



**REQUEST FOR BIDS**  
FOR  
**SHILOH UNITY ROAD PHASE 1**  
**LANCASTER SALES TAX PROGRAM #9**

**ADVERTISEMENT DATE: JANUARY 23, 2020**

**PROJECT NUMBER: 1502-9**

**BIDS DUE: 3:00 PM, THURSDAY, FEBRUARY 20,  
2020**

**LENGTH: 7.76 MILES**

**TYPE: Cement Modified Recycled Base, HMA Paving, and  
Miscellaneous Related Items on Shiloh Unity Road,  
Phase 1**

**ENGINEER: INFRASTRUCTURE CONSULTING & ENGINEERING (ICE)**

**CONTRACTOR:** \_\_\_\_\_

**ADDRESS:**  
\_\_\_\_\_  
\_\_\_\_\_

**IF YOU DOWNLOAD THIS DOCUMENT,**

**PLEASE EMAIL BILL COLEMAN AT**

**[BILL.COLEMAN@ICE-ENG.COM](mailto:BILL.COLEMAN@ICE-ENG.COM)**

**SO YOU CAN RECEIVE ANY**

**ADDENDA OR PLAN CHANGES**

**THAT MAY BE ISSUED AT A LATER DATE**

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## SECTION I: NOTICE TO CONTRACTORS

**Project Name:** SHILOH UNITY ROAD, PHASE 1

**Project Number:** RFB 1502-9

**Project Location:** Shiloh Unity Road in Lancaster, SC

**Bid Bond/Security:** Required at 5% of the bid amount

**Performance Bond:** Required at 100% of the bid amount

**Payment Bond:** Required at 100% of the bid amount

**DBE Participation:** Encouraged at 5% or greater

**Description of Project:** **Cement Modified Recycled Base, HMA Paving, and Miscellaneous Related Items on Shiloh Unity Road Phase I**

**Agency/Owner:** Lancaster County, 101 North Main Street, Lancaster, SC 29720

**Engineer:** *INFRASTRUCTURE CONSULTING & ENGINEERING, LLC (ICE)*: Project Manager, Bill Coleman, 1021 Briargate Circle, Columbia, SC 29210 Phone: 803-822-0333 Email: [bill.coleman@ice-eng.com](mailto:bill.coleman@ice-eng.com), cell 803-261-5581 Fax: 803-822-0034

**Questions:** All questions, requests, and correspondence shall be addressed to the Project Manager, Bill Coleman. All questions concerning the Bid Documents shall be in writing and submitted by **February 17, 2020**.

**Plans and bid documents on File:** Lancaster County Procurement Office, *INFRASTRUCTURE CONSULTING & ENGINEERING, LLC (ICE) Columbia, SC*

**Plan Deposit:** Bid Documents may be obtained as a hard copy from the Engineer for \$100.00 non-refundable fee or electronic copy for no charge.

**Pre-Bid Conference:** There will be no pre-bid conference. Any questions or concerns should be addressed by email to Bill Coleman, at [bill.coleman@ice-eng.com](mailto:bill.coleman@ice-eng.com). All questions with answers will be forwarded to all known plan holders

**Bid Closing and Opening: 3:00 PM, February 20, 2020, Bid Submittal:** Submit Sealed Bids clearly marked "RFB-1502-9" with the bidder's name, address, and South Carolina contractor license number on the envelope to: Lancaster County Procurement, Attn: Ms. Cathy McDaniel, County Administrative Building, 1<sup>st</sup> Floor, 101 N Main Street, Lancaster, SC 29720"

**Substantial Completion:** Project will be completed and ready for final inspection on **December 31, 2020**

## **SECTION II: GENERAL CONDITIONS AND CONTRACT**

## GENERAL CONDITIONS

### 1. BID INSTRUCTIONS AND SUBMITTAL:

- a. Bids shall be publicly opened at the time and place as indicated in the Notice to Contractors.
- b. Sealed bids shall be enclosed and secured in an envelope bearing the markings as described under Bid Submittals in the Notice to Contractors. Bids shall be addressed to the Lancaster County Procurement Office, Attention: Ms. Cathy McDaniel, County Administrative Building, 1<sup>st</sup> Floor, 101 North Main Street, Lancaster SC 29720.
- c. Bids shall be submitted no later than **3:00 PM, February 20, 2020**, if mailed or hand delivered in the places and manners as described in paragraph b above and on the date indicated by the Notice to Contractors. Bids received after these times are considered late bids. Late bids shall not be considered, unless the delay was caused by improper handling by the County's employees.
- d. The County shall not accept responsibility for unidentified bids.
- e. In the event that a bid is unintentionally opened prior to the official time set for the bid opening, the employee opening such bid shall immediately inform the Procurement Officer or his/her assistant who shall, in the presence of another of equal rank or above, immediately contact the vendor submitting the bid.
- f. The vendor so contacted will be informed as to the circumstances and shall be invited to come to the office of Procurement to reseal and submit or withdraw the bid, if the vendor elects to reseal and submit the bid, such vendor shall be required to sign, date and indicate the time of resealing on the bid envelope. If the vendor directs the Procurement Office to reseal the bid, both the employee making the contact to the vendor and the owner witness present, shall sign, date and indicate the time of sealing on the bid envelope.
- g. In the event that the Procurement Office is directed by the vendor to return the bid, a statement properly witnessed stating the action taken and when, shall be duly filed.
- h. All prices and quotations shall be entered in ink or typewritten and shall remain firm for no less than sixty (60) days from the date of the bid. Mistakes may be crossed out and corrections inserted adjacent there to and shall be initialed in ink by the person signing the bid. The bidder shall insert the net price per stated unit and the extension against each item, which he/she proposed to deliver. The price shall include in the grand total column all delivery charges, installation and applicable taxes when necessary.
- i. Bids Will Not Be Considered unless sealed accompanied by a bidder's bond, for 5 percent (5%) of the amount of the bid. Bid bond will be duly executed by the bidder as principal & having as surety thereon a surety company licensed to do business in the State of South Carolina. Successful bidder will be required to furnish a satisfactory performance & payment bond each in the amount of 100 percent (100%) of the bid.
- j. The County Reserves the Right to accept or reject any & all responses, to waive technicalities & informalities, to negotiate further with the Contractor of its choice, & to request additional information, to interview & to make an award deemed in its own best interest.

All submittals shall become property of the County & is subject to the Freedom of Information Act (FOIA) regulations.

2. TAXES: When applicable, South Carolina sales tax shall be shown as a separate entry on the bid total summation. In other words, there shall be a bid subtotal with South Carolina tax added in to create a grand total. When required, exemption certificates shall be furnished on forms provided by the vendor.
3. PROPRIETARY INFORMATION: Bidders shall visibly mark as "CONFIDENTIAL" each part of their bid which considers proprietary information. Price may not be considered confidential proprietary information.
4. AMBIGUOUS BIDS: Bids which are uncertain as to terms, delivery, quantity, or compliance with requirements and/or specifications may be rejected or otherwise disregarded.
5. COVENANT AGAINST CONTINGENT FEES: The vendor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the vendor for the purpose of securing business. For breach or violation of this warranty, Lancaster County shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.
6. BIDDER'S QUALIFICATIONS: Bids shall be considered only from bidders who are regularly established in the business called for and who in the judgment of the Owner are financially responsible and able to show evidence of their reliability, ability, experience, equipment supervised by them to render prompt and satisfactory service in the volume called for under this contract. **Bids Will Not Be Considered unless the bidder is legally qualified under the provisions of the South Carolina Contractor's Licensing Law (South Carolina Code of Laws as amended). Interested bidders must be on current SCDOT prequalified prime contractors list to be eligible for Lancaster County road paving and/grading projects.**
7. ACKNOWLEDGEMENT OF AMENDMENTS TO REQUEST FOR BIDS:
  - a. Bidders shall acknowledge receipt of any amendments to this solicitation either by signing and returning one (1) copy of the amendment or by letter or by telegram or by fax, or e-mail and by acknowledging the amendment on the Bid Form.
  - b. Lancaster County must receive the acknowledgment by the time, date, and at the place specified for receipt of bids.
8. AFFIRMATIVE ACTION: The successful bidder will take affirmative action in complying with all Federal and State requirements concerning fair employment, employment of the handicapped, and concerning the treatment of all employees, without regard or discrimination by reason of race, color, religion, sex, national origin and/or physical handicap and to ENSURE EQUAL EMPLOYMENT OPPORTUNITY is provided for as applicable.
9. EXPLANATION TO PROSPECTIVE BIDDERS:
  - a. Any prospective bidder desiring an explanation or interpretation of this solicitation shall request it in writing soon enough to allow a reply to reach all prospective bidders before submission of their bids.
  - b. Oral explanation and/or instructions given before the award of the contract shall not be binding.

- c. Any information given to a prospective bidder pertaining to this solicitation shall be furnished promptly to other prospective bidders as an amendment, if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective bidders.
10. **AWARDING POLICY:** The County reserves the right to select and award on an individual item basis, lot (group) basis or an “all or none” basis, whichever the County determines to be most advantageous. Therefore, individual prices per item must be indicated on the bid form. Bidders are encouraged to offer discounts for consideration of consolidated award. Furthermore, the County in determining the lowest responsible bidder on each of the items shall consider, in addition to the bid prices, the quality, training, suitability and adaptability of the services required by this solicitation. The County reserves the right to reject or accept any or all bids and to waive any informalities and/or irregularities thereof. In the event that identical bids are received on like items, the Procurement Officer, subject to the approval of the County Administrator, shall award bids by whichever of the following procedures is deemed most appropriate under the circumstances:
- a. Award to the firm whose primary business establishment is physically located:
    - i. within the boundaries of Lancaster County; and
    - ii. within the boundaries of the State of South Carolina.
  - b. If all the above are equal, the County shall award by a toss of a coin with all interested parties given an opportunity to witness. The County shall have a minimum of two witnesses for the coin toss.
11. **WITHDRAWAL OF BIDS:** Any bidder may withdraw his bid prior to the closing time scheduled for the receipt of bids. No bid shall be withdrawn for a period of sixty (60) days after the schedule closing time for the receipt of bids. The County reserves the right to award contracts for a period of sixty (60) days.
12. **SUBMISSION OF DATA:** Each bidder, upon request, shall submit evidence of Liability Insurance, Workmen’s Compensation (if required), and other data regarding experience relating to this bid and proposes to satisfy the requirements of this solicitation and fulfillment of a contract.
13. **ACCIDENTS:** The vendor shall hold the County harmless from any and all damages and claims that may arise by reason of any negligence on the part of the vendor, his agents or employees in the performance of this contract. In case any action is brought against the County or any of its agents or employees, the vendor shall assume full responsibility for the defense thereof. Upon his failure to do so after proper notice, the County reserves the right to defend such motion and charge all costs thereof to the vendor. The vendor shall take all precautions necessary to protect the public against injury.
14. **STATEMENT OF COMPLIANCES AND ASSURANCES:** By submitting a bid and signing the bid schedule, vendors are providing written assurance of non-collusion and understanding, and acceptance of all general and special conditions stated in this contract. In addition, this signature certifies that the firm or agency represented in the bid submitted complies with all applicable federal and state laws and regulations.
15. **BIDDERS RESPONSIBILITY:** Each bidder shall fully acquaint himself/herself with conditions relating to the scope and restrictions attending the execution of the work under the conditions of this bid. It is expected that this will sometimes require on-site observation. The failure or omission of bidder to acquaint himself/herself with existing conditions shall in no way relieve the bidder of any obligations with respect to this bid or contract.

16. FAILURE TO SUBMIT BID: Recipients of this solicitation not responding with a bid should not return this solicitation unless it specified otherwise. Instead, they should advise the issuing office by letter or postcard whether they want to receive future consideration for similar requirements. If a recipient does not submit a bid or fails to respond by submitting a “no bid” for three (3) consecutive bids for the same commodity, they shall be removed from the applicable vendor list.
17. EXAMINATION OF RECORDS:
- a. The County Administrator of Lancaster County or his duly authorized representative(s) and/or duly authorized representative(s) from the office of the County Auditor shall, until three (3) years after final payment under this contract, have access to and the right to examine any of the Contractors’ directly pertinent books, documents, papers or other records involving transactions related to this contract.
  - b. He/She agrees to include in first-tier subcontracts under this contract a clause to the effect that the County Administrator of Lancaster County or his duly authorized representative(s), and/or duly authorized representative(s) from the office of the County Auditor shall, until three (3) years after final payment under the subcontract, have access to and the right to examine any of the subcontractors’ directly pertinent books, documents, papers or other records involving transactions related to the subcontract(s).
18. MATERIALS REQUIRED: Materials required must be in conformity with the specifications and shall be subject to inspection and approval after delivery, shall comply in quality and type of material, and method of manufacture with all applicable local or state laws pertaining thereto. The right is reserved to reject and return at the risk and expense of the vendor such portions of any shipment which may be defective or fail to comply with specifications and without validating the remainder of the order.
19. “OR APPROVED EQUAL” CLAUSES: Certain processes, types of equipment or kinds of materials are described in the specifications and on the drawings by means of trade names and catalog numbers. In each instance where this occurs, it is understood and inferred that such description is followed by the words “or approved equal”. Such method of description is intended merely as a means of establishing a standard of comparison. However, the County reserves the right to select the items which, in the judgment of the County, are best suited to the needs of the County, based on price, quality, service, availability and other relative factors. Bidders must indicate brand name, model, model number, size, type, weight, color, etc., of the item bid if not exactly the same as the item specified. Vendor’s stock number or catalog number is not sufficient to meet this requirement. If any bidder desires to furnish an item different from that specifically mentioned in the specifications, he/she shall submit with his bid the information, data, pictures, cuts, designs, etc., of the material he/she plans to furnish so as to enable the County to compare the material specified; and, such material will be given due consideration. The County reserves the right to insist upon and receive the items as specified, if the submitted items do not meet the County’s standards for acceptance.
20. PATENTS: The vendor shall hold the County, its officers, agents, and employees harmless from liability of any nature or kind whatsoever, on account of use by the publisher or author, manufacturer or agent, of any copyrighted or copyrighted composition, secret process, article or appliance furnished or used under this bid.

21. INSTALLATION: Where equipment is called for to be installed under this bid, it shall be placed, leveled and accurately fastened into place by the vendor. He/she shall be responsible for obtaining dimensions and other such data which may be required to assure exact fit to work under another contract or as intended by the County. The vendor shall be responsible providing an appropriate amount of lead-in to equipment requiring electrical, water or other basic service. The County will normally be responsible for bringing the appropriate service to the lead-in. The vendor shall completely remove from the premises all packing, crating, and other letter due to his/her work. He/she shall also be responsible for the cost of repair of any damage to existing work which is caused by him/her equipment.
22. GUARANTEE: The vendor shall supply a guarantee for all workmanship for the equipment the/she is furnishing for a period comparable to the standards in the industry. When defects or faulty material is discovered during the guarantee period, the vendor shall, immediately, upon notification by the County, proceed at his/her own expense, to repair or replace the same, together with any damage to all finishes, equipment, and furnishings that may have been damaged as a result of the defective equipment or workmanship.
23. PROPER INVOICE: Invoices submitted for payment for goods or services provided under this Contract, shall contain, as a minimum the following information:
- Name of business concern
  - Contract number or other authorization for delivery of service or property
  - Complete description
  - Price and quantity of property or service actually delivered or executed
  - Name where applicable
  - Title, telephone number and complete mailing address of responsible official to whom payment is to be sent; and other substantiating documentation of information as required by the contract or owner.
24. CONFLICTS IN SPECIFICATIONS: When contract language or specifications are in conflict, the Engineer shall choose the language/specification that is applicable to the project condition covered, and shall generally choose the more stringent, restrictive or costly language/specification.
25. SERVICE FACILITIES: In considering the services bid upon, the County shall take into consideration past performance of existing work and installations, service and facilities provided by the bidder. The bidder shall have available a local organization that is trained in proper construction methods.
26. S.C. LAW CLAUSE: Upon award of a contract under this bid, the person, partnership, association, or corporation to whom the award is made must comply with the laws of South Carolina which require such person or entity to be authorized and/or licensed to do business in this State. Notwithstanding the fact that applicable statutes may exempt or exclude the successful bidder from requirements that it be authorized and/or licensed to do business in this State, by submission of this signed bid, the bidder agrees to subject itself to the jurisdiction and process of the courts of the State of South Carolina as to all matters and disputes arising or to arise under the contract and the performance thereof, including any questions as to the liability for taxes, licenses, or fees levied by the State.
27. COMPETITION: There are no Federal or State laws that prohibit bidders from submitting a bid lower than a price or bid given to the United States Government. Bidders may bid lower than the United States Government Contract price without any liability because the State is exempt from provisions of the Robinson-Pitman Act and other related laws.

28. EXCUSABLE DELAY: The Contractor shall not be liable for any excess costs of the failure to perform the contract arising out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include but are not restricted to acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but, in every case the failure to perform must be beyond the control and without the fault or negligence of Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs or failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.
29. ASSIGNMENT: No contract may be assigned, sublet, or transferred without a written consent of the Procurement Officer.
30. SPECIFICATIONS: Any deviation from specifications indicated herein must be clearly pointed out; otherwise, it will be considered that items offered are in strict compliance with these specifications, and the successful bidder shall be held responsible thereof.
31. INCORPORATION BY REFERENCE: The contents of this Request for Bids, including all drawings, attachments, specifications, and any addenda, will become part of the contract for this Project.
32. PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS:
- a. The Contractor shall preserve and protect all structures, equipment, and vegetation (such as grass, trees, and shrubs) or on or adjacent to the work sites, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by any careless operation of equipment, or by workman, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with tree pruning compound as directed by the Engineer.
  - b. The Contractor shall protect from damage all existing improvements and utilities at or near the work site and on adjacent property of a third party, the locations of which are known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the County representatives(s) may recommend that the necessary work be performed and charge the cost to the Contractor.
33. BID FORMS: Documentation contained in Section "V" shall be completed and submitted along with the Proposal. A bid bond as required by these General Conditions shall also be included.
34. TERMINATION: Subject to the provisions below, the contract may be terminated by the Procurement Officer providing a thirty (30) day advance notice in writing is given to the Contractor.
- a. Termination for Convenience. In the event that this contract is terminated or cancelled upon request and for the convenience of the County without the required thirty (30)

- day advance notice, then the County shall negotiate reasonable termination costs, if applicable.
- b. Termination for Cause. Termination by the County for cause, default or negligence on the part of the Contractor shall be excluded from the foregoing provisions; termination costs, if any, shall not apply. The thirty (30) day advance notice requirement is waived and the default provision in this bid shall apply.
35. SAFETY AND PROTECTION: Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to all persons on the Site or who may be affected by the Work, all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
36. SECURITY REQUIRED:
- a. Bid Security – Each Bid must be accompanied by a Bid Bond acceptable to the County. Bid Bonds must be issued by a corporate surety registered and authorized to do business in the State of South Carolina. Bid Bonds shall be payable to the County, shall be for at least five (5%) percent of the total amount of the Bid, and shall serve as a guarantee deposit that the bid will be carried out to the complete satisfaction of the County.
- b. Forfeiture of Bid Security – Nonperformance by the successful Bidder, or its failure to execute the Contract and meet performance and payment bond requirements and insurance requirements within five (5) calendar days after issuance of Notice of Award, shall result in its bid security being forfeited as liquidated damages, and the Notice of Award and Contract will be rescinded and awarded to another Bidder. Withdrawal or attempted withdrawal of a Bid after the closing date and time but prior to sixty (60) calendar days after the closing date may also result in forfeiture of bid security.
- c. Return of Bid Security – Bid security will be returned to all bidders after the successful Bidder has executed the Contract and delivered all required bonds and insurance certificates. Unsuccessful Bidders will not be entitled to any interest earnings on returned funds.
- d. Payment and Performance Security
- i. The successful Bidder shall provide Performance and Payment Bonds, in a form satisfactory to the County (see Attached “Sample Forms”), in the following amounts no later than at the time of execution of the Contract:
- Payment Bond: 100% of the total amount of the Contract.
  - Performance Bond: 100% of the total amount of the Contract.
- ii. The aforesaid Payment and Performance Bonds must be issued by a corporate surety registered and authorized to do business in South Carolina and must be countersigned by a licensed, authorized South Carolina agent.

- iii. Attorneys-in-fact who sign Bid Bonds or Performance Bonds must file with each Bond a certified and effective, dated copy of their power of attorney.
- iv. The time to be covered by the Performance Bond shall commence on the date of execution of any contract resulting from this RFB and terminate upon final payment to Bidder by County. The time to be covered by the Payment Bond shall commence on the date of execution of any contract resulting from this RFB and terminate twelve (12) months after the date of final acceptance of the Work by the County.
- v. Contractor shall execute the attached Form of Agreement upon contract award.

37. CHANGE ORDER:

- a. A Change Order is a written order to the Contractor, signed by the authorized County representative, directing changes in the work within the provisions of the Contract.
- b. A Change Order is used to change contract quantities for items with unit prices, provide for incentives, penalties, and adjustments for unit price items as provided in the original Contract, delete contract items, and revise contract time.
- c. A Change Order may include written agreement made and entered into by and between the Contractor and the Owner, covering alterations and unforeseen work incidental to the proper completion of the project, when such work is paid for at an agree unit or lump sum price. Such Change Order becomes a part of the Contract when approved and properly executed.

38. PERMITS/LICENSING: It shall be the responsibility of the contractor to comply with County Ordinances by securing necessary permits and licenses.

39. ENVIRONMENTAL MANAGEMENT: Vendor/Supplier/Contractor will be responsible for complying with all federal, state, and local environmental regulations relating to transportation, handling, storage, spillage and any other aspect of providing the services specified herein, as applicable.

40. SITE INSPECTION:

- a. The bidder is expected to have become familiar with and take into consideration, site conditions which may affect the work and to check all dimensions at the site.
- b. Each bidder shall acquaint themselves thoroughly as to the character and nature of the work to be done. Each bidder furthermore shall make a careful examination of the site of the work and inform themselves fully as to the difficulties to be encountered in performance of the work, the facilities for delivering, storing and placing materials and equipment and other conditions relating to construction and labor.
- c. The bidder shall examine the premises and the site and compare them with any applicable drawings and specifications. He/she shall familiarize themselves with the existing conditions such as obstructive area levels and any problems related to erecting the required systems.
- d. No plea of ignorance of conditions that exist or may hereafter exist on the site of the work, or difficulties that may be encountered in the execution of the work, as a result of failure to make necessary investigations and examinations, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill in every detail all the requirements of the contract documents and to complete the work for the consideration set forth therein, or as a basis for any claim whatsoever.
- e. Insofar as possible, the Contractor, in carrying out his/her work, must employ such methods or means as will not cause interruption of or interference with the work of any other Contractor, or County personnel at the site.

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we \_\_\_\_\_, as Principal, a (\_\_\_ corporation, \_\_\_ partnership, \_\_\_ individual) duly authorized by law to do business as a construction contractor in the State of South Carolina, and \_\_\_\_\_, as Surety, a corporation duly authorized to transact surety business under the Law of the state of South Carolina, are held and firmly bound unto Lancaster County as obligee, in the penal sum of:

**Five Percent (5%) of the Bid Amount**

for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for the project named:

**SHILOH UNITY ROAD, PHASE 1 (PROJECT #1502-9)**

NOW, THEREFORE, if the Oblige shall accept the bid of the Principal and the Principal shall enter into a Contract with the Oblige in accordance with the terms of such bid, and give such bonds as may be specified in the bidding or Contract Documents with good and sufficient surety acceptable to the Oblige, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2020

**PRINCIPAL**

**SURETY**

\_\_\_\_\_  
Bidder's Name and Corporate Seal (Seal)

\_\_\_\_\_  
Surety's Name and Corporate Seal (Seal)

By: \_\_\_\_\_  
Signature and Title

By: \_\_\_\_\_  
Signature and Title  
(Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title

Attest: \_\_\_\_\_  
Signature and Title

Note: A copy of the agent's Power of Attorney for the Surety Company must be attached to this bond form.

## FORM OF AGREEMENT

BETWEEN OWNER AND CONTRACTOR  
FOR CONSTRUCTION CONTRACT

THIS AGREEMENT is by and between LANCASTER COUNTY (“Owner”) and  
\_\_\_\_\_ (“Contractor”).

Owner and Contractor hereby agree as follows:

### ARTICLE 1 – WORK

Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: **Cement Modified Recycled Base, HMA Paving, and Miscellaneous Related Items on Shiloh Unity Road in Lancaster, SC.**

### ARTICLE 2 – THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

**SHILOH UNITY ROAD, PHASE 1 (PROJECT #1502-9)**

### ARTICLE 3 – ENGINEER

3.01 The Project has been designed by INFRASTRUCTURE CONSULTING & ENGINEERING, LLC (ICE), (Engineer), which is to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

### ARTICLE 4 – CONTRACT TIMES

#### 4.01 Time of the Essence

- a. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

#### 4.02 Dates for Substantial Completion and Final Payment

- a. **The project will be completed December 31, 2020** and be ready for final payment in accordance with the General Conditions on or before the above dates.

#### 4.03 Liquidated Damages

- a. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$500.00 for each day that expires after the time specified in Paragraph 4.02 above for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$500.00 for each day that expires after the time specified in Paragraph 4.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

### ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined in the bid documents:

- a. For all Work other than Unit Price Work, a lump sum of: \$ N/A

All specific cash allowances are included in the above price.

- b. For all Unit Price Work, an amount equal to the sum of the established unit price for each.
- c. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ITEM NO	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
1	Mobilization	LS	1		
2	Traffic Control	LS	1		
3	Cement Modified Recycled Base (10" uniform) Method A	SY	113,736		
4	Portland Cement for Cement Modified Recycled Base (55 LBS/SY)	TON	3,128		
5	Maintenance Stone	TON	50		
6	HMA Surface Course Type C (liquid included) 2" Uniform	SY	6,420		
7	HMA Surface Course Type E (liquid included) 75 LBS/SY	SY	109,187		
8	HMA Surface Course Type C (liquid included) 175 LBS/SY	SY	109,187		
9	Permanent Vegetation	ACRE	14		
10	Permanent Raised Yellow Markers Bi-Di 4 "x 4"	EACH	819		
11	Permanent Construction Signs (ground mounted) Schedule E	SF	432		
12	Permanent Construction Signs (ground mounted) Schedule C	SF	380		
13	Loose Stone/25MPH	SF	68		
14	15" HDPE	LF	24		
15	18" HDPE	LF	24		
16	15" RCP Class III	LF	24		
17	18" RCP Class III	LF	48		
18	24" RCP Class III	LF	64		
19	30" RCP Class III	LF	36		
20	36" RCP Class III	LF	68		
21	72" RCP Class III	LF	16		
22	Catch Basin Type 9	EA	1		
23	Street Sign	EA	16		
24	Sales Tax Signs	EA	4		
25	Silt Fence	LF	500		
26	24" White Solid Lines (Stop) FDP	LF	228		
27	24" White Solid Lines (Stop) Thermoplastic-125 milo	LF	228		
28	4" White Solid Lines (Pavement Edge Lines) FDP	LF	245,670		
29	4" White Solid Lines (Pavement Edge Lines) Thermoplastic-90 mil	LF	81,890		
30	4" Yellow Solid Lines (No Passing Zone) FDP	LF	245,670		
31	4" Yellow Solid Lines (No Passing Zone) Thermoplastic-90 Mil	LF	81,890		
32	Riprap	TON	20		
33	57 Stone	TON	20		
34	Rumble Strips	MILE	7.5		
35	STOP AHEAD Thermoplastic 125 Mil	EA	2		
36	Borrow	CY	7,000		
37	MT3 Leading End Treatment TL3	EA	26		
38	MGS3 GR Standard Shoulder	LF	5,262.5		
39	Pre-mash Trailing W-Beam Type B 12.5"	EA	10		
40	MTBB Mash Thrie-Beam Barrier Connector	EA	4		
41	Thrie-Beam	LF	100		

*(Grand Total in Words)*

The Bid prices for Unit Price Work set forth as of the Effective Date of the Agreement are based on estimated quantities. As provided in the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in of the General Conditions.

**ARTICLE 6-- PAYMENT PROCEDURES****6.01 Submittal and Processing of Payments**

Contractor shall submit Applications for Payment in accordance with the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

**6.02 Progress payments; Retainage**

- a. Owner shall make progress payments because of the Contract Price based on Contractor's Applications for Payment on or about the 15th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below. All such payments will be measured by the schedule of values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.
- b. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with the General Conditions.
- c. 95 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
- d. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- e. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts as Engineer shall determine in accordance with the General Conditions and less 95 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

**6.03 Final Payment**

- a. Upon final completion and acceptance of the Work in accordance with the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer.

**ARTICLE 7 - INTEREST**

- 7.01 All moneys not paid when due as provided in the General Conditions shall bear interest at the rate of 12 percent per annum.

**ARTICLE 8 – CONTRACTOR RESPONSIBILITIES**

- 8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:

- a. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
- b. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- c. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

- d. Contractor does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- e. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- f. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- g. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

## **ARTICLE 9 – CONTRACT DOCUMENTS**

### 9.01 Contents

- a. The Contract Documents consist of the following:
  - b. This Agreement
  - c. Performance bond
  - d. Payment bond
  - e. General Conditions
  - f. Standard Specifications and Drawings as referenced in the bid documents.
  - g. The contents of the Request for Bids, including all drawings, attachments, specifications, special provisions, supplemental specifications and any addenda
  - h. Drawings consisting of 0 pages.
  - i. Addenda (numbers 0 to \_\_\_\_, inclusive).
  - j. Exhibits to this Agreement (enumerated as follows):
    - k. Contractor's Bid
    - l. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
      - m. Notice to Proceed
      - n. Work Change Directives.
      - o. Change Orders.
    - p. The documents listed in paragraph 9.01.an are attached to this agreement (except as expressly noted otherwise above)
    - q. There are no contract documents other than those listed in this Article 9.
    - r. The contract documents may only be amended, modified, or supplemented as provided in the General Conditions.

## **ARTICLE 10 – MISCELLANEOUS**

### 10.01 Terms

- a. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

**10.02 Assignment of Contract**

- a. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

**10.03 Successors and Assigns**

- a. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

**10.04 Severability**

- a. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

**10.05 Contractor's Certifications**

- a. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
  1. "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
  2. "Fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  3. "Collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
  4. "Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

**10.06 Warranty**

The Contractor agrees to a one-year warranty against defects, failures etc. caused by materials and workmanship, beginning on the date of final acceptance of punch list.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS, WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

This Agreement will be effective on \_\_\_\_\_, 2020 (which is the Effective Date of the Agreement).

OWNER:

CONTRACTOR

Lancaster County, South Carolina

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

(If Contractor is a corporation, a partnership, or a joint venture, attaches evidence of authority to sign.)

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Address for giving notices:

Address for giving notices:

101 North Main Street

Lancaster SC 29720

License No.: \_\_\_\_\_

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

(Where applicable)

Agent for service of process:

\_\_\_\_\_

**PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS, that \_\_\_\_\_, as Principal, hereinafter called Contractor, and \_\_\_\_\_, as Surety, hereinafter called Surety, are held and firmly bound unto Lancaster County, 101 North Main Street, Lancaster, SC 29720, as oblige, hereinafter called Owner, in the amount of: \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has entered into a certain contract with the Owner, dated \_\_\_\_\_ day of \_\_\_\_\_, 2020, for the construction of **SHILOH UNITY ROAD, PHASE 1 (PROJECT #1502-9)**, in accordance with the Drawings and Specifications prepared by INFRASTRUCTURE CONSULTING & ENGINEERING, LLC, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations there under, the Surety may promptly remedy the default, or shall promptly:

- 1) Complete the Contract accordance with its terms and conditions, or
- 2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price", as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of the Owner.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2020

**PRINCIPAL**

**SURETY**

\_\_\_\_\_  
Bidder's Name and Corporate Seal (Seal)

\_\_\_\_\_  
Surety's Name and Corporate Seal (Seal)

By: \_\_\_\_\_  
Signature and Title

By: \_\_\_\_\_  
Signature and Title  
(Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title

Attest: \_\_\_\_\_  
Signature and Title

**PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS, that \_\_\_\_\_, as Principal, hereinafter called Contractor, and \_\_\_\_\_, as Surety, hereinafter called Surety, are held and firmly bound unto Lancaster County, 101 North Main Street, Lancaster, SC 29720, as obligee, hereinafter called Owner, in the amount of: \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has entered into a certain contract with the Owner, dated \_\_\_\_\_ day of \_\_\_\_\_, 2020, for the construction of: **SHILOH UNITY ROAD, PHASE 1 (PROJECT #1502-9)**, in accordance with the Drawings and Specifications prepared by: INFRASTRUCTURE CONSULTING & ENGINEERING, LLC (ICE): which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
  - a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, Postage prepaid, in an envelope addressed to the Principal, Owner, or Surety, at place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
  - b) After the expiration of one (1) year following the date on which Principal Ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2020

**PRINCIPAL**

**SURETY**

\_\_\_\_\_  
Bidder's Name and Corporate Seal

\_\_\_\_\_  
Surety's Name and Corporate Seal

By: \_\_\_\_\_  
Signature and Title

By: \_\_\_\_\_  
Signature and Title  
(Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title

Attest: \_\_\_\_\_  
Signature and Title

### **SECTION III: SPECIAL PROVISIONS**

**SPECIAL PROVISIONS****PROJECT NUMBER****COUNTY**

RFB 1502-9

LANCASTER

This project is to be constructed under the South Carolina Department of Transportation's Specifications for Highway Construction Edition of 2007, the South Carolina Department of Transportation's 2004 Construction Manual, and the Supplemental Technical Specifications and Standard Drawings in effect at the time of the letting, and the following Special Provisions.

