0.000078
PFTrDA (perfluorotridecanoic acid)	0.000044 J	<0.000042	<0.000042	<0.000041	<0.000042	<0.000042	<0.000041	<0.000042	<0.000042	<0.000042	<0.000042	<0.000042	<0.000042	<0.000042	<0.000042	<0.45	<0.45	<0.44	NE	NE
PFUnA (perfluoroundecanoic acid)	0.000076 J	<0.000047	<0.000047	<0.000047	<0.000048	<0.000047	<0.000046	<0.000048	<0.000047	<0.000047	<0.000048	<0.000047	<0.000047	<0.000047	<0.000047	<0.35	<0.35	<0.34	NE	49

Notes:
Results presented in milligrams per Kilogram (mg/Kg)
Compounds not shown were not detected
Field blanks collected as FB-1-P, FB-2-P, and FB-3-P; results presented in nanograms per liter (ng/L)
PFAS = Per- and Polyflouroalkyl Substances
PFUnA acronym is synonymous with PFUDA
ft bg = feet below grade
B-DUP collected from sample B-8-P
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit.
<0.00 = Below the laboratory method detection limit
NE = No Established Standard
PSRG = NCDEQ Preliminary Soil Remediation Goals, January 2025

VALUE	= concentration is greater than the laboratory method detection limits
VALUE	= concentration is greater than the Protection of Groundwater PSRG
VALUE	= concentration is greater than the Industrial/Commercial PSRG
VALUE	= concentration was selected for input into the NCDEQ Risk Calculator to represent "worst case" conditions at the subject property

TABLE 4: SUMMARY OF GROUNDWATER ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

	Sample ID	GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	GW-7	GW-8	GW-9	GW-10	DUP-1	EB-1	EB-2	EB-3	TB-1	TB-2	TB-3	NC2LGWQS	Non-Residential GWSL for VI
	Collection Date	6/10/25	6/10/25	6/11/25	6/11/25	6/11/25	6/11/25	6/10/25	6/12/25	6/12/25	6/11/25	6/10/25	6/10/25	6/11/25	6/12/25	6/5/25	6/5/25	6/11/25		
VOCs by EPA Method 8260	Bromomethane	<1.7	<1.7	<1.7	<1.7	1.9 J	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	10	15
	cis-1,2-Dichloroethene	<0.38	<0.38	<0.38	<0.38	1.4	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	70	210
	Chloroform	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	2.0	1.7	<0.43	<0.43	<0.43	<0.43	70	3.6
	Dichlorodifluoromethane	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	0.64 J	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	1,000	6.2
	Methyl-tert-butyl ether	<0.42	<0.42	<0.42	<0.42	<0.42	1.8	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	<0.42	20	2,000
	Tetrachloroethene	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	**8.4**	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	0.7	48
SVOCs by EPA Method 8270	Di-n-butylphthalate	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	2.4 J	<2.2	<2.2	<2.2	NA	NA	NA	700	NE
PPL Metals by EPA Methods 6020/7470	Antimony	<0.50	<0.50	<0.310	<0.310	<0.310	<0.310	<0.50	<0.50	<0.50	<0.310	<0.50	<0.50	<0.310	<0.50	NA	NA	NA	1	NE
	Arsenic	<0.50	1.1	0.170 J	<0.120	0.291 J	<0.120	<0.50	<0.50	<0.50	0.616 J	<0.50	<0.50	<0.120	<0.50	NA	NA	NA	10	NE
	Beryllium	0.12	<0.033	<0.200	<0.200	<0.200	<0.200	0.58	<0.033	<0.033	<0.200	0.57	<0.033	<0.200	<0.033	NA	NA	NA	4	NE
	Cadmium	<0.067	**2.4**	<0.120	<0.120	0.362 J	<0.120	<0.067	<0.067	0.22	<0.120	<0.067	<0.067	<0.120	<0.067	NA	NA	NA	2	NE
	Chromium	7.5	1.4	1.64 J	1.53 J	4.53	2.50	**19.5**	8.4	1.1	4.59	**18.3**	<0.50	<0.900	1.3	NA	NA	NA	10	NE
	Copper	6.7	7.2	2.50 J	1.14 J	2.19 J	0.995 J	16.1	2.6	8.8	1.75 J	16.2	<0.42	<0.700	<0.42	NA	NA	NA	1,000	NE
	Lead	<0.22	2.6	<0.500	<0.500	<0.500	<0.500	<0.22	<0.22	1.5	<0.500	<0.22	<0.22	<0.500	<0.22	NA	NA	NA	15	NE
	Nickel	8.0	13.4	6.47	3.80	19.6	16.8	30.9	2.2	2.0	8.64	32.2	<0.26	<0.500	<0.26	NA	NA	NA	100	NE
	Selenium	<0.20	<0.20	<0.250	0.690 J	0.348 J	<0.250	<0.20	<0.20	<0.20	<0.250	<0.20	<0.20	<0.250	<0.20	NA	NA	NA	20	NE
	Silver	<0.028	<0.028	<0.110	<0.110	<0.110	<0.110	<0.028	<0.028	<0.028	<0.110	<0.028	<0.028	<0.110	<0.028	NA	NA	NA	20	NE
	Zinc	<6.7	565	9.32 J	6.69 J	24.4 J	7.42 J	38.2	<6.7	<6.7	8.01 J	39.2	<6.7	<4.00	<6.7	NA	NA	NA	1,000	NE
	Mercury	<0.14	<0.14	<0.0700	<0.0700	<0.0700	<0.0700	<0.14	<0.14	<0.14	<0.0700	<0.14	<0.14	<0.0700	<0.14	NA	NA	NA	1	NE

Notes:
Results presented in micrograms per Liter (µg/L)
Compounds not shown were not detected
DUP-1 collected from sample GW-7
Equipment blanks collected as EB-1, EB-2, and EB-3
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit.
BMDL = Below laboratory method detection limits
<0.00 = Below the laboratory method detection limit
NA = Not Analyzed
NE = No Established Standard
VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
PPL = Priority Pollutant Metals
NC2LGWQS = North Carolina 2L Groundwater Quality Standards, dated April 2022
Groundwater Screening Level (GWSL) for Vapor Intrusion (VI), dated January 2025

VALUE	= concentration is greater than the laboratory method detection limits
VALUE	= concentration is greater than the NC2LGWQS
VALUE	= This concentration was selected for input into the NCDEQ Risk Calculator to represent "worst case" conditions at the subject property

TABLE 5: SUMMARY OF PFAS GROUNDWATER ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

Sample ID	GW-1-P	GW-2-P	GW-3-P	GW-4-P	GW-5-P	GW-7-P	GW-10-P	DUP-1-P	DUP-2-P	EB-1-P	EB-2-P	FB-4-P	FB-5-P	NC2LGWQS
Collection Date	6/10/25	6/10/25	6/11/25	6/11/25	6/11/25	6/10/25	6/11/25	6/10/25	6/11/25	6/10/25	6/11/25	6/10/25	6/11/25	
PFAS by EPA Method 1633														
PFBS (perfluorobutane sulfonic acid)	<0.82	**1.8**	**2.2**	**1.7**	**5.0**	<0.40	1.2 J	<0.83	**1.7**	<0.41	<0.40	<0.40	<0.40	NE
PFHxA (perfluorohexanoic acid)	<0.75	1.5 J	**2.0**	<0.37	**28.7**	<0.37	0.86 J	<0.75	<0.37	<0.37	<0.37	<0.37	<0.37	NE
PFBA (perfluorobutanoic acid)	<3.0	5.5 J	4.5 J	<1.5	**23.3**	<1.5	1.9 J	<3.0	<1.5	<1.5	<1.5	<1.5	<1.5	NE
PFHpS (perfluoroheptane sulfonic acid)	<0.91	0.70 J	<0.46	<0.45	<0.45	<0.45	<0.45	<0.92	<0.45	<0.45	<0.45	<0.44	<0.45	NE
PFPeA (perfluoropentanoic acid)	<1.9	<0.99	1.7 J	<0.91	**22.1**	<0.91	<0.92	<1.9	<0.91	<0.92	<0.91	<0.91	<0.92	NE
PFPeS (perfluoropentane sulfonic acid)	<0.74	1.0 J	0.71 J	0.59 J	**5.7**	<0.36	0.41 J	<0.74	0.38 J	<0.37	<0.36	<0.36	<0.36	NE
PFHpA (perfluoroheptanoic acid)	<1.2	**2.7**	**2.4**	<0.59	**27.4**	<0.59	<0.60	<1.2	<0.59	<0.60	<0.59	<0.58	<0.59	NE
PFHxS (perfluorohexane sulfonic acid)	2.9 J	**3.1**	**6.3**	0.48 J	**10.9**	<0.39	0.84 J	<0.81	0.55 J	<0.40	<0.39	<0.39	<0.39	NE
PFNA (perfluorononanoic acid)	<1.0	1.2 J	<0.52	<0.50	<0.50	<0.50	<0.51	<1.0	<0.50	<0.51	<0.50	<0.50	<0.50	NE
PFOS (perfluorooctane sulfonic acid)	**8.7**	**62.1**	**32.4**	0.44 J	**3.3**	<0.38	**1.9**	<0.77	<0.38	<0.38	0.54 J	<0.37	<0.38	0.7
PFOA (perfluorooctanoic acid)	**3.9**	**15.1**	**27.6**	<0.47	**41.6**	<0.47	**2.6**	<0.96	<0.47	<0.47	0.54 J	<0.46	<0.47	0.001

Notes:
Results presented in nanograms per Liter (ng/L)
Compounds not shown were not detected
Field blanks collected as FB-4-P and FB-5-P
Equipment blanks collected as EB-1-P and EB-2-P
PFAS = Per- and Polyflouroalkyl Substances
DUP-1-P collected from sample GW-7-P
DUP-2-P collected from sample GW-4-P
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit (RL). Estimated concentrations are not considered to be a violation of the NC2LGWQS.
For non-naturally occurring substances for which numeric groundwater standards have not been established, detections above the laboratory RL are considered to be a violation of North Carolina Groundwater Standards per 15A NCAC 02L .0202(c).
<0.00 = Below the laboratory method detection limit
NE = No Established Standard
NC2LGWQS = North Carolina 2L Groundwater Quality Standards dated November 1, 2025

VALUE	= concentration is greater than the laboratory method detection limits
VALUE	= concentration is greater than the NC2LGWQS or laboratory RL for which groundwater standards have not been established
VALUE	= concentration was selected for input into the NCDEQ Risk Calculator to represent "worst case" conditions at the subject property

TABLE 6: SUMMARY OF SURFACE WATER ANALYTICAL DATA

Fortress Wood Products II – Brownfields Assessment
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

	Sample ID	SW-1	SW-2	SW-3	SW-DUP	TB-4	SW-1	SW-2	SW-3	SW-DUP
	Collection Date	12/5/25	12/5/25	12/5/25	12/5/25	11/25/25	NCAC 2B Surface Water Standards			
PPL Metals by EPA Methods 6020/7470	Antimony	0.318 J	<0.310	0.364 J	0.364 J	NA	5,300 - Class C Waters			
	Arsenic	0.456 J	0.557 J	0.292 J	0.290 J	NA	10 - Class WS Waters			
	Calcium	20,600	12,100	7,490	7,900	NA	NE			
	Chromium	0.980 J	1.33 J	1.05 J	1.42 J	NA	71.8*	44.27*	23.34*	24.44*
	Copper	3.50 J	**8.30**	**5.89**	**6.21**	NA	8.66*	5.23*	2.68*	2.81*
	Lead	<0.500	0.843 J	**0.764 J**	**1.13 J**	NA	2.41*	1.26*	0.53*	0.56*
	Magnesium	10,900	5,600	1,380	1,470	NA	NE			
	Nickel	1.05 J	1.94 J	1.08 J	1.36 J	NA	50.33*	30.54*	15.77*	16.53*
	Zinc	9.98 J	19.4 J	29.1	29.4	NA	114.32*	69.32*	35.75*	37.49*
Hardness by Standard Method 2340	Hardness	96,200	53,300	24,400	25,800	NA	-	-	-	-
VOCs by EPA Method 8260	Targeted Compounds	BMDL	BMDL	BMDL	BMDL	BMDL	-	-	-	-
SVOCs by EPA Method 8270	Targeted Compounds	BMDL	BMDL	BMDL	BMDL	NA	-	-	-	-

Notes:
Results presented in micrograms per Liter (µg/L)
Compounds not shown were not detected
SW-DUP collected from sample SW-3
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit.
<0.00 = Below the laboratory method detection limit
BMDL = Below laboratory method detection limits
NA = Not Analyzed
NE = No Established Standard
VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
PPL = Priority Pollutant Metals
* = calculated chronic value based on hardness of the corresponding collected sample

VALUE	= concentration is greater than the laboratory method detection limits
VALUE	= concentration is greater than the calculated chronic NCAC 2B Standard based on the hardness of the corresponding collected sample
VALUE	= This concentration was selected for input into the NCDEQ Risk Calculator to represent "worst case" conditions at the subject property

TABLE 7: SUMMARY OF PFAS SURFACE WATER ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

Sample ID	SW-1-P	SW-2-P	SW-3-P	SW-DUP-P	EB-3-P	FB-6-P	15A NCAC 2B Surface Water Standards
Collection Date	12/5/25	12/5/25	12/5/25	12/5/25	12/5/25	12/5/25	
PFAS by EPA Method 1633							
PFBS (perfluorobutane sulfonic acid)	**2.8**	**2.7**	**3.4**	**3.2**	<1.2	<1.2	NE
PFHxA (perfluorohexanoic acid)	**3.2**	**9.3**	**5.7**	**5.8**	<0.24	<0.23	NE
PFBA (perfluorobutanoic acid)	<0.95	**17**	**14**	**9.6**	<0.94	<0.93	NE
PFDA (perfluorodecanoic acid)	<0.49	0.70 J	0.51 J	<0.49	<0.49	<0.48	NE
PFPeA (perfluoropentanoic acid)	**3.8**	**12**	**7.5**	**6.9**	<0.44	<0.43	NE
PFHpA (perfluoroheptanoic acid)	1.5 J	**4.0**	**2.0**	**1.9**	<0.32	<0.31	NE
PFHxS (perfluorohexane sulfonic acid)	1.5 J	**1.9**	1.1 J	0.87 J	<0.70	<0.69	NE
PFNA (perfluorononanoic acid)	0.66 J	**1.6**	1.1 J	0.86 J	<0.60	<0.59	NE
PFOS (perfluorooctane sulfonic acid)	**6.0**	**11**	**5.2**	**5.2**	<0.54	<0.53	NE
PFOA (perfluorooctanoic acid)	**5.6**	**13**	**4.1**	**3.7**	<0.73	<0.71	NE

Notes:
Results presented in nanograms per Liter (ng/L)
Compounds not shown were not detected
SW-DUP-P collected from SW-3-P
Equipment blank collected as EB-3-P
Field blank collected as FB-6-P
PFAS = Per- and Polyflouroalkyl Substances
Surface water standards do no exist for PFAS compounds. The surface water analytical data is being compared to the 15A NCAC 2B Surface Water Standards for PFAS.
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit (RL).
<0.00 = Below the laboratory method detection limit
NE = No Established Standard
15A NCAC 2B Surface Water Standards = North Carolina Administrative Code 2B Surface Water Standards dated November 1, 2025

VALUE	= concentration is greater than the laboratory method detection limits
VALUE	= concentration is greater than the laboratory RL for which surface water standards have not been established
VALUE	= concentration was selected for input into the NCDEQ Risk Calculator to represent "worst case" conditions at the subject property

TABLE 8: SUMMARY OF SEDIMENT ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment Services
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

Sample ID	SS-1	SS-2	SS-3	SS-DUP	Industrial/Commercial PSRG
Sample Depth (ft bg)	1	1	1	1	
Sample Type	Grab	Grab	Grab	Grab	
Collection Date	12/5/25	12/5/25	12/5/25	12/5/25	
VOCs by EPA 8260					
p-Isopropyltoluene	<0.0037	0.0094	<0.0034	<0.0034	240
PPL Metals by EPA 6020/7471/7199					
Antimony	<0.232	0.232 J	<0.230	<0.207	93
Arsenic	**3.25**	2.90	1.44	0.855	3.00
Beryllium	0.304 J	0.313 J	0.571 J	0.329 J	470
Cadmium	<0.128	<0.125	<0.127	<0.115	20
Chromium	47.2	54.7	64.2	56.6	NE
Hexavalent Chromium	1.9	2.6	1.7	1.0 J	20
Trivalent Chromium	45.3	52.1	62.5	55.6	3,100,000
Copper	15.8	32.5	21.4	19.3	9,300
Lead	5.27	8.27	9.04	7.71	800
Nickel	4.30	5.85	15.6	14.7	4,600
Selenium	0.344 J	0.268 J	0.962	0.806	1,200
Silver	<0.108	<0.105	<0.107	<0.0961	1,200
Zinc	29.4	31.6	18.3	15.1	70,000
Thallium	<0.155	<0.152	<0.155	<0.139	2.3
Mercury	<0.0262	<0.0267	<0.0273	<0.0260	70
SVOCs by EPA 8270					
Targeted Compounds	BMDL	BMDL	BMDL	BMDL	-

Notes:
Results presented in milligrams per Kilogram (mg/Kg)
Compounds not shown were not detected
ft bg = feet below grade
SS-DUP collected from sample SS-3
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit
<0.00 = Below the laboratory method detection limit
BMDL = Below laboratory method detection limits
NE = No Established Standard
Trivalent chromium concentrations were calculated by subtracting hexavalent chromium concentrations from total chromium concentrations.
For purposes of calculation, J-flagged concentrations were assumed to be actual concentrations.
VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
PPL = Priority Pollutant
PSRG = NCDEQ Preliminary Soil Remediation Goals, January 2025

VALUE	= concentration is greater than the laboratory method detection limits
VALUE	= concentration is greater than the Industrial/Commercial PSRG

TABLE 9: SUMMARY OF PFAS SEDIMENT ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

Sample ID	SS-1-P	SS-2-P	SS-3-P	SS-DUP-P	Industrial/Commercial PSRG
Sample Depth (ft bg)	0.5	0.5	0.5	0.5	
Collection Date	12/5/25	12/5/25	12/5/25	12/5/25	
PFAS by EPA Method 1633					
PFOS (perfluorooctane sulfonic acid)	<0.000041	<0.000041	0.00017 J	0.00016 J	0.016
PFOA (perfluorooctanoic acid)	<0.000036	<0.000036	**0.000093 J**	**0.00011 J**	0.000078

Notes:
Results presented in milligrams per Kilogram (mg/Kg)
Compounds not shown were not detected
ft bg = feet below grade
SS-DUP-P collected from sample SS-3-P
PFAS = Per- and Polyflouroalkyl Substances
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit.
<0.00 = Below the laboratory method detection limit
PSRG = NCDEQ Preliminary Soil Remediation Goals, January 2025

VALUE	= concentration is greater than the laboratory method detection limits
VALUE	= concentration is greater than the Industrial/Commercial PSRG

TABLE 10: SUMMARY OF SOIL VAPOR ANALYTICAL DATA
Fortress Wood Products II – Brownfields Assessment
1 Metals Drive
Greensboro, Guilford County, North Carolina
Brownfields Project ID No. 28063-24-041
ECS Project No. 49:22413-C

Sample ID	SV-1	SV-2	SV-3	SV-DUP	Non-Residential VISL
Initial Sample Vacuum Reading (in Hg)	-29	-28	-28	-27	
Final Sample Vacuum Reading (in Hg)	-5	-5	-5	-5	
Collection Date	12/5/25	12/5/25	12/5/25	12/5/25	
VOCs by EPA Method TO-15					
Acetone	9.43	32.6	8.39	9.36	NE
Benzene	4.09	85.6	0.757	3.64	160
2-Butanone	1.21 J	3.72	1.25 J	1.18 J	440,000
Carbon Disulfide	5.82	21.5	2.77	2.59	61,000
Carbon Tetrachloride	0.693 J	<0.470	<0.470	0.549 J	200
Chloroform	3.52	<0.506	<0.506	2.88	53
Chloromethane	0.494	<0.227	<0.227	0.601	7,900
Cyclohexane	1.79	43.0	<0.585	1.62	530,000
Dichlorodifluoromethane	2.94	25.6	851	2.97	8,800
1,1-Dichloroethane	<0.285	1.31	<0.285	<0.285	770
1,1-Dichloroethene	<0.296	11.6	<0.296	<0.296	350
cis-1,2-Dichloroethene	<0.315	106	<0.315	<0.315	3,500
Ethanol	<4.47	5.56	8.20	4.90	NE
Ethylbenzene	1.47	9.15	0.416 J	1.26	490
4-Ethyltoluene	<0.435	7.21	<0.435	<0.435	NE
Heptane	15.3	105	2.49	13.5	35,000
Hexane	24.5	150	3.56	21.7	61,000
2-Hexanone	<0.544	<0.544	<0.544	1.10 J	2,600
Isopropylbenzene	<0.355	4.92	<0.355	<0.355	35,000
Methylene Chloride	1.16	<0.587	0.642 J	1.23	53,000
4-Methyl-2-pentanone	<0.434	<0.434	0.446 J	<0.434	260,000
Styrene	<0.341	<0.341	0.434 J	<0.341	88,000
1,1,1-Trichloroethane	<0.391	<0.391	0.908 J	<0.391	440,000
1,1,2-Trichlorotrifluoroethane	1.46 J	11.2	4.28	1.26 J	440,000
1,2,4-Trimethylbenzene	1.27	25.7	<0.455	1.16	5,300
1,3,5-Trimethylbenzene	0.510 J	10.8	<0.419	0.452 J	5,300
2,2,4-Trimethylpentane	4.67	234	1.44	4.23	NE
Tetrachloroethene	11.3	208	228	10.8	3,500
Trichloroethene	0.424 J	37.1	0.438 J	0.430 J	180
Toluene	8.59	20.7	5.57	7.61	440,000
trans-1,2-Dichloroethene	<0.291	3.62	<0.291	<0.291	3,500
Trichlorofluoromethane	87.7	5.31	40.2	67.4	NE
Vinyl Chloride	<0.211	**1,010**	<0.211	<0.211	280
Total Xylenes	5.25	34.0	1.09 J	4.32	8,800

Notes:
Results presented in micrograms per cubic meter (µg/m3)
Compounds not shown were not detected
in Hg = Inches of mercury
SV-DUP collected from SV-1
VISL = Vapor Intrusion Screening Level
NE = No Established Standard
J = Value shown is an estimated value. The J values are detected concentrations greater than the method detection limit and less than the laboratory reporting limit
<0.00 = Less than the laboratory method reporting limit
Total Xylenes = sum of m,p xylenes and o-xylenes
Concentrations presented in the table are compared to the NCDEQ VISL Calculations, dated January 2025

VALUE	= concentration greater than laboratory method reporting limit
VALUE	= concentration greater than the Non-Residential VISL
VALUE	= concentration selected for input into the NCDEQ Risk Calculator to represent "worst case" conditions at the subject property

Civil Drawings

*****TO BE FILLED OUT BY ENGINEER / DESIGNER*****

***** LANDSCAPE APPROVAL AND INSPECTION *****

☐ A LANDSCAPE PLAN (which depicts the plant types and locations) Must Be Submitted To The Town Planner For Review And Approval On or Before _____ (90 Days).

☐ The Required LANDSCAPE PLANT MATERIAL Must Be Installed And Inspected Prior To Receiving A Certificate of Compliance.

To request an inspection contact Planning Director at 336-454-1138

***** TREE PRESERVATION APPROVAL AND INSPECTION *****

☐ The Required TREE PROTECTION FENCING Must Be Installed and Inspected Prior to Land Disturbance.

To request a pre-construction meeting contact the Town Planner at 336-454-1138

☐ The Required REFORESTATION AREA Must Be Installed And Inspected Prior To Receiving A Certificate of Compliance.

***** ZONING APPROVAL AND INSPECTION *****

☐ The Required Parking Spaces And Drive Aisles Must Be PAVED And STRIPED Prior To Receiving a Certificate of Compliance.

☐ Tank Permit required*
(Contact Planning Director at 336-454-1138)

☐ Sign Permit required*
(Contact Planning Director at 336-454-1138).

***** WATERSHED APPROVAL AND INSPECTION *****

☐ A FINAL PLAT Must Be Recorded In The Guilford County Register Of Deeds Prior To Receiving A Certificate of Occupancy.

☐ Construction of the WATER QUALITY DEVICE(S) Must Be Complete and the "Engineer's Certification of Completion" Sent To The Planning Director Prior To Receiving A Certificate of Occupancy.

☐ Contact the Town of Jamestown Planning Department at 336-454-1138 to schedule Watershed Plan Review.

***** FLOODPLAIN APPROVAL *****

☐ Elevation Certification Required

***** SOIL EROSION CONTROL *****
(Contact Planning Director at 336-454-1138)

☐ Watershed Pond Construction/Surety Or Improvement Guarantee Must Be Submitted.

***** PUBLIC SERVICES CONSTRUCTION APPROVAL *****
(Contact Public Services Director at 336-454-1138)

☐ Pavement Cut Permit May Be Required*
☐ Roadway Construction Plans Required*
☐ Storm Sewer System.
  ☐ Permit Required To Tie Into Stormwater System
  ☐ Driveway Culvert Inspection Required.

Water System*
  ☐ Jamestown Water Tap Privilege Fee and Meter Charge
  ☐ State Water Permit Required.
  ☐ Outside City-Utility Agreement And Annexation Petition Required.

Sanitary Sewer System*
  ☐ Jamestown Sewer Tap Privilege Fee and Meter Charge
  ☐ State Sanitary Sewer System Permit Required.
  ☐ Outside City-Utility Agreement And Annexation Petition Required.

*Fee required before construction plans are released and NCDENR applications approved.

***** PROJECT SUMMARY *****

Minimum Number Of Required Parking Spaces: _____

Total Number Of Provided Parking Spaces: 44 SPACES

Plat book and/or Deed book Reference: 008931-02691

Street Classification(s): IND - INDUSTRIAL DISTRICT

Developer's Name: SILVI MATERIALS

Address: 355 NEWBOLD RD, FAIRLESS HILLS, PA 19030

Daytime Phone Number: (297) 566-1820

Existing Land Use: IND - INDUSTRIAL DISTRICT SIC #: 3272

Stormwater Management/Watershed

Stormwater Control/Improvements(s) NONE

Maximum Amount of BUA Allowed Per Stormwater Control Design: EXISTING BUA: 9.93 AC

Distance to Nearest Floodway: 3,500 FT

On-site soil types(s): B AND C

Hydrology groups(s): SOIL GROUP

Amount of site to be disturbed: 9.13 ACRES

***** FINANCIAL RESPONSIBILITY ACKNOWLEDGEMENT *****

_____ is to provide a one year warranty to guarantee the public improvement from failure due to faulty workmanship or materials. Once the project is complete, this individual or corporation will be required to sign a notarized agreement, upon completion and return of this agreement, they will receive a final acceptance letter and the year warranty will begin. The Town of Jamestown will not release bonds or accept public infrastructure for maintenance without a final inspection.

_____
Financial Responsibility Individual or Corporation Signature

ADDRESS: _____

TELEPHONE: _____

***** TRANSPORTATION APPROVAL *****
(Contact Planning Director at 336-454-1138)

Driveway Permit:

☐ Driveway Permit Required

☐ N.C. Department Of Transportation Driveway Permit Required.

Driveway Permit Issued? _____ YES _____ N/A

_____ NO, DO NOT ISSUE BUILDING PERMIT

***** SUBDIVISION APPROVAL *****

☐ A FINAL PLAT Must Be Recorded In The Guilford County Register Of Deeds Prior To Issuance Of A Building Permit.

Final Plat Recorded? _____ YES _____ N/A

_____ NO, DO NOT ISSUE BUILDING PERMIT

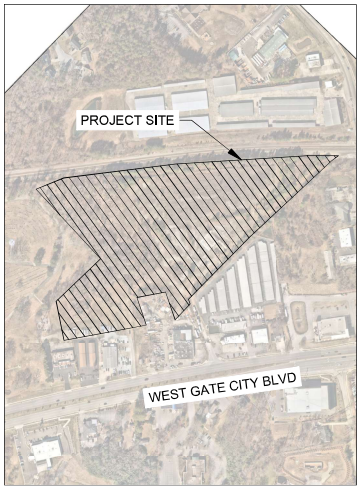
COVER SHEET APPLICATION FORM (Effective January 1, 2007)
Town Of Jamestown Planning Department
Mailing Address P.O. Box 848 Jamestown, NC 27282
Office Address: 301 East Main Street, Jamestown, NC 27282
If you have any questions about the process, call the Planning Director at 336-454-1138
Submit 3 full sets of plans (including profile sheets) to the Planning Director for review.
Plan review takes 7-10 working days; the Planning Director or staff will contact you when your plan is ready.
See Planning & Development Fee Schedule for additional applicable fees.
Information is also available on the Town's website at www.Jamestown-nc.gov
PROJECT SUMMARY
Owner/Applicant: SILVI MATERIALS
Telephone Number: (297) 566-1820 Fax Number:
E-Mail: GBROWN@SILVI.COM
Report Comments to: KIMLEY HORN
Telephone Number: (843) 737-6390 Fax Number:
E-Mail: ALEX.HENSLEY@KIMLEY-HORN.COM
Report Comments to:
Telephone Number: Fax Number:
E-Mail:
Tax Map/Block/Parcel #(s) 155986, 155985, 155991
Total Tract Acreage: 18.16 ACRES
Zoning District: UNZONED
Watershed Designation:
Proposed Use: INDUSTRIAL DISTRICT
Number of Lots:
Multifamily Developments: # of Units
Types: Apartments Townhomes Condominiums
Non-Residential Developers: Existing GFA Proposed GFA
Amount of Existing BUA:
Amount of proposed BUA:
PROJECT SUBMISSION GUIDELINES
Plans submitted to the Planning Director that do not include the items on the Design Review Application Form will not be reviewed, and will be returned to the contact person.
This portion of the cover sheet must be filled out and signed by the person designating the site to show that he/she has read and provided the required information to submit a plan to the Planning Director.
I have read, understood and completed the attached plan to the best of my knowledge and ability.
Name: Phone: Date:

***** DEVELOPMENT FORMS TO BE COMPLETED AND SUBMITTED *****
(Contact Public Services Director at 336-454-1138)

☐ Development Checklist
☐ Dedication Warranty
☐ Certificate of Construction Completion
☐ Engineer Certification of Compliance
☐ As-built Plans Printed on Mylar

Date Map Revised:

REV.	DATE	DESCRIPTION	BY



VICINITY MAP
(Scale 1" = 300')

Technical Review Committee Endorsement Block

Watershed Plan and/or Site Plan, Group Development Plan, Subdivision Plan approved by the Technical Review Committee for 24 months, subject to the approval of any required street and utility plans and profiles and approval of a separate land-disturbing permit and/or erosion control plan.

_____
Director of Planning and Development Date

_____
Public Service Director Date

Note: Plan approval represents the maximum possible development on the site. Additional reviews in the process (including Public Services plan review) could reduce the amount of development possible on the site.

Conformance with this approved plan is your responsibility; and any change in land use, lot lines, building locations, parking, drives, utility lines, landscaping, etc. must be resubmitted to the Planning Department to eliminate delays in the review process.

TRACKING NUMBER _____

JAMESTOWN NORTH CAROLINA
Settled 1759
301 EAST MAIN STREET
P.O. BOX 848
JAMESTOWN, NORTH CAROLINA 27282
TELEPHONE 336-454-1138 FAX 336-885-3504

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE 704-334-7131
550 S MAIN STREET SUITE 300, GREENVILLE, SC 29601

PRELIMINARY DESIGN FOR
SILVI MATERIALS METALS DR
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO,
NORTH CAROLINA 2740
TOWN OF JAMESTOWN - GUILFORD COUNTY - DEEP RIVER TOWNSHIP
NORTH CAROLINA

CIVIL CONSTRUCTION DRAWINGS

FOR

SILVI MATERIALS METALS DR

1 METALS DRIVE , GREENSBORO, NORTH CAROLINA 27407

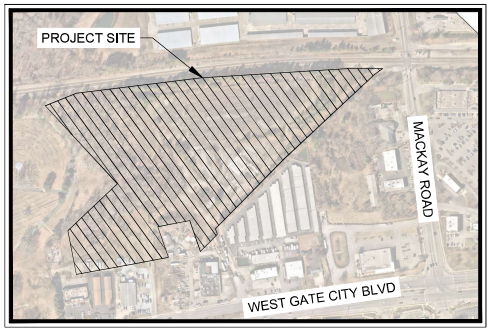
FEMA MAP

THE PROJECT SITE DOES NOT LIE WITHIN A FLOOD HAZARD AREA PER FIRM PANEL 3710783200J DATED 06-18-2007.

PARCEL NO.: 155986,155985,155991
ZONING: IND
GREENSBORO, GUILFORD COUNTY, SOUTH CAROLINA
PROPERTY AREA = 18.16 ACRES
TOTAL DISTURBED AREA = 9.94 ACRES
EXISTING IMPERVIOUS AREA = 9.93 ACRES (54.7%)
EXISTING PERVIOUS AREA = 8.23 ACRES (45.3%)
PROPOSED IMPERVIOUS AREA = 9.13 ACRES (50.2%)
PROPOSED PERVIOUS AREA = 9.03 ACRES (49.8%)

NOTES:

1. ATTENTION IS DRAWN TO THE FACT THAT THE SCALE OF THESE DRAWINGS MAY HAVE BEEN DISTORTED DURING THE REPRODUCTION PROCESS. THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.
2. IF ANY CONFLICTS, DISCREPANCIES, OR ANY OTHER UNSATISFACTORY CONDITIONS ARE DISCOVERED, EITHER ON THE CONSTRUCTION DOCUMENTS OR FIELD CONDITIONS, THE **CONTRACTOR** MUST NOTIFY THE ENGINEER IMMEDIATELY AND SHALL NOT COMMENCE FURTHER OPERATION UNTIL THE CONFLICTS, DISCREPANCIES, OR OTHER UNSATISFACTORY CONDITIONS ARE RESOLVED.
3. THE APPROVAL OF THESE PLANS AND THE ISSUANCE OF THIS LAND DISTURBANCE PERMIT DOES NOT IN ANY WAY SUGGEST THAT ALL OTHER REQUIREMENTS FOR THE LEGAL OR APPROPRIATE OPERATIONS FOR THIS ACTIVITY, WHICH MAY REQUIRE ADDITIONAL PERMITTING HAVE BEEN MET. THE ONUS IS ON THE OWNER/DEVELOPER/ BUILDER TO DISCOVER WHAT ADDITIONAL PERMITTING OR APPROVALS MAY BE NECESSARY TO OPERATE FROM THIS POINT IN AN APPROPRIATE AND LEGAL MANNER. PLAN APPROVAL OR PERMIT ISSUANCE DOES NOT ABSOLVE THE APPLICANT FROM COMPLYING WITH ALL APPLICABLE LAWS, STANDARDS, OR OTHER PERMITS WHICH MAY BE REQUIRED FOR THIS PROJECT.



VICINITY MAP

N.T.S.

PROJECT CONTACTS

OWNER/DEVELOPER:	SILVI MATERIALS 355 NEWBOLD RD, FAIRLESS HILLS, PA 19030 PHONE: (297) 566-1820 CONTACT:GARY BROWN EMAIL:GBROWN@SILVI.COM
CIVIL ENGINEER:	KIMLEY-HORN & ASSOCIATES, INC. 550 S MAIN ST, SUITE 300 GREENVILLE, SC 29601 PHONE: (843) 737-6390 CONTACT: ALEX HENSLEY, P.E. EMAIL: ALEX.HENSLEY@KIMLEY-HORN.COM
SURVEYOR:	CPT ENGINEERING AND SURVEYING, INC. 4400 TYNING STREET HIGH POINT, NC 27265 PHONE:(336) 812-8800 CONTACT: JEFFREY CAISON EMAIL: JEFFC@CPTENGINEERING.COM
RAIL CONSULTANT:	AMERICAN TRACK 1559 BOILING SPRINGS RD, BOILING SPRINGS, PA 17007 CONTACT:(717) 920-8722 CONTACT: SHAWN MCCORKLE EMAIL: SMCCORKLE@AMERICANTRACK.COM

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
C0-00	COVER SHEET JAMESTOWN
C0-01	COVER SHEET
C0-02	GENERAL NOTES
C1-00	ALTA
C1-01	EXISTING CONDITIONS & DEMO PLAN
C2-01	PHASE 1 EROSION CONTROL
C3-00	PHASE 2 EROSION CONTROL
C4-00	SITE PLAN
C4-01	TRUCK TURN
C5-00	GRADING AND DRAINAGE PLAN
C5-01	STORM PROFILES
C6-00	UTILITY PLAN
C7-00	EROSION CONTROL DETAILS
C8-00	SITE DETAILS
C8-01	SITE DETAILS
C9-00	STORMWATER DETAILS
C10-00	UTILITY DETAILS
L1-00	LANDSCAPE PLAN
L1-01	TREE PROTECTION PLAN
L2-00	LANDSCAPE NOTES AND DETAILS

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC. 27265, PHONE: (336) 813-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM PHONE: 704-334-4131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

COVER SHEET

SILVI MATERIALS METALS DR
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO,
NORTH CAROLINA 27407

SHEET NUMBER
C0-01

GENERAL NOTES:

1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS, BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND DIMENSIONS OF EXIT PORCHES, RAMPS, DOWNSPOUTS, GRAVEL AREAS ADJACENT TO BUILDING WALLS, UTILITY ENTRANCE LOCATIONS AND BOLLARDS IN BUILDING SIDEWALKS. ANY DISCREPANCIES FOUND BETWEEN THE BUILDING AND CIVIL PLANS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
2. ACCESSIBLE PARKING SIGNS WITH A "VAN" MARKING SHALL HAVE ADDITIONAL SIGN MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY SIGN DENOTING VAN ACCESSIBILITY; REFER TO CONSTRUCTION DETAIL SHEETS.
3. REFER TO CONSTRUCTION DETAIL SHEETS FOR DETAILS OF ON-SITE SIGNAGE, STRIPING, AND PAVEMENT MARKING. REFER TO SITE PLAN FOR ADDITIONAL DIMENSIONAL INFORMATION.
4. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
5. ALL ISLANDS WITH CURB SHALL BE LANDSCAPED UNLESS OTHERWISE INDICATED.
6. EXISTING SITE CONDITIONS BASED ON PUBLICLY AVAILABLE LIDAR DATA DOWNLOADED ON 04/17/2025 AND FROM AERIAL IMAGERY DOWNLOADED FROM NEAR MAP ON 04/22/2025. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.
7. THE CONTRACTOR SHALL EMPLOY ALL NECESSARY BARRICADES, SIGNS, FENCES, FLASHING LIGHTS, TRAFFIC MEN, ETC. FOR MAINTENANCE AND PROTECTION OF TRAFFIC AS REQUIRED BY THE STATE DEPT. OF TRANSPORTATION, AND GUILFORD COUNTY INSPECTIONS.
8. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL REPLACE EXISTING CONCRETE CURBS, SIDEWALK, PAVING, AND GUTTER AS INDICATED ON PLANS AND AS NECESSARY TO CONNECT TO EXISTING INFRASTRUCTURE.
10. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS AND TEMPORARY CONSTRUCTION EASEMENTS MAY BE REQUIRED.
11. CONTRACTOR AGREES TO REPAIR ANY DAMAGE TO THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE STANDARDS OF NCDOT AND GUILFORD COUNTY.
12. COORDINATE ALL CURB AND STREET GRADES IN INTERSECTIONS WITH INSPECTOR.
13. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN THE ACTUAL FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
14. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.
15. THE CONTRACTOR SHALL CONSTRUCT ACCESSIBLE RAMPS AT ALL INTERSECTIONS IN ACCORDANCE WITH NCDOT AND GUILFORD COUNTY STANDARDS.
16. SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
17. ALL OFF-SITE CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH CURRENT NCDOT STANDARD SPECIFICATIONS AND DETAILS. ALL ON-SITE CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH GUILFORD COUNTY STANDARD SPECIFICATIONS AND DETAILS.
18. ALL WORK MUST COMPLY WITH NORTH CAROLINA STATE BUILDING CODE AND NORTH CAROLINA ACCESSIBILITY CODE AS WELL AS FEDERAL, STATE AND LOCAL ACCESSIBILITY REQUIREMENTS.
19. ADJACENT STREETS SHALL BE KEPT CLEAN AT ALL TIMES.
20. NO GEOTECH REPORT WAS MADE AVAILABLE FOR THIS SITE.

DEMOLITION NOTES:

1. THE CONTRACTOR SHALL COORDINATE ALL REMOVAL EFFORTS WITH THE OWNER. COORDINATION ITEMS ARE ANTICIPATED TO INCLUDE SITE ACCESS, TRAFFIC CONTROL, MAINTENANCE OF ACCESS AND UTILITIES FOR EXISTING BUILDINGS TO REMAIN, AND EROSION CONTROL.
2. ALL FEATURES MARKED TO BE ABANDONED IN PLACE SHALL REMAIN IN EXISTING CONDITION UNLESS REMOVED THROUGH EFFORTS FOR OTHER FEATURES.
3. SPECIAL CARE SHALL BE TAKEN TO PROTECT AND MAINTAIN ALL EXISTING FEATURES NOT MARKED FOR REMOVAL. IN THE EVENT OF ANY IMPACT TO SUCH FEATURES, THE CONTRACTOR SHALL PERFORM REPAIR AND/OR RESTORATION TO ORIGINAL CONDITION AS OF START OF WORK.
4. WHERE PAVEMENT REMOVAL AREAS ABUT OTHER PAVEMENT AREAS TO REMAIN, THE EXISTING PAVEMENT SHALL BE SAW CUT TO PROVIDE A BOUNDARY WHICH IS STRAIGHT AND CLEAN IN APPEARANCE.
5. ALL SANITARY SEWER MAIN FEATURES WILL GENERALLY BE PROTECTED IN PLACE UNLESS SPECIFICALLY MARKED FOR REMOVAL.
6. THE CONTRACTOR SHALL PROPERLY AND LEGALLY DISPOSE OF ALL DEMOLITION DEBRIS OFF OF THE CONSTRUCTION SITE.

TREE PROTECTION NOTES:

1. THE CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS OUTSIDE OF CUT/FILL LINES, IN ADDITION TO THOSE THAT RECEIVE TREE/SHRUB PROTECTION BARRIERS. THE CONTRACTOR IS ALSO REQUESTED TO SAVE ALL OTHER EXISTING TREES AND SHRUBS WHERE POSSIBLE.
2. WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER AND IMMEDIATELY COVER ALL ROOT CUT SURFACES LARGER THAN TWO INCHES IN DIAMETER WITH TREE WOUND DRESSING. USE PLYWOOD FORMS WHEN TREE ROOTS ARE ADJACENT TO PROPOSED CURB & GUTTER OR SIDEWALK.
3. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, GRADING OR CONSTRUCTION BEGINS, AND NOT REMOVED UNTIL FINAL INSPECTION.
4. NO GRUBBING WITHIN TREE PROTECTION ZONE. LEAVE SOIL AND LEAF LITTER UNDISTURBED. SUPPLEMENT WITH 1-2 INCHES OF MULCH. RE-SEED WITH GRASS ONLY IN DISTURBED/GRADED AREAS.
5. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, CLEARING, GRADING OR CONSTRUCTION BEGINS AND IS NOT TO BE REMOVED UNTIL AFTER CONSTRUCTION.

TRAFFIC CONTROL:

1. REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION) AND NCDOT STANDARDS FOR DETAILS OF STANDARD TRAFFIC CONTROL SIGNS AND STANDARDS.

FINE GRADING NOTES:

1. SIDEWALKS TO HAVE A MAXIMUM 2.00% CROSS SLOPE AND A MAXIMUM 5% LONGITUDINAL SLOPE.
2. PEDESTRIAN CROSSWALKS TO HAVE MAXIMUM 2.00% CROSS SLOPE AND MAXIMUM 5.00% LONGITUDINAL SLOPE WITHIN STRIPED AREA.
3. ADA PARKING AREAS AND ACCESSIBLE AREAS TO HAVE A MAXIMUM 2.00% SLOPE IN ALL DIRECTIONS.
4. SIDEWALK INTERSECTIONS AND RAMP LANDINGS TO HAVE A MAXIMUM 2.00% SLOPE IN ALL DIRECTIONS.

BACKFLOW PREVENTION NOTES:

1. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPARTMENT CONNECTION POINTS OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS GUILFORD COUNTY REQUIRED BACKFLOW PREVENTER.
2. EACH NCDEQ / CITY OF ASHEVILLE UTILITY DEPARTMENT REQUIRED BACKFLOW PREVENTER ASSEMBLY IS REQUIRED TO BE TESTED BY AN APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM INTO SERVICE.
3. THE DOMESTIC BACKFLOW PREVENTER SHALL BE INSTALLED PER NCDEQ / CITY OF ASHEVILLE REGULATIONS AT THE PROPERTY LINE AND AS SHOWN IN THE LOCATION OF THE UTILITY PLAN.
4. THE FIRE BACKFLOW PREVENTER FOR THE FIRE SPRINKLER SYSTEM SHALL BE INSTALLED PER NCDEQ / CITY OF ASHEVILLE REGULATIONS AT THE PROPERTY LINE AND AS SHOWN IN THE LOCATION OF THE UTILITY PLAN.

DRAINAGE:

1. STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

   15" DIAMETER AND LARGER: RCP, CLASS III PER ASTM C-76, WITH FLEXIBLE PLASTIC BITUMEN GASKETS AT JOINTS.

   LESS THAN 15" DIAMETER: PVC SCHEDULE 40 OR HDPE - AASHTO DESIGNATION M252 TYPE S, M294 TYPE S AND MP7-97 TYPE S, SMOOTH INTERIOR/ANNULAR EXTERIOR, ONLY PERMITTED WHEN SPECIFICALLY INDICATED ON THE CONSTRUCTION DRAWINGS. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER'S INSTALLATION GUIDELINES OR NCDOT SPECIFICATION, WHICHEVER IS MORE STRINGENT. PIPE JOINTS AND FITTINGS SHALL CONFORM TO AASHTO M252 AND M294.
2. ALL STORM DRAINAGE WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE CLASS III REINFORCED CONCRETE PIPE UNLESS OTHERWISE SPECIFIED AS CLASS IV.
3. ALL PIPE LENGTHS AND SLOPES ARE APPROXIMATE.
4. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
5. ADDITIONAL SUBSURFACE DRAINAGE MAY RE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
6. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
   A. NO MORE THAN 500 LF OF TRENCH MAY BE OPENED AT ONE TIME.
   B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
   C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
   D. MATERIAL USED FOR BACK-FILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
   E. DESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL REGULATIONS.
   F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
7. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
8. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
9. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
10. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION. CATCH BASINS, MANHOLES, FRAMES, GRATES, ETC. SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE NCDOT STANDARD DETAILS AND SPECIFICATIONS.
11. THIS PLAN DETAILS PIPES UP TO 5FT FROM THE BUILDING FACE. REFER TO DRAWINGS BY OTHERS FOR BUILDING CONNECTIONS. CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY.
12. ALL STORM SEWER MANHOLES IN PAVED AND UNPAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. LIDS SHALL BE LABELED "STORM SEWER".
13. STRUCTURE TOP ELEVATIONS SHOWN HERE IN ARE APPROXIMATE. CONTRACTOR SHALL ADJUST AS NECESSARY.
14. RIM ELEVATIONS AS SHOWN ON THE CONSTRUCTION DRAWINGS ARE TO THE GUTTER FLOW LINE.
15. DRAINAGE AS-BUILTS WILL BE REQUIRED FOR FINAL INSPECTION.
16. ALL STORM CONNECTIONS SHALL BE WATERTIGHT.

