FAYETTE County
Create Your Story!

Purchasing Department
140 Stonewall Avenue West, Ste 204
Fayetteville, GA 30214
Phone: 770-305-5420
www.fayettecountyga.gov

August 7, 2024

Subject: Invitation to Bid 2455-B: Starr's Mill School Tunnel Construction

Gentlemen/Ladies:

Fayette County, Georgia invites you to submit a bid for construction of a tunnel for pedestrian, bicyclists, and golf cart traffic under Redwine Road. You are invited to submit a bid in accordance with the information contained herein.

A pre-bid conference will not be held for this project.

Questions concerning this Invitation to Bid should be addressed to Sherry White in writing via email to swhite@fayettecountyga.gov. Questions will be accepted until 3:00 p.m., August 23, 2024.

Purchasing Department office hours are Monday through Friday 8:00 a.m. to 5:00 p.m. The office telephone number is (770) 305-5420.

Please return your response to the following address:

Fayette County Purchasing Department
140 Stonewall Avenue West, Suite 204
Fayetteville, Georgia 30214

Bid Number: 2455-B
Bid Name: Starr's Mill School Tunnel Construction

Your envelope *must* be sealed and should show your company's name and address.

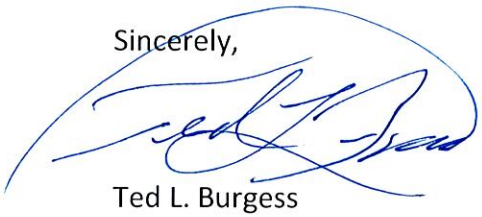
Bids will be received at the above address until 3:00 p.m., September 4, 2024 in the Purchasing Department, Suite 204. Bids will be opened at that time.

Bids must be signed to be considered. Late bids cannot be considered. Faxed bids or emailed bids cannot be considered.

If you download this Invitation to Bid from the County's web site, it will be your responsibility to check the web site for any addenda that might be issued for this solicitation. The County cannot not be responsible for a vendor not receiving information provided in any addendum.

Thank you for participating in the solicitation process.

Sincerely,



Ted L. Burgess
Chief Procurement Officer

SPECIFICATIONS

STARR'S MILL SCHOOL TUNNEL CONSTRUCTION

(AND MULTI-USE PATH SYSTEM AT REDWINE & ROBINSON ROADS)

Fayette County, GA

Fayette County Project Number: 17TAI

Invitation to Bid: 2455-B

PREPARED BY:

FAYETTE COUNTY PUBLIC WORKS

Fayetteville, GA 30214

INDEX

Checklist of Required Documents

(Be Sure to Return This Checklist and
the Required Documents in the order listed below)

ITB #2455-B: Starr's Mill School Tunnel Construction

Company information – on the form provided _____

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1) – form provided _____

Bid Bond* _____

References – on form provided _____

Pricing sheet* _____

List of exceptions to specifications, if any – on the form provided _____

GDOT Prequalification Table and Documentation – form provided _____

Signed Addenda (if issued) _____

***FAILURE TO INCLUDE THIS ITEM WILL RESULT IN DISQUALIFICATION**

COMPANY NAME: _____

INTRODUCTION

ITB #2455-B: Starr's Mill School Tunnel Construction

This project is for construction of a tunnel under Redwine Road, immediately south of the Robinson Road intersection, and approximately 1,900 feet of new paths along Redwine Road and Robinson Road to connect with existing paths. The purpose of this project is to provide a permanent and safe route for pedestrians, bicyclists, and golf cart operators across Redwine Road and to access the Starr's Mill School Complex.

Fayette County has acquired all the necessary rights of entry, fee-simple right-of-way, and easements for the construction of this project. All work is to be performed within these areas as shown on the project plans. This project is fully funded through Fayette County's 2017 Special Purpose Local Options Sales Tax (SPLOST). A Bridge Foundation Inspection (BFI) for tunnel foundation design is complete and provided herein as Exhibit 3.

This project has three important schedule components:

1. The project shall be substantially complete by July 20, 2025. Substantially complete means the tunnel and all the paths are open for use by the public.

2. The project shall be final complete within 60 days of substantial completion.

3. The Contractor has flexibility on when to install the box culvert (in accordance with items 1 and 2 above), however the closure of Redwine Road shall be no more than 28 consecutive calendar days.

GENERAL TERMS AND CONDITIONS
ITB #2455-B: Starr's Mill School Tunnel Construction

1. **Definitions**:
    a. **Bidder**: A company or individual who submits a bid in response to this Invitation to Bid.
    b. **Successful Bidder**: The company or individual that is awarded a contract.
    c. **Contractor**: The Successful Bidder, upon execution of the contract.
    d. **County**: Fayette County, Georgia.

2. **Bid is Offer to Contract**: Each bid constitutes an offer to become legally bound to a contract with the County, incorporating the Invitation to Bid and the bidder's bid. The binding offer includes compliance with all terms, conditions, special conditions, specifications, and requirements stated in the Invitation to Bid, except to the extent that a bidder takes written exception to such provisions, and the County agrees to the exception. All such terms, conditions, special conditions, specifications, and requirements will form the basis of the contract. The bidder should take care to answer all questions and provide all requested information, and to note any exceptions in the bid submission. Failure to observe any of the instructions or conditions in this Invitation to Bid may result in rejection of the bid.

3. **Binding Offer**: To allow sufficient time for a contract to be awarded, each bid shall constitute a firm offer that is binding for ninety (90) days from the date of the bid opening to the date of award.

4. **Bidder's Questions**: As appropriate, the County will post answers to questions and/or other information concerning the Invitation to Bid in the form of an addendum on the County's website at www.fayettecountyga.gov. It is the responsibility of the prospective bidder to check the website for any addenda issued for this Invitation to Bid.

5. **References**: Include with your bid a list of three (3) jobs that your company has done that are of the same or similar nature to the work described in this Invitation to Bid, on the form provided. Include all information as requested on the form.

6. **Bid Submission**: Submit your bid, along with any addenda issued by the County, in a *sealed* opaque envelope. Mail or deliver one (1) original bid, signed in ink by a company official authorized to make a legal and binding offer, and one (1) copy on a flash drive, to:

    Fayette County Government
    Purchasing Department
    140 Stonewall Avenue West, Suite 204
    Fayetteville, GA 30214

    Bid Number: 2455-B
    Bid Name: Starr's Mill School Tunnel Construction

Also show your company name on the envelope. You may submit sealed bids in person, by U.S. mail, or by a commercial carrier. Do not submit bids by facsimile, e-mail, or other electronic means. Once submitted, all bids become the property of Fayette County.

7. **Bid Preparation Costs**: The bidder shall bear all costs associated with preparing the bid.

8. **Late Bids**: Bids not received in the Purchasing Department by the time and date of the scheduled bid opening will not be considered.

9. **More than One Bid**: Do not submit alternate bids or options, unless requested or authorized by the County in the Invitation to Bid. If a responder submits more than one bid without being requested or authorized to do so, the County may disqualify the bids from that responder, at the County's option.

10. **Bid Corrections or Withdrawals**: The bidder may correct a mistake, or withdraw a bid, before the bid opening by sending written notification to the Director of Purchasing. Bids may be withdrawn after the bid opening only with written authorization from the Director of Purchasing.

11. **Defects or Irregularities in Bids**: The County reserves the right to waive any defect or irregularity in any bid received. In case of a discrepancy between unit prices and extended prices, the unit price will govern unless the facts or other considerations indicate another basis for correction of the discrepancy.

12. **Prices Held Firm**: Prices bid shall be firm for the period of the contract, unless otherwise specified in the contract. All prices bid for commodities, supplies, equipment, or other products shall be quoted FOB Destination, Fayette County or job site.

13. **Brand Name**: If items in this Invitation to Bid have been identified, described or referenced by a brand name or trade name description, such identification is intended to be descriptive, but not restrictive and is to indicate the quality and characteristics of products that may be offered. Alternative products may be considered for award if clearly identified in the bid. Items offered must meet required specifications and must be of a quality which will adequately serve the use and purpose for which intended.

14. **Bidder Substitutions**: Bidders offering substitutions or deviations from specifications stated in the invitation to bid, shall list such substitutions or deviations on the "Exceptions to Specifications" sheet provided, or on a separate sheet to be submitted with the bid. The absence of such list shall indicate that the bidder has taken no exception to the specifications. The evaluation of bids and the determination as to equality and acceptability of products or services offered shall be at the discretion of the County.

15. **Samples**: When the County requires samples as part of the bid and vendor selection process, bidders must provide requested samples within the time allotted, and at no

cost to the County unless otherwise specified. Any goods provided under contract shall conform to the sample submitted. The County will return samples only at the bidder's request, and at the bidder's expense, if they are not destroyed by testing.

16. **Non-Collusion**: By responding to this Invitation to Bid, the bidder represents that the bid is not made in connection with any competing bidder, supplier, or service provider submitting a separate response to this Invitation to Bid and is in all respects fair and without collusion or fraud.

17. **Bid Evaluation**: Award will be made to the lowest responsive, responsible bidder, taking into consideration payment terms, vendor qualifications and experience, quality, references, any exceptions listed, and/or other factors deemed relevant in making the award. The County may make such investigation as it deems necessary to determine the ability of the bidder to perform, and the bidder shall furnish to the County all information and data for this purpose as the County may request. The County reserves the right to reject any bid item, any bid, or all bids, and to re-advertise for bids.

18. **Unbalanced bid**: If the County determines that the apparent low bid is materially unbalanced, the County retains the right to deem the apparent low bid non-responsive, and to reject said bid and award to the next-lowest bidder whose bid is not materially unbalanced, or to reject any and all bids and re-advertise the project.

19. **Trade Secrets – Confidentiality**: If any person or entity submits a bid or proposal that contains trade secrets, an affidavit shall be included with the bid or proposal. The affidavit shall declare the specific included information which constitutes trade secrets. Any trade secrets must be either (1) placed in a separate envelope, clearly identified and marked as such, or (2) at a minimum, marked in the affidavit or an attached document explaining exactly where such information is, and otherwise marked, highlighted, or made plainly visible. See O.C.G.A. § 50-18-72 (A)(34).

20. **Trade Secrets – Internal Use**: In submitting a bid, the bidder agrees that the County may reveal any trade secret materials contained in the bid to all County staff and officials involved in the selection process, and to any outside consultant or other third parties who may assist in the selection process. The bidder agrees to hold harmless the County and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material which the bidder has designated as a trade secret.

21. **Ethics – Disclosure of Relationships**: Before a proposed contract in excess of $10,000.00 is recommended for award to the Board of Commissioners or the County Administrator, or before the County renews, extends, or otherwise modifies a contract after it has been awarded, the Contractor must disclose certain relationships with any County Commissioner or County Official, or their spouse, mother, father, grandparent, brother, sister, son or daughter related by blood, adoption, or marriage (including in-laws). A relationship that must be reported exists if any of these individuals is a director, officer, partner, or employee, or has a substantial financial interest the business, as described in Fayette County Ordinance Chapter 2, Article IV, Division 3 (Code of Ethics).

If such relationship exists between your company and any individual mentioned above, relevant information must be presented in the form of a written letter to the Director of Purchasing. You must include the letter with any bid, proposal, or price quote you submit to the Purchasing Department.

In the event that a Contractor fails to comply with this requirement, the County will take action as appropriate to the situation, which may include actions up to and including rejection of the bid or offer, cancellation of the contract in question, or debarment or suspension from award of a County contract for a period of up to three years.

22. **Contract Execution & Notice to Proceed**: After the Board of Commissioners makes an award, all required documents are received by the County, and the contract is fully executed with signature of both parties, the County will issue a written Notice to Proceed. The County shall not be liable for payment of any work done or any costs incurred by any bidder prior to the County issuing the Notice to Proceed.

23. **Unavailability of Funds**: This contract will terminate immediately and absolutely at such time as appropriated and otherwise unobligated funds are no longer available to satisfy the obligations of the County under the contract.

24. **Insurance**: The Successful Bidder shall procure and maintain the following insurance, to be in effect throughout the term of the contract, in at least the amounts and limits as follows:

    a. **General Liability Insurance**: $1,000,000 combined single limit per occurrence, including bodily and personal injury, destruction of property, and contractual liability.

    b. **Automobile Liability Insurance**: $1,000,000 combined single limit each occurrence, including bodily injury and property damage liability.

    c. **Worker's Compensation & Employer's Liability Insurance**: Workers Compensation as required by Georgia statute.

    Before a contract with the Successful Bidder is executed, the Successful Bidder shall provide Certificates of Insurance for all required coverage. The Successful Bidder can provide the Certificate of Insurance after award of the contract but must be provided prior to execution of the contract document by both parties. The certificate shall list an additional insured as follows:

    Fayette County, Georgia
    140 Stonewall Avenue West
    Fayetteville, GA 30214

25. **Bid Bond**: Bidder shall include a bid bond with your bid, equal to five percent (5%) of the total amount bid. Bid bonds shall be provided by a surety which appears on the U.S.

Treasury's list of approved bond sureties (Circular 570).

26. **Performance and Payment Bonds**: Prior to execution of a contract, the Successful Bidder shall submit performance and payment bonds each equal to 100 percent of the contract value, provided by a surety which appears or the U.S. Treasury's list of approved bond sureties (Circular 570).

27. **Building Permits**: Work performed for the County requiring building permits by licensed Contractors will not have permit fees assessed, although any re-inspection fees for disapproved inspections will be the responsibility of the Contractor prior to final inspections and the Certificate of Occupancy or Certificate of Completion being issued.

28. **Unauthorized Performance**: The County will not compensate the Contractor for work performed unless the work is authorized under the contract, as initially executed, or as amended.

29. **Assignment of Contract**: Assignment of any contract resulting from this Invitation to Bid will not be authorized, except with express written authorization from the County.

30. **Indemnification**: The Contractor shall indemnify and save the County and all its officers, agents and employees harmless from all suits, actions, or other claims of any character, name and description brought for or on account of any damages, losses, or expenses to the extent caused by or resulting from the negligence, recklessness, or intentionally wrongful conduct of the Contractor or other persons employed or utilized by the Contractor in the performance of the contract. The Contractor shall pay any judgment with cost which may be obtained against the County growing out of such damages, losses, or expenses.

31. **Severability**: The invalidity of one or more of the phrases, sentences, clauses or sections contained in the contract shall not affect the validity of the remaining portion of the contract. If any provision of the contract is held to be unenforceable, then both parties shall be relieved of all obligations arising under such provision to the extent that the provision is unenforceable. In such case, the contract shall be deemed amended to the extent necessary to make it enforceable while preserving its intent.

32. **Delivery Failures**: If the Contractor fails to deliver contracted goods or services within the time specified in the contract or fails to replace rejected items in a timely manner, the County shall have authority to make open-market purchases of comparable goods or services. The County shall have the right to invoice the Contractor for any excess expenses incurred or deduct such amount from monies owed the Contractor. Such purchases shall be deducted from contracted quantities.

33. **Substitution of Contracted Items**: The Contractor shall be obligated to deliver products awarded in this contract in accordance with terms and conditions specified herein. If the Contractor is unable to deliver the products under the contract, it shall be the Contractor's responsibility to obtain prior approval of the ordering agency to deliver an acceptable substitute at the same price quoted in the Contractor's original bid. In the

event the Contractor consistently needs to substitute or refuses to substitute products, the County reserves the right to terminate the contract or invoke the "Delivery Failures" clause stated herein.

34. **Inspection and Acceptance of Deliveries**: The County reserves the right to inspect all goods and products delivered. The County will decide whether to accept or reject items delivered. The inspection shall be conclusive except with respect to latent defects, fraud, or such gross mistakes as shall amount to fraud. Final inspection resulting in acceptance or rejection of the products will be made as soon as practicable, but failure to inspect shall not be construed as a waiver by the County to claim reimbursement or damages for such products which are later found to be in non-conformance with specifications. Should public necessity demand it, the County reserves the right to use or consume articles delivered which are substandard in quality, subject to an adjustment in price to be determined by the Purchasing Director.

35. **Termination for Cause**: The County may terminate the contract for cause by sending written notice to the Contractor of the Contractor's default in the performance of any term of this agreement. As appropriate, the County will compensate the Contractor for completed performance, and for any partially completed performance as determined by the County to be adequately performed. Termination shall be without prejudice to any of the County's rights or remedies by law.

36. **Termination for Convenience**: The County may terminate the contract for its convenience at any time with 10 days' written notice to the Contractor. In the event of termination for convenience, the County will pay the Contractor for services performed. The County will compensate partially completed performance based upon a signed statement of completion submitted by the Contractor, which shall itemize each element of performance completed.

37. **Force Majeure**: Neither party shall be deemed to be in breach of the contract to the extent that performance of its obligations is delayed, restricted, or prevented by reason of any act of God, natural disaster, act of government, or any other act or condition beyond the reasonable control of the party in question.

38. **Governing Law**: This agreement shall be governed in accordance with the laws of the State of Georgia. The parties agree to submit to the jurisdiction in Georgia, and further agree that any cause of action arising under this agreement shall be required to be brought in the appropriate venue in Fayette County, Georgia.

PROJECT SPECIFIC TERMS AND CONDITIONS
ITB #2455-B: STARR'S MILL SCHOOL TUNNEL

A. Reference and Incorporation of GDOT Specifications - Unless noted otherwise in this Invitation to Bid (ITB), the Georgia Department of Transportation's Standard Specifications Construction of Transportation Systems, most recent edition, are incorporated by reference into the Project Manual and contract documents. All work shall be performed in accordance with the GDOT specifications, and all pay items shall be measured and evaluated in accordance with the specifications. They shall supersede all other specifications unless more stringent requirements are listed.

It is the responsibility of the Contractor to be familiar with these specifications before bidding and to adhere to them during construction. Fayette County is the owner of the project and shall serve as the administrator of the contract in lieu of "The Department". Copies of the documents can be obtained from the GDOT website.

B. Schedule – The project shall commence within twenty (20) calendar days of the Contractor receiving the Notice to Proceed (NTP) and shall be substantially complete **on or before July 20, 2025**. The project shall reach final completion within **sixty (60) Calendar Days** from the date of Substantial Completion. Contract time is measured on a Calendar Day basis and includes County Holidays and weekends.

C. County Holidays – The Contractor shall not work on a County Holiday unless written approval is provided by Fayette County at least three days prior to the Holiday. The County Holiday Schedule is available on the County's website: https://fayettecountyga.gov/information/county_holidays.htm

D. Work Hours – Unless pre-approved otherwise by Fayette County, all work shall be performed Monday thru Friday and between the hours of 8:00 AM and 5:00 PM.

E. Prequalification of Bidders – The Prime Contractor and/or Subcontractor(s) shall be GDOT prequalified in each of the Work Classes listed below. Furthermore, the Prime Contractor shall be prequalified in either 500, 513, or 550. The Prime Contractor shall provide at least two (2) successfully completed projects of similar scope and size within the past five (5) years. Fayette County reserves the right to consider a contractor's GDOT prequalification's and past performance when determining if a bid is responsive and responsible.

Class	Description
150	Traffic Control
310	Graded Aggregate Construction
400	Hot Mix Asphaltic Concrete Construction
500a	Retaining Walls

500 Concrete Structures; or **513** – Precast Reinforced Concrete Box Culvert, Barrel Sections, and End Sections; or **550** – Storm Drain Pipe, Pipe-Arch Culverts, and Side Drain Pipe

The Prime Contractor shall self-perform at least 30 percent of the contract as determined by invoices.

The bid package shall include the required documentation demonstrating the above items are satisfied. Failure to provide the documentation may result in the bid being disqualified.

F. **OSHA** – Adhere to the Occupational Safety and Health Administration's (OSHA) excavation standards, *29 Code of Federal Regulations (CFR) Part 1926, Subpart P* for excavation and trenching operations.

G. **Contractor Staging** – No staging area is provided by Fayette County for the project beyond the acquired right-of-way and easements for the project. Contractor staging shall not interfere with traffic on County roads.

H. **Toilet Facilities** - Provide toilet facilities that meet local sanitary codes. Provide consumable and non-consumable goods (toilet paper, paper towels, hand soap) for the life of the project.

I. **Contractor Supervision and Work Coordination –** The Contractor shall supervise and direct the work. He/she shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, including traffic control. The Contractor shall employ and maintain onsite a qualified supervisor or superintendent who will be designated in writing by the Contractor as the Contractor's site representative. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall always be present on the site as required to perform adequate supervision and coordination of the work.

J. **Workmanship Guarantee** – The Contractor shall warranty and guarantee all materials supplied, equipment furnished, and work performed to be free from defects (resulting from faulty materials supplied or workmanship) for a period of twelve (12) months from the date of Substantial Completion.

The Owner shall give notice of observed defects with reasonable promptness and the Contractor shall have 45 calendar days to address the issue(s). If the Contractor fails to make such repairs, adjustments, or other work that may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred. If different guarantees or warranties are required in the technical specifications for specific items, then the more stringent (i.e., longer) apply.

K. **Special Allowance** – Due to the nature of the project and the potential for unforeseen conditions, it is anticipated that some additional work or modification to the scope may be required. A **$250,000.00** allowance is to be included in the Base Bid, to be used to cover Claims (Section 105.13) or Extra Work (Section 109.05). The procedures for submitting such requests are documented in the referenced Sections. If approved, the amount of the Claim or Extra Work will be deducted from the Allowance. Requests greater than the amount available in the Allowance category will require approval from the Fayette County Board of Commissioners. Any allowance remaining unused at the end of the project will be deducted from the Contract amount by a Supplemental Agreement.

L. **Tunnel Lighting** - The Contractor shall provide lighting within the tunnel and at each entrance. The specifications for the lighting shall be developed by the Contractor, or a Subcontractor/Vendor, and provided to Fayette County for review, comment, and approval before implementation. The lighting work shall be in accordance with all applicable building code standards, including ANSI/IES.

The Contractor shall contact and coordinate this work with Coweta-Fayette EMC to install the necessary and proper equipment and obtain electrical service for the lighting. The lump sum price for bid item 999-9901 shall include full compensation for all design, supervision, labor, materials, equipment, tools, and incidentals necessary to construct in place, in accordance with the Contract Documents.

Lighting considerations should include cost, vandal-resistance, efficiency, low maintenance, entrance and exit lighting, a lower number of lights within the tunnel while maintaining good nighttime visibility with minimal unlit sections, and clearance for two-way golf cart traffic. Lighting examples are provided as Exhibit 4.

M. **Section 102 Bidding Requirements and Conditions** – This section of the GDOT Specifications is removed in its entirety from this ITB.

N. **Section 103 Award and Execution of Contract** – This section of the GDOT Specifications is removed in its entirety from this ITB.

O. **Section 105.09 Authority and Duties of the Resident Engineer** – The Resident Engineer shall be designated by Fayette County.

P. **Section 105.10 Duties of the Inspector** – Inspectors may be employed by Fayette County or Fayette County's designated Engineer.

Q. **Section 106.11 Field Laboratory** – A field laboratory is not required.

R. **Section 107.02 Permits and Licenses** – The Contractor shall procure all permits and licenses, pay all charges, taxes, and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work unless otherwise stated in the Contract

Documents.

S. **Section 108.03 Prosecution and Progress** - The Contractor shall furnish the County, for approval, a progress schedule following the receipt of the Notice to Proceed and prior to the pre-construction conference. The Contractor shall provide a revised progress schedule at the end of each month showing the proposal plan to prosecute the balance of the work. No payments will be made to the Contractor while delinquent in the submission of a progress schedule or a revised progress schedule.

T. **Section 108.08 Failure or Delay in Completing Work on Time** - Time is an essential element of the Contract, and any delay in the prosecution of the Work may inconvenience the public, obstruct traffic, or interfere with business. In addition to the aforementioned inconveniences, any delay in completion of the Work will always increase the cost of engineering. For this reason, it is important that the Work be pressed vigorously to completion. Should the Contractor or, in case of default, the Surety fail to complete the Work within the time stipulated in the Contract or within such extra time that may be allowed, charges shall be assessed against any money due or that may become due the Contractor in accordance with the following schedule:

Contract Amount		**Daily Charges**
For More Than	**To and Including**	**Per Calendar Day Beyond Schedule Completion Date**
$---	$50,000	$950
$50,000	$250,000	$960
$250,000	$500,000	$1,240
$500,000	$2,500,000	$1,660
$2,500,000	$5,000,000	$2,700
$5,000,000	$10,000,000	$3,400

These fixed liquidated damages are not established as a penalty but are calculated and agreed upon in advance by the County and the Contractor due the uncertainty and impossibility of making a determination as to the actual and consequential damages which are incurred by the County and the general public as a result of the failure on the part of the Contractor to complete The Work on time.

In addition to the above, the Contractor shall meet and satisfy all applicable GDOT specifications as written in Section 108 Prosecution and Progress. In the event of a conflict the more stringent shall apply.

U. Section 109.07 Partial Payment – At the end of each month the Contractor shall submit a pay application to the Engineer and County for review. The total value of items complete in place will be verified by the Engineer and certified for payment. No payments will be made to the Contractor while delinquent in the submission of a progress schedule or a revised progress schedule.

V. Section 150 Traffic Control – See Special Provision.

W. Section 630 Modular Block Wall – Walls to be Redi-Rock or approved equivalent. Wall design to be completed by vendor and/or contractor's engineer and submitted to the County for final approval prior to procurement. Contractor to provide the County with and adhere to the manufacturer specifications.

X. Section 670 Water Distribution System – Section 670 Water Distribution System - All Water Systems impacts to be in strict accordance with Fayette County Water System Specifications and as noted on the plans.

COMPANY INFORMATION
ITB #2455-B: Starr's Mill School Tunnel Construction

A. COMPANY

Company Name: _____

Physical Address: _____

_____

Mailing Address (if different): _____

_____

Website (if applicable): _____

B. AUTHORIZED REPRESENTATIVE

Signature: _____

Printed or Typed Name: _____

Title: _____

E-mail Address: _____

Phone Number: _____ Fax Number: _____

C. PROJECT CONTACT PERSON

Name: _____

Title: _____

Phone Number: _____

E-mail Address: _____

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(l)

The undersigned contractor ("Contractor") executes this Affidavit to comply with O.C.G.A § 13-10-91 related to any contract to which Contractor is a party that is subject to O.C.G.A. § 13-10-91 and hereby verifies its compliance with O.C.G.A. § 13-10-91, attesting as follows:

a) The Contractor has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program;

b) The Contractor will continue to use the federal work authorization program throughout the contract period, including any renewal or extension thereof;

c) The Contractor will notify the public employer in the event the Contractor ceases to utilize the federal work authorization program during the contract period, including renewals or extensions thereof;

d) The Contractor understands that ceasing to utilize the federal work authorization program constitutes a material breach of Contract;

e) The Contractor will contract for the performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the Contractor with the information required by O.C.G.A. § 13-10-91(a), (b), and (c);

f) The Contractor acknowledges and agrees that this Affidavit shall be incorporated into any contract(s) subject to the provisions of O.C.G.A. § 13-10- 91 for the project listed below to which Contractor is a party after the date hereof without further action or consent by Contractor; and

g) Contractor acknowledges its responsibility to submit copies of any affidavits, drivers' licenses, and identification cards required pursuant to O.C.G.A. § 13-10-91 to the public employer within five business days of receipt.

_____ _____

Federal Work Authorization User Identification Number Date of Authorization

_____ **2455-B Starr's Mill School Tunnel Construction**

Name of Contractor Name of Project

Fayette County, Georgia
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, _____, 2023 in _____ (city), _____ (state).

_____
Signature of Authorized Officer or Agent

_____
Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 2023.

_____
NOTARY PUBLIC

My Commission Expires: _____

REFERENCES

ITB #2455-B: STARR'S MILL SCHOOL TUNNEL CONSTRUCTION

Please list three (3) references for current or recent customers who can verify the quality of service your company provides. Include at least two (2) successfully completed projects of similar scope and size within the past five (5) years. Projects of similar size and scope are preferable.

1. Government/Company Name _____

City & State _____

Work or Service Provided_____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

2. Government/Company Name _____

City & State _____

Work or Service Provided_____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

3. Government/Company Name _____

City & State _____

Work or Service Provided_____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

COMPANY NAME _____

Pricing Sheet

ITB #2455-B: Starr's Mill School Tunnel Construction

Responder agrees to perform all the work described in the Contract documents for the following prices:

PAY ITEM	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENDED PRICE
150-1000	TRAFFIC CONTROL -	1.00	LS		
163-0232	TEMPORARY GRASSING	3.00	AC		
163-0240	MULCH	35.00	TN		
163-0301	CONSTRUCT AND REMOVE CONSTRUCTION EXITS	4.00	EA		
163-0529	CONSTRUCT AND REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM	160.00	LF		
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	18.00	EA		
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	478.00	LF		
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES	160.00	LF		
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	2.00	EA		
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	18.00	EA		
167-1000	WATER QUALITY MONITORING AND SAMPLING	1.00	EA		
167-1500	WATER QUALITY INSPECTIONS	10.00	MO		
171-0030	TEMPORARY SILT FENCE, TYPE C	956.00	LF		
207-0203	FOUND BKFILL MATL, TP II	100.00	CY		
210-0100	GRADING COMPLETE -	1.00	LS		
310-5040	GR AGGR BASE CRS, 4 INCH, INCL MATL	2,516.00	SY		
310-5060	GR AGGR BASE CRS, 6 INCH, INCL MATL	865.00	SY		
310-5080	GR AGGR BASE CRS, 8 INC, INCL MATL	1,742.00	SY		
402-1802	RECYCLED ASPH CONC PATCHING, INCL BITUM MATL & H LIME	50.00	TN		
402-3100	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE I, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME	274.00	TN		

402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	214.00	TN		
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	200.00	TN		
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	143.00	TN		
413-0750	TACK COAT	700.00	GL		
432-0206	MILL ASPH CONC PVMT, 1 1/2 IN DEPTH	1,069.00	SY		
441-0303	CONC SPILLWAY, TP 3, MODIFIED	1.00	EA		
411-0748	CONCRETE MEDIAN, 6 IN	11.00	SY		
441-5002	CONCRETE HEADER CURB, 6 IN, TP 2	20.00	LF		
441-6216	CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	1,423.00	LF		
441-7014	CURB CUT WHEELCHAIR RAMP, TYPE D	2.00	EA		
444-1000	SAWED JOINTS IN EXIST PAVEMENTS - PCC	100.00	LF		
500-3101	CLASS A CONCRETE, 12 IN DEPTH	20.00	CY		
500-9999	CLASS B CONC, BASE OR PVMT WIDENING	8.00	CY		
513-9999	REINFORCED CONCRETE BOX CULVERT, PRECAST, SINGLE, 12 FT X 9 FT	48.00	LF		
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	284.00	LF		
550-1181	STORM DRAIN PIPE, 18 IN, H 10-15	53.00	LF		
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	218.00	LF		
550-1241	STORM DRAIN PIPE, 24 IN, H 10-15	512.00	LF		
550-1242	STORM DRAIN PIPE, 24 IN, H 15-20	77.00	LF		
550-3324	SAFETY END SECTION 24 IN, STORM DRAIN, 4:1 SLOPE	1.00	EA		
603-2181	STN DUMPED RIP RAP, TP 3, 18 IN	26.00	SY		
603-7000	PLASTIC FILTER FABRIC	26.00	SY		
610-9001	REM SIGN	2.00	EA		
611-5551	RESET SIGN	2.00	EA		
620-0100	TEMPORARY BARRIER, METHOD NO. 1	1,150.00	LF		

627-1100	COPING A, WALL 2	50.00	LF		
627-1160	TRAFFIC BARRIER H, WALL 1, WALL 2	941.00	LF		
630-9999	MODULAR BLOCK RETAINING WALL SYSTEM	11,101.00	SF		
634-1200	RIGHT OF WAY MARKERS	9.00	EA		
636-1036	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 11	5.00	SF		
636-2070	GALV STEEL POSTS, TP 7	24.00	LF		
641-1100	GUARDRAIL, TP T	42.00	LF		
641-1200	GUARDRAIL, TP W	157.00	LF		
641-2200	DBL FACED GUARDRAIL, TP W	66.00	LF		
641-5015	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING	1.00	EA		
641-6000	GUARDRAIL ANCHORAGE TP 10D, SPCL DES	1.00	EA		
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	1,274.00	LF		
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	1,126.00	LF		
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	100.00	LF		
653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	54.00	LF		
653-3501	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	174.00	GLF		
654-1001	RAISED PVMT MARKERS TP 1	32.00	EA		
656-0080	REMOVE EXIST SOLID TRAF STRIPE, 8 IN, THERMOPLASTIC	240.00	LF		
668-1100	CATCH BASIN, GP 1, 1033D	2.00	EA		
668-1100	CATCH BASIN, GP 1, 1034D	1.00	EA		
668-1110	CATCH BASIN, GP 1, ADDL DEPTH	24.00	LF		
668-2100	DROP INLET, GP 1, 1019A	3.00	EA		
668-2100	DROP INLET, GP 1, D-4 DITCH 36 X 36	5.00	EA		
668-2110	DROP INLET, GP 1, ADDL DEPTH	37.00	LF		
668-4300	STORM SEWER MANHOLE, TP 1	2.00	EA		

668-4312	STORM SEWER MANHOLE, TP 1, ADDL DEPTH, CL 2	11.00	LF		
668-7000	DRIVEWAY GRATE INLET, SPECIAL DESIGN	2.00	EA		
670-1120	WATER MAIN, 12 IN	360.00	LF		
670-1490	CUT AND CAP EXISTING WATER MAIN	2.00	EA		
670-2002	VALVE MARKER	2.00	EA		
670-2120	GATE VALVE, 12 IN	2.00	EA		
670-4520	CONCRETE THRUST COLLAR, 12 IN PIPE	2.00	EA		
700-6910	PERMANENT GRASSING	1.00	AC		
700-7000	AGRICULTURAL LIME	6.00	TN		
700-8000	FERTILIZER MIXED GRADE	2.00	TN		
700-8100	FERTILIZER NITROGEN CONTENT	100.00	LB		
700-9300	SOD	2,520.00	SY		
716-2000	EROSION CONTROL MATS, SLOPES	2,400.00	SY		
999-5200	DETECTABLE WARNING SURFACE	40.00	SF		
999-9901	TUNNEL LIGHTING, CONTRACTOR DESIGN & INSTALL	1.00	LS		
999-9902	CONSTRUCTION ALLOWANCE	1.00	LS	$250,000.00	$ 250,000.00
				TOTAL BASE BID STARR'S MILL SCHOOL TUNNEL	

NOTES**:**

1. All applicable charges shall be included in your total quoted amount, including but not limited to materials, equipment, installation, labor, and any other amounts. No additional charges will be allowed after the quote received by date.

2. All warranties shall be included in your total quoted amount.

State time needed to commence work after notice to proceed is issued: _____Days*

State length of time needed to complete project: _____ Days*

State, List or Attach the terms of your warranty, if applicable: _____

_____

_____

*Please note time requirements listed in the “Introduction” page and Section B of the “Project Specific Terms and Conditions.”

COMPANY NAME _____

EXCEPTIONS TO SPECIFICATIONS

ITB #2455-B: Starr's Mill School Tunnel Construction

Please list below any exceptions or clarifications to the specifications of this Invitation to Bid. Explain any exceptions in full.

_____

_____

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_____

COMPANY NAME_____

GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT)
CONTRACTORS AND SUBCONTRACTORS
PREQUALIFICATION TABLE
ITB 2455-B: Starr's Mill School Tunnel

The Prime Contractor and/or Subcontractor(s) shall be GDOT prequalified in each of the Work Classes listed below. Furthermore, the **Prime Contractor shall be prequalified in either 500, 513 or 550**. In addition, the Prime Contractor shall provide at least two (2) successfully completed projects of similar scope and size within the past five (5) years. Fayette County reserves the right to consider a contractor's GDOT prequalification's and past performance when determining if a bid is responsive and responsible.

WORK CLASS	DESCRIPTION	PRIME or SUB. GDOT VENDOR ID
150	Traffic Control	
310	Graded Aggregate Construction	
400	Hot Mix Asphaltic Concrete Construction	
500 513 550	Concrete Structures – And/Or – Precast Reinforced Concrete Box Culvert, Barrel Sections, and End Sections – And/Or – Storm Drain Pipe, Pipe-Arch Culverts, and Side Drain Pipe	
500a	Retaining Walls	

Prior to issuing the Notice to Proceed, the Prime Contractor shall provide to Fayette County, for review and approval, the subcontractors to be used on the project.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

SPECIAL PROVISION

SECTION 150 – TRAFFIC CONTROL

150.1 GENERAL DESCRIPTION

This section, as supplemented by the Plans, Specifications, and Manual on Uniform Traffic Control Devices (MUTCD) shall be considered the Temporary Traffic Control (TTC) Plan. Activities shall consist of furnishing, installing, maintaining, and removing necessary traffic signs, pedestrian signs, barricades, lights, signals, cones, pavement markings and other traffic control devices and shall include flagging and other means for guidance and protection of vehicular and pedestrian traffic through the Work Zone. This Work shall include both maintaining existing devices and installing additional devices as necessary in construction work zones.

All traffic control devices used during the construction of the project shall meet the standards utilized in the MUTCD, and shall comply with the requirements of these Specifications, Georgia Construction Standards and Details, Project Plans, Design Manuals, and Special Provisions. When any provisions of this Specification or the Plans do not meet the minimum requirements of the MUTCD, the MUTCD shall control. The current edition of the MUTCD shall be in effect for the duration of the project.

No work shall be started on any project phase until the appropriate traffic control devices have been placed in accordance with the Project requirements. Changes to traffic flow shall not commence unless all labor, materials, and equipment necessary to make the changes are available on the Project.

When any shift or change is made to the location of traffic or to the flow patterns of traffic, the permanent safety features shall be installed and fully operational before making the change. The cost of performing this work shall be included in Traffic Control-Lump Sum.

150.2 WORK ZONE RESTRICTIONS

The Engineer may restrict construction operations if the Work would seriously disrupt traffic flow when unusual traffic conditions exist, such as during holidays or bad weather.

Full road closure of Redwine Road shall be limited to a maximum of twenty-eight (28) consecutive calendar days and must be supported with an approved Road Closure Permit, detour plan, and minimum of two (2) weeks advance notice from the contractor. Except for milling and paving operations, the intersection of Robinson Road at Redwine Road shall remain open to thru traffic in both directions throughout construction. **The path and tunnel must be complete and open for public use on or before July 20th, 2025.**

Intermittent and/or daily single-lane closures shall be subject to the approval of the Engineer. Each lane closure request shall be made at least 48 hours in advance of the time the lane closure is to be implemented. Lane closures will not be allowed to remain unless being utilized continuously for the purpose for which they were set up. No lane closures shall be permitted on school days between the hours of 7:00 am to 8:30 am and 3:30 pm to 5:30 pm without prior approval by the Engineer.

Where full width sections of the existing subgrade, base or surfacing are to be removed, and new base, subgrade, or surfacing are to be constructed, the Contractor should maintain at least one 12-ft lane of traffic through the construction area by removing and replacing the undesirable material for half the width of the existing roadway at a time. Replacement should be made such that paving is completed to the level of the existing pavement in the adjacent lane by the end of the workday or before opening all the roadway to traffic.

Unless modified by the special conditions, a milled surface on any asphaltic concrete surface shall not be allowed to remain open to traffic for a period of time that exceeds thirty (> 30) calendar days.

It shall be the responsibility of the Contractor to verify that these minimum requirements have been met before proceeding with any phase of the Work. The Worksite Traffic Control Supervisor (WTCS) shall monitor the work to ensure that all the rocks, boulders, construction debris, stockpiled materials, equipment, tools and other potential hazards are kept clear of the travel lane.

150.3 SUBMITTALS / PRECONSTRUCTION

A. Contractor Responsibilities

The Contractor will select the appropriate traffic control means and methods for the work in accordance with Part 6 of the current edition of the Manual of Uniform Traffic Control Devices and the Georgia Department of Transportation Standards, Specifications, and

Special Provisions (Section 150). Variation(s) from these documents or special conditions or operations will require approval of the Engineer.

The Contractor shall develop detailed staging and temporary traffic control plans for performing specific areas of the Work including but not limited to all traffic shifts, detours, paces, or other activities that disrupt traffic flow. The Engineer may require detailed staging and TTC plans for lane closures. These plans shall be submitted for approval at least two (2) weeks prior to the scheduled date of the activity. Activities that

have not been approved at least seven (7) days prior to the scheduled date shall be rescheduled.

B. Sequence of Operations

Any Sequence of Operations provided in this Contract in conjunction with any staging details which may be shown in the plans, is a suggested sequence for performing the Work. It is intended as a general staging plan for the orderly execution of the work while minimizing the impact on mainline, cross-streets, and side streets. The Contractor shall develop detailed staging and temporary traffic control plans for performing specific areas of the Work including but not limited to all traffic shifts, detours, paces, or other activities that disrupt traffic flow. These plans shall be submitted for approval at least two (2) weeks prior to the scheduled date of the activity. Activities that have not been approved at least seven (7) days prior to the scheduled date shall be rescheduled.

Where traffic is permitted through the work area under stage construction, the Contractor may choose to construct, at no additional expense to the County, temporary on-site bypasses or detours in order to expedite the work. Plans for such temporary bypasses or detours shall be submitted to the Engineer for review and approval thirty at least (30) calendar days prior to the proposed construction. Such bypasses or detours shall be removed promptly when in the opinion of the Engineer, they are no longer necessary for the satisfactory progress of the Work.

The County will not pay, or in any way, reimburse the Contractor for claims arising from the Contractor's inability to perform the Work in accordance with the Sequence of Operations provided in the Contract or from an approved Contractor alternate.

The Contractor shall secure the Engineer's approval of the Contractor's proposed plan of operation, sequence of work and methods of providing for the safe passage of vehicular traffic before it is placed in operation. The proposed plan of operation shall supplement the approved traffic control plan. Any major changes to the approved TTC plan, proposed by the Contractor, shall be submitted to the Engineer for approval.

The above details shall be submitted to the Engineer for approval at least fourteen (14) days prior to the anticipated traffic shift. The Contractor shall have traffic control details for a traffic shift which has been approved by the Engineer prior to commencement of the physical shift. All preparatory work relative to the traffic shift, which does not interfere with traffic, shall be accomplished prior to the designated starting time. The Engineer and the Contractor's representative will verify that all conditions have been met prior to the Contractor obtaining materials for the actual traffic shift.

150.4 ENFORCEMENT AND ADJUSTMENTS

Full road closure of Redwine Road shall be limited to a maximum of twenty-eight (28) consecutive calendar days and must be supported with an approved Road Closure Permit, detour plan, and minimum of two (2) weeks advance notice from the contractor. **The path and tunnel must be complete and open for public use on or before July 20th, 2025.**

The safe passage of traffic through and around the temporary traffic control zone, while minimizing confusion and disruption to traffic flow, shall have priority over all other Contractor activities. Continued failure of the Contractor to comply with the requirements of Section 150 - Traffic Control will result in non-refundable deductions of monies from the Contract as shown in this Subsection for non-performance of Work.

Failure of the Contractor to comply with this Specification shall be reason for the Engineer suspending all other work on the Project, except erosion control and traffic control, taking corrective action as specified in Section 105, and/or withholding payment of monies due to the Contractor for any work on the Project until traffic control deficiencies are corrected. These other actions shall be in addition to the deductions for non-performance of traffic control.

SCHEDULE OF DEDUCTIONS FOR EACH CALENDAR DAY OF DEFICIENCIES OF TRAFFIC CONTROL INSTALLATION AND/OR MAINTENANCE			
ORIGNAL TOTAL CONTRACT AMOUNT			
From More Than	**To and Including**	**Daily Charge**	**Daily Charge when School is in Session**
$0	$100,000	$250	$500
$100,000	$1,000,000	$650	$1,300
$1,000,000	$5,000,000	$1,300	$2,600
$5,000,000	$20,000,000	$2,000	$4,000

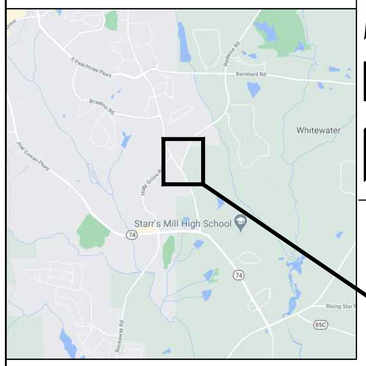
150.5 MEASURMENT AND PAYMENT

Payments will be made as a percent complete (as measured by schedule unless approved otherwise by Fayette County) of the lump sum price bid, which shall include all traffic control not paid for separately.

All of the requirements of Section 150 shall be in full force and effect. The cost of complying with these requirements will not be paid for separately but shall be included in the overall lump sum price.

10/31/2023 9:38:02 AM USER:Eric Brisse	P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Cover.dwg	COUNTY	CROY REFERENCE NUMBER	SHEET NO.	TOTAL SHEETS
		FAYETTE	1866.032	###	###

LOCATION SKETCH



NOT TO SCALE

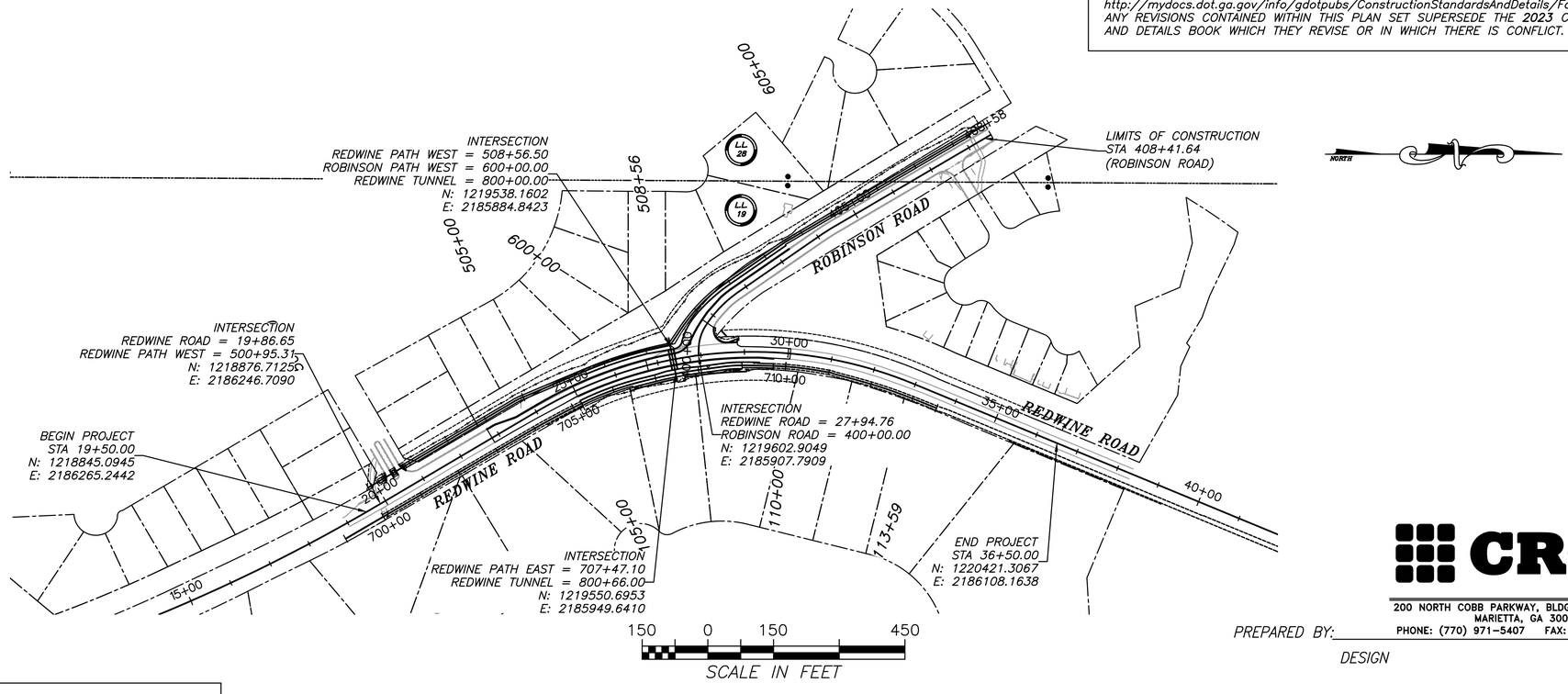
NOTE: THE COORDINATES LISTED ARE WEST ZONE GRID COORDINATES BASED ON THE GA. STATE PLANE COORDINATE SYSTEM OF 1985.
HORIZONTAL DATUM : NAD 1983 MARN
VERTICAL DATUM : NAVD 1988
PROJECT UNITS: ENGLISH

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

LAND LOTS 19 & 28 OF THE 6TH DISTRICT, FAYETTE COUNTY, GEORGIA PROJECT NO. 17TAI

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE **2023** CONSTRUCTION STANDARDS AND DETAILS BOOK AND ATTACHED APPLICABLE REVISIONS. THE **2023** CONSTRUCTION STANDARDS AND DETAILS BOOK IS AVAILABLE AT:
http://mydocs.dot.ga.gov/info/gdotpubs/ConstructionStandardsAndDetails/Forms/AllItems.aspx
ANY REVISIONS CONTAINED WITHIN THIS PLAN SET SUPERSEDE THE **2023** CONSTRUCTION STANDARDS AND DETAILS BOOK WHICH THEY REVISE OR IN WHICH THERE IS CONFLICT.



LENGTH OF PROJECT	COUNTY NO. 113
	MILES
NET LENGTH OF ROADWAY	0.07
NET LENGTH OF BRIDGES	0.00
NET LENGTH OF PROJECT	0.32
NET LENGTH OF EXCEPTIONS	0.00
GROSS LENGTH OF PROJECT	0.32

NOTE:
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS, DOCUMENTS DRAWINGS, OF PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION WITH THIS DOCUMENT, TO "STATE HIGHWAY DEPARTMENT OF GEORGIA", "STATE HIGHWAY DEPARTMENT", "GEORGIA STATE HIGHWAY DEPARTMENT", "HIGHWAY DEPARTMENT", OR "DEPARTMENT" WHEN THE CONTEXT THEREOF MEANS THE STATE HIGHWAY DEPARTMENT OF GEORGIA MEAN, AND SHALL BE DEEMED TO MEAN THE DEPARTMENT OF TRANSPORTATION.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE FAYETTE COUNTY IN ANY WAY. THE ATTENTION OF THE BIDDER IS SPECIFICALLY DIRECTED TO ARTICLES 102.04, 102.05, AND 104.03 OF THE STANDARD SPECIFICATIONS OF THE DEPARTMENT OF TRANSPORTATION, CURRENT EDITION, AND ANY MODIFICATIONS THEREOF, WHICH WILL BE A PART OF THIS CONTRACT.

ALL WORK TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, CONSTRUCTION OF TRANSPORTATION SYSTEMS, OF THE DEPARTMENT OF TRANSPORTATION OF GEORGIA, CURRENT EDITION. AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION – AND, AS MODIFIED BY CONTRACT DOCUMENTS.

GEORGIA811 Utilities Protection Center, Inc
Know what's below. Call before you dig.

THIS PROJECT IS LOCATED 100% IN FAYETTE COUNTY
THIS PROJECT IS LOCATED 100% IN CONGRESSIONAL DISTRICT NO. 03
THIS PROJECT IS LOCATED 100% IN LAND DISTRICT 6

FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL

FEDERAL ROUTE NO. N/A
STATE ROUTE NO. N/A

PROJECT MIDPOINT
STA 28+00.0000
N 1219608.2900
E 2185908.6200

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

PREPARED BY: DESIGN

UNDER THE SUPERVISION OF: Chris Rideout, P.E.
DESIGN

GEORGIA PROFESSIONAL 23019 ENGINEER CHRIS RIDEOUT

PLANS COMPLETED: 10-25-2023

REVISIONS

DATE	SHEET NO.	REQUESTED BY

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

DWG NO.	DESCRIPTION
(01-01)	COVER
(02-01)	INDEX
(03-01)	REVISION SUMMARY SHEET
(04-01 TO 04-02)	GENERAL NOTES
(05-01 TO 05-05)	TYPICAL SECTIONS
(06-01 TO 06-02)	SUMMARY OF QUANTITIES
(11-01 TO 11-04)	CONSTRUCTION LAYOUT
(13-01 TO 13-04)	MAINLINE PLANS
(15-01 TO 15-03)	PATH PROFILES
(18-01 TO 18-04)	GRADING PLAN
(21-01)	DRAINAGE AREA MAP
(22-01 TO 22-02)	DRAINAGE PROFILES
(24-00)	UTILITY PLAN LEGEND
(24-01 TO 24-04)	UTILITY PLANS
(26-01 TO 26-04)	SIGNING AND MARKING PLANS
(32-01 TO 32-05)	WALL PLAN & PROFILE
(44-01 TO 44-05)	WATER RELOCATION PLANS & DETAILS
(50-01)	EROSION CONTROL PLAN - COVER
(51-01 TO 51-03)	EROSION CONTROL PLAN - NOTES
(52-01 TO 52-07)	EROSION CONTROL PLAN - LEGEND AND UNIFORM CODE
(53-01)	EROSION CONTROL PLAN - DRAINAGE AREA MAP
(54-01 TO 54-12)	EROSION CONTROL PLAN - BMP LOCATION DETAILS
(55-01)	EROSION CONTROL PLAN - WATERSHED MAP & SITE MONITORING
(56-01 TO 56-02)	EROSION CONTROL PLAN - CONSTRUCTION STANDARDS & DETAILS
(60-00)	RIGHT OF WAY PLANS - COVER
(60-01 TO 60-05)	RIGHT OF WAY PLANS

DWG NO.	DESCRIPTION

FOR ALL GDOT STANDARDS, DETAILS, AND THE CONSTRUCTION STANDARDS AND DETAILS BOOK REFERENCE:
http://mydocs.dot.ga.gov/info/gdotpubs/ConstructionStandardsAndDetails/Forms/AllItems.aspx

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF CROY ENGINEERING, LLC, NOR ARE THEY TO BE ASSIGNED TO ANY PARTY WITHOUT WRITTEN PERMISSION AND CONSENT.

REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

INDEX

DRAWING NO. 02-01

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

DATE	SHEET(S)	DESCRIPTION

DATE	SHEET(S)	DESCRIPTION

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Notes Etc.dwg 9/14/2023 10:52 AM USER: Eric Brisse

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF CROY ENGINEERING, LLC, NOR ARE THEY TO BE ASSIGNED TO ANY PARTY WITHOUT WRITTEN PERMISSION AND CONSENT.

REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

REVISION SUMMARY SHEET

DRAWING NO. 03-01

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

PROJECT GENERAL NOTES:

TOTAL SITE AREA: 2.71 AC
TOTAL AREA TO BE DISTURBED: 2.71 AC

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD AND SUPPLEMENTAL SPECIFICATIONS, CURRENT EDITION.

2. ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON PLANS, AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. UTILITY FACILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY UNDER THIS REQUIREMENT. "EXISTING UTILITY FACILITIES" MEANS ANY UTILITY THAT EXISTS ON THE PROJECT IN ITS ORIGINAL, RELOCATED OR NEWLY INSTALLED POSITION.

3. THE FOLLOWING UTILITIES HAVE FACILITIES IN THE PROJECT AREA:

   1. AGL RESOURCES – SOUTHERN CO.
      CHRIS BRITTIAN (770) 570–8292
   2. AT&T – D SOUTHEAST NETWORK
      ANDRE WALTON (404) 218–4468
   3. COMCAST
      REGGIE ARNEY (678) 878–5541
   4. COWETA–FAYETTE EMC
      STEVE JONES (678) 488–8834
   5. FAYETTE WATER
      JAMES ROSSER (770) 686–9032

4. INGRESS AND EGRESS SHALL BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES. REFER TO SUB–SECTION 107.07 OF THE GEORGIA STANDARD SPECIFICATIONS.

5. RIGHT–OF–WAY MARKERS IN RESIDENTIAL LAWN AND DEVELOPED COMMERCIAL AREAS SHALL BE PLACED FLUSH WITH THE FINISHED SURFACE.

6. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FURNISH SUITABLE BORROW MATERIAL FOR THE PROJECT AND TO DISPOSE OF ANY UNSUITABLE OR WASTE MATERIAL IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. CONCRETE AND ASPHALT MATERIALS REMOVED FROM THE PROJECT SITE MAY NOT BE PLACED IN FILL LOCATIONS THAT FALL WITHIN EASEMENT OR RIGHT–OF–WAY AREAS.

7. PERFORATED UNDERDRAIN SHALL BE PLACED IN AREAS WHERE WET CONDITIONS EXIST IN THE SUBGRADE AS REQUIRED OR AS DIRECTED BY THE ENGINEER.

8. STRUCTURES, TREES, SHRUBS AND OTHER PLANT MATERIAL THAT FALL WITHIN THE RIGHT–OF–WAY AND EASEMENT LIMITS, BUT OUTSIDE THE LIMITS OF CONSTRUCTION, SHALL NOT BE DISTURBED UNLESS DIRECTED BY THE ENGINEER.

9. THE CONTRACTOR SHALL OBSERVE ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS REGARDING PIPE INSTALLATION IN TRENCHES. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COST INCURRED TO COMPLY WITH THIS REQUIREMENT.

10. METAL PIPES UNDERNEATH THE TRAVEL WAY MUST BE REMOVED OR FILLED WITH FLOWABLE FILL. THE COST FOR REMOVAL OF PIPES SHALL BE INCLUDED IN THE PRICE BID FOR GRADING COMPLETE PER LUMP SUM OR IN THE PRICE BID FOR FLOWABLE FILL PER CUBIC YARD (WHEN DIRECTED FOR USE).

    EXISTING PIPES WITHIN CONSTRUCTION LIMITS NO LONGER IN USE OR IN CONFLICT WITH PROPOSED PLANS TO BE REMOVED UNLESS OTHERWISE NOTED OR DIRECTED, COST SHALL BE INCLUDED IN GRADING COMPLETE.

11. IN AREAS WHERE NEW PAVEMENT OR PAVEMENT WIDENING IS REQUIRED, SAW CUT OF EXISTING PAVEMENT WILL BE REQUIRED IN ACCORDANCE WITH SECTION 411 OF THE GEORGIA STANDARD SPECIFICATIONS AND WILL BE INCLUDED IN PRICE BID FOR "GRADING COMPLETE". THE SAW CUT SHALL BE AS CLOSE TO THE EDGE OF PAVEMENT AS POSSIBLE.

12. ALL RETAINING WALLS SHALL BE REDI–ROCK OR APPROVED EQUIVALENT. WALL DESIGN TO BE DONE BY MANUFACTURER AND/OR CONTRACTOR'S ENGINEER, AND SUBMITTED TO COUNTY ENGINEER FOR FINAL APPROVAL PRIOR TO PROCUREMENT; THIS INCLUDES COUNTY APPROVAL FOR STRUCTURAL AND AESTHETIC PURPOSES. ALL RETAINING WALL EXPOSED FACES SHALL HAVE ANTI–GRAFFITI COATING. THE AESTHETIC FINISH AND ANTI–GRAFFITI COATING SHALL BE INCLUDED IN THE PRICE OF THE WALL.

13. ALL DRIVEWAYS SHALL BE MAINTAINED DURING CONSTRUCTION. ALL DRIVEWAYS TO BE CONSTRUCTED SHALL BE REPLACED IN KIND I.E. ASPHALT FOR ASPHALT, CONCRETE FOR CONCRETE ETC. ANY OTHER DRIVEWAY MATERIAL OR SPECIALIZED DRIVEWAY WILL NOT BE REPLACED IN KIND (I.E. PAVERS) AND WILL BE REPLACED WITH ASPHALT OR CONCRETE. ALL EARTH OR GRAVEL DRIVES SHALL BE PAVED WITH ASPHALT TO THE RIGHT–OF–WAY LIMIT OR TIE–IN POINT. DRIVEWAYS SHALL BE PAVED AS FOLLOWS:

    ASPHALTIC DRIVES:
    RESIDENTIAL – 1–1/2" ASPH. CONC. 12.5 MM SUPERPAVE, 165 LB/SY
    – 6" GRADED AGGREGATE BASE

    COMMERCIAL – 1–1/2" ASPH. CONC. 12.5 SUPERPAVE, 165 LB/SY
    – 2" ASPH. CONC. 19MM SUPERPAVE, 220 LB/SY
    – 6" GRADED AGGREGATE BASE

    CONCRETE DRIVES:
    RESIDENTIAL – 6" CONCRETE VALLEY GUTTER
    – 4" CONCRETE DRIVEWAY

    COMMERCIAL – 8" CONCRETE VALLEY GUTTER
    – 6" CONCRETE DRIVEWAY

PROJECT GENERAL NOTES CONT'D:

14. ALL CONCRETE SIDEWALKS AND WHEEL CHAIR RAMPS LOCATED IN THE RADIUS RETURN SHALL BE 8" THICK.

15. LUMP–SUM TRAFFIC CONTROL: THE PRICE BID FOR LUMP–SUM TRAFFIC CONTROL SHALL INCLUDE THE COST OF STAGED CONSTRUCTION, MAINTENANCE OF TRAFFIC (INCLUDING AGGREGATE SURFACE COURSE), INSTALLATION AND REMOVAL OF ALL TEMPORARY SIGNAGE, INTERIM PAVEMENT MARKINGS, BARRICADES, AND OTHER INTERIM TRAFFIC CONTROL DEVICES NECESSARY FOR THE CONSTRUCTION AND MAINTENANCE OF THE PROJECT. DEVICES UTILIZED ON THE PROJECT SHALL BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION AND SECTION 150. ALL DEVICES, SIGNS, POSTS, BARRICADES, ETC SHALL BE FROM THE GDOT QUALIFIED PRODUCTS LIST (QPL). ALL DEVICES SHALL BE CRASHWORTHY UNDER AASHTO AND NCHRP 350 REQUIREMENTS. THE ENGINEER MAY DIRECT THAT ADDITIONAL DEVICES AND MARKINGS BE ADDED TO THE TRAFFIC CONTROL PLAN. THE COST OF NOMINAL ITEMS ADDED BY THE ENGINEER SHALL BE INCLUDED IN LUMP–SUM TRAFFIC CONTROL EXCEPT FOR THE ADDITION OF A CHANGEABLE MESSAGE SIGN(S). THE CONTRACT UNIT PRICE WILL BE PAID FOR A CHANGEABLE MESSAGE SIGN(S) OR A UNIT PRICE WILL BE DETERMINED WHEN A CHANGEABLE MESSAGE SIGN(S) IS NOT INCLUDED IN THE CONTRACT.

16. DETOURS IN THE PLANS: SUGGESTED DETOURS SHOWN IN THE PLANS ARE FOR INFORMATION ONLY. CONTRACTOR SHALL SUBMIT ON SITE AND OFF SITE DETOURS, AS PER SPECIAL PROVISION 150 TRAFFIC CONTROL, FOR REVIEW AND APPROVAL. THE COST OF MAINTENANCE, GRADING, TEMPORARY DRAINAGE, TEMPORARY SIGNAGE, TEMPORARY MARKINGS AND TEMPORARY DEVICES SHALL BE INCLUDED IN LUMP–SUM TRAFFIC CONTROL. THE COST OF STONE BASE (GAB) AND THE PLACEMENT OF THE TYPICAL PAVEMENT SECTION, TEMPORARY BARRIERS, ATTENUATORS, TEMPORARY GUARDRAIL, AND ANCHORS, IF NEEEDED, WILL BE PAID AT CONTRACT UNIT PRICES. IF NO PAY ITEM IS SET UP FOR THE AFOREMENTIONED ITEMS FOR DETOURS THEN, IF REQUIRED, WILL BE INCLUDED IN LUMP SUM TRAFFIC CONTROL, AND IT WILL NOT BE MEASURED SEPARATELY FOR PAYMENT. ANY UNIT PRICES SET UP WILL INCLUDE INSTALLATION AND REMOVAL. PERMANENT DEVICES, TO BE INCORPORATED INTO THE FINAL WORK, MAY BE USED FOR INTERIM/TEMPORARY DUTIES PROVIDED THE PERMANENT DEVICES ARE NOT DAMAGED DURING THE INTERIM USAGE. THE COST FOR REPLACEMENT OF DAMAGED COMPONENTS SHALL BE AT THE CONTRACTOR'S EXPENSE.

    DETOURS NOT SHOWN IN THE PLANS (DETOURS PROPOSED BY THE CONTRACTOR): THE COST TO INSTALL, MAINTAIN AND REMOVE ANY DETOUR SHALL BE INCLUDED IN THE PRICE BID FOR LUMP–SUM TRAFFIC CONTROL. THE COST OF GRADING, PAVEMENT, SIGNING, MARKINGS, TEMPORARY DEVICES, TEMPORARY CONCRETE BARRIERS, ATTENUATORS, TEMPORARY GUARDRAIL AND ANCHORS, ETC SHALL BE INCLUDED IN THE PRICE BID FOR LUMP–SUM TRAFFIC CONTROL. DETOURS NOT SHOWN IN THE PLANS WILL NOT BE ELIGIBLE TO BE PAID AT CONTRACT UNIT PRICES.

17. ALL CUT AND FILL SLOPES SHALL BE STABILIZED TO COMPLY WITH SECTION 161.3.05.B OF THE SPECIFICATIONS IN ORDER TO REDUCE THE POTENTIAL FOR EROSION. IF THE SEASON DOES NOT PERMIT PERMANENT GRASSING, TEMPORARY STRAW MULCH AND/OR TEMPORARY VEGETATION SHALL BE USED AS PER THE EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN (ESPCP) OR AS DIRECTED BY THE ENGINEER.

18. EROSION CONTROL MEASURES SHALL BE INSTALLED TO BE IN COMPLIANCE WITH THE APPROVED EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN (ESPCP). EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES THAT INVOLVE ENVIRONMENTAL SENSITIVE AREAS (ESA'S) AS DEFINED UNDER SECTION 107.23.F OF THE SPECIFICATIONS AND THE ESPCP. IN GENERAL, EROSION CONTROL ITEMS SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITIES AND SHALL BE MAINTAINED AT ALL TIMES.

19. CONTRACTOR TO MAINTAIN ACCESS TO ALL MULTI–USE PATHS DURING CONSTRUCTION AND TO COORDINATE WITH FAYETTE CO.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, RELOCATING, AND MAINTAINING THE PROPERTY OWNER'S MAILBOX TO AN AREA OUTSIDE CONSTRUCTION LIMITS DURING THE LIFE OF THE CONTRACT. THE LOCATION OF THE BOX SHOULD BE CONVENIENT TO BOTH THE MAIL CARRIER AND THE PATRON, YET NOT INTERFERE WITH PROPOSED WORK. IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONFER WITH THE POST OFFICE SERVING THE AREA. ALL COSTS INCURRED FOR COMPLIANCE WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS.

21. AN N.O.I. (NOTICE OF INTENT) IS REQUIRED FOR THIS PROJECT. THE DISTURBED AREA IS 2.71 ACRES.

22. ATTENTION IS CALLED TO SECTION 149.3, CONSTRUCTION REQUIREMENTS, CONTRACTOR IS REQUIRED TO TAKE THREE–POINT LEVELS ON WIDENING AND RECONSTRUCTION PROJECTS AND OBTAIN THE ENGINEER'S APPROVAL OF THE "BEST FIT" PROFILE AND CROSS SLOPE, TO MINIMIZE LEVELING REQUIREMENTS OF THE EXISTING ROADWAY. THE CONTRACTOR MUST GET THE ENGINEER'S APPROVAL OF THE PROPOSED BEST FIT BEFORE BEGINNING WIDENING AND RECONSTRUCTION. COST FOR SURVEY WORK TO BE INCLUDED IN GRADING COMPLETE OR OTHER ITEMS, NO SEPARATE PAYMENT SHALL BE MADE.

23. ALL ROADWAY DRAINAGE PIPES SHALL BE REINFORCED CONCRETE.

24. CONTRACTOR TO PROVIDE PRE–CONSTRUCTION PHOTOS OF ALL DRIVEWAYS TO PROJECT ENGINEER PRIOR TO CONSTRUCTION. PHOTOS MAY BE DIGITAL.

25. ALL EXISTING STORM DRAIN PIPES INCLUDING BOX CULVERTS WITHIN THE CONSTRUCTION LIMITS SHALL BE CLEANED PRIOR TO COMPLETION OF PROJECT. COST TO BE INCLUDED IN GRADING COMPLETE.

26. ALL GRASSED MEDIANS, LANDSCAPED AREAS BETWEEN THE BACK OF CURB AND SIDEWALK AND TO SHOULDER BREAK POINT SHALL BE SODDED WITH TIFTUF BERMUDA SOD. ALL COST ASSOCIATED WITH THIS REQUIREMENT SHALL BE INCLUDED IN THE PRICE BID FOR 700–9000 SOD.

PROJECT GENERAL NOTES CONT'D:

27. ALL EXISTING PEDESTRIAN FACILITIES, INCLUDING ACCESS TO TRANSIT STOPS, SHALL BE MAINTAINED. WHERE PEDESTRIAN ROUTES ARE CLOSED, ALTERNATE ROUTES SHALL BE PROVIDED. WHEN EXISTING PEDESTRIAN FACILITIES ARE DISRUPTED, CLOSED, OR RELOCATED WITHIN THE LIMITS OF THE PROJECT, THE TEMPORARY PEDESTRIAN FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITIES (PER LATEST MUTCD). COST FOR CONSTRUCTING AND MAINTAINING TEMPORARY PEDESTRIAN FACILITIES SHALL BE INCLUDED IN THE PRICE BID FOR GRADING COMPLETE.

28. THE ROADWAY FINAL SURFACE COURSE JOINTS MUST MATCH THE PROPOSED LANE EDGES AS SHOWN IN THE PAVEMENT MARKING PLANS.

MAINTENANCE OF TRAFFIC GENERAL NOTES:

1. ALL ITEMS NECESSARY FOR COMPLIANCE WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE PRICE BID FOR "TRAFFIC CONTROL".

2. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. LATEST EDITION.

3. ALL SIGNS SHALL HAVE TYPE [I] RETROREFLECTIVE SHEETING UNLESS OTHERWISE NOTED.

4. IN RESIDENTIAL AREAS, TEMPORARY AND PERMANENT SIGNS SHALL BE LOCATED ON OR AS CLOSE AS POSSIBLE TO PROPERTY LINES.

5. EXISTING TRAFFIC SIGNS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. MAINTENANCE CONSTRUCTION RELATED TRAFFIC CONTROL DEVICES.

6. THE WORK–SITE TRAFFIC CONTROL SUPERVISOR (WTCS) SHALL BE RESPONSIBLE FOR THE ELIMINATION OF ANY CONFLICTING PAVEMENT MARKINGS. THE WTCS SHALL NOT USE "BLACK OUT PAINT" TO ERADICATE CONFLICTING MARKINGS, THE ENGINEER SHALL MAKE THE FINAL DETERMINATION WHETHER THE CONFLICTING MARKINGS HAVE BEEN ADEQUATELY ELIMINATED.

7. TEMPORARY TRAFFIC BARRIERS SHALL HAVE A TWO (2') FEET MINIMUM OFFSET FROM THE EDGE OF ANY TRAVEL LANE, ONLY TRAFFIC DRUMS, MEETING THE MINIMUM REQUIREMENTS OF THE MUTCD AND SECTION 150, AND TEMPORARY BARRIERS THAT ARE CRASHWORTHY SHALL BE USED ADJACENT TO TRAVEL LANES, UNLESS PRIOR APPROVAL IS GRANTED BY FAYETTE COUNTY. THE TEMPORARY BARRIERS CAN NOT BE PLACED LESS THAN TWO (2') FEET FROM THE EDGE OF THE TRAVEL LANE. THE USE OF TYPE 1 AND 11 BARRICADES AND TRAFFIC CONES IS PROHIBITED.

8. TRAFFIC DRUMS MEETING THE MINIMUM REQUIREMENTS OF THE MUTCD AND SECTION 150 SHALL BE USED FOR CHANNELIZATION OF TRAFFIC IN ALL TRAFFIC SHIFTS, FOR ANY WORK ZONE, THE MAXIMUM DRUM SPACING, IN FEET, SHALL BE THE DESIGN OR POSTED SPEED LIMIT, WHICHEVER IS LESS. BASED ON FIELD CONDITIONS, THE MAXIMUM SPACING OF THE TRAFFIC DRUMS MAY NEED TO BE FURTHER REDUCED.

9. ALL TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR SO AS NOT TO INTERFERE WITH SIGHT DISTANCES ALONG ANY ADJACENT SIDE ROAD OR DRIVEWAY.

10. FAYETTE COUNTY RESERVES THE RIGHT TO MODIFY THIS MAINTENANCE OF TRAFFIC PLAN AS FIELD CONDITIONS WARRANT. IF ADDITIONAL TRAFFIC CONTROL DEVICES ARE REQUIRED, THESE SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE COUNTY.

11. TEMPORARY TRAFFIC CONTROL PLANS MUST BE SUBMITTED BY THE CONTRACTOR TO FAYETTE COUNTY PUBLIC WORKS DEPARTMENT, FOR INFORMATION CALL (770) 320–6010.

12. REFLECTORIZED TYPE 3 BARRICADES SHALL BE USED AT THE ACTUAL LOCATION OF TOTAL ROAD CLOSURE. EACH BARRICADE SHALL HAVE TWO TYPE 'A' LIGHTS AND ONE R11–2 (ROAD CLOSED) SIGN ATTACHED.

13. ALL M4–9 SIGNS SHALL HAVE ADVISORY BLADES (INSTALLED ABOVE THE "DETOUR" SIGN) IDENTIFYING THE CLOSED STREET THAT THE DETOUR ROUTE SERVES.

14. CHANGEABLE MESSAGE SIGNS, INFORMING MOTORISTS OF LANE AND/OR ROAD CLOSURES AND/OR TRAFFIC SHIFTS SHALL BE INSTALLED A MINIMUM OF 2 WEEKS PRIOR TO THE ROAD CLOSURE. THESE SIGNS SHALL BE INSTALLED AT OR AS NEAR AS POSSIBLE TO THE ROAD CLOSURE (SEE SPECIFICATIONS BELOW):

    (ROAD NAME) WILL BE CLOSED TO THRU TRAFFIC
    FROM (SIDE ROAD) TO (SIDE ROAD)
    FROM (DATE) THRU (DATE)
    (REASON FOR CLOSURE)
    FOR INFO CALL (770) 320–6010

15. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREPARE A MAINTENANCE OF TRAFFIC PLAN FOR APPROVAL BY FAYETTE COUNTY BEFORE STARTING CONSTRUTION. PAYMENT SHALL BE INCLUDED IN THE PRICE FOR TRAFFIC CONTROL. THE CONTRACTOR SHALL CONSTRUCT THE PROJECT IN PHASES TO ADHERE TO THE RESTRICTED ROAD CLOSURE TIMELINE AND DATES AS STATED IN THE CONTRACT SPECIFICATIONS.

16. THE CONTRACTOR SHALL MAINTAIN INGRESS AND EGRESS TO ALL DRIVEWAYS AT ALL TIMES.

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971–5407 FAX: (770) 971–0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

GENERAL NOTES

DRAWING NO. 04–01

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Notes Etc.dwg 12/19/2023 2:27 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

EXISTING CONDITIONS:

1. ALL DIMENSIONS AND DETAILS OF EXISTING WORK INDICATED ON THE DRAWINGS SHALL BE FIELD MEASURED AND VERIFIED BEFORE PROCEEDING. FIELD CHECKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IMMEDIATELY REPORT ANY DISCREPANCIES TO OWNER AND ENGINEER.

2. CONTRACTOR IS CAUTIONED OF THE EXISTENCE OF UNDERGROUND UTILITIES. CONTRACTOR IS RESPONSIBLE FOR REPAIRING, AT NO COST TO THE OWNER, ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPEARANCES, ETC., WHICH OCCURS AS A RESULT OF WORK UNDER THIS CONTRACT. CONTRACTOR SHALL CALL UTILITIES PROTECTION CENTER (PHONE NUMBER 811), FOR FIELD LOCATING UTILITIES PRIOR TO CONSTRUCTION.

GRADING NOTES:

1. CONTOURS AND ELEVATIONS SHOWN ON THESE DRAWINGS REPRESENT FINISHED GRADE. THE CONTRACTOR SHALL ALLOW FOR TOP SOIL, PAVEMENT THICKNESS, SLABS, WALL FOOTINGS, ETC., WHEN GRADING TO SUBGRADE.

2. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN TWO HORIZONTAL FEET TO ONE VERTICAL FOOT, UNLESS SPECIFICALLY NOTED OTHERWISE.

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REVISION DATES

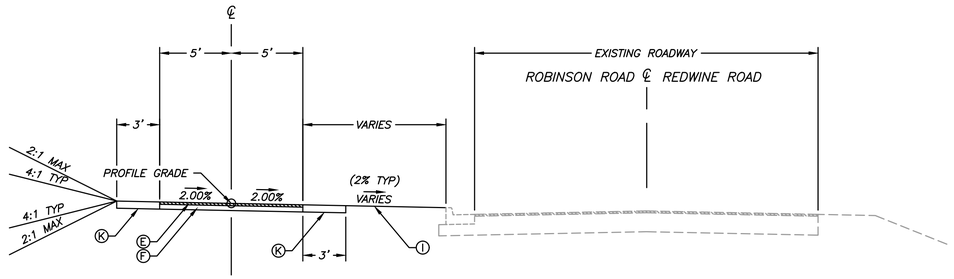
FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

GENERAL NOTES

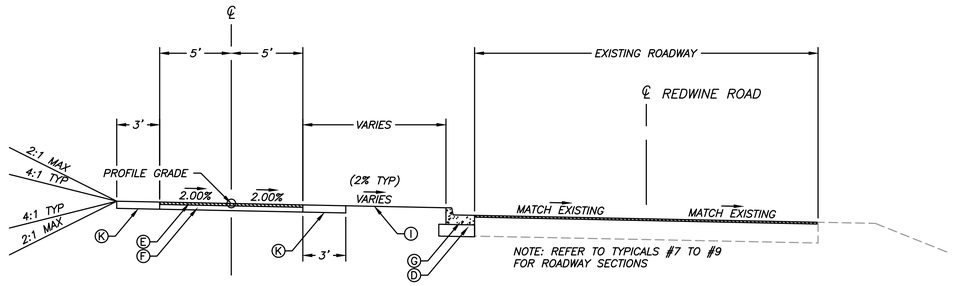
DRAWING NO. 04-02

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



TYPICAL SECTION #1

REDWINE PATH WEST
STA 501+17.65 to STA 503+91.29
ROBINSON PATH WEST
STA 603+53.75 to STA 608+43.38



TYPICAL SECTION #2

REDWINE PATH WEST
STA 503+91.29 to STA 506+50.00

- (A) 1.5" RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
- (B) 2" RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
- (C) 3" RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 LB/SY)
- (D) 8" GR AGGR BASE CRS, INCL MATL
- (E) 2" RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TP I, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME (220 LB/SY)
- (F) 4" GR AGGR BASE CRS, INCL MATL
- (G) CONC CURB & GUTTER, 8 IN X 24 IN, TP 2
- (H) MILL ASPH PVMT, 1 1/2 IN DEPTH
- (I) SOD, BERMUDA TIFWAY
- (J) RETAINING WALL, REDI-ROCK OR EQUIVALENT, W/ BARRIER
- (K) 6" GR AGGR BASE CRS, INCL MATL

NTS

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

TYPICAL SECTIONS

DRAWING NO. 05-01

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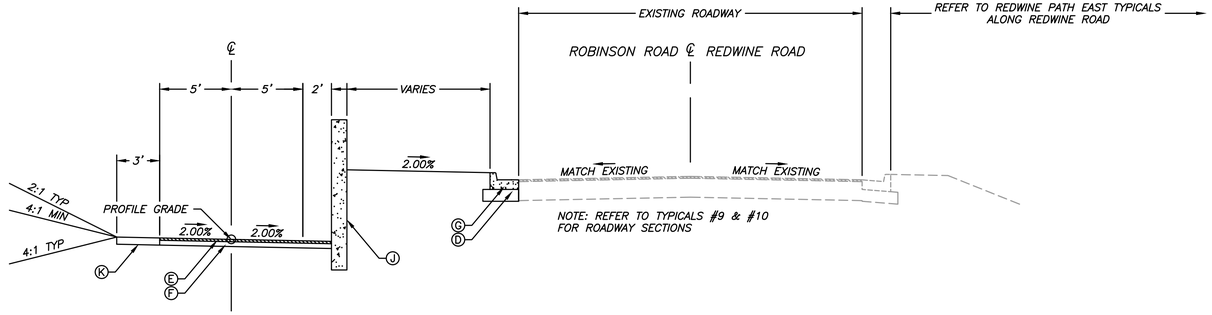
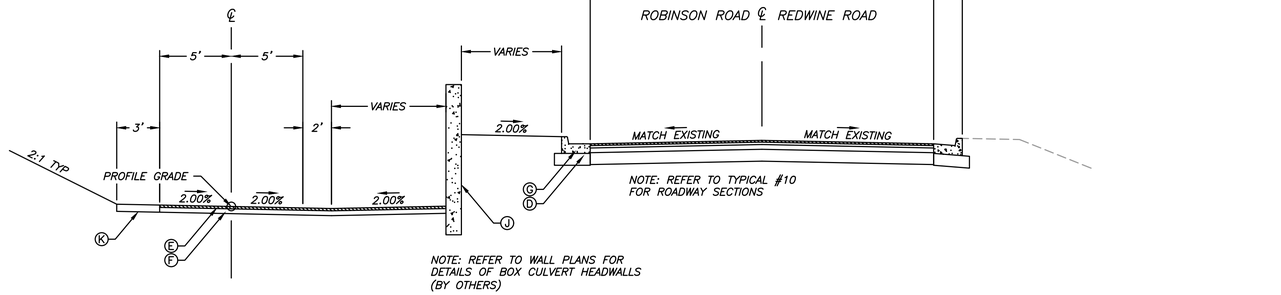
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



TYPICAL SECTION #3

REDWINE PATH WEST
STA 506+50.00 to STA 508+00.00
ROBINSON PATH WEST
STA 600+88.90 to STA 603+53.75



TYPICAL SECTION #4

REDWINE PATH WEST
STA 508+00.00 to STA 508+56.50
ROBINSON PATH WEST
STA 600+00.00 to STA 600+88.90

- (A) 1.5" RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
- (B) 2" RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
- (C) 3" RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 LB/SY)
- (D) 8" GR AGGR BASE CRS, INCL MATL
- (E) 2" RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TP I, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME (220 LB/SY)
- (F) 4" GR AGGR BASE CRS, INCL MATL
- (G) CONC CURB & GUTTER, 8 IN X 24 IN, TP 2
- (H) MILL ASPH PVMT, 1 1/2 IN DEPTH
- (I) SOD, BERMUDA TIFWAY
- (J) RETAINING WALL, REDI-ROCK OR EQUIVALENT, W/ BARRIER
- (K) 6" GR AGGR BASE CRS, INCL MATL

NTS

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MARIETTA, GA 30062
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

TYPICAL SECTIONS

DRAWING NO. 05-02

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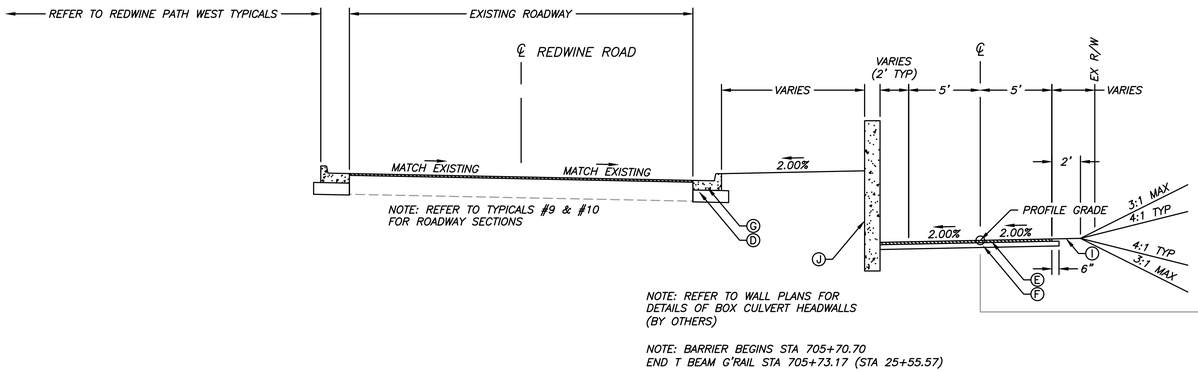
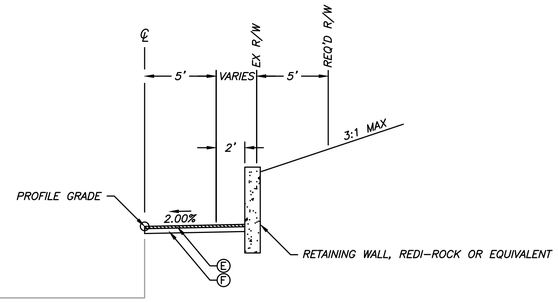
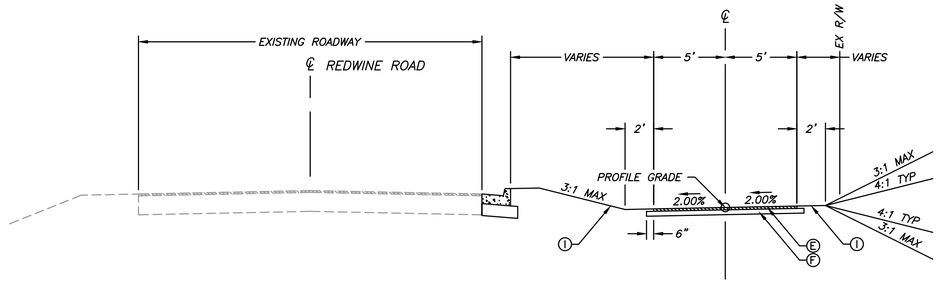
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///





NOTE: OUTSIDE SHOULDER SHORT RETAINING WALL
STA 706+44.52 to STA 709+00.36

TYPICAL SECTION #5
REDWINE PATH EAST
STA 705+21.39 to STA 709+40.00



TYPICAL SECTION #6
REDWINE PATH EAST
STA 709+40.00 to STA 709+71.61

Ⓐ 1.5" RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
Ⓑ 2" RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
Ⓒ 3" RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 LB/SY)
Ⓓ 8" GR AGGR BASE CRS, INCL MATL
Ⓔ 2" RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TP I, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME (220 LB/SY)
Ⓕ 4" GR AGGR BASE CRS, INCL MATL
Ⓖ CONC CURB & GUTTER, 8 IN X 24 IN, TP 2
Ⓗ MILL ASPH PVMT, 1 1/2 IN DEPTH
Ⓘ SOD, BERMUDA TIFWAY
Ⓙ RETAINING WALL, REDI-ROCK OR EQUIVALENT, W/ BARRIER
Ⓚ 6" GR AGGR BASE CRS, INCL MATL

NTS

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

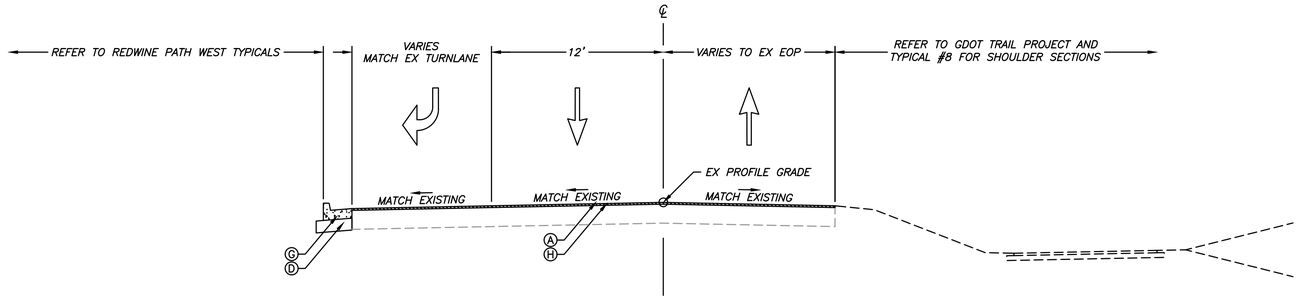
STARRS MILL SCHOOL TUNNEL

TYPICAL SECTIONS

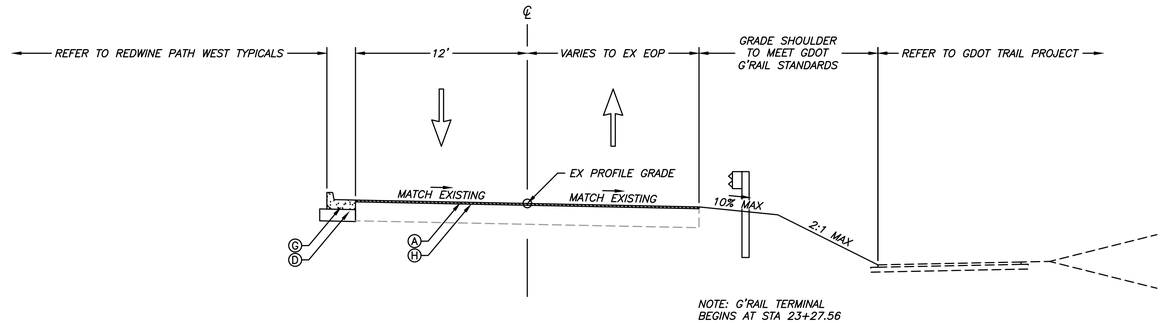
DRAWING NO. 05-03

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Typicals.dwg 9/14/2023 4:11 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



TYPICAL SECTION #7
REDWINE ROAD
STA 22+82.63 to STA 23+53.30



TYPICAL SECTION #8
REDWINE ROAD
STA 23+53.30 to STA 25+02.09

Ⓐ 1.5" RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
Ⓑ 2" RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
Ⓒ 3" RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 LB/SY)
Ⓓ 8" GR AGGR BASE CRS, INCL MATL
Ⓔ 2" RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TP I, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME (220 LB/SY)
Ⓕ 4" GR AGGR BASE CRS, INCL MATL
Ⓖ CONC CURB & GUTTER, 8 IN X 24 IN, TP 2
Ⓗ MILL ASPH PVMT, 1 1/2 IN DEPTH
Ⓘ SOD, BERMUDA TIFWAY
Ⓙ RETAINING WALL, REDI-ROCK OR EQUIVALENT, W/ BARRIER
Ⓚ 6" GR AGGR BASE CRS, INCL MATL

NTS

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

TYPICAL SECTIONS

DRAWING NO. 05-04

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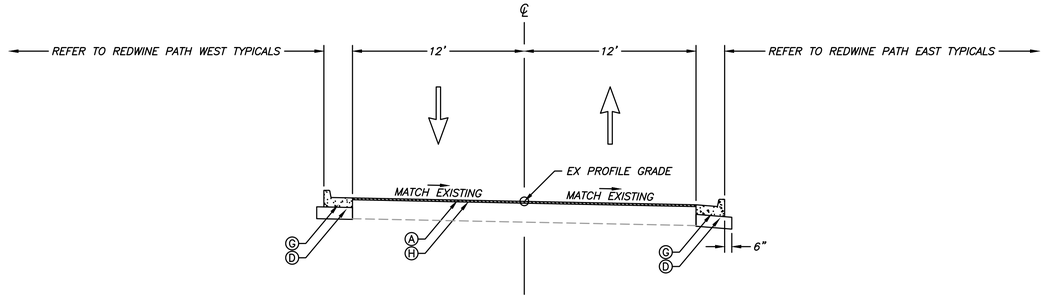
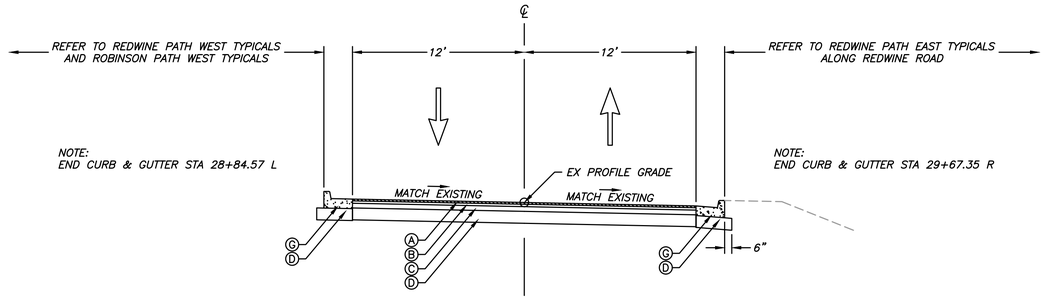
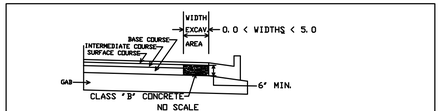
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



TYPICAL SECTION #9
REDWINE ROAD
STA 25+02.09 to STA 26+75.00



TYPICAL SECTION #10
REDWINE ROAD
STA 26+75.00 to STA 30+05.00
ROBINSON ROAD
STA 400+00.00 to STA 400+77.82



CLASS 'B' CONCRETE BASE OR PAVEMENT WIDENING
Item Code 500-9999 - Cu. Yds.

In excavated areas between the existing paving and new curb and gutter that are 5'-0" or less in width, Class 'B' concrete shall be placed in lieu of the base and paving specified by the typical section. Payment will be made under "Class B Concrete Base and Pavement Widening".

In excavated areas greater than 5'-0" in width, the Contractor shall place base and paving as specified on the typical section.

See plans for details of curb and gutter construction.

CLASS "B" CONCRETE BASE OR WIDENING DETAIL

(A) 1.5" RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
(B) 2" RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
(C) 3" RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 LB/SY)
(D) 8" GR AGGR BASE CRS, INCL MATL
(E) 2" RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TP I, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME (220 LB/SY)
(F) 4" GR AGGR BASE CRS, INCL MATL
(G) CONC CURB & GUTTER, 8 IN X 24 IN, TP 2
(H) MILL ASPH PVMT, 1 1/2 IN DEPTH
(I) SOD, BERMUDA TIFWAY
(J) RETAINING WALL, REDI-ROCK OR EQUIVALENT, W/ BARRIER
(K) 6" GR AGGR BASE CRS, INCL MATL

NTS

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES

FAYETTE COUNTY
STARRS MILL SCHOOL TUNNEL
TYPICAL SECTIONS
DRAWING NO. 05-05

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

ROADWAY ITEMS

LOCATION	GR AGGR BASE CRS, 4 INCH, INCL MATL	GR AGGR BASE CRS, 6 INCH, INCL MATL	GR AGGR BASE CRS, 8 INCH, INCL MATL	MILL ASPHALT CONC. PVMT, 1 1/2 IN DEPTH	*RECYCLED ASPH CONC PATCHING, INCL BITUM MATL & H LINE	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TP 1, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TACK COAT	CONCRETE MEDIAN, 6 IN	CONCRETE HEADER CURB, 6 IN, TP 2	CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	*SAWED JOINTS IN EXIST. PAVEMENTS– PCC	CLASS B PVMT WIDENING	DETECTABLE WARNING SURFACE	CURB CUT WHEELCHAIR RAMP, TYPE D
	SY	SY	SY	SY	TN	TON	TON	TON	TON	GAL	SY	LF	LF	LF	CY	SF	EA
TOTAL	2516	865	1742	1069	50	274	200	143	214	700	11	20	1423	100	8	40	2

*AS DIRECTED

GRADING COMPLETE
LUMP SUM

CONCRETE RIGHT–OF–WAY MARKERS GA. STD. 9003	
TOTAL	9 EA

TRAFFIC CONTROL
LUMP SUM

REMOVE SIGN	
TOTAL	2 EA

TEMPORARY BARRIER, METHOD NO. 1	
TOTAL	1150 LF

RESET SIGN	
TOTAL	2 EA

GUARDRAIL QUANTITIES

LOCATION	GUARDRAIL, TP W	GUARDRAIL, TP T	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY–ABSORBING	GUARDRAIL ANCHORAGE TP 10D, SPCL DES
	LF	LF	EA	EA
TOTAL	223	42	1	1

RAISED PAVEMENT MARKERS (EACH)

LOCATION	REFLECTIVE–RAISED		
	YELLOW	CLEAR	CLEAR/ RED
	TYPE 1	TYPE 2	TYPE 3
TOTAL	32	0	0

TEMPORARY EROSION CONTROL

LOCATION	TEMPORARY GRASSING	MULCH– DISTURBED AREA	TEMPORARY SILT FENCE TP C	MAINTENANCE OF TEMPORARY SILT FENCE TP C	CONSTRUCT & REMOVE INLET SEDIMENT TRAP	MAINTENANCE OF INLET SEDIMENT TRAP	CONSTRUCT AND REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM	MAINTENANCE OF CHECK DAMS – ALL TYPES	CONSTRUCTION EXIT	MAINTENANCE OF CONSTRUCTION EXIT	WATER QUALITY MONITORING & SAMPLING	WATER QUALITY INSPECTIONS
	AC	TN	LF	LF	EA	EA	LF	LF	EA	EA	EA	MO
TOTAL	3	35	956	478	18	18	160	160	4	2	1	12

SIGNS

DESCRIPTION	UNIT	QUANTITY
HWY SIGNS, TP 1 MATL, REFL SHEETING, TP11	SF	5
GALV. STEEL POSTS, TP 7	LF	24

PERMANENT EROSION CONTROL

LOCATION	PERMANENT GRASSING	STN DUMPED RIP RAP TP 3, 18 IN.	SOD	AGRICULTURAL LIME	FERTILIZER MIXED GRADE	FERTILIZER NITROGEN CONTENT	PLASTIC FILTER FABRIC	EROSION CONTROL MATS, SLOPES
	AC	SY	SY	TN	TN	LB	SY	SY
TOTAL	1	26	2520	6	2	100	26	2400

NOTES:
REFER TO SHEET 44–05 FOR ALL WATERLINE RELOCATION QUANTITIES, DETAILS AND NOTES.

TRAFFIC STRIPE

DESCRIPTION	UNIT	QUANTITY
		THERMOPLASTIC
5" SOLID WHITE	LF	1274
5" SOLID YELLOW	LF	1126
24" SOLID WHITE	LF	100
8" SOLID WHITE	LF	54
5" SKIP WHITE(2'SEG, 6"GAP)	GLF	174

REMOVE EXIST SOLID TRAF STRIPE, 8 IN, THERMOPLASTIC	
TOTAL	240 LF

CROY
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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

SUMMARY OF QUANTITIES

DRAWING NO. 06–01

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Notes Etc.dwg 12/19/2023 5:21 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

DRAINAGE ITEMS

STRUCTURE NUMBER	LOCATION	18" STORM DRAIN PIPE, H 1–10	18" STORM DRAIN PIPE, H 10–15	24" STORM DRAIN PIPE, H 1–10	24" STORM DRAIN PIPE, H 10–15	24" STORM DRAIN PIPE, H 15–20	CATCH BASIN GP 1, GA STD 1033D	CATCH BASIN GP 1, GA STD 1034D	CATCH BASIN GP 1, ADDL DEPTH	DROP INLET, GP 1, GA STD 1019A	DROP INLET, GP 1, GA STD D–4 DITCH 36 X 36	DROP INLET, GP 1, ADDL DEPTH	STORM SEWER MANHOLE, TP 1, GA STD 1011A	STORM SEWER MANHOLE, TP 1, ADDL DEPTH, CL 2	DRIVEWAY GRATE INLET, SPECIAL DESIGN, GA STD D–27 SD GRATE INLET 21"	SAFETY END SECTION 24 IN, STORM DRAIN, 6:1 SLOPE
		LF	LF	LF	LF	LF	EA	EA	LF	EA	EA	LF	EA	LF	EA	EA
A LINE																
A7.1	STA. 22+92.97 L	61						1								
C LINE																
C1	STA. 28+41.72 R				105					1		5				
C2	STA. 27+45.87 R			93									1			
C2.1	STA. 27+45.80 R	6													1	
C2.2	STA. 27+45.68 R		10				1		11							
C2.3	STA. 27+45.24 L		43												1	
C3	STA. 26+35.12 R	107								1						
C4	STA. 25+21.34 R	110								1						
D LINE																
D0	STA. 35+20.00 L															1
D1	STA. 34+88.01 L			32							1					
D2	STA. 33+95.00 L			93							1	2				
D3	STA. 32+68.50 L				127						1	7				
D4	STA. 31+36.24 L				136						1	11				
D5	STA. 29+96.12 L				144						1	12				
D5.1	STA. 29+61.15 R					59	1		13							
D5.2	STA. 29+49.78 R					18							1	11		
TOTAL		284	53	218	512	77	2	1	24	3	5	37	2	11	2	1

FOUND BKFILL MATL, TP II	
TOTAL	100 CY

CONC SPILLWAY, TP 3 – SPCL DES GA. STD. 9013	
TOTAL	1 EA

REINFORCED CONCRETE (PRECAST) SINGLE BOX CULVERT – 12' X 9'	
PRECAST BOX CULVERT	48 LF
CLASS A CONCRETE – 12" DEPTH	20 CY

BOX CULVERT NOTES:
– CONTRACTOR TO PROVIDE MANUFACTURER SHOP DRAWINGS FOR COUNTY APPROVAL PRIOR TO ORDERING THE PRECAST BOX CULVERT.
– CONTRACTOR TO INSTALL AND SUPPLY ALL NECESSARY MISCELLANEOUS MATERIALS, COST TO BE INCLUDED IN PRICE OF PRECAST BOX CULVERT.
– 12" CLASS A CONCRETE INVERT TO BE POURED INSIDE BASE OF BOX CULVERT, FINISH GRADE TO MATCH PLAN INVERTS AS SHOWN.

RETAINING WALL ITEMS

LOCATION / WALL #	STATION	SIDE	MODULAR BLOCK WALL	TRAFFIC BARRIER H	COPING A
			SF	LF	LF
WALL #1	506+50.00 – 603+53.75	RT	5953	568	
WALL #2	705+21.39 – 709+40.00	LT	4320	373	50
WALL #3	706+44.52 – 709+00.36	RT	828		
TOTAL			11101	941	50

NOTES:
– RETAINING WALLS, WITH OR WITHOUT BARRIERS, TO BE REDI–ROCK OR APPROVED EQUIVALENT
– REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL INFORMATION
– WALL PLAN & PROFILE, 32–SERIES SHEETS, ARE FOR REFERENCE ONLY, WALL DESIGN TO BE DONE BY MANUFACTURER AND SUBMITTED TO COUNTY FOR FINAL APPROVAL
– COST TO INSTALL AND ALL NECESSARY MATERIALS, INCLUDING BACKFILL, TO BE INCLUDED IN THE COST OF THE WALLS.

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

SUMMARY OF QUANTITIES

DRAWING NO. 06–02

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Notes Etc.dwg 2/27/2024 2:49 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

NORTH

500+90
501+00
502+00
503+00
504+00
505+00
506+00

BEGIN PATH
STA 501+17.65
N: 1218872.5728
E: 2186195.7393

REDWINE PATH WEST

N30°32'46.96"W
386.05'

PC: 504+76.05
C9
PT: 504+96.16

N22°51'47.72"W
153.84'

PT: 19+79.09

REDWINE ROAD

C101
20+00
21+00
22+00
N30°32'46.96"W
428.05'
23+00
24+00
PC: 24+07.14
C102
25+00

MATCHLINE 25+25 (SEE SHEET 11-02)

PC: 103+84.00
PC: 705+21.39
PT: 105+13.53

100+00
101+00
102+00
N30°17'05.49"W
484.00'
103+00
104+00
C13
105+00
C14

REDWINE MULTI-USE PATH GDOT

N26°22'43.52"W
7.86'

END GDOT PROJECT
REDWINE MULTI-USE PATH GDOT = 105+21.39
BEGIN STARRS MILL PROJECT PATH
REDWINE PATH EAST = 705+21.39
N: 1219336.1702
E: 2186017.5449

705+00

BEGIN PROJECT
STA 19+50.00
N: 1218845.0945
E: 2186265.2442

CURVE NO.= 101
PI STA.= 13+12.31
N= 1218284.7050
E= 2186596.0739
Δ= 19°26'05.6"
D= 1°26'35.6"
T= 679.85
L= 1346.63
R= 3970.00

LIST OF ALIGNMENT STATIONS:

REDWINE ROAD =	STA 10+##
ROBINSON ROAD =	STA 400+##
REDWINE MULTI-USE PATH GDOT =	STA 100+##
REDWINE PATH WEST =	STA 500+##
ROBINSON PATH WEST =	STA 600+##
REDWINE PATH EAST =	STA 700+##
REDWINE TUNNEL =	STA 800+##

CURVE NO.= 9
PI STA.= 504+86.12
N= 1219189.9052
E= 2186008.4700
Δ= 7°40'59.2"
D= 38°11'49.9"
T= 10.07
L= 20.11
R= 150.00

CURVE NO.= 13
PI STA.= 704+48.79
N= 1219271.0813
E= 2186049.8253
Δ= 3°54'22.0"
D= 3°00'56.0"
T= 64.79
L= 129.53
R= 1900.00

CURVE NO.= 14
PI STA.= 705+78.85
N= 1219387.6498
E= 2185992.0141
Δ= 9°57'06.5"
D= 8°40'52.2"
T= 57.46
L= 114.64
R= 660.00

CURVE NO.= 102
PI STA.= 28+85.96
N= 1219651.2098
E= 2185789.6504
Δ= 53°00'59.2"
D= 5°58'05.9"
T= 478.81
L= 888.30
R= 960.00

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

CONSTRUCTION LAYOUT

DRAWING NO. 11-01

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

CURVE NO.= 10
PI STA.= 507+53.62
N= 1219436.4238
E= 2185904.5228
Δ= 11°54'53.4"
D= 5°46'11.9"
T= 103.62
L= 206.50
R= 993.00

INTERSECTION
REDWINE PATH WEST = 508+56.50
ROBINSON PATH WEST = 600+00.00
REDWINE TUNNEL = 800+00.00
N: 1219538.1602
E: 2185884.8423

CURVE NO.= 11
PI STA.= 601+22.86
N= 1219606.9521
E= 2185783.0520
Δ= 21°18'27.3"
D= 14°19'26.2"
T= 75.25
L= 148.75
R= 400.00

507+00
508+00
600+00
601+00
602+00
603+00
NORTH
PC: 506+50.00
REDWINE PATH WEST
C10
508+56
PC: 600+47.19
ROBINSON PATH WEST
C11
PT: 601+96.36
N34°38'27.01"W
159.10'
PT: 401+79.04
403+00
402+00
N34°38'27.01"W
222.09'
ROBINSON ROAD
C202
PC: 400+70.43
401+00
MATCHLINE 25+25 (SEE SHEET 11-01)
26+00
C14
PCC: 706+36.03
PT: 706+64.78
C15
27+00
REDWINE TUNNEL
799+83
800+00
PC: 400+16.20
C201
N55°56'54.28"W
47.61'
N88°20'26.10"W
16.20'
INTERSECTION
REDWINE ROAD = 27+94.76
ROBINSON ROAD = 400+00.00
N: 1219602.9049
E: 2185907.7909
400+00
28+00
MATCHLINE 403+25 (SEE SHEET 11-03)
706+00
C16
66.00'
N79°04'05.72"E
REDWINE PATH EAST
N13°55'52.48"W
34.07'
PC: 706+98.84
707+00
INTERSECTION
REDWINE PATH EAST = 707+47.10
REDWINE TUNNEL = 800+66.00
N: 1219550.6953
E: 2185949.6410
800+83
PT: 707+99.66
708+00
N7°41'58.67"W
57.20'
PC: 708+36.86
C17
PCC: 708+90.0
C18
29+00
PT: 709+26.53
C102
REDWINE ROAD
PC: 709+67.94
30+00
709+00
N1°14'48.45"E
35.41'
C19
END STARRS MILL PROJECT PATH
REDWINE PATH EAST = 709+71.61
BEGIN GDOT PROJECT
REDWINE MULTI-USE PATH GDOT = 109+72.06
110+00
710+00
N: 1219773.8516
E: 2185931.8470
MATCHLINE 30+50 (SEE SHEET 11-04)

CURVE NO.= 201
PI STA.= 400+44.00
N= 1219604.1790
E= 2185863.8111
Δ= 31°04'14.5"
D= 57°17'44.8"
T= 27.80
L= 54.23
R= 100.00

CURVE NO.= 202
PI STA.= 401+25.45
N= 1219648.9593
E= 2185794.1392
Δ= 22°37'44.6"
D= 20°50'05.4"
T= 55.02
L= 108.61
R= 275.00

CURVE NO.= 102
PI STA.= 28+85.96
N= 1219651.2098
E= 2185789.6504
Δ= 53°00'59.2"
D= 5°58'05.9"
T= 478.81
L= 888.30
R= 960.00

LIST OF ALIGNMENT STATIONS:

REDWINE ROAD =	STA 10+##
ROBINSON ROAD =	STA 400+##
REDWINE MULTI-USE PATH GDOT =	STA 100+##
REDWINE PATH WEST =	STA 500+##
ROBINSON PATH WEST =	STA 600+##
REDWINE PATH EAST =	STA 700+##
REDWINE TUNNEL =	STA 800+##

CURVE NO.= 14
PI STA.= 705+78.85
N= 1219387.6498
E= 2185992.0141
Δ= 9°57'06.5"
D= 8°40'52.2"
T= 57.46
L= 114.64
R= 660.00

CURVE NO.= 15
PI STA.= 706+50.40
N= 1219456.5567
E= 2185971.6984
Δ= 2°29'44.6"
D= 8°40'52.2"
T= 14.38
L= 28.75
R= 660.00

CURVE NO.= 16
PI STA.= 707+49.30
N= 1219552.5505
E= 2185947.8868
Δ= 6°13'53.8"
D= 6°10'50.8"
T= 50.46
L= 100.82
R= 927.00

CURVE NO.= 17
PI STA.= 708+73.45
N= 1219675.6793
E= 2185931.2399
Δ= 6°19'50.6"
D= 19°05'54.9"
T= 16.59
L= 33.15
R= 300.00

CURVE NO.= 18
PI STA.= 709+08.27
N= 1219710.5243
E= 2185930.4072
Δ= 2°36'56.5"
D= 7°09'43.1"
T= 18.26
L= 36.52
R= 800.00

CURVE NO.= 19
PI STA.= 710+16.74
N= 1219818.9753
E= 2185932.7676
Δ= 8°14'55.7"
D= 7°32'20.1"
T= 54.80
L= 109.42
R= 760.00

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

CONSTRUCTION LAYOUT

DRAWING NO. 11-02

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_ConstLayout.dwg 10/18/2023 10:25 AM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

NORTH

604+00 605+00 606+00 607+00 608+00 608+86

PI: 603+55.47

ROBINSON PATH WEST

N30°23'34.26"W
530.57'

END PATH TIE-IN
TO EXISTING
STA 608+43.38
N: 1220220.6213
E: 2185402.9926

ROBINSON ROAD

N34°38'27.01"W
222.09'

404+00 C203 405+00 406+00 N30°23'34.26"W 407+00 408+00 408+58

412.85'

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)
N: 1220256.0545
E: 2185412.3523

PC: 404+01.13

PT: 404+45.62

MATCHLINE 403+25 (SEE SHEET 11-02)

MATCHLINE (SEE SHEET 11-04)

CURVE NO.= 203
PI STA.= 404+23.38
N= 1219895.2590
E= 2185623.9692
Δ= 4°14'52.7"
D= 9°32'57.5"
T= 22.25
L= 44.48
R= 600.00

LIST OF ALIGNMENT STATIONS:

REDWINE ROAD =	STA 10+##
ROBINSON ROAD =	STA 400+##
REDWINE MULTI-USE PATH GDOT =	STA 100+##
REDWINE PATH WEST =	STA 500+##
ROBINSON PATH WEST =	STA 600+##
REDWINE PATH EAST =	STA 700+##
REDWINE TUNNEL =	STA 800+##

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

CONSTRUCTION LAYOUT

DRAWING NO. 11-03

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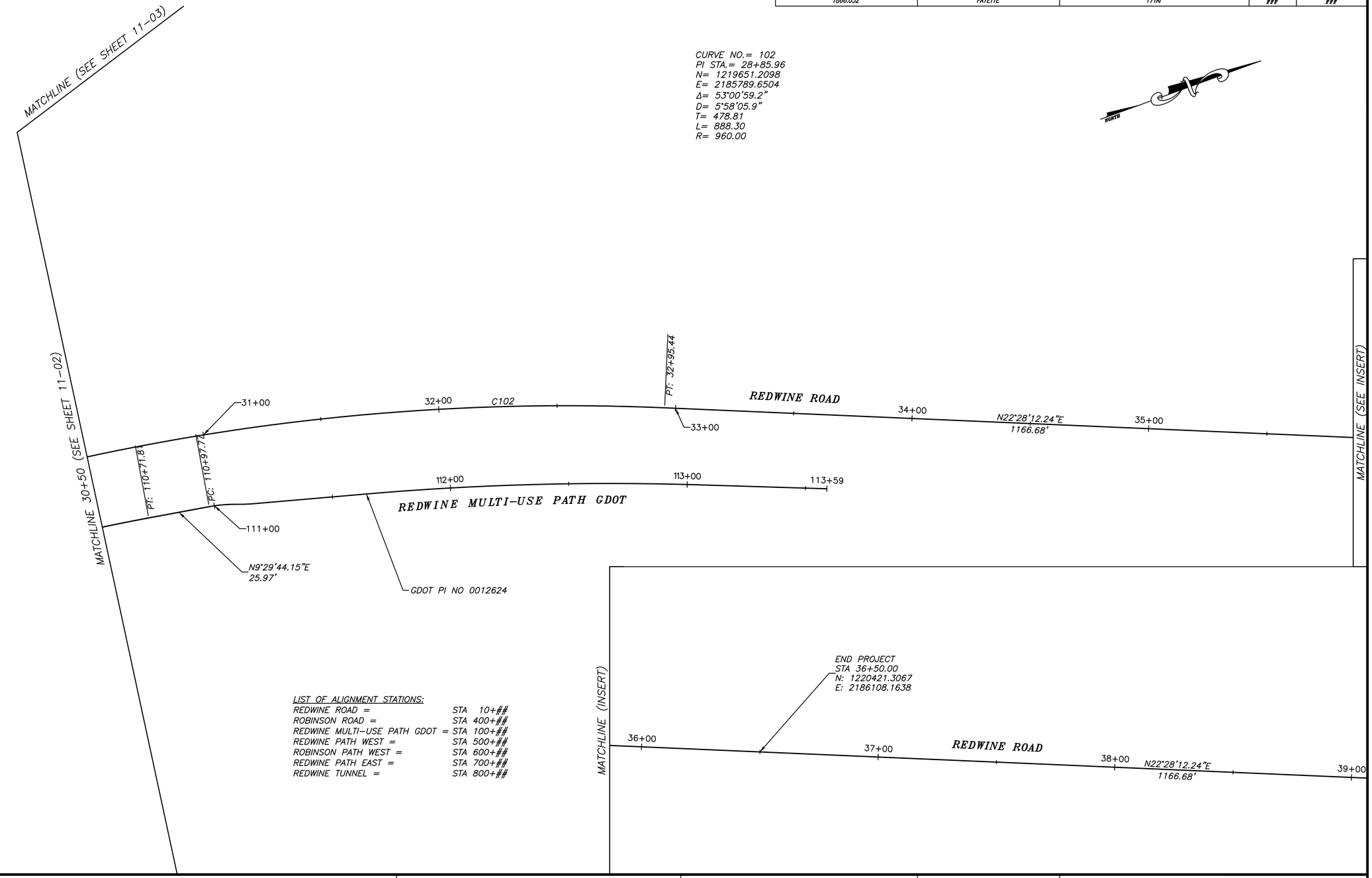
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



0 20 40 80

SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

CONSTRUCTION LAYOUT

DRAWING NO. 11-04

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

IN (SE) 829.13
IN (NE) 828.93
OUT 828.70

6" PVC SS

PAVEMENT CUT FOR SS FORCE MAIN (FM) DOES NOT CONNECT TO MH. COULD NOT LOCATE ACTUAL FM

PEGGY H CARSON
060902001
301 FORESTON PL
DB3923 PG0419

EX R/W

JENNIFER A ZEITZ
060902033
300 FORESTON PL
DB2871 PG99

JOHN D BEANE II
060904044
702 REDWOOD PARK
DB4519 PG0520

DIANNE MANEY
060904043
704 REDWOOD PARK
DB4689 PG0521

BLAKE M & VIRGINIA W GIBSON
060904042
706 REDWOOD PARK

NORTH

ONCE NEW PATH & TUNNEL ARE OPEN FOR PUBLIC USE CONTRACTOR TO OBLITERATE EX PATHWAY & GRADE TO DRAIN

CONTRACTOR TO BE RESPONSIBLE TO REPLACE, RELOCATE, OR REPAIR LIGHTING, ELECTRICAL, IRRIGATION, AS NECESSARY.

SIGN TO BE DEMOLISHED & REMOVED BY CONTRACTOR. TO BE REPLACED BY PEACHTREE CITY.

CHILDREN AT PLAY

500+90 501+00 502+00 503+00 504+00 505+00 506+00

001
PEACHTREE CITY
060902034
CITY GREENBELT
PB18 PG47-48 & 62-65

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

#4RB

STD TP "D" CURB CUT RAMP (TYP)

BEGIN PATH
501+17.65

REDWINE PATH WEST

4' (TYP)

10'

EX R/W

CART STOP

STOP

CART PATH & CROSSWALK

REDWINE RD
FORESTON PLACE
ROAD SIGN

CART PATH & CROSSWALK

10' PATH WITH 3' SHOULDERS (TYP)

FIBER OPTIC MARKER

TIE-IN TO EX CURB & GUTTER OVER 4' TRANSITION (TYP)

10' WIDE CUT-THRU CONC MEDIAN WITH CONC HEADER CURBS AND DETECTABLE WARNING SURFACES.

ST A7.1

23+03.30
21.75 L

23+53.30
12.00 L

CLASS "B" CONC. WIDENING

22+82.63
21.75 L

BEGIN PAVING
22+82.63

REDWINE ROAD

20+00 21+00 22+00 23+00 24+00 25+00

BEGIN "W" BEAM G'RAIL
23+80.68
14.92 R

25+02.09
12.00 R

CART PATH & CROSSWALK

ST GDOT A-1 | ST GDOT A-1A | ST GDOT A-2 | ST GDOT A-3 | ST GDOT A-4 | ST GDOT A-5 | ST GDOT A-6 | ST GDOT A-7 | ST GDOT A-8

REDWINE MULTI-USE PATH GDOT

18"

100+00 101+00 102+00 103+00 104+00 105+00

12" DIR

ELECTRICAL BOX

ELECTRICAL BOX

EX R/W

GDOT PROJECT STORM SHOWN FOR REFERENCE

GDOT STD TP 12A G'RAIL TERMINAL
23+27.56
14.12 R

BEGIN WALL #2
705+21.39
7.00 L

ST C4

GDOT PI NO 0012624

BEGIN PROJECT
STA 19+50.00
N: 1218845.0945
E: 2186265.2442

WILLIAM C BUTLER
060304009
280 JEFFERSON WOODS DR
DB1327 PG432

DANIEL GAVORA
060304008
275 JEFFERSON WOODS
DB4542 PG0490

LAURIE D RADER
060302009
170 MOCKINGBIRD TRL
DB3305 PG639

END GDOT PATH PROJECT
REDWINE MULTI-USE PATH GDOT = 105+21.39
BEGIN STARRS MILL PATH PROJECT
REDWINE PATH EAST = 705+21.39

705+00

ONCE NEW PATH & TUNNEL ARE OPEN FOR PUBLIC USE CONTRACTOR TO OBLITERATE EX PATHWAY & GRADE TO DRAIN

004
RUDOLF MEZOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG435

MATCHLINE 25+25 (SEE SHEET 13-02)

REFER TO WALL PLAN & PROFILE SHEETS (SERIES 32) FOR ALL WALLS

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

MAINLINE PLAN

DRAWING NO. 13-01

10/18/2023 10:43 AM USER: Eric Brisse
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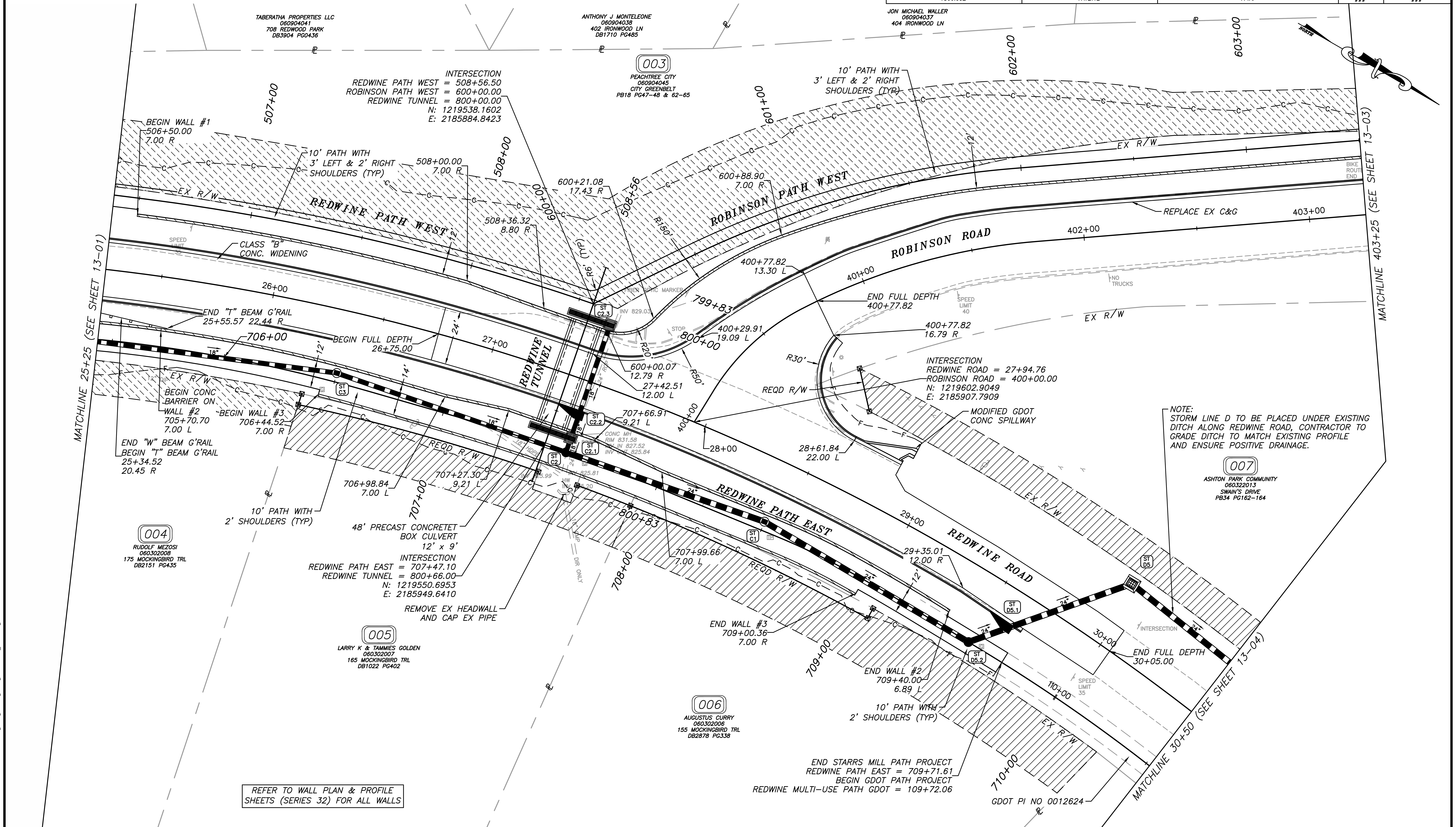
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###



TABERATHA PROPERTIES LLC
060904041
708 REDWOOD PARK
DB3904 PG0436
ANTHONY J MONTELEONE
060904038
402 IRONWOOD LN
DB1710 PG485
JON MICHAEL WALLER
060904037
404 IRONWOOD LN
003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65
INTERSECTION
REDWINE PATH WEST = 508+56.50
ROBINSON PATH WEST = 600+00.00
REDWINE TUNNEL = 800+00.00
N: 1219538.1602
E: 2185884.8423
10' PATH WITH
3' LEFT & 2' RIGHT
SHOULDERS (TYP)
BEGIN WALL #1
506+50.00
7.00 R
507+00
508+00
508+00.00
7.00 R
600+21.08
17.43 R
508+56
600+88.90
7.00 R
601+00
602+00
603+00
EX R/W
REDWINE PATH WEST
ROBINSON PATH WEST
ROBINSON ROAD
REPLACE EX C&G
402+00
403+00
BIKE ROUTE END
MATCHLINE 403+25 (SEE SHEET 13-03)
MATCHLINE 25+25 (SEE SHEET 13-01)
508+36.32
8.80 R
R6' (TYP)
R150'
CLASS "B"
CONC. WIDENING
26+00
END "T" BEAM G'RAIL
25+55.57 22.44 R
706+00
BEGIN FULL DEPTH
26+75.00
24'
27+00
REDWINE TUNNEL
799+83
800+00
400+77.82
13.30 L
401+00
END FULL DEPTH
400+77.82
400+29.91
19.09 L
400+77.82
16.79 R
NO TRUCKS
SPEED LIMIT 40
EX R/W
R30'
INTERSECTION
REDWINE ROAD = 27+94.76
ROBINSON ROAD = 400+00.00
N: 1219602.9049
E: 2185907.7909
REQD R/W
MODIFIED GDOT
CONC SPILLWAY
600+00.07
12.79 R
27+42.51
12.00 L
R20'
R50'
707+66.91
9.21 L
400+00
28+00
NOTE:
STORM LINE D TO BE PLACED UNDER EXISTING DITCH ALONG REDWINE ROAD, CONTRACTOR TO GRADE DITCH TO MATCH EXISTING PROFILE AND ENSURE POSITIVE DRAINAGE.
BEGIN CONC
BARRIER ON
WALL #2
705+70.70
7.00 L
BEGIN WALL #3
706+44.52
7.00 R
END "W" BEAM G'RAIL
BEGIN "T" BEAM G'RAIL
25+34.52
20.45 R
CONC MH
RIM 831.58
INV IN 827.52
INV OUT 825.84
28+61.84
22.00 L
007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164
707+27.30
9.21 L
706+98.84
7.00 L
707+00
REQD R/W
REDWINE PATH EAST
29+00
REDWINE ROAD
EX R/W
10' PATH WITH
2' SHOULDERS (TYP)
004
RUDOLF MEZOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG435
48' PRECAST CONCRETET
BOX CULVERT
12' x 9'
INTERSECTION
REDWINE PATH EAST = 707+47.10
REDWINE TUNNEL = 800+66.00
N: 1219550.6953
E: 2185949.6410
800+83
707+99.66
7.00 L
708+00
29+35.01
12.00 R
REMOVE EX HEADWALL
AND CAP EX PIPE
005
LARRY K & TAMMIES GOLDEN
060302007
165 MOCKINGBIRD TRL
DB1022 PG402
END WALL #3
709+00.36
7.00 R
709+00
END WALL #2
709+40.00
6.89 L
30+00
END FULL DEPTH
30+05.00
110+00
SPEED LIMIT 35
10' PATH WITH
2' SHOULDERS (TYP)
006
AUGUSTUS CURRY
060302006
155 MOCKINGBIRD TRL
DB2878 PG338
MATCHLINE 30+50 (SEE SHEET 13-04)
END STARRS MILL PATH PROJECT
REDWINE PATH EAST = 709+71.61
BEGIN GDOT PATH PROJECT
REDWINE MULTI-USE PATH GDOT = 109+72.06
710+00
GDOT PI NO 0012624
REFER TO WALL PLAN & PROFILE SHEETS (SERIES 32) FOR ALL WALLS

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LEGEND

PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	—C—F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

MAINLINE PLAN

DRAWING NO. 13-02

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

SOUTHERN CROSS PTC REALTY LLC
060904035
408 IRONWOOD LN
DB4912 PG0578

APPROXIMATE LAND LOT LINE

LL 28

LL 18

JOSEPH P JR & THERESA ALFANO
060904036
406 IRONWOOD LN

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

DAVID & EVA KELLY
060903007
9 LEA WAY
DB4113 PG0589

NORTH

WOODEN GUEST HOUSE

6' WOODEN FENCE

604+00

605+00

606+00

607+00

608+00

608+86

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

END WALL #1
603+53.75
7.00 R

END "T" BEAM G'RAIL
BEGIN "W" BEAM G'RAIL
403+46.52
23.35 L

DOUBLE SIDED G'RAIL
WITH "W" BEAM ALONG
TRAIL SIDE

END "W" BEAM G'RAIL
403+71.45
21.50 L

GDOT STD TP 10-D
G'RAIL TERMINAL
404+11.67

10' PATH WITH
3' SHOULDERS (TYP)

10'

END PATH TIE-IN
TO EXISTING
608+43.38

EX R/W

ROBINSON PATH WEST

CART STOP

STOP AHEAD

ROBINSON ROAD

403+30.06
13.79 L

404+00

405+00

406+00

407+00

408+00

408+58

CART PATH & CROSSWALK

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)

MATCHLINE 403+25 (SEE SHEET 13-02)

BEGIN "T" BEAM G'RAIL
403+25.89
24.59 L

EX R/W

ROBINSON ROAD
ASHTON PARK

ROD IRON FENCE

CART PATH & CROSSWALK

CART STOP

ROD IRON FENCE

REFER TO WALL PLAN & PROFILE
SHEETS (SERIES 32) FOR ALL WALLS

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

#4RB

6' PVC FENCE

#4RB

NORMAN TERRELL PARKER
060322010
204 ASHTON PARK
DB3576 PG0370

JOHN R GETREU
060322011
202 ASHTON PARK
DB4754 PG0640

DORIS ANN MARTIN
060322012
200 ASHTON PARK
DB3451 PG0156

JAMES F MEEDER
060322009
206 ASHTON PARK
DB4256 PG0582

MICHAEL S GUNNELLS
060322001
101 ASHTON PARK
DB2531 PG320

BEVERLY H & MARION J WHITE
060322002
103 ASHTON PARK
DB4381 PG0620

APPROXIMATE LAND LOT LINE

LL 28

LL 18

MATCHLINE (SEE SHEET 13-04)

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

MAINLINE PLAN

DRAWING NO.
13-03

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 13-03)

JAMES F MEEDER
060322009
206 ASHTON PARK
DB4256 PG0582

TRUDY LOUISE GOMER
060322008
208 ASHTON PARK
DB2559 PG25

MICHAEL SHANE LANCE
060322007
210 ASHTON PARK
DB4501 PG0131

TONY F DASILVA
060322006
212 ASHTON PARK
DB2631 PG439

CHANG BUM PARK
060322005
214 ASHTON PARK
DB4898 PG0331

DENNIS D PALMER
060323018
216 ASHTON PARK
DB4722 PG0510

MARK A POWELL
060323017
218 ASHTON PARK
DB4325 PG0436

#428

NORTH

4" PVC FENCE

NOTE:
STORM LINE D TO BE PLACED UNDER EXISTING DITCH ALONG REDWINE ROAD, CONTRACTOR TO GRADE DITCH TO MATCH EXISTING PROFILE AND ENSURE POSITIVE DRAINAGE.

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

SEE STORM PROFILES FOR APPROX. LIMITS OF DITCH GRADING

EX R/W

24"

ST D4

ST D3

ST D2

ST D1

ST D0

REDWINE ROAD

31+00 32+00 33+00 34+00 35+00

MATCHLINE 30+50 (SEE SHEET 13-02)

111+00 112+00 113+00 113+59

REDWINE MULTI-USE PATH GDOT

EX R/W

12" DIP

CASTILLO MARIA
060302003
125 MOCKINGBIRD TRL
DB3613 PG555

MARTIN ANTHONY
060302002
115 MOCKINGBIRD TRL
BK4789 PG482-484

MATCHLINE (SEE INSERT)

GDOT PI NO 0012624

KAREN VAN HORN
060302005
145 MOCKINGBIRD TRL
DB3887 PG628

TIMOTHY J & CHERYL MURPHY
060302004
135 MOCKINGBIRD TRL
DB1288 PG109

MATCHLINE (INSERT)

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

EX R/W

36+00 37+00 38+00 39+00

REDWINE ROAD

INV=794.56'
24" CMP

INV=793.71'

GDOT PROJECT STORM
SHOWN FOR REFERENCE ONLY

EX R/W

LEGEND

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS —C—F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR. OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

MAINLINE PLAN

DRAWING NO. 13-04

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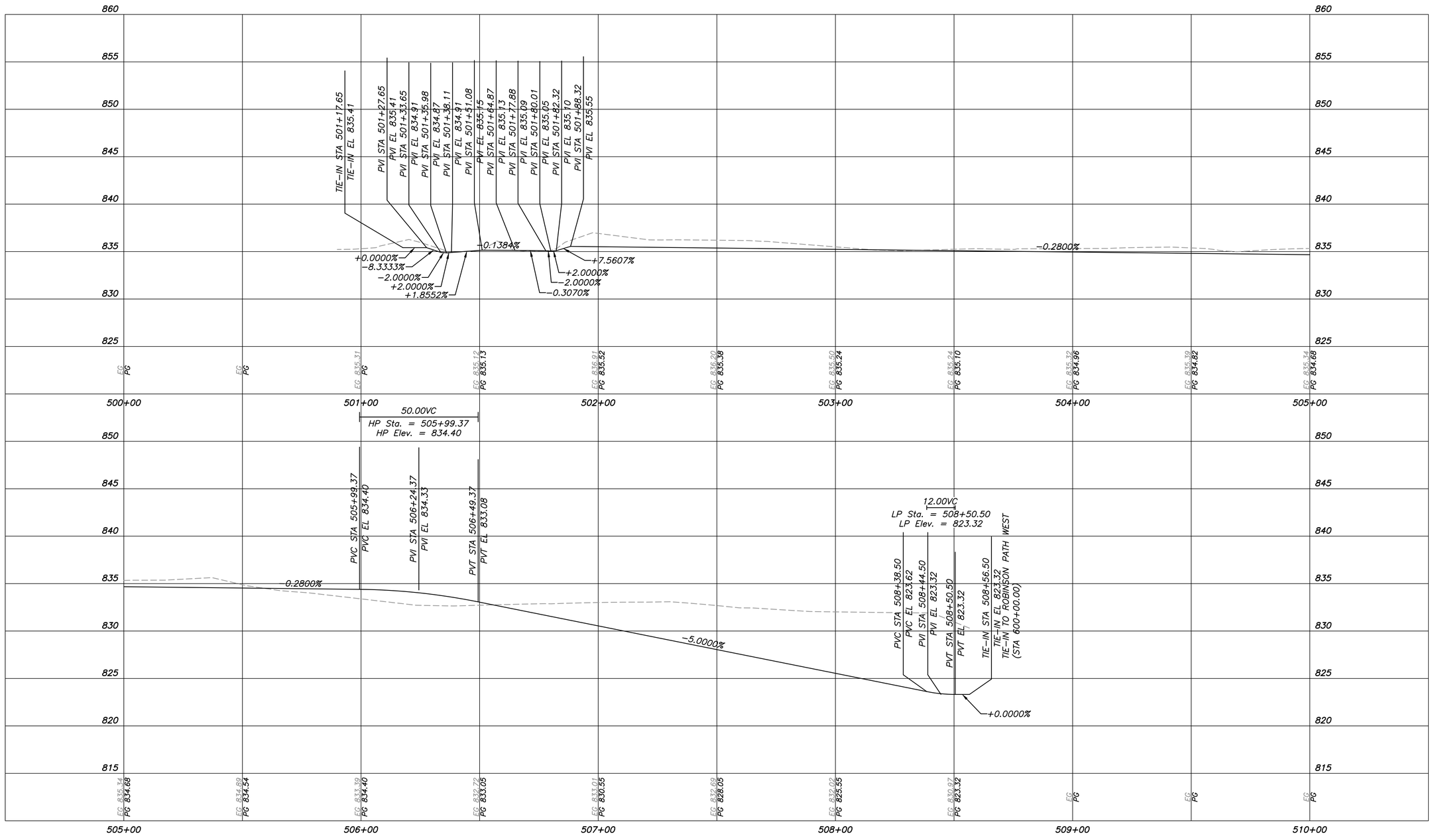
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



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0 20 40 80
HORIZONTAL SCALE IN FEET

0 5 10 20
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

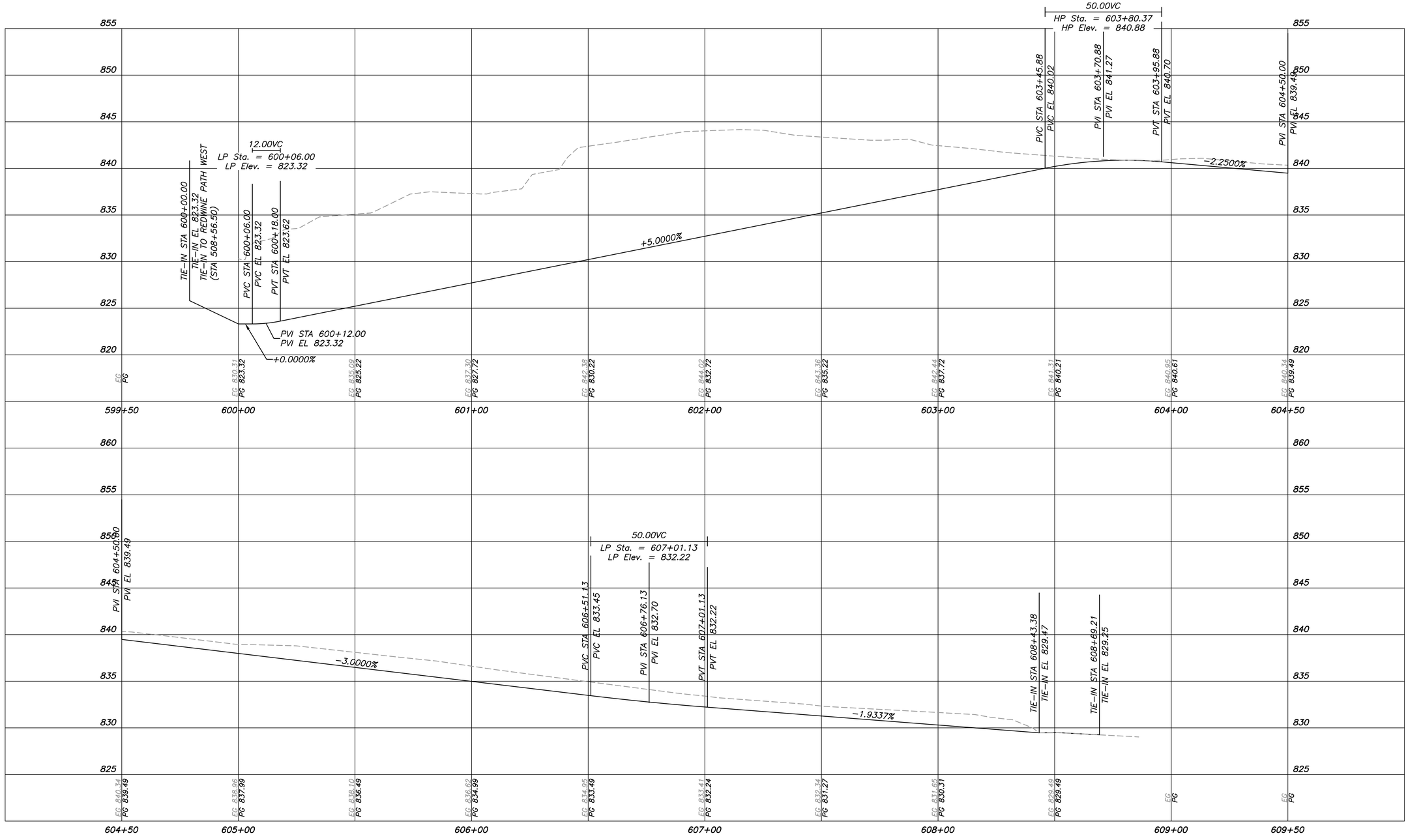
FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

PATH PROFILES
REDWINE PATH WEST

DRAWING NO.
15-01

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



0 20 40 80
HORIZONTAL SCALE IN FEET

0 5 10 20
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

PATH PROFILES
ROBINSON PATH WEST

DRAWING NO.
15-02

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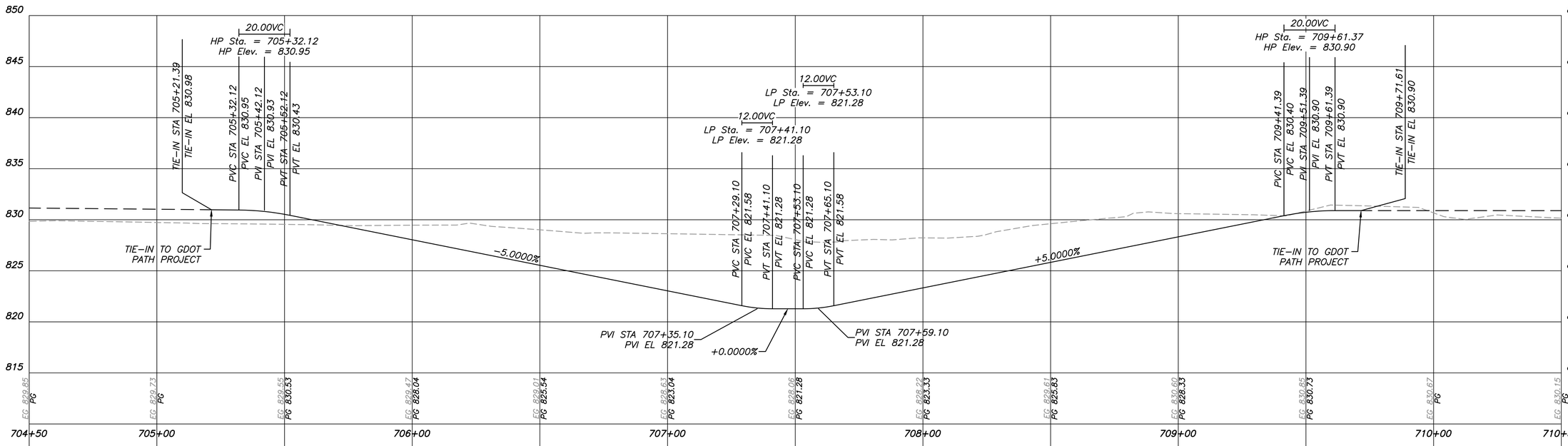
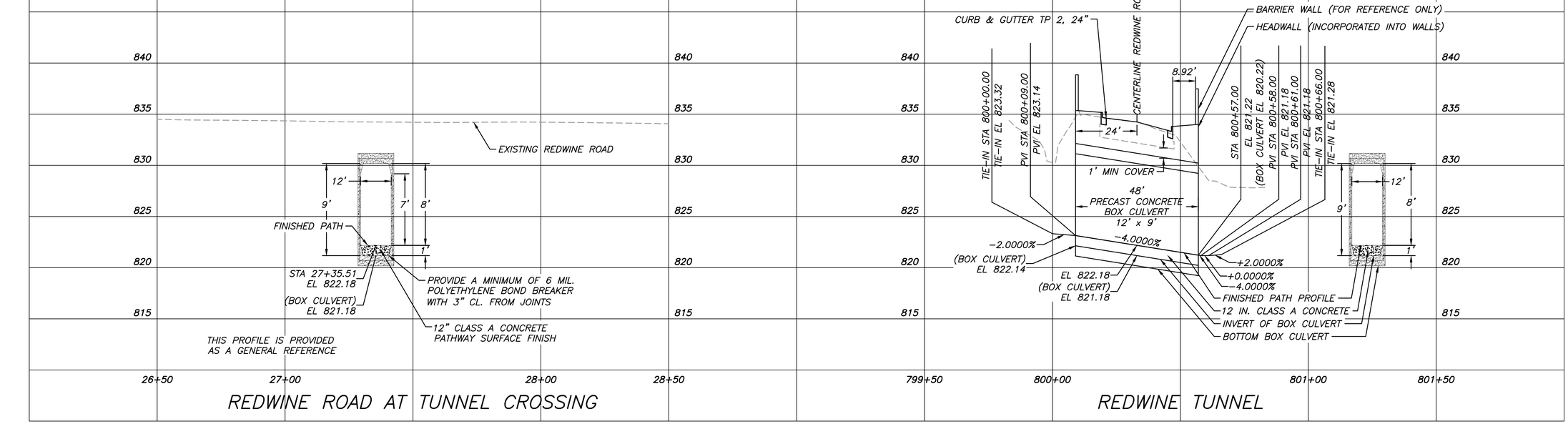
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///





0 20 40 80
HORIZONTAL SCALE IN FEET

0 5 10 20
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971–5407 FAX: (770) 971–0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

PATH PROFILES

DRAWING NO. 15–03

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

NORTH

PEGGY H CARSON
060902001
301 FORESTON PL
DB3923 PG0419

JENNIFER A ZEITZ
060902033
300 FORESTON PL
DB2871 PG99

JOHN D BEANE II
060904044
702 REDWOOD PARK
DB4519 PG0520

DIANNE MANEY
060904043
704 REDWOOD PARK
DB4689 PG0521

BLAKE M & VIRGINIA W GIBSON
060904042
706 REDWOOD PARK

PEACHTREE CITY
060902034
CITY GREENBELT
PB18 PG47-48 & 62-65

PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

EX R/W

6" PVC SS

IN (SE) 829.13
IN (NE) 828.93
OUT 828.70

PAVEMENT CUT FOR SS FORCE MAIN (FM) DOES NOT CONNECT TO MH. COULD NOT LOCATE ACTUAL FM

CHILDREN AT PLAY

500+90 501+00 502+00 503+00 504+00 505+00 506+00

BEGIN PATH
501+17.65

STD TP "D" CURB CUT RAMP (TYP)

STOP

CART STOP

CART PATH & CROSSWALK

REDWINE RD
FORESTON PLACE
ROAD SIGN

10' PATH

REDWINE PATH WEST

FIBER OPTIC MARKER

PG 833.60
PG/EG 833.65
PG 834.39
PG 834.98
PG 835.51
PG 835.65

20+00 21+00 22+00 23+00 24+00 25+00

~ASPHALT~

REDWINE ROAD

25+02.09
12.00 R
PG/EG 834.00

MATCHLINE 25+25 (SEE SHEET 18-02)

100+00 101+00 102+00 103+00 104+00 105+00

ST GDOT A-1 ST GDOT A-1A ST GDOT A-2 ST GDOT A-3 ST GDOT A-4 ST GDOT A-5 ST GDOT A-6 ST GDOT A-7 ST GDOT A-8 ST C4

GDOT PI NO 0012624

REDWINE MULTI-USE PATH GDOT

EX R/W

BEGIN PROJECT
STA 19+50.00
N: 1218845.0945
E: 2186265.2442

BEGIN WALL #2
705+21.39
7.00 L

END GDOT PATH PROJECT
REDWINE MULTI-USE PATH GDOT = 105+21.39
BEGIN STARRS MILL PATH PROJECT
REDWINE PATH EAST = 705+21.39

705+00

WILLIAM G BUTLER
060304009
280 JEFFERSON WOODS DR
DB1327 PG432

DANIEL GAVORA
060304008
275 JEFFERSON WOODS
DB4542 PG0490

LAURIE D RADER
060302009
170 MOCKINGBIRD TRL
DB3305 PG639

004
RUDOLF MEZOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG435

REFER TO WALL PLAN & PROFILE SHEETS (SERIES 32) FOR ALL WALLS

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

GRADING PLAN

DRAWING NO. 18-01

USER: Eric Brisse
10/17/2023 4:03 PM
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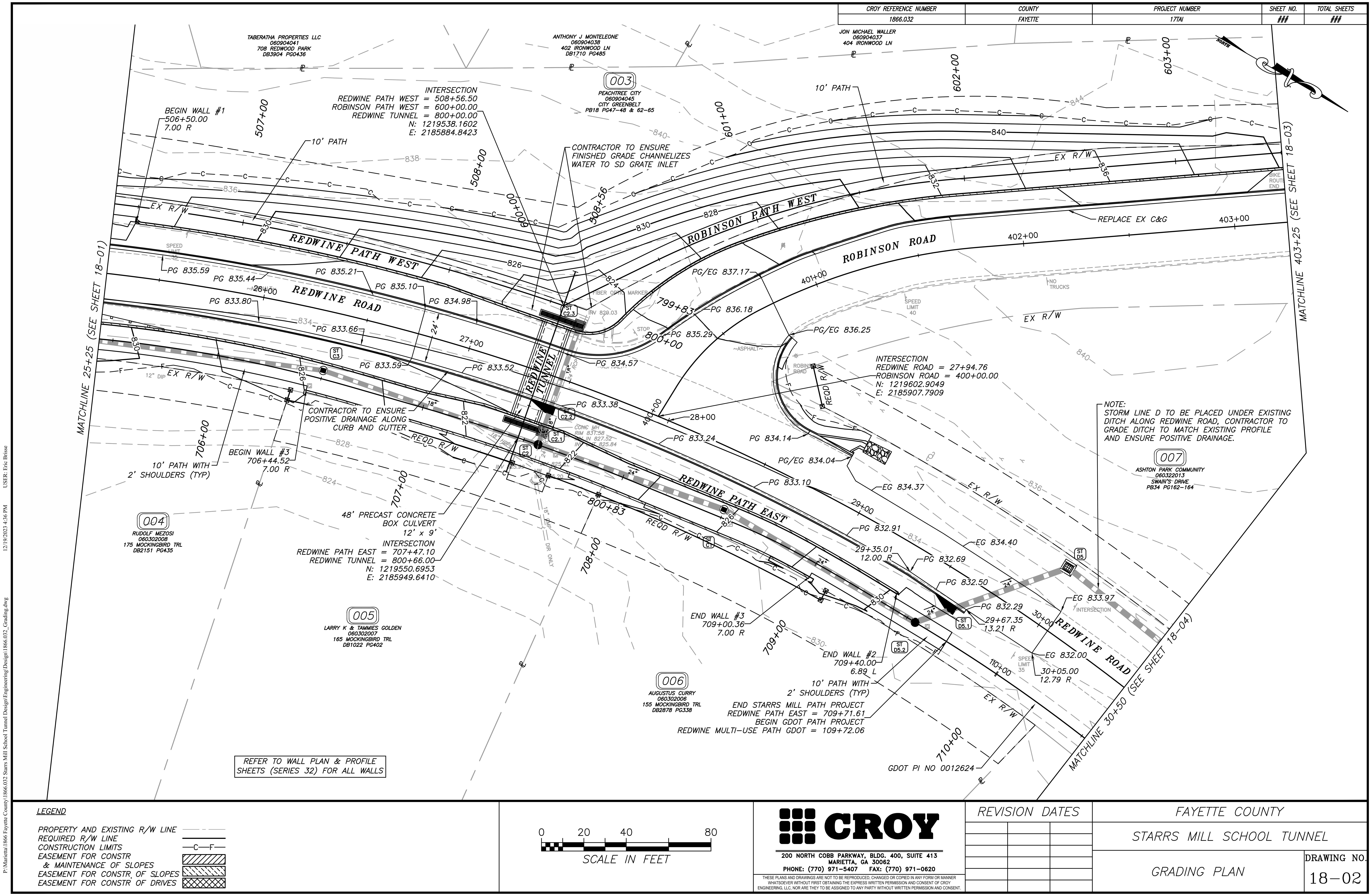

CROY REFERENCE NUMBER 1866.032
COUNTY FAYETTE
PROJECT NUMBER 17TAI
SHEET NO. ###
TOTAL SHEETS ###
REDWINE PATH WEST
REDWINE ROAD
ROBINSON PATH WEST
ROBINSON ROAD
REDWINE TUNNEL
REDWINE PATH EAST
INTERSECTION
REDWINE PATH WEST = 508+56.50
ROBINSON PATH WEST = 600+00.00
REDWINE TUNNEL = 800+00.00
N: 1219538.1602
E: 2185884.8423
BEGIN WALL #1
506+50.00
7.00 R
10' PATH
CONTRACTOR TO ENSURE FINISHED GRADE CHANNELIZES WATER TO SD GRATE INLET
REPLACE EX C&G
INTERSECTION
REDWINE ROAD = 27+94.76
ROBINSON ROAD = 400+00.00
N: 1219602.9049
E: 2185907.7909
NOTE:
STORM LINE D TO BE PLACED UNDER EXISTING DITCH ALONG REDWINE ROAD, CONTRACTOR TO GRADE DITCH TO MATCH EXISTING PROFILE AND ENSURE POSITIVE DRAINAGE.
CONTRACTOR TO ENSURE POSITIVE DRAINAGE ALONG CURB AND GUTTER
BEGIN WALL #3
706+44.52
7.00 R
10' PATH WITH 2' SHOULDERS (TYP)
48' PRECAST CONCRETE BOX CULVERT 12' x 9'
INTERSECTION
REDWINE PATH EAST = 707+47.10
REDWINE TUNNEL = 800+66.00
N: 1219550.6953
E: 2185949.6410
END WALL #3
709+00.36
7.00 R
END WALL #2
709+40.00
6.89 L
10' PATH WITH 2' SHOULDERS (TYP)
END STARRS MILL PATH PROJECT
REDWINE PATH EAST = 709+71.61
BEGIN GDOT PATH PROJECT
REDWINE MULTI-USE PATH GDOT = 109+72.06
GDOT PI NO 0012624
REFER TO WALL PLAN & PROFILE SHEETS (SERIES 32) FOR ALL WALLS
MATCHLINE 25+25 (SEE SHEET 18-01)
MATCHLINE 403+25 (SEE SHEET 18-03)
MATCHLINE 30+50 (SEE SHEET 18-04)
003 PEACHTREE CITY 060904045 CITY GREENBELT PB18 PG47-48 & 62-65
004 RUDOLF MEZOSI 060302008 175 MOCKINGBIRD TRL DB2151 PG435
005 LARRY K & TAMMIES GOLDEN 060302007 165 MOCKINGBIRD TRL DB1022 PG402
006 AUGUSTUS CURRY 060302006 155 MOCKINGBIRD TRL DB2878 PG338
007 ASHTON PARK COMMUNITY 060322013 SWAIN'S DRIVE PB34 PG162-164
TABERATHA PROPERTIES LLC 060904041 708 REDWOOD PARK DB3904 PG0436
ANTHONY J MONTELEONE 060904038 402 IRONWOOD LN DB1710 PG485
JON MICHAEL WALLER 060904037 404 IRONWOOD LN
LEGEND
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR. OF SLOPES
EASEMENT FOR CONSTR OF DRIVES
0 20 40 80
SCALE IN FEET
CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620
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REVISION DATES
FAYETTE COUNTY
STARRS MILL SCHOOL TUNNEL
GRADING PLAN
DRAWING NO. 18-02
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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

SOUTHERN CROSS PTC REALTY LLC
060904035
408 IRONWOOD LN
DB4912 PG0578

APPROXIMATE LAND LOT LINE

LL 29

LL 18

JOSEPH P JR & THERESA ALFANO
060904036
406 IRONWOOD LN

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

DAVID & EVA KELLY
060903007
9 LEA WAY
DB4113 PG0589

NORTH

WOODEN GUEST HOUSE

6' WOODEN FENCE

604+00

605+00

606+00

607+00

608+00

608+86

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

END WALL #1
603+53.75
7.00 R

842

840

838

836

834

832

830

10' PATH

END PATH TIE-IN
TO EXISTING
608+43.38

EX R/W

ROBINSON PATH WEST

STOP AHEAD

~ASPHALT~

ROBINSON ROAD

404+00

405+00

406+00

407+00

408+00

408+58

CART STOP

~ASPHALT CART PATH~

CART PATH & CROSSWALK

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)

MATCHLINE 403+25 (SEE SHEET 18-02)

FO

ROBINSON ROAD
ASHTON PARK

4' ROD IRON FENCE

CART PATH & CROSSWALK

CART STOP

STOP

ASPHALT CART PATH

REFER TO WALL PLAN & PROFILE SHEETS (SERIES 32) FOR ALL WALLS

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

#4RB

6' PVC FENCE

#4RB

NORMAN TERRELL PARKER
060322010
204 ASHTON PARK
DB3576 PG0370

JOHN R GETREU
060322011
202 ASHTON PARK
DB4754 PG0640

DORIS ANN MARTIN
060322012
200 ASHTON PARK
DB3451 PG0156

JAMES F MEEDER
060322009
206 ASHTON PARK
DB4256 PG0582

MICHAEL S GUNNELLS
060322001
101 ASHTON PARK
DB2531 PG320

BEVERLY H & MARION J WHITE
060322002
103 ASHTON PARK
DB4381 PG0620

APPROXIMATE LAND LOT LINE

LL 29

LL 18

MATCHLINE (SEE SHEET 18-04)

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LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

GRADING PLAN

DRAWING NO. 18-03

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 18-03)

MATCHLINE 30+50 (SEE SHEET 18-02)

MATCHLINE (SEE INSERT)

MATCHLINE (INSERT)

JAMES F MEEDER
060322009
206 ASHTON PARK
DB4256 PG0582

TRUDY LOUISE GOMER
060322008
208 ASHTON PARK
DB2559 PG25

MICHAEL SHANE LANCE
060322007
210 ASHTON PARK
DB4501 PG0131

TONY F DASILVA
060322006
212 ASHTON PARK
DB2631 PG439

CHANG BUM PARK
060322005
214 ASHTON PARK
DB4898 PG0331

DENNIS D PALMER
060323018
216 ASHTON PARK
DB4722 PG0510

MARK A POWELL
060323017
218 ASHTON PARK
DB4325 PG0436

#428

NOTE:
STORM LINE D TO BE PLACED UNDER EXISTING DITCH ALONG REDWINE ROAD, CONTRACTOR TO GRADE DITCH TO MATCH EXISTING PROFILE AND ENSURE POSITIVE DRAINAGE.

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

SEE STORM PROFILES FOR APPROX. LIMITS OF DITCH GRADING

ST D4
ST D3
ST D2
ST D1
ST D0

24"

EX R/W

REDWINE ROAD

31+00
32+00
33+00
34+00
35+00

836
830
824
820
816
810

REDWINE MULTI-USE PATH GDOT

GDOT PI NO 0012624

111+00
112+00
113+00
113+59

12" DIP

CASTILLO MARIA
060302003
125 MOCKINGBIRD TRL
DB3613 PG555

MARTIN ANTHONY
060302002
115 MOCKINGBIRD TRL
BK4789/ PG482-484

4" PVC FENCE

NORTH

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

808
804
800

36+00
37+00
38+00
39+00

INV=794.56'
24" CMP

INV=793.17'

KAREN VAN HORN
060302005
145 MOCKINGBIRD TRL
DB3887 PG628

TIMOTHY J & CHERYL MURPHY
060302004
135 MOCKINGBIRD TRL
DB1288 PG109

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

GRADING PLAN

DRAWING NO. 18-04

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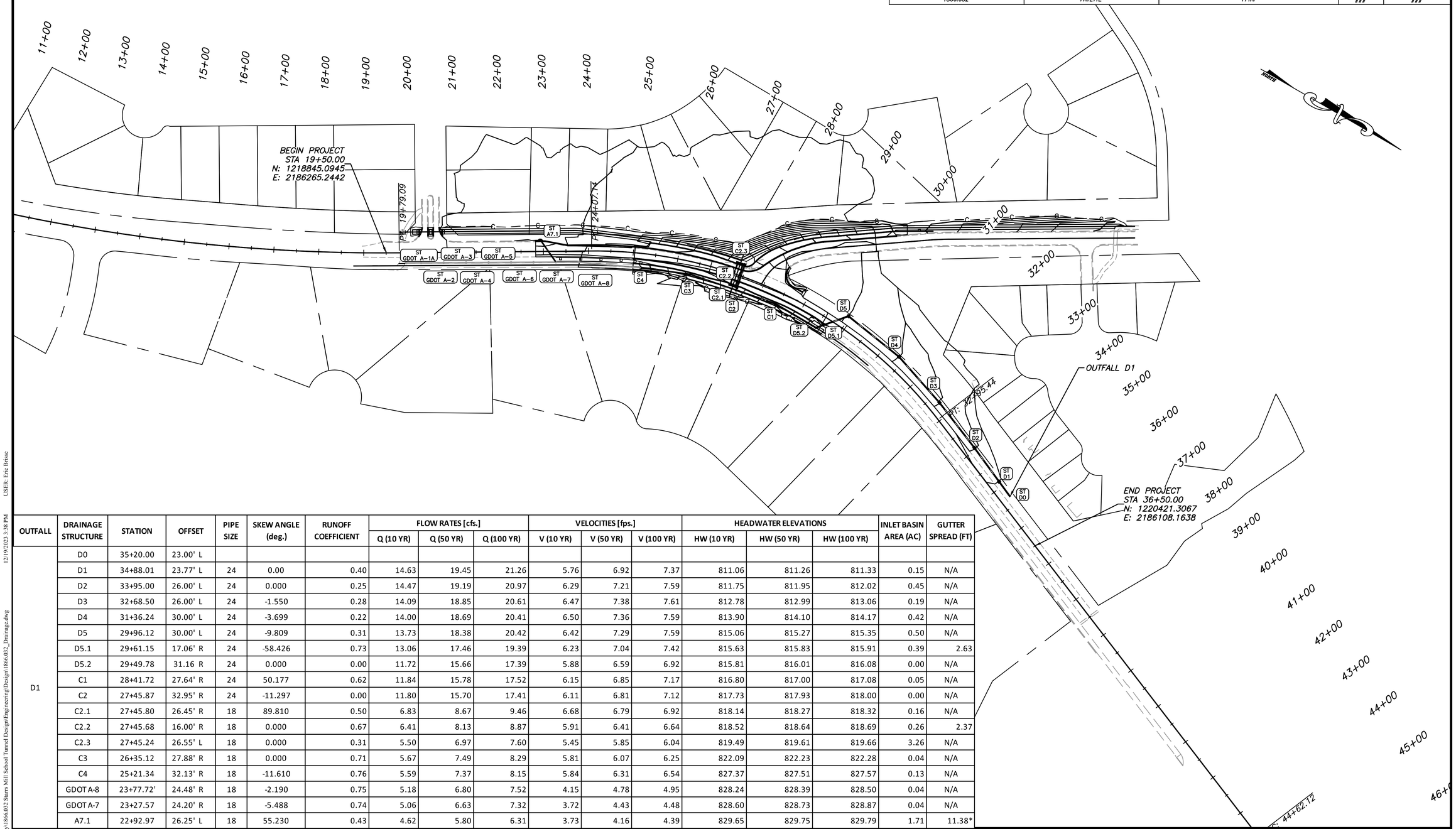
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



OUTFALL	DRAINAGE STRUCTURE	STATION	OFFSET	PIPE SIZE	SKEW ANGLE (deg.)	RUNOFF COEFFICIENT	FLOW RATES [cfs.]			VELOCITIES [fps.]			HEADWATER ELEVATIONS			INLET BASIN AREA (AC)	GUTTER SPREAD (FT)
							Q (10 YR)	Q (50 YR)	Q (100 YR)	V (10 YR)	V (50 YR)	V (100 YR)	HW (10 YR)	HW (50 YR)	HW (100 YR)		
D1	D0	35+20.00	23.00' L														
	D1	34+88.01	23.77' L	24	0.00	0.40	14.63	19.45	21.26	5.76	6.92	7.37	811.06	811.26	811.33	0.15	N/A
	D2	33+95.00	26.00' L	24	0.000	0.25	14.47	19.19	20.97	6.29	7.21	7.59	811.75	811.95	812.02	0.45	N/A
	D3	32+68.50	26.00' L	24	-1.550	0.28	14.09	18.85	20.61	6.47	7.38	7.61	812.78	812.99	813.06	0.19	N/A
	D4	31+36.24	30.00' L	24	-3.699	0.22	14.00	18.69	20.41	6.50	7.36	7.59	813.90	814.10	814.17	0.42	N/A
	D5	29+96.12	30.00' L	24	-9.809	0.31	13.73	18.38	20.42	6.42	7.29	7.59	815.06	815.27	815.35	0.50	N/A
	D5.1	29+61.15	17.06' R	24	-58.426	0.73	13.06	17.46	19.39	6.23	7.04	7.42	815.63	815.83	815.91	0.39	2.63
	D5.2	29+49.78	31.16 R	24	0.000	0.00	11.72	15.66	17.39	5.88	6.59	6.92	815.81	816.01	816.08	0.00	N/A
	C1	28+41.72	27.64' R	24	50.177	0.62	11.84	15.78	17.52	6.15	6.85	7.17	816.80	817.00	817.08	0.05	N/A
	C2	27+45.87	32.95' R	24	-11.297	0.00	11.80	15.70	17.41	6.11	6.81	7.12	817.73	817.93	818.00	0.00	N/A
	C2.1	27+45.80	26.45' R	18	89.810	0.50	6.83	8.67	9.46	6.68	6.79	6.92	818.14	818.27	818.32	0.16	N/A
	C2.2	27+45.68	16.00' R	18	0.000	0.67	6.41	8.13	8.87	5.91	6.41	6.64	818.52	818.64	818.69	0.26	2.37
	C2.3	27+45.24	26.55' L	18	0.000	0.31	5.50	6.97	7.60	5.45	5.85	6.04	819.49	819.61	819.66	3.26	N/A
	C3	26+35.12	27.88' R	18	0.000	0.71	5.67	7.49	8.29	5.81	6.07	6.25	822.09	822.23	822.28	0.04	N/A
	C4	25+21.34	32.13' R	18	-11.610	0.76	5.59	7.37	8.15	5.84	6.31	6.54	827.37	827.51	827.57	0.13	N/A
	GDOT A-8	23+77.72'	24.48' R	18	-2.190	0.75	5.18	6.80	7.52	4.15	4.78	4.95	828.24	828.39	828.50	0.04	N/A
	GDOT A-7	23+27.57	24.20' R	18	-5.488	0.74	5.06	6.63	7.32	3.72	4.43	4.48	828.60	828.73	828.87	0.04	N/A
	A7.1	22+92.97	26.25' L	18	55.230	0.43	4.62	5.80	6.31	3.73	4.16	4.39	829.65	829.75	829.79	1.71	11.38*

*STRUCTURE IN RIGHT TURN LANE

0 100 200 400
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

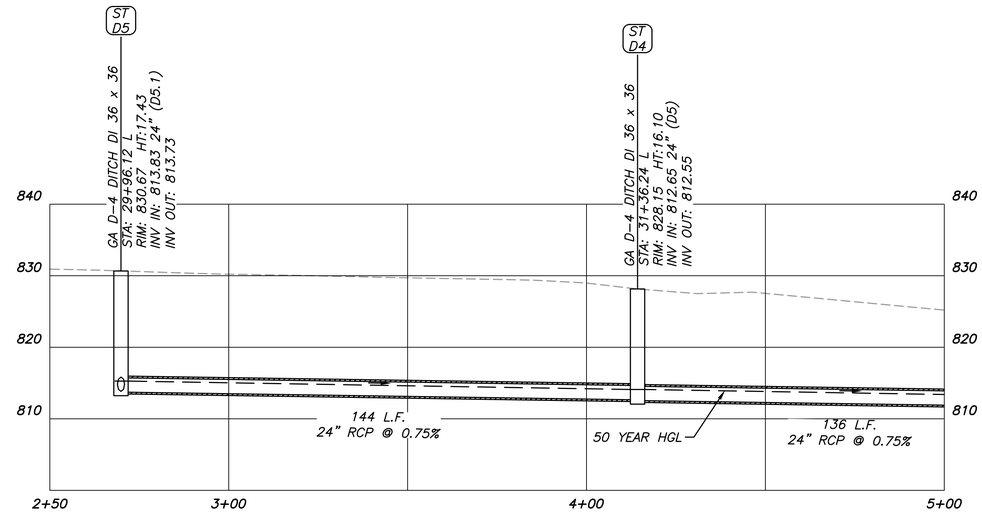
STARRS MILL SCHOOL TUNNEL

DRAINAGE AREA MAP

DRAWING NO. 21-01

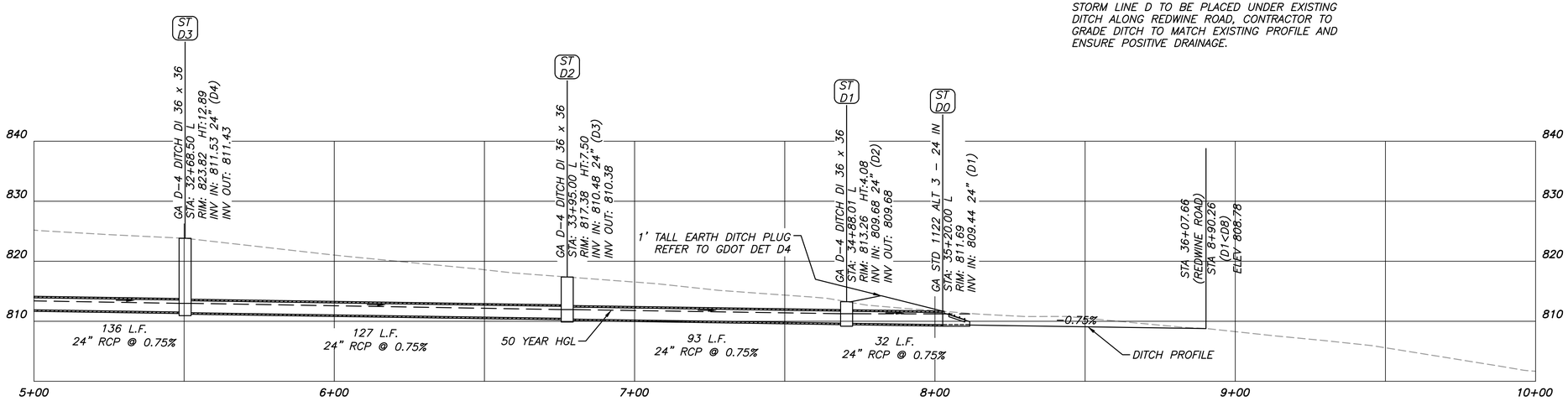
USER: Eric Brisse
12/19/2023 3:38 PM
P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Drainage.dwg

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



D4<D5

NOTE:
STORM LINE D TO BE PLACED UNDER EXISTING DITCH ALONG REDWINE ROAD, CONTRACTOR TO GRADE DITCH TO MATCH EXISTING PROFILE AND ENSURE POSITIVE DRAINAGE.



D1<D3

0 20 40 80
HORIZONTAL SCALE IN FEET
0 10 20 40
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

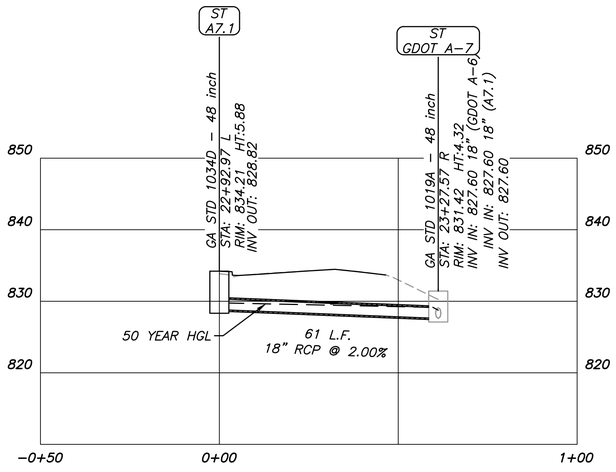
DRAINAGE PROFILES

DRAWING NO. 22-01

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel\Design\Engineering\Design\1866.032_Storm.dwg 10/24/2023 3:41 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

NOTE: FOR GA D-27 (SD GRATE INLET FOR DRIVEWAYS), ADDITIONAL DETAILS FOR JUNCTION STRUCTURE CAN BE REFERENCED FROM GA STD 1019A/AP AND GA STD 9031U. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO COUNTY FOR APPROVAL PRIOR TO COMMENCING.



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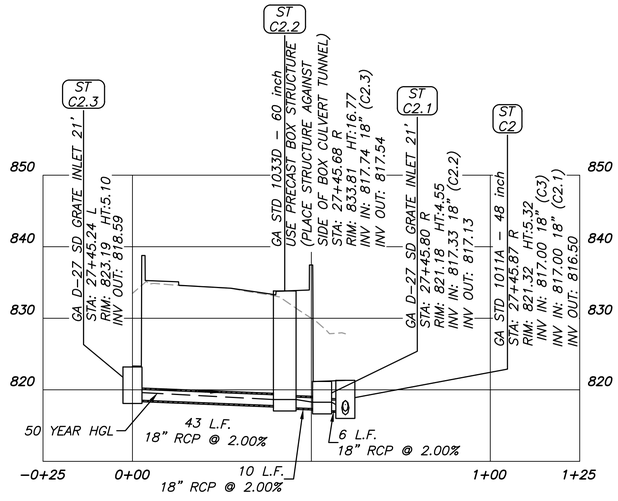

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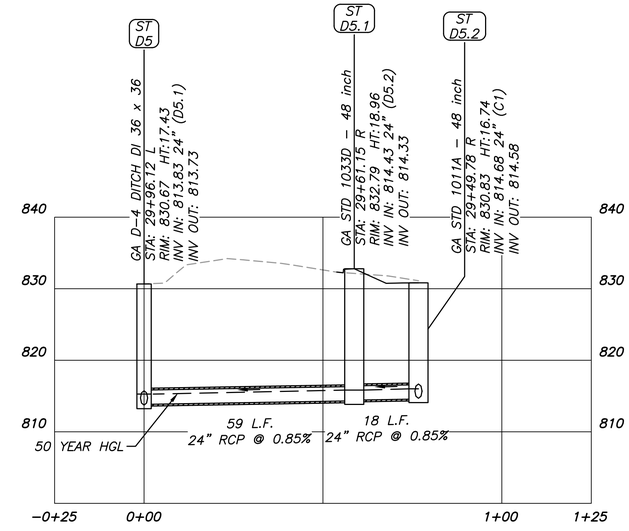
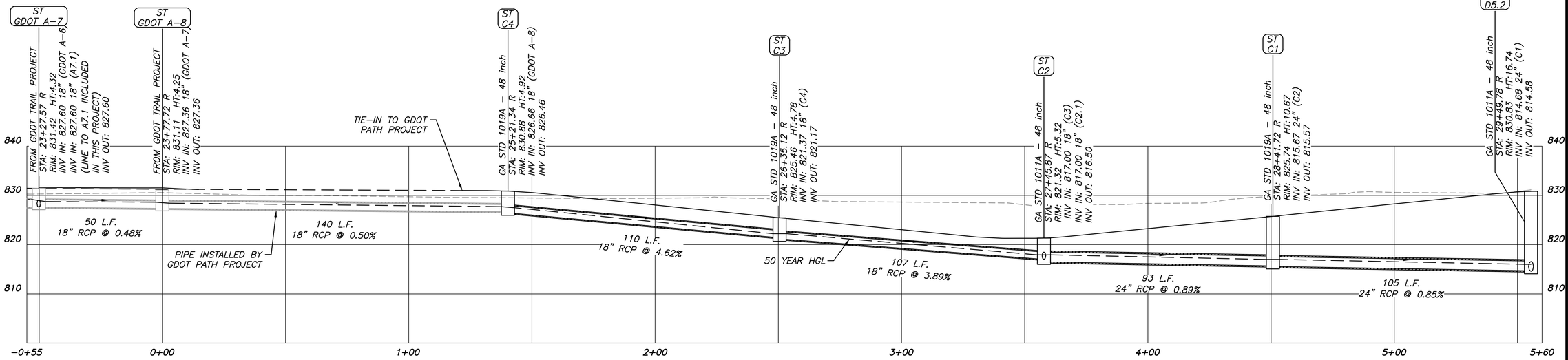


D5<D5.2



D5.2<A–8

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel\Design\Engineering\Design\1866.032_Storm.dwg 10/24/2023 3:41 PM USER: Eric Briese

0 20 40 80
HORIZONTAL SCALE IN FEET
0 10 20 40
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

DRAINAGE PROFILES

DRAWING NO. 22-02

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

EXISTING UTILITIES

- EXISTING GUY WIRE
- EX. OH ELECTRIC
- EX POWER POLE
- EX TRANSFORMER
- EX. UG ELECTRIC
- EX GAS LINE
- EX GAS METER
- EX GAS VALVE
- EX WATER LINE
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX SANITARY SEWER
- EX SS MANHOLE
- EX TELEPHONE MH
- EX OH TELEPHONE
- EX TELEPHONE POLE
- EX UG TELEPHONE
- EX LIGHT POLE
- EX PEDESTRIAN POLE
- EX TRAFFIC BOX
- EX WATER VALVE

PROPOSED UTILITIES

- PROPOSED GUY WIRE
- PROP. OH ELECTRIC
- PROP. POWER POLE
- PROP. TRANSFORMER
- PROP. UG ELECTRIC
- PROP. GAS LINE
- PROP. GAS METER
- PROP. GAS VALVE
- PROP. WATER LINE
- PROP. FIRE HYDRANT
- PROP. WATER METER
- PROP. WATER VALVE
- PROP. SANITARY SEWER
- PROP. SS MANHOLE
- PROP. TELEPHONE MH
- PROP. OH TELEPHONE
- PROP. TELEPHONE POLE
- PROP. UG TELEPHONE

EXISTING SIGNAL

- CONTROLLER CABINET
- STRAIN POLE
- MAST ARM
- TIMBER POLE
- STREET LIGHT
- 3 SECTION HEAD
- 5 SECTION HEAD
- OVERHEAD SIGN
- PEDESTAL POLE
- PED SIGNAL HEAD
- CURB CUT RAMP
- PULLBOX, TP 1
- PULLBOX, TP 2
- PULLBOX, TP 3
- PULLBOX, TP 4
- PULLBOX, TP 5
- 6x6 PULSE LOOP
- 6x18 CALL LOOP
- 6x40 PRESENCE LOOP (DIPOLE)
- 6x40 PRESENCE LOOP (QUADRUPOLE)
- CONDUIT
- RAILROAD CONTROLLER
- SIGN POST
- AERIAL FIBER OPTIC CABLE
- SPLICE CLOSURE

PROPOSED SIGNAL

- CONTROLLER CABINET
- STRAIN POLE
- MAST ARM
- TIMBER POLE
- DOWN GUY
- LUMINAIRE
- 3 SECTION HEAD
- 3 SECTION HEAD W/ BACKPLATE
- 5 SECTION HEAD
- 5 SECTION HEAD W/ BACKPLATE
- OVERHEAD SIGN
- PEDESTAL POLE
- PED SIGNAL HEAD
- CURB CUT RAMP – (See ADA Detail)
- PULLBOX, TP 1
- PULLBOX, TP 2
- PULLBOX, TP 3
- PULLBOX, TP 4
- PULLBOX, TP 5
- 6x6 PULSE LOOP
- 6x18 CALL LOOP
- 6x40 PRESENCE LOOP (DIPOLE)
- 6x40 PRESENCE LOOP (QUADRUPOLE)
- CONDUIT
- AERIAL SPAN
- RAILROAD CONTROLLER
- SIGN POST
- UNDERGROUND FIBER OPTIC CABLE
- AERIAL FIBER OPTIC CABLE
- VIDEO DETECTION ZONE
- IVDS CAMERA

GEORGIA811
www.Georgia811.com
Contact 811 before you dig.

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

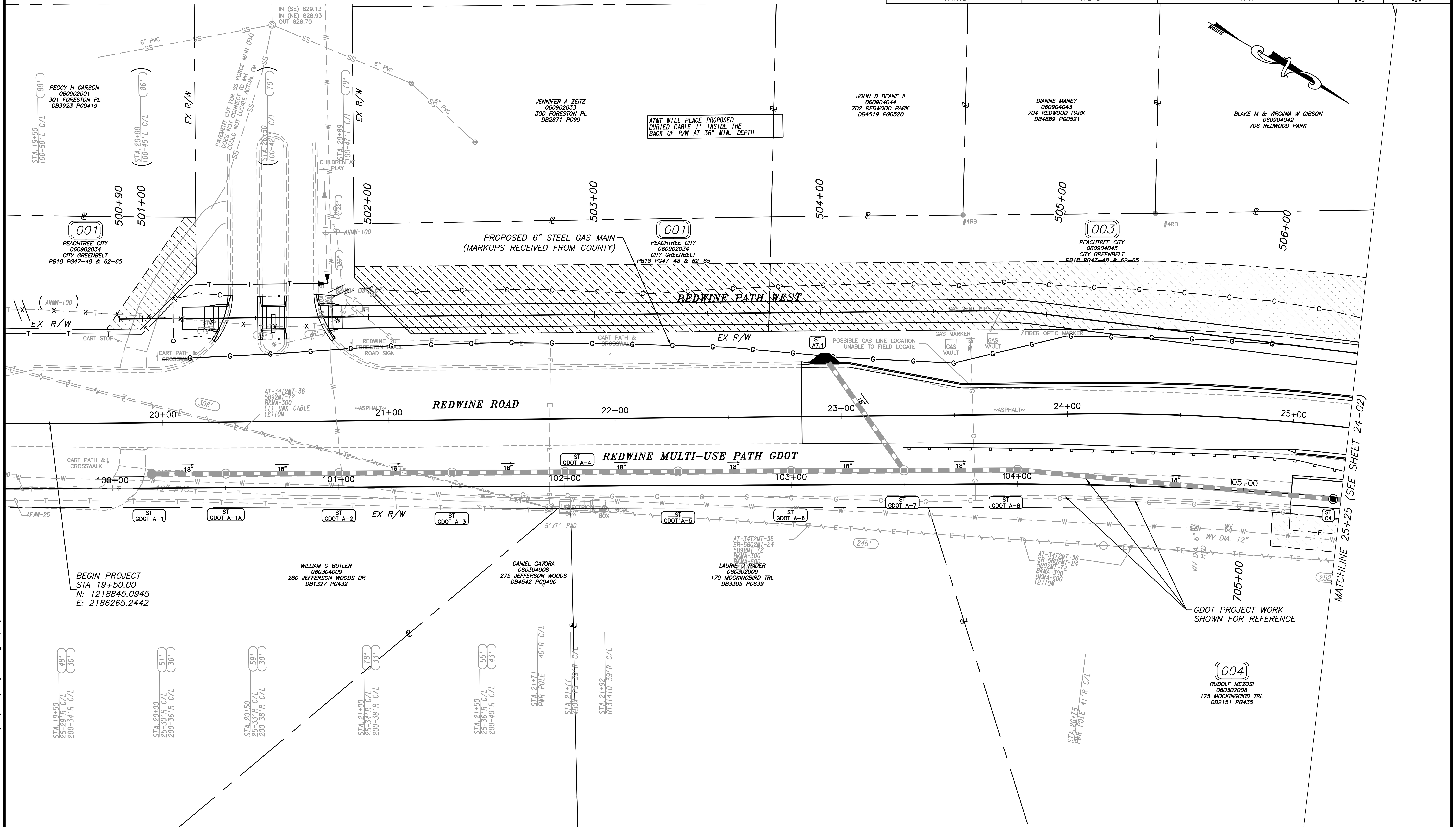
STARRS MILL SCHOOL TUNNEL

UTILITY PLAN LEGEND

DRAWING NO. 24-00

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel\Design\Engineering\Design\1866.032_Utility.dwg 10/18/2023 10:28 AM USER: Eric Briese

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###



NORTH
PEGGY H CARSON
060902001
301 FORESTON PL
DB3923 PG0419
JENNIFER A ZEITZ
060902033
300 FORESTON PL
DB2871 PG99
JOHN D BEANE II
060904044
702 REDWOOD PARK
DB4519 PG0520
DIANNE MANEY
060904043
704 REDWOOD PARK
DB4689 PG0521
BLAKE M & VIRGINIA W GIBSON
060904042
706 REDWOOD PARK
AT&T WILL PLACE PROPOSED
BURIED CABLE 1' INSIDE THE
BACK OF R/W AT 36" MIN. DEPTH
EX R/W
001
PEACHTREE CITY
060902034
CITY GREENBELT
PB18 PG47-48 & 62-65
003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65
PROPOSED 6" STEEL GAS MAIN
(MARKUPS RECEIVED FROM COUNTY)
REDWINE PATH WEST
POSSIBLE GAS LINE LOCATION
UNABLE TO FIELD LOCATE
GAS MARKER
FIBER OPTIC MARKER
REDWINE ROAD
REDWINE MULTI-USE PATH GDOT
500+90
501+00
502+00
503+00
504+00
505+00
506+00
20+00
21+00
22+00
23+00
24+00
25+00
100+00
101+00
102+00
103+00
104+00
105+00
705+00
BEGIN PROJECT
STA 19+50.00
N: 1218845.0945
E: 2186265.2442
WILLIAM G BUTLER
060304009
280 JEFFERSON WOODS DR
DB1327 PG432
DANIEL GAVORA
060304008
275 JEFFERSON WOODS
DB4542 PG0490
LAURIE D PADER
060302009
170 MOCKINGBIRD TRL
DB3305 PG639
004
RUDOLF MEZOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG435
GDOT PROJECT WORK
SHOWN FOR REFERENCE
MATCHLINE 25+25 (SEE SHEET 24-02)

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Utility.dwg 10/18/2023 10:28 AM USER: Eric Brisse

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80

SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

UTILITY PLANS

DRAWING NO. 24-01

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

TABERATHA PROPERTIES LLC
060904041
708 REDWOOD PARK
DB3904 PG0436

ANTHONY J MONTELEONE
060904038
402 IRONWOOD LN
DB1710 PG485

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-55

JON MICHAEL WALLER
060904037
404 IRONWOOD LN

004
RUDOLF MEZOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG435

005
LARRY K & TAMMIES GOLDEN
060302007
165 MOCKINGBIRD TRL
DB1022 PG402

006
AUGUSTUS CURRY
060302006
155 MOCKINGBIRD TRL
DB2878 PG338

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

REDWINE PATH WEST
REDWINE PATH EAST
REDWINE ROAD
ROBINSON PATH WEST
ROBINSON ROAD

MATCHLINE 25+25 (SEE SHEET 24-01)
MATCHLINE 403+25 (SEE SHEET 24-03)
MATCHLINE 30+50 (SEE SHEET 24-04)

AT&T WILL PLACE PROPOSED BURIED CABLE 1' INSIDE THE BACK OF R/W AT 36" MIN. DEPTH

PROPOSED 6" STEEL GAS MAIN (MARKUPS RECEIVED FROM COUNTY)

REFER TO SERIES 44 SHEETS FOR WATERLINE RELOCATION PLANS

AFWM-600 LOSES SIGNAL HERE

ANWM-300 LOSES SIGNAL HERE

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

UTILITY PLANS

DRAWING NO. 24-02

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

SOUTHERN CROSS PTC REALTY LLC
060904035
408 IRONWOOD LN
DB4912 PG0578

APPROXIMATE LAND LOT LINE

JOSEPH P JR & THERESA ALFANO
060904036
406 IRONWOOD LN

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

DAVID & EVA KELLY
060903007
9 LEA WAY
DB4113 PG0582

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

FIBER CONTINUES AT ATT SITE ON HOLLY GROVE RD

WOODEN GUARD HOUSE

6' WOODEN FENCE

604+00 605+00 606+00 607+00 608+00 608+86

ROBINSON PATH WEST

ROBINSON ROAD

EX R/W

404+00 405+00 406+00 407+00 408+00 408+58

~ASPHALT~

CART PATH & CROSSWALK

ASPHALT CART PATH

ROBINSON ROAD PARK

STOP AHEAD

MATCHLINE 403+25 (SEE SHEET 24-02)

MATCHLINE (SEE SHEET 24-04)

AT&T WILL PLACE PROPOSED BURIED CABLE 1' INSIDE THE BACK OF R/W AT 36" MIN. DEPTH

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

JAMES F MEEDER
060322009
206 ASHTON PARK
DB4256 PG0582

NORMAN TERRELL PARKER
060322010
204 ASHTON PARK
DB3576 PG0370

JOHN R GETREU
060322011
202 ASHTON PARK
DB4754 PG0640

DORIS ANN MARTIN
060322012
200 ASHTON PARK
DB3561 PG0156

MICHAEL S GUNNELLS
060322001
101 ASHTON PARK
DB2531 PG320

BEVERLY H & MARION J WHITE
060322002
103 ASHTON PARK
DB4381 PG0620

APPROXIMATE LAND LOT LINE

LL 78

LL 79

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel\Design\Engineering\Design\1866.032_Utility.dwg 12/19/2023 2:31 PM USER: Eric Brisse

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

UTILITY PLANS

DRAWING NO. 24-03

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 24-03)

JAMES F MEEDER
060322009
206 ASHTON PARK
DB4256 PG0582

TRUDY LOUISE GOMER
060322008
208 ASHTON PARK
DB2559 PG25

MICHAEL SHANE LANCE
060322007
210 ASHTON PARK
DB4501 PG0131

TONY F DASILVA
060322006
212 ASHTON PARK
DB2631 PG439

CHANG BUM PARK
060322005
214 ASHTON PARK
DB4898 PG0331

DENNIS D PALMER
060323018
216 ASHTON PARK
DB4722 PG0510

MARK A POWELL
060323017
218 ASHTON PARK
DB4325 PG0436

#428

STA. 32+21
PWR POLE 40'L C/L

STA. 34+91
PWR POLE 40'L C/L

4" PVC FENCE

NORTH

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

PROPOSED 6" STEEL GAS MAIN
(MARKUPS RECEIVED FROM COUNTY)

275'

ST D4 | ST D3 | ST D2 | ST D1 | ST D0

EX R/W

24"

AT-34T2MT-36
BKMA-300
(2)10M

31+00 | 32+00 | 33+00 | 34+00 | 35+00

REDWINE ROAD

MATCHLINE 30+50 (SEE SHEET 24-02)

111+00 | 112+00 | 113+00 | 113+59

12" PVC

REDWINE MULTI-USE PATH GDOT

EX R/W

GDOT PROJECT WORK
SHOWN FOR REFERENCE

CASTILLO MARIA
060302003
125 MOCKINGBIRD TRL
DB3613 PG555

MARTIN ANTHONY
060302002
115 MOCKINGBIRD TRL
BK4789 PG482-484

MATCHLINE (SEE INSERT)

6" DIA. HYD

NO AT&T CONFLICTS
ON THIS DRAWING

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

333'

EX R/W

AT-34T2MT-36
BKMA-300
(2)10M

MATCHLINE (INSERT)

36+00 | 37+00 | 38+00 | 39+00

REDWINE ROAD

INV=794.56'
24" CMP

INV=793.17'

12" PVC

EX R/W

KAREN VAN HORN
060302005
145 MOCKINGBIRD TRL
DB3887 PG628

TIMOTHY J & CHERYL MURPHY
060302004
135 MOCKINGBIRD TRL
DB1288 PG109

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—T—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

UTILITY PLANS

DRAWING NO. 24-04

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

IN (SE) 829.13
IN (NE) 828.93
OUT 828.70

6" PVC

PAVEMENT CUT FOR SS FORCE MAIN (FM) DOES NOT CONNECT TO MH. COULD NOT LOCATE ACTUAL FM

STA 20+20
R1-1 (18)
STOP

ONCE NEW PATH & TUNNEL ARE OPEN FOR PUBLIC USE CONTRACTOR TO REMOVE EX SIGNS AND CROSSWALK

24" SOLID WHITE STOP BAR (TYP)

SIGN TO BE REPLACED BY OTHERS

PTC STD CROSSWALK SOLID WHITE STRIPE (REFER TO PTC LOCAL DESIGN MANUAL FOR DETAIL)

CHILDREN AT PLAY

STA 20+81
R1-1 (18)
STOP

5" MINI SKIP STRIPE WHITE (TYP)
(2' SEG., 6' GAP)

500+90
501+00
502+00
503+00
504+00
505+00
506+00

#4RB

REDWINE PATH WEST

CART STOP

CART PATH & CROSSWALK

REMOVE & RESET EX STOP SIGN

REDWINE RD
FORESTON PLACE
ROAD SIGN

CART PATH & CROSSWALK

POSSIBLE GAS LINE LOCATION UNABLE TO FIELD LOCATE

GAS MARKER

GAS VAULT

FIBER OPTIC MARKER

5" SOLID WHITE STRIPE (TYP)

~ASPHALT~

REDWINE ROAD

20+00
21+00
22+00
23+00
24+00
25+00

5" DOUBLE SOLID YELLOW STRIPE (TYP)
TP 1 YELLOW RPMS @40' SPACING

CART PATH & CROSSWALK

CART STOP

100+00
101+00
102+00
103+00
104+00
105+00

REDWINE MULTI-USE PATH CDOT

ELECTRICAL BOX

ELECTRICAL BOX

ONCE NEW PATH & TUNNEL ARE OPEN FOR PUBLIC USE CONTRACTOR TO REMOVE EX SIGNS AND CROSSWALK BY HYDROBLASTING OR SAND BLASTING (NO GRINDING ALLOWED)

5" SOLID WHITE STRIPE (TYP)

705+00

MATCHLINE 25+25 (SEE SHEET 26-01)

NORTH

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF CROY ENGINEERING, LLC, NOR ARE THEY TO BE ASSIGNED TO ANY PARTY WITHOUT WRITTEN PERMISSION AND CONSENT.

REVISION DATES

FAYETTE COUNTY

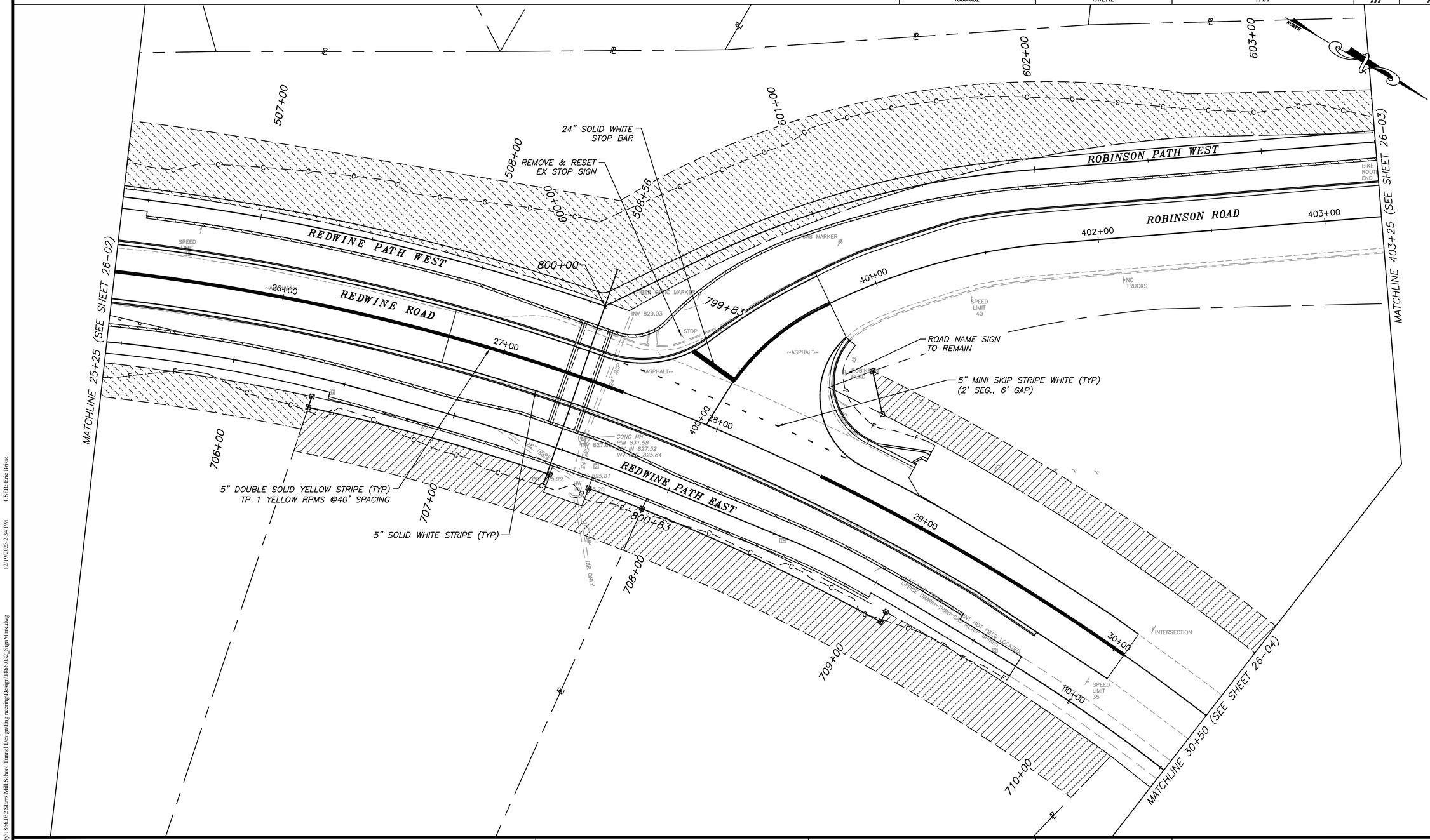
STARRS MILL SCHOOL TUNNEL

SIGNING AND MARKING

DRAWING NO. 26-01

10/18/2023 4:25 PM USER: Eric Brisse
P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel\Design\Engineering\Design\1866.032_SignMark.dwg

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR. OF DRIVES

0 20 40 80

SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

SIGNING AND MARKING

DRAWING NO. 26-02

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

NORTH

APPROXIMATE LAND LOT LINE

LL 28

LL 19

WOODEN GUEST HOUSE

6' WOODEN FENCE

604+00 605+00 606+00 607+00 608+00 608+86

ROBINSON PATH WEST

ROBINSON ROAD

404+00 405+00 406+00 407+00 408+00 408+58

~ASPHALT~

STOP AHEAD

~ASPHALT CART PATH~

CART STOP

CART PATH & CROSSWALK

CART STOP

ROBINSON ROAD ASHTON PARK

1" ROD IRON FENCE

4" ROD IRON FENCE

MATCHLINE 403+25 (SEE SHEET 26-02)

MATCHLINE (SEE SHEET 26-04)

#4RB

6" PVC FENCE

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LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR. OF DRIVES

0 20 40 80

SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

SIGNING AND MARKING

DRAWING NO. 26-03

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 26-03)

#428

NORTH

4" PVC FENCE

MATCHLINE (SEE SHEET 26-02)

30+50

31+00

32+00

33+00

REDWINE ROAD

34+00

35+00

MATCHLINE (SEE INSERT)

111+00

112+00

113+00

113+59

REDWINE MULTI-USE PATH GDOT

MATCHLINE (INSERT)

36+00

37+00

REDWINE ROAD

38+00

39+00

INV=794.56'
24" CMP

INV=793.71'

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—T—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

0 20 40 80

SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

SIGNING AND MARKING

DRAWING NO. 26-04

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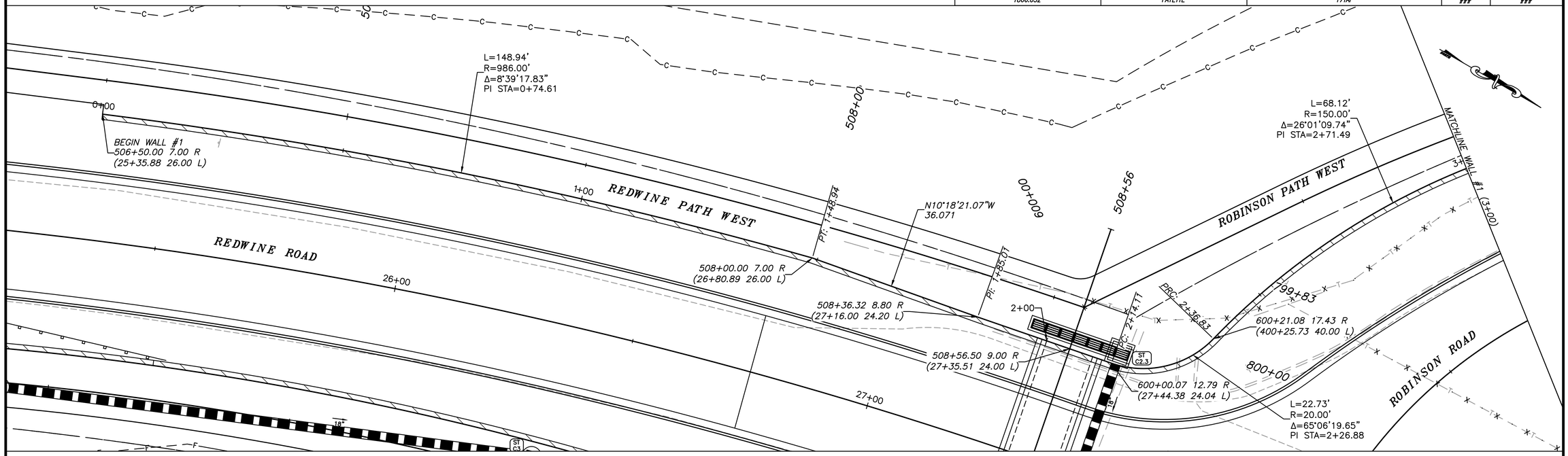
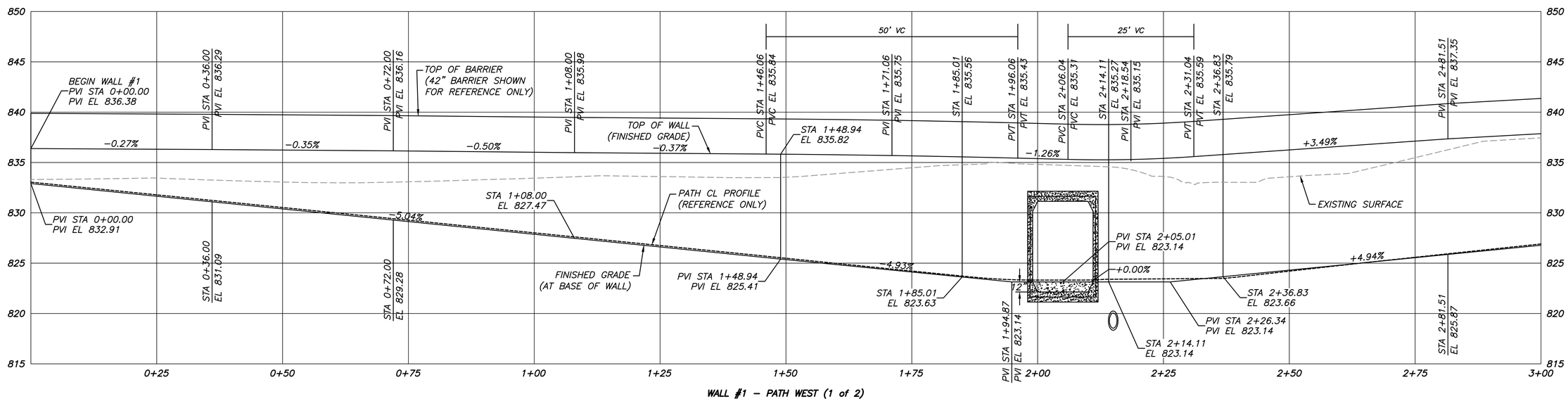
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///





WALL #1 – PATH WEST (1 of 2)

NOTES:
- RETAINING WALLS, WITH BARRIERS, TO BE REDI-ROCK OR APPROVED EQUIVALENT.
- WALL ENDS TO BE TAPERED. LOCATION AND TAPERS TO BE AGREED UPON IN THE FIELD AND DESIGN TO BE DONE BY MANUFACTURER AND/OR CONTRACTOR'S ENGINEER AND SUBMITTED TO THE COUNTY.
- WALL PLAN AND PROFILE SHOWN ARE FOR REFERENCE ONLY, FULL WALL DESIGN TO BE DONE BY MANUFACTURER AND/OR CONTRACTOR'S ENGINEER AND SUBMITTED TO COUNTY FOR FINAL APPROVAL.
- REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- SEE TABLE ON 6-SERIES SUMMARY OF QUANTITY SHEETS FOR ALL QUANTITIES.

0 10 20 40
HORIZONTAL SCALE IN FEET

0 5 10 20
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

WALL PLAN & PROFILE
WALL #1 (STA 0+00–3+00)

DRAWING NO. 32–01

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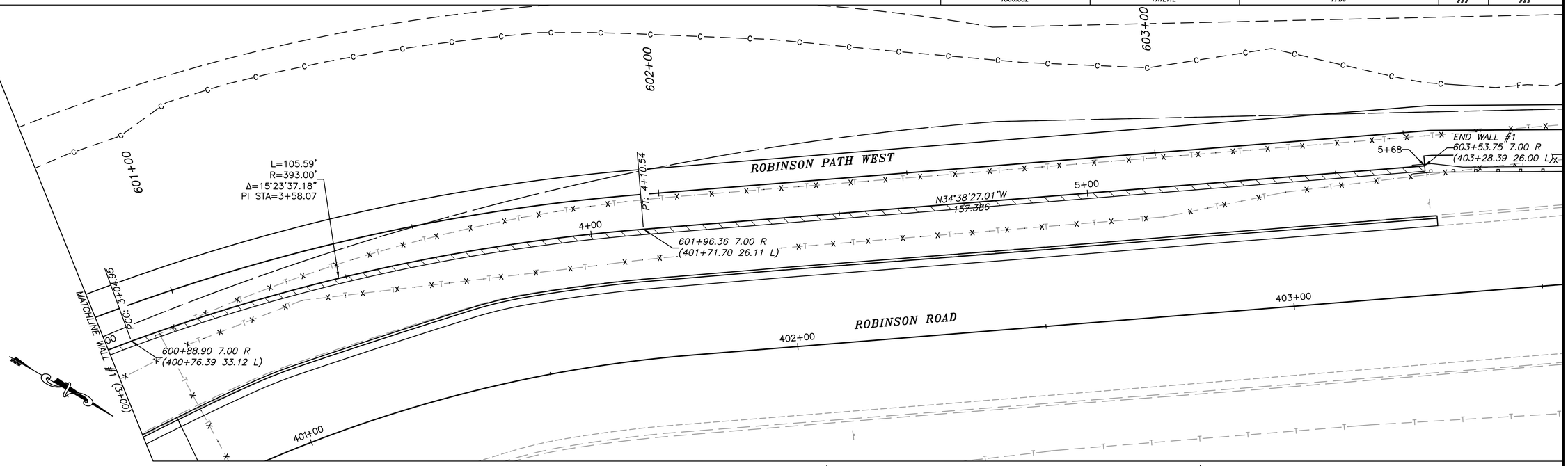
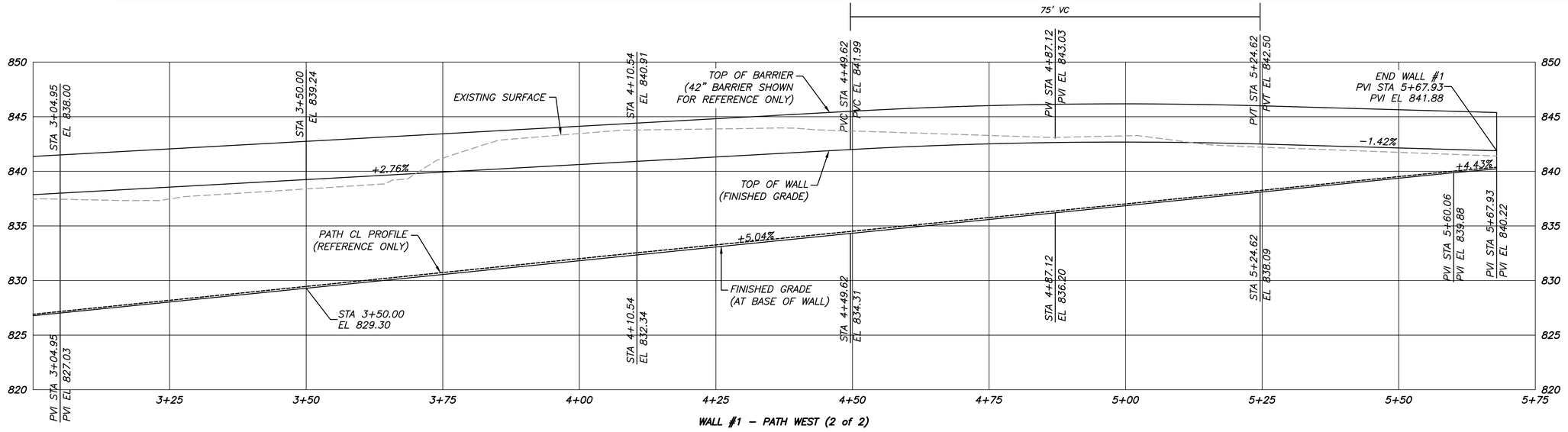
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///





WALL #1 – PATH WEST (2 of 2)

NOTES:
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- SEE TABLE ON 6-SERIES SUMMARY OF QUANTITY SHEETS FOR ALL QUANTITIES.

0 10 20 40
HORIZONTAL SCALE IN FEET

0 5 10 20
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

WALL PLAN & PROFILE
WALL #1 (STA 3+00-5+75)

DRAWING NO.
32-02

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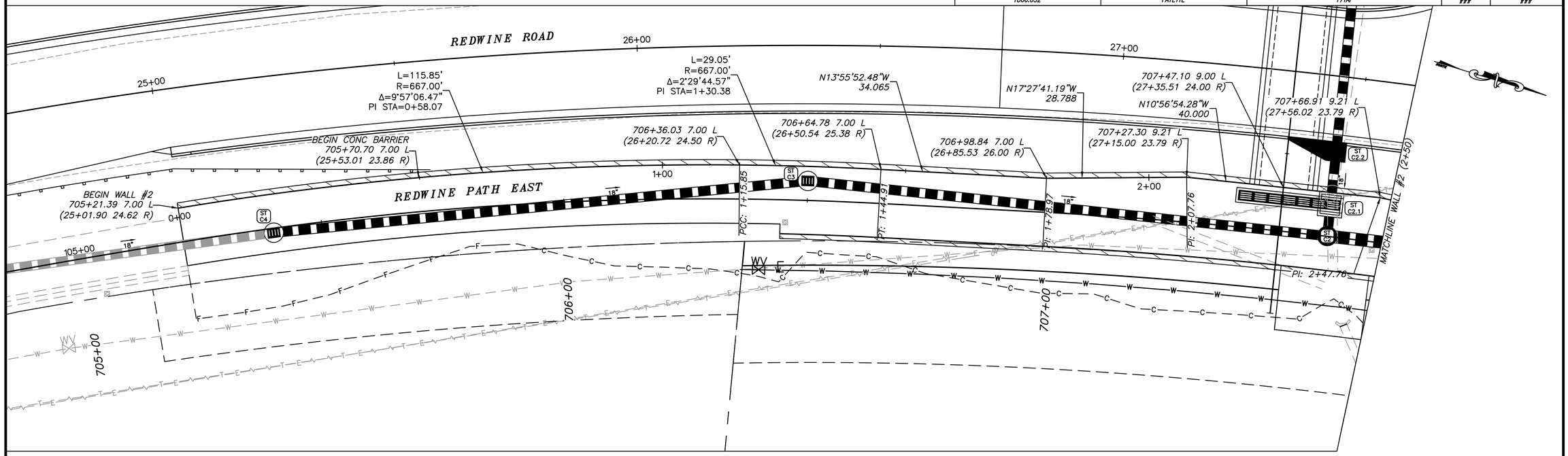
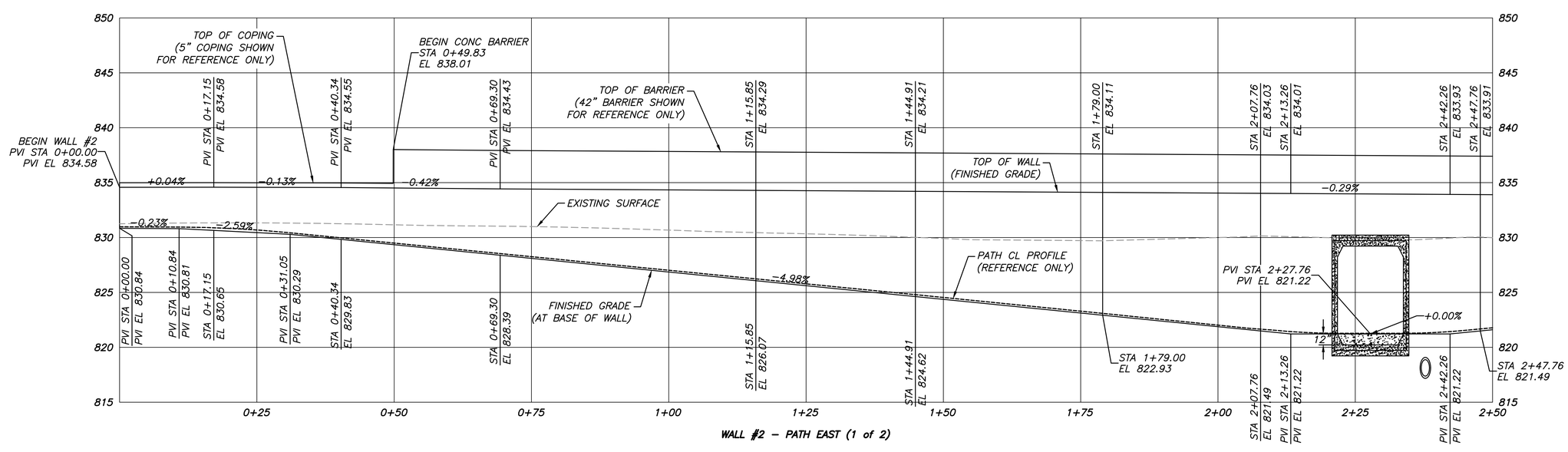
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///





WALL #2 – PATH EAST (1 of 2)

NOTES:
- RETAINING WALLS, WITH BARRIERS, TO BE REDI-ROCK OR APPROVED EQUIVALENT.
- WALL ENDS TO BE TAPERED. LOCATION AND TAPERS TO BE AGREED UPON IN THE FIELD AND DESIGN TO BE DONE BY MANUFACTURER AND/OR CONTRACTOR'S ENGINEER AND SUBMITTED TO THE COUNTY.
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- REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- SEE TABLE ON 6-SERIES SUMMARY OF QUANTITY SHEETS FOR ALL QUANTITIES.

0 10 20 40
HORIZONTAL SCALE IN FEET
0 5 10 20
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

WALL PLAN & PROFILE
WALL #2 (STA 0+00-2+50)

DRAWING NO. 32-03

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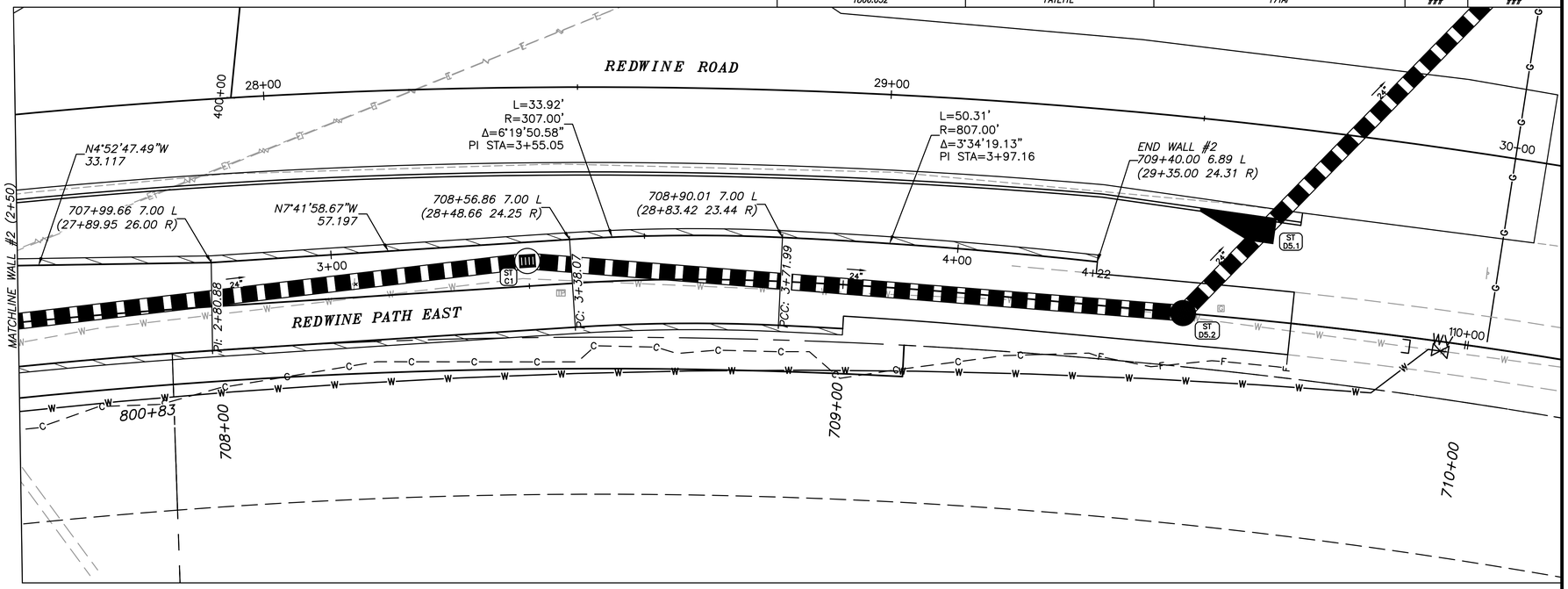
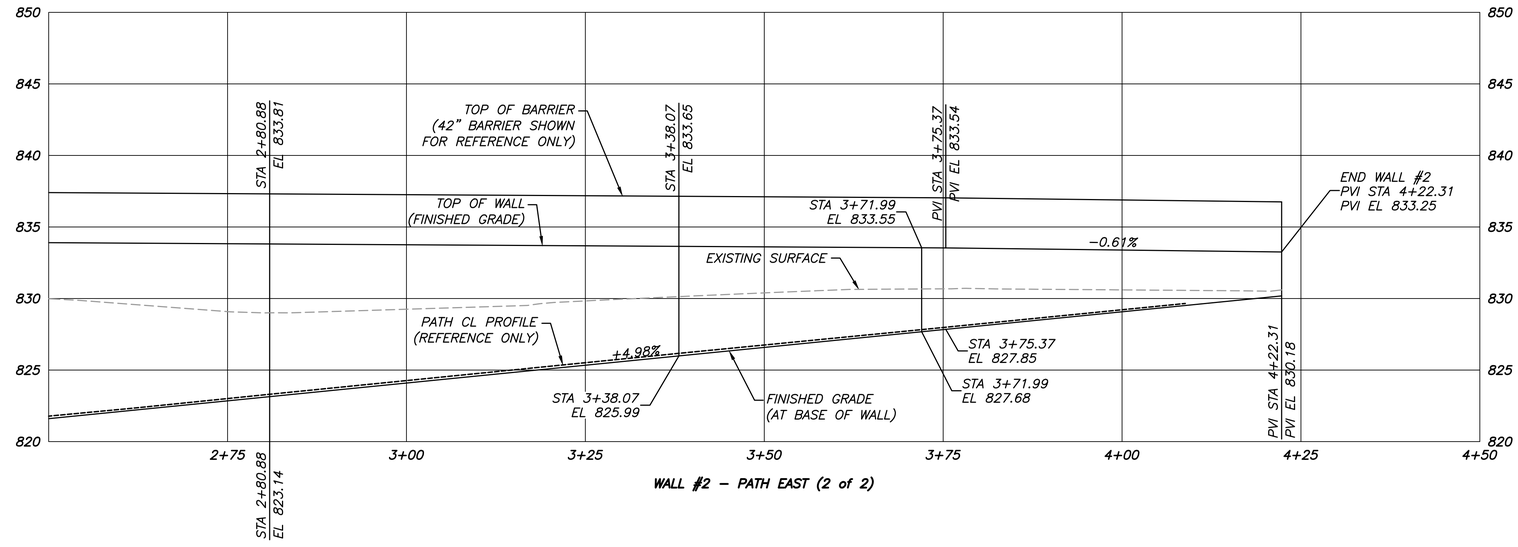
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###





WALL #2 – PATH EAST (2 of 2)

NOTES:
- RETAINING WALLS, WITH BARRIERS, TO BE REDI-ROCK OR APPROVED EQUIVALENT.
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0 10 20 40
HORIZONTAL SCALE IN FEET
0 5 10 20
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

WALL PLAN & PROFILE
WALL #2 (STA 2+50-4+50)

DRAWING NO. 32-04

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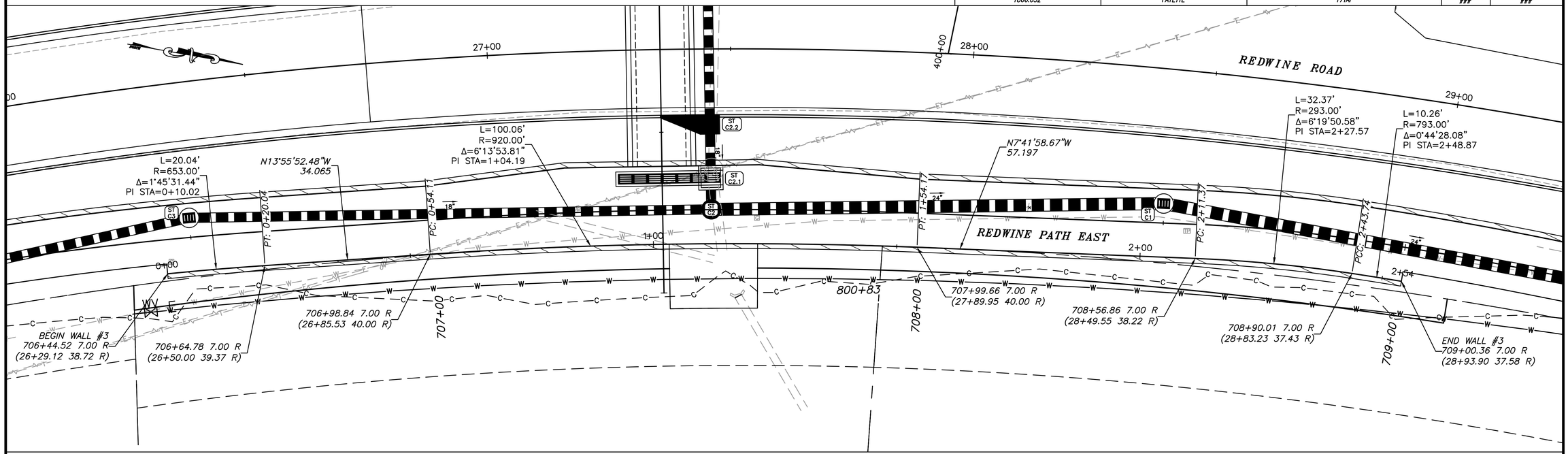
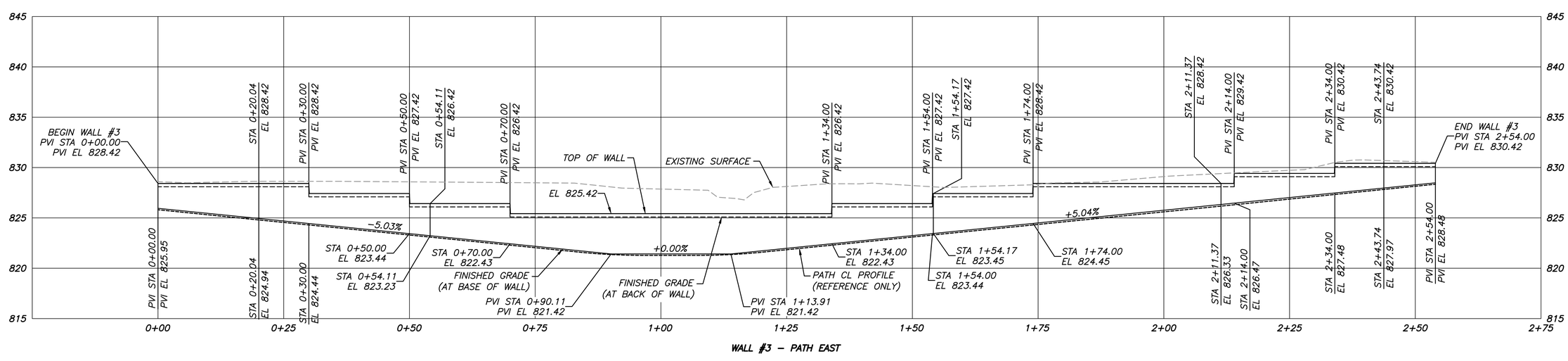
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///





WALL #3 – PATH EAST

NOTES:
- RETAINING WALLS TO BE REDI-ROCK OR APPROVED EQUIVALENT.
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0 10 20 40
HORIZONTAL SCALE IN FEET

0 5 10 20
VERTICAL SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

WALL PLAN & PROFILE
WALL #3

DRAWING NO. 32-05

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

NORTH

IN (SE) 829.13
IN (NE) 828.93
OUT 828.70

6" PVC

PAVEMENT CUT FOR SS FORCE MAIN (FM) DOES NOT CONNECT TO MH. COULD NOT LOCATE ACTUAL FM

AT&T WILL PLACE PROPOSED BURIED CABLE 1' INSIDE THE BACK OF R/W AT 36" MIN. DEPTH

PROPOSED 6" STEEL GAS MAIN
(MARKUPS RECEIVED FROM COUNTY)

REDWINE PATH WEST

REDWINE ROAD

REDWINE MULTI-USE PATH GDOT

ST A7.1 — POSSIBLE GAS LINE LOCATION UNABLE TO FIELD LOCATE

GAS MARKER — GAS VAULT — FIBER OPTIC MARKER — GAS VAULT

~ASPHALT~

500+90 | 501+00 | 502+00 | 503+00 | 504+00 | 505+00 | 506+00

20+00 | 21+00 | 22+00 | 23+00 | 24+00 | 25+00

100+00 | 101+00 | 102+00 | 103+00 | 104+00 | 105+00

001 | 001 | 003 | 004

#4RB | #4RB

ST GDOT A-1 | ST GDOT A-1A | ST GDOT A-2 | ST GDOT A-3 | ST GDOT A-4 | ST GDOT A-5 | ST GDOT A-6 | ST GDOT A-7 | ST GDOT A-8 | ST C4

ELECTRICAL BOX | ELECTRICAL BOX

18" | 12" DIP | 6" DIP

WV DIA. 6" HDPE | WV DIA. 12"

705+00

MATCHLINE 25+25 (SEE SHEET 44-02)

BEGIN PROJECT
STA 19+50.00
N: 1218845.0945
E: 2186265.2442

NOTE:
NO WATERLINE RELOCATION WORK ON THIS SHEET

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

WATERLINE RELOCATION PLANS

DRAWING NO. 44-01

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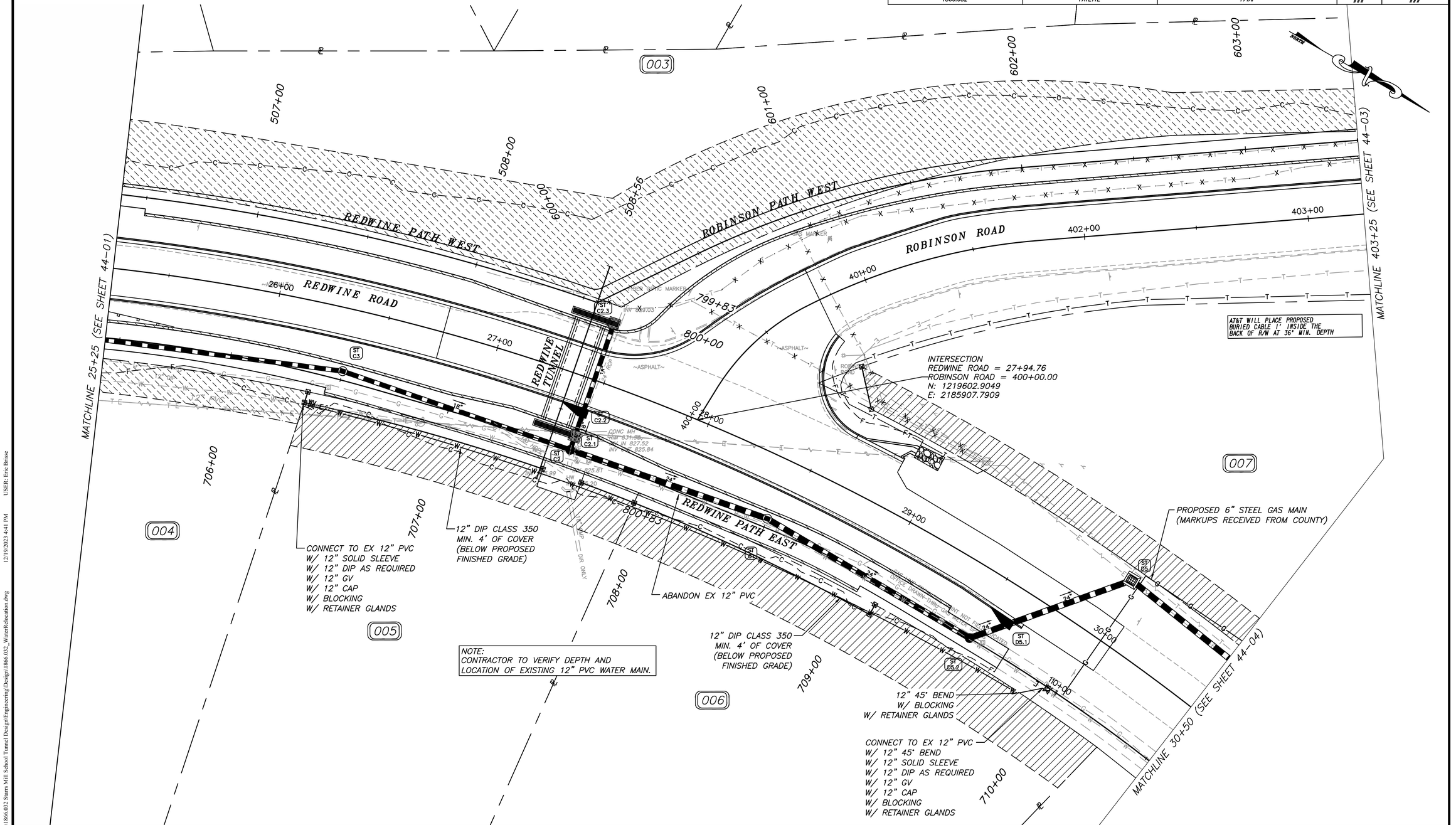
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###



AT&T WILL PLACE PROPOSED BURIED CABLE 1' INSIDE THE BACK OF R/W AT 36" MIN. DEPTH

INTERSECTION
REDWINE ROAD = 27+94.76
ROBINSON ROAD = 400+00.00
N: 1219602.9049
E: 2185907.7909

PROPOSED 6" STEEL GAS MAIN
(MARKUPS RECEIVED FROM COUNTY)

CONNECT TO EX 12" PVC
W/ 12" SOLID SLEEVE
W/ 12" DIP AS REQUIRED
W/ 12" GV
W/ 12" CAP
W/ BLOCKING
W/ RETAINER GLANDS

12" DIP CLASS 350
MIN. 4' OF COVER
(BELOW PROPOSED
FINISHED GRADE)

ABANDON EX 12" PVC

NOTE:
CONTRACTOR TO VERIFY DEPTH AND
LOCATION OF EXISTING 12" PVC WATER MAIN.

12" DIP CLASS 350
MIN. 4' OF COVER
(BELOW PROPOSED
FINISHED GRADE)

12" 45° BEND
W/ BLOCKING
W/ RETAINER GLANDS

CONNECT TO EX 12" PVC
W/ 12" 45° BEND
W/ 12" SOLID SLEEVE
W/ 12" DIP AS REQUIRED
W/ 12" GV
W/ 12" CAP
W/ BLOCKING
W/ RETAINER GLANDS

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0 20 40 80
SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES

FAYETTE COUNTY
STARRS MILL SCHOOL TUNNEL
WATERLINE RELOCATION PLANS

DRAWING NO.
44-02

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

NORTH

APPROXIMATE LAND LOT LINE

LL 28

LL 29

WOODEN GUEST HOUSE

6' WOODEN FENCE

6' WOODEN FENCE

604+00

605+00

606+00

607+00

608+00

608+86

003

ROBINSON PATH WEST

~ASPHALT CART PATH~

~ASPHALT~

ROBINSON ROAD

~ASPHALT~

404+00

405+00

406+00

407+00

408+00

408+58

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)

MATCHLINE 403+25 (SEE SHEET 44-02)

3" DIP

4" ROD IRON FENCE

4" ROD IRON FENCE

4" ROD IRON FENCE

~ASPHALT CART PATH~

AT&T WILL PLACE PROPOSED BURIED CABLE 1' INSIDE THE BACK OF R/W AT 36" MIN. DEPTH

NOTE:
NO WATERLINE RELOCATION WORK ON THIS SHEET

#4RB

#4RB

6" PVC FENCE

8" DIP

MATCHLINE (SEE SHEET 44-04)

APPROXIMATE LAND LOT LINE

LL 29

LL 28

0 20 40 80

SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

WATERLINE RELOCATION PLANS

DRAWING NO. 44-03

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_WaterRelocation.dwg 12/19/2023 2:36 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 44-03)

#428

NORTH

4" PVC FENCE

007

PROPOSED 6" STEEL GAS MAIN
(MARKUPS RECEIVED FROM COUNTY)

ST D4

ST D3

ST B2

ST B1

ST D0

24"

REDWINE ROAD

31+00 32+00 33+00 34+00 35+00

MATCHLINE 30+50 (SEE SHEET 44-02)

111+00 112+00 113+00 113+59

12" PVC

REDWINE MULTI-USE PATH GDOT

12" DIP

MATCHLINE (SEE INSERT)

NOTE:
NO WATERLINE RELOCATION WORK ON THIS SHEET

12" DIP
WV DIA-HYD

NO AT&T CONFLICTS
ON THIS DRAWING

MATCHLINE (INSERT)

007

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

36+00 37+00 38+00 39+00

REDWINE ROAD

INV=794.56'
24" CMP

INV=793.17'

12" PVC

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

WATERLINE RELOCATION PLANS

DRAWING NO. 44-04

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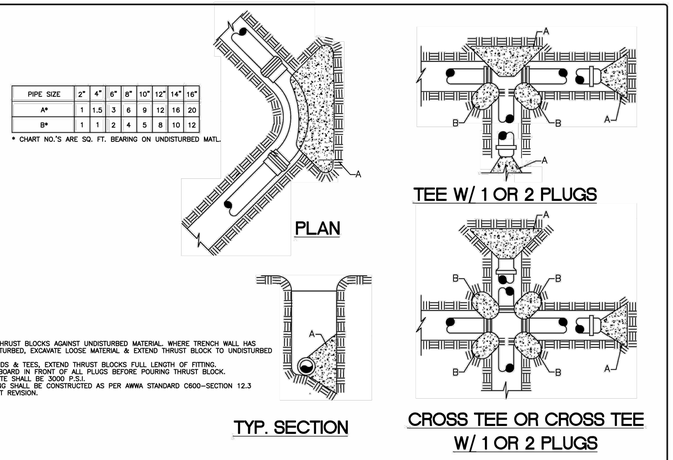
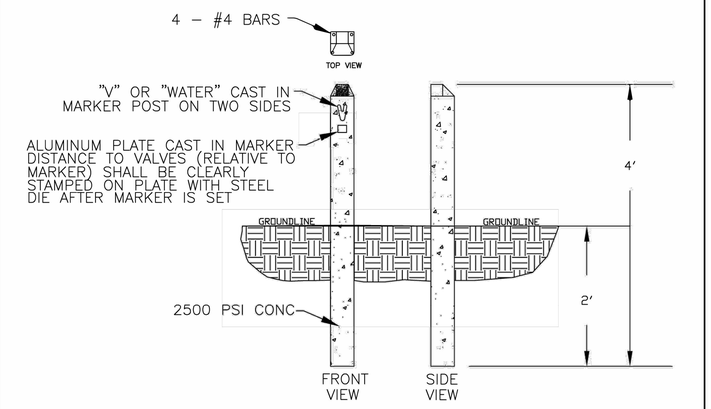
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

WATER NOTES:

1. ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH FAYETTE COUNTY WATER SYSTEM (FCWS) SPECIFICATIONS.
2. ALL NEWLY INSTALLED WATER MAIN SHALL BE DUCTILE IRON PIPE.
3. ALL MATERIALS SHALL CONFORM TO FAYETTE COUNTY DEVELOPMENT SPECIFICATIONS.
4. THE CONTRACTOR SHALL PROVIDE FCWS SUBMITTALS ON ALL PIPE AND MATERIALS USED FOR APPROVAL. ANY WORK DONE BY THE CONTRACTOR SHALL BE AT HIS OWN RISK UNTIL REVIEW AND APPROVAL OF THESE SUBMITTALS ARE COMPLETE.
5. CONTRACTORS SHALL ADHERE TO ALL APPLICABLE OSHA REGULATIONS.
6. THE CONTRACTOR SHALL NOTIFY THE FCWS FIELD OPERATIONS SPECIALIST (770) 320-6020 TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL SCHEDULE TIE-IN, BLOCKING, BACTERIAL, AND PRESSURE & CHLORINATION TESTING INSPECTIONS THROUGH SAGESGOV PORTAL (HTTPS://WWW.SAGESGOV.COM/FAYETTECOUNTY-GA).
8. THE CONTRACTOR SHALL NOTIFY THE FCWS FIELD OPERATIONS SPECIALIST (770) 320-6020 TO SCHEDULE ADDITIONAL SITE VISITS FOR INSPECTIONS BEFORE ANY WORK IS HIDDEN FROM VIEW.
9. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL UTILITIES BEFORE CONSTRUCTION AND VERIFYING THE LOCATION OF ALL UTILITIES SHOWN OR NOT SHOWN.
10. ALL UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRING RELOCATION OR ADJUSTMENT IN ORDER TO ACCOMMODATE PROPOSED IMPROVEMENTS SHALL BE RELOCATED OR ADJUSTED AT THE CONTRACTOR'S EXPENSE.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY AND COORDINATE HIS WORK WITH EXISTING UTILITIES WHICH CONFLICT WITH HIS WORK. CONTRACTOR SHALL MAINTAIN SUCH UTILITIES SHOWN OR NOT SHOWN ON THIS PLAN.
12. WATER LINES SHALL HAVE A MINIMUM COVER OF 4 FEET FROM FINISHED GRADE.
13. ALL WATER MAIN CROSSING UNDER A ROADWAY (PAVED OR UNPAVED) INTENDED FOR VEHICULAR PASSAGE SHALL BE IN STEEL CASING AS PER FCWS SPECIFICATIONS.
14. ALL VALVES AND FITTINGS ARE TO BE RESTRAINED WITH APPROPRIATE TYPE AND NUMBER OF EBBA IRON OR UNIFLANGE RESTRAINT SYSTEM APPURTENANCES APPROVED BY THE FCWS PRIOR TO CONSTRUCTION. ANY CONCRETE BLOCKING THAT IS ALLOWED SHALL BE INSTALLED TO UNDISTURBED EARTH.
15. ALL VALVE BOXES ARE TO HAVE COLLARS AND MARKERS AS REQUIRED BY THE FCWS. IN ADDITION, ALL VALVES SHALL BE MARKED WITH A SAWED "V" NOTCH PAINTED BLUE ON THE CURB.
16. MINIMUM HORIZONTAL AND VERTICAL DISTANCES BETWEEN WATER LINES AND OTHER UNDERGROUND UTILITIES OR STRUCTURES SHALL BE 2 FEET.
17. WATER LINES SHALL BE INSTALLED AFTER CURB AND GUTTER AND 7 FEET FROM THE BACK OF THE CURB OR PERNAS APPROVED UTILITY PLACEMENT DETAIL. END OF MAIN SHALL HAVE HYDRANT.
18. NO SERVICE TAPS SHALL BE INSTALLED BENEATH PAVEMENT.
19. ALL SERVICE LINES CROSSING UNDER PAVEMENT OR IN FRONT OF LOTS SHALL BE ENCASED IN 2 INCH CONDUIT MATERIAL APPROVED BY FAYETTE COUNTY WATER SYSTEM.
20. ALL WATER SERVICES SHALL BE MARKED WITH A SAWED "W" NOTCH PAINTED BLUE ON THE CURB.
21. SINGLE AND DOUBLE WATER SERVICE LINES SHALL BE MINIMUM OF 1 INCH TYPE K COPPER. FOR DOUBLE SERVICES 3/4 INCH COPPER AFTER WYE WILL BE ALLOWED AND SHALL BE NO MORE THAN 4 FEET IN LENGTH. SERVICE SHALL TERMINATE WITH CURB STOP AND METER BOX. METER BOX LOCATION SHALL BE APPROVED BY FCWS.
22. METER BOXES SHALL BE PLASTIC/COMPOSITE WITH 1-7/8" DIAMETER OPENING TO ALLOW FOR ATTACHMENT OF CELLULAR METER ENDPOINT.
23. CURB STOP SHALL BE HORIZONTAL WITH A DEPTH BETWEEN 9-11 INCHES CENTER OF FLOW FROM FINAL GRADE.
24. ALL FIRE HYDRANTS SHALL BE 5-1/4 INCH VALVE OPENING M&H STYLE 129.
25. NEW WATER LINE SHALL BE PRESSURE TESTED FOR 2 HOURS AT 200 PSI. UNACCEPTABLE LEAKAGE SHALL BE REPAIRED AND WATER LINE SHALL BE RETESTED PRIOR TO ACCEPTANCE BY FAYETTE COUNTY WATER SYSTEM. MAIN MUST BE DISINFECTED PRIOR TO BEING PLACED IN SERVICE AND HAVE PASS BACTERIAL TEST.



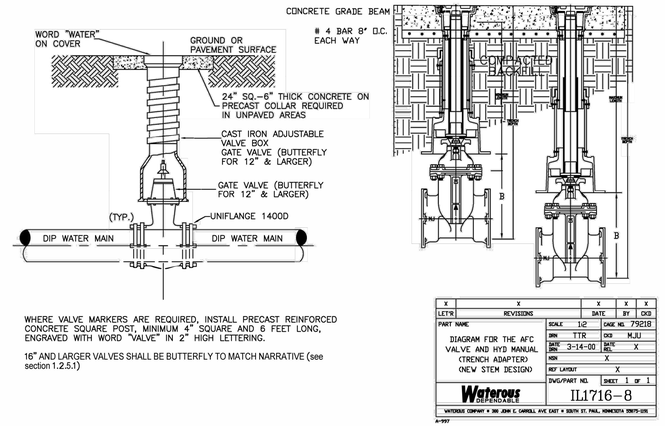
FAYETTE County Water System | THRUST BLOCK DETAIL | W-0009 | DESIGNED: J.F.C. | DRAWN: | DATE: 01/15 | SCALE: N.T.S. | BY | REVISIONS | DATE



FAYETTE County Water System | VALVE MARKER DETAIL | W-0019 | DESIGNED: J.F.C. | DRAWN: | DATE: 01/15 | SCALE: N.T.S. | BY | REVISIONS | DATE

WATER RELOCATION QUANTITIES		
DESCRIPTION	UNIT	QUANTITY
WATER MAIN, 12 IN	LF	360
CUT AND CAP EXISTING WATER MAIN	EA	2
VALVE MARKER	EA	2
GATE VALVE, 12 IN	EA	2
CONCRETE THRUST COLLAR, 12 IN PIPE	EA	2

NOTE:
REFER TO SPECIAL PROVISIONS AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION. NO ADDITIONAL QUANTITIES OR PAYMENTS WILL BE MADE BEYOND QUANTITIES LISTED, ALL ADDITIONAL MATERIALS OR INCIDENTALS TO COMPLETE THE WATERLINE INSTALLATION TO BE INCLUDED IN THE OVERALL COST OF THE PROJECT.



FAYETTE County Water System | WATER LINE VALVE INSTALLATION | W-0023 | DESIGNED: J.F.C. | DRAWN: | DATE: 01/15 | SCALE: N.T.S. | BY | REVISIONS | DATE

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

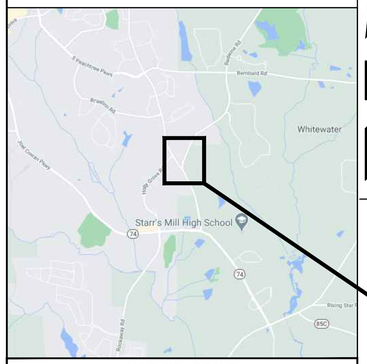
WATERLINE RELOCATION DETAILS

DRAWING NO. 44-05

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel\Design\Engineering\Design\1866.032_WaterRelocation.dwg 10/18/2023 4:42 PM USER: Eric Brisse

9/14/2023 11:40:21 AM USER:Eric Brisse	P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Eros-Cover.dwg	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
		FAYETTE	1866.032	###	###

LOCATION SKETCH



NOT TO SCALE

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983)/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

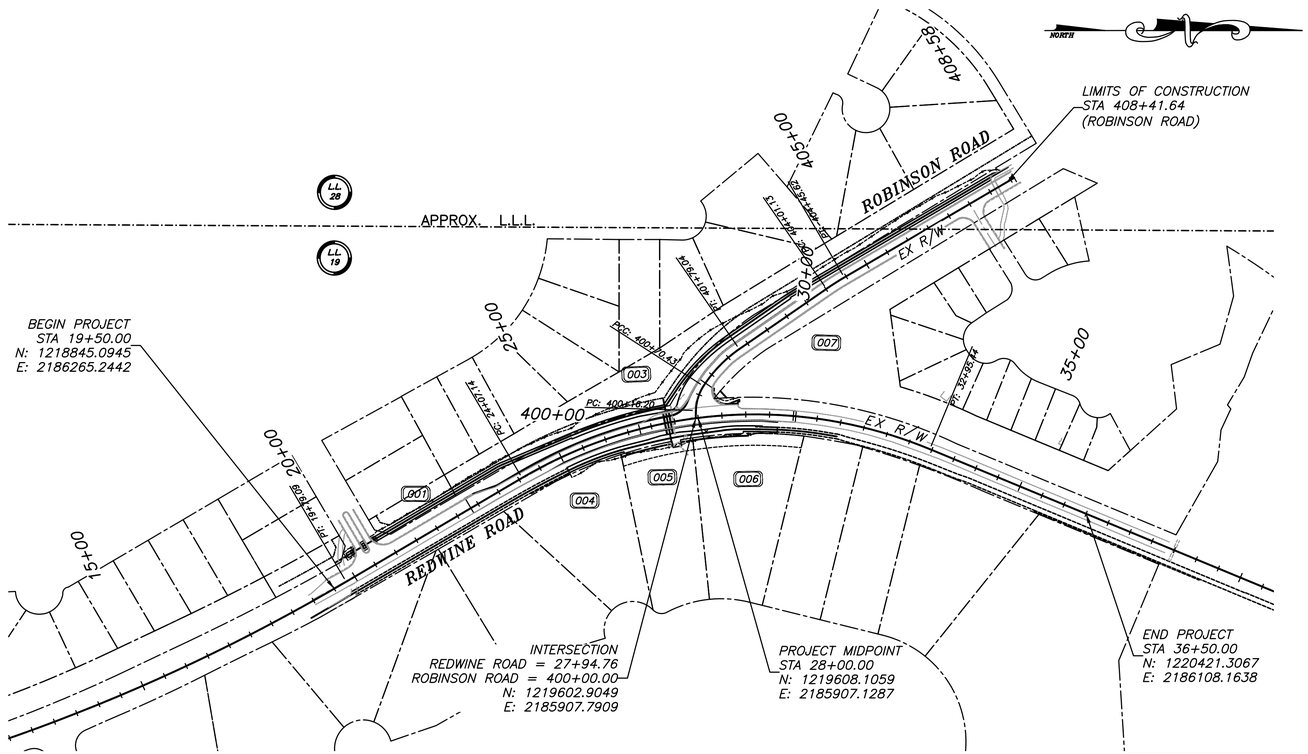
FAYETTE COUNTY

EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN

STARRS MILL SCHOOL TUNNEL

COUNTY: FAYETTE
PROJECT NO. 17TAI

GPS LOCATION		
START PROJECT:	33.35028°	N
	-84.52794°	W
END PROJECT:	33.35461°	N
	-84.52847°	W



"I certify that this Erosion, Sedimentation and Pollution Control Plan has been prepared in accordance with Part IV, of the General NPDES Permit No. GAR100002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted, provides for sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR100002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GAR100002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water."

"I certify under penalty of law that this plan was prepared after a site visit to the location described herein by myself or my authorized agent, under my direct supervision."

CHRIS RIDEOUT, P.E.

DATE — ENGINEER'S NAME, P.E.

GEORGIA PROFESSIONAL 23019 ENGINEER CHRIS RIDEOUT

LEVEL II CERT 6947

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

PRIMARY PERMITEE
PHIL MALLON
NAME
115 MCDONOUGH RD FAYETTEVILLE,GA 30215
ADDRESS
770-313-9855
PHONE NUMBER
PMALLON@FAYETTECOUNTY.GA.GOV
E-MAIL ADDRESS

24-HOUR CONTACT
24-HOUR CONTACT
NAME
ADDRESS
24-HOUR TELEPHONE
PHONE NUMBER
E-MAIL ADDRESS
Contractor shall complete the information in this box.

GEORGIA811 Utilities Protection Center, Inc
Know what's below. Call before you dig.

LENGTH OF PROJECT	COUNTY NO. 113
	MILES
NET LENGTH OF ROADWAY	0.07
NET LENGTH OF BRIDGES	0.00
NET LENGTH OF PROJECT	0.32
NET LENGTH OF EXCEPTIONS	0.00
GROSS LENGTH OF PROJECT	0.32

0 150 300 600
SCALE IN FEET

PLANS COMPLETED: 09-14-2023

REVISIONS

DATE	DRAWING *	SIGNATURE	GSWCC LEVEL II*	REQUESTING AGENCY

DRAWING No. 50-01

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

ESPCP GENERAL NOTES

The escape of sediment from the project site shall be prevented by the installation of erosion and sediment control measures and practices prior to land-disturbing activities.

Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective control, additional erosion and sedimentation control measures shall be implemented to control or treat the sediment source.

ESPCP ALTERATIONS

This Erosion, Sedimentation, and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project on the basis of common construction methods and techniques. If the Contractor elects to alter the staged construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance to Special Provision 161-Control of Soil Erosion and Sedimentation of the contract.

The Contractor, the Certified Design Professional, and the WECS shall carefully evaluate this plan prior to commencing land-disturbing activities. Admendments/revisions to the ESPCP which have a significant effect on BMPs with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC Level-II Certified Design Professional. Additional BMPs may be added per Special Provision 161-Control of Soil Erosion and Sedimentation.

CONSTRUCTION SCHEDULE AND SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted after the project is awarded along with the NOI. A copy of the construction schedule shall be maintained at the project site.

The project budget includes sufficient funds for the payment of construction exits. The Contractor is responsible for establishing at least one (1) construction exit per the specifications of the construction exit detail included in this ESPCP to minimize or eliminate the vehicle tracking of dirt, soils, and sediments off site. To facilitate project logistics, the Contractor is also responsible for selecting the location(s) of the construction exit(s).

INITIAL BMP
- *-Construct Construction Exits.*
- *-Install Type Sensitive Silt Fence where specified at disturbed areas.*

INTERMEDIATE BMP
- *-Maintain Construction Exits.*
- *-Maintain Silt Fences.*
- *-Install Sediment Traps for proposed storm structure Inlets.*
- *-Install Stone Dropped Riprap at storm outlet structures specified on plans.*
- *-Apply Temporary Mulching on the disturbed areas prior to final grading.*
- *-Apply Temporary Grassing on the disturbed areas prior to final grading.*

FINAL BMP
- *-Apply Permanent Grassing on disturbed areas.*
- *-Apply Sod on disturbed areas*

	M1	M2	M3	M4	M5	M6	M7	M8	M9
INITIAL BMPs	■	■	■	■	■	■	■	■	
INTERMEDIATE BMPs				■	■	■	■		
FINAL BMPs							■	■	■

SITE STABLIZATION AND VEGETATION PLANTING SCHEDULE

The EPD General NPDES GAR100002 permit states that any disturbed area where construction activities have temporarily or permanently ceased shall be stabilized within 14 days of such cessation or as soon as practicable if precluded by adverse weather conditions. However in special cases, the Project Engineer may require the contractor to perform stabilization more often than 14 days.

Disturbed areas shall be stabilized with suitable material listed in the current edition of the Department's Standard Specifications (or Special Provisions) Sections 161, 163, 700, or 711 on the basis of when construction activities are expected to resume.

All temporary and permanent vegetative practices including plant species, planting dates, seeding, fertilizing, liming, and mulching rates for this project can be found in Section 700 of the current edition of the Department's Standard Specifications (or Special Provisions) and other applicable contract documents or landscaping plans.

BMP INSTALLATION AND MAINTENANCE MEASURES

See the Department's Standard Specifications (or Special Provisions) 161, 163, 165, 700, 711, and other contract documents for installation and maintenance measures.

PETROLEUM STORAGE, SPILLS AND LEAKS

These plans expressly delegate the responsibility of proper on-site hazardous material management to the Contractor. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture, clean up, and disposal of any petroleum product, or other hazardous material, leaks or spills associated with the servicing, refueling or operation of any equipment utilized at the site. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with the action plan. The Contractor shall not park, refuel, or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site, the Contractor shall prepare an ESPCP addendum that addresses the additional BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GAR100002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

WASTE DISPOSAL

Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be discharged to Waters of the State, unless authorized by a Section 404 Permit.

DEWATERING AND PUMPING ACTIVITIES

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag, or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of pumped discharges. The contractor shall prepare sampling plans in accordance with the current GAR100002 NPDES permit by utilizing a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

NONSTORMWATER DISCHARGES

Nonstormwater discharges defined in Part III.A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, the Manual for Erosion and Sediment Control in Georgia, Department Standards, and other contract documents. The NPDES does not authorize the discharge of soaps or solvents used in vehicle and equipment washing or the discharge of wastewater containing stucco, paint,oils, curing compounds, and other construction materials.

READY MIX CHUTE WASH DOWN

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of Portland cement concrete is prohibited on this site.

In accordance with Standard Specification 107: Legal Regulations and Responsibility to the Public, only the discharge chute utilized in the delivery of Portland cement concrete may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travelled way, including shoulders, for a wash-down pit. The pit shall be large enough to store all wash-down water without overtopping. Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above it shall be graded to match the elevation of the surrounding areas. Alternate wash-down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash-down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down pit that includes the following: (1) a location away from any storm drain, stream, or river, (2) access to the vehicle being used for wash down, (3) sufficient volume for wash-down water, and (4) permission to use the area for wash down.

On sites where permission or access to excavate a wash-down pit is unavailable, the Contractor may have to wash-down into a sealable 55-gallon drum or other suitable container and then transport the container to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

OTHER CONTROLS

If the Contractor elects to store building material, building products, construction waste, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials on the site, the Contractor shall provide an appropriate covering to minimize the exposure of those materials or products to precipitation and stormwater to minimize the discharge of pollutants. Minimization of exposure is not required in cases where exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of the specific material or product poses little risk to stormwater contamination or is intended for outdoor use.

The Contractor shall follow this ESPCP and ensure and demonstrate compliance with all applicable State and/or local regulations for waste disposal, sanitary sewer and septic systems, and petroleum storage.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Standard Specifications.

POSTCONSTRUCTION BMPs FOR STORMWATER MANAGEMENT

All permanent postconstruction BMPs are shown in the construction plans and in the ESPCP plan. The postconstruction BMPs for this project consist of vegetation, riprap at pipe outlets for velocity dissipation and outlet stabilization, and slope stabilization matting where necessary. The postconstruction BMPs will provide permanent stabilization of the site and prevent abnormal transportation of sediment and pollutants into receiving waters.

SOIL SERIES INFORMATION

The following is a summary of the soils that are expected to be found on the project site:

MAP UNIT SYMBOL:	MAP UNIT NAME:	SLOPE PERCENTAGES:	ACRES IN AOI:	PERCENT OF AOI:
CeB	Cecil Sandy Loam	2-6	6.5	90.7%
CeC	Cecil Sandy Loam	2-6	0.7	9.3%

Due to the size and scope of this project and the nature of soils series maps, it is not reasonably practical to delineate the precise locations of the above listed soils on the construction plans.The NRCS soil survey and soil series maps for the project site are also available online at https: //websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

SILT FENCE INSTALLATION WITH J HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique is called using J hooks (or spurs). The J hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankments or slopes. The J hooks shall be spaced in accordance with GDOT Construction Detail D-24C. The maximum J-hook spacing is reached when the top of the J hook is at the same elevation as the bottom of the immediately upgradient J hook. J Hooks shall be paid for as silt fence items per linear foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.

RETENTION OF RECORDS

The Department will retain all records related to the implementation of this ESPCP in accordance with Part IV.F of the General Permit GAR100002.

SEDIMENT STORAGE

The site has a total disturbed area of 2.71 acres.

The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMP's specified in this table.

Location	Total Drainage Area (acres)	Disturbed Area (acres)	Required Sediment Storage Volume (yd^3)	Total Storage Volume Provided (yd^3)	Check Dams (8 yd^3/each) # of Devices	Check Dams (8 yd^3/each) Total Volume (yd^3)	Inlet Sediment Traps (8 yd^3/each) # of Devices	Inlet Sediment Traps (8 yd^3/each) Total Volume (yd^3)	Silt Fence (0.3 yd^3/ft) Length (ft)	Silt Fence (0.3 yd^3/ft) Total Volume (yd^3)
Outfall 1	7.73	2.31	518	333	8	64	23	184	282	85
Total Sheet Flow	0.40	0.40	27	202	0	0	0	0	674	202
Total	8.13	2.71	545	535	8	64	23	184	956	287

To prevent runoff from bypassing inlet sediment traps, a temporary sump shall be installed around all inlet sediment traps that are not located in a low point or an excavated sump. Construct temporary sumps in accordance with Construction Detail D-24C. Temporary sumps shall be installed in a manner that ensures stormwater does not bypass the inlet. The Contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

Outfall 1 – The drainage basin will not meet the required 67 cubic yards per acre of storage volume. The reason for this is due to the linear nature of the disturbance in this area. To mitigate this, the BMPs will strictly follow the clean out schedule and interval for each type of BMP used.

The drainage area disturbances are linear in nature, therefore it is not a suitable location for a Sediment Basin. The land disturbing activities associated with constructing and removing a Sediment Basin would cause adverse impacts in excess of those intended to be mitigated. Sediment storage will be provided by Inlet Sediment Traps.

CROY
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MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

ESPCP GENERAL NOTES

DRAWING NO. 51-01

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_ErosCover.dwg 3/1/2023 3:00 PM USER: Luis Mercado

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

USE OF ALTERNATIVE AND/OR ADDITIONAL BMPS:

No alternative or additional BMPs will be used on this project.

RIPRAP OUTLET PROTECTION

Structure #, Outfall ID#, or Station and Offset	Pipe Diameter Do (ft)	Q_{25} (ft^3/s)	V_{25} (ft/s)	Tailwater Condition (TW<0.5 Do TW>0.5 Do)	Width at Drainage Structure W1=3Do (ft)	Apron Length La (ft)	Downstream Width W2=Do+0.4La (ft)	Average Stone Diameter d_{50} (ft)	Apron Thickness D (ft)	Riprap Type (Type 3 or Type 1)	Quantity (yd^2)
D0	2.0	14.8	5.79	TW>0.5 Do	6.00	12	12.80	1.00	1.50	Type 3	13
29+88, 29' LT	N/A	1.4	2.13	TW<0.5 Do	6.00	12	13.00	1.00	1.50	Type 3	13

STATE-WATER BUFFER IMPACTS

State–water buffers, as defined by O.C.G.A. 12–7–1, are not impacted by this project.

Non–exempt activities shall not be conducted within the 25– or 50–foot undisturbed stream buffers as measured from the point wrested vegetation or within 25–feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits.

INSPECTIONS AND REPORTING

As the primary permittee, the Department must retain the design professional who prepared the ESPCP, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days of installation over the entire infrastructure project. Alternatively, for linear infrastructure projects, the permittee must retain either of these personnel to inspect the initial sediment storage requirements and perimeter control BMPs for the initial segment, as defined by Part IV.A.5. of the current GAR100002 Permit, within 7 days of installation and all sediment basins within the entire linear infrastructure project within 7 days of installation. The inspecting design professional shall report the results to the primary permittee within 7 days, and the permittee must correct all deficiencies within 2 business days of receipt of the inspection report, unless on–site weather conditions are such that more time is required. Additionally, the Department's Construction Project Engineer will be responsible for all subsequent 7 day inspections for all new BMP installations.

All other inspections shall be documented on the appropriate Department inspection forms. See Standard Specification (or Special Provision) 167 and other contract documents for inspection and reporting requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

Whenever the Department finds that a BMP has failed or is deficient beyond routine maintenance and has resulted in sediment deposition into waters of the State, the Contractor shall take reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. When the repair does not require a new or replacement BMP or significant repair, the BMP failure or deficiency must be corrected by the close of the next business day from the time of discovery. A repair requiring a new or replacement BMP or significant repair must be operational by no later than 7 days from the time of discovery. If the repair time within 7 days is infeasible, the Contractor and the Department shall schedule the BMP repair to be operational as soon as practical after the 7 day time frame.

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non–refundable deductions as specified in the contract documents.

WATER QUALITY INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for the inspecting and sampling procedures. Sampling locations are provided in the Sampling Location table herein.

DISCHARGES INTO OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an impaired stream segment that has been listed for criteria violated, "Bio F" (impaired fish community) and/or "Bio M" (impaired macro invertebrate community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

SAMPLING LOCATIONS AND GENERAL NOTES

Representative sampling may be utilized on this project as explained here. The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics: the type of construction activity, the disturbed acreage, the average slope about the outfall, and the soil erosion index 0–10, 10 being the most erodible soil. The construction activity types are new road on fill, new road in cut, road widening, and maintenance/safety. The disturbed area classes are less than or equal to 1 acre, greater than 1 acre to less than 2 acres, and equal to or greater than 2 acres. The average outfall slope is mild if it is equal to or less than 0.03, and steep if it is greater than 0.03. The soil erosion index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map, hydrology and hydraulic studies, construction plans, geotechnical soil survey, and erosion sedimentation and pollution control plans, the Department has determined that the representative sampling scheme shown below is valid for the duration of the project. The table shows the groups of similar outfall drainage basins.

The increase in turbidity at the specified locations in the table below will be representative of the alternate outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternate representative sampled features are identified in the table below.

Note: The Total Site Area is 2.71 acres.										Representative Sampling Scheme				
SAMPLING INFORMATION										OUTFALL CHARACTERISTICS				
Primary Sampled Feature	Location (Station and Offset)	Name of Receiving Water	Applicable Construction Stage for Sampling	Sampling Type (Outfall or Receiving water)	Drainage Area for Receiving Water (mi^2)	Upstream Disturbed Area (acres)	Warm or Cold Water Stream	Appendix B NTU Value (Outfall Sampling only)	Allowable NTU Increase (Receiving water sampling only)	Location Description	Construction Activity	Disturbed Area (acres)	Average Outfall Slope (Rise/Run)	Soil Erosion Index	Represented Outfall Drainage Basins
1	35+29.00, 22.78' LT	Unnamed Trib. to Camp Creek	All	Outfall	0.140	2.71	Warm	75	N/A	End of Network	Maintenance & Safety	2.31	0.008	5	1

The primary sampled features specified should be used as the initial sampling locations. An alternate sampled feature may be used if additional sampling is required or to replace a primary sampled feature that is no longer located within the active phase of construction.

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

ESPCP GENERAL NOTES

DRAWING NO. 51–02

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS
SWCD: _TOWALIGA SWCD_____

Project Name:___ Starrs Mill School Tunnel **Address:_Redwine Raod, Peachtree City, GA_____**

City/County:_Fayette_____ Date on Plans:___September 14th, 2023_____

Name & email of person filling out checklist:__Lalo Mercado: amercado@croyeng.com_____

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
51-03	Y	1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
50-01	Y	2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed)
50-01	Y	3 The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.
50-01	Y	4 Provide the name, address, email address, and phone number of primary permittee.
51-01	Y	5 Note total and disturbed acreages of the project or phase under construction.
50-01	Y	6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.
50-01	Y	7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
51-01	Y	8 Descriptions of the nature of construction activity and existing site conditions.
50-01	Y	9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
51-02	Y	10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
50-01	Y	11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on **Part IV page 21** of the permit.
50-01	Y	12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on **Part IV page 20** of the permit. *
50-01	Y	13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on **Part IV.D.6.c.(3) page 37** of the permit as applicable. *
51-02	Y	14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation." in accordance with **Part IV.A.5 page 26** of the permit. *
51-02	Y	15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
51-02	N	16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
51-01	Y	17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional." *
51-01	Y	18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *
51-01	Y	19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
51-01	Y	20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."
51-01	Y	21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
51-02	N	22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of a Biota Impaired Stream Segment must comply with Part III. C. of the permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. *
	N/A	23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan. *
51-01	Y	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited. *
51-01	Y	25 Provide BMPs for the remediation of all petroleum spills and leaks.
51-01	Y	26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. *
51-01	Y	27 Description of practices to provide cover for building materials and building products on site. *
51-01	Y	28 Description of the practices that will be used to reduce the pollutants in storm water discharges. *

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
51-01	Y	29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
51-02	Y	30 Provide complete requirements of Inspections and record keeping by the primary permittee. *
51-02	Y	31 Provide complete requirements of Sampling Frequency and Reporting of sampling results. *
51-01	Y	32 Provide complete details for Retention of Records as per Part IV.F. of the permit. *
51-02	Y	33 Description of analytical methods to be used to collect and analyze the samples from each location. *
51-02	Y	34 Appendix B rationale for NTU values at all outfall sampling points where applicable. *
51-02	Y	35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable. *
51-01	Y	36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase. *
54's	Y	37 Graphic scale and North arrow.
55-01	Y	38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: Existing Contours: USGS 1": 2000' Topographical Sheets; Proposed Contours: 1" : 400' Centerline Profile
	N/A	39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov.
	N/A	40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. *
	N/A	41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
	N/A	42 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.
53-01	Y	43 Delineation and acreage of contributing drainage basins on the project site.
55-01	Y	44 Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.
53-01	Y	45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
53-01	Y	46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
51-01	Y	47 Soil series for the project site and their delineation.
54's	Y	48 The limits of disturbance for each phase of construction.
51-01		49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.
54's	Y	50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
56-01	Y	51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
56-02	Y	52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

* If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream, the * checklist items would be N/A.

Effective January 1, 2023

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

ESPCP GENERAL NOTES

DRAWING NO. 51-03

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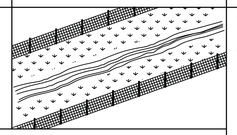
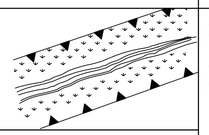
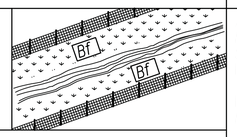
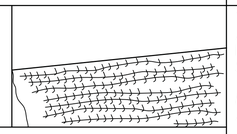
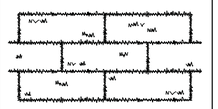
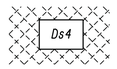
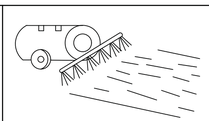
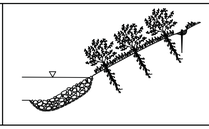
CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
	ORANGE BARRIER FENCE		ORANGE BARRIER FENCE DELINEATES ENVIRONMENTALLY SENSITIVE AREAS WHERE THE CONTRACTOR SHALL NOT CLEAR, GRUB, OR PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.
		LINE CODE  ORANGE BARRIER FENCE	
ESA	ENVIRONMENTALLY SENSITIVE AREA		AN ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE. ESAs INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, HISTORIC SITES, ARCHAEOLOGICAL SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS. IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.
		LINE CODE  ESA-25'(OR 50')STREAM BUFFER, ETC.	
Bf	BUFFER ZONE		A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS. WHEN NECESSARY, BUFFER ZONES ARE TO BE PROTECTED BY ORANGE BARRIER FENCE.
		SYMBOL Bf	
Ds1	MULCH SECTION 163		THIS IS AN APPLICATION OF STRAW MULCH USED TO REDUCE SOIL EROSION AND STABILIZE THE SOIL. IT IS USED TO CONTROL EROSION IN AREAS WHERE PERMANENT VEGETATION IS OUT OF SEASON OR TO TEMPORARILY STABILIZE AREAS PRIOR TO FINAL GRADING. MULCHING REQUIREMENTS ARE ADDRESSED BY STANDARD SPECIFICATIONS AND/OR THE PROJECT ENGINEER. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL Ds1	
Ds2	TEMPORARY GRASSING SECTION 163,700		THE SOWING OF A QUICK GROWING SPECIES OF GRASS SUITABLE TO THE AREA AND SEASON. IT IS TYPICALLY USED TO CONTROL EROSION IN AREAS LONGER THAN MULCHING IS EXPECTED TO LAST. TEMPORARY GRASSING SHOULD BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATIONS. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL Ds2	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ds3	PERMANENT GRASSING SECTION 700		THE SOWING OF PERMANENT VEGETATION, SUCH AS GRASS, SUITABLE TO THE AREA AND SEASON. PERMANENT VEGETATION SHALL BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATION. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL Ds3	
Ds4	SODDING CONSTRUCTION DETAIL D-54 SECTION 700,890		THE INSTALLATION OF A SPECIES OF GRASS SODDING SUITABLE TO THE AREA AND SEASON TO PROVIDE IMMEDIATE PERMANENT VEGETATION. SODDING MAY BE SHOWN FOR HIGHLY SENSITIVE AREAS, TO IMPROVE AESTHETICS, OR FOR SPECIAL PLANTING REQUIREMENTS ON THE BASIS OF ENVIRONMENTAL COMMITMENTS OR LANDSCAPING REQUIREMENTS. THE BMP PATTERN FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		PATTERN 	
Fl-Co	FLOCCULANTS COAGULANTS SECTION 163,700, 895		FLOCCULANTS AND COAGULANTS ARE USED TO SETTLE SUSPENDED SEDIMENT, HEAVY METALS, AND HYDROCARBONS (TSS) IN SLOW MOVING RUNOFF FROM CONSTRUCTION SITES FOR WATER CLARIFICATION. ANIONIC POLYACRYLAMIDES (PAM) MAY BE USED IN CONJUNCTION WITH BMPs WITHIN CHANNELS UPSTREAM OF A POST-CONSTRUCTION POND, TEMPORARY SEDIMENT BASIN, OR TEMPORARY SEDIMENT TRAP. FLOCCULANTS SHALL NOT BE USED DOWNSTREAM OF AFOREMENTIONED BMPs! FLOCCULANTS/COAGULANTS ARE TO BE SHOWN ON PLANS WITH APPLICABLE BMP IF NEEDED. PAYMENT FOR PAM AS A FLOCCULANT WILL BE INCLUDED IN THE PRICE FOR THE INSTALLATION AND/OR MAINTENANCE OF THE BMP IT IS USED IN CONJUNCTION WITH. NO SEPARATE PAYMENT WILL BE MADE.
		SYMBOL Fl-Co POLYACRYLAMIDE	
Sb	STREAMBANK STABILIZATION SECTION 702		STREAMBANK STABILIZATION IS THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAMBANKS, OR TO PREVENT, OR RESTORE AND REPAIR SMALL STREAMBANK EROSION PROBLEMS. STREAMBANK STABILIZATION AREAS SHOULD BE SHOWN ON THE PLANS WHEN APPLICABLE TO THE PROJECT. REFER TO THE PROJECT'S STREAM AND STREAM BUFFER MITIGATION PLANS FOR PLANT SPECIES, LOCATIONS, AND OTHER PLANTING DETAILS.
		PATTERN 	

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

NO SCALE

REVISION DATES
3/2/2017

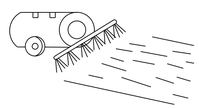
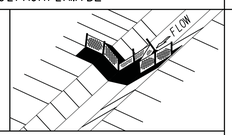
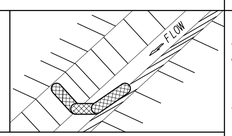
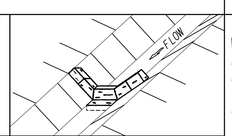
EROSION CONTROL LEGEND

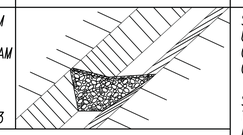
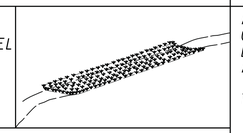
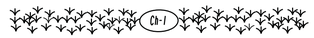
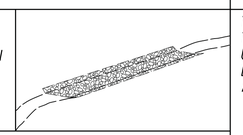
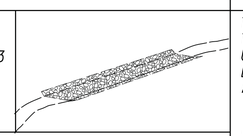
UNIFORM CODE SHEET

SHEET 1 OF 7

CHECKED:	D. EAGLETON	DATE: 01/01/16	DRAWING No.
BACKCHECKED:		DATE:	52-0001
CORRECTED:		DATE:	
VERIFIED:		DATE:	

7/31/2015 GPLN

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ss	SLOPE STABILIZATION CONSTRUCTION DETAIL D-35 SECTION 716		SLOPE STABILIZATION (EROSION CONTROL MATTING) IS A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS. SLOPE STABILIZATION MAY BE A ROLLED EROSION CONTROL PRODUCT (RECP) OR A HYDRAULIC EROSION CONTROL PRODUCT (HECP). SLOPE STABILIZATION SHALL BE USED ON ALL CUT OR FILL SLOPES OF 2.5:1 OR STEEPER AND WITHIN 50 FEET OF ALL CROSS DRAINS AND CULVERTS. NOTE: ONLY COCONUT FIBER BLANKET OR WOOD FIBER BLANKET SHALL BE USED AS SLOPE STABILIZATION WITHIN BUFFERED AREAS.
	PATTERN 		
Tac	TACKIFIERS SECTION 163, 700, 895		TACKIFIERS HYDRATE IN WATER AND READILY BLEND WITH OTHER SLURRY MATERIALS AND ARE USED TO TIE-DOWN FOR SOIL, COMPOST, SEED, STRAW, HAY OR MULCH. TACKIFIERS REQUIREMENTS, SUCH AS ANIONIC POLYACRYLAMIDES (PAM) ARE ADDRESSED BY STANDARD SPECIFICATIONS AND ARE NOT TYPICALLY SHOWN ON THE PLANS. PAM IS TYPICALLY USED BY THE CONTRACTOR FOR TEMPORARY OR PERMANENT GRASSING. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR CRITERIA.
	SYMBOL Tac POLYACRYLAMIDE		
Cd-F	FABRIC CHECK DAM CONSTRUCTION DETAIL D-24D SECTION 171		A CHECK DAM COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POST, OVERFLOW WEIR, AND TURF REINFORCEMENT MATTING (TRM) SPLASHPAD PLACED IN DITCHES IN A SPECIAL CONFIGURATION WHICH CONTROLS ENERGY DISSIPATION AND FILTRATION OF STORM WATER. SEE CONSTRUCTION DETAIL D-24D FOR ADDITIONAL INFORMATION AND SPACING REQUIREMENTS. THIS ITEM IS SUITABLE FOR USE IN ROADSIDE DITCHES THAT ARE PART OF INFRASTRUCTURE CONSTRUCTION PROJECTS AND WITHIN THE CLEAR ZONE. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	SYMBOL Cd-F		
Cd-Fs	COMPOST FILTER SOCK CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A COMPOST FILTER SOCK CHECK DAM IS COMPOSED OF A PHOTODEGRADABLE OR BIODEGRADABLE KNITTED MESH MATERIAL CONTAINING A WEED FREE FILLER MATERIAL DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THEY SHALL BE PROPERLY STAKED FOR DITCH APPLICATIONS. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR MATERIAL SPECIFICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	SYMBOL Cd-Fs		
Cd-Hb	BALED STRAW CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A BALE STRAW CHECK DAM IS COMPOSED OF BALES PREFERABLY BOUND WITH WIRE OR NYLON INSTEAD OF TWINE. BALES SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING ADJACENT BALES. THE DOWNSTREAM ROW OF BALES SHALL BE PLACED IN A TRENCH TO ALLOW THE TOP OF THE BALE'S LONG, WIDE SIDE TO BE LEVEL WITH THE GROUND AS A NON-ERODIBLE SPLASH PAD. PROPER STAKING IS ALSO REQUIRED FOR DITCH APPLICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	SYMBOL Cd-Hb		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Cd-S	STONE CHECK DAM OR SANDBAG CHECK DAM CONSTRUCTION DETAIL D-56 SECTION 163.603		STONE CHECK DAMS ARE CONSTRUCTED OF TYPE-3 RIP-RAP WITH GEOTEXTILE UNDERLINER. STONE CHECK DAMS ARE PREFERRED IN ROADWAY DITCHES OUTSIDE THE CLEAR ZONE. CONSIDERATION SHOULD BE GIVEN TO USING OTHER APPROPRIATE CHECK DAMS AND/OR BMPs WITHIN THE CLEAR ZONE. SANDBAG CHECK DAMS ARE RECOMMENDED IN CONCRETE LINED CHANNELS FOR TEMPORARY VELOCITY CONTROL ONLY. ENSURE DISCHARGE POINT IS PROPERLY STABILIZED AND INCLUDE APPROPRIATE BMPs FOR SEDIMENT STORAGE UPSTREAM AND/OR DOWNSTREAM OF CONCRETE LINED CHANNELS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	SYMBOL Cd-S		
Ch-1	VEGETATED CHANNEL STABILIZATION SECTION 700		A NEW OR EXISTING CHANNEL MAY BE LINED WITH PERMANENT VEGETATION ONLY FOR VELOCITIES UP TO 5.0 fps. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT CHANNEL LINING DESIGN PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. TYPICALLY NOT SHOWN IN PLANS.
	LINE CODE 		
Ch-2R1	CHANNEL STABILIZATION RIP-RAP, TYPE 1 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 1 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE 		
Ch-2R3	CHANNEL STABILIZATION RIP-RAP, TYPE 3 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 3 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE 		

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

NO SCALE

REVISION DATES
3/2/2017
11/28/2018

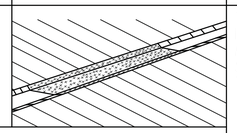
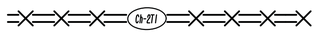
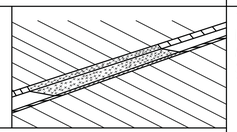
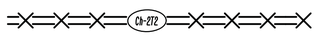
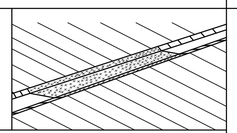
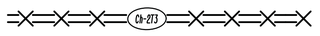
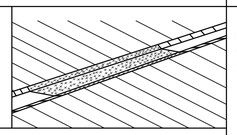
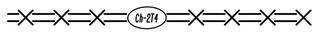
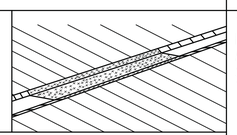
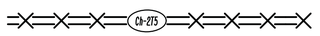
EROSION CONTROL LEGEND

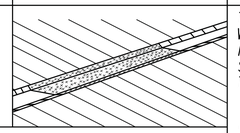
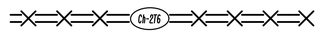
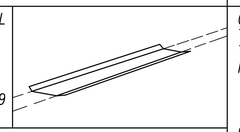
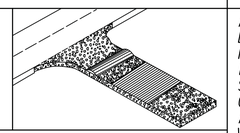
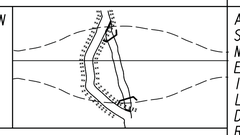
UNIFORM CODE SHEET

SHEET 2 OF 7

CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 52-0002

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T1	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-2 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T2	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-4 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T3	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-6 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T4	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-8 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T5	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-10 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T6	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711	 LINE CODE 	THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-12 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-3	CONCRETE CHANNEL STABILIZATION CONSTRUCTION DETAIL D-10, D-49 SECTION 441	 LINE CODE 	CHANNELS ARE LINED WITH CONCRETE FOR VELOCITIES >/= 10 fps. THIS ITEM CONSISTS OF CONSTRUCTING A 4" THICK CONCRETE CHANNEL. THE CONCRETE SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN. RIP-RAP SHOULD BE USED TO DISSIPATE ENERGY DOWNSTREAM OF CONCRETE LINED CHANNELS.
Co	CONSTRUCTION EXIT CONSTRUCTION DETAIL D-41 SECTION 163, 800	 SYMBOL 	A CONSTRUCTION EXIT IS A STONE STABILIZED PAD THAT REDUCES OR ELIMINATES THE TRANSPORT OF MUD FROM CONSTRUCTION AREAS ONTO PUBLIC ROADS BY EQUIPMENT OR RUNOFF. BEST USED AT ACCESS POINTS, I.e. NEW LOCATION PROJECTS, BORROW PITS, WASTE PITS, ACCESS ROADS, ETC. SHOULD BE MINIMUM 20' WIDE, 50' LONG, 6" THICK, AND REQUIRES A GEOTEXTILE UNDERLINER. ON SITES WHERE THE GRADE TOWARD A PAVED AREA IS GREATER THAN 2%, A FULL WIDTH DIVERSION RIDGE 6" TO 8" HIGH WITH 3:1 SLOPES SHALL BE CONSTRUCTED APPROXIMATELY 15' UPSTREAM OF PAVED AREA. A TIRE WASHING AREA TO REMOVE MUD MAY ALSO BE REQUIRED PRIOR TO ENTRANCE ONTO PUBLIC ROADWAYS. ALL CONSTRUCTION EXIT REQUIREMENTS ARE INCLUDED IN THE PRICE OF THE CONSTRUCTION EXIT.
Dc-A	STREAM DIVERSION CHANNEL GEOTEXTILE, POLYETHYLENE FILM SECTION 163	 LINE CODE 	A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE OR POLYETHYLENE FILM. INSTALL TWO ROWS OF Sdl-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 0 - 2.5 fps. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

GDOT

NO SCALE

REVISION DATES

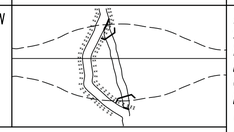
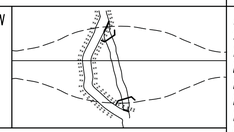
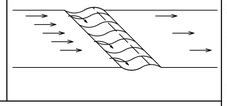
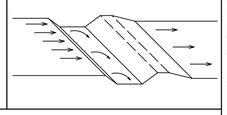
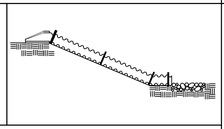
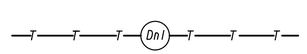
3/2/2017		

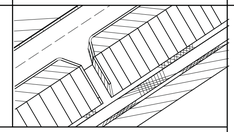
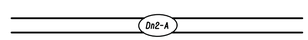
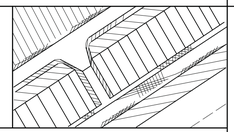
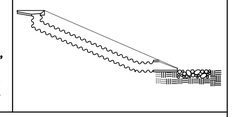
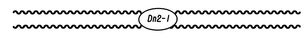
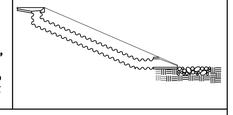
EROSION CONTROL LEGEND

UNIFORM CODE SHEET

SHEET 3 OF 7

CHECKED:	D. EAGLETON	DATE: 01/01/16	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	52-0003
VERIFIED:		DATE:	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dc-B	STREAM DIVERSION CHANNEL GEOTEXTILE ONLY SECTION 163	 LINE CODE 	A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE ONLY. INSTALL TWO ROWS OF Sdl-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 2.5 - 9.0 fps. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
Dc-C	STREAM DIVERSION CHANNEL RIP-RAP & GEOTEXTILE SECTION 163	 LINE CODE 	A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH RIP-RAP AND GEOTEXTILE. INSTALL TWO ROWS OF Sdl-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 9.0 - 13.0 fps. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
Dl-1	DIVERSION BERM CONSTRUCTION DETAIL D-47 SECTION 205	 LINE CODE 	A NON-DESIGNED TEMPORARY EARTHEN BERM WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO BE USED AT THE EDGE OF EMBANKMENT DURING THE GRADING OPERATION. THE BERMS ARE ALSO CONSTRUCTED ABOVE, ACROSS OR BELOW A SLOPE TO REDUCE THE LENGTH OF A SLOPE. THEY ARE USED TO INTERCEPT RUNOFF, PREVENTING SLOPE EROSION AND TO DIRECT THE RUNOFF TO A STABLE OUTLET, DOWN DRAINS "Dnl"OR CATCHMENT AREAS AND ON ALL GRADING PROJECTS.
Dl-2	DIVERSION CHANNEL SECTION 205	 LINE CODE 	A DESIGNED TEMPORARY OR PERMANENT CHANNEL WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO DIVERT OFFSITE RUNOFF AWAY FROM DISTURBED AREAS WITHIN THE PROJECT AREA. CHANNEL FOR OFFSITE RUNOFF SHALL BE STABILIZED WITH APPROPRIATE CHANNEL STABILIZATION. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA. A DIVERSION CHANNEL DETAIL MUST ALSO BE PROVIDED IN THE ESPCP. RUNOFF FROM DISTURBED AREAS WITHIN THE PROJECT AREA SHALL NOT BE ALLOWED TO CONVERGE WITH OFFSITE RUNOFF WITHIN THIS DIVERSION.
Dnl	TEMPORARY DOWNDRAIN STRUCTURE FLEXIBLE CONSTRUCTION DETAIL D-19 SECTION 163	 LINE CODE 	A TEMPORARY PIPE SLOPE DRAIN IS A PLASTIC FLEXIBLE PIPE TO CARRY WATER FROM THE WORK AREA TO A LOWER ELEVATION. TEMPORARY SLOPE DRAINS SHOULD BE PLACED AT INTERVALS OF 350 FEET ON 0% - 2% GRADES, 200 FEET ON STEEPER GRADES AND MORE FREQUENTLY AS DICTATED BY FIELD CONDITIONS. THE TYPICAL PIPE SIZE IS A CORRUGATED 10". THE PIPE WILL BE ANCHORED WITH STAKES AT INTERVALS NOT TO EXCEED 10'. THE OUTLET AREA SHALL BE STABILIZED FOR VELOCITY DISSIPATION AND EROSION CONTROL.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dn2-A	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441	 LINE CODE 	A CONCRETE FLUME TYPE "A" IS USED TO DIRECT SURFACE RUNOFF DOWN A ROADWAY SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN ALL DEPRESSED AREAS WHERE WATER WILL FLOW DOWN THE SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OTHER CRITERIA).
Dn2-B	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441	 LINE CODE 	A CONCRETE FLUME TYPE "B" IS USED TO DIRECT SURFACE DITCH RUNOFF DOWN A BACK SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN DEPRESSED AREAS WHERE CONCENTRATED OFFSITE WATER REACHES THE CUT SLOPE. IT IS DESIGNED TO SAFELY CONVEY WATER DOWN THE CUT SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
Dn2-1	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP1, 9017J TP1, DETAIL D-26 TP1 SECTION 576, 577	 LINE CODE 	CONCRETE DRAIN INLET WITH METAL PIPE IS USED TO DRAIN CURBS, ON A GRADE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
Dn2-2	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP2, 9017J TP2, DETAIL D-26 TP2 SECTION 576, 577	 LINE CODE 	CONCRETE DRAIN INLET AND METAL PIPE IS USED TO DRAIN CURB, IN A SAG, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

GDOT

NO SCALE

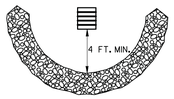
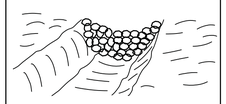
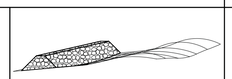
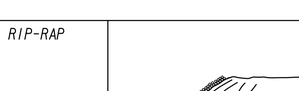
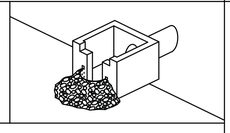
REVISION DATES
3/2/2017

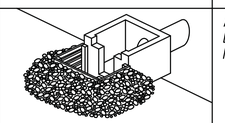
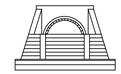
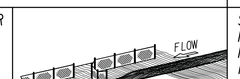
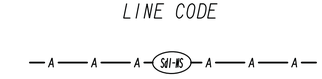
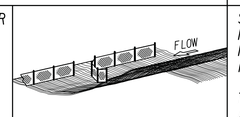
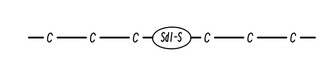
EROSION CONTROL LEGEND

UNIFORM CODE SHEET

SHEET 4 OF 7

CHECKED:	D. EAGLETON	DATE:	01/01/16	DRAWING No.
BACKCHECKED:		DATE:		52-0004
CORRECTED:		DATE:		
VERIFIED:		DATE:		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Fr	FILTER RING CONSTRUCTION DETAIL D-46 SECTION 163	 SYMBOL Fr	A TEMPORARY STONE BARRIER CONSTRUCTED AT DRAINAGE STRUCTURE INLETS AND POST-CONSTRUCTION POND OUTLETS. IT REDUCES RUNOFF VELOCITY AND HELPS PREVENT SEDIMENT FROM LEAVING SITE PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION ON USAGE.
Rd	ROCK FILTER DAM CONSTRUCTION DETAIL D-43 SECTION 163, 603	 SYMBOL Rd	ROCK FILTER DAMS ARE CONSTRUCTED OF TYPE 3 STONE RIP-RAP FACED WITH #57 STONE ON THE UPSTREAM SIDE. THEY ARE PLACED ACROSS DRAINAGEWAYS WHICH DRAIN 50 ACRES OR LESS. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING ROCK FILTER DAMS. THE DAM SHOULD NOT BE HIGHER THAN THE CHANNEL BANKS. ROCK FILTER DAMS SHOULD BE USED IN DITCHES PRIOR TO DISCHARGING INTO STREAMS, WETLANDS, OPEN-WATERS, OR OTHER ESAs.
Rd-B	STONE FILTER BERM CONSTRUCTION DETAIL D-50 SECTION 163, 603	 LINE CODE 	STONE FILTER BERMS ARE CONSTRUCTED SIMILAR TO ROCK FILTER DAMS FOR A LINEAR APPLICATION. THEY ARE CONSTRUCTED OF TYPE-3 STONE RIP-RAP FACED WITH #57 STONE ON THE UPSTREAM SIDE. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING STONE FILTER BERMS. STONE FILTER BERMS ARE IDEAL ALONG THE PERIMETER FOR SHEET FLOW AND/OR SHALLOW CONCENTRATED FLOW TO A COMMON LOW AREA WHERE PERIMETER SILT FENCE ALONE MAY BE INSUFFICIENT, THERE IS NO WELL-DEFINED CHANNEL FOR A STANDARD ROCK FILTER DAM, AND/OR CONSTRUCTING A ROCK OUTLET TEMPORARY SEDIMENT TRAP IS NOT APPLICABLE.
Rp	RIP-RAP SECTION 603	 PATTERN 	RIP-RAP IS A FLEXIBLE PERMANENT BLANKET FOR PROTECTION OF FILL SLOPES AND BRIDGE END ROLLS. RIP-RAP TYPE-1 SHOULD BE PLACED ON TOP OF A GEOTEXTILE UNDERLINER AT A MINIMUM 24" THICKNESS OR AS INDICATED ON THE PLANS. RIP-RAP MAY ALSO BE USED AT DRAINAGE STRUCTURE OUTLETS WITHIN THE RIGHT-OF-WAY. HOWEVER, APPROPRIATE OUTLET PROTECTION SHOULD BE PROVIDED AT OUTFALLS. REFER TO STORM DRAIN OUTLET PROTECTION FOR ADDITIONAL INFORMATION ON USING RIP-RAP AT OUTFALLS.
Rt-P	RETROFITTING PERFORATED HALF-ROUND PIPE CONSTRUCTION DETAIL D-44 SECTION 163	 SYMBOL Rt-P	A PERFORATED HALF-ROUND PIPE WITH STONE FILTER PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER. SHOULD BE USED ONLY IN DETENTION PONDS WITH LESS THAN 30 ACRES TOTAL DRAINAGE AREA. SHALL ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Rt-B	RETROFITTING SLOTTED BOARD DAM CONSTRUCTION DETAIL D-45 SECTION 163	 SYMBOL Rt-B	A SLOTTED BOARD DAM CONSISTS OF STONE AND/OR FILTER FABRIC AND BOARDS WITH 0.5" - 1.0" SPACING TO SERVE AS A TEMPORARY SEDIMENT FILTER. PERMANENT STORMWATER DETENTION POND OUTLET: -DRAINAGE AREA UP TO 100 ACRES -DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA ROADWAY DRAINAGE STRUCTURE: -OPEN END PIPES, WINGED HEADWALLS, OR CONCRETE WEIR OUTLETS WITH DRAINAGE AREA LESS THAN 30 ACRES REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
Rt-Sg1 Rt-Sg2 Rt-Sg3	RETROFITTING SILT CONTROL GATES CONSTRUCTION DETAIL D-20 SECTION 163	 SYMBOL Rt-Sg1 Rt-Sg2 Rt-Sg3	A SILT CONTROL GATE CONSISTS OF BOARDS WITHOUT SPACING AND FILTER FABRIC TO BE USED FOR TEMPORARY SEDIMENT STORAGE ON ROADWAY PROJECTS AT THE INLET OF STRUCTURES WITH A DRAINAGE AREA UP TO 50 ACRES. THE DISTURBED AREA WITHIN THE DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. SILT CONTROL GATES SHOULD NOT BE USED ALONE, BUT WITH ANOTHER BMP DOWNSTREAM PRIOR TO DISCHARGE LEAVING PROJECT AREA. DO NOT USE SILT GATES IN STATE WATERS. Rt-Sg1=TYPE 1: USED ON BOX CULVERTS Rt-Sg2=TYPE 2: USED ON STRAIGHT HEADWALLS Rt-Sg3=TYPE 3: USED ON FLARED END SECTIONS AND TAPERED HEADWALLS
Sdl-NS	SEDIMENT BARRIER (NON-SENSITIVE) SILT FENCE TYPE A CONSTRUCTION DETAIL D-24 SECTION 171	 LINE CODE 	SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-A SILT FENCE IS TYPICALLY USED IN NON-ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS LESS THAN 10'. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.
Sdl-S	SEDIMENT BARRIER (SENSITIVE) SILT FENCE TYPE C CONSTRUCTION DETAIL D-24 SECTION 171	 LINE CODE 	SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-C SILT FENCE IS TYPICALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS 10' AND GREATER. ALL ENVIRONMENTALLY SENSITIVE AREAS (ESAs) SHALL BE PROTECTED WITH A DOUBLE-ROW OF TYPE-C SILT FENCE REGARDLESS OF FILL HEIGHT. A SINGLE-ROW MAY BE USED FOR OTHER APPLICATIONS. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

GDOT

NO SCALE

REVISION DATES
3/2/2017

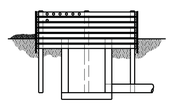
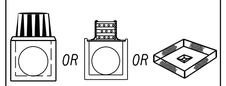
EROSION CONTROL LEGEND

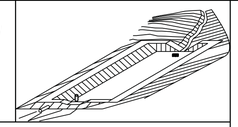
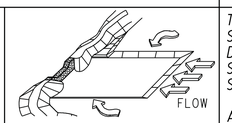
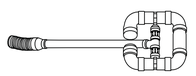
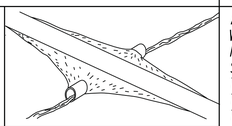
UNIFORM CODE SHEET

SHEET 5 OF 7

CHECKED:	D. EAGLETON	DATE: 01/01/16	DRAWING No.
BACKCHECKED:		DATE:	52-0005
CORRECTED:		DATE:	
VERIFIED:		DATE:	

7/31/2015 GPLN

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd1-BB	SEDIMENT BARRIER BRUSH BARRIER CONSTRUCTION DETAIL D-24B SECTION 201	 LINE CODE * * * Sd1-BB * * *	THIS ITEM CONSISTS OF INTERMINGLED BRUSH, LOGS, ETC. SO AS NOT TO FORM A SOLID DAM. CONSTRUCTED AT THE TOE OF FILL SLOPES ONLY DURING THE CLEARING AND GRUBBING OPERATION. THE BARRIER SHOULD BE USED AT THE TOE OF FILL SLOPES ON GRADING PROJECTS IN RURAL AREAS WHERE SUFFICIENT RIGHT OF WAY OR EASEMENT IS AVAILABLE (10 FEET OR MORE). THE BARRIER SHOULD RUN ROUGHLY PERPENDICULAR TO THE FLOW OF WATER WHERE THIS DOES NOT CONFLICT WITH RIGHT-OF-WAY OR EASEMENT LIMITS. THEY WILL NOT BE PLACED IN WETLANDS. TYPICALLY NOT SHOWN ON PLANS. PAYMENT FOR THIS ITEM IS INCLUDED IN THE CLEARING AND GRUBBING COST. NO SEPARATE PAYMENT SHALL BE MADE.
Sd2-B	INLET SEDIMENT TRAP (BAFFLE BOX) CONSTRUCTION DETAIL D-42 SECTION 163	 SYMBOL Sd2-B	BAFFLE BOX INLET SEDIMENT TRAP USED FOR INLETS RECEIVING HIGH FLOW RATE AND/OR VELOCITY. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES 7 cfs AND GREATER.
Sd2-Bg	INLET SEDIMENT TRAP (BLOCK & GRAVEL) CONSTRUCTION DETAIL D-42 SECTION 163	 SYMBOL Sd2-Bg	BLOCK AND GRAVEL DROP INLET PROTECTION USED FOR WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. CAN BE USED AT CULVERT INLETS. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 5 - 7 cfs.
Sd2-F	INLET SEDIMENT TRAP (FILTER FABRIC) CONSTRUCTION DETAIL D-24C SECTION 163	 (a) OR (b) OR (c) SYMBOL Sd2-F	(a) A SEDIMENT BARRIER CONSISTING OF A PREFABRICATED FRAME WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (b) A SEDIMENT BARRIER CONSISTING OF A PERFORATED METAL STAND PIPE WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (c) TYPE C SILT FENCE WITH SUPPORTING FRAME CAN BE USED AS AN ALTERNATE TO INLET SEDIMENT TRAP FOR AREAS WITH SLOPES < 5%. THIS ITEM IS USED TO PREVENT SILT FROM ENTERING THE PIPE SYSTEM. SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS. RECOMMENDED FOR INLET RECEIVING FLOW RATES THAT RANGE FROM 0 - 4 cfs.
Sd2-G	INLET SEDIMENT TRAP (GRAVEL) CONSTRUCTION DETAIL D42 SECTION 163	 SYMBOL Sd2-G	GRAVEL DROP INLET PROTECTION USED WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED. STONE AND GRAVEL ARE USED TO TRAP SEDIMENT. THE SLOPE TOWARD THE INLET SHALL BE NO MORE THAN 3:1. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 3 - 5 cfs.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd3	TEMPORARY SEDIMENT BASIN CONSTRUCTION DETAIL D-22A, D-22B SECTION 163	 SYMBOL Sd3	A BASIN CREATED BY EXCAVATING AN AREA, DAMMING CONCENTRATED FLOW, OR A COMBINATION OF BOTH. THE BASIN IS DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DRAINAGE AREA. THE DRAINAGE AREA SHOULD NOT EXCEED 150 ACRES. BASINS TYPICALLY CONSISTS OF A DAM, PRINCIPAL SPILLWAY, AND AN EMERGENCY SPILLWAY. A FLOATING SURFACE SKIMMER SHALL BE REQUIRED AS PART OF THE PRINCIPAL SPILLWAY UNLESS INFEASIBLE. SUFFICIENT RIGHT-OF-WAY OR EASEMENT IS NEEDED FOR BASIN CONSTRUCTION AND MAINTENANCE ACCESS. SEDIMENT BASINS SHALL BE CONSIDERED ON ALL PROJECTS, BUT MAY NOT BE PRACTICAL. BASINS SHOULD BE LOCATED TO MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES AND UTILITIES. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
Sd4-C	ROCK OUTLET TEMPORARY SEDIMENT TRAP CONSTRUCTION DETAIL D-53 SECTION 163	 FLOW SYMBOL Sd4-C	TEMPORARY POND WITH ROCK OUTLET DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER DRAINAGE AREA. DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. DISTINGUISHED FROM TEMPORARY SEDIMENT BASIN BY LACK OF PRINCIPAL SPILLWAY. MAXIMUM POND DEPTH FROM BOTTOM OF POND TO EMERGENCY SPILLWAY IS 4 FEET. A TEMPORARY SEDIMENT BASIN SHALL BE EVALUATED PRIOR TO CONSIDERING A TEMPORARY SEDIMENT TRAP. A TEMPORARY SEDIMENT TRAP IS IDEAL FOR SMALL AREAS WITH NO UNUSUAL DRAINAGE FEATURES AND EFFECTIVE AGAINST COARSE SEDIMENT, BUT NOT AGAINST SILT OR CLAY PARTICLES THAT REMAIN SUSPENDED. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
Sk	FLOATING SURFACE SKIMMER CONSTRUCTION DETAIL D-22A, D-22B SECTION 163	 SYMBOL Sk	A BUOYANT DEVICE THAT DRAINS WATER FROM THE SURFACE OF A TEMPORARY SEDIMENT BASIN AT A CONTROLLED FLOW RATE. THE INLET/ORIFICE SIZE IS DESIGNED TO DRAIN THE BASIN WITHIN 24 - 48 HOURS. THE SKIMMER INFORMATION SHALL BE PROVIDED IN CONJUNCTION WITH THE SEDIMENT BASIN INFORMATION IN PLANS. IF A SKIMMER IS INFEASIBLE, THE DESIGNER SHALL PROVIDE A WRITTEN JUSTIFICATION IN THE PLANS. SKIMMERS ARE ATTACHED TO A RISER WITHOUT PERFORATIONS AND ACTS AS THE PRIMARY SPILLWAY. THE SKIMMER BMP SYMBOL SHALL BE SHOWN IN CONJUNCTION WITH THE TEMPORARY SEDIMENT BASIN BMP SYMBOL WHEN APPLICABLE. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION.
Sr	TEMPORARY STREAM CROSSING SECTION 107	 SYMBOL Sr	A TEMPORARY STRUCTURE INSTALLED ACROSS A FLOWING STREAM OR WATERCOURSE FOR USE BY CONSTRUCTION EQUIPMENT. THIS BMP PROVIDES A MEANS TO CROSS STREAMS OR WATERCOURSES WITHOUT MOVING SEDIMENT INTO STREAMS, DAMAGING THE STREAM BED OR CHANNEL, OR CAUSING FLOODING. THIS BMP SHOULD NOT BE USED ON STREAMS WITH DRAINAGE AREAS GREATER THAN ONE SQUARE MILE, UNLESS SPECIFICALLY DESIGNED TO ACCOMMODATE THE ADDITIONAL DRAINAGE AREA BY THE DESIGN PROFESSIONAL. A CERTIFICATION STATEMENT AND SIGNATURE SHALL ACCOMPANY THE DESIGN. THIS BMP SHALL BE DESIGNED ACCORDING TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". FOR CONTRACTOR'S USE ONLY!

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

GDOT

NO SCALE

REVISION DATES
3/2/2017
11/28/2018

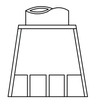
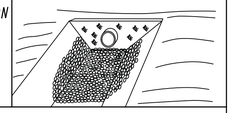
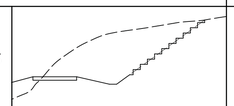
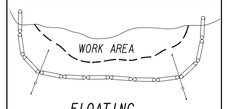
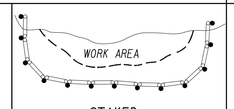
EROSION CONTROL LEGEND

UNIFORM CODE SHEET

SHEET 6 OF 7

CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 52-0006

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
St	STORM DRAIN OUTLET PROTECTION GA. STD. 1125 & 2332	 SYMBOL St	A PIPE OR BOX CULVERT OUTLET HEADWALL WITH AN APRON AND DISSIPATOR BLOCKS IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE PRIOR TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM. IT IS USED ON THE OUTLET OF ALL BOX CULVERTS AND ON 48" AND LARGER PIPES. MAY BE USED ON INLET FOR FLOWING STREAMS. USE ON SMALL PIPES WHEN OUTLET VELOCITY OF THE 25-YEAR STORM IS 12 fps AND GREATER.
St-Rp	STORM DRAIN OUTLET PROTECTION (RIP-RAP) CONSTRUCTION DETAIL D-55 SECTION 603	 PATTERN FLAT AREA St-Rp OR St-Rp WELL-DEFINED CHANNEL	RIP-RAP OUTLET PROTECTION IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE, CHANNEL, OR STRUCTURE PRIOR TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM. THE MINIMUM DESIGN OF RIP-RAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM PEAK FLOW, BUT LARGER STORMS ARE RECOMMENDED. TYPE-1 RIP-RAP AT A DEPTH OF 36" AND PLACED ON FILTER FABRIC IS PREFERRED FOR ALL d50 </= 1.2 FEET. TYPE-3 RIP-RAP AT A DEPTH OF 18" AND PLACED ON FILTER FABRIC MAY BE USED FOR d50 </= 0.7 FEET. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR REQUIRED DESIGN DIMENSIONS AND OTHER INFORMATION TO BE INCLUDED IN THE PLANS.
Su	SURFACE ROUGHENING SERRATED SLOPES CONSTRUCTION DETAIL S-7 SECTION 205	 LINE CODE Su	PROVIDING A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS, BY OPERATING A CLEATED DOZER ON THE SLOPE IN A VERTICAL DIRECTION. CREATING SERRATED SLOPES IN THE GRADING PROCESS TO CONSTRUCT BENCHES WILL REDUCE RUNOFF VELOCITY AND INCREASE INFILTRATION OF WATER. IN MOST CASES THIS BMP IS NOT REQUIRED TO BE SHOWN ON THE PLANS, BUT REQUIRED TO BE COMPLETED BY THE CONTRACTOR UNDER ALL PROJECTS. IF SERRATED SLOPES ARE SPECIFIED BY THE SOIL SURVEY, THEN THIS BMP SHALL BE SHOWN ON THE PLANS WHERE SERRATED SLOPES ARE TO BE USED.
Tc-F	TURBIDITY CURTAIN FLOATING CONSTRUCTION DETAIL D-51 SECTION 170	 WORK AREA FLOATING LINE CODE Tc-F	A FLOATING TURBIDITY CURTAIN IS USED TO PREVENT SEDIMENT FROM MOVING IN WATER BY ALLOWING IT TO DROP OUT OF SUSPENSION AND REMAIN WITHIN THE CONSTRUCTION AREA. IT IS TYPICALLY USED WHERE CONSTRUCTION IS REQUIRED IN A LARGE BODY OF WATER SUCH AS LAKES AND RIVERS. IT SHOULD BE USED AS DIRECTED BY THE ENGINEER. THIS BMP IS ONLY TO BE USED WHEN PERMITTED FILL IS BEING PLACED INTO A STATE WATER, OR AS A SUPPLEMENT TO ADEQUATELY PLACED PERIMETER BMPs. IT MAY ALSO BE REFERRED TO AS A FLOATING BOOM, SILT BARRIER, OR SILT CURTAIN.
Tc-S	TURBIDITY CURTAIN STAKED CONSTRUCTION DETAIL D-51 SECTION 170	 WORK AREA STAKED LINE CODE Tc-S	A STAKED TURBIDITY CURTAIN IS USED TO PREVENT SEDIMENT FROM MOVING IN WATER BY ALLOWING IT TO DROP OUT OF SUSPENSION AND REMAIN WITHIN THE CONSTRUCTION AREA. IT IS TYPICALLY USED IN SHALLOW INUNDATED AREAS. IT MAY BE USED TO PROTECT A SMALL STREAM BEING REALIGNED OR RESTORED. IN THIS CASE, CURTAIN SHOULD EXTEND TO BOTTOM OF STREAMBED. THE HEIGHT SHOULD BE LIMITED TO 5 FEET UNLESS DIRECTED AND EXTEND 2 FEET ABOVE NORMAL WATER ELEVATION. IT SHOULD BE USED AS DIRECTED BY THE ENGINEER. THIS BMP IS ONLY TO BE USED WHEN PERMITTED FILL IS BEING PLACED INTO A STATE WATER, OR AS A SUPPLEMENT TO ADEQUATELY PLACED PERIMETER BMPs. IT MAY BE REFERRED TO AS A SILT BARRIER OR SILT CURTAIN.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

7/31/2015 GPLN

GDOT

NO SCALE

REVISION DATES
3/2/2017

EROSION CONTROL LEGEND

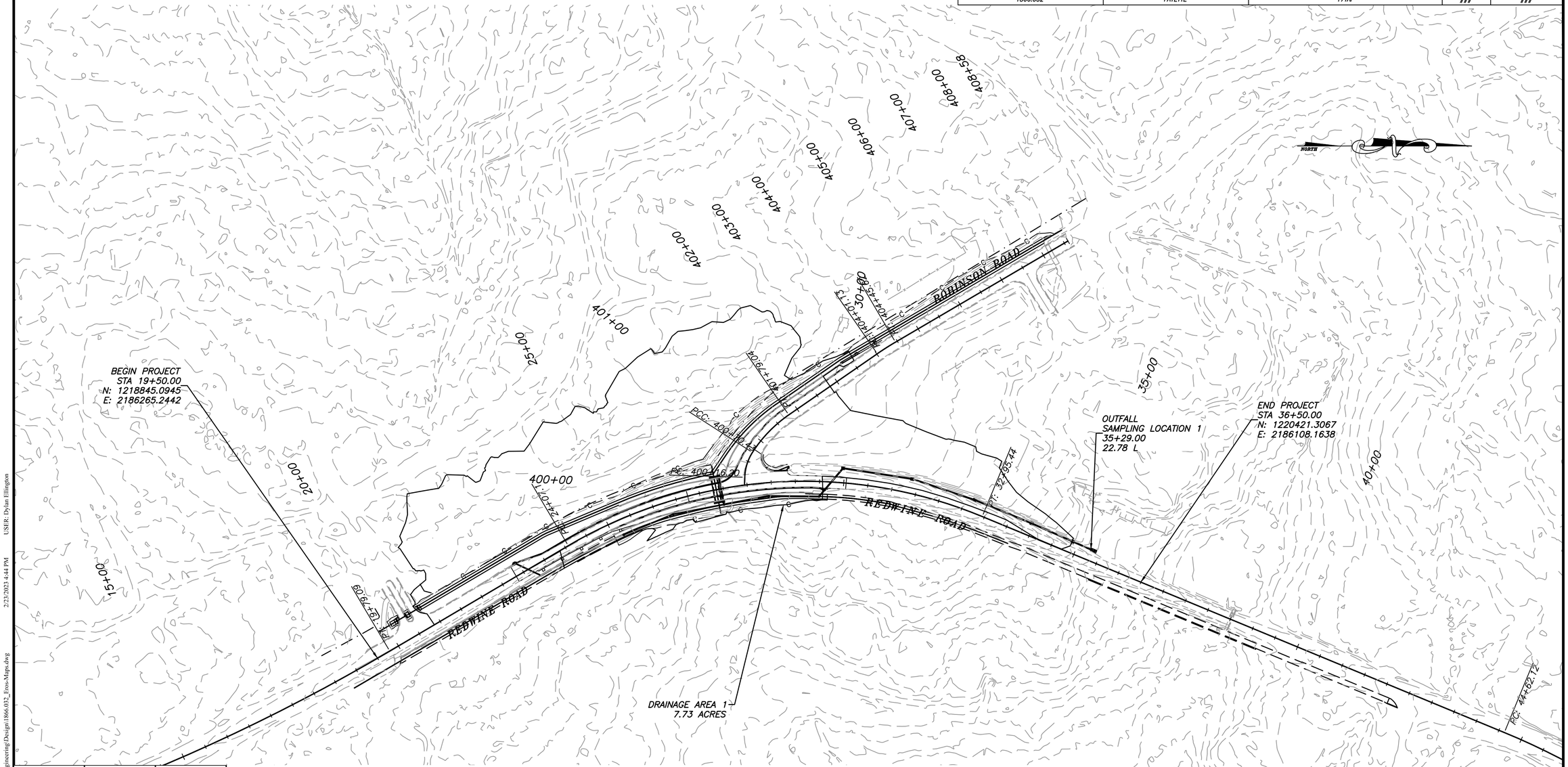
UNIFORM CODE SHEET

SHEET 7 OF 7

CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 52-0007

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###



Total Drainage Area (ac)	Total Disturbed Area (ac)	Total Project Area (ac)
8.13	2.71	2.71

Outfall	Road Name	Station Offset	Drainage Area (ac)	Disturbed Area (ac)	Runoff Coefficents		Q(50)		Q(100)		V(50)		V(100)		Outfall Description	Outfall Channel Slope
					Exist.	Fut.	Pre	Post	Pre	Post	Pre	Post	Pre	Post		
D0	Redwine Road	35+29.00 22.78' L	7.73	2.31	0.23	0.35	2.52	20.02	2.75	21.88	1.47	6.72	1.50	7.25	Pipe (Outfall 1)	0.75%
Sheet Flow	Redwine Road	N/A	0.40	0.40	0.19	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Sheet Flow	N/A

0 100 200 400
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

EROSION CONTROL DRAINAGE AREA MAP

DRAWING NO. 53-01

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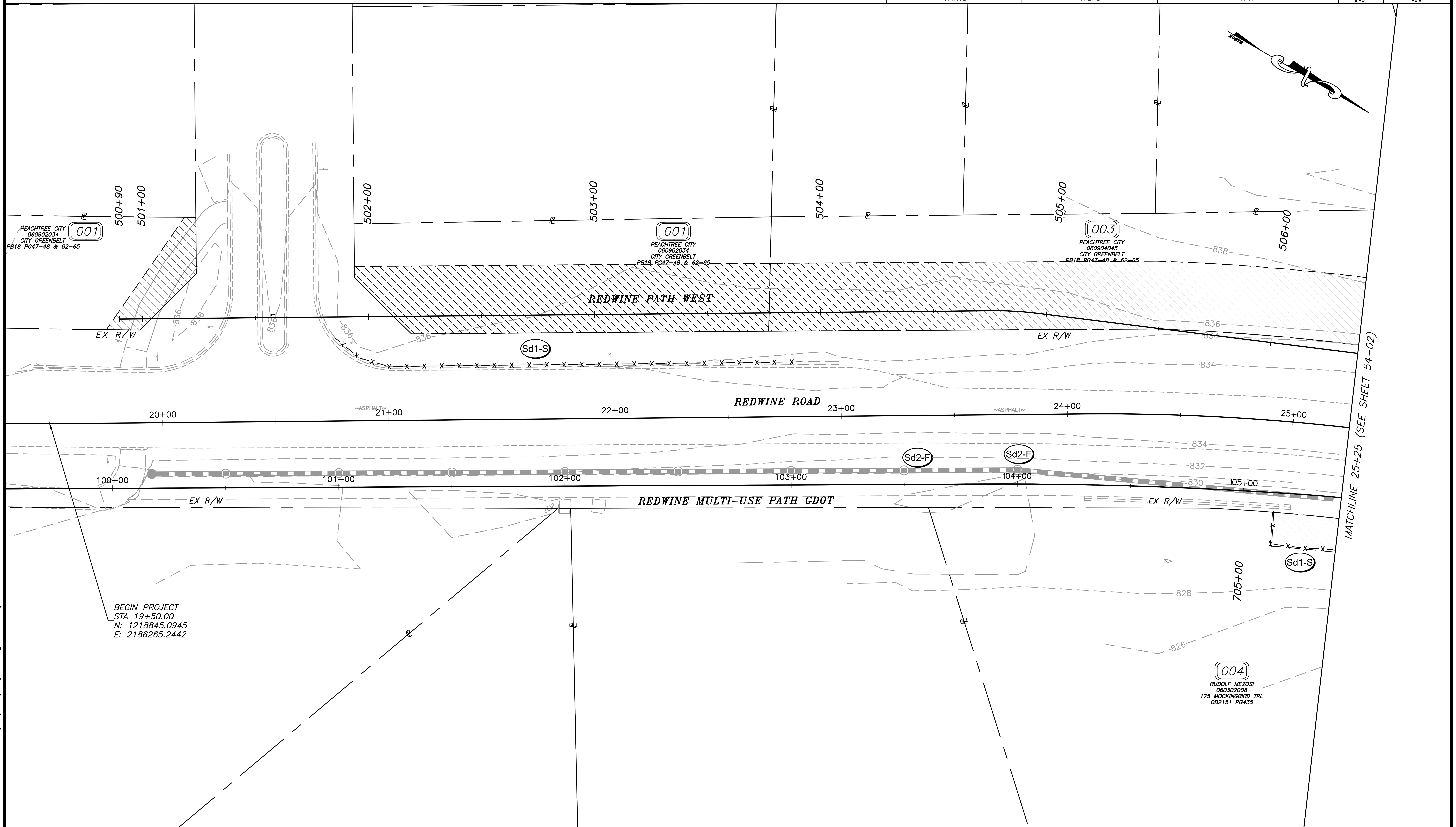
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###



LEGEND

PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	—C—F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR. OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	
BEGIN LIMIT OF ACCESS	BLA
END LIMIT OF ACCESS	ELA
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA – ENV. SENSITIVE AREA	

0 20 40 80
SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

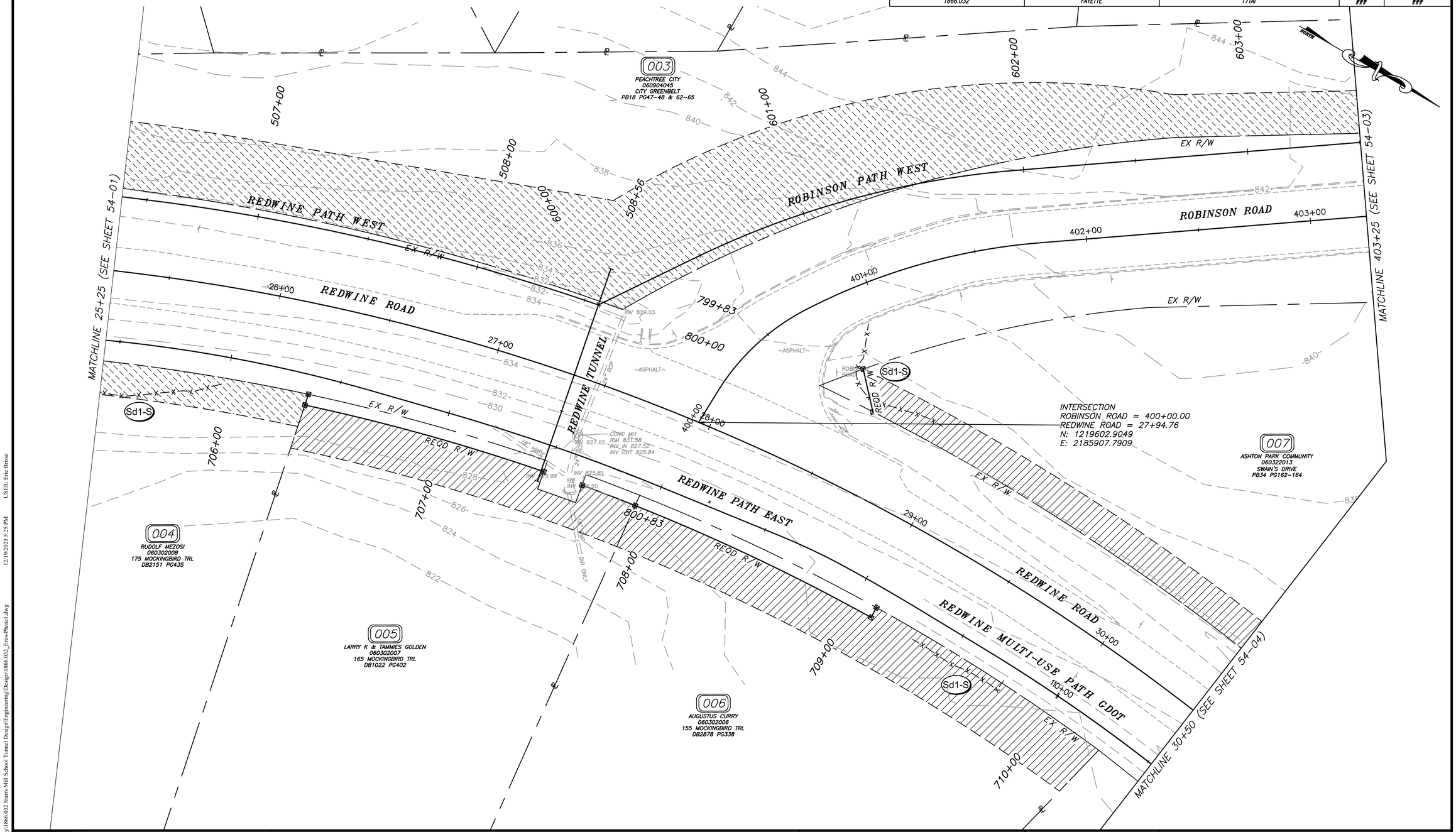
STARRS MILL SCHOOL TUNNEL

INITIAL PHASE
BMP LOCATION DETAILS

DRAWING NO. 54-01

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Eros-Phase1.dwg 12/19/2023 5:25 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



LEGEND

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS . . . . . BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS . . . . . ELA
CONSTRUCTION LIMITS —C—F—	LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D R/W & LIMIT OF ACCESS
EASEMENT FOR CONSTR. OF SLOPES	ORANGE BARRIER FENCE
EASEMENT FOR CONSTR OF DRIVES	ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

INITIAL PHASE
BMP LOCATION DETAILS

DRAWING NO. 54-02

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

NORTH

604+00 605+00 606+00 607+00 608+00 608+86

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

6' WOODEN FENCE

Sd1-S

EX R/W

ROBINSON PATH WEST

~ASPHALT CART PATH~

~ASPHALT~

ROBINSON ROAD

404+00 405+00 406+00 407+00 408+00 408+58

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)

MATCHLINE 403+25 (SEE SHEET 54-02)

840 838 836 834 832 830

4' ROD IRON FENCE

6' PVC FENCE

MATCHLINE (SEE SHEET 54-04)

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

- BEGIN LIMIT OF ACCESS . . . . . BLA
- END LIMIT OF ACCESS . . . . . ELA
- LIMIT OF ACCESS
- REQ'D R/W & LIMIT OF ACCESS
- ORANGE BARRIER FENCE
- ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

INITIAL PHASE
BMP LOCATION DETAILS

DRAWING NO. 54-03

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Ems-Phase1.dwg 12/19/2023 5:25 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 54-03)

MATCHLINE 30+50 (SEE SHEET 54-02)

MATCHLINE (SEE INSERT)

MATCHLINE (INSERT)

836 834 832 830 828 826 824 822 820 818 816 814 812 810

808 806 804 802 800

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

EX R/W

REDWINE ROAD

31+00 32+00 33+00 34+00 35+00

111+00 112+00 113+00 113+59

REDWINE MULTI-USE PATH GDOT

NOKIA

4" PVC FENCE

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

36+00 37+00 38+00 39+00

INV=794.56'
24" CMP

INV=793.71'

LEGEND

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS . . . . . BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS . . . . . ELA
CONSTRUCTION LIMITS —C—F—	LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D R/W & LIMIT OF ACCESS
EASEMENT FOR CONSTR. OF SLOPES	ORANGE BARRIER FENCE
EASEMENT FOR CONSTR OF DRIVES	ESA – ENV. SENSITIVE AREA —▽—▽—

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

INITIAL PHASE
BMP LOCATION DETAILS

DRAWING NO. 54-04

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

NORTH

PEACHTREE CITY
060902034
CITY GREENBELT
PB18 PG47-48 & 62-65
001

PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65
003

RUDOLF MEZOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG435
004

500+90 501+00 502+00 503+00 504+00 505+00 506+00

REDWINE PATH WEST

REDWINE ROAD

REDWINE MULTI-USE PATH GDOT

EX R/W

~ASPHALT~

20+00 21+00 22+00 23+00 24+00 25+00

100+00 101+00 102+00 103+00 104+00 105+00

705+00

MATCHLINE 25+25 (SEE SHEET 54-06)

BEGIN PROJECT
STA 19+50.00
N: 1218845.0945
E: 2186265.2442

Ds1 Ds2 Sd1-S Sd2-P Sd2-F ST A7.1 ST GDOT A-1 ST GDOT A-1A ST GDOT A-2 ST GDOT A-3 ST GDOT A-4 ST GDOT A-5 ST GDOT A-6 ST GDOT A-7 ST GDOT A-8 ST C4

18"

USER: Eric Brisse
12/19/2023 5:34 PM
P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Eros-Phase2.dwg

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

- BEGIN LIMIT OF ACCESS . . . . . BLA
- END LIMIT OF ACCESS . . . . . ELA
- LIMIT OF ACCESS
- REQ'D R/W & LIMIT OF ACCESS
- ORANGE BARRIER FENCE
- ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

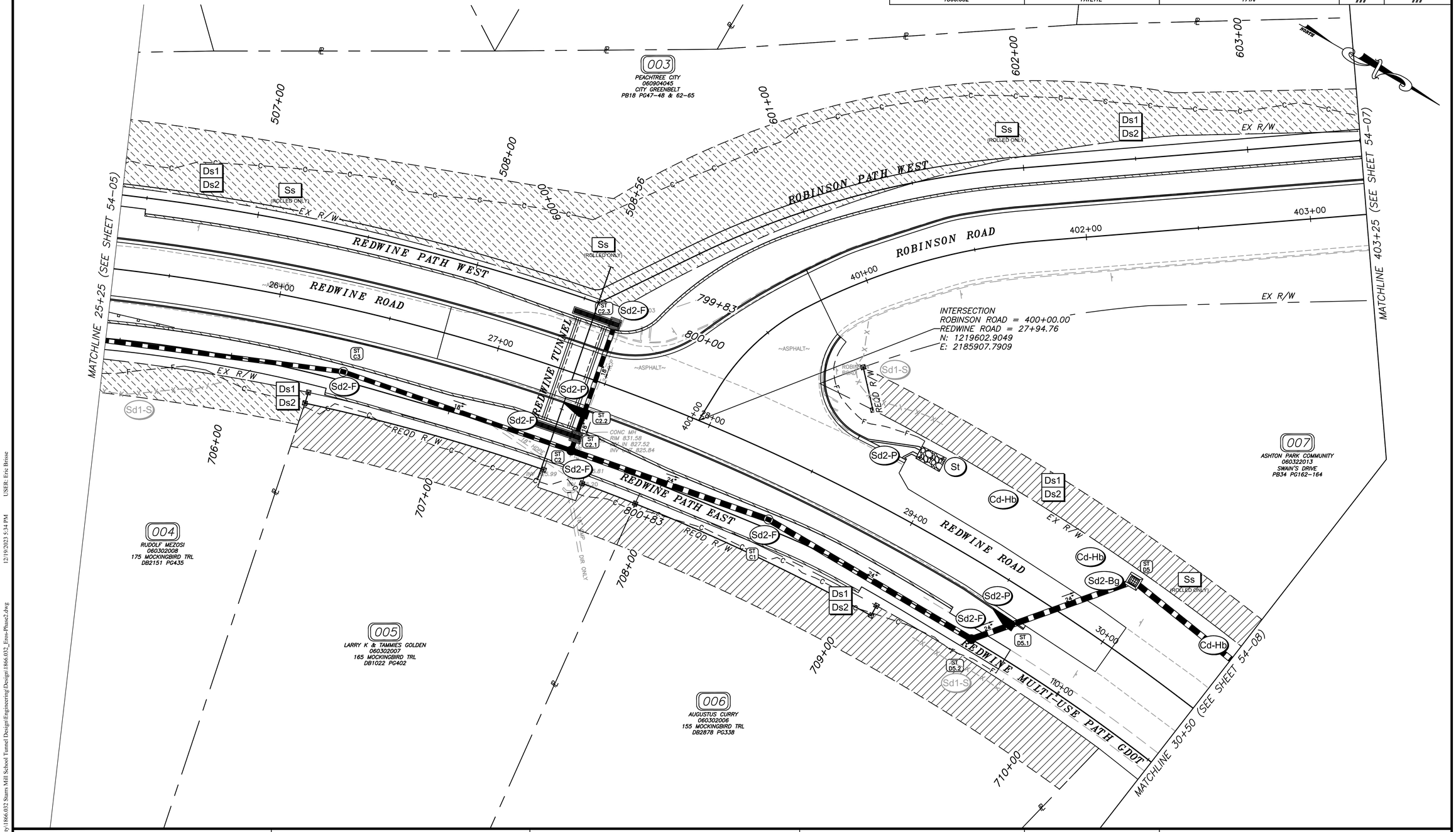
FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

INTERMEDIATE PHASE BMP LOCATION DETAILS

DRAWING NO. 54-05

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



LEGEND

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS . . . . . BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS . . . . . ELA
CONSTRUCTION LIMITS —C—F—	LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D R/W & LIMIT OF ACCESS
EASEMENT FOR CONSTR. OF SLOPES	ORANGE BARRIER FENCE
EASEMENT FOR CONSTR OF DRIVES	ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

INTERMEDIATE PHASE BMP LOCATION DETAILS

DRAWING NO. 54-06

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

NORTH

604+00 605+00 606+00 607+00 608+00 608+86

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

6' WOODEN FENCE

Sd1-S

Ds1
Ds2

Ss
(ROLLED ONLY)

EX R/W

ROBINSON PATH WEST

~ASPHALT CART PATH~

~ASPHALT~

404+00 405+00 406+00 407+00 408+00 408+58

ROBINSON ROAD

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)

MATCHLINE 403+25 (SEE SHEET 54-06)

4" ROD IRON FENCE

6" PVC FENCE

MATCHLINE (SEE SHEET 54-08)

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Ems-Phase2.dwg 12/19/2023 5:34 PM USER: Eric Brisse

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

- BEGIN LIMIT OF ACCESS . . . . . BLA
- END LIMIT OF ACCESS . . . . . ELA
- LIMIT OF ACCESS
- REQ'D R/W & LIMIT OF ACCESS
- ORANGE BARRIER FENCE
- ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

INTERMEDIATE PHASE
BMP LOCATION DETAILS

DRAWING NO.
54-07

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 54-07)

NORTH

4" PVC FENCE

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

Ds1
Ds2
Ss
(ROLLED ONLY)
Cd-Hb
Sd2-F
Sd2-Bg
St
ST D4
ST D3
ST D2
ST D1
ST D0
24"

EX R/W

31+00
32+00
33+00
34+00
35+00

REDWINE ROAD

REDWINE MULTI-USE PATH GDOT

111+00
112+00
113+00
113+59

MATCHLINE 30+50 (SEE SHEET 54-06)

MATCHLINE (SEE INSERT)

007

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

MATCHLINE (INSERT)

36+00
37+00
38+00
39+00

INV=794.56'
54" CMP

INV=793.71'
54"

LEGEND

PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	—C—F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR. OF SLOPES	
EASEMENT FOR CONSTR. OF DRIVES	

BEGIN LIMIT OF ACCESS	BLA
END LIMIT OF ACCESS	ELA
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA – ENV. SENSITIVE AREA	

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

INTERMEDIATE PHASE
BMP LOCATION DETAILS

DRAWING NO.
54-08

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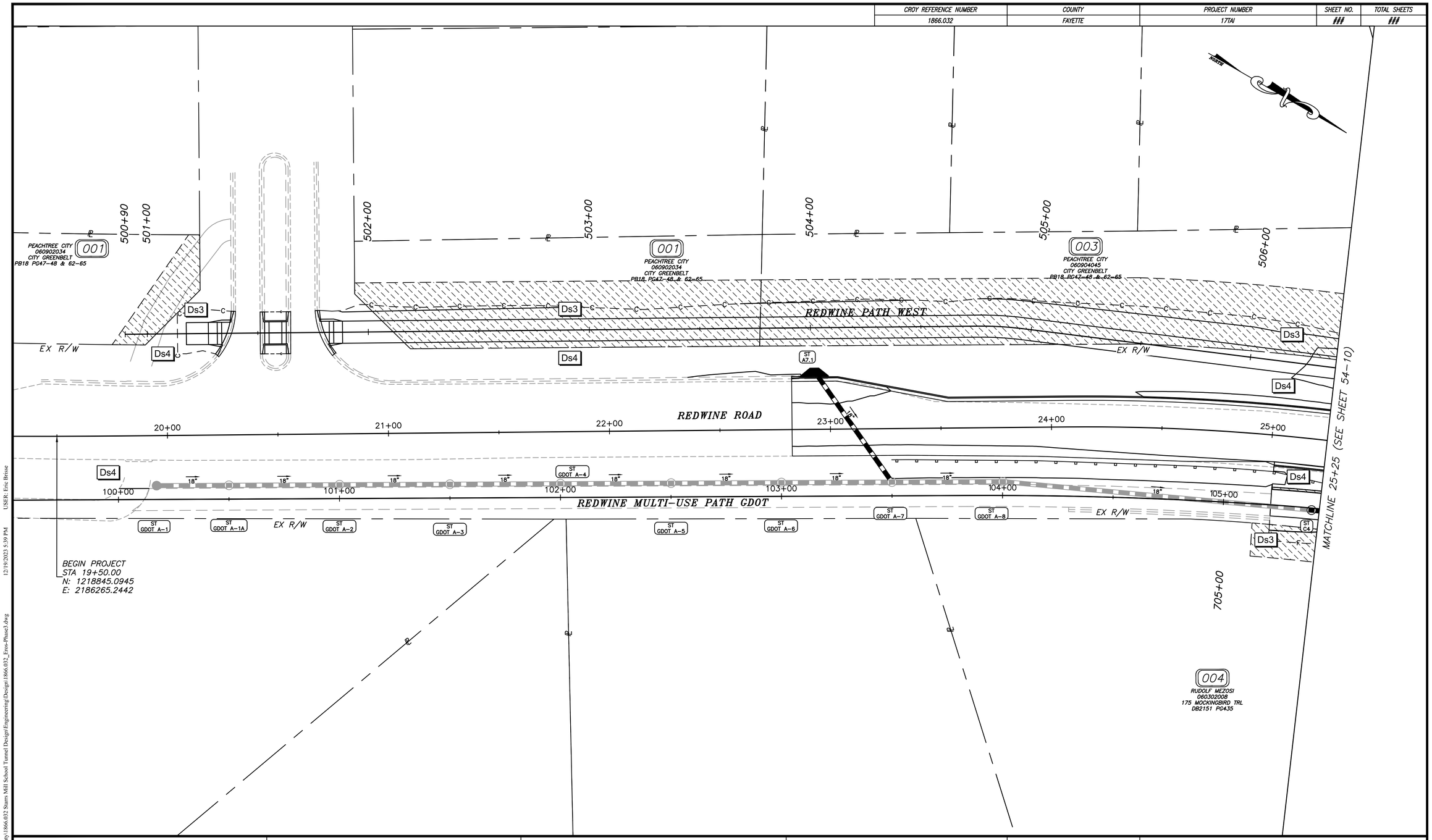
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



USER: Eric Brisse
12/19/2023 5:39 PM
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LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR. OF DRIVES

- BEGIN LIMIT OF ACCESS . . . . . BLA
- END LIMIT OF ACCESS . . . . . ELA
- LIMIT OF ACCESS
- REQ'D R/W & LIMIT OF ACCESS
- ORANGE BARRIER FENCE
- ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

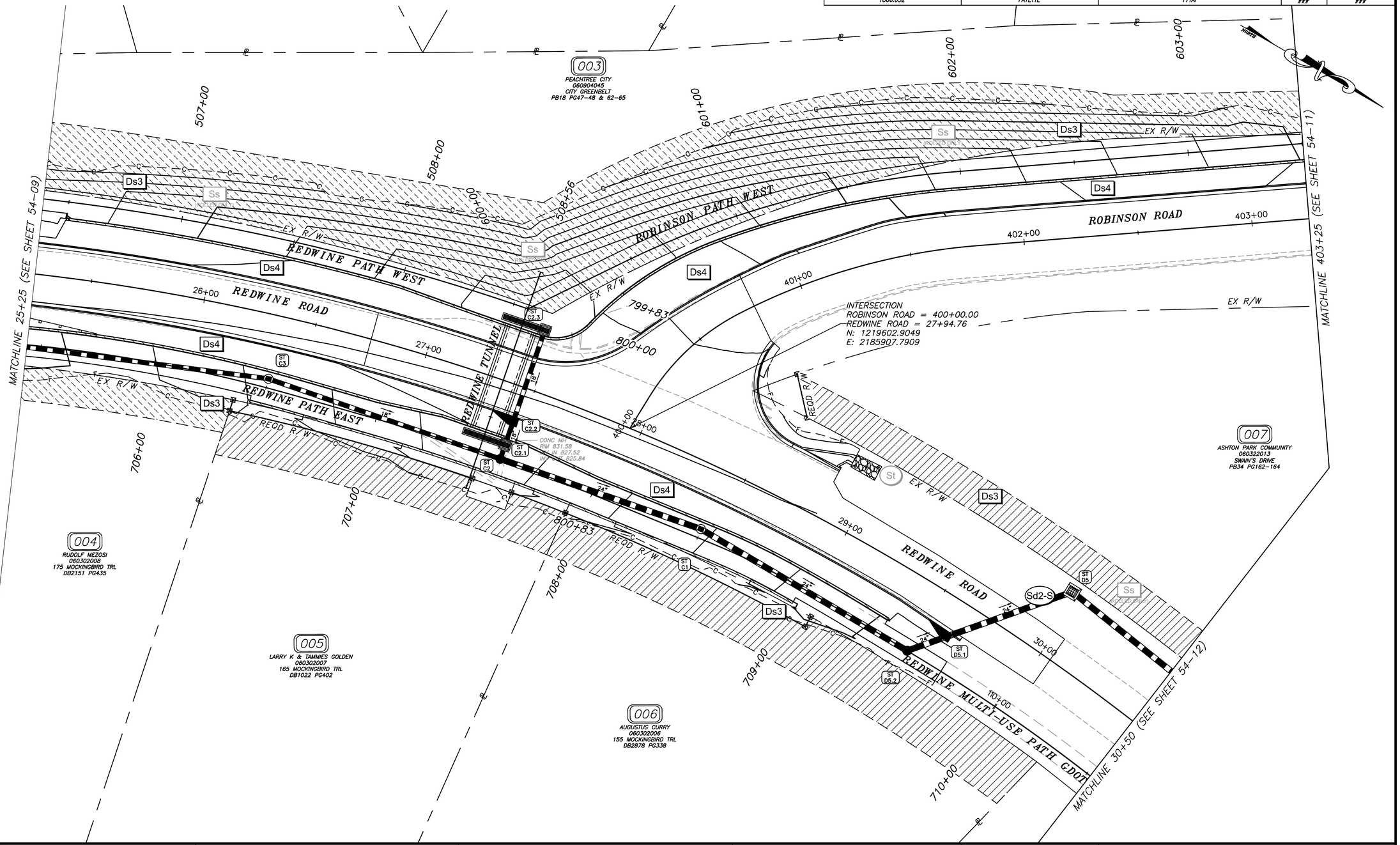
FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

FINAL PHASE
BMP LOCATION DETAILS

DRAWING NO.
54-09

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



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LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

- BEGIN LIMIT OF ACCESS . . . . . BLA
- END LIMIT OF ACCESS . . . . . ELA
- LIMIT OF ACCESS
- REQ'D R/W & LIMIT OF ACCESS
- ORANGE BARRIER FENCE
- ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

FINAL PHASE
BMP LOCATION DETAILS

DRAWING NO.
54-10

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

NORTH

604+00 605+00 606+00 607+00 608+00 608+86

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

Ds3 Ds4 Ss

EX R/W

ROBINSON PATH WEST

ROBINSON ROAD

404+00 405+00 406+00 407+00 408+00 408+58

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)

MATCHLINE 403+25 (SEE SHEET 54-10)

MATCHLINE (SEE SHEET 54-12)

LEGEND

- PROPERTY AND EXISTING R/W LINE
- REQUIRED R/W LINE
- CONSTRUCTION LIMITS —C—F—
- EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR. OF SLOPES
- EASEMENT FOR CONSTR OF DRIVES

- BEGIN LIMIT OF ACCESS . . . . . BLA
- END LIMIT OF ACCESS . . . . . ELA
- LIMIT OF ACCESS
- REQ'D R/W & LIMIT OF ACCESS
- ORANGE BARRIER FENCE
- ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

FINAL PHASE
BMP LOCATION DETAILS

DRAWING NO. 54-11

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 54-11)

NORTH

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

Ds3 | Ss | ST D4 | EX R/W | ST D3 | ST D2 | Ss | ST D1 | Ds3 | ST D0 | St

Sd2-S | Sd2-S | Sd2-S | Sd2-S

24" | 24" | 24" | 24" | 24"

31+00 | 32+00 | 33+00 | 34+00 | 35+00

REDWINE ROAD

REDWINE MULTI-USE PATH GDOT

111+00 | 112+00 | 113+00 | 113+59

EX R/W | EX R/W

MATCHLINE 30+50 (SEE SHEET 54-10)

MATCHLINE (SEE INSERT)

007

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

MATCHLINE (INSERT)

Ds3

EX R/W

36+00 | 37+00 | 38+00 | 39+00

REDWINE ROAD

EX R/W

54"

LEGEND

PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	—C—F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR. OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

BEGIN LIMIT OF ACCESS	BLA
END LIMIT OF ACCESS	ELA
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA – ENV. SENSITIVE AREA	—▽—▽—

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

FINAL PHASE
BMP LOCATION DETAILS

DRAWING NO. 54-12

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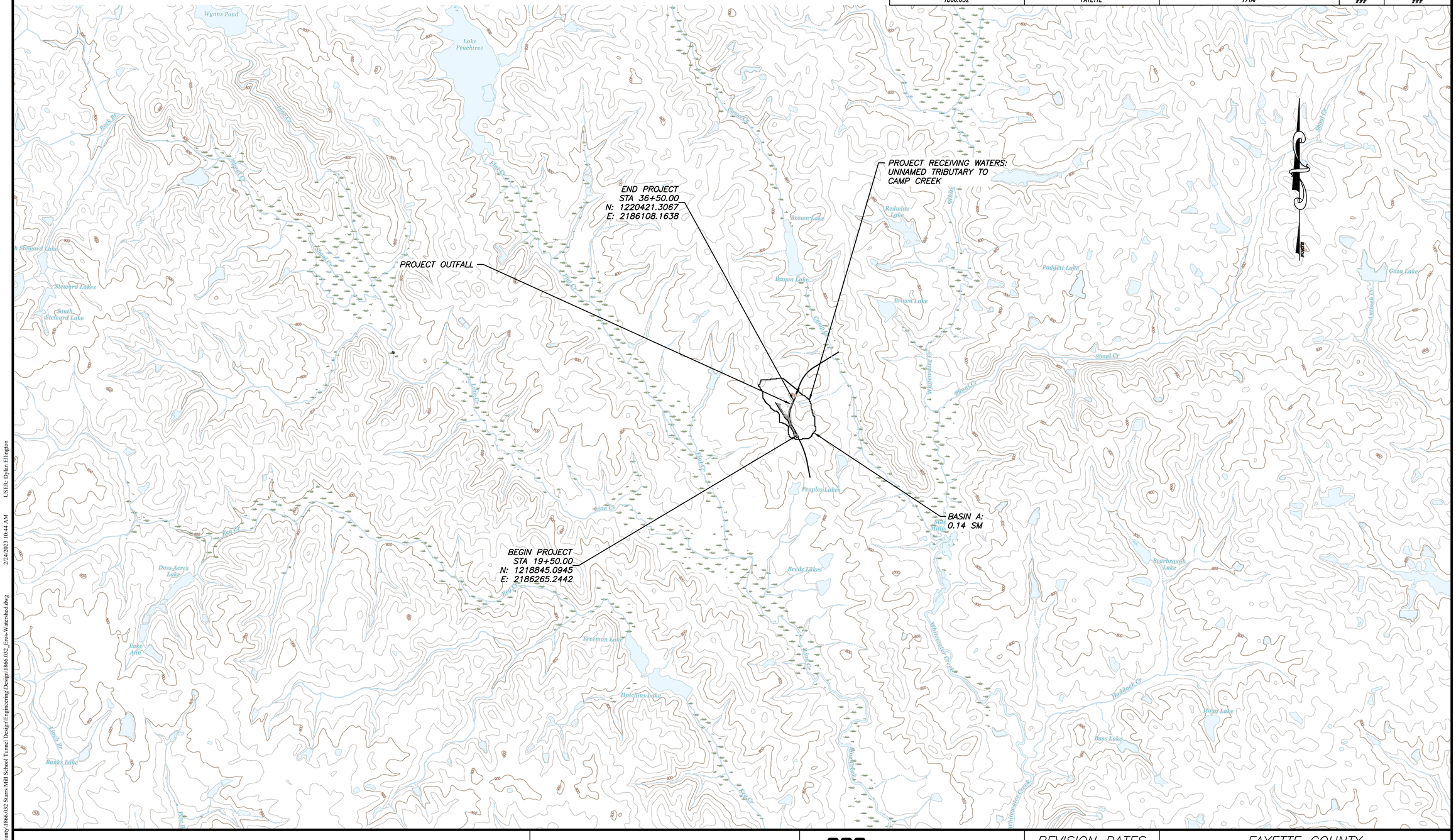
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///



0 2000 4000 8000

SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

ESPCP – WATERSHED MAP

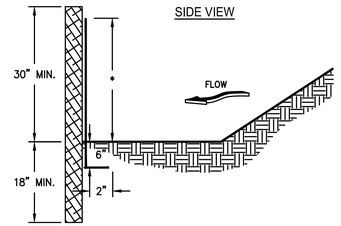
DRAWING NO. 55-01

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Eros-Watershed.dwg 2/24/2023 10:44 AM USER: Dylan Ellington

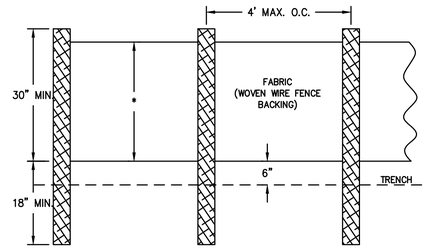
CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

Sd1-S SILT FENCE - TYPE SENSITIVE

SIDE VIEW



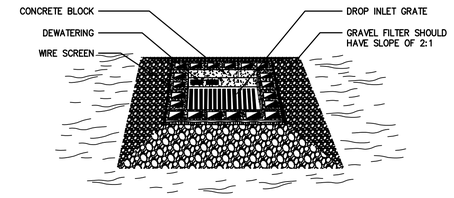
FRONT VIEW



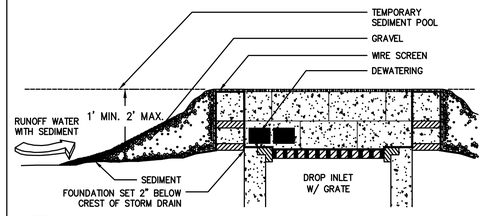
NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

BLOCK AND GRAVEL DROP INLET PROTECTION

Sd2-Bg BLOCK AND GRAVEL PERSPECTIVE



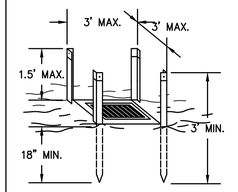
BLOCK AND GRAVEL SECTION



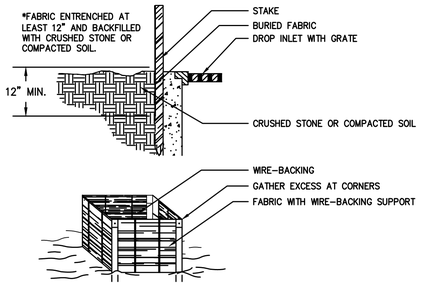
NOTE:
1. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH ½ INCH OPENINGS SHALL BE FITTED OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
2. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. THE FIRST ROW OF BLOCKS WILL BE PLACED HERE FOR LATERAL SUPPORT.
3. ONE BLOCK (AS SHOWN) IS TO BE PLACED ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW FOR POOL DRAINAGE.

Sd2-F FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

STEEL FRAME AND SILT FENCE INSTALLATION

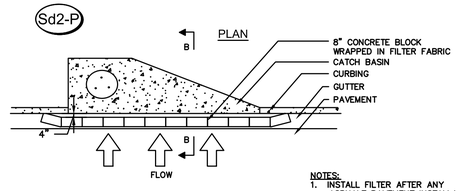


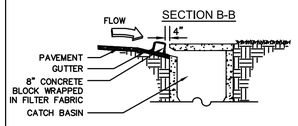
NOTES:
1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
2. THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
3. THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.



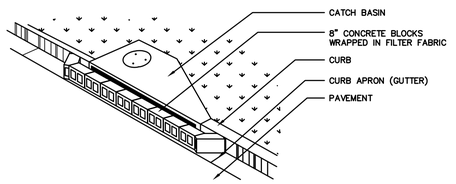
CURB INLET FILTER "PIGS IN BLANKET"

Sd2-P



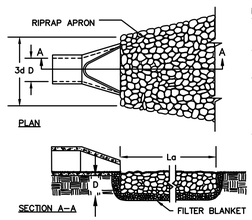


NOTES:
1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.
3. FACE OPENINGS IN BLOCKS OUTWARD.
4. LEAVE A GAP OF APPROXIMATELY 4 INCHES BETWEEN THE CURB AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT HAZARDOUS PONDING.
5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.



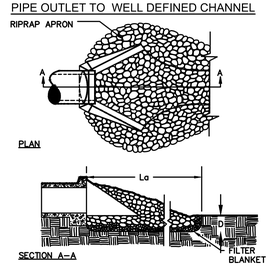
St RIPRAP OUTLET PROTECTION

PIPE OUTLET TO FLAT AREA – NO WELL DEFINED CHANNEL



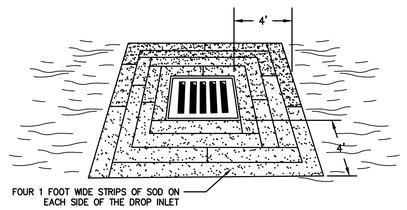
NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESSTHAN 6".
3. IN A WELL–DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

PIPE OUTLET TO WELL DEFINED CHANNEL



Sd2-S INLET SEDIMENT TRAP

SOD STRIPS PROTECT INLET AREA FROM EROSION
(SOURCE: VA SWCC)



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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

ESPCP STANDARDS AND DETAILS

DRAWING NO. 56-01

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

N.T.S.

SPECIFICATIONS

Mulching Without Seeding

This standard applied to grades or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

Site Preparation

1. Grade to permit the use of equipment for applying and anchoring mulch.
2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
3. Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials

Select one of the following materials and apply at the depth indicated:

1. *Dry straw or hay* shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.
2. *Wood waste* (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
3. *Polyethylene film* shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

Applying Mulch

When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.

1. *Dry straw or hay mulch* and *wood chips* shall be applied uniformly by hand or by mechanical equipment.
2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.
3. Apply polyethylene film on exposed areas.

Anchoring Mulch

1. *Straw* or *hay mulch* can be pressed into the soil with a disk harrow with the disk set straight or with a special 'packer disk'. Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. **Straw or hay mulch shall be anchored immediately after application.**

   Straw or hay mulch spread with special blower-type equipment may be anchored. Tackifiers, binders and hydraulic mulch with tackifier specifically designed for taking straw can be substituted for emulsified asphalt. Please refer to specification **Tackifiers and binders**. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.
2. Netting of the appropriate size shall be used to anchor *wood waste.* Openings of the netting shall not be larger than the average size of the wood waste chips.
3. *Polyethylene film* shall be anchor trenched at the top as well as incrementally as necessary.

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

N.T.S.

SPECIFICATIONS

Grading and Shaping

Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others. No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Seedbed Preparation

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or hand-seeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.
When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and Fertilizer

Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at determined by soil test for pH. Quick acting lime should be incorporated to modify pH during the germination period. Bio stimulants should also be considered when there is less than 3% organic matter in the soil. Graded areas require lime application. Soils must be tested to determine required amounts of fertilizer and amendments. Fertilizer should be applied before land preparation and incorporated with a disk, ripper, or chisel. On slopes too steep for, or inaccessible to equipment, fertilizer shall be hydraulically applied, preferably in the first pass with seed and some hydraulic mulch, then topped with the remaining required application rate.

Seeding

Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker-seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand. See table below.

Mulching

Temporary vegetation can, in most cases, be established without the use of mulch provided there is little to no erosion potential. However, the use of mulch can often accelerate and enhance germination and vegetation establishment. Mulch without seeding should be considered for short term protection. Refer to **Ds1 - Disturbed Area Stabilization (With Mulching Only).**

Irrigation

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

PLANT, PLANTING RATES, AND PLANTING DATES FOR TEMPORARY COVER OR COMPANION CROPS

SPECIES	BROADCAST RATES PER ACRE	BROADCAST RATES PER 1000 SQ. FT.	PLANTING DATES FOR SOUTHERN PIEDMONT REGION (J F M A M J J A S O N D)	REMARKS
BARLEY (Horduem vulgare) alone / in mixture	144 lbs. / 24 lbs.	3.3 lbs. / 0.6 lb.		14,000 seed per pound. Winterhardy. Use on productive soils.
LESPEDEZA,ANNUAL (Lespedeza striata) alone / in mixture	40 lbs. / 10 lbs.	0.9 lb. / 0.2 lb.		200,000 seed per pound. May volunteer for several years. Use inoculant EL.
LOVEGRASS, WEEPING (Horduem vulgare) alone / in mixture	4 lbs. / 2 lbs.	0.1 lb. / 0.05 lb.		1,500,000 seed per pound. May last for several years. Mix with Sericea lespedeza.
MILLET, BROWNTOP (Panicum fascicalatum) alone / in mixture	40 lbs. / 10 lbs.	0.9 lb. / 0.2 lb.		137,000 seed per pound. Quick dense cover. Will provide too much competition in mixtures if seeded at high rates.
MILLET, PEARL (Pennesetum glaucum) alone	50 lbs.	1.1 lb.		88,000 seed per pound. Quick dense cover. May reach 5 feet in height. Not recommended for mixtures.
OATS (Avena sativa) alone / in mixture	128 lbs. / 32 lbs.	2.9 lbs. / 0.7 lb.		13,000 seed per pound. Use on productive soils. Not as winterhardy as rye or barley.
RYE (Secale cereale) alone / in mixture	168 lbs. / 28 lbs.	3.9 lbs. / 0.6 lb.		18,000 seed per pound. Quick cover. Drought tolerant and winterhardy.
RYEGRASS, ANNUAL (Lolium temulentum) alone	40 lbs.	0.9 lb.		227,000 seed per pound. Dense cover. Very competitive and is not to be used in mixtures.
SUDANGRASS (Sorghum Sudanese) alone	60 lbs.	1.4 lb.		55,000 seed per pound. Good on droughty sites. Not recommended for mixtures.
WHEAT (Triticum Aestivum) alone / in mixture	180 lbs. / 30 lbs.	4.1 lbs. / 0.7 lb.		15,000 seed per pound.

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

N.T.S.

Seedbed Preparation

Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used (but is strongly recommended for any seeding process, when possible). When conventional seeding is to be used, seedbed preparation will be done as follows:

Broadcast Plantings

1. Tillage, at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate lime and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.
2. Tillage may be done with any suitable equipment.
3. Tillage should be done on the contour where feasible.
4. On slopes too steep for the safe operation of tillage equipment, the soil surface shall be pitted or trenched across the slope with appropriate hand tools to provide two places 6 to 8 inches apart in which seed may lodge and germinate. hydraulic seeding may also be used.

Individual Plants

5. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting.
6. For nursery stock plants, holes shall be large enough to accommodate roots without crowding.
7. Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

Innoculants

All legume seed shall be inoculated with appropriate nitrogen-fixing bacteria. the innoculant shall be a pure culture prepared specifically for the seed species and used within the dates on the container.

A mixing medium recommended by the manufacturer shall be used to bond the innoculant to the seed. for conventional seeding, use twice the amount of innoculant recommended by the manufacturer. For hydraulic seeding, four times the amount of innoculant recommended by the manufacturer shall be used.

All inoculated seed shall be protected from the sun and high temperatures and shall be planted the same day inoculated. No inoculated seed shall remain in the hydroseeder longer than one hour.

Planting

Hydraulic Seeding

Mix the seed (innoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

Conventional Seeding

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a culti-packer-seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.

No-Till Seeding

No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. the seed must be uniformly distributed and planted at the proper depth.

Individual Plants

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots.
Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface.
Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the hole.

Mulching

Mulch is required for all permanent vegetation applications. mulch applied to seeded areas shall achieve 75% to 100% soil cover. When selecting a mulch, design professionals should consider the mulch's functional longevity, vegetation establishment enhancement, and erosion control effectiveness. Select the mulching material from the following and apply as indicated:

1. Dry straw or dry hay of good quality and free of weed seeds can be used. dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.
2. Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. One thousand pounds of wood cellulose or wood pulp fiber, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:1 or steeper.
4. Sericea Lespedeza hay containing mature seed shall be applied at a rate of three tons per acre.
5. Pine straw or pine bark shall be applied at a thickness of 3 inches for bedding purposes. other suitable materials in sufficient quantity may be used where ornamentals or other ground covers are planted. This is **NOT** appropriate for seeded areas.
6. When using temporary erosion control blankets or block sod, mulch is not required.
7. Bituminous treated roving may be applied on planted areas, slopes, in ditches or dry water- ways to prevent erosion. Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications.

Wood cellulose and wood pulp fibers shall not contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application during seeding.

Applying Mulch

Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting the mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil surface.

Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment.

Anchoring Mulch

Anchor straw or hay mulch immediately after application by one of the following methods:

1. Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk"' or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and
2. 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil.
3. Synthetic tackifiers, binders or hydraulic mulch specifically designed to tack straw, shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. All tackifiers, binders or hydraulic mulch specifically designed to tack straw should be verified nontoxic through EPA 2021.0 testing. Refer to **Tackifiers-Tac**
4. Rye or wheat can be included with fall and winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one-half bushel per acre.
5. Plastic mesh or netting with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

Bedding Material

Mulch is used as a bedding material to conserve moisture and control weeds in nurseries, ornamental beds, around shrubs, and on bare areas on lawns.

Material	Depth
Grain Straw	4" TO 6"
Grass Hay	4" TO 6"
Pine Needles	3" TO 5"
Wood Waste	4" TO 6"

Irrigation

Irrigation will be applied at a rate that will not cause runoff.

Topdressing

Topdressing will be applied on all temporary and permanent (perennial) species planted alone or in mixtures with other species. Recommended rates of application are listed in table 6-5.1.

Second Year and Maintenance Fertilization

Second year fertilizer rates and maintenance fertilizer rates are listed in table 6-5.1.

Lime Maintenance Application

Apply one ton of agricultural lime every 4 to 6 years or as indicated by soil tests. Soil tests can be conducted to determine more accurate requirements, if desired.

Use And Management

Mow Sericea Lespedeza only after frost to ensure that the seeds are mature. mow between November and march.

Bermudagrass, Bahia grass and Tall Fescue may be mowed as desired. Maintain at least 6 inches of top growth under any use and management. Moderate use of top growth is beneficial after establishment.

Exclude traffic until the plants are well established. Because of the quail nesting season, mowing should not take place between may and September.

FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	NITROGEN TOP DRESSING RATE
1. Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. ----- 30 lbs./ac.
2. Cool season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	0-50 lbs./ac. ----- -----
3. Ground covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 lbs./ac. 1300 lbs./ac. 1100 lbs./ac.	----- ----- -----
4. Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole	-----
5. Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac.	-----
6. Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	30 lbs./ac.
7. Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 50-100 lbs./ac. 30 lbs./ac.
8. Warm season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50 lbs./ac.

PLANT, PLANTING RATES, AND PLANTING DATES FOR PERMANENT COVER

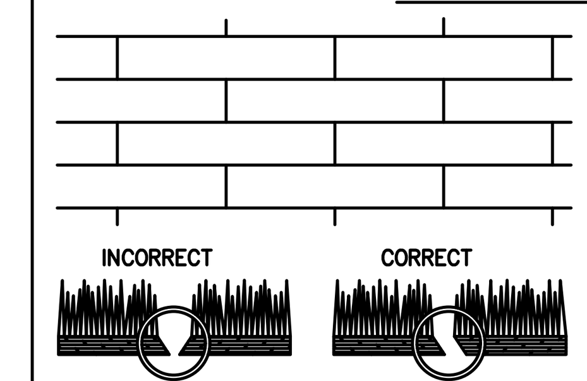
SPECIES	BROADCAST RATES PER ACRE	BROADCAST RATES PER 1000 SQ. FT.	PLANTING DATES FOR SOUTHERN PIEDMONT REGION (J F M A M J J A S O N D)	REMARKS
BAHIA, PENSACOLA (Paspalum notatum) alone or w/ temp. cover / with other perennials	60 lbs. / 30 lbs.	1.4 lb. / 0.7 lb.		166,000 seed per pound. Low growing. Sod forming. Slow to establish. Plant with a companion crop. Will spread into bermuda pastures and lawns. Mis with Sericea lespedeza or weeping lovegrass.
BAHIA, WILMINGTON (Paspalum notatum) alone or w/ temp. cover / with other perennials	60 lbs. / 30 lbs.	1.4 lb. / 0.7 lb.		
BERMUDA, COMMON (Cynodon dactylon) alone / with other perennials	10 lbs. / 6 lbs.	0.2 lb. / 0.1 lb.		1,787,000 seed per pound. Quick cover. Low growing and sod forming. Full sun. Good for athletic fields.
BERMUDA, COMMON (Cynodon dactylon) with temporary cover / with other perennials	10 lbs. / 6 lbs.	0.2 lb. / 0.1 lb.		Plant with winter annuals. Plant with tall fescue.
BERMUDA SPRIGS (Cynodon dactylon) Coastal, Common, or Tift 44	40 cu. ft.	0.9 cu. ft.		A cubic foot contains approximately 650 sprigs. A bushel contains 1.25 cubic feet or approximately 800 sprigs.
CENTIPEDE (Eremochloa ophiuroides)	Block sod only			Drought tolerant. Full sun or partial shade. Effective adjacent to concrete and in concentrated flow areas. Irrigation is needed until fully established. Do not plant near pastures. Winterhardy as far north as Athens and Atlanta.
CROWNVETECH (Coronilla varia) with winter annuals or cool season grasses	15 lbs.	0.3 lb.		100,000 seed per pound. Dense growth. Drought tolerant and fire resistant. Attractive rose, pink, and white blossoms spring to late fall. Mix with 30 pounds of Tall fescue or 15 pounds or rye. Inoculate seed with M inoculant.
FESCUE, TALL (Festuca arundinacea) alone / with other perennials	50 lbs. / 30 lbs.	1.1 lb. / 0.7 lb.		227,000 seed per pound. Use alone only on better sites. Not for droughty soils. Mix with perennial lespedezas or crownvetch. Apply topdressing in spring following fall plantings. Not for heavy use areas or athletic fields.
LESPEDEZA, SERICA (Lespedeza cuneata) scarified / unscarified / seed-bearing hay	60 lbs. / 75 lbs. / 3 tons	1.4 lbs. / 1.7 lbs. / 138 lbs.		350,000 seed per pound. Widely adapted. Low maintenance. Mix with weeping lovegrass, common bermuda, bahia, or tall fescue. Takes 2 to 3 years to become fully established. Excellent on roadbanks. Inoculate seed with EL inoculant.
LESPEDEZA (Lespedeza virgata DC) or (Lespedeza cuneata G. Don) scarified / unscarified	60 lbs. / 75 lbs.	1.4 lbs. / 1.7 lbs.		300,000 seed per pound. Height of growth is 18 to 24 inches. Advantageous in urban areas. Spreading-type growth has bronze coloration. Mix with Weeping lovegrass, Common bermuda, bahia, tall fescue or winter annuals. Do not mix with Sericea lespedeza. Slow to develop solid stands. Inoculate seed with EL inoculate.
LESPEDEZA, SHRUB (Lespedeza bicolor) (Lespedeza thumbergii) plants	3' x 3'			Provide wildlife food and cover.
LOVEGRASS, WEEPING (Eragrostis curvula) alone / with other perennials	4 lbs. / 2 lbs.	0.1 lb. / 0.05 lb.		1,500,000 seed per pound. Quick cover. Drought tolerant. Grows well with Sericea lespedeza on roadbanks.
PANICGRASS, ATLANTIC COASTAL (Panicum amarum var. amarulum)	20 lbs.	0.5 lb.		Grows well on coastal sand dunes, borrow areas, and gravel pits. Provides winter cover for wildlife. Mix with Sericea lespedeza except on sand dunes.
REED CANARY GRASS (Phalaris arundinacea) alone / with other perennials	50 lbs. / 30 lbs.	1.1 lbs. / 0.7 lb.		Grows similar to tall fescue.
SUNFLOWER, 'AZTEC' MAXIMILLIAM (Helianthus maximiliani)	10 lbs.	0.2 lb.		227,000 seed per pound. Mix with weeping lovegrass or other low-growing grasses or legumes.

DURABLE SHRUBS AND GROUND COVERS FOR PERMANENT COVER

Common Name	Scientific Name	Mature Height	Plant Spacing	Comments
Albelia	Abelia grandiflora	3-4 ft.	5 ft.	Also a prostrate form 2 feet high. Sun, semi-shade. Semi-evergreen.
Carolina Yellow Jessamine	Gelsemium sempervirens	low	3 ft.	Vine. Yellow, trumpet-like flowers. Hardy, one of best vines. Evergreen. Native to Georgia.
Carpet Blue	Ajuga reptans	2-4 in.	3 ft.	Needs good drainage, partial shade. Blue or white flowers. Evergreen.
Bearberry Cotoneaster	Cotoneaster dammeri	2-4 in.	5 ft.	White flowers, red fruit. Sun. Evergreen.
Ground Cover Cotoneaster	Cotoneaster salicifoluis 'Repens'	1-2 ft.	5 ft.	White flowers, red fruit. Sun. Evergreen.
Rock Cotoneaster	Cotoneaster horizontalis	1-2 ft.	5 ft.	Semi-evergreen. Sun.
Virginia Creeper	Parthenocissue quinquefolia	low	3 ft.	Red in fall. Vine. Deciduous. Native to Georgia.
Daylilly	Hemerocallis spp.	2-3 ft.	2 ft.	Many flower colors. Full sun. Very Hardy.
English Ivy	Hedera helix	low	3 ft.	Shade only. Climbs.
Compacta Holly	Ilex crenata 'Compacta'	3-4 ft.	5 ft.	Sun, semi-shade.
Chinese Holly	Ilex cornuta 'Rotunda'	3-4 ft.	5 ft.	Very durable. Sun, semi-shade.
Dwarf Burford Holly	Ilex burfordii 'Nana'	5-8 ft.	8 ft.	
Dwarf Yaupon Holly	Ilex vomitoria 'Nana'	3-4 ft.	5 ft.	Very durable, sun, semi-shade.
Repandens Holly	Ilex crenata 'Repandens'	2-3 ft.	5 ft.	Sun, semi-shade.
Andorra Juniper	Juniperus horizontalis 'Plumosa'	2-3 ft.	5 ft.	Excellent for slopes. Sun.
Andorra Compacta Juniper	Juniperus horizontalis 'Plumosa compacta'	1-2 ft.	5 ft.	More compact than andora.
Blue Chip Juniper	Juniperus horizontalis 'Blue Chip'	8-10 in.	4 ft.	
Blue Rug Juniper	Juniperus horizontalis 'Wiltonii'	4-6 in.	3 ft.	Very low. Sun.
Parsons Juniper	Juniperus davurica 'Expansa' (Squamata Parsoni)	18-24 in.	5 ft.	One of the best, good winter cover.
Pfitzer Juniper	Juniperus chinensis 'Pfitzerana'	6-8 ft.	6 ft.	Needs room.
Prince of Wales Juniper	Juniperus horizontalis 'Prince of Wales'	8-10 in.	4 ft.	Feathery appearance.
Sargent Juniper	Juniperus chinensis 'Sargentii'	1-2 ft.	5 ft.	Full sun. Needs good drainage. Good winter color.
Shore Juniper	Juniperus conferta	2-3 ft.	5 ft.	Emerald Sea or Blue Pacific cultivars are good.
Liriope	Liriope muscari	8-10 in.	3 ft.	
Creeping Liriope	Liriope spicata	10-12 in.	1 ft.	Spreads by runners.
Big Leaf Periwinkle	Vinca major	12-15 in.	4 ft.	Lilac flowers in spring. Semi-shade.
Common Periwinkle	Vinca minor	5-6 in.	4 ft.	Lavender-blue flowers in spring. Semi-shade.
Cherokee Rose	Rosa laevigata	2 ft.	5 ft.	Rampant grower. Not for restricted spaces.
Memoria Rose	Rosa weuchuriana	2 ft.	5 ft.	Rampant grower.
St. Johnswort	Hypericum calycenum	8-12 in.	3 ft.	Semi-shade.
Anthony Waterer Spirea	Spirea bumalda	3-4 ft.	5 ft.	Sun.
Thunberg Spirea	Spirea thinbergii	3-4 ft.	5 ft.	Sun.

SOD MAINTENANCE AND INSTALLATION

SOD LAYOUT AND PREPARATION



LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

BUTTING: ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

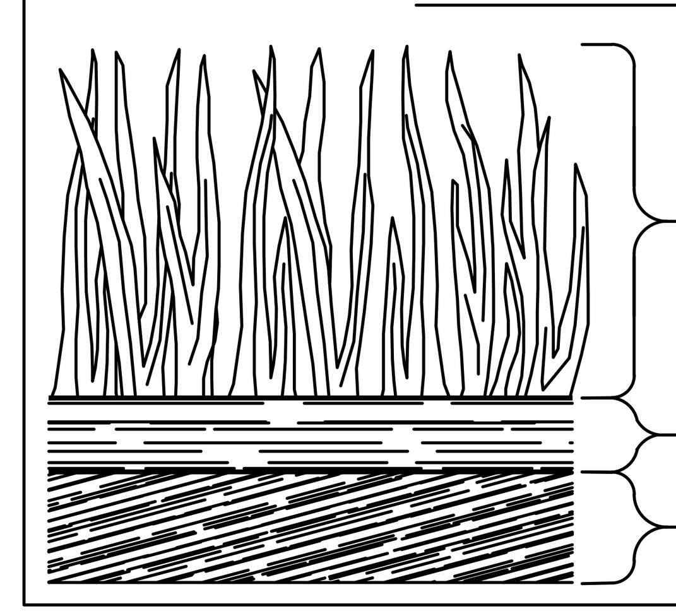
DIRECTIONS FOR INITIAL MAINTENANCE

Step 1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL

Step 2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.

Step 3. MOW WHEN THE SOD IS ESTABLISHED -- IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").

APPEARANCE OF GOOD SOD



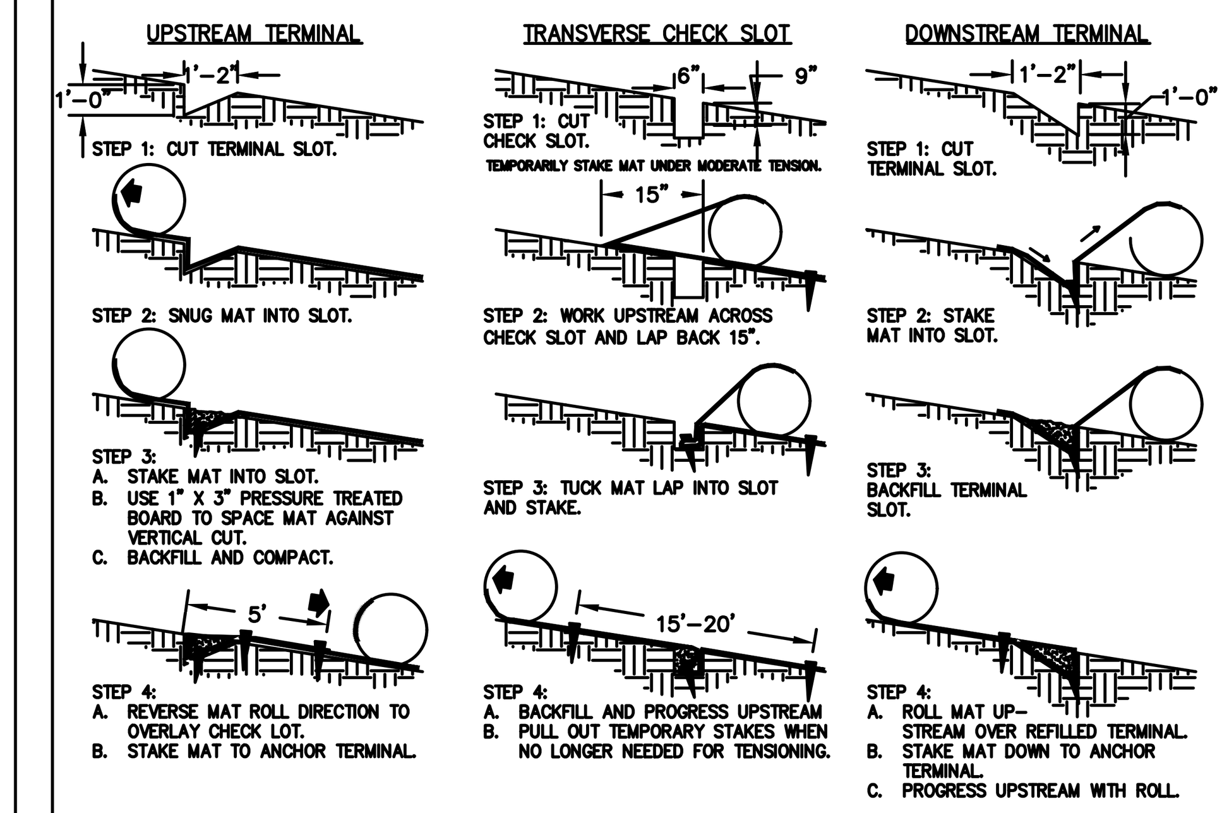
SHOOTS OR GRASS BLADES: GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH: GRASS CLIPPINGS AND DEAD LEAVES (UP TO 1/2" THICK).

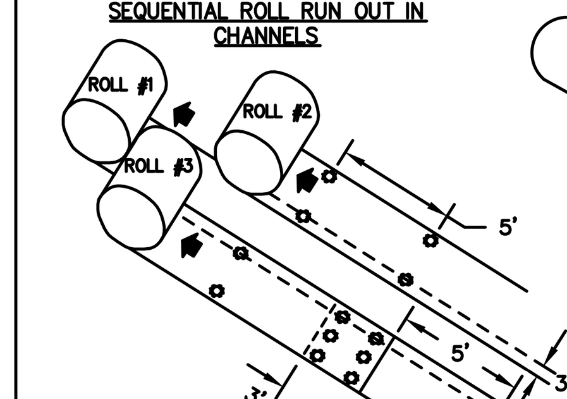
ROOT ZONE: SOIL AND ROOTS. SHOULD BE 1/2"-3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH.

TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

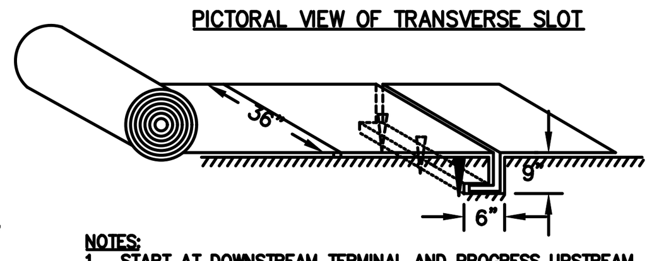
BLANKET AND MATTING CROSS-SECTIONS



SEQUENTIAL ROLL RUN OUT IN CHANNELS



PICTORAL VIEW OF TRANSVERSE SLOT



NOTES:

1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.
4. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.
5. USE 3" OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE SEAMS.
6. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

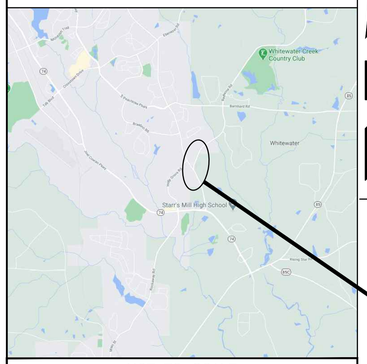
ESPCP STANDARDS AND DETAILS

DRAWING NO. 56-02

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Eros-Cover.dwg 2/24/2023 10:07 AM USER: Lalo Mercado

10/12/2023 9:18:51 AM USER:Eric Brisse	P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Right of Way.dwg	COUNTY	CROY REFERENCE NUMBER	SHEET NO.	TOTAL SHEETS
		FAYETTE	1866.032	###	###

LOCATION SKETCH



NOT TO SCALE

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983)/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

FUNCTIONAL CLASS:
MINOR ARTERIAL

THIS PROJECT IS 100% IN FAYETTE COUNTY IN CONG. DIST. NO. 03.

LAND LOTS: 19, 28
LAND DISTRICT: 6

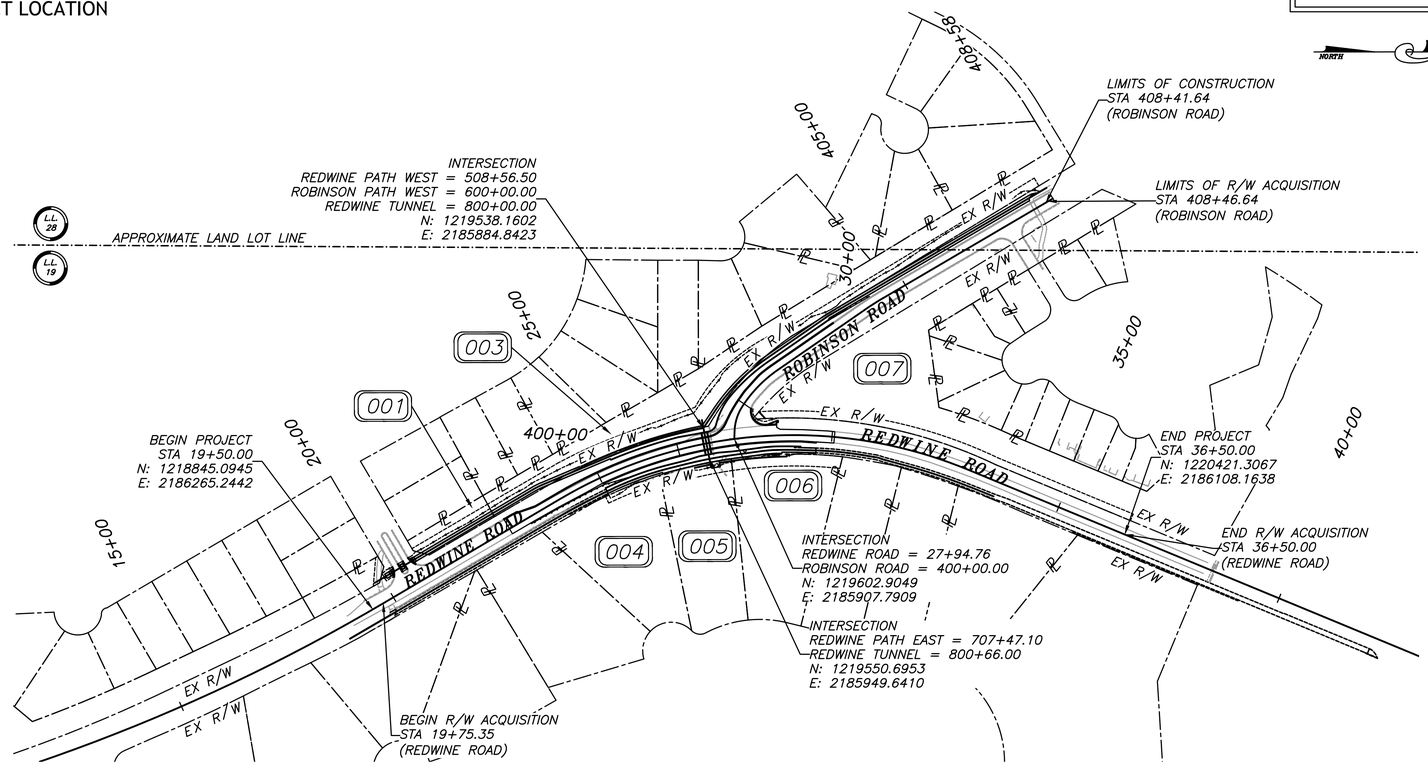
FAYETTE COUNTY

RIGHT OF WAY PROPOSED STARRS MILL SCHOOL TUNNEL

PROJECT NO. 17TAI

CONVENTIONAL SIGNS

- STATE OR COUNTY LINE
- CITY LIMIT LINE
- LAND LOT LINE
- PROPERTY LINE
- SURVEY OR BASE LINE
- RIGHT OF WAY LINE
  - EXISTING
  - REQUIRED
  - LIMIT OF ACCESS
  - REQD R/W & LIMIT OF ACCESS
  - R/W MARKERS
- FENCE
- RAILROAD
- POWER LINE
- TELEPHONE LINE
- POWER POLES
- TELEPHONE OR TELEGRAPH POLES



0 150 300 600
SCALE IN FEET

NOTE:
PROJECT TO BE CONSTRUCTED AS PER GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CONSTRUCTION OF TRANSPORTATION SYSTEMS, CURRENT EDITION, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION AND MODIFIED BY CONTRACT DOCUMENTS.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

LENGTH OF RIGHT OF WAY PROJECT	COUNTY NO. 113
	MILES
NET LENGTH OF RIGHT OF WAY	0.32
NET LENGTH OF BRIDGES	0.00
NET LENGTH OF EXCEPTIONS	0.00
GROSS LENGTH OF PROJECT	0.32

FAYETTE County — Create Your Story!

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

PLANS PREPARED BY: CHRIS RIDEOUT, P.E.
DESIGN

PLANS COMPLETED: 10-10-2022

REVISIONS	
11-15-2022	
04-03-2023	
09-12-2023	
10-12-2023	

DRAWING No. 60-00

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

IN (SE) 829.13
IN (NE) 828.93
OUT 828.70

PEGGY H CARSON
060902001
301 FORESTON PL
DB3923 PG0419

JENNIFER A ZEITZ
060902033
300 FORESTON PL
DB2871 PG99

JOHN D BEANE II
060904044
702 REDWOOD PARK
DB4519 PG0520

DIANNE MANEY
060904043
704 REDWOOD PARK
DB4689 PG0001

BLAKE M & VIRGINIA W GIBSON
060904042
706 REDWOOD PARK

EX R/W

500+90 501+00 502+00 503+00 504+00 505+00 506+00

001
PEACHTREE CITY
060902034
CITY GREENBELT
PB18 PG47-48 & 62-65

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

001-C3
20+15.46
90.69 L
20+10.46
90.75 L
001-L4
001-L2
20+15.42
65.69 L
AREA #1
001-L5
19+75.35
41.35 L
001-C1
POB #1 (001)
19+90.39
41.07 L
PT: 19+79.09

20+85.34
68.26 L
001-L7
20+85.33
63.24 L
001-L6
001-L8
AREA #2
POB #2 (001)
21+10.30
38.21 L
001-L10
001-L9
001-L11
22+69.30
67.90 L
POB (003)
22+68.33
37.91 L
003-L14
003-L2
24+38.19
67.77 L
003-C3
24+38.44
37.76 L
003-C13
GAS MARKER
GAS VAULT
GAS VAULT

#4RB
#4RB

REDWINE ROAD
N30°32'46.96"W
428.053
PC: 24+07.14
C101
C102
20+00 21+00 22+00 23+00 24+00 25+00
100+00 101+00 102+00 103+00 104+00 105+00
REDWINE MULTI-USE PATH GDOT
12" DIP
ELECTRICAL BOX
ELECTRICAL BOX
EX R/W
EX R/W
EX R/W

BEGIN R/W ACQUISITION
STA 19+75.35
(REDWINE ROAD)

WILLIAM G BUTLER
060304009
280 JEFFERSON WOODS DR
DB1327 PG432

DANIEL GAVORA
060304008
275 JEFFERSON WOODS
DB4542 PG0490

LAURIE D RADER
060302009
170 MOCKINGBIRD TRL
DB3305 PG639

004-C4
24+94.12
40.47 R
004-L3
004-C2
24+94.40
55.47 R
705+00

MATCHLINE 25+25 (SEE SHEET 60-02)

BEGIN PROJECT
STA 19+50.00
N: 1218845.0945
E: 2186265.2442

CURVE NO.= 101
PI STA.= 13+12.31
N= 1218284.7050
E= 2186596.0739
Δ= 19°26'05.6"
D= 1°26'35.6"
T= 679.85
L= 1346.63
R= 3970.00
E= 57.79

CURVE NO.= 102
PI STA.= 28+85.96
N= 1219651.2098
E= 2185789.6504
Δ= 53°00'59.2"
D= 5°58'05.9"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

004
RUDOLF MEZOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG435

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Right of Way.dwg 11/15/2022 5:55 PM USER: Eric Brisse

LEGEND

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS . . . . . BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS . . . . . ELA
CONSTRUCTION LIMITS —C—F—	LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D R/W & LIMIT OF ACCESS
EASEMENT FOR CONSTR. OF SLOPES	ORANGE BARRIER FENCE
EASEMENT FOR CONSTR OF DRIVES	ESA – ENV. SENSITIVE AREA

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		
11-15-2022		

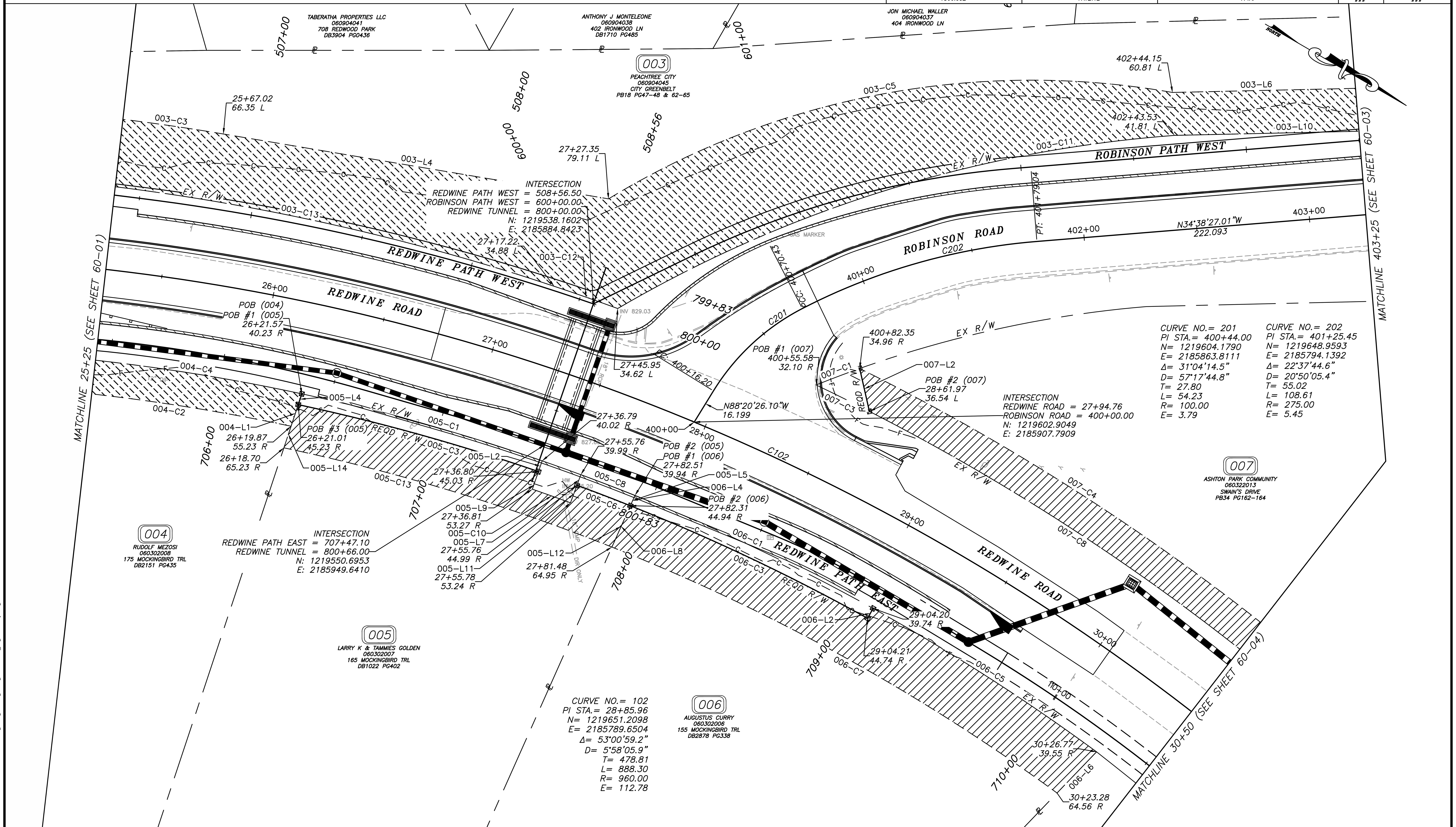
FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

RIGHT OF WAY PLANS

DRAWING NO. 60-01

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###



TABERATHA PROPERTIES LLC
060904041
708 REDWOOD PARK
DB3904 PG0436
ANTHONY J MONTELEONE
060904038
402 IRONWOOD LN
DB1710 PG485
JON MICHAEL WALLER
060904037
404 IRONWOOD LN
003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65
507+00
508+00
508+56
600+00
601+00
25+67.02
66.35 L
003-C3
003-L4
003-C13
003-C12
003-C5
003-C11
003-L6
003-L10
402+44.15
60.81 L
402+43.53
41.81 L
27+27.35
79.11 L
INTERSECTION
REDWINE PATH WEST = 508+56.50
ROBINSON PATH WEST = 600+00.00
REDWINE TUNNEL = 800+00.00
N: 1219538.1602
E: 2185884.8423
27+17.22
34.88 L
EX R/W
ROBINSON PATH WEST
ROBINSON ROAD
C202
REDWINE PATH WEST
REDWINE ROAD
26+00
27+00
28+00
29+00
30+00
401+00
402+00
403+00
N34°38'27.01"W
222.093
PI: 401+79.04
PCC: 401+10.43
C201
799+83
800+00
800+83
PC: 400+16.20
27+45.95
34.62 L
27+36.79
40.02 R
N88°20'26.10"W
16.199
400+00
MATCHLINE 25+25 (SEE SHEET 60-01)
MATCHLINE 403+25 (SEE SHEET 60-03)
MATCHLINE 30+50 (SEE SHEET 60-04)
POB (004)
POB #1 (005)
26+21.57
40.23 R
004-C4
004-C2
004-L1
26+19.87
55.23 R
26+18.70
65.23 R
005-L4
005-C1
005-C3
005-C13
005-L14
005-L2
005-C8
005-C6
POB #3 (005)
26+21.01
45.23 R
REQD R/W
706+00
707+00
708+00
709+00
710+00
27+55.76
39.99 R
27+36.80
45.03 R
POB #2 (005)
POB #1 (006)
27+82.51
39.94 R
005-L5
006-L4
POB #2 (006)
27+82.31
44.94 R
005-L9
27+36.81
53.27 R
005-C10
005-L7
27+55.76
44.99 R
005-L12
005-L11
27+55.78
53.24 R
27+81.48
64.95 R
006-L8
006-C1
006-C3
006-L2
006-C7
006-C5
006-L6
REDWINE PATH EAST
29+04.20
39.74 R
29+04.21
44.74 R
30+26.77
39.55 R
30+23.28
64.56 R
C102
INTERSECTION
REDWINE PATH EAST = 707+47.10
REDWINE TUNNEL = 800+66.00
N: 1219550.6953
E: 2185949.6410
004
RUDOLF MEZOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG435
005
LARRY K & TAMMIES GOLDEN
060302007
165 MOCKINGBIRD TRL
DB1022 PG402
006
AUGUSTUS CURRY
060302006
155 MOCKINGBIRD TRL
DB2878 PG338
CURVE NO.= 102
PI STA.= 28+85.96
N= 1219651.2098
E= 2185789.6504
Δ= 53°00'59.2"
D= 5°58'05.9"
T= 478.81
L= 888.30
R= 960.00
E= 112.78
POB #1 (007)
400+55.58
32.10 R
400+82.35
34.96 R
007-C1
007-C3
007-L2
REQD R/W
POB #2 (007)
28+61.97
36.54 L
INTERSECTION
REDWINE ROAD = 27+94.76
ROBINSON ROAD = 400+00.00
N: 1219602.9049
E: 2185907.7909
007-C4
007-C8
007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164
CURVE NO.= 201
PI STA.= 400+44.00
N= 1219604.1790
E= 2185863.8111
Δ= 31°04'14.5"
D= 57°17'44.8"
T= 27.80
L= 54.23
R= 100.00
E= 3.79
CURVE NO.= 202
PI STA.= 401+25.45
N= 1219648.9593
E= 2185794.1392
Δ= 22°37'44.6"
D= 20°50'05.4"
T= 55.02
L= 108.61
R= 275.00
E= 5.45
NORTH

LEGEND

PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	—C—F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR. OF SLOPES	
EASEMENT FOR CONSTR. OF DRIVES	
BEGIN LIMIT OF ACCESS	BLA
END LIMIT OF ACCESS	ELA
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA	—∇—∇—

0 20 40 80
SCALE IN FEET

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES
11-15-2022
04-03-2023
09-12-2023
10-12-2023

FAYETTE COUNTY
STARRS MILL SCHOOL TUNNEL
RIGHT OF WAY PLANS

DRAWING NO. 60-02

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel Design\Engineering\Design\1866.032_Right of Way.dwg 10/12/2023 9:52 AM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

SOUTHERN CROSS PTC REALTY LLC
060904035
408 IRONWOOD LN
DB4912 PG0578

APPROXIMATE LAND LOT LINE

LL 98

LL 97

JOSEPH P JR & THERESA ALFANO
060904036
406 IRONWOOD LN

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

DAVID & EVA KELLY
060903007
9 LEA WAY
DB4113 PG0589

NORTH

604+00

605+00

606+00

607+00

608+00

608+86

WOODEN GUEST HOUSE

6' WOODEN FENCE

#4RB
DIST

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

408+46.64
56.75 L

404+72.02
50.95 L

003-L6

003-L7

404+72.32
31.95 L

408+46.64
37.74 L

003-L8

EX R/W

003-L9

EX R/W

003-L10

ROBINSON PATH WEST

PC: 404+01.13

PT: 404+56.62

404+00

C203

405+00

ROBINSON ROAD
N30°23'34.26"W
412.849

406+00

407+00

408+00

408+58

N34°38'27.01"W
222.093

N: 1219876.0195
E: 2185637.2619

N: 1220133.8784
E: 2185484.0121

LIMITS OF R/W ACQUISITION
STA 408+46.64
(ROBINSON ROAD)

MATCHLINE 403+25 (SEE SHEET 60-02)

EX R/W

4" RCDP IRON FENCE

4" RCDP IRON FENCE

4" RCDP IRON FENCE

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

CURVE NO.= 203
PI STA.= 404+23.38
N= 1219895.2590
E= 2185623.9692
Δ= 4°14'52.7"
D= 9°32'57.5"
T= 22.25
L= 44.48
R= 600.00
E= 0.41

#4RB

#4RB

6' PVC FENCE

NORMAN TERRELL PARKER
060322010
204 ASHTON PARK
DB3576 PG0370

JOHN R GETREU
060322011
202 ASHTON PARK
DB4754 PG0640

DORIS ANN MARTIN
060322012
200 ASHTON PARK
DB3451 PG0156

MICHAEL S GUNNELLS
060322001
101 ASHTON PARK
DB2531 PG320

BEVERLY H & MARION J WHITE
060322002
103 ASHTON PARK
DB4381 PG0620

MATCHLINE (SEE SHEET 60-04)

APPROXIMATE LAND LOT LINE

LL 79

LL 78

LEGEND

PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	—C—F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR. OF SLOPES	
EASEMENT FOR CONSTR. OF DRIVES	

BEGIN LIMIT OF ACCESS	BLA
END LIMIT OF ACCESS	ELA
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA – ENV. SENSITIVE AREA	—▽—▽—

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES		
11-15-2022		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

RIGHT OF WAY PLANS

DRAWING NO.
60-03

P:\Marietta\1866 Fayette County\1866.032 Starrs Mill School Tunnel\Design\Engineering\Design\1866.032_Right of Way.dwg 11/15/2022 5:55 PM USER: Eric Brisse

CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	///	///

MATCHLINE (SEE SHEET 60-03)

TRUDY LOUISE GOMER
060322008
208 ASHTON PARK
DB2559 PG25

MICHAEL SHANE LANCE
060322007
210 ASHTON PARK
DB4501 PG0131

TONY F DASILVA
060322006
212 ASHTON PARK
DB2631 PG439

CHANG BUM PARK
060322005
214 ASHTON PARK
DB4898 PG0331

DENNIS D PALMER
060323018
216 ASHTON PARK
DB4722 PG0510

MARK A POWELL
060323017
218 ASHTON PARK
DB4325 PG0436

4" PVC FENCE

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

NORTH

33+45.01
46.89 L

33+44.59
31.89 L

007-C4

EX R/W

007-C8

007-L5

007-L7

EX R/W

PI: 32+90.44

33+00

N: 1220097.8789
E: 2185974.3935

MATCHLINE (SEE SHEET 60-02)

31+00

C102

32+00

34+00

REDWINE ROAD
N22°28'12.24"E
1166.676

35+00

MATCHLINE 30+50

111+00

112+00

REDWINE MULTI-USE PATH GDOT

113+00

113+59

EX R/W

12" DIP

CASTILLO MARIA
060302003
125 MOCKINGBIRD TRL
DB3613 PG555

MARTIN ANTHONY
060302002
115 MOCKINGBIRD TRL
BK4789 PG482-484

MATCHLINE (SEE INSERT)

CURVE NO.= 102
PI STA.= 28+85.96
N= 1219651.2098
E= 2185789.6504
Δ= 5°3'00.59.2"
D= 5°58'05.9"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

KAREN VAN HORN
060302005
145 MOCKINGBIRD TRL
DB3887 PG628

TIMOTHY J & CHERYL MURPHY
060302004
135 MOCKINGBIRD TRL
DB1288 PG109

36+50.00
46.47 L

007-L5

007-L6

007-L7

36+50.00
31.47 L

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

EX R/W

END R/W ACQUISITION
STA 36+50.00
(REDWINE ROAD)

36+00

37+00

REDWINE ROAD

38+00

39+00

INV=794.56'
24" CMP

INV=793.71'

EX R/W

LEGEND

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS —C—F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR. OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS . . . . . BLA
END LIMIT OF ACCESS . . . . . ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA – ENV. SENSITIVE AREA —▽—▽—

0 20 40 80
SCALE IN FEET

CROY
200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
PHONE: (770) 971-5407 FAX: (770) 971-0620

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REVISION DATES			
11-15-2022			
10-12-2023			

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

RIGHT OF WAY PLANS

DRAWING NO. 60-04

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CROY REFERENCE NUMBER	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1866.032	FAYETTE	17TAI	###	###

PARCEL 001 — REQ'D TEMP. EASM'T. #1

POB	#	BEARING	DISTANCE
19+90.39 41.07 LT		CHORD BEARING:	S29°27'08"E
	001–C1	CHORD LENGTH:	15.00'
		ARC LENGTH:	15.00'
		RADIUS:	4986.70'
	001–L2	N85°10'29"W	60.58'
		CHORD BEARING:	N29°47'04"W
	001–C3	CHORD LENGTH:	5.00'
		ARC LENGTH:	5.00'
		RADIUS:	4936.70'
	001–L4	N59°32'30"E	25.00'
	001–L5	S75°04'06"E	35.11'

REQ'D AREA = 813 S.F.
REQ'D AREA = 0.019 AC.

PARCEL 001 — REQ'D TEMP. EASM'T. #2

POB	#	BEARING	DISTANCE
21+10.30 38.21 LT	001–L6	S14°31'25"W	35.35'
	001–L7	S59°31'16"W	5.02'
	001–L8	N30°26'07"W	183.97'
	001–L9	N61°19'04"E	30.01'
	001–L10	S30°26'09"E	158.03'

REQ'D AREA = 5193 S.F.
REQ'D AREA = 0.119 AC.
TOTAL REQ'D TEMP AREA = 0.138 AC

PARCEL 003 — REQ'D TEMP. EASM'T. #1

POB	#	BEARING	DISTANCE
22+68.33 37.91 LT	003–L1	S61°19'04"W	30.01'
	003–L2	N30°19'13"W	171.07'
		CHORD BEARING:	N24°15'35"W
	003–C3	CHORD LENGTH:	137.73'
		ARC LENGTH:	137.83'
		RADIUS:	1034.60'
	003–L4	N20°26'35"W	172.74'
		CHORD BEARING:	N40°40'51"W
	003–C5	CHORD LENGTH:	253.84'
		ARC LENGTH:	259.42'
		RADIUS:	360.00'
	003–L6	N31°16'45"W	231.93'
	003–L7	N31°16'45"W	374.66'
	003–L8	N59°36'26"E	19.00'
	003–L9	S31°16'45"E	374.37'
	003–L10	S31°16'45"E	231.44'
		CHORD BEARING:	S47°15'51"E
	003–C11	CHORD LENGTH:	257.93'
		ARC LENGTH:	260.15'
		RADIUS:	573.67'
		CHORD BEARING:	S10°41'33"E
	003–C12	CHORD LENGTH:	29.77'
		ARC LENGTH:	29.77'
		RADIUS:	1004.60'
		CHORD BEARING:	S19°47'32"E
	003–C13	CHORD LENGTH:	288.33'
		ARC LENGTH:	289.33'
		RADIUS:	1004.60'
	003–L14	S30°19'13"E	171.34'

REQ'D AREA = 36,954 S.F.
REQ'D AREA = 0.848 AC.

PARCEL 004 — REQ'D TEMP. EASM'T. #1

POB	#	BEARING	DISTANCE
26+21.57 40.23 RT	004–L1	N78°22'02"E	15.09'
		CHORD BEARING:	S21°42'40"E
	004–C2	CHORD LENGTH:	118.14'
		ARC LENGTH:	118.23'
		RADIUS:	904.10'
	004–L3	S63°37'16"W	15.00'
		CHORD BEARING:	N21°39'59"W
	004–C4	CHORD LENGTH:	122.01'
		ARC LENGTH:	122.09'
		RADIUS:	919.04'

REQ'D AREA = 1803 S.F.
REQ'D AREA = 0.041 AC.

PARCEL 005 — REQ'D R/W #1

POB	#	BEARING	DISTANCE
26+21.57 40.23 RT		CHORD BEARING:	N14°24'59"W
	005–C1	CHORD LENGTH:	110.34'
		ARC LENGTH:	110.41'
		RADIUS:	920.78'
	005–L2	N79°02'38"E	5.00'
		CHORD BEARING:	S14°25'54"E
	005–C3	CHORD LENGTH:	110.28'
		ARC LENGTH:	110.35'
		RADIUS:	915.78'
	005–L4	S78°22'02"W	5.03'

REQ'D AREA = 552 S.F.
REQ'D AREA = 0.013 AC.

PARCEL 005 — REQ'D R/W #2

POB	#	BEARING	DISTANCE
27+82.51 39.94 RT	005–L5	N84°02'59"E	5.00'
		CHORD BEARING:	S09°03'27"E
	005–C6	CHORD LENGTH:	25.30'
		ARC LENGTH:	25.30'
		RADIUS:	915.78'
	005–L7	S80°11'07"W	5.00'
		CHORD BEARING:	N09°02'45"W
	005–C8	CHORD LENGTH:	25.64'
		ARC LENGTH:	25.64'
		RADIUS:	919.04'

REQ'D AREA = 127 S.F.
REQ'D AREA = 0.003 AC.

PARCEL 005 — REQ'D PERM. EASM'T. #3

POB	#	BEARING	DISTANCE
26+21.01 45.23 RT		CHORD BEARING:	N14°25'54"W
	005–C3	CHORD LENGTH:	110.28'
		ARC LENGTH:	110.35'
		RADIUS:	915.78'
	005–L9	N79°02'38"E	8.24'
		CHORD BEARING:	N10°22'54"W
	005–C10	CHORD LENGTH:	17.91'
		ARC LENGTH:	17.91'
		RADIUS:	905.00'
	005–L11	S80°11'07"W	8.25'
		CHORD BEARING:	N09°03'27"W
	005–C6	CHORD LENGTH:	25.30'
		ARC LENGTH:	25.30'
		RADIUS:	915.78'
	005–L12	N84°02'59"E	20.02'
		CHORD BEARING:	S13°10'15"E
	005–C13	CHORD LENGTH:	151.57'
		ARC LENGTH:	151.75'
		RADIUS:	895.78'
	005–L14	S78°22'02"W	20.12'

REQ'D AREA = 2907 S.F.
REQ'D AREA = 0.067 AC.

PARCEL 006 — REQ'D R/W #1

POB	#	BEARING	DISTANCE
27+82.51 39.94 RT		CHORD BEARING:	N04°36'50"W
	006–C1	CHORD LENGTH:	116.57'
		ARC LENGTH:	116.65'
		RADIUS:	918.55'
	006–L2	N89°01'27"E	5.00'
		CHORD BEARING:	S04°37'13"E
	006–C3	CHORD LENGTH:	116.13'
		ARC LENGTH:	116.21'
		RADIUS:	913.55'
	006–L4	S84°02'59"W	5.00'

REQ'D AREA = 582 S.F.
REQ'D AREA = 0.013 AC.

PARCEL 006 — REQ'D PERM. EASM'T. #2

POB	#	BEARING	DISTANCE
27+82.31 44.94 RT		CHORD BEARING:	N04°37'13"W
	006–C3	CHORD LENGTH:	116.13'
		ARC LENGTH:	116.21'
		RADIUS:	913.55'
	006–L2	S89°01'27"W	5.00'
		CHORD BEARING:	N02°41'20"E
	006–C5	CHORD LENGTH:	117.43'
		ARC LENGTH:	117.51'
		RADIUS:	918.55'
	006–L6	S76°09'04"E	25.22'
		CHORD BEARING:	S01°05'12"E
	006–C7	CHORD LENGTH:	224.90'
		ARC LENGTH:	225.50'
		RADIUS:	893.55'
	006–L8	S84°02'59"W	20.02'

REQ'D AREA = 5164 S.F.
REQ'D AREA = 0.119 AC.

PARCEL 007 — REQ'D R/W #1

POB	#	BEARING	DISTANCE
400+55.58 32.10 RT		CHORD BEARING:	N50°45'10"W
	007–C1	CHORD LENGTH:	20.58'
		ARC LENGTH:	20.58'
		RADIUS:	503.67'
	007–L2	N47°13'58"E	19.45'
		CHORD BEARING:	S03°37'16"E
	007–C3	CHORD LENGTH:	26.28'
		ARC LENGTH:	26.28'
		RADIUS:	1004.60'

REQ'D AREA = 199 S.F.
REQ'D AREA = 0.005 AC.

PARCEL 007 — REQ'D PERM. EASM'T. #1

POB	#	BEARING	DISTANCE
28+61.97 36.54 LT	007–L2	S47°13'58"W	19.45'
		CHORD BEARING:	N10°58'41"E
	007–C4	CHORD LENGTH:	512.33'
		ARC LENGTH:	517.88'
		RADIUS:	1019.60'
	007–L5	N22°32'56"E	304.99'
	007–L6	S67°31'48"E	15.00'
	007–L7	S22°32'56"W	305.41'
		CHORD BEARING:	S11°20'23"W
	007–C8	CHORD LENGTH:	493.26'
		ARC LENGTH:	498.36'
		RADIUS:	1004.60'

REQ'D AREA = 12200 S.F.
REQ'D AREA = 0.280 AC.

CROY

200 NORTH COBB PARKWAY, BLDG. 400, SUITE 413
MARIETTA, GA 30062
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REVISION DATES		
11–15–2022		
04–03–2023		
09–12–2023		
10–12–2023		

FAYETTE COUNTY

STARRS MILL SCHOOL TUNNEL

RIGHT OF WAY PLANS

DRAWING NO. 60–05

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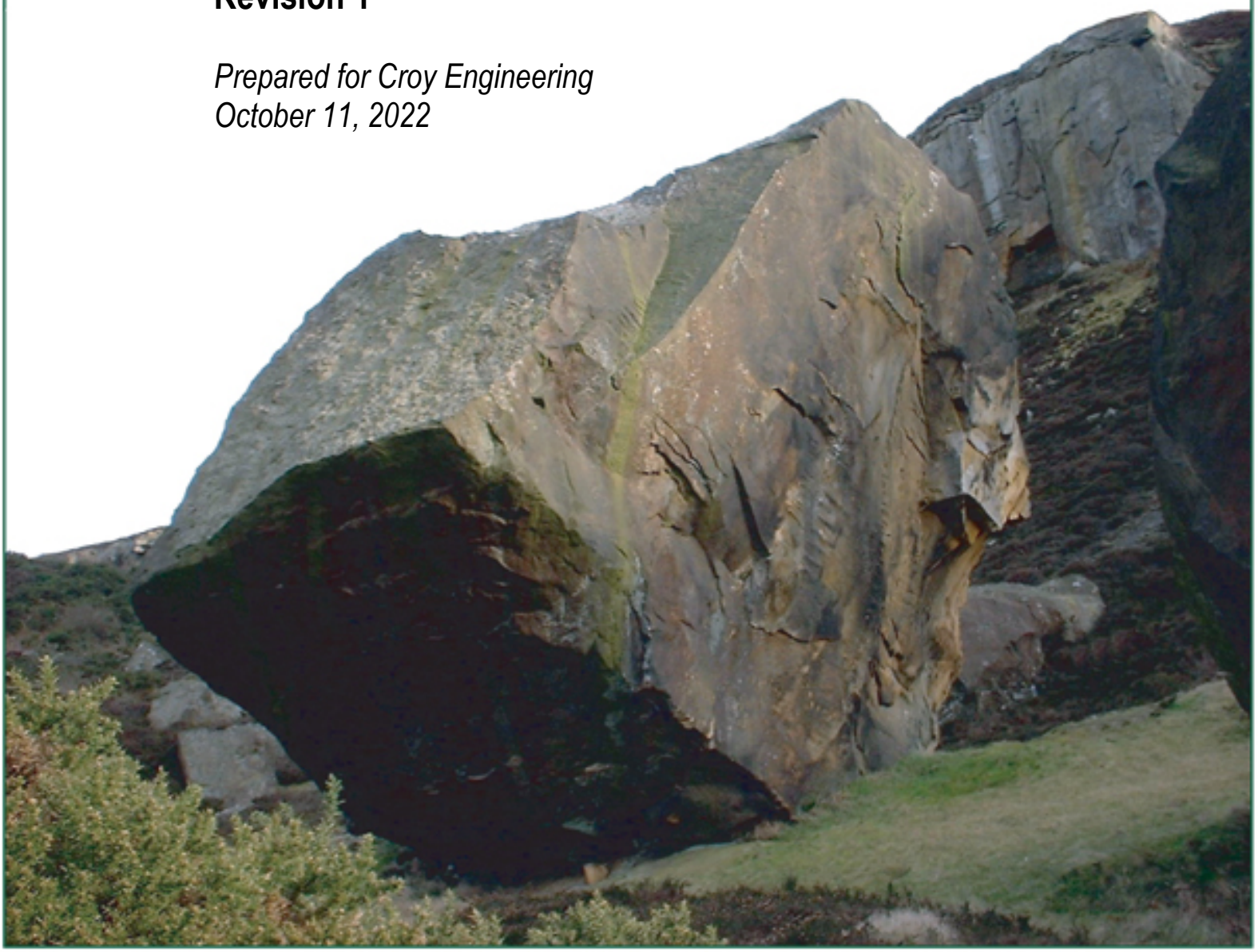
GEO HYDRO ENGINEERS

Report of Subsurface Exploration and Geotechnical Engineering Evaluation

Starrs Mill School Tunnel
Redwine Road and Robinson Road
Peachtree City, Georgia
Geo-Hydro Project Number 222425.20
Revision 1

Prepared for Croy Engineering
October 11, 2022



Mr. Eric M. Brisse, P.E.
Croy Engineering
200 Cobb Parkway North
Building 400, Suite 413
Marietta, Georgia 30062

October 11, 2022

Report of Subsurface Exploration
and Geotechnical Engineering Evaluation
Starrs Mill School Tunnel - Redwine Road and Robinson Road
Peachtree City, Georgia
Geo-Hydro Project Number 222425.20

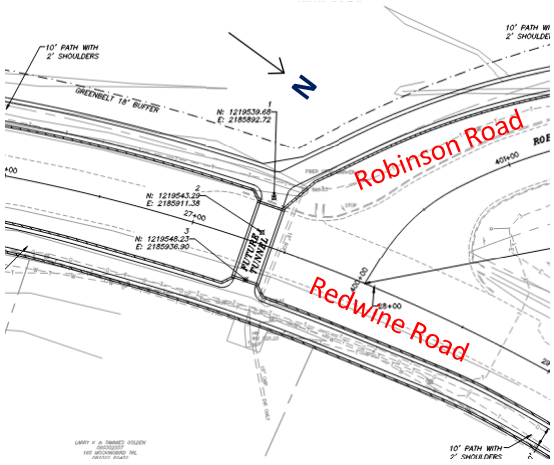
Dear Mr. Brisse:

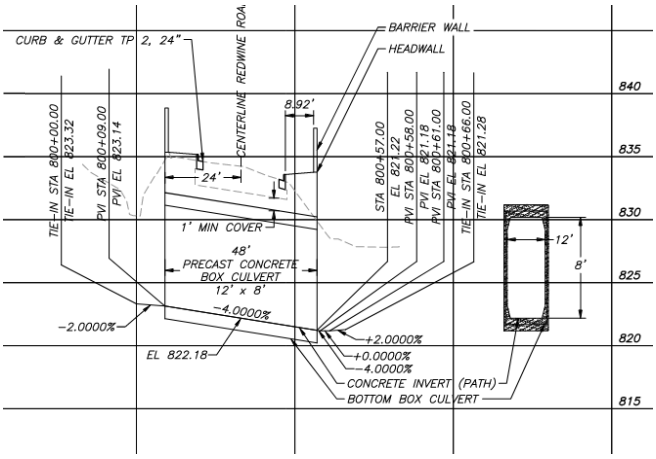
Geo-Hydro Engineers, Inc. has completed the authorized subsurface exploration for the above referenced project. The scope of services for this project was outlined in our proposal number 25809.2 Revision 3 dated August 2, 2022.

PROJECT INFORMATION

The project site is located on Redwine Road approximately 50 feet south of the intersection of Redwine Road and Robinson Road in Peachtree City, Georgia. Figure 1 in the Appendix shows the approximate site location.

We understand that a new pedestrian tunnel is planned to cross under Redwine Road. Specifics regarding dimensions and design are still being determined, and loading conditions have not been provided. Current plans illustrate a 48-foot long, pre-cast concrete culvert with internal clear dimensions of 8 feet high by 12 feet wide. The box culvert as currently configured will have about 1 to 3 feet of cover, and an invert elevation approximately 12 to 14 feet below the current road surface (invert elevation ranging from about 821 to 823). The site plan excerpt below left illustrates the planned tunnel location, and the current planned tunnel profile is shown below right.





EXPLORATORY PROCEDURES

The subsurface exploration consisted of three machine-drilled soil test borings performed at the approximate locations shown on Figure 2 included in the Appendix. The test borings were located in the field by measuring angles and distances from existing site features. The ground surface elevations shown on the test boring records were interpolated from the *Grading Plan (Drawing Number 18-02 dated 9/26/2021)* and the *Path Profiles (Drawing Number 15-03 dated 9/20/2022*) prepared by Croy, and the information is not certified as correct by this engineer. Users of the data do so at their own risk. In general, the boring locations and elevations should be considered approximate.

Standard penetration testing, as provided for in ASTM D1586, was performed at select depth intervals in the soil test borings. Soil samples obtained from the drilling operation were examined and classified in general accordance with ASTM D2488 (Visual-Manual Procedure for Description of Soils). Soil classifications include the use of the Unified Soil Classification System described in ASTM D2487 (Classification of Soils for Engineering Purposes). The soil classifications also include our evaluation of the geologic origin of the soils. Evaluations of geologic origin are based on our experience and interpretation and may be subject to some degree of error.

Descriptions of the soils encountered, groundwater conditions, standard penetration resistances, and other pertinent information are provided in the test boring records included in the Appendix.

REGIONAL GEOLOGY

The project site is located in the Southern Piedmont Geologic Province of Georgia. Soils in this area have been formed by the in-place weathering of the underlying crystalline rock, which accounts for their classification as "residual" soils. Residual soils near the ground surface that have experienced advanced weathering frequently consist of red brown clayey silt (ML) or silty clay (CL). The thickness of this surficial clayey zone may range up to roughly 6 feet. For various reasons, such as erosion or local variation of mineralization, the upper clayey zone is not always present.

With increased depth, the soil becomes less weathered, coarser grained, and the structural character of the underlying parent rock becomes more evident. These residual soils are typically classified as sandy micaceous silt (ML) or silty micaceous sand (SM). With a further increase in depth, the soils eventually become quite hard and take on an increasing resemblance to the underlying parent rock. When these materials have a standard penetration resistance of 100 blows per foot or greater, they are referred to as partially weathered rock. The transition from soil to partially weathered rock is usually a gradual one and may occur at a wide range of depths. Lenses or layers of partially weathered rock are not unusual in the soil profile.

Partially weathered rock represents the zone of transition between the soil and the indurated metamorphic rocks from which the soils are derived. The subsurface profile is, in fact, a history of the weathering process that the crystalline rock has undergone. The degree of weathering is most advanced at the ground surface, where fine-grained soil may be present. Conversely, the weathering process is in its early stages immediately above the surface of relatively sound rock, where partially weathered rock may be found.

The thickness of the zone of partially weathered rock and the depth to the rock surface have both been found to vary considerably over relatively short distances. The depth to the rock surface may frequently range from the ground surface to 80 feet or more. The thickness of partially weathered rock, which overlies the rock surface, may vary from only a few inches to as much as 40 feet or more.

SOIL TEST BORING SUMMARY

Starting at the ground surface, all borings encountered approximately 5 to 8 inches of asphalt. Beneath the asphalt, boring B-1 encountered about 5 inches of graded aggregate base, and borings B-2 and B-3 encountered approximately 6 and 8 inches of concrete, respectively. Detailed measurements for quantity estimation were not performed for this exploration. For planning purposes, we recommend assuming an arbitrary surface material thickness of 6 inches for topsoil and 12 inches for pavement materials (asphalt/concrete + crushed stone base).

Beneath surface materials, all three borings encountered fill extending to a depth of about 6 feet. The fill materials were classified as sandy clay and sandy silt with varying amounts of rock fragments. Standard penetration resistances recorded in the fill ranged from 8 to 14 blows per foot.

Beneath the fill, all borings encountered residual soils typical of the Piedmont Region. The residuum was classified as sandy silt and silty sand. Standard penetration resistances recorded in the residual soils ranged from 9 to 41 blows per foot.

Partially weathered rock was encountered in boring B-3 at a depth of about 27 feet. Partially weathered rock is locally defined as residual material having standard penetration resistance values greater than 100 blows per foot.

Conditions causing auger refusal were encountered in all borings at depths ranging from 32 to 33 feet. Auger refusal is the condition that prevents advancement of the boring using conventional soil drilling techniques. Auger refusal may be indicative of a boulder, a lens or layer of rock, a rock pinnacle, or a larger rock mass.

At the time of drilling, groundwater was not encountered in the borings. The borings were backfilled with soil cuttings and patched with asphalt upon completion. It should be noted that groundwater levels will fluctuate several feet depending on yearly and seasonal rainfall variations and other factors and may rise in the future.

For more detailed descriptions of subsurface conditions, please refer to the test boring records included in the Appendix.

Summary of Subsurface Conditions

Boring	Ground Surface Elevation	Bottom of Fill Material		Groundwater*		Top of PWR		Auger Refusal		Boring Termination	
		Depth (feet)	Elev.	Depth (feet)	Elev.	Depth (feet)	Elev.	Depth (feet)	Elev.	Depth (feet)	Elev.
B-1	835	6	829	NE	---	NE	---	32	803	32	803
B-2	834	6	828	NE	---	NE	---	33	801	33	801
B-3	833	6	827	NE	---	27	806	32	801	32	801

All Depths and Elevations in this Summary Table are Approximate
NE: Not Encountered
PWR: Partially Weathered Rock
Elev.: Elevation
*Groundwater level measured at time of drilling

EVALUATIONS AND RECOMMENDATIONS

The following evaluations and recommendations are based on the information available on the proposed construction, the data obtained from the test borings, and our experience with soils and subsurface conditions similar to those encountered at this site. Because the test borings represent a very small statistical sampling of subsurface conditions, it is possible that conditions may be encountered during supplemental explorations or construction that are substantially different from those indicated by the test borings. In these instances, adjustments to the design and construction may be necessary.

Geotechnical Considerations

The following geotechnical characteristics of the site should be considered for planning and design:

- Fill materials were encountered in all borings extending to a depth of about 6 feet. We did not observe any debris or organic material in the soil samples recovered from the borings that would suggest that a trash pit or uncontrolled fill will be encountered during installation of the tunnel. However, it is important to note that the composition and consistency of fill materials can vary drastically over relatively short distances. It would not be unusual to encounter localized areas of uncontrolled fill materials during construction of the tunnel.

- The results of the test borings suggest favorable excavation conditions within the expected excavation depths for installation of the tunnel. Fill materials and residual soils within the anticipated excavation limits should be readily removable with conventional earth moving equipment. The lower end of the tunnel invert will be at elevation 821. Partially weathered rock was encountered in boring B-3 at a depth of about 27 feet (approximate elevation 806), and auger refusal, typically indicative of rock, was encountered at depths of 32 to 33 feet (approximate elevation between 801 and 803). Nevertheless, the geology of the Piedmont is characterized by drastic changes within relatively short distances. The possible presence within the tunnel excavation of boulders, weathered rock seams, or denser materials than those encountered in the borings cannot be completely dismissed.

- At the time of drilling, groundwater was not encountered in the test borings. Based on our understanding of the project and the results of the test borings, we do not expect groundwater to be a major hindrance to design or construction. Regardless of groundwater conditions, the contractor should be prepared to manage surface runoff during rain events, and subsurface drainage will be required behind all below-grade structures including foundation walls.

- At the time of this report, we have not been provided structural loading information for the project. Based on our understanding of the design, our experience with similar projects, and the data obtained from the borings, the pre-cast culvert can be supported directly at grade. Thorough evaluation of the excavation will be necessary to identify any localized areas of loose or soft soils within the culvert footprint. Soft or weak soils should be excavated and replaced with well-compacted, GDOT compliant graded aggregate base (GAB). For design purposes, we recommend an allowable bearing pressure of 3,000 psf.

- Based on the results of the test borings and following the calculation procedure in the 2018 International Building Code (Chapter 20, ASCE 7-16), the *Site Class* for the site is *D*. The mapped and design spectral response accelerations are as follows: S_S=0.155, S_1=0.080, S_{DS}=0.166, S_{D1}=0.128.

The following sections provide recommendations regarding these issues and other geotechnical aspects of the project.

Existing Fill Materials

Fill materials were encountered in all borings extending to a depth of about 6 feet. There are several important factors that should be considered regarding existing fill materials and the limitations of subsurface exploration.

- The quality of existing fill materials can be highly variable, and test borings are often not able to detect all of the zones or layers of poor-quality fill materials.

- It is likely that fill materials will be encountered during construction in areas not directly explored. Variations within the fill should be expected, and poor-quality or loose fill material may be encountered during construction.

- Layers of poor-quality fill materials that are less than about 2.5 to 5 feet thick may often remain undetected by soil test borings due to the discrete-interval sampling method used in this exploration.

- The interface between existing fill materials and the original ground surface may include a layer of organic material that was not properly stripped off during the original grading. Depending on its relationship to finished subgrades, an organic layer might adversely affect support of tunnel culvert structure. If such organic layers are encountered during construction, it may be necessary to "chase out" the organic layer by excavating the layer along with overlying soils.

- Subsurface exploration is simply not capable of disclosing all conditions that may require remediation.

Groundwater

At the time of drilling, groundwater was not encountered in the test borings. It is important to note that groundwater levels will fluctuate depending on yearly and seasonal rainfall variations and other factors and may rise in the future. Based on our understanding of the project, we do not expect groundwater to be a major hindrance to design or construction.

Regardless of groundwater conditions, the contractor should be prepared to manage runoff during wet weather conditions and subsurface drainage will be necessary behind all below-grade structures including foundation walls.

Excavation Characteristics

The soil test borings indicate generally favorable excavation conditions within the anticipated excavation limits. However, subsurface conditions in the Piedmont Region can vary drastically over relatively short distances, and the presence of boulders, rock seams, or rock pinnacles is not uncommon in areas intermediate of borings locations or not directly explored.

For construction bidding and field verification purposes it is common to provide a verifiable definition of rock in the project specifications. The following are typical definitions of mass rock and trench rock:

- Mass Rock: Material which cannot be excavated with a single-tooth ripper drawn by a crawler tractor having a minimum draw bar pull rated at 56,000 pounds (Caterpillar D-8K or equivalent) and occupying an original volume of at least one cubic yard.

- Trench Rock: Material occupying an original volume of at least one-half cubic yard which cannot be excavated with a hydraulic excavator having a minimum flywheel power rating of 123 kW (165 hp); such as a Caterpillar 322CL, John Deere 230C LC, or a Komatsu PC220LC-7; equipped with a short tip radius bucket not wider than 42 inches.

The foregoing definitions are based on large equipment typically utilized for mass grading. Subsequent excavations for building foundations, retaining walls, and underground utilities are often performed with smaller equipment such as rubber-tired backhoe/loaders or even mini-excavators. Contractors will often request additional payment for mobilizing larger equipment than that which was anticipated during preparation of their construction bid. The amount of additional compensation, if any, and the minimum equipment size necessary to qualify for any additional compensation should be defined before the start of construction.

Reuse of Excavated Materials

Based on the results of the test borings, the fill materials and residual soils at the project site appear suitable for reuse as structural fill. Routine adjustment of moisture content will be necessary to allow proper placement and compaction.

It is important to establish as part of the construction contract whether soils having elevated moisture content and/or high plasticity will be considered suitable for reuse. We often find these issues to be a point of contention and a source of delays and change orders. From a technical standpoint, soils with moisture contents wet of optimum as determined by the standard Proctor test (ASTM D698) can be reused provided that the moisture is properly adjusted to within the workable range. Likewise, soils with liquid limits above 50 can also be reused provided they are blended with lower plasticity soils as needed to reduce their liquid limit. From a practical standpoint, wet soils can be very difficult to dry during periods of extended wet weather and low temperatures. Blending soils to reduce their plasticity also requires extra handling and effort. Such difficulties should be considered during planning and budgeting. A clear understanding by the general contractor and grading subcontractor regarding the reuse of excavated soils will be important to avoid delays and unexpected cost overruns.

Structural Fill

Materials selected for use as structural fill should be free of organic debris, demolition debris, and other deleterious materials. The material should not contain rocks having a diameter over 4 inches. It is our opinion that the following soils represented by their USCS group symbols will typically be suitable for use as structural fill and are usually found in abundance in the Piedmont: (SM), (ML), and (CL). The following soil types are typically suitable but are not abundant in the Piedmont: (SW), (SP), (SC), (SP-SM), and (SP-SC). The following soil types are considered unsuitable: (MH), (CH), (OL), (OH), and (Pt).

Laboratory Proctor compaction tests and classification tests should be performed on representative samples obtained from the proposed borrow material to provide data necessary to determine acceptability and for quality control. The moisture content of suitable borrow soils should generally be no more than 3 percentage points below or above optimum at the time of compaction. Tighter moisture limits may be necessary with certain soils.

Suitable fill material should be placed in thin lifts. Lift thickness depends on the type of compaction equipment, but a maximum loose-lift thickness of 8 inches is generally recommended. The soil should be compacted by a self-propelled sheepsfoot roller. Within small excavations such as in utility trenches, around manholes, above foundations, or behind retaining walls, we recommend the use of "wacker packers" or "Rammax" compactors to achieve the specified compaction. Loose lift thicknesses of 4 to 6 inches are recommended in small area fills.

We recommend that structural fill be compacted to at least 95 percent of the standard Proctor maximum dry density (ASTM D698). The upper 12 inches of pavement subgrades should be compacted in accordance with Georgia DOT requirements to at least 100 percent of the standard Proctor maximum dry density (ASTM D698). Additionally, the maximum dry density of structural fill should be no less than 90 pcf. Geo-Hydro should perform density tests during fill placement.

Earth Slopes

Temporary construction slopes should be designed in strict compliance with OSHA regulations. The exploratory borings indicate that materials to be excavated for the project may include Type B and Type C materials as defined in 29 CFR 1926 Subpart P. This dictates that temporary construction slopes for excavation depths of 20 feet or less should be as follows:

- Type B (residual soil): No steeper than 1H:1V
- Type C (fill materials, or any soil type below the groundwater level): No steeper than 1.5H:1V

Temporary construction slopes should be closely observed on a daily basis by the contractor's "competent person" for signs of mass movement: tension cracks near the crest, bulging at the toe of the slope, etc. The responsibility for excavation safety and stability of construction slopes should lie solely with the contractor.

We recommend that extreme caution be observed in trench excavations. Several cases of loss of life due to trench collapses in Georgia point out the lack of attention given to excavation safety on some projects. We recommend that applicable local and federal regulations regarding temporary slopes and shoring and bracing of trench excavations be closely followed.

Temporary Excavation Bracing

If a sloped excavation is not feasible, trench boxes or other temporary excavation bracing will be required. The most appropriate type of excavation bracing will be dictated by subsurface conditions at the time of construction. Typically, the contractor will design and implement temporary excavation bracing as part of means and methods of construction.

Earth Pressure

Three earth pressure conditions are generally considered for retaining wall design: "at rest", "active", and "passive" stress conditions. Retaining walls which are rigidly restrained at the top and will be essentially unable to rotate under the action of earth pressure (such as basement or foundation walls) should be designed for "at rest" conditions. Retaining walls which can move outward at the top as much as 0.5 percent of the wall height (such as free-standing walls) should be designed for "active" conditions. For the evaluation of the resistance of soil to lateral loads the "passive" earth pressure must be calculated. It should be noted that full development of passive pressure requires deflections toward the soil mass on the order of 1.0 percent to 4.0 percent of total wall height.

Earth pressure may be evaluated using the following equation:

$$p_h = K\,(D_w Z + q_s) + W_w(Z-d)$$

where: p_h = horizontal earth pressure at any depth below the ground surface (Z).
W_w = unit weight of water
Z = depth to any point below the ground surface

d = depth to groundwater surface
D_w = wet unit weight of the soil backfill (depending on borrow sources). The wet unit weight of most residual soils may be expected to range from approximately 115 to 125 pcf. Below the groundwater level, D_w must be the buoyant weight.
q_s = uniform surcharge load (add equivalent uniform surcharge to account for construction equipment loads)
K = earth pressure coefficient as follows:

Earth Pressure Condition	Coefficient
At Rest (K_o)	0.5
Active (K_a)	0.33
Passive (K_p)	3.0

The groundwater term, $W_w(Z-d)$, should be used if no drainage system is incorporated behind retaining walls. If a drainage system is included which will not allow the development of any water pressure behind the wall, then the groundwater term may be omitted. The development of excessive water pressure is a common cause of retaining wall failures. Drainage systems should be carefully designed to ensure that long term permanent drainage is accomplished.

The above design recommendations are based on the following assumptions:

- Horizontal backfill
- 95 percent standard Proctor compactive effort on backfill (ASTM D698)
- No safety factor is included

For convenience, equivalent fluid densities are frequently used for the calculation of lateral earth pressures. For "at rest" stress conditions, an equivalent fluid density of 63 pcf may be used. For the "active" state of stress an equivalent fluid density of 42 pcf may be used. These equivalent fluid densities are based on the assumptions that drainage behind the retaining wall will allow *no* development of hydrostatic pressure; that native sandy silts or silty sands will be used as backfill; that the backfill soils will be compacted to 95 percent of standard Proctor maximum dry density; that backfill will be horizontal; and that no surcharge loads will be applied.

For analysis of sliding resistance of the base of a retaining wall, the coefficient of friction may be taken as 0.4 for the soils at the project site. This is an ultimate value, and an adequate factor of safety should be used in design. The force which resists base sliding is calculated by multiplying the normal force on the base by the coefficient of friction. Full development of the frictional force could require deflection of the base of roughly 0.1 to 0.3 inches.

Foundation Design

Based on the results of the test borings, we expect that the proposed culvert will be underlain by residual soil. Based on our experience with similar projects and the results of the test borings, the culvert can be supported directly on a properly prepared subgrade. Any unstable materials at the bearing elevations should

be completely removed and replaced with GDOT compliant graded aggregate base (GAB) compacted to at least 95 percent of the modified Proctor maximum dry density (ASTM D1557). For planning purposes, we recommend assuming that 20 percent of the culvert footprint will require excavation and replacement extending to a depth of 2 feet. This is intended as a budgetary allowance. The actual amount of excavation and replacement required should be based on actual conditions at the time of construction and may exceed this recommended allowance.

Contingent upon proper subgrade preparation and thorough evaluation of the culvert excavation footprint, it is our opinion that the proposed culvert can be supported at grade. We recommend an allowable bearing pressure of 3,000 psf for design.

Seismic Design

Based on the results of the test borings and following the calculation procedure in the 2012 International Building Code (Chapter 20, ASCE 7-10), the *Site Class* for the site is *D*. The mapped and design spectral response accelerations are as follows: S_s=0.155, S_1=0.080, S_{DS}=0.166, S_{D1}=0.128.

Based on the information obtained from the soil test borings, it is our opinion that the potential for liquefaction of the residual soils at the site due to earthquake activity is relatively low.

* * * * * *

We appreciate the opportunity to work with you on this project and are prepared to provide any additional services you may require. If you have any questions concerning this report or any of our services, please call us.

Sincerely,

GEO-HYDRO ENGINEERS, INC.

Jacob O. Congrove, E.I.T.
Staff Engineer
jcongrove@geohydro.com

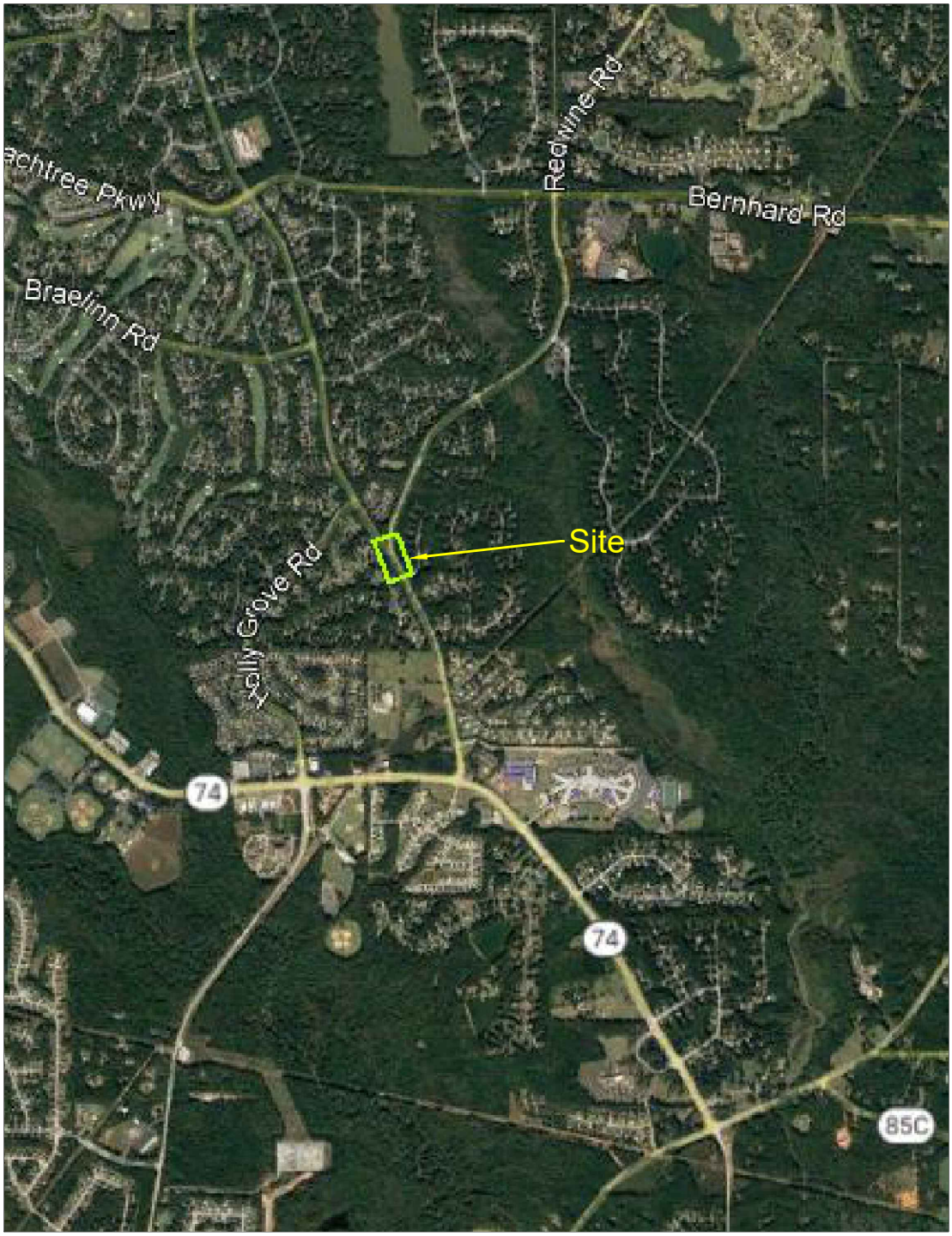
Luis E. Babler, P.E.
Chief Engineer
luis@geohydro.com

GEORGIA REGISTERED No. 021308 PROFESSIONAL ENGINEER LUIS E. BABLER

KDJ/LEB/222425.20 Starrs Mill School Tunnel Geotechnical Report JC leb

GEO HYDRO ENGINEERS

APPENDIX

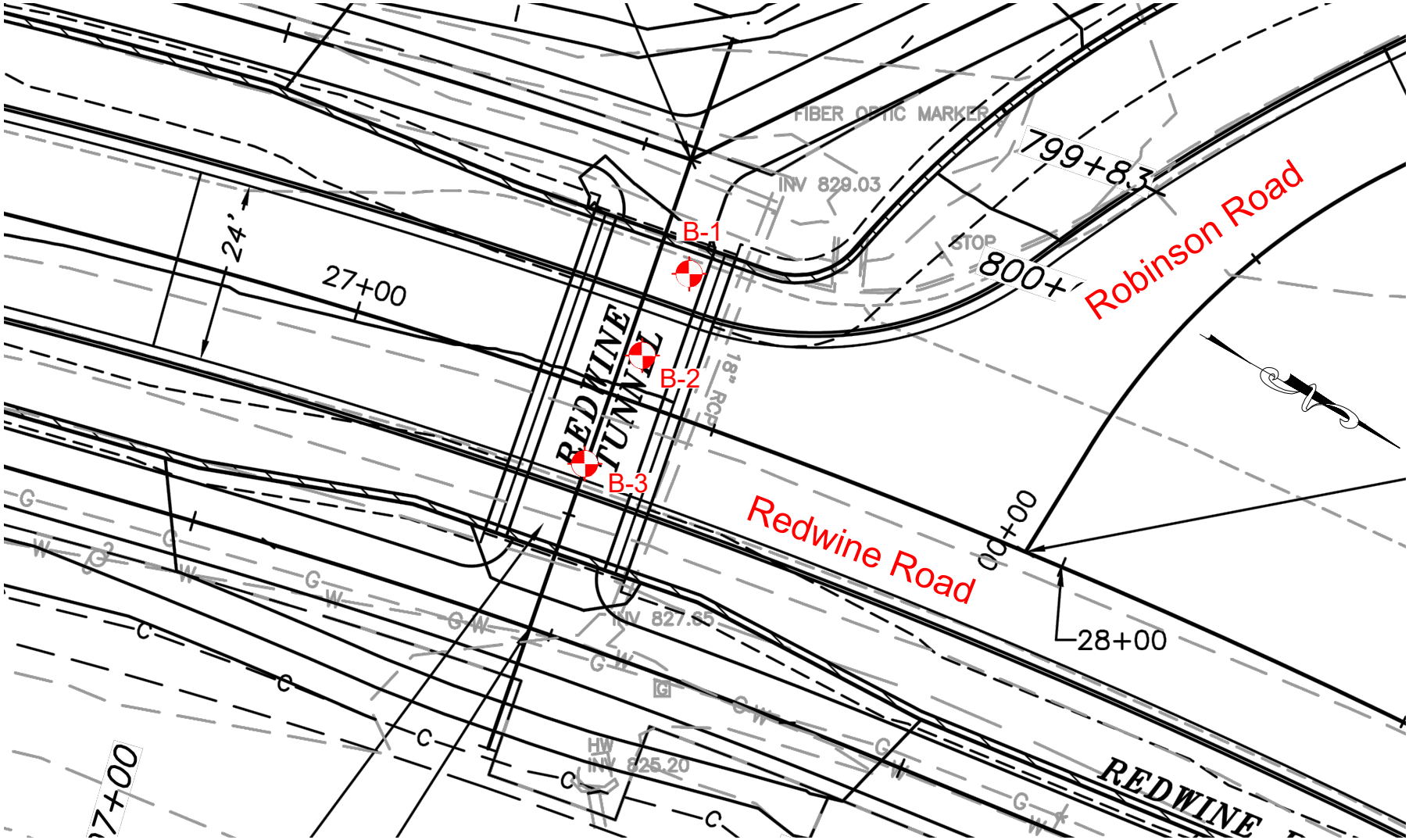


0 0.25 0.5 1 1.5

Approximate Scale, Miles

Figure 1: Site Location Plan

Starrs Mill School Tunnel
Peachtree City, Georgia
Geo-Hydro Project Number 222425.20



LEGEND: Soil Test Boring	Figure 2: Boring Location Plan	Starrs Mill School Tunnel Peachtree City, Georgia Geo-Hydro Project Number 222425.20

Symbols and Nomenclature

Symbols

▌	Thin-walled tube (TWT) sample recovered
▯	Thin-walled tube (TWT) sample not recovered
●	Standard penetration resistance (ASTM D1586)
50/2”	Number of blows (50) to drive the split-spoon a number of inches (2)
65%	Percentage of rock core recovered
RQD	Rock quality designation - % of recovered core sample which is 4 or more inches long
GW	Groundwater
	Water level at least 24 hours after drilling
	Water level one hour or less after drilling
ALLUV	Alluvium
TOP	Topsoil
PM	Pavement Materials
CONC	Concrete
FILL	Fill Material
RES	Residual Soil
PWR	Partially Weathered Rock
SPT	Standard Penetration Testing

Penetration Resistance Results	Number of Blows, N	Approximate Relative Density
Sands	0-4	very loose
	5-10	loose
	11-20	firm
	21-30	very firm
	31-50	dense
	Over 50	very dense

	Number of Blows, N	Approximate Consistency
Silts and	0-1	very soft
Clays	2-4	soft
	5-8	firm
	9-15	stiff
	16-30	very stiff
	31-50	hard
	Over 50	very hard

Drilling Procedures

Soil sampling and standard penetration testing performed in accordance with ASTM D 1586. The standard penetration resistance is the number of blows of a 140-pound hammer falling 30 inches to drive a 2-inch O.D., 1.4-inch I.D. split-spoon sampler one foot. Rock coring is performed in accordance with ASTM D 2113. Thin-walled tube sampling is performed in accordance with ASTM D 1587.

GEO HYDRO ENGINEERS

B-1

Test Boring Record

GEO HYDRO ENGINEERS

Project: **Starrs Mill School Tunnel**		Project No: **222425.20**
Location: **Peachtree City, Georgia**		Date: **9/22/22**
Method: **HSA- ASTM D1586**	GWT at Drilling: **Not Encountered**	G.S. Elev: **835**
Driller: **GCD (Auto-Hammer)**	GWT at 24 hrs: **N/A: Boring Backfilled**	Logged By: **JOC**

Elev. (Ft)	Depth (Ft)	Description	N
	0	Asphalt (Approximately 5 inches)	
		Graded Aggregate Base (Approximately 5 inches)	9
830	5	Stiff red-tan fine sandy clay (SC) with rock fragments (FILL)	9
		Stiff red-tan fine sandy silt (ML) (RESIDUUM)	11
825	10		11
		Firm to loose tan highly micaceous silty fine to medium sand (SM)	
820	15		11
815	20		11
810	25		9
		Dense gray silty fine to medium sand (SM)	
805	30		41
		Auger Refusal at 33 feet	
800	35		
795	40		

Standard Penetration Test (Blows/Foot)

0 10 20 30 40 50 60 70 80 90 100

Remarks:

TEST BORING RECORD BORING LOGS.GPJ GEO HYDRO.GDT 9/27/22

B-2

Test Boring Record

GEO HYDRO ENGINEERS

Project: **Starrs Mill School Tunnel**		Project No: **222425.20**
Location: **Peachtree City, Georgia**		Date: **9/22/22**
Method: **HSA- ASTM D1586**	GWT at Drilling: **Not Encountered**	G.S. Elev: **834**
Driller: **GCD (Auto-Hammer)**	GWT at 24 hrs: **N/A: Boring Backfilled**	Logged By: **JOC**

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N
				Asphalt (Approximately 5 inches)	
				Concrete (Approximately 6 inches)	
				Stiff tan fine sandy silt (ML) (FILL)	9
830	5				11
				Stiff tan and brown micaceous fine sandy silt (ML) (RESIDUUM)	13
825	10				15
				Firm to loose brown highly micaceous silty fine to medium sand (SM)	
820	15				11
815	20				11
810	25				9
				Dense brown highly micaceous silty fine to medium sand (SM)	
805	30				40
				Auger Refusal at 32 feet	
800	35				
795	40				

Standard Penetration Test (Blows/Foot)

0 10 20 30 40 50 60 70 80 90 100

Remarks:

TEST BORING RECORD BORING LOGS.GPJ GEO HYDRO.GDT 9/27/22

B-3

Test Boring Record

GEO HYDRO ENGINEERS

Project: **Starrs Mill School Tunnel**		Project No: **222425.20**
Location: **Peachtree City, Georgia**		Date: **9/22/22**
Method: **HSA- ASTM D1586**	GWT at Drilling: **Not Encountered**	G.S. Elev: **833**
Driller: **GCD (Auto-Hammer)**	GWT at 24 hrs: **N/A: Boring Backfilled**	Logged By: **JOC**

Elev. (Ft)	Depth (Ft)	Description	N
833	0	Asphalt (Approximately 8 inches)	
		Concrete (Approximately 8 inches)	
830		Stiff to firm red and tan fine sandy silt (ML) (FILL)	14
	5		8
825		Very stiff red and brown fine sandy silt (ML) (RESIDUUM)	17
	10		17
820		Firm tan highly micaceous silty fine to medium sand (SM)	
	15		12
815			
	20		15
810			
	25		17
805		Partially weathered rock sampled as gray silty fine to medium sand (SM)	
	30		50/6"
800		Auger Refusal at 33 feet	
	35		
795			
	40		

Standard Penetration Test (Blows/Foot)

0 10 20 30 40 50 60 70 80 90 100

Remarks:

TEST BORING RECORD BORING LOGS.GPJ GEO HYDRO.GDT 9/27/22

ATLANTA GAS LIGHT COMPANY

STARR'S MILL SCHOOL TUNNEL

PROJECT #:17TAI

PROJECT OWNER: FAYETTE COUNTY

DOT DISTRICT: 3

COUNTY: FAYETTE

SERVICE CENTER: CLAYTON/NEWNAN

TOTAL FOOTAGE RETIRED

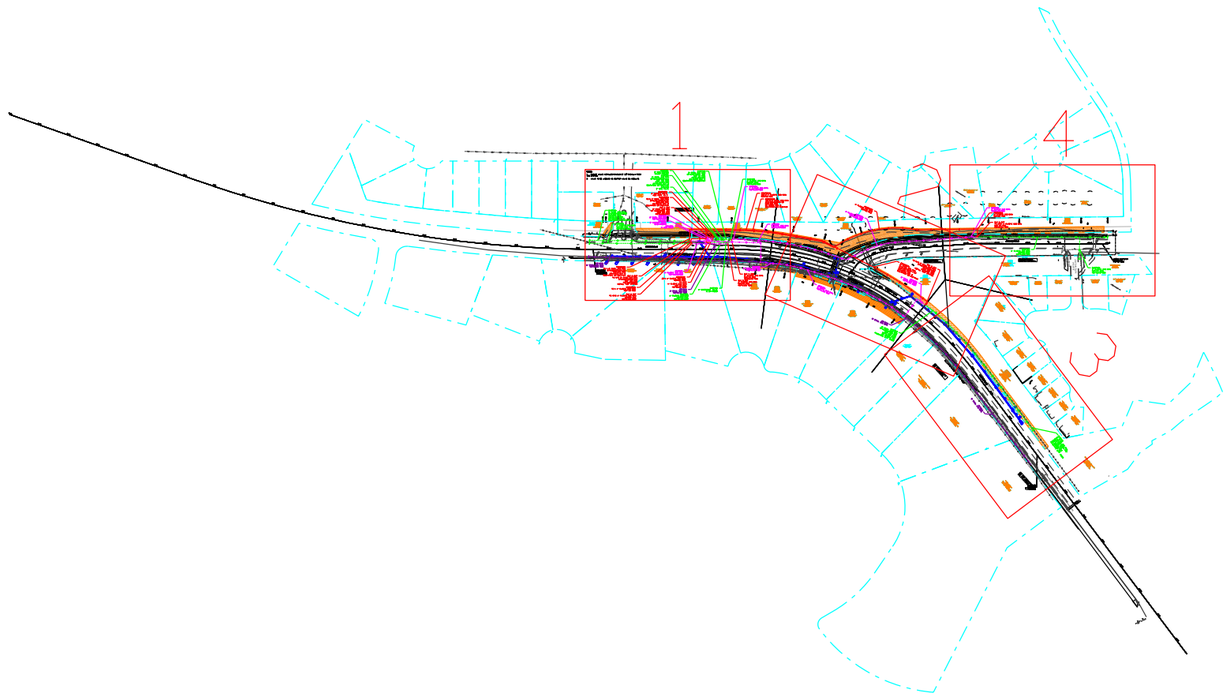
2" HP STEEL - 40 LF
6" HP STEEL - 905 LF
4" MP PLASTIC - 830 LF

TOTAL FOOTAGE INSTALLED

2" HP STEEL - 115 LF
6" HP STEEL - 900 LF
4" MP PLASTIC - 1090 LF

REGULATOR STATION / RECTIFIER

TO REMAIN IN PLACE
REDWINE RD @ FORESTON PL / ST250901



GEORGIA811
www.georgia811.com
Know what's below.
Call before you dig.

NOTES TO CONTRACTOR

ALL TIE-INS TO STEEL REQUIRE A TEST STATION

IF THE EXISTING SYSTEM IS PROTECTED BY ANODES, INSTALLATION OF A 17# ANODE AT TIE-IN IS REQUIRED

LOCATE/TEST STATIONS MUST BE INSTALLED PER SOUTHERN COMPANY GAS (SCG) OPERATIONS AND PROCEDURES MANUAL (OPM)

PROPOSED MAIN SHOULD MAINTAIN A MINIMUM OF 12 INCHES OF RADIAL SEPARATION FROM ALL UNDERGROUND STRUCTURES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SOUTHERN COMPANY GAS OPERATIONS AND PROCEDURES MANUAL AND PERMIT REQUIREMENTS

REFER TO PROJECT NECESSITIES AND BENEFITS IN APPROVED AFE FOR PROJECT DETAILS

ALL STEEL GAS MAIN 4 INCHES AND GREATER WILL BE INTERNALLY COATED EXCEPT FOR STEEL MAIN INSTALLED BETWEEN INLET/DISTRICT AND OUTLET/EMERGENCY VALVES OF THE STATION

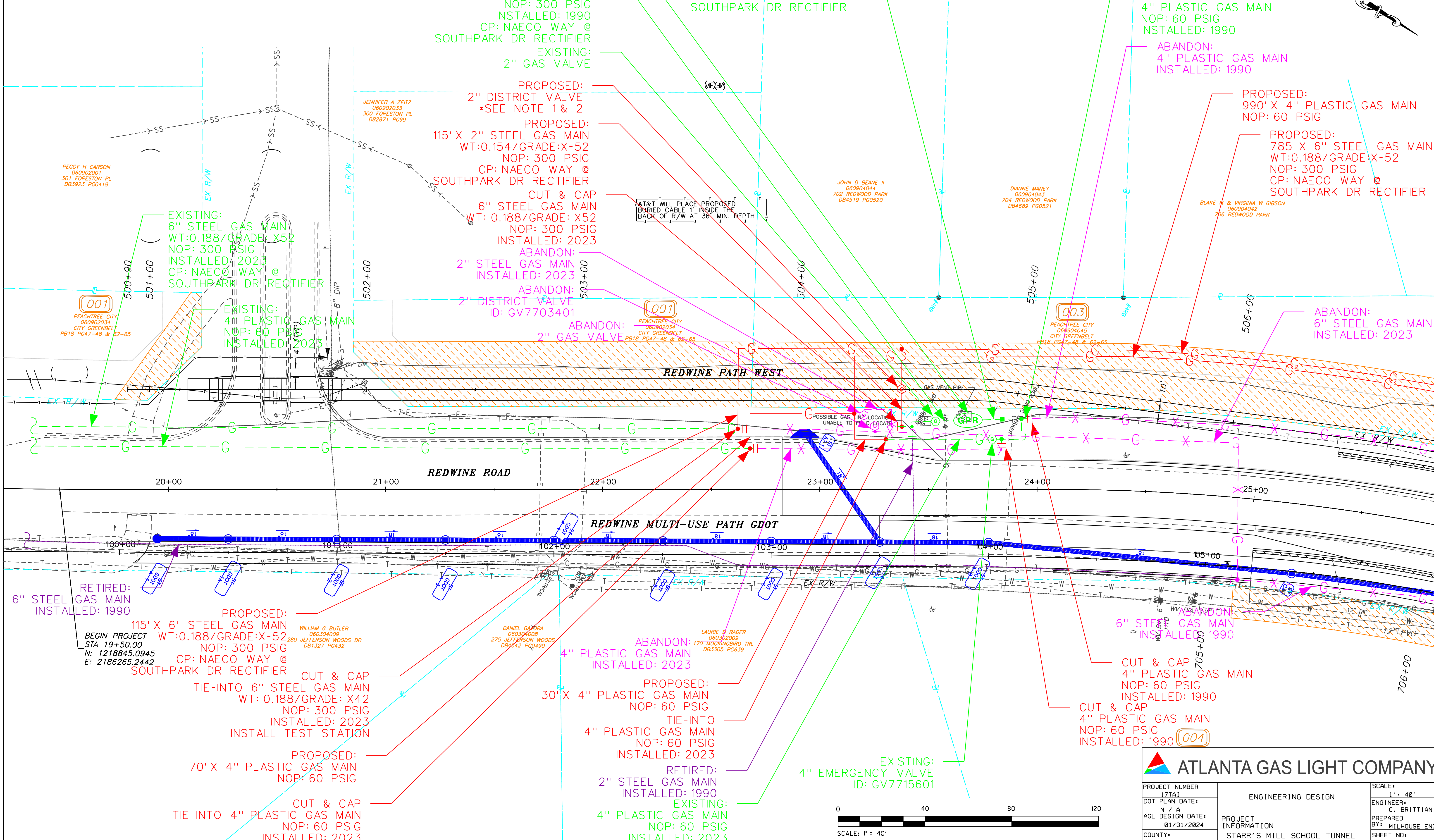
60 PSIG SYSTEM DESIGNED TO OPERATE AT 60 PSIG TO TESTED AT MINIMUM OF 90 PSIG

300 PSIG SYSTEM DESIGNED TO OPERATE AT 300 PSIG TO BE TESTED AT MINIMUM OF 450 PSIG

NOTES:

1. ENSURE VALVE INSTALLED MINIMUM OF 25' RADIALLY FROM REG STATION.

2. VALVE TO BE LABELED AS DISTRICT VALVE ON ASBUILTS



ATLANTA GAS LIGHT COMPANY

PROJECT NUMBER: 17TAI	ENGINEERING DESIGN	SCALE: 1" = 40'
DOT PLAN DATE: N / A		ENGINEER: C. BRITTIAN
AGL DESIGN DATE: 01/31/2024	PROJECT INFORMATION: STARR'S MILL SCHOOL TUNNEL	PREPARED BY: MILHOUSE ENG.
COUNTY: FAYETTE		SHEET NO: 1

PROPOSED:
4" PLASTIC GAS MAIN
NOP: 60 PSIG

ABANDON:
4" PLASTIC GAS MAIN
INSTALLED: 1990

ROBERT L SHARP
060904040
710 REDWOOD PARK
DB932 PG515

ANTHONY J MONTELEONE
060904038
402 IRONWOOD LN
DB1710 PG485

JON MICHAEL MILLER
060904037
404 IRONWOOD LN

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

ROBINSON PATH WEST

ROBINSON ROAD

REPLACE EX C&G

AT&T WILL PLACE PROPOSED BURIED CABLE INSIDE THE BACK OF R/W AT 36" MIN. DEPTH

CUT & CAP
TIE-INTO 6" STEEL GAS MAIN
WT: 0.188/GRADE: X52
NOP: 300 PSIG
INSTALLED: 1993
INSTALL TEST STATION

PROPOSED:
6" STEEL GAS MAIN
WT:0.188/GRADE:X-52
NOP: 300 PSIG
CP: NAECO WAY @
SOUTHPARK DR RECTIFIER

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

ABANDON:
6" STEEL GAS MAIN
INSTALLED: 2023

REDWINE PATH WEST

REDWINE PATH EAST

REDWINE ROAD

REQD R/W

EX R/W

ABANDON:
6" STEEL GAS MAIN
INSTALLED: 1993

RETIRED:
6" STEEL GAS MAIN

EXISTING:
6" STEEL GAS MAIN
WT:0.188/GRADE: X52
NOP: 300 PSIG
INSTALLED: 2023
CP: REDWINE RD,
PEACHTREE CITY ANODE

004
RUDOLF MEYOSI
060302008
175 MOCKINGBIRD TRL
DB2151 PG439

005
LARRY K & TAMMIES GOLDEN
060304007
165 MOCKINGBIRD TRL
DB1022 PG402

006
AUGUSTUS CURRY
060302006
155 MOCKINGBIRD TRL
DB2878 PG338

0 40 80 120
SCALE: 1" = 40'

ATLANTA GAS LIGHT COMPANY

PROJECT NUMBER: 17141	ENGINEERING DESIGN	SCALE: 1". 40'
DOT PLAN DATE: N / A		ENGINEER: C. BRITTIAN
AGL DESIGN DATE: 01/31/2024	PROJECT INFORMATION	PREPARED BY: MILHOUSE ENG.
COUNTY: FAYETTE	STARR'S MILL SCHOOL TUNNEL	SHEET NO: 2

JAMES F MEEDER
060322009
206 ASHTON PARK
DB4256 PG0582

TRUDY LOUISE GOMER
060322008
208 ASHTON PARK
DB2559 PG25

MICHAEL SHANE LANCE
060322007
210 ASHTON PARK
DB4501 PG0131

TONY F DASILVA
060322006
212 ASHTON PARK
DB2631 PG439

CHANG BUM PARK
060322005
214 ASHTON PARK
DB4898 PG0331

DENNIS D PALMER
060323018
216 ASHTON PARK
DB4722 PG0510

MARK A POWELL
060323017
218 ASHTON PARK
DB4325 PG0436

MIKE HUBBARD
060323016
220 ASHTON PARK
DB2526 PG295

ASHT

4' PVC FENCE

007
ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

EXISTING:
6" STEEL GAS MAIN
WT:0.188/GRADE: X52
NOP: 300 PSIG
INSTALLED: 2023
CP: REDWINE RD,
PEACHTREE CITY ANODE

EX R/W

REDWINE ROAD

830 31+00 32+00 33+00 34+00 35+00 36+00 37+00

111+00 112+00 113+00 113+59

12" PVC

REDWINE MULTI-USE PATH GDOT

12" DIP

RETIRED:
6" STEEL GAS MAIN

GDOT PI NO 0012624

NO AT&T CONFLICTS
ON THIS DRAWING

NO AT&T CONFLICTS
ON THIS DRAWING

END PROJECT
STA 36+50.00
N: 1220421.3067
E: 2186108.1638

KAREN VAN HORN
060302005
145 MOCKINGBIRD TRL
DB3887 PG628

TIMOTHY J & CHERYL MURPHY
060302004
135 MOCKINGBIRD TRL
DB1288 PG109

CASTILLO MARIA
060302003
125 MOCKINGBIRD TRL
DB3613 PG555

MARTIN ANTHONY
060302002
115 MOCKINGBIRD TRL
BK4789 PG482-484

0 40 80 120
SCALE: 1" = 40'

ATLANTA GAS LIGHT COMPANY

PROJECT NUMBER 17TAI	ENGINEERING DESIGN	SCALE: 1" = 40'
DOT PLAN DATE: N / A		ENGINEER: C. BRITTIAN
AGL DESIGN DATE: 01/31/2024	PROJECT INFORMATION STARR'S MILL SCHOOL TUNNEL	PREPARED BY: MILHOUSE ENG.
COUNTY: FAYETTE		SHEET NO: 3

SOUTHERN CROSS PTC REALTY LLC
060904035
408 IRONWOOD LN
DB4912 PG0578

APPROXIMATE LAND LOT LINE

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

MICHAEL R HALL
060903008
210 BELLA ROSA
DB4789 PG0415

DAVID & EVA KELLY
060903007
9 LEA WAY
DB4113 PG0589

ABANDON:
4" PLASTIC GAS MAIN
INSTALLED: 1990

PROPOSED:
4" PLASTIC GAS MAIN
NOP: 60 PSIG

CUT & CAP
TIE-INTO 4" PLASTIC GAS MAIN
NOP: 60 PSIG
INSTALLED: 1990

604+00
605+00
606+00
607+00
608+00
608+86

842
840
834

003
PEACHTREE CITY
060904045
CITY GREENBELT
PB18 PG47-48 & 62-65

EX R/W

ROBINSON PATH WEST

838
832

ROBINSON ROAD

404+00
405+00
406+00
407+00
408+00
408+58

EXISTING:
4" PLASTIC GAS MAIN
NOP: 60 PSIG
INSTALLED: 1990

EX R/W

AT&T WILL PLACE PROPOSED
BURIED CABLE 1" INSIDE THE
BACK OF R/W AT 36" MIN. DEPTH

8" DIP

LIMITS OF CONSTRUCTION
STA 408+41.64
(ROBINSON ROAD)

EXISTING:
2" PLASTIC GAS MAIN
NOP: 60 PSIG
INSTALLED: 1990

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

ASHTON PARK COMMUNITY
060322013
SWAIN'S DRIVE
PB34 PG162-164

NORMAN TERRELL PARKER
060322010
204 ASHTON PARK
DB3576 PG0370

JOHN R GETREU
060322011
202 ASHTON PARK
DB4754 PG0640

DORIS ANN MARTIN
060322012
200 ASHTON PARK
DB3451 PG0156

MICHAEL S GUNNELLS
060322001
101 ASHTON PARK
DB2531 PG320

BEVERLY H & MARION J WHITE
060322002
103 ASHTON PARK

8" DIP

0 40 80 120
SCALE: 1" = 40'

ATLANTA GAS LIGHT COMPANY

PROJECT NUMBER 17TAI	ENGINEERING DESIGN	SCALE: 1" = 40'
DOT PLAN DATE: N / A		ENGINEER: C. BRITTIAN
AGL DESIGN DATE: 01/31/2024	PROJECT INFORMATION	PREPARED BY: MILHOUSE ENG.
COUNTY: FAYETTE	STARR'S MILL SCHOOL TUNNEL	SHEET NO: 4

EXHIBIT 4

Lighting System Style Examples