**DEFINITION AND TERMS:**

Delete Paragraph 101.3.27, (the) Engineer, of the 2007 Version of the Standard Specifications for Highway Construction in its entirety and replace with the following:

*Lancaster County, acting directly or through his duly authorized representative, such representative acting within the scope of particular assigned duties or authority. On this Project the firm of INFRASTRUCTURE CONSULTING & ENGINEERING, LLC (ICE): shall function as the Engineer's duly authorized representative with authority as described in Section 105, "CONTROL OF WORK", of the Standard Specifications for Highway Construction, latest Edition.*

***The project Owner is LANCASTER COUNTY. In the specifications where the terms "SCDOT" or "Department" or other like terms are used to describe the facility Owner, it shall be interpreted as meaning Lancaster County, as appropriate.***

Add "Notice-to-Proceed" to Section 101 as follows:

*Notice-to-Proceed. A written notice to the Contractor fixing the date on which the Contract Time will commence to run and on which the Contractor may start to perform obligations under the Contract Documents.*

*It is the intentions of the owner to have the Contractor begin work on this project as soon as practical. The owner anticipates that an award and contract will be issued within two weeks after bids are received. The owner will require that the completed contract, bonds, insurance and other information required by the contract shall be completed within two weeks after bids are received.*

**ERRATA TO 2007 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION:**

See attached Supplemental Specification dated **January 1, 2018** on page 41.

**SUBSTANTIAL COMPLETION OF WORK:**

Substantial Completion of Work is the point in the project when work has been constructed to the typical section in the Plans over the entire length of the project including tie-ins, all pay items have been installed in reasonable conformance with the plans and specifications over the entire length of the project and all lanes of traffic are open to the public in their final configuration with the final applications of thermoplastic and raised pavement markers with the only remaining work to be performed being punch list items.

Contractor shall have the work substantially complete on **December 31, 2020**

**STANDARD DRAWINGS:**

The Bidders are hereby advised that this project shall be constructed using the SCDOT 2013 Standard Drawings with all updates effective at the time of the letting. The Standard Drawings are available for download at [http://www.scdot.org/doing/sd\\_disclaimer.shtml](http://www.scdot.org/doing/sd_disclaimer.shtml). All drawings that are updated are labeled with their effective letting date in red.

The Standard Drawings are available to purchase through the SCDOT Engineering Publications Sales Center. The Engineering Publication Sales Center is located in Room G-19 (basement level) of the SCDOT Headquarters Building, 955 Park Street, Columbia, South Carolina.

All references in the plans, standard specifications, supplemental specifications, supplemental technical specifications or special provisions to drawings under the previous numbering system are hereby updated to the new drawing numbers. Refer to sheets 000-205-01 through 000-205-07 to find new drawing numbers when looking for references to older drawing numbers.

**STANDARD DRAWING ERRATA:**

The Bidders are hereby advised that the following note changes apply to the published Standard Drawings

On sheet 000-205-05, add the following information under the columns below:

OLD DRAWING NAME	NEW DRAWING NAME
720-905-01 to 720-905-05	720-901-01 to 720-993-32

On sheet 605-005-05, replace entire text of General Note #4 with the following text:

4. The square footage of sign panels attached to 2½" x 2½" 12-gauge sign support secured to a 3" x 3" 7-gauge breakaway anchor shall not exceed 20 square feet.

On sheet 610-005-00, revise the following information as noted below:

Add (**OPTIONAL**) underneath "TRUCK MOUNTED ATTENUATOR" adjacent to the illustration.

A chart, entitled "Truck Mounted Attenuator", displaying the minimum length of buffer space required when a truck mounted attenuator is not utilized.

The buffer area illustration has been updated to illustrate the requirements necessary when a truck mounted attenuator is utilized and the requirements necessary when a truck mounted attenuator is not utilized.

Underneath the section entitled "PORTABLE TRUCK MOUNTED ATTENUATOR", update Note 4 to read as follows:

A trailer mounted advance warning arrow panel may be utilized in advance of the work area when this traffic control setup is utilized for asphalt concrete placement operations.

On sheet 610-405-00, revise the following information as noted below:

Add (**OPTIONAL**) underneath "LEAD VEHICLE" adjacent to the illustration.

The "WORK VEHICLE" signing requirements have been updated. When the "LEAD VEHICLE" is omitted, the first "WORK VEHICLE" in the work train will also include the signing requirements specified for the "LEAD VEHICLE" in addition to the standard signing requirements for the "WORK VEHICLE".

Note 2 of the "Operation Notes" have been updated to describe the requirements for the "WORK VEHICLE" when the "LEAD VEHICLE" is omitted from the work train.

On sheet 720-305-00, delete the entire note directly above main detail: #f

sidewalk exists, the driveway opening should...

On sheet 720-405-00 section B replace dimension 2'-6" maximum with:  
2'-6"  
minimum

On sheet 720-901-01 replace note 5.04 with:  
5.04 When a mid-block crossing is required, consider mid-block staggered crossing (720-955-41) to encourage eye contact between the pedestrian and the oncoming traffic. Always angle the stagger so that the pedestrian travels through the refuge facing the oncoming traffic.

On sheet 722-305-00 Detail 4 replace note "French Drain see note 21" with:  
French Drain see note 4.5.

On sheet 722-305-00 table 722-305A, 4<sup>th</sup> column, change the following:  
Delete (SF)

Replace text "up to 36" with "up to 3'X3' "

Replace text "larger than 36" with "larger than 3'X3'"

On sheet 804-105-00 Title Block replace text "Rirap (Bridge End)" with:  
Riprap (Bridge End)

On sheet 805-325-00 detail 2 replace text "rectangular washers (FWR03)  
See 805-005-00" with:  
"rectangular washers (FWR03) See 805-090-00"

On sheet 805-325-00 change text of note 5 to the following:  
5. For project specific requirements such as additional offset blocks, extra length posts, and post attachment details, see Project Plans. Include all costs of project specific requirements in the Guardrail Thrie-Beam Bridge Connector pay item.

On sheet 805-330-00 detail 2 replace text "rectangular washers (FWR03) See 805-005-00" with:  
"rectangular washers (FWR03) See 805-090-00"

On sheet 805-330-00 change text of note 4 to the following:  
4. For project specific requirements such as additional offset blocks, extra length posts, and post attachment details, see Project Plans. Include all costs of project specific requirements in the Guardrail Thrie-Beam Bridge Connector pay item.

On sheet 805-510-00 detail 3 replace guardrail base plate note with the following:  
See standard drawings 805-655-xx for guardrail base plate options.

On sheet 805-655-M1 replace note 30.4 with the following:  
30.4 Install adhesive anchors to a depth sufficient to develop a minimum factored (reduced) ultimate tensile capacity of 21 kips per anchor bolt. Increase minimum embedment shown in detail 4 as required by adhesive manufacturer's recommendations for the existing material properties, anchor bolt pattern, edge conditions, and any other design reduction.

On sheet 805-811-01 Type 11A barrier wall reinforcement add the following note:  
Provide reinforcement equal to the stem reinforcement and bending details shown for the Type 11B concrete barrier (drawing 805-811-02).

On sheet **000-205-05**, add the following information under the columns below:

OLD DRAWING NAME

NEW DRAWING NAME

720-905-01 to 720-905-05

720-901-01 to 720-993-32

On sheet **605-005-05**, replace entire text of General Note #4 with the following text:

4. The square footage of sign panels attached to 2½" x 2½" 12-gauge sign support secured to a 3" x 3" 7-gauge breakaway anchor shall not exceed 20 square feet.

On sheet **610-005-00**, revise the following information as noted below:

Add **(OPTIONAL)** underneath "TRUCK MOUNTED ATTENUATOR" adjacent to the illustration.

A chart, entitled "Truck Mounted Attenuator", displaying the minimum length of buffer space required when a truck mounted attenuator is not utilized.

The buffer area illustration has been updated to illustrate the requirements necessary when a truck mounted attenuator is utilized and the requirements necessary when a truck mounted attenuator is not utilized.

Underneath the section entitled "PORTABLE TRUCK MOUNTED ATTENUATOR", update Note 4 to read as follows:

A trailer mounted advance warning arrow panel may be utilized in advance of the work area when this traffic control setup is utilized for asphalt concrete placement operations.

On sheet **610-405-00**, revise the following information as noted below:

Add **(OPTIONAL)** underneath "LEAD VEHICLE" adjacent to the illustration.

The "WORK VEHICLE" signing requirements have been updated. When the "LEAD VEHICLE" is omitted, the first "WORK VEHICLE" in the work train will also include the signing requirements specified for the "LEAD VEHICLE" in addition to the standard signing requirements for the "WORK VEHICLE".

Note 2 of the "Operation Notes" have been updated to describe the requirements for the "WORK VEHICLE" when the "LEAD VEHICLE" is omitted from the work train.

On sheet **720-305-00**, delete the entire note directly above main detail: ~~if sidewalk exists, the driveway opening should...~~

On sheet **720-405-00** section B replace dimension 2'-6" maximum with:

2'-6"

minimum

On sheet **720-901-01** replace note 5.04 with:

5.04 When a mid-block crossing is required, consider mid-block staggered crossing (720-955-41) to encourage eye contact between the pedestrian and the oncoming traffic. Always angle the stagger so that the pedestrian travels through the refuge facing the oncoming traffic.

On sheet **722-305-00** Detail 4 replace note "French Drain see note 21" with:

French Drain see note 4.5.

On sheet **722-305-00** table 722-305A, 4<sup>th</sup> column, change the following:

Delete {SF}

Replace text "up to 36" with "up to 3'X3' "

Replace text "larger than 36" with "larger than 3'X3"

On sheet **804-105-00** Title Block replace text "Riprap (Bridge End)" with:

Riprap (Bridge End)

On sheet 805-325-00 detail 2 replace text “rectangular washers (FWR03) See 805-005-00” with: “rectangular washers (FWR03) See 805-090-00”

On sheet 805-325-00 change text of note 5 to the following:

5. For project specific requirements such as additional offset blocks, extra length posts, and post attachment details, see Project Plans. Include all costs of project specific requirements in the Guardrail Thrie-Beam Bridge Connector pay item.

On sheet 805-330-00 detail 2 replace text “rectangular washers (FWR03) See 805-005-00” with: “rectangular washers (FWR03) See 805-090-00”

On sheet 805-330-00 change text of note 4 to the following:

4. For project specific requirements such as additional offset blocks, extra length posts, and post attachment details, see Project Plans. Include all costs of project specific requirements in the Guardrail Thrie-Beam Bridge Connector pay item.

On sheet 805-510-00 detail 3 replace guardrail base plate note with the following:

See standard drawings 805-655-xx for guardrail base plate options.

On sheet 805-655-M1 replace note 30.4 with the following:

30.4 Install adhesive anchors to a depth sufficient to develop a minimum factored (reduced) Ultimate tensile capacity of 21 kips per anchor bolt. Increase minimum embedment shown in detail 4 as required by adhesive manufacturer’s recommendations for the existing material properties anchor bolt pattern, edge conditions, and any other design reduction.

On sheet 805-811-01 Type 11A barrier wall reinforcement add the following note:

Provide reinforcement equal to the stem reinforcement and bending details shown for the Type 11B concrete barrier (drawing 805-811-02).

#### **AWARD OF CONTRACT:**

Subsection 103.2 of the Standard Specifications is amended to allow sixty (60) days for the award of a contract after the opening of proposals.

#### **PROPOSAL ITEMS AND QUANTITIES:**

A list of bid items and quantities is on page 58.

#### **CONSTRUCTION STAKES, LINES AND GRADES:**

Stakes, Lines, and Grades shall be provided by the Contractor as necessary.

#### **QUALIFIED PRODUCT LISTINGS:**

All references to “Approval Sheet” or “Approval Policy” are to be replaced with “Qualified Products Listings (QPL)” and “Qualified Products Policies (QPP)” respectively. This change includes all references in the SCDOT Standard Drawings, SCDOT Standard Specifications, SCDOT Supplemental Specifications, SCDOT Special Provisions, SCDOT Supplemental Technical Specifications, SCDOT Internet and Intranet websites, and all other documents produced by SCDOT.

#### **SOUTH CAROLINA MINING ACT:**

See Attached Supplemental Specification Dated **March 20, 2003** on page 40.

This Supplemental Specification is hereby modified as follows:

Paragraph 9 is hereby deleted and replaced with the following:

The deputy secretary for engineering, or his duly appointed representative, will make a final inspection of the reclaimed area and keep a permanent record of his approval thereof. A map or sketch providing the location and approximate acreage of each pit used on the project will be provided to the resident construction engineer for inclusion in the final plans.

The last paragraph is hereby deleted and replaced with the following:

The contractor shall comply with the provisions of the plan that are applicable to the project as determined by the engineer. Seeding or other work necessary to comply with the plan on pits furnished by the contractor shall be at the expense of the contractor. Seeding shall be in accordance with SC-M-810 (latest version) which can be found at [http://scdot.org/doing/sup\\_tech\\_specs.shtml](http://scdot.org/doing/sup_tech_specs.shtml).

#### **DBE PARTICIPATION:**

The Bidder is encouraged to utilize DBE subcontractors on this project. All DBE participation shall be reported to the Engineer prior to Substantial Completion.

#### **CONSTRUCTION QUALITY CONTROL AND ASSURANCE TESTING:**

The contractor shall provide construction quality control and quality assurance testing for this project, except for MANUFACTURERS MATERIALS CERTIFICATIONS AND CERTIFIED TEST REPORTS where materials are furnished by others.

#### **INSURANCE REQUIREMENTS:**

In addition to the requirements as set forth in Section 103.8 of the Standard Specifications (Edition of 2007), the Contractor shall purchase and maintain, in a company or companies acceptable to the Owner, general liability and automobile liability insurance written on an occurrence basis, with minimum limits as shown below or as required by law, whichever is greater. **The Contractor shall include the Owner, and INFRASTRUCTURE CONSULTING & ENGINEERING, LLC (ICE): as Additional Insured's.** The authorized insurance company shall provide a Waiver of Subrogation in all policies maintained by the insured for the performance of the Contract.

GENERAL LIABILITY	LIMIT
General Aggregate	\$1,000,000.00
Products – Comp/Ops Aggregate	\$500,000.00
Personal & Advertising Injury	\$500,000.00
Each Occurrence	\$500,000.00
Fire Damage (any one fire)	\$25,000.00
Medical Expense (any one person)	\$10,000.00
AUTOMOBILE LIABILITY (Any Auto)	
Combined Single Limit	\$500,000.00

The Contractor shall also purchase and maintain in a company or companies acceptable to the Owner, Worker's Compensation and Employer's Liability Insurance with minimum limits as shown below or as required by law, whichever is greater:

<u>WORKER'S COMPENSATION and EMPLOYER'S LIABILITY (statutory)</u>	<u>LIMIT</u>
(Each Accident)	\$100,000.00
(Disease-Policy Limit)	\$500,000.00
(Disease-Each Employee)	\$100,000.00

Certificates of Insurance acceptable to the Owner shall be filed not less than 10 days after notification of award.

The Certificate of Insurance shall not be changed to the extent that limits are decreased by endorsement, canceled or non-renewed without thirty (30) days prior written notice to the Owner. The Contractor shall provide and maintain the overages as required by Section 103.08 and these additional requirements. Failure to provide and maintain the required coverage will be grounds to declare the Contractor in default of the Contract.

The criteria which Insurance Company or Companies are deemed satisfactory by the Owner shall include, but not be limited to the following:

- a) The above required insurance coverage shall be written by a Company or Companies licensed in the areas of required coverage by the Insurance Commissioner of the South Carolina Department of Insurance, and
- b) The Insurance Company or Companies shall be assigned a rating of "A-" or better by A. M. Best Company on its most recent Best's Insurance Report, and
- c) The Owner considers the "ACORD Certificate of Insurance" as an acceptable form of certificate.

**RETAINAGE:**

If the Contractor's progress is judged to be delinquent or portions of the work are defective, the County reserves the right to withhold additional retainage. The total amount retained will be sufficient to cover anticipated liquidated damages and the cost to correct defective work.

**PROMPT PAYMENT CLAUSE:**

See attached Supplemental Specification dated **June 14, 2000** on page **54**.

**MANUFACTURERS MATERIALS CERTIFICATIONS AND CERTIFIED TEST REPORTS:**

The contractor shall supply the Engineer with all required materials certifications and manufacturers test reports for items to be permanently incorporated into the project, prior to their use. The County must approve these certifications and reports before payment can be made to the contractor for these items.

**REQUIRED MEDIA NOTIFICATION FOR CONSTRUCTION PROJECTS:**

Contractors are encouraged to co-operate with the news media since all projects are constructed with public funds. Because the scope of this project will cause disruption of normal traffic flow, the Contractor is required to notify the public, in a timely manner, of disruptive activities such as lane closures.

The Contractor is required to utilize area media to accomplish public notification of traffic disruptions.

The Contractor is required to deal directly with the news media and all reasonable efforts should be made to co-operate with the media. However, the safety, security and construction schedule on site should not be disrupted in order to accomplish this. The Contractor may coordinate these activities with and receive guidance from the Engineer.

**CONTRACT PROVISION TO REQUIRE CERTIFICATION AND COMPLIANCE CONCERNING ILLEGAL ALIENS:**

By submission of this bid, the bidder as the prime contractor does hereby agree:

- a. to certify its compliance with the requirements of Chapter 14 of Title 8 of the S.C. Code of Laws regarding Unauthorized Aliens and Public Employment;
- b. to provide SCDOT with any documents required to establish such compliance upon request; and
- c. to register and participate and require agreement from subcontractors and subcontractors to register and participate in the federal work authorization program to verify the employment authorization of all new employees, or to employ only workers who supply the documents required pursuant to S.C. Code 8-14-20(B)(2).

**PROSECUTION OF THE ROAD IMPROVEMENT WORK:**

It is the County's intentions that work on this contract be performed in a sequential manner. Once a construction activity (reclamation, treatment, shoulder work) has started on a road, the Contractor will continue this activity until it is complete before moving to another road. In the event the Contractor elects to use multiple crews on this project, work may proceed on more than one area. However, in no case will construction activities be initiated on more area than the number of work crews engaged in the work without the approval of the Resident Construction Engineer.

**CONTRACT TIME AND DETERMINATION AND EXTENSION OF CONTRACT TIME:**

Any extensions of these completion dates will adhere to Section 108.6 of the Standard Specifications.

**FAILURE TO COMPLETE THE WORK ON TIME:**

Delete Section 108.9 in its entirety and substitute the following in its place:

Owner and Contractor recognize that time is of the essence and that the Owner will suffer financial loss if the work is not substantially complete in accordance with the time(s) specified herein. They also recognize the delays, expenses and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by the Owner if the work is not completed on time.

Accordingly, instead of requiring such proof, the Owner and the Contractor agree that as liquidated damages for delay (but not as a penalty) the Contractor shall pay the Owner **\$500.00 per day** for each calendar day past the contract specified interim and final completion dates.

**COORDINATION OF UTILITY RELOCATION WORK WITH HIGHWAY CONSTRUCTION:**

As it is not economically feasible to complete the rearrangement of all utility conflicts in advance of the highway construction, such rearrangements may be underway concurrently with construction.

***It shall be the responsibility of the contractor to inspect the site for potential utility conflicts.***

It is the responsibility of the Contractor to call Palmetto Utility Protection Service (1-888-721-7877) three (3) days prior to work so that existing utilities can be properly marked.

**CEMENT MODIFIED RECYCLED BASE**

Section 306 of the standard specifications is deleted and replaced with the attached supplemental specification, Cement Modified Recycled Base, SCDOT Designation: SC-M-306931/18), as shown on page 45.

**RATE OF APPLICATION:**

Portland cement shall be uniformly applied and mixed over the entire length of each roadway at a rate established per roadway, as determined by the Project Manager or Engineer. The pounds per square yard specified are set up as an average rate of application. The Engineer may direct variations wherever conditions warrant. Sampling, preparing and testing of Cement Modified Recycled Base Compression Specimens will be done as per SCT-26 (8/20/17). **Curing method is Method B.**

**The rate of application for this project will be determined by the contractor per SCT-26 (8/20/17) with a separate test on each ½ mile of road. For bid purposes only, 55 LBS/SY have been used on 10" thick reclamation county.**

**DRESSING OF SHOULDERS:**

Prior to beginning work on the Cement Stabilized Earth base Course, the contractor shall be required to remove all vegetation in the existing roadway and to a distance of 12 inches outside the edge of the new *pavement* and any other area which impedes the placement of the base and or asphalt mixture to the specified width.

The contractor shall also remove and dispose of all excess asphalt and debris which is disturbed during minor grading for widening or during removal of debris or grass from existing surface during preparation of surface for new lift. After the surfacing has been placed, the contractor shall blade the disturbed material to the extent that the shoulder is left in a neat and presentable condition. All excess material shall be removed from the project. No direct payment shall be made for this work. All costs are to be included in the price of other items of work.

### **BORROW EXCAVATION FOR SHOULDERS**

This work shall consist of satisfactory placement of all materials necessary to bring the shoulder grade to within 1 inch of the final pavement edge grade. The Contractor shall furnish all earth material necessary to eliminate any edge of final pavement to shoulder gradient differential that exceeds 1inch.

Selected materials shall be used for this operation. The selected material shall consist of a friable material such as topsoil, etc., containing grass roots and having the properties of being comparatively porous; capable of growing grass and of a stable nature in that when compacted it will resist erosion and be capable of supporting vehicles when relatively wet. When the area where material is to be placed, is greater than 4 feet in width, it shall be scarified and/or disked to a minimum depth of 3 inches prior to placing any material. Scarifying or disked is not required for areas less than 4 feet in width. Borrow shall be mixed with the existing scarified and/or disked shoulder material in such a manner as to provide a seed bed in accord with Section 810.15 of the Standard Specifications. The Contractor has the option of placing the borrow material (a) Prior to placing final surface course or (b) Following the placing of the finished surface course. Payment for this work shall be included in the payment price for Cement Stabilized Earth Base or Cement Modified Reclaimed Base or HMA Surface Course Type C (liquid included). The shoulder material shall be Pageland Sand Company tater dirt or an equal approved by the engineer.

### **MAINTENANCE STONE:**

Maintenance Stone used on this project shall conform to the gradation requirements of Section 305, or to the gradation specified for Aggregate No. CR-14 in the Standard Specifications. This material will be used in driveways and as directed by the engineer.

### **ROADWAYS TO BE INCLUDED IN THIS PROJECT:**

Lancaster County, due to budget considerations, reserves the right to adjust the amount of work to be performed on this project. Projects (complete roads) may be added or deleted only at the discretion of the County. The Contractor shall, by signing this request for bids, agree to adjust, as indicated by the County, the lengths or quantities of roadways and corresponding pay items to be performed, at the times and locations determined to be beneficial to the County.

### **ROADWAY TYPICAL SECTION:**

Each roadway or section of roadway shall have a corresponding ROADWAY TYPICAL SECTION that the final roadway surface shall be graded and surfaced to meet. The ROADWAY TYPICAL SECTION drawing is included in these bid documents starting on **page 64**. The Typical Section contains profile and cross slope criteria that shall be met for the entire length of each roadway or roadway section. Contractor shall grade the existing roadway to generally improve vertical curves and to create uniform roadway profiles and alignments. Roadway profiles shall be graded to maintain drainage and to minimize dips or steepness (minimum of .05% or as directed by Engineer). Slope and profile shall be subject to approval by Engineer prior to cement stabilization. All work associated with achieving the ROADWAY TYPICAL SECTION shall be included in the unit price work for Cement Modified Recycled Base, with the exception of bid item for borrow.

### **BITUMINOUS SURFACING:**

Sections 406 – 408 of the Standard Specifications shall be amended and/or include as follows:

Contractor shall allow proper breakdown of liquid emulsion before applying stone to treatment.

The Contractor shall exercise care so as not to spread an excessive amount of aggregate, which may become a hazard.

Bituminous Surfacing Single Treatment shall include CRS-2 emulsion.

After sufficient time has passed to allow stone to adequately set, but no later than 24 hours upon completion of rolling, roads and intersections must be swept to remove all loose stone from the treatment.

Section 406.3.2 Aggregate Spreaders: The first sentence shall be amended to read, Aggregate Spreaders for this project shall be self-propelled.

### **BITUMINOUS SURFACING – DOUBLE TREATMENT:**

CRS – 2P may be used in the place of CRS – 2 for the Double Treatment Process. Excess stone shall be removed prior to final inspection.

### **BITUMINOUS SURFACING OPERATIONS:**

The bituminous surfacing overlays shall be applied in two separate and distinct operations as described in sections 406 & 407 of the Standard Specifications, each operation representing about one-half of the roadway width and traffic shall be maintained continuously. Unless otherwise directed by the Engineer, paving operations shall be scheduled such that the length of the longitudinal joint exposed to traffic shall not extend beyond the length of pavement placed in one normal day's operation (or 3 miles, whichever is greater) before dropping back to bring the adjacent lane forward.

### **MAINTENANCE OF TRAFFIC:**

In addition to the Contractor maintaining traffic throughout the length of this project as required by the Specifications, it will also be necessary that the Contractor, prior to beginning any work, submit to the Engineer for approval his plan for constructing this project.

### **MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES:**

The Contractor is advised that all work involving design or installation of traffic control devices, including but not limited to signs, pavement markings, elements of work zone traffic control, signals, etc., shall be in compliance with the FHWA's Manual on Uniform Traffic Control Devices (MUTCD), latest edition. The latest edition is defined as the edition that the Traffic Engineering Division of SCDOT recognizes as having been officially adopted (Engineering Directive, Memorandum 19) at the time the project is let, unless stated otherwise in the Special Provisions.

The engineer will mark the location of any signs to be used on this project.

### **TRAFFIC CONTROL:**

The Contractor shall execute the item of Traffic Control as required by the Standard Specifications, the plans, the Standard Drawings for Road Construction, these special provisions, all supplemental specifications, the MUTCD, and the Engineer. This is an amendment to the Standard Specifications to require the following:

#### **GENERAL REGULATIONS -**

These special provisions shall have priority to the plans and comply with the requirements of the MUTCD and the standard specifications. Revisions to the traffic control plan through modifications of the special provisions and the plans shall require approval by the County. Final approval of any revisions to the traffic control plan shall be pending upon review.

Install and utilize changeable message signs in all lane closures installed on high volume high-speed multilane roadways. Use of changeable message signs in lane closures installed on low volume low speed multilane roadways is optional unless otherwise directed by the plans and the Engineer. Install and use a changeable message sign within a lane closure set-up as directed by the *Standard Drawings for Road Construction*. When a lane closure is not present for any time to exceed 24 hours, remove the changeable message sign from the

roadway. Place the sign in a predetermined area on the project site, as approved by the Engineer, where the sign is not visible to passing motorists. The preprogrammed messages utilized shall be in accordance with the *Standard Drawings for Road Construction* when used as part of the traffic control set-up for lane closures.

Only those messages pertinent to the requirements of the traffic control situation and the traffic conditions are permitted for display on a changeable message sign at all times. At no time will the messages displayed on a changeable message sign duplicate the legends on the permanent construction signs.

During operation of changeable message signs, place the changeable message sign on the shoulder of the roadway no closer than 6 feet between the sign and the near edge of the adjacent travel lane. When the sign location is within 30' of the near edge of a travel lane open to traffic, supplement the sign location with no less than 5 portable plastic drums placed between the sign and the adjacent travel lane for delineation of the sign location. Install and maintain the drums no closer than 3 feet from the near edge of the adjacent travel lane. This requirement for delineation of the sign location shall apply during all times the sign location is within 30' of the near edge of a travel lane open to traffic, including times of operation and non-operation. Oversized cones are prohibited as a substitute for the portable plastic drums during this application.

**All signs mounted on portable sign supports shall have a minimum mounting height of 5' from the ground to the bottom of the sign. All signs mounted on ground mounted u-channel posts shall have a minimum mounting height of 7' from the ground to the bottom of the sign.**

**Temporary "Exit" signs (M1025-00) shall be located within each temporary gore during lane closures on multilane roadways. Mount these signs a minimum of 7' from the pavement surface to the bottom of the sign in accordance with the requirements of the MUTCD.**

When covering signs with opaque materials, the Department prohibits attaching a covering material to the face of the sign with tape or a similar product or any method that will leave a residue on the retro reflective sheeting. Residue from tape or similar products, as well as many methods utilized to remove such residue, damages the effective reflectivity of the sign. Therefore, contact of tape or a similar product with the retro reflective sheeting will require replacement of the sign. Cost for replacement of a sign damaged by improper covering methods will be considered incidental to providing and maintaining the sign; no additional payment will be made.

Signs not illustrated on the typical traffic control standard drawings designated for permanent construction signs shall be considered temporary and shall be included in the lump sum price bid item for "Traffic Control" unless otherwise specified.

Install and maintain any necessary detour signing as specified by the typical traffic control standard drawings designated for detour signing, Part VI of the MUTCD, these Special Provisions, and the Engineer. The lump sum price bid item for "Traffic Control" includes payment for installation and maintenance of the detour signing.

The Contractor shall maintain the travel patterns as directed by the traffic control plans and shall execute construction schedules expeditiously. The Contractor shall provide the Resident Engineer with no less than a two-week prior notification of changes in traffic patterns.

~~During nighttime flagging operations, flaggers shall wear a safety vest and safety pants that comply with the requirements of ANSI / ISEA 107-2004 standard performance for Class 3 risk exposure or latest revisions and a fluorescent hard hat. The safety vest and the safety pants shall be retro reflectorized, and the color of the background material of the safety vest and safety pants shall be fluorescent orange red.~~

~~During nighttime flagging operations, the contractor shall illuminate each flagger station with any combination of portable lights, standard electric lights, existing street lights, etc., that will provide a minimum illumination level of 108 Lx or 10 fc.~~

~~During nighttime flagging operations, supplement the array of advance warning signs with a changeable message sign for each approach. These changeable message signs are not required during daytime flagging operations. Install the changeable message signs 500' in advance of the advance warning sign arrays. Messages should be "Flagger Ahead" and "Prepare to Stop".~~

Upon completion of the final riding surface on each road, the Contractor will be allowed up to 3 working days to begin eliminating shoulder drop-offs greater than 2" and continue the work until these drop-offs are eliminated.

**During paving operations, the Department requires lane closures at all times where grade elevation differences and drop-offs greater than 2" exist adjacent to or between the travel lanes of a roadway opened to traffic, unless otherwise specified by these special provisions. Maintain lane closure restrictions at all times unless otherwise directed by these special provisions.**

**During surface planing and milling operations, the department requires lane closures at all times where grade elevation differences and drop-offs greater than 1" exist adjacent to or between the travels lanes of a roadway open to traffic, unless otherwise specified by these special provisions. If this grade elevation difference exceeds 1", mill the adjacent travel lanes or pave the milled travel lanes as necessary to Eliminate these grade elevation differences before opening the travel lanes to traffic at these locations. Maintain lane closure restrictions at all times unless otherwise directed by these special provisions.**

**During the paving operations, the length of roadway with an acceptable grade elevation difference less than or equal to 2" shall not exceed 2 miles.**

**During the surface planning operations, the length of roadway with an acceptable grade elevation difference less than or equal to 1" shall not exceed 2 miles.**

#### **LANE CLOSURE RESTRICTIONS -**

The Contractor shall install all lane closures as directed by the Standard Specifications for Highway Construction (Edition of 2007), the Standard Drawings for Road Construction, these special provisions, the MUTCD, and the Engineer. The Contractor shall close the travel lanes of two-lane two-way roadways by installing flagging operations. The Contractor shall close the travel lanes of multilane roadways as directed by the typical traffic control standard drawings designated for lane closures on primary routes.

**The Department prohibits lane closures on primary routes during any time of the day that traffic volumes exceed 800 vehicles per hour per direction. The Department reserves the right to suspend a lane closure if any resulting traffic backups are deemed excessive by the Engineer. Maintain all lane closure restrictions as directed by the plans, these special provisions, and the Engineer.**

The Department reserves the right to restrict the installation of lane closures on high volume primary routes when the presence of a lane closure will seriously hinder normal traffic flow during extended holiday periods. An extended holiday period is hereby defined as those days preceding and following the holiday that experience significant increases in the volume of traffic due to the holiday as determined by the Department. Also, the Department reserves the right to increase an extended holiday period if excessive traffic disruptions occur during those days prior to and after the established extended holiday period. Extended holiday periods include but are not limited to the week of Thanksgiving, the weeks before and after Christmas, and the weeks before and after the 4<sup>th</sup> of July. The Contractor should submit inquiries to the Engineer regarding specific days of an extended holiday period no less than two weeks prior to entering into an extended holiday period. The Contractor should make these inquiries annually due to the progressive nature of the calendar.

**Flagging operations are considered to be lane closures for two-lane two-way operations and shall be subject to all restrictions for lane closures as specified by this contract.**

**Lane closures, including flagging operations, are restricted to maximum distances of 2 miles. Install all lane closures according to the typical traffic control standard drawings. On occasions when daytime lane**

closures must be extended into the nighttime hours, substitute the nighttime lane closure standards for the daytime lane closure standards.

The Department reserves the right to suspend a lane closure if any resulting traffic backups are deemed excessive by the Engineer. Maintain all lane closure restrictions as directed by the Standard Specifications, these special provisions, and the Engineer.

#### **TYPICAL TRAFFIC CONTROL STANDARD DRAWINGS -**

Typical traffic control standard drawings of the "Standard Drawings for Road Construction" for this project shall be as shown below or as required:

<b>STD 605-010-02</b>	<b>PERMANENT CONSTRUCTION SIGNING</b>	<b>PRIMARY ROUTES</b>
<b>STD 610-005-00</b>		<b>FLAGGING OPERATIONS</b>

Permanent Construction Signing		
Scheme E	18	432
Scheme C	5	380
Loose Stone\25 MPH	8	68
Total		880

Install the permanent construction signs as shown on the typical traffic control standard drawing, "Construction Signing Permanent Primary Routes 605-010-02", or as directed by Engineer. A list of roadways for the placement of the signs can be obtained from the Engineer.

#### **CONSTRUCTION SCHEDULE:**

The successful Bidder shall, prior to commencement of work, submit to the Engineer a schedule showing the order in which he proposes to carry on the Work indicating the periods during which he will perform work on each roadway. The County of Lancaster reserves the right to determine priority of schedule items, but unless modified by the parties, in writing, the successful Bidder shall have sole Responsibility for following and coordinating its schedule.

#### **SURPLUS MATERIAL:**

The contract bid price for other items of work shall be full payment for excavating, hauling, disposing of and seeding any surplus material. All milled material shall be disposed of at an approved site.

#### **SEEDING:**

Section 810.2.3.3 is hereby amended by adding the following note to the table:

The use of Annual Sudan Grass for temporary vegetation shall be prohibited statewide.

All seeding will be mulched using Method C: Hydro seeding.

#### **PERMANENT PIPE CULVERTS**

Section 714 of the Standard Specifications, Permanent Pipe Culverts:

Ensure that all types and sizes of permanent and temporary pipe culverts to conform to the requirements of the special provisions and the latest edition of applicable SCDOT supplemental, OMR Standard Method of tests. **Supplemental Technical Specification SC-M-714 in effect at the time the bid proposed for the project was advertised. (September 8, 2009)**

#### **HOT MIX ASPHALT (LIQUID INCLUDED)**

The costs of shaping and compacting the existing or added crushed stone base in driveways or elsewhere shall be included in the costs of the HMA which will cover the base. All driveways will be paved. The contractor shall furnish to the Engineer a plant mix lab report for each mix used on a daily basis.

**PIPE DISPOSAL**

Any pipe that must be removed shall be removed by the contractor to an approved site. The cost of pipe disposal is to be included in the cost of the new pipe.

**TESTING**

The contractor will be responsible for all quality control and testing. One-point proctors will be accepted if necessary. A minimum of one compaction test will be run every 2500 feet of cement modified reclaimed base. Roller patterns, daily plant test reports, and other tests required by SCDOT will also be required on HMA.

**WORK SCHEDULE**

There will be no mixing or other digging type operations after 4 PM on Fridays until 7AM on Monday, without written permission of the engineer.

**ASPHALT BINDER ADJUSTMENT INDEX**

The Asphalt binder index on this project is the SCDOT index for January 1 2020, of \$490.88, but will be used only on HMA Surface Course Type C (liquid included) and be determined in the following manner. Each square yard of HMA Surface Course Type C (liquid included) 2" uniform shall be assumed to weigh 220 pounds or .11 tons. HMA Surface Course Type C (liquid Included) 1½ "uniform shall be assumed to weigh 165LBS/SY or 0.0825 Tons. Using the daily plant mix lab report, the amount of binder will be determined and indexed up or down accordingly. SCDOT index formula will be used to determine dollar amount.

**WARRANTY**

The Contractor agrees to a one-year warranty against defects, failures etc. caused by materials and workmanship, beginning on the date of final acceptance of punch list.

**STREET SIGNS**

Double sided street signs, 6" in height, will be installed at each intersection as per sign schedule on **page 77**.

**LANCASTER SALES TAX SIGNS**

Signs to be same grade as SCDOT signs and placed at the beginning and end of each road. See construction sign drawings on page 86. Upon final acceptance of road, signs will be removed and delivered to Lancaster Public Works, 1980 Pageland Highway, Lancaster SC 29720. See **page 126** for detail.

**CEMENT MODIFIED RECYCLED BASE DEPTH**

The bid item for Cement Modified Recycled Base thickness is shown on each road in the quantities per road section on **page 63**. After mix designs are determined, if more than stated uniform depth is required, 3% of base bid will be added for each additional inch of depth required.

**MIX DESIGNS**

Lab results will be delivered to the engineer for final determination of rate and depth.

**BID ITEM FOR BORROW**

This item is for furnishing and placing extra dirt required for widening shoulders, as necessary to meet Typical Section and cross sections including extra width for guardrail. Any item that is required to accomplish the above, such as, but not limited to, remove existing vegetation, scarifying, benching, and compaction will be included in pay item for Borrow. Material shall meet SCDOT specifications and be approved by the engineer. Shoulder material needed to make shoulders flush with HMA after paving is not included in this item. Shoulder material is addressed in Borrow Excavation for shoulders in special provisions.

## **SECTION IV: SUPPLEMENTAL SPECIFICATIONS**

March 20, 2003

## THE SOUTH CAROLINA MINING ACT

The South Carolina Mining Act enacted by the General Assembly in 1973 requires that the Department adopt reclamation standards to govern activities of the Department and any person acting under contract with the Department, on highway rights-of-way or material pits maintained solely in connection with the construction, repair and maintenance of the public road systems in South Carolina.

### STANDARD PLAN FOR THE RECLAMATION OF EXCAVATED AREAS ADOPTED BY THE South Carolina DEPARTMENT OF TRANSPORTATION

Reclamation plans as stated herein shall include all areas disturbed in excavations of borrow and material pits, except planned inundated areas.

The final side slopes of areas excavated for borrow and material pits shall be left at such an angle so as to minimize erosion and the possibility of slides. The minimum slope in every case shall be not less than 3:1.

Small pools of water should not be allowed that are, or are likely to become noxious, odious, or foul to collect or remain on the borrow pit. Suitable drainage ditches, conduits, or surface gradient shall be constructed to avoid collection of noxious, odious, or foul pools of water unless the borrow pit is to be reclaimed into a lake or pond.

Borrow pits reclaimed to a lake or pond must have an adequate supply of water to maintain a water sufficient level to maintain a minimum water depth of four (4) feet on at least fifty (50) percent of the surface area of the lake or pond.

Excavated areas will be drained where feasible unless otherwise requested by the property owner where, in such instances, the property owner may wish to develop the excavated area for recreational purposes or for the raising of fish, or for other uses, in compliance with the South Carolina Mining Act.

Where material is stripped from the ground surface in relatively thin layers, the area, after excavation has been completed, will be thoroughly scarified and terraced and planted to establish satisfactory vegetation necessary to control erosion. Vegetative cover should be established on a continuing basis to ensure soil stability appropriate to the area. Conservation practices essential for controlling both on-site and off-site erosion and siltation must be established. A minimum of seventy-five (75) percent vegetative ground cover, with no substantial bare spots, must be established and maintained into the second growing season.

Excavated areas that are drained will be seeded to obtain a satisfactory vegetative cover. The side slopes of excavated area will be planted to vegetation.

The State Highway Engineer, or his duly appointed representative, will make a final inspection of the reclaimed area and keep a permanent record of his approval thereof. A map or sketch providing the location and approximate acreage of each pit used on the project will be made available to the Final Plans Engineer.

All applicable regulations of agencies and statutes relating to the prevention and abatement of pollution shall be complied with by the contractor in the performance of the contract.

The Contractor shall comply with the provisions of the Plan which are applicable to the project as determined by the Engineer. Seeding or other work necessary to comply with the plan on pits furnished by the contractor shall be at the expense of the contractor. Bermuda shall not be planted on ground surface pit areas. The quantity of fescue seed specified in Subsection 810.04 of the Standard Specifications shall be increased to fifteen (15) pounds in lieu of the deleted Bermuda seed.

January 1, 2018

## ERRATA TO 2007 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION

Make the changes listed below to correct errata in the SCDOT *2007 Standard Specifications for Highway Construction*:

### DIVISION 100 GENERAL PROVISIONS

#### SECTION 101 DEFINITIONS AND TERMS

##### Subsection 101.2 Abbreviations and Acronyms

Amend the table of **SCDOT OFFICIALS AND OFFICES** as follows:

DELETIONS		REPLACEMENTS	
<del>BDE*</del>	<del>Bridge Design Engineer</del>	PSE*	Preconstruction Support Engineer
<del>BDGE*</del>	<del>Bridge Design Geotechnical Engineer</del>	GDSE*	Geotechnical Design Support Engineer
<del>SHE*</del>	<del>State Highway Engineer</del>	DSE*	Deputy Secretary for Engineering

\*Wherever it appears in the text, replace the deleted abbreviation with the new abbreviation.

#### SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS

##### Subsection 102.8 Irregular Bids

Paragraph 2, item E, first sentence; delete the word "the" after the word "When".

#### SECTION 105 CONTROL OF WORK

##### Subsection 105.6 Cooperation with Utilities

Paragraph 1, last sentence; change the word "THE" to "the".

### DIVISION 200 EARTHWORK

#### SECTION 202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

##### Subsection 202.5 Measurement

Paragraph 5, second bullet; change the words "Brick sidewalk" to "Concrete, brick or stone sidewalks".

#### SECTION 204 STRUCTURE EXCAVATION

##### Subsection 204.2.1.2 Structure Excavation for Culverts

Paragraph 1, at the end of the first sentence; change "**Subsection 204.4**" to "**Subsection 204.5**".

### DIVISION 400 ASPHALT PAVEMENTS

#### SECTION 401 HOT MIXED ASPHALT (HMA) PAVEMENT

##### Subsection 401.2.1.2 Liquid Anti-Stripping Agent

Paragraph 1, first sentence; delete the period at the end of the sentence and add "and SC-M-406."

##### Subsection 401.2.5 Material for Full Depth Patching

Paragraph 1, delete and replace with the following:

"Use an approved SCDOT Intermediate Type C mix for all Full Depth Patching."

**Subsection 401.5 Measurement**

After paragraph 10, add the following paragraph:

11 The measurement of Prime Coat is the number of gallons of asphalt material applied to the completed and accepted base course.

**Subsection 401.6 Payment**

After paragraph 12, add the following paragraph:

13 "The payment for Prime Coat is at the contract unit price for Prime Coat and includes compensation for all labor, equipment, tools, maintenance, and incidentals necessary to complete that work."

**Subsection 401.6 Payment**

Paragraph 13, **Table of Pay Items**

Change paragraph reference number "13" to "14" and add the following Pay Item:

Item No.	Pay Item	Unit
4010005	Prime Coat	GAL

**SECTION 403 HMA SURFACE COURSE****Subsection 403.5 Measurement**

Paragraph 1, first sentence; change "HMA Intermediate Course" to "HMA Surface Course".

**Subsection 403.6 Payment**

Paragraph 1, first sentence; change "HMA Intermediate Course" to "HMA Surface Course".

**SECTION 407 ASPHALT SURFACE TREATMENT – DOUBLE TREATMENT****Subsection 407.5 Measurement**

Paragraph 1, first sentence; add the word "is" after "(Double Treatment Type (1, 2, 3, 4, or 5))".

**SECTION 408 ASPHALT SURFACE TREATMENT – TRIPLE TREATMENT****Subsection 408.5 Measurement**

Paragraph 1, first sentence; add the word "is" after "(Triple Treatment Type (1 or 2))".

**DIVISION 600 MAINTENANCE AND TRAFFIC CONTROL****SECTION 625 PERMANENT PAVEMENT MARKINGS FAST DRY WATERBOURNE PAINT****Subsection 625.2.2.4.11 Lead Content**

Paragraph 1, first sentence; change 6% to 0.06%.

**SECTION 627 THERMOPLASTIC PAVEMENT MARKINGS****Subsection 627.4.10 Inspection and Acceptance of Work**

Paragraph 2, first sentence; change "period of 90 days" to "period of 180 days".

**Subsection 627.4.10 Inspection and Acceptance of Work**

Paragraph 2, second sentence; change "90-day observation period" to "180-day observation period".

**Subsection 627.4.10 Inspection and Acceptance of Work**

Paragraph 3, first sentence; change "90-day period" to "180-day period".

**DIVISION 700 STRUCTURES****SECTION 709 STRUCTURAL STEEL****Subsection 709.4.3.5.2 Submittals and Notification**

Paragraph 1, delete the last two sentences and replace them with, "The Department's review and acceptance are required before any field welding will be permitted."

**Subsection 709.6.3 Pay Items (page 650)**

Subsection heading number; change subsection heading number from "709.6.3" to "709.6.4".

**SECTION 712 DRILLED SHAFTS AND DRILLED PILE FOUNDATIONS****Subsection 712.4.4 Dry Construction Method**

Paragraph 2, last sentence in A; change "*Drilled Shaft Report*" to "*Drilled Shaft Log*".

**Subsection 712.4.10.4 Excavation Cleanliness**

Paragraph 1, last sentence; change "*Drilled Shaft Report*" to "*Drilled Shaft Log*".

**Subsection 712.4.10.6 Shaft Load Test**

Change first paragraph reference number from "2" to "1".

**Subsection 712.6.10 Drilled Pile Set-Up**

Insert paragraph reference number "1" to the left of the first paragraph.

**SECTION 723 DECK JOINT STRIP SEAL****Subsection 723.1 Description**

Insert paragraph reference number "3" to the left of the third paragraph.

**SECTION 726 BRIDGE DECK REHABILITATION****Subsection 726.4.1 General**

Insert paragraph reference number "1" to the left of the first paragraph.

**Subsection 723.4.6 Full Depth Patching (page 790)**

Subsection heading number; change subsection heading number from "723.4.6" to "726.4.6"

**Subsection 726.6.8 Concrete Overlay (Latex) or (Portland Cement) (page 802) Paragraph 2,**  
the equation is changed to  $AP=CP \times (ACS/RCS) ^ 2$

**SECTION 727 CROSSHOLE SONIC LOGGING OF DRILLED SHAFT FOUNDATIONS****Subsection 726.6 Payment (page 807)**

Subsection heading number; change subsection heading number from "726.6" to "727.6"

**DIVISION 800 INCIDENTAL CONSTRUCTION****SECTION 805 GUARDRAIL****Subsection 805.5 Measurement**

Paragraph 4; amend as follows:

"The quantity for the pay item 8053000 Additional Length Guardrail Post is the length of required post installed in excess of the standard-length post based on the system being installed, measured by the linear foot (LF), complete, and accepted."

**SECTION 815 EROSION CONTROL**

**Subsection 815.1 Description**

Paragraph 1, first sentence; change "temporary flexible pipe" to "temporary pipe".

**Subsection 815.5 Measurement**

Paragraph 13; delete the first sentence and replace it with the following sentence: "The quantity for Temporary Pipe Slope Drains is measured and paid for in accordance with **Subsections 803.5** and **803.6** respectively."

**Subsection 815.5 Measurement**

Delete paragraph 19.

**Subsection 815.6 Payment**

After paragraph 15, add the following paragraph:

16 Payment for Removal of Silt Retained by Silt Fence is full compensation for removing and disposing of sediment deposits accumulated by silt fences as specified or directed and includes all materials, labor, equipment, tools, supplies, transportation, and incidentals necessary to fulfill the requirements of the pay item in accordance with the Plans, the Specifications, and other terms of the Contract.

**Subsection 815.6 Payment**

Change original paragraph number "16" to "17".

**Subsection 815.6 Payment**

Pay Item table; change the Unit for Item No. 8156214 to "EA".

**INDEX:**

Amend as follows:

Page I-3, after "Bridge Deck Rehabilitation, measurement and payment:" Delete page 807.

Page I-12, after "Letting:"  
Replace page 19 with page 9.

Page I-13, after "Overhead Sign Structure:" Replace page 488 with page 495.

Page I-15, after "Proof Rolling:" Delete page 98.

Page I-18, after "Structural Steel, turned and ribbed bolts:" Replace page 624 with page 625.

Page I-19, after "Waterproofing, bridge deck:" Delete page 907.

Page I- Drawings:"  
Replace page 543 with page 779.

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## Supplemental Technical Specification for

# Cement Modified Recycled Base

SCDOT Designation: SC-M-306 (01/18)

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### 1.0 DESCRIPTION

- 1.1 This section contains specifications for the materials, equipment, construction, measurement, and payment for the modification of an existing paved roadway or shoulder by scarifying the existing pavement structure, mixing it with Portland cement, and constructing the base course in conformance with the lines, grades, dimensions, and cross-sections shown on the Plans or as directed by the RCE.

### 2.0 MATERIALS

- 2.1 Portland Cement - Use Portland cement that conforms to the requirements of **Subsection 301.2.1**.  
2.2 Water - Use water conforming to the requirements of **Subsection 701.2.11**.  
2.3 Asphalt Material – Use asphalt material conforming to the requirements of **Subsection 301.2.4**.

### 3.0 EQUIPMENT

- 3.1 Ensure that the equipment necessary for the proper construction of the work is on site and in acceptable working condition. Provide sufficient equipment to enable prosecution of the work in accordance with the project schedule and completion of the work in the specified time.
- 3.2 Construct the base with self-propelled rotary mixer(s)/reclaimer(s) capable of mixing in place to the required depth. The mixer(s)/reclaimer(s) shall have a mechanism for controlling the reclaimed material gradation via breaker bar and/or a door opening on the mixer(s)/reclaimer(s). Mixer(s)/reclaimer(s) shall be fitted with an integrated liquid injection system capable of introducing liquid into the cutting drum during the mixing process.
- 3.3 Provide a sufficient number of water trucks on the jobsite at all times of operation to maintain the moisture requirements listed in **Subsection 9**. Ensure that the water truck used in conjunction with the reclaimer uses a direct injection system, and additional trucks maintain surface moisture during grading and compaction work and until the curing treatment is applied in accordance with **Subsection 13**. Accomplish this using a controlled and uniform application of water without eroding or otherwise damaging the CMRB surface.
- 3.4 Provide a spreader/distributor capable of achieving consistent, accurate and uniform distribution across the entire length and width of the roadway while minimizing dust. Ensure that the spreader has adjustable openings or gate headers and is not solely dependent on vehicle speed to obtain the required spread rate.
- 3.5 Provide a combination of sheepfoot rollers, smooth wheel tandem rollers, and/or pneumatic-tired rollers that have the ability to adequately compact reclaimed material throughout the entire specified CMRB thickness. Ensure the necessary weight, size and number of rollers to achieve the requirements of **Subsection 10**.

### 4.0 CONSTRUCTION

- 4.1 Regulate the sequence of work to process the necessary quantity of material to provide the full depth of modification as shown on the Plans:
- 4.1.1 Ensure structural integrity of reclaimed material is consistent throughout the depth of the modification.
- 4.1.2 Ensure surface quality is sufficient to provide durable temporary pavement structure surface and supports permanent pavement structure performance.
- 4.1.3 Incorporate appropriate material as specified in the plans for drainage correction, cross slope correction or roadway strengthening.

### 5.0 QUALITY CONTROL PLAN, TEST STRIP & CORRECTIVE ACTION REQUIREMENTS

- 5.1** Prepare an annual Quality Control Plan that ensures that operational techniques and activities provide integral and finished material of acceptable quality for each Cement Modified Recycled Base project. Submit a Quality Control Plan for acceptance to the Chemical Stabilization Engineer (CSE) in writing a minimum of two weeks before work begins for the year.
- 5.2** The Quality Control Plan should include, but not be limited to addressing the following items;
- 5.2.1** Contingency plans for pulverization, mixing and compaction when specifications criteria are not met. Consider the specific roadway conditions of various project sites.
- 5.2.2** Plan for identifying in-situ moisture conditions, adjusting the moisture content to meet specifications, and maintaining moisture content through the time of curing. Include a description of the methods and minimum contractor testing for moisture. Consider specific environmental conditions of various project sites and schedules.
- 5.3** Test Strips
- 5.3.1** The first load of cement on the roadway will be used as a test strip to determine if the contractor is capable of producing a mixture according to specifications. Particular attention will be paid to the moisture and compaction requirements set in **Subsection 10**, mixing and processing requirements set in **Subsection 9**, pulverization requirements set in **Subsection 7**, depth requirements in **Subsection 17**, and cement tolerances in **Subsection 8**. Cease production after the first load if any of the requirements of the specification are outside of the tolerances and change procedures to contingency plans approved in the QC Plan to continue work. Continue production as normal on the same day when the test strip meets the specification requirements.
- 5.3.2** The first load applied with the contingency plans will be used as a test strip to evaluate the corrective action plan. Cease production after this initial load of cement if the requirements of this specification are still not being met and submit a revised corrective action plan to the RCE for acceptance prior to continuing work.
- 5.3.3** If the requirements of this specification are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

## **6.0 SHOULDERS & ROADWAY PREPARATION**

- 6.1** Remove all excess vegetation generated from the clipping and cleaning of shoulders from the roadway and any other debris, including Reflective Pavement Markers, prior to performing the mixing operations. Remove material from the shoulders as necessary to ensure proper drainage at all times.

## **7.0 PULVERIZATION**

- 7.1** Provide means, methods, and equipment necessary to obtain satisfactory pulverization of the pavement so that at the completion of pulverization and mixing (prior to compactive efforts), a uniform mixture is created in which 100% of the reclaimed material mixture (by weight) passes a 3-inch sieve and 95% of the reclaimed material mixture (by weight) passes a 2-inch sieve. When necessary, SC-T-1 Section 6.6 will be used for sampling to run gradation tests. Rework areas not meeting this gradation control measure as necessary, adhering to the time limitations in **Subsection 11**. The pulverization pass is defined as at least one pass of the mixer prior to the application of cement. Additional passes are allowed. Lightly compact following each pass of the mixer to produce a uniform layer. Carefully control the depth of pulverization and conduct operations in a manner to ensure that the surface of the roadbed below the pulverized material remains undisturbed and conforms to the required cross-section. Means, methods and equipment including but not limited to additional passes of the reclaimer, milling in place or the use of supplementary equipment to achieve pulverization is the responsibility of the contractor and incidental to the process.
- 7.2** If the requirements of pulverization are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

**8.0 APPLICATION OF CEMENT**

- 8.1** The CSE will determine the rate of cement based on test results supplied in writing by the Contractor. Do not commence construction until an approved rate has been determined by the CSE. Allow two weeks from the date of submittal for the results and selection of appropriate cement rate. The test results will be conducted according to SC-T-26 by an AASHTO-accredited laboratory with material obtained from the roadway in which construction is to occur. Ensure that the roadway sampling and mix design testing is representative of the entire area and depth to be treated, several samples and/or designs may be necessary.
- 8.2** Spread Portland Cement uniformly on the pulverized material at the rate established by the CSE, taking care to minimize fugitive dust and minimize overlapping of the passes (maximum 6 inches). Apply cement only when the temperature is 40°F in the shade and rising, and no freezing temperatures are predicted for at least 48 hours. Do not perform work on frozen or excessively wet subgrade. A tolerance of 5% (of the rate) is allowed in the spread rate for individual sections (load of cement) of roadway; however, adjustments should be made in order to keep the actual spread rate as close to that established by the CSE. Only apply cement to such an area that all the operations (including final compaction) can be continuous and completed in daylight, unless adequate artificial light is provided. Ensure that all operations (including final compaction) can be completed within 3 hours of application of cement.
- 8.3** Do not allow the percentage of moisture in the reclaimed material mixture at the time of cement application to exceed the quantity that permits uniform and thorough mixture of reclaimed material or that creates instability of the roadway. Do not allow equipment, except that used in spreading and mixing, to pass over the freshly spread cement until it is mixed with the reclaimed material mixture.
- 8.4** If the requirements of cement application are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

**9.0 MIXING & PROCESSING**

- 9.1** Pulverize material as necessary to meet the requirements given in **Subsection 7**. The pulverization pass is defined as at least one pass of the mixer prior to the application of cement. Lightly compact following each pass of the mixer to produce a uniform layer.
- 9.2** After the cement has been applied per **Subsection 8**, mix and uniformly add necessary moisture to the reclaimed material to ensure that the moisture content is above the optimum value as set in the approved mix design when tested within 30 minutes of final compaction. Mix with at least one pass of the reclaimer after cement application at minimum. Additional passes are allowed, adhering to time limitations set forth within this specification. Ensure full width pulverizing and mixing by overlapping a minimum of 6 inches with each longitudinal pass, including at the longitudinal joint of each lane, and a minimum of 2 feet with each transverse joint. Additional mixing passes may be required in the contract documents. Lightly compact following each pass of the mixer to produce a uniform layer.
- 9.3** Immediately begin final compaction after the mixing process has been completed so that the requirements of **Subsection 10** are met.
- 9.4** Remove excess material generated from the mixing process after final grading operations have been completed.
- 9.5** If the requirements of mixing and processing are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

**10.0 COMPACTION**

- 10.1** Before beginning compaction, ensure that the mixture is free from excessive fluff and overly compacted areas to allow for uniform compaction of the layer. Continue compaction until the entire depth of the base course mixture is uniformly compacted to not less than 95% of the maximum density. SC-T-23, SC-

T-26, SC-T-27, or SC-T-29 will be used at the discretion of the RCE to determine the maximum density of the composite mix. If tests show that 95.0% requirement is not being met, adjust construction operations to obtain the required density. Complete the compaction work within 1 hour of the final mixing pass.

- 10.2** After the mixture is compacted, reshape the surface of the base course as necessary to conform to the required lines, grades, and cross-section. Perform light scarifying to a depth which removes the sheepfoot imprints at minimum. Continue as required to obtain a uniform surface and to prevent scaling and delamination.
- 10.3** Perform compacting and finishing in a manner that produces a smooth, closely knit surface, free from equipment imprints, cracks, ridges, or loose material. Maintain the moisture content of the mixture and surface above optimum moisture as determined by the pre-approved mix design, to the time of final curing coat being applied. The moisture content and density requirements for compaction will be tested for acceptance within 30 minutes of final compaction. Additional moisture contents tests will be randomly performed for acceptance through the curing application to ensure that the surface moisture is maintained above optimum moisture.
- 10.4** If the requirements of compaction are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

#### **11.0 CONSTRUCTION LIMITATIONS**

- 11.1** Perform work in daylight hours unless adequate artificial light is provided. Limit the area over which the cement-pavement mixture is spread so that all operations specified in **Subsections 7, 8, 9, 10 and 13** are performed continuously until completion of a section (load of cement). Complete all grading and compaction work on a section (load of cement) within 2 hours after the initial mixing pass of the reclaimer unless the RCE approves a longer period.
- 11.2** If operations are interrupted for a continuous period of greater than 1 hour after the cement has been mixed with the reclaimed material, reconstruct the entire affected section (area of interruption) in accordance with these specifications. When the un-compacted reclaimed material mixture and cement is wetted so that the moisture content exceeds that specified, manipulate and aerate the mixture to reduce the moisture to the specified content provided the base course is completed within the time limits of these specifications.
- 11.3** Begin subsequent lifts of asphalt or chip seals which cover the Cement Modified Recycled Base curing methods and act as a final riding surface within 7 calendar days of completion of the CMRB section unless the RCE approves a longer period. Begin these subsequent lifts so that no more than 4 miles have temporary surface treatment on them at any time. A section is defined as the contract section of roadway receiving CMRB treatment. When using Curing Methods B or C, ensure that a milled surface is not left open to the public for more than 72 hours.

#### **12.0 WEATHER LIMITATIONS**

- 12.1** Apply cement only when the temperature is 40°F in the shade and rising, and no freezing temperatures are predicted for at least 48 hours. Do not perform work on frozen or excessively wet subgrade. The temperature restrictions for single treatment, when used as a curing option, shall meet the requirements of this reclamation specification. If the successive course is a final riding course, the seasonal restrictions of December, January and February apply unless otherwise approved by the DOC.

#### **13.0 CURING**

- 13.1** After the Cement Modified Recycled Base has been finished as specified, cure the surface using the specified method in the plans or contract. Dampen and sweep the CMRB immediately prior to the application of the surfacetreatment.

*Curing Method A: Surface (Single) Treatment*

*Curing Method B: Surface (Single) Treatment with Milling Curing*

*Method C: Surface (Double) Treatment with Milling*

- 13.2** After the Cement Modified Recycled Base has been finished as specified, protect the base from rapid drying and traffic by placing Asphalt Surface Treatment as specified in **Section 406 or 407**, with

the exception that lightweight aggregate is not required and CRS-2 may be used in place of CRS-2P. Perform this operation daily to protect the newly constructed Cement Modified Recycled Base, unless otherwise directed by the RCE.

- 13.3** Prior to placement of the HMA course in Methods B & C, mill the Cement Modified Recycled Base course surface to obtain a true and level finish for the asphalt placement. Ensure that a diamond milling pattern with a double or triple strike is clearly visible in the finished surface. Consider the final thickness during construction, leaving the specified depth of treatment after the milling has occurred. Ensure that the surface is left in a condition ready for paving, free from scabbing, scaling and other defects. Ensure that any structure lost to additional, deeper milling to remove these defects is replaced with asphalt. Include this cost in the Cement Modified Recycled Base price.

#### **14.0 CONSTRUCTION JOINTS**

- 14.1** At the end of each day's construction, form a straight construction joint as specified in **Subsection 301.4.9**.

#### **15.0 SURFACE SMOOTHNESS**

- 15.1** Ensure that the finished surface of the recycled base meets the requirements of **Subsection 301.4.10**. The grade of the road will be based on existing conditions of the roadway. Grade the cross slope to obtain positive drainage as well as smooth transitions from crown to superelevated sections of the roadway, re-grade roads with a pre-existing cross slope of 2% or greater to the same cross slope. On roads with a pre-existing cross slope of less than 2%, the Contractor and RCE will determine the measures required to obtain positive drainage and the final cross slope.

#### **16.0 RIDEABILITY**

- 16.1** Ensure that the final asphalt surface placed on Cement Modified Recycled Base course meets the Rideability requirements of SC-M-403 for either New Construction or Resurfacing, whichever is applicable based on the specified pavement structure.

#### **17.0 THICKNESS TOLERANCE**

- 17.1** The thickness of the completed Cement Modified Recycled Base will be measured at random intervals not to exceed 1,000 feet in length. The average job thickness will be measured daily using the average value of all measurements taken by the inspector each day. Where the measured thickness is more than 1 inch greater than the specified thickness, the thickness of that location will be considered the specified thickness plus 1 inch. If the average job thickness varies from the specified job thickness by more than ½ inch, an adjusted unit price is used for calculating payment. The pay factor will be calculated as below and applied;

$$\text{Pay Factor} = 1 - \frac{|\text{Average Job Thickness} - \text{Specified Job Thickness}|}{\text{Specified Job Thickness}}$$

$$\text{Adjusted Contract Unit Price} = \text{Pay Factor} * \text{Contract Unit Price}$$

- 17.2** If the requirements of thickness (any single test value greater than 1 inch different from the specified depth) are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

#### **18.0 OPENING TO TRAFFIC**

- 18.1** Local traffic may use completed portions of the Cement Modified Recycled Base provided the base has hardened sufficiently to prevent marring, damaging or visible rutting of the surface by such usage. Ensure that no damage occurs to the curing coat. With approval of the District Office, temporary detours may be utilized during the reclamation process to reduce the traffic on the reclaimed roadway. Use the subgrade shoulders or completed pavement, when available, for transporting materials,

workers, and equipment throughout the project. Do not place construction equipment on the base without the approval of the RCE unless it is being used in the subsequent construction operation.

## 19.0 MAINTENANCE

**19.1** Maintain the Cement Modified Recycled Base in accordance with **Subsection 301.4.13**.

## 20.0 MEASUREMENT

**20.1** The quantity for the pay item Cement Modified Recycled Base (of the uniform thickness required) is the surface area of a uniform base constructed by applying and mixing cement with the subgrade as specified and is measured by the square yard (SY) of the modified base in-place, complete and accepted. Cement Modified Recycled Base constructed outside the designated area is not measured for payment.

**20.2** The quantity for the pay item Portland Cement for Cement Modified Recycled Base is the weight of cement incorporated into the base at the rate established by the CSE and is measured by the ton (TON), complete and accepted. Portland cement incorporated in excess of 5% of the amount established by the CSE is not included in the measurement. Furnish the RCE with invoices of all cement received to verify weight.

## 21.0 PAYMENT

**21.1** Payment for the accepted quantity of Cement Modified Recycled Base (of the uniform required thickness) or Portland Cement for Cement Modified Recycled Base, measured in accordance with **Subsection 20** is determined using the contract unit bid price for the applicable item.

**21.2** Payment for Cement Modified Recycled Base (of the uniform required thickness) is full compensation for constructing the Cement Modified Recycled Base course as specified or directed and includes pulverizing and scarifying the existing pavement, applying and spreading cement, processing and mixing base course material, watering and maintaining proper moisture content, compacting, finishing, curing, hauling and disposing of excess shoulder material and curing base course, forming construction joints, and all other materials, labor, equipment, tools, transportation, and incidentals necessary to complete the work in accordance with the Plans, the Specifications, and other terms of the Contract.

**21.3** Base course that is deficient in thickness is paid for at the adjusted unit price specified in **Subsection 20**.

**21.4** Payment for Portland Cement for Cement Modified Recycled Base is full compensation for furnishing and weighing the cement as specified or directed and includes all other materials, labor, equipment, tools, supplies, transportation, and incidentals necessary to complete the work in accordance with the Plans, the Specifications, and other terms of the Contract.

**21.5** Payment for excess reclaimed material generated from the roadway (excluding shoulder material) is paid for as unclassified excavation.

**21.6** Payment for each item includes all direct and indirect costs or expenses required to complete the work.

**21.7** Pay items under this section include the following:

Item No.	Pay Item	Unit
3063306	Cement Modified Recycled Base (6" Uniform)	SY
3063308	Cement Modified Recycled Base (8" Uniform)	SY
3063310	Cement Modified Recycled Base (10" Uniform)	SY
3063312	Cement Modified Recycled Base (12" Uniform)	SY
3064000	Portland Cement for Cement Modified Recycled Base	TON

January 1, 2018

### REMOVAL OF EXISTING ASPHALT PAVEMENT BEFORE PATCHING

Delete Subsection 401.4.14 Removal of Existing Asphalt Pavement before Patching, of the Standard Specifications in its entirety and replace with the following:

The **RCE** will determine the limits of distressed pavement and will mark width and length of patches. **RCE / RME** will inspect the road and ensures that drainage is adequate, and no additional work needs to be done to the ditches and shoulders to promote proper drainage. The **RCE** may elect to obtain random cores if needed to determine proper depth of distressed area to be patched. Construct patches with a minimum size of 6.5 feet x 6.5 feet with at least 25 feet between patches. Care should be taken to ensure that longitudinal joints do not end up in the wheel paths. In the event that considerable quantities of full depth patching (FDP) are encountered, the RCE will consult with the State Pavement Design Engineer to consider other rehabilitation methods.

Remove the pavement to the depth indicated in the Plans, ensuring that the face of the cut is straight and vertical, with the exception of tapers needed to get equipment in and out of the patched area. If unstable material is encountered, remove additional material as directed by the **RCE**. Backfill the volume of the material removed below the patch with material meeting the requirements of **Section 305**, Graded Aggregate Base, and thoroughly compact in layers not exceeding 4 inches with a vibratory compactor. Thoroughly tack the sides of the existing pavement before placing the asphalt patch material in the hole.

Place the patch material in relatively uniform layers not to exceed the number of lifts in the table below. Ensure that the patch material is selected from the table below. Compact each layer with a vibratory compactor and a pneumatic roller. Whenever practical, allow lifts to cool down prior to placing the next lift, especially when doing multiple patches in the same area. The 175° F requirement between lifts does not apply to FDP. Conduct the work so that patches are opened and filled each day, with the roadway being opened to traffic by the end of each day's operation. Ensure that the finished patch is smooth riding by using a straight edge. Temperature and calendar restrictions found in **Section 401.4.4** do not apply, however no FDP will be permitted if the area is wet or frozen prior to removing the old pavement.

Full Depth Patching Materials		
Depth of FDP	Select mixture type below based on Depth of FDP	
	Alternate Mixture Options	Typical Mixture
4" or Less	Surface Type B / C 2 Lifts	Intermediate C 2 Lifts
6"	Surface Type B / C 2 Lifts	Intermediate C 2 Lifts
8"	Intermediate B Special 2 lifts	Intermediate C 3 lifts
10"	Intermediate B Special 2 lifts	Intermediate C 3 lifts
12" or More	Consult with the State Pavement Design Engineer	

January 1, 2018

**SECTION 810: EROSION CONTROL MEASURES**

**Delete Subsection 810.4.2** of the Standard Specifications in its entirety and replace with the following:

In addition to the erosion control measures specified in the Plans, Standard Specifications, Supplemental Technical Specifications and the Special Provisions, the Contractor is advised that all land disturbing activities (clearing and grubbing, excavation, borrow and fill) are subject to the requirements set forth in the following permits and regulations:

- South Carolina Code of Regulations 63-380, Standard Plan for Erosion, Sediment, and Stormwater Runoff Control. The regulation can be found at the South Carolina Legislature website.
- Erosion and Sediment Reduction Act of 1983 (Title 48, Chapter 18 of the South Carolina Code of Laws of 1983, as amended). Section 70 of this code authorized the South Carolina Department of Health and Environmental Control (SCDHEC) to administer this regulation with respect to lands under the jurisdiction of the South Carolina Department of Transportation. The code can be found at the South Carolina Legislature website.
- National Pollutant Discharge Elimination System (NPDES) General Permit Number SCR160000, effective January 1, 2013 (or latest version): The Environmental Protection Agency, in accordance with the Federal Clean Water Act, has granted to the South Carolina Department of Health and Environmental Control (SCDHEC) the authority to administer the Federal NPDES permit program in the State of South Carolina. The permit may be viewed at the SCDOT website.

In accordance with the NPDES General Permit SCR160000 section 2.1.E: "The Prime Contractor hired by SCDOT for a project will become a Secondary Operator with SCDOT upon signing the awarded contract. The Secondary Operator must complete the agreement found in Appendix B of the SCDOT Contract, (Contractor Certification Form). The agreement is to be signed in accordance with the signatory requirements of §122.22 of the South Carolina Regulation 61-9. The agreement is to be maintained with the SWPPP.

By signing the Contract, the contractor accepts/understands the terms and conditions of the *Storm Water Pollution Prevention Plan (SWPPP)* as required by the NPDES General Permit SCR160000 and may be legally accountable to SCDHEC for compliance with the terms and conditions of the SWPPP. In addition, the contractor is responsible for ensuring all subcontractors comply with the SWPPP and the permit requirements.

The SCDOT will complete and forward a *Notice of Intent (NOI)* to SCDHEC. If SCDHEC does not send a letter within 10 business days of receipt of the *NOI*, authorizing coverage, denying coverage, or advising that a review of the *SWPPP* will take place, coverage will be automatically granted.

At the pre-construction conference, with the contractor, the SWPPP will be explained and discussed so that the contractor is made aware of their responsibilities in the *SWPPP*.

Upon authorization of coverage, the SWPPP is to be fully implemented. The prompt installation of erosion coordinated with construction activities to maintain compliance with the above regulations and NPDES General Permit.

Erosion and Sediment Control Inspections are to be conducted by a qualified individual (Certified Erosion Prevention and Sediment Control Inspectors (CEPSCI), P.E., or those as stated in the permit) by the Department at least every 7-calendar days. A representative of the Contractor is also encouraged to accompany the inspection. Correct deficiencies noted during these inspections within the assigned priority period. If deficiencies are not corrected within this timeframe, the RCE can stop all work (except erosion and sediment control measures) until the deficiencies are corrected.

Give special attention to critical areas within the project limits (i.e., running streams, water bodies, wetlands, etc.). In these areas, the RCE may direct the Contractor to undertake immediate corrective action, but in no case, allow these deficiencies to remain unresolved more than 48 hours for a priority 1 deficiency or 7 days for a priority 2 deficiency. This is in accordance with their assigned priority as identified during the Erosion and Sediment Control Inspection.

Failure to adequately comply with the provisions as detailed above or any other required erosion control measures can result in stoppage of all contract operations (except erosion and sediment control measures) until corrective action has been taken. Additional sanctions may be invoked by the SCDHEC in accordance with their authority.

Fines assessed on the Department by SCDHEC as the result of the Contractor's non-compliance or violation of said permit provisions will be paid by the Department and will subsequently be deducted from any monies due to the Contractor. In case no monies are due or available, the fines incurred will be charged against the Contractor's Surety.

July 2017

**PROMPT PAYMENT CLAUSE**

(1) Subject to the provisions on retainage provided in Paragraph (2) below, when a subcontractor has satisfactorily performed a work item of the subcontract, the Contractor must pay the subcontractor for the work item within seven (7) calendar days of the Contractor's receipt of payment from SCDOT. A subcontractor shall be considered to have "satisfactorily performed a work item of the subcontract" when the SCDOT pays the Contractor for that work item. In the case of a second or third tier subcontractor, the 7-day time period begins to run when the 1st tier subcontractor receives payment from the Contractor or when the 2nd tier subcontractor receives payment from the 1st tier subcontractor.

(2) The Contractor may withhold as retainage up to five (5%) percent of a subcontractor's payment until satisfactory completion of all work items of the subcontract. "Satisfactory completion of all work items of the subcontract" shall mean when the SCDOT accepts the last work item of the subcontract. The Contractor must release to the subcontractor any retainage withheld within seven (7) calendar days from the date the Contractor receives payment from SCDOT for the last work item of the subcontract or within seven (7) days from SCDOT's acceptance of the last work item of the subcontract, whichever is the latest to occur. However, upon documentation of good cause provided by the contractor and written concurrence by the Director of Construction, the Contractor may continue to withhold the 5% retainage.

(3) Prior to receiving payment of each monthly estimate, the Contractor shall (a) certify to SCDOT that the construction estimate is complete and that its subcontractors have been paid for work covered by previous estimates, for which they are entitled to be paid, in accordance with paragraphs (1) and (2) above, and (b) submit verification that Contractor has received similar certifications or evidence from its subcontractors that lower tier subcontractors have been paid in accordance with paragraph (1). No payment will be made to Contractor unless such documentation/certification is received or SCDOT has issued written approval for delayed payment and required status reports as follows:

- (i) The obligation to promptly pay subcontractors (all tiers) or to release retainage does not arise if there is a legitimate subcontract dispute with first tier and/or lower tier subcontractors. If there is a subcontract dispute, the Contractor may submit a written request to SCDOT to approve a delay in payment to the subcontractor which shall explain the nature of the dispute and identify relevant subcontract provisions as support. The explanation may include those reasons set forth in the SC Prompt Pay Act (S.C. Code Section 29-6-40). Payment to the subcontractor shall not be withheld without prior SCDOT written approval.
- (ii) Contractor shall submit a status report of the dispute in each monthly progress payment. The status report shall contain:
  - justification for the continuation of nonpayment in the form of a pending judicial proceedings, alternate dispute resolution (ADR) process or administrative proceedings, as evidence of why the delay shall continue; or
  - a certification that the matter is resolved and payment has been issued to the subcontractor (first tier and/or lower tier subcontractors).

(4) Failure to comply with any of the above provisions shall constitute a material breach of the contract and shall result in one or more of the following sanctions: (1) no further payments to the Contractor unless and until compliance is achieved; (2) monetary sanctions; and/or (3) the Contractor being declared in default and being subject to termination pursuant to Section 108.10 of the Standard Specifications.

(5) Any subcontractor who believes it is due payment in accordance with the Prompt Payment Clause may request information from the servicing Resident Construction Engineer (RCE) as to whether and when payment for the subcontractor's work has been made to the Contractor. If payment has been made to the Contractor, and a subcontractor certifies to the RCE that the subcontractor has not been paid within seven (7) calendar days of SCDOT's payment to the Contractor or paid as provided in paragraph (1) for sub-tiers, the RCE will notify the Director of Construction. If SCDOT has not approved the delay in payment pursuant to paragraph 3 above, appropriate remedies set forth in paragraph (4) will be applied. On federally funded projects, the subcontractor may contact the Federal Highway Administration should SCDOT fail to address the non-payment issue.

(6) The Contractor agrees by submitting this bid or proposal that it will include this clause titled "PROMPT PAYMENT CLAUSE," provided by the SCDOT, without modification, in all subcontracts with its subcontractors. Contractor is responsible for requiring all of its subcontractors to include this PROMPT PAYMENT CLAUSE in all lower tier subcontracts. If Contractor knowingly enters or knowingly allows a subcontractor or lower tier subcontractor to enter into a subcontract without the PROMPT PAYMENT CLAUSE, SCDOT may apply the appropriate remedies set forth in paragraph (4) or pursue other available remedies, including breach of contract.

## **SECTION V: BID FORM**



**Lancaster County  
State of South Carolina  
Invitation for Bid**

Solicitation Number: 1502-9  
 Date Issued: 1/23/2020  
 Procurement Officer: Cathy McDaniel  
 Phone: 803-285-6323  
 E-Mail Address: cdmcdaniel@lanastercountysc.net

**DESCRIPTION: Shiloh Unity Road, Phase 1, Lancaster County Sales Tax Program**  
 (Return This Page with Your Offer)

*The Term "Offer" Means Your "Bid" or "Proposal". Offer must be submitted in a sealed package. Solicitation Number & Opening Date must appear on package exterior. See "Submitting Your Offer" provision.*

SUBMIT OFFER BY (Opening Date/Time **3:00 PM, February 20, 2020** (See "Deadline for Submission of Offer" provision)

QUESTIONS MUST BE RECEIVED BY 02-17-2020 (See "Questions from Offerors" provision)

NUMBER OF COPIES TO BE SUBMITTED: **ONE**

PRE-BID CONFERENCE: <b>NONE</b> DATE & TIME:  (As appropriate, see "Conferences - Pre-Bid/Proposal" & "Site Visit" provisions)	LOCATION: <b>N/A</b>
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AWARD & AMENDMENTS	If there is an Intent to Award, at this time, it will be posted with Certified Bid Tabulation on <b>02/21/2020</b> . The award, this solicitation, any amendments, and any related notices will be posted at the following web address: <a href="http://www.mylanastercsc.org/index.asp?Type=B_BASIC&amp;SEC={B0876753-5857-4E46-80CB-1241DF93BAED}">http://www.mylanastercsc.org/index.asp?Type=B_BASIC&amp;SEC={B0876753-5857-4E46-80CB-1241DF93BAED}</a>
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Submit a signed copy of this form with Your Offer. By submitting a bid or proposal, you agree to be bound by the terms of the Solicitation. You agree to hold Your Offer open for a minimum of thirty (30) calendar days after the Opening Date.  
 (See "Signing Your Offer" and "Electronic Signature" provisions.)

NAME OF OFFEROR  (full legal name of business submitting the offer)	Any award issued will be issued to, and the contract will be formed with, the entity identified as the Offeror. The entity named as the offeror must be a single and distinct legal entity. Do not use the name of a branch office or a division of a larger entity if the branch or division is not a separate legal entity, i.e., a separate corporation, partnership, sole proprietorship, etc.
AUTHORIZED SIGNATURE  (Person must be authorized to submit binding offer to contract on behalf of Offeror.)	TAXPAYER IDENTIFICATION NO.  (See "Taxpayer Identification Number" provision)
TITLE  (business title of person signing above)	STATE OF INCORPORATION  (If you are a corporation, identify the state of incorporation.)

OFFEROR'S TYPE OF ENTITY: (Check one)	(See "Signing Your Offer" provision.)
<input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Partnership <input type="checkbox"/> Other _____	
<input type="checkbox"/> Corporate entity (not tax-exempt) <input type="checkbox"/> Corporation (tax-exempt) <input type="checkbox"/> Government entity (federal, state, or local)	

**SHILOH UNITY ROAD, PHASE 1, LANCASTER COUNTY SALES TAX PROGRAM**

**BID FORM**

(Return This Page with Your Offer)

<p><b>HOME OFFICE ADDRESS</b> (Address for offeror's home office / principal place of business)</p>          	<p><b>NOTICE ADDRESS</b> (Address to which all procurement and contract related notices should be sent.) (See "Notice" clause)</p>          <p>_____</p> <p>Area Code - Number - Extension                      Facsimile</p> <p>_____ E-mail Address</p>
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<p><b>PAYMENT ADDRESS</b> (Address to which payments will be sent.) (See "Payment" clause)</p>          <p>_____ Payment Address same as Home Office Address</p> <p>_____ Payment Address same as Notice Address (<b>check only one</b>)</p>	<p><b>ORDER ADDRESS</b> (Address to which purchase orders will be sent) (See "Purchase Orders and "Contract Documents" clauses)</p>          <p>_____ Order Address same as Home Office Address</p> <p>_____ Order Address same as Notice Address (<b>check only one</b>)</p>
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<p><b>ACKNOWLEDGMENT OF AMENDMENTS</b>                  Offerors acknowledges receipt of amendments by indicating amendment number and its date of issue. (See "Amendments to Solicitation" Provision)</p>							
Amendment No.	Amendment Issue Date	Amendment No.	Amendment Issue Date	Amendment No.	Amendment Issue Date	Amendment No.	Amendment Issue Date

**BID SUBMISSION**

**SHILOH UNITY ROAD, PHASE 1, LANCASTER COUNTY SALES TAX PROGRAM****BID FORM**

(Return This Page with Your Offer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
1	Mobilization	LS	1		
2	Traffic Control	LS	1		
3	Cement Modified Recycled Base (10" uniform) Method A	SY	113,736		
4	Portland Cement for Cement Modified Recycled Base (55 LBS/SY)	TON	3,128		
5	Maintenance Stone	TON	50		
6	HMA Surface Course Type C (liquid included) 2" Uniform	SY	6,420		
7	HMA Surface Course Type E (liquid included) 75 LBS/SY	SY	109,187		
8	HMA Surface Course Type C (liquid included) 175 LBS/SY	SY	109,187		
9	Permanent Vegetation	ACRE	14		
10	Permanent Raised Yellow Markers Bi-Di 4 "x 4"	EACH	819		
11	Permanent Construction Signs (ground mounted) Schedule E	SF	432		
12	Permanent Construction Signs (ground mounted) Schedule C	SF	380		
13	Loose Stone/25MPH	SF	68		
14	15" HDPE	LF	24		
15	18" HDPE	LF	24		
16	15" RCP Class III	LF	24		
17	18" RCP Class III	LF	48		
18	24" RCP Class III	LF	64		
19	30" RCP Class III	LF	36		
20	36" RCP Class III	LF	68		
21	72" RCP Class III	LF	16		
22	Catch Basin Type 9	EA	1		
23	Street Sign	EA	16		
24	Sales Tax Signs	EA	4		
25	Silt Fence	LF	500		
26	24" White Solid Lines (Stop) FDP	LF	228		
27	24" White Solid Lines (Stop) Thermoplastic-125 milo	LF	228		
28	4" White Solid Lines (Pavement Edge Lines) FDP	LF	245,670		
29	4 " White Solid Lines (Pavement Edge Lines) Thermoplastic-90 mil	LF	81,890		
30	4" Yellow Solid Lines (No Passing Zone) FDP	LF	245,670		
31	4" Yellow Solid Lines (No Passing Zone) Thermoplastic-90 Mil	LF	81,890		
32	Riprap	TON	20		
33	57 Stone	TON	20		
34	Rumble Strips	MILE	7.5		
35	STOP AHEAD Thermoplastic 125 Mil	EA	2		
36	Borrow	CY	7,000		
37	MT3 Leading End Treatment TL3	EA	26		
38	MGS3 GR Standard Shoulder	LF	5,262.5		
39	Pre-mash Trailing W-Beam Type B 12.5"	EA	10		
40	MTBB Mash Thrie-Beam Barrier Connector	EA	4		
41	Thrie-Beam	LF	100		
<b>GRAND TOTAL</b>					

(Grand Total in Words)

Bidder will complete the Work in accordance with the Contract Documents for the above unit prices, which include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, and all other cost etc., to complete the finish work as stipulated in the Bid Documents.

**SHILOH UNITY ROAD, PHASE 1, LANCASTER COUNTY SALES TAX PROGRAM**

**BID FORM**

**(Return This Page with Your Offer)**

**LISTING OF SUBCONTRACTORS**

Any bidder in response to this Request for Bids shall set forth in his bid the name and location of the place of business for each of the following subcontractors (if so specified) who may perform work or render services to the prime Contractor to or about the construction, or who will specifically fabricate or install a portion of the work. If the prime Contractor determines to use his own employees to perform any portion of the work for which he would otherwise be required to list a subcontractor, and if the prime Contractor is qualified to perform such work under the terms of the Request for Bids, the prime Contractor shall indicate this in his bid and not subcontract any of that work except with the approval of owner for good cause shown.

Failure to list specified subcontractors shall render the prime Contractor's bid non-responsive. No prime Contractor whose bid is accepted shall substitute any person as a subcontractor in place of the subcontractor listed in the original bid, except as specified within the contract documents.

Listing of Subcontractors

Subcontractor: \_\_\_\_\_  
Work to be undertaken: \_\_\_\_\_  
Place of Business: \_\_\_\_\_  
Principal: \_\_\_\_\_  
License No. \_\_\_\_\_

Subcontractor: \_\_\_\_\_  
Work to be undertaken: \_\_\_\_\_  
Place of Business: \_\_\_\_\_  
Principal: \_\_\_\_\_  
License No. \_\_\_\_\_

Subcontractor: \_\_\_\_\_  
Work to be undertaken: \_\_\_\_\_  
Place of Business: \_\_\_\_\_  
Principal: \_\_\_\_\_  
License No.: \_\_\_\_\_

## **SECTION VI: PROJECT INFORMATION**

**PROJECT ESTIMATED QUANTITIES OVERALL AND BY ROAD**

**Overall Line Items and Estimated Total Quantities**

ITEM #	DESCRIPTION	UNIT	QUANTITY
1	Mobilization	LS	1
2	Traffic Control	LS	1
3	Cement Modified Recycled Base (10" uniform) Method A	SY	113,736
4	Portland Cement for Cement Modified Recycled Base (55 LBS/SY)	TON	3,128
5	Maintenance Stone	TON	50
6	HMA Surface Course Type C (liquid included) 2" Uniform	SY	6,420
7	HMA Surface Course Type E (liquid included) 75 LBS/SY	SY	109,187
8	HMA Surface Course Type C (liquid included) 175 LBS/SY	SY	109,187
9	Permanent Vegetation	ACRE	14
10	Permanent Raised Yellow Markers Bi-Di 4 "x 4"	EACH	819
11	Permanent Construction Signs (ground mounted) Schedule E	SF	432
12	Permanent Construction Signs (ground mounted) Schedule C	SF	380
13	Loose Stone/25MPH	SF	68
14	15" HDPE	LF	24
15	18" HDPE	LF	24
16	15" RCP Class III	LF	24
17	18" RCP Class III	LF	48
18	24" RCP Class III	LF	64
19	30" RCP Class III	LF	36
20	36" RCP Class III	LF	68
21	72" RCP Class III	LF	16
22	Catch Basin Type 9	EA	1
23	Street Sign	EA	16
24	Sales Tax Signs	EA	4
25	Silt Fence	LF	500
26	24" White Solid Lines (Stop) FDP	LF	228
27	24" White Solid Lines (Stop) Thermoplastic-125 milo	LF	228
28	4" White Solid Lines (Pavement Edge Lines) FDP	LF	245,670
29	4 " White Solid Lines (Pavement Edge Lines) Thermoplastic-90 mil	LF	81,890
30	4" Yellow Solid Lines (No Passing Zone) FDP	LF	245,670
31	4" Yellow Solid Lines (No Passing Zone) Thermoplastic-90 Mil	LF	81,890
32	Riprap	TON	20
33	57 Stone	TON	20
34	Rumble Strips	MILE	7.5
35	STOP AHEAD Thermoplastic 125 Mil	EA	2
36	Borrow	CY	7,000
37	MT3 Leading End Treatment TL3	EA	26
38	MGS3 GR Standard Shoulder	LF	5,262.5
39	Pre-mash Trailing W-Beam Type B 12.5"	EA	10
40	MTBB Mash Thrie-Beam Barrier Connector	EA	4
41	Thrie-Beam	LF	100

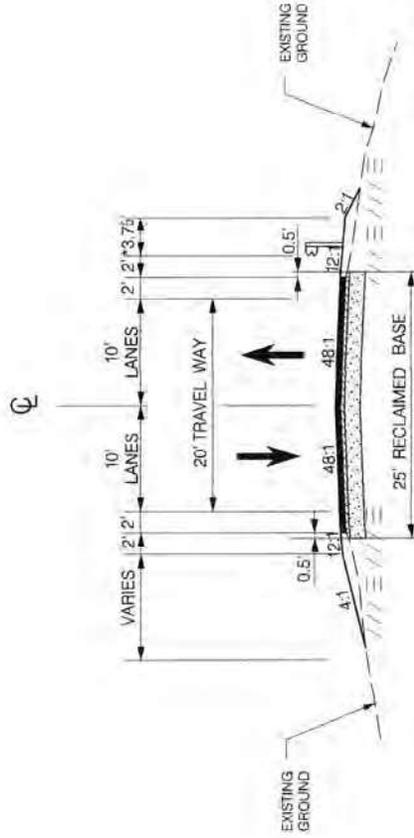
**Road Name:** Shiloh Unity Road S-28  
**Start:** SC 522  
**Stop:** SC 9  
**Road Length in feet:** 40945  
**Width in feet:** 24  
**Miles:** 7.76

ITEM #	DESCRIPTION	UNIT	QUANTITY
1	Mobilization	LS	1
2	Traffic Control	LS	1
3	Cement Modified Recycled Base (10" uniform) Method A	SY	113,736
4	Portland Cement for Cement Modified Recycled Base (55 LBS/SY)	TON	3,128
5	Maintenance Stone	TON	50
6	HMA Surface Course Type C (liquid included) 2" Uniform	SY	6,420
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19	30" RCP Class III	LF	36
20	36" RCP Class III	LF	68
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32	Riprap	TON	20
33	57 Stone	TON	20
34	Rumble Strips	MILE	7.5
35	STOP AHEAD Thermoplastic 125 Mil	EA	2
36	Borrow	CY	7,000
37	MT3 Leading End Treatment TL3	EA	26
38	MGS3 GR Standard Shoulder	LF	5,262.5
39	Pre-mash Trailing W-Beam Type B 12.5"	EA	10
40	MTBB Mash Thrie-Beam Barrier Connector	EA	4
41	Thrie-Beam	LF	100

## TYPICAL SECTIONS

## TYPICAL SECTIONS

1- Shiloh Unity Road



**TYPICAL CROSS SECTION**  
**S-29-28 SHILOH UNITY ROAD**  
**FROM SC-522 TO SC-9**  
 N.T.S.

- LEGEND:**
- 175 LBS. - HOT MIX ASPHALT SURFACE COURSE TYPE C (LIQUID INCLUDED) OVERLAY
  - 75 LBS. - HOT MIX ASPHALT TYPE E (LIQUID INCLUDED)
  - RECLAIMED CEMENT MODIFIED RECYCLED BASE (10" UNIFORM) CURING METHOD A

- GENERAL NOTES FOR TYPICAL CROSS SECTION:**
- 1) CONTRACTOR TO CONTACT ALL UTILITY COMPANIES BEFORE ANY WORK COMMENCES. VERIFY UTILITIES WITHIN PROJECT AREA.
  - 2) ALL WORK SHALL CONFORM WITH APPLICABLE SCDOT REQUIREMENTS AND CODES.
  - 3) TEMPORARY CONTROL OF STORM WATER DRAINAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, AND SHALL BE MAINTAINED THROUGHOUT THE PERIOD OF CONSTRUCTION.
  - 4) WHERE EXISTING PAVEMENT IS SHOWN TO BE MATCHED-EDGE OR CONTACT FACE WITH EXISTING PAVEMENT SHALL BE SAW CUT TO A REAL VERTICAL LINE.
  - 5) ADJUSTMENT, RELOCATION, OR REPLACEMENT OF EXISTING TELEPHONE, ELECTRIC, TELEVISION, AND OTHER PRIVATE UTILITIES SHALL BE COMPLETED IN CONJUNCTION WITH THE TIMEFRAME OF THE CONTRACT SCHEDULE. THIS WORK SHALL BE COORDINATED BY THE CONTRACTOR.
  - 6) ALL RADII ARE 25' UNLESS OTHERWISE SHOWN.
  - 7) ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH SOUTH CAROLINA DEPARTMENT OF HIGHWAYS AND PUBLIC INFRASTRUCTURE, THE SOUTH CAROLINA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, EDITION 2000.

1502-9

**INFRASTRUCTURE**  
 CONSULTING & ENGINEERING

LANCASTER COUNTY  
 SALES TAX PROGRAM # 9

REV. DATE: 11.15.11

## PROJECT STANDARD DRAWINGS

Standard Drawings Attached for Reference:

605-010-02 (Scheme E)

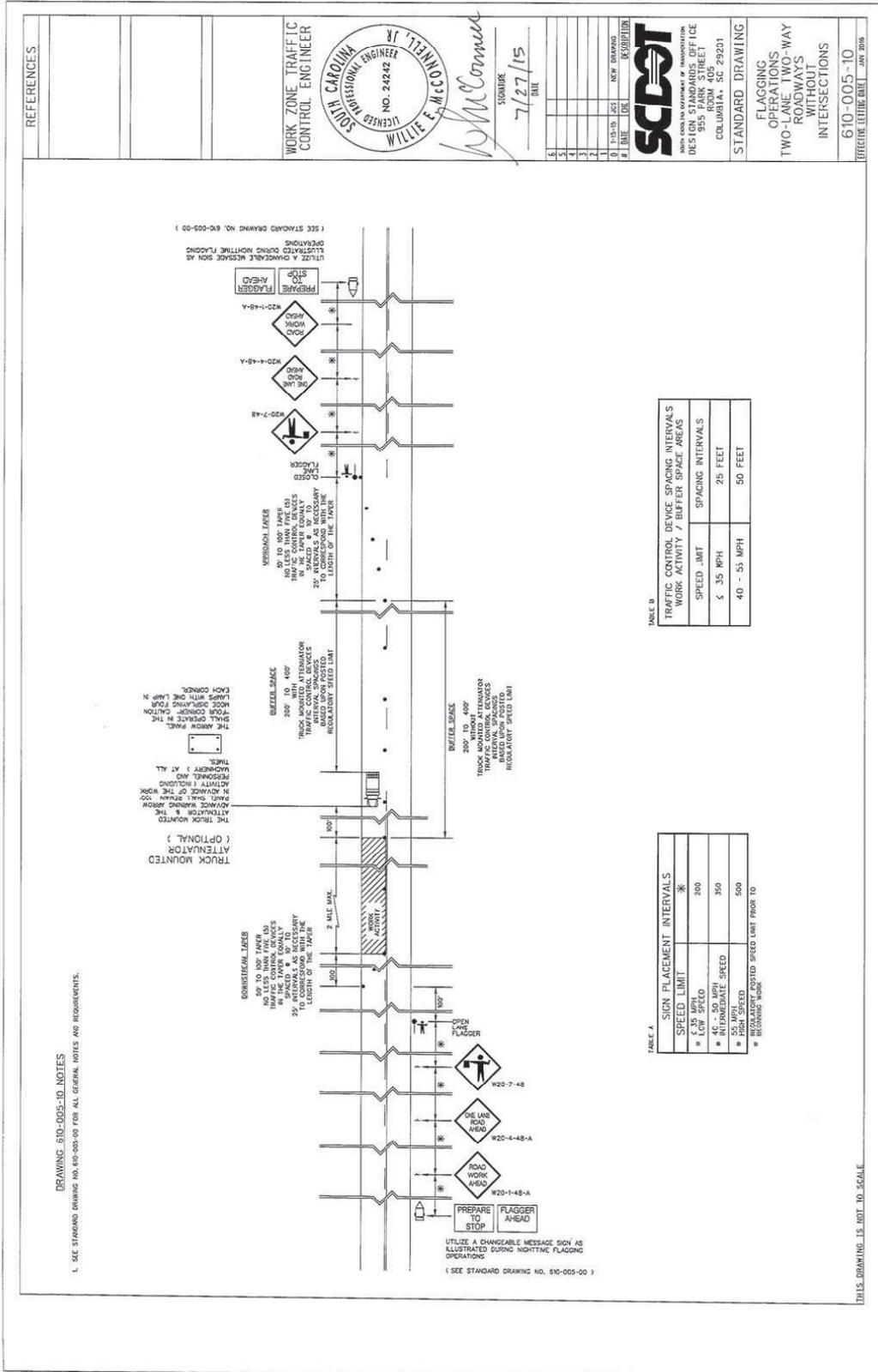
610-005-00 (Flagging Operations)

630-105-00 (Pavement Marking Typical & Raised Marker Placement & Detail)

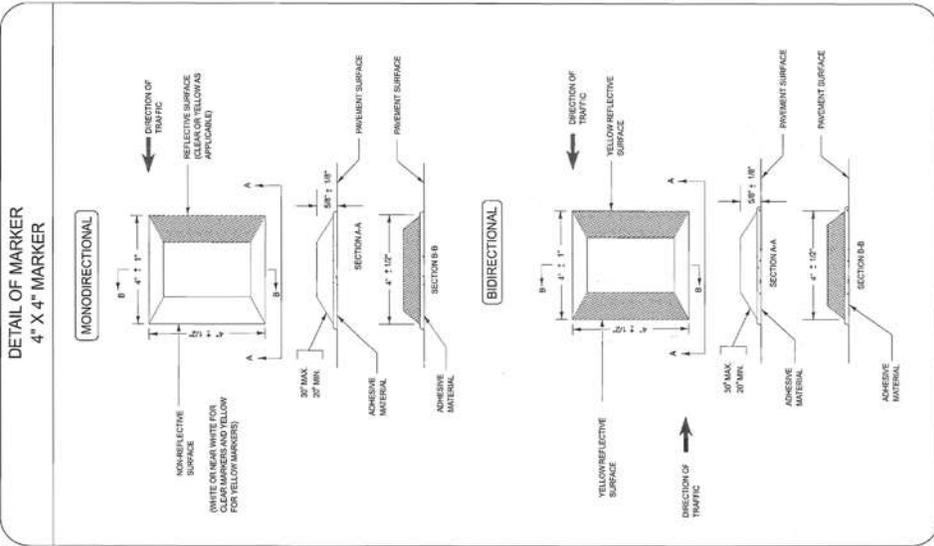
651-110-00 (Flat Sheet Mounting Details)







PAVEMENT MARKING TYPICAL  
RAISED MARKER PLACEMENT & DETAIL



NOTES

1. ALL RAISED PAVEMENT MARKERS ARE TO BE SURFACE MOUNTED.
2. RAISED PAVEMENT MARKERS ARE USED TO SUPPLEMENT LINE OR SYMBOL PAVEMENT MARKINGS.
3. RAISED MARKERS ARE USED ONLY ON ROADWAYS SPECIFICALLY INDICATED ON THE PLANS. SOME ROADWAYS WILL HAVE LINE AND SYMBOL PAVEMENT MARKINGS, WITHOUT THE USE OF PAVEMENT MARKERS.
4. RAISED PAVEMENT MARKERS ARE THE SAME COLOR AS THE LINE THEY SUPPLEMENT. CLEAR PAVEMENT MARKERS ARE USED WITH WHITE LINES OR SYMBOLS, AND YELLOW, WITH YELLOW LINES. WHEN RED PAVEMENT MARKERS ARE USED, THE RED COLOR IS TO INDICATE A WORKING WAY MOVEMENT.
5. RAISED MARKERS ARE USED TO SUPPLEMENT LANE LINES AND LEFT EDGE LINES AGAINST NARROW (8' OR LESS AND NORMALLY PAVED) MEDIANS. THEY ARE NOT USED WITH RIGHT EDGE LINES OR LEFT EDGE LINES ADJACENT TO A WIDE (NORMALLY 30' OR MORE AND EARTH) MEDIAN.
6. RAISED MARKERS ARE NOT NORMALLY USED ADJACENT TO A RAISED CURBED MEDIAN WHERE THE MEDIAN IS ONE HALF MILE OR MORE IN LENGTH. RAISED MARKERS MAY HOWEVER, BE USED ADJACENT TO RAISED MEDIAN WHERE THE MEDIAN IS SHORTER THAN ONE HALF MILE. RAISED MARKERS AT NIGHT IS ENHANCED BY CONTINUING THE RAISED MARKINGS. FOR SHORT RAISED MEDIANS THE RAISED PAVEMENT MARKERS ARE USED EVEN THOUGH THE YELLOW LINE THEY SUPPLEMENT IS TERMINATED WHERE THE MEDIAN BEGINS.
7. MARKERS SUPPLEMENTING SOLID LINES SHALL BE SPACED AT 40'.
8. RAISED PAVEMENT MARKERS ARE NOT USED ADJACENT TO CURB AND GUTTER EXCEPT WHERE SPECIFIED BY PLAN NOTES.
9. REFLECTIVE PORTION OF MARKERS MUST BE PLACED SO AS TO BE VIEWED BY THE INTENDED APPROACHING DRIVERS ON THE ROADWAY BEING MARKED.
10. THERE WILL BE A MINIMUM OF TWO RAISED MARKERS PER TURN LANE. IF ONLY TWO BROKEN LINES ARE USED, THERE WILL BE A RAISED MARKER WILL BE USED BEFORE AND AFTER THE LINE.
11. THERE WILL BE A MINIMUM REFLECTIVE AREA OF 2.5 sq. ft.

NO.	DATE	BY	DESCRIPTION

STONING AND MARKING  
ENGINEER



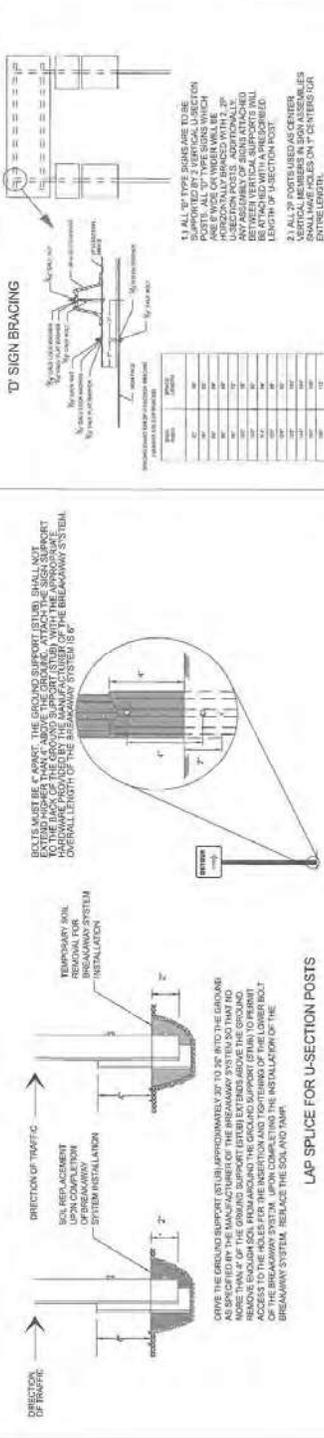
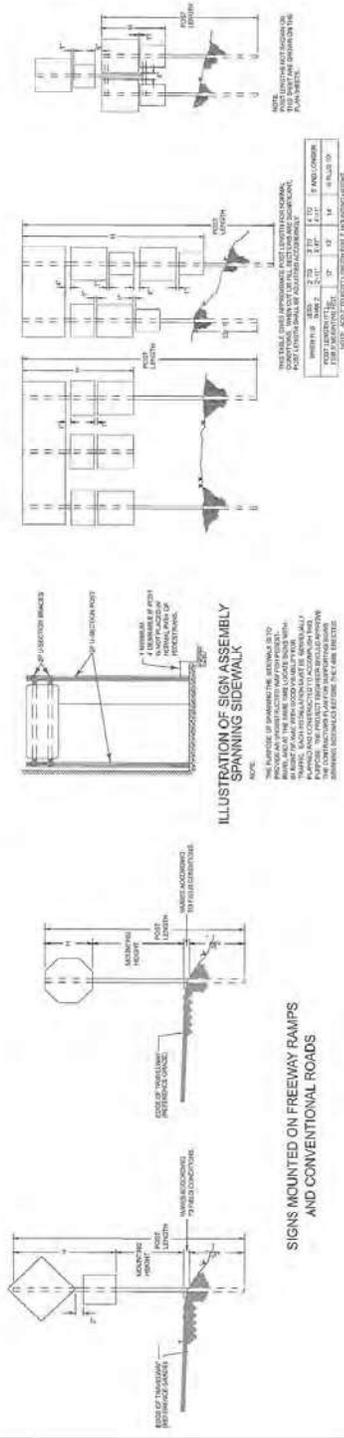
DATE  
2-12-08

**SCDOT**  
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DESIGN STANDARDS OFFICE  
955 PARK STREET  
ROOM 400  
COLUMBIA, SC 29201

STANDARD DRAWING  
PAVEMENT MARKING TYPICAL  
RAISED MARKER  
PLACEMENT & DETAIL

630-105-00  
REVISIONS

# FLAT SHEET SIGN MOUNTING DETAILS



**SIZE & LENGTH OF U-SECTION POSTS FOR SINGLE SIGNS**

SIGN	10 FT SIGN		12 FT SIGN		14 FT SIGN		16 FT SIGN		18 FT SIGN		20 FT SIGN		22 FT SIGN		24 FT SIGN		26 FT SIGN		28 FT SIGN		30 FT SIGN	
	POST HEIGHT (FT)	POST LENGTH (FT)																				
10 FT	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
12 FT	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32
14 FT	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34
16 FT	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36
18 FT	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
20 FT	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40
22 FT	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
24 FT	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44	44
26 FT	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44	44	46	46
28 FT	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44	44	46	46	48	48
30 FT	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44	44	46	46	48	48	50	50

**REFERENCES**

**SIGNING AND MARKING ENGINEER**

**SCDOT**

DESIGN STANDARDS OFFICE  
555 PARK STREET  
COLUMBIA, SC 29901

**STANDARD DRAWING**

**FLAT SHEET MOUNTING DETAILS**

651-110-00

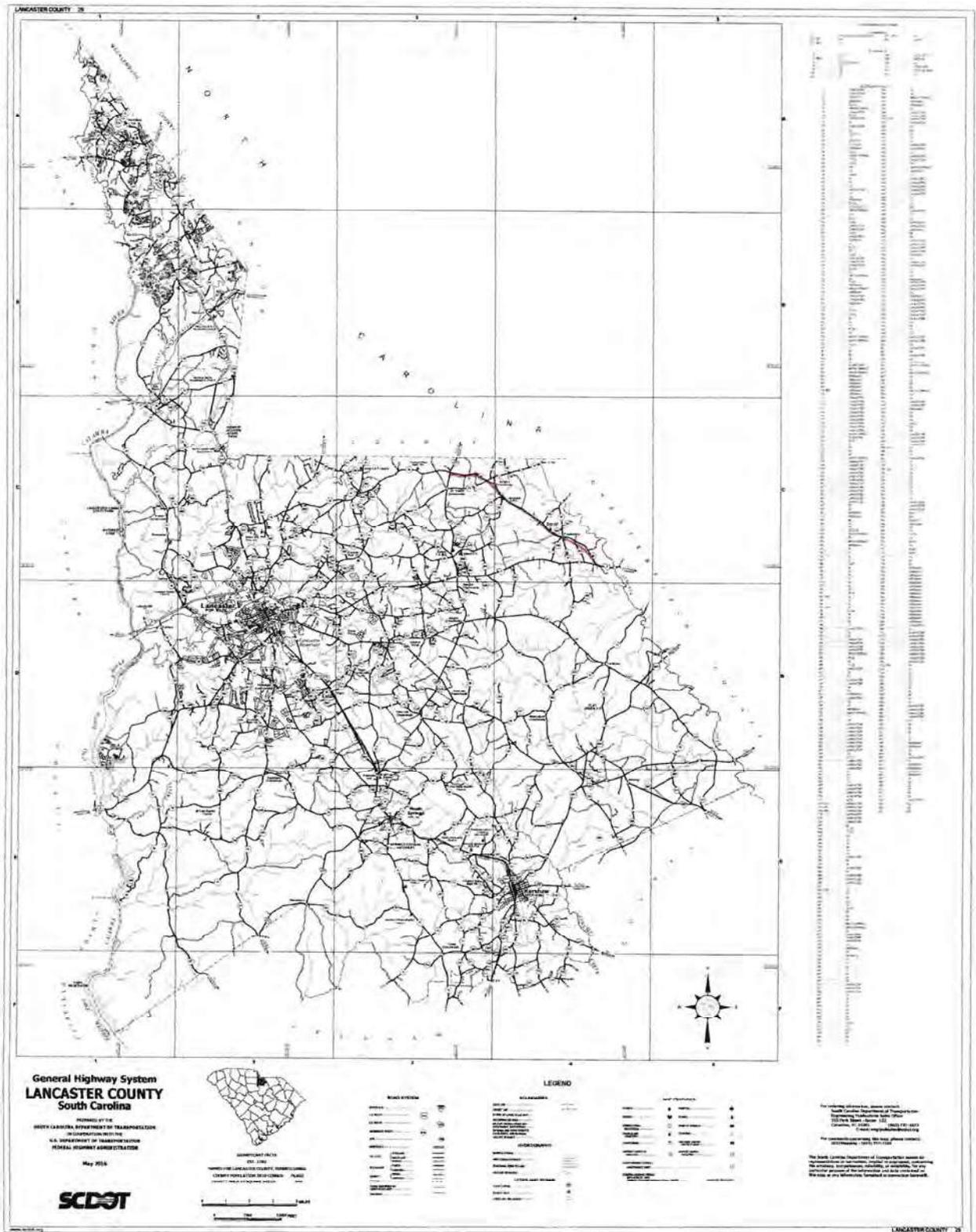
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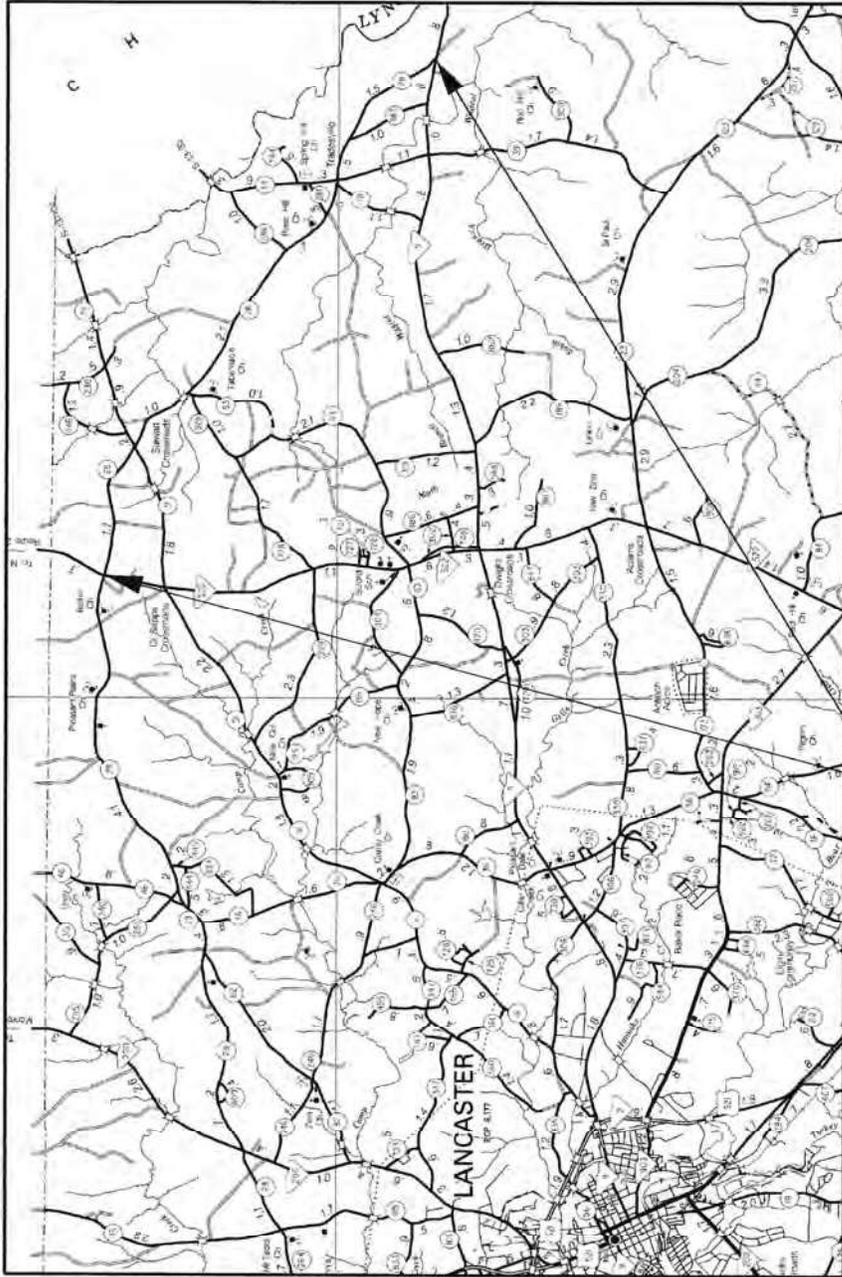
**PROJECT MAPS**

## SCDOT Lancaster County Map Road Strip Map

1. County Map
2. Shiloh Unity Road



LANCASTER COUNTY  
REPAVING S-29-28 SHILOH UNITY ROAD



SHILOH UNITY ROAD (S-29-28)  
BEGIN CONSTRUCTION  
END CONSTRUCTION

1502-9



LANCASTER COUNTY  
SALES TAX PROGRAM # B

DATE: 1/15/15  
DWG NO.

**SIGN SCHEDULE**

## Street Signs

Road Name	Intersection
Shiloh Unity Road	North Rocky Creek Road
Shiloh Unity Road	Gaslight Avenue
Shiloh Unity Road	Lamplighter Road
Shiloh Unity Road	Whittle Street
Shiloh Unity Road	Whey Street
Shiloh Unity Road	Camp Creek Road
Shiloh Unity Road	Zeb Deese Road
Shiloh Unity Road	Tabernacle Road
Shiloh Unity Road	Plyler Mill Road
Shiloh Unity Road	Alee Lane
Shiloh Unity Road	Jerry Funderburk Road
Shiloh Unity Road	Spring Hill Church Road
Shiloh Unity Road	Stacks Road
Shiloh Unity Road	Bertha Knight Road
Shiloh Unity Road	Brady Road
Shiloh Unity Road	Pageland Highway

All signs will be installed on 14-gauge, 2" square galvanized posts, breakaway supports, per SCDOT Standard Drawings. All signs will meet SCDOT Specifications

Note A: Stop signs will be R-1-1-30

Note B: 25 MPH Speed Limit Signs will be W13-1-24-25

Note C: 35 MPH Speed Limit Signs will be W13-1-24-35

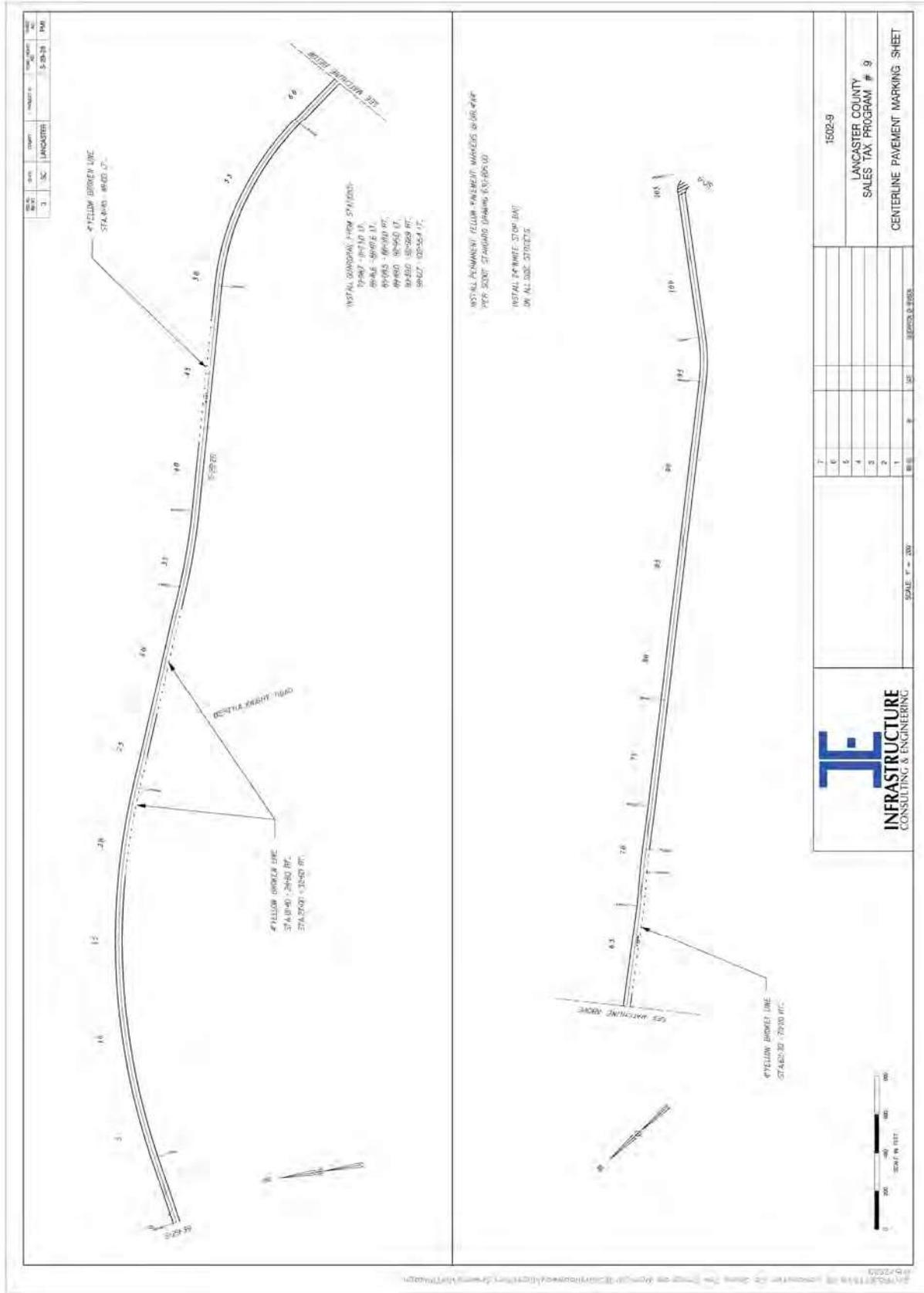
Note D: Sales Tax Sign will be 36" x 24", .080 Aluminum with reflective sheeting,  
Design as shown on next page.

Note E: Street Signs will be white on green, 6" high, 4" white HIP letters, .080 aluminum, double faced, 30" to 42" in length depending on street name. Pay item for street sign, includes furnishing and installing post, which will contain 2 signs with names of intersecting roads and removal of existing sign.

**PAVEMENT MARKING PLANS**

## Pavement Marking Plans

- 1- Shiloh Unity Road



NO.	DATE	DESCRIPTION	BY	CHKD.
1	05-20-20	ISSUED FOR PERMITS	MM	MM
2	05-20-20	ISSUED FOR PERMITS	MM	MM
3	05-20-20	ISSUED FOR PERMITS	MM	MM

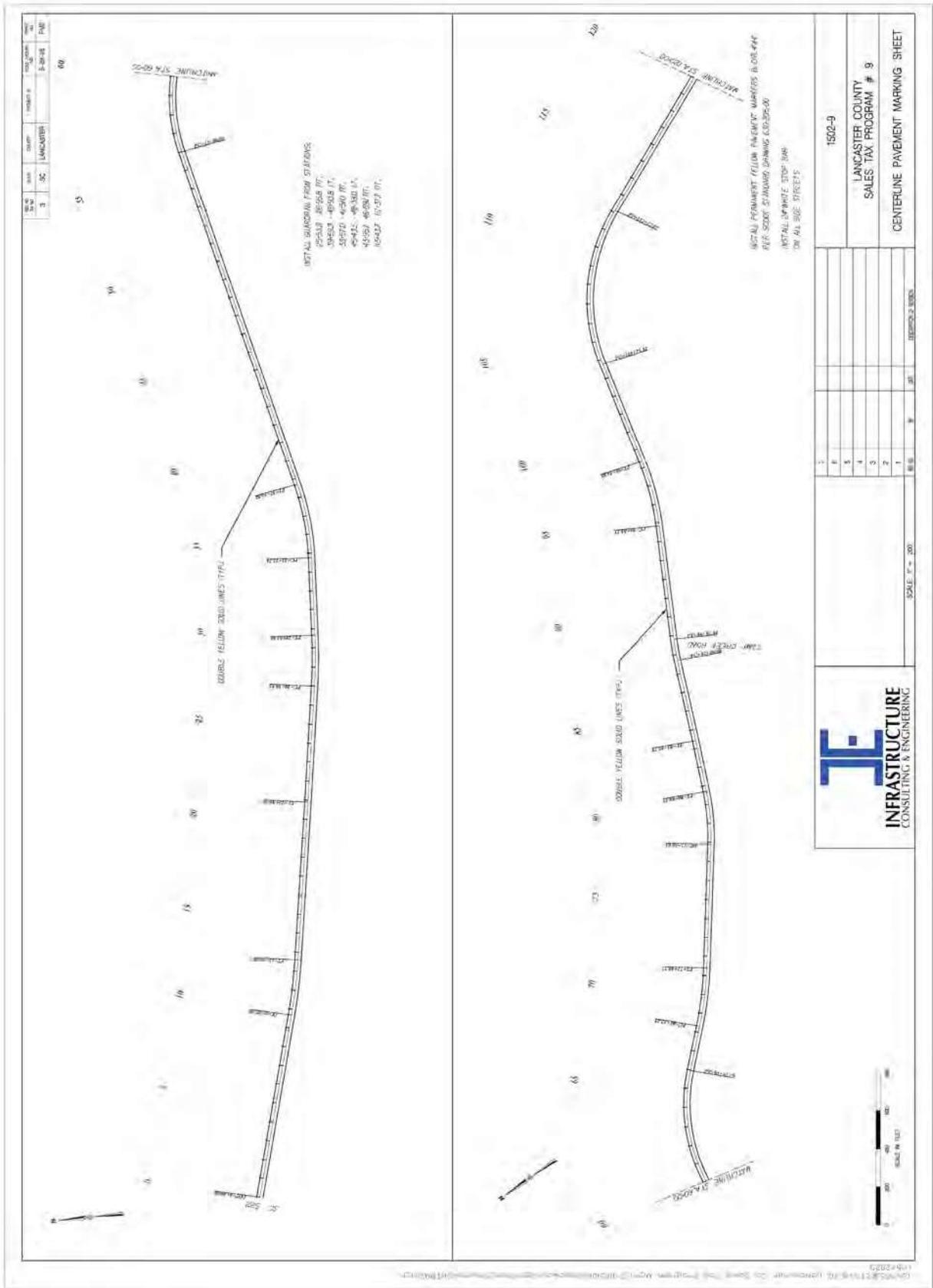
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6					
5					
4					
3					
2					
1					

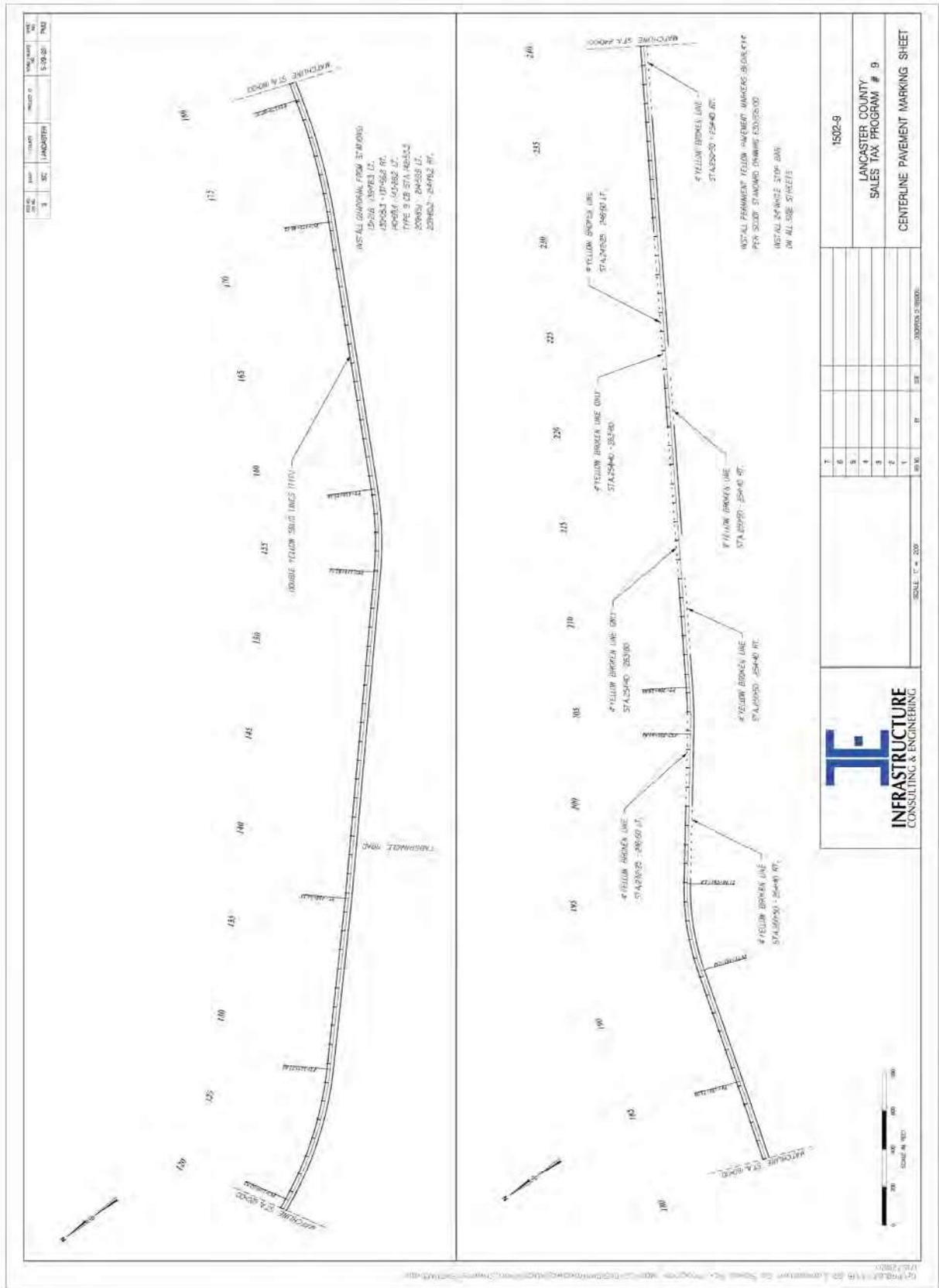
SCALE: 1" = 200'

DATE: 05-20-20

**INFRASTRUCTURE**  
CONSULTING & ENGINEERING

1502-9  
LANCASTER COUNTY  
SALES TAX PROGRAM # 9  
CENTERLINE PAVEMENT MARKING SHEET



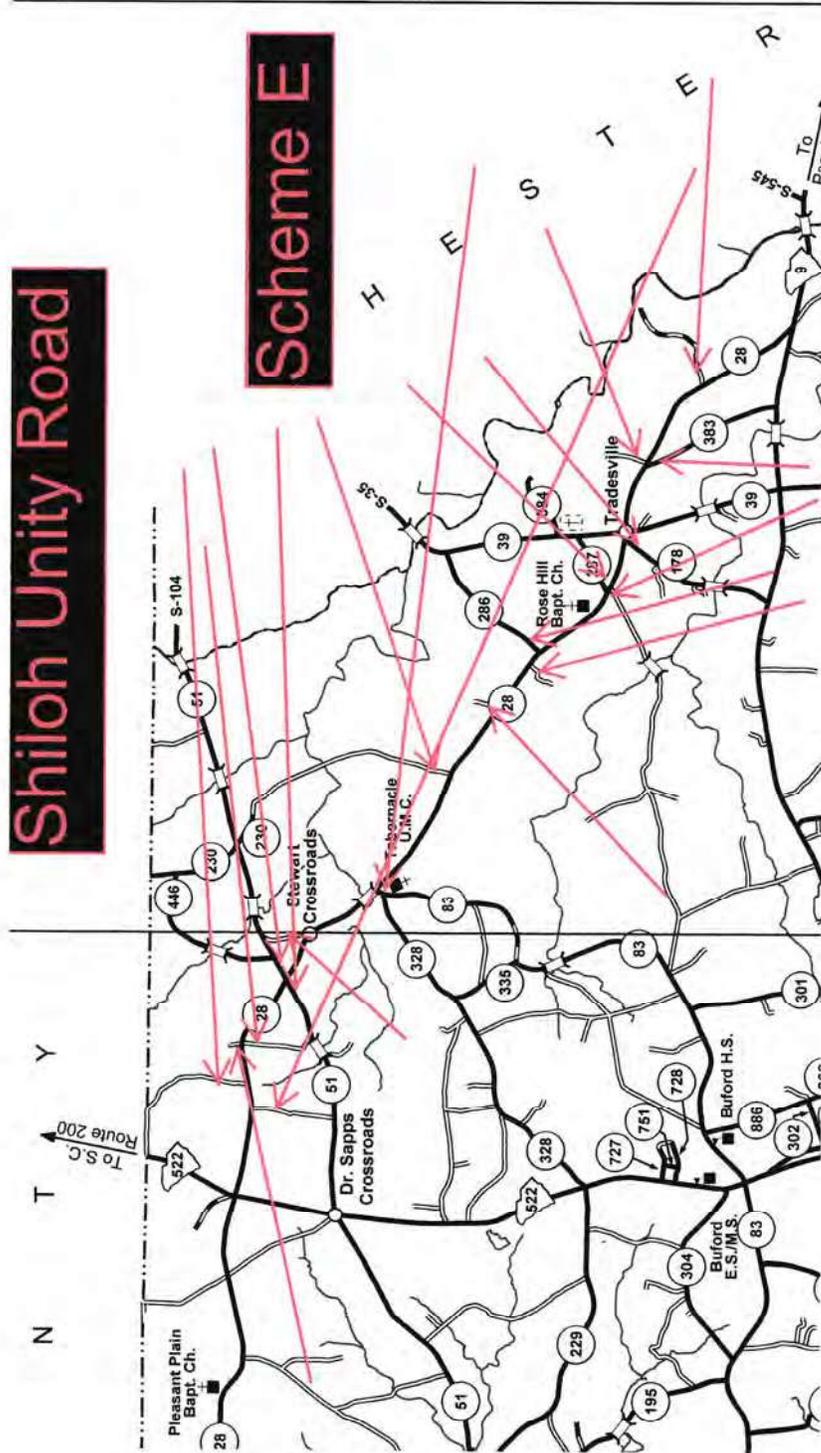


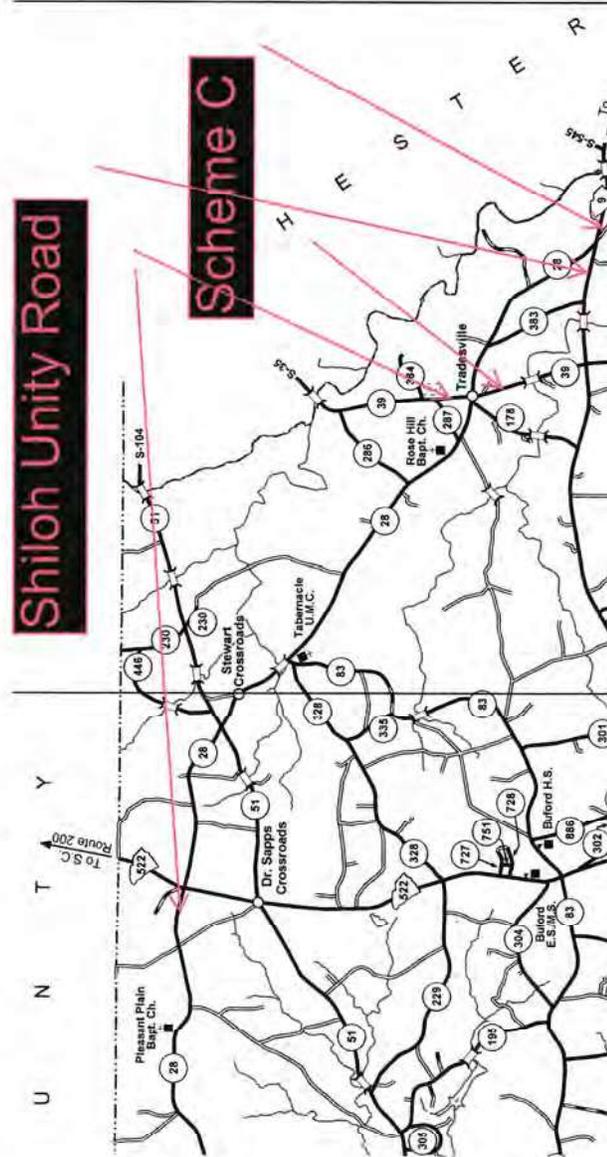


**PERMANENT CONSTRUCTION SIGNS**

## Permanent Construction Signs

1. Shiloh Unity Road





## Shiloh Unity Road, Phase I

### **Loose Stone/25MPH Sign**

This sign will be placed 500' into project and every mile thereafter on both lanes

### **Sales Tax Sign**

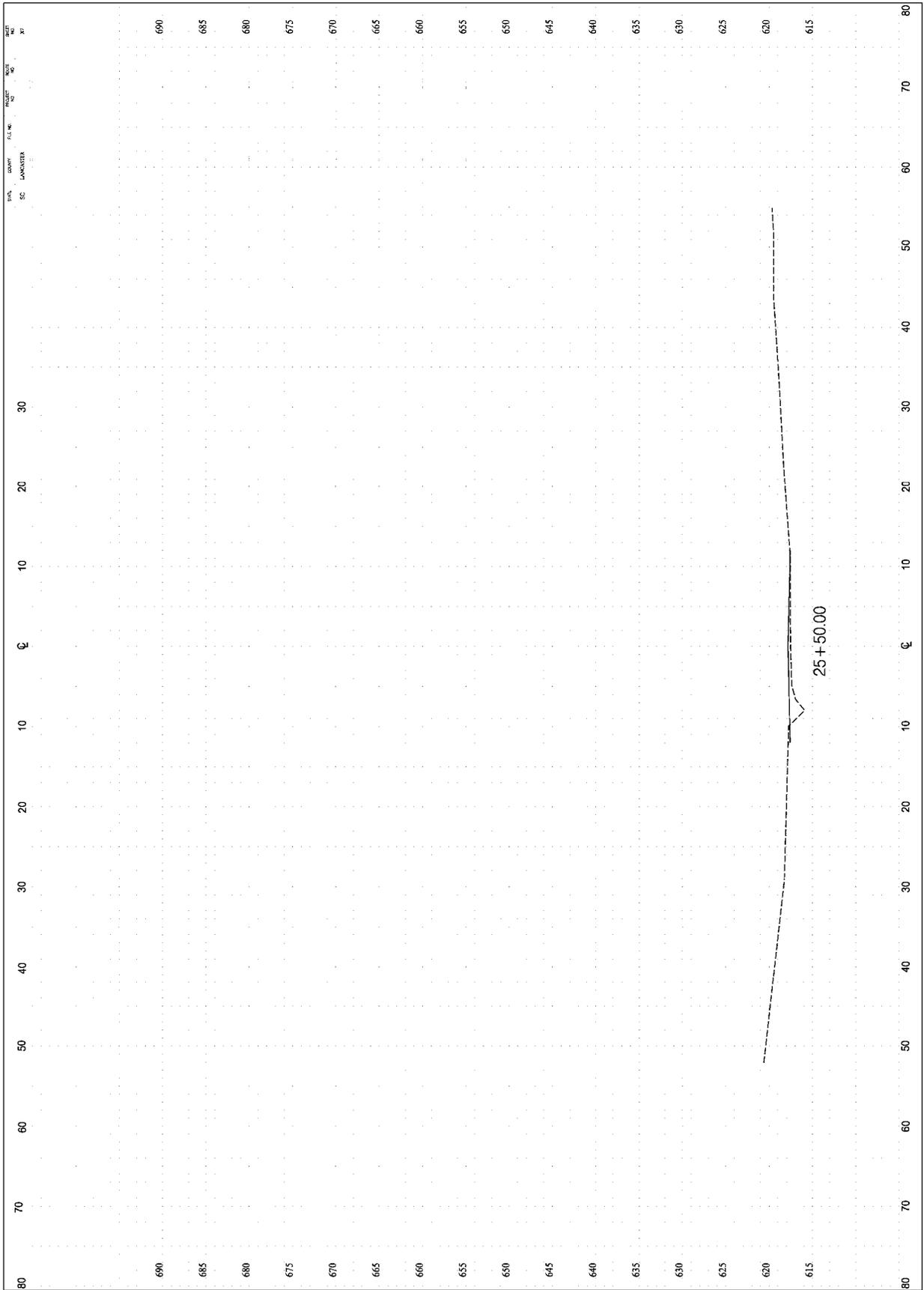
This sign will be placed 250' into project at begin and end of project and also 250' into project at Old Camden Monroe Highway intersection.

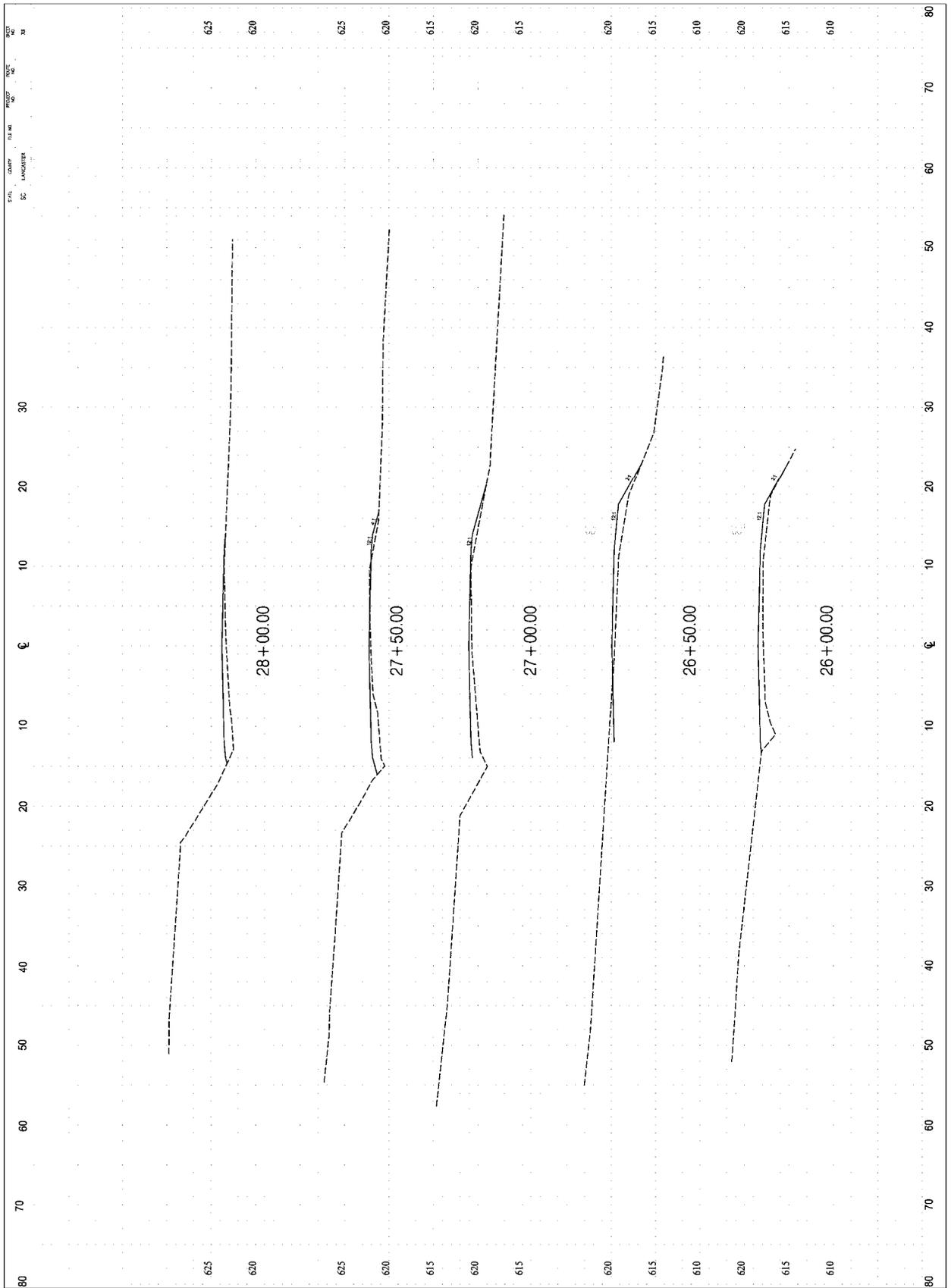
**GUARD RAIL PLANS  
(See Cross Section Plans)**

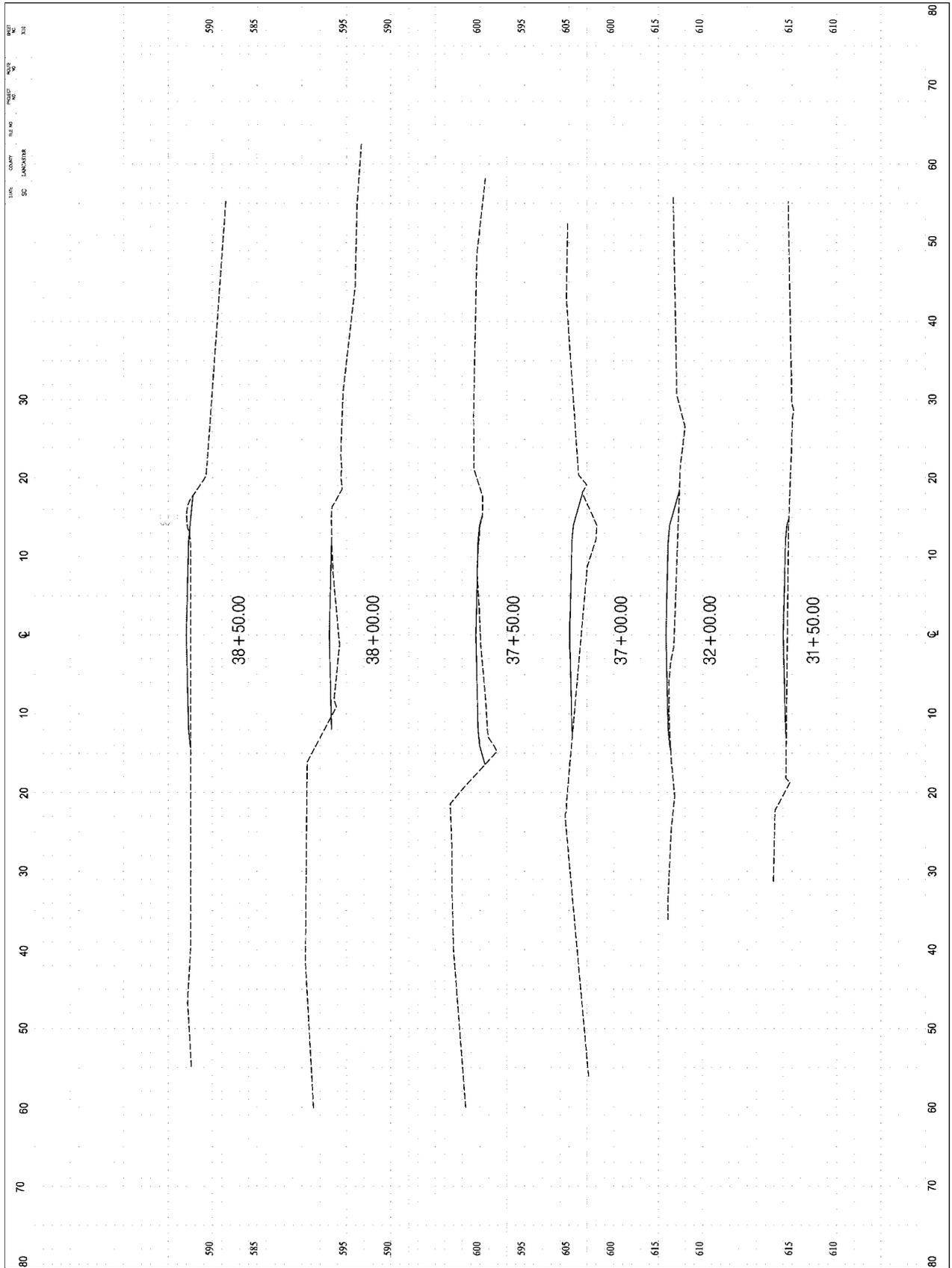
## Shiloh Unity Guardrail Stationing

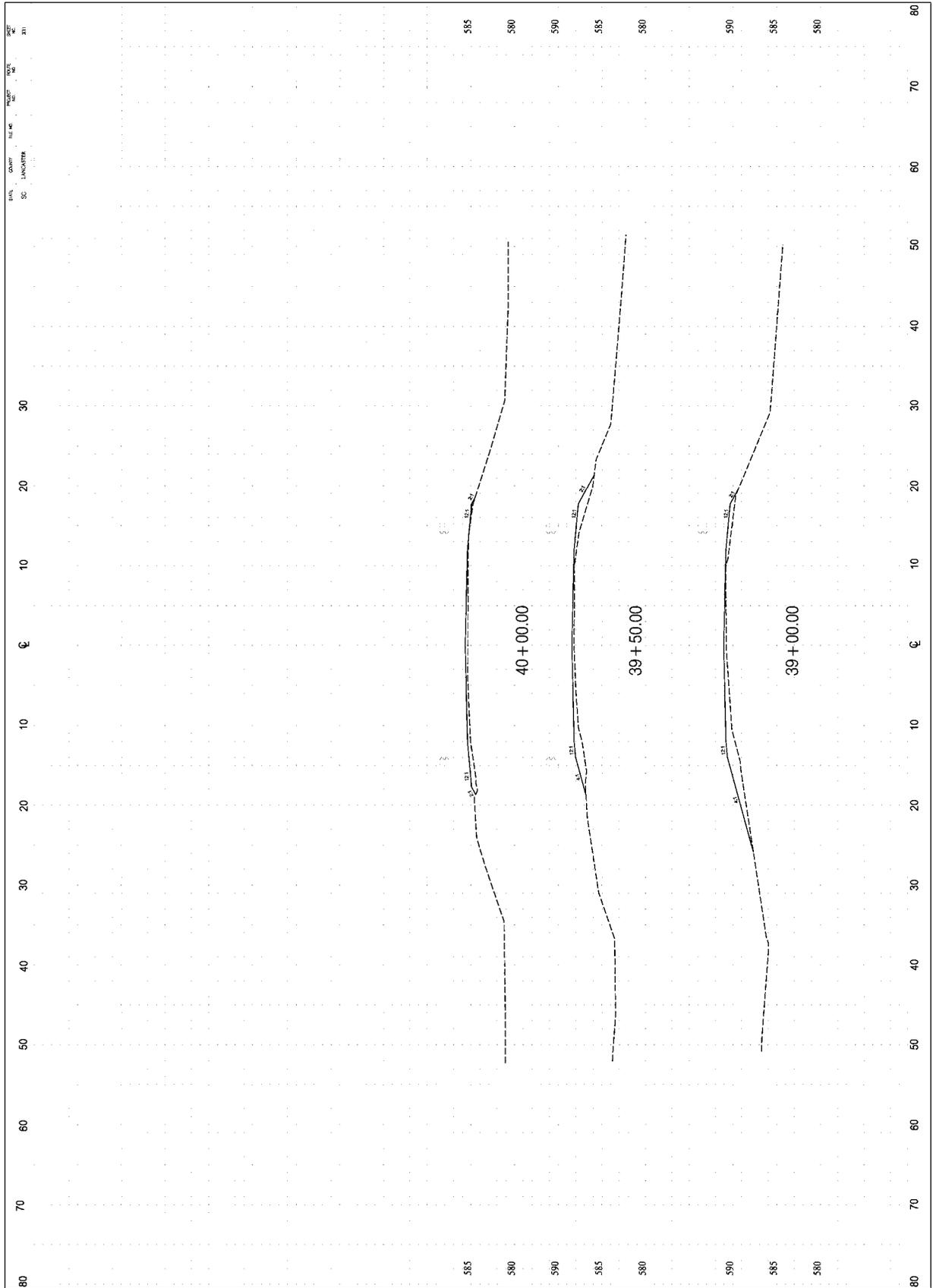
Type B, wrap radius at driveway	25+53.8 - 26+95.8 RT.	MT3
MT3	39+59.3 - 42+90.8 LT.	MT3
MT3	38+57.0 - 41+51.0 RT.	MT3
MT3	45+43.5 - 48+38.0 LT.	MT3
MT3	43+95.1 - 46+89.1 RT.	MT3
MT3	113+43.7 - 117+37.7 RT.	MT3
MT3	131+21.6 - 138+78.3 LT.	MT3
MT3	130+05.3 - 137+56.8 RT.	MT3
MT3	140+69.4 - 143+28.2 LT.	Type B, wrap radius at driveway
Install Type 9 CB Sta. 142+53.3, Reinstall driveway culvert with 36" RCP, tie to Type 9 raising invert 2', backfill ditch		
MT3	209+85.1 - 214+59.9 LT.	Type B, wrap radius at driveway
MT3	208+60.2 - 214+79.2 RT.	MT3
MT3	279+25.8 - 282+39.3 LT.	Type B, wrap radius at driveway
MT3	278+18.6 - 281+13.3 RT.	Type B, wrap radius at driveway
Type B, wrap radius at driveway	79+98.7 - 81+73.0 LT.	Type B, wrap radius at driveway
MT3	86+16.6 - 88+97.6 LT.	MT3
Type B, wrap radius at driveway	85+08.5 - 88+08.0 RT.	MT3
Type B, wrap radius at driveway	89+89.0 - 92+95.0 LT.	Type B, wrap radius at driveway
Type B, wrap radius at driveway	90+39.0 92+92.9 RT.	Type B, wrap radius at driveway
MT3	98+61.7 - 102+55.4 RT.	MT3

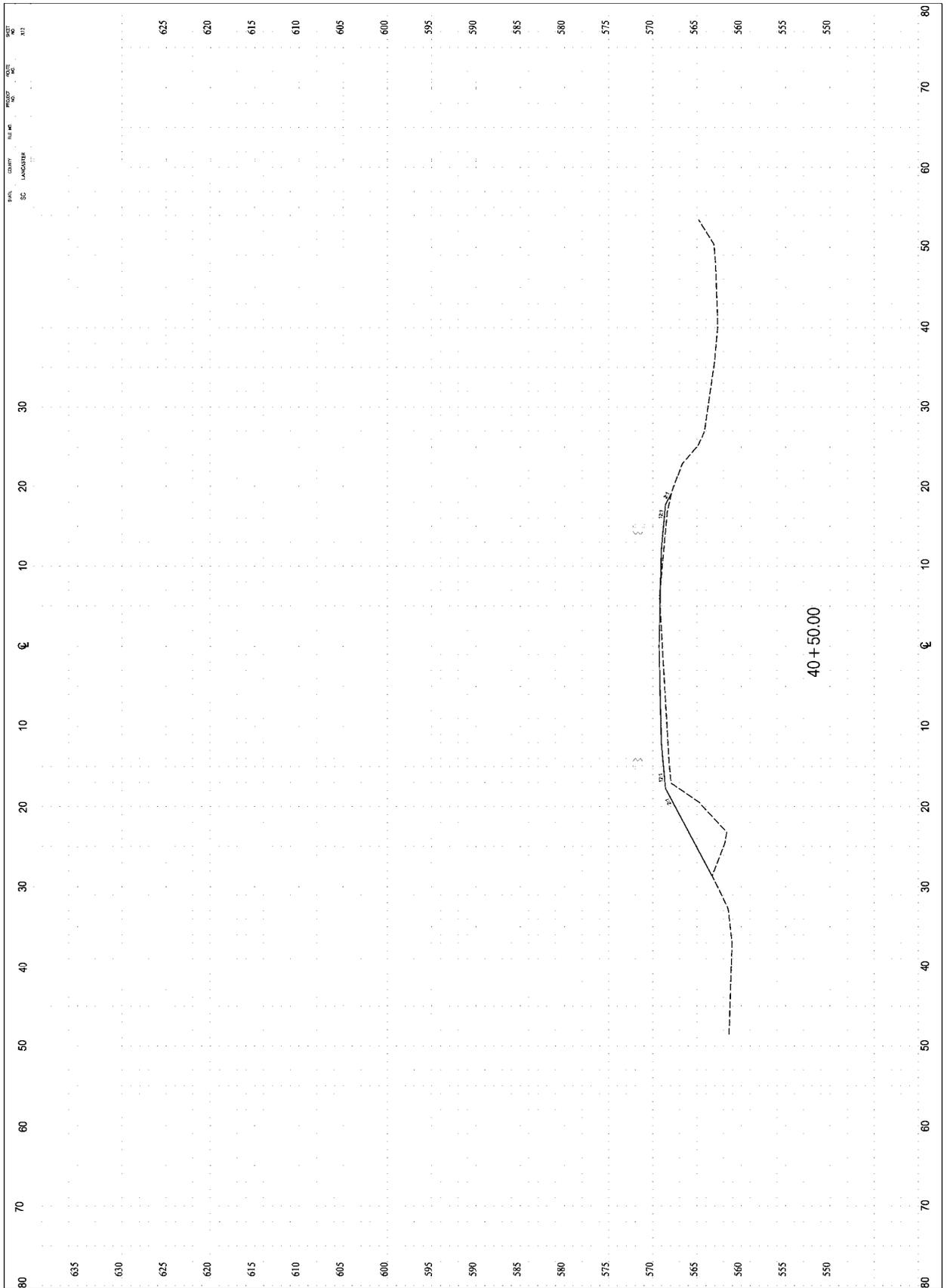
# CROSS SECTIONS

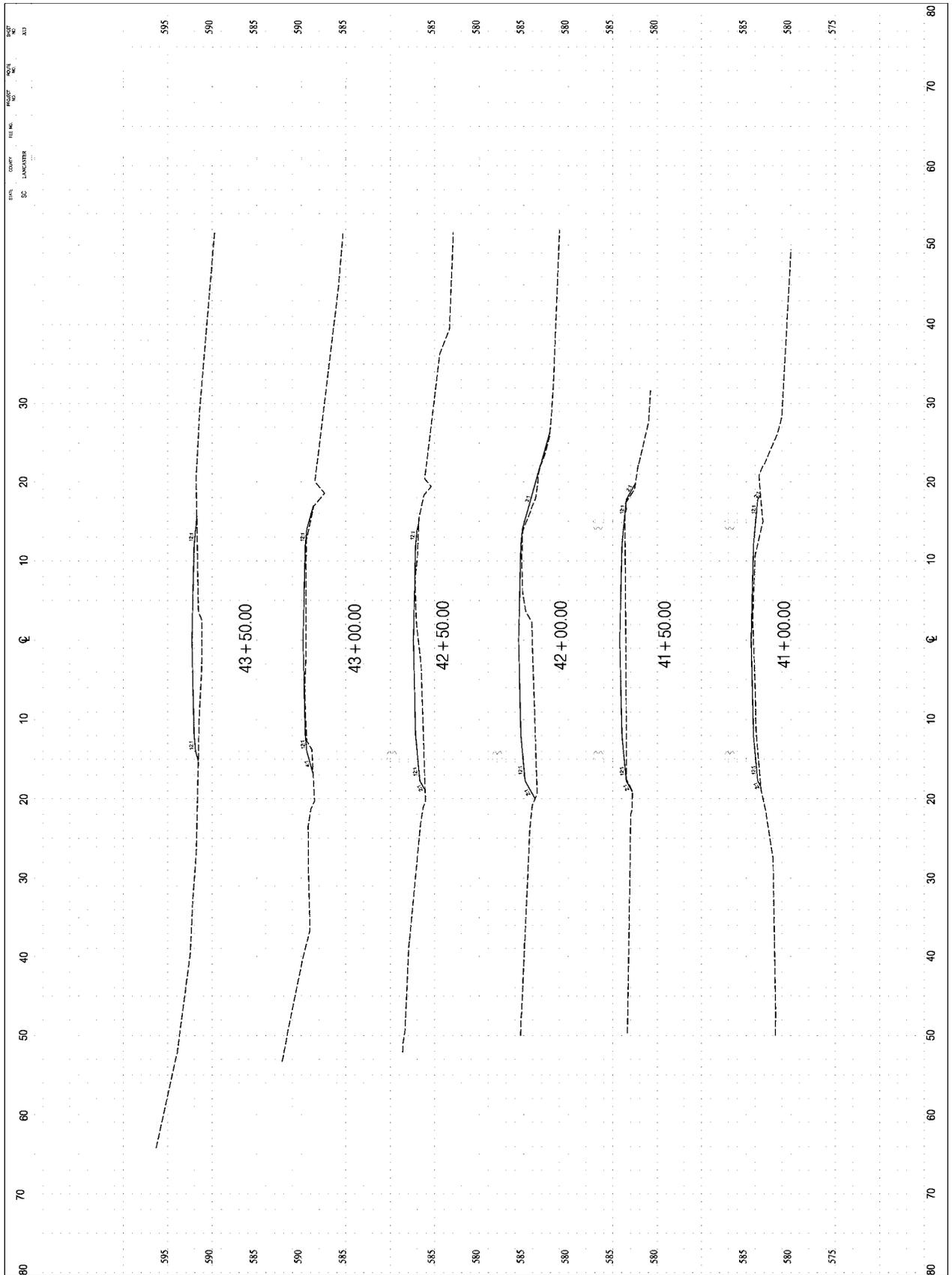


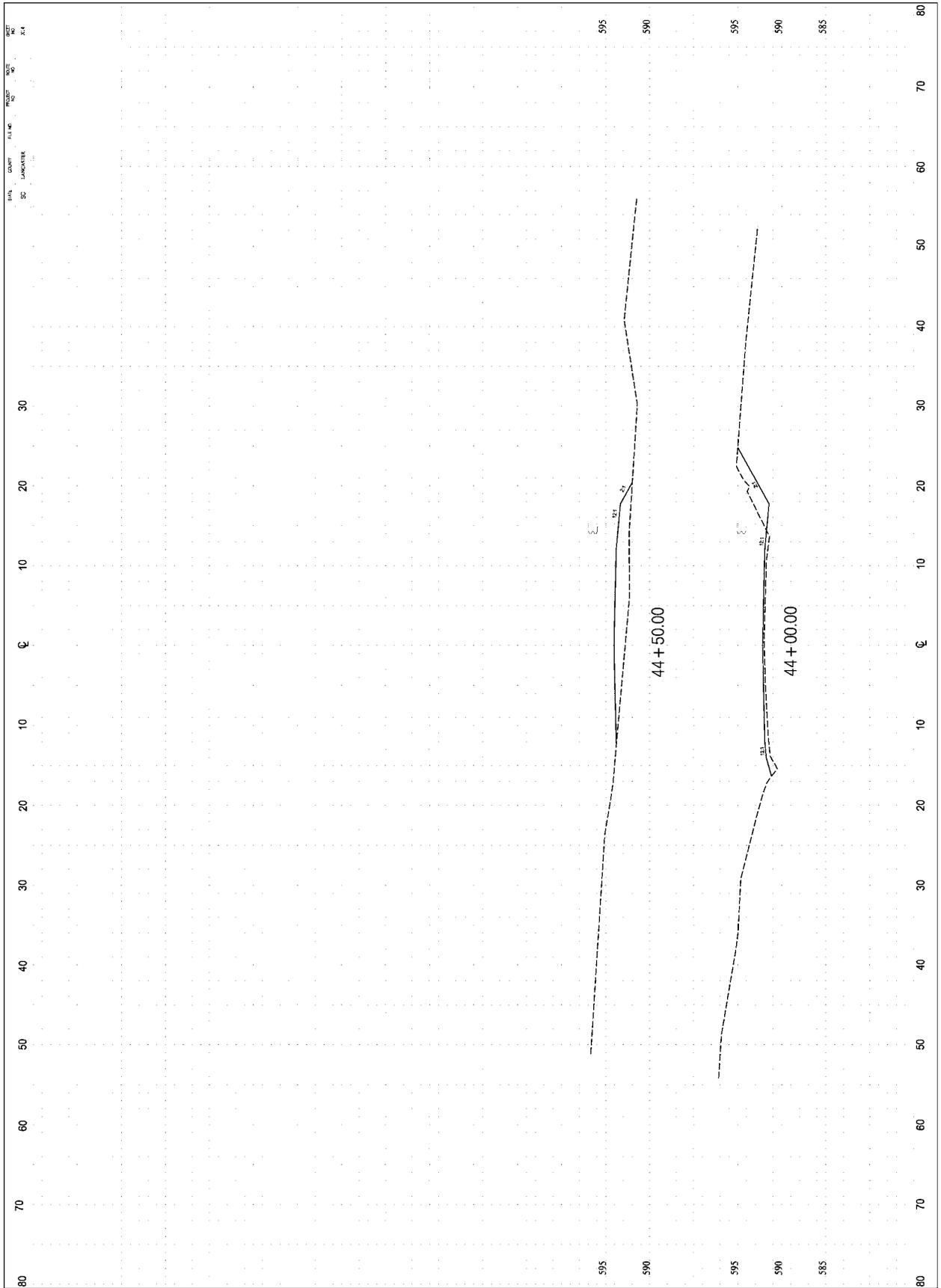


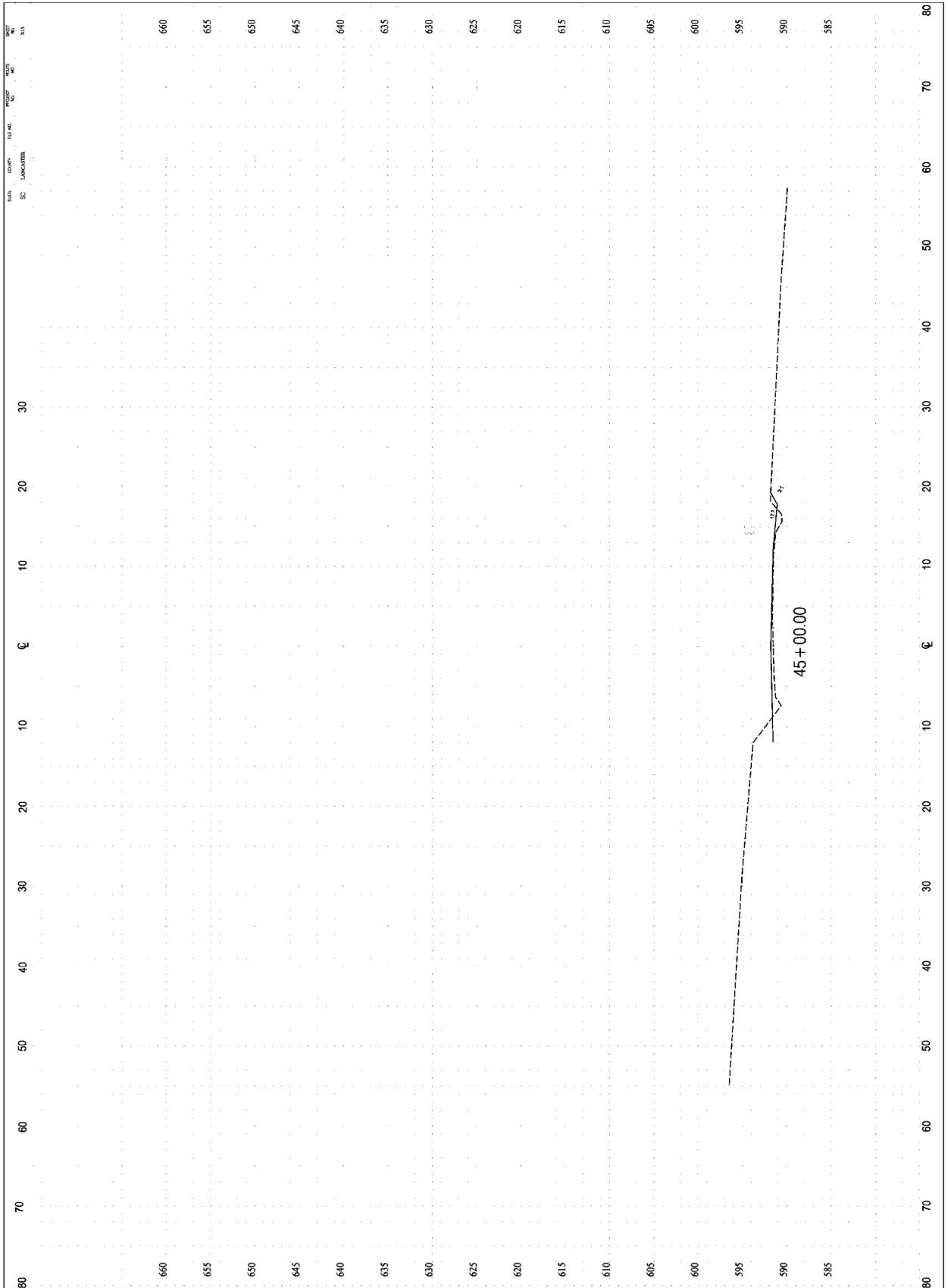


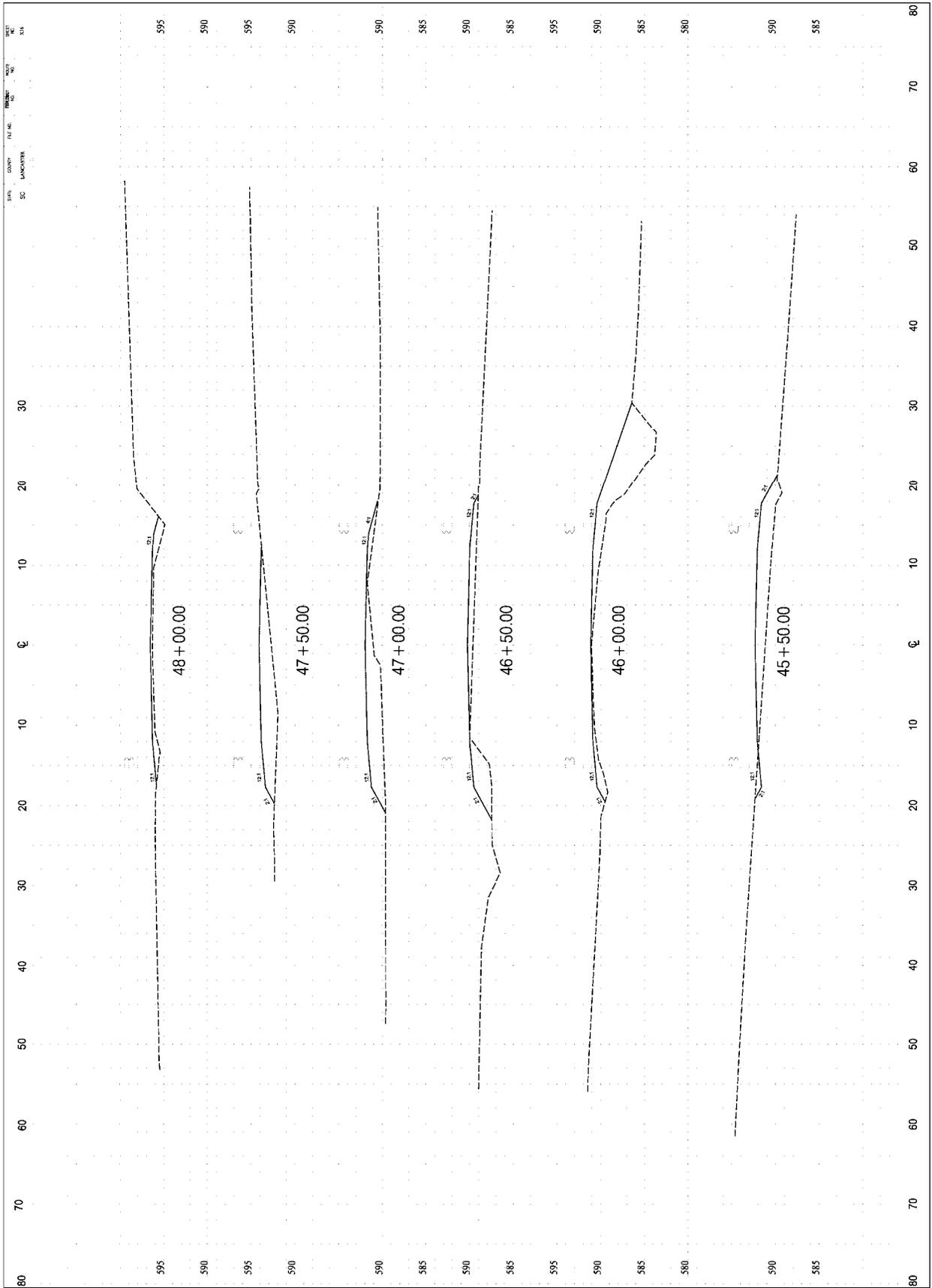


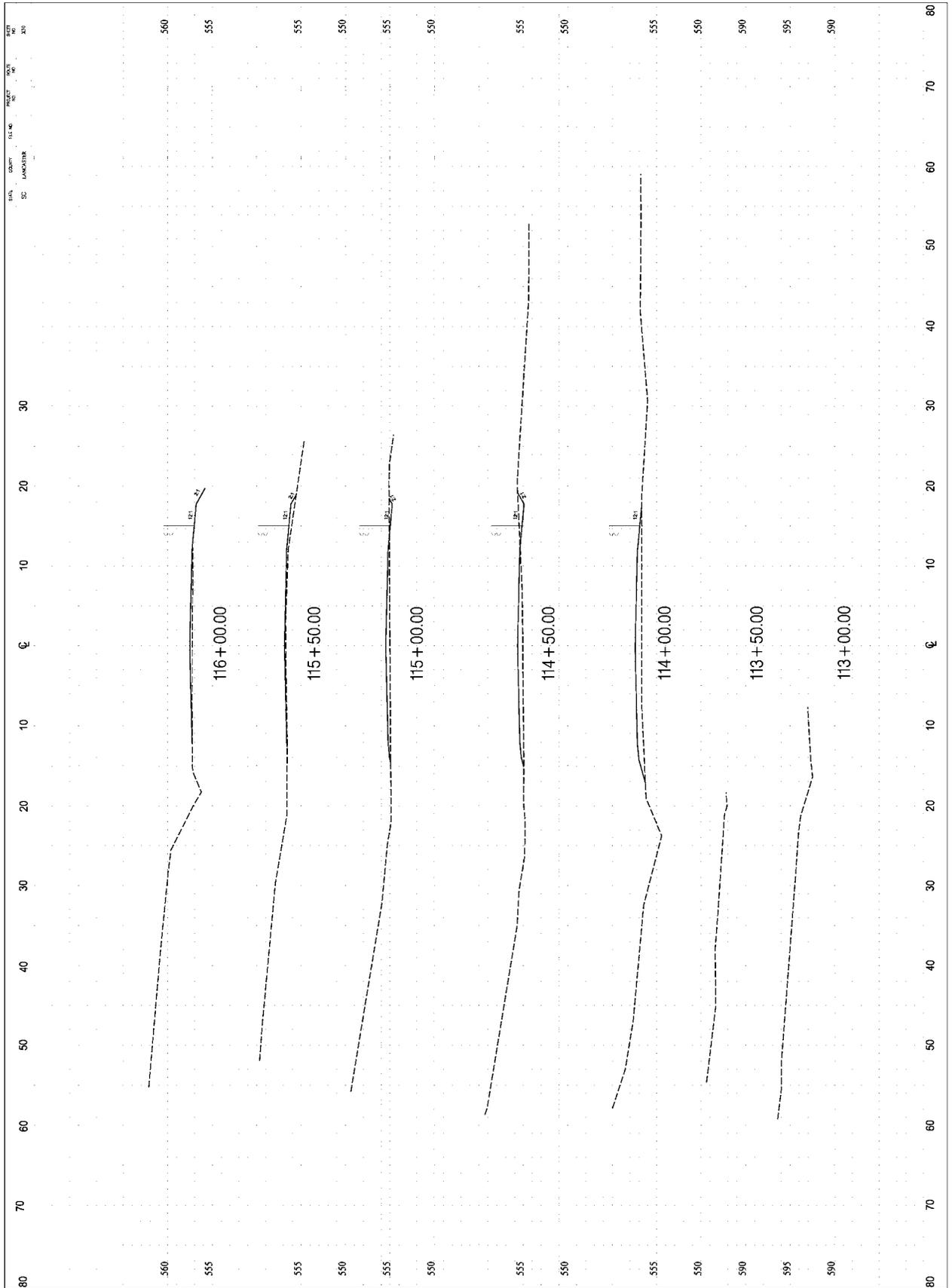


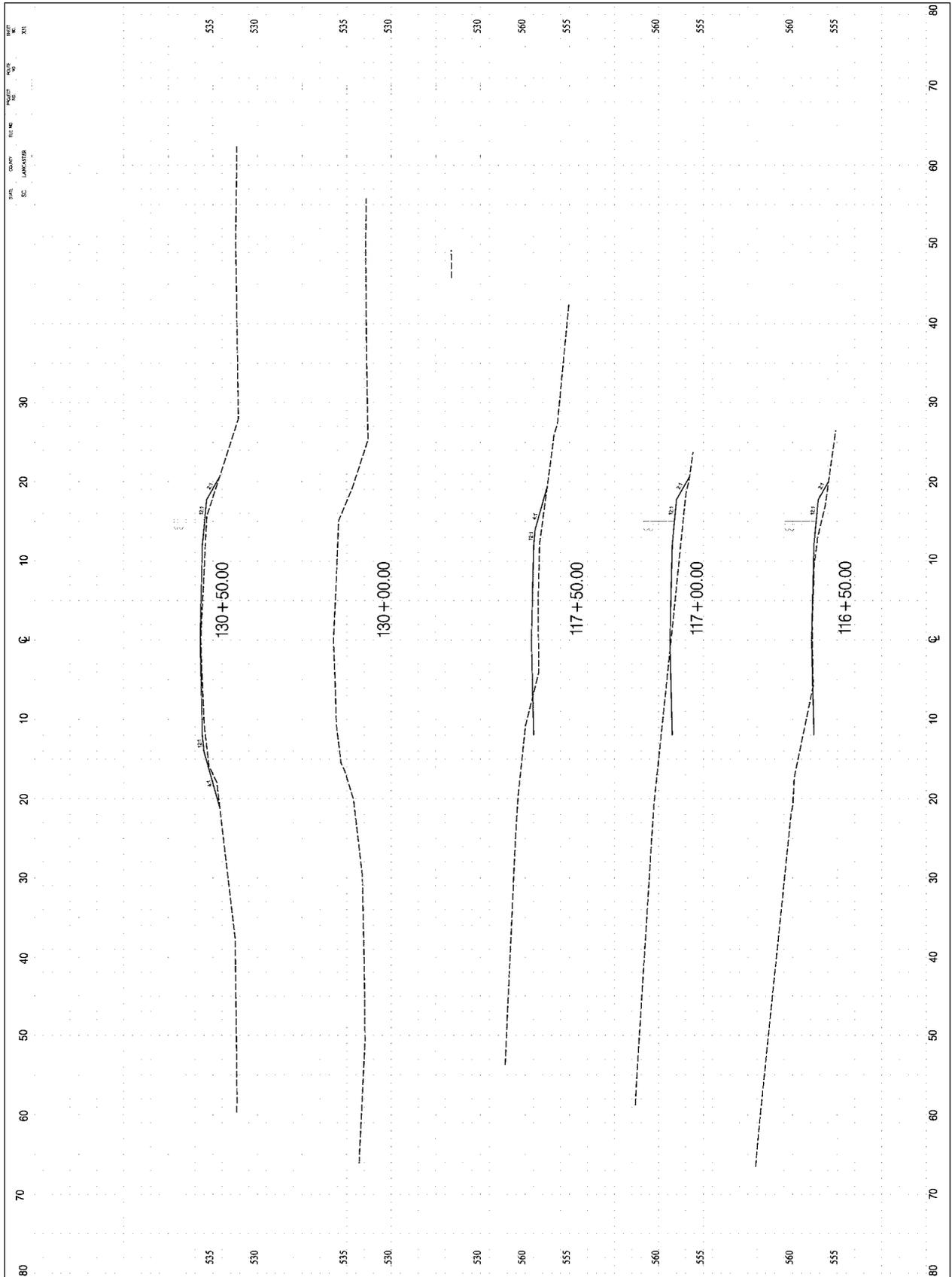


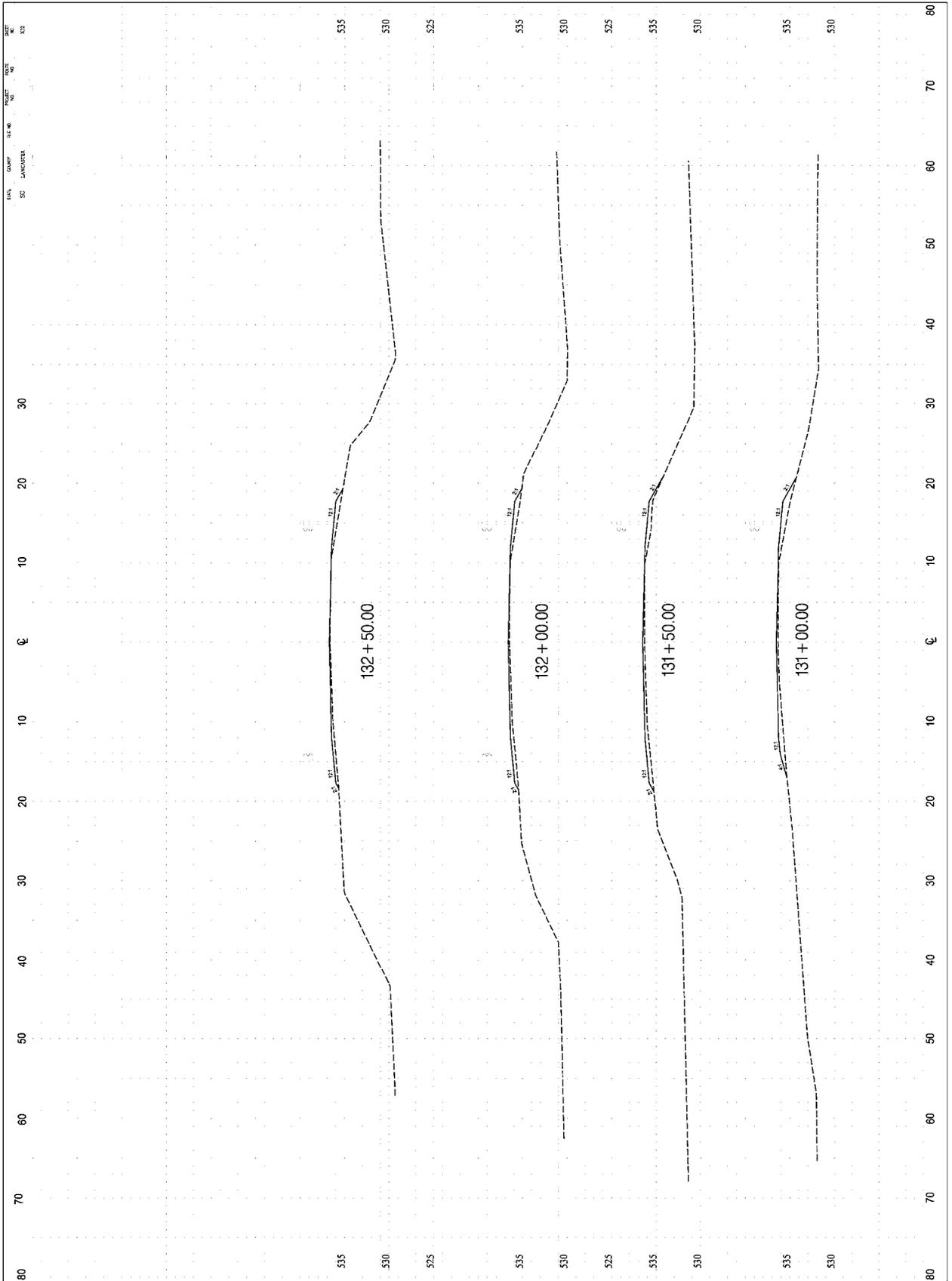


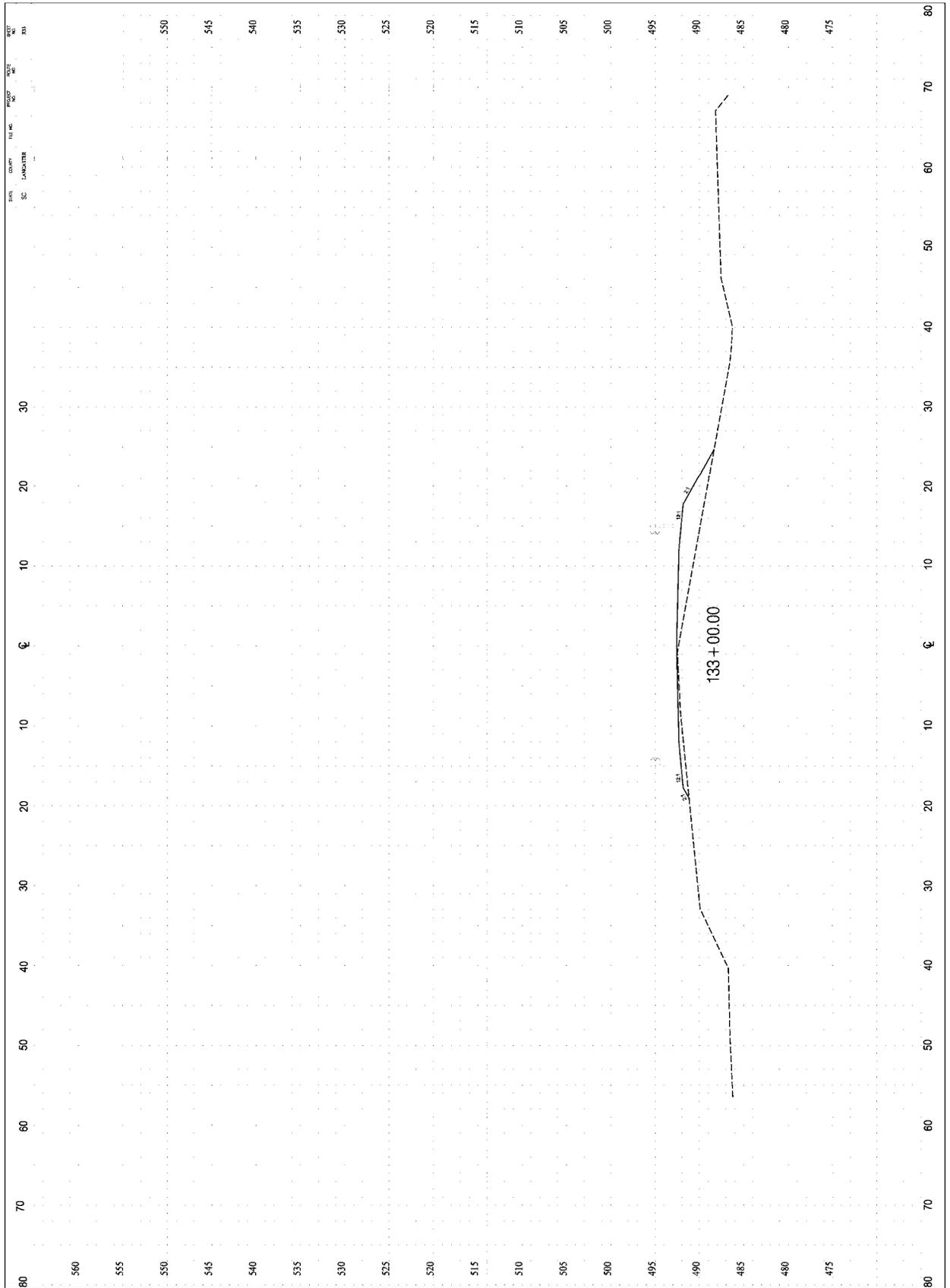


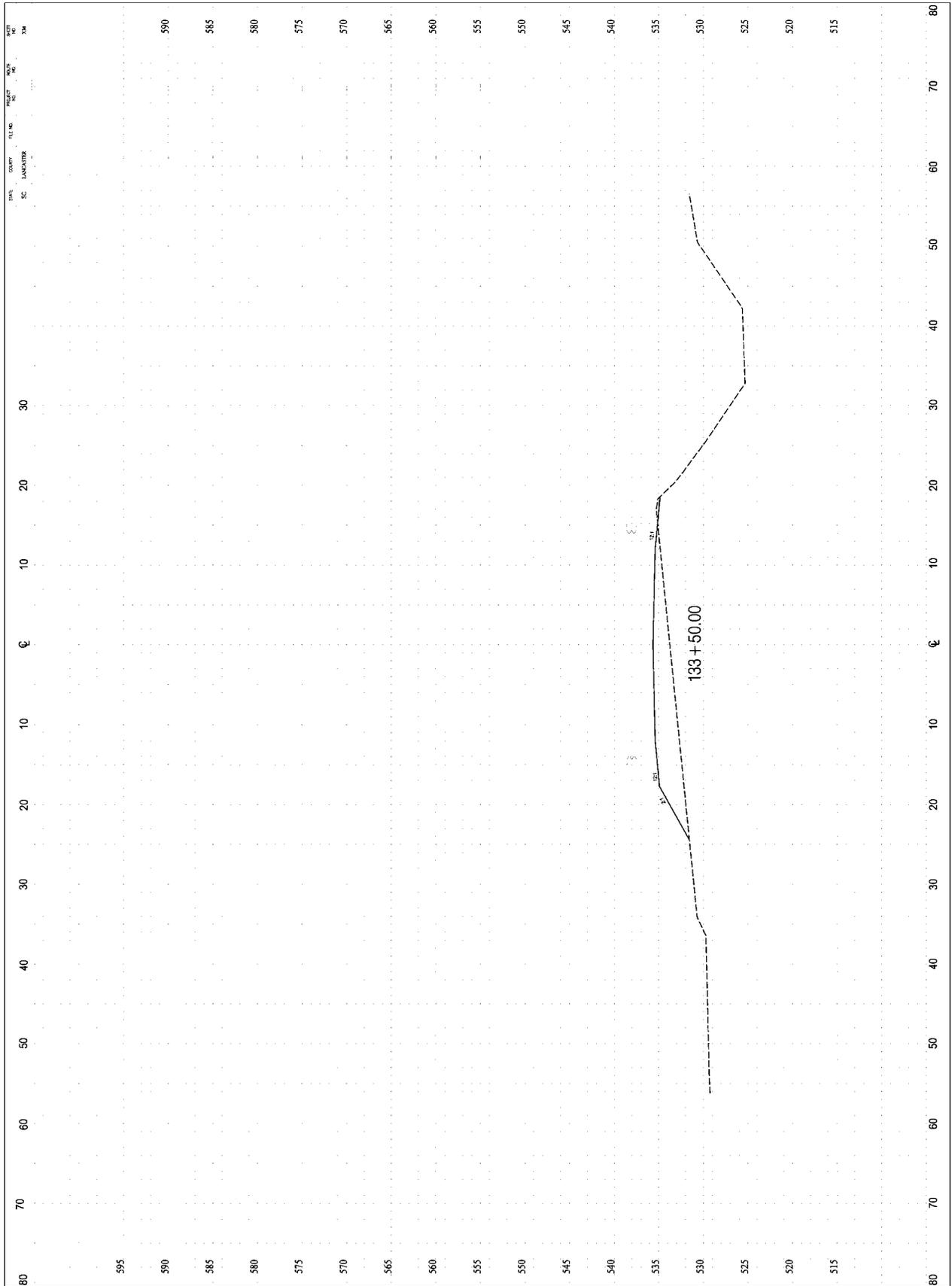




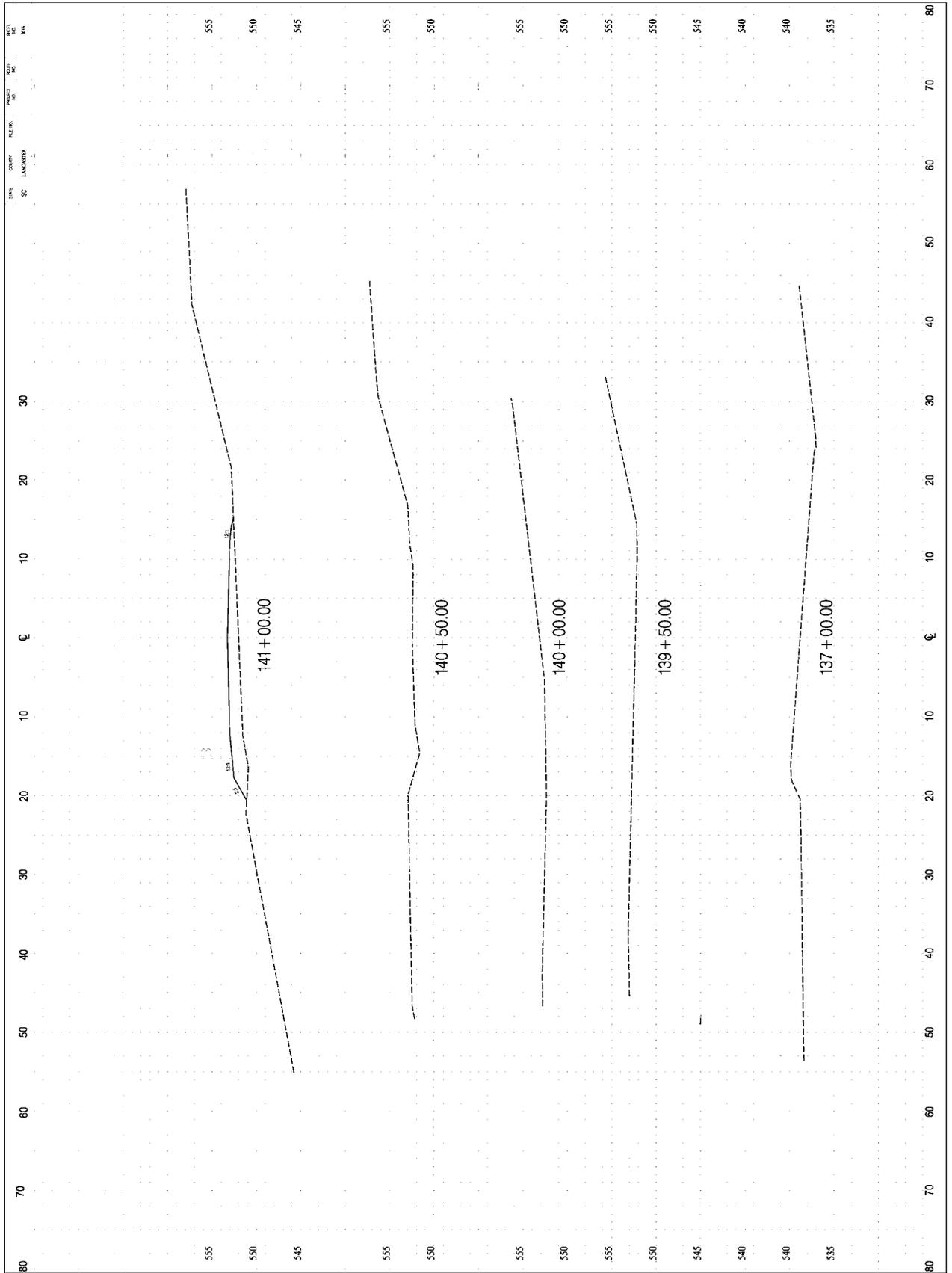


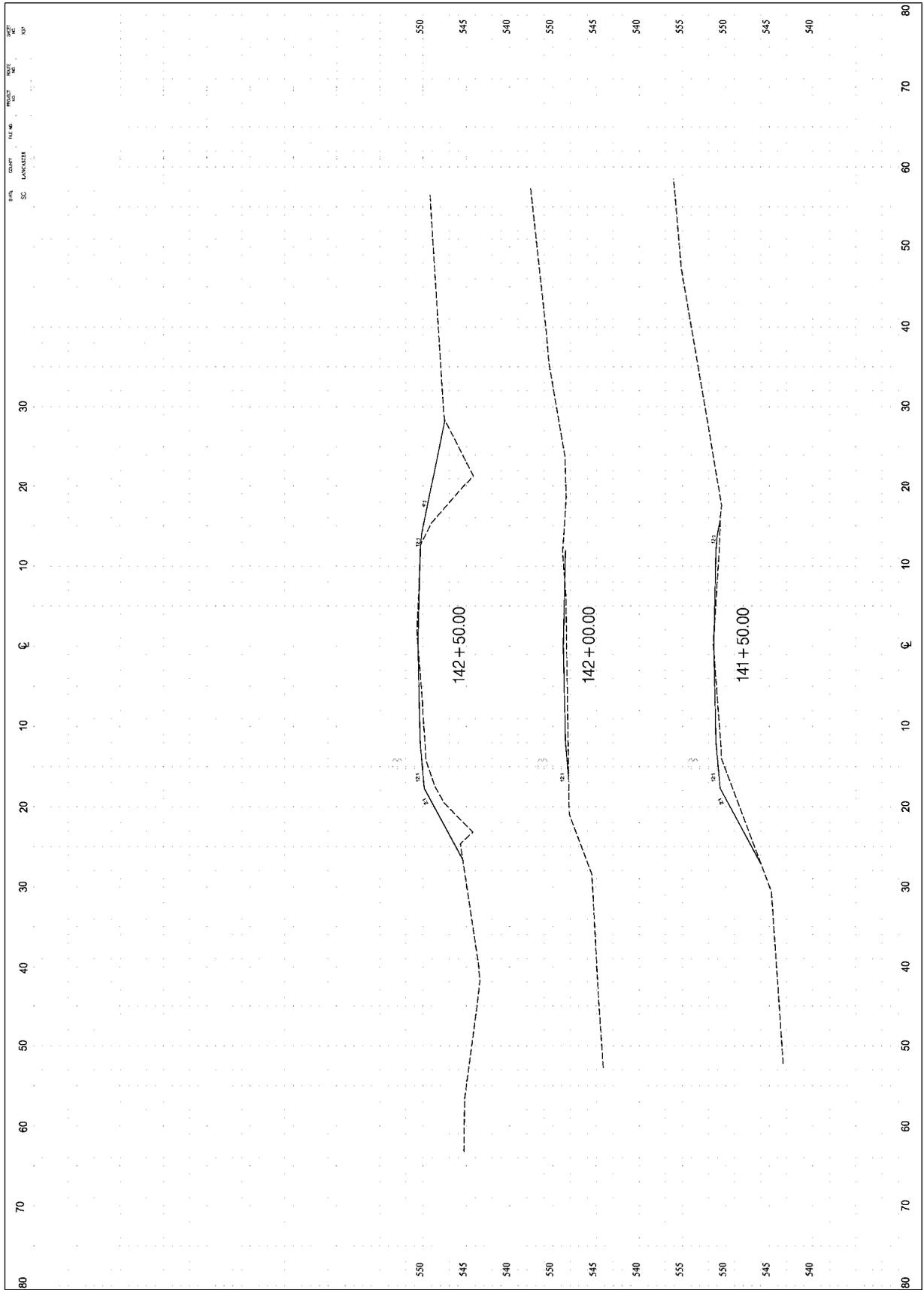




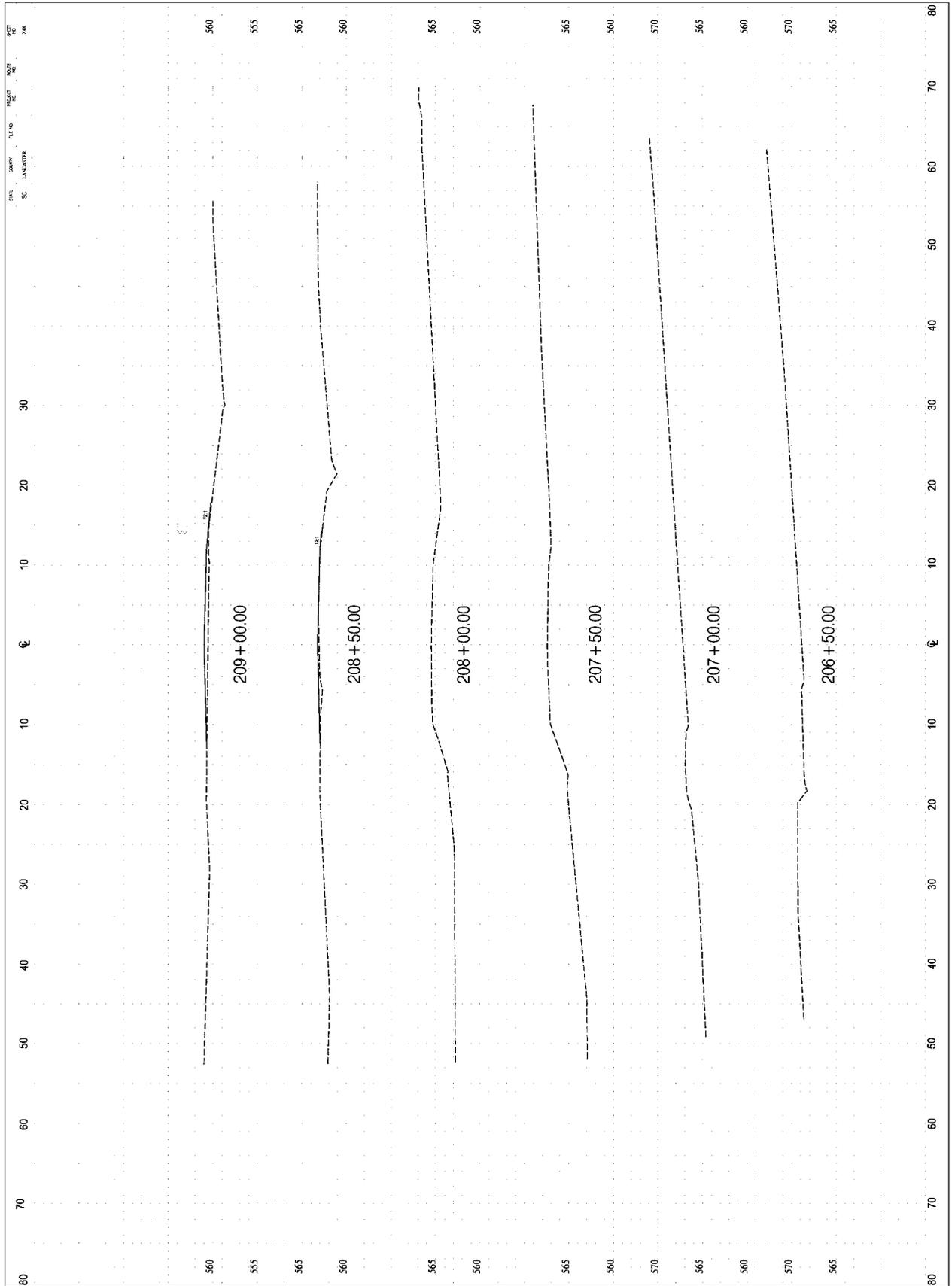


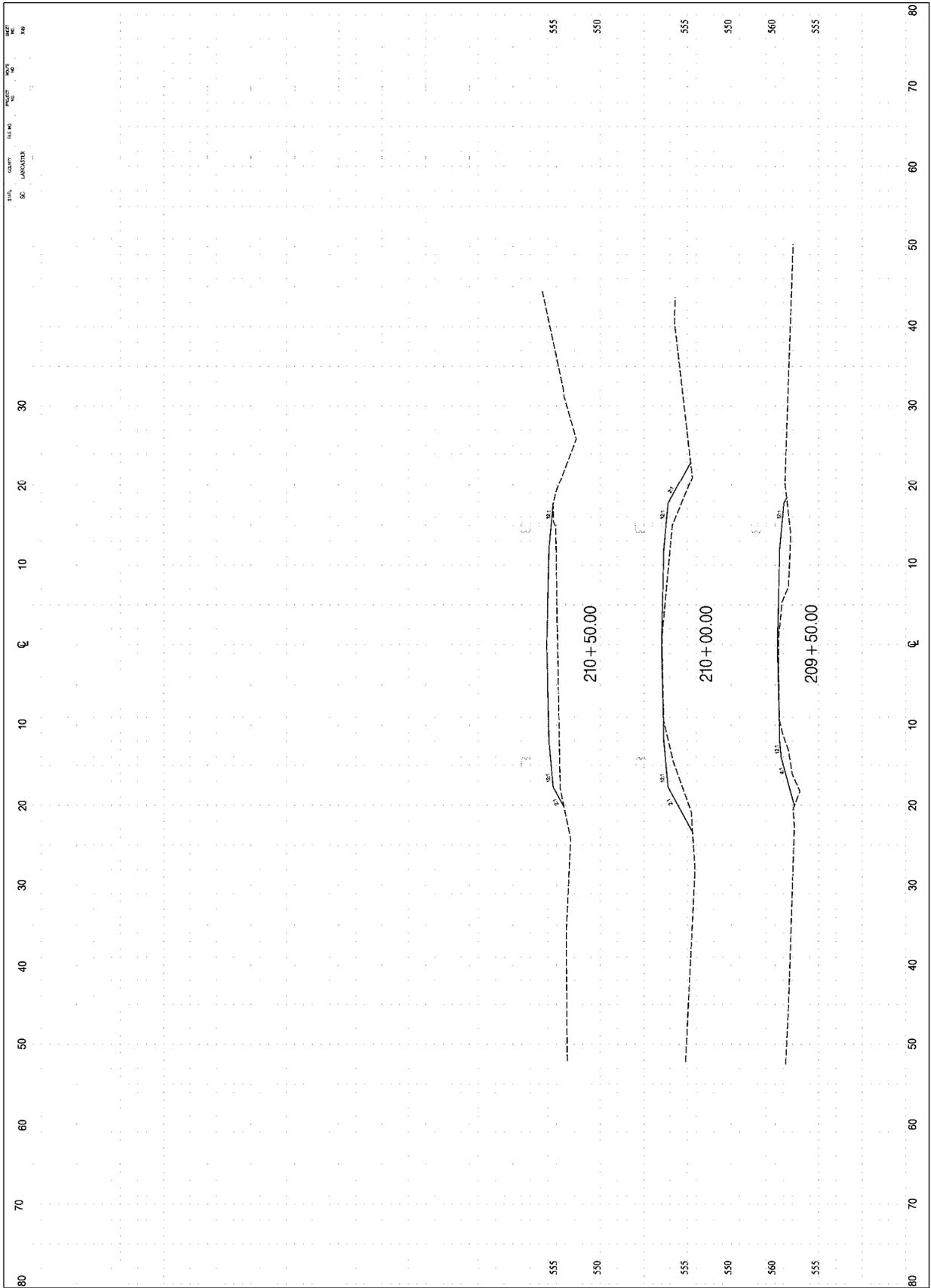


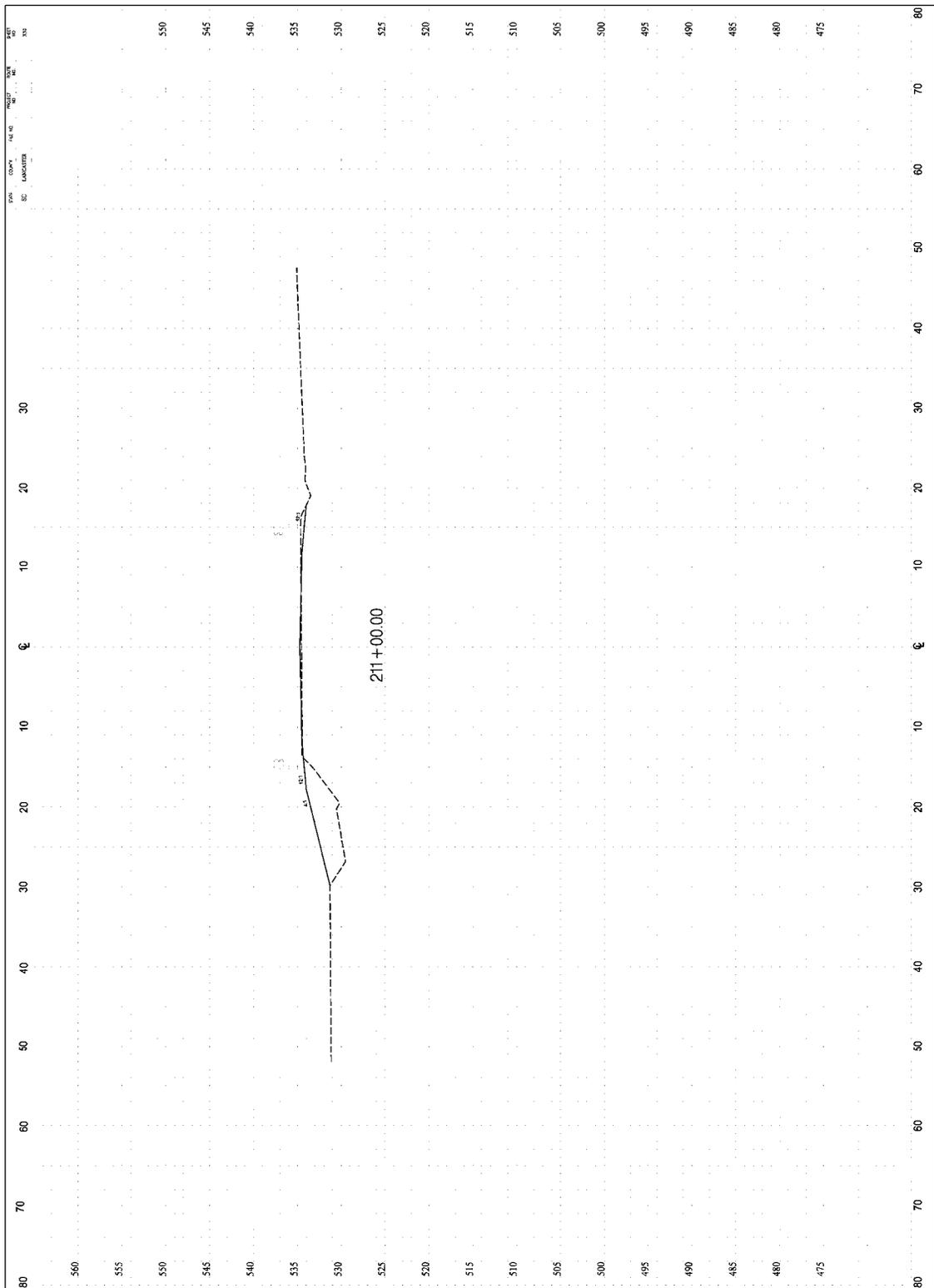


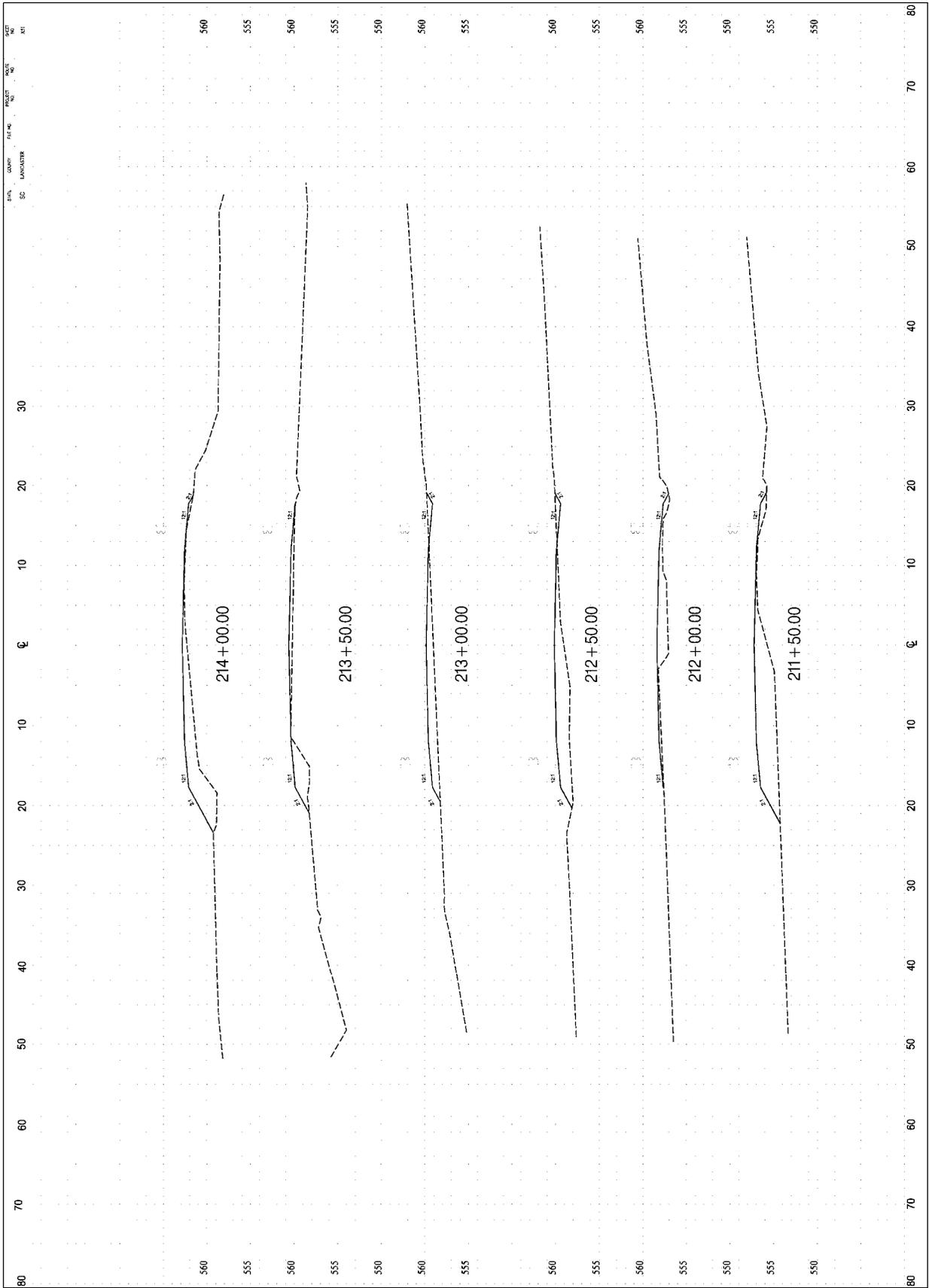


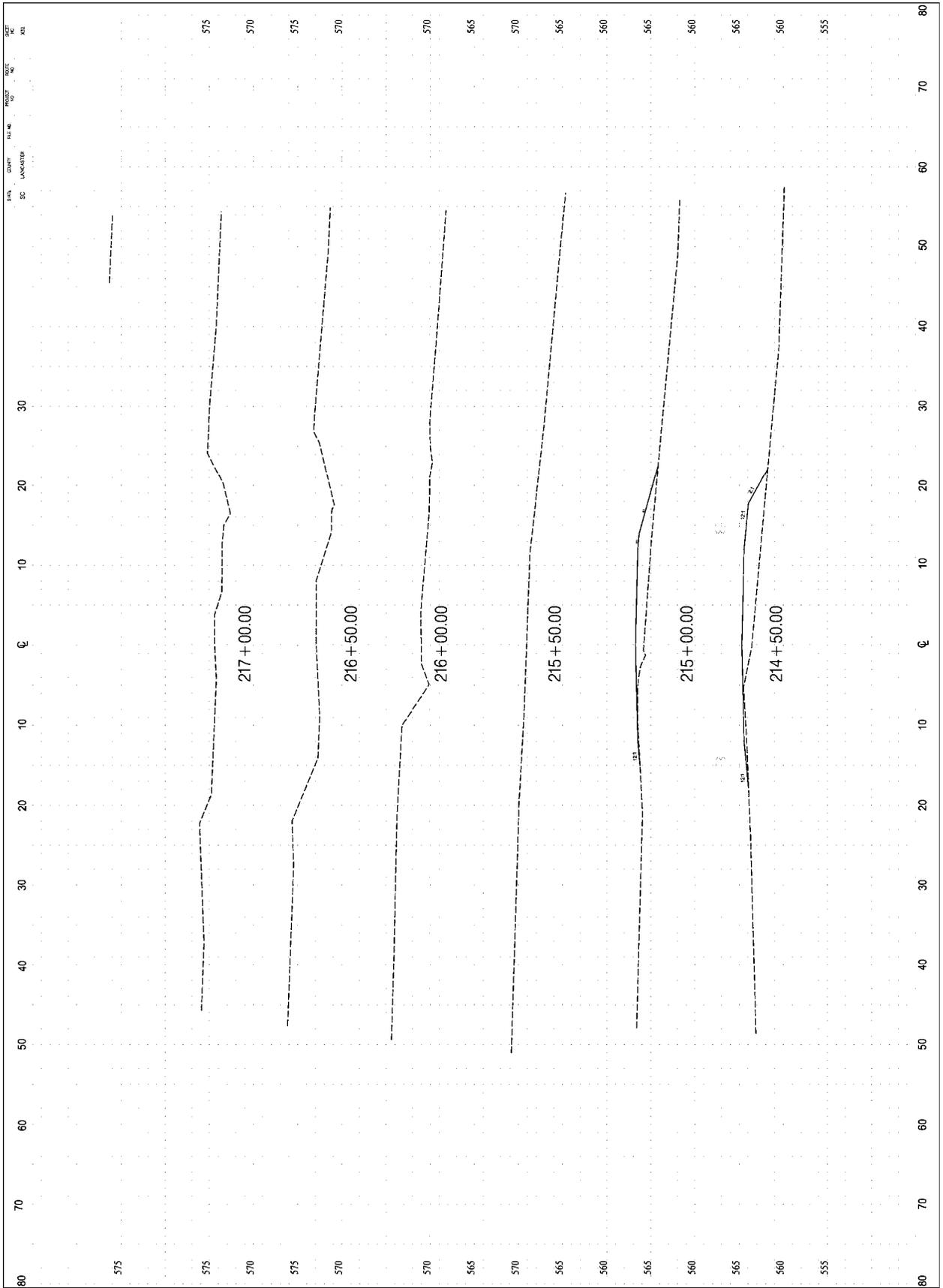




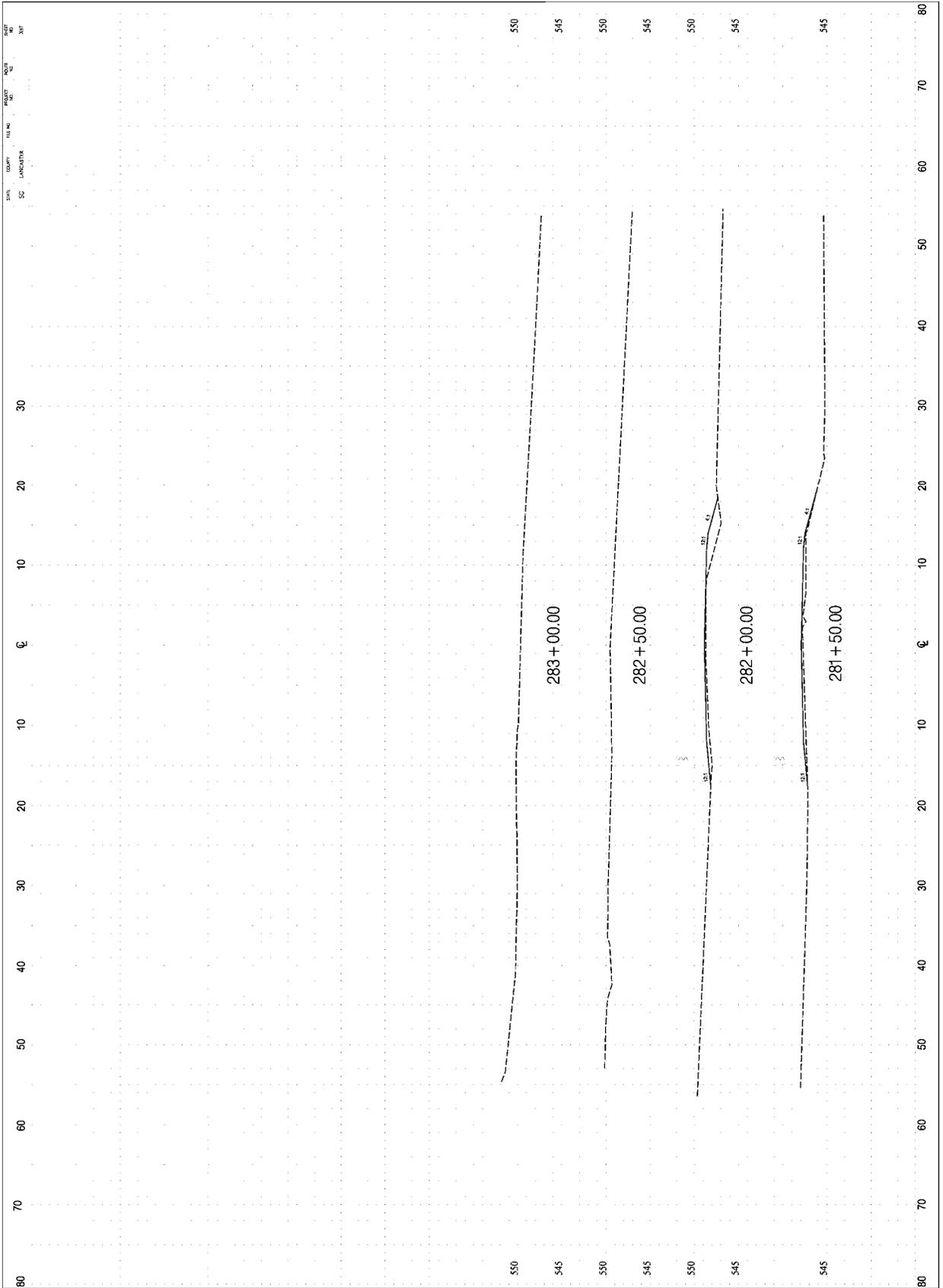


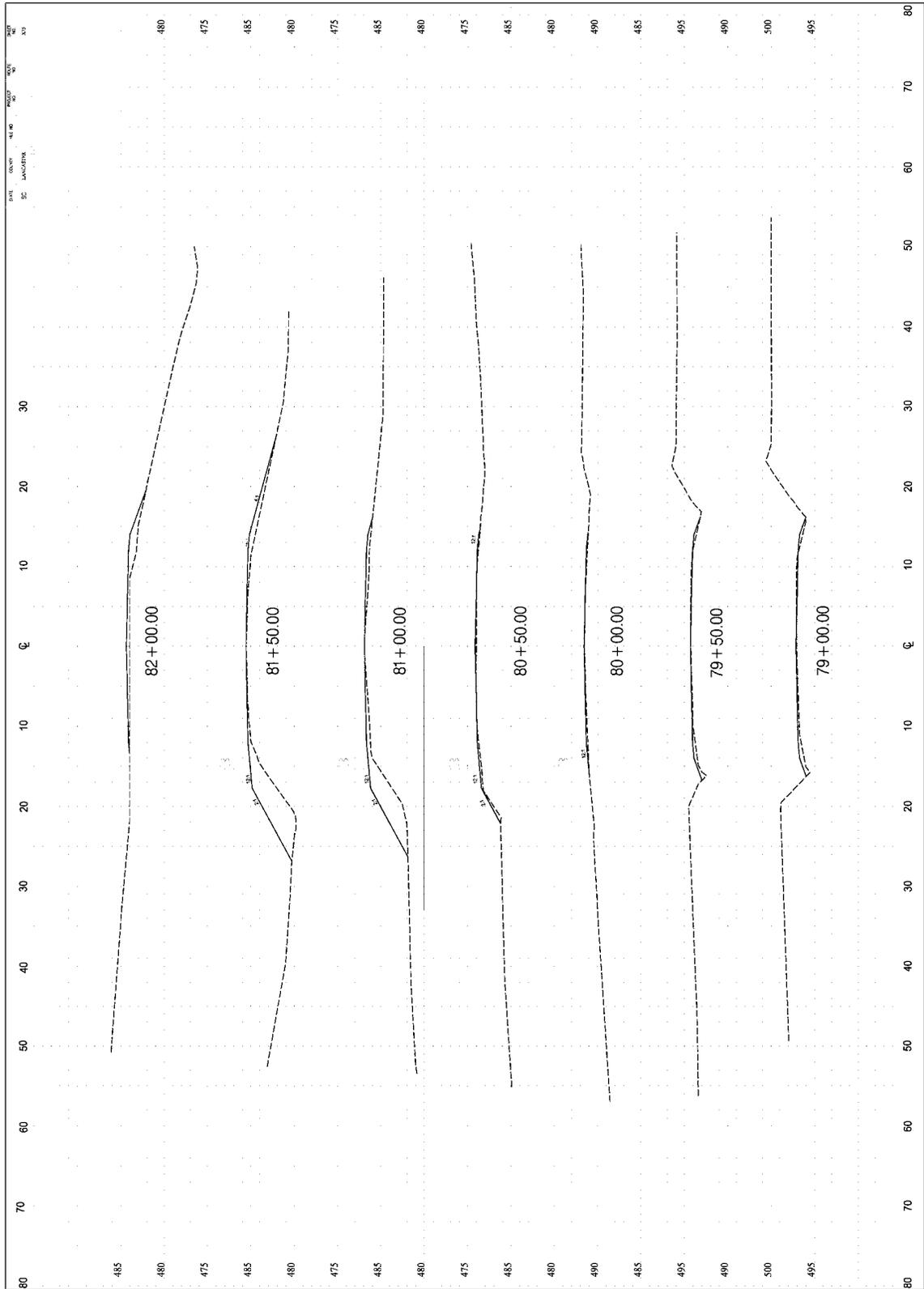


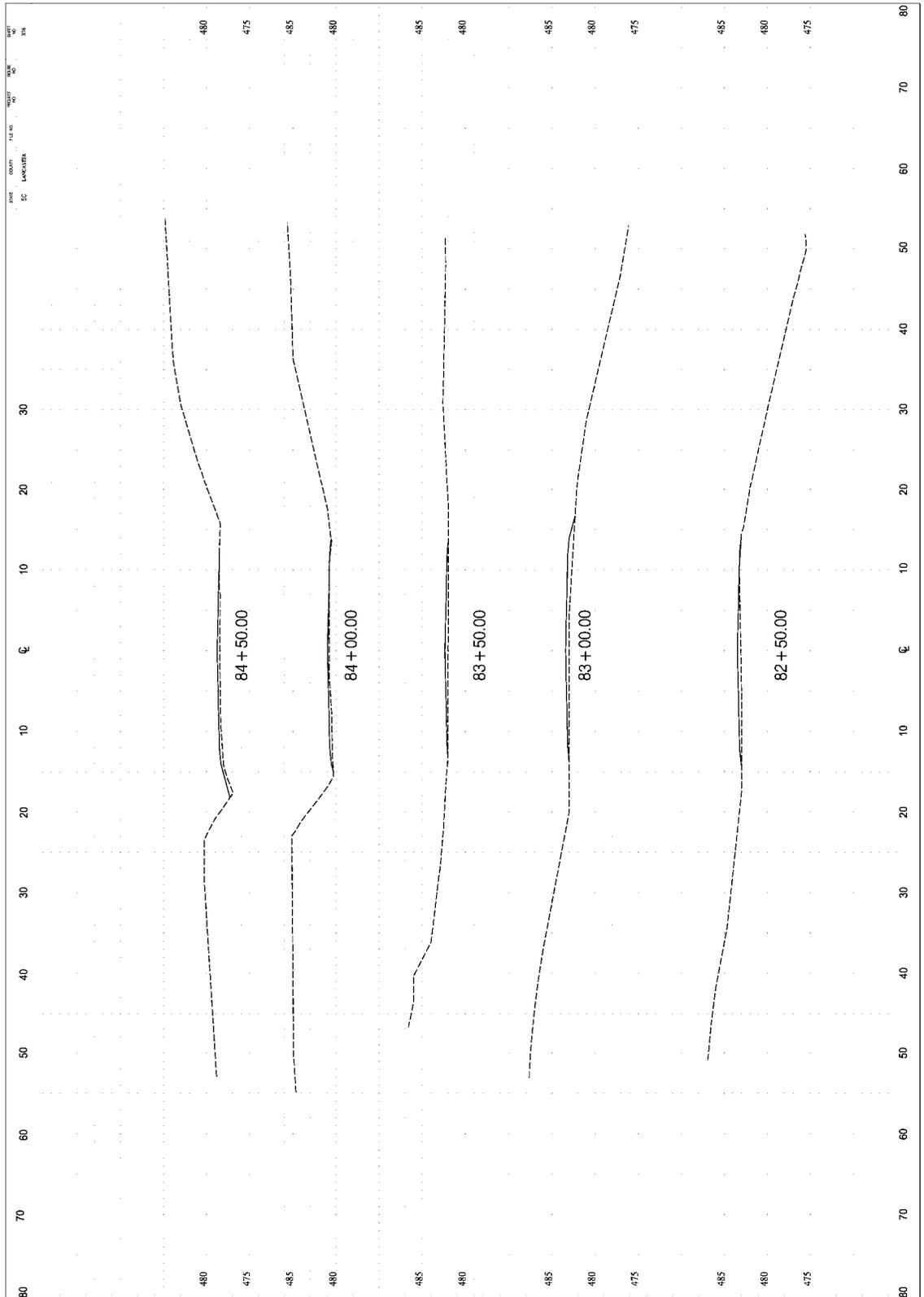


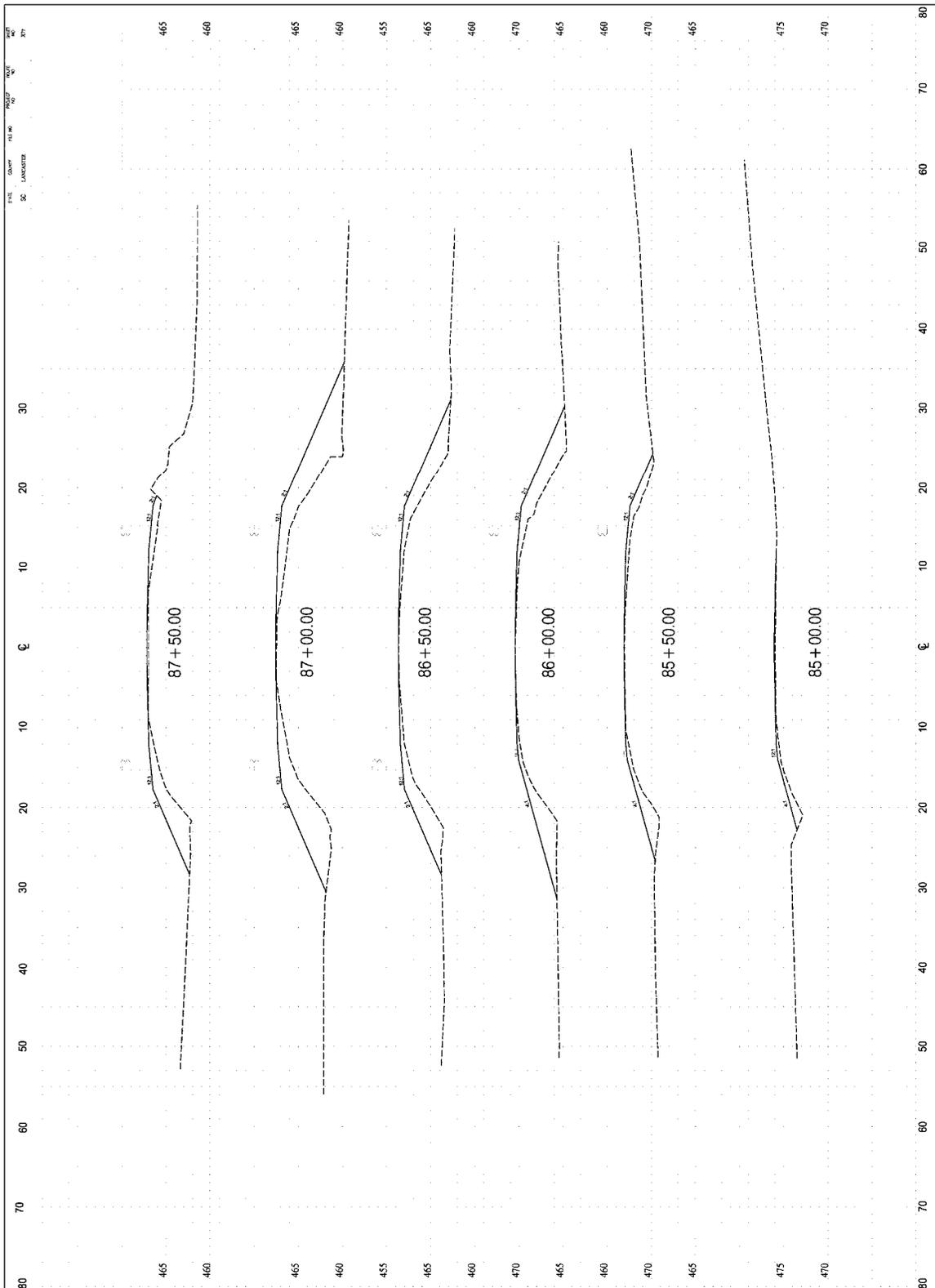