UTILITY NOTES:

1. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. CONTRACTOR SHALL NOTIFY THE CITY OF GREENSBORO UTILITY INSPECTORS 72-HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:

   8" PVC SDR35 PER ASTM D 3034, FOR PIPES LESS THAN 12' DEEP
   8" PVC SDR26 PER ASTM D 3034, FOR PIPES MORE THAN 12' DEEP
   6" PVC SCHEDULE 40
   4" PVC SCHEDULE 40
   DUCTILE IRON PIPE PER AWWA C150 AND AWWA C151
4. WATER LINES SHALL BE AS FOLLOWS:

   4" AND LARGER - DUCTILE IRON PIPE PER AWWA C150
   SMALLER THAN 4" - TYPE K COPPER TUBE
5. MINIMUM TRENCH WIDTH SHALL BE 3 FEET.
6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT ON UTILITY DETAILS.
7. WATER AND SEWER MAINS SHALL BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3.0' COVER ON ALL WATERLINES.
9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATERLINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATERLINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING, MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
10. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
12. THE AUTHORITY HAVE JURISDICTION HAS THE RIGHT TO INSPECT ALL PRIVATE WATER SYSTEMS.
13. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.
14. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
15. REFER TO ARCHITECTURAL DRAWINGS FOR TIE-IN LOCATION AND ELEVATION OF ALL UTILITIES.
16. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF CITY OF GREENSBORO WITH REGARDS TO MATERIALS, INSTALLATION, AND TESTING OF THE WATER AND SEWER LINES.
17. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
18. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES CHARTED OR UNCHARTED WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
19. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS AND/OR TESTING REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
20. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
21. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE.
22. ALL EXISTING UTILITIES PROPOSED TO BE RELOCATED ON THESE PLANS SHALL BE PLACED UNDERGROUND.
23. ALL SANITARY SEWER AND WATER DISTRIBUTION SYSTEM WORK TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR.
24. THE CONTRACTOR SHALL COORDINATE AS REQUIRED WITH THE UTILITY PROVIDER FOR INSTALLATION OF PRIMARY ELECTRIC SERVICE AND TELEPHONE SERVICE TO THE PROPOSED BUILDINGS.
25. WHEN A WATER MAIN CROSSES OVER A SEWER MAIN, THERE MUST BE EIGHTEEN INCHES OF VERTICAL SEPARATION. IF THE WATER MAIN MUST GO UNDER THE SEWER MAIN, BOTH THESE LINES MUST BE OF DUCTILE IRON FOR A DISTANCE OF TEN FEET ON EITHER SIDE OF THE CROSSING WITH A TWELVE INCH VERTICAL SEPARATION. THE CROSSING OF OTHER UNDERGROUND PIPE REQUIRES A MINIMUM OF TWELVE INCHES OF VERTICAL SEPARATION. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
26. WHEN A WATER LINE PASSES OVER OR UNDER A STORM SEWER, VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED UNLESS WATER LINES ARE OF DUCTILE IRON OR ENCASED IN CONCRETE. A MINIMUM 6" CONCRETE PAD SHALL BE POURED BETWEEN THE TWO. DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
27. A FIRE INSPECTOR SHALL INSPECT THE UNDERGROUND FIRE LINE PIPING FROM THE PIV TO THE BUILDING, FOR YARD FIRE DEPARTMENT CONNECTIONS (FDCS), THE UNDERGROUND FDC PIPING MUST BE INSPECTED BEFORE IT IS COVERED UP.
28. GREASE INTERCEPTOR SIZING AND DETAILS ARE TO BE INCLUDED WITH BUILDING CONSTRUCTION PLUMBING PLANS.

GRADING:

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF GREENSBORO AND NCDOT REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES. SPOT ELEVATIONS AT CURB LOCATIONS ARE TO THE BOTTOM FACE OF CURB (FLOWLINE), UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK, AND THIS MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
4. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION.
6. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
7. ALL FILL TO BE COMPACTED PER THE RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER.
8. LIMITS OF CLEARING SHOWN ON GRADING PLAN ARE BASED UPON THE APPROXIMATE CUT AND FILL SLOPE LIMITS, OR OTHER GRADING REQUIREMENTS.
9. THE PROPOSED CONTOURS SHOWN IN DRIVES AND PARKING LOTS AND SIDEWALKS ARE FINISHED ELEVATIONS INCLUDING ASPHALT. REFER TO PAVEMENT CROSS SECTION DATA TO ESTABLISH CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
10. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE SO THAT RUNOFF WILL DRAIN BY GRAVITY FLOW ACROSS NEW PAVEMENT AREAS TO NEW OR EXISTING DRAINAGE INLETS OR SHEET OVERLAND.
11. ANY GRADING, BEYOND THE LIMITS OF CONSTRUCTION AS SHOWN ON THE GRADING PLAN IS CONSIDERED A VIOLATION OF THE GRADING PERMIT AND SUBJECT TO A FINE.
12. EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM THE SURVEY REFERENCED IN THIS PLAN SET.
13. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND ALL TERMS AND CONDITIONS IN THE STATE OR MUNICIPAL GRADING AND EROSION CONTROL PERMIT ISSUED FOR THIS PROJECT.
14. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL.
15. CONTRACTOR SHALL STABILIZE AND WATER DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
16. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO THE SAME.
17. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET OSHA, FEDERAL, STATE AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THESE DRAWINGS. THE DESIGN ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE DESIGN(S) TO INSTALL SAID ITEMS.
18. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS, DOOR LOCATIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND ELEVATIONS.
19. ALL FILL MATERIALS, EXISTING BUILDING FOUNDATIONS, PAVEMENT AND UTILITY STRUCTURES, TOPSOIL AND ANY OTHER DELETERIOUS MATERIALS SHALL BE COMPLETELY REMOVED FROM WITHIN THE BEARING ZONE BELOW THE STRUCTURE.
20. ALL FOUNDATION AND UTILITY EXCAVATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNIAL REPRESENTATIVE TO DETERMINE WHETHER UNSUITABLE MATERIAL MUST BE REMOVED. ALL UNDESIRABLE MATTER SHALL BE REMOVED, BACKFILLED AND COMPACTED WITH SUITABLE MATERIAL AS REQUIRED BY THE GEOTECHNICAL REPRESENTATIVE AT CONTRACTOR'S EXPENSE.
21. GRADES, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE, AS DIRECTED BY THE ENGINEER, THEY MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN CONDITIONS. STATIONS, OFFSETS AND ELEVATIONS REFER TO THE CENTER OF DROP INLETS, MANHOLES AND JUNCTION BOXES, AND THE MIDPOINT OF THE LIP FOR CATCH BASINS.
22. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
23. EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
24. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE, UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY OR ABANDONED AT MAIN AS REFERENCED IN THE PLANS.
25. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
26. ALL AREAS WITH 2:1 SLOPE OR ERODABLE SLOPES SHALL BE COVERED WITH ERONET MATTING OR APPROVED EQUAL INSTALL PER MANUFACTURER'S INSTRUCTIONS.
27. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
28. CONTRACTOR TO BE RESPONSIBLE FOR DEWATERING AS NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL DEWATERING RECOMMENDATIONS.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR PROPERLY DISPOSING OF EXCESS MATERIAL OFF-SITE.
2. CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE CONSTRUCTION PROJECT ALL EROSION CONTROL COUNTER MEASURES SHOWN ON THIS SHEET IN ACCORDANCE WITH APPLICABLE STANDARDS AND REGULATIONS FROM THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ).
3. GROUND COVER SHALL BE ESTABLISHED PER "SEEDBED PREPARATION NOTES" PROVIDED IN THE EROSION CONTROL DETAILS.
4. THE CONTRACTOR SHALL PROVIDE GROUND COVER ON DESIGNATED AREAS AND SLOPES GREATER THAN 3:1 WITHIN 7 DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. CONTRACTOR SHALL PROVIDE GROUND COVER IN 14 DAYS ON ALL OTHER AREAS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED WITHIN 14 WORKING DAYS FOLLOWING THE COMPLETION OF CONSTRUCTION.
5. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
6. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
7. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURE SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED AND APPROVAL HAS BEEN OBTAINED FROM THE CITY OF GREENSBORO INSPECTOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
9. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ASHEVILLE AND NCDEQ EROSION AND SEDIMENT CONTROL REGULATIONS, U.S. DEPT. OF AGRICULTURE, AND U.S. SOIL CONSERVATION SERVICE.
10. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE EROSION CONTROL INSPECTOR SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.
11. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
12. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS WHICH ARE NOT OTHERWISE STABILIZED SHALL BE TOP SOILED AND SEEDED, TEMPORARILY OR PERMANENTLY IN ACCORDANCE WITH THE NCDEQ REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT IS REQUIRED PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.
13. CONTRACTOR TO ENSURE THAT SEDIMENT LADEN RUNOFF DOES NOT LEAVE SITE LIMITS OR ENTER PROTECTED AREAS. ANY SEDIMENT DEPOSITED BEYOND DISTURBED AREA WITHIN SITE LIMITS SHALL BE REMOVED.
14. WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT OF THE ORIGINAL APPLICATION.
15. ALL DRAINAGE INLETS SHALL BE PROTECTED FROM SILTATION. INEFFECTIVE PROTECTION DEVICES SHALL BE IMMEDIATELY REPLACED AND THE INLET CLEANED. FLUSHING IS NOT AN ACCEPTABLE METHOD OF CLEANING.
16. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.
17. STABILIZATION MEASURES SHALL BE APPLIED TO STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

ENVIRONMENTAL NOTE:
STREAM DELINATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 812-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM PHONE: 704-333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

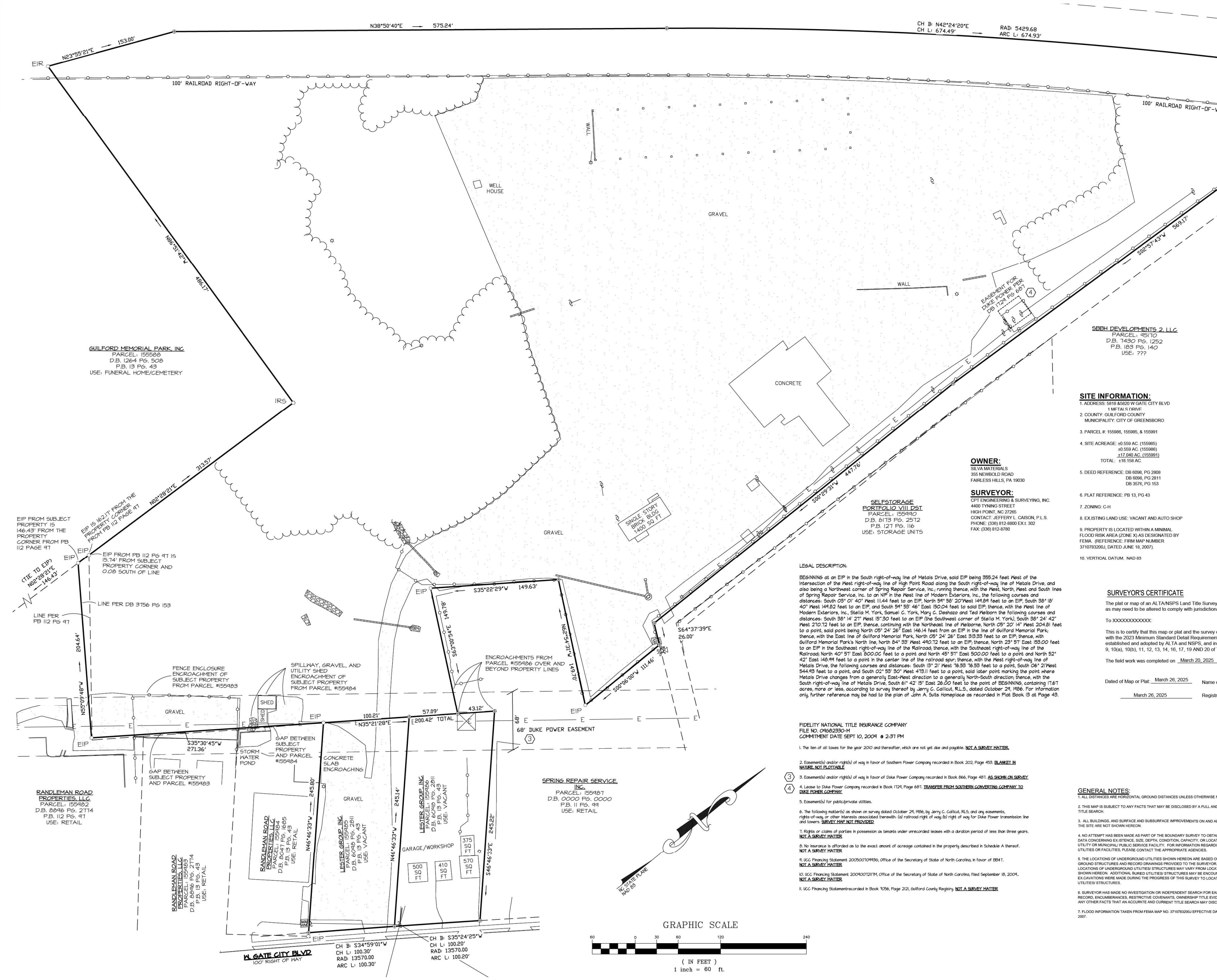
PRELIMINARY NOT FOR CONSTRUCTION

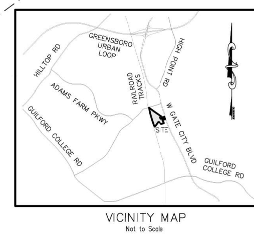
KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

GENERAL NOTES

SILVI MATERIALS METALS DR
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740
JAMESTOWN NC

SHEET NUMBER
C0-02





VICINITY MAP
Not to Scale

OWNER:
SILVA MATERIALS
355 NEWBOLD ROAD
FAIRLESS HILLS, PA 19030

SURVEYOR:
CPT ENGINEERING & SURVEYING, INC.
4400 TYNING STREET
HIGH POINT, NC 27265
CONTACT: JEFFERY L. CAISON, P.L.S.
PHONE: (336) 812-8800 EX.t. 302
FAX: (336) 812-8780

SITE INFORMATION:
1. ADDRESS: 5818 &5820 W GATE CITY BLVD
1 METALS DRIVE
2. COUNTY: GUILFORD COUNTY
MUNICIPALITY: CITY OF GREENSBORO

3. PARCEL #: 155986, 155985, & 155991

4. SITE ACREAGE: ±0.559 AC. (155985)
±0.559 AC. (155986)
±17.040 AC. (155991)
TOTAL: ±18.158 AC.

5. DEED REFERENCE: DB 6098, PG 2808
DB 6098, PG 2811
DB 3576, PG 153

6. PLAT REFERENCE: PB 13, PG 43

7. ZONING: C-H

8. EX.ISTING LAND USE: VACANT AND AUTO SHOP

9. PROPERTY IS LOCATED WITHIN A MINIMAL FLOOD RISK AREA (ZONE X) AS DESIGNATED BY FEMA. (REFERENCE: FIRM MAP NUMBER 3710783200J, DATED JUNE 18, 2007).

10. VERTICAL DATUM. NAD 83

LEGAL DESCRIPTION:

BEGINNING at an EIP in the South right-of-way line of Metals Drive, said EIP being 355.24 feet West of the intersection of the West right-of-way line of High Point Road along the South right-of-way line of Metals Drive, and also being a Northwest corner of Spring Repair Service, Inc.; running thence, with the West, North, West and South lines of Spring Repair Service, Inc. to an NIP in the West line of Modern Exteriors, Inc., the following courses and distances: South 03° 01' 40" West 111.44 feet to an EIP, North 59° 58' 20"West 149.89 feet to an EIP, South 38° 18' 40" West 149.82 feet to an EIP, and South 59° 53' 46" East 150.04 feet to said EIP; thence, with the West line of Modern Exteriors, Inc., Stella M. York, Samuel C. York, Mary C. Deshazo and Ted Welborn the following courses and distances: South 38° 14' 27" West 157.30 feet to an EIP (the Southwest corner of Stella M. York), South 38° 24' 42" West 270.72 feet to an EIP, thence, continuing with the Northeast line of Welborne, North 05° 20' 14" West 204.81 feet to a point, said point being North 05° 24' 26" East 146.14 feet from an EIP in the line of Guilford Memorial Park; thence, with the East line of Guilford Memorial Park, North 05° 24' 26" East 313.33 feet to an EIP; thence, with Guilford Memorial Park's North line, North 84° 33' West 490.72 feet to an EIP; thence, North 23° 57' East 153.00 feet to an EIP in the Southeast right-of-way line of the Railroad; thence, with the Southeast right-of-way line of the Railroad; North 40° 57' East 800.0C feet to a point and North 45° 57" East 500.00 feet to a point and North 52° 42" East 148.99 feet to a point in the center line of the railroad spur; thence, with the West right-of-way line of Metals Drive, the following courses and distances: South 13° 21' West 76.53 76.53 feet to a point, South 06° 21'West 544.93 feet to a point, and South 02° 53' 30" West 473.11 feet to a point, said later point marking the point where Metals Drive changes from a generally East-West direction to a generally North-South direction; thence, with the South right-of-way line of Metals Drive, South 61° 42' 15" East 26.00 feet to the point of BEGINNING, containing 17.67 acres, more or less, according to survey thereof by Jerry C. Callicut, R.L.S., dated October 29, 1986. For information only, further reference may be had to the plan of John A. Suits Homeplace as recorded in Plat Book 13 at Page 43.

FIDELITY NATIONAL TITLE INSURANCE COMPANY
FILE NO. 09G82330-M
COMMITMENT DATE SEPT 10, 2009 @ 2:37 PM

1. The lien of all taxes for the year 2010 and thereafter, which are not yet due and payable. NOT A SURVEY MATTER.

2. Easement(s) and/or right(s) of way in favor of Southern Power Company recorded in Book 202, Page 453. BLANKET IN NATURE, NOT PLOTTABLE

(3) 3. Easement(s) and/or right(s) of way in favor of Duke Power Company recorded in Book 866, Page 487. AS SHOWN ON SURVEY

(4) 4. Lease to Duke Power Company recorded in Book 1729, Page 687. TRANSFER FROM SOUTHERN CONVERTING COMPANY TO DUKE POWER COMPANY

5. Easement(s) for public/private utilities.

6. The following matter(s) as shown on survey dated October 29, 1986, by Jerry C. Callicut, RLS, and any easements, rights-of-way, or other interests associated therewith: (a) railroad right of way; (b) right of way for Duke Power transmission line and towers. SURVEY MAP NOT PROVIDED

7. Rights or claims of parties in possession as tenants under unrecorded leases with a duration period of less than three years. NOT A SURVEY MATTER

8. No insurance is afforded as to the exact amount of acreage contained in the property described in Schedule A thereof. NOT A SURVEY MATTER

9. UCC Financing Statement 200500709936, Office of the Secretary of State of North Carolina, in favor of BB&T. NOT A SURVEY MATTER

10. UCC Financing Statement 20090072117M, Office of the Secretary of State of North Carolina, filed September 18, 2009.. NOT A SURVEY MATTER

11. UCC Financing Statementrecorded in Book 7056, Page 2121, Guilford County Registry. NOT A SURVEY MATTER

SURVEYOR'S CERTIFICATE

The plat or map of an ALTA/NSPS Land Title Survey shall bear only the following certification, except as may need to be altered to comply with jurisdictional standards:

To XXXXXXXXXXXX:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2023 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 6(a), 6(b), 7(a), 7 (b1), 8, 9, 10(a), 10(b), 11, 12, 13, 14, 16, 17, 19 AND 20 of Table A thereof.

The field work was completed on March 20, 2025

Dated of Map or Plat: March 26, 2025 Name of Surveyor: JEFFERY L. CAISON

March 26, 2025 Registration No.: L-4403

NORTH CAROLINA PROFESSIONAL SEAL L-4403 LAND SURVEYOR JEFFERY L. CAISON

GENERAL NOTES:
1. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES UNLESS OTHERWISE NOTED.

2. THIS MAP IS SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.

3. ALL BUILDINGS, AND SURFACE AND SUBSURFACE IMPROVEMENTS ON AND ADJACENT TO THE SITE ARE NOT SHOWN HEREON.

4. NO ATTEMPT HAS BEEN MADE AS PART OF THE BOUNDARY SURVEY TO OBTAIN OR SHOW DATA CONCERNING EX.ISTENCE, SIZE, DEPTH, CONDITION, CAPACITY, OR LOCATION OF ANY UTILITY OR MUNICIPAL/ PUBLIC SERVICE FACILITY. FOR INFORMATION REGARDING THESE UTILITIES OR FACILITIES, PLEASE CONTACT THE APPROPRIATE AGENCIES.

5. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON ABOVE GROUND STRUCTURES AND RECORD DRAWINGS PROVIDED TO THE SURVEYOR. LOCATIONS OF UNDERGROUND UTILITIES/ STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/ STRUCTURES MAY BE ENCOUNTERED. NO EX.CAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/ STRUCTURES.

6. SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBERANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

7. FLOOD INFORMATION TAKEN FROM FEMA MAP NO. 3710783200J EFFECTIVE DATE JUNE 18, 2007.

LEGEND

Symbol	Description
○	BOUNDARY CORNER- NEW IRON ROD UNLESS OTHERWISE NOTED
NIP/EIP ○	NEW/EXISTING IRON PIPE
NIR/EIR ○	NEW/EXISTING IRON ROD
NMN/EMN ○	NEW/EXISTING MAGNETIC NAIL
⊗	NON-MONUMENTED POINT
	VALVE-WATER
	MANHOLE-STORM
EM	METER-ELECTRIC
GM	METER-GAS
WM	METER-WATER
	POWER POLE
	GUY WIRE
EV	VAULT-ELECTRIC
GV	VAULT-GAS
TV	VAULT-TELEPHONE/COMM
WV	VAULT-WATER
UV	VAULT-UTILITY
	LAMP POST
	FENCE LINE
E	OVERHEAD ELECTRIC
	STORM LINE
	SIGN
	FIRE HYDRANT
	WOODSLINE
□	CONCRETE COLUMNS

REVISIONS
XXXXXXXXXXXXX

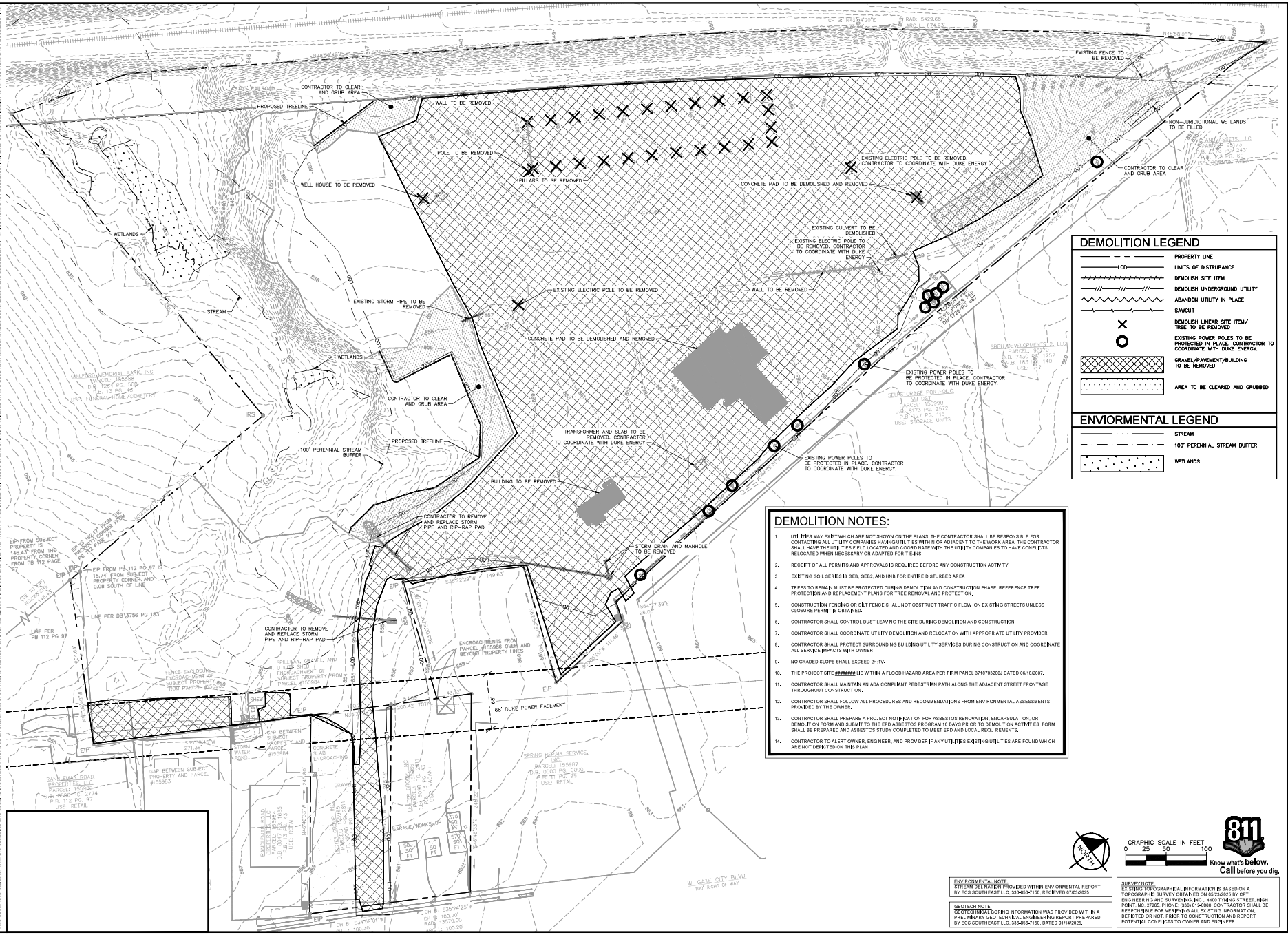
CPT ENGINEERING AND SURVEYING, INC.
LAND DEVELOPMENT CONSULTING
CORPORATE LICENSE NUMBER C-1375
4400 TYNING STREET
HIGH POINT, NORTH CAROLINA 27265
PHONE: (336) 812-8800 ~ FAX: (336) 812-8780

PRELIMINARY

ALTA/NSPS LAND TITLE SURVEY
1 METALS DRIVE; 5818 &5820 W GATE CITY BLVD
JAMESTOWN TOWNSHIP ~ GUILFORD COUNTY
GREENSBORO ~ NORTH CAROLINA

SITE ADDRESS:
1 METALS DRIVE;
5818 &5820 W GATE CITY BLVD

SCALE:	1" = 50'
DATE:	3/26/2025
PROJECT:	1866-25
DRAWN BY:	DTW
SHEET	I



DEMOLITION NOTES:

1. UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL HAVE THE UTILITIES FIELD LOCATED AND COORDINATE WITH THE UTILITY COMPANIES TO HAVE CONFLICTS RELOCATED WHEN NECESSARY OR ADAPTED FOR TIE-INS.
2. RECEIPT OF ALL PERMITS AND APPROVALS IS REQUIRED BEFORE ANY CONSTRUCTION ACTIVITY.
3. EXISTING SOIL SERIES IS GEB, GEB2, AND HNB FOR ENTIRE DISTURBED AREA.
4. TREES TO REMAIN MUST BE PROTECTED DURING DEMOLITION AND CONSTRUCTION PHASE. REFERENCE TREE PROTECTION AND REPLACEMENT PLANS FOR TREE REMOVAL AND PROTECTION.
5. CONSTRUCTION FENCING OR SILT FENCE SHALL NOT OBSTRUCT TRAFFIC FLOW ON EXISTING STREETS UNLESS CLOSURE PERMIT IS OBTAINED.
6. CONTRACTOR SHALL CONTROL DUST LEAVING THE SITE DURING DEMOLITION AND CONSTRUCTION.
7. CONTRACTOR SHALL COORDINATE UTILITY DEMOLITION AND RELOCATION WITH APPROPRIATE UTILITY PROVIDER.
8. CONTRACTOR SHALL PROTECT SURROUNDING BUILDING UTILITY SERVICES DURING CONSTRUCTION AND COORDINATE ALL SERVICE IMPACTS WITH OWNER.
9. NO GRADED SLOPE SHALL EXCEED 2H:1V.
10. THE PROJECT SITE ******** LIE WITHIN A FLOOD HAZARD AREA PER FIRM PANEL 3710783200J DATED 08/18/2007.
11. CONTRACTOR SHALL MAINTAIN AN ADA COMPLIANT PEDESTRIAN PATH ALONG THE ADJACENT STREET FRONTAGE THROUGHOUT CONSTRUCTION.
12. CONTRACTOR SHALL FOLLOW ALL PROCEDURES AND RECOMMENDATIONS FROM ENVIRONMENTAL ASSESSMENTS PROVIDED BY THE OWNER.
13. CONTRACTOR SHALL PREPARE A PROJECT NOTIFICATION FOR ASBESTOS RENOVATION, ENCAPSULATION, OR DEMOLITION FORM AND SUBMIT TO THE EPD ASBESTOS PROGRAM 10 DAYS PRIOR TO DEMOLITION ACTIVITIES. FORM SHALL BE PREPARED AND ASBESTOS STUDY COMPLETED TO MEET EPD AND LOCAL REQUIREMENTS.
14. CONTRACTOR TO ALERT OWNER, ENGINEER, AND PROVIDER IF ANY UTILITIES EXISTING UTILITIES ARE FOUND WHICH ARE NOT DEPICTED ON THIS PLAN

GRAPHIC SCALE IN FEET
0 25 50 100

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 813-4800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
7			
6			
5			
4			
3			
2			
1			

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704.333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT	015100001
DATE	10/01/2025
SCALE	AS SHOWN
DESIGNED BY	AKK
DRAWN BY	LDS
CHECKED BY	SAH

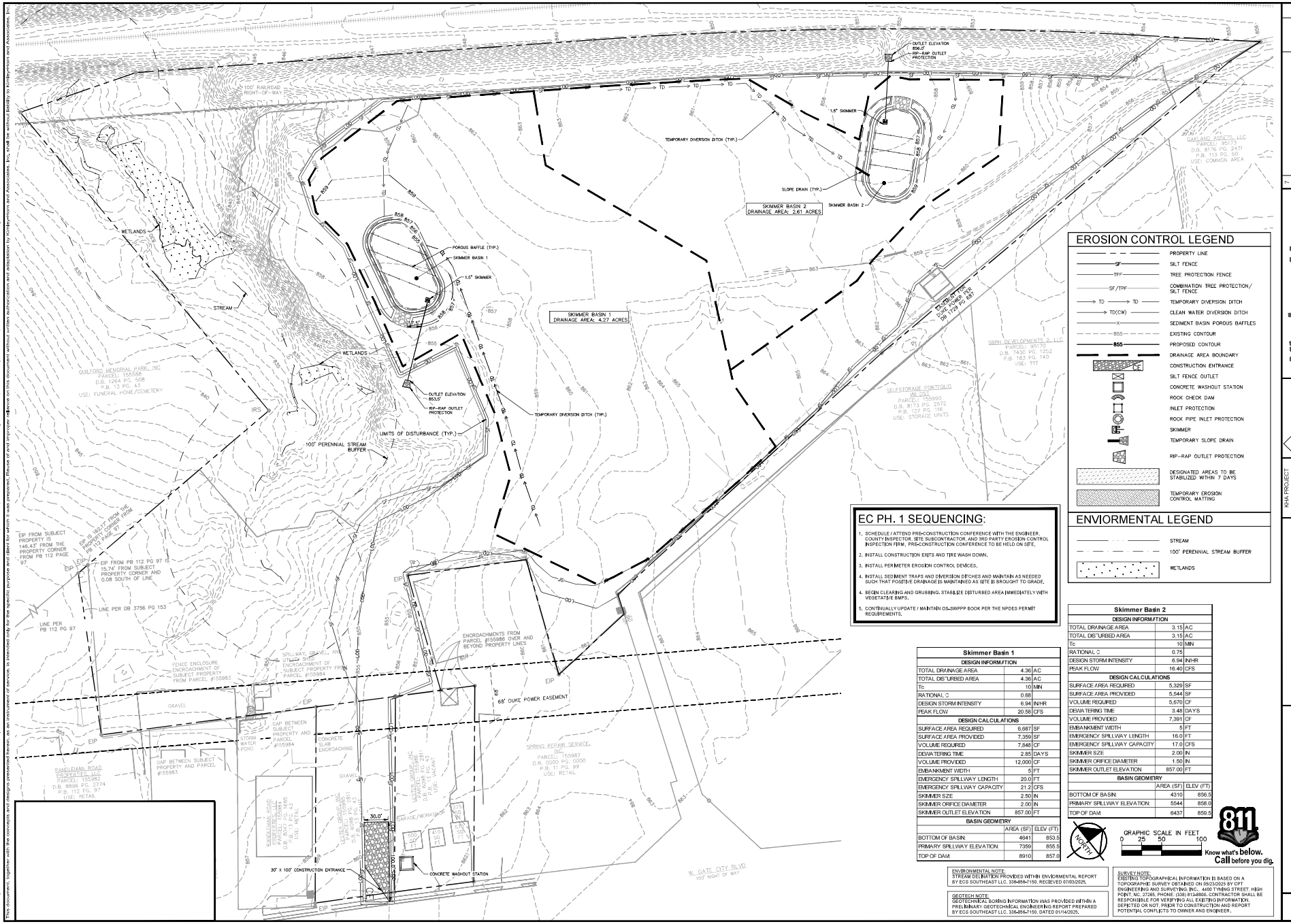
SILVI MATERIALS METALS DR

SILVI MATERIALS

1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740

EXISTING CONDITIONS & DEMO PLAN

SHEET NUMBER
C1-01



EROSION CONTROL LEGEND

- PROPERTY LINE
- SF — SILT FENCE
- TPF — TREE PROTECTION FENCE
- SF/TPF — COMBINATION TREE PROTECTION/ SILT FENCE
- TD → TD — TEMPORARY DIVERSION DITCH
- TD(CW) — CLEAN WATER DIVERSION DITCH
- SEDIMENT BASIN POROUS BAFFLES
- 855 — EXISTING CONTOUR
- 855 — PROPOSED CONTOUR
- DRAINAGE AREA BOUNDARY
- CE — CONSTRUCTION ENTRANCE
- SILT FENCE OUTLET
- CONCRETE WASHOUT STATION
- ROCK CHECK DAM
- INLET PROTECTION
- ROCK PIPE INLET PROTECTION
- SKIMMER
- TSD — TEMPORARY SLOPE DRAIN
- RIP-RAP OUTLET PROTECTION
- DESIGNATED AREAS TO BE STABILIZED WITHIN 7 DAYS
- TEMPORARY EROSION CONTROL MATTING

ENVIORMENTAL LEGEND

- STREAM
- 100' PERENNIAL STREAM BUFFER
- WETLANDS

EC PH. 1 SEQUENCING:

1. SCHEDULE / ATTEND PRE-CONSTRUCTION CONFERENCE WITH THE ENGINEER, COUNTY INSPECTOR, SITE SUBCONTRACTOR, AND 3RD PARTY EROSION CONTROL INSPECTION FIRM. PRE-CONSTRUCTION CONFERENCE TO BE HELD ON SITE.
2. INSTALL CONSTRUCTION EXITS AND TIRE WASH DOWN.
3. INSTALL PERIMETER EROSION CONTROL DEVICES.
4. INSTALL SEDIMENT TRAPS AND DIVERSION DITCHES AND MAINTAIN AS NEEDED SUCH THAT POSITIVE DRAINAGE IS MAINTAINED AS SITE IS BROUGHT TO GRADE.
4. BEGIN CLEARING AND GRUBBING. STABILIZE DISTURBED AREA IMMEDIATELY WITH VEGETATIVE BMPS.
5. CONTINUALLY UPDATE / MAINTAIN OS-SWPPP BOOK PER THE NPDES PERMIT REQUIREMENTS.

Skimmer Basin 1		
DESIGN INFORMATION		
TOTAL DRAINAGE AREA	4.36	AC
TOTAL DISTURBED AREA	4.36	AC
Tc	10	MIN
RATIONAL C	0.68	
DESIGN STORM INTENSITY	6.94	IN/HR
PEAK FLOW	20.58	CFS
DESIGN CALCULATIONS		
SURFACE AREA REQUIRED	6,687	SF
SURFACE AREA PROVIDED	7,359	SF
VOLUME REQUIRED	7,846	CF
DEWATERING TIME	2.85	DAYS
VOLUME PROVIDED	12,000	CF
EMBANKMENT WIDTH	5	FT
EMERGENCY SPILLWAY LENGTH	20.0	FT
EMERGENCY SPILLWAY CAPACITY	21.2	CFS
SKIMMER SIZE	2.50	IN
SKIMMER ORIFICE DIAMETER	2.00	IN
SKIMMER OUTLET ELEVATION	857.00	FT
BASIN GEOMETRY	AREA (SF)	ELEV (FT)
BOTTOM OF BASIN:	4641	853.5
PRIMARY SPILLWAY ELEVATION:	7359	855.5
TOP OF DAM:	8910	857.0

Skimmer Basin 2		
DESIGN INFORMATION		
TOTAL DRAINAGE AREA	3.15	AC
TOTAL DISTURBED AREA	3.15	AC
Tc	10	MIN
RATIONAL C	0.75	
DESIGN STORM INTENSITY	6.94	IN/HR
PEAK FLOW	16.40	CFS
DESIGN CALCULATIONS		
SURFACE AREA REQUIRED	5,329	SF
SURFACE AREA PROVIDED	5,544	SF
VOLUME REQUIRED	5,670	CF
DEWATERING TIME	3.48	DAYS
VOLUME PROVIDED	7,391	CF
EMBANKMENT WIDTH	5	FT
EMERGENCY SPILLWAY LENGTH	16.0	FT
EMERGENCY SPILLWAY CAPACITY	17.0	CFS
SKIMMER SIZE	2.00	IN
SKIMMER ORIFICE DIAMETER	1.50	IN
SKIMMER OUTLET ELEVATION	857.00	FT
BASIN GEOMETRY	AREA (SF)	ELEV (FT)
BOTTOM OF BASIN:	4310	856.5
PRIMARY SPILLWAY ELEVATION:	5544	858.0
TOP OF DAM:	6437	859.5

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC. 27265, PHONE: (336) 813-4800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
7			
6			
5			
4			
3			
2			
1			

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM PHONE: 704-333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

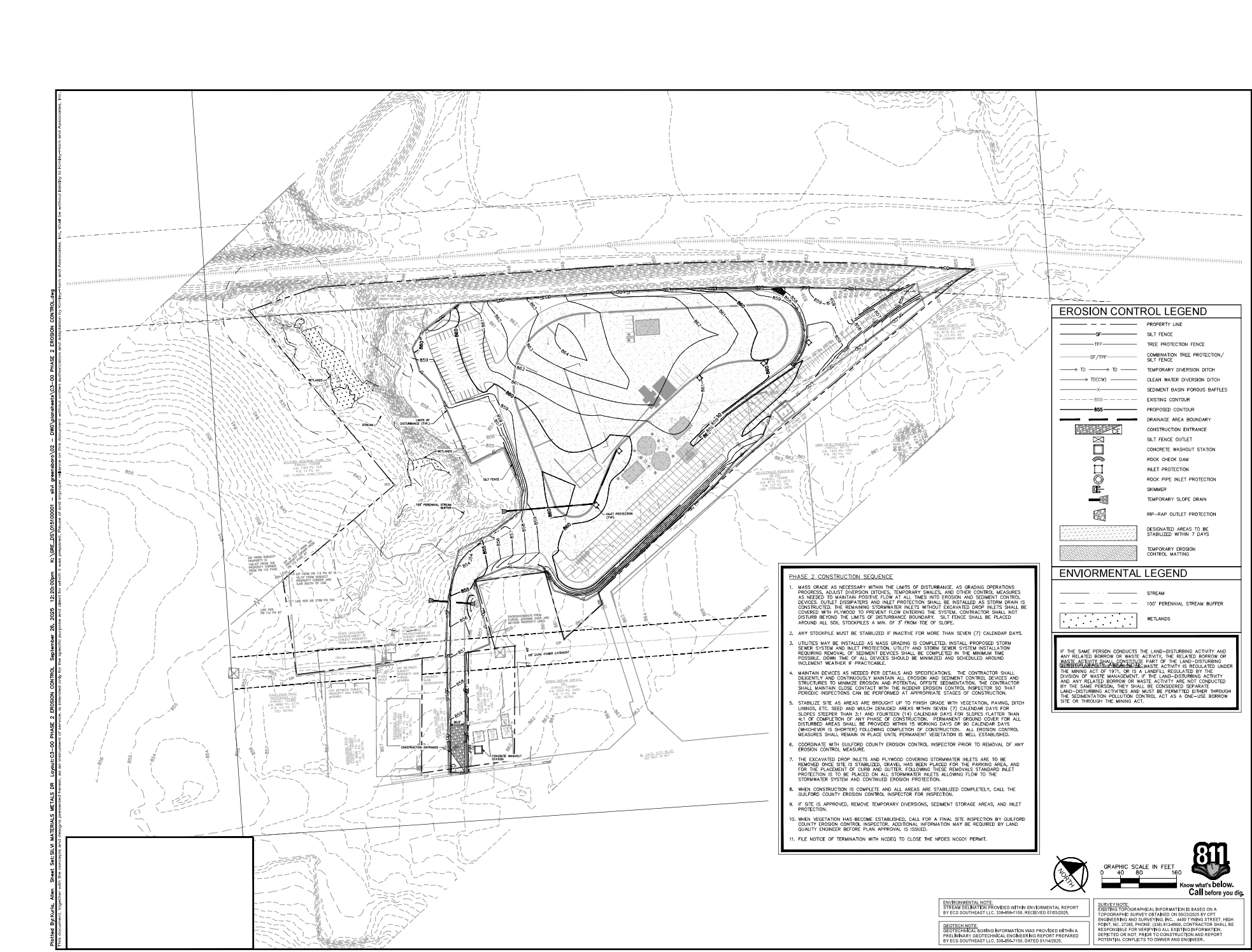
NOT PRELIMINARY FOR CONSTRUCTION

KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

PHASE 1 EROSION CONTROL

SILVI MATERIALS METALS DR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 27407

SHEET NUMBER
C2-01



Plotted By:Kurtis Allen Sheet Set:SILVI MATERIALS METALS DR Layout:C3-00 PHASE 2 EROSION CONTROL September 26, 2025 12:20:00pm K:\GRE_DS\015100001 – silvi greensboro\02 – DWG\plansheets\C3-00 PHASE 2 EROSION CONTROL.dwg

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM PHONE: 704-334-3131
500 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

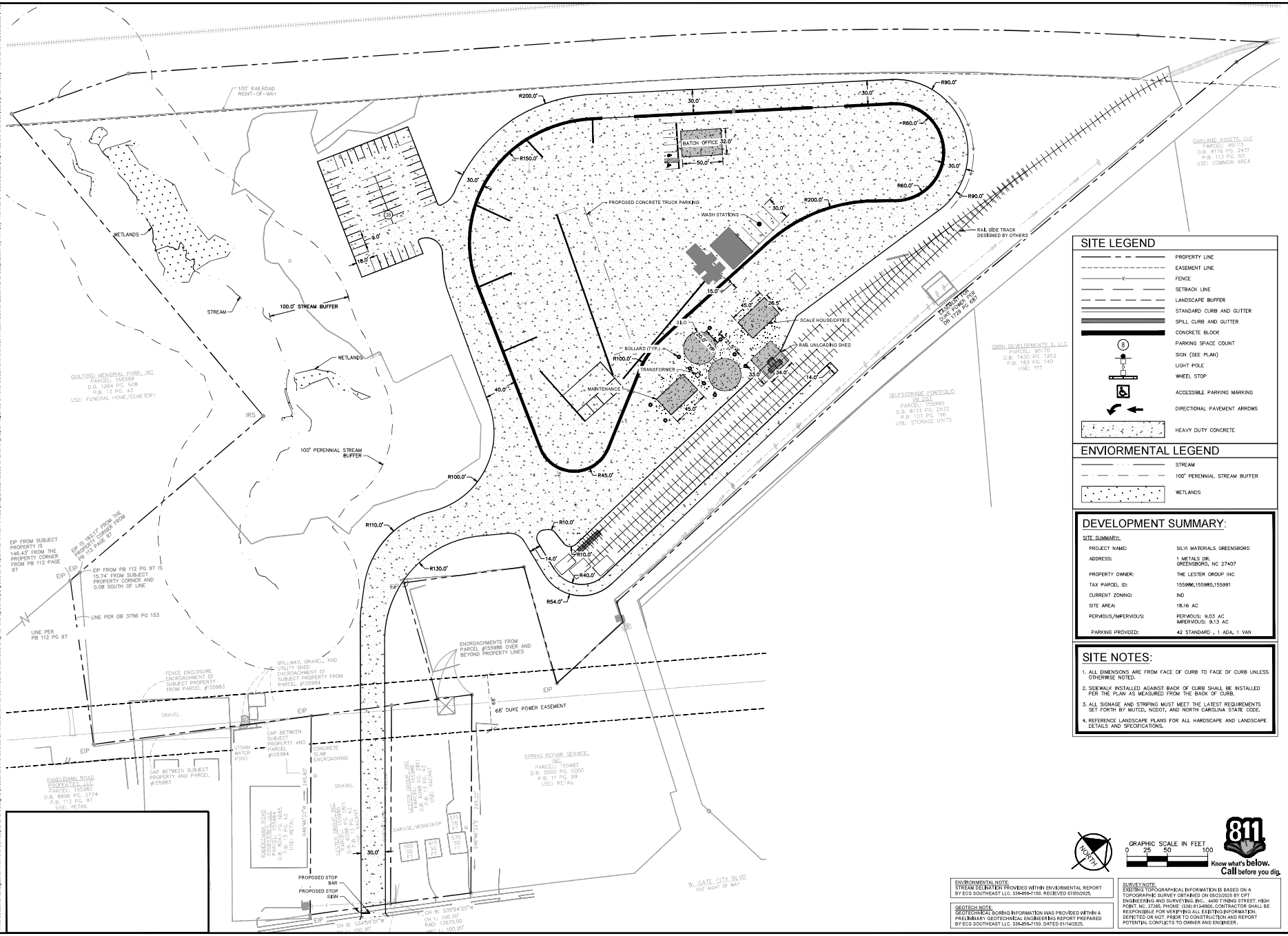
PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT	015100001
DATE	10/01/2025
SCALE	AS SHOWN
DESIGNED BY	AKK
DRAWN BY	LDS
CHECKED BY	SAH

PHASE 2 EROSION CONTROL

SILVI MATERIALS METALS DR
FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO,
NORTH CAROLINA 27407

SHEET NUMBER
C3-00



SITE LEGEND

- PROPERTY LINE
- EASEMENT LINE
- FENCE
- SETBACK LINE
- LANDSCAPE BUFFER
- STANDARD CURB AND GUTTER
- SPILL CURB AND GUTTER
- CONCRETE BLOCK
- PARKING SPACE COUNT
- SIGN (SEE PLAN)
- LIGHT POLE
- WHEEL STOP
- ACCESSIBLE PARKING MARKING
- DIRECTIONAL PAVEMENT ARROWS
- HEAVY DUTY CONCRETE

ENVIORMENTAL LEGEND

- STREAM
- 100' PERENNIAL STREAM BUFFER
- WETLANDS

DEVELOPMENT SUMMARY:

SITE SUMMARY:

PROJECT NAME:	SILVI MATERIALS GREENSBORO
ADDRESS:	1 METALS DR. GREENSBORO, NC 27407
PROPERTY OWNER:	THE LESTER GROUP INC
TAX PARCEL ID:	155986,155985,155991
CURRENT ZONING:	IND
SITE AREA:	18.16 AC
PERVIOUS/IMPERVIOUS:	PERVIOUS: 9.03 AC IMPERVIOUS: 9.13 AC
PARKING PROVIDED:	42 STANDARD , 1 ADA, 1 VAN

SITE NOTES:

1. ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. SIDEWALK INSTALLED AGAINST BACK OF CURB SHALL BE INSTALLED PER THE PLAN AS MEASURED FROM THE BACK OF CURB.
3. ALL SIGNAGE AND STRIPING MUST MEET THE LATEST REQUIREMENTS SET FORTH BY MUTCD, NCDOT, AND NORTH CAROLINA STATE CODE.
4. REFERENCE LANDSCAPE PLANS FOR ALL HARDSCAPE AND LANDSCAPE DETAILS AND SPECIFICATIONS.

GRAPHIC SCALE IN FEET
0 25 50 100

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC. 336-856-7150. RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC. 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING INC., 4400 TYNING STREET, HIGH POINT, NC 27265, PHONE: (336) 813-4800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704-334-3131
500 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT	015100001
DATE	10/01/2025
SCALE	AS SHOWN
DESIGNED BY	AKK
DRAWN BY	LDS
CHECKED BY	SAH

SILVI MATERIALS METALS DR

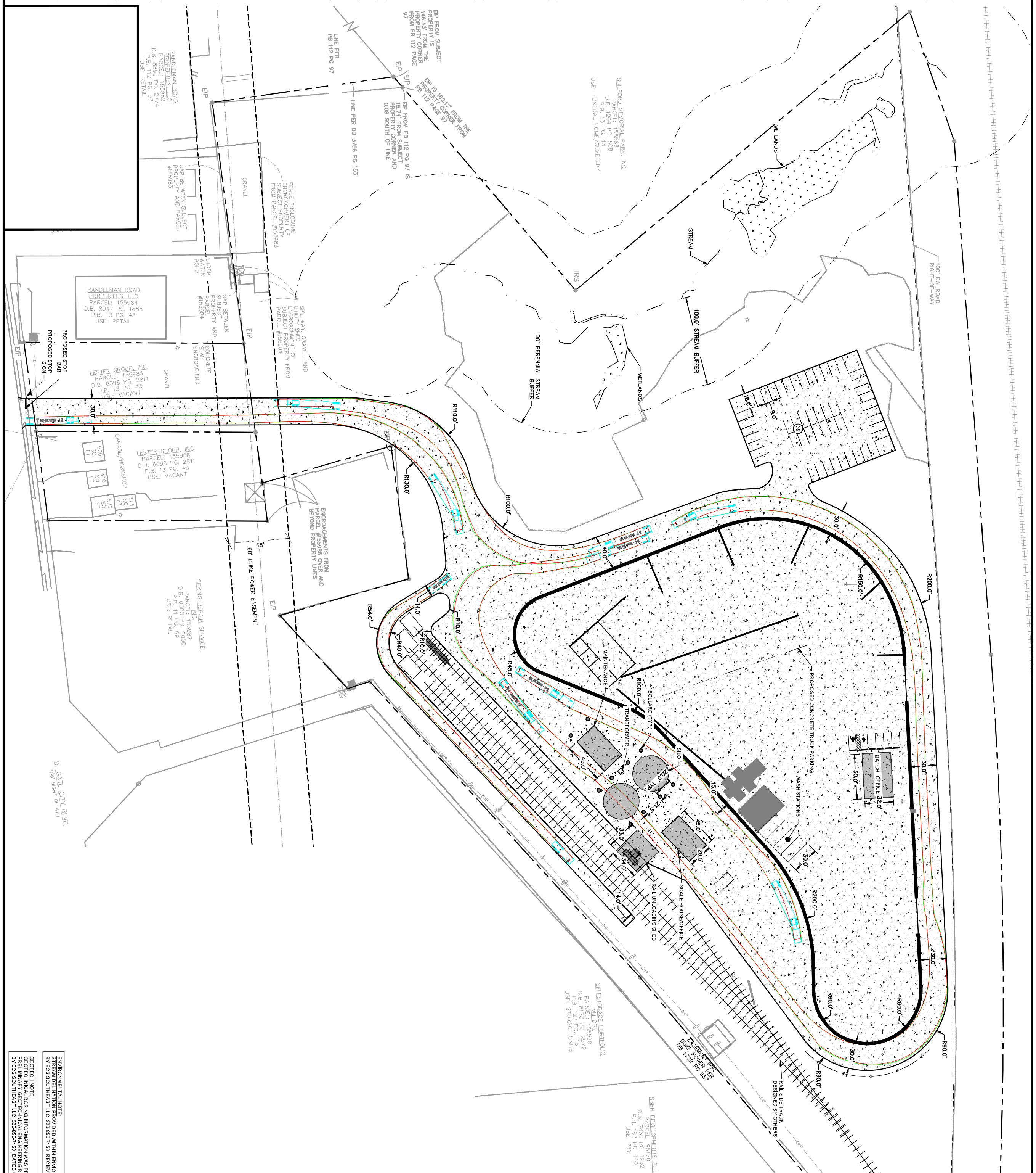
SILVI MATERIALS

1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 27407

SITE PLAN

SHEET NUMBER
C4-00

Plotted By: Kurio, Allen Sheet Set: SILVI MATERIALS METALS DR Layout: C4-01 TRUCK TURN September 26, 2025 12:20:17pm K:\GRE_DS\015100001 - silvi greensboro\02 - DWG\plansheets\C4-00 SITE PLAN.dwg



Vehicle: WB-67 - Interstate Semi-Trailer

Vehicle: Mack 10x4 Concrete Agitator

SITE NOTES:

1. ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. SIDEWALK INSTALLED AGAINST BACK OF CURB SHALL BE INSTALLED PER THE PLAN AS MEASURED FROM THE BACK OF CURB.
3. ALL SIGNAGE AND STRIPING MUST MEET THE LATEST REQUIREMENTS SET FORTH BY MUTCD, SCDOT, AND SOUTH CAROLINA STATE CODE.
4. REFERENCE LANDSCAPE PLANS FOR ALL HARDSCAPE AND LANDSCAPE DETAILS AND SPECIFICATIONS.

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 812-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

SHEET NUMBER
C4-01

SILVI MATERIALS METALS DR

PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO,
NORTH CAROLINA 2740
JAMESTOWN NC

TRUCK TURN

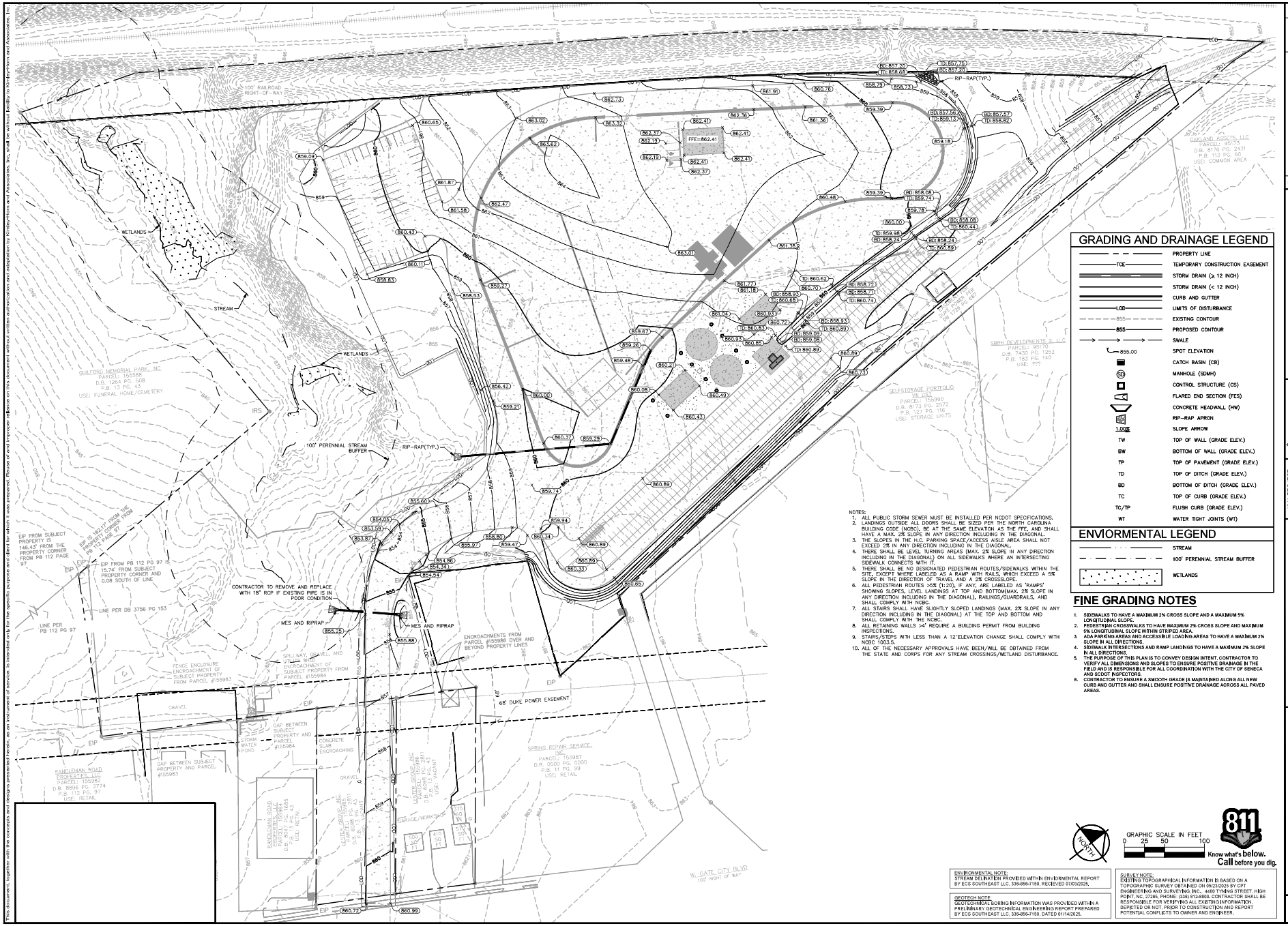
KHA PROJECT	015100001
DATE	10/01/2025
SCALE	AS SHOWN
DESIGNED BY	AKK
DRAWN BY	LDS
CHECKED BY	SAH

PRELIMINARY NOT FOR CONSTRUCTION

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704-333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

No.	REVISIONS	DATE	BY
7			
6			
5			
4			
3			
2			
1			



NOTES:
1. ALL PUBLIC STORM SEWER MUST BE INSTALLED PER NCDOT SPECIFICATIONS.
2. LANDINGS OUTSIDE ALL DOORS SHALL BE SIZED PER THE NORTH CAROLINA BUILDING CODE (NCBC), BE AT THE SAME ELEVATION AS THE FFE, AND SHALL HAVE A MAX. 2% SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL.
3. THE SLOPES IN THE H.C. PARKING SPACE/ACCESS AISLE AREA SHALL NOT EXCEED 2% IN ANY DIRECTION INCLUDING IN THE DIAGONAL.
4. THERE SHALL BE LEVEL TURNING AREAS (MAX. 2% SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL) ON ALL SIDEWALKS WHERE AN INTERSECTING SIDEWALK CONNECTS WITH IT.
5. THERE SHALL BE NO DESIGNATED PEDESTRIAN ROUTES/SIDEWALKS WITHIN THE SITE, EXCEPT WHERE LABELED AS A RAMP WITH RAILS, WHICH EXCEED A 5% SLOPE IN THE DIRECTION OF TRAVEL AND A 2% CROSSSLOPE.
6. ALL PEDESTRIAN ROUTES >5% (1:20), IF ANY, ARE LABELED AS 'RAMPS' SHOWING SLOPES, LEVEL LANDINGS AT TOP AND BOTTOM(MAX. 2% SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL), RAILINGS/GUARDRAILS, AND SHALL COMPLY WITH NCBC.
7. ALL STAIRS SHALL HAVE SLIGHTLY SLOPED LANDINGS (MAX. 2% SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL) AT THE TOP AND BOTTOM AND SHALL COMPLY WITH THE NCBC.
8. ALL RETAINING WALLS >4' REQUIRE A BUILDING PERMIT FROM BUILDING INSPECTIONS.
9. STAIRS/STEPS WITH LESS THAN A 12"ELEVATION CHANGE SHALL COMPLY WITH NCBC 1003.5.
10. ALL OF THE NECESSARY APPROVALS HAVE BEEN/WILL BE OBTAINED FROM THE STATE AND CORPS FOR ANY STREAM CROSSINGS/WETLAND DISTURBANCE.

GRADING AND DRAINAGE LEGEND

	PROPERTY LINE
TCE	TEMPORARY CONSTRUCTION EASEMENT
	STORM DRAIN (≥ 12 INCH)
	STORM DRAIN (< 12 INCH)
	CURB AND GUTTER
LOD	LIMITS OF DISTURBANCE
855	EXISTING CONTOUR
855	PROPOSED CONTOUR
	SWALE
855.00	SPOT ELEVATION
	CATCH BASIN (CB)
	MANHOLE (SDMH)
	CONTROL STRUCTURE (CS)
	FLARED END SECTION (FES)
	CONCRETE HEADWALL (HW)
	RIP-RAP APRON
1.00%	SLOPE ARROW
TW	TOP OF WALL (GRADE ELEV.)
BW	BOTTOM OF WALL (GRADE ELEV.)
TP	TOP OF PAVEMENT (GRADE ELEV.)
TD	TOP OF DITCH (GRADE ELEV.)
BD	BOTTOM OF DITCH (GRADE ELEV.)
TC	TOP OF CURB (GRADE ELEV.)
TC/TP	FLUSH CURB (GRADE ELEV.)
WT	WATER TIGHT JOINTS (WT)

ENVIORMENTAL LEGEND

	STREAM
	100' PERENNIAL STREAM BUFFER
	WETLANDS

FINE GRADING NOTES

1. SIDEWALKS TO HAVE A MAXIMUM 2% CROSS SLOPE AND A MAXIMUM 5% LONGITUDINAL SLOPE.
2. PEDESTRIAN CROSSWALKS TO HAVE MAXIMUM 2% CROSS SLOPE AND MAXIMUM 5% LONGITUDINAL SLOPE WITHIN STRIPED AREA.
3. ADA PARKING AREAS AND ACCESSIBLE LOADING AREAS TO HAVE A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
4. SIDEWALK INTERSECTIONS AND RAMP LANDINGS TO HAVE A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
5. THE PURPOSE OF THIS PLAN IS TO CONVEY DESIGN INTENT. CONTRACTOR TO VERIFY ALL DIMENSIONS AND SLOPES TO ENSURE POSITIVE DRAINAGE IN THE FIELD AND IS RESPONSIBLE FOR ALL COORDINATION WITH THE CITY OF SENECA AND SCDOT INSPECTORS.
6. CONTRACTOR TO ENSURE A SMOOTH GRADE IS MAINTAINED ALONG ALL NEW CURB AND GUTTER AND SHALL ENSURE POSITIVE DRAINAGE ACROSS ALL PAVED AREAS.

GRAPHIC SCALE IN FEET
0 25 50 100

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC. 27265, PHONE: (336) 813-4800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
7			
6			
5			
4			
3			
2			
1			

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM PHONE: 704.333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

SILVI MATERIALS METALS DR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 27407

GRADING AND DRAINAGE PLAN

SHEET NUMBER
C5-00

Plotted By:Kurtis, Allen Sheet Set:SILVI MATERIALS METALS DR Layout:C2-00 GRADING AND DRAINAGE PLAN September 26, 2025 12:20:39pm K:\GRE_DPS\015100001 - silvi greensboro\02 - DWG\plansheets\C5-00 GRADING AND DRAINAGE PLAN.dwg

GRADING AND DRAINAGE LEGEND

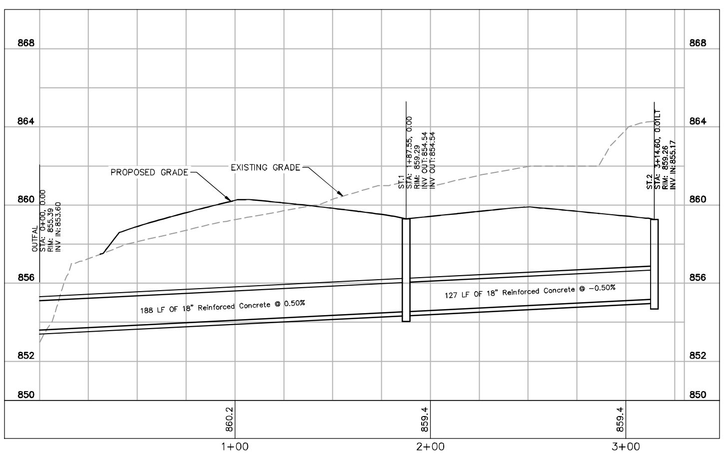
- PROPERTY LINE
- TCE — TEMPORARY CONSTRUCTION EASEMENT
- STORM DRAIN (≥ 12 INCH)
- STORM DRAIN (< 12 INCH)
- CURB AND GUTTER
- LOD — LIMITS OF DISTURBANCE
- 855 — EXISTING CONTOUR
- 855 — PROPOSED CONTOUR
- SWALE
- 855.00 — SPOT ELEVATION
- CATCH BASIN (CB)
- SD — MANHOLE (SDMH)
- CONTROL STRUCTURE (CS)
- FLARED END SECTION (FES)
- CONCRETE HEADWALL (HW)
- RIP-RAP APRON
- 1.00% — SLOPE ARROW
- TW — TOP OF WALL (GRADE ELEV.)
- BW — BOTTOM OF WALL (GRADE ELEV.)
- TP — TOP OF PAVEMENT (GRADE ELEV.)
- TD — TOP OF DITCH (GRADE ELEV.)
- BD — BOTTOM OF DITCH (GRADE ELEV.)
- TC — TOP OF CURB (GRADE ELEV.)
- TC/TP — FLUSH CURB (GRADE ELEV.)
- WT — WATER TIGHT JOINTS (WT)

ENVIORMENTAL LEGEND

- STREAM
- 100' PERENNIAL STREAM BUFFER
- WETLANDS

FINE GRADING NOTES

1. SIDEWALKS TO HAVE A MAXIMUM 2% CROSS SLOPE AND A MAXIMUM 5% LONGITUDINAL SLOPE.
2. PEDESTRIAN CROSSWALKS TO HAVE MAXIMUM 2% CROSS SLOPE AND MAXIMUM 5% LONGITUDINAL SLOPE WITHIN STRIPED AREA.
3. ADA PARKING AREAS AND ACCESSIBLE LOADING AREAS TO HAVE A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
4. SIDEWALK INTERSECTIONS AND RAMP LANDINGS TO HAVE A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.
5. THE PURPOSE OF THIS PLAN IS TO CONVEY DESIGN INTENT. CONTRACTOR TO VERIFY ALL DIMENSIONS AND SLOPES TO ENSURE POSITIVE DRAINAGE IN THE FIELD AND IS RESPONSIBLE FOR ALL COORDINATION WITH THE CITY OF SENECA AND SCDOT INSPECTORS.
6. CONTRACTOR TO ENSURE A SMOOTH GRADE IS MAINTAINED ALONG ALL NEW CURB AND GUTTER AND SHALL ENSURE POSITIVE DRAINAGE ACROSS ALL PAVED AREAS.



NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 812-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
7			
6			
5			
4			
3			
2			
1			

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704-333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

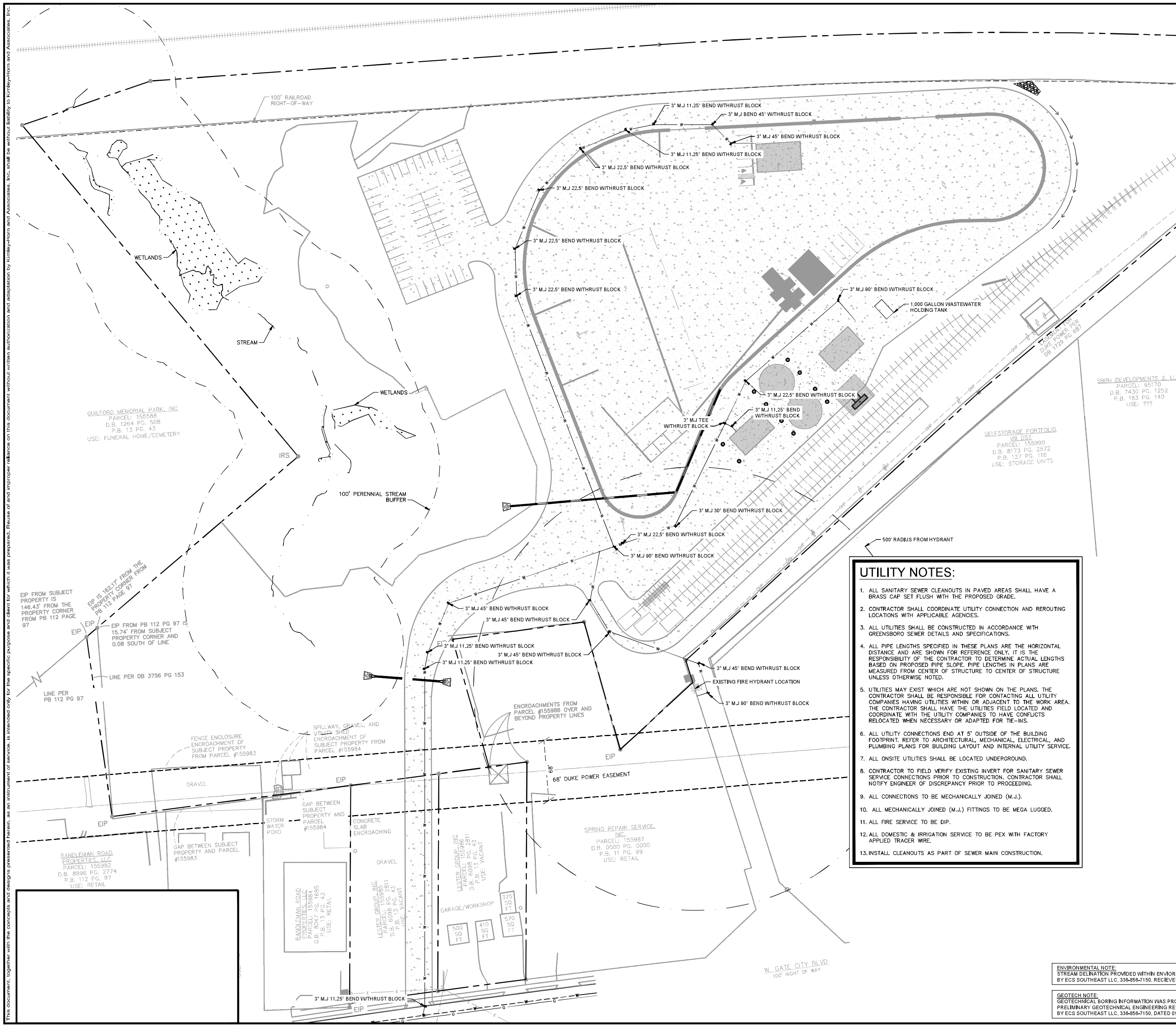
STORM PROFILES

SILVI MATERIALS METALS DR

PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740
JAMESTOWN NC

SHEET NUMBER
C5-01

Plotted By:Kurlo, Allen Sheet Set:SILVI MATERIALS METALS DR Layout:C2-00 GRADING AND DRAINAGE PLAN September 26, 2025 12:20:58pm K:\GRE_DS\015100001 - silvi greensboro\02 - DWG\plansheets\C5-10 STORM PROFILES.dwg



UTILITY NOTES:

1. ALL SANITARY SEWER CLEANOUTS IN PAVED AREAS SHALL HAVE A BRASS CAP SET FLUSH WITH THE PROPOSED GRADE.
2. CONTRACTOR SHALL COORDINATE UTILITY CONNECTION AND REROUTING LOCATIONS WITH APPLICABLE AGENCIES.
3. ALL UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH GREENSBORO SEWER DETAILS AND SPECIFICATIONS.
4. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
5. UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL HAVE THE UTILITIES FIELD LOCATED AND COORDINATE WITH THE UTILITY COMPANIES TO HAVE CONFLICTS RELOCATED WHEN NECESSARY OR ADAPTED FOR TIE-INS.
6. ALL UTILITY CONNECTIONS END AT 5' OUTSIDE OF THE BUILDING FOOTPRINT. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING PLANS FOR BUILDING LAYOUT AND INTERNAL UTILITY SERVICE.
7. ALL ONSITE UTILITIES SHALL BE LOCATED UNDERGROUND.
8. CONTRACTOR TO FIELD VERIFY EXISTING INVERT FOR SANITARY SEWER SERVICE CONNECTIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF DISCREPANCY PRIOR TO PROCEEDING.
9. ALL CONNECTIONS TO BE MECHANICALLY JOINED (M.J.).
10. ALL MECHANICALLY JOINED (M.J.) FITTINGS TO BE MEGA LUGGED.
11. ALL FIRE SERVICE TO BE DIP.
12. ALL DOMESTIC & IRRIGATION SERVICE TO BE PEX WITH FACTORY APPLIED TRACER WIRE.
13. INSTALL CLEANOUTS AS PART OF SEWER MAIN CONSTRUCTION.

UTILITY LEGEND

- PROPERTY LINE
- STREAM/WETLAND BUFFER
- WATER LINE
- FIRE LINE
- SANITARY SEWER LINE
- ELECTRIC
- FIBER OPTIC
- GAS
- POWER
- TELECOMMUNICATION
- CABLE
- LIGHT POLE
- WATER METER
- GATE VALVE
- POINT OF CONNECTION
- BACKFLOW PREVENTOR
- PIPE TEE/BENDS
- REDUCER
- FIRE HYDRANT (FH)
- FIRE DEPARTMENT CONNECTION (FDC)

ENVIORMENTAL LEGEND

- STREAM
- 100' PERENNIAL STREAM BUFFER
- WETLANDS

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 812-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn

550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601
WWW.KIMLEY-HORN.COM PHONE: 704-333-5131

PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT	015100001
DATE	10/01/2025
SCALE	AS SHOWN
DESIGNED BY	AKK
DRAWN BY	LDS
CHECKED BY	SAH

UTILITY PLAN

SILVI MATERIALS METALS DR

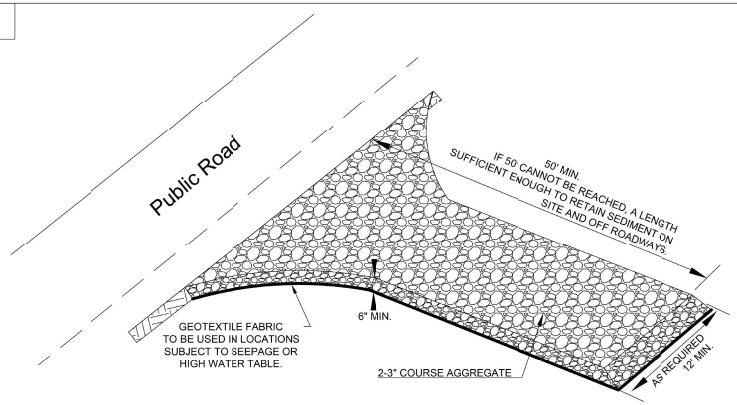
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740

JAMESTOWN NC

SHEET NUMBER
C6-00

DATE:

PAGE:



Construction:

1. Clear the entrance and exit area of all vegetation, roots, and other objectionable material and properly grade it.
2. Place the gravel to the specific grade and dimensions shown on the plans, and smooth it.
3. Provide drainage to carry water to a sediment trap or other suitable outlet.
4. Use geotexile fabrics in order to improve stability of the foundation in locations subject to seepage or high water table.

Maintenance:

1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater. Make any required repairs immediately.
2. Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2-inch stone.
3. Sediment on roadways is to be removed immediately by broom and shovel, either by manual or mechanical means, and not to be washed off where it has the potential to enter a stream, drainage way or storm drain system.

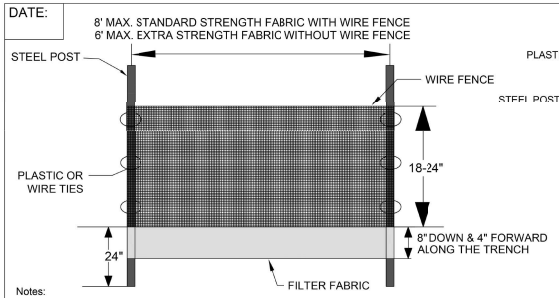
DEQ

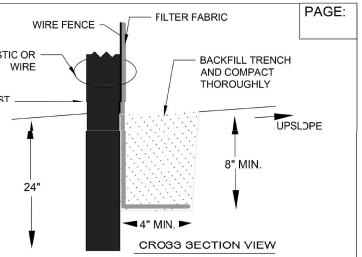
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

DATE:

PAGE:





Notes:

1. Construct the sediment barrier of standard strength or extra strength synthetic filter fabrics.
2. Ensure that the height of the sediment fence does not exceed 24 inches above the ground. (Higher fences may impound volumes of water sufficient to cause failure of the structure)
3. Construct the filter fabric from a continuous roll cut to the length of the barrier to avoid joints. When joints are necessary, securely fasten the filter cloth only at a support post with 4 feet minimum overlap to the next post.
4. Support standard strength filter fabric by wire mesh fasened securely to the upslope side of the posts. Extend the wire mesh support to the bottom of the trench. Fasten the wire reinforcement, then fabric on the upslope side of the fence post. Wire or plastic zip ties should have a minimum 50 pound tensile strength.
5. When a wire mesh support fence is used, space posts a maximum of 8 feet apart. Supports should be driven securely into the ground a minimum of 24 inches. Wire mesh should be a minimum 14-gauge with 6 inch mesh spacing.
6. Extra strength filter fabric with 6 foot post spacing does not require a wire mesh suppot fence. Securely fasten the filter fabric directly to posts. Wire or plastic zip ties should have a minimum of 50 pound tensile strength.
7. Excavate the trench approximately 4 inches wide and 8 inches deep along the proposed line of the posts and upslope from the barrier.
8. Place 12 inches of fabric along the bottom and side of the trench.
9. Backfill the trench with soil placed over the filter fabric and compact. Thorough compaction of the backfill is critical to silt fence performance.
10. Do not attach filter fabric to existing trees.
11. Do not place across ditches, streams, or any other areas of concentrated flow.

Max. Slope Length and Slope for Which Sediment Fence is Applicable

Slope	Slope Length (ft)	Max. Area (ft²)
<2%	100	10,000
2 to 5%	75	7,500
5 to 10%	50	5,000
10 to 20%	25	2,500
>20%	15	1,500

Maintenance:

1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater. Make any required repairs immediately.
2. Should the fabric of a sediment fence collapse, tear, decompose, or become ineffective, replace it promptly.
3. Remove sediment deposits as necessary to provide adequate storage volume for the next rain and reduce pressure on the fence. Take care to avoid undermining the fence during cleanouts.
4. Remove all fencing materials and unstable sediment deposits and bring the area to grade and stabilize it after the contributing drainage area has been properly stabilized.

DEQ

SEDIMENT FENCE

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

Date:

Page:

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met.

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,

(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,

(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sized, designed and maintained dewatering tanks, weir tanks, and filtration systems,

(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,

(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and

(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

PART III
SELF INSPECTION, RECORDKEEPING AND REPORTING
SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause he safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, he self-inspection shall be performed upon the commencement of he next business day. Any time when inspections were delayed shall be noted in the Inspection Record. See Self Inspection Timeframes table to the right for guidelines on frequency of inspections and required aspects of records.

Self Inspection Timeframes

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend on holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (this will determine if a site inspection is needed). days on which no rainfall occurred shall be recorded as "Zero." The permittee may use another rain-monitoring device approvedby the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected 2. Date ast Time of the inspection 3. Name of the person performing the inspection 4. Indicaton of whether the measures were operating properly 5. Description of maintenance needs for the measure 6. Description, Evidence, and date of corrective actions taken
(3) Stormwater discharge outfalls(SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected 2. Date ond Time of the inspection 3. Nameof the person performing the inspection 4. Purpence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration 5. Indication of visible sediment leaving the site 6. Description, Evidence, and date corrective actions taken
(4) Perimeter of Site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible Sedimentation is found outside site limits, then record of the following shall be nade: 1) Actions taken to clean up or stabilize sediment that has left the site limits 2) Description, Evidence and date of corrective actions taken 3) An exolanation as to the actions taken to control future releases
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or has visible increase turbidity from the construction activity, then a record of the following shall be nade: 1)Description, Evidence and date of corrective actions taken 2)Records of required reports to the appropriate Division Regional Office per Part III, Section C, Item(2)(a) of this permit
(6) Ground Stabilization Measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover) 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or assurance that they will be provided as soon as possible

NOTE: The rain inspection resets therequired 7 calendar day inspection requirement.

NORTH CAROLINA Environmental Quality

EFFECTIVE DATE:11/12/2020

NCG-01 SELF INSPECTION

Date:

Page:

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10 feet or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
- Temporary grass seed covered with straw or other mulches and tackifiers. - Hydroseeding - Rolled erosion control products with or without temporary grass seed - Appropriately applied strawor other mulch - Plastic sheeting	- Permanent grass seed covered with straw or other mulches and tackifiers - Geotextile fabrics such as permanent soil reinforcement matting - Hydroseeding - Shrubs or other permanent plantings covered with mulch - Uniform and evenly distributed ground cover sufficient to restrain erosion - Structural methods such as concrete, asphalt or retaining walls - Rolled erosion control products with grass seed

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction Genera Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be show no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional equirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticidesand rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredeats and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriatefor the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentration specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containmentof treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

NORTH CAROLINA Environmental Quality

EFFECTIVE DATE: 11/12/2020

NCG-01 GROUND COVER

Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC. 27265, PHONE: (336) 813-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704.333-5131
500 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

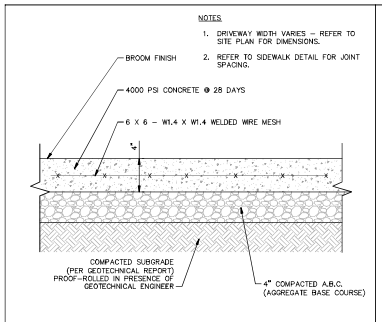
KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

EROSION CONTROL DETAILS

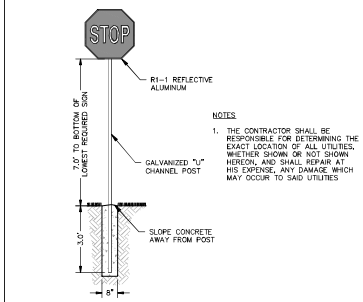
SILVI MATERIALS METALS DR

SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 27407

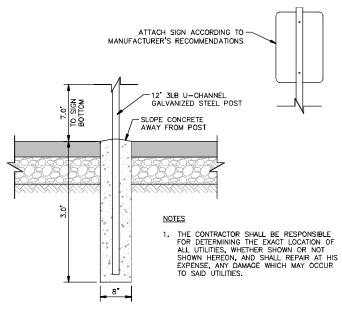
SHEET NUMBER
C7-00



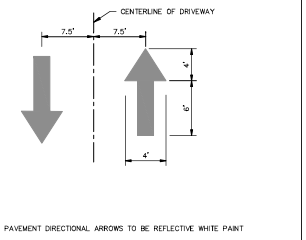
CONCRETE DRIVEWAY
N.T.S. KHA DETAIL NO: 02.106.R01 XX



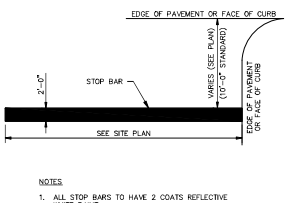
STOP SIGN
N.T.S. KHA DETAIL NO: 02.301.R01 XX



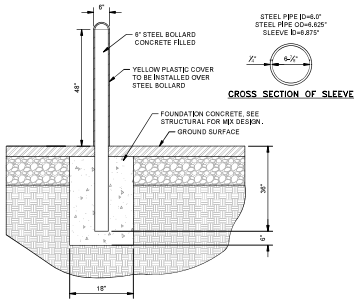
SIGN POST
N.T.S. KHA DETAIL NO: 02.304.R02 XX



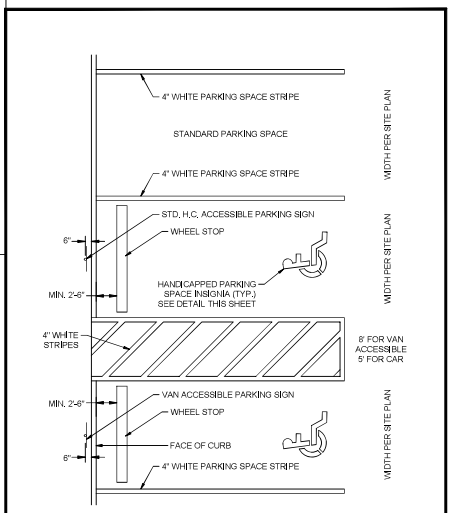
PAVEMENT DIRECTIONAL ARROW
N.T.S. KHA DETAIL NO: 02.306.R01 XX



STOP BAR MARKING
N.T.S. KHA DETAIL NO: 02.307.R01 XX



6" STEEL BOLLARD WITH LDPE PLASTIC COVER
N.T.S. KHA DETAIL NO: 02.901.R01 XX



STANDARD ACCESSIBLE HANDICAP PARKING SPACE

No.	REVISIONS	DATE	BY
7			
6			
5			
4			
3			
2			
1			

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM PHONE: 704.334.4131
500 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

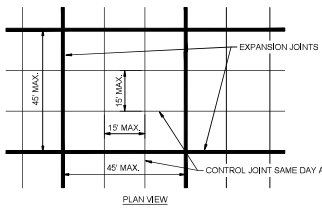
PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

SITE DETAILS

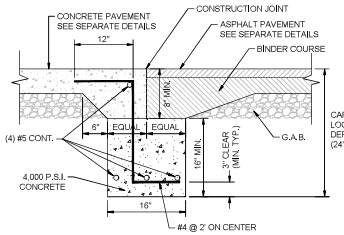
SILVI MATERIALS METALS DR
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO,
NORTH CAROLINA 2740

SHEET NUMBER
C8-00

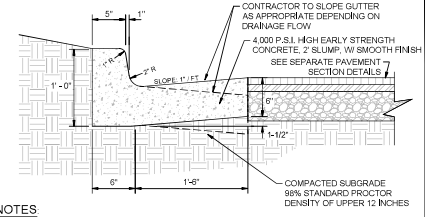


NOTE: EXPANSION AND CONTROL JOINTS SHALL BE SPACED EQUALLY AND CENTERED WITHIN THE PAVEMENT AREA, WHICH MAY REQUIRE LESS THAN THE MAXIMUM ALLOWABLE

VEHICULAR CONC. PAVEMENT JOINT SPACING DETAIL



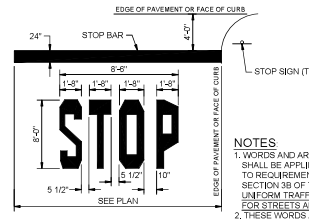
CONCRETE / ASPHALT JOINT DETAIL



NOTES
1. EXPANSION JOINTS REQUIRED AT ALL STRUCTURES AND CURB RETURNS. MAX. DIST BETWEEN CONTROL JOINTS = 25 FT.

24" CONCRETE CURB & GUTTER DETAIL

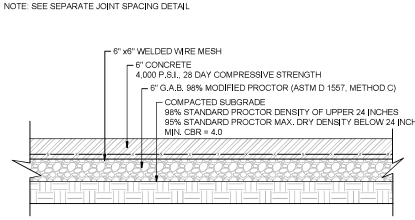
WITHOUT GRADED AGGREGATE BASE BELOW CURB AND GUTTER



NOTES
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS
2. THESE WORDS AND BAR ARE TO BE PAINTED REFLECTIVE WHITE.

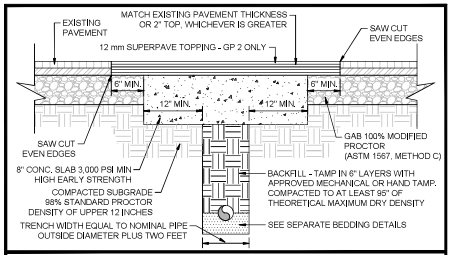
STOP BAR DETAIL

NOTE: SEE SEPARATE JOINT SPACING DETAIL

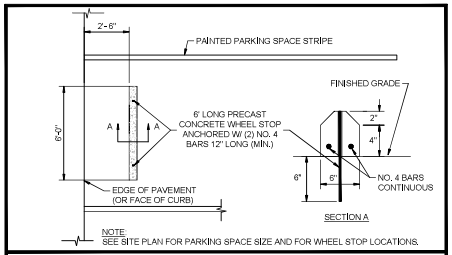


HEAVY DUTY CONCRETE PAVEMENT SECTION

PAVING SECTION PER GEOTECH REPORT PREPARED BY XXXXX
DATED XX/XX/XXXX

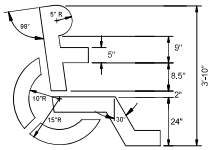


PAVEMENT (UTILITY) PATCH DETAIL



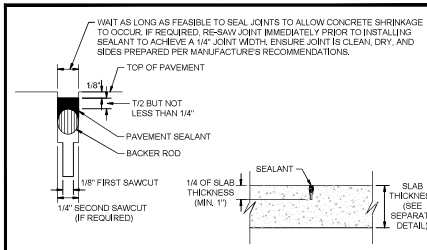
NOTE
SEE SITE PLAN FOR PARKING SPACE SIZE AND FOR WHEEL STOP LOCATIONS.

CONCRETE WHEEL STOP DETAIL

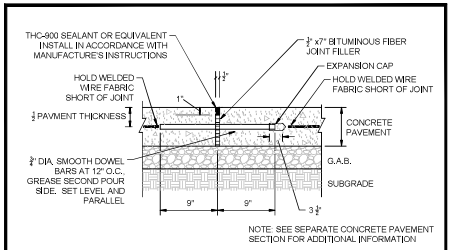


NOTE
1. STRIPING - 5" WIDE TRAFFIC PAINT (WHITE ON A BLUE BACKGROUND)

HANDICAP PARKING INSIGNIA DETAIL

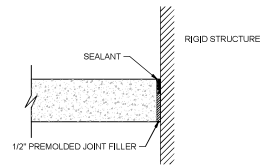


CONCRETE CONTROL JOINT DETAIL



NOTE: SEE SEPARATE CONCRETE PAVEMENT SECTION FOR ADDITIONAL INFORMATION

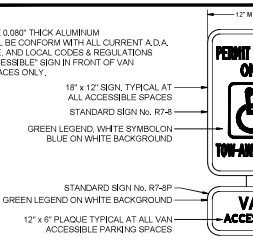
CONCRETE EXPANSION JOINT DETAIL



NOTE
1. PROVIDE ISOLATION JOINT WHERE CONCRETE PAVEMENT ABUTS A RIGID STRUCTURE.

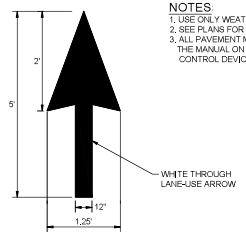
CONCRETE ISOLATION JOINT DETAIL

NOTES
1. ALL SIGNS TO BE 0.080" THICK ALUMINUM
2. ALL SIGNS SHALL BE CONFORM WITH ALL CURRENT A.D.A. FEDERAL, STATE, AND LOCAL CODES & REGULATIONS
3. PLACE "VAN ACCESSIBLE" SIGN IN FRONT OF VAN ACCESSIBLE SPACES ONLY.



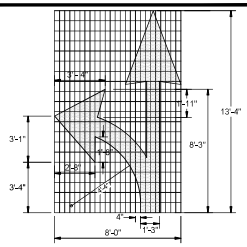
18" x 12" SIGN, TYPICAL AT ALL ACCESSIBLE SPACES
STANDARD SIGN No. R7-8
GREEN LEGEND, WHITE SYMBOL ON BLUE ON WHITE BACKGROUND
STANDARD SIGN No. R7-8P
GREEN LEGEND ON WHITE BACKGROUND
12" x 6" PLAQUE TYPICAL AT ALL VAN ACCESSIBLE PARKING SPACES

VAN ACCESSIBLE ADA SIGN DETAIL

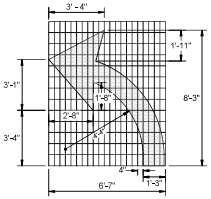


NOTES
1. USE ONLY WEATHER RESISTANT PAINT.
2. SEE PLANS FOR LOCATIONS.
3. ALL PAVEMENT MARKINGS TO CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

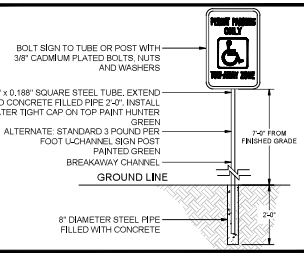
STANDARD ARROW MARKINGS - STRAIGHT (TYPE 1)



STANDARD ARROW MARKINGS - STRAIGHT-TURN (TYPE 3)



STANDARD ARROW MARKINGS - TURN (TYPE 2)



HANDICAP PARKING SIGN PLACEMENT DETAIL

No.	REVISIONS	DATE	BY
7			
6			
5			
4			
3			
2			
1			

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
WWW.KIMLEY-HORN.COM PHONE: 704.334-3131
500 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

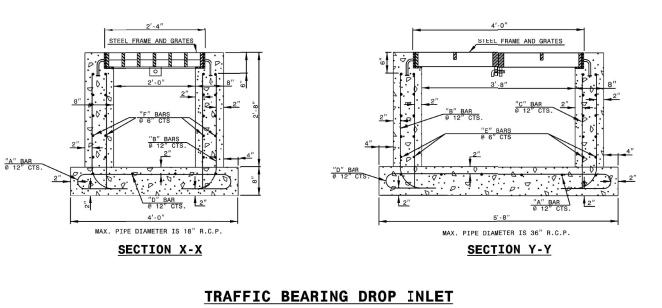
KHA PROJECT	015100001
DATE	10/01/2025
SCALE	AS SHOWN
DESIGNED BY	AKK
DRAWN BY	LDS
CHECKED BY	SAH

SITE DETAILS

SILVI MATERIALS METALS DR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740

SHEET NUMBER
C8-01

NOTES:
-HORIZONTAL AND VERTICAL DIMENSIONS MAY BE ADJUSTED AS THE FIELD CONDITIONS AND/OR ALTERNATE DESIGN REQUIRE.
-MAXIMUM HEIGHT FOR THIS STRUCTURE IS 14'-0".
-STD. DWG. 840.46 CONTROLS MAXIMUN DEPTH IF PRECAST BOX IS USED.
-MAKE ALL ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
-ANCHOR STEEL FRAME AND GRATES IN ACCORDANCE WITH DETAILS SHOWN.
-NO BRICK RISERS ARE PERMITTED ON ANY PART OF THIS DRAINAGE STRUCTURE.

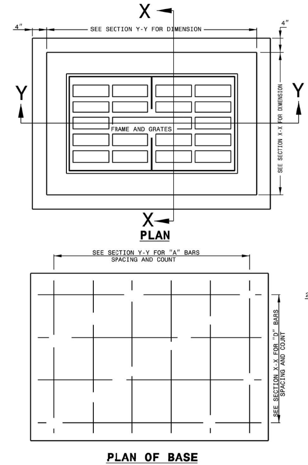


TRAFFIC BEARING DROP INLET

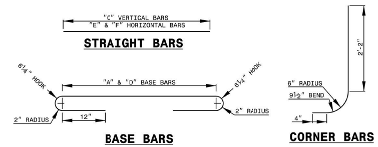
ROADWAY STANDARD DRAWING FOR
TRAFFIC BEARING GRATED DROP INLET
FOR STEEL (840.37) DOUBLE FRAME AND GRATES

1-24 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

SHEET 1 OF 2 **840.36**



BILL OF MATERIALS				
COMMON		CONCRETE		
BAR	SIZE	LENGTH	QUANTITY	WEIGHT
A	#5	6'-4½"	6	39.9
B	#5	3'-3½"	16	54.9
C	#5	2'-8"	14	38.9
D	#5	8'-0½"	4	33.6
E	#5	3'-0"	20	62.6
F	#5	4'-8"	20	97.3
REINF. STEEL (TOTAL WEIGHT LBS.)				327.2
CONCRETE IN BASE (CUBIC YARDS)				0.56
CONCRETE IN WALLS (CUBIC YARDS)				0.92
CONCRETE TOTAL (CUBIC YARDS)				1.48
CONC. CUBIC YARDS IN WALL/FOOT OF HEIGHT				0.35
LBS. OF REINF. STEEL IN WALL/FOOT OF HEIGHT				94.9

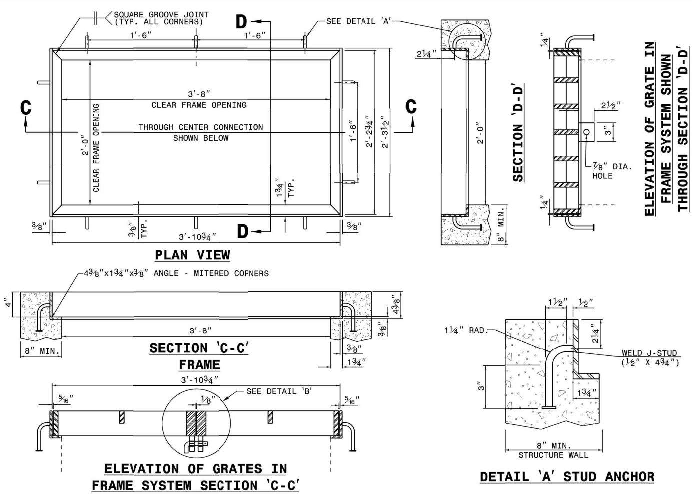


GENERAL NOTES:
-USE CLASS 'AA' CONCRETE FOR CAST IN PLACE BOX.
-CHAMFER ALL EXPOSED CONCRETE CORNERS 1".
-USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
-IF PIPES ARE SET IN THE BASE FOLLOW CONSTRUCTION PROCEDURES SHOWN BY STD. DWG. 840.00.
-INCLUDE REINFORCING STEEL COST IN THE BID PRICE FOR "MASONRY DRAINAGE STRUCTURE".
-PROVIDE GRATED DROP INLETS OVER 3'-6" DEEP WITH STEPS SPACED 12" ON CENTER AS DIRECTED BY STD. DWG. 840.66.
-FRAME AND GRATES ARE SEPARATE CONTRACT ITEMS.

ROADWAY STANDARD DRAWING FOR
TRAFFIC BEARING GRATED DROP INLET
FOR STEEL (840.37) DOUBLE FRAME AND GRATES

1-24 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

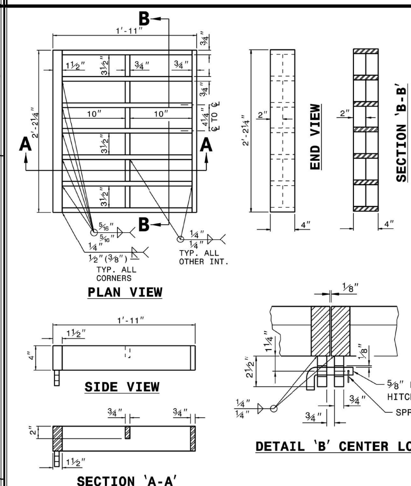
SHEET 2 OF 2 **840.36**



ROADWAY STANDARD DRAWING FOR
STEEL GRATE AND FRAME

1-24 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

SHEET 1 OF 2 **840.37**



NOTES:

1. HOT DIP GALVANIZE FRAME AND GRATE IN ACCORDANCE WITH ASTM DESIGNATION A-123 AND AASHTO M-111.
2. GRATE IS DESIGNED TO WITHSTAND HS25-44 LOADING.
3. TWO (2) GRATES REQUIRED PER FRAME. ONE (1) GRATE DEPICTED FOR CLARITY.
4. PROVIDE STEEL CONFORMING TO THE LATEST REQUIRMENTS OF AASHTO M270 (ASTM A709) GRADE 36.
5. WELD IN ACCORDANCE WITH THE AASHTO/AWS D1.5 BRIDGE WELDING CODE. SEAL WELD ALL CONNECTIONS ALONG TOP AND BOTTOM HORIZONTAL SEAMS OF CONNECTIONS IN ADDITION TO ANY REQUIRED STRUCTURAL WELDS.
6. USE 5/16" DOUBLE FILLET WELDS FOR CONNECTING MAIN BARS TO EDGE BARS AND ¼" FILLETS AT ALL OTHER LOCATIONS.
7. NOTCHING OF BEARING BARS TO ACCEPT CROSS BAR IS PROHIBITED.
8. 840.37 FRAMES AND GRATES ARE SUBJECT TO LIVE LOADS AND ARE NOT CONSIDERED TO BE ANCILLARY PRODUCTS.

ROADWAY STANDARD DRAWING FOR
STEEL GRATE AND FRAME

1-24 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

SHEET 2 OF 2 **840.37**

ENVIRONMENTAL NOTE:
STREAM DELINATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 812-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704-333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

STORMWATER DETAILS

SILVI MATERIALS METALS DR
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740
JAMESTOWN NC

SHEET NUMBER
C9-00

SIZE AND DEGREE OF BEND	STATIC THRUST IN POUNDS	FAIRLY DRY CLAY 4,000 LBS/FT²	SOFT CLAY 2,000 LBS/FT²	GRAVEL, COURSE 16,000 LBS/FT²	ALWAYS DRY CLAY 8,000 LBS/FT²	SAND, COMPACT, FIRM, 8,000 LBS/FT²	SAND - CLEAN, DRY 4,000 LBS/FT²	QUICKSAND-VERY POOR SOIL 1,000 LBS/FT²	ROCK-POOR 10,000 PSF
6"									
11-1/4°	812	1 FT²	1	1	1	1	1	1	1
22-1/2°	1653	1 FT²	1	1	1	1	1	2	1
45°	3247	1 FT²	2	1	1	1	1	4	1
90°	5994	2 FT²	3	1	1	1	2	6	1
PLUG	4239	1 FT²	2	1	1	1	1	4	1
8"									
11-1/4°	1444	1 FT²	1	1	1	1	1	2	1
22-1/2°	2939	1 FT²	2	1	1	1	1	3	1
45°	5773	2 FT²	3	1	1	1	2	6	1
90°	10656	3 FT²	6	1	2	2	3	11	2
PLUG	7536	2 FT²	4	1	1	1	2	8	1
12"									
11-1/4°	3248	1 FT²	2	1	1	1	1	3	1
22-1/2°	6612	2 FT²	4	1	1	1	2	7	1
45°	12988	3 FT²	7	1	2	2	3	13	2
90°	23976	6 FT²	12	2	3	3	6	24	3
PLUG	16956	4 FT²	9	1	2	2	4	17	2
16"									
11-1/4°	5775	2 FT²	3	1	1	1	2	6	1
22-1/2°	11756	3 FT²	6	1	2	1	3	12	1
45°	23090	6 FT²	12	2	3	3	6	23	3
90°	42624	11 FT²	22	3	6	6	11	43	4
PLUG	30144	8 FT²	15	2	4	4	8	30	3

* DIGITAL FILE 28 Aug 2002

BASED ON TEST PRESSURE OF 150 PSI

NOTES:

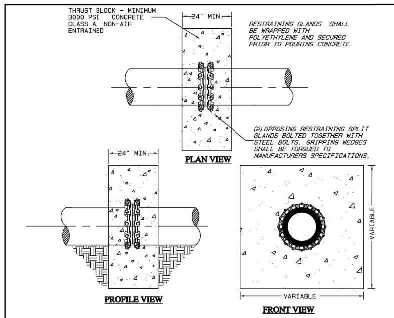
REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.

USE 6"-90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY.

C I T Y O F G R E E N S B O R O

STANDARD REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS — STD. NO. 106 — REV.

G:\Exchange\Standards\Water\COG106.pro

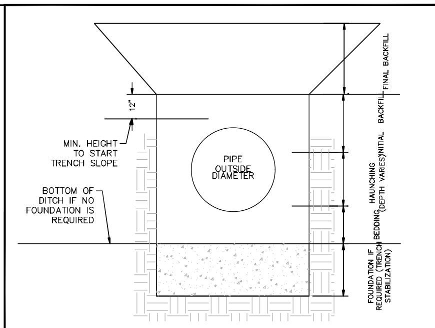


NOTES:
1. SEE CITY OF GREENSBORO - WATER LINE AND SEWER LINE STANDARD CONSTRUCTION SPECIFICATIONS, SUB-ARTICLE 3.02 & 3.03 FOR (TRENCH AND BACKFILL) AND (TRENCH STABILIZATION) REQUIREMENTS.
2. THRUST BLOCK SHALL BE ORIENTED APPROXIMATELY CENTER OF PIPE JOINT.
3. *OPTIONAL* A WELDED COLLAR (INSTALLED BY PIPE MANUFACTURER) MAY BE USED IN LIEU OF RESTRAINING GLANDS. ALL OTHER DESIGN REQUIREMENTS SHALL APPLY AS SHOWN.
4. FOR PIPES LARGER THAN 16" DIAMETER, THE DEADMAN THRUST RESTRAINT WITH BLOCKING MUST BE DESIGNED AND SEALED BY A N.C. PROFESSIONAL ENGINEER.
5. ANY PROPOSED MODIFICATIONS TO THIS STANDARD BASED ON THE FIELD CONDITIONS MUST BE PRE-APPROVED BY THE CITY OF GREENSBORO FIELD INSPECTOR AND/OR THE ENGINEER OF RECORD.
6. QUANTITIES SHOWN BELOW ARE TO THE NEAREST QUARTER YARD AND ARE BASED ON MINIMUM MASS WEIGHT REQUIREMENTS OF THE TEST PRESSURES SHOWN.

MINIMUM CUBIC YARDS OF CONCRETE REQUIRED			
PIPE DIAMETER	**150 PSI TEST PRES.**	200 PSI TEST PRES.	250 PSI TEST PRES.
6"	**0.75**	1.0	1.25
8"	**1.5**	2.0	2.25
10"	**2.0**	3.0	3.5
12"	**3.0**	4.0	5.0
16"	**5.5**	7.25	9.0

C I T Y O F G R E E N S B O R O

DEADMAN THRUST RESTRAINT WITH MASS WEIGHT BLOCKING — STD. NO. 118 — REV. 06-13, 06-15



WATER PIPE BEDDING DETAIL

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 813-8800, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

811 Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704-333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

PRELIMINARY NOT FOR CONSTRUCTION

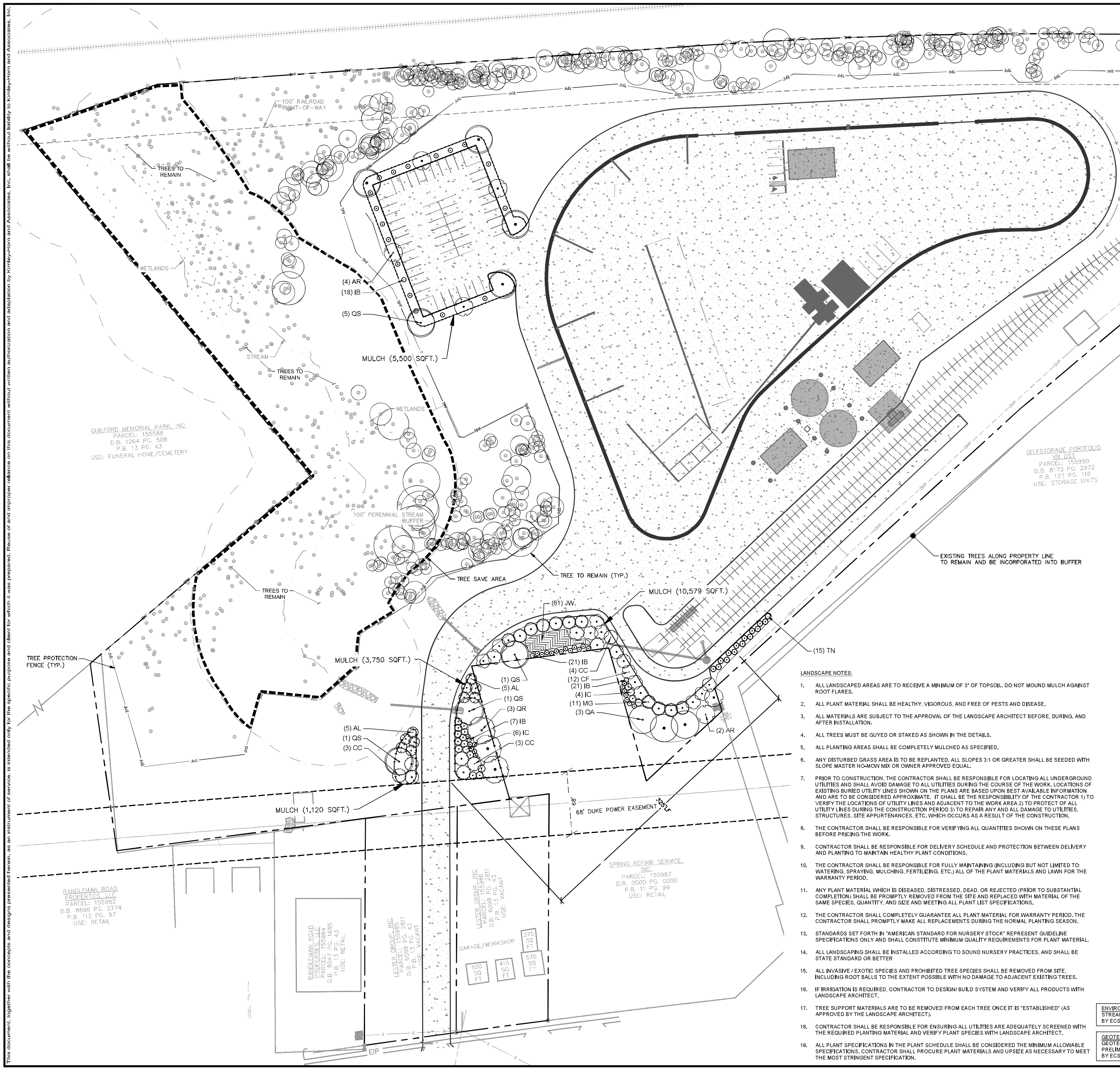
KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY AKK
DRAWN BY LDS
CHECKED BY SAH

UTILITY DETAILS

SILVI MATERIALS METALS DR
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740
NC
JAMESTOWN

SHEET NUMBER
C10-00

Plotted By:Kurio, Allen Sheet Set:SILVI MATERIALS METALS DR Layout:C10-00 UTILITY DETAILS September 26, 2025 12:22:02pm K:\GRE_DS\015100001 - silvi greensboro\02 - DWG\plansheets\C10-00 UTILITY DETAILS.dwg



NOTES:

1. ESTABLISH SOD IN ALL DISTURBED AREAS. SEE SPECIFICATIONS FOR MORE INFORMATION.
2. ALL AREAS WITH PROPOSED LANDSCAPE MATERIAL SHALL RECEIVE A MINIMUM THREE (3) INCHES OF SHREDDED HARDWOOD MULCH. SEE LANDSCAPE PLAN FOR MULCH BOUNDARY LINES. SEE LANDSCAPE DETAILS FOR TYPICAL MULCH AREA DIMENSIONS.

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	CAL.	HEIGHT
TREES							
	AL	10	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	B & B	1.5" MIN.	6' MIN
	AR	6	ACER RUBRUM	RED MAPLE	B & B	2" MIN.	8-10' MIN
	CC	10	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	B & B	1.5" MIN.	6' MIN.
	CF	13	CORNUS FLORIDA	FLOWERING DOGWOOD	B & B	1.5" MIN.	6' MIN.
	MG	11	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM MAGNOLIA	B & B	1.5" MIN.	6' MIN.
	QA	3	QUERCUS ALBA	WHITE OAK	B & B	1.5" MIN.	6' MIN.
	QR	3	QUERCUS RUBRA	NORTHERN RED OAK	B & B	1.5" MIN.	6' MIN
	QS	8	QUERCUS SHUMARDII	SHUMARD OAK	B & B	2" MIN.	8-10' MIN
	TN	15	THUJA OCCIDENTALIS 'AMERICAN PILLAR'	AMERICAN PILLAR ARBORVITAE	B&B	2" MIN.	6' MIN

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	HEIGHT
SHRUBS						
	IB	46	ILEX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY	5 GAL	18" MIN.
	IC	10	ILEX OPACA 'CANARY'	CANARY AMERICAN HOLLY	5 GAL	18" MIN.
	IJ	8	ILEX OPACA 'JERSEY KNIGHT'	JERSEY KNIGHT AMERICAN HOLLY	5 GAL	18" MIN.

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	NATIVE	SPACING
GROUND COVERS							
	JW	61	JUNIPERUS HORIZONTALIS 'WILTONII'	BLUE RUG JUNIPER	1 GAL.		48" o.c.

MISC.	QTY	BOTANICAL/COMMON NAME	SPECIFICATIONS
MULCH	15,449 SF.	SHREDDED HARDWOOD MULCH	3" DEPTH MINIMUM, FREE OF WEEDS/INVASIVE PLANT MATERIAL
SOD	TBD	FESTUCA ARUNDINACEA/TALL FESCUE	ROLLED TIGHT, 100% WEED/INSECT/DISEASE FREE

LANDSCAPE NOTES:

1. ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 3" OF TOPSOIL. DO NOT MOUND MULCH AGAINST ROOT FLARES.
2. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
3. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
4. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
5. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
6. ANY DISTURBED GRASS AREA IS TO BE REPLANTED. ALL SLOPES 3:1 OR GREATER SHALL BE SEEDED WITH SLOPE MASTER NO-MOW MIX OR OWNER APPROVED EQUAL.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE WARRANTY PERIOD.
11. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
12. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR WARRANTY PERIOD. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.
13. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
14. ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES, AND SHALL BE STATE STANDARD OR BETTER
15. ALL INVASIVE / EXOTIC SPECIES AND PROHIBITED TREE SPECIES SHALL BE REMOVED FROM SITE, INCLUDING ROOT BALLS TO THE EXTENT POSSIBLE WITH NO DAMAGE TO ADJACENT EXISTING TREES.
16. IF IRRIGATION IS REQUIRED, CONTRACTOR TO DESIGN/ BUILD SYSTEM AND VERIFY ALL PRODUCTS WITH LANDSCAPE ARCHITECT.
17. TREE SUPPORT MATERIALS ARE TO BE REMOVED FROM EACH TREE ONCE IT IS "ESTABLISHED" (AS APPROVED BY THE LANDSCAPE ARCHITECT).
18. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL UTILITIES ARE ADEQUATELY SCREENED WITH THE REQUIRED PLANTING MATERIAL AND VERIFY PLANT SPECIES WITH LANDSCAPE ARCHITECT.
19. ALL PLANT SPECIFICATIONS IN THE PLANT SCHEDULE SHALL BE CONSIDERED THE MINIMUM ALLOWABLE SPECIFICATIONS. CONTRACTOR SHALL PROCURE PLANT MATERIALS AND UPSIZE AS NECESSARY TO MEET THE MOST STRINGENT SPECIFICATION.

SILVI GREENSBORO

PER JAMESTOWN LDO

SECTION		REQUIRED	PROVIDED
Sec. 11.6-2	BUFFER (TYPE A)	40' AVG. WIDTH	PROVIDED*
		8 EVERGREEN TREES PER 100' 325 LF = 26 TREES	26 TREES*
		4 CANOPY TREES PER 100' 325 LF = 13 TREES	13 TREES*
		10 UNDERSTORY TREES PER 100' 325 LF = 33 TREES	32 TREES*
		33 SHRUBS PER 100' 325 LF = 107 SHRUBS	99 SHRUBS*
Sec. 11.6-5	PARKING	1 DECIDUOUS TREE PER 1,500 SF 17,175 SQFT = 12 TREES	9 TREES*
		4 SHRUBS PER 1,500 SF 17,715 SQFT = 46 SHRUBS	52 SHRUBS
		ALL PARKING SPACES WITHIN 40' OF TREE	PROVIDED WHERE SITE PLAN ALLOWS
Sec. 11.8	TREE CONSERVATION AREAS	6% OF LOT AREA 18.16 AC SITE = 1.09 AC TCA	2.89 AC TCA

*NOTE: SEE EXEMPTIONS MEMO

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 812-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704-333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT BRIAN HAWKES — PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY MMD
DRAWN BY MMD
CHECKED BY TBH

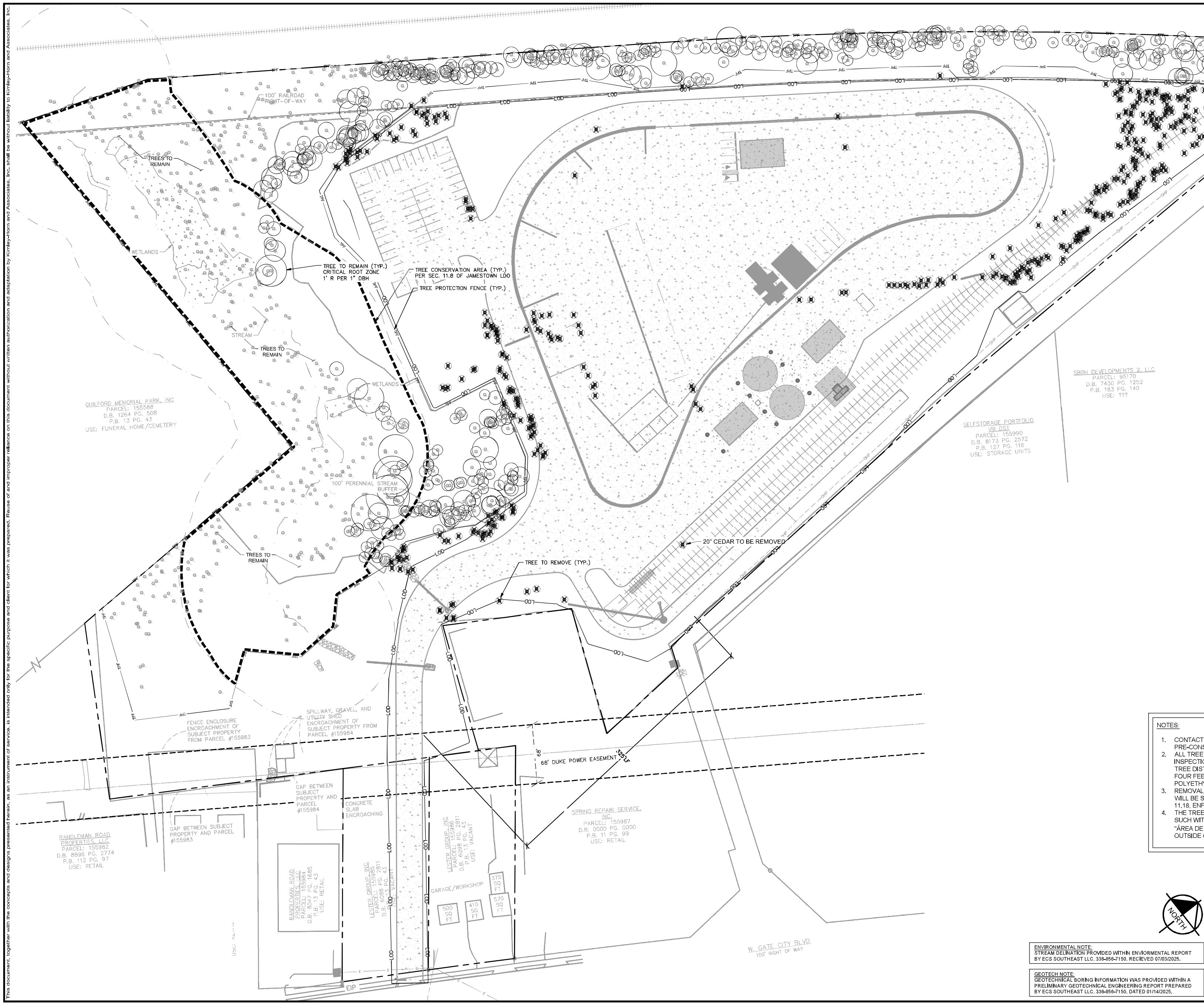
LANDSCAPE PLAN

SILVI MATERIALS METALS DR

PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740

JAMESTOWN NC

SHEET NUMBER
L1-00



LEGEND:

- EXISTING TREE
- X TREE TO REMOVED
- TREE PROTECTION FENCE
- TREE SAVE AREA

T1	RED MAPLE
T2	PERSIAN SILK TREE
T3	PIGNUT HICKORY
T4	MOCKERNUT HICKORY
T5	FLOWERING DOGWOOD
T6	COMMON PERSIMMON
T7	WHITE ASH
T8	EASTERN RED CEDAR
T9	SWEETGUM
T10	TULIP POPLAR
T11	SOUTHERN MAGNOLIA
T12	AMERICAN HOP-HORNBEAM
T13	PRINCESS TREE
T14	SHORTLEAF PINE
T15	EASTERN WHITE PINE
T16	LOBLOLLY PINE
T17	AMERICAN SYCAMORE
T18	BLACK CHERRY
T19	CALLERY PEAR
T20	WHITE OAK
T21	SOUTHERN RED OAK
T22	BLACKJACK OAK
T23	WILLOW OAK
T24	NORTHERN RED OAK
T25	BLACK LOCUST
T26	BLACK WILLOW
T27	AMERICAN ELM

NOTES:

1. CONTACT THE PLANNING DEPARTMENT TO SET UP A PRE-CONSTRUCTION MEETING PRIOR TO COMMENCING WORK.
2. ALL TREE PROTECTION DEVICES MUST BE INSTALLED PRIOR TO INSPECTION BY THE PLANNING DIRECTOR AND PRIOR TO ANY TREE DISTURBANCE ACTIVITIES. FENCES SHALL BE AT LEAST FOUR FEET HIGH AND SHALL CONSIST OF ORANGE POLYETHYLENE SAFETY FENCING.
3. REMOVAL OR DAMAGE OF TREES IN THE CONSERVATION AREA WILL BE SUBJECT TO THE PENALTIES ESTABLISHED IN SECTION 11.18, ENFORCEMENT, OF THE JAMESTOWN LDO.
4. THE TREE CONSERVATION AREA (TCA) MUST BE DESIGNATED AS SUCH WITH SIGNAGE READING "TREE CONSERVATION AREA" AND "ÁREA DE CONSERVACIÓN DE ÁRBOLES" POSTED VISIBLY ON THE OUTSIDE OF THE FENCED-IN AREA.

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

811 Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINEATION PROVIDED WITHIN ENVIRONMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECEIVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC 27265, PHONE: (336) 812-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601
WWW.KIMLEY-HORN.COM PHONE: 704-333-5131

PRELIMINARY NOT FOR CONSTRUCTION — BRIAN HAWKES, NORTH CAROLINA

KHA PROJECT 015100001
DATE 10/01/2025
SCALE AS SHOWN
DESIGNED BY MMD
DRAWN BY MMD
CHECKED BY TBH

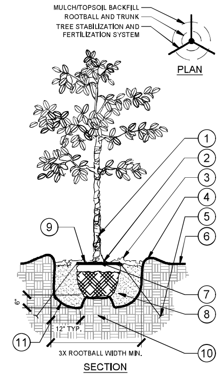
TREE PROTECTION PLAN

SILVI MATERIALS METALS DR

PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740

JAMESTOWN NC

SHEET NUMBER
L1-01



1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 3" MINIMUM MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. 4" HIGH BERM, FIRMLY COMPACTED.
5. TREE FROG ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.

NOTES:

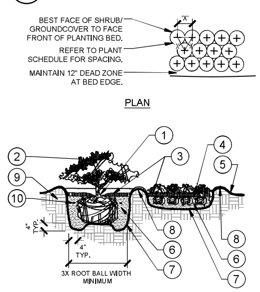
A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.

B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.

C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

1 TREE PLANTING

SECTION / PLAN — NTS



1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 3" MULCH LAYER AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES) NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY OF PLANTING PIT SIDES AND BOTTOM.
8. 4" HIGH BERM FIRMLY COMPACTED.
9. UNDISTURBED NATIVE SOIL.
10. FERTILIZER TABLETS (MAX 3" DEEP)

NOTES:

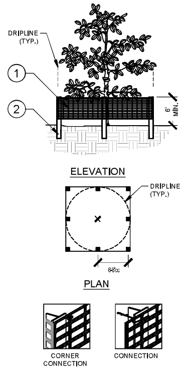
A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.

C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

2 SHRUB/GROUNDCOVER PLANTING

SECTION / PLAN — NTS



1. 6'H "PERIMETER PLUS" CONSTRUCTION FENCE BY CONWED PLASTICS OR OWNER'S REPRESENTATIVE APPROVED EQUAL. SUBMIT PRODUCT INFORMATION FOR APPROVAL PRIOR TO INSTALLATION.
2. 8' TALL METAL "T" POSTS OR 2" x 2" X 8' PRESSURE TREATED WOOD POSTS WITH 24" BURIAL BELOW GRADE.

INSTALLATION NOTES:

A. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.

B. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/3 OF THE HEIGHT OF THE POST. FOR EXAMPLE, A 6' POST SHOULD BE SET AT LEAST 2' INTO THE GROUND.

C. SPACE POSTS EVERY 6' (MIN.) TO 8' (MAX.).

D. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

NOTE: IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH FENCE. WIRE MAY DAMAGE FENCE OVER TIME.

3 TREE PROTECTION FENCING

ELEVATION / PLAN — NTS

GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS SPECIFIED HEREIN.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BMP DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

3. THE CONTRACTOR SHALL SUBMIT A DETAILED PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN UNLESS THE WORK REQUIRES NOTHING MORE THAN A DIRECT APPLICATION OF NCDOT DESIGN STANDARDS, INDEX 600. IF A DIRECT APPLICATION OF INDEX 600 IS PROPOSED, THE CONTRACTOR SHALL SUBMIT IN WRITING A STATEMENT INDICATING THE STANDARD INDEX AND PAGE NUMBER NO LESS THAN 10 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION. WHEN A DIRECT APPLICATION OF NCDOT STANDARD INDEX 600 IS NOT ACCEPTABLE A PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY A PROFESSIONAL ENGINEER WHO HAS SUCCESSFULLY COMPLETED ADVANCED TRAINING IN MAINTENANCE OF TRAFFIC, AS DEFINED BY NCDOT FOR APPROVAL BY THE COUNTY ENGINEER'S REPRESENTATIVE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNER OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR; REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA; LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION; THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

C. PROTECTION OF EXISTING PLANT MATERIALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC.... THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF THREE HUNDRED DOLLARS ($300) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

2. SEE TREE MITIGATION PLAN AND NOTES, IF APPLICABLE.

D. MATERIALS

1. GENERAL

MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER, UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

2. PLANT MATERIALS

a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. ALL PLANTS SHALL BE DETERMINED BY THE STATE DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.

b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:

2. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH, IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND HAVE A PH BETWEEN 5.5 AND 7.0.

b. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND.

2. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

F. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

* WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). MULCH SHALL BE "FLORIMULCH," EUCALYPTUS MULCH, OR SIMILAR SUSTAINABLY HARVESTED MULCH UNLESS SPECIFIED OTHERWISE.

2. PROVIDE A THREE (3) INCH MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT (6' MINIMUM) PLANTED UNDER THIS CONTRACT.

I. DIGGING AND HANDLING

1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED (B&B), AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS: ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.

5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

4. RPG= "ROOTS PLUS GROWER" CONTAINER PRODUCTS SHALL BE USED WHERE SPECIFIED.

K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

O. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.

2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL STATE OFFICIAL (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.

4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

5. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.

7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACK FILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.

8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.

9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.

10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).

11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.

12. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.

13. TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST, IN ACCORDANCE WITH ANSI A-300.

14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOW ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

16. ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.

2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

4. SODDING

a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

b. THE SOD SHALL BE CERTIFIED TO MEET STATE REQUIREMENTS & SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

6. LAWN MAINTENANCE

a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).

b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

S. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

T. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

2. ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.

3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

4 TYPICAL LANDSCAPE SPECIFICATIONS

Know what's below. Call before you dig.

ENVIRONMENTAL NOTE:
STREAM DELINATION PROVIDED WITHIN ENVIORMENTAL REPORT BY ECS SOUTHEAST LLC, 336-856-7150, RECIEVED 07/03/2025.

GEOTECH NOTE:
GEOTECHNICAL BORING INFORMATION WAS PROVIDED WITHIN A PRELIMINARY GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS SOUTHEAST LLC, 336-856-7150, DATED 01/14/2025.

SURVEY NOTE:
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 05/23/2025 BY CPT ENGINEERING AND SURVEYING, INC., 4400 TYNING STREET, HIGH POINT, NC, 27265, PHONE: (336) 812-8800. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn

550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601
WWW.KIMLEY-HORN.COM PHONE: 704-333-5131

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT — BRIAN HAWKES — PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT	015100001
DATE	10/01/2025
SCALE	AS SHOWN
DESIGNED BY	MMD
DRAWN BY	MMD
CHECKED BY	TBH

LANDSCAPE NOTES AND DETAILS

SILVI MATERIALS METALS DR

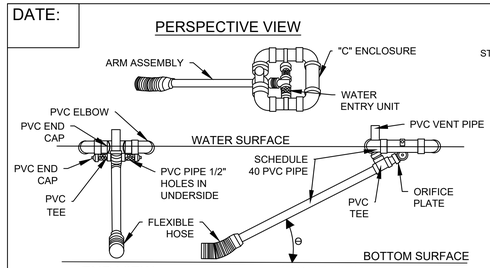
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740

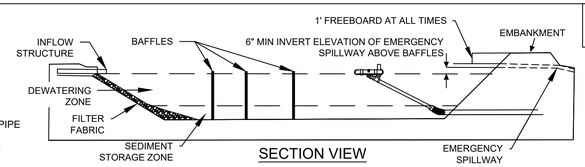
JAMESTOWN — NC

SHEET NUMBER
L2-00

DATE:

PAGE:



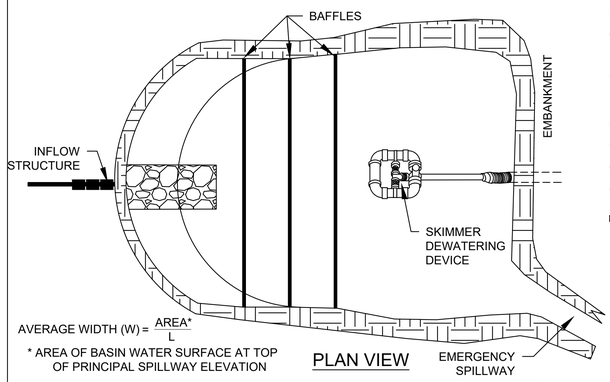


NOTES:

1. Clear, grub and strip the area under the embankment of all vegetation and root mat. Remove all surface soil containing high amounts of organic matter and stockpile or dispose of it properly. Haul all objectionable material to the designated disposal area. Place temporary sediment control measures below basin as needed.
2. Place the fill in lifts not to exceed 9 inches, and machine compact it. Over fill the embankment 6 inches to allow for settlement.
3. Place the barrel on a firm, smooth foundation of impervious soil. Do not use pervious material such as sand, gravel, or crushed stone as backfill around the pipe. Place the fill around the pipe spillway in 4-inch layers and compact it under and around the pipe to at least the same density as the adjacent embankment.
4. Place a minimum depth of 2 feet compacted backfill over the pipe spillway before crossing with construction equipment.
5. Ensure that the flow length to basin width ratio is at least 2:1 to improve trapping efficiency. Length is measured at the elevation of the principal spillway.
6. Assemble the skimmer following manufacturers instructions or as designed and lay on the bottom of the basin with the flexible joint at the inlet of the barrel pipe. Attach the flexible joint to the barrel pipe and position the skimmer over the excavated pit or support. Be sure to attach a rope and anchor it to the side of the basin.This will be used to pull the skimmer to the side for maintenance.
7. Install the spillway in undisturbed soil to the greatest extent possible. The spillway should be lined with laminated plastic or impermeable geotextile fabric. The fabric must be wide and long enough to cover the bottom and sides and extend onto the top of the dam for anchoring in a trench. The edges may be secured with 8-inch staples or pins.
8. Filter fabric must be long enough to extend down the slope and exit onto stable ground. The width of the fabric must be one piece, not joined or spliced; otherwise water can get under the fabric.
9. The upper section(s) should overlap the lower section(s) so that water cannot flow under the fabric. Secure the upper edge and sides of the fabric in a trench with staples or pins.
10. Discharge water into the basin in a manner to prevent erosion. Use temporary slope drains or diversions with outlet protection to divert sediment-laden water to the upper end of the pool area to improve basin trap efficiency.
11. Stabilize the emergency spillway embankment and all other disturbed areas above the crest of the principal spillway immediately after construction.

MAINTENANCE:

1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater. Make necessary repairs immediately.
2. Remove sediment and restore the basin to its original dimensions when sediment accumulates to one-half the height of the first baffle. Pull the skimmer to one side so that the sediment underneath can be excavated. Excavate the sediment from the entire basin, not just around the skimmer or within the first cell.
3. Make sure any vegetation growing in the bottom of the basin does not hold down the skimmer.
4. Repair baffles if they are damaged. Re-anchor the baffles if water is flowing underneath or around them.
5. Ensure the skimmer is not clogged with trash or debris.
6. If the skimmer arm or barrel pipe is clogged, remove orifice and clear debris with a plumber's snake or by flushing with clean water. Be sure to replace the orifice before repositioning the skimmer.
7. Check fabric lined spillway for damage and make any required repairs with fabric that spans the full width of the spillway. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for piping and settlement.

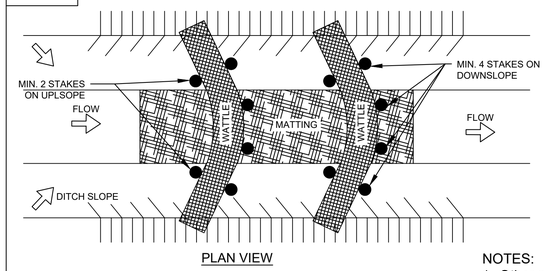


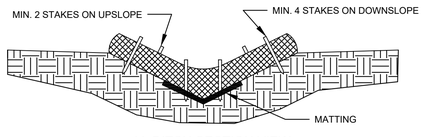
SKIMMER SEDIMENT BASIN

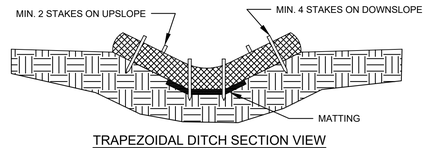
Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

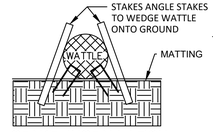
DATE:

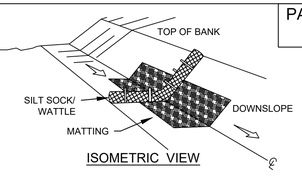
PAGE:











Spacing Between Socks / Wattles (Feet)

Channel Slope (%)	8-inch Diameter Sock	12-inch Diameter Sock
1	67	100
2	33	50
3	22	33
4	17	25
5	13	20

NOTES:

1. Other materials providing equivalent protection against erosive velocities may be substituted for compost use in silt socks or wattles.
2. Fill silt sock/wattle netting uniformly to the desired length such that logs do not deform.
3. Use 24 inch long wooden stakes with a 2 inch x 2 inch nominal cross section.
4. Install silt sock/wattle(s) to a height on slope so flow will not wash around silt sock/wattle and scour slopes, or as directed.
5. Install a minimum of two up-slope stakes and four down-slope stakes at an angle to wedge silt sock/wattle to ground at bottom ditch. Use staples to secure silt sock/wattle to the ground to prevent undermining.
6. The use of flocculants such as Polyacrylamide (PAM) is recommended. Apply flocculants on top of sock/wattle and to matting on either side of sock/wattle according to manufacturer recommended rates. Reapply after each 1.0 inch rainfall.

MAINTENANCE:

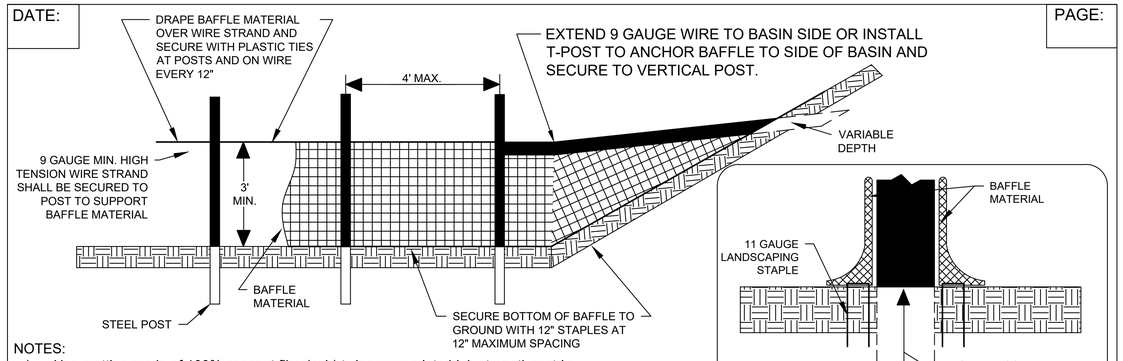
1. Inspect all measures weekly and after each rainfall of 1.0 inch or greater. Remove accumulated sediment and any debris.
2. Silt sock/Wattle(s) must be replaced if clogged or torn.
3. If ponding becomes excessive, the silt sock/wattle may need to be replaced with a larger diameter or a different measure.
4. Reinstall if damaged or dislodged.
5. Silt socks/Wattles shall be inspected until land disturbance is compete and the area above the measure is permanently stabilized.

SILT SOCK / WATTLE FOR CHECK DAM

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

DATE:

PAGE:



NOTES:

1. Use matting made of 100% coconut fiber(coir) twine woven into high strength matrix.
2. Staples should be made of 0.125 inch diameter, new steel wire formed into a 'U' shape not less than 12 inches in length with a throat of 1 inch in width. The staples anchor the porous baffles into the sides and bottom of the basin.
3. Grade the basin so that the bottom is level front to back and side to side.
4. Install the coir fiber baffles immediately upon excavation of the basins.
5. Install posts across the width of the sediment trap.
6. Steel posts should be driven to a depth of 24 inches and spaced in a maximum of 4 feet apart. The top of the fabric should be a minimum of 6 inches higher than the invert of the spillway. Tops of the baffles should be a minimum of 2 inches lower than the top of the earthen embankment.
7. Install 3 coir fiber baffles in basins at drainage outlets with a spacing of 1/4 the basin length. 2 coir fiber baffles can be installed in the basins less than 20 feet in length with a spacing of 1/3 the basin length.
8. Attach a 9-gauge high tension wire strand to the steel posts at a height of 6 inches above the spillway elevation with plastic ties or wire fasteners to prevent sagging. If the temporary sediment basin will be converted to a permanent stormwater basin of a greater depth, the baffle height should be based on the pool depth during use as a temporary sediment basin.

MAINTENANCE:

1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater and repair immediately.
2. Maintain access to baffles. If the fabric collapses, tears, decomposes, or becomes ineffective, replace immediately.
3. Remove sediment deposits when it reaches half full. Replace if baffle fabric is damaged during clean-out operations. Sediment depth should never exceed half the designed storage depth.

POROUS BAFFLES

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

GUILFORD COUNTY PLANNING AND DEVELOPMENT — Temporary Seeding

Planting Type	Planting Rates/ Acres	Planting Dates
Rye grain and Kobe Lespedeza	120 lbs. 50 lbs.	Jan. 1 – May 1
German Millet or Sudan grass	40-50 lbs.	May 1 – Aug. 15
Rye grain *(oats may be substituted before Oct. 1 or wheat from Oct. 1 – Nov. 15)*	120 lbs.	Aug. 15 – Dec. 30
Annual Rye grass	40 lbs.	Aug. 15 – Nov. 30
Weeping Lovegrass	5 lbs.	May 1 – Aug. 15

Notes
Weeping Lovegrass is a perennial grass but is included here because of its adoptability to poor soil conditions and is drought tolerant.

Purpose
Seeding disturbed areas with annual grasses or legumes to provide temporary ground cover to minimize soil erosion.

Practical Applications
Where bare soil has been exposed by construction activities, and vegetative cover is needed for less than one year. These areas may include temporary sediment traps, diversions, stockpiles, building pads, etc. It may also be used as a temporary perimeter buffer.

Preparation
Prepare seedbed by ripping, harrowing, chiseling, or plowing to a depth of at least 6 inches that produces a loose friable surface. Remove all stones, boulders, stumps, or debris from the surface which would prohibit germination or plant growth.

Apply 750-1000 lbs. of 10-10-10 fertilizer and up to 2 tons of dolomitic lime per acre. (Note: lime may not be required if a soil test indicates a pH of 6.5 or higher).

Mulch after seeding with 1.5 tons of grain straw per acre and crimp straw into the soil or tack with liquid asphalt at 400 gallons per acre or emulsified asphalt at 300 gallons per acre.

Temporary Seeding
Rev. 5/26/2023

Page 1 of 1

GUILFORD COUNTY PLANNING AND DEVELOPMENT — Permanent Seeding

Planting Type	Planting Rates/ Acres	Planting Dates
Tall Fescue (Low Maintenance)	100-150 lbs.	Aug. 15 - Oct 15 Feb. 15 – May 1
Tall Fescue waterways and lawns (High Maintenance)	200-250 lbs.	Aug. 1 - Oct. 15 Feb. 15- May 1
Blend of two turf-type tall fescues (90%) and two or more improved Kentucky bluegrass varieties (10%) high maintenance.	200-250 lbs.	Aug. 15 – Oct. 15 Feb. 15 – May 1
Tall fescue and Kobe or Korean Lespedeza	100 lbs. and 20-25 lbs.	Feb. 15 – May 1 Aug.15 - Oct. 15
Tall Fescue and Sericea Lespedeza	50 lbs. 60 lbs.	Nov. 1 – Feb. 1 *(unscarified)*
Tall fescue and German Millet or Sudangrass	60 lbs. 30 lbs.	July and August
Tall Fescue and Ryegrain	70 lbs. 25 lbs.	Nov. 1- Jan. 30
Common Bermudagrass	8 lbs. (*hulled*) 15-20 lbs. (*unhulled*)	Apr.15 –June30 Feb. 1 – Mar. 30

Notes
1. *For spring seeding, use scarified lespedeza seed. For late fall and winter seeding, use unscarified seed.*
2. *Annuals, such as millet, sudangrass, and ryegrain, must be kept at 10-12" maximum height.*

Purpose
To permanently stabilize disturbed areas created by construction activities and minimize soil erosion.

Practical Applications
Where bare soil on construction activities is not covered by structures or other erosion control measures.

Preparation
Prepare seedbed by ripping, chiseling, harrowing, or plowing to a depth of 6" that produces a loose, friable surface. Remove all stones, boulders, stumps, or debris from the surface which would prohibit germination or plant growth.

Incorporate into the soil 800-1000 lbs. of 10-10-10 fertilizer plus 500 lbs. of 20% superphosphate per acre and 2 tons of dolomitic lime per acre unless soil tests indicate that a lower rate of lime can be used.

Mulch after seeding with 1.5 tons of grain straw per acre and crimp straw into the soil or tack with liquid asphalt at 400 gallons per acre or emulsified asphalt at 300 gallons per acre.

Permanent Seeding
Rev. 5/26/2023

Page 1 of 1

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

Kimley»Horn

WWW.KIMLEY-HORN.COM PHONE: 704-333-5131
550 S MAIN STREET, SUITE 300, GREENVILLE, SC 29601

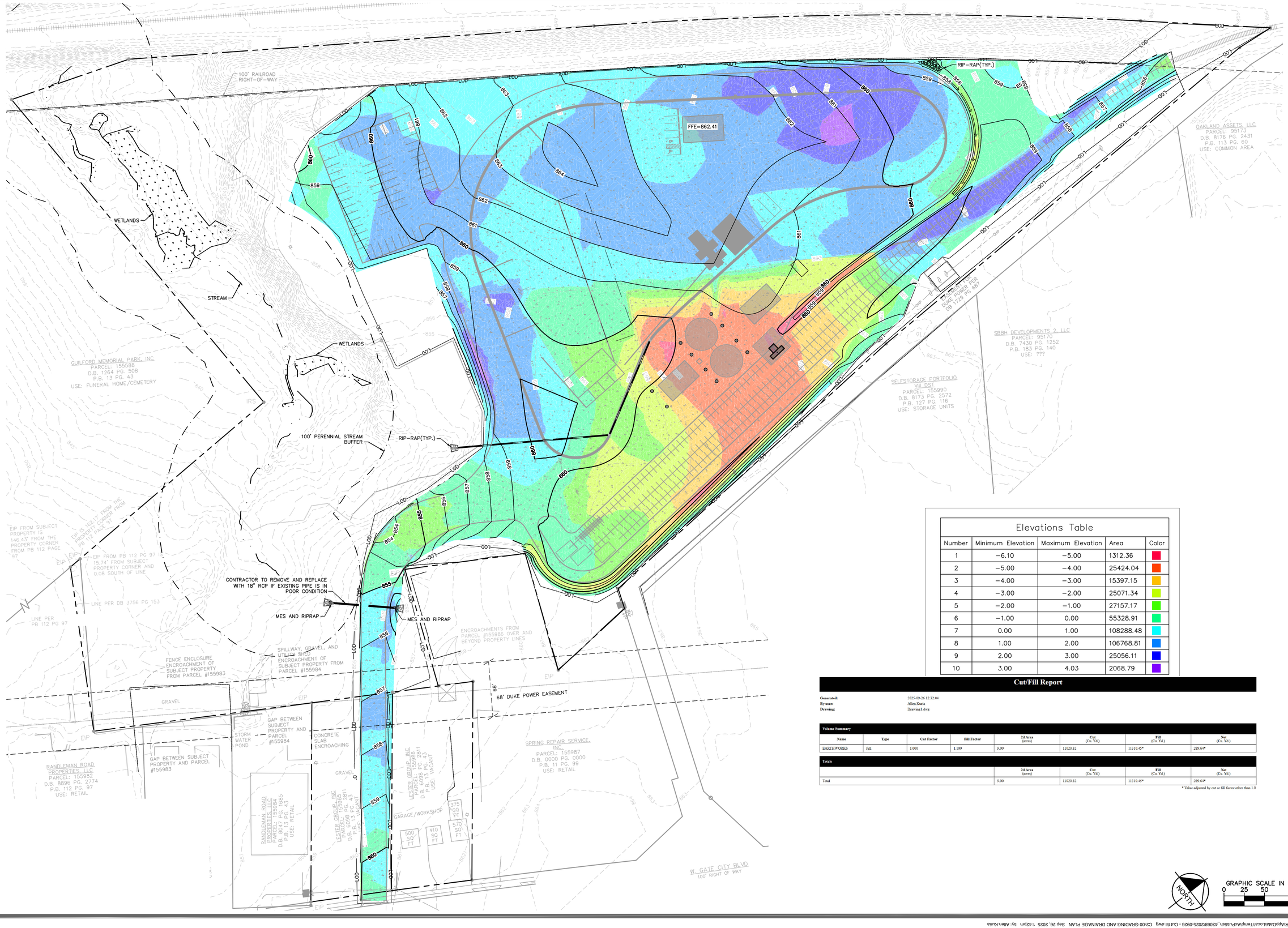
PRELIMINARY NOT FOR CONSTRUCTION

KHA PROJECT	DESIGNED BY	DRAWN BY	CHECKED BY
015100001	AKK	LDS	SAH
DATE	SCALE		
10/09/2025	AS SHOWN		

EROSION CONTROL DETAILS

SILVI MATERIALS METALS DR
PREPARED FOR
SILVI MATERIALS
1 METALS DRIVE, GREENSBORO, NORTH CAROLINA 2740
JAMESTOWN
NO

SHEET NUMBER
C7-05



Elevations Table				
Number	Minimum Elevation	Maximum Elevation	Area	Color
1	−6.10	−5.00	1312.36	
2	−5.00	−4.00	25424.04	
3	−4.00	−3.00	15397.15	
4	−3.00	−2.00	25071.34	
5	−2.00	−1.00	27157.17	
6	−1.00	0.00	55328.91	
7	0.00	1.00	108288.48	
8	1.00	2.00	106768.81	
9	2.00	3.00	25056.11	
10	3.00	4.03	2068.79	

Cut/Fill Report

Generated: 2025-09-26 12:32:04
By user: Allen.Kuria
Drawing: Drawing1.dwg

Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (acres)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
EARTHWORKS	fill	1.000	1.100	9.00	11020.82	11310.45*	289.64*

Totals

	2d Area (acres)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	9.00	11020.82	11310.45*	289.64*

* Value adjusted by cut or fill factor other than 1.0

Kimley»Horn ©
SC LICENSE #C-00166
550 S MAIN STREET - SUITE 300
GREENVILLE, SOUTH CAROLINA 29601
PHONE 704-333-5131

CUT / FILL EXHIBIT

DATE: 09-26-2025

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

Plotted By:Kuria, Allen Sheet Set:SILVI MATERIALS METALS DR Layout:C2-00 GRADING AND DRAINAGE PLAN September 26, 2025 01:42:50pm K:\GRE_DS\015100001 - Silvi Greensboro\02 - DWG\Exhibits\2025-09-26-Cut Fill\2025-0926 - Cut fill.dwg

Drawing name: C:\Users\ALLEN~1.KUR\AppData\Local\Temp\AcPublish_43068\2025-0926 - Cut fill.dwg C2-00 GRADING AND DRAINAGE PLAN Sep 26, 2025 1:42pm by: Allen.Kuria