



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J.R. "JOEY" HOPKINS  
SECRETARY

July 18, 2024

**County: Wake**  
**Subject: Encroachment Contract**  
**US 401**  
**E051-092-24-00779**

S&S Java Enterprises  
13 Lafoy Drive  
Clayton, NC 27527

Dear Sir or Madam,

Attached for your files is a copy of Right of Way Encroachment Agreement, which has been properly executed. This contract covers the following:

**Grading, drainage, paving, curb and gutter, and sidewalk as shown on the provided plans**

**APPROVED FOR CONSTRUCTION / ASSOCIATED WITH DRIVEWAY PERMIT**  
**#D051-092-24-00038**

**A PERFORMANCE AND INDEMNITY BOND IN THE VALUE OF \$7,000.00 IS REQUIRED AND SHALL BE POSTED WITH THE DISTRICT OFFICE PRIOR TO THE START OF WORK. THE BOND SHALL DISPLAY THE ENCROACHMENT AGREEMENT NUMBER.**

This encroachment is approved subject to the Standard and Special Provisions which are attached to and made a part of the Encroachment Contract.

Sincerely

Daniel T. Boulware, PE, District Engineer  
for B. H. Jones, PE, Division Engineer

BHJ/DTB/TRE

cc: Daniel T. Boulware (w/ orig)  
Town of Rolesville

Attachment

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
DIVISION 5 – DISTRICT 1  
1575 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1575

*Telephone:* (919) 814-6115  
*Fax:* (919) 715-5778  
*Customer Service:* 1-877-368-4968

*Location:*  
4009 DISTRICT DRIVE  
RALEIGH, NC 27607

*Website:* [www.ncdot.gov](http://www.ncdot.gov)

## **Encroachment Special Provisions**

1. This project is located within the limits of an upcoming TIP Project U-6241. Notify the Town of Roleville prior to beginning work and discuss coordination with the Project. The project plans call for a resurfacing of Main Street to a new three-lane pattern. All curb and gutter work, CB installations, sawcuts for waterline/sewer taps and installations must be completed prior to the resurfacing. There is also some overlap/difference between your proposed sidewalk and landscaping work that will require coordination with the Town to assure responsibilities and any modifications required.
2. An executed copy of the agreement, provisions and approved plans shall be present at the construction site at all times. If safety or traffic conditions warrant such an action, NCDOT reserves the right to further limit, restrict or suspend operations within the right of way.
3. Current and future state projects take precedence over this Encroachment.
4. Notify the Town of Roleville before beginning work.
5. Traffic shall be maintained at all times.

All lanes of traffic are to be open during the hours of 6:00 A.M. to 9:00 A.M. and from 4:00 P.M. to 7:00 P.M. Monday through Friday, during any time of inclement weather, or as directed by the District Engineer. If the location of work calls for a rolling roadblock on Interstates and divided highway US routes, the restriction is to work only on Sunday from 1:00 A.M. to 10:00 A.M, and only after explicit approval by the District Engineer.

Any violation of these hours will result in ceasing any further construction by the Encroaching Party or their contractor. Nighttime and weekend operations will NOT be allowed unless written approval is received from the District Engineer.

If nighttime or weekend work is allowed or required, all signs must be retro-reflective, and a work zone lighting plan must be submitted for approval prior to construction. Two-way traffic shall be maintained at all times unless designated by the District Engineer. Traffic shall not be rerouted or detoured without the prior written approval from the District Engineer.

If the construction is within 1000 feet of a school location or on a designated bus route, the construction shall be coordinated with the school start and end times to avoid traffic delays.

Work requiring lane or shoulder closures shall not be performed on both sides of the road simultaneously within the same area. Any work requiring equipment or personnel within 5 feet of the edge of any travel lane of an undivided facility and within 10 feet of the edge of any travel lane of a divided facility shall require a lane closure with appropriate tapers per current NCDOT Roadway Standard Drawings or MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

Sidewalk closures shall be installed as necessary. Pedestrian traffic shall be detoured around these closures and shall be signed appropriately and in accordance with The American with Disabilities Act Accessibility Guidelines. The encroaching party must adhere to the guidelines for accommodating pedestrians in encroachment work zones as described in the NCDOT Pedestrian Work Zone Accommodations Training found at <https://www.youtube.com/watch?v=AOuYa5IW3dg&feature=youtube>. Refer to the Standard Provisions to determine when all lane closures are prohibited around public holidays.

6. A \$7,000.00 Performance and Indemnity Bond shall be executed and posted with the District Engineer at 4009 District Drive, Raleigh, North Carolina 27607, prior to beginning any work on the Right of Way. When the required roadway improvements have been completed and all work is found to be satisfactory, a one-year warranty period will begin. Then after a period of one year from the date of completion, upon written request by the Permittee to the District Engineer, an inspection and review will be conducted by NCDOT, and if all work is found to be satisfactory, the bond will be released.
7. Any/All curb and gutter constructed in the right of way shall be 30 inch standard. Any curb and gutter removed shall be removed in full sections at existing joints.

A compacted base shall be prepared prior to placement of curb and gutter; consisting of a minimum 10 inches of Aggregate Base Course or a minimum 5 inches of Asphalt Concrete Base Course, type B25.0C.

Placement and compaction shall adhere to NCDOT Standards and Specifications. The addition/replacement of curb and gutter next to an existing asphalt roadway shall be constructed as follows:

- 1) The Permittee shall contact the District Office at (919) 814-6115 for inspection of forms or grade line prior to placing concrete for curb and gutter. Please provide 48 hours notification for inspections. All storm drainage grates and frames shall be on site at the time of the inspection.
- 2) The edges of the existing asphalt shall be saw-cut to provide a straight and uniform edge for concrete to be placed along.
- 3) Mill a minimum 1.5-inch by 1.5-foot section at the edge of pavement along the proposed curb and gutter.
- 4) The contractor shall use an appropriate method to provide a straight, uniform front edge of concrete where tying to the ultimate top of pavement. This office recommends using a 2x4 laid flat along the milled surface at the edge of pavement. Concrete curb and gutter shall be constructed per NCDOT Standards and Specifications.
- 5) Once the concrete is poured and set, a minimum 1.5-inch lift of surface asphalt, type S9.5C, shall be placed in the milled section. It is the sole responsibility of the contractor to ensure that the proposed curb and gutter is placed at the correct height to provide proper drainage in addition to a smooth tie-in once asphalt is placed.

Additional milling may be required to repair any damages done to the existing asphalt during construction. For any questions feel free to contact the District Engineers Office, at (919) 814-6115.

8. The roadway improvements shall be required as shown on the attached plans and as per Driveway Permit #D051-092-24-00038.
9. Roadway improvements shall be required as shown on the attached plans.
10. All disturbed areas are to be fully restored to current NCDOT minimum roadway standards or as directed by the Division Engineer or their representative. Disturbed areas within NCDOT Right-of-Way include, but not limited to, any excavation areas, pavement removal, drainage or other features.

11. The edges of the existing asphalt shall be saw cut to provide a straight and uniform edge before paving to it.

Any existing paved shoulder and/or attachments that do not meet the required pavement structure shall be removed before any widening occurs.

The width of any existing paved shoulder shall be included in the proposed widening.

A milled lap joint of 1.5" x 1.5' shall be required to tie in to the existing pavement.

12. Curb cuts and ramps for disabled persons shall be constructed in accordance with the current NCDOT "Standard for Wheelchair Ramp Curb Cuts" and the Americans With Disabilities Act (ADA) Accessibility Guidelines For Buildings and Facilities.
13. Sidewalks shall be constructed in accordance with the current NCDOT "Standard for Wheelchair Ramp Curb Cuts" and the Americans With Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities.
14. Pipes shall be installed as necessary to maintain existing drainage patterns. Pipes shall be sized properly to accommodate the drainage area at its point of discharge. Pipes shall be reinforced concrete pipe with a minimum inside diameter of 15 inches. Storm drain crosslines traversing the roadway shall be reinforced concrete pipe with a minimum inside diameter of 18 inches.
15. All (cast-in-place and/or pre-cast) splice boxes, handholes, manholes, drainage structures and other appurtenances within NCDOT Right of Way shall be of a NCDOT approved design for traffic bearing, HS-20 loading, and shall be flush mounted. Manholes, handholes and vaults shall not be placed in the ditch line, side slopes of the ditch or in the pavement.
16. All frames, grates, rings, covers, etc. are to be manufactured in accordance with the requirements of Section 106-1B - "Domestic Steel". Foreign castings are not approved for use within NCDOT Right of Way.
17. Before work begins, please forward the contact information of the general contractor to the Senior Assistant District Engineer, Montel Sparrow at [mvsparrow@ncdot.gov](mailto:mvsparrow@ncdot.gov). Include contact name, emergency phone number and email.
18. The roadway shall be kept free of silt, mud and debris at all times.

## **Encroachment Standard Provisions**

1. Please note that approval of the permit does not constitute review or approval of utilities by NCDOT. Plans and a completed agreement shall be submitted to the District Engineer's office for review and approval.
2. An executed copy of this agreement, provisions, and approved plans, as well as all other permits currently approved by NCDOT for this site, shall be present at the construction site at all times. If safety or traffic conditions warrant such an action, NCDOT reserves the right to further limit, restrict or suspend operations within the right of way, or at the discretion of the District Engineer.
3. This agreement only covers work within NCDOT Right-of-Way. The encroacher is responsible for verifying all right of way. NCDOT does not guarantee the right of way on this road. If the right of way was not obtained by the fee simple method, it is the responsibility of the encroacher to obtain permission from the underlying property owner/owners. NCDOT shall not be held responsible for any claim for damages brought about by any property owner by reason of this installation.
4. The Encroacher shall notify the public, including all adjacent property owners and businesses, a minimum of 2 weeks prior to beginning work.
5. Retaining walls or other vertical structures shall not be permitted inside NCDOT right of way.
6. All materials and construction shall be in accordance with NCDOT standards and specifications, including but not limited to, the NCDOT Standard Specifications for Roads and Structures 2024, the NCDOT Roadway Standards Drawings, and NCDOT Policies and Procedures for Accommodating Utilities on Highway Rights of Way.
7. The Encroaching party or their contractor shall provide three (3) business days advance phone call at (919) 814-6115 to the District Engineer's office. Failure to provide notification prior to beginning construction is subject to the Division Engineer's discretion to cease construction activity for this agreement. NCDOT reserves the right to cease any construction or maintenance work associated with this installation by the encroaching party until the construction or maintenance meets the satisfaction of the Division Engineer or their representative.
8. No lane closures shall be permitted between the hours of 6:00 AM to 9:00 AM and 4:00 PM to 7:00 PM, Monday through Friday unless otherwise specified in the Special Provisions of this agreement.
9. It shall be the responsibility of the encroaching party to determine the location of utilities within the project area. NCGS § 87-115 through § 87-130 of the Underground Utility Safety and Damage Prevention Act requires underground utilities to be located by calling 811 prior to construction. The encroaching party shall be responsible for notifying other utility owners and providing protection and safeguards to prevent damage or interruption to existing facilities and maintain access to them. The encroaching party shall be responsible for making arrangements to adjust or relocate any utilities that conflict with the proposed work.
10. All Right of Way and easements necessary for construction and maintenance shall be dedicated to NCDOT with proof of dedication furnished to the District Engineer prior to beginning work.
11. Encroaching party shall be responsible for obtaining all necessary permanent and/or temporary construction, drainage, utility, and/or sight distance easements.
12. This agreement does not authorize installations within nor encroachment onto railroad rights of way. Permits for installations within railroad right of way must be obtained from the railroad and are the responsibility of the encroaching party.

13. This approval and associated plans and supporting documents shall not be interpreted to allow any design change or change in the intent of the design by the Owner, Design Engineer, or any of their representatives. Any revisions or changes to these approved plans or intent for construction must be obtained in writing from the District Engineer's office or their representative prior to construction or during construction if an issue arises during construction to warrant changes.
14. At the end of each working day, equipment shall be parked outside of the clear recovery zone in order to avoid any obstruction to the travelling public. This clear recovery zone is measure from the edge of the nearest travel lane.

Ingress and egress shall be maintained to all businesses and dwellings at all times.

No lane closures shall be permitted between the hours of 6:00 AM to 9:00 AM and 4:00 PM to 7:00 PM, Monday through Friday unless otherwise specified in the Special Provisions of this agreement.

No parking or material storage shall be allowed along the shoulders of any NCDOT roadways.

The encroacher shall provide traffic control devices, lane closures, road closures, positive protection and/or any other warning or positive protection devices necessary for the safety of road users during construction and any subsequent maintenance. This shall be performed in conformance with the latest NCDOT Roadway Standard Drawings and Standard Specifications for Roads and Structures and Amendments or Supplements thereto. When there is no guidance provided in the Roadway Standard Drawings or Specifications, comply with the Manual on Uniform Traffic Control Devices for Streets and Highways and Amendments or Supplements thereto. No work shall be performed in the Right of Way unless this requirement is satisfied. NCDOT reserves the right to require a written traffic control plan for project operations.

Sidewalk closures shall be installed as necessary. Pedestrian traffic shall be detoured around these closures and shall be signed appropriately and in accordance with The American with Disabilities Act Accessibility Guidelines.

Two-way traffic shall be maintained at all times.

Work shall not be performed on both sides of the road simultaneously within the same area.

## 15. WORK ZONE TRAFFIC CONTROL QUALIFICATIONS AND TRAINING PROGRAM

All personnel performing any activity inside the highway right of way are required to be familiar with the NCDOT Maintenance / Utility Traffic Control Guidelines (MUTCG). No specific training course or test is required for qualification in the Maintenance /Utility Traffic Control Guidelines (MUTCG).

All flagging, spotting, or operating Automated Flagger Assist Devices (AFAD) inside the highway right of way requires qualified and trained Work Zone Flaggers. Training for this certification is provided by NCDOT approved training resources and by private entities that have been pre-approved to train themselves.

All personnel involved with the installation of Work Zone Traffic Control devices inside the highway right of way are required to be qualified and trained Work Zone Installers. Training for this certification is provided by NCDOT approved training resources and by private entities that have been pre-approved to train themselves.

All personnel in charge of overseeing work zone Temporary Traffic Control operations and installations inside the highway right of way are required to be qualified and trained Work Zone Supervisors. Training for this certification is provided by NCDOT approved training resources and by private entities that have been pre-approved to train themselves.

For questions and/or additional information regarding this training program please refer to <https://connect.ncdot.gov/projects/WZTC/Pages/Training.aspx> or call the NCDOT Work Zone Traffic Control Section (919) 814-5000.

The party of the second part shall employ traffic control measures that are in accordance with the prevailing federal, state, local, and NCDOT policies, standards, and procedures. These policies, standards, and procedures include, but are not limited to the following:

Manual on Uniform Traffic Control Devices (MUTCD) – North Carolina has adopted the MUTCD to provide basic principles and guidelines for traffic control device design, application, installation, and maintenance. North Carolina uses the MUTCD as a minimum requirement where higher supplemental standards specific to North Carolina are not established. Use fundamental principles and best practices of MUTCD (Part 6, Temporary Traffic Control).

NCDOT Maintenance / Utility Traffic Control Guidelines – This document enhances the fundamental principles and best practices established in MUTCD Part 6, Temporary Traffic Control, incorporating NCDOT-specific standards and details. It also covers important safety knowledge for a wide range of work zone job responsibilities.

If the Traffic Control Supervisor determines that portable concrete barrier (PCB) is required to shield a hazard within the clear zone, then PCB shall be designed and sealed by a licensed North Carolina Professional Engineer. PCB plans and design calculations shall be submitted to the District Engineer for review and approval prior to installation.

Ingress and egress shall be maintained to all businesses and dwellings affected by the project. Special attention shall be paid to police, EMS and fire stations, fire hydrants, secondary schools, and hospitals.

Excavated areas adjacent to pavement having more than a 2 inch drop shall be made safe with a 6:1 or flatter slope and shall be designated by appropriate delineation during periods of construction inactivity, including, but not limited to, night and weekend hours.

## 16. Current and future state projects take precedence over this agreement.

17. No access to the job site, parking or material storage shall be allowed along or from the Control of Access Roadway.
18. The resetting of the Control of Access fence shall be in accordance with the applicable NCDOT standard and as directed by the Division Engineer or their representative.
19. The installation within the Control of Access fence shall not adversely affect the design, construction, maintenance, stability, traffic safety or operation of the controlled access highway, and the utility must be serviced without access from the through-traffic roadways or ramps.
20. All erosion control devices and measures shall be constructed, installed, maintained, and removed by the Encroacher in accordance with all applicable Federal, State, and Local laws, regulations, ordinances, and policies. All earth areas shall be regraded and seeded in accordance with NCDOT Standards Specifications for Roads and Structures.
21. All erosion control devices and measures shall be constructed, installed, maintained, and removed by the Encroacher in accordance with all applicable Federal, State, and Local laws, regulations, ordinances, and policies. Permanent vegetation shall be established on all disturbed areas in accordance with the recommendations of the Division Roadside Environmental Engineer. All areas disturbed (shoulders, ditches, removed accesses, etc.) shall be graded and seeded in accordance with the latest NCDOT Standards Specifications for Roads and Structures and within 15 calendar days with an approved NCDOT seed mixture (all lawn type areas shall be maintained and reseeded as such). Seeding rates per acre shall be applied according to the Division Roadside Environmental Engineer. Any plant or vegetation in the NCDOT planted sites that is destroyed or damaged as a result of this agreement shall be replaced with plants of like kind or similar shape.

No trees within NCDOT right of way shall be cut without authorization from the Division Roadside Environmental Engineer. An inventory of trees measuring greater than 4 caliper inches (measured 6" above the ground) is required when trees within C/A right of way will be impacted by the project installation. Mitigation is required and will be determined by the Division Roadside Environmental Engineer's Office.

The applicant is responsible for identifying project impacts to waters of the United States (wetlands, intermittent streams, perennial streams and ponds) located within the NCDOT right-of-way. The discharge of dredged or fill material into waters of the United States requires authorization from the United States Army Corps of Engineers (USACE) and certification from the North Carolina Division of Water Quality (NCDWQ). The applicant is required to obtain pertinent permits or certification from these regulatory agencies if construction of the project impacts waters of the United States within the NCDOT right-of-way. The applicant is responsible for complying with any river or stream Riparian Buffer Rule as regulated by the NCDWQ. The Rule regulates activity within a 50-foot buffer along perennial streams, intermittent streams and ponds. Additional information can be obtained by contacting the NCDWQ or the USACE.

The contractor shall perform all monitoring and record keeping and any required maintenance of erosion and sediment control measures to maintain compliance with stormwater regulations.

22. Existing drainage patterns shall be maintained at all times throughout the proposed construction. The encroacher shall keep the roadway clean of dirt and debris at all times throughout the duration of the project.
23. All earth areas disturbed shall be regraded and reseeded in accordance with NCDOT Standards and Specifications.



24. All proposed landscaping and plantings located within the NCDOT right of way shall be approved by the Division Roadside Environmental Engineer at (919) 816-9290.

In the event these plants require relocation or removal for highway construction, reconstruction, or maintenance of safety, such removal or relocation will be done immediately by the permittee upon notification by the NCDOT entirely at the expense of the permittee.

25. The encroaching party shall comply with all applicable local, state and federal environmental regulations, and shall obtain all necessary state and federal environmental permits, including but not limited to, those related to sediment control, storm water, wetland, streams, endangered species, and historical sites.
26. The applicant is responsible for complying with the Neuse and Tar-Pamlico Riparian Buffer Rule as regulated by the NCDWQ. The Rule regulates activity within a 50-foot buffer along perennial streams, intermittent streams and ponds.
27. All temporary and final pavement markings, reflective pavement markings and signage are the responsibility of the Encroacher. All final pavement markings shall be thermoplastic. Any pavement markings that are damaged or obliterated shall be restored at no cost to the department.
28. Any existing driveways, pavement, sidewalk, curb and gutter or drainage structures that are damaged during construction shall be repaired to their original condition.
29. Guardrail shall be installed where warranted and in accordance with the guidelines shown in the 2024 Highway Design Branch Roadway Standard Drawings.

Guardrail removed or damaged during construction shall be replaced or repaired to their original condition at no cost to NCDOT.

30. Prior approval for any blasting must be obtained from the District Engineer or their representative.
31. All traffic control, asphalt mixes, structures, construction, workmanship and construction methods, and materials shall be in compliance with the most-recent versions of the following resources: ASTM Standards, Manual on Uniform Traffic Control Devices, NCDOT Utilities Accommodations Manual, NCDOT Standard Specifications for Roads and Structures, NCDOT Roadway Standard Drawings, NCDOT Asphalt Quality Management System manual, and the approved plans.
32. Excavated material shall not be placed on the roadway at any time.
33. Trenching, bore pits and/or other excavations shall not be left open or unsafe overnight. The Contractor shall comply with all OSHA requirements and provide a competent person on site to supervise excavation at all times.
34. All excavations inside the theoretical 1:1 slope from the existing edge of pavement to the bottom of the nearest excavation wall should be made in accordance with the following conditions. Traffic should be moved to a travel lane outside the limits of a theoretical one-to-one slope from the bottom of the nearest trench wall to the pavement surface. Active excavation shoring, such as sheet piling, shall be installed. The design of the shoring shall include the effects of traffic loads. The shoring system shall be designed and sealed by an engineer registered in North Carolina. Trench boxes shall not be accepted as shoring. The trench backfill material should meet the Statewide Borrow Criteria.

35. All material to a depth of 8 inches below the finished surface of the subgrade shall be compacted to a density equal to at least 100% of that obtained by compacting a sample of the material in accordance with AASHTO T99 as modified by the Department. The subgrade shall be compacted at a moisture content which is approximately that required to produce the maximum density indicated by the above test method. The contractor shall dry or add moisture to the subgrade when required to provide a uniformly compacted and acceptable subgrade. The option to backfill any trenches with dirt or either #57 stone or #78 stone with consolidation with a plate tamp and without a conventional density test may be pursued with the written consent of the District Engineer. If this option is exercised, then roadway ABC stone and asphalt repair as required will also be specified by the District Engineer.
36. The paving of this roadway shall be in accordance with the latest version of NCDOT Standard Specifications, Sections 610, 1012 and 1020. The Contractor shall follow all procedures of the latest Quality Management System (QMS) Asphalt Manual for asphalt pavement - Maintenance Version (see <https://connect.ncdot.gov/resources/Materials/MaterialsResources/Forms/Default.aspx>) to find the most recent version. The Contractor must adhere to all testing requirements and quality control requirements specified. The Contractor shall contact the NCDOT Division QA Supervisor prior to producing plant mix and make the Supervisor aware that the mix is being produced for a future NCDOT road. Contact the District Engineer to determine the NCDOT Division QA Supervisor. Only NCDOT approved mix designs will be acceptable. A Quality Control Plan shall be submitted (as Directed by the District Engineer) to the District Engineer's Office prior to asphalt production utilizing form QMS-MV1. Failing mixes and/or densities are subject to penalties including monetary payments or removal and replacement. To minimize traffic queuing in construction areas, the possibility of traffic detours may be considered when working on high traffic routes even if traffic control is used. The District Engineer may require traffic detours.
37. Roadway certification reports sealed by a Professional Engineer shall be submitted to the North Carolina Department of Transportation at 4009 District Drive, Raleigh, North Carolina, indicating the following:
- \* Pavement thickness by type
  - \* Pavement density, core and/or test locations
  - \* Base thickness
  - \* Base density
38. When paving beyond utility installation is involved, a Roadway certification report sealed by a Professional Engineer shall be submitted to the District Engineer's office indicating the following:
- Pavement thickness by type
  - Pavement density, core and/or test locations
  - Base thickness
  - Base density
  - Subgrade density
- Test frequency and method shall be in conformance with the NCDOT Materials and Tests Manual. Test must be performed by a Certified Technician including name and Certification number on report.
39. Any pavement damaged because of settlement of the pavement or damaged by equipment used to perform work, shall be re-surfaced to the satisfaction of the District Engineer. This may include the removal of pavement and a 50' mechanical overlay. All pavement work and pavement markings (temporary and final) are the responsibility of the Encroaching Party.

40. "Potholing" (or "daylighting") pavement cores to expose existing utilities shall be made with a circular minimum 6" to maximum 18" diameter "test" hole to a maximum depth of 12 inches. Pavement core locations shall not be placed in the wheel path whenever possible. Vacuum excavation shall be utilized to expose underground utilities below pavement subgrade. Displaced dirt and rock debris must be suctioned away from the excavation area through a large hose to a vacuum truck and disposed by the encroaching party. Avoid using mechanized equipment in the proximity of all exposed underground utility lines. Pavement cores shall be repaired within the same working day. The pavement core shall be retained and evaluated for reuse to fill the core hole.
41. Pavement cuts shall be repaired the same day the cuts are made unless an asphalt patch cannot be accomplished the same day due to material availability or time restrictions. When the asphalt patch is not feasible, the following apply:
  - a. The pavement cut shall be filled to the surface with ABC stone or Flowable Fill per NCDOT's Standards and Specifications.
  - b. Once the cut is filled, a minimum ¾-inch steel plate shall be placed and pinned to prevent moving. Plates shall be designed large enough to span a minimum of 1-foot on all sides on the pavement cut.
  - c. When flowable fill is used, it shall cure for 24 hours prior to any asphalt material placement. Flowable fill bleed water shall not be present during paving operations. Paving shall not cause damage (shoving, distortion, pumping, etc.) to the flowable fill.
  - d. Install and leave "BUMP AHEAD" signs according to MUTCD until the steel plate has been removed. Once the flowable fill has cured, remove the steel plate, and mill/fill according to the directions of the District Engineer.
  - e. All pavement cuts must be sealed with NCDOT approved sealant to prevent future pavement separation or cracking.
42. Excavation within 1000 feet of a signalized intersection will require notification by the encroaching party to the Division Traffic Engineer at telephone number (919) 536-4000 no less than one week prior to beginning work. All traffic signal or detection cables must be located prior to excavation. Cost to replace or repair NCDOT signs, signals, pavement markings or associated equipment and facilities shall be the responsibility of the encroaching party. Any intersection modifications pertaining to signalization, lane additions/modifications, striping changes/additions, and or pedestrian accomodation installation/revision shall require a new signal plan of record be prepared, submitted and reviewed by the Division Traffic Engineer.
43. Any guardrail removed or damaged during construction shall be replaced or repaired to its original condition, meeting current NCDOT standards or as directed by the Division Engineer or their representative.
44. Conformance with driveway permit review should be required in conjunction with this encroachment agreement. In the event there is a conflict between the driveway permit and the encroachment agreement, the District Engineer should resolve the conflict and notify the parties involved.
45. If the approved method of construction is unsuccessful and other means are required, prior approval must be obtained through the District Engineer before construction may continue.
46. Right of Way monuments disturbed during construction shall be referenced by a registered Land Surveyor and reset after construction.
47. The Encroaching Party and/or their Contractor shall comply with all OSHA requirements. If OSHA visits the work area associated with this project, the District Office shall be notified by the encroaching party immediately if any violations are cited.

48. The encroaching party shall notify the District Engineer or their representative immediately in the event any drainage structure is blocked, disturbed or damaged. All drainage structures disturbed, damaged or blocked shall be restored to its original condition as directed by the District Engineer or their representative.
49. No commercial advertising shall be allowed within NCDOT Right of Way.
50. A minimum of 5 feet clearance is required for utility installations beneath or near drainage pipes, headwalls, and a minimum of two-foot clearance below the flowline of streams. If directional drilling, a minimum ten-foot clearance distance is required from drainage structures and a minimum of 5 feet below flowline of streams.

At points where the utility is placed under existing storm drainage, the trench will be backfilled with excavatable flowable fill up to the outside diameter of the existing pipe.

51. Approval may be rescinded upon failure to follow any of the provisions in this permit and may be considered a violation of the agreement.
52. All driveways disturbed during construction shall be returned to a state comparable with the condition of the driveways prior to construction.
53. Prior to beginning work, it is the requirement of the Encroaching Party to contact the appropriate Utility Companies involved and make arrangements to adjust or relocate any utilities that conflict with the proposed work.
54. Poles shall be located/relocated at or as near as possible to the right-of-way line, shall be set outside the Clear Recovery Area as outlined by AASHTO and outside sight distance triangles.

Poles located within guardrail sections shall be installed a minimum of 5 feet behind any guardrail. When applicable, poles shall be placed behind sidewalk.

Any associated guy wires to ground anchors and stub poles shall not be placed between a pole and the travel way and should be located outside the clear recovery area.

Minimum vertical clearance shall be 18' for aerial crossings over NCDOT roadways and 15'-6" for installations parallel to the roadway.

55. All Traffic signs moved during construction shall be reinstalled as soon as possible to the satisfaction of the Division Traffic Engineer or their representative.
56. All Traffic signs moved shall be reinstalled as soon as possible to meet NCDOT specifications.

DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY ENCROACHMENT AGREEMENT FOR CURB AND GUTTER, PAVEMENT WIDENING AND STORM DRAINAGE

-AND-

S&S Java Enterprises

13 Lafoy Drive, Clayton, NC 27527

THIS AGREEMENT, made and entered into this the 18th day of July, 20 24, by and between the Department of Transportation, party of the first part; and S&S Java Enterprises - Rolesville, LLC

party of the second part,

WITNESSETH

THAT WHEREAS, the party of the second part desires to encroach on the right of way of the public road designated as Route(s) A: US401 (S Main St), located A:400 LF to 550 LF West of Intersection of US401 (S Main St) and Old Rogers Rd

with the construction and/or erection of: Grading, drainage, paving, curb and gutter, and sidewalk as shown on the provided plans

WHEREAS, it is to the material advantage of the party of the second part to effect this encroachment, and the party of the first part in the exercise of authority conferred upon it by statute, is willing to permit the encroachment within the limits of the right of way as indicated, subject to the conditions of this agreement;

NOW, THEREFORE, IT IS AGREED that the party of the first part hereby grants to the party of the second part the right and privilege to make this encroachment as shown on attached plan sheet(s), specifications and special provisions which are made a part hereof upon the following conditions, to wit:

That the said party of the second part binds and obligates himself to install the encroaching facility in such safe and proper condition that it will not interfere with or endanger travel upon said highway.

That the party of the second part agrees to provide during construction proper signs, signal lights, flagmen and other warning devices for the protection of traffic in conformance with the latest Manual on Uniform Traffic Control Devices for Streets and Highways and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the Division Engineer of the party of the first part.

That the party of the second part hereby agrees to indemnify and save harmless the party of the first part from all damages and claims for damage that may arise by reason of the installation and maintenance of this encroachment.

It is clearly understood by the party of the second part that the party of the first part will assume no responsibility for any damage that may be caused to such facilities, within the highway rights of way limits, in carrying out its construction.

That the party of the second part agrees to restore all areas disturbed during construction to the satisfaction of the Division Engineer of the party of the first part. The party of the second part agrees to exercise every reasonable precaution during construction and maintenance to prevent eroding of soil; silting or pollution of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces or other property; or pollution of the air. There shall be compliance with applicable rules and regulations of the North Carolina Division of Environmental Management, North Carolina Sedimentation Control Commission, and with ordinances and regulations of various counties, municipalities and other official agencies relating to pollution prevention and control. When any construction operation disturbs the ground surface and existing ground cover, the party of the second part agrees to remove and replace the sod or otherwise reestablish the grass cover to meet the satisfaction of the Division Engineer of the party of the first part.

That the party of the second part agrees to assume the actual cost of any inspection of the work considered to be necessary by the Division Engineer of the party of the first part.

That the party of the second part agrees to have available at the encroaching site, at all times during construction, a copy of this agreement showing evidence of approval by the party of the first part. The party of the first part reserves the right to stop all work unless evidence of approval can be shown.

Provided the work contained in this agreement is being performed on a completed highway open to traffic; the party of the second part agrees to give written notice to the Division Engineer of the party of the first part when all work contained herein has been completed. Unless specifically requested by the party of the first part, written notice of completion of work on highway projects under construction will not be required.

That in the case of noncompliance with the terms of this agreement by the party of the second part, the party of the first part reserves the right to stop all work until the facility has been brought into compliance or removed from the right of way at no cost to the party of the first part.

That it is agreed by both parties that this agreement shall become void if actual construction of the work contemplated herein is not begun within one (1) year from the date of authorization by the party of the first part unless written waiver is secured by the party of the second part from the party of the first part.

R/W (161B) : Party of the Second Part certifies that this agreement is true and accurate copy of the form

R/W (161B) incorporating all revisions to date.

IN WITNESS WHEREOF, each of the parties to this agreement has caused the same to be executed the day and year first above written.

DEPARTMENT OF TRANSPORTATION

BY: \_\_\_\_\_  
For: DIVISION ENGINEER

ATTEST OR WITNESS:  
Jocelyn L. Southerland  
Jocelyn L. Southerland

Robert L. Southerland  
S&S Java Enterprises - Rolesville, LLC  
Second Party  
Managing Member

INSTRUCTIONS

When the applicant is a corporation or a municipality, this agreement must have the corporate seal and be attested by the corporation secretary or by the empowered city official, unless a waiver of corporate seal and attestation by the secretary or by the empowered City official is on file in the Raleigh office of the State Utilities Manager. In the space provided in this agreement for execution, the name of the corporation or municipality shall be typed above the name, and title of all persons signing the agreement should be typed directly below their signature.

When the applicant is not a corporation, then his signature must be witnessed by one person. The address should be included in this agreement and the names of all persons signing the agreement should be typed directly below their signature.

This agreement must be accompanied, in the form of an attachment, by plans or drawings showing the following applicable information:

1. All roadways and ramps.
2. Right of way lines and where applicable, the control of access lines.
3. Location of the proposed encroachment.
4. Length and type of encroachment.
5. Location by highway survey station number. If station number cannot be obtained, location should be shown by distance from some identifiable point, such as a bridge, road, intersection, etc. (To assist in preparation of the encroachment plan, the Department's roadway plans may be seen at the various Highway Division Offices, or at the Raleigh office.)
6. Drainage structures or bridges if affected by encroachment.
7. Typical section indicating the pavement design and width, and the slopes, widths and details for either a curb and gutter or a shoulder and ditch section, whichever is applicable.
8. Horizontal alignment indicating general curve data, where applicable.
9. Vertical alignment indicated by percent grade, P.I. station and vertical curve length, where applicable.
10. Amount of material to be removed and/or placed on NCDOT right of way, if applicable.
11. Cross-sections of all grading operations, indicating slope ratio and reference by station where applicable.
12. All pertinent drainage structures proposed. Include all hydraulic data, pipe sizes, structure details and other related information.
13. Erosion and sediment control.
14. Any special provisions or specifications as to the performance of the work or the method of construction that may be required by the Department must be shown on a separate sheet attached to encroachment agreement provided that such information cannot be shown on plans or drawings.
15. The Department's Division Engineer should be given notice by the applicant prior to actual starting of installation included in this agreement.
16. Method of handling traffic during construction where applicable.
17. Scale of plans, north arrow, etc.

Plotted By: Alexander, Jamal Sheet Set: SCOOTER'S ROLESVILLE - Layout: C0.0 COVER SHEET - July 10, 2024 11:18:58am K:\RAL\_LDEV\016485000-Scoters Rolesville\Planning\15\_CAD Files\PlanSheets\C0.0 COVER SHEET.dwg  
 This document, together with the concepts and designs presented herein, 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.

# SCOOTER'S ROLESVILLE

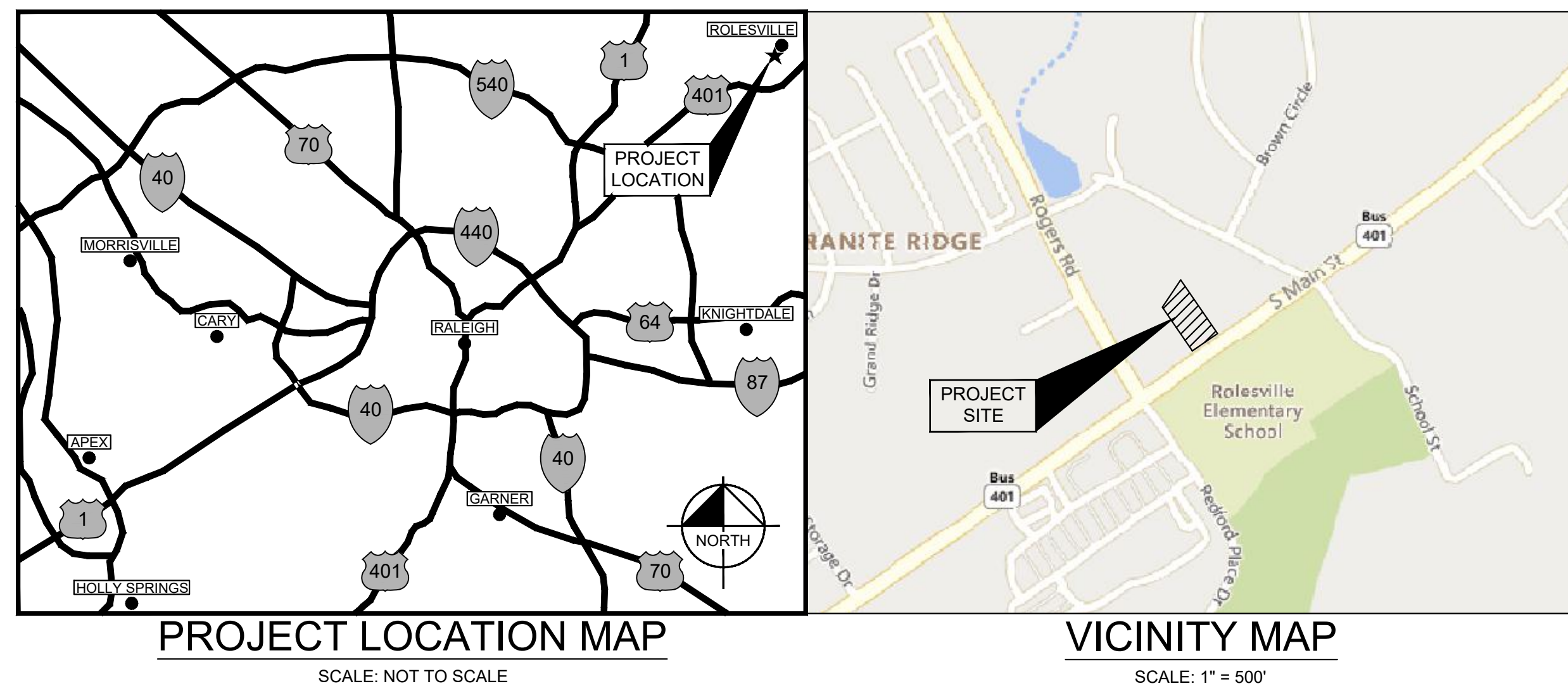
306 SOUTH MAIN STREET  
ROLESVILLE, NC 27571

A DEVELOPMENT BY:  
**S&S JAVA ENTERPRISES**

PROJECT NO.: SDP-23-09  
DATE: OCTOBER 31, 2023

## SITE DATA TABLE

PIN:	1759806076
TOTAL SITE AREA:	0.70 AC
EXISTING ZONING:	GENERAL COMMERCIAL (GC)
BUFFERS:	30' STREETScape BUFFER 25' TYPE 3 PERIMETER BUFFER (REAR)
PROPERTY SETBACKS:	FRONT: 20' SIDE: 15' REAR: 35'
WATERSHED:	SANFORD CREEK
RIVER BASIN:	NEUSE
CURRENT USE:	VACANT
PROPOSED USE:	COMMERCIAL
CURRENT IMPERVIOUS:	144 SF
PROPOSED IMPERVIOUS:	18,700 SF
PARKING:	MIN. REQUIRED: (2.5 SPACES/1,000 SF) X 700 SF = 2.5 SPACES  MAX. ALLOWED: (10 SPACES/1,000 SF) X 700 SF = 7 SPACES  PROVIDED: 7 SPACES
ACCESSIBLE PARKING:	REQUIRED: 1 SPACE PROVIDED: 1 SPACE
LOADING SPACES:	REQUIRED: 1 SPACE PROVIDED: 1 SPACE
BICYCLE PARKING:	MIN. REQUIRED: (1 SPACE/5,000 SF) X 700 SF = 1 SPACES  PROVIDED: 2 SPACES
OPEN SPACE:	REQUIRED:  TOTAL REQUIRED: 0.70 AC X 5% = 0.035 AC (1,525 SF)  ACTIVE OPEN SPACE REQUIRED: 0.035 AC X 50% = 0.018 AC (784 SF)  PROVIDED:  ACTIVE OPEN SPACE PROVIDED: 0.031 AC (1,358 SF)  PASSIVE OPEN SPACE PROVIDED: 0.050 AC (2,192 SF)  TOTAL OPEN SPACE PROVIDED: 0.081 AC (3,550 SF)
TREE COVERAGE DATA:	SEE SHEET L1.0
BUILDING HEIGHT:	19'
BUILDING SQUARE FOOTAGE:	700 SF (APPROX.)



## PROJECT OWNERS & CONSULTANTS

<b>OWNER</b> ROLESVILLE, LLC 11016 RUSHMORE DRIVE, SUITE 160 CHARLOTTE, NORTH CAROLINA 28277 CONTACT: MARLAINE KLINTWORTH PHONE: (919) 868-4472 EMAIL: mvkcommercial@gmail.com	<b>LANDSCAPE ARCHITECT</b> KIMLEY-HORN AND ASSOCIATES, INC. 421 FAYETTEVILLE ST., SUITE 600 RALEIGH, NORTH CAROLINA 27601 CONTACT: ADAM FULLERTON, MLA, ASLA PHONE: (919) 653-2937 EMAIL: adam.fullerton@kimley-horn.com
<b>DEVELOPER</b> S&S JAVA ENTERPRISES - ROLESVILLE, LLC 13 LAFAY DRIVE CLAYTON, NORTH CAROLINA 27527 CONTACT: ROBERT SOUTHERLAND PHONE: (919) 426-7670 EMAIL: b2river@earthlink.net	<b>SURVEYOR</b> CMP PROFESSIONAL LAND SURVEYORS, PC 333 S. WHITE ST WAKE FOREST, NORTH CAROLINA 27587 CONTACT: MICHAEL A. MOSS, PLS PHONE: (919) 556-3148 EMAIL: mike@cnppls.com
<b>CIVIL ENGINEER</b> KIMLEY-HORN AND ASSOCIATES, INC. 421 FAYETTEVILLE ST., SUITE 600 RALEIGH, NORTH CAROLINA 27601 CONTACT: CHRIS BOSTIC, P.E. PHONE: (919) 653-2927 EMAIL: chris.bostic@kimley-horn.com	

DISTURBED AREA: 0.70 AC

**EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT**

**APPROVED**

EROSION CONTROL  S- 121948-2024

STORMWATER MGMT.  S-121938-2024

FLOOD STUDY  S-

DATE \_\_\_\_\_

ENVIRONMENTAL CONSULTANT SIGNATURE

**SURVEY NOTE:**  
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 02/23/2023 BY CMP PROFESSIONAL LAND SURVEYORS, 333 S. WHITE STREET, WAKE FOREST, NC 27588. PHONE: (919) 556-3148. 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	Sheet Title
C0.0	COVER SHEET
C0.1	GENERAL NOTES
C1.0	EXISTING CONDITIONS & DEMOLITION PLAN
C2.0	SITE PLAN
C3.0	GRADING AND DRAINAGE PLAN
C4.0	UTILITY PLAN
C4.1	MECHANICAL PLAN
C4.2	SEPTIC TANK DETAILS
C5.0	EROSION CONTROL PLAN - PHASE 1
C5.1	EROSION CONTROL PLAN - PHASE 2
C5.2	EROSION CONTROL DETAILS
C5.3	EROSION CONTROL DETAILS
C8.0	SITE DETAILS
C8.1	SITE DETAILS
C9.0	STORM DETAILS
C9.1	STORM DETAILS
C10.0	SANITARY SEWER DETAILS
C11.0	WATER DETAILS
C11.1	WATER DETAILS
L1.0	LANDSCAPE PLAN
L2.0	LANDSCAPE DETAILS
L2.1	LANDSCAPE NOTES
E3.1	EXTERIOR SITE PHOTOMETRIC PLAN
A1.5	TRASH ENCLOSURE PLAN
A2.0	EXTERIOR COLOR ELEVATIONS
A2.1	EXTERIOR ELEVATIONS
A2.2	EXTERIOR ELEVATIONS

### SITE PERMITTING APPROVAL

**Water and Sewer Permits (if applicable)**

The City of Raleigh consents to the connection and extension of the City's **Public Sewer System** as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. **City of Raleigh Public Utilities Department Permit # \_\_\_\_\_**

The City of Raleigh consents to the connection and extension of the City's **Public Water System** as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. **City of Raleigh Public Utilities Department Permit # \_\_\_\_\_**

The City of Raleigh consents to the connection to its public sewer system and extension of the **private sewer collection system** as shown on this plan. The material and constructions methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

**City of Raleigh Public Utilities Department Permit # \_\_\_\_\_**

### CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval \_\_\_\_\_  
Raleigh Water Review Officer

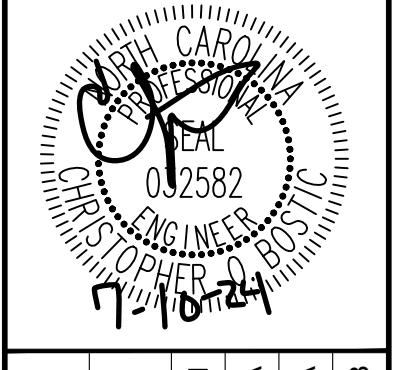


Know what's below.  
Call before you dig.

NO.	REVISIONS	DATE	BY
1	TOWN COMMENTS	07/08/2024	JAA
2	TOWN COMMENTS	03/01/2024	JAA
3	TOWN COMMENTS	01/02/2024	IMDE

**Kimley-Horn**

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 WWW.KIMLEY-HORN.COM PHONE: 919.677.2000 FAX: 919.677.2050  
 #F-0102 WWW.KIMLEY-HORN.COM 421 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601



KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
016485000	10/31/2023	AS SHOWN	JAA	JAA	COB

# COVER SHEET

SCOOTER'S ROLESVILLE  
PREPARED FOR  
S&S JAVA ENTERPRISES  
ROLESVILLE, NC

SHEET NUMBER  
**C0.0**

SDP-23-09

GENERAL NOTES:

- 1. WORK IN THIS PROJECT SHALL CONFORM TO THESE PLANS, THE LATEST EDITIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) ROAD AND BRIDGE SPECIFICATIONS...
2. THE TERM "CONTRACTOR" AS REFERENCED HERE-IN SHALL ALSO INCLUDE THE SUBCONTRACTOR OR PRINCIPAL TRADE CONTRACTOR...
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL JOBSITE SAFETY, INCLUDING BUT NOT LIMITED TO TRENCH SAFETY...
4. THE LOCATION AND SIZE OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE ONLY...
5. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC...
6. TRAFFIC CONTROL WITHIN ALL VEHICULAR AREAS IS THE RESPONSIBILITY OF THE CONTRACTOR...
7. ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER...
8. CONSTRUCTION STAKEOUT FOR THIS PROJECT SHALL BE PER A DIGITAL (CAD) FILE PROVIDED BY THE ENGINEER...
9. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION...
10. CONTRACTOR IS RESPONSIBLE FOR VERIFYING OR OBTAINING ALL REQUIRED PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION...
11. THE FRAMES AND COVERS OF ALL EXISTING AND PROPOSED DRAINAGE, SANITARY SEWER, WATER MAIN, GAS, AND WIRE UTILITY STRUCTURES SHALL BE ADJUSTED TO MATCH PROPOSED FINISHED ELEVATIONS AND SLOPES...
12. ROADWAYS AND BUILDINGS MUST BE CAPABLE OF SUPPORTING FIRE APPARATUS DURING CONSTRUCTION...
13. EXISTING INFORMATION SHOWN TAKEN FROM A TOPOGRAPHIC SURVEY DATED FEBRUARY 23, 2023 AND PROVIDED BY CMP PROFESSIONAL LAND SURVEYORS C-1525, 333 S. WHITE STREET, P.O. BOX 1253, WAKE FOREST, N.C. 27588...
14. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NC DOT AND ROLESVILLE STANDARDS, SPECIFICATIONS, & DETAILS IF APPLICABLE.

GRADING

- 1. OBTAIN AND POST THE WAKE COUNTY LAND DISTURBANCE PERMIT ONSITE PRIOR TO COMMENCING WORK ON SITE.
2. REFER TO FINAL CONSTRUCTION PLANS FOR CLEARING LIMITS AND TEMPORARY EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
3. CONTRACTOR SHALL ADHERE TO THE LIMITS OF TREE PROTECTION FENCE.
4. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY, AND SHALL BE CHECKED AFTER EVERY RAINFALL...
5. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE, AND AS SHOWN ON THESE PLANS...
6. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS AND REPORT...
7. GRADING CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.
8. ALL MATERIALS USED FOR BACKFILL SHALL BE FREE OF WOOD, ROOTS, ROCKS, BOULDERS, OR ANY OTHER NON-COMPATIBLE SOIL TYPE MATERIAL...
9. MATERIALS USED TO CONSTRUCT EMBANKMENTS FOR ANY PURPOSE, BACKFILL AROUND DRAINAGE STRUCTURES, OR IN UTILITY TRENCHES FOR ANY OTHER DEPRESSION REQUIRING FILL OR BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY...
10. ALL DEMOLITION, DEBRIS, AND OTHER EXCESS MATERIAL SHALL BE HAULED OFF-SITE AND LEGALLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
11. NO TREE WITHIN THE TREE PROTECTION AREA SHALL BE REMOVED OR DAMAGED.
12. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION PRIOR TO THE PROJECT ACCEPTANCE IS SCHEDULED...
13. REFERENCE GEOTECHNICAL REPORT FOR PAVING SUB GRADE INFORMATION.
14. ALL SPOT GRADE ELEVATIONS IN CURB AND GUTTER REPRESENT GUTTER FLOWLINE ELEVATION AT FACE OF CURB UNLESS OTHERWISE NOTED...
15. PROPOSED CONTOURS AND GUTTER GRADIENTS ARE APPROXIMATE...
16. REFER TO SITE PLAN AND FINAL PLAT FOR HORIZONTAL DIMENSIONS.
17. WHERE FILL IS TO BE PLACED ON EXISTING SLOPES STEEPER THAN 4:1, CONTRACTOR SHALL EXCAVATE BENCHES WITH A MAXIMUM DEPTH OF 3'.
18. THE CONTRACTOR SHALL COORDINATE WITH THE GEOTECHNICAL ENGINEER FOR APPROPRIATE SLOPE STABILIZATION ON ALL SLOPES STEEPER THAN 3:1.
19. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR BLASTING ROCK IF BLAST ROCK IS ENCOUNTERED...
20. SILT FENCE SHALL BE PLACED AROUND ALL TEMPORARY SOIL STOCKPILES A MINIMUM OF 3' FROM TOE OF SLOPE.
21. VERTICAL DATUM IS BASED ON NAVD 88.

SANITARY SEWER

- 1. SANITARY SEWER SERVICES SHALL BE SCHEDULE 40 PVC.
2. CLEANOUT SYMBOLS SHOWN ON THESE PLANS REPRESENT LOCATION OF SURFACE ACCESS POINT. CONTRACTOR SHALL LOCATE WYE APPROPRIATELY BASED ON PIPE DEPTH.
3. SANITARY SEWER CLEAN-OUTS LOCATED IN PAVEMENT AREAS SHALL BE HEAVY-DUTY TRAFFIC BEARING CASTINGS.

WATER

- 1. WATERLINES, LARGER THAN 2" SHALL BE DUCTILE IRON PIPE MEETING THE REQUIREMENTS OF ANSI-AWWA C151 PRESSURE CLASS 350...
2. ALL UNDERGROUND UTILITIES AND FIRE HYDRANTS MUST BE FUNCTIONALLY APPROVED PRIOR TO STRUCTURAL CONSTRUCTION.
3. NATIONAL STANDARD THREADS SHALL BE INSTALLED ON FIRE HYDRANTS.
4. ALL FIRE HYDRANTS AND FDC CONNECTIONS TO HAVE STORZ TYPE CONNECTION PER CITY OF RALEIGH FIRE DEPARTMENT STANDARDS.

BACKFLOW PREVENTION:

- 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 REQUIRED BACKFLOW PREVENTER.
2. EACH BACKFLOW PREVENTER ASSEMBLY IS REQUIRED TO BE TESTED BY AN APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM INTO SERVICE...
3. PRIOR TO CONSTRUCTION BEGINNING, ALL SIGNAGE AND TRAFFIC CONTROL SHALL BE IN PLACE.
4. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF CONTRACT DOCUMENTS AS WELL AS ALL APPROVALS AND EASEMENTS ON THE JOB SITE AT ALL TIMES.
5. THE CONTRACTOR SHALL REPAIR ALL DRIVEWAYS, DRIVEWAY PIPES, CURB AND GUTTER, SIDEWALKS AND STREET TO EXISTING CONDITION OR BETTER.

CONSTRUCTION NOTES

- 1. THE CONTRACTOR SHALL CONDUCT THE WORK IN A SAFE MANNER AND WITH A MINIMUM AMOUNT OF INCONVENIENCE TO TRAFFIC.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SHALL ADHERE TO THE PROVISIONS OF THE MUTCD (MOST CURRENT EDITION).
3. PRIOR TO CONSTRUCTION BEGINNING, ALL SIGNAGE AND TRAFFIC CONTROL SHALL BE IN PLACE.
4. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF CONTRACT DOCUMENTS AS WELL AS ALL APPROVALS AND EASEMENTS ON THE JOB SITE AT ALL TIMES.
5. THE CONTRACTOR SHALL REPAIR ALL DRIVEWAYS, DRIVEWAY PIPES, CURB AND GUTTER, SIDEWALKS AND STREET TO EXISTING CONDITION OR BETTER.

PAVING/CURBING

- 1. WHERE PROPOSED CURB AND GUTTER TIES TO EXISTING CURB OR CURB AND GUTTER, A TRANSITION OF 10' SHALL BE MADE TO CONFORM TO THE EXISTING HEIGHTS AND SHAPES.
2. BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF PAVEMENT AND OTHER ITEMS ESTABLISHED IN THE PLANS...
3. ALL PAVEMENT SUB GRADES (EVEN WHEN ROCK IS ENCOUNTERED) SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES AND COMPACTED TO A MINIMUM DENSITY OF 98 PERCENT OF ASTM D-698 DENSITY AT OPTIMUM MOISTURE...
4. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS AND MISCELLANEOUS STRIPING AS SHOWN ON THE PLANS...
5. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS...
6. ALL CURB JOINTS SHALL EXTEND THROUGH THE CURB...
7. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS...
8. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES ON PUBLIC STREETS SHALL CONFORM TO MUTCD, NCDOT, AND ROLESVILLE STANDARDS.

STORM DRAINAGE

- 1. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS AND GRATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER.
2. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER.
3. THE ROLESVILLE INSPECTOR SHALL INSPECT ALL "PUBLIC" CONSTRUCTION...
4. ALL RCP STORM SEWER MAINS AND LATERALS SHALL BE MINIMUM CLASS III REINFORCED CONCRETE PIPE.
5. ALL PVC PIPE USED IN DRAINAGE SYSTEM SHALL BE MINIMUM SDR-35 OR APPROVED EQUAL.
6. ALL PVC TO RCP CONNECTIONS SHALL BE CONSTRUCTED WITH CONCRETE COLLARS.
7. THE LOCATIONS OF STORM SEWER STRUCTURES SHOWN ON THESE PLANS (AND PROVIDED IN ASSOCIATED CAD FILES) ARE APPROXIMATE...
8. RIM ELEVATIONS FOR STORM CATCH BASINS ARE MEASURED TO THE GUTTER FLOW LINE.

TRAFFIC CONTROL NOTES

- 1. WITHIN THE SIGHT TRIANGLES AND SIGHT EASEMENTS SHOWN ON THESE PLANS, NO OBSTRUCTION SHALL BE LOCATED IN WHOLE OR PART BETWEEN (2) FEET AND (8) FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION...
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL ROLESVILLE AND/OR N.C.D.O.T. STANDARDS AND SPECIFICATIONS.
3. REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION) FOR DETAILS OF STANDARD TRAFFIC CONTROL SIGNS AND STANDARDS.

SEEDBED PREPARATION

- 1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL...
5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED...
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK...
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON...
9. CONSULT SAEC ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.
10. \*AGRICULTURAL LIMESTONE - 2 TONS/ ACRES (3 TONS/ACRE IN CLAY SOILS) FERTILIZER - 1,000 LBS. / ACRE...
\*\*OR SORGHUM-SUDAN HYBRIDS

SEEDING SCHEDULE

Table with columns: DATE, TYPE, PLANTING RATE. Rows include SHOULDERS, SIDE DITCHES, SLOPES (MAX 3:1) and SLOPES (3:1 TO 2:1) with specific seed types and rates.

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENuded AREAS.

\*TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING.

\*NOTE: THIS SEEDING SCHEDULE IS FOR EROSION AND SEDIMENT CONTROL ONLY. SEE LANDSCAPE PLAN FOR FINAL SEEDING.

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.

NURSE CROP: WHEN SEEDING BERMUDA GRASS SEED CONTRACTOR SHALL ADD 25 LB/AC OF ANNUAL RYE GRASS AS NURSE CROP UNTIL PERMANENT ESTABLISHMENT OF BERMUDA GRASS

EROSION CONTROL NOTES

- 1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL HANDBOOK.
2. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE PROJECT CONSTRUCTION ALL EROSION CONTROL MEASURES SHOWN WITHIN THESE PLANS...
3. ALL CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH REGULATIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER GENERAL PERMIT.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND DISTURBANCE.
5. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION...
7. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES...
8. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS...
9. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY...
10. STABILIZATION IS THE BEST FORM OF EROSION CONTROL...
11. CONTRACTOR TO ENSURE THAT SEDIMENT LADEN RUNOFF DOES NOT LEAVE SITE LIMITS OR ENTER PROTECTED AREAS...
12. ROLLED EROSION CONTROL PRODUCTS (RECP'S) SHOULD BE USED TO AID PERMANENT VEGETATED STABILIZATION...
13. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 21 DAYS AFTER FINAL SITE STABILIZATION...
14. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE...
15. WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED INTO THE SOIL BY CONSTRUCTION TRAFFIC...
16. TEMPORARY CONSTRUCTION ENTRANCES SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES...
17. ALL DRAINAGE INLETS SHALL BE PROTECTED FROM SILTATION...
18. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES...
19. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP...
20. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES...
21. DURING Dewatering OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE...
22. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY...
23. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY CONTRACTOR ONCE STABILIZATION OR A SUFFICIENT GROUND COVER HAS BEEN ESTABLISHED...
24. STABILIZATION MEASURES SHALL BE APPLIED TO STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
25. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDING UPON FIELD CONDITIONS.
26. LIMITS OF GRADING SHOWN ON THE PLAN ARE MAXIMUM LIMITS FOR EROSION CONTROL PURPOSES ONLY...
27. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE WAKE COUNTY EROSION CONTROL ORDINANCE...
28. GRADING MORE THAN 12,000 SF WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE WAKE COUNTY EROSION CONTROL ORDINANCE...

ABBREVIATIONS

\*NOT ALL ABBREVIATIONS MAY BE USED FOR THIS PROJECT.

- CB - CATCH BASIN
YI - YARD INLET
CO - CLEAN OUT
DI - DROP INLET
EX - EXISTING
FES - FLARED END-SECTION
JB - JUNCTION BOX
LOD - LIMITS OF DISTURBANCE
PVC - POLYVINYL CHLORIDE
RCP - REINFORCED CONCRETE PIPE
TYP. - TYPICAL

SURVEY NOTE: EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 02/23/2023 BY CMP PROFESSIONAL LAND SURVEYORS...

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Table with columns: DATE, REVISIONS, TOWN COMMENTS, NCDOT COMMENTS.

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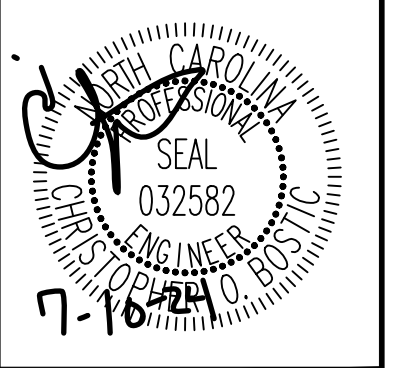


Table with columns: SCALE, AS SHOWN, DESIGNED BY, DRAWN BY, CHECKED BY.

GENERAL NOTES

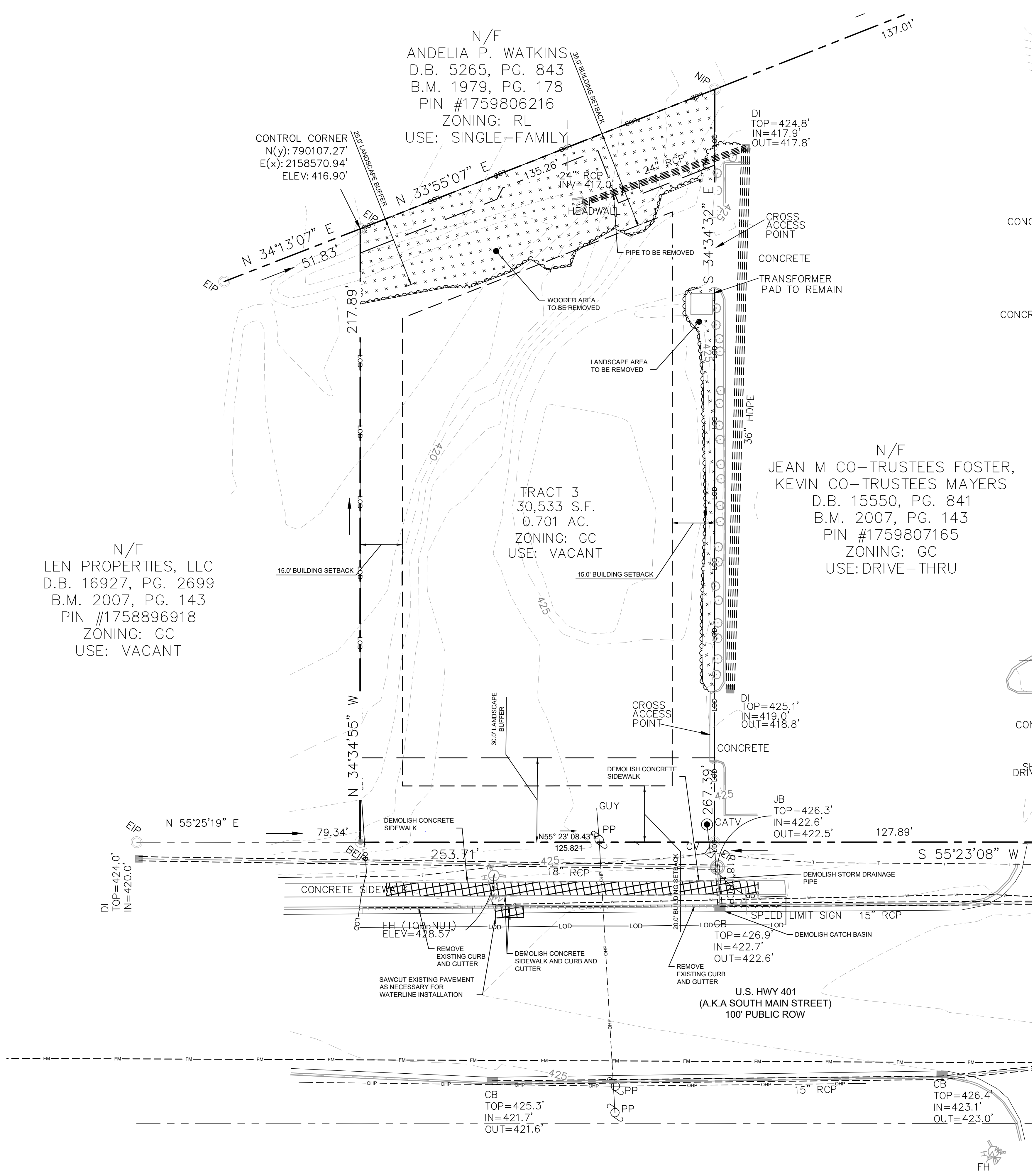
SCOOTERS ROLESVILLE PREPARED FOR S&S JAVA ENTERPRISES ROLESVILLE NC



Know what's below. Call before you dig.



Plotted By: Alexander, Jamal Sheet: S&S SCOOTER'S ROLESVILLE Layout: C1.0 EXISTING CONDITIONS & DEMOLITION PLAN July 10, 2024 11:19:07am K:\RAL\_LDEV\016485000-Scooters Rolesville\Planning\15\_CAD Files\Plan\Sheets\C1.0 EXISTING CONDITIONS & DEMOLITION PLAN.dwg  
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NORTH

GRAPHIC SCALE IN FEET  
0 10 20 40

DEMOLITION LEGEND	
	PROPERTY LINE
	LIMITS OF DISTURBANCE
	DEMOLISH SITE ITEM
	SAWCUT
	SIDEWALK/PAVEMENT/GRAVEL AREA TO BE REMOVED
	VEGETATED AREA TO BE REMOVED

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

**Kimley»Horn**

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 421 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601



KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
016485000	10/31/2023	AS SHOWN	JAA	JAA	COB

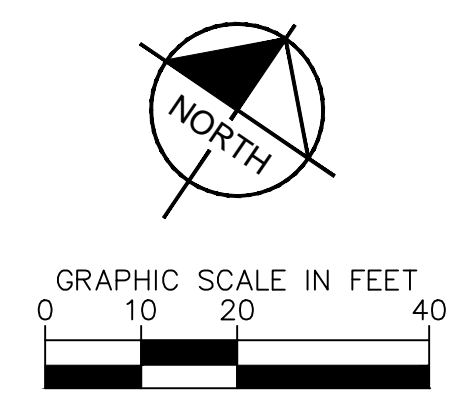
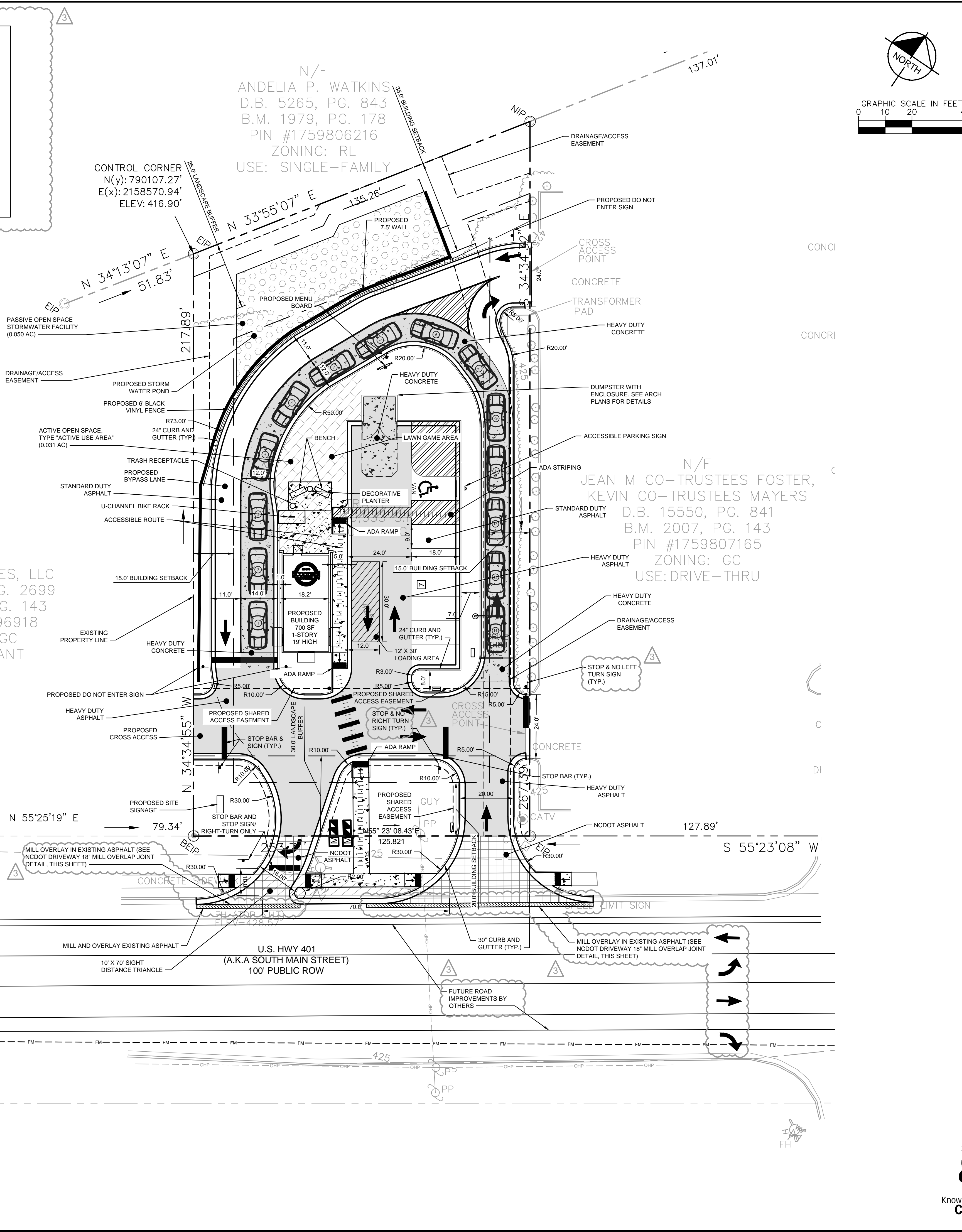
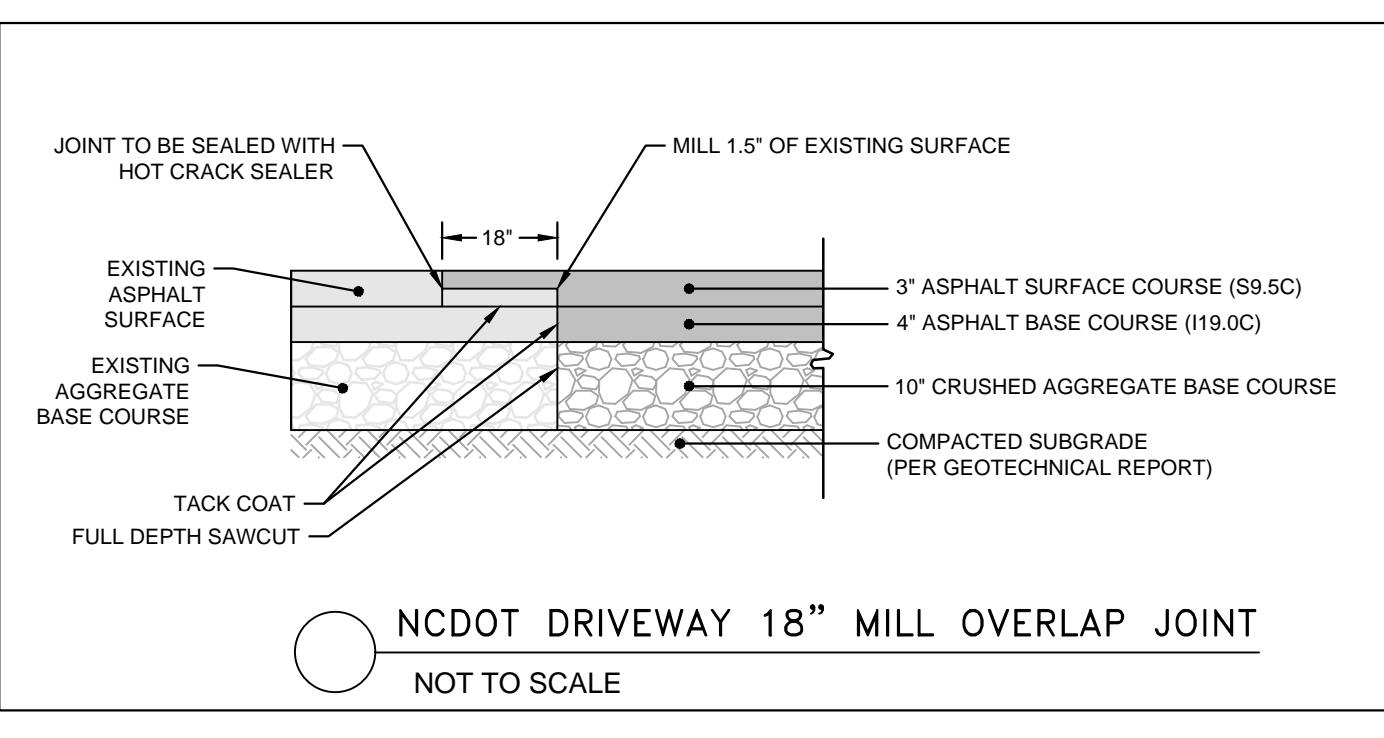
**EXISTING  
CONDITIONS &  
DEMOLITION PLAN**

**SCOOTER'S  
ROLESVILLE  
PREPARED FOR  
S&S JAVA ENTERPRISES  
ROLESVILLE NC**

**SURVEY NOTE:**  
 EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 02/23/2023 BY CIMP PROFESSIONAL LAND SURVEYORS, 333 S. WHITE STREET, WAKE FOREST, NC 27588. PHONE: (919) 556-3148. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.



Plotted By: Alexander, Jamal Sheet Set: SCOOTER'S ROLESVILLE Layout: C2.0 SITE PLAN July 10, 2024 11:29:08am KIRAL LDEV016485000-Scoters Rolesville\Planning\15\_CAD Files\PlanSheets\C2.0 SITE PLAN.dwg  
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SITE LEGEND	
	PROPERTY LINE
	EASEMENT LINE
	FENCE
	STANDARD CURB AND GUTTER
	SPILL CURB AND GUTTER
	PARKING SPACE COUNT
	SIGN (SEE PLAN)
	LIGHT POLE
	WHEEL STOP
	ACCESSIBLE PARKING MARKING (V INDICATES VAN ACCESSIBLE)
	DIRECTIONAL PAVEMENT ARROWS
	ACCESSIBLE RAMP
	ACCESSIBLE ROUTE
	STANDARD DUTY ASPHALT
	HEAVY DUTY ASPHALT
	NCDOT DRIVEWAY ASPHALT
	STANDARD DUTY CONCRETE
	HEAVY DUTY CONCRETE
	CONCRETE SIDEWALK
	ACTIVE OPEN SPACE
	PASSIVE OPEN SPACE

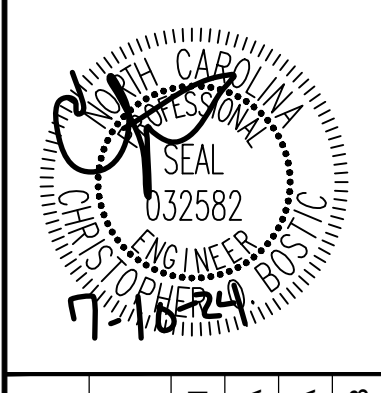
PARKING:	MIN. REQUIRED: (2.5 SPACES/1,000 SF) X 700 SF = 2.5 SPACES
	MAX. ALLOWED: (10 SPACES/1,000 SF) X 700 SF = 7 SPACES
	PROVIDED: 7 SPACES
ACCESSIBLE PARKING:	REQUIRED: 1 SPACE PROVIDED: 1 SPACE
LOADING SPACES:	REQUIRED: 1 SPACE PROVIDED: 1 SPACE
BICYCLE PARKING:	MIN. REQUIRED: (1 SPACE/5,000 SF) X 7,000 SF = 1 SPACES
	PROVIDED: 2 SPACES
OPEN SPACE:	REQUIRED:
	TOTAL REQUIRED: 0.70 AC X 5% = 0.035 AC (1,525 SF)
	ACTIVE OPEN SPACE REQUIRED: 0.035 AC X 50% = 0.018 AC (784 SF)
	PROVIDED:
	ACTIVE OPEN SPACE PROVIDED: 0.031 AC (1,358 SF)
	PASSIVE OPEN SPACE PROVIDED: 0.050 AC (2,192 SF)
	TOTAL OPEN SPACE PROVIDED: 0.081 AC (3,550 SF)

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NO.	DATE	BY	REVISIONS
1	07/08/2024	JAA	NCDOT COMMENTS
2	03/01/2024	JAA	TOWN COMMENTS
3	01/02/2024	IMDE	TOWN COMMENTS

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KHA PROJECT	016485000
DATE	10/31/2023
SCALE	AS SHOWN
DESIGNED BY	JAA
DRAWN BY	JAA
CHECKED BY	COB

**SITE PLAN**

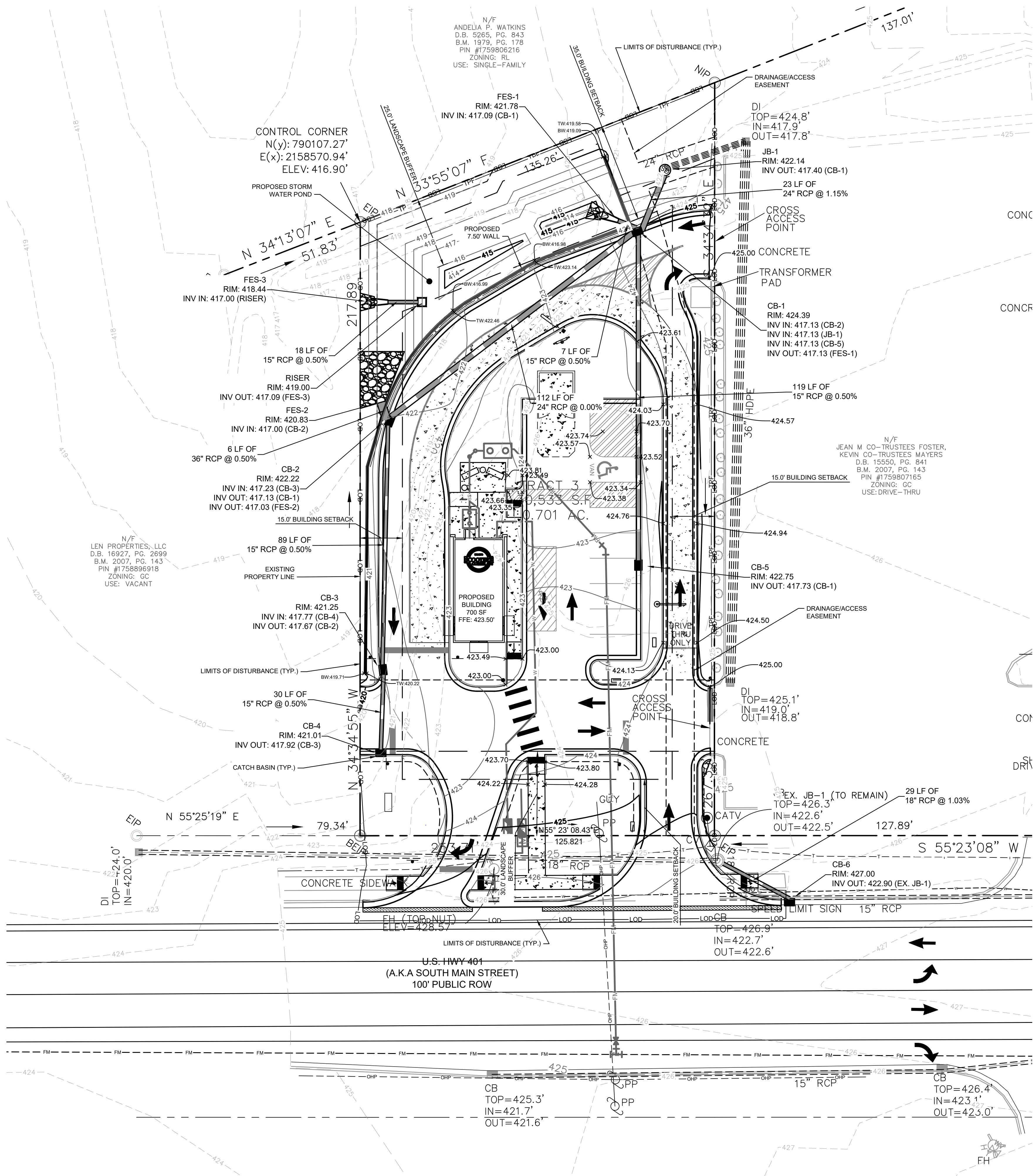
**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE, NC

SHEET NUMBER  
**C2.0**



SDP-23-09

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### GRADING AND DRAINAGE LEGEND

	PROPERTY LINE
	TEMPORARY CONSTRUCTION EASEMENT
	STORM DRAIN (> 12 INCH)
	STORM DRAIN (< 12 INCH)
	ROOF DRAIN
	UNDER DRAIN
	CURB AND GUTTER
	SPILL CURB AND GUTTER
	CLEARING LIMITS
	EXISTING CONTOUR
	PROPOSED CONTOUR
	SPOT ELEVATION
	CATCH BASIN (CB)
	MANHOLE (SDMH)
	CLEANOUT (SDCO)
	DROP INLET (DI)
	AREA DRAIN (AD)
	CONTROL STRUCTURE (CS)
	FLARED END SECTION (FES)
	CONCRETE HEADWALL (HW)
	RIP-RAP APRON
	FLOW ARROW
	TOP OF WALL (GRADE ELEV.)
	BOTTOM OF WALL (GRADE ELEV.)
	TOP OF PAVEMENT (GRADE ELEV.)
	TOP OF CURB (GRADE ELEV.)
	FLUSH CURB (GRADE ELEV.)
	WATER TIGHT JOINTS (WT)

**SURVEY NOTE:**  
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NO.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			

NCDOT COMMENTS: 07/08/2024 JAA  
 TOWN COMMENTS: 03/01/2024 JAA  
 TOWN COMMENTS: 01/02/2024 IMDE

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**Professional Seal:**  
 KIMLEY-HORN AND ASSOCIATES, INC.  
 032582  
 7-1674

KHA PROJECT	016485000
DATE	10/31/2023
SCALE	AS SHOWN
DESIGNED BY	JAA
DRAWN BY	JAA
CHECKED BY	COB

## GRADING AND DRAINAGE PLAN

**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE, NC



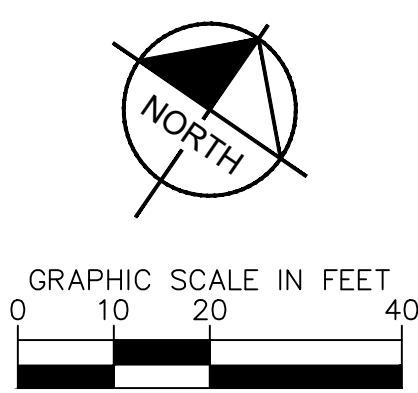
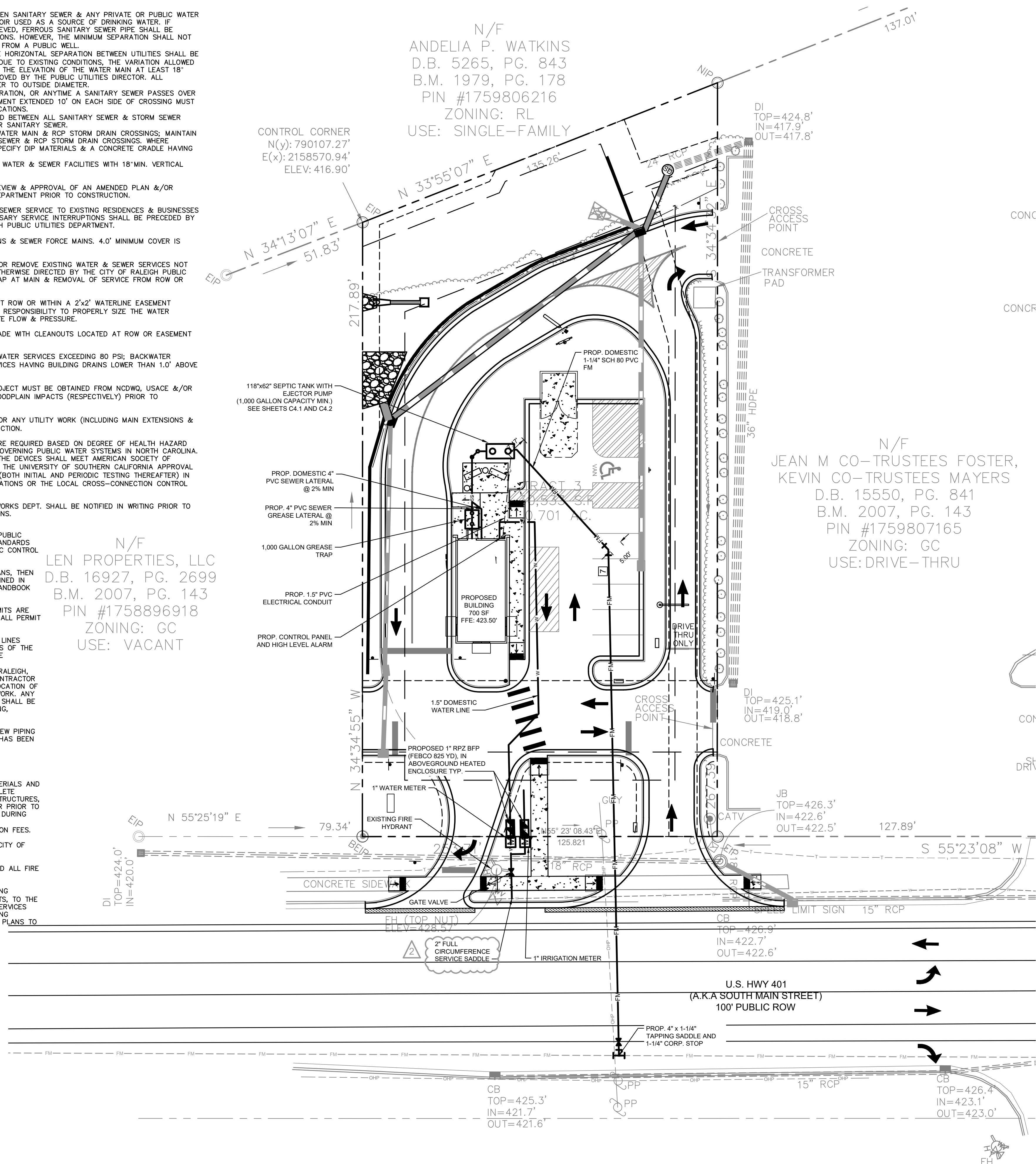
**STANDARD UTILITY NOTES**

- ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS & SPECIFICATIONS
- UTILITY SEPARATION REQUIREMENTS:
  - A) A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE, SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
  - B) WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
  - C) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATER MAIN, DIP MATERIALS OR STEEL ENCASUREMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
  - D) 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
  - E) MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATER MAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE.
  - F) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT.
- INSTALL 2" WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'x2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
- INSTALL 4" PVC SEWER SERVICES @ 2.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWG, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- NCDOT ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE ROW PRIOR TO CONSTRUCTION.
- CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT.
- THE STATE OF NORTH CAROLINA AND C.O.R. PUBLIC WORKS DEPT. SHALL BE NOTIFIED IN WRITING PRIOR TO UTILITY INSTALLATION AND FOR SCHEDULING INSPECTIONS.
- TRAFFIC CONTROLS FOR ANY UTILITY WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE IN COMPLIANCE WITH STANDARDS OF THE NORTH CAROLINA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- IN THE EVENT AN ITEM IS NOT COVERED BY THESE PLANS, THEN THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT HANDBOOK COVERING SUCH ITEMS SHALL APPLY.
- IF CITY OF RALEIGH WATER AND SANITARY SEWER PERMITS ARE REQUIRED, CONTRACTOR IS RESPONSIBLE FOR ALL PERMIT FEES.
- LOCATIONS AND SIZES OF EXISTING WATER AND SEWER LINES SHOWN ON THESE PLANS WITHIN THE PROPERTY LIMITS OF THE SITE ARE ASSUMED BASED ON SURVEY OF SURFACE FEATURES (MANHOLES, VALVES, VAULTS, METERS, ETC.) PREPARED BY GSC SURVEYING, INC., 4072 BARRETT DRIVE, RALEIGH, N.C. 27609. IT IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF THE EXISTING UTILITIES PRIOR TO COMMENCING WORK. ANY DEVIATIONS FROM WHAT IS INDICATED ON THESE PLANS SHALL BE REPORTED TO THE DEVELOPER AND ENGINEER, IN WRITING, IMMEDIATELY.
- CONTRACTOR SHALL PROVIDE A MEANS TO KEEP ALL NEW PIPING ISOLATED FROM EXISTING PIPING UNTIL ALL NEW PIPING HAS BEEN TESTED, AND ACCEPTED FOR SERVICE.
- EXISTING UTILITIES SHALL BE PROTECTED DURING ALL CONSTRUCTION.
- THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE UTILITIES. ALL PUBLIC PIPE, STRUCTURES, AND FITTINGS SHALL BE INSPECTED BY THE CITY INSPECTOR PRIOR TO BEING COVERED. THE INSPECTOR MUST ALSO BE PRESENT DURING DISINFECTION AND PRESSURE TESTING OF ALL MAINS. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
- UTILITY WORK SHALL BE INSPECTED AND ACCEPTED BY CITY OF RALEIGH PRIOR TO PLACING INTO SERVICE.
- THERE SHALL BE A MINIMUM 3' CLEAR DISTANCE AROUND ALL FIRE HYDRANTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING "AS-BUILT" PLANS PER CITY OF RALEIGH REQUIREMENTS TO THE ENGINEER SHOWING THE LOCATION OF WATER AND SEWER SERVICES AND ANY DEVIATIONS FROM PLANS MADE DURING CONSTRUCTION. THE ENGINEER WILL PROVIDE THESE RECORD PLANS TO THE CITY OF RALEIGH.

N/F  
**ANDELIA P. WATKINS**  
 D.B. 5265, PG. 843  
 B.M. 1979, PG. 178  
 PIN #1759806216  
 ZONING: RL  
 USE: SINGLE-FAMILY

N/F  
**LEN PROPERTIES, LLC**  
 D.B. 16927, PG. 2699  
 B.M. 2007, PG. 143  
 PIN #1758896918  
 ZONING: GC  
 USE: VACANT

N/F  
**JEAN M CO-TRUSTEES FOSTER,  
 KEVIN CO-TRUSTEES MAYERS**  
 D.B. 15550, PG. 841  
 B.M. 2007, PG. 143  
 PIN #1759807165  
 ZONING: GC  
 USE: DRIVE-THRU



UTILITY LEGEND	
---	PROPERTY LINE
— W —	WATER LINE
— FW —	FIRE LINE
— SS —	SANITARY SEWER LINE
— E —	ELECTRIC
— FO —	FIBER OPTIC
— G —	GAS
— P —	POWER
— T —	TELECOMMUNICATION
— TV —	CABLE
□	LIGHT POLE
⊠	WATER METER
⊠	GATE VALVE
⊠	POINT OF CONNECTION
⊠	BACKFLOW PREVENTOR
⊠	PIPE TEE/BENDS
⊠	REDUCER
⊠	FIRE HYDRANT (FH)
⊠	FIRE DEPARTMENT CONNECTION (FDC)
⊠	SANITARY SEWER CLEANOUT (SSCO)
⊠	SANITARY SEWER MANHOLE (SSMH)
⊠	SANITARY SEWER GREASE TRAP

**SITE PERMITTING APPROVAL**

**Water and Sewer Permits (if applicable)**

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. **City of Raleigh Public Utilities Department Permit #** \_\_\_\_\_

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. **City of Raleigh Public Utilities Department Permit #** \_\_\_\_\_

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. **City of Raleigh Public Utilities Department Permit #** \_\_\_\_\_

**CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION**

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval \_\_\_\_\_  
 Raleigh Water Review Officer

**SURVEY NOTE:**  
 EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 02/23/2023 BY CMP PROFESSIONAL LAND SURVEYORS, 333 S. WHITE STREET, WAKE FOREST, NC 27588. PHONE: (919) 556-3148. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

Plotted By: Alexander, Jamal Sheet Set: SCOOTER'S ROLESVILLE Layout: C4.0 UTILITY PLAN July 10, 2024, 11:19:38am K:\RAL\_LDEV\016485000-Scoters Rolesville\Planning\15\_CAD Files\PlanSheets\C4.0 UTILITY PLAN.dwg  
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KHA PROJECT		016485000	DATE	10/31/2023	SCALE	AS SHOWN	DESIGNED BY	JAA	DRAWN BY	JAA	CHECKED BY	COB
NCDOT COMMENTS		07/08/2024	JAA									
TOWN COMMENTS		03/01/2024	JAA									
TOWN COMMENTS		01/02/2024	IMDE									
REVISIONS												
	DATE											

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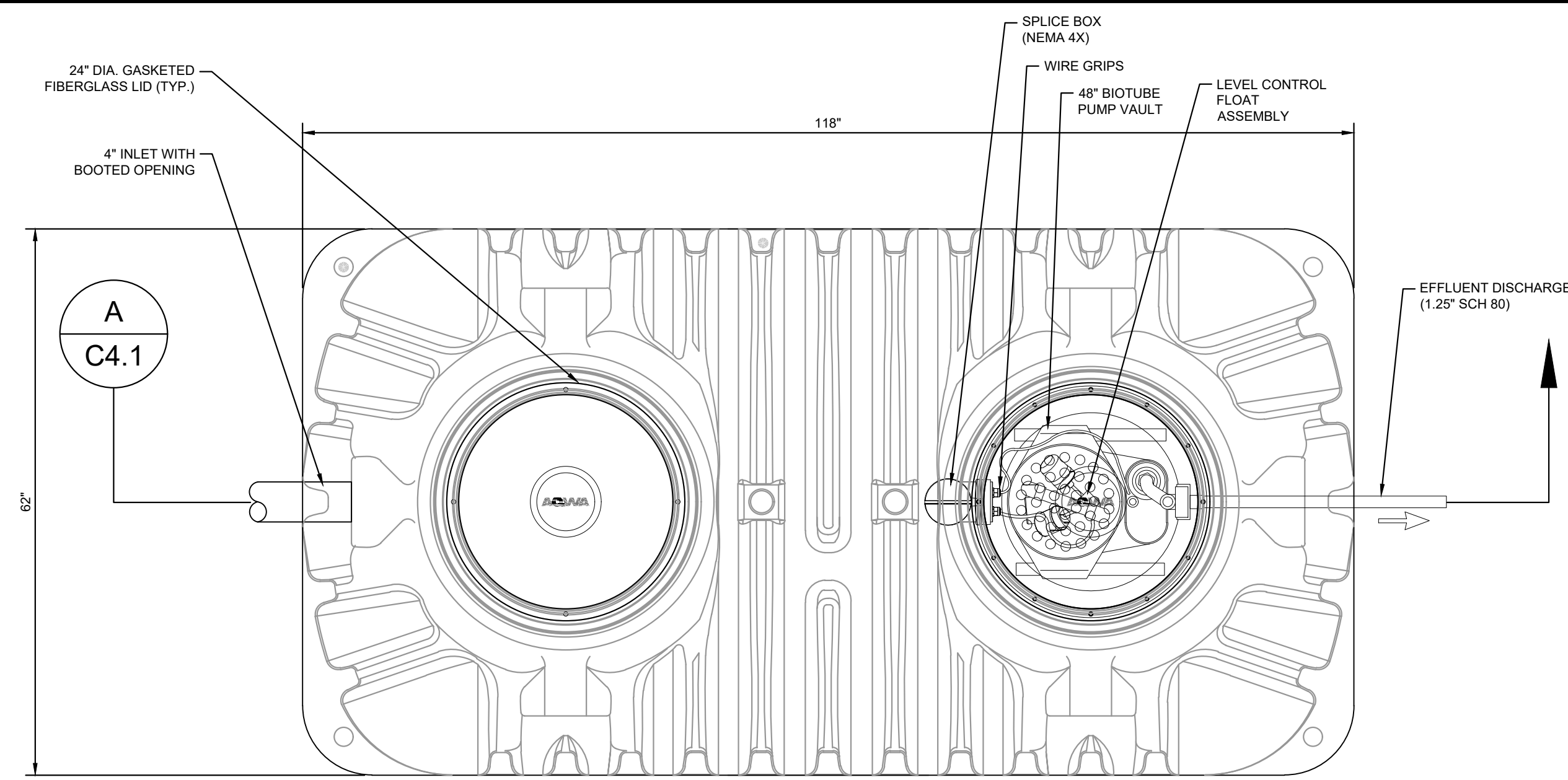
**UTILITY PLAN**

**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE, NC

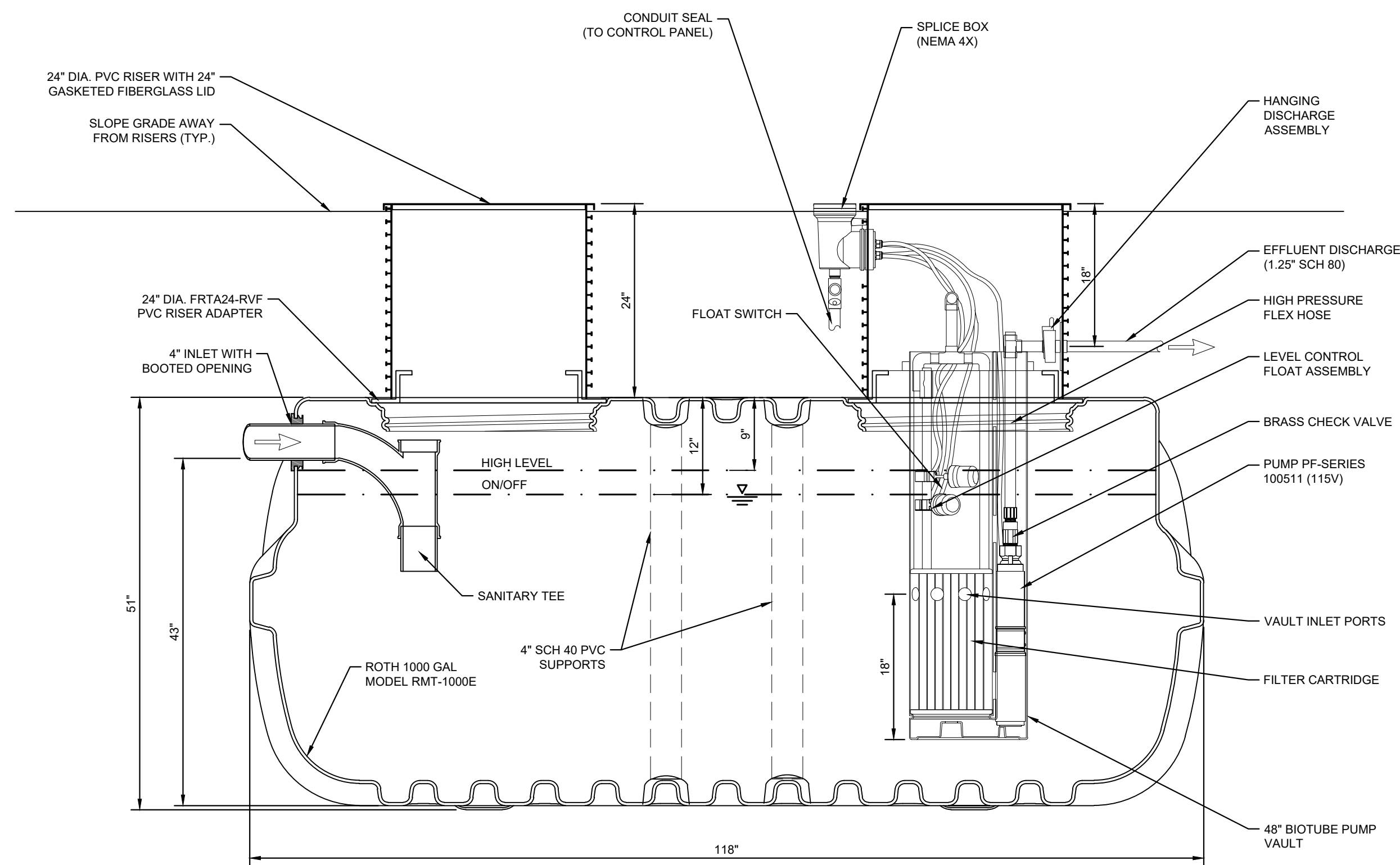
SHEET NUMBER  
**C4.0**



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**1** MECHANICAL PLAN VIEW SCALE: NTS

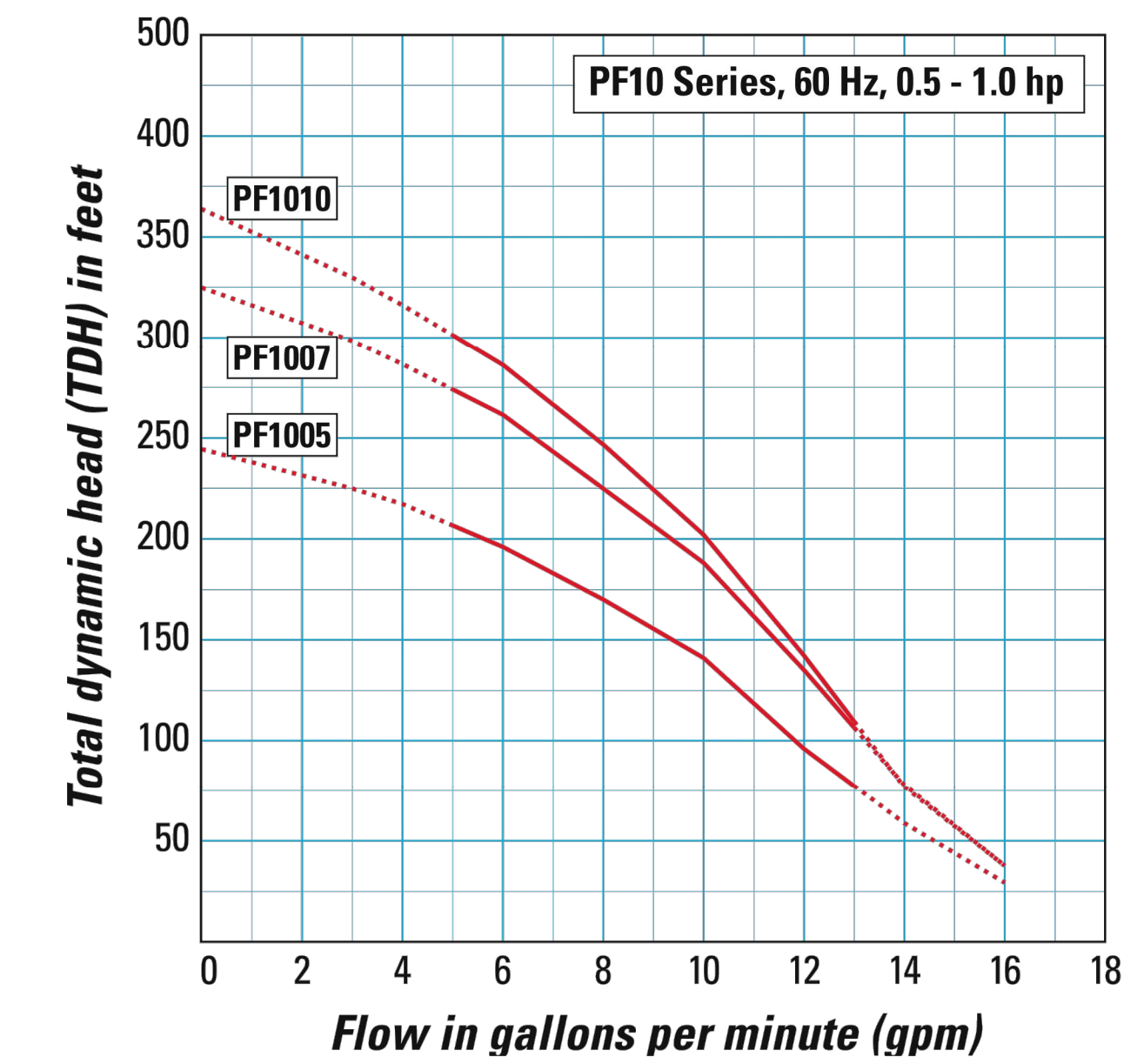


**A** MECHANICAL SECTION VIEW SCALE: NTS

NOTES:  
 1) PROPOSED STEP SYSTEM SHALL BE EQUIPPED WITH AN "ORENCO S1" CONTROL PANEL OR APPROVED EQUAL. CONTACT MICHAEL CLAYTON (MCLAYTON@AQWA.NET, 252-292-1667) FOR STEP SYSTEM SPECIFICATIONS.

SEPTIC TANK GENERAL INFORMATION	
AVERAGE DAILY FLOW	306 GPD
TANK	1000 GAL ROTH TANK
TANK DIMENSIONS	118"x62"x52"
DISCHARGE PIPING	1.25"Ø SCH 80 PVC
CONTROL PANEL	ORENCO S1
HORSEPOWER	1 HP (NON-OVERLOADING OVER ENTIRE PUMP CURVE)
VOLTAGE/PHASE/CYCLES	240 V / 1 PHASE / 60 HZ
PUMP	ORENCO PF100511
PRIMARY LEVEL SENSING METHOD	FLOATS (3)
FLOAT SETTINGS	9", 12" (FROM TOP OF TANK)
FLOAT FUNCTIONS	HIGH LEVEL, ON/OFF

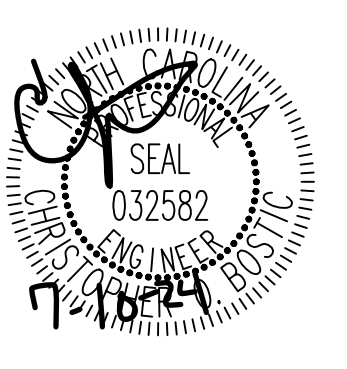
**Pump Curves**



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No.	REVISIONS	DATE	BY
1	TOWN COMMENTS	01/02/2024	JAA
2	TOWN COMMENTS	03/01/2024	JAA
3	TOWN COMMENTS	07/08/2024	JAA

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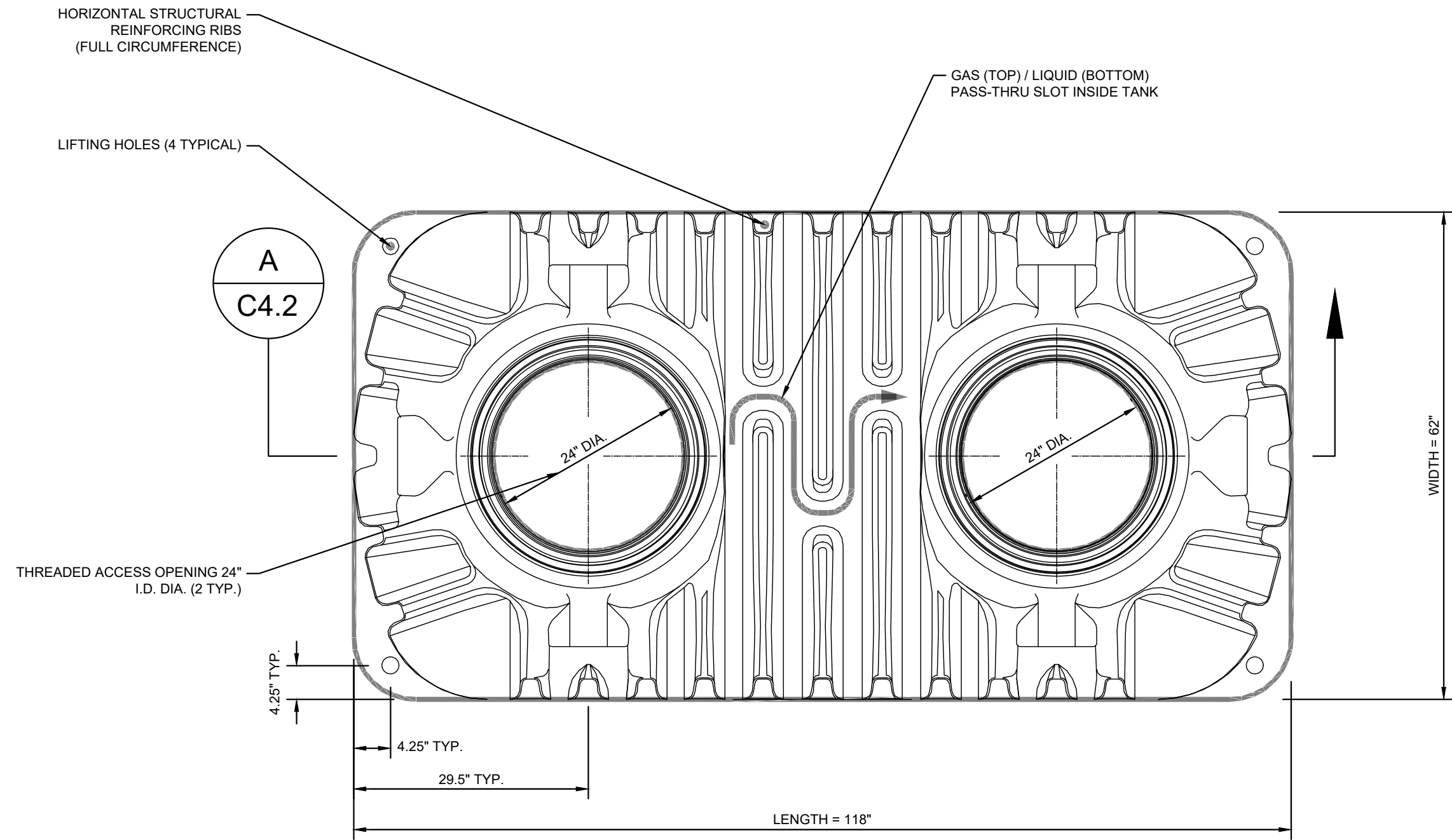
KHA PROJECT	016485000
DATE	10/31/2023
SCALE	AS SHOWN
DESIGNED BY	JAA
DRAWN BY	JAA
CHECKED BY	COB

**MECHANICAL PLAN**

**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE NC

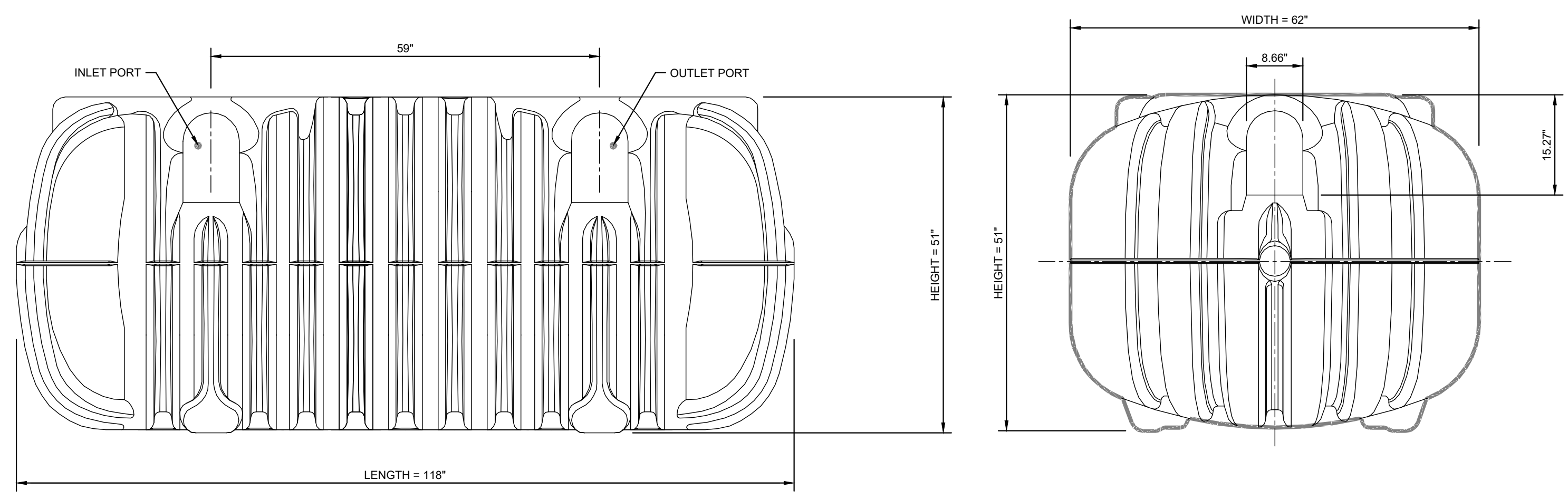


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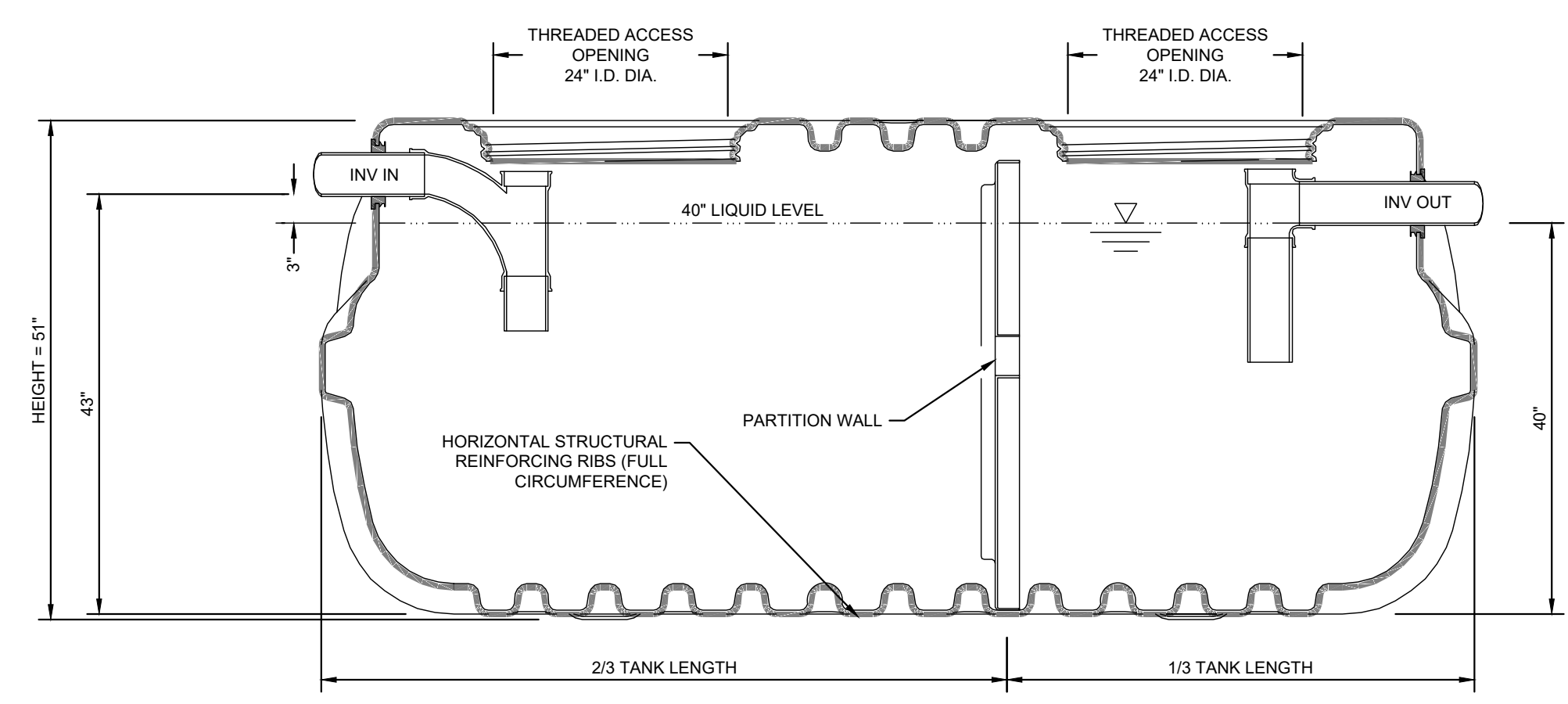
**1** SEPTIC TANK PLAN VIEW

SCALE: NTS



**2** SEPTIC TANK ELEVATION VIEW

SCALE: NTS



**A** SEPTIC TANK SECTION VIEW

SCALE: NTS

**SURVEY NOTE:**  
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	7	6	5	4
	3	2	1	No.
	KHA PROJECT 016485000 DATE 10/31/2023 SCALE AS SHOWN DESIGNED BY JAA DRAWN BY JAA CHECKED BY COB			
<b>SEPTIC TANK DETAILS</b>				
SCOOTER'S ROLESVILLE PREPARED FOR S&S JAVA ENTERPRISES ROLESVILLE NC				
SHEET NUMBER <b>C4.2</b>				

**SELF MONITORING AND INSPECTION NOTIFICATION**

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS BECAME EFFECTIVE OCTOBER 1, 2010. TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, A COMBINED FORM IS NOW AVAILABLE. THE NEW FORM WAS DEVELOPED TO SATISFY THE REQUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL ACT AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCDENR 010000, BEGINNING AUGUST 1, 2013. THE DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES IS RESPONSIBLE FOR ADMINISTERING BOTH THE SPCA AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCS 010000. THE COMBINED FORM SHOULD MAKE IT EASIER TO COMPLY WITH SELF-INSPECTION REQUIREMENTS. THE COMBINED SELF-MONITORING FORM IS AVAILABLE AS A PDF AND WORD DOCUMENT FROM THE LAND QUALITY WEB SITE, [HTTP://PORTAL.NCDENR.ORG/WEB/VERECISION](http://portal.ncdenr.org/web/verecision) IF YOU HAVE QUESTIONS, PLEASE CONTACT THE LAND QUALITY SECTION AT NCDENR REGIONAL OFFICE.

**MAINTENANCE NOTES:**

DURING THE DEVELOPMENT OF A SITE, THE DEVELOPER SHALL INSTALL AND MAINTAIN ALL TEMPORARY AND PERMANENT STORMWATER CONTROL MEASURES AS REQUIRED BY THE APPROVED PLAN OR ANY PROVISION OF THIS ARTICLE. THE ACT OR ANY ORDER ADOPTED PURSUANT TO THIS ARTICLE OR THE ACT AFTER SITE DEVELOPMENT, THE DEVELOPER SHALL INSTALL AND/OR MAINTAIN ALL NECESSARY PERMANENT STORMWATER CONTROL MEASURES SPECIFIED IN THE APPROVED PLAN, EXCEPT THOSE MEASURES INSTALLED WITHIN A ROAD OR STREET RIGHT-OF-WAY OR EASEMENT ACCEPTED FOR MAINTENANCE BY A GOVERNMENTAL AGENCY. CONVEYANCE OF THE PROPERTY SHALL NOT TERMINATE THE ORIGINAL DEVELOPER'S OBLIGATIONS UNDER THIS ARTICLE UNTIL SUCH TIME AS A REPLACEMENT PERMIT IS APPROVED BY THE COUNTY ENGINEER, OR DESIGNEE. THE ORIGINAL DEVELOPER SHALL INCLUDE IN THE DEED CONVEYING THE PROPERTY NOTICE OF THE EXISTENCE OF THE STORMWATER CONTROL MEASURES AND THE PURCHASER'S OBLIGATIONS TO MAINTAIN AND INSPECT THEM AND TO OBTAIN A PERMIT AND OTHERWISE COMPLY WITH THE TERMS OF THIS ARTICLE. REFER TO THE EROSION CONTROL DETAILS SHEET FOR ADDITIONAL MAINTENANCE NOTES.

- CONSTRUCTION ENTRANCE:**  
INSPECT CONSTRUCTION ROADS AND PARKING AREAS PERIODICALLY FOR CONDITION OF SURFACE. TOP DRESS WITH NEW GRAVEL AS NEEDED. CHECK ROAD DITCHES AND OTHER SEEDED AREAS FOR EROSION AND SEDIMENTATION AFTER RUNOFF-PRODUCING RAINS. MAINTAIN ALL VEGETATION IN A HEALTHY, VIGOROUS CONDITION. SEDIMENT PRODUCING AREAS SHOULD BE TREATED IMMEDIATELY.
- SILT FENCE:**  
INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. 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.
- SILT FENCE GRAVEL OUTLET:**  
INSPECT SEDIMENT FENCE GRAVEL OUTLETS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. ANY RIP RAP DISPLACED MUST BE REPLACED IMMEDIATELY.
- BLOCK AND GRAVEL INLET PROTECTION:**  
INSPECT THE BARRIER OF AFTER EACH RAIN AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

N/F  
ANDELIA P. WATKINS  
D.B. 5265, PG. 843  
B.M. 1979, PG. 178  
PIN #1759806216  
ZONING: RL  
USE: SINGLE-FAMILY

N/F  
LEN PROPERTIES, LLC  
D.B. 16927, PG. 2699  
B.M. 2007, PG. 143  
PIN #1758896918  
ZONING: GC  
USE: VACANT

N/F  
JEAN M CO-TRUSTEES FOSTER,  
KEVIN CO-TRUSTEES MAYERS  
D.B. 15550, PG. 841  
B.M. 2007, PG. 143  
PIN #1759807165  
ZONING: GC  
USE: DRIVE-THRU

**NPDES GROUND COVER REQUIREMENTS**

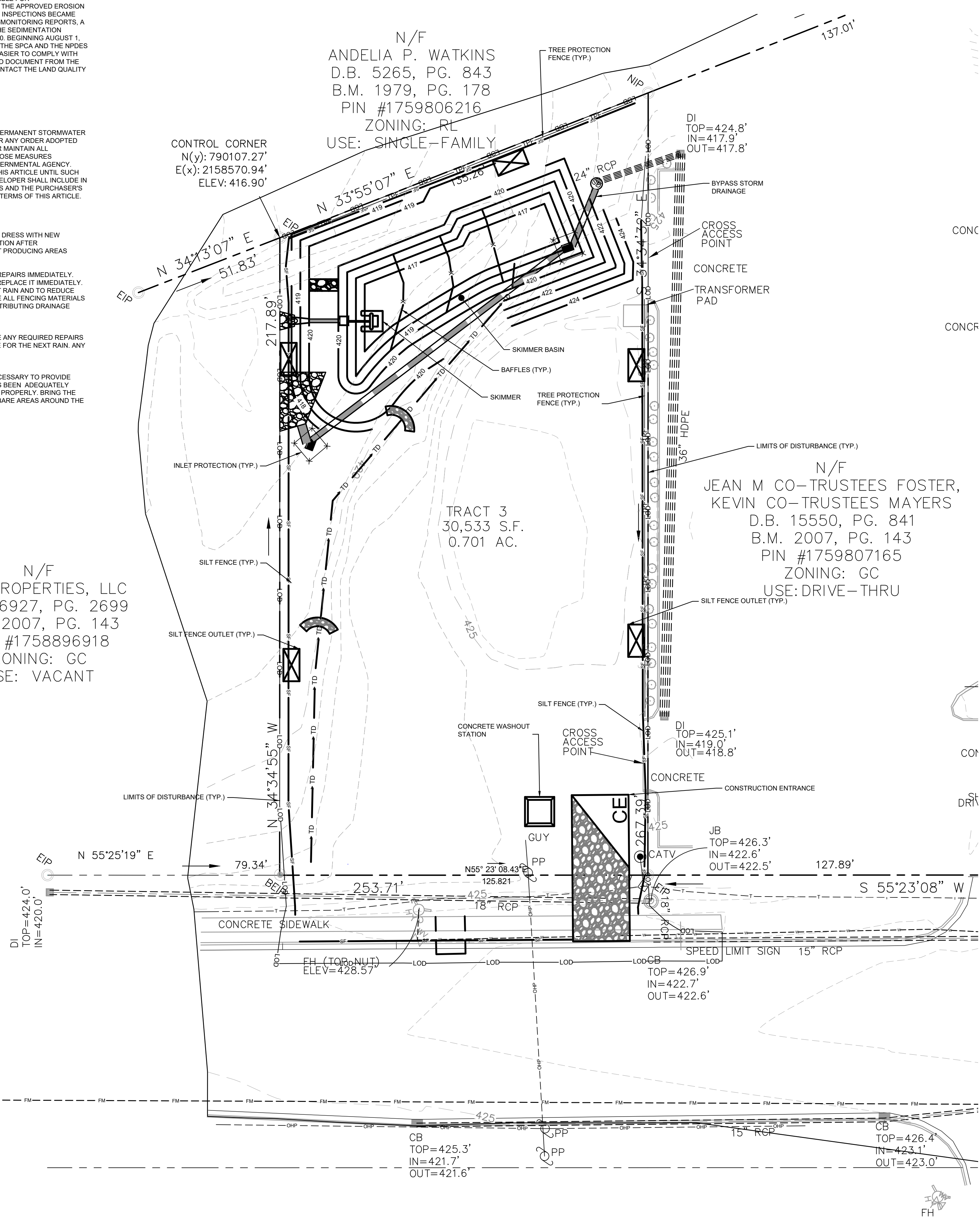
SITE AREA DESCRIPTION	STABILIZATION	TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE EXCEPT FOR PERIMETERS AND HOW ZONES.

SILT FENCES SHOWN ON PLANS ARE FOR REPRESENTATIVE PURPOSES. CONSTRUCT DIRECTLY ALONG THE CLEARING LIMITS WHERE APPLICABLE.

SILT FENCE OUTLETS ARE TO BE PROVIDED ALONG ALL LOW POINTS OF SILT FENCE AND AREAS WHERE RUNOFF MAY CONCENTRATE CAUSING DAMAGE TO SILT FENCE. CONTRACTOR TO INSTALL OUTLETS AS NECESSARY TO ENSURE SILT FENCE IS FULLY FUNCTIONAL THROUGHOUT THE DURATION OF CONSTRUCTION.

REFER TO GENERAL NOTES SHEET C0.1 FOR EROSION CONTROL, SEEDBED PREPARATION, AND SEEDING SCHEDULE NOTES FOR BOTH PHASES.

DISTURBED AREA: 0.70 AC



Skimmer Basin 1	
DESIGN INFORMATION	
TOTAL DRAINAGE AREA	0.70 AC
TOTAL DISTURBED AREA	0.70 AC
Tc	5 MIN
RATIONAL C	0.35
DESIGN STORM INTENSITY	8.06 IN/HR
PEAK FLOW	1.97 CFS
DESIGN CALCULATIONS	
SURFACE AREA REQUIRED	642 SF
SURFACE AREA PROVIDED	2,277 SF
VOLUME REQUIRED	1,260 CF
DEWATERING TIME	3.48 DAYS
VOLUME PROVIDED	3,285 CF
EMBANKMENT WIDTH	10 FT
EMERGENCY SPILLWAY LENGTH	4.0 FT
EMERGENCY SPILLWAY CAPACITY	2.1 CFS
SKIMMER SIZE	2.00 IN
SKIMMER ORIFICE DIAMETER	1.00 IN
SKIMMER OUTLET ELEVATION	417.00 FT
BASIN GEOMETRY	
BOTTOM OF BASIN	AREA (SF) ELEV (FT)
	1008 417.0
PRIMARY SPILLWAY ELEVATION	2277 419.0
TOP OF DAM	3412 420.5

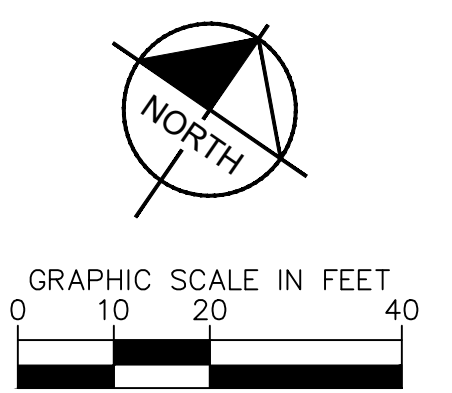
**EROSION CONTROL LEGEND**

- PROPERTY LINE
- - - - - TCE TEMPORARY CONSTRUCTION EASEMENT
- - - - - CL CLEARING LIMITS
- - - - - SF SILT FENCE
- - - - - TPF TREE PROTECTION FENCE
- - - - - SF/TPF COMBINATION TREE PROTECTION/SILT FENCE
- - - - - TD TEMPORARY DIVERSION DITCH
- - - - - TD(CW) CLEAN WATER DIVERSION DITCH
- - - - - X SEDIMENT BASIN POROUS BAFFLES
- - - - - PUMP DISCHARGE HOSE
- - - - - 805 EXISTING CONTOUR
- - - - - 805 PROPOSED CONTOUR
- - - - - DRAINAGE AREA BOUNDARY
- - - - - CE CONSTRUCTION ENTRANCE
- - - - - SILT FENCE OUTLET
- - - - - CONCRETE WASHOUT STATION
- - - - - ROCK CHECK DAM
- - - - - INLET PROTECTION
- - - - - ROCK PIPE INLET PROTECTION
- - - - - SKIMMER
- - - - - TEMPORARY SLOPE DRAIN
- - - - - RIP-RAP OUTLET PROTECTION
- - - - - SILT BAG
- - - - - DESIGNATED AREAS TO BE STABILIZED WITHIN 7 DAYS
- - - - - TEMPORARY EROSION CONTROL MATTING

- PHASE 1 CONSTRUCTION SEQUENCE:**
- THE FOLLOWING PHASE 1 CONSTRUCTION SEQUENCE IS FURNISHED AS A GENERAL GUIDE FOR PREPARATION OF A SEQUENCE OF CONSTRUCTION EVENTS.
  - SCHEDULE AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH WAKE COUNTY ENVIRONMENTAL CONSULTANT. OBTAIN A LAND-DISTURBING PERMIT.
  - INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
  - CALL ENVIRONMENTAL CONSULTANT FOR AN ON-SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT TO OBTAIN CERTIFICATE OF COMPLIANCE.
  - ONCE CERTIFICATE OF COMPLIANCE HAS BEEN OBTAINED, APPLY FOR NCDENR eNOI ON NCDENR WEBSITE.
  - UPON APPROVAL, CLEARING AND DEMOLITION MAY BEGIN. MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY. EROSION CONTROL MEASURES SHALL BE RESTORED TO ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO 50% OF DESIGN DEPTH.
  - INSTALL BYPASS STORM DRAINAGE AND RIPRAP OUTLET AS SHOWN.
  - INSTALL SKIMMER BASIN AND TEMPORARY DIVERSION DITCH. SEED, MAT, MULCH, AND ANCHOR DIVERSION DITCH AND BASIN IMMEDIATELY AFTER CONSTRUCTION AS APPROPRIATE.
  - INSPECT AND REPAIR EROSION CONTROL MEASURES AFTER EVERY RAINFALL EVENT OF 1/2" OR GREATER OR EVERY SEVEN (7) CALENDAR DAYS.
  - SKIMMER BASIN SHALL BE CLEANED WHEN ONE-HALF FULL.
  - FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING EACH PHASE OF EROSION CONTROL MEASURES. SEED AND MULCH DENUDED AREA WITHIN 15 CALENDAR DAYS AFTER ANY PHASE OF GRADING. MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
  - ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPARTMENT OF AGRICULTURE, AND WAKE COUNTY EROSION CONTROL ORDINANCE.
  - REFER TO SHEET C0.1 - GENERAL NOTES FOR GENERAL EROSION CONTROL NOTES AND MAINTENANCE.

LIMITS OF DISTURBANCE: 0.70 AC

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NO.	REVISIONS	DATE	BY
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421 FAYETTEVILLE STREET, SUITE 800, RALEIGH, NC 27601



KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY	COB
016485000	10/31/2023	JAA	JAA	JAA	JAA	COB	

**EROSION CONTROL PLAN - PHASE 1**

**SCOOTER'S ROLESVILLE**  
PREPARED FOR  
**S&S JAVA ENTERPRISES**  
NC



Plotted By: Alexander, Jamal Sheet: S&S SCOOTER'S ROLESVILLE Layout: CS.1 EROSION CONTROL PLAN - PHASE 2 July 2, 2024 11:20:18am K:\RAL\_LDEV\016485000-Scooter's Rolesville\Planning\PI16\_CAD Files\PlanSheets\CS.1 EROSION CONTROL PLAN - PHASE 2.dwg  
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DURING THE DEVELOPMENT OF A SITE, THE DEVELOPER SHALL INSTALL AND MAINTAIN ALL TEMPORARY AND PERMANENT STORMWATER CONTROL MEASURES AS REQUIRED BY THE APPROVED PLAN OR ANY PROVISION OF THIS ARTICLE. THE ACT OR ANY ORDER ADOPTED PURSUANT TO THIS ARTICLE OR THE ACT AFTER SITE DEVELOPMENT, THE DEVELOPER SHALL INSTALL AND/OR MAINTAIN ALL NECESSARY PERMANENT STORMWATER CONTROL MEASURES SPECIFIED IN THE APPROVED PLAN, EXCEPT THOSE MEASURES INSTALLED WITHIN A ROAD OR STREET RIGHT-OF-WAY OR EASEMENT ACCEPTED FOR MAINTENANCE BY A GOVERNMENTAL AGENCY. CONVEYANCE OF THE PROPERTY SHALL NOT TERMINATE THE ORIGINAL DEVELOPER'S OBLIGATIONS UNDER THIS ARTICLE UNTIL SUCH TIME AS A REPLACEMENT PERMIT IS APPROVED BY THE COUNTY ENGINEER, OR DESIGNEE. THE ORIGINAL DEVELOPER SHALL INCLUDE IN THE DEED CONVEYING THE PROPERTY NOTICE OF THE EXISTENCE OF THE STORMWATER CONTROL MEASURES AND THE PURCHASER'S OBLIGATIONS TO MAINTAIN AND INSPECT THEM AND TO OBTAIN A PERMIT AND OTHERWISE COMPLY WITH THE TERMS OF THIS ARTICLE. REFER TO THE EROSION CONTROL DETAILS SHEET FOR ADDITIONAL MAINTENANCE NOTES. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- CONSTRUCTION ENTRANCE:**  
INSPECT CONSTRUCTION ROADS AND PARKING AREAS PERIODICALLY FOR CONDITION OF SURFACE. TOP DRESS WITH NEW GRAVEL AS NEEDED. CHECK ROAD DITCHES AND OTHER SEEDED AREAS FOR EROSION AND SEDIMENTATION AFTER RUNOFF-PRODUCING RAINS. MAINTAIN ALL VEGETATION IN A HEALTHY, VIGOROUS CONDITION. SEDIMENT PRODUCING AREAS SHOULD BE TREATED IMMEDIATELY.
- SILT FENCE:**  
INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. 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.
- SILT FENCE GRAVEL OUTLET:**  
INSPECT SEDIMENT FENCE GRAVEL OUTLETS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. ANY RIP RAP DISPLACED MUST BE REPLACED IMMEDIATELY.
- BLOCK AND GRAVEL INLET PROTECTION:**  
INSPECT THE BARRIER OF AFTER EACH RAIN AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

N/F  
 LEN PROPERTIES, LLC  
 D.B. 16927, PG. 2699  
 B.M. 2007, PG. 143  
 PIN #1758896918  
 ZONING: GC  
 USE: VACANT

N/F  
 ANDELIA P. WATKINS  
 D.B. 5265, PG. 843  
 B.M. 1979, PG. 178  
 PIN #1759806216  
 ZONING: RL  
 USE: SINGLE-FAMILY

N/F  
 JEAN M CO-TRUSTEES FOSTER,  
 KEVIN CO-TRUSTEES MAYERS  
 D.B. 15550, PG. 841  
 B.M. 2007, PG. 143  
 PIN #1759807165  
 ZONING: GC  
 USE: DRIVE-THRU

**NPDES GROUND COVER REQUIREMENTS**

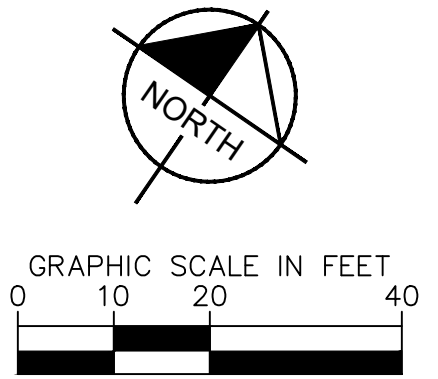
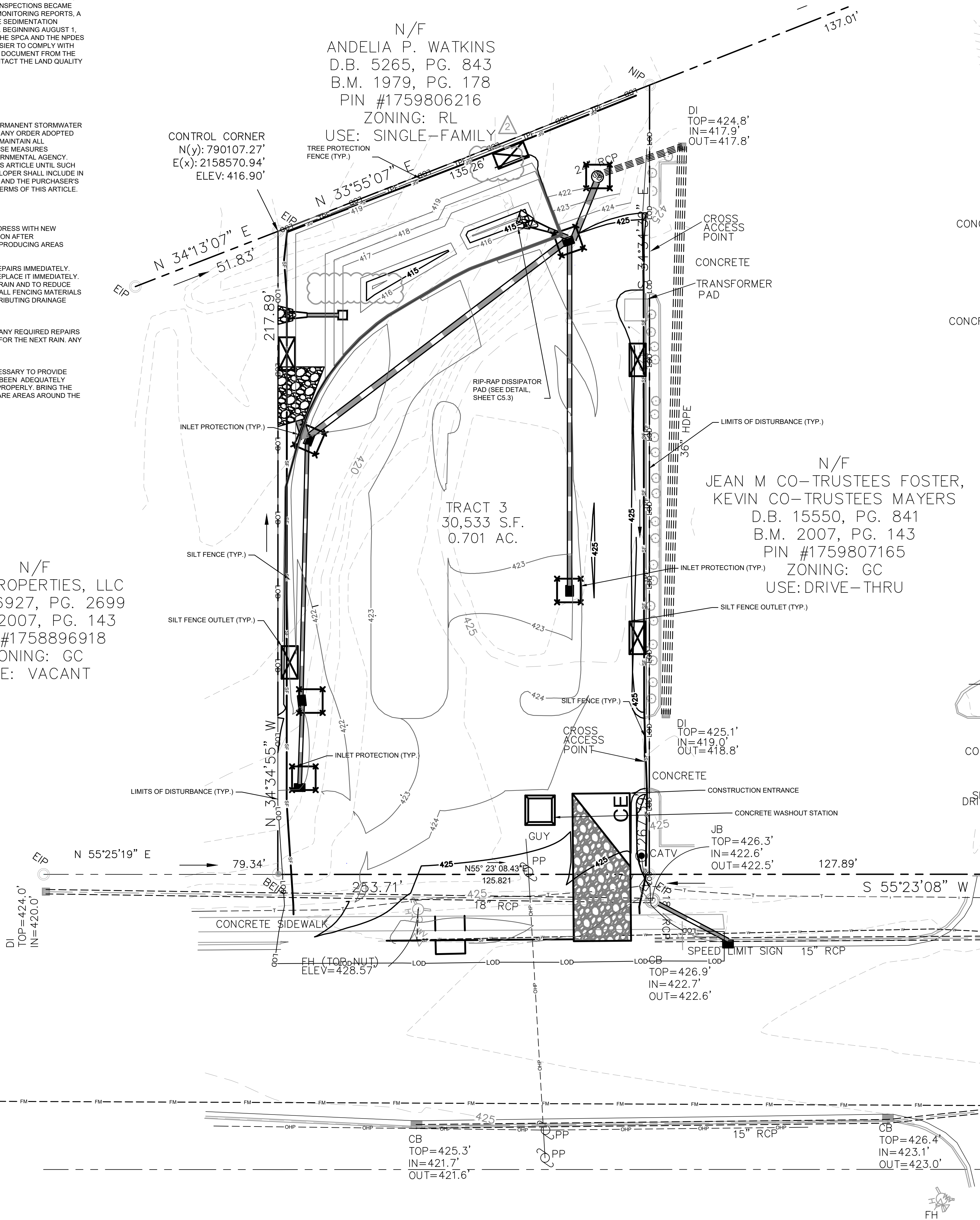
SITE AREA DESCRIPTION	STABILIZATION	TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE EXCEPT FOR PERIMETERS AND HOW ZONES.

SILT FENCES SHOWN ON PLANS ARE FOR REPRESENTATIVE PURPOSES. CONSTRUCT DIRECTLY ALONG THE CLEARING LIMITS WHERE APPLICABLE.

SILT FENCE OUTLETS ARE TO BE PROVIDED ALONG ALL LOW POINTS OF SILT FENCE AND AREAS WHERE RUNOFF MAY CONCENTRATE CAUSING DAMAGE TO SILT FENCE. CONTRACTOR TO INSTALL OUTLETS AS NECESSARY TO ENSURE SILT FENCE IS FULLY FUNCTIONAL THROUGHOUT THE DURATION OF CONSTRUCTION.

REFER TO GENERAL NOTES SHEET C0.1 FOR EROSION CONTROL, SEEDBED PREPARATION, AND SEEDING SCHEDULE NOTES FOR BOTH PHASES.

**DISTURBED AREA: 0.70 AC**



**EROSION CONTROL LEGEND**

---	PROPERTY LINE
---	TEMPORARY CONSTRUCTION EASEMENT
---	CLEARING LIMITS
---	SILT FENCE
---	TREE PROTECTION FENCE
---	COMBINATION TREE PROTECTION/SILT FENCE
→ TD	TEMPORARY DIVERSION DITCH
→ TD(CW)	CLEAN WATER DIVERSION DITCH
→ X	SEDIMENT BASIN POROUS Baffles
→	PUMP DISCHARGE HOSE
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	DRAINAGE AREA BOUNDARY
CE	CONSTRUCTION ENTRANCE
---	SILT FENCE OUTLET
---	CONCRETE WASHOUT STATION
---	ROCK CHECK DAM
---	INLET PROTECTION
---	ROCK PIPE INLET PROTECTION
---	SKIMMER
---	TEMPORARY SLOPE DRAIN
---	RIP-RAP OUTLET PROTECTION
---	SILT BAG
---	DESIGNATED AREAS TO BE STABILIZED WITHIN 7 DAYS
---	TEMPORARY EROSION CONTROL MATTING

**PHASE 2 CONSTRUCTION SEQUENCE:**

- THE FOLLOWING PHASE 2 CONSTRUCTION SEQUENCE IS FURNISHED AS A GENERAL GUIDE FOR PREPARATION OF A SEQUENCE OF CONSTRUCTION EVENTS.
- BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE. EROSION CONTROL MEASURES SHALL BE RESTORED TO ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO 50% OF DESIGN DEPTH. WHEN SEDIMENT BASIN DEWATERING IS REQUIRED, DEWATER USING PUMP AND FILTER BAG (SEE "STANDARD FILTER BAG FOR DEWATERING ACTIVITIES" DETAIL ON SHEET 5.4) PLACE PUMP ON BERM AND ATTACH FILTER BAG PER DETAIL CONSTRUCTION SPECIFICATIONS.
- INSTALL STORM DRAINAGE AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS, OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENuded AREAS PER GROUND STABILIZATION TIME FRAMES.
- PROVIDE GROUND COVER ON SLOPES GREATER THAN 3:1 WITHIN 7 DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PROVIDE GROUND COVER TO ALL OTHER AREAS WITHIN 14 DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING OR INACTIVITY.
- INSPECT AND REPAIR EROSION CONTROL MEASURES AFTER EVERY RAINFALL EVENT OF 1/2" OR GREATER OR EVERY SEVEN (7) CALENDAR DAYS.
- FOR ALL PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING EACH PHASE OF EROSION CONTROL MEASURES. SEED AND MULCH DENuded AREA WITHIN 15 CALENDAR DAYS AFTER ANY PHASE OF GRADING. MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPARTMENT OF AGRICULTURE, AND WAKE COUNTY EROSION CONTROL ORDINANCE.
- REFER TO SHEET C0.1 - GENERAL NOTES FOR GENERAL EROSION CONTROL NOTES AND MAINTENANCE.

LIMITS OF DISTURBANCE: 0.70 AC

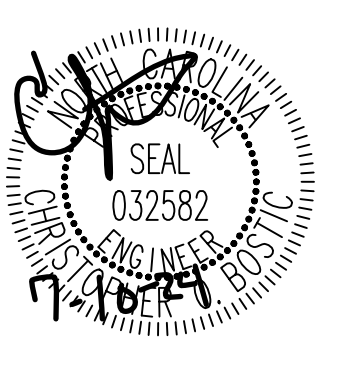
**SURVEY NOTE:**  
 EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 02/23/2023 BY CMP PROFESSIONAL LAND SURVEYORS, 333 S. WHITE STREET, WAKE FOREST, NC 27588. PHONE: (919) 556-3148. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.



Know what's below.  
 Call before you dig.

NO.	REVISIONS	DATE	BY
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**Kimley-Horn**  
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 #F-0102 WWW.KIMLEY-HORN.COM PHONE: 919-677-2000 FAX: 919-677-2050  
 421 FAYETTEVILLE STREET, SUITE 800, RALEIGH, NC 27601



KHA PROJECT	016485000
DATE	10/31/2023
SCALE	AS SHOWN
DESIGNED BY	JAA
DRAWN BY	JAA
CHECKED BY	COB

**EROSION CONTROL PLAN - PHASE 2**

**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 NC



**SELF MONITORING AND INSPECTION NOTIFICATION**

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS BECAME EFFECTIVE OCTOBER 1, 2010. TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, A COMBINED FORM IS NOW AVAILABLE. THE NEW FORM WAS DEVELOPED TO SATISFY THE REQUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL ACT AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCGS 01000, BEGINNING AUGUST 1, 2013. THE DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES IS RESPONSIBLE FOR ADMINISTERING BOTH THE SPCA AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCGS 010000. THE COMBINED FORM SHOULD MAKE IT EASIER TO COMPLY WITH SELF-INSPECTION REQUIREMENTS. THE COMBINED SELF-MONITORING FORM IS AVAILABLE AS A PDF AND WORD DOCUMENT FROM THE LAND QUALITY WEB SITE, [HTTP://PORTAL.NCDENR.ORG/WEB/EROCSIGN](http://portal.ncdenr.org/web/erocsign) IF YOU HAVE QUESTIONS, PLEASE CONTACT THE LAND QUALITY SECTION AT NCDEQ REGIONAL OFFICE.

**MAINTENANCE NOTES:**

DURING THE DEVELOPMENT OF A SITE, THE DEVELOPER SHALL INSTALL AND MAINTAIN ALL TEMPORARY AND PERMANENT STORMWATER CONTROL MEASURES AS REQUIRED BY THE APPROVED PLAN OR ANY PROVISION OF THIS ARTICLE. THE ACT OR ANY ORDER ADOPTED PURSUANT TO THIS ARTICLE OR THE ACT AFTER SITE DEVELOPMENT, THE DEVELOPER SHALL INSTALL AND/OR MAINTAIN ALL NECESSARY PERMANENT STORMWATER CONTROL MEASURES SPECIFIED IN THE APPROVED PLAN, EXCEPT THOSE MEASURES INSTALLED WITHIN A ROAD OR STREET RIGHT-OF-WAY OR EASEMENT ACCEPTED FOR MAINTENANCE BY A GOVERNMENTAL AGENCY. CONVEYANCE OF THE PROPERTY SHALL NOT TERMINATE THE ORIGINAL DEVELOPER'S OBLIGATIONS UNDER THIS ARTICLE UNTIL SUCH TIME AS A REPLACEMENT PERMIT IS APPROVED BY THE COUNTY ENGINEER, OR DESIGNEE. THE ORIGINAL DEVELOPER SHALL INCLUDE IN THE DEED CONVEYING THE PROPERTY NOTICE OF THE EXISTENCE OF THE STORMWATER CONTROL MEASURES AND THE PURCHASER'S OBLIGATIONS TO MAINTAIN AND INSPECT THEM AND TO OBTAIN A PERMIT AND OTHERWISE COMPLY WITH THE TERMS OF THIS ARTICLE. REFER TO THE EROSION CONTROL DETAILS SHEET FOR ADDITIONAL MAINTENANCE NOTES. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- CONSTRUCTION ENTRANCE:**  
INSPECT CONSTRUCTION ROADS AND PARKING AREAS PERIODICALLY FOR CONDITION OF SURFACE. TOP DRESS WITH NEW GRAVEL AS NEEDED. CHECK ROAD DITCHES AND OTHER SEEDED AREAS FOR EROSION AND SEDIMENTATION AFTER RUNOFF-PRODUCING RAINS. MAINTAIN ALL VEGETATION IN A HEALTHY, VIGOROUS CONDITION. SEDIMENT PRODUCING AREAS SHOULD BE TREATED IMMEDIATELY.
- SILT FENCE:**  
INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. 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.
- SILT FENCE GRAVEL OUTLET:**  
INSPECT SEDIMENT FENCE GRAVEL OUTLETS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. ANY RIP RAP DISPLACED MUST BE REPLACED IMMEDIATELY.
- BLOCK AND GRAVEL INLET PROTECTION:**  
INSPECT THE BARRIER OF AFTER EACH RAIN AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

**NPDES GROUND COVER REQUIREMENTS**

SITE AREA DESCRIPTION	STABILIZATION	TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE EXCEPT FOR PERIMETERS AND HOW ZONES.

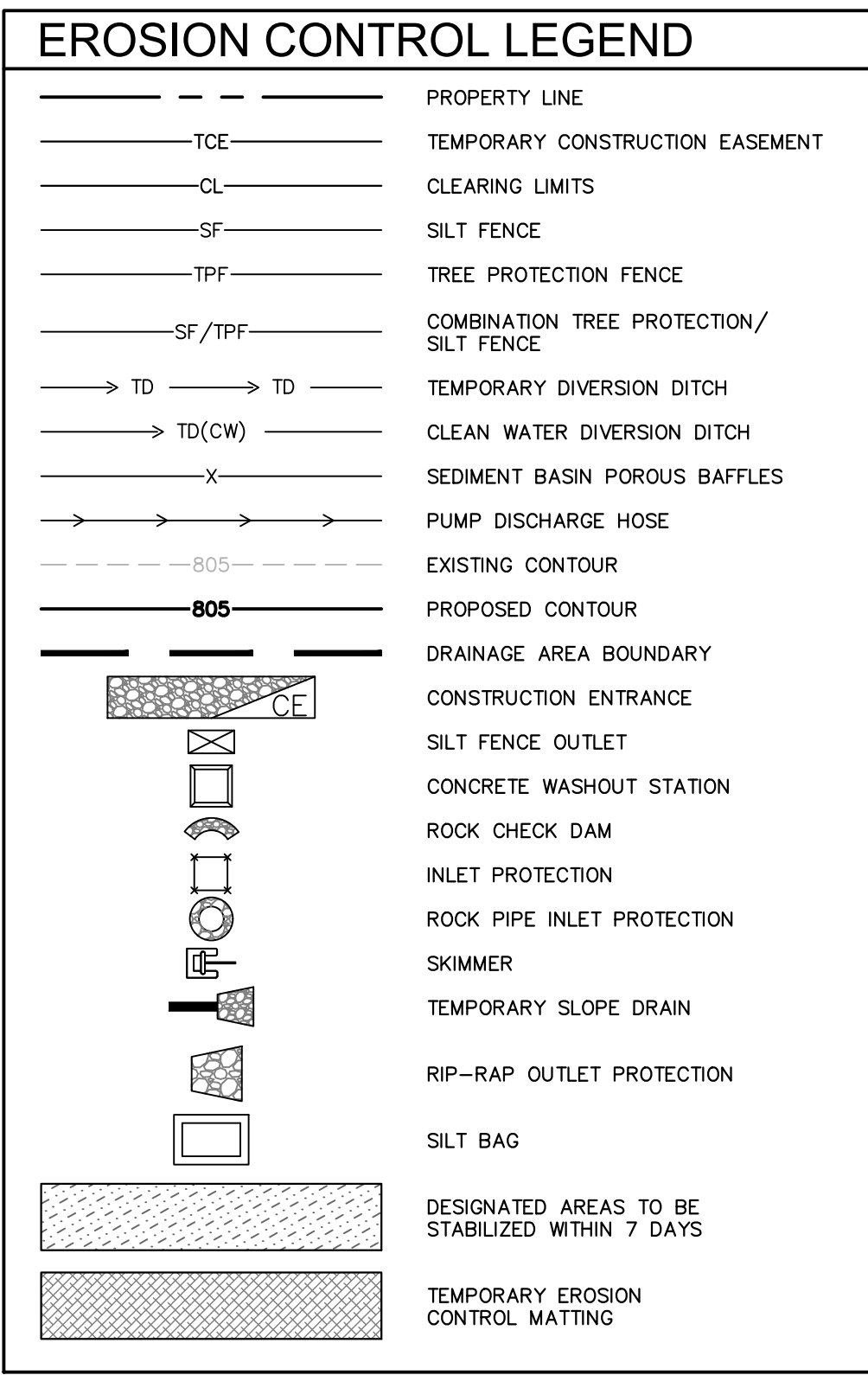
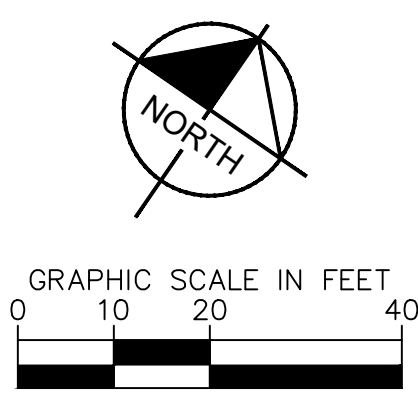
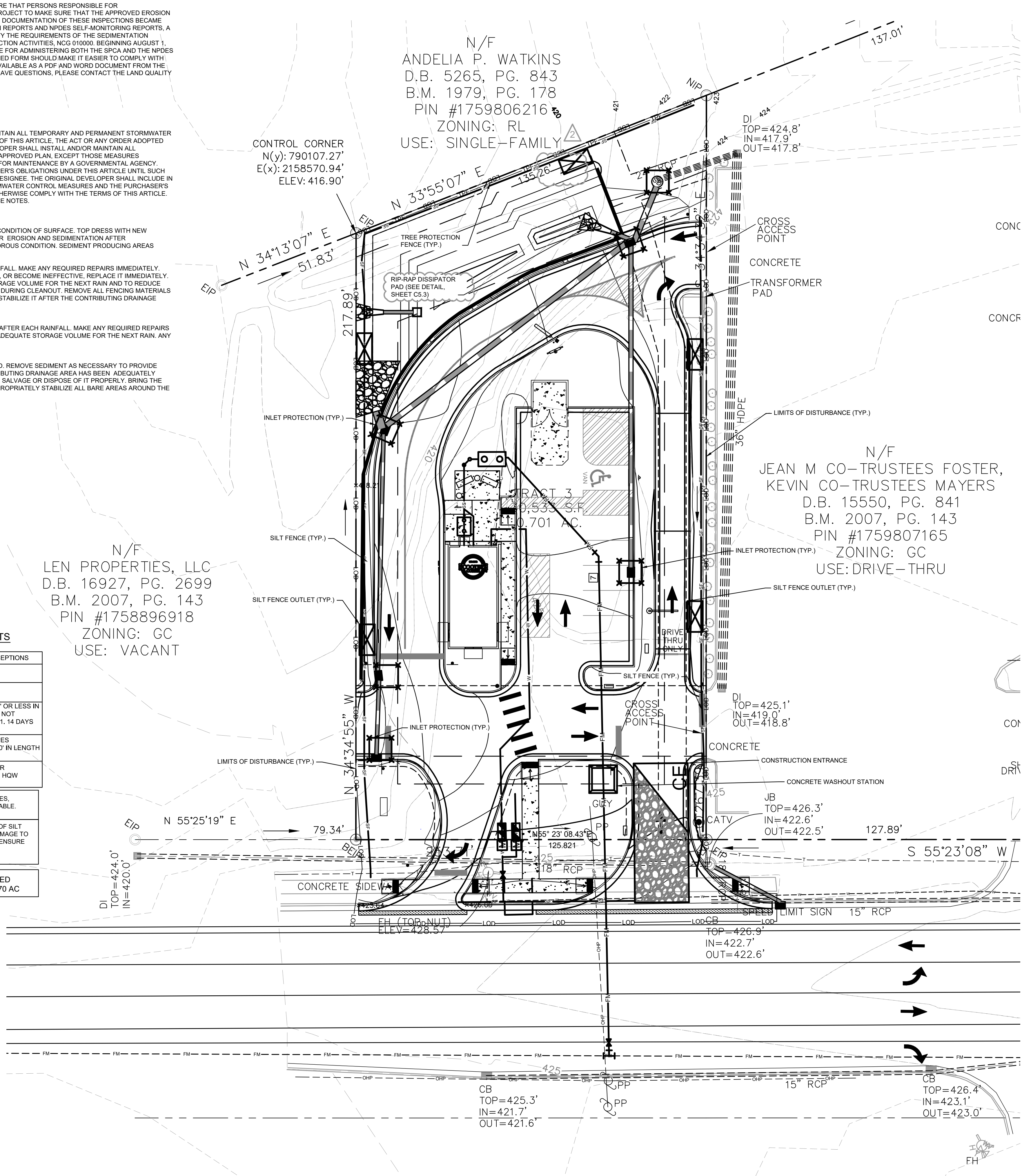
SILT FENCES SHOWN ON PLANS ARE FOR REPRESENTATIVE PURPOSES. CONSTRUCT DIRECTLY ALONG THE CLEARING LIMITS WHERE APPLICABLE.

SILT FENCE OUTLETS ARE TO BE PROVIDED ALONG ALL LOW POINTS OF SILT FENCE AND AREAS WHERE RUNOFF MAY CONCENTRATE CAUSING DAMAGE TO SILT FENCE. CONTRACTOR TO INSTALL OUTLETS AS NECESSARY TO ENSURE SILT FENCE IS FULLY FUNCTIONAL THROUGHOUT THE DURATION OF CONSTRUCTION.

REFER TO GENERAL NOTES SHEET 00.1 FOR EROSION CONTROL, SEEDBED PREPARATION, AND SEEDING SCHEDULE NOTES FOR BOTH PHASES.

**DISTURBED AREA: 0.70 AC**

Plotted By: Alexander, Jamal Sheet Set: SCOOTER'S ROLESVILLE - Layout: CS:2 EROSION CONTROL PLAN - PHASE 3, July 10, 2024, 11:20:28am. K:\RAL - LDEV\016485000-Scooter's Rolesville\Planning\15\_CAD Files\PlanSheets\CS:2 EROSION CONTROL PLAN - PHASE 3.dwg  
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**PHASE 2 CONSTRUCTION SEQUENCE:**

- THE FOLLOWING PHASE 2 CONSTRUCTION SEQUENCE IS FURNISHED AS A GENERAL GUIDE FOR PREPARATION OF A SEQUENCE OF CONSTRUCTION EVENTS.
- MAINTAIN CONSTRUCTION ENTRANCE AND SILT FENCE.
- CALL FOR ON-SITE INSPECTION BY INSPECTOR ONCE ALL PHASE 2 EROSION CONTROL MEASURES ARE INSTALLED. OBTAIN CERTIFICATE OF COMPLIANCE FROM WAKE COUNTY.
- CONTRACTOR IS TO CUT AND/OR FILL AREAS TO BRING THE SITE TO THE PROPOSED GRADES SHOWN ON THE GRADING AND DRAINAGE PLANS. GRADING ACTIVITY SHALL BE LIMITED TO WITHIN THE CLEARING LIMITS. MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY.
- PROVIDE GROUND COVER ON SLOPES GREATER THAN 3:1 WITHIN 7 DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PROVIDE GROUND COVER TO ALL OTHER AREAS WITHIN 14 DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING OR INACTIVITY.
- INSTALL STORM DRAINAGE AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS, OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME FRAMES.
- INSPECT AND REPAIR EROSION CONTROL MEASURES AFTER EVERY RAINFALL EVENT OF 1/2" OR GREATER OR EVERY SEVEN (7) CALENDAR DAYS.
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPARTMENT OF AGRICULTURE, AND CITY OF GREENVILLE EROSION CONTROL ORDINANCE.
- REFER TO SHEET C0.1 - GENERAL NOTES FOR GENERAL EROSION CONTROL NOTES AND MAINTENANCE.
- ALL EROSION CONTROL MEASURES TO REMAIN IN PLACE UNTIL +/- 80% STABILIZATION IS ACHIEVED.
- UPON STABILIZATION OF UPSTREAM AREA AND APPROVAL FROM THE INSPECTOR, SKIMMER BASIN SHALL BE CLEANED OF SEDIMENT AND CONVERTED TO A WET POND.
- ALL SEDIMENT SHALL REMAIN OUT OF PERMANENT BMP ONCE CONVERTED. SEDIMENT THAT ENTERS THE BMP SHALL BE REMOVED IMMEDIATELY, AND THE BMP INSPECTED TO ENSURE COMPLIANCE HAS BEEN MAINTAINED.
- ONCE CONSTRUCTION IS COMPLETE AND ENTIRE SITE IS STABILIZED, CALL FOR FINAL INSPECTION BY WAKE COUNTY ENVIRONMENTAL CONSULTANT. IF APPROVED, REMOVE REMAINING EROSION CONTROL MEASURES. ALL REMAINING PERMANENT EROSION CONTROL DEVICES SHOULD NOW BE INSTALLED.
- WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL INSPECTION BY WAKE COUNTY ENVIRONMENTAL CONSULTANT. OBTAIN A CERTIFICATE OF COMPLETION.

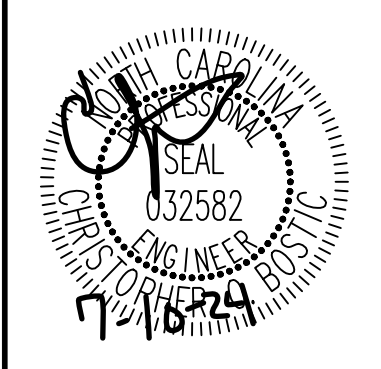
**LIMITS OF DISTURBANCE: 0.70 AC**

**SURVEY NOTE:**  
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 02/23/2023 BY CMT PROFESSIONAL LAND SURVEYORS, 333 S. WHITE STREET, WAKE FOREST, NC 27588. PHONE: (919) 556-3148. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEFICIT OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

NO.	REVISIONS	DATE	BY
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**Kimley-Horn**

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 421 FAYETTEVILLE STREET, SUITE 800, RALEIGH, NC 27601  
 #F-0102 WWW.KIMLEY-HORN.COM PHONE: 919.677.2000 FAX: 919.677.2050



KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY	COB
016485000	10/31/2023	AS SHOWN	JAA	JAA	JAA	COB	

**EROSION CONTROL PLAN - PHASE 3**

**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE, NC

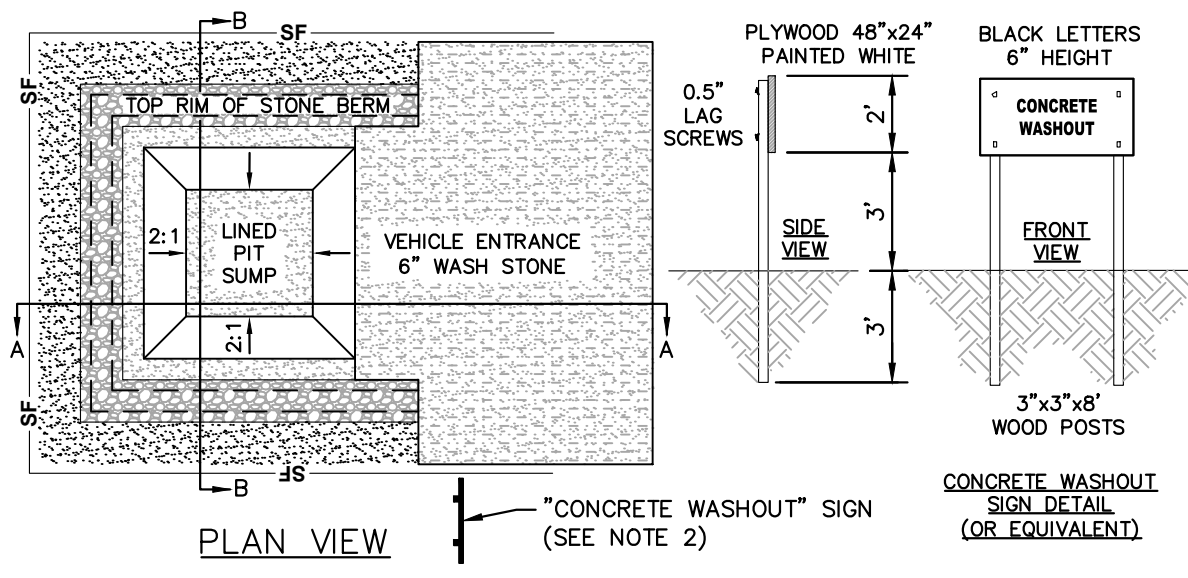


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SDP-23-09

SHEET NUMBER  
**C5.2**

Plotted By: Alexander, Jamal Sheet Set: SCOOTER'S ROLESVILLE Layout: C5.3 EROSION CONTROL DETAILS July 10, 2024, 11:20:38am. K:\RAL\_LDEV\016485000-Scooters Rolesville\Planning\15-CAD Files\Plan\Sheet\C5.3 EROSION CONTROL DETAILS.dwg  
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- NOTES**
1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
  2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
  3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE AND DISPOSED OF OR RECYCLED.
  4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.
  5. PIT CAPACITY IS MINIMUM OF 6 CUBIC FEET PER 10 CUBIC YARDS OF CONCRETE.

**CONCRETE WASHOUT STATION**  
N.T.S.

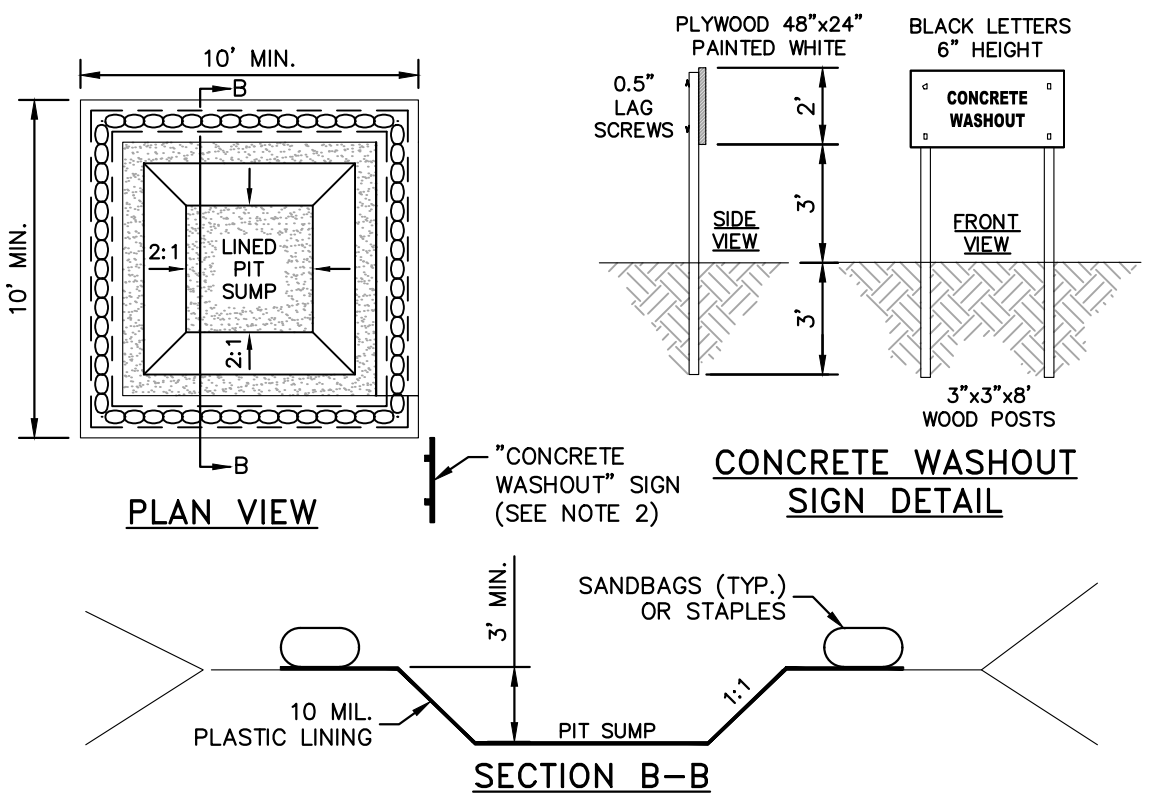
KHA DETAIL NO: 01.102.R01

DATE	TYPE	PLANTING RATE	REGION
JAN. 1 - MAY 1	RYE (GRAIN)	120 LBS/ACRE	PIEDMONT
JAN. 1 - MAY 1	ANNUAL LESPEDEZA (KOBE)	50 LBS/ACRE	PIEDMONT
MAY 1 - AUG. 15	GERMAN MILLET	40 LBS/ACRE	PIEDMONT
MAY 1 - AUG. 15	SMALL-STEMMED SUDANGRASS	50 LBS/ACRE	PIEDMONT
AUG. 15 - DEC. 30	RYE (GRAIN)	120 LBS/ACRE	PIEDMONT
DEC. 1 - APR. 15	RYE (GRAIN)	120 LBS/ACRE	COASTAL PLAIN
DEC. 1 - APR. 15	ANNUAL LESPEDEZA (KOBE)	50 LBS/ACRE	COASTAL PLAIN
APR. 15 - AUG. 15	GERMAN MILLET	40 LBS/ACRE	COASTAL PLAIN
AUG. 15 - DEC. 30	RYE (GRAIN)	120 LBS/ACRE	COASTAL PLAIN
FEB. 15 - MAY 15	RYE (GRAIN)	120 LBS/ACRE	MOUNTAINS - ABOVE 2500 FEET
FEB. 1 - MAY 1	RYE (GRAIN)	120 LBS/ACRE	MOUNTAINS - ABOVE 2500 FEET
FEB. 15 - MAY 15	ANNUAL LESPEDEZA (KOREAN)	50 LBS/ACRE	MOUNTAINS - ABOVE 2500 FEET
FEB. 1 - MAY 1	ANNUAL LESPEDEZA (KOREAN)	50 LBS/ACRE	MOUNTAINS - BELOW 2500 FEET
MAY 15 - AUG. 15	GERMAN MILLET	40 LBS/ACRE	MOUNTAINS
MAY 15 - AUG. 15	SMALL-STEMMED SUDANGRASS	50 LBS/ACRE	MOUNTAINS
AUG. 15 - DEC. 15	RYE (GRAIN)	120 LBS/ACRE	MOUNTAINS

- SEEDBED PREPARATION:**
1. TILL OR DISK THE PREPARED AREAS TO BE SEEDED TO A MINIMUM DEPTH OF FOUR INCHES.
  2. REMOVE STONES LARGER THAN THREE INCHES ON ANY SIDE, STICKS, ROOTS AND OTHER EXTRANEOUS MATERIALS THAT SURFACE.
  3. IF NOT INCORPORATED DURING THE SOIL PREPARATION PROCESS, ADD PH MODIFIER AND FERTILIZERS AT THE RATE SPECIFIED IN THE SOIL TEST REPORT. IF THERE IS NO SOIL TEST REPORT, FOLLOW SOIL AMENDMENTS BELOW.
  4. RE-COMPACT THE AREA UTILIZING A CULTPACKER ROLLER. THE FINISHED GRADE SHALL BE A SMOOTH EVEN SOIL SURFACE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
  5. EVENLY APPLY SEED USING A CYCLONE SEEDER (BROADCAST), DRILL, CULTPACKER SEEDER, OR HYDROSEEDER. SMALL GRAINS SHOULD BE PLANTED NO MORE THAN 1 INCH DEEP AND GRASSES AND LEGUMES NO MORE THAN 1/2 INCH. BROADCAST SEED MUST BE COVERED BY RAKING OR CHAIN DRAGGING, AND THEN LIGHTLY FIRMED WITH A ROLLER OR CULTPACKER. HYDROSEEDING MIXTURES SHOULD INCLUDE A WOOD FIBER (CELLULOSE) MULCH.
- NOTES:**
1. CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENIED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.
  2. THIS SEEDING SCHEDULE IS FOR EROSION AND SEDIMENT CONTROL ONLY. SEE LANDSCAPE PLAN FOR FINAL SEEDING.
  3. 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.
  4. CONTRACTOR SHALL PROVIDE GROUND COVER IN 14 DAYS ON ALL OTHER AREAS FOLLOWING COMPLETION OF ANY PHASE OF GRADING.
  5. PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION.

**TEMPORARY SEEDING SCHEDULE AND SEEDBED PREPARATION**  
N.T.S.

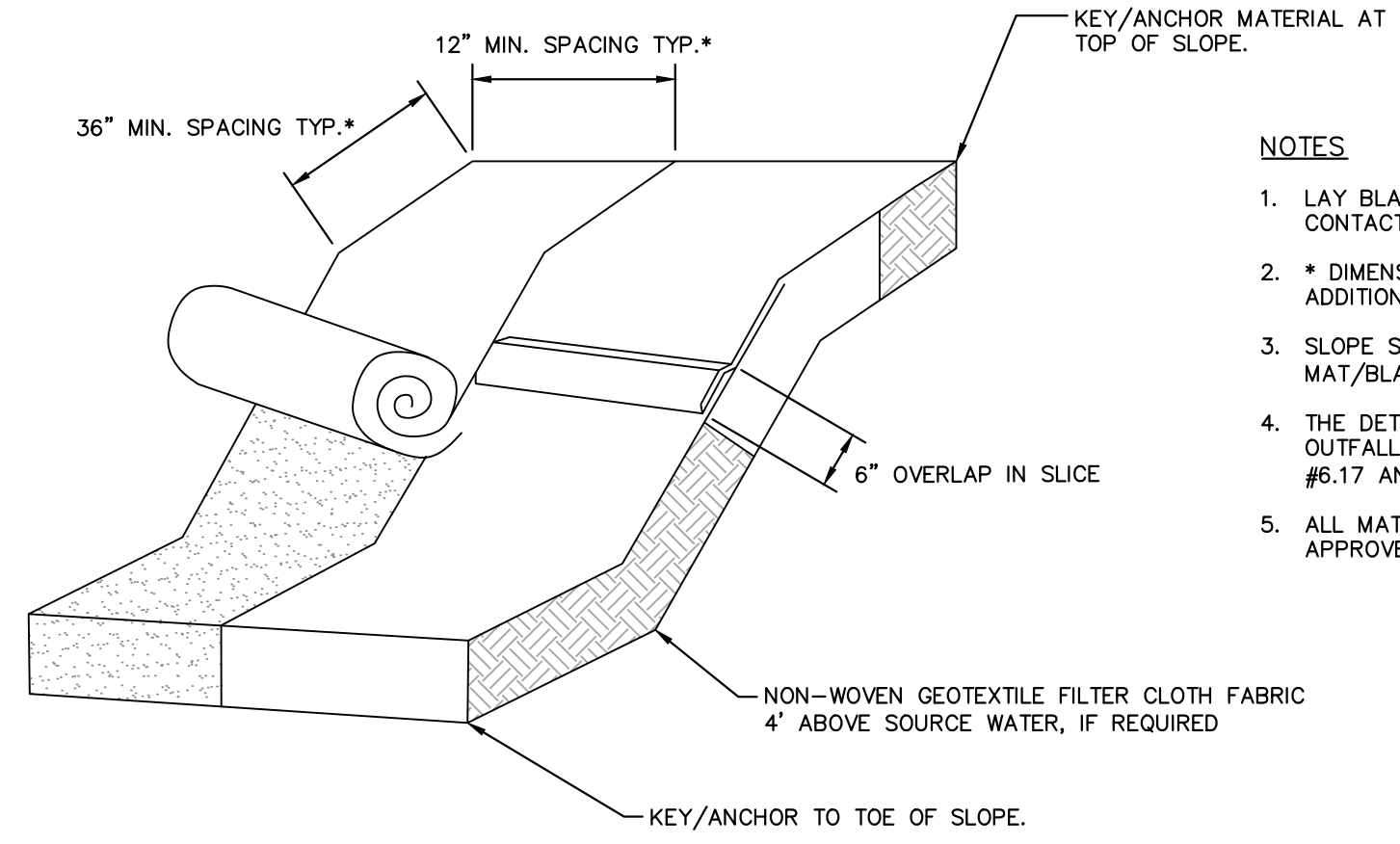
KHA DETAIL NO: 01.104.R01



- NOTES**
1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
  2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
  3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE AND DISPOSED OF OR RECYCLED.
  4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.
  5. PIT CAPACITY IS MINIMUM OF 6 CUBIC FEET PER 10 CUBIC YARDS OF CONCRETE.

**CONCRETE WASHOUT STATION**  
N.T.S.

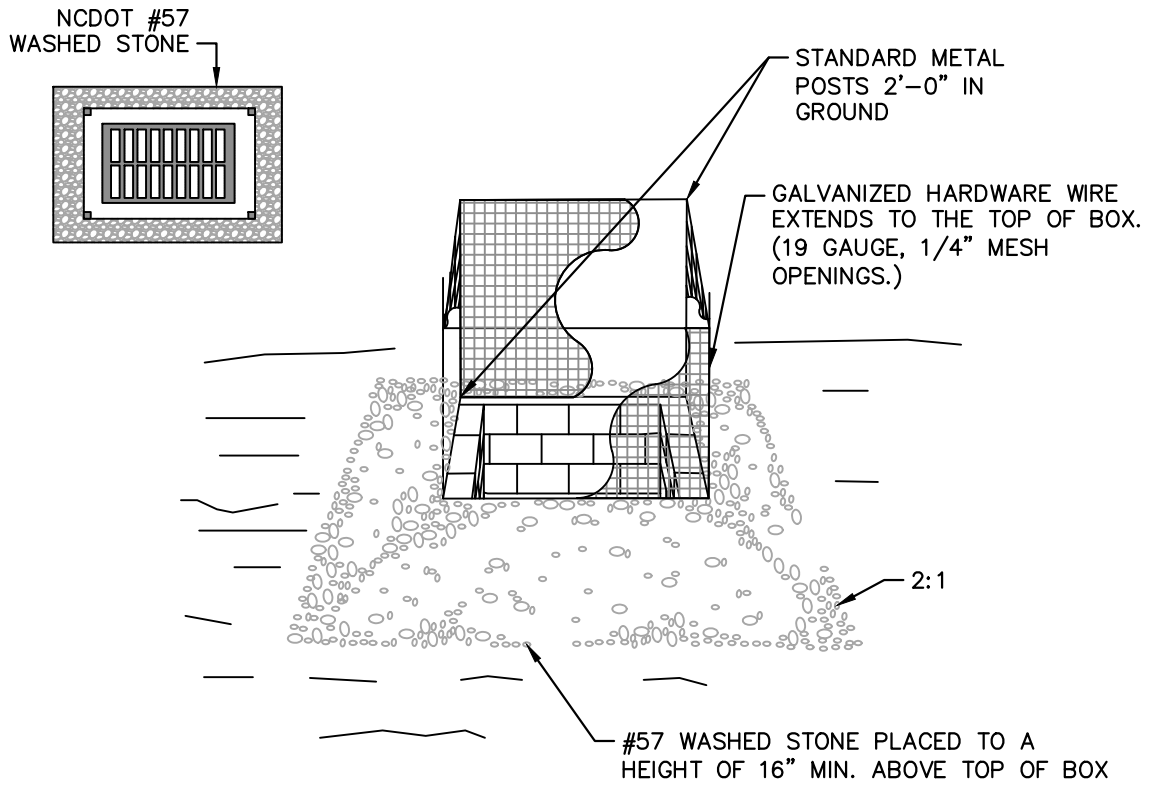
KHA DETAIL NO: 01.102.R01



- NOTES**
1. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
  2. \* DIMENSIONS SHOWN ARE MINIMUM. MANUFACTURED PRODUCTS MAY HAVE ADDITIONAL REQUIREMENTS THAT MUST BE MET.
  3. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS, GRASS. MAT/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
  4. THE DETAIL SHOWN IS FOR SLOPE MATTING. FOR CHANNEL OR PIPE OUTFALL MATTING SPECIFICATIONS, PLEASE REFER TO NCSOPDM STANDARD #6.17 AND MANUFACTURER'S GUIDELINES.
  5. ALL MATTING TO BE ERONET™ S150® EROSION CONTROL BLANKET OR APPROVED EQUIVALENT.

**TEMPORARY MATTING**  
N.T.S.

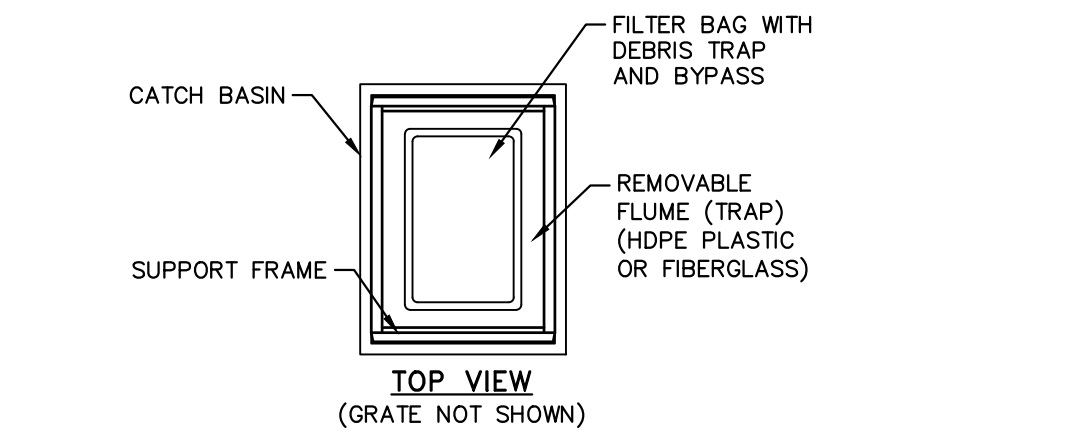
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- MAINTENANCE**
- INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/8 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

**CATCH BASIN AND YARD INLET PROTECTION**  
N.T.S.

KHA DETAIL NO: 01.202.R01

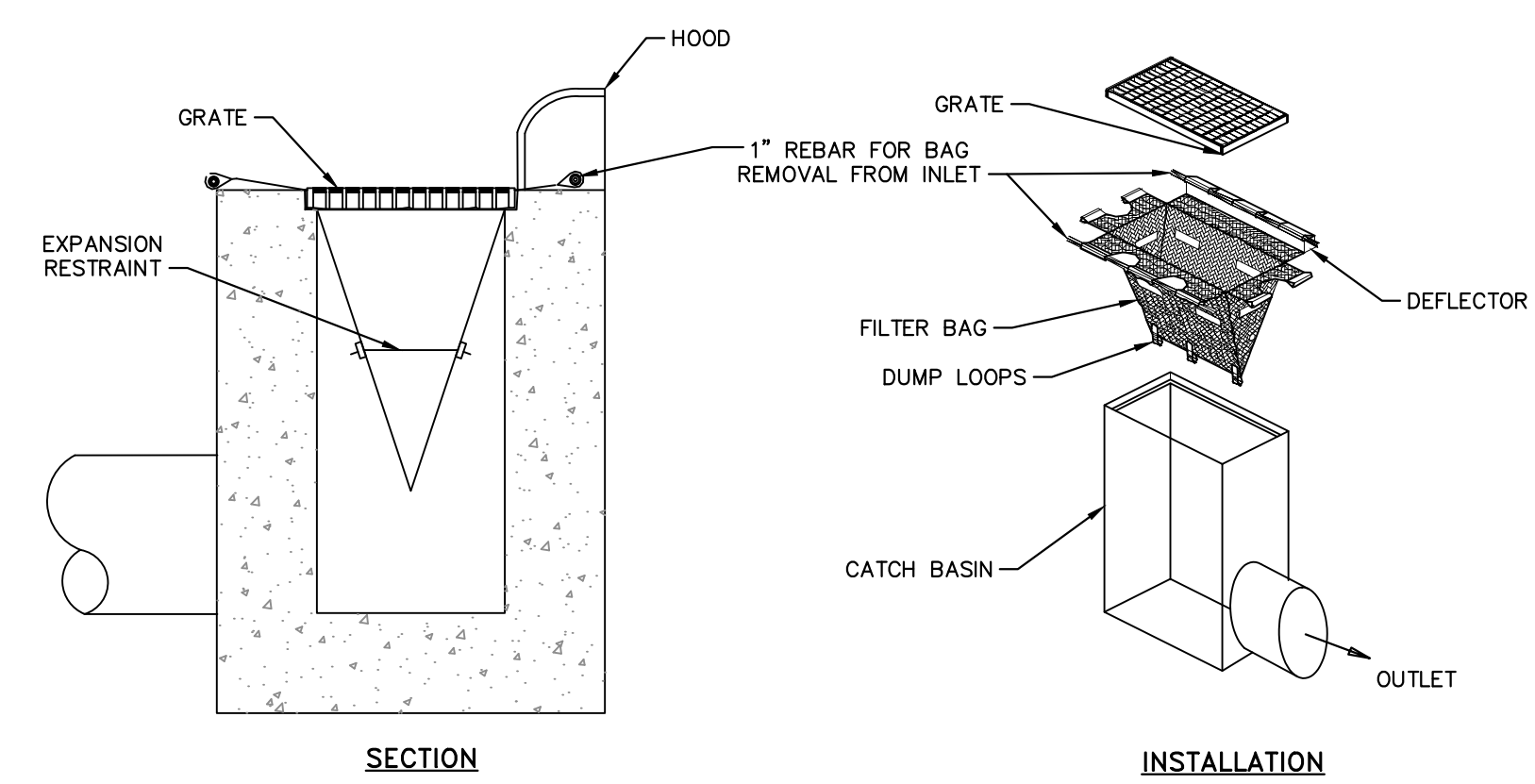


CAPACITY CHART			
MODEL NO.	INLET SIZE	LINER DEPTH	CLEAN FLOW RATE**
FF-2424HC	24" x 24"	12"	1.67 CU. FT., 470 GPM
"	24" x 24"	24"	4.18 CU. FT., 914 GPM
"	24" x 24"	36"	6.69 CU. FT., 1,357 GPM
FF-2436HC	24" x 36"	12"	2.55 CU. FT., 641 GPM
"	24" x 36"	24"	6.38 CU. FT., 1,201 GPM
"	24" x 36"	36"	10.20 CU. FT., 1,761 GPM
FF-3636HC-GO	36" x 36"	12"	3.36 CU. FT., 772 GPM
"	36" x 36"	24"	8.39 CU. FT., 1,402 GPM
"	36" x 36"	36"	13.43 CU. FT., 2,032 GPM

\* STORAGE CAPACITY REFLECTS MAXIMUM SOLIDS COLLECTION PRIOR TO IMPEDING BYPASS.  
\*\* FLOW RATES ARE "CALCULATED CLEAN FLOW RATES" BASED ON LINER MATERIAL FLOW RATE OF 70 GPM/50. FT. (RECOMMEND APPLYING FACTOR OF .25 TO .50 TO FLOW RATES TO ALLOW FOR SEDIMENT AND DEBRIS)

**CATCH BASIN SILT PROTECTION INSERT**  
N.T.S.

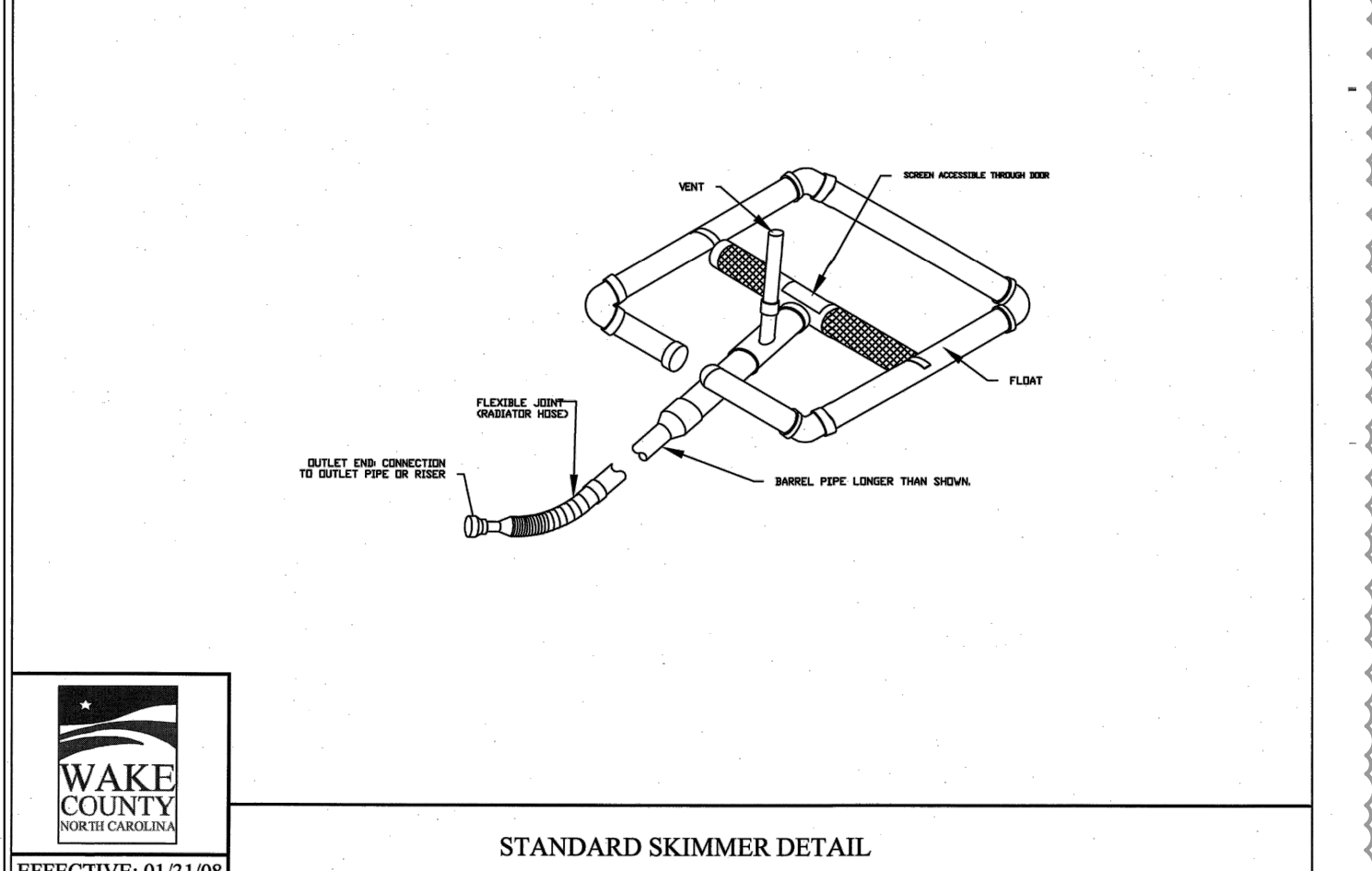
**CATCH BASIN INLET PROTECTION**  
N.T.S.



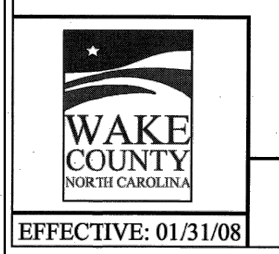
- NOTES**
1. INLET MAINTENANCE SHALL BE DOCUMENTED IN PROJECT LOG BOOK.
  2. FILTER TYPES SHALL BE APPROVED BY THE CITY INSPECTOR PRIOR TO INSTALLATION.
  3. FILTER BAGS MAY BE REMOVED WHEN SITE IS STABILIZED IN THE DIRECTION OF THE ENGINEER.
  4. FILTER BAGS SHALL BE REMOVED PRIOR TO STREET ACCEPTANCE.
  5. FILTER BAGS SHALL BE CLEANED OR REPLACED ON A REGULAR BASIS (NOT BE MORE THAN HALF FULL AT ANY TIME).
  6. FILTER BAGS SHALL NOT BE ALLOWED IN EXISTING CITY OR NCDOT ROADS.

**CATCH BASIN INLET PROTECTION**  
N.T.S.

KHA DETAIL NO: 01.201.R01



- NOTES**
1. CATCH BASIN INSERTS ARE AVAILABLE IN SIZES TO FIT MOST INDUSTRY-STANDARD CATCH BASINS (SEE CAPACITY CHART). CUSTOM SIZES ARE AVAILABLE.
  2. FILTER SUPPORT FLANGES SHALL BE CONSTRUCTED FROM STAINLESS STEEL (TYPE 304) DEBRIS TRAP (FLUME) SHALL BE CONSTRUCTED FROM EITHER PETROLEUM RESISTANT FIBERGLASS OR HDPE PLASTIC.
  3. FILTER LINER SUPPORT BASKET SHALL BE CONSTRUCTED FROM A BIAXIAL GEGRID WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 900 X 1400, AS TESTED IN ACCORDANCE WITH ASTM D-4595.
  4. INSERT LINERS ARE AVAILABLE IN STANDARD DEPTHS OF 12", 24" OR 36" (REFER TO CAPACITY CHART). CUSTOM LINER DEPTHS MAY BE SPECIFIED.
- MAINTENANCE SPECIFICATIONS**
- INSPECT THE PROTECTION INSERT AND REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. IF THE CONTAINMENT IS MORE THAN 1/3 FULL OF SEDIMENT, EMPTY THE PROTECTION INSERT BY LIFTING THE UNIT OUT OF THE INLET AND REPLACING.

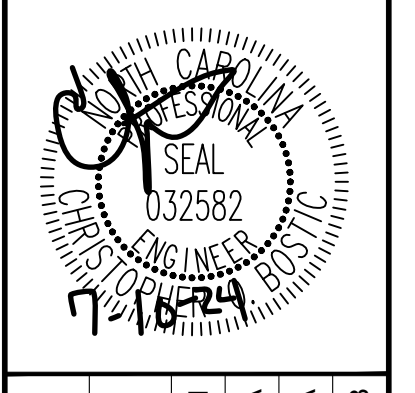


**SURVEY NOTE:**  
EXISTING TOPOGRAPHICAL INFORMATION IS BASED ON A TOPOGRAPHIC SURVEY OBTAINED ON 02/23/2023 BY CMP PROFESSIONAL LAND SURVEYORS, 333 S. WHITE STREET, WAKE FOREST, NC 27588. PHONE: (919) 556-3148. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING INFORMATION, DEPICTED OR NOT, PRIOR TO CONSTRUCTION AND REPORT POTENTIAL CONFLICTS TO OWNER AND ENGINEER.

NO.	REVISIONS	DATE	BY
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**Kimley-Horn**

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 #F-0102 WWW.KIMLEY-HORN.COM PHONE: 919.677.2000 FAX: 919.677.2050  
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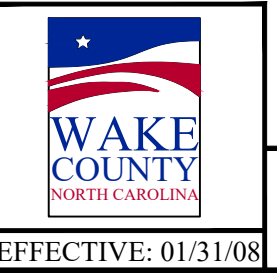
KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
016485000	10/31/2023	AS SHOWN	JAA	JAA	COB

**SCOOTER'S ROLESVILLE EROSION CONTROL DETAILS**

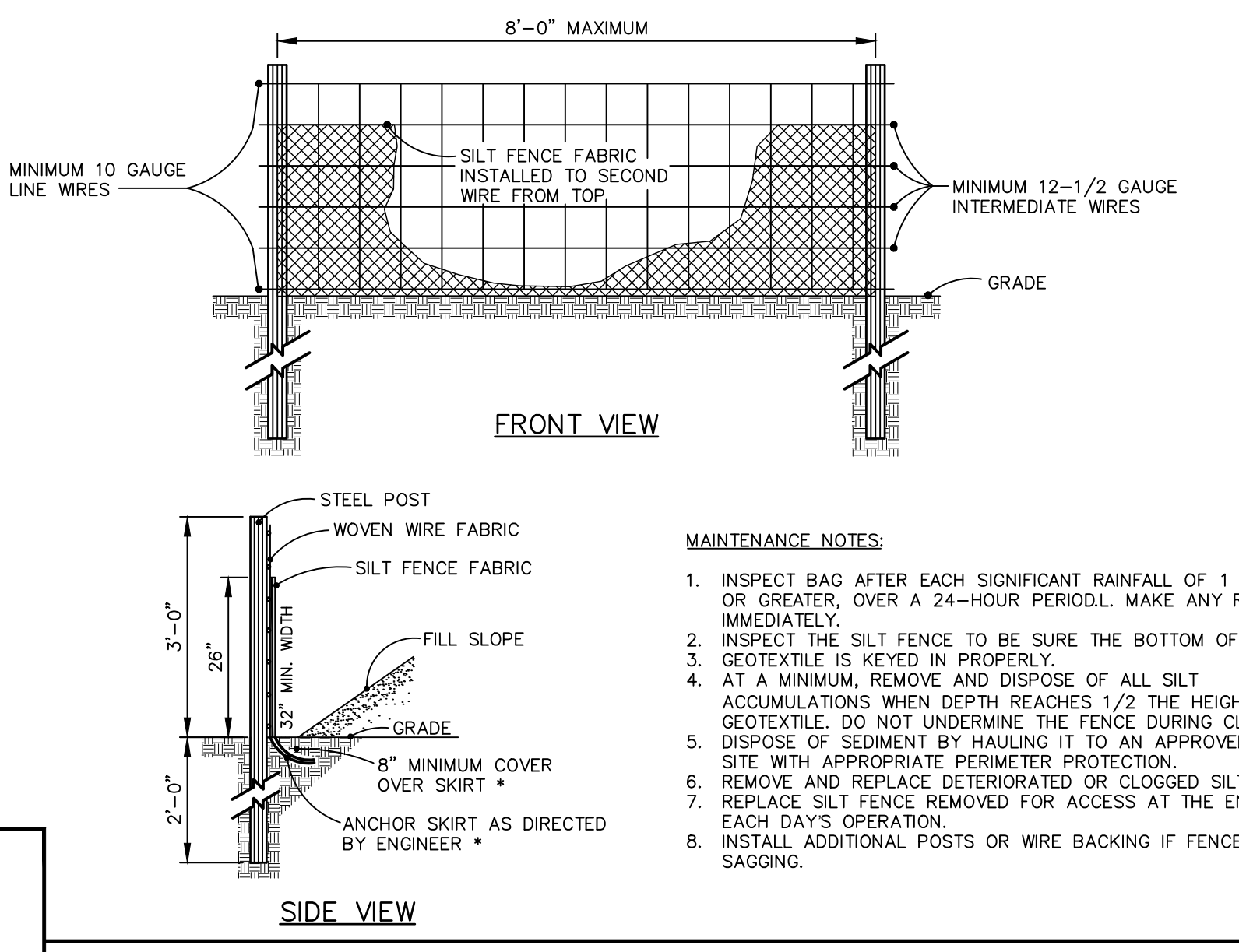
PREPARED FOR  
**S&S JAVA ENTERPRISES**  
ROLESVILLE, NC



Plotted by Alexander, Jamal Sheet SCS4 EROSION CONTROL DETAILS July 10, 2024, 11:20:41am. K:\RALD\016485000-Scooters Rolesville\Planning\15-CAD Files\PlanSheets\CS4 EROSION CONTROL DETAILS.dwg  
 This document, together with the concepts and designs presented herein, 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.

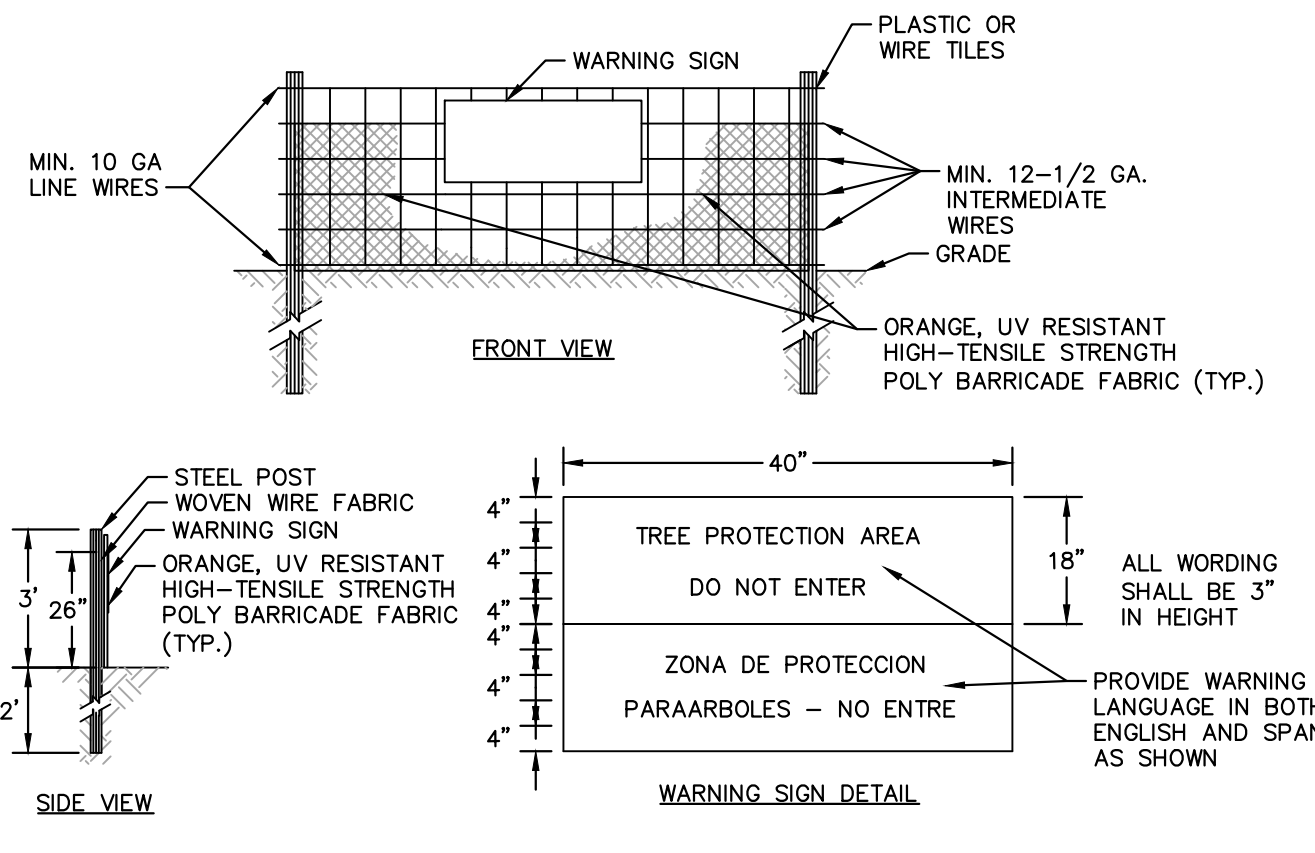


EFFECTIVE: 01/31/08



STANDARD TEMPORARY SILT FENCE

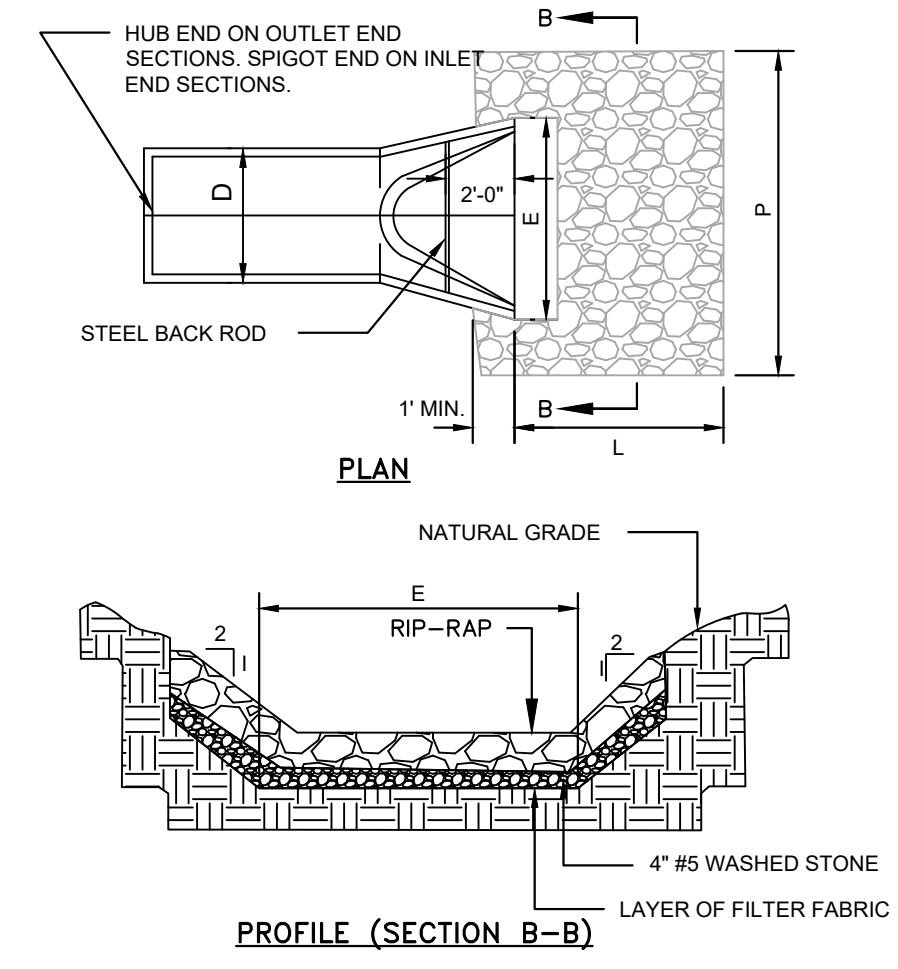
- MAINTENANCE NOTES:**
1. INSPECT BAG AFTER EACH SIGNIFICANT RAINFALL OF 1 INCHES OR GREATER, OVER A 24-HOUR PERIOD. MAKE ANY REPAIRS IMMEDIATELY.
  2. INSPECT THE SILT FENCE TO BE SURE THE BOTTOM OF THE GEOTEXTILE IS KEVED IN PROPERLY.
  3. AT A MINIMUM, REMOVE AND DISPOSE OF ALL SILT ACCUMULATIONS WHEN DEPTH REACHES 1/2 THE HEIGHT OF THE GEOTEXTILE. DO NOT UNDERMINE THE FENCE DURING CLEANOUT.
  4. DISPOSE OF SEDIMENT BY HAULING IT TO AN APPROVED WASTE SITE WITH APPROPRIATE PERMIT PROTECTION.
  5. REMOVE AND REPLACE DETERIORATED OR CLOGGED SILT FENCE.
  6. REPLACE SILT FENCE REMOVED FOR ACCESS AT THE END OF EACH DAY'S OPERATION.
  7. INSTALL ADDITIONAL POSTS OR WIRE BACKING IF FENCE IS SAGGING.



TREE PROTECTION FENCE  
N.T.S.

- NOTES:**
1. TREE PROTECTION FENCING MUST BE INSTALLED AT A MINIMUM RADIUS OF THE CRITICAL ROOT ZONE (CRZ) OF TREES. (CRZ DEFINED AS RADIUS x 1.25' (FT) PER INCH AT DBH FROM TRUNK OF TREE).
  2. IF CONSTRUCTION OCCURS WITHIN THE CRZ AT LEAST 12" OF MULCH AND/OR LOGGING MATS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
  3. THE TREE PROTECTION FENCING MUST NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT.
  4. THERE WILL BE ZERO TOLERANCE FOR STORING OR PARKING VEHICLES, SUPPLIES, OR EQUIPMENT UNDER PROTECTED TREES.
  5. IMPACT PROTECTION DEVICES MUST BE REMOVED AFTER CONSTRUCTION.
  6. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS SHOWN.
  7. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
  8. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.
  9. SHOULD THE FABRIC OF A PROTECTION FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, CONTRACTOR SHALL REPLACE IT PROMPTLY.

KHA DETAIL NO: 01.304.R01



RIP-RAP APRON AT FLARED END SECTION  
N.T.S.

**SIZING CHART**

STRUCTURE	Q-FULL (CFS)	E (FT)	L (FT)	P (FT)	D (IN)	STONE THICKNESS (IN)	STONE DIAMETER (IN)	STONE CLASS	VELOCITY (FPS)
FES-1	4.58	3.80	5.00	6.30	15	12	3	A	3.73
FES-2	47.29	9.00	18.00	21.00	36	22	6	B	6.69
FES-3	4.58	3.80	5.00	6.30	15	12	3	A	3.73

- NOTES:**
1. THE LENGTHS OF THE RIP-RAP APRONS WERE DETERMINED BY USING THE NEW YORK DOT DISSIPATOR METHOD, AS OUTLINED IN SECTION 8.06 OF THE NCDOT EROSION CONTROL MANUAL.
  2. RIP-RAP APRONS DESIGNED FOR FULL FLOW CAPACITY.
- NOTES:**
1. END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.
  2. THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIP-RAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.
  3. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL.
  4. MAXIMUM TAPER TO RECEIVING CHANNEL 5:1.
  5. ALL SUBGRADE BELOW THE STRUCTURE TO BE COMPACTED TO 95% OR GREATER.
  6. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.
  7. NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE PERMITTED.

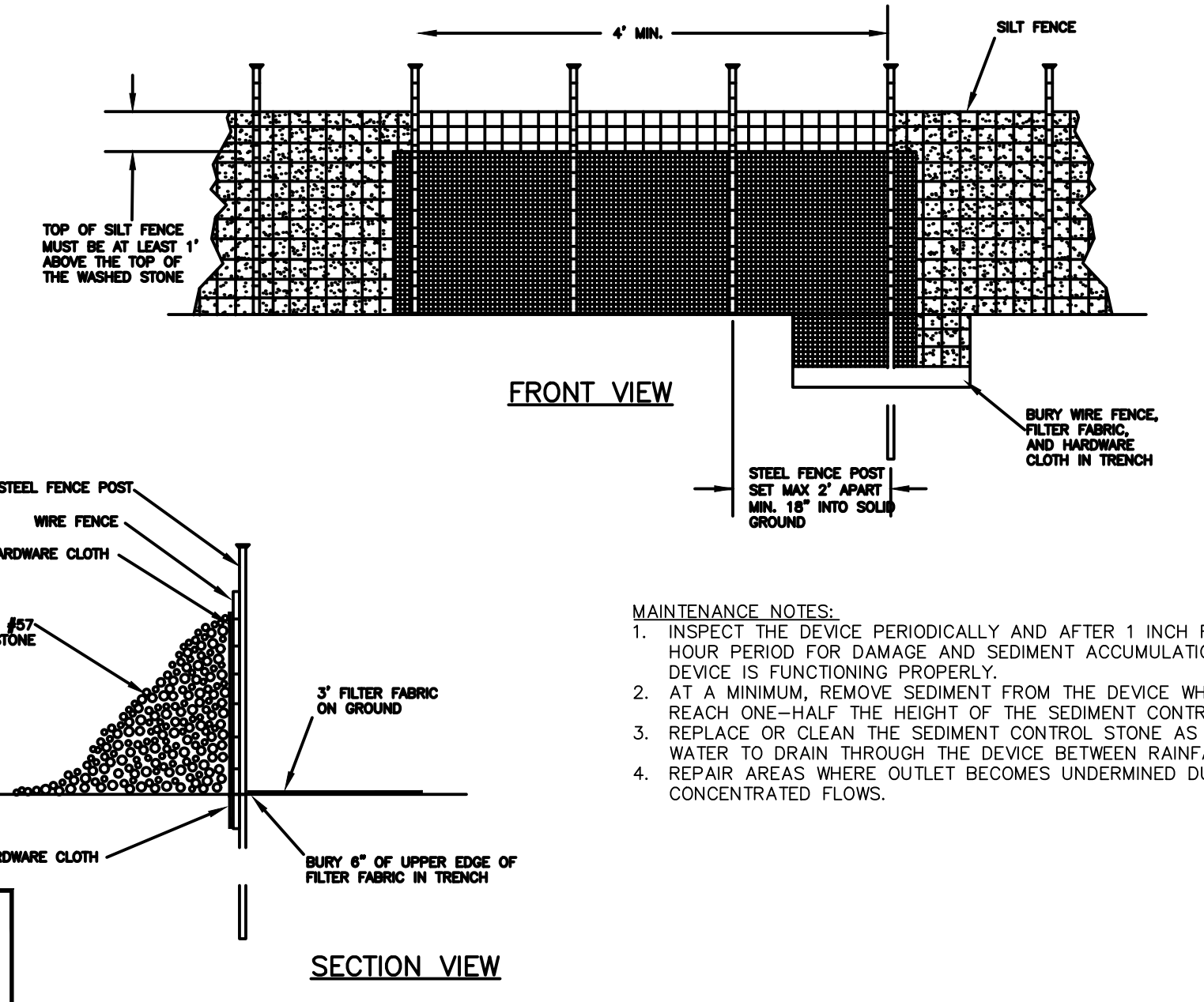
**MAINTENANCE NOTES:**  
 IN GENERAL, ONCE A RIP-RAP INSTALLATION HAS BEEN PROPERLY DESIGNED AND INSTALLED IT REQUIRES VERY LITTLE MAINTENANCE. RIP-RAP SHOULD BE INSPECTED PERIODICALLY FOR SCOUR OR DISLODGED STONES. CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED IN SOME LOCATIONS.

- CONSTRUCTION SPECIFICATIONS:**
1. ENSURE THAT THE SUBGRADE FOR THE FILTER AND RIPRAP FOLLOWS THE REQUIRED LINES AND GRADES SHOWN IN THE PLAN. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL. LOW AREAS IN THE SUBGRADE ON UNDISTURBED SOIL MAY ALSO BE FILLED BY INCREASING THE RIPRAP THICKNESS.
  2. THE RIPRAP AND GRAVEL FILTER MUST CONFORM TO THE SPECIFIED GRADING LIMITS SHOWN ON THE PLANS.
  3. FILTER CLOTH, WHEN USED, MUST MEET DESIGN REQUIREMENTS AND BE PROPERLY PROTECTED FROM PUNCHING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIPRAP AND PLACING ANOTHER PIECE OF FILTER CLOTH OVER THE DAMAGED AREA. ALL CONNECTING JOINTS SHOULD OVERLAP SO THE TOP LAYER IS ABOVE THE DOWNSTREAM LAYER A MINIMUM OF 1 FOOT. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE FILTER CLOTH.
  4. RIPRAP MAY BE PLACED BY EQUIPMENT, BUT TAKE CARE TO AVOID DAMAGING THE FILTER.
  5. THE MINIMUM THICKNESS OF THE RIPRAP SHOULD BE 1.5 TIMES THE MAXIMUM STONE DIAMETER.
  6. RIPRAP MAY BE FIELD STONE OR ROUGH QUARRY STONE. IT SHOULD BE HARD, ANGULAR, HIGHLY WEATHER-RESISTANT AND WELL GRADED.
  7. CONSTRUCT THE APRON ON ZERO GRADE WITH NO OVERFILL AT THE END. MAKE THE TOP OF THE RIPRAP AT THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY BELOW IT.
  8. ENSURE THAT THE APRON IS PROPERLY ALIGNED WITH THE RECEIVING STREAM AND PREFERABLY STRAIGHT THROUGHOUT ITS LENGTH. IF A CURVE IS NEEDED TO FIT SITE CONDITIONS, PLACE IT IN THE UPPER SECTION OF THE APRON.
  9. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION.

KHA DETAIL NO: 03.205.R02



EFFECTIVE: 01/31/08

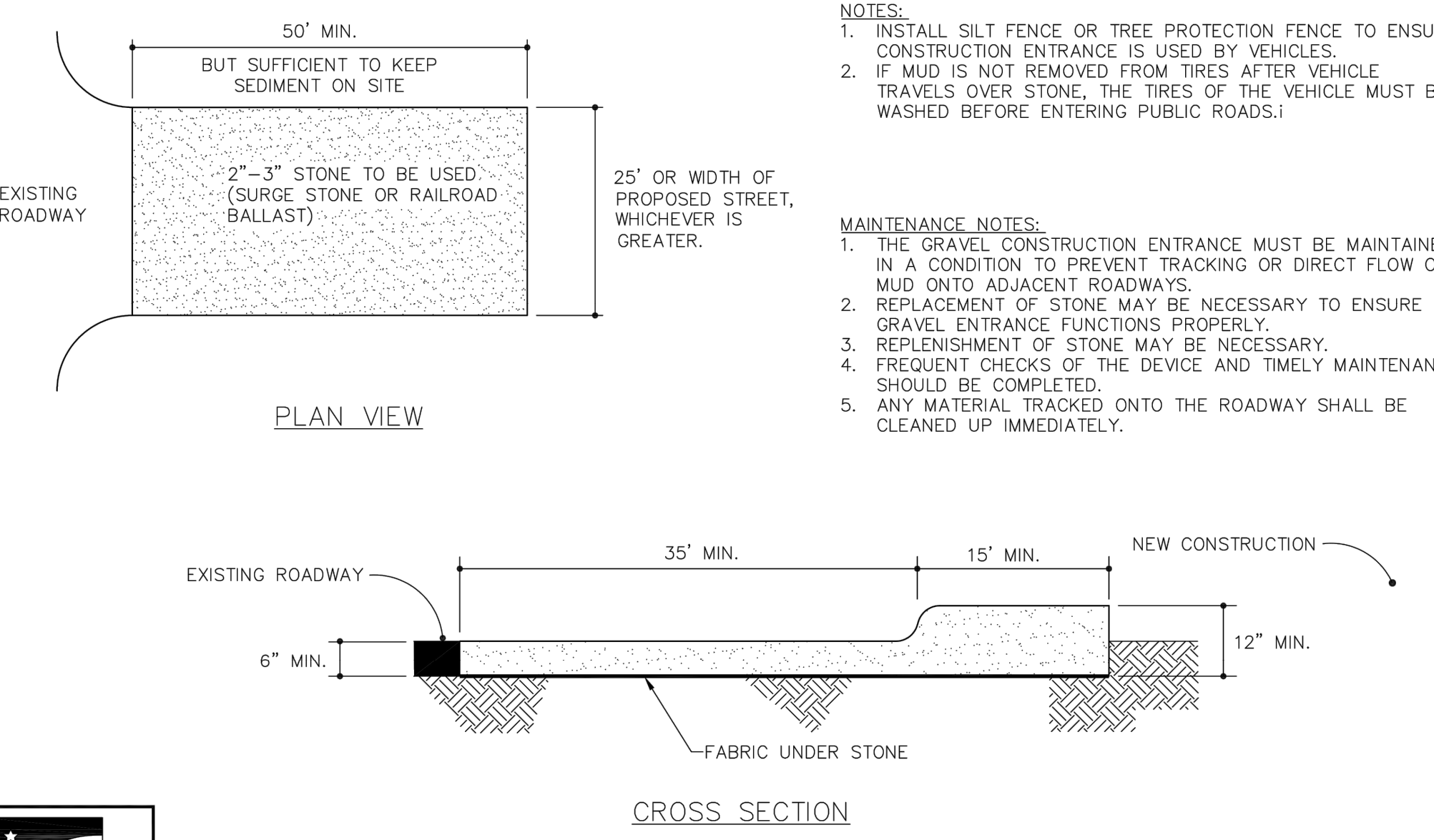


STANDARD SILT FENCE OUTLET

- MAINTENANCE NOTES:**
1. INSPECT THE DEVICE PERIODICALLY AND AFTER 1 INCH RAINFALL OVER 24 HOUR PERIOD FOR DAMAGE AND SEDIMENT ACCUMULATION TO CONFIRM THE DEVICE IS FUNCTIONING PROPERLY.
  2. AT A MINIMUM, REMOVE SEDIMENT FROM THE DEVICE WHEN ACCUMULATIONS REACH ONE-HALF THE HEIGHT OF THE SEDIMENT CONTROL STONE.
  3. REPLACE OR CLEAN THE SEDIMENT CONTROL STONE AS NEEDED TO ALLOW WATER TO DRAIN THROUGH THE DEVICE BETWEEN RAINFALL EVENTS.
  4. REPAIR AREAS WHERE OUTLET BECOMES UNDERMINED DUE TO CONCENTRATED FLOWS.

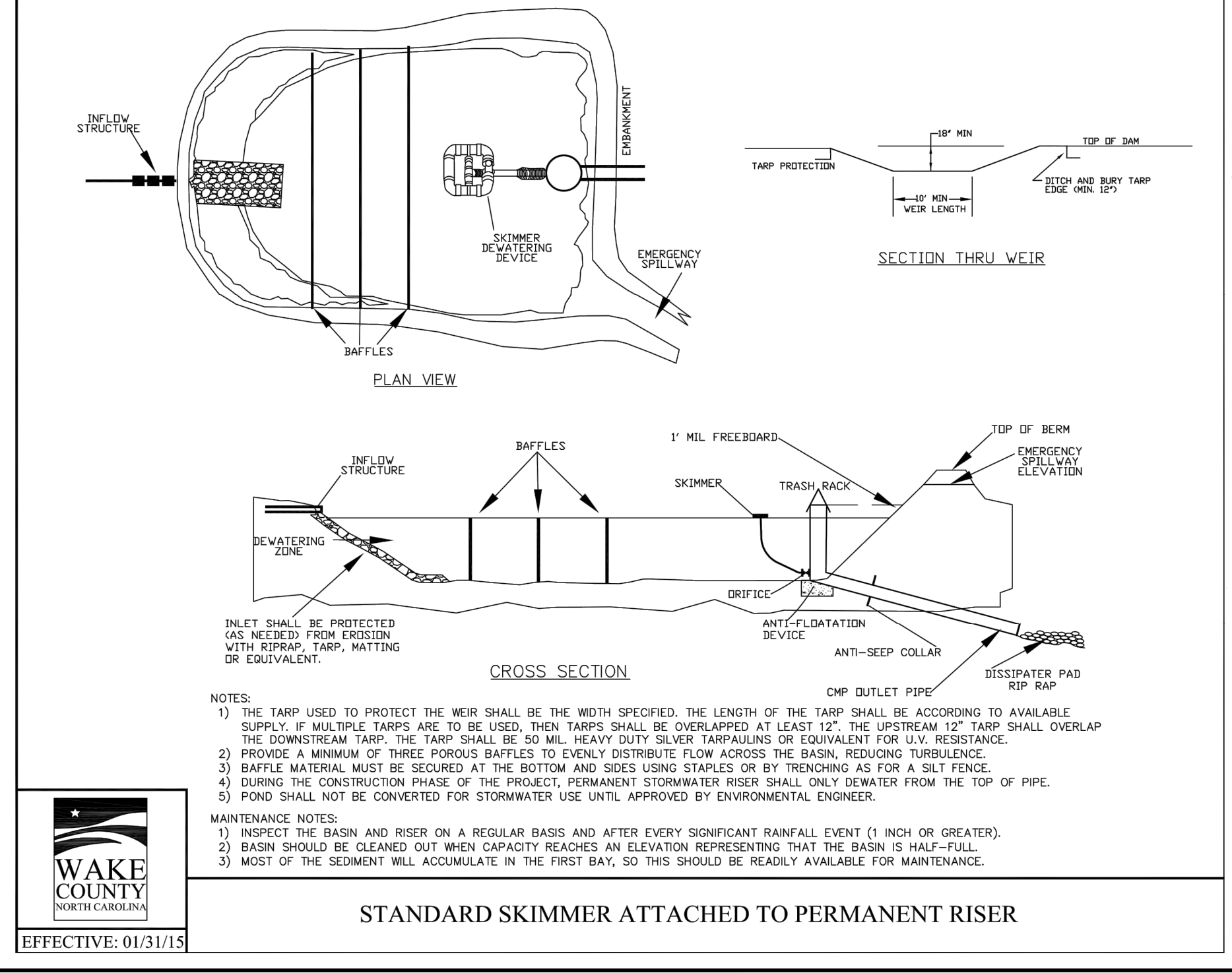


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STANDARD CONSTRUCTION ENTRANCE

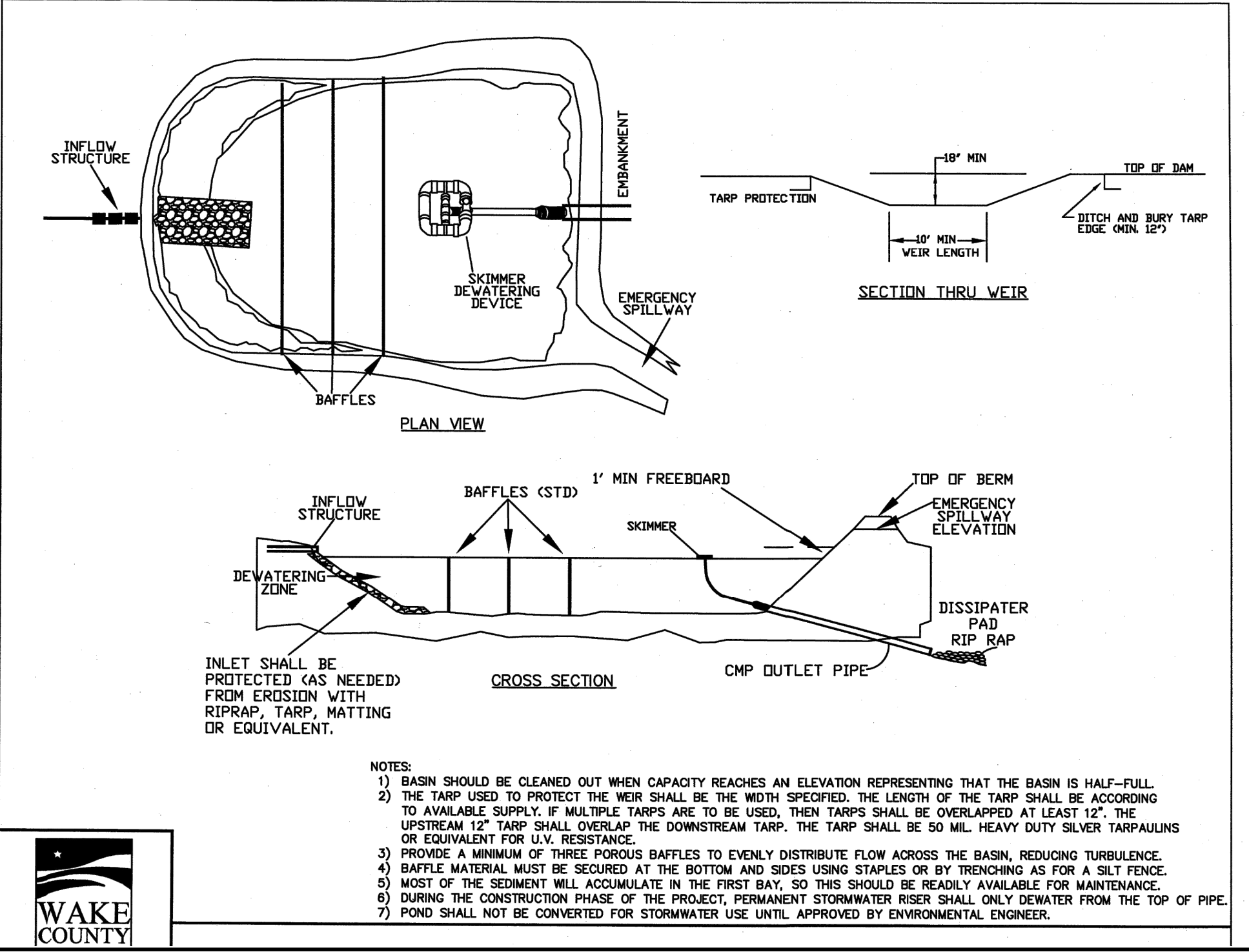
- MAINTENANCE NOTES:**
1. THE GRAVEL CONSTRUCTION ENTRANCE MUST BE MAINTAINED IN A CONDITION TO PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO ADJACENT ROADWAYS.
  2. REPLACEMENT OF STONE MAY BE NECESSARY TO ENSURE THE GRAVEL ENTRANCE FUNCTIONS PROPERLY.
  3. REPLENISHMENT OF STONE MAY BE NECESSARY.
  4. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE SHOULD BE COMPLETED.
  5. ANY MATERIAL TRACKED ONTO THE ROADWAY SHALL BE CLEANED UP IMMEDIATELY.



STANDARD SKIMMER ATTACHED TO PERMANENT RISER

- NOTES:**
- 1) THE TARP USED TO PROTECT THE WEIR SHALL BE THE WIDTH SPECIFIED, THE LENGTH OF THE TARP SHALL BE ACCORDING TO AVAILABLE SUPPLY. IF MULTIPLE TARPS ARE TO BE USED, THEN TARPS SHALL BE OVERLAPPED AT LEAST 12". THE UPSTREAM 12" TARP SHALL OVERLAP THE DOWNSTREAM TARP. THE TARP SHALL BE 50 MIL HEAVY DUTY SILVER TARPULINS OR EQUIVALENT FOR UV RESISTANCE.
  - 2) PROVIDE A MINIMUM OF THREE POROUS BAFFLES TO EVENLY DISTRIBUTE FLOW ACROSS THE BASIN, REDUCING TURBULENCE.
  - 3) BAFFLE MATERIAL MUST BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR A SILT FENCE.
  - 4) DURING THE CONSTRUCTION PHASE OF THE PROJECT, PERMANENT STORMWATER RISER SHALL ONLY DEWATER FROM THE TOP OF PIPE.
  - 5) POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.
- MAINTENANCE NOTES:**
- 1) INSPECT THE BASIN AND RISER ON A REGULAR BASIS AND AFTER EVERY SIGNIFICANT RAINFALL EVENT (1 INCH OR GREATER).
  - 2) BASIN SHOULD BE CLEANED OUT WHEN CAPACITY REACHES AN ELEVATION REPRESENTING THAT THE BASIN IS HALF-FULL.
  - 3) MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE READILY AVAILABLE FOR MAINTENANCE.

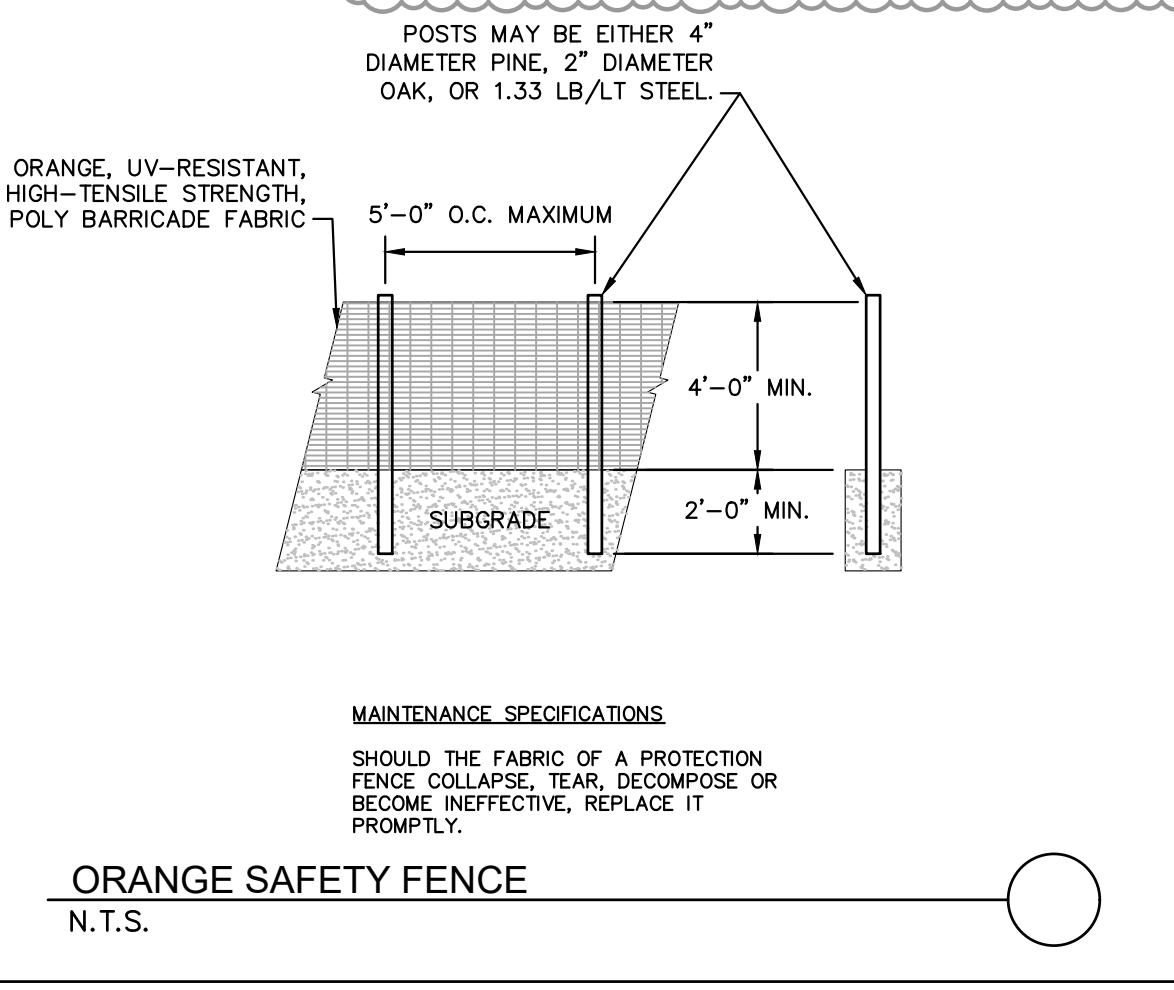
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STANDARD SKIMMER ATTACHED TO PERMANENT RISER

- NOTES:**
- 1) BASIN SHOULD BE CLEANED OUT WHEN CAPACITY REACHES AN ELEVATION REPRESENTING THAT THE BASIN IS HALF-FULL.
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  - 5) MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE READILY AVAILABLE FOR MAINTENANCE.
  - 6) DURING THE CONSTRUCTION PHASE OF THE PROJECT, PERMANENT STORMWATER RISER SHALL ONLY DEWATER FROM THE TOP OF PIPE.
  - 7) POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.

EFFECTIVE: 01/31/15



ORANGE SAFETY FENCE  
N.T.S.

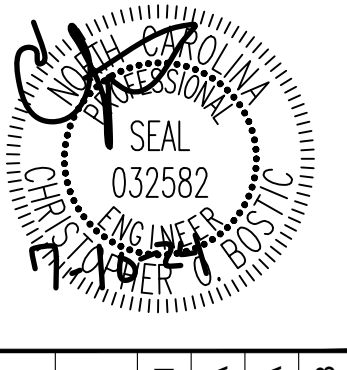
- MAINTENANCE SPECIFICATIONS:**
- SHOULD THE FABRIC OF A PROTECTION FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.



Know what's below. Call before you dig.

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KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
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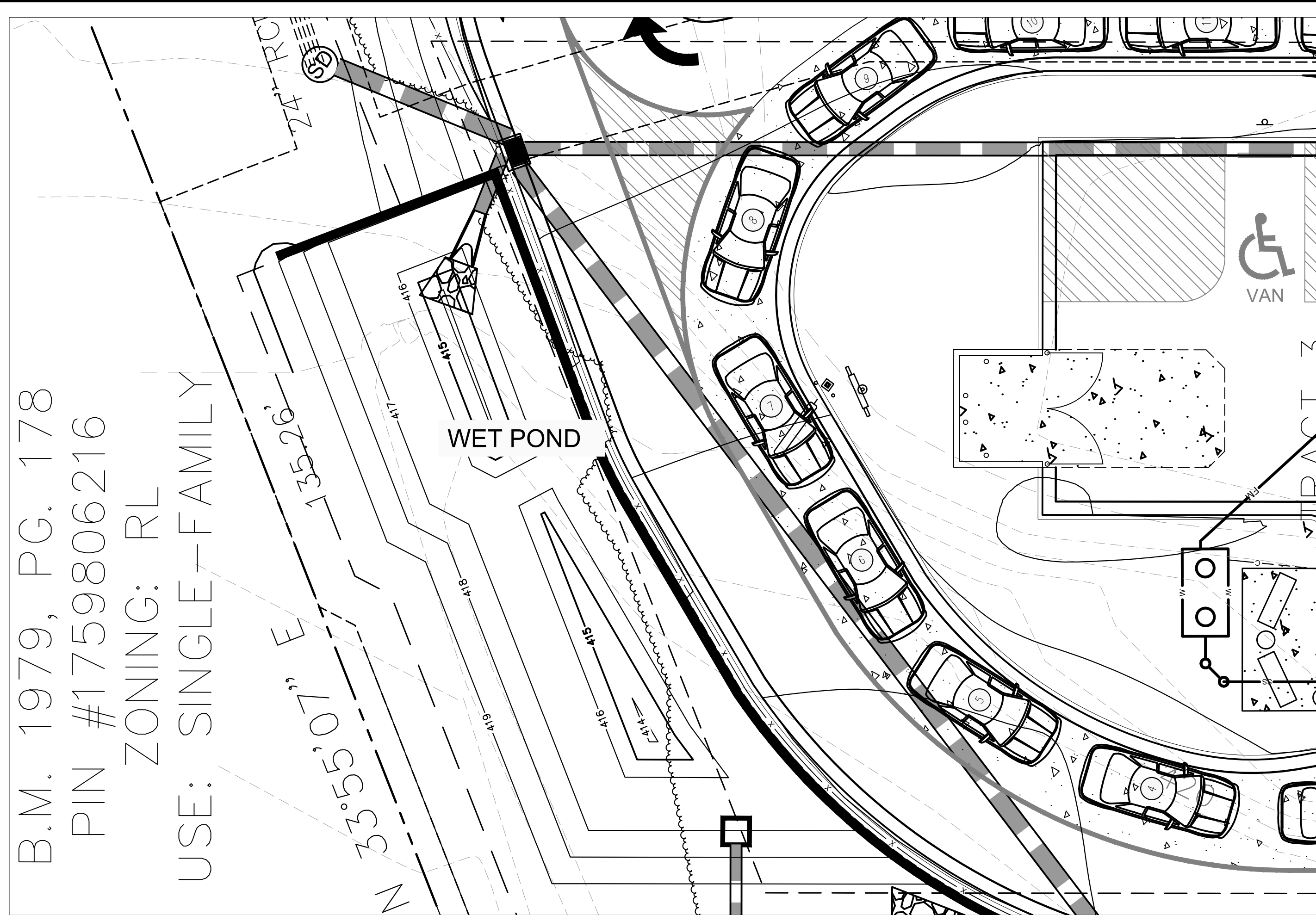
**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 NC

**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 NC

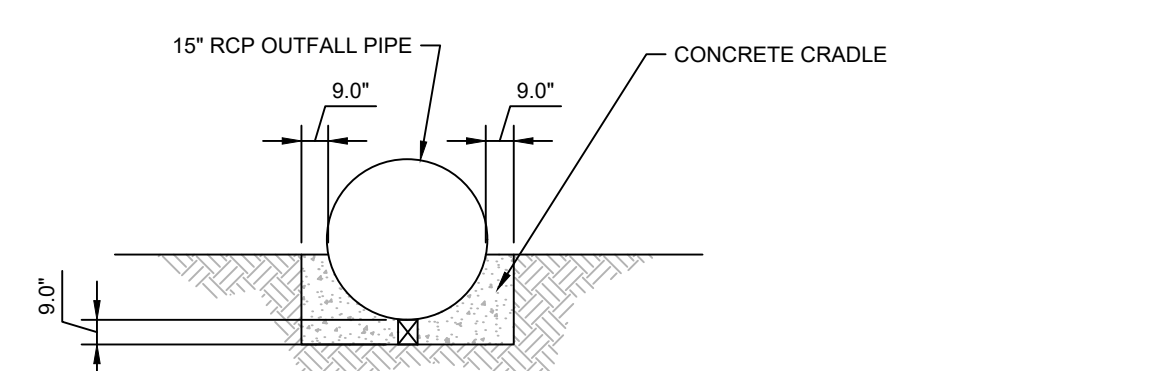
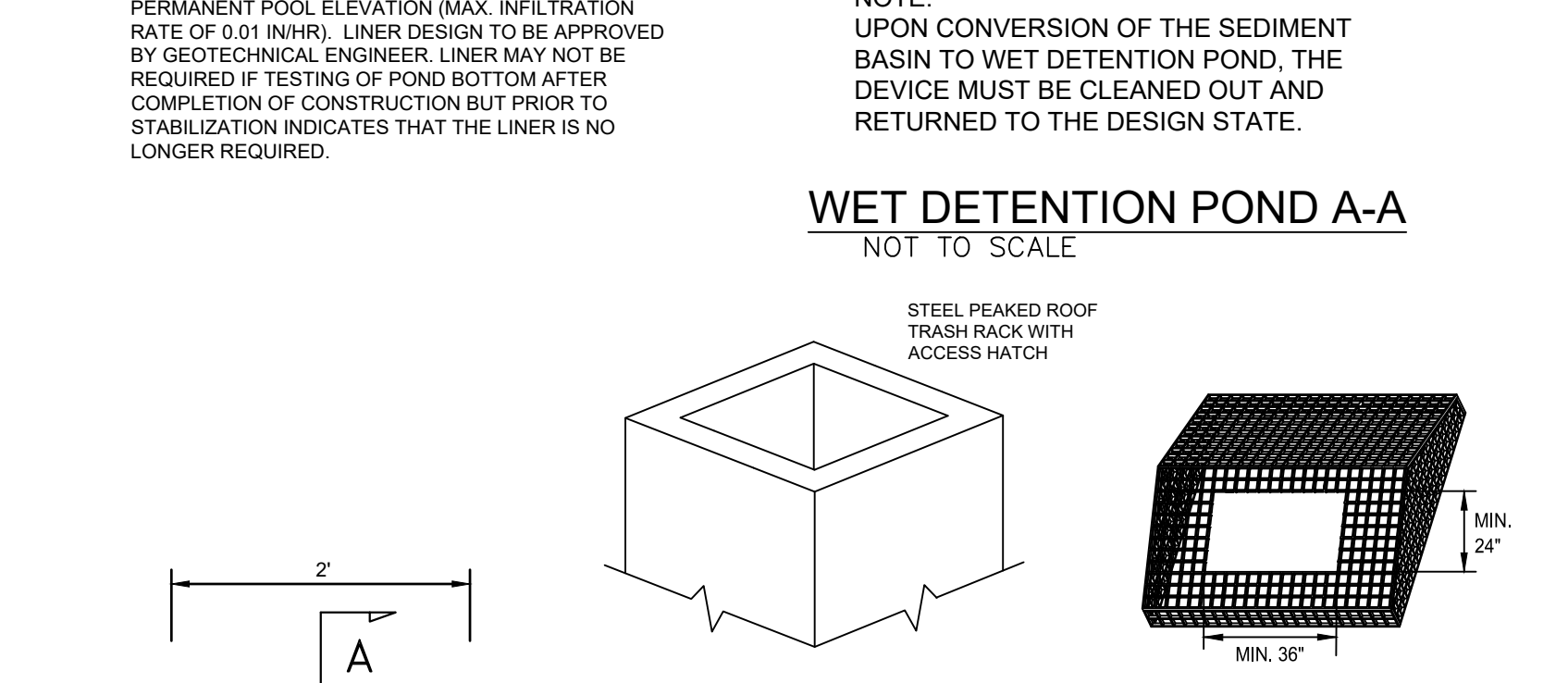
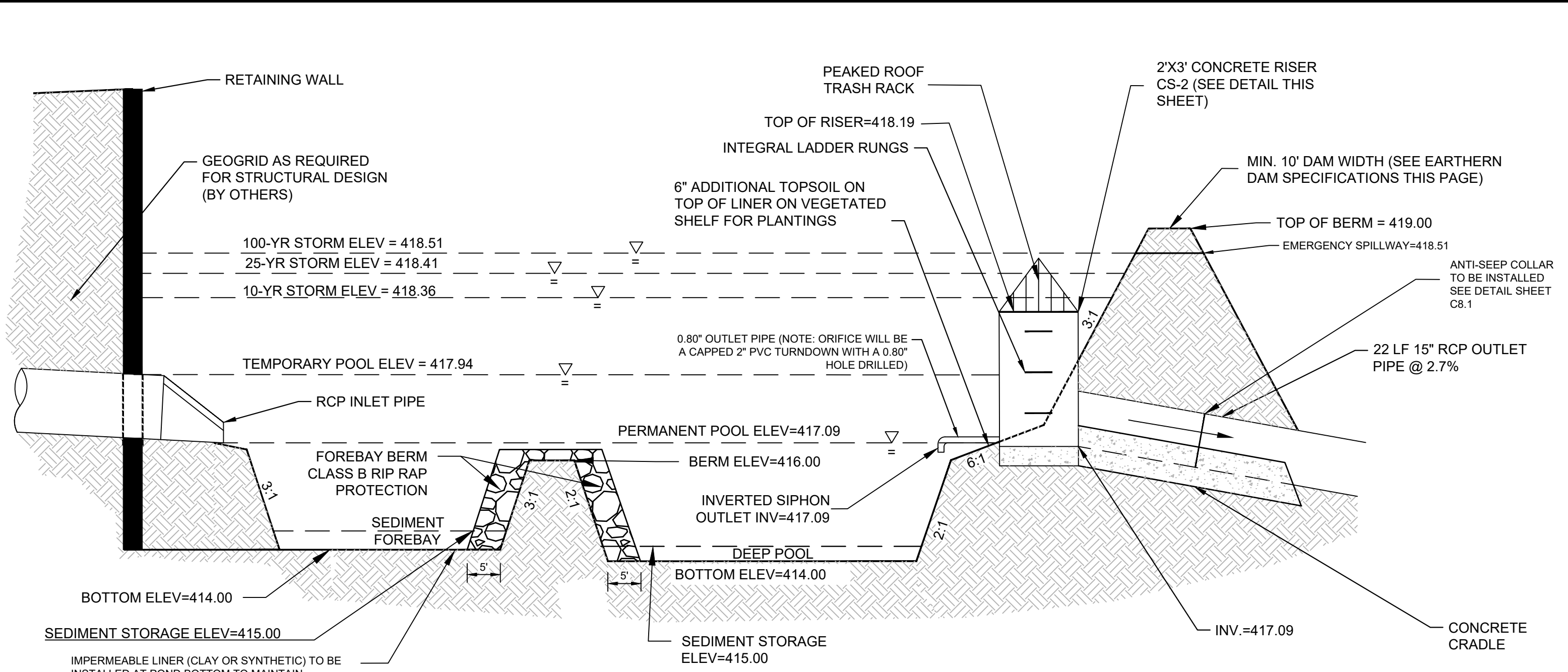
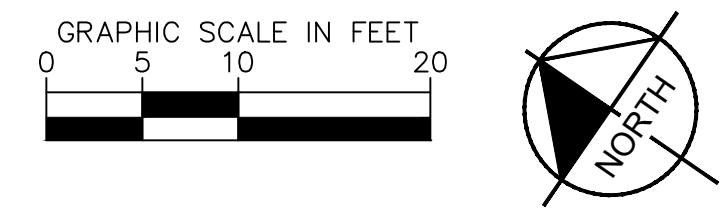
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C5.4

Plotted by: Alexander, Jamal Sheet Set: SCOOTER'S ROLESVILLE Layout: C6.0 WET POND DETAILS July 10, 2024 11:20:53am K:\RAL\LD\VO\16485000-Scoters Rolesville\Planning\15-CAD Files\PlanSheets\C6.0 UNDERGROUND DETENTION AND BIOTENTION DETAILS.dwg  
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B.M. 1979, PG. 178  
 PIN #1759806216  
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 USE: SINGLE-FAMILY

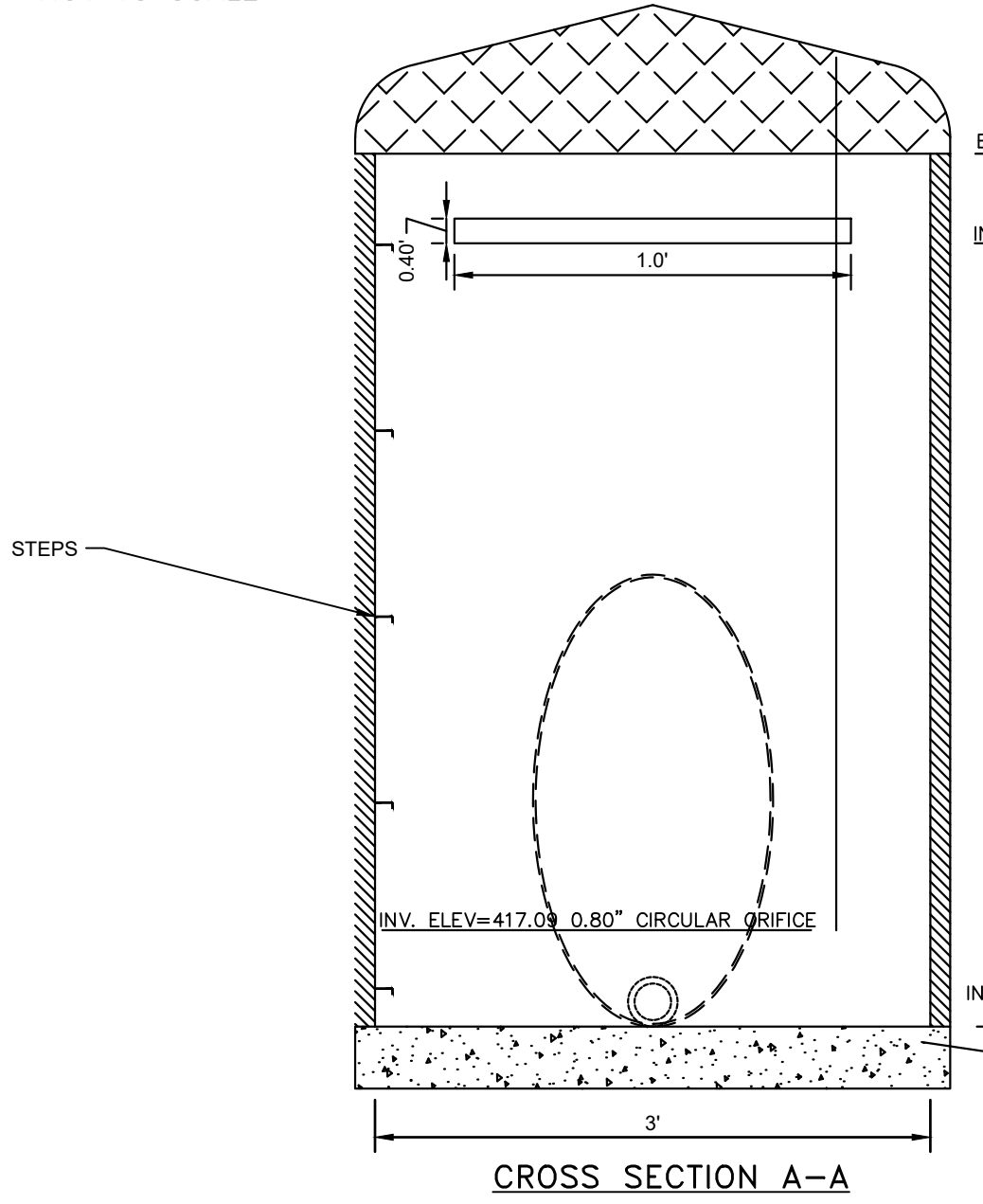


- BRING GRADE TO SPRING LINE FOR PIPE
- EXCAVATE TRENCH AS SHOWN AND PLACE PIPE ON SUPPORTS
- FILL TO SPRINGLINE WITH CONCRETE
- WRAP PIPE JOINTS WITH A NONWOVEN GEOTEXTILE
- CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
- THE CONCRETE FOR THE CRADLE SHALL BE CONSOLIDATED PRIMARILY BY INTERNAL VIBRATION, AND SHALL BE FINISHED "ROUGH" SO AS TO ACHIEVE A MORE ADEQUATE BOND BETWEEN THE CONCRETE IN THE CRADLE AND THE FIRST LIFT OF STRUCTURAL FILL.

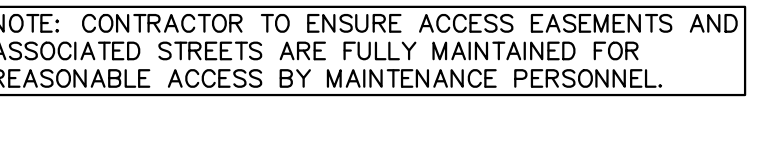
**EARTHEN DAM SPECIFICATIONS**

- OTHERWISE PROVIDED, THE WIDTH OF A BUFFER ZONE IS MEASURED HORIZONTALLY FROM THE EDGE OF THE WATER TO THE NEAREST EDGE OF THE DISTURBED AREA, WITH THE 25 PERCENT OF THE STRIP NEARER THE LAND-DISTURBING ACTIVITY CONTAINING NATURAL OR ARTIFICIAL MEANS OF CONFINING VISIBLE SILTATION.
- THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. THE ANGLE FOR GRADED SLOPES AND FILLS MUST BE DEMONSTRATED TO BE STABLE. STABLE IS THE CONDITION WHERE THE SOIL REMAINS IN ITS ORIGINAL CONFIGURATION, WITH OR WITHOUT MECHANICAL CONSTRAINTS.
- UNLESS A PERMIT FROM THE DEPARTMENT'S DIVISION OF WASTE MANAGEMENT TO OPERATE A LANDFILL IS ON FILE FOR THE OFFICIAL SITE, ACCEPTABLE FILL MATERIAL SHALL BE FREE OF ORGANIC OR OTHER DEGRADABLE MATERIALS, MASONRY, CONCRETE AND BRICK IN SIZES EXCEEDING 12 INCHES, AND ANY MATERIALS WHICH WOULD CAUSE THE SITE TO BE REGULATED AS A LANDFILL BY THE STATE OF NORTH CAROLINA.
- WHENEVER LAND-DISTURBING ACTIVITY THAT WILL DISTURB MORE THAN ONE ACRE IS UNDERTAKEN ON A TRACT, THE PERSON CONDUCTING THE LAND-DISTURBING ACTIVITY SHALL INSTALL EROSION AND SEDIMENTATION CONTROL DEVICES AND PRACTICES THAT ARE SUFFICIENT TO RESTRAIN THE SEDIMENT GENERATED BY THE LAND DISTURBING ACTIVITY WITHIN THE BOUNDARIES OF THE TRACT DURING CONSTRUCTION UPON AND DEVELOPMENT OF SAID TRACT, AND SHALL PLANT OR OTHERWISE PROVIDE A PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION AFTER COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
- ALL SUBGRADE TO RECEIVE FILL SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING NEW FILL. METHODS FOR EVALUATION SHALL INCLUDE PROOF ROLLING USING TANDEM AXLE DUMP TRUCK OR SIMILAR PNEUMATIC TIRE EQUIPMENT, OR OTHER METHODS AS SPECIFIED BY THE ON-SITE GEOTECHNICAL ENGINEER. ALL SOIL THAT RUTS, PUMPS, OR DEFLECTS EXCESSIVELY AS DETERMINED BY THE GEOTECHNICAL ENGINEER SHALL BE CORRECTED AS SPECIFIED BY THE ON-SITE GEOTECHNICAL ENGINEER.
- UNLESS OTHERWISE PROVIDED, THE WIDTH OF A BUFFER ZONE IS MEASURED HORIZONTALLY FROM THE EDGE OF THE WATER TO THE NEAREST EDGE OF THE DISTURBED AREA, WITH THE 25 PERCENT OF THE STRIP NEARER THE LAND DISTURBING ACTIVITY CONTAINING NATURAL OR ARTIFICIAL MEANS OF CONFINING VISIBLE SILTATION.
- THE SURFACE OF THE GROUND AND MOISTURE CONTENT OF THE LOOSENED MATERIAL SHALL BE SUCH THAT IT WILL READILY BOND WITH THE FIRST LAYER OF FILL MATERIAL.
- CONTROLLED FILL, AS SPECIFIED BY THE GEOTECHNICAL ENGINEER, IN THE DAM EMBANKMENT SHALL BE PLACED IN 6-INCH LOOSE LAYERS (3-INCH LOOSE LAYERS WITHIN 3- FEET OF EITHER SIDE OF THE PRINCIPAL SPILLWAY PIPE TO A DEPTH OF 2- FEET OVER) AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF + OR - TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698.
- ANY FILL LAYER THAT IS SMOOTH DRUM ROLLED TO REDUCE MOISTURE PENETRATION DURING A STORM EVENT SHALL BE PROPERLY SCARIFIED PRIOR TO THE PLACEMENT OF THE NEXT SOIL LIFT.
- FILL ADJACENT TO THE RISER AND PRINCIPAL SPILLWAY PIPE SHALL BE PLACED SO THAT LIFTS ARE AT THE SAME LEVEL ON BOTH SIDES OF THE STRUCTURES.
- EARTHWORK COMPACTION WITHIN 3- FEET OF ANY STRUCTURES SHALL BE ACCOMPLISHED BY MEANS OF HAND TAMPERS, MANUALLY DIRECTED POWER TAMPERS OR PLATE COMPACTORS OR MINIATURE SELF-PROPELLED ROLLERS.
- SURFACE WATER AND STREAM FLOW SHALL BE CONTINUOUSLY CONTROLLED THROUGHOUT CONSTRUCTION AND THE PLACEMENT OF CONTROLLED FILL.
- AT THE END OF EACH DAY'S ACTIVITIES, CONTRACTOR SHALL SEAL SURFACE OF NEW FILL BY USE OF A SMOOTH WHEEL ROLLER AND PROVIDE POSITIVE DRAINAGE OFF OF NEW FILL SURFACE.
- THE GEOTECHNICAL ENGINEER MUST INSPECT AND APPROVE ALL SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS PERFORMED THEREON.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRYING SOILS TOO WET TO ACHIEVE COMPACTION OR STABILITY. SOILS SHALL NOT BE CONSIDERED UNSUITABLE SOLELY DUE TO MOISTURE CONTENT.
- COMPACTION BY MEANS OF DROP WEIGHTS FROM A CRANE OR HOST SHALL NOT BE PERMITTED.
- HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO PASS OVER CAST-IN-PLACE STRUCTURES UNTIL ADEQUATE CURING TIME HAS ELAPSED.
- TESTS OF THE DEGREE (%) OF COMPACTION OF THE PLACED FILL IN THE DAM SHALL BE PERFORMED AS A PART OF THE CONTRACTOR'S NORMAL QUALITY CONTROL PROGRAM FOR THE CONSTRUCTION OF THE DAM. TESTS SHALL BE CONDUCTED CONCURRENT WITH THE INSTALLATION OF THE DAM'S FILL, AND THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE DAM SO THAT THE TESTING CAN BE COMPLETED. SHOULD THE RESULTS OF THE TESTS INDICATE THAT THE SPECIFIED DEGREE OF COMPACTION HAS NOT BEEN OBTAINED, THE PORTIONS OF THE DAM REPRESENTED BY SUCH TESTS SHALL BE REWORKED OR REBUILT. ALL PORTIONS OF THE DAM SHALL ACHIEVE THE SPECIFIED MINIMUM DEGREE OF COMPACTION.

**SECTION A-A SPILLWAY**  
NOT TO SCALE



**CS-02 RISER CONTROL STRUCTURE**  
NOT TO SCALE

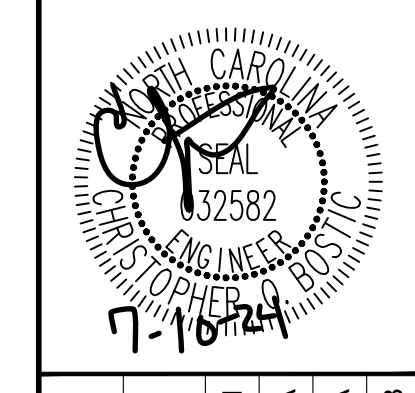


NOTE: AT THE CONCLUSION OF THE PROJECT ALL SCMS INSTALLED ON-SITE MUST BE CERTIFIED BY A DESIGN PROFESSIONAL AND THE TOWN OF GARNER ENGINEERING DEPARTMENT MUST RECEIVE ALL AS-BUILT DRAWINGS PRIOR TO RECEIVING THE CERTIFICATE OF OCCUPANCY.

NOTE: CONTRACTOR TO ENSURE ACCESS EASEMENTS AND ASSOCIATED STREETS ARE FULLY MAINTAINED FOR REASONABLE ACCESS BY MAINTENANCE PERSONNEL.

No.	REVISIONS	DATE	BY
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 #F-0102 WWW.KIMLEY-HORN.COM PHONE: 919-677-2000 FAX: 919-677-2050  
 421 FAYETTEVILLE STREET, SUITE 800, RALEIGH, NC 27601



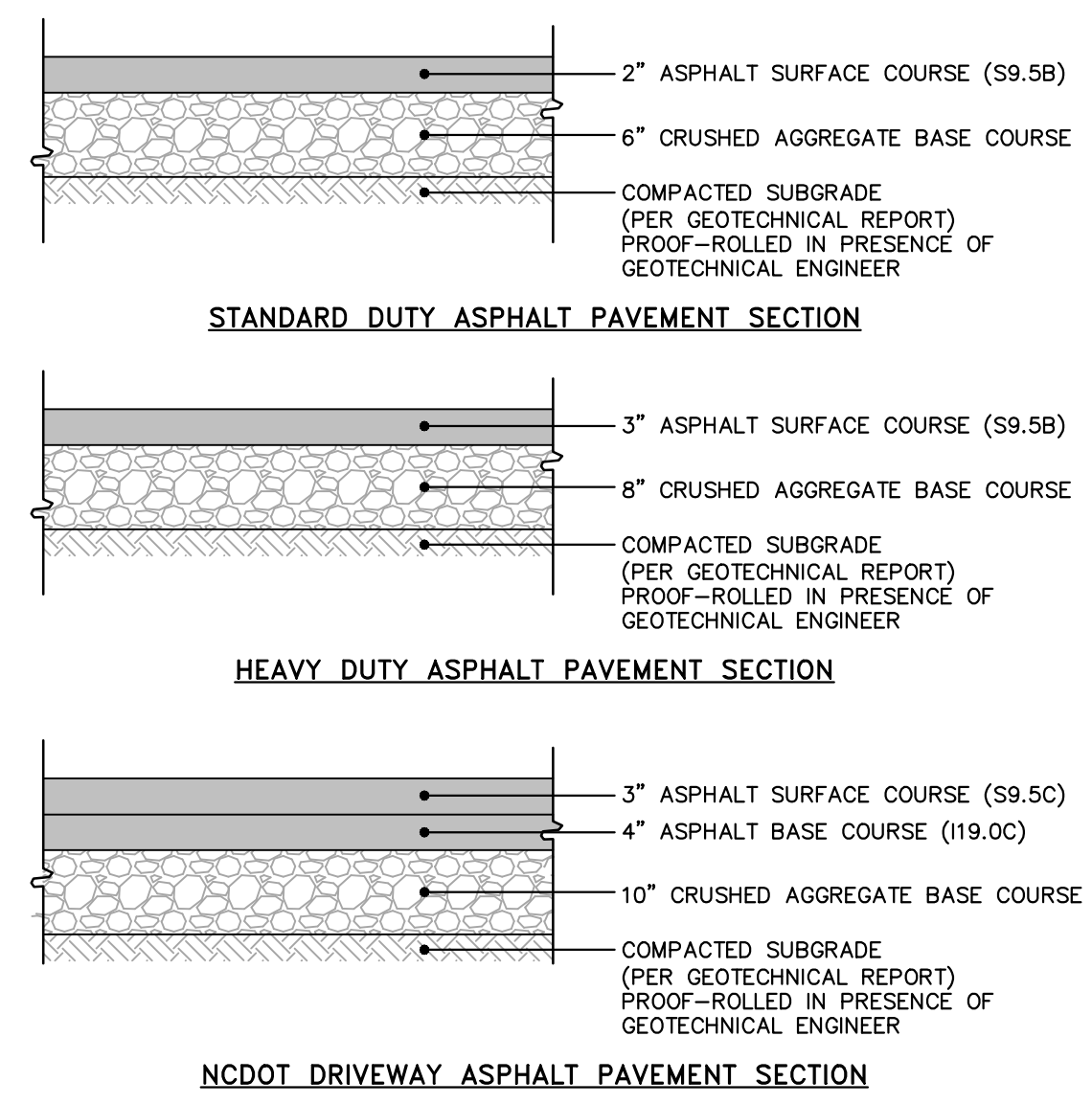
KHA PROJECT	016485000
DATE	10/31/2023
SCALE	AS SHOWN
DESIGNED BY	JAA
DRAWN BY	JAA
CHECKED BY	COB

**WET POND DETAILS**

**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE, NC



Plotted By: Alexander, Jamal Sheet: S&S SCOOTER'S ROLESVILLE Layout: C8.0 SITE DETAILS July 10, 2024, 11:30:48am. K:\RAL\_LDEV\016485000-Scoters Rolesville\Planning\15\_CAD Files\PlanSheets\C8.0 SITE DETAILS.dwg  
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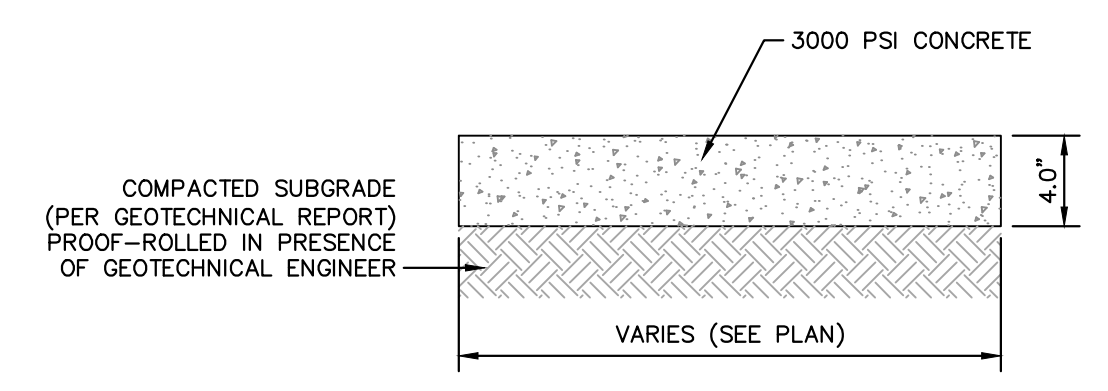


**NOTES**

- ALL PAVEMENT MATERIALS SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) STANDARD SPECIFICATIONS.
- PAVEMENT SECTION MUST MEET THE CRITERIA GIVEN IN THE SITE SOIL REPORT.

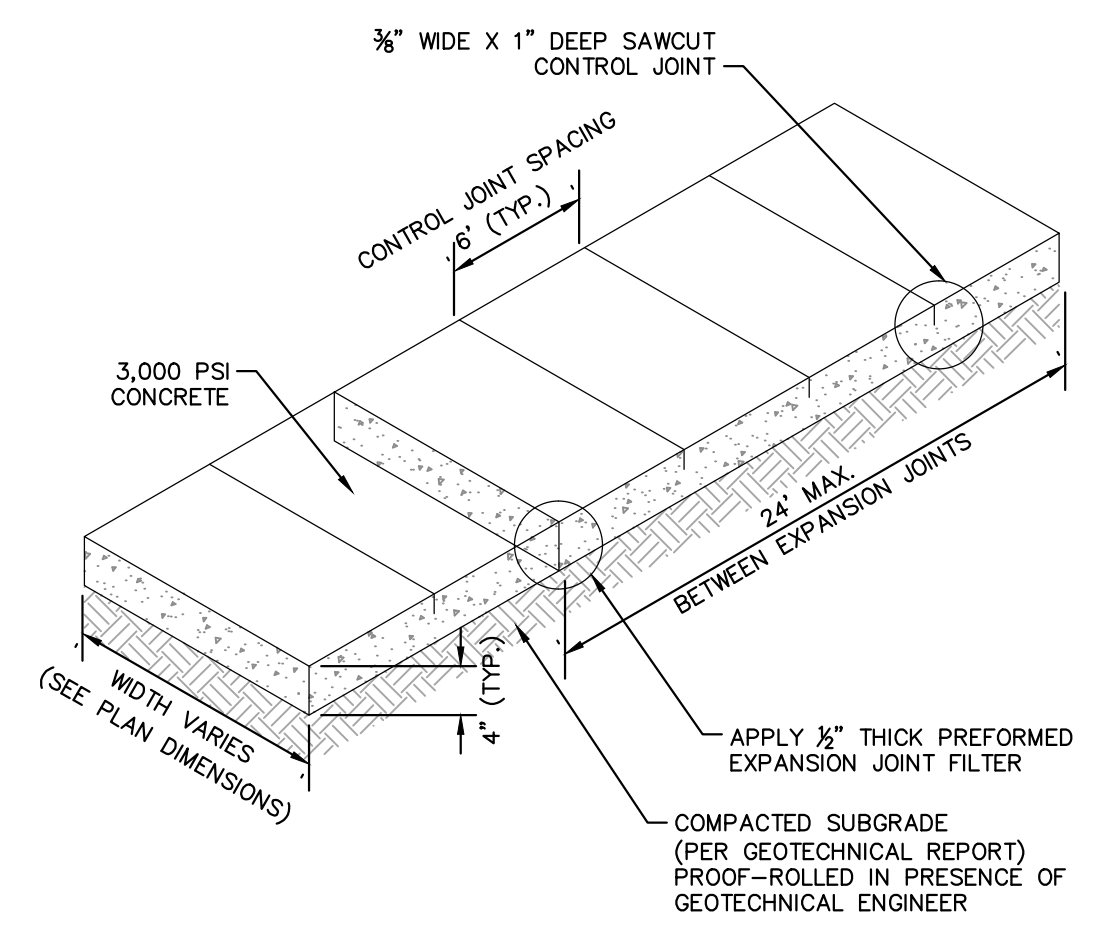
**ASPHALT PAVEMENT SECTIONS**

N.T.S.



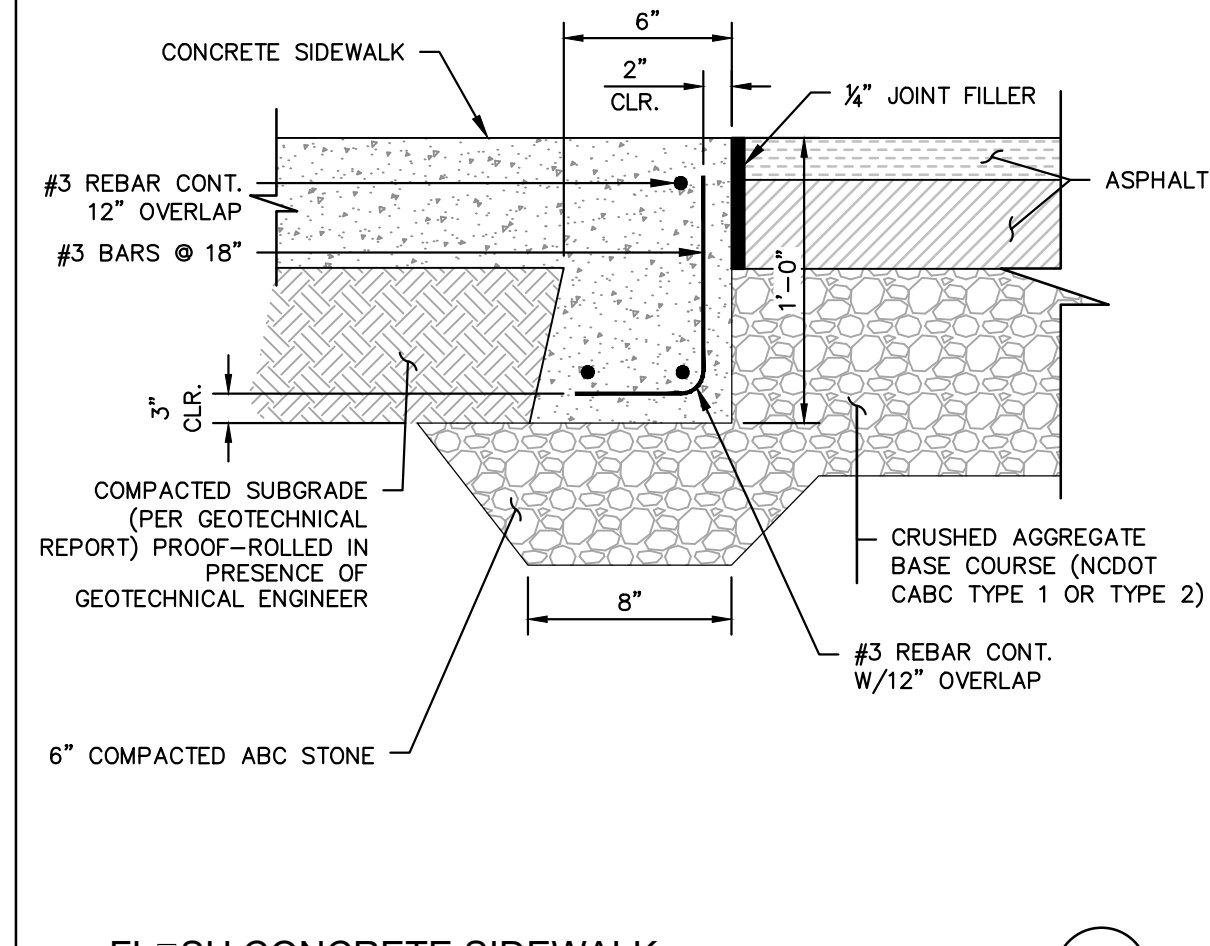
**SIDEWALK SECTION**

N.T.S. KHA DETAIL NO: 02.102.R01



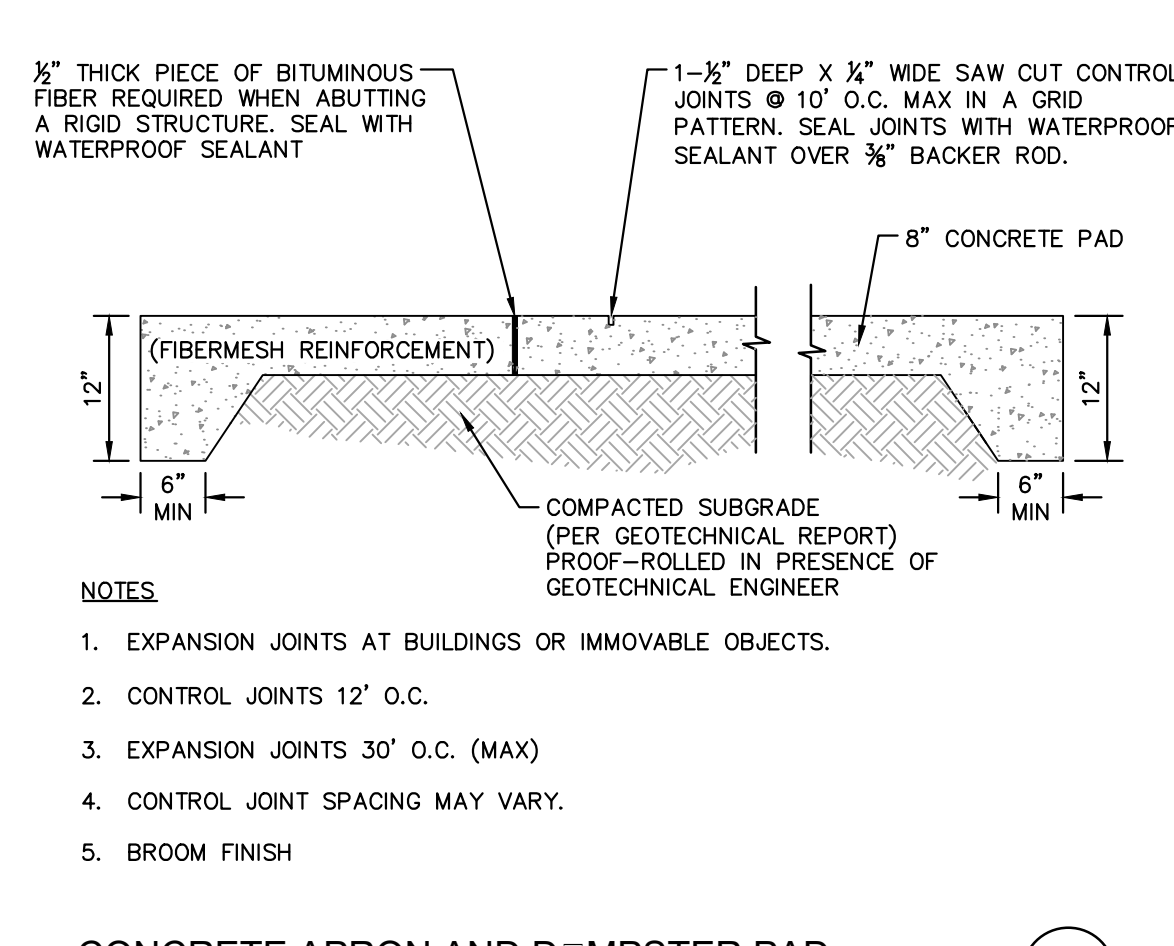
**SIDEWALK**

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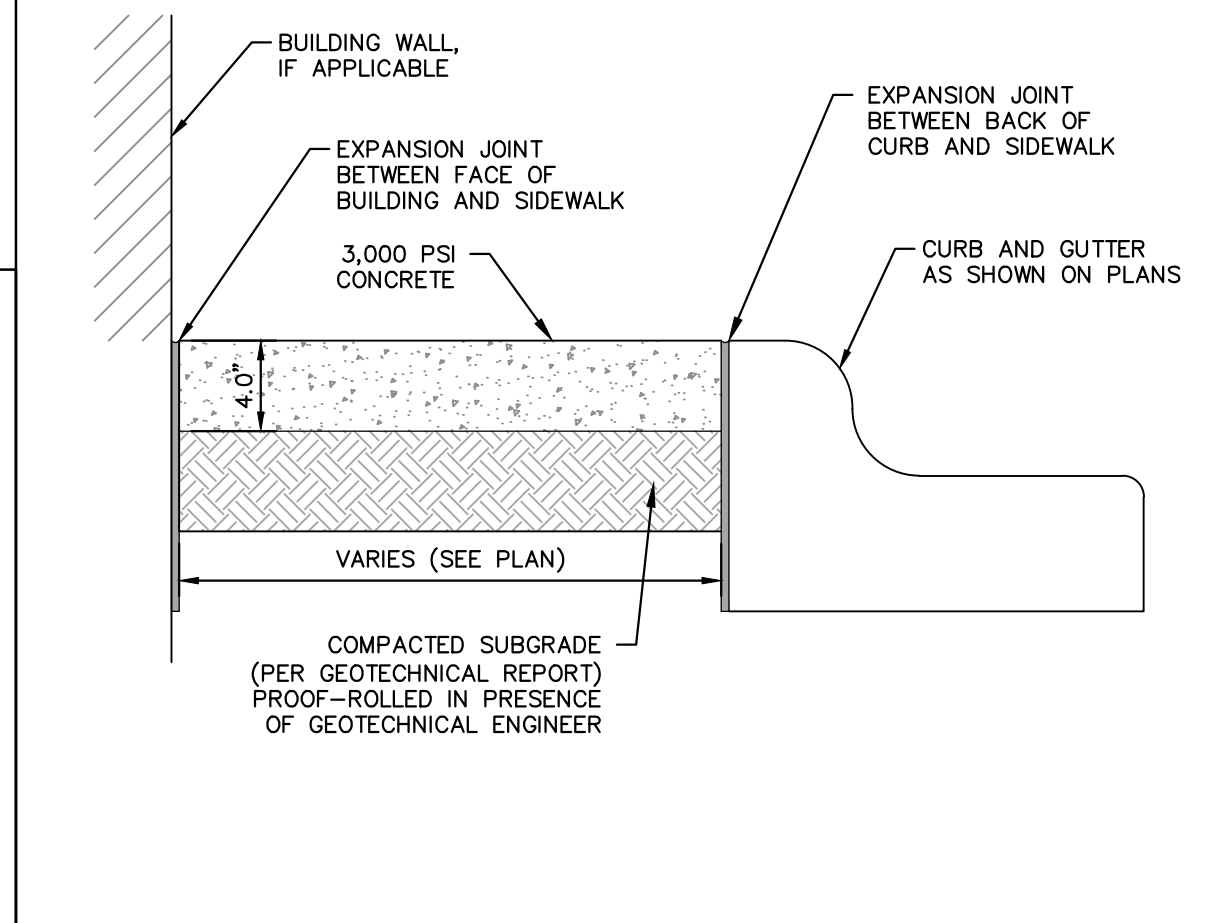
**FLUSH CONCRETE SIDEWALK**

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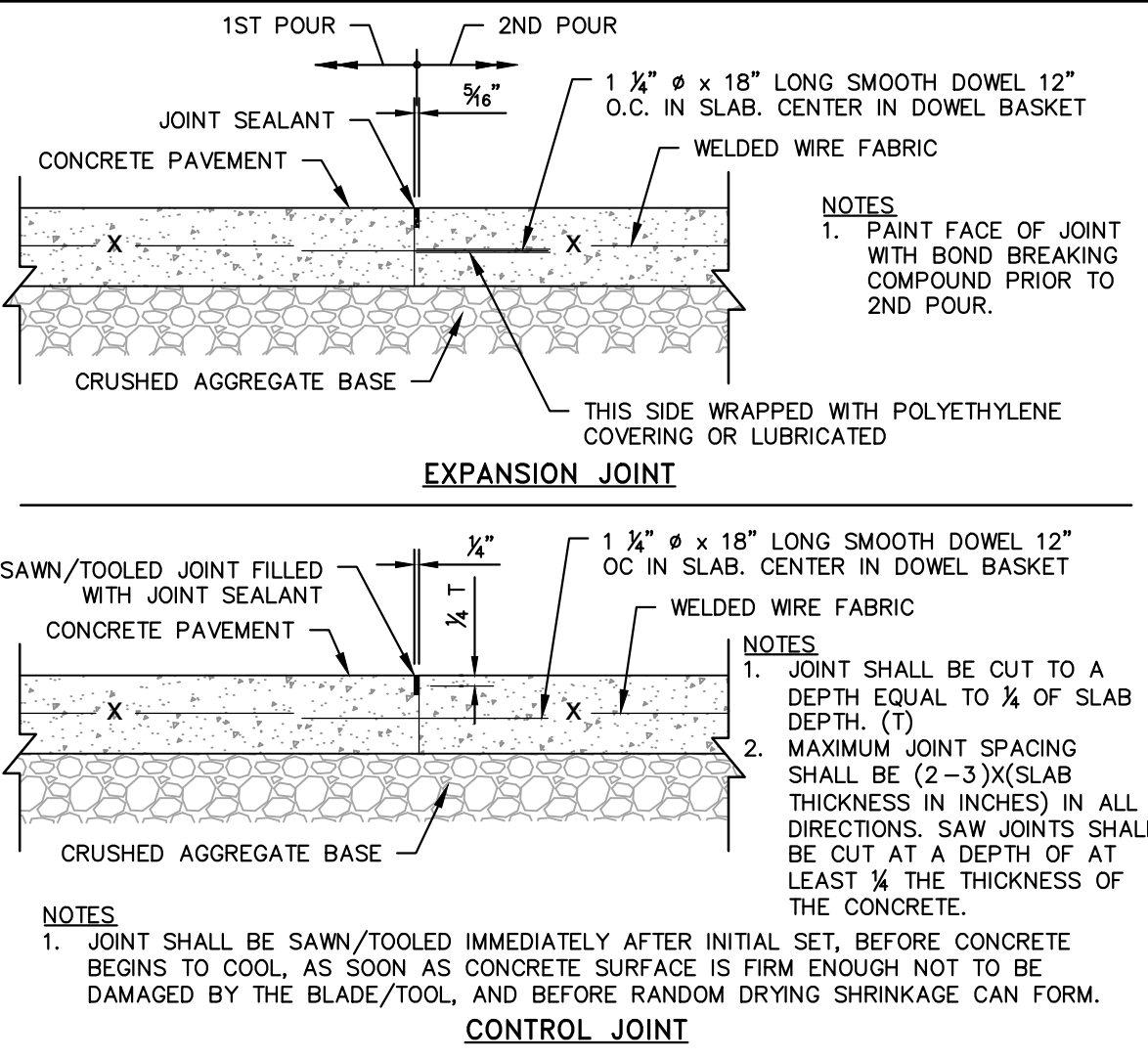
**CONCRETE APRON AND DUMPSTER PAD**

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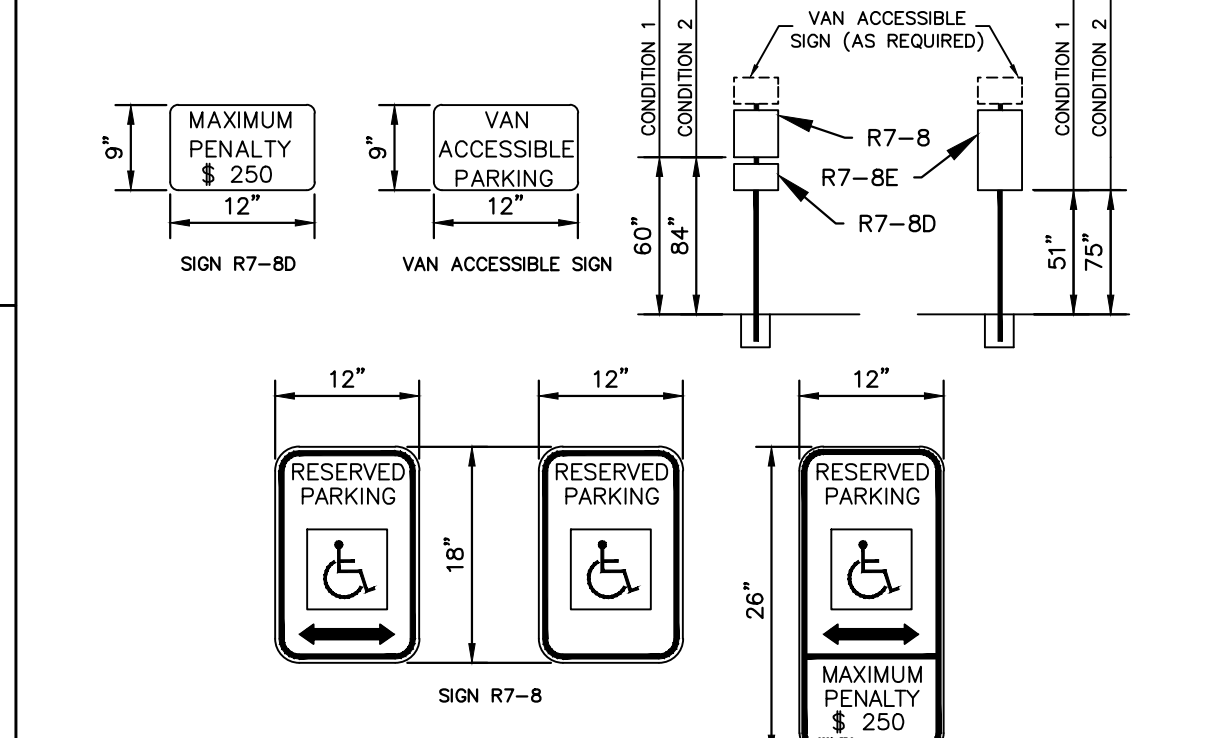
**SIDEWALK ADJACENT TO PARKING AREAS**

N.T.S. KHA DETAIL NO: 02.105.R02



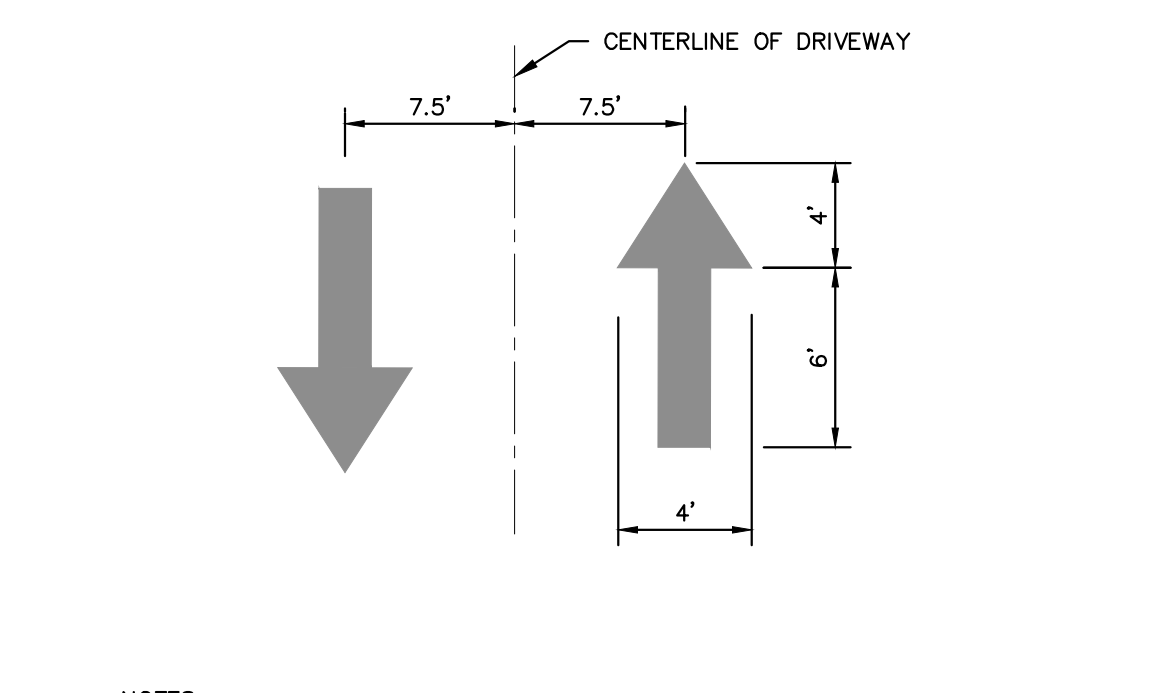
**HEAVY DUTY CONTROL AND EXPANSION JOINTS**

N.T.S. KHA DETAIL NO: 02.108.R02



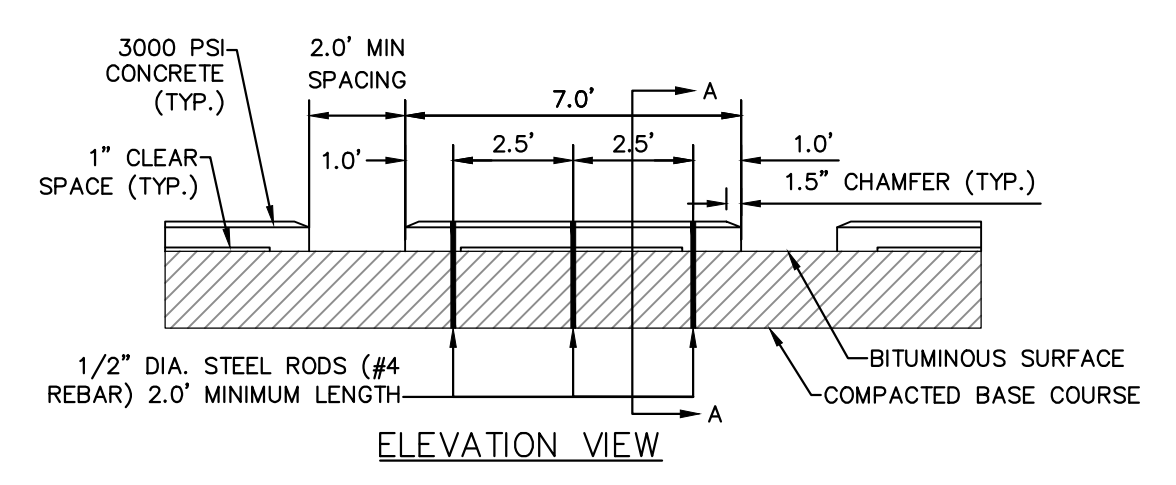
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N.T.S. KHA DETAIL NO: 02.308.R01



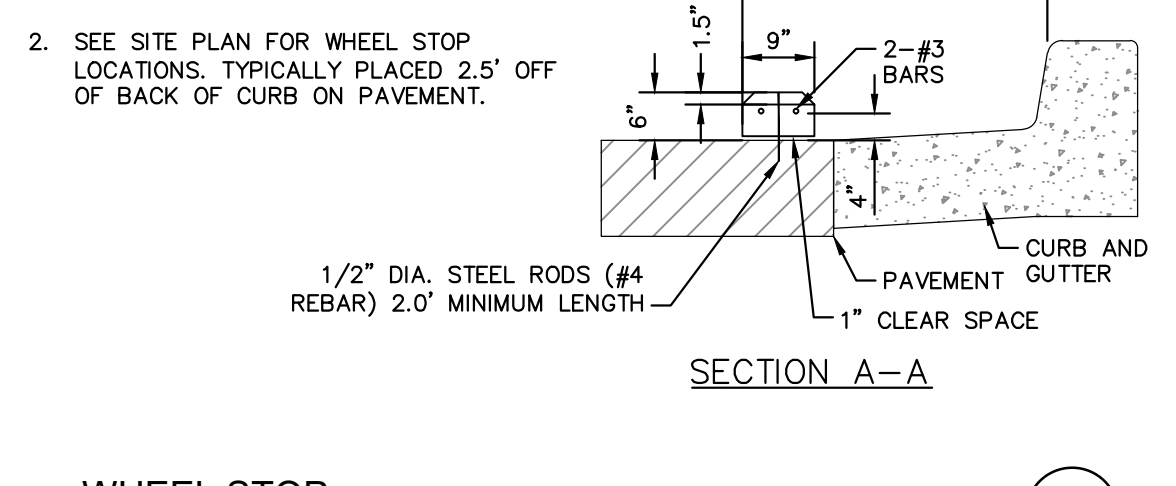
**PAVEMENT DIRECTIONAL ARROW**

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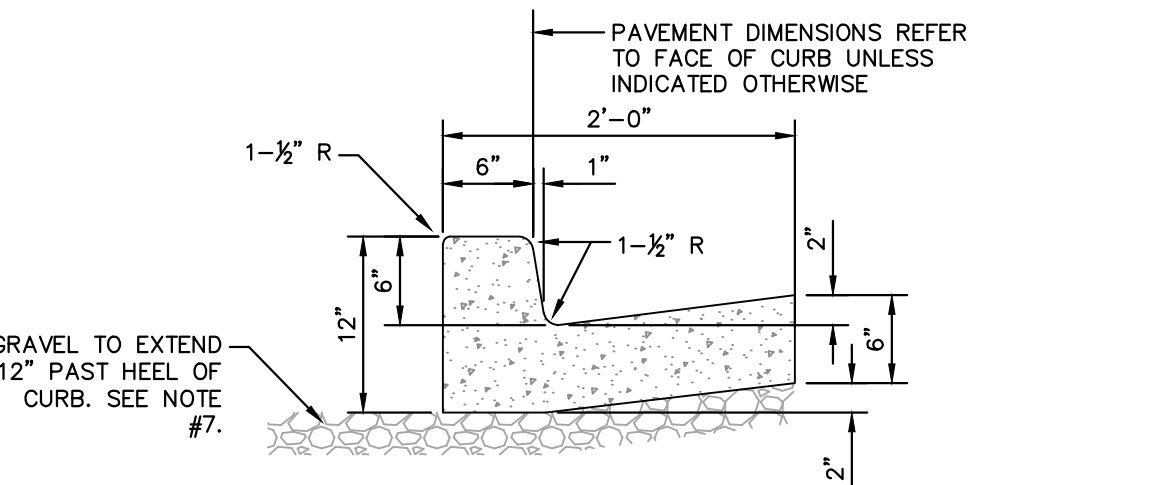
**WHEEL STOP**

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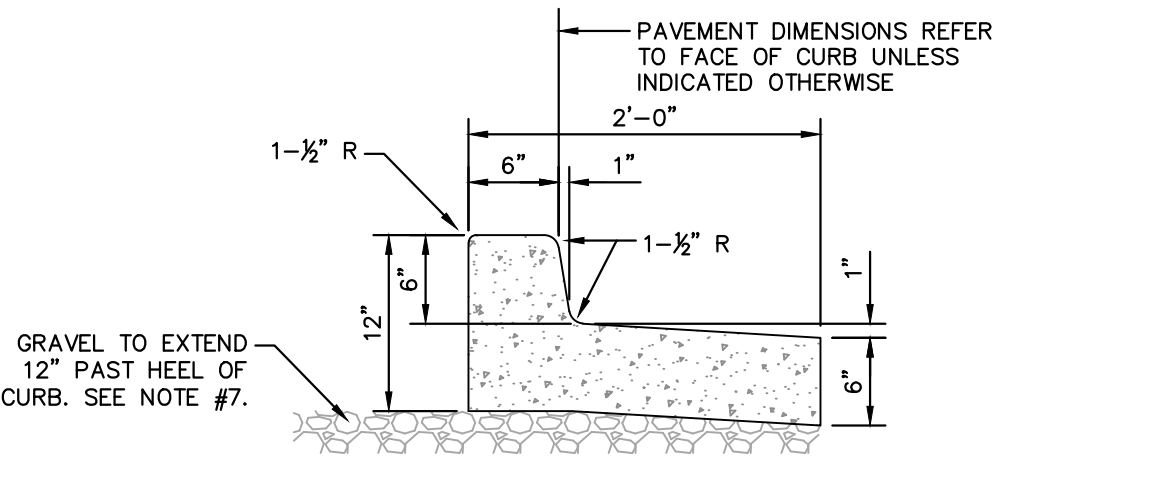
**BIKE RACK DETAIL**

SCALE: NTS REVISION DATE: 05/10/2016



**CATCHING CURB AND GUTTER**

GRAVEL TO EXTEND 12" PAST HEEL OF CURB. SEE NOTE #7.



**DRY CURB AND GUTTER**

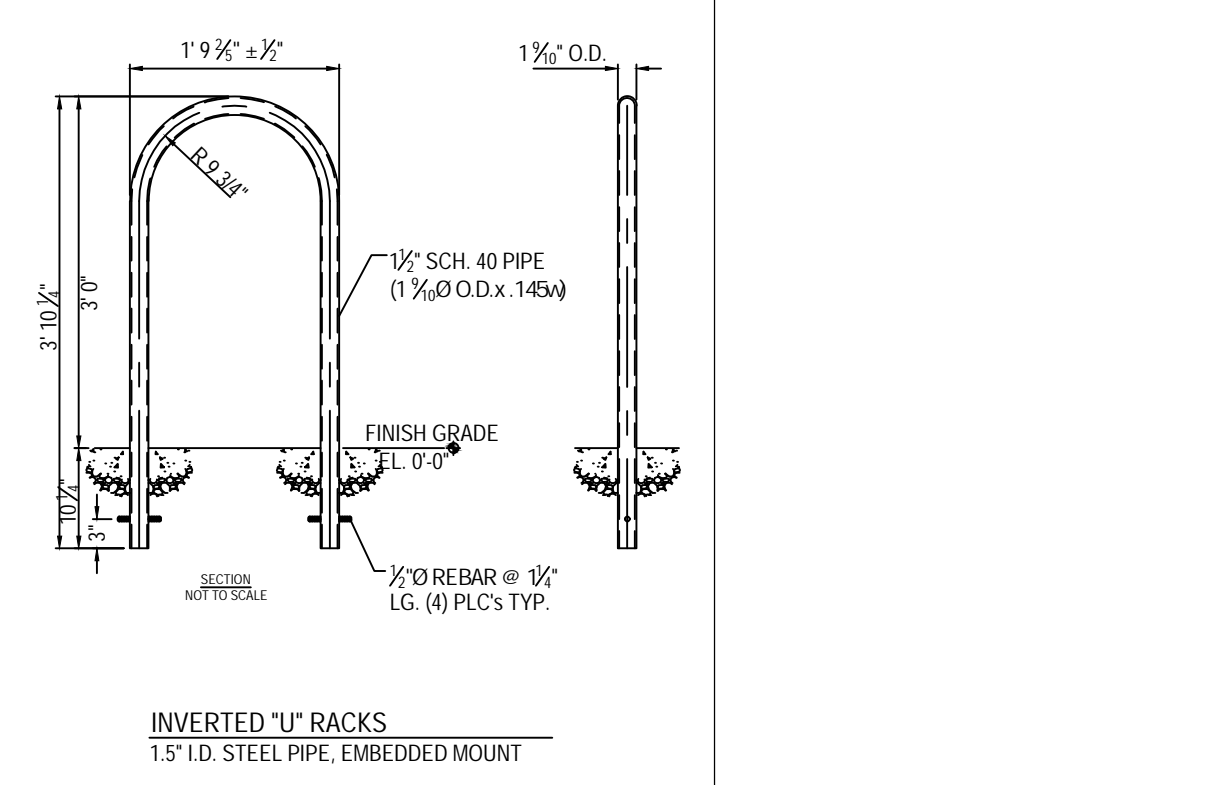
NOTE: INSTALL SPILL CURB IN AREAS WHERE PAVEMENT SLOPES AWAY FROM CURB.

**CURB AND GUTTER NOTES**

- CONTRACTION JOINTS SHALL BE SPACED AT 10-FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
- CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
- ALL EXPANSION JOINTS SHALL BE SPACED AT 90 FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ABUTTING SIDEWALK.
- CONCRETE COMPRESSIVE STRENGTH SHALL BE 3000 P.S.I. IN 28 DAYS.
- CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS, REFER TO SITE PLAN FOR LOCATIONS.
- TOP 6" OF SUBGRADE BENEATH THE CURB AND GUTTER SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- EXTEND GRAVEL 12" PAST HEEL OF CURB IF REQUIRED PER GEOTECHNICAL RECOMMENDATIONS, MIN. DEPTH 4" IF FIELD CONDITIONS WARRANT.

**24" CURB AND GUTTER**

N.T.S. KHA DETAIL NO: 02.203.R01



**INVERTED 'U' RACKS**

1.5" I.D. STEEL PIPE, EMBEDDED MOUNT

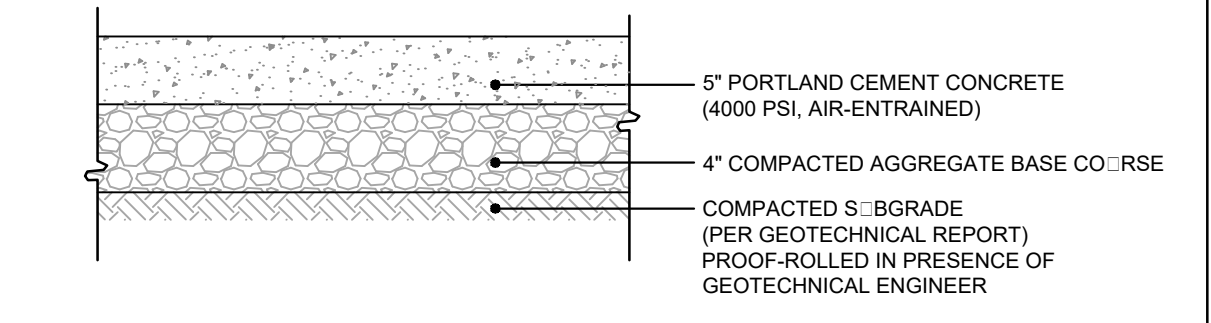
**NOTES:**

- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- DO NOT SCALE DRAWINGS.
- CONTACT MANUFACTURER FOR CUSTOM COLORS.
- SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL.

NOTE: RACKS SHALL BE SPACED AT LEAST 24" FROM WALLS, CURB FACES, PAVEMENT EDGES, AND OTHER OBSTRUCTIONS. AT LEAST 36" CLEARANCE SHALL BE PROVIDED FROM THE CENTERLINE OF EACH ADJACENT RACK. A MINIMUM 4' ASLE SHALL BE PROVIDED TO THE FRONT OR REAR OF A BICYCLE SPACE.

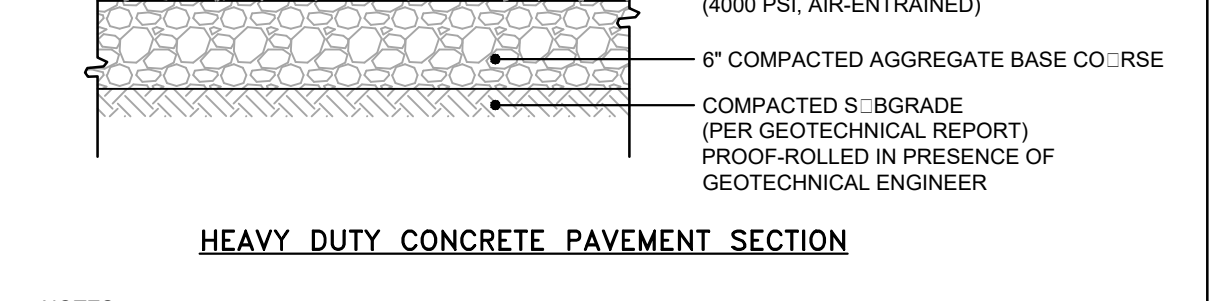
**BIKE RACK DETAIL**

SCALE: NTS REVISION DATE: 05/10/2016



**STANDARD DUTY CONCRETE PAVEMENT SECTION**

N.T.S.



**HEAVY DUTY CONCRETE PAVEMENT SECTION**

N.T.S.

**CONCRETE PAVEMENT SECTIONS**

N.T.S. KHA DETAIL NO: XX

**NOTES**

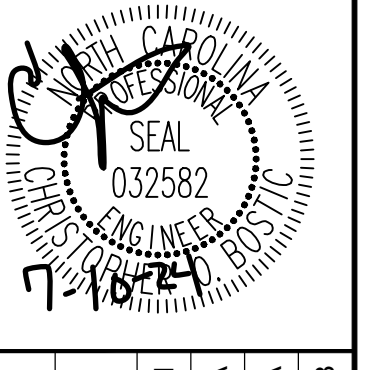
- ALL PAVEMENT MATERIALS SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) STANDARD SPECIFICATIONS.
- PAVEMENT SECTION MUST MEET THE CRITERIA GIVEN IN THE SITE SOIL REPORT.

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NO.	REVISIONS	DATE	BY
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**Kimley»Horn**

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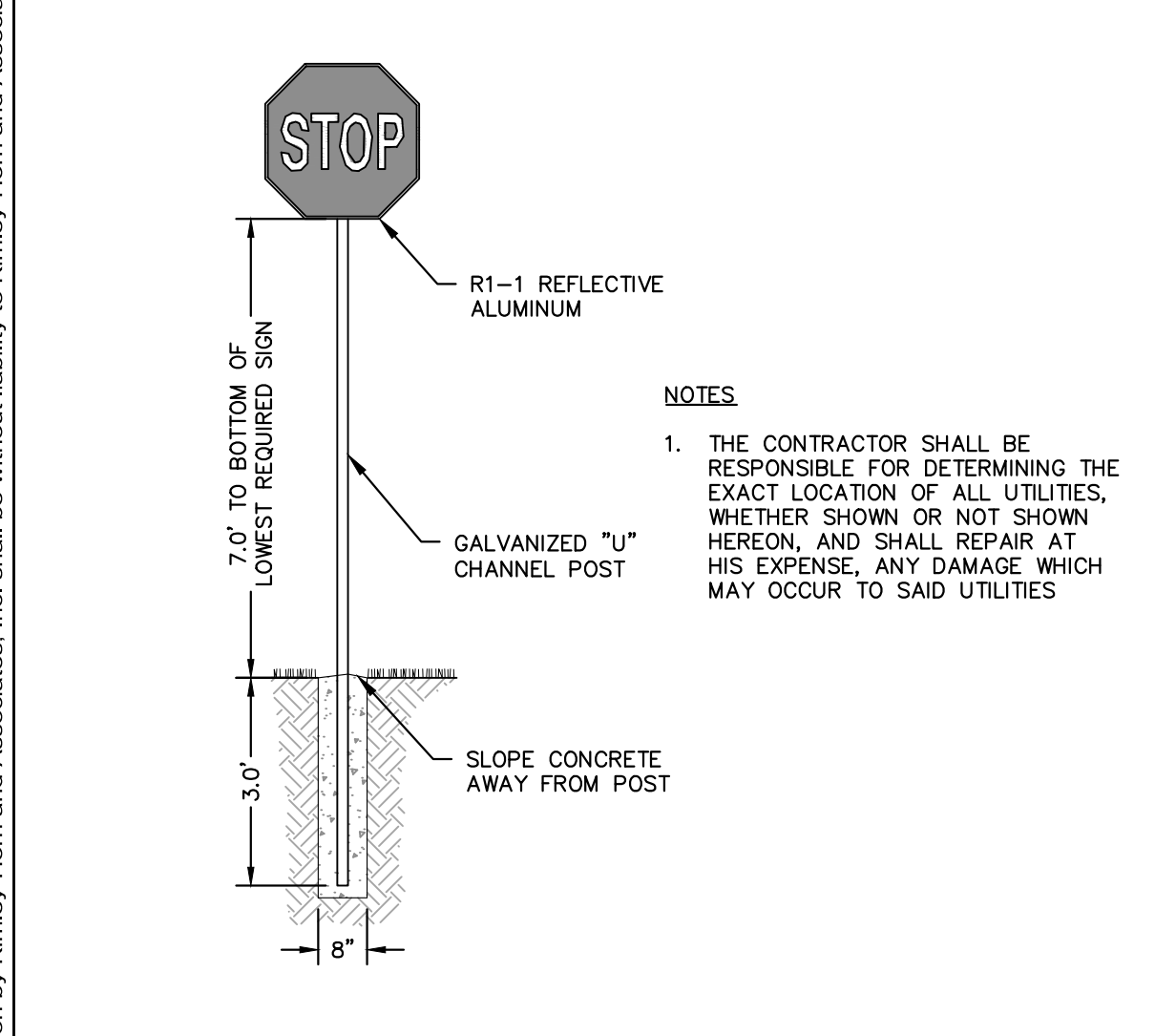
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016485000	10/31/2023	AS SHOWN	JAA	JAA	COB

**SITE DETAILS**

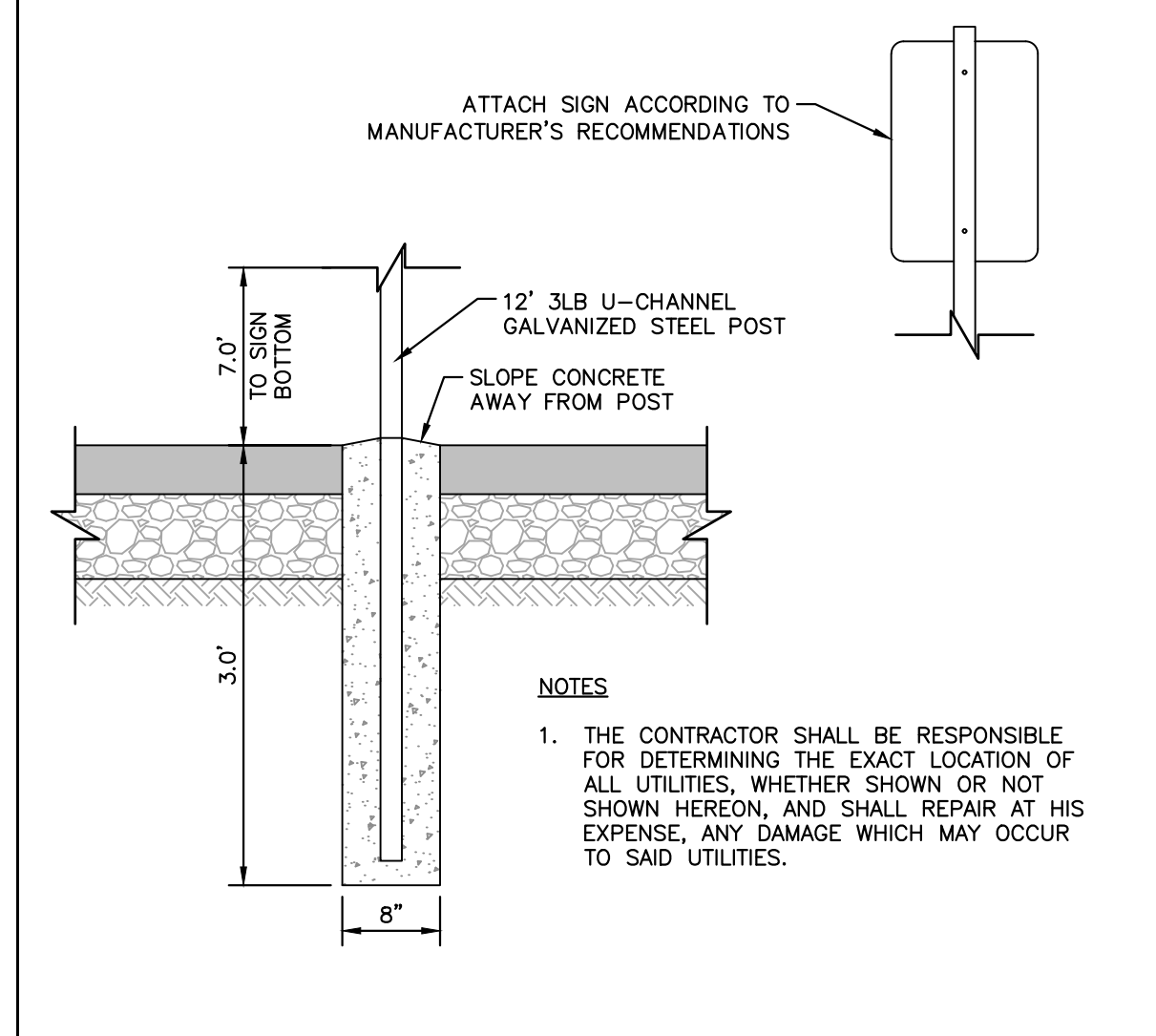
**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE, NC



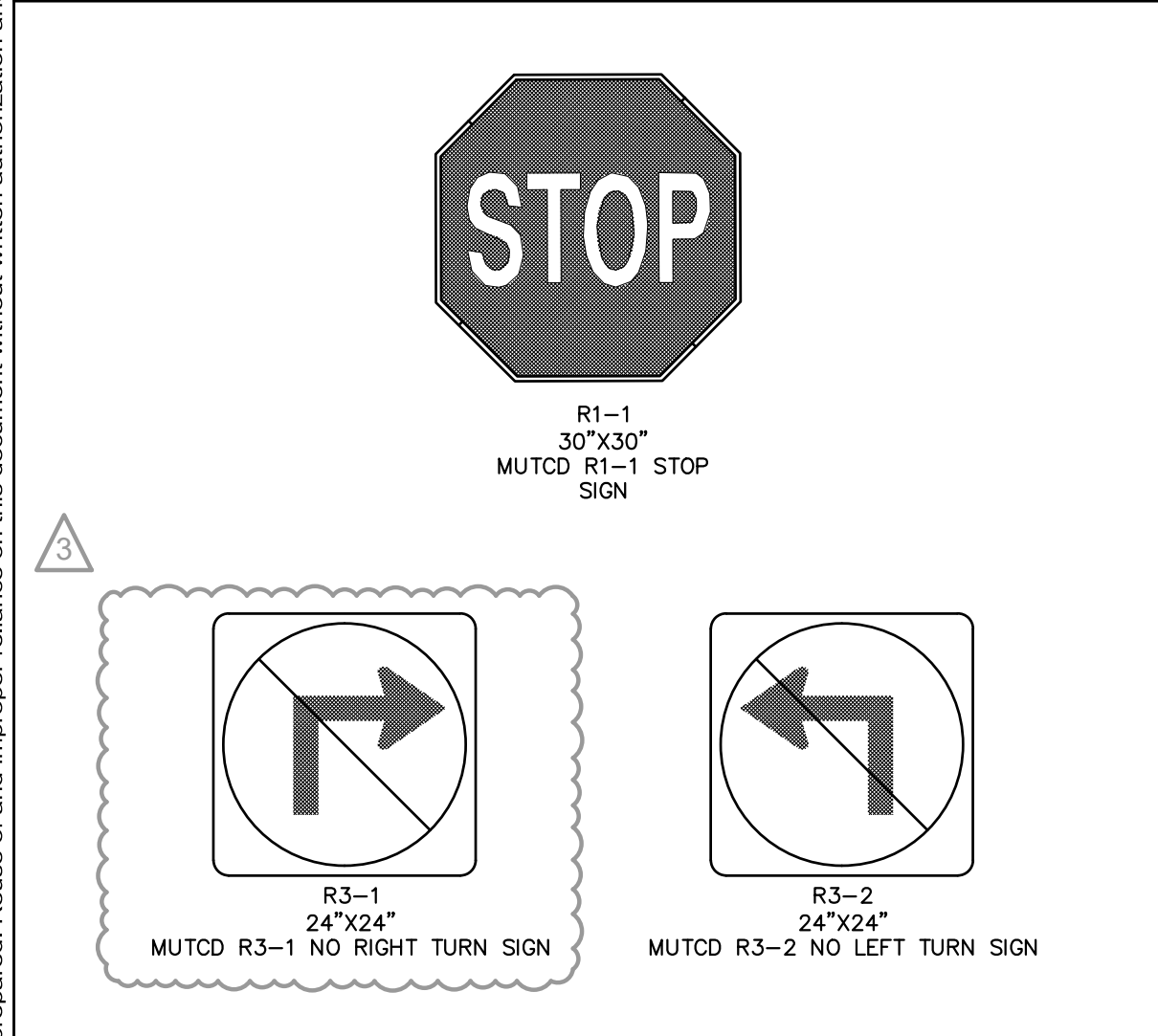
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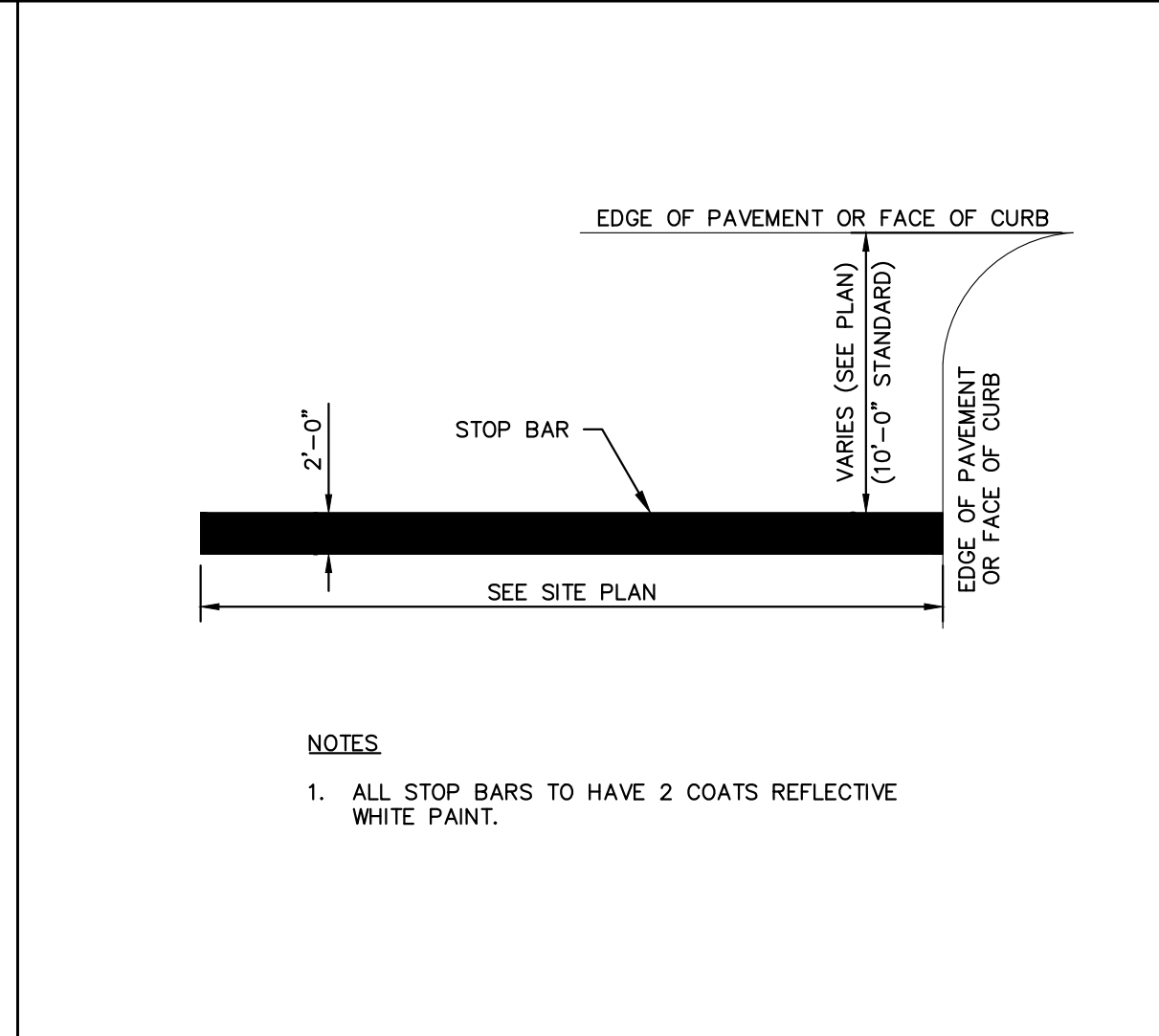
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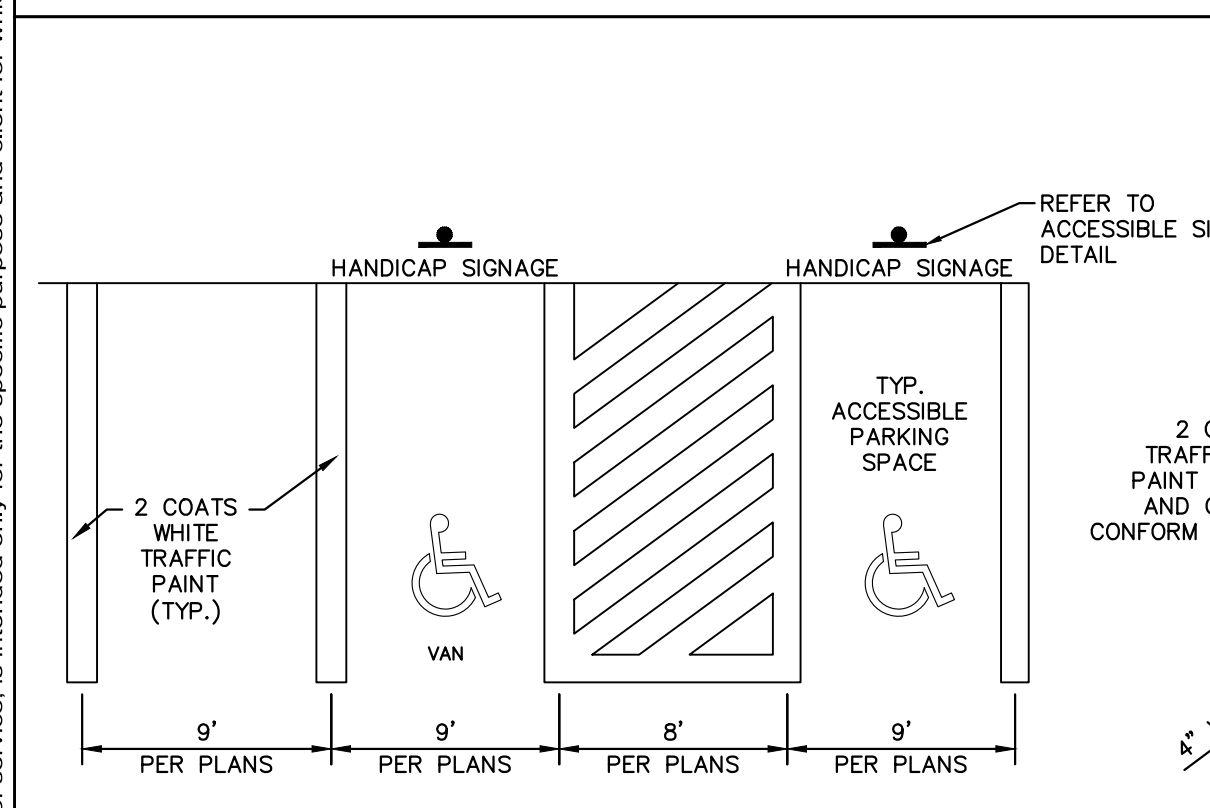
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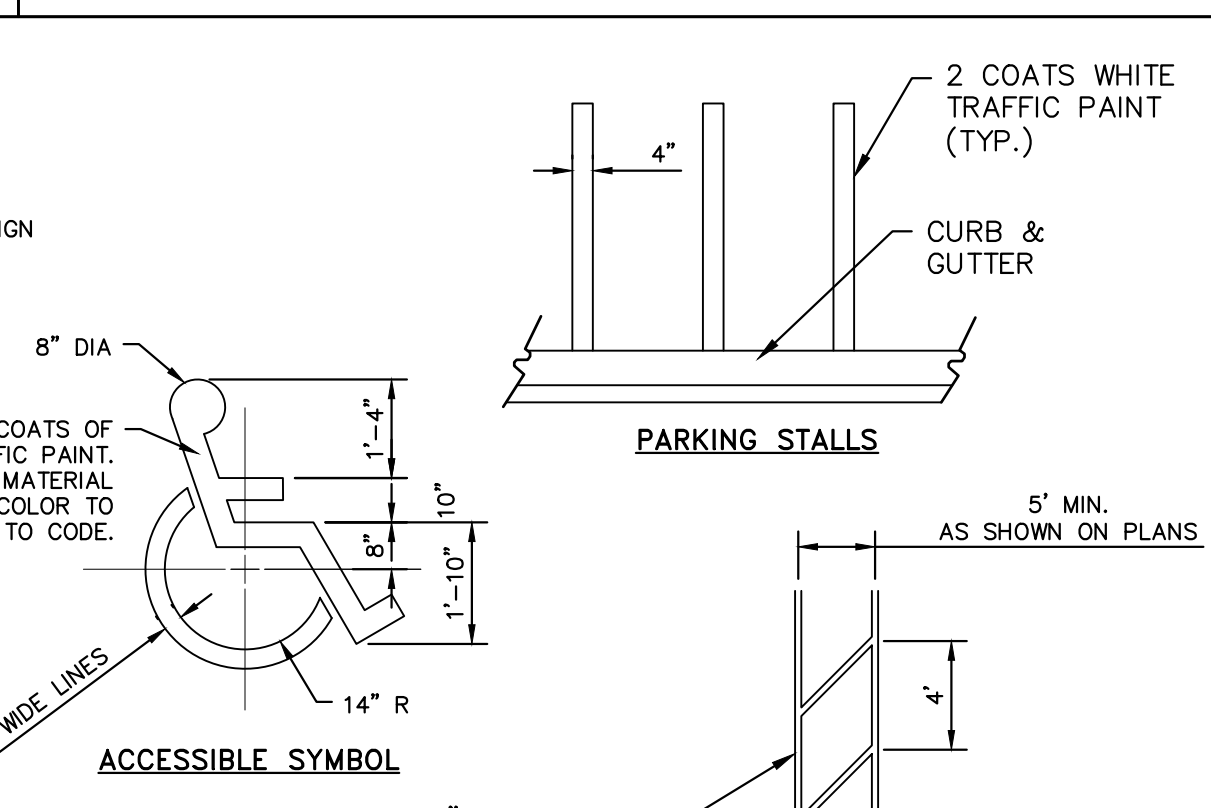
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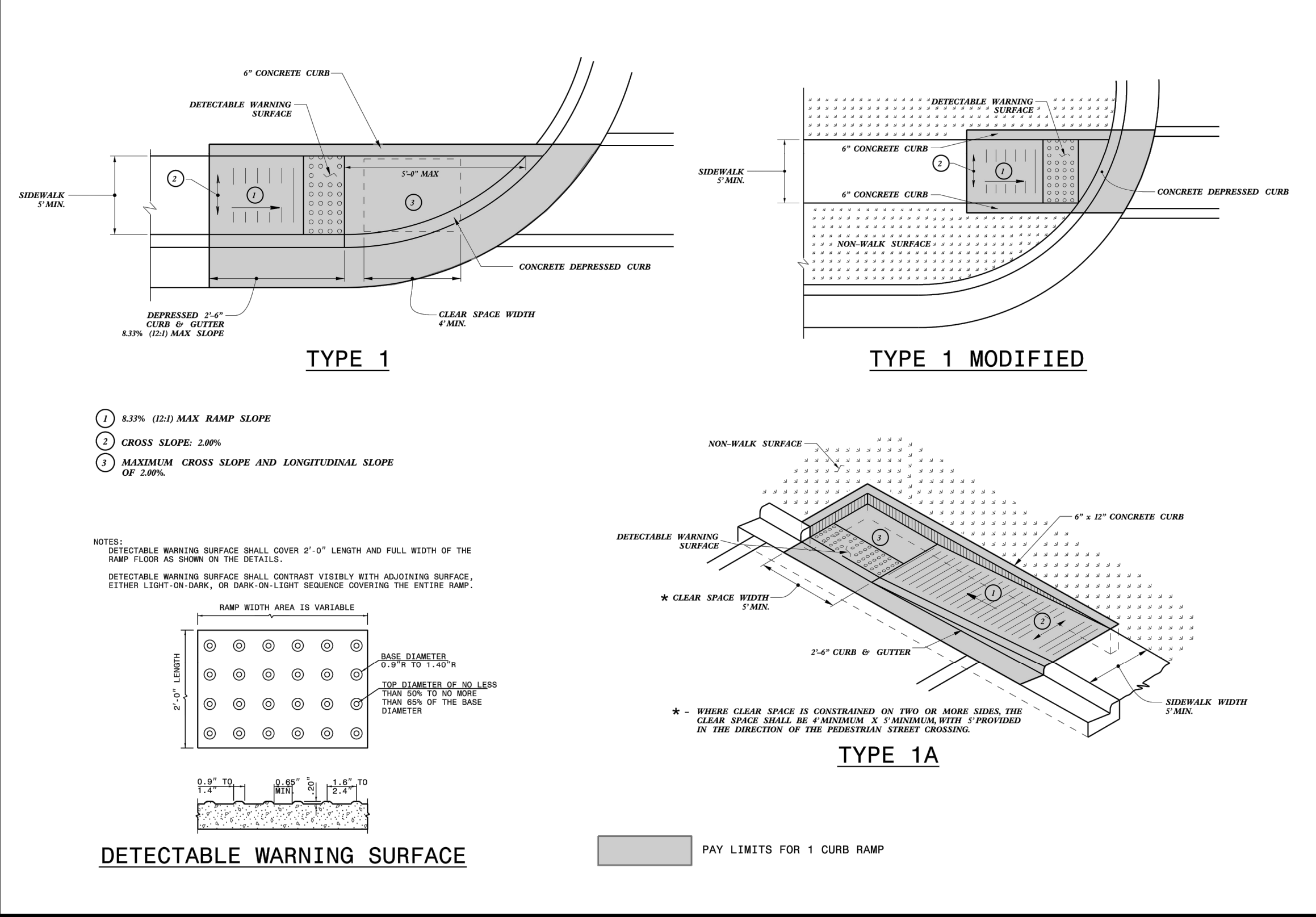
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**PAVEMENT STRIPING**  
N.T.S. KHA DETAIL NO: 02.305.R02



**PEDESTRIAN ACCESSIBILITY CROSSWALK**  
N.T.S. KHA DETAIL NO: 02.305.R02



**DETECTABLE WARNING SURFACE**  
N.T.S. KHA DETAIL NO: 02.308.R01

- NOTES:**
- CONSTRUCT THE RAMP SURFACE TO BE STABLE, FIRM, AND SLIP RESISTANT. CONSTRUCT THE CURB RAMP TYPE AS SHOWN IN THE PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER.
  - LOCATE CURB RAMP AND PLACE PEDESTRIAN CROSSWALK MARKINGS AS SHOWN IN THE PAVEMENT MARKING PLANS. WHEN FIELD ADJUSTMENTS REQUIRE MOVING CURB RAMP OR MARKINGS AS SHOWN, CONTACT THE SIGNING AND DELINEATION UNIT OR LOCATE AS DIRECTED BY THE ENGINEER.
  - COORDINATE THE CURB RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO A 4'x4' CLEAR SPACE AT THE BASE OF THE CURB RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES.
  - SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL LANE IS 4' MINIMUM.
  - REFER TO THE PAVEMENT MARKING PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS. IF A PAVEMENT MARKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL DESIGN SECTION FOR THE STOP BAR LOCATIONS OR LOCATE AS DIRECTED BY THE ENGINEER.
  - TERMINATE PARKING A MINIMUM OF 20' FROM THE BACK OF PEDESTRIAN CROSSWALK.
  - CONSTRUCT CURB RAMP A MINIMUM OF 4' WIDE.
  - CONSTRUCT THE RUNNING SLOPE OF THE RAMP 8.33% MAXIMUM.
  - ALLOWABLE CROSS SLOPE ON SIDEWALKS AND CURB RAMP WILL BE 2% MAXIMUM.
  - CONSTRUCT THE SIDE FLARE SLOPE A MAXIMUM OF 10% MEASURED ALONG THE CURB LINE.
  - CONSTRUCT THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE BASE OF THE CURB RAMP A MAXIMUM OF 5% AND MAINTAIN A SMOOTH TRANSITION.
  - CONSTRUCT CLEAR SPACES FOR SIDEWALK A MINIMUM OF 4'x4' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. CONSTRUCT CLEAR SPACES FOR MEDIAN ISLANDS A MINIMUM OF 5'x5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. IF CONSTRAINED ON TWO OR MORE SIDES, THE CLEAR SPACE SHALL BE 4' MINIMUM X 5' MINIMUM, WITH 5' PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.
  - TO USE A MEDIAN ISLAND AS A PEDESTRIAN REFUGE AREA, MEDIAN ISLANDS WILL BE A MINIMUM OF 6' WIDE. CONSTRUCT MEDIAN ISLANDS TO PROVIDE PASSAGE OVER OR THROUGH THE ISLAND.
  - SMALL CHANNELIZATION ISLANDS THAT CAN NOT PROVIDE A 5'x5' CLEAR SPACE AT THE TOP OF RAMPS, WILL BE CUT THROUGH LEVEL WITH THE SURFACE STREET.
  - CURB RAMP WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, WHERE THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE, OR THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED.
  - PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE CURB RAMP JOINS THE CURB AS SHOWN IN ROADWAY STANDARD DRAWING 848.01.
  - PLACE ALL PEDESTRIAN PUSH BUTTON ACTUATORS AND CROSSING SIGNALS AS SHOWN IN THE PLANS OR AS SHOWN IN THE MUTCD.
  - DETECTABLE WARNING SURFACES WILL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
  - DETECTABLE WARNING SURFACES WILL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.

**DETECTABLE WARNING SURFACE**  
N.T.S. KHA DETAIL NO: 02.308.R01

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

ROADWAY STANDARD DRAWING FOR  
**CURB RAMP**  
DIRECTIONAL RAMP

SHEET 6 OF 13  
**848.06**

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

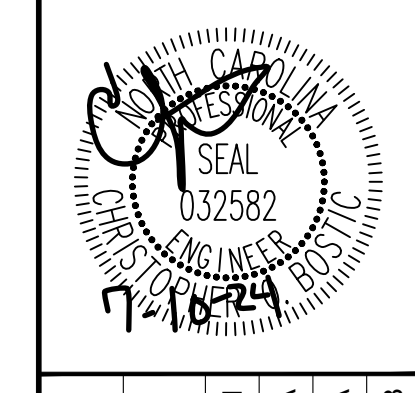
ROADWAY STANDARD DRAWING FOR  
**CURB RAMP**  
NOTES

SHEET 13 OF 13  
**848.06**

**SURVEY NOTE:**  
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#F-0102 WWW.KIMLEY-HORN.COM PHONE: 919-677-2000 FAX: 919-677-2050  
421 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601



**SITE DETAILS**

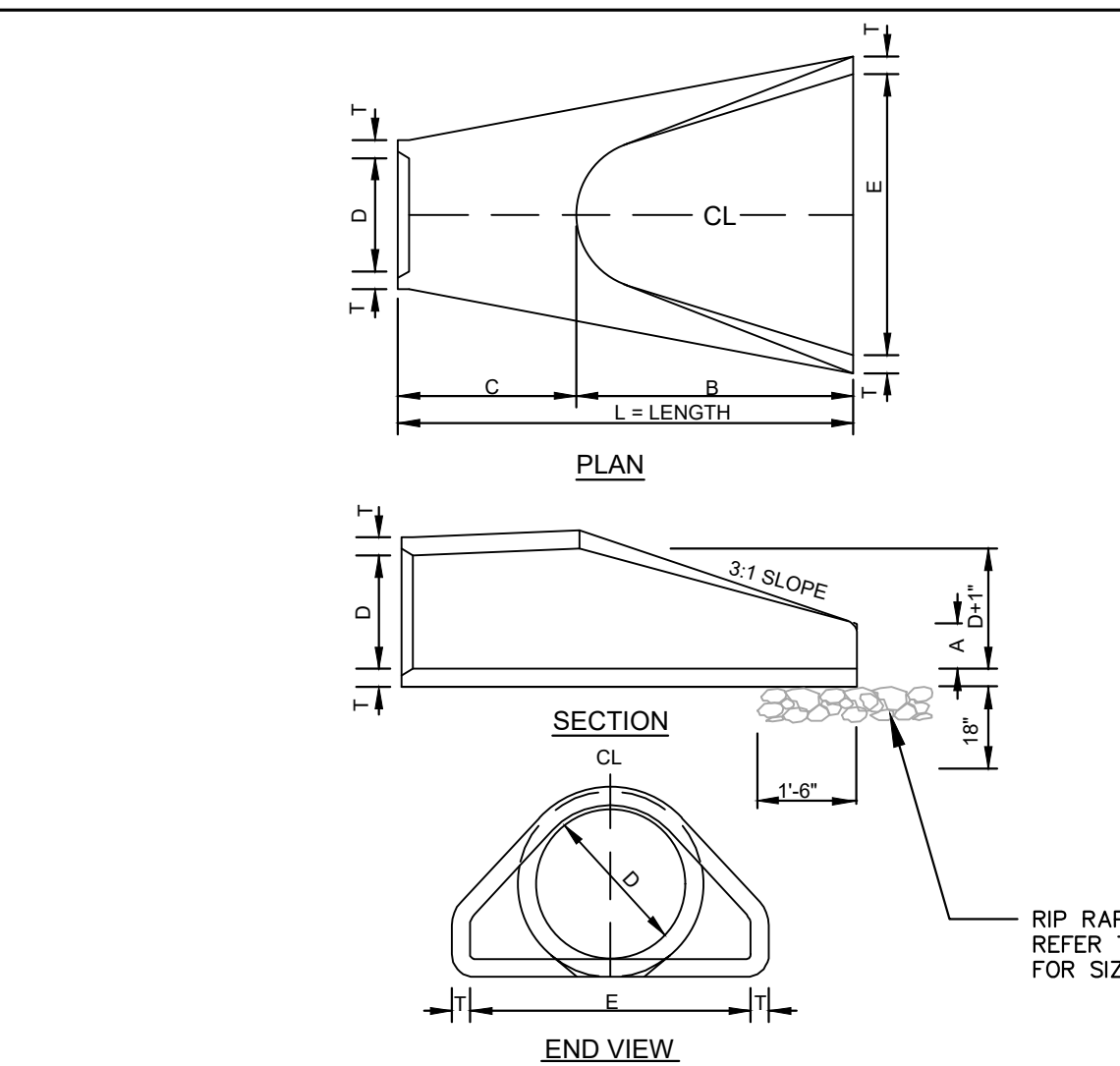
**SCOOTER'S ROLESVILLE**  
PREPARED FOR  
**S&S JAVA ENTERPRISES**  
ROLESVILLE NC

SHEET NUMBER  
**C8.1**



SDP-23-09

Plotted By: Alexander, Jamal Sheet: S&S SCOOTER'S ROLESVILLE Layout: C9.0 STORM DETAILS July 10, 2024 11:21:13am K:\RA\LD\016485000-Scooters Rolesville\Planning\15-CAD Files\PlanSheets\C9.2 STORM DETAILS.dwg  
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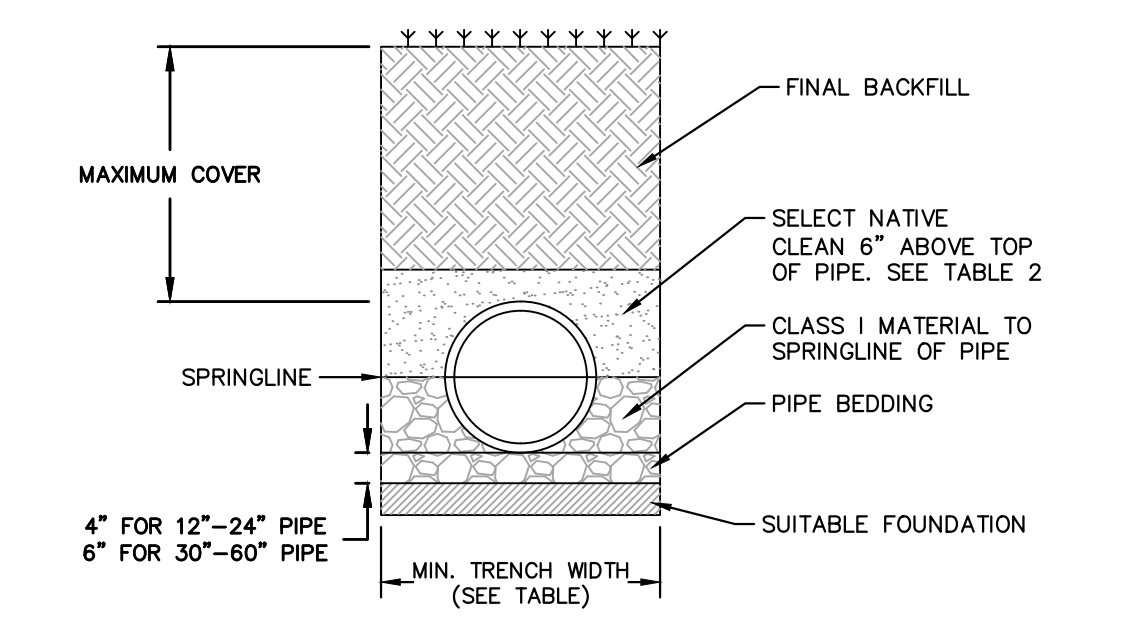
**TABLE OF DIMENSIONS**

D	T	A	B	C	E	L	WT.
12"	2-1/4"	4"	2'-0"	4'-1"	2'-0"	6'-1"	730
15"	2-1/4"	6"	2'-3"	3'-10"	2'-0"	6'-1"	730
18"	2-1/2"	9"	2'-3"	3'-10"	3'-0"	6'-1"	1190
24"	3"	10"	3'-8"	2'-8"	4'-0"	8'-2"	1770
30"	3-1/2"	1'-0"	4'-8"	1'-8"	5'-0"	8'-2"	2380
36"	4"	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"	5320
42"	4-1/2"	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"	5920
48"	5"	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"	7470
54"	5-1/2"	2'-3"	6'-8"	2'-10"	7'-0"	8'-4"	8810
60"	6"	2'-6"	6'-0"	3'-3"	8'-0"	8'-3"	11180
66"	6-1/2"	3'-0"	6'-0"	2'-3"	8'-6"	8'-3"	12530
72"	7"	3'-0"	6'-6"	1'-9"	9'-0"	8'-3"	13980

- GENERAL NOTES:**
- SEE FORMER NCDOT STANDARD 310.01 FOR DETAILS.
  - REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M170.
  - ALL CONCRETE TO BE 3000 P.S.I. COMPRESSIVE STRENGTH MIN.
  - PROVIDE TONGUE OR SPIGOT JOINT AT INLET END SECTION.
  - PROVIDE GROOVE OR BELL JOINT AT OUTLET END SECTION.
  - THE DIMENSIONS FOR END SECTIONS SHALL SUBSTANTIALLY AGREE WITH THE TABLE. MINOR VARIATIONS WILL BE PERMITTED BASED ON THE MANUFACTURER'S STANDARD SPECIFICATIONS.
  - NOT TO BE USED IN NCDOT MAINTAINED RIGHT OF WAY.

**CONCRETE FLARED END SECTION**  
N.T.S.

KHA DETAIL NO: 01.905.001



**TABLE 1, RECOMMENDED MINIMUM TRENCH WIDTHS**

PIPE DIAM.	MIN. TRENCH WIDTH
12"	30"
15"	36"
18"	42"
24"	48"
30"	54"
36"	60"
42"	66"
48"	72"
54"	78"
60"	84"
66"	90"
72"	96"

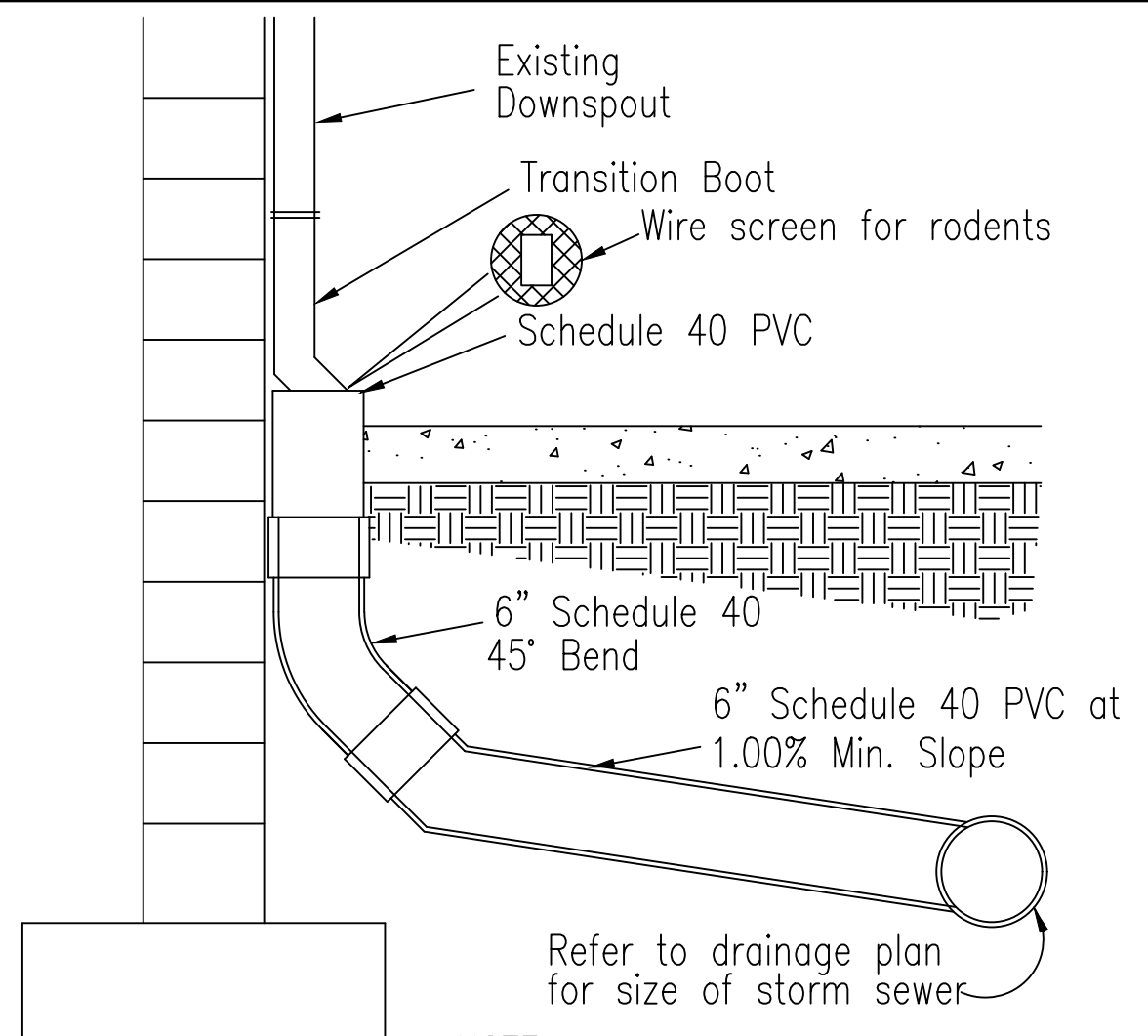
**TABLE 2, MAXIMUM COVER FOR ADS HP STORM PIPE, ALTERNATE INSTALLATION, (r<sub>s</sub> = 120)**

PIPE DIAM.	SELECT NATIVE CLEAN MATERIAL CLASSIFICATION		
	CLASS II	CLASS III	CLASS IV
12"	17	14	11
15"	17	14	11
18"	17	14	11
24"	17	14	11
30"	17	14	11
36"	17	14	11
42"	17	14	11
48"	17	14	11
54"	17	14	11
60"	17	14	11
66"	17	14	11
72"	17	14	11

- NOTES:**
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
  - SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321. CLASS I/IV MATERIALS (MH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS.
  - FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
  - BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).
  - BACKFILL:** FOR PIPES OUTSIDE OF PAVEMENT CLASS I MATERIAL TO BE USED FOR BACKFILL UP TO THE SPRINGLINE OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. CLASS I MATERIAL MUST BE COMPACTED IN 6" (200mm) LIFTS.
  - MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS IS 12" (300mm) FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION.
  - SELECT NATIVE CLEAN BACKFILL SHALL BE WELL PLACED, MODERATELY COMPACTED (85% SPD) CLASS IV OR BETTER PER ASTM D2321 WITH NO FOREIGN DEBRIS INCLUDING ROCKS, LARGE CLUMPS ORGANIC MATERIAL, OR FROZEN MATERIAL.
  - HP STORM ALTERNATE TRENCH DETAIL ONLY APPLIES TO BACKFILL INSTALLATIONS IN NON-TRAFFIC APPLICATIONS PER TN 2.04A. ALTERNATE TRENCH USE MUST BE APPROVED BY DESIGN ENGINEER. DETAIL DOES NOT SUPERSEDE ADS STANDARD DETAIL STD-108.

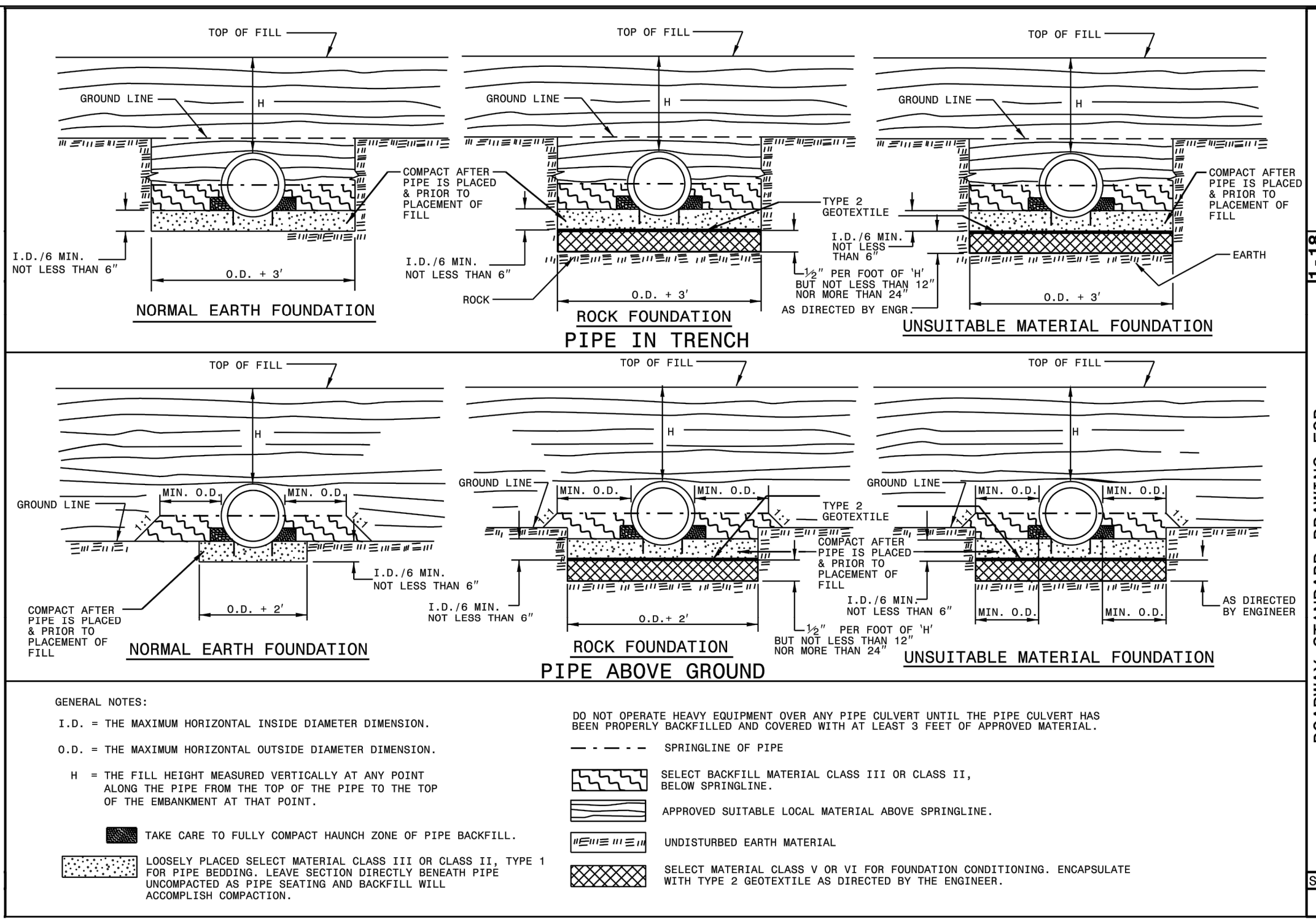
**HP STORM TRENCH INSTALLATION DETAIL**  
N.T.S.

KHA DETAIL NO: 03.101.001



**TYPICAL ROOF DRAIN CONNECTION**  
NOT TO SCALE

NOTE: ALL DOWNSPOUT COLLECTOR PIPE SHALL BE SCHEDULE 40 PVC.



**FLEXIBLE PIPE**

Round Corrugated Steel Pipe 2 2/3 x 1/2 corrugation **			
Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet)	
		16	12
12	12	204	256
15	12	162	204
18	12	135	169
21	12	115	145
24	12	100	126
30	12	79	100
36	12	65	83
42	12	55	70
48	12	48	61
54	12	44	54
60	12	41	50
66	12	38	47
72	12	36	45
78	12	34	43
84	12	32	41

Round Corrugated Aluminum Pipe 2 2/3 x 1/2 corrugation **			
Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet)	
		16	12
12	12	123	155
15	12	98	123
18	12	81	102
21	12	69	87
24	12	60	76
27	12	53	67
30	12	47	60
36	12	40	51
42	12	35	44
48	12	31	38
54	12	27	33
60	12	24	30
66	12	21	27
72	12	19	24
78	12	17	22
84	12	16	21

- RIGID PIPE**
- RCSP - (Minimum fill) 1' for Class IV & CLASS V  
2' for Class III & Class II
- (Maximum fill) 10' - Class II pipe  
20' - Class III pipe  
30' - Class IV pipe  
40' - Class V pipe
- (For fills > 40' & < 80' use LRFD Direct Design Method)

**GENERAL NOTES:**

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.  
O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.  
H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE I, BELOW SPRINGLINE.  
APPROVED SUITABLE LOCAL MATERIAL ABOVE SPRINGLINE.  
UNDISTURBED EARTH MATERIAL.

SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE 2 GEOTEXTILE AS DIRECTED BY THE ENGINEER.

**RIGID PIPE**  
REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS  
RCSP - AASHTO M170

STATE OF NORTH CAROLINA  
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DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
METHOD OF PIPE INSTALLATION  
RIGID PIPE

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

ROADWAY STANDARD DRAWING FOR  
METHOD OF PIPE INSTALLATION  
FILL HEIGHT TABLES

SHEET 2 OF 3  
300.01

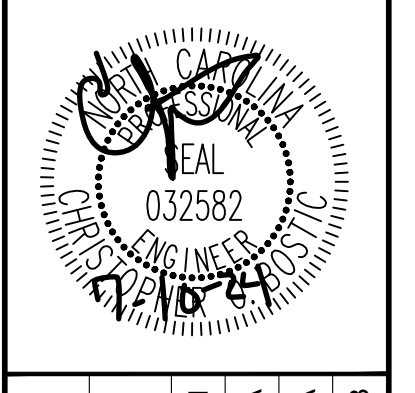
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No.	REVISIONS	DATE	BY
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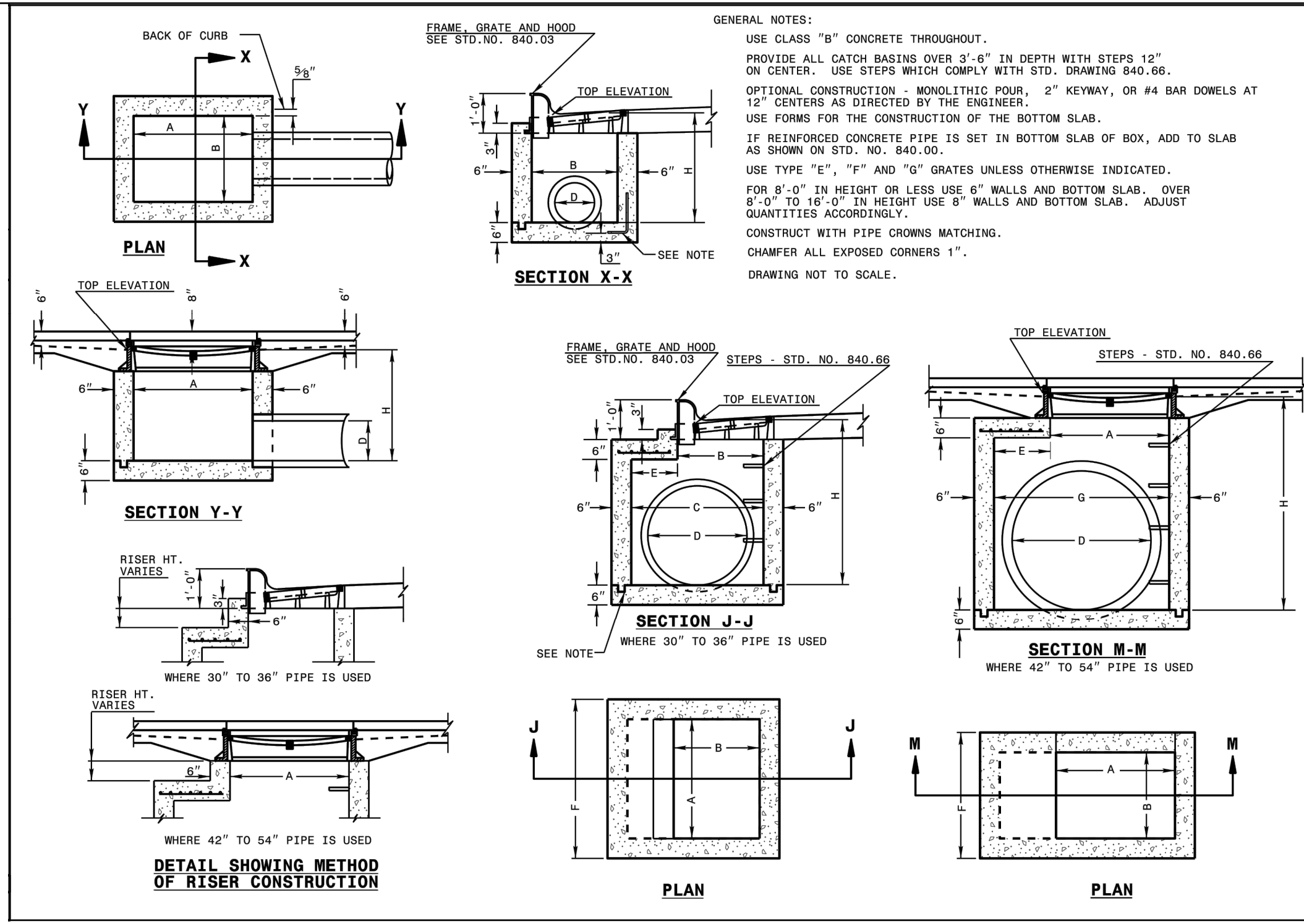
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016485000	10/31/2023	AS SHOWN	JAA	JAA	COE

**SCOOTER'S ROLESVILLE**  
PREPARED FOR  
**S&S JAVA ENTERPRISES**  
ROLESVILLE, NC

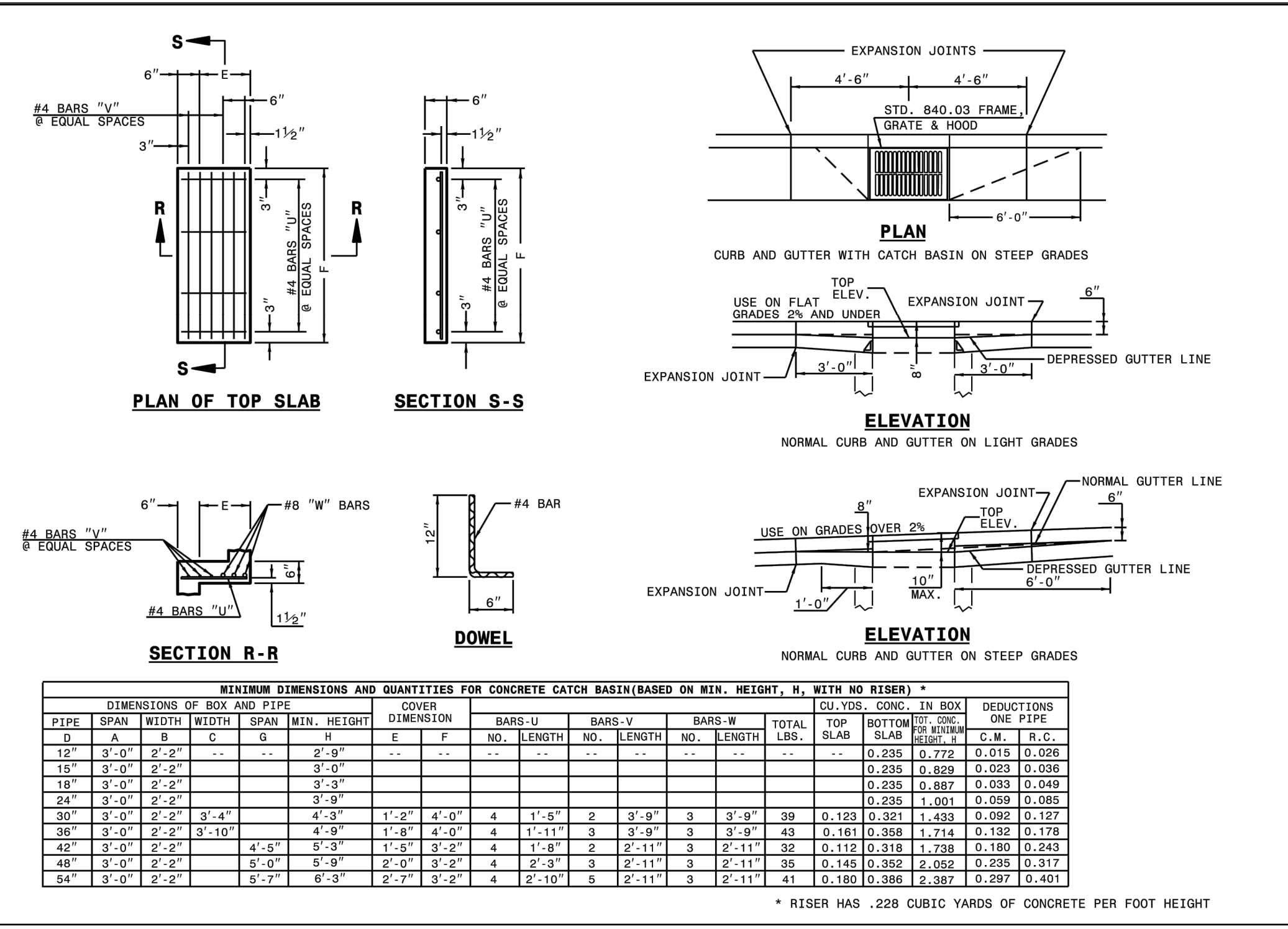
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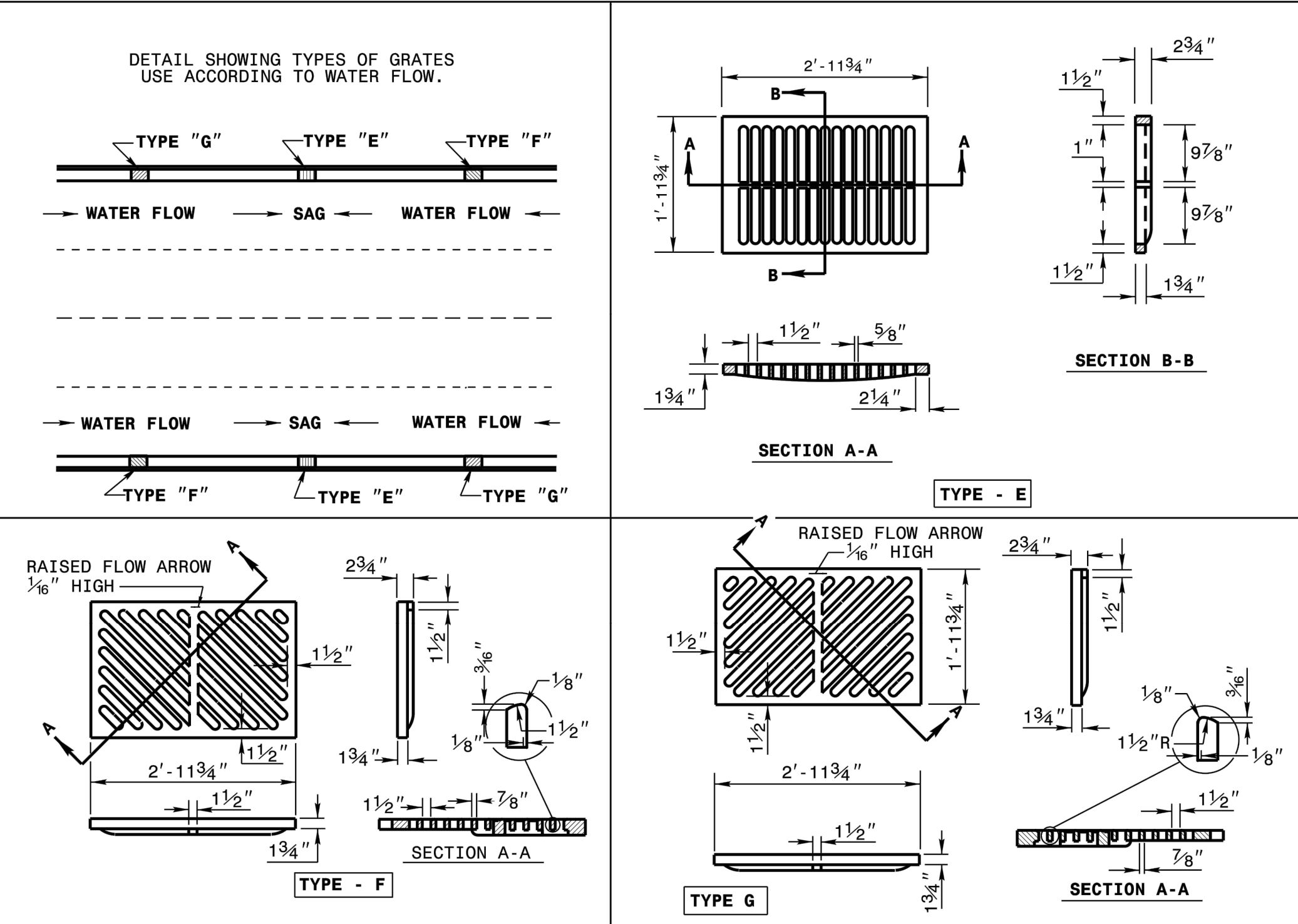
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 RALEIGH, N.C.  
 ROADWAY STANDARD DRAWING FOR  
**CONCRETE CATCH BASIN**  
 12" THRU 54" PIPE  
 SHEET 1 OF 2  
**840.02**



STATE OF NORTH CAROLINA  
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 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.  
 ROADWAY STANDARD DRAWING FOR  
**CONCRETE CATCH BASIN**  
 12" THRU 54" PIPE  
 SHEET 2 OF 2  
**840.02**



STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.  
 ROADWAY STANDARD DRAWING FOR  
**FRAME, GRATES, AND HOOD**  
 FOR USE ON STANDARD CATCH BASIN  
 SHEET 2 OF 2  
**840.03**

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SDP-23-09

SCOOTER'S ROLESVILLE  
 PREPARED FOR  
 S&S JAVA ENTERPRISES  
 ROLESVILLE, NC

STORM DETAILS

DATE: 10/31/2023  
 SCALE: AS SHOWN  
 DESIGNED BY: JAA  
 DRAWN BY: JAA  
 CHECKED BY: COE

DATE: 07/08/2024  
 TOWN COMMENTS: JAA  
 DATE: 03/01/2024  
 TOWN COMMENTS: JAA  
 DATE: 01/02/2024  
 IMDB

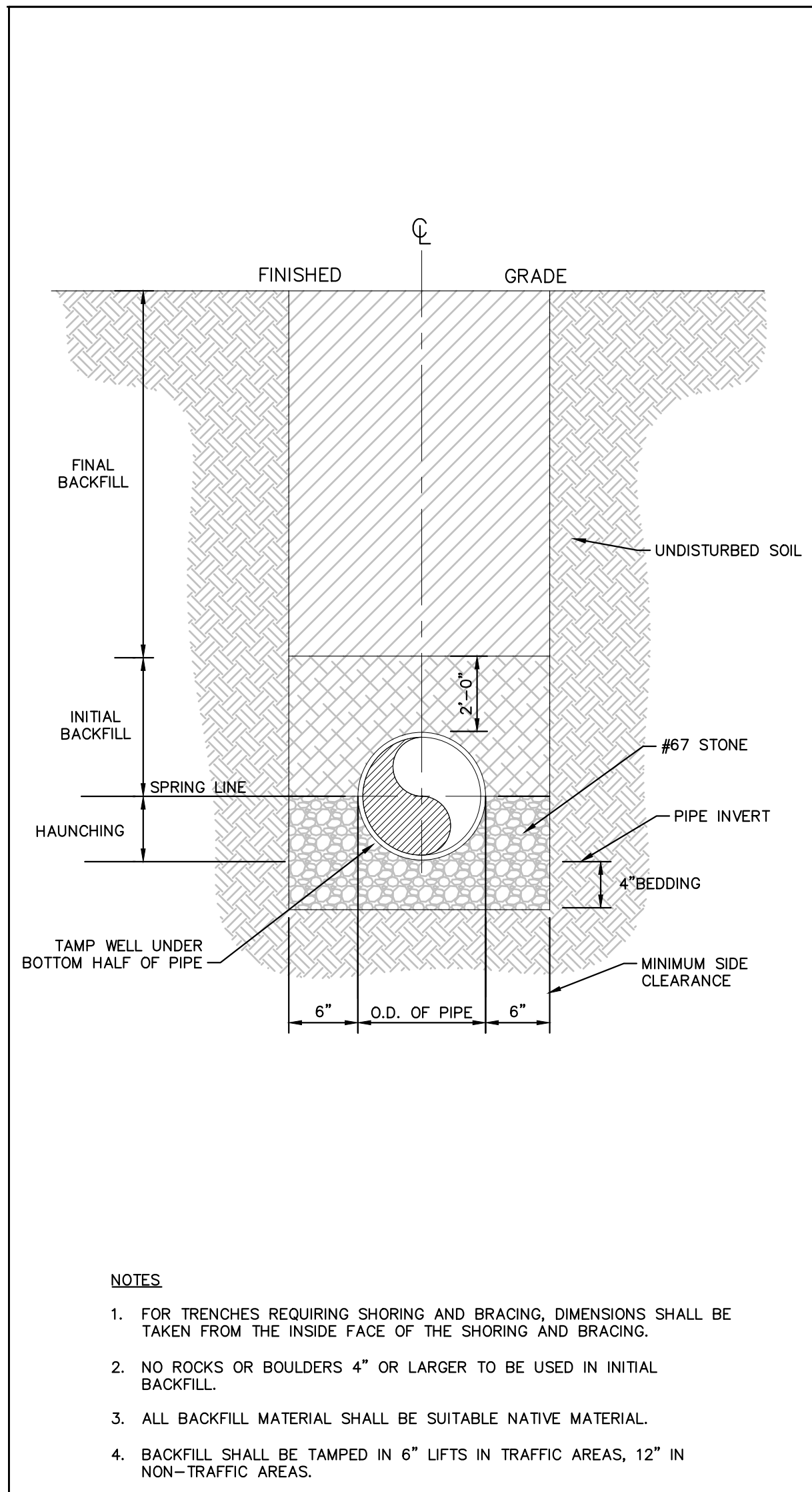
KHA PROJECT: 016485000

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 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

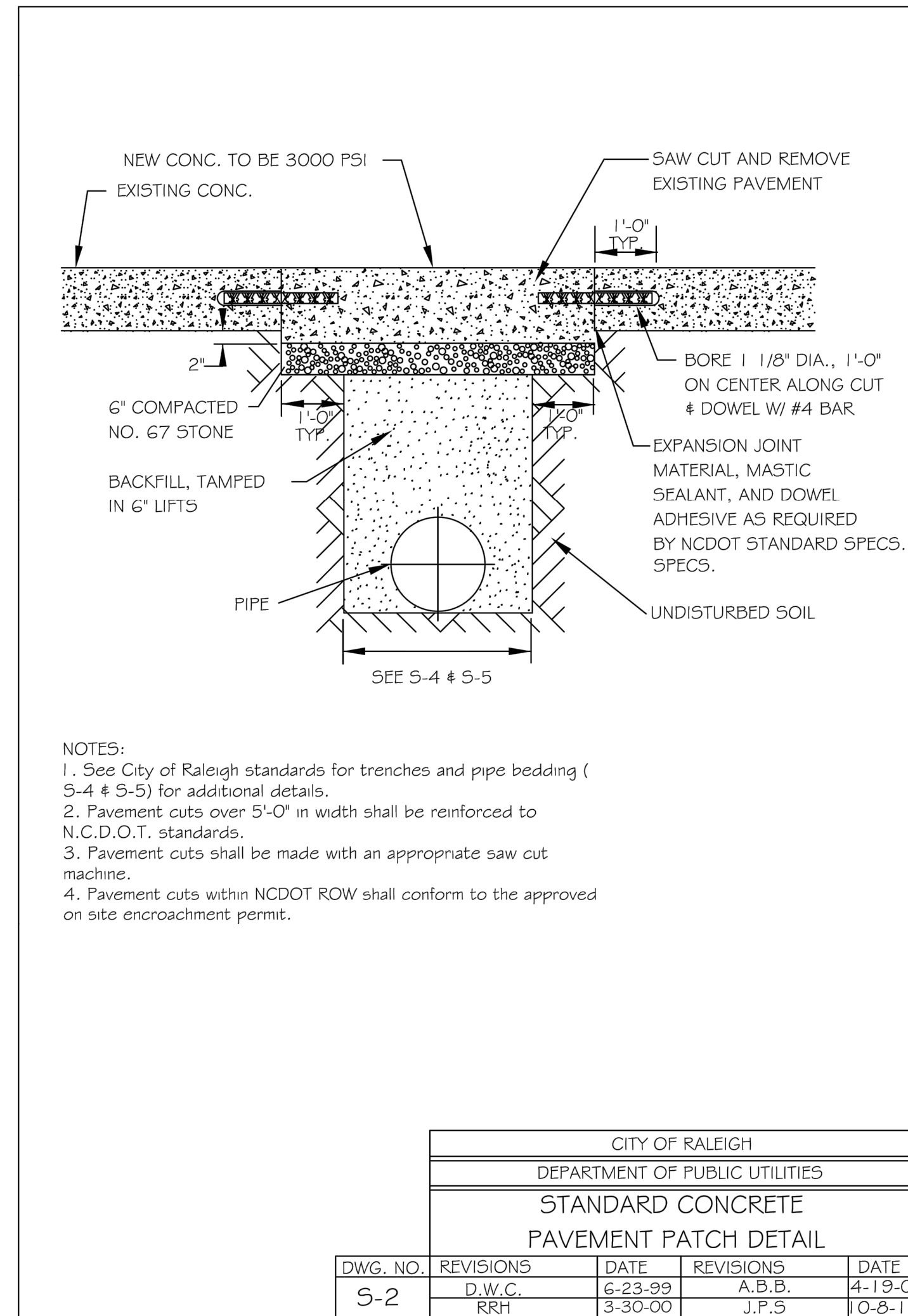
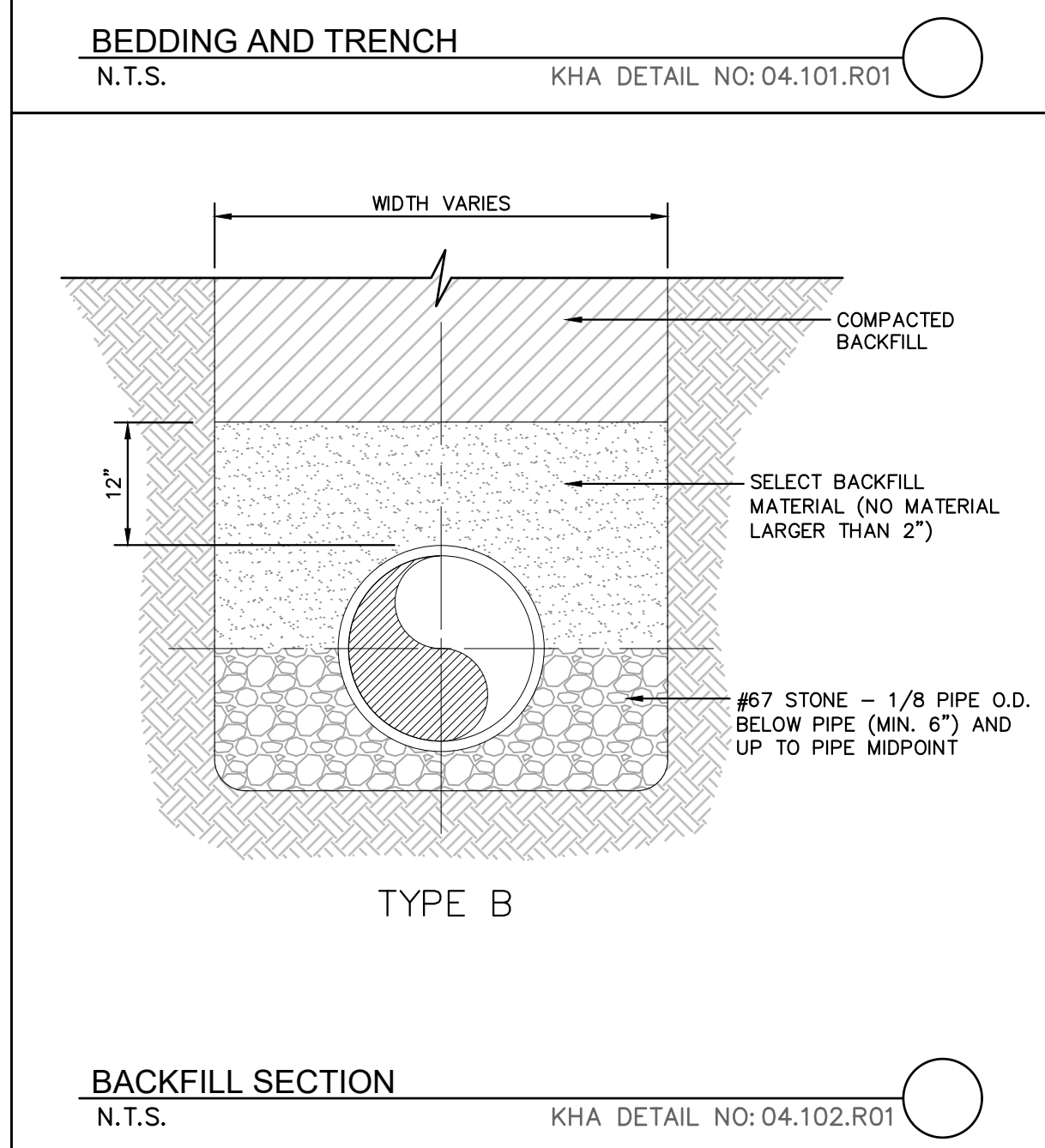
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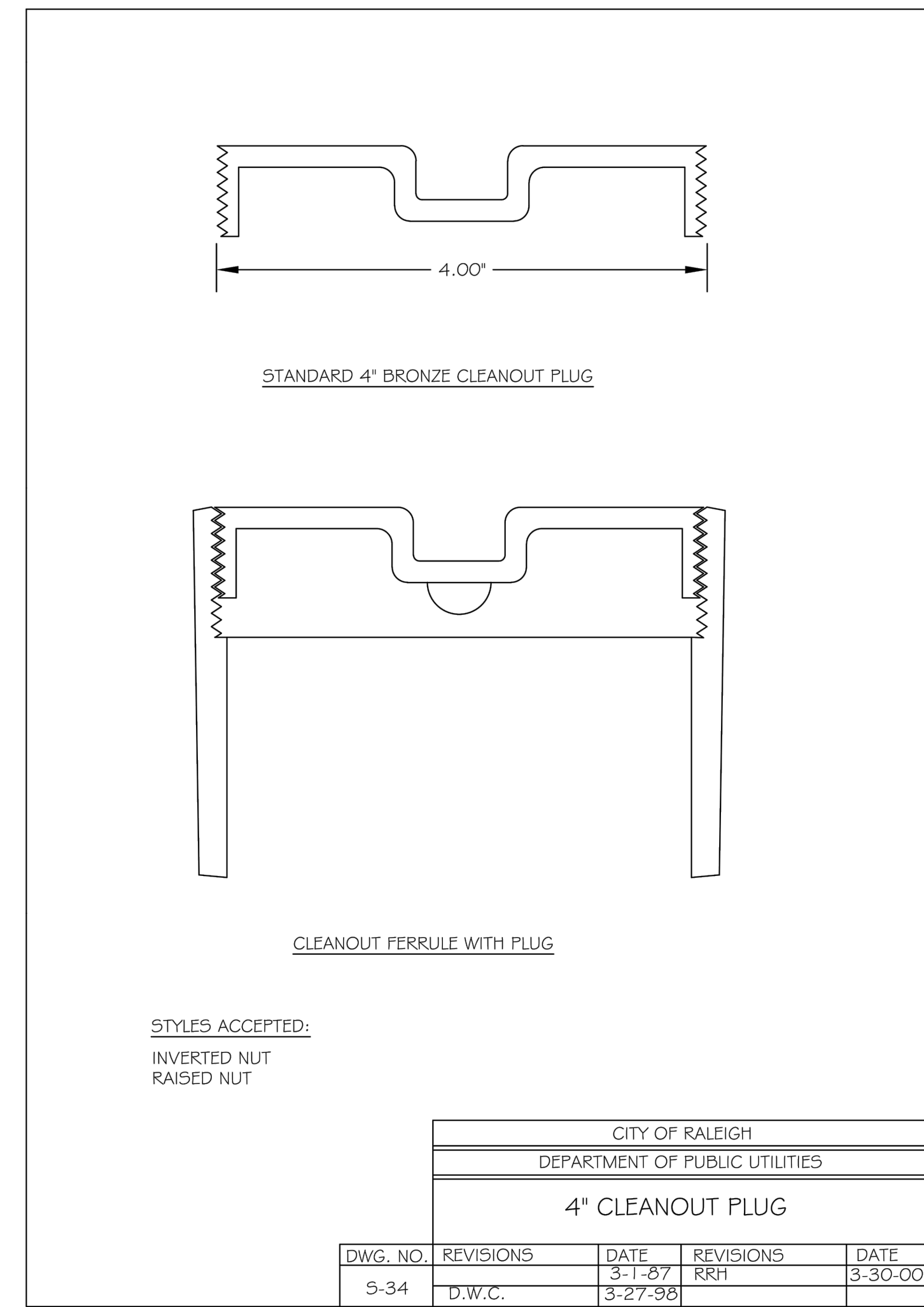
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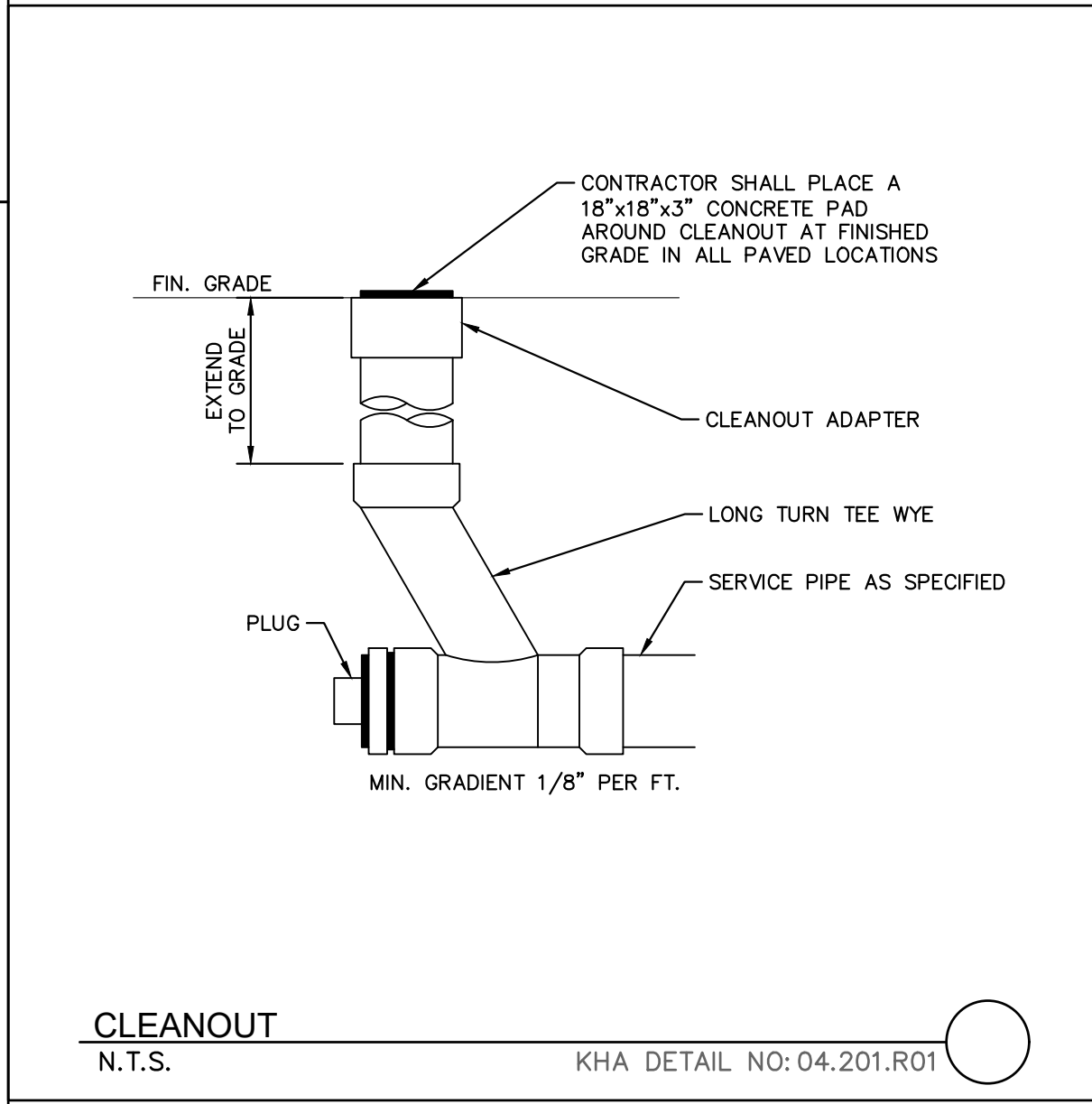
- NOTES:**
- FOR TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
  - NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
  - ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
  - BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.



CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
STANDARD CONCRETE PAVEMENT PATCH DETAIL				
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
5-2	D.W.C.	6-23-99	A.B.B.	4-19-04
	RRH	3-30-00	J.P.S	0-8-10



CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
4" CLEANOUT PLUG				
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
5-34	D.W.C.	3-1-87	RRH	3-30-00
		3-27-98		



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**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE NC

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 7/10/24

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KHA PROJECT: 016485000  
 DATE: 10/31/2023  
 SCALE: AS SHOWN  
 DESIGNED BY: JAA  
 DRAWN BY: JAA  
 CHECKED BY: COB

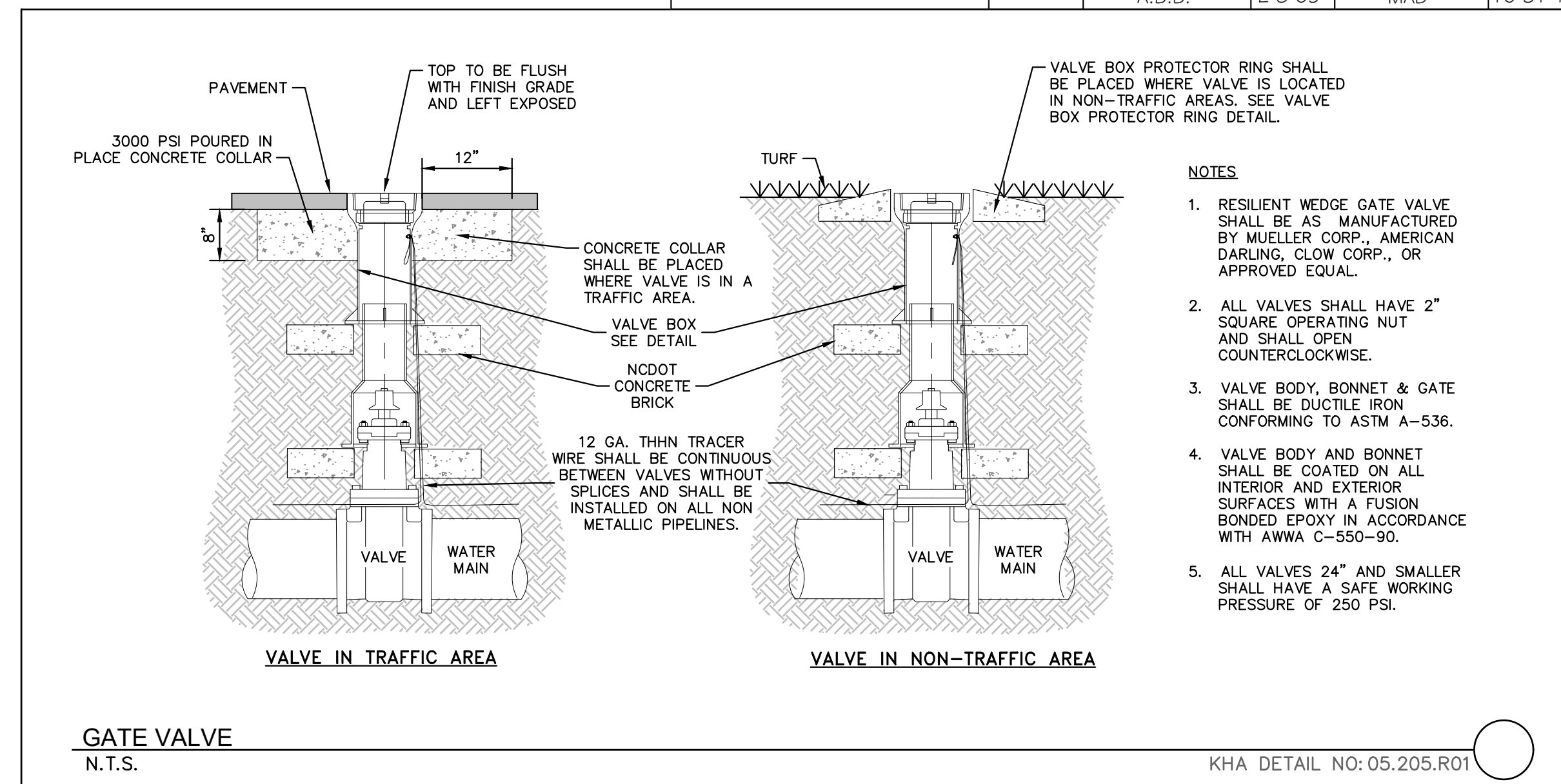
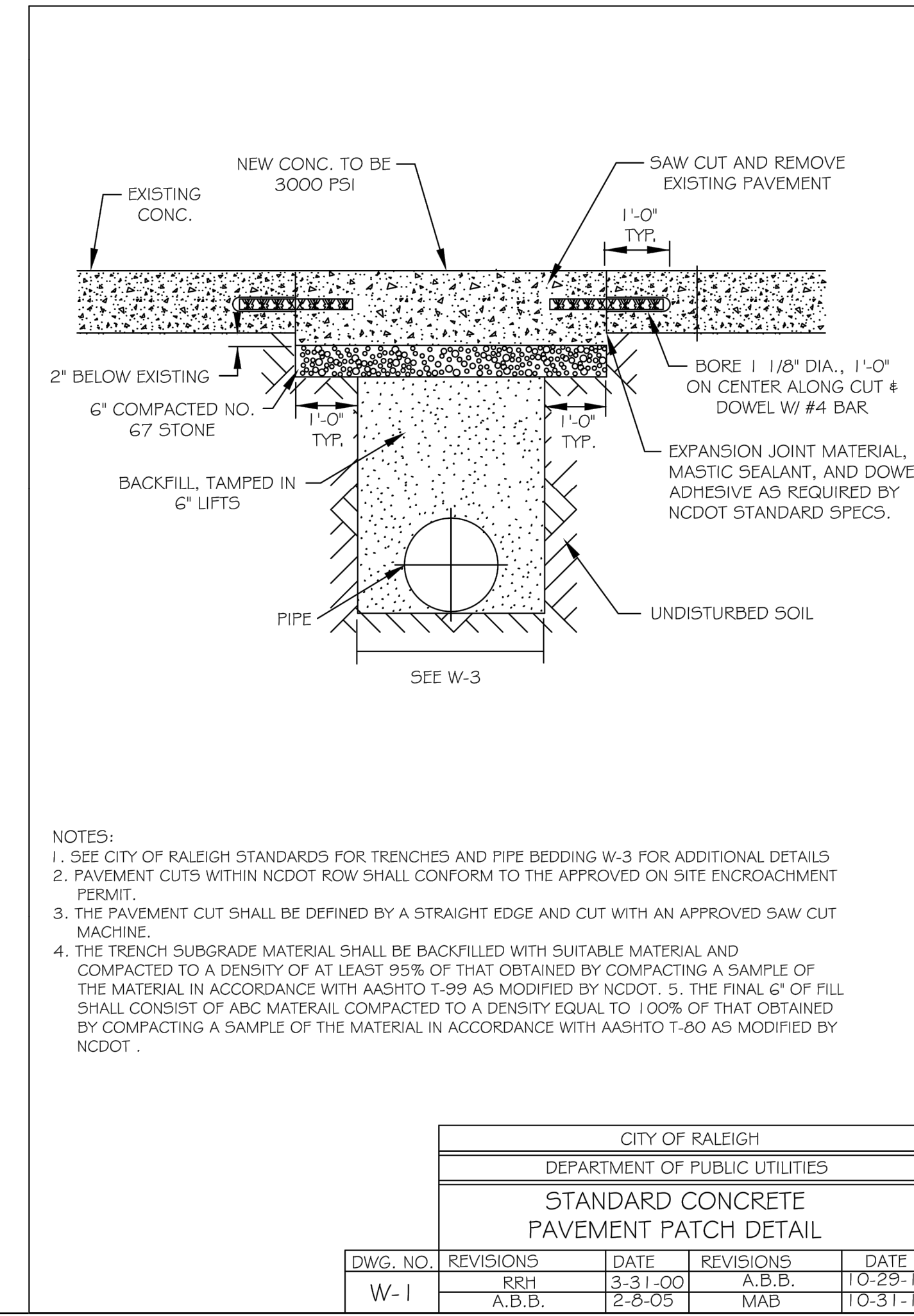
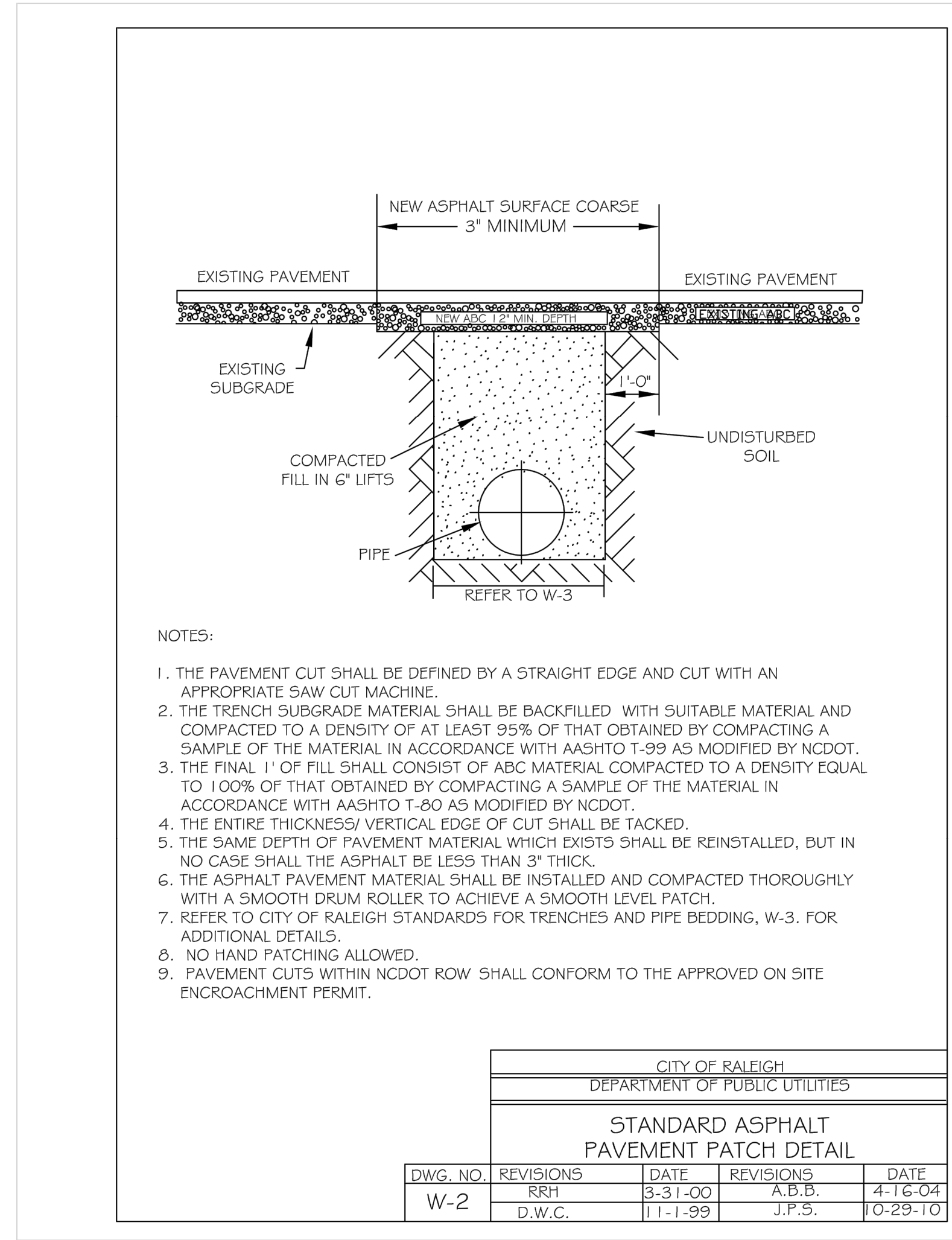
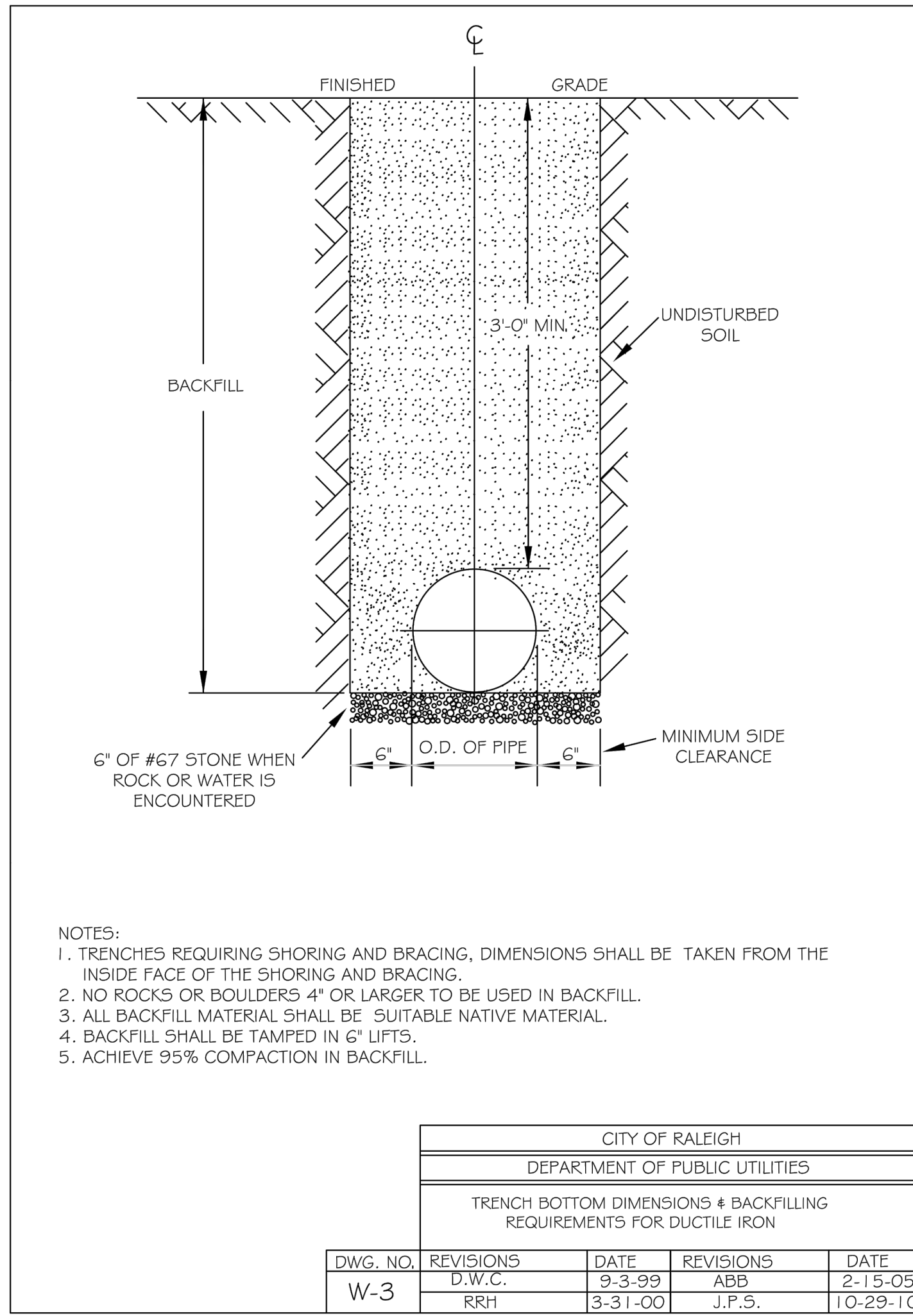
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SHEET NUMBER  
**C10.0**

SDP-23-09



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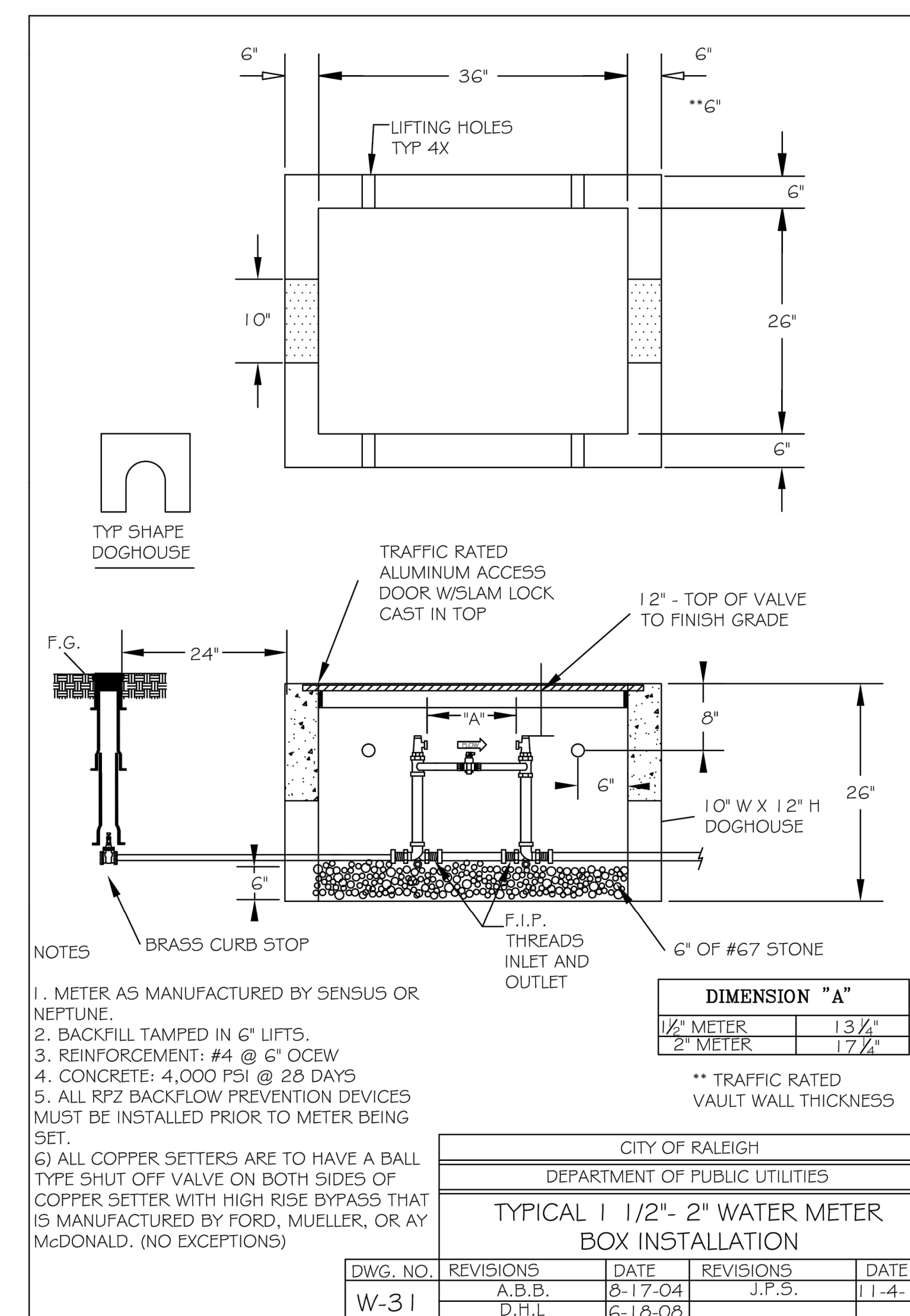
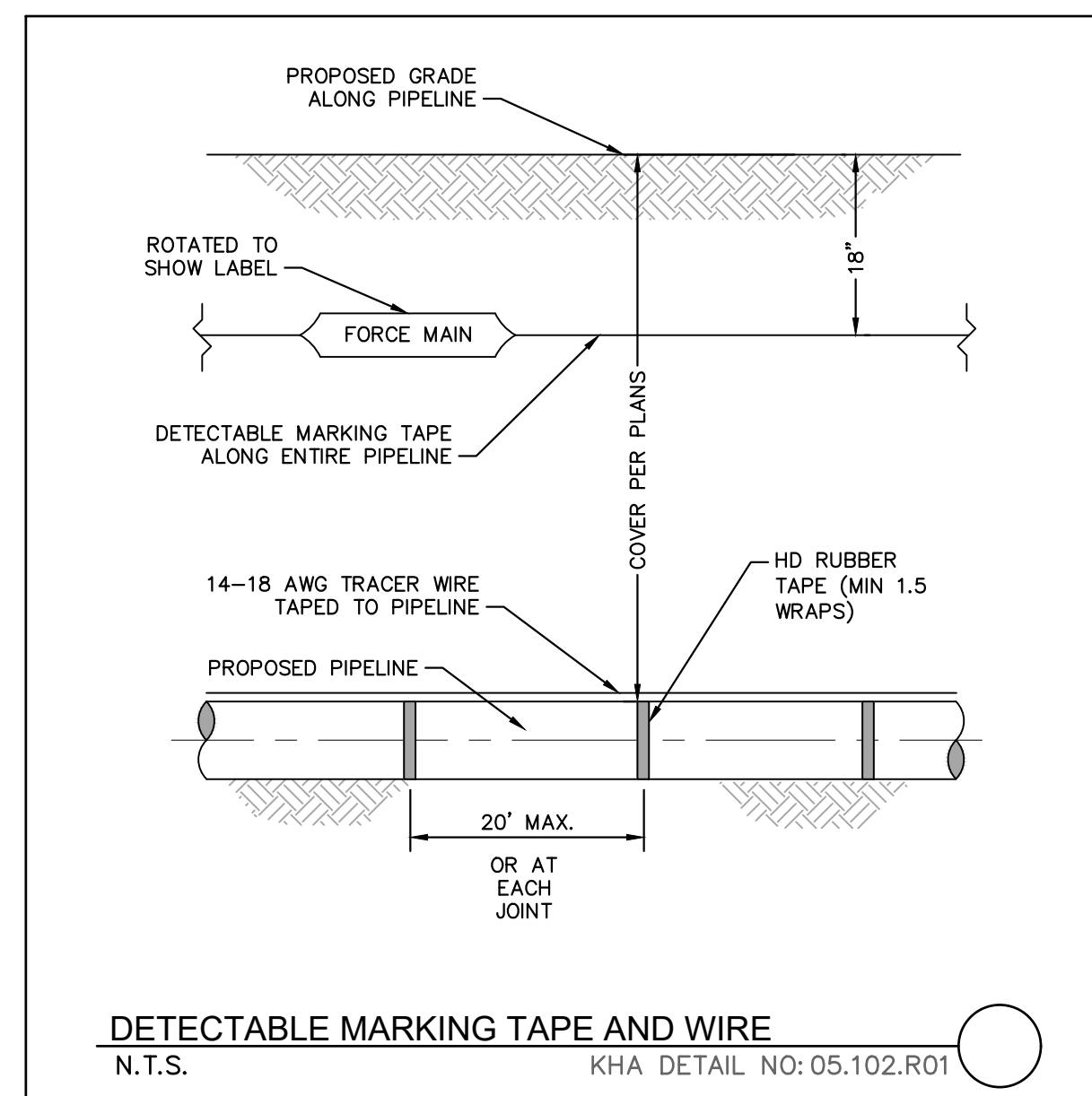
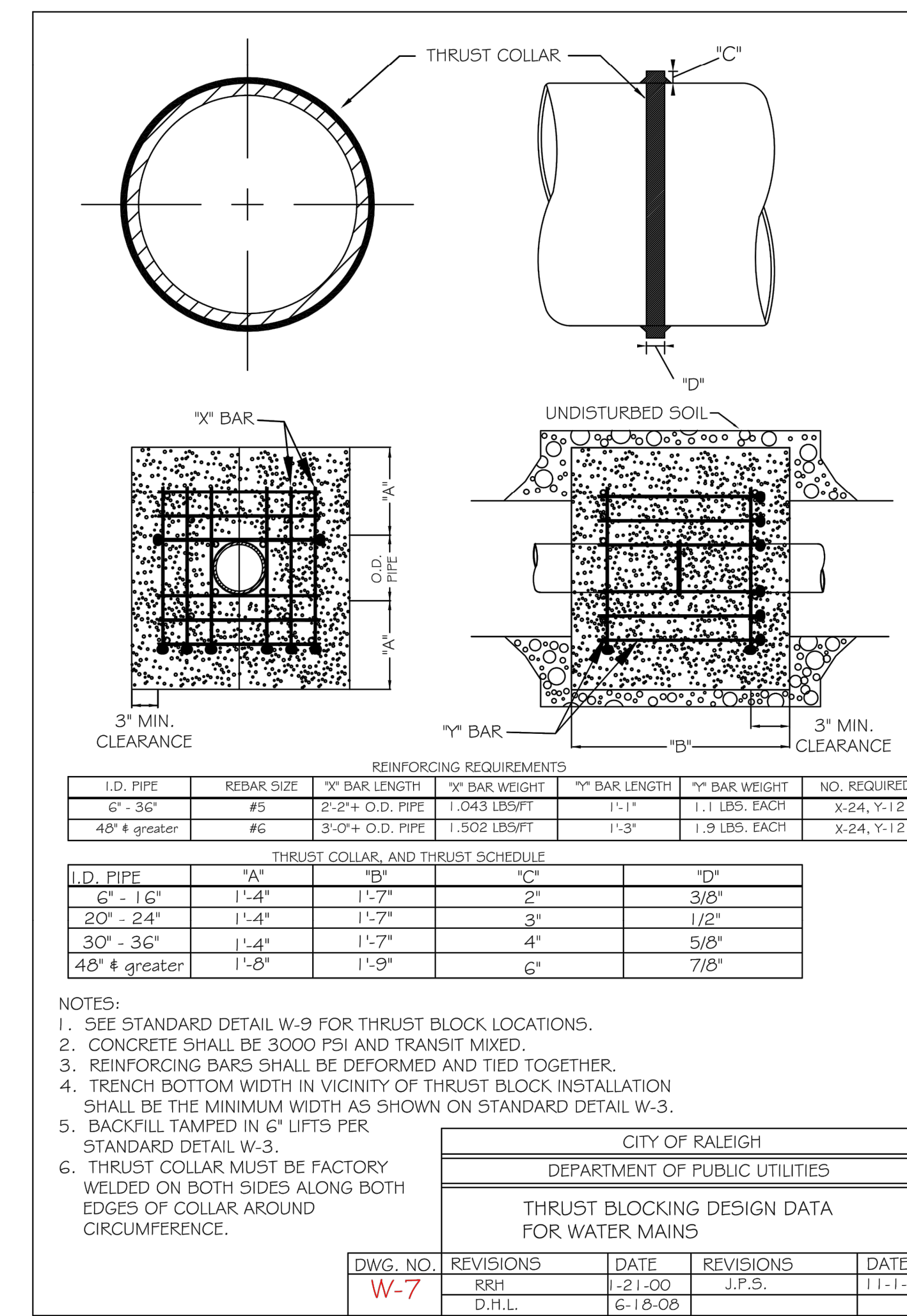
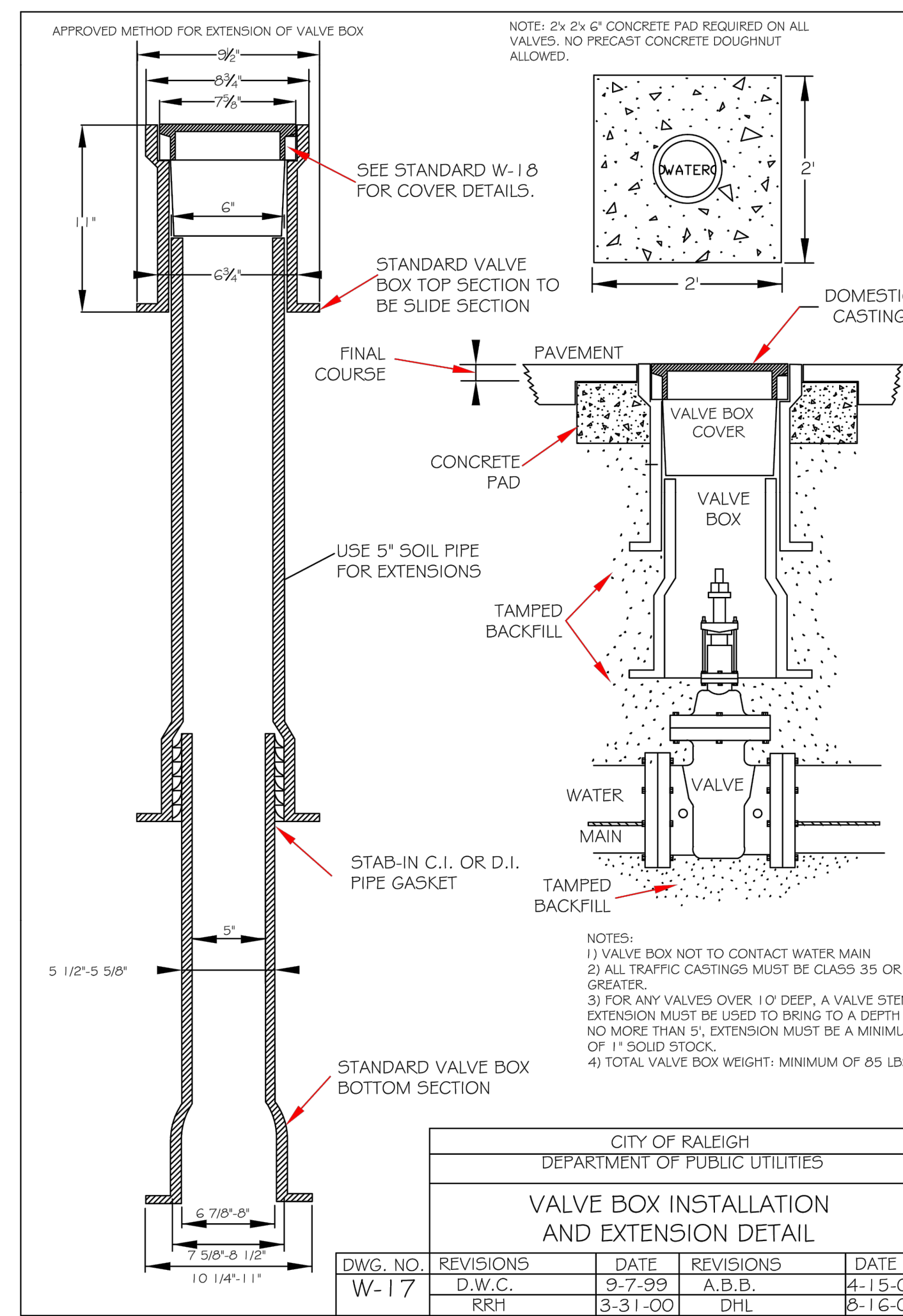
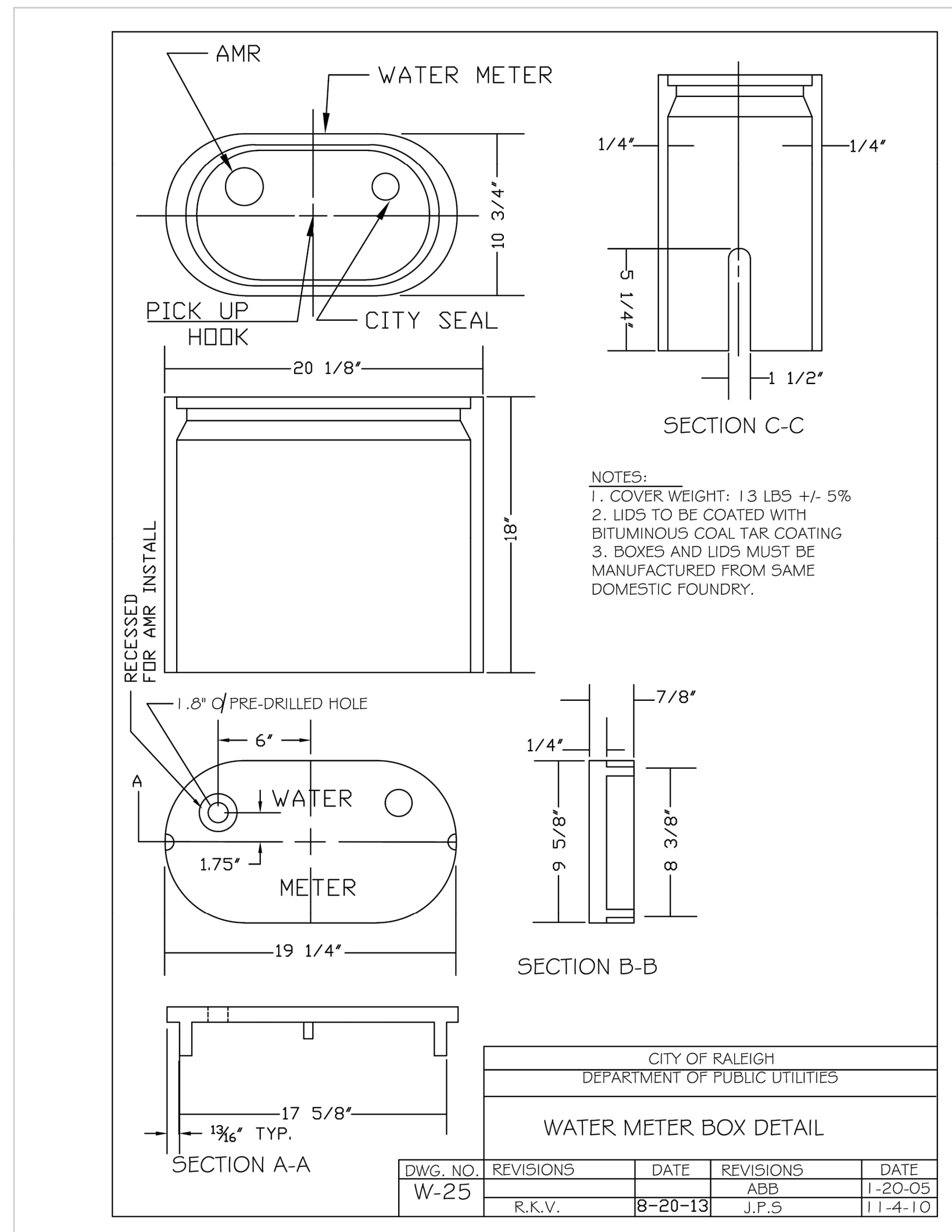
**SURVEY NOTE:**  
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SDP-23-09

KHA PROJECT 016485000		DATE 10/31/2023		SCALE AS SHOWN		DESIGNED BY JAA		DRAWN BY JAA		CHECKED BY COB	
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						TOWN COMMENTS 03/01/2024 JAA		TOWN COMMENTS 01/02/2024 IMDE		REVISIONS DATE BY	
						SHEET NUMBER C11.0		PROJECT SCOOTER'S ROLESVILLE PREPARED FOR S&S JAVA ENTERPRISES ROLESVILLE NC			

Plotted By: Alexander, Jamal Sheet Set: SCOOTER'S ROLESVILLE Layout: C11.1 WATER DETAILS July 10, 2024 11:21:37am K:\RAL\_LDEV\016485000-Scooters Rolesville\Planning\PI15\_CAD Files\PlanSheets\C11.1 WATER DETAILS.dwg  
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**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE NC

**WATER DETAILS**

KHA PROJECT: 016485000  
 DATE: 10/31/2023  
 SCALE: AS SHOWN  
 DESIGNED BY: JAA  
 DRAWN BY: JAA  
 CHECKED BY: COB

REVISIONS  
 No. 7 6 5 4 3 2 1  
 DATE

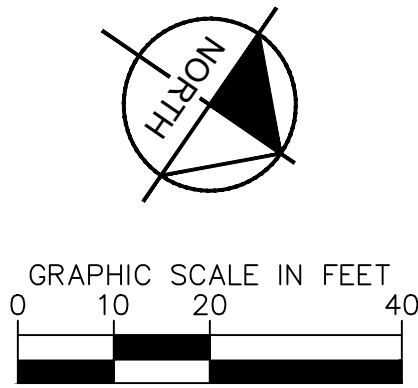
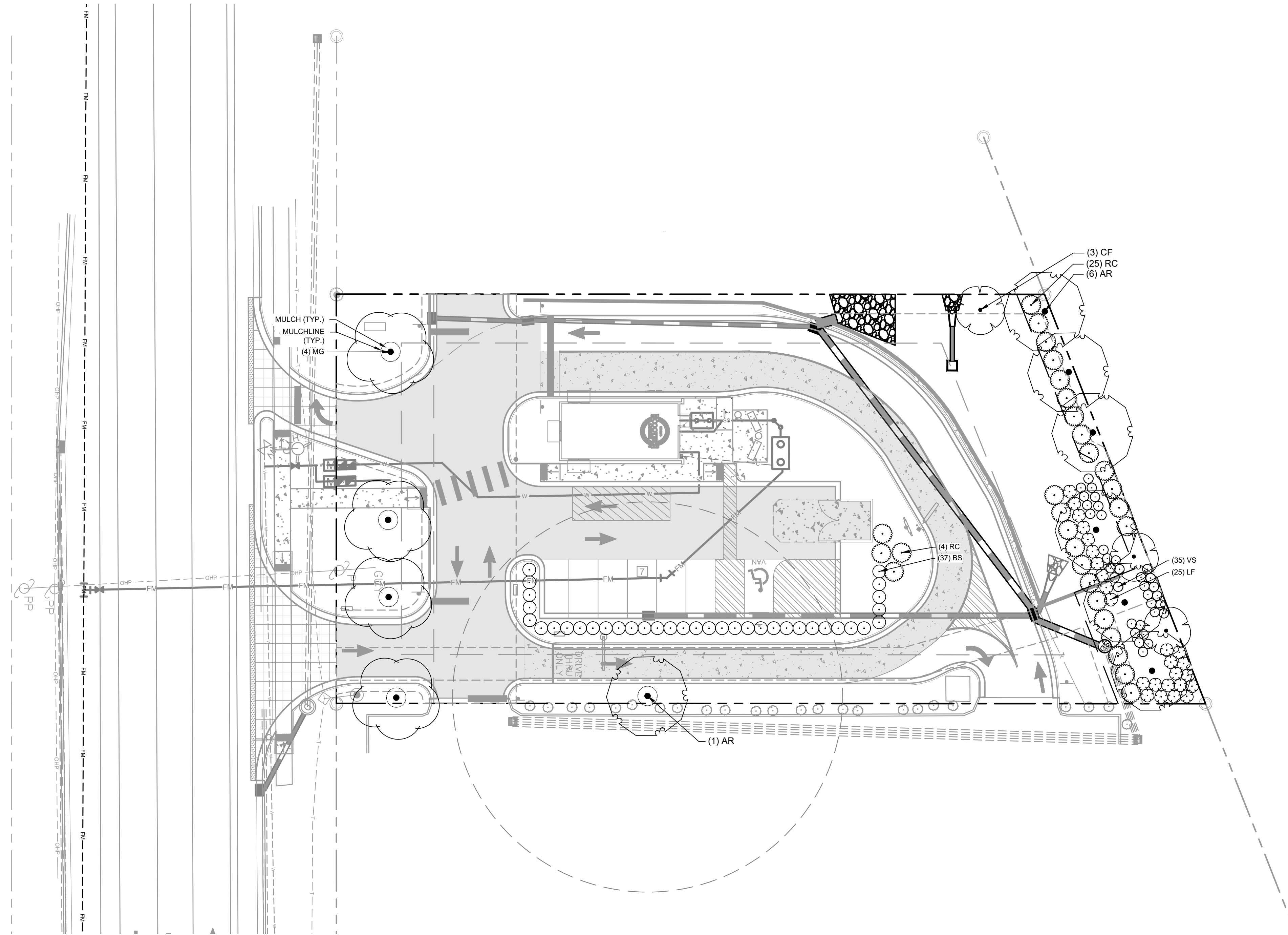
NCDOT COMMENTS: 07/08/2024 JAA  
 TOWN COMMENTS: 03/01/2024 JAA  
 TOWN COMMENTS: 01/02/2024 IMDE

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

SDP-23-09

SHEET NUMBER  
**C11.1**

Plotted By: Alexander, Jamal Sheet Set: SCOOTER'S ROLESVILLE Layout: L1.0 LANDSCAPE PLAN July 10, 2024 11:21:47am K:\RAL\_LDEV\016485000-Scooters Rolesville\Planning\P15\_CAD Files\Plan\Sheet\L1.0 LANDSCAPE PLAN.dwg  
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**LANDSCAPE NOTES:**

- ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 3" OF TOPSOIL. DO NOT MOUND MULCH AGAINST ROOT FLARES.
- ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
- ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
- ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
- ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
- 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.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS.
- 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.
- 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.
- THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR WARRANTY PERIOD. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.
- STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES, AND SHALL BE STATE STANDARD OR BETTER.
- 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.
- CONTRACTOR TO DESIGN BUILD SYSTEM AND VERIFY ALL PRODUCTS WITH LANDSCAPE ARCHITECT.
- TREE SUPPORT MATERIALS ARE TO BE REMOVED FROM EACH TREE ONCE IT IS "ESTABLISHED" (AS APPROVED BY THE LANDSCAPE ARCHITECT).
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL UTILITIES ARE ADEQUATELY SCREENED WITH THE REQUIRED PLANTING MATERIAL AND VERIFY PLANT SPECIES WITH LANDSCAPE ARCHITECT.
- 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.

**LANDSCAPE REQUIREMENTS**

PERIMETER BUFFER REQUIREMENTS 6.2.2.1		
Type 3 Perimeter Buffer: 136 lf	Required	Provided
Width	25 feet	Provided
Canopy Trees	4 canopy trees per 100 linear feet = 6 canopy trees	6 Canopy Trees
Understory Trees	2 understory trees per 100 linear feet = 3 understory trees	3 Understory Trees
Shrubs	60 shrubs per 100 linear feet = 82 shrubs	83 shrubs
STREET BUFFER 6.2.2.2		
Street Buffer: 126 lf	Required	Provided
Width	30 feet	Provided
Street Tree	1 per 40 linear feet = 4 street trees	4 Street Trees
PARKING LANDSCAPING 6.2.4.4		
Parking Perimeter	Required	Provided
Shrubs	Continuous row of shrubs within 5 feet of the parking lot edge	Provided

- NOTES:**
- ESTABLISH SOD IN ALL DISTURBED AREAS. SEE SPECIFICATIONS FOR MORE INFORMATION.
  - 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.

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SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	CAL.	HEIGHT
<b>PERIMETER BUFFER TREES</b>							
	CF	3	CORNUS FLORIDA	FLOWERING DOGWOOD	FG, B&B	2" CAL. MIN	8' MIN.
	MG	4	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	FG, B&B	3" CAL.	10-12' MIN
<b>STREET BUFFER TREES</b>							
	AR	7	ACER RUBRUM	RED MAPLE	FG, B&B	3" CAL.	10-12' MIN
<b>PERIMETER BUFFER SHRUBS</b>							
	LF	25	LEUCOTHOE FONTANESIANA	DROOPING LEUCOTHOE	3 GAL	24" HT.	
	RC	29	RHODODENDRON CATAWBIENSE	MOUNTAIN ROSEBAY	3 GAL	24" HT.	
	VS	35	ITEA VIRGINICA	VIRGINIA SWEETSPIRE	3 GAL	24" HT.	



SDP-23-09

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**SCOOTER'S ROLESVILLE**

PREPARED FOR  
**S&S JAVA ENTERPRISES**

ROLESVILLE NC

**LANDSCAPE PLAN**

DATE: 10/31/2023  
 SCALE: AS SHOWN  
 DESIGNED BY: JAA  
 DRAWN BY: JAA  
 CHECKED BY: COB

NO. 1  
 DATE: 01/02/2024  
 REVISIONS

NO. 2  
 DATE: 03/01/2024  
 TOWN COMMENTS

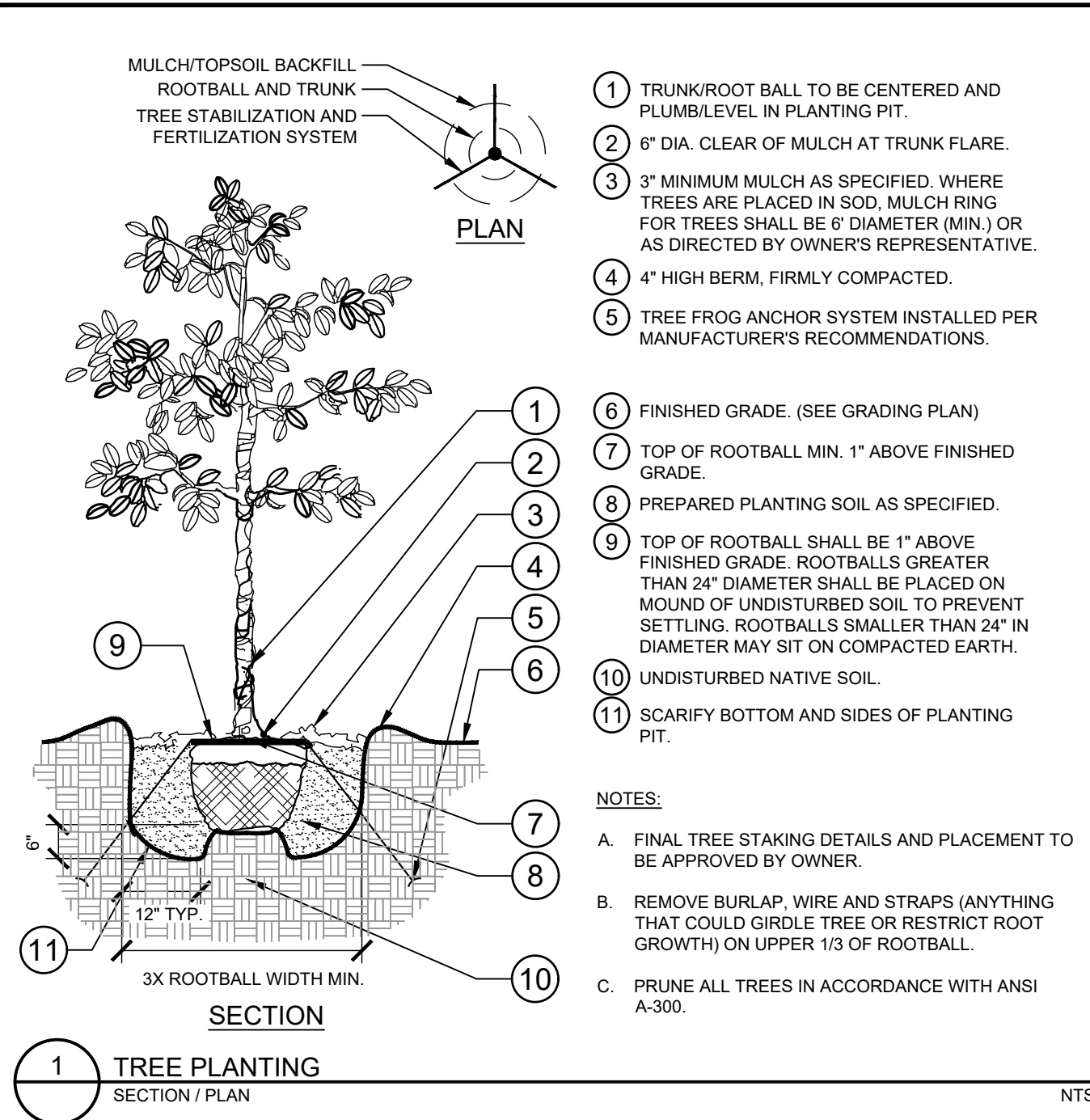
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 DATE: 07/08/2024  
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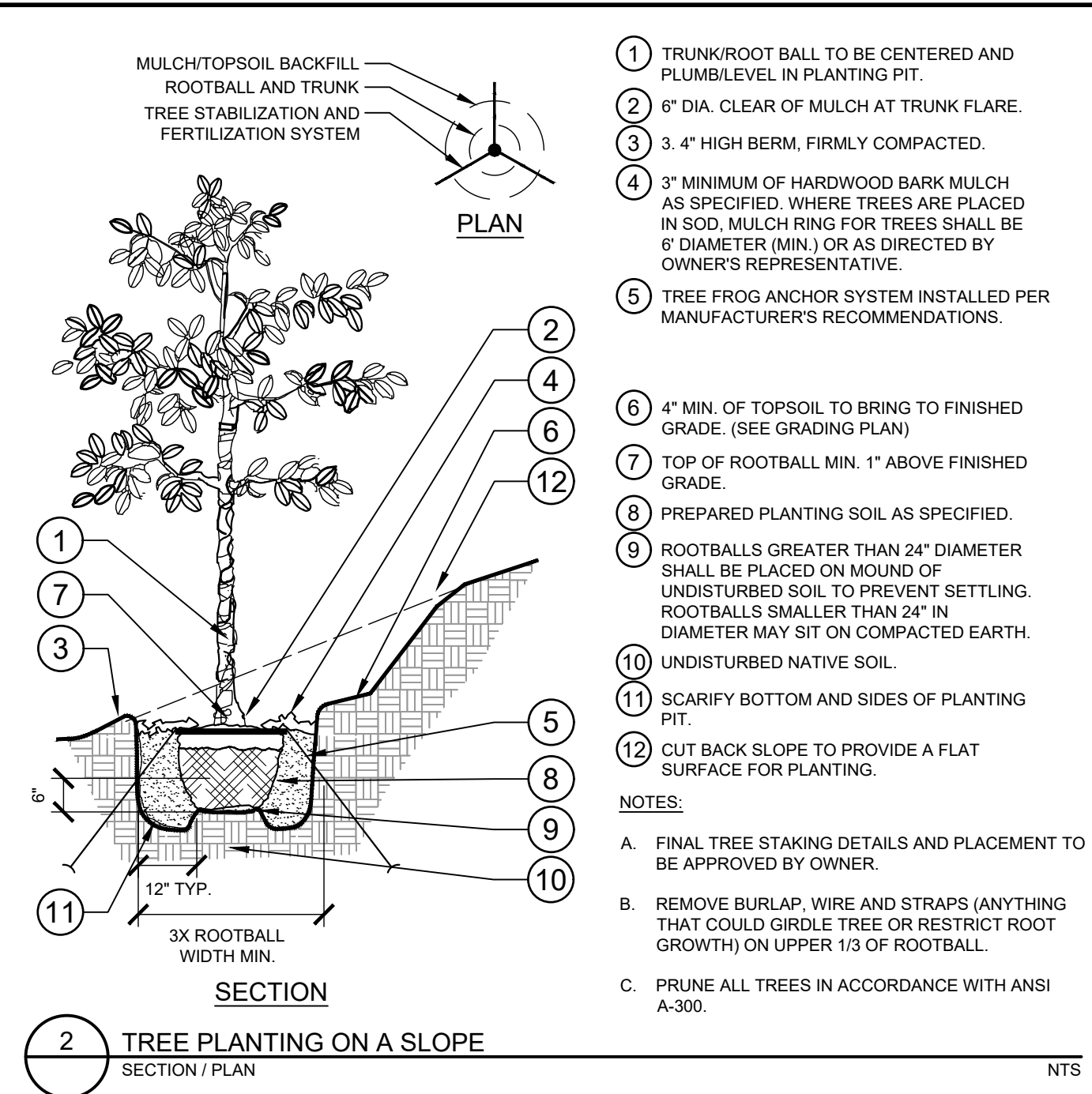
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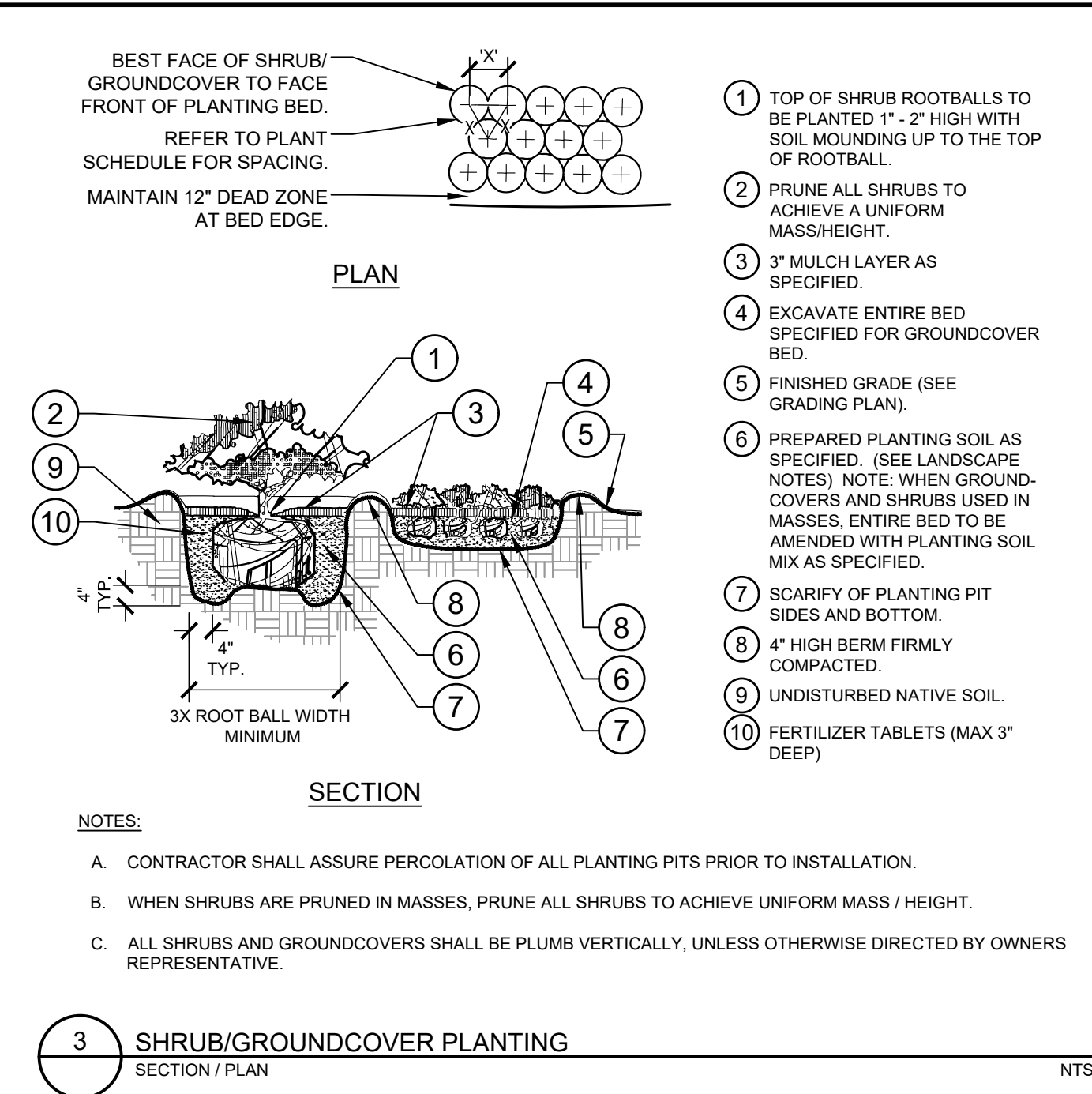
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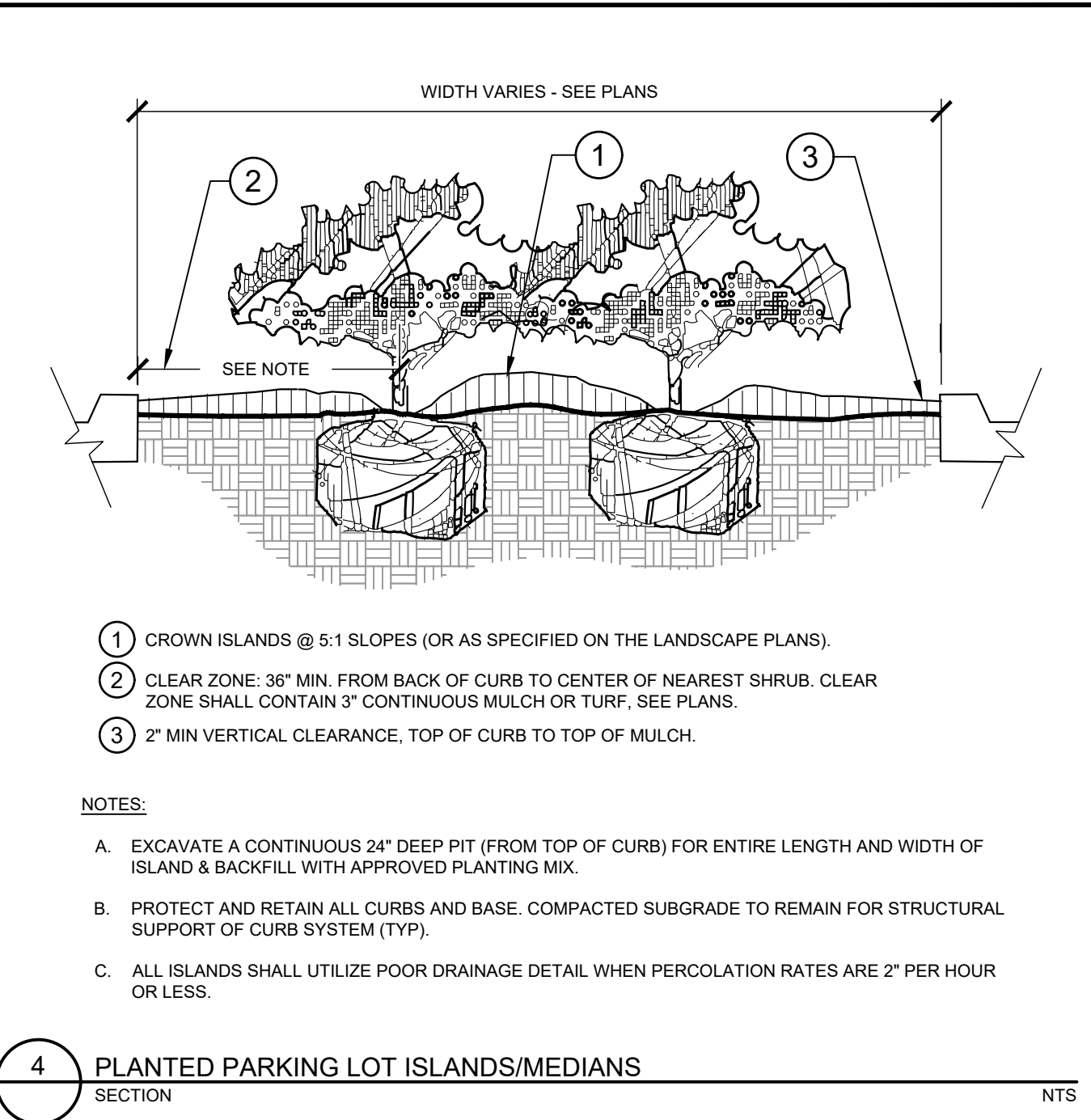
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SECTION / PLAN NTS



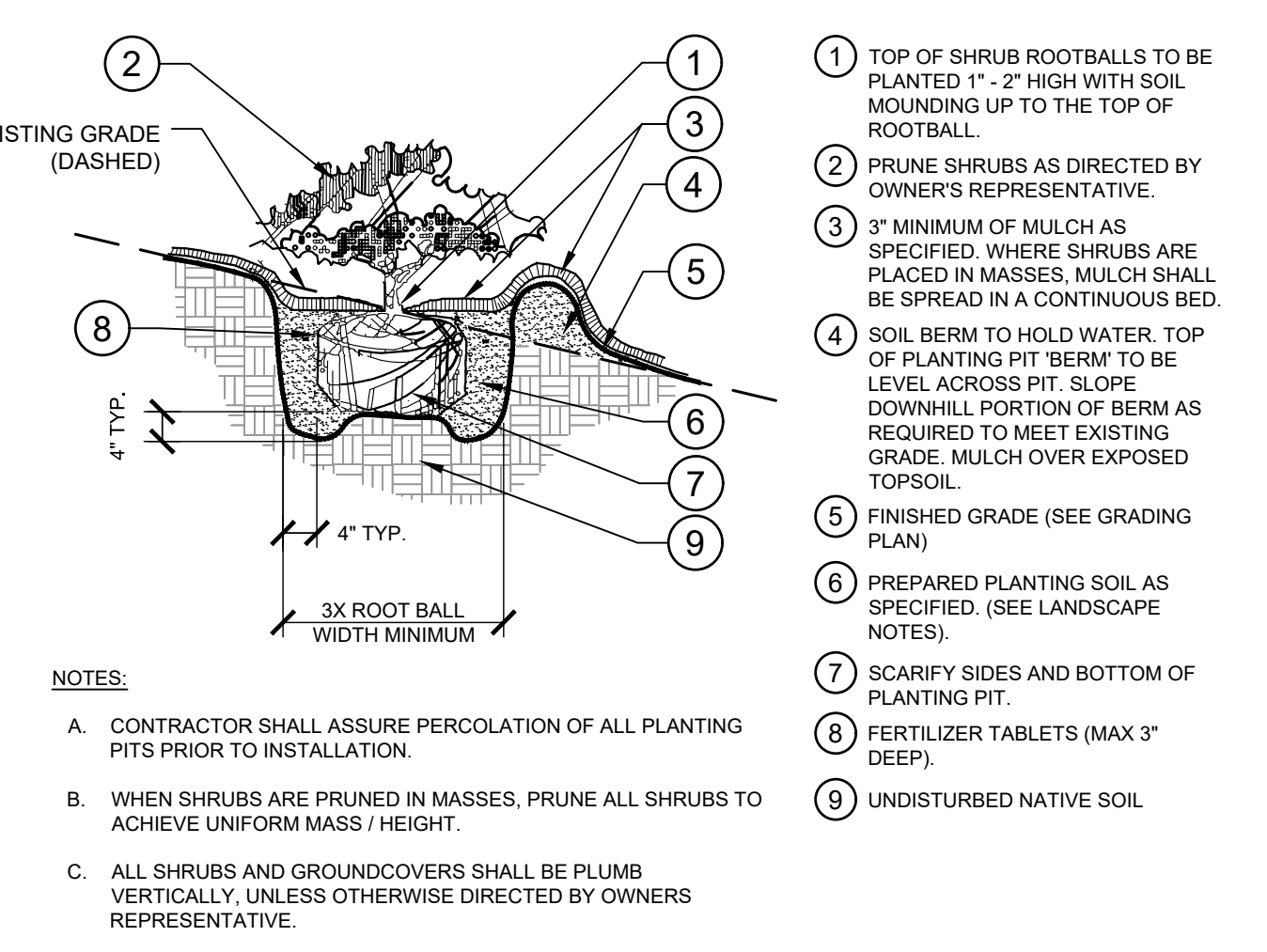
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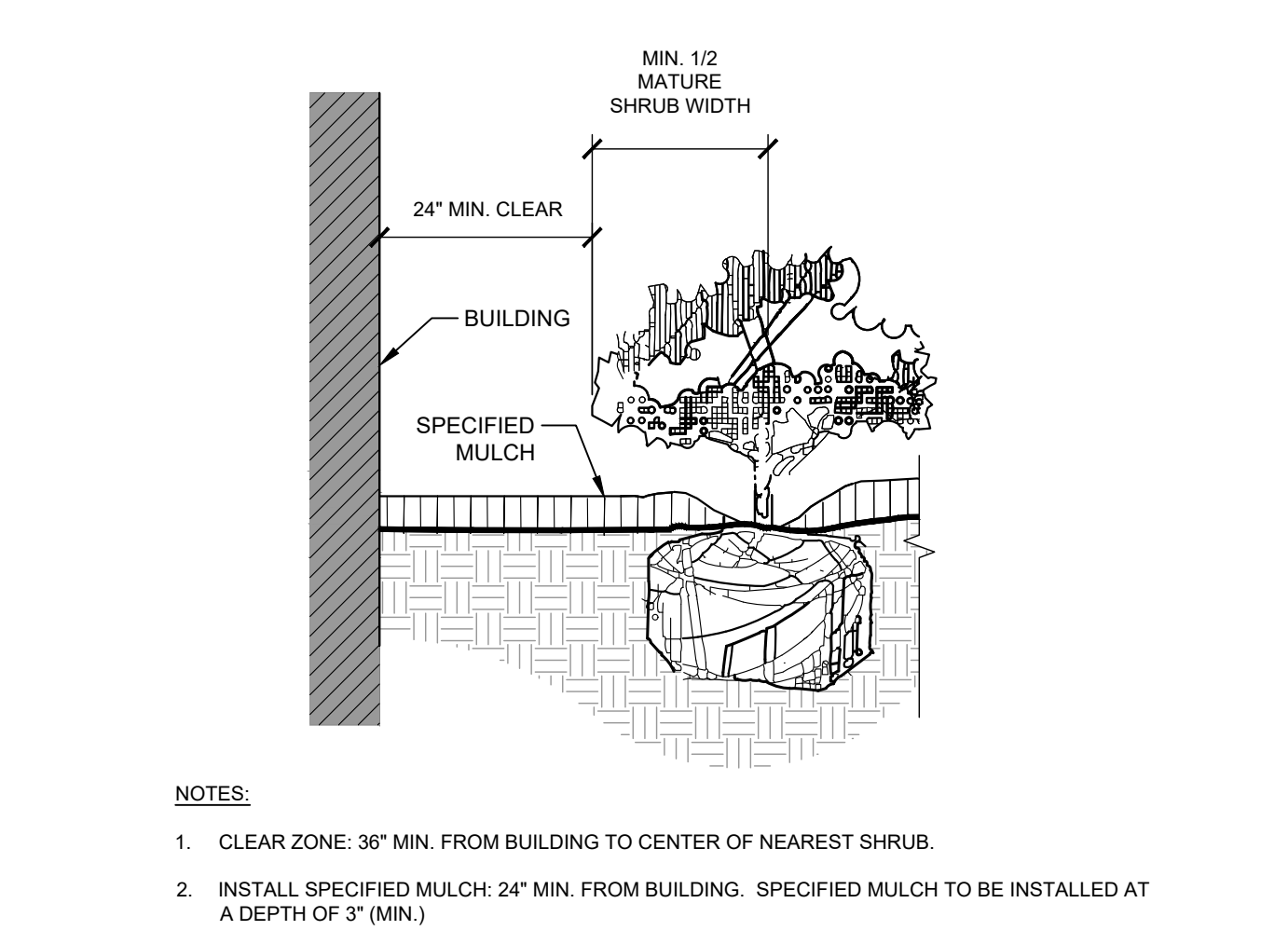
**3 SHRUB/GROUNDCOVER PLANTING**  
SECTION / PLAN NTS



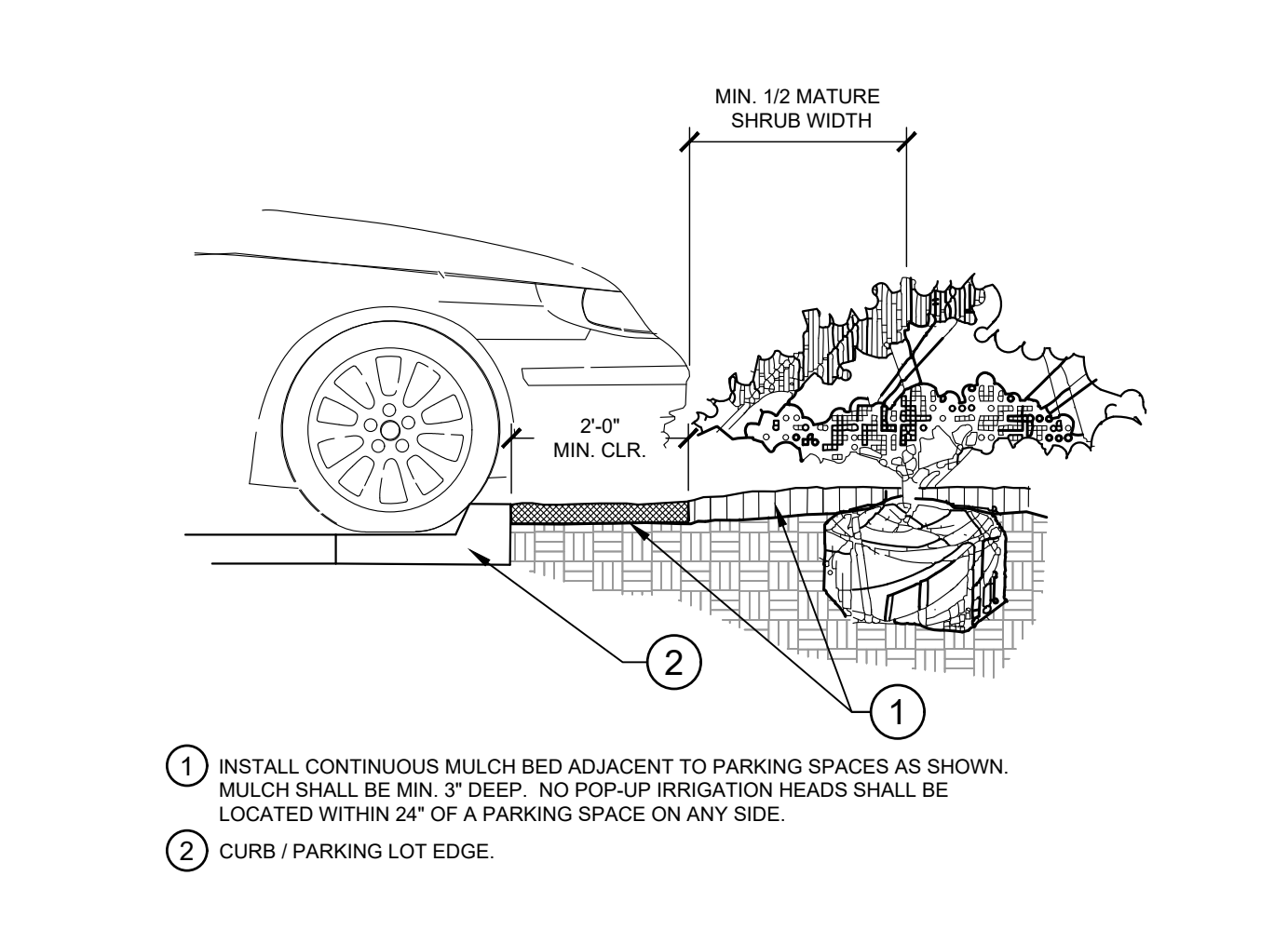
**4 PLANTED PARKING LOT ISLANDS/MEDIANS**  
SECTION NTS



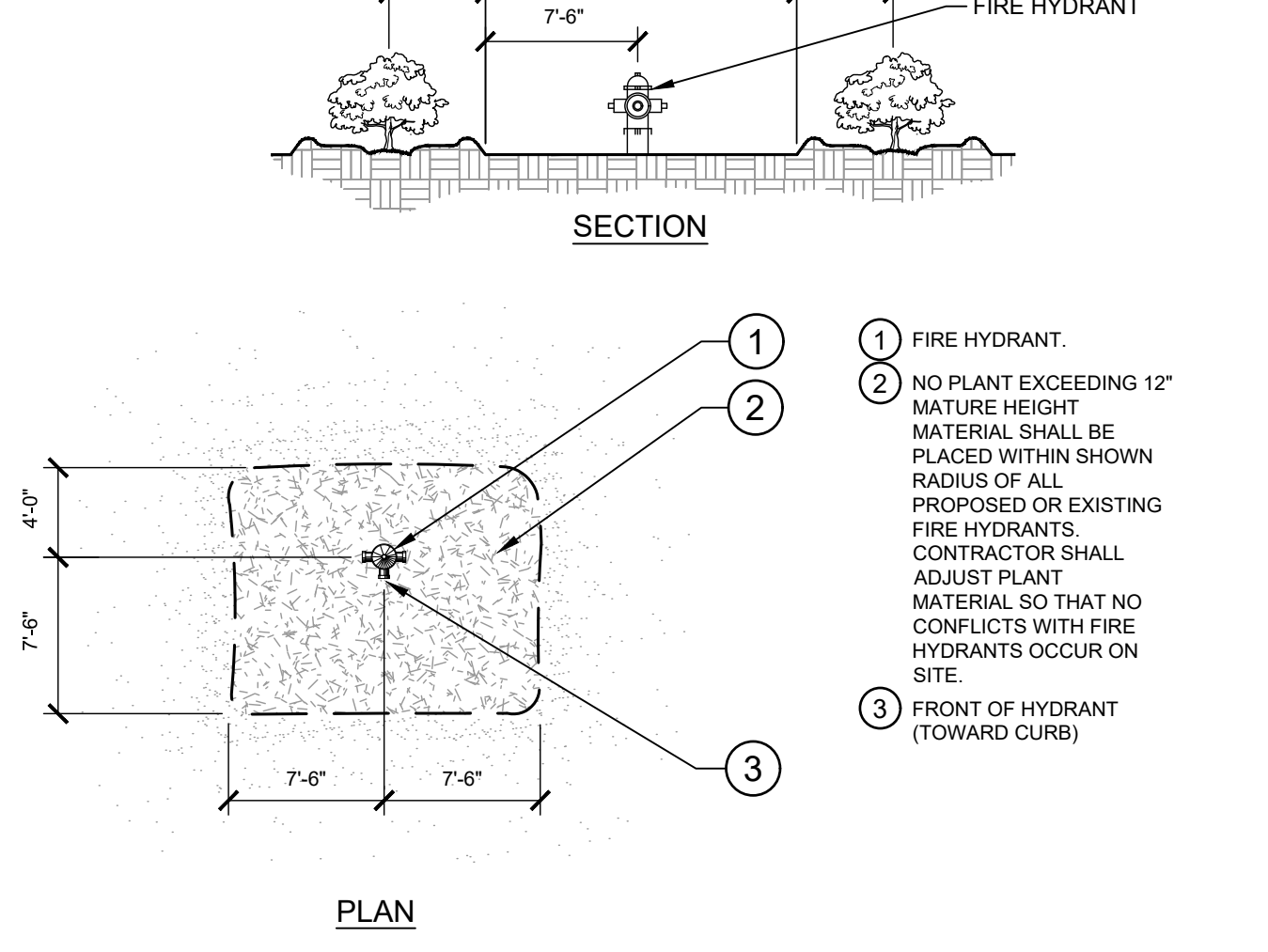
**5 SHRUB/GROUNDCOVER PLANTING ON A SLOPE**  
SECTION NTS



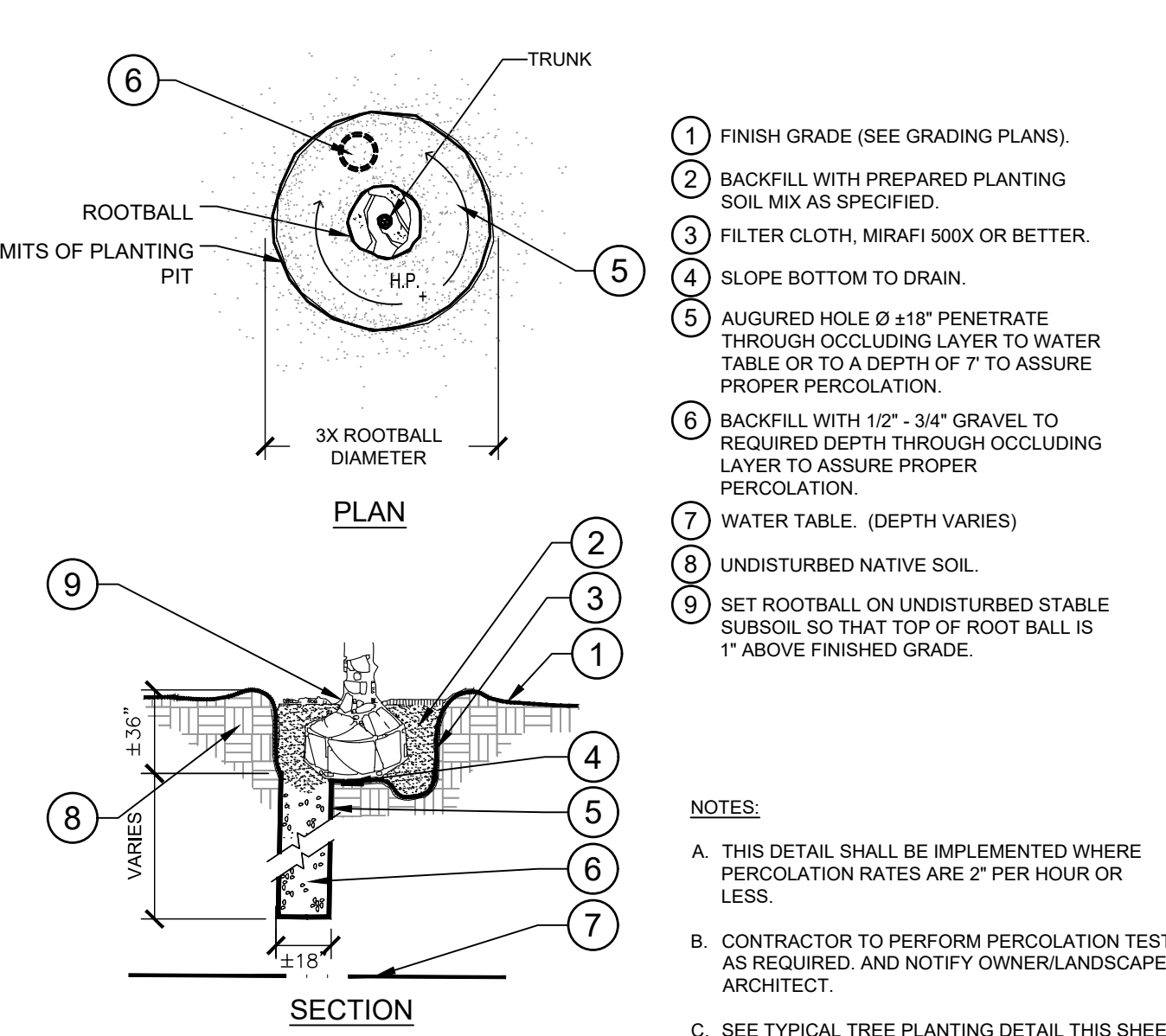
**6 PLANTINGS ADJACENT TO BUILDINGS**  
SECTION NTS



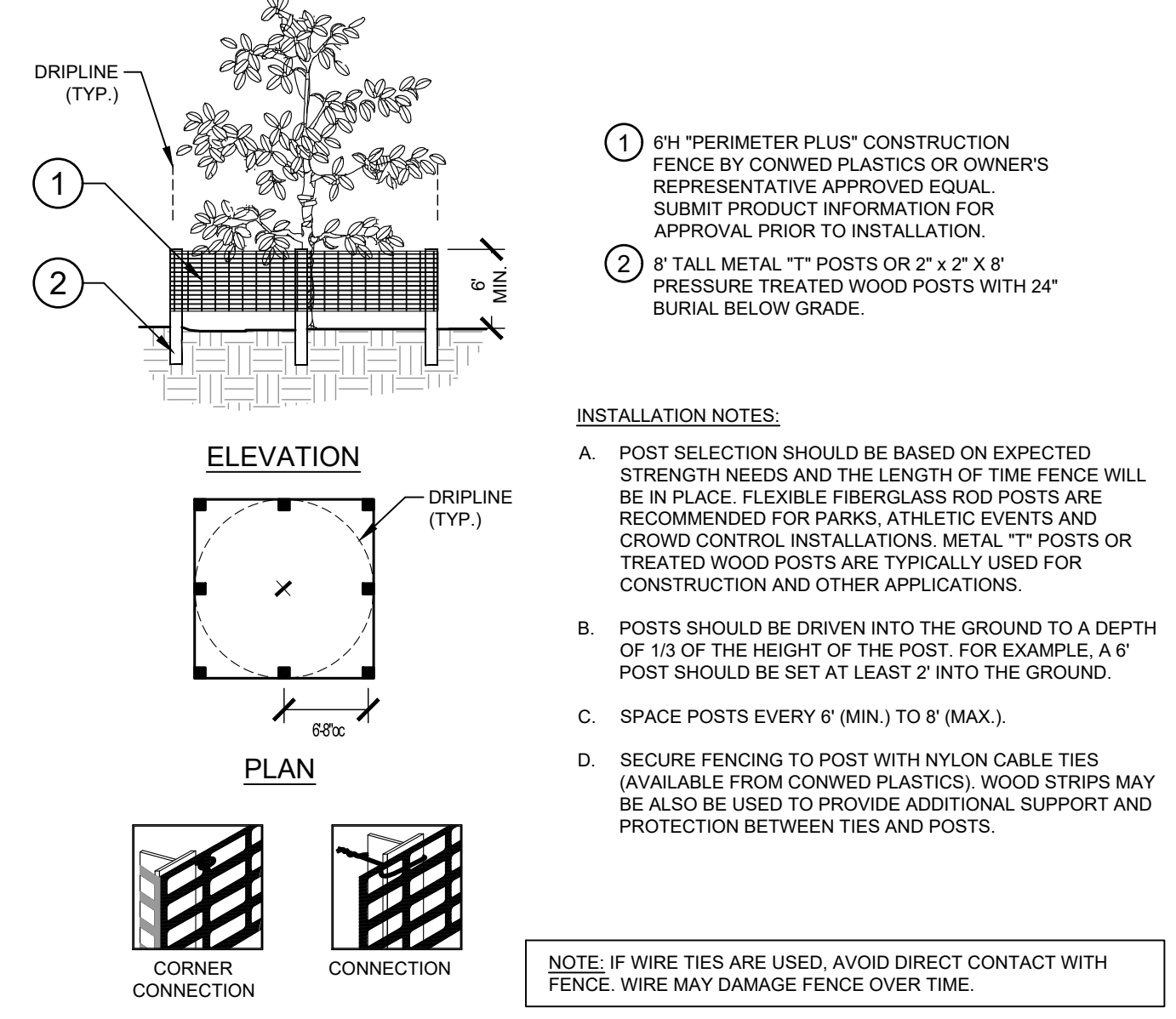
**7 PARKING SPACE/CURB PLANTING**  
SECTION NTS



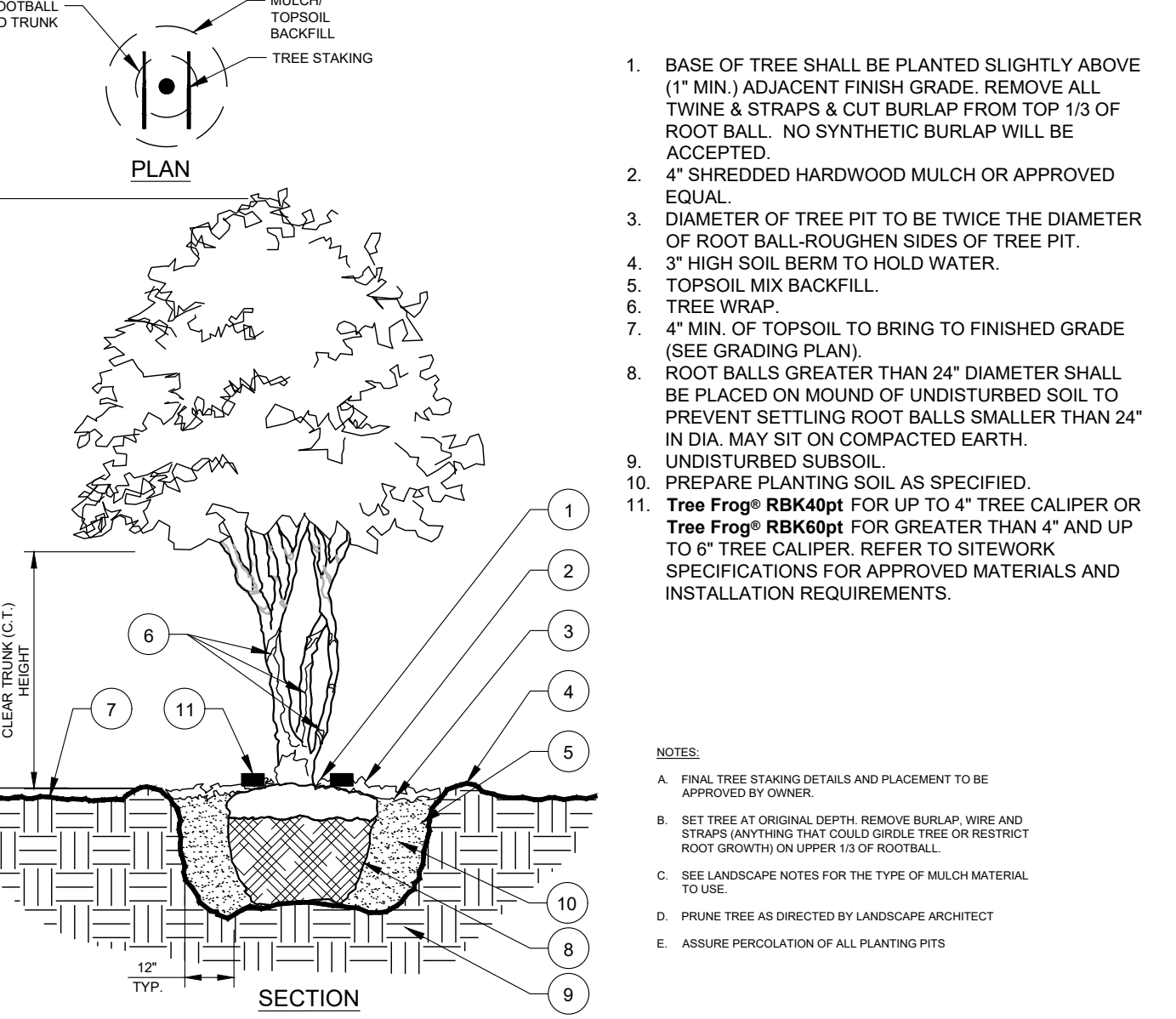
**8 SHRUB PLANTING AT FIRE HYDRANT**  
SECTION / PLAN NTS



**9 POOR DRAINAGE CONDITION**  
SECTION / PLAN NTS



**10 TREE PROTECTION FENCING**  
ELEVATION / PLAN NTS



**11 MULTI-TRUNK TREE PLANTING**  
SECTION / PLAN NTS

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KHA PROJECT	016485000
DATE	10/31/2023
SCALE	AS SHOWN
DESIGNED BY	JAA
DRAWN BY	JAA
CHECKED BY	COB

**SCOOTER'S ROLESVILLE**  
 PREPARED FOR  
**S&S JAVA ENTERPRISES**  
 ROLESVILLE, NC



Plotted By: Alexander, Jamal - Sheet Set: SCOOTER'S ROLESVILLE - Layout: L2 - LANDSCAPE NOTES - July 10, 2024, 11:21:56am - K:\RAL\_LDE\016485000-Scooter's Rolesville\Planning\PL15\_CAD Files\PlanSheets\L2\_LANDSCAPE DETAILS.dwg  
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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 THROUGHOUT 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 DOT 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 DOT 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 DOT FOR APPROVAL BY THE COUNTY ENGINEER'S REPRESENTATIVE.

- 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.

- 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. FERTILIZER INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

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 WORK 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.

- K. COLLECTED STOCK
- 1. 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
- 1. 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
- 1. 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.

- 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 REGRADEING 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.

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.

- 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.

- 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.

- 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.

- 6. LAWN MAINTENANCE (Continued)
  - OPON 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

- 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.
  - 3. 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.

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.

- 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.

- 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.

- 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 GROWN 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.

- 3. 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.

- 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 PLANTS 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 (Ø 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 ANTI-TRANSPIRANT PRODUCT ("WILT-PRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
  - 2. BALLED AND BURLAPPED (BB&B) AND FIELD GROWN (FO) 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

- 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 (Continued)

- 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.

1 TYPICAL LANDSCAPE SPECIFICATIONS

SCOOTER'S ROLESVILLE

LANDSCAPE NOTES

811

NC

S&S JAVA ENTERPRISES

ROLESVILLE

KHA PROJECT  
016485000

DATE  
10/31/2023

SCALE  
AS SHOWN

DESIGNED BY  
JAA

DRAWN BY  
JAA

CHECKED BY  
COB

NCDOT COMMENTS  
07/08/2024  
JAA

TOWN COMMENTS  
03/01/2024  
JAA

TOWN COMMENTS  
01/02/2024  
MDE

REVISIONS  
DATE  
BY

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421 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601

KIMLEY-HORN

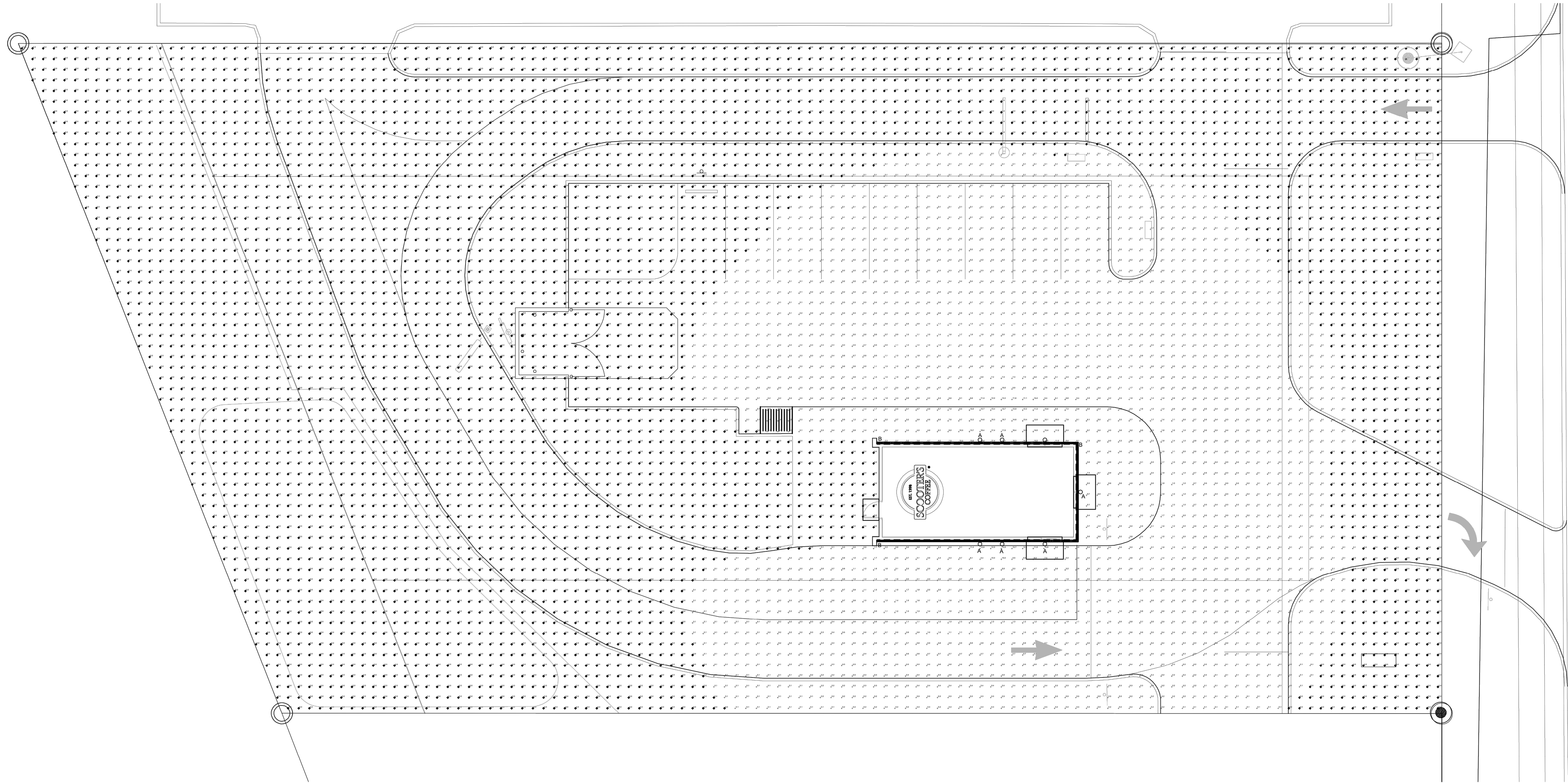
SHEET NUMBER  
L2.1

SDP-23-09



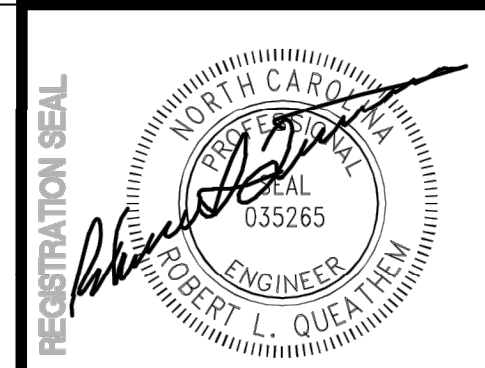
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☐	A		7	RAB LIGHTING INC.	SLIM12/D10		1	2006	0.8	15	
☐	B		130		NF/SP-PROW-120-24V-3000K		1	180	0.8	2.89861	

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Scooter Property	+	0.4 fc	17.7 fc	0.0 fc	N/A	N/A



**U.S. HWY 401 100' PUBLIC RAW**

**1 EXTERIOR SITE PHOTOMETRIC PLAN**  
 SCALE: 1" = 10'-0"



**ROBERT L. QUEATHEM**  
 ENGINEER  
 1950 CRAIG ROAD, SUITE 300  
 PH. (314) 415-2400 FAX (314) 415-2300  
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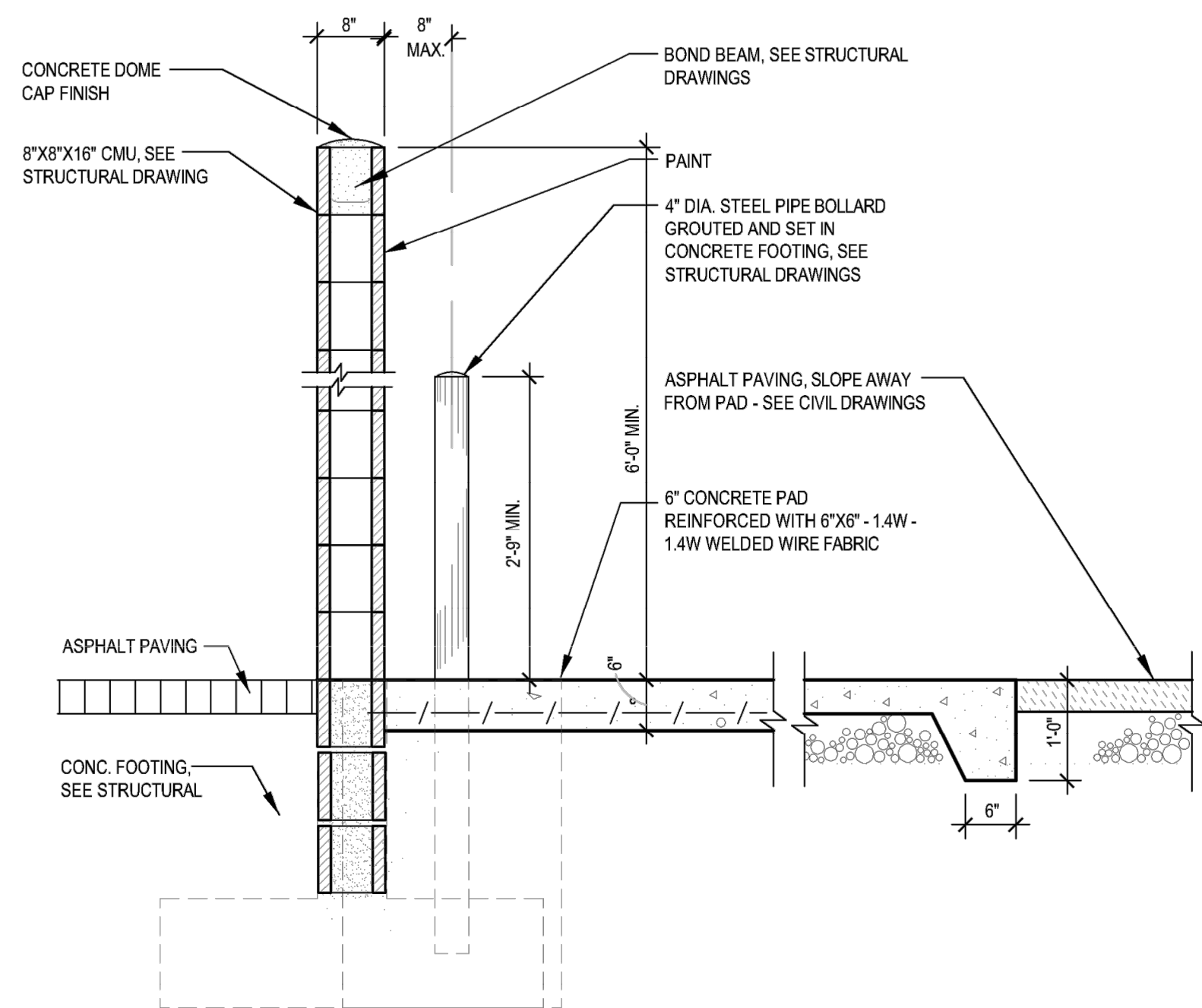
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TITLE:  
**EXTERIOR SITE PHOTOMETRIC PLAN**

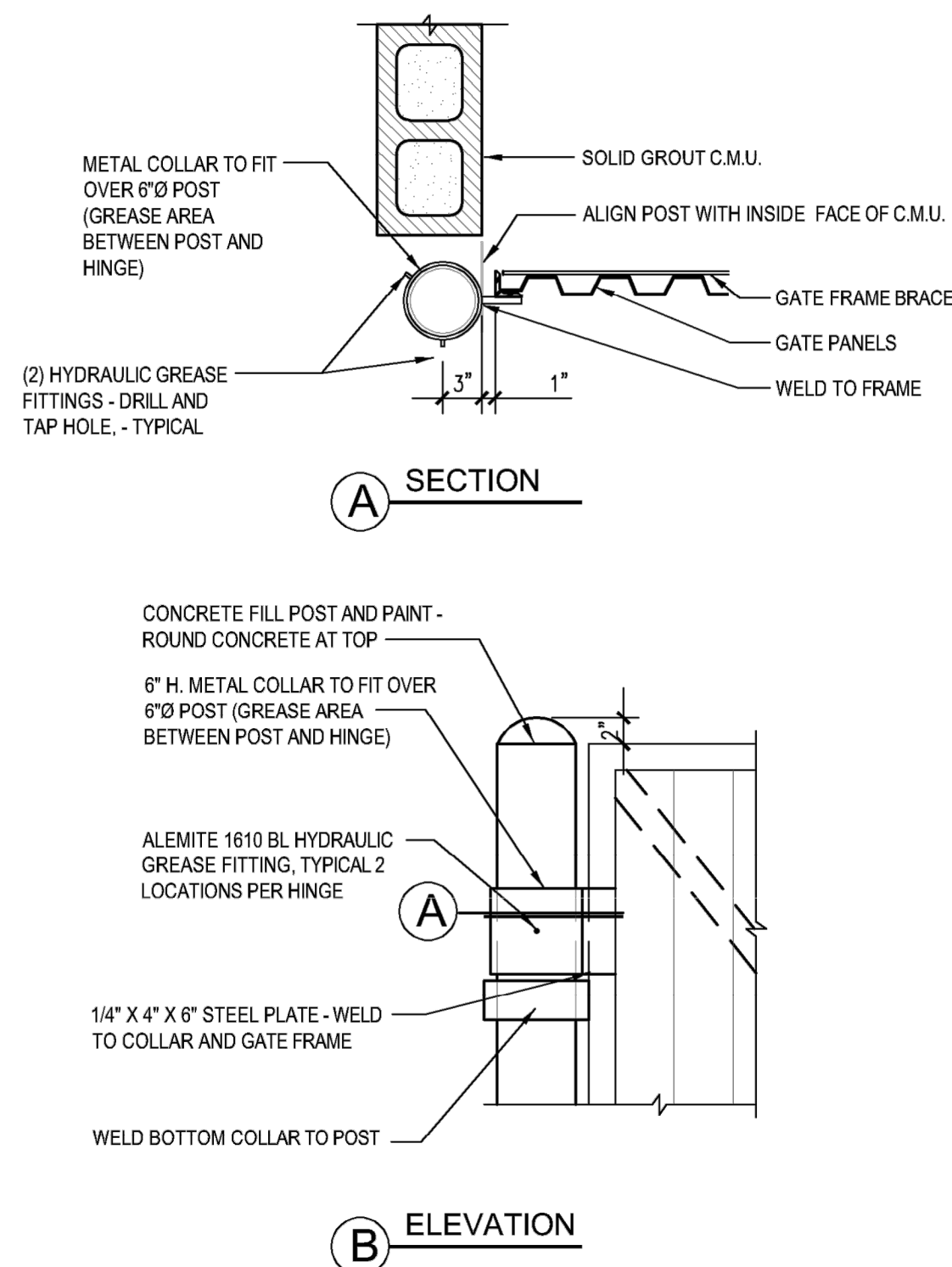
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**306 S. MAIN ST.  
 ROLESVILLE, NC 27571**  
 FRANCHISEE & STORE NUMBER:  
**SCOOTER'S COFFEE #562  
 P&S JAVA ENTERPRISES, INC.**

KIOSK PROTOTYPE:  
 4.1 PROTOTYPE  
 MAY 2022  
 ISSUE DATE:  
 08/14/2023  
 PROJECT NO.  
 230522  
 DRAWN BY:  
 JDK  
 CHECKED BY:  
 SAH

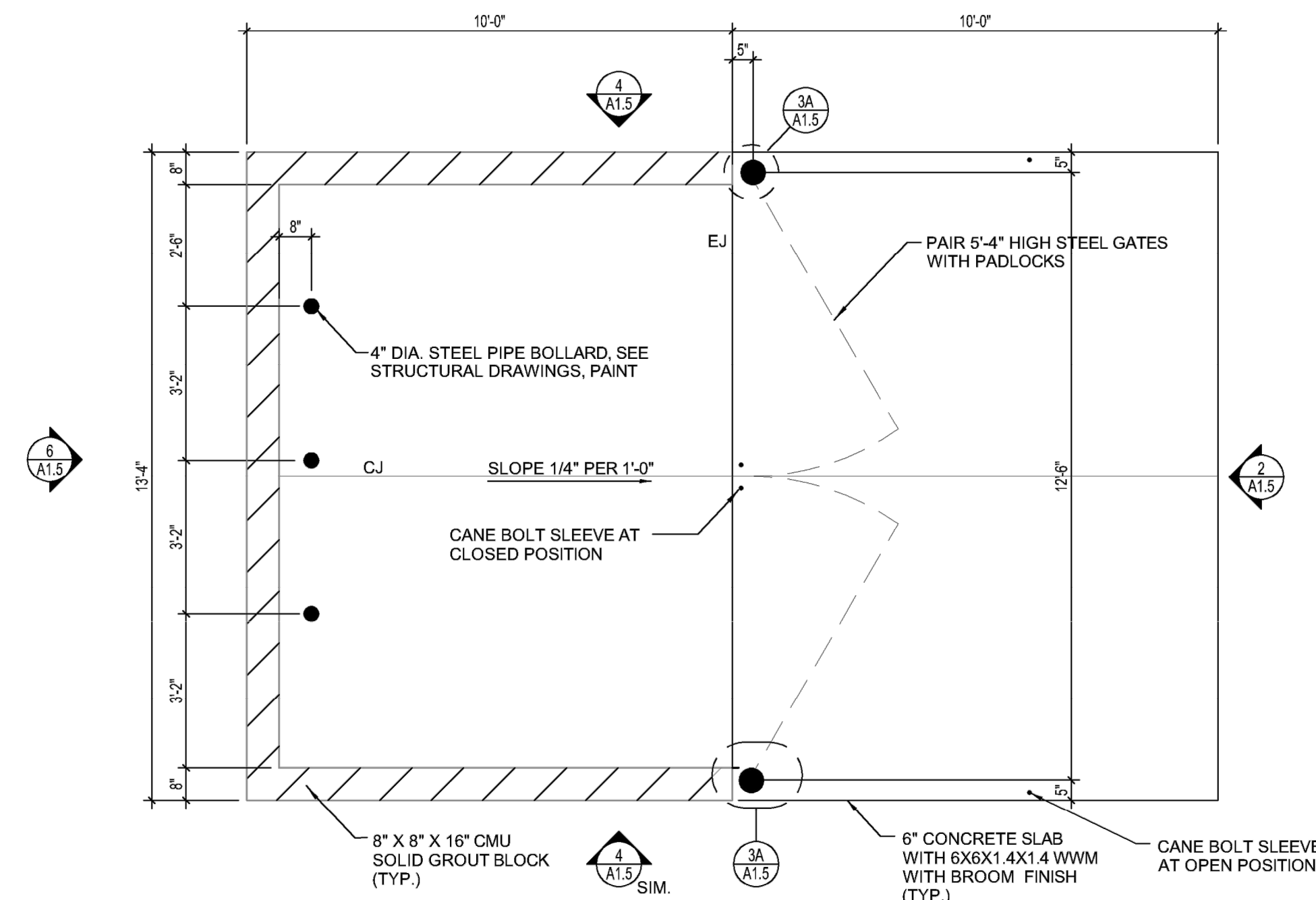
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**E3.1**



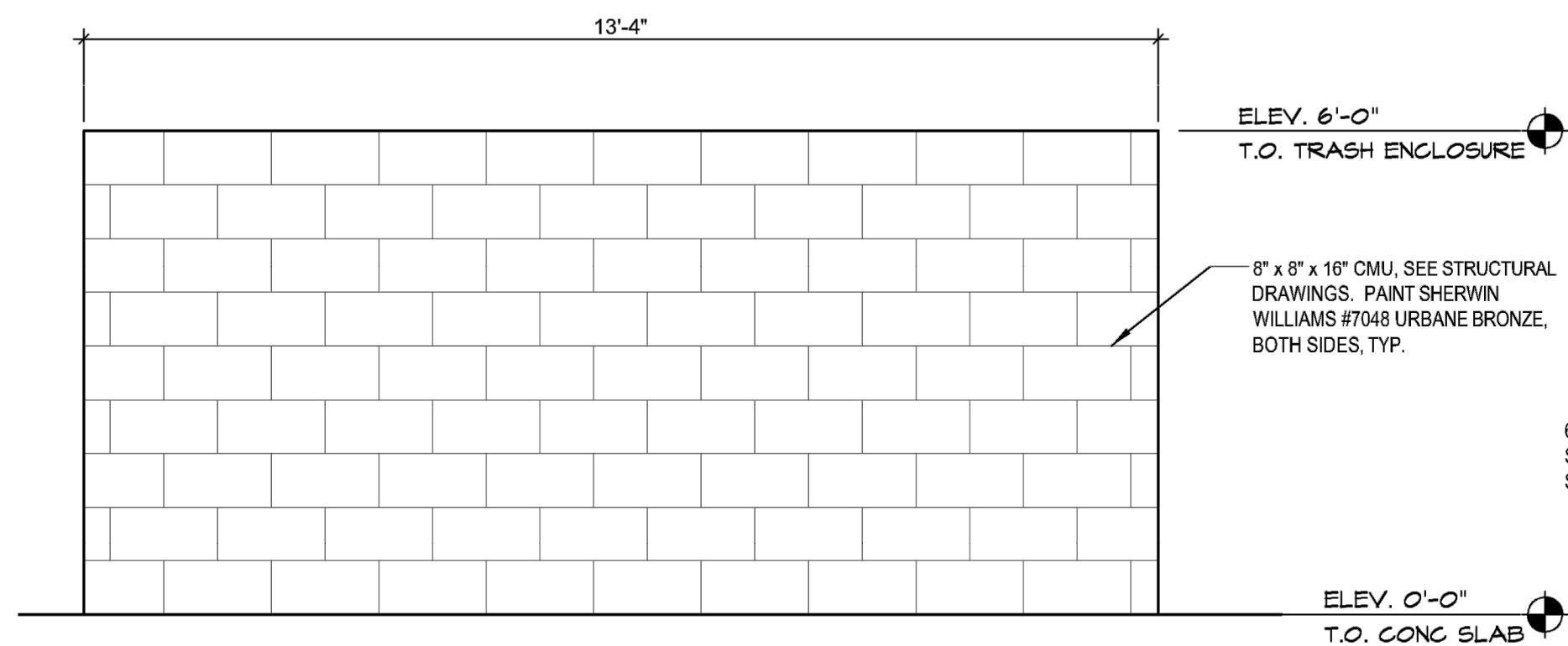
5 SECTION AT TRASH ENCLOSURE  
SCALE: 3/4" = 1'-0"



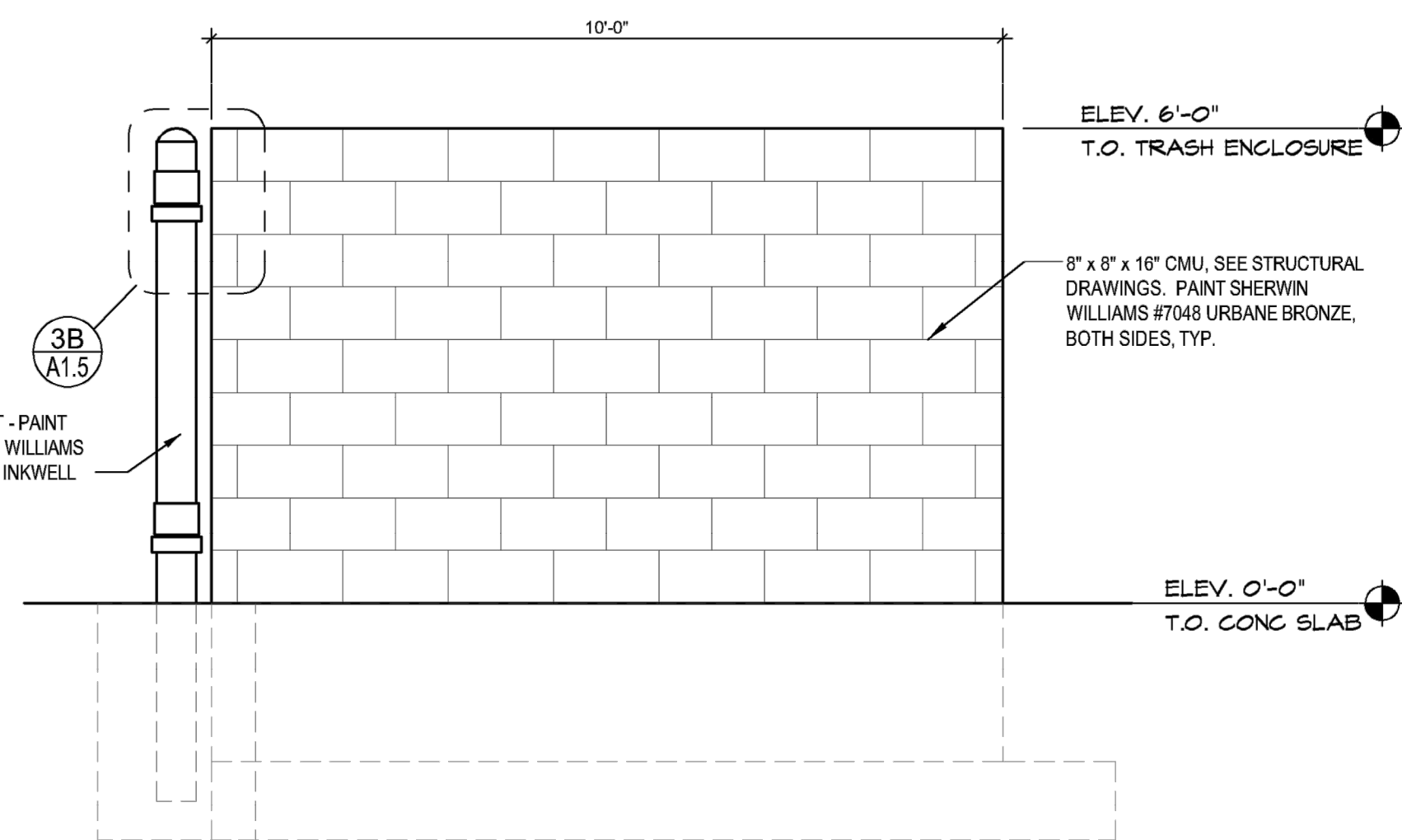
3 HINGE AT TRASH GATE  
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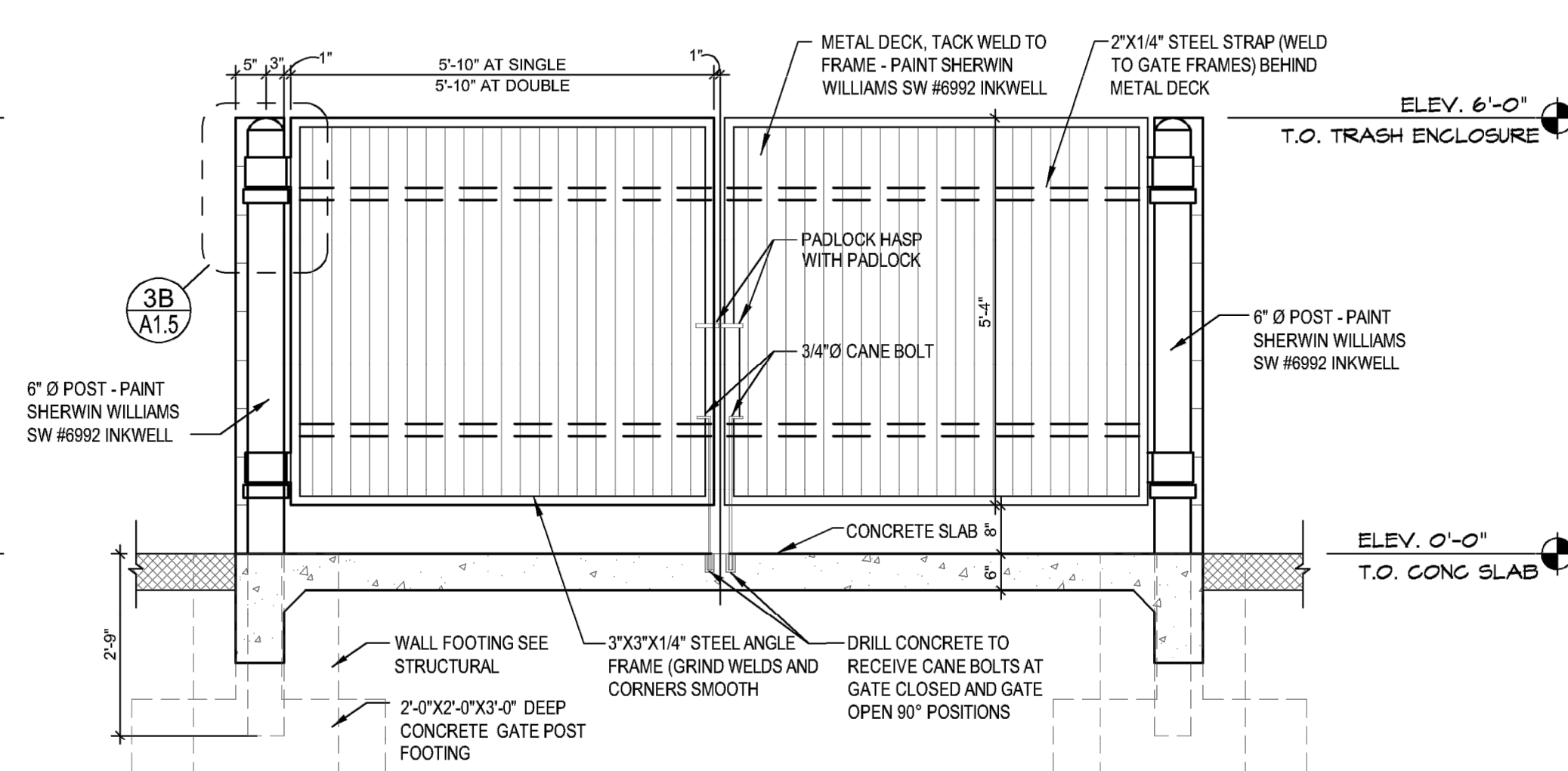
1 TRASH ENCLOSURE  
SCALE: 3/8" = 1'-0"



6 TRASH ENCLOSURE - BACK ELEVATION  
SCALE: 1/2" = 1'-0"



4 TRASH ENCLOSURE - SIDE BACK ELEVATION  
SCALE: 1/2" = 1'-0"



2 TRASH ENCLOSURE - FRONT ELEVATION  
SCALE: 1/2" = 1'-0"



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PH. (314) 415-2400 FAX (314) 415-2300  
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REV	DATE	DESCRIPTION

**TITLE:**  
TRASH ENCLOSURE PLAN, ELEVATIONS & DETAILS

**PROJECT ADDRESS:**  
306 S. MAIN ST.  
ROLESVILLE, NC 27571  
**FRANCHISE & STORE NUMBER:**  
SCOOTER'S COFFEE #562  
P&S JAVA ENTERPRISES, INC.

**KIOSK PROTOTYPE:**  
4.1 PROTOTYPE  
MAY 2022  
**ISSUE DATE:**  
08/14/2023  
**PROJECT NO.**  
230522  
**DRAWN BY:**  
BB  
**CHECKED BY:**  
XXX

**SHEET NO.**  
**A1.5**



# FINISH SCHEDULE

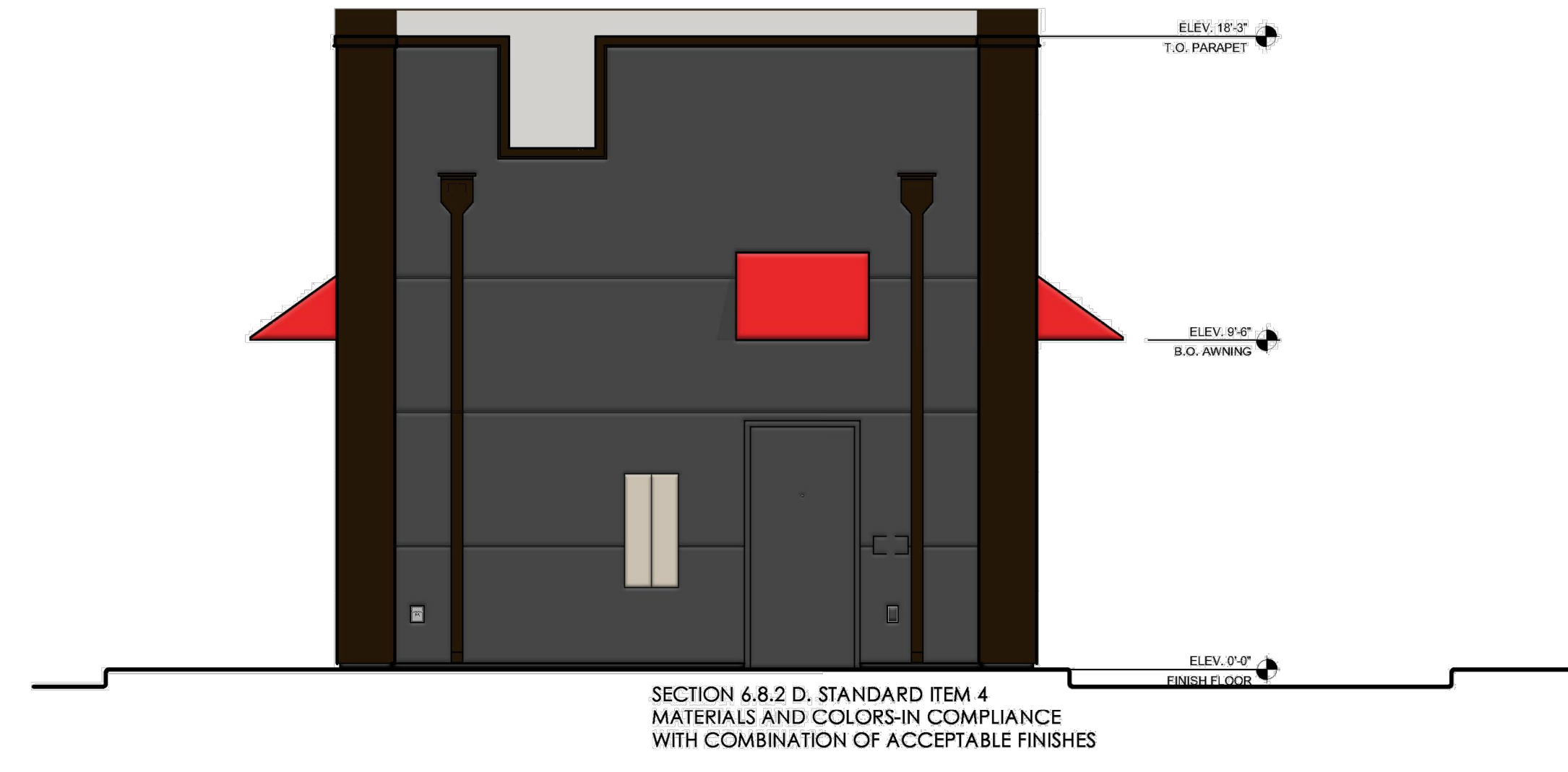
	CARBON LEDGESTONE		STUCCO PAINTED SHERWIN WILLIAMS "SKYLINE STEEL"
	FIBERON COMPOSITE CLADDING		STUCCO PAINTED SHERWIN WILLIAMS "INKWELL"
	SCOOTER'S BRAND RED COLOR		DARK BRONZE ALUMINUM



4 DRIVE THRU SIDE EXTERIOR ELEVATION  
SCALE: 1/4" = 1'-0"



3 FRONT EXTERIOR ELEVATION  
SCALE: 1/4" = 1'-0"



2 BACK EXTERIOR ELEVATION  
SCALE: 1/4" = 1'-0"



1 SIDE EXTERIOR ELEVATION  
SCALE: 1/4" = 1'-0"

MATERIAL PERCENTAGES		
DRIVE THRU SIDE EXTERIOR ELEVATION		
TOTAL WALL AREA	714 SQ. FT.	100%
STUCCO - INKWELL	0 SQ. FT.	0%
STUCCO - SKYLINE STEEL	201 SQ. FT.	28%
CARBON LEDGE STONE	229 SQ. FT.	32%
FIBERON COMPOSITE CLADDING	97 SQ. FT.	14%
WINDOWS/DOORS	39 SQ. FT.	5%
TRIMS	63 SQ. FT.	9%

MATERIAL PERCENTAGES		
BACK EXTERIOR ELEVATION		
TOTAL WALL AREA	357 SQ. FT.	100%
STUCCO - INKWELL	250 SQ. FT.	70%
STUCCO - SKYLINE STEEL	0 SQ. FT.	0%
CARBON LEDGE STONE	0 SQ. FT.	0%
FIBERON COMPOSITE CLADDING	0 SQ. FT.	0%
M	24 SQ. FT.	7%
TRIMS	83 SQ. FT.	23%

MATERIAL PERCENTAGES		
FRONT EXTERIOR ELEVATION		
TOTAL WALL AREA	324 SQ. FT.	100%
STUCCO - INKWELL	0 SQ. FT.	0%
STUCCO - SKYLINE STEEL	20 SQ. FT.	6%
CARBON LEDGE STONE	217 SQ. FT.	67%
FIBERON COMPOSITE CLADDING	36 SQ. FT.	11%
WINDOWS/DOORS	36 SQ. FT.	11%
TRIMS	21 SQ. FT.	6%

MATERIAL PERCENTAGES		
SIDE EXTERIOR ELEVATION		
TOTAL WALL AREA	714 SQ. FT.	100%
STUCCO - INKWELL	0 SQ. FT.	0%
STUCCO - SKYLINE STEEL	201 SQ. FT.	28%
CARBON LEDGE STONE	229 SQ. FT.	32%
FIBERON COMPOSITE CLADDING	97 SQ. FT.	14%
WINDOWS/DOORS	39 SQ. FT.	5%
TRIMS	63 SQ. FT.	9%

SECTION 6.8.2 D. STANDARD ITEM  
MINIMUM DESIGN ITEMS-DESIGN HAS (4) ITEMS INCLUDING:  
A-PROJECTION OF PARAPET/OVERHANG WITH WOOD FINISH ON UNDERSIDE  
B-STACKED STONE COLUMN AT STREET FACING FACADE  
D-AWNING LIGHTING PROVIDED  
F-COMPLEMENTARY CHANGE IN MATERIAL & TEXTURES USING STACKED STONE, WOOD AND STUCCO FINISHES  
F-FINISHES VARY IN COLOR



**FREDERICK J. GOGLIA**  
ARCHITECT, NCARB, RDI  
1950 CRAIG ROAD, SUITE 300  
PH. (314) 415-2400 FAX (314) 415-2300  
WWW.ARCV.COM  
ST. LOUIS, MO 63146



REV	DATE	DESCRIPTION

TITLE: EXTERIOR COLOR ELEVATIONS

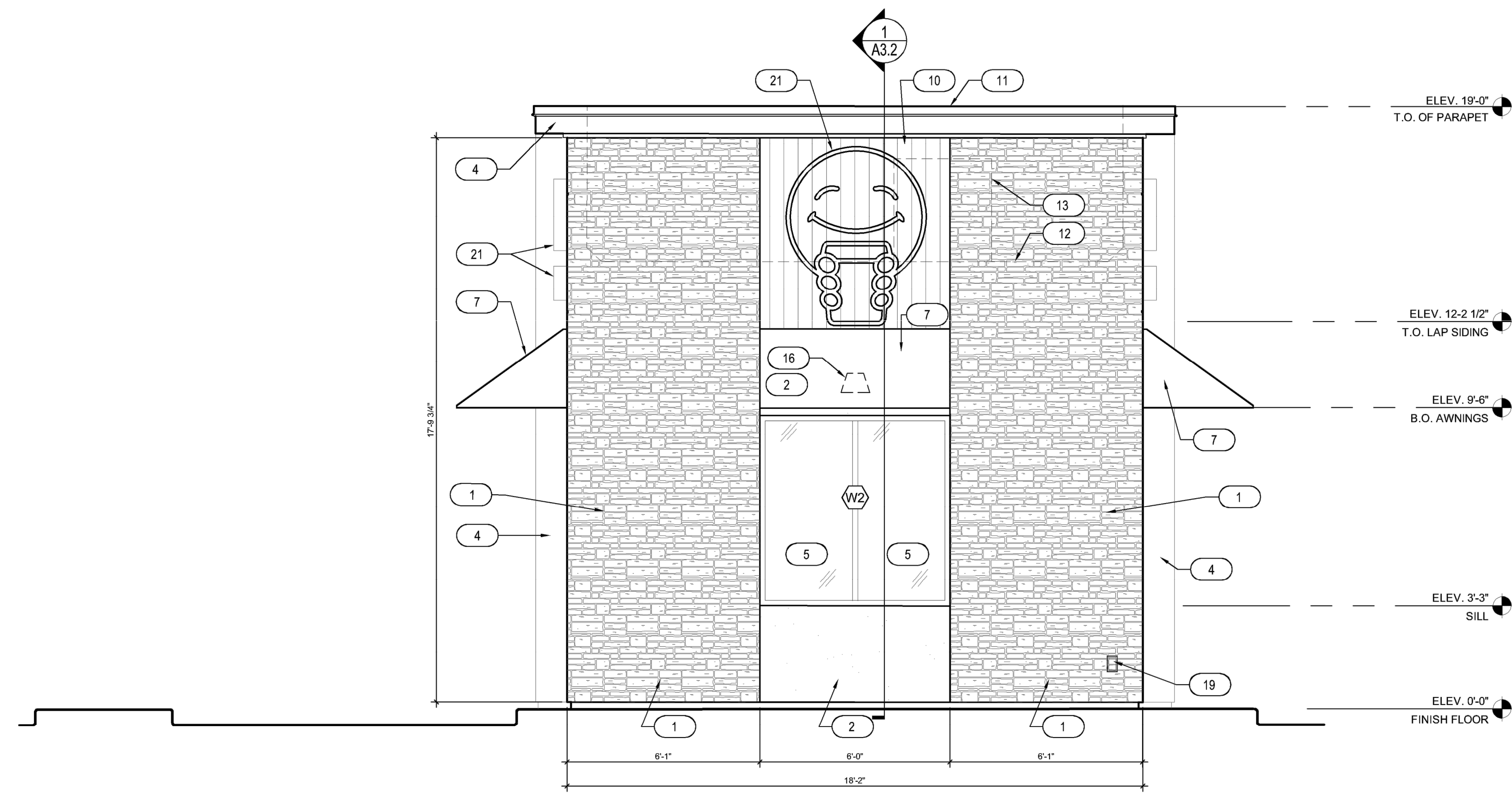
PROJECT ADDRESS:  
306 S. MAIN ST.  
ROLESVILLE, NC 27571  
FRANCHISEE & STORE NUMBER:  
SCOOTER'S COFFEE #562  
P&S JAVA ENTERPRISES, INC.

KIOSK PROTOTYPE:  
4.1 PROTOTYPE  
MAY 2022  
ISSUE DATE:  
08/14/2023  
PROJECT NO.  
230522  
DRAWN BY:  
CHECKED BY:

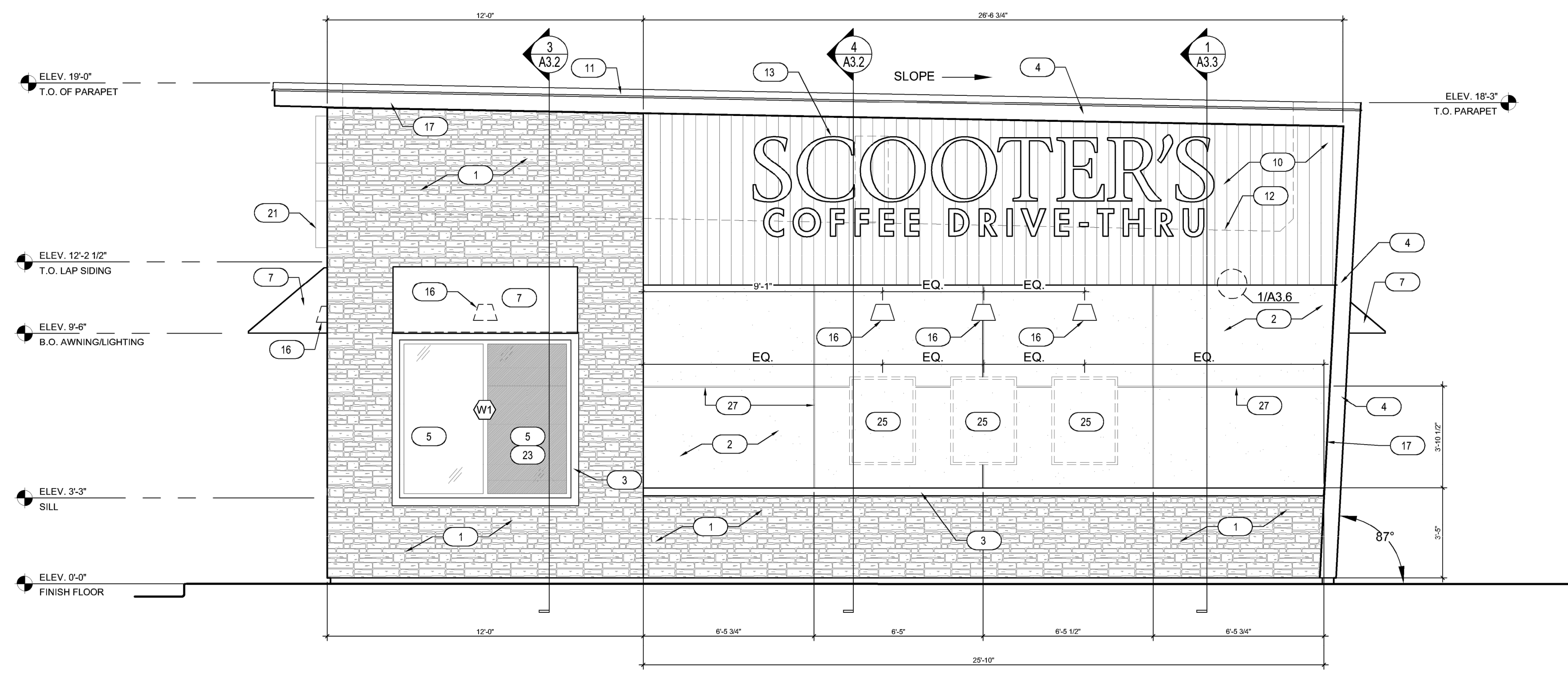
SHEET NO.  
**A2.0**

**KEYNOTES**

1. CARBON LEDGE STONE BY REALSTONE SYSTEMS
2. STUCCO - COLOR: SHERWIN WILLIAMS SW1015 SKYLINE STEEL
3. 3 1/2" TRIM - COLOR: SHERWIN WILLIAMS SW2848 ROYCROFT PEWTER
4. METAL FASCIA - DARK BRONZE
5. INSULATED DARK BRONZE ALUMINUM WINDOWS WITH DUAL PANE TEMPERED GLASS
6. QUICKSERVE 48X48 WINDOW - COLOR: DARK BRONZE
7. AWNING BY OTHERS - COLOR: RED
8. INSULATED HOLLOW METAL DOOR & FRAME, PAINT SHERWIN WILLIAMS SW6992
9. WIDE ANGLE PEEP HOLE, BY DOOR MANUFACTURER
10. FIBERON COMPOSITE CLADDING
11. PARAPET CAP FLASHING - DARK BRONZE
12. LINE OF ROOF BEYOND
13. AIR CONDENSER, SEE MECHANICAL DRAWINGS
14. ROOF SCUPPER AND DOWNSPOUT, SEE DETAIL 8/A6.3
15. MAILBOX BY GC BLACK
16. WALL MOUNTED LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS
17. LED LIGHT BAND, SEE ELECTRICAL DRAWINGS
18. SES PANEL, SEE ELECTRICAL DRAWINGS
19. ELECTRICAL OUTLETS, SEE ELECTRICAL DRAWINGS
20. HOSE BIBB, SEE PLUMBING DRAWINGS
21. PROPOSED SIGNAGE BY OTHERS, UNDER SEPARATE PERMIT
22. CONNECT DOWNSPOUTS TO UNDERGROUND PIPING, REF. CIVIL.
23. SPANDREL GLASS
24. NEW SECURITY CAMERA
25. CUSTOMER PROVIDED SIGN PANELS. PANELS TO BE MOUNTED TO FASCIA BY GC (WHEN PROVIDED) IN CUSTOMER SPECIFIED LOCATION USING PROPER HARDWARE AND FASTENERS (NON-CORROSIVE)
26. STUCCO - COLOR: SHERWIN WILLIAMS SW6993 INKWELL EGGSHELL FINISH
27. STUCCO REVEAL



**1 FRONT EXTERIOR ELEVATION**  
SCALE: 3/8" = 1'-0"



**2 SIDE EXTERIOR ELEVATION**  
SCALE: 3/8" = 1'-0"

REV	DATE	DESCRIPTION

TITLE:  
**EXTERIOR ELEVATIONS**

PROJECT ADDRESS:  
306 S. MAIN ST.  
ROLESVILLE, NC 27571

FRANCHISEE & STORE NUMBER:  
SCOOTER'S COFFEE #562  
P&S JAVA ENTERPRISES, INC.

KIOSK PROTOTYPE:  
4.1 PROTOTYPE  
MAY 2022

ISSUE DATE:  
08/14/2023

PROJECT NO.  
230522

DRAWN BY:  
NES

CHECKED BY:  
SW

SHEET NO.

**A2.1**



REV	DATE	DESCRIPTION

TITLE:  
EXTERIOR  
ELEVATIONS

PROJECT ADDRESS:  
 306 S. MAIN ST.  
 ROLESVILLE, NC 27571  
 FRANCHISEE & STORE NUMBER:  
 SCOOTER'S COFFEE #562  
 P&S JAVA ENTERPRISES, INC.

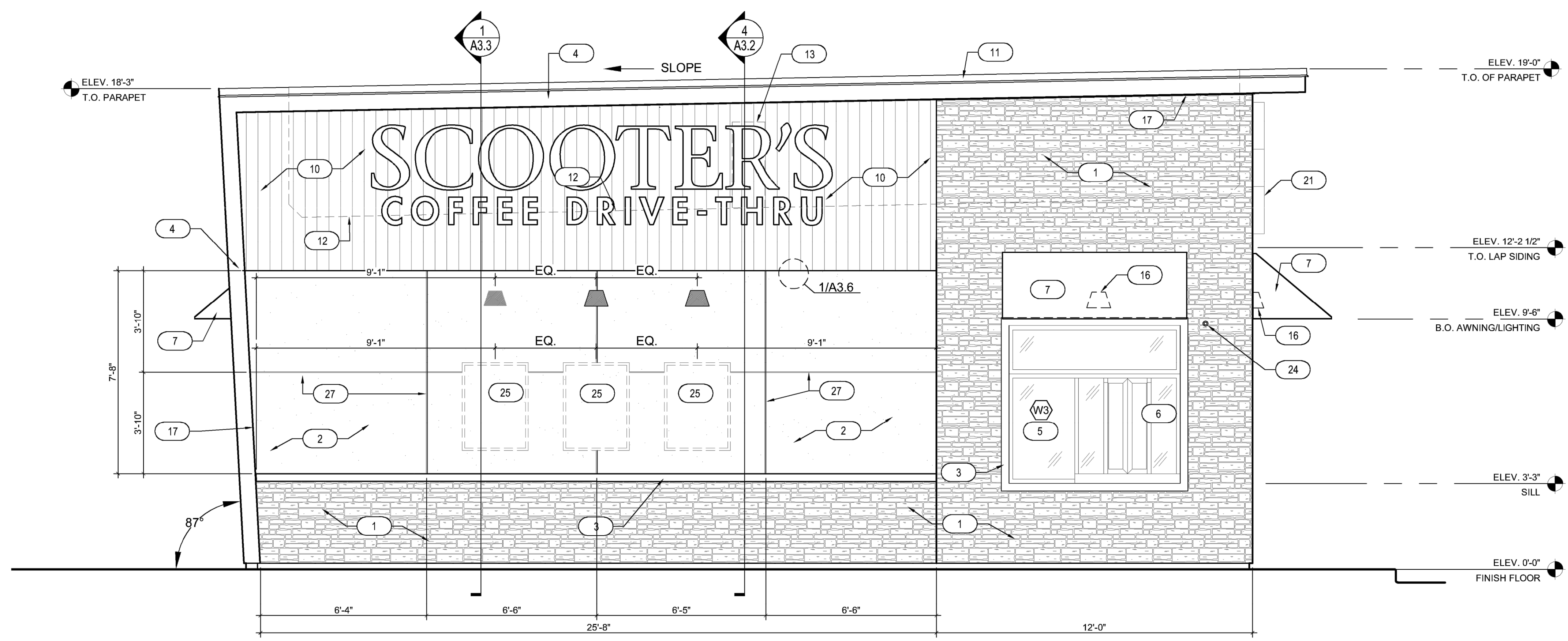
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 MAY 2022  
 ISSUE DATE:  
 08/14/2023  
 PROJECT NO.  
 230522  
 DRAWN BY:  
 NES  
 CHECKED BY:  
 SW

SHEET NO.

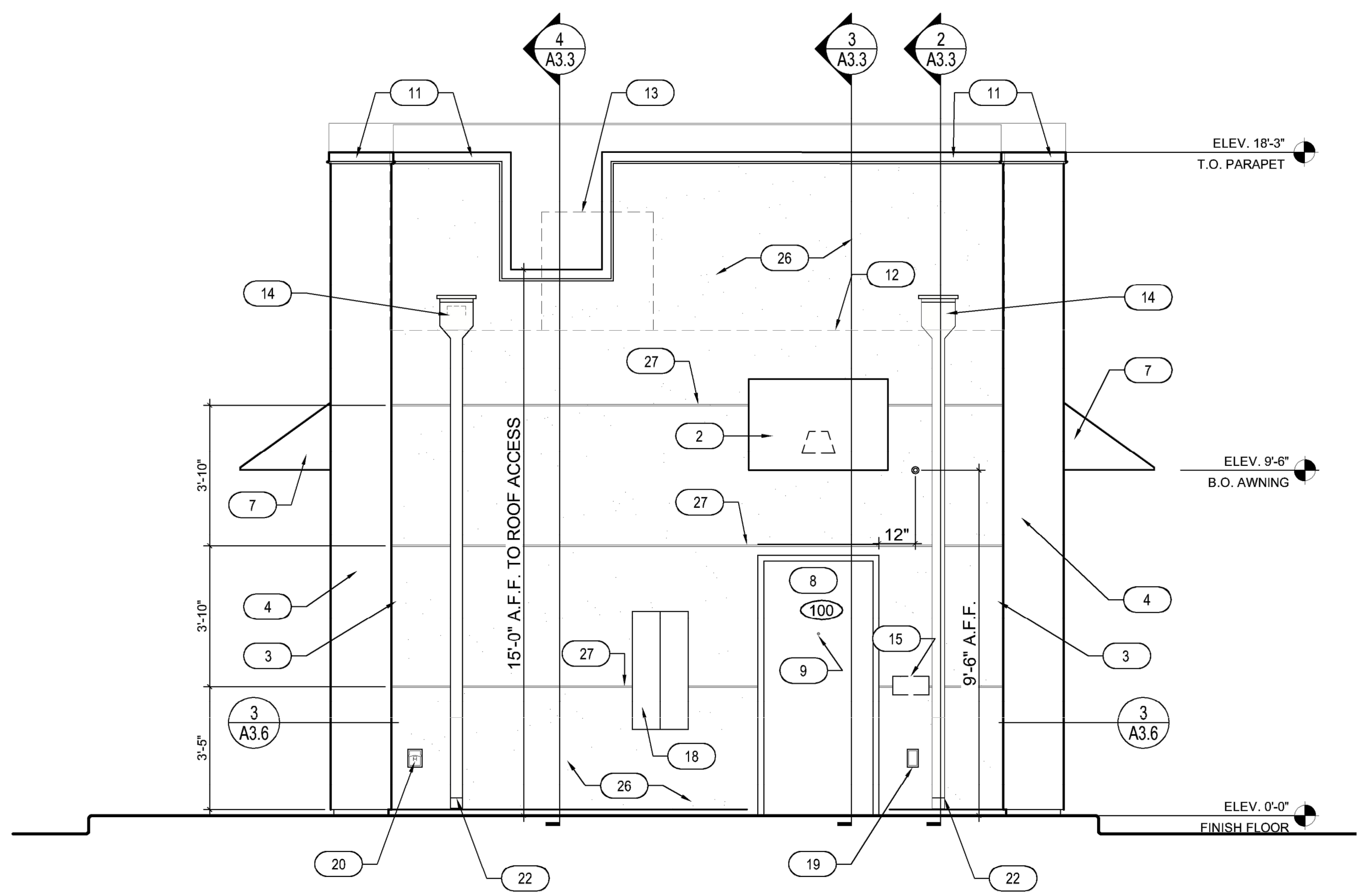
A2.2

KEYNOTES

- CARBON LEDGE STONE BY REALSTONE SYSTEMS
- STUCCO - COLOR: SHERWIN WILLIAMS SW1015 SKYLINE STEEL
- 3 1/2" TRIM - COLOR: SHERWIN WILLIAMS SW2848 ROYCROFT PEWTER
- METAL FASCIA - DARK BRONZE
- INSULATED DARK BRONZE ALUMINUM WINDOWS WITH DUAL PANE TEMPERED GLASS
- QUICKSERVE 48X48 WINDOW - COLOR: DARK BRONZE
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- INSULATED HOLLOW METAL DOOR & FRAME, PAINT SHERWIN WILLIAMS SW6992
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- STUCCO - COLOR: SHERWIN WILLIAMS SW6993 INKWELL EGGSHELL FINISH
- STUCCO REVEAL



1 SIDE EXTERIOR ELEVATION  
SCALE: 3/8" = 1'-0"



2 BACK EXTERIOR ELEVATION  
SCALE: 3/8" = 1'-0"

MATERIALPERCENTAGES DRIVE THRU SIDE EXTERIOR ELEVATION		
TOTAL WALL AREA	714 SQ. FT.	100%
STUCCO - INKWELL	0 SQ. FT.	0%
STUCCO - SKYLINE STEEL	201 SQ. FT.	28%
CARBON LEDGE STONE	229 SQ. FT.	32%
FIBERON COMPOSITE CLADDING	97 SQ. FT.	14%
WINDOWS/DOORS	39 SQ. FT.	5%
TRIMS	63 SQ. FT.	9%

MATERIALPERCENTAGES FRONT EXTERIOR ELEVATION		
TOTAL WALL AREA	324 SQ. FT.	100%
STUCCO - INKWELL	0 SQ. FT.	0%
STUCCO - SKYLINE STEEL	20 SQ. FT.	6%
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FIBERON COMPOSITE CLADDING	36 SQ. FT.	11%
WINDOWS/DOORS	36 SQ. FT.	11%
TRIMS	21 SQ. FT.	6%

MATERIALPERCENTAGES BACK EXTERIOR ELEVATION		
TOTAL WALL AREA	357 SQ. FT.	100%
STUCCO - INKWELL	250 SQ. FT.	70%
STUCCO - SKYLINE STEEL	0 SQ. FT.	0%
CARBON LEDGE STONE	0 SQ. FT.	0%
FIBERON COMPOSITE CLADDING	0 SQ. FT.	0%
M	24 SQ. FT.	7%
TRIMS	83 SQ. FT.	23%

MATERIALPERCENTAGES SIDE EXTERIOR ELEVATION		
TOTAL WALL AREA	714 SQ. FT.	100%
STUCCO - INKWELL	0 SQ. FT.	0%
STUCCO - SKYLINE STEEL	201 SQ. FT.	28%
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FIBERON COMPOSITE CLADDING	97 SQ. FT.	14%
WINDOWS/DOORS	39 SQ. FT.	5%
TRIMS	63 SQ. FT.	9%

**KIMLEY-HORN & ASSOCIATES, INC.**

421 Fayetteville Street, Suite 600

Raleigh, North Carolina 27601

TEL: (919) 677-2000 FAX: (919) 677-2050

**ENGINEER'S OPINION OF PROBABLE COST**

**PROJECT: Scooter's Rolesville (US HWY 401/S MAIN ST)**

**PREPARED BY: Luke Newton**

**CHECKED BY: Chris Bostic**

**JOB NUMBER: 016485000**

**DATE: 5/20/2024**

**DATE: 5/20/2024**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT BID	TOTAL
1	Erosion Control	131	LF	\$7.00	\$917.00
5	30" Curb & Gutter	164	LF	\$20.00	\$3,280.00
8	Accessible Ramps	4	EA	\$1,500.00	\$6,000.00
9	10" ABC Stone Base	78	TON	\$40.00	\$3,120.00
10	4" Intermediate Course	31	TON	\$90.00	\$2,790.00
11	3" Asphalt Surface	23	TON	\$90.00	\$2,070.00
12	Seeding & Mulching	0.05	AC	\$5,000.00	\$250.00
13	2-inch Saddle & Valve	1	EA	\$5,000.00	\$5,000.00
14	2-inch Waterline	23	LF	\$25.00	\$575.00
15	1-1/4" Force Main	78	LF	\$20.00	\$1,560.00
16	Catch Basin	1	EA	\$3,500.00	\$3,500.00
17	Storm Drainage Pipe	29	LF	\$40.00	\$1,160.00
18	Signs	1	EA	\$1,000.00	\$1,000.00
19	6' Concrete Sidewalk	39	SY	\$50.00	\$1,950.00
				<b>TOTAL</b>	<b>\$33,200</b>

**Notes:**

1. Cost opinion is based on the Site Plan named "Scooter's Rolesville" dated March 01, 2024 prepared by Kimley-Horn.
2. Cost opinion does not include costs for unsuitable soils or general conditions.
3. Cost opinion does not include permitting and review fees.



The Engineer has no control over the cost of labor, materials, or equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs, as provided here, are made on the basis of the Engineer's experience and qualifications and represent the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable cost prepared for the Owner.

## Holloway (Summit Design & Engineering), Magda P

---

**From:** Marsh, Eric L  
**Sent:** Monday, April 1, 2024 5:04 PM  
**To:** Josh Douthit; Elabarger, Michael S; McFarland, Mical  
**Cc:** Gruber, Meredith; Alexander, Jamal; Holloway (Summit Design & Engineering), Magda P; Bostic, Chris  
**Subject:** RE: [External] RE: Rolesville Driveway Permit Applications (D051-092-24-00038 & D051-092-24-00039)

Josh captured my additional concerns. Feel free to move forward with these recommendations in mind.

Thanks,

**Eric L. Marsh, MPA, EI**  
**Assistant Town Manager**  
Town of Rolesville  
PO Box 250  
502 Southtown Circle  
Rolesville, NC 27571  
919.556.3506



---

**From:** Josh Douthit <jdouthit@rkk.com>  
**Sent:** Monday, April 1, 2024 4:59 PM  
**To:** Elabarger, Michael S <michael.elabarger@rolesville.nc.gov>; Marsh, Eric L <Eric.Marsh@rolesville.nc.gov>; McFarland, Mical <mical.mcfarland@rolesville.nc.gov>  
**Cc:** Gruber, Meredith <meredith.gruber@rolesville.nc.gov>; Alexander, Jamal <Jamal.Alexander@kimley-horn.com>; Holloway (Summit Design & Engineering), Magda P <ext-mpholloway@ncdot.gov>; Bostic, Chris <Chris.Bostic@kimley-horn.com>  
**Subject:** [External] RE: Rolesville Driveway Permit Applications (D051-092-24-00038 & D051-092-24-00039)

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Chris/Mike

I don't see any conflicts in the area but there will need to be some coordination between the developments and our LAP project to prevent extra costs/rework and aesthetic reasons. Luckily we are doing minimal work in this section of the project. A couple of things that I have noted are:

- 302 S. Main / The Learning Center
  - Differing Trees/Landscaping plans adjacent to existing sidewalk parallel with Main Street.
  - Both plans show installing a new ADA curb ramp on Old Rogers Rd, our plans also have a few joints of sidewalk to tie in while The Learning Center is redoing entire sidewalk.

- Our plans call for a resurfacing of Main Street so it would be beneficial to have the sawcut and waterline tie in done prior to the resurfacing of Main Street.
- Street light to be added from our project on SE corner of lot near the intersection.
  
- 306 S. Main / Scooters Coffee
  - Differing Trees/Landscaping plans adjacent to existing sidewalk parallel with Main Street
  - Our plans call for a resurfacing of Main Street so it would be beneficial to have the water/sewer tie in done prior to the resurfacing of Main Street.

I don't see any issues or direct conflicts with these projects moving forward in accordance with the LDO and Planning review process but will let Eric provide the final ok.

Let me know if you have any questions.

Thanks

---

**JOSH DOUTHIT, PE**  
Project Engineer



8601 Six Forks Road, Suite 700  
Raleigh, NC 27615

910-644-4054 C  
[www.rkk.com](http://www.rkk.com)

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---

**From:** Elabarger, Michael S <[michael.elabarger@rolesville.nc.gov](mailto:michael.elabarger@rolesville.nc.gov)>

**Sent:** Monday, April 1, 2024 11:33 AM

**To:** Josh Douthit <[jdouthit@rkk.com](mailto:jdouthit@rkk.com)>; Marsh, Eric L <[Eric.Marsh@rolesville.nc.gov](mailto:Eric.Marsh@rolesville.nc.gov)>; McFarland, Mical <[mical.mcfarland@rolesville.nc.gov](mailto:mical.mcfarland@rolesville.nc.gov)>

**Cc:** Gruber, Meredith <[meredith.gruber@rolesville.nc.gov](mailto:meredith.gruber@rolesville.nc.gov)>; Alexander, Jamal <[Jamal.Alexander@kimley-horn.com](mailto:Jamal.Alexander@kimley-horn.com)>; Holloway (Summit Design & Engineering), Magda P <[ext-mpholloway@ncdot.gov](mailto:ext-mpholloway@ncdot.gov)>; Bostic, Chris <[Chris.Bostic@kimley-horn.com](mailto:Chris.Bostic@kimley-horn.com)>

**Subject:** RE: Rolesville Driveway Permit Applications (D051-092-24-00038 & D051-092-24-00039)

**EXTERNAL EMAIL:** Do not click links or open attachments unless you trust the 'Sender' and know the content is safe.

Good morning,

I'm forwarding this to the [LAPP project management](#) representative Josh Douthit, and cc'ing the Interim Town Manager and Economic Development Director as well. I believe Josh can speak to this on behalf of the project and Town, but if not, Mr. Marsh likely can.

For reference some links for these 2 development projects:

- 302 S. Main / The Learning Center – latest Site Development Plan submittal – [https://www.rolesvillenc.gov/sites/default/files/uploads/projects/documents/v3\\_sdp-24-02-tle-rolesville-plans.pdf](https://www.rolesvillenc.gov/sites/default/files/uploads/projects/documents/v3_sdp-24-02-tle-rolesville-plans.pdf)

- 306 S. Main / Scooters Coffee – latest Site Development Plan submittal - [https://www.rolesvillenc.gov/sites/default/files/uploads/projects/documents/v3\\_sdp-23-09\\_rvsd-plan-set\\_2024-03-01.pdf](https://www.rolesvillenc.gov/sites/default/files/uploads/projects/documents/v3_sdp-23-09_rvsd-plan-set_2024-03-01.pdf)

I can offer that through 2 reviews of each of these projects by the Town’s Technical Review Committee [TRC] staff, there have not been any conflicts identified with the LAPP project and any improvements planned for this stretch of S. Main Street.

Thank you!  
Mike Elabarger  
Senior Planner / TRC Coordinator

---

**From:** Bostic, Chris <[Chris.Bostic@kimley-horn.com](mailto:Chris.Bostic@kimley-horn.com)>  
**Sent:** Monday, April 1, 2024 9:51 AM  
**To:** Elabarger, Michael S <[michael.elabarger@rolesville.nc.gov](mailto:michael.elabarger@rolesville.nc.gov)>  
**Cc:** Gruber, Meredith <[meredith.gruber@rolesville.nc.gov](mailto:meredith.gruber@rolesville.nc.gov)>; Alexander, Jamal <[Jamal.Alexander@kimley-horn.com](mailto:Jamal.Alexander@kimley-horn.com)>; Holloway (Summit Design & Engineering), Magda P <[ext-mpholloway@ncdot.gov](mailto:ext-mpholloway@ncdot.gov)>  
**Subject:** FW: [External] Rolesville Driveway Permit Applications (D051-092-24-00038 & D051-092-24-00039)

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Good morning Michael.

Please see below thread. DOT is wanting confirmation in their review of both TLE and Scooters that we have coordinated with the Town on U-6241/Main Street. They reference Eric Marsh but sending to you for direction. Have also copied our reviewer at NCDOT.

Can you please respond to this thread as we have coordinated during TRC review?

Chris

---

**From:** Holloway (Summit Design & Engineering), Magda P <[ext-mpholloway@ncdot.gov](mailto:ext-mpholloway@ncdot.gov)>  
**Sent:** Wednesday, March 27, 2024 8:49 AM  
**To:** Alexander, Jamal <[Jamal.Alexander@kimley-horn.com](mailto:Jamal.Alexander@kimley-horn.com)>  
**Cc:** Bostic, Chris <[Chris.Bostic@kimley-horn.com](mailto:Chris.Bostic@kimley-horn.com)>; Haidari, Mohammad J <[mjhaidari@ncdot.gov](mailto:mjhaidari@ncdot.gov)>  
**Subject:** Re: [External] Rolesville Driveway Permit Applications (D051-092-24-00038 & D051-092-24-00039)

Good morning. Thank you for this information. As it states in the portal, Eric Marsh would need to provide comments for both of these projects confirming that he is good for this project to move forward. We always have to hear from the PM for our documentation. Can you coordinate that effort to get us the response we need? It can all be within this email as long as both encroachments are referenced. Thank you in advance.

Magda

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---

**From:** Alexander, Jamal <[Jamal.Alexander@kimley-horn.com](mailto:Jamal.Alexander@kimley-horn.com)>  
**Sent:** Tuesday, March 26, 2024 11:22:28 AM  
**To:** Holloway (Summit Design & Engineering), Magda P <[ext-mpholloway@ncdot.gov](mailto:ext-mpholloway@ncdot.gov)>

Cc: Bostic, Chris <[Chris.Bostic@kimley-horn.com](mailto:Chris.Bostic@kimley-horn.com)>

Subject: [External] Rolesville Driveway Permit Applications (D051-092-24-00038 & D051-092-24-00039)

You don't often get email from [jamal.alexander@kimley-horn.com](mailto:jamal.alexander@kimley-horn.com). [Learn why this is important](#)

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Good Morning Magda,

I'm reaching out regarding comments received on the Scooter's Rolesville (D051-092-24-00038) and The Learning Center Rolesville (D051-092-24-00039) projects, shown below. We have already coordinated with the Town of Rolesville on the sidewalk project in our TRC reviews. Could you please let us know next steps?

Scooters:

DP Comments

Per Raymond Hayes, this project is within U-6241 project limits. The town will need to provide comments (Eric Marsh).

New DOT Comments

Magda P Holloway(Tue Mar 12 2024 06:54:26 GMT-0400 (Eastern Daylight Time))Per Raymond Hayes, this project is within U-6241 project limits. The town will need to provide comments (Eric Marsh).;  
Preston A Fisher(Thu Mar 07 2024 11:56:35 GMT-0500 (Eastern Standard Time))Project may conflict with BP-2021-05. Reached out to Raymond Hayes for more information.;

The Learning Center Rolesville:

DP Comments

Per Raymond Hayes, this project is within U-6241 project limits. The town will need to provide comments (Eric Marsh).

New DOT Comments

Magda P Holloway(Tue Mar 12 2024 06:54:26 GMT-0400 (Eastern Daylight Time))Per Raymond Hayes, this project is within U-6241 project limits. The town will need to provide comments (Eric Marsh).;  
Preston A Fisher(Thu Mar 07 2024 11:56:35 GMT-0500 (Eastern Standard Time))Project may conflict with BP-2021-05. Reached out to Raymond Hayes for more information.;

Thanks,

**Jamal Alexander, EI** | Civil Analyst

**Kimley-Horn** | 421 Fayetteville Street, Suite 600, Raleigh, NC 27601



Direct: 919 566 1945

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# VERIFICATION OF COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

(Check Appropriate Box)

- Permits from the N.C. Department of Environmental Quality and the U.S. Army Corp of Engineers are not required for this project. However, all applicable federal and state regulations have been followed.
- The required permits from the N.C. Department of Environmental Quality and the U.S. Army Corp of Engineers have been obtained for this project. Copies of the permits are attached.
- All applicable NPDES Stormwater Permit requirements have been or will be met for this project.
- The project is in compliance with all applicable sedimentation and erosion control laws and regulations.

Project Name: Scooter's Rolesville

Township: Rolesville

County: Wake

Project Engineer: Kimley-Horn

Phone Number 919-653-2927

Project Contact: Chris Bostic

Applicant's Name: S&S Java Enterprises- Rolesville, LLC

Date Submitted: January , 2024



**National Pollutant Elimination System (NPDES)  
Stormwater Permit Compliance Certification**

I Robert Southerland, a duly authorized representative of S&S Java Enterprises - Rolesville, LLC, an industrial/commercial/residential facility requesting attachment to a North Carolina Department of Transportation highway drainage system at US 401 (South Main St) in Wake County, do hereby certify the following:

**Check appropriate box and circle type of facility**

- The Industrial / Commercial / Residential facility does not require an NPDES stormwater permit.
- The Industrial / Commercial / Residential facility does require an NPDES stormwater permit. The permit has been obtained and a Stormwater Pollution Prevention Plan (SPPP) is in place. Appropriate structural stormwater best management practices (BMP) are designed and installed as required by the Department of Environment and Natural Resources (DENR) and/or the local governing agency. All structural stormwater BMP's are located outside of NCDOT right-of-way.

I understand if the Department of Transportation determines the facility is not in compliance with NPDES stormwater requirements, the Department will report the noncompliance to the DENR Division of Water Quality. I also understand that falsification of this certification may result in penalty of law against the facility and me as prescribed in the North Carolina General Statutes.

Signature: Robert L. Southerland

Date: 11 Jan 2024

Note: If the applicant has a question as to whether an NPDES stormwater permit is required, he or she may contact the N.C. Division of Water Quality in Raleigh at (919) 733-5083 (ask for Stormwater and General Permits Unit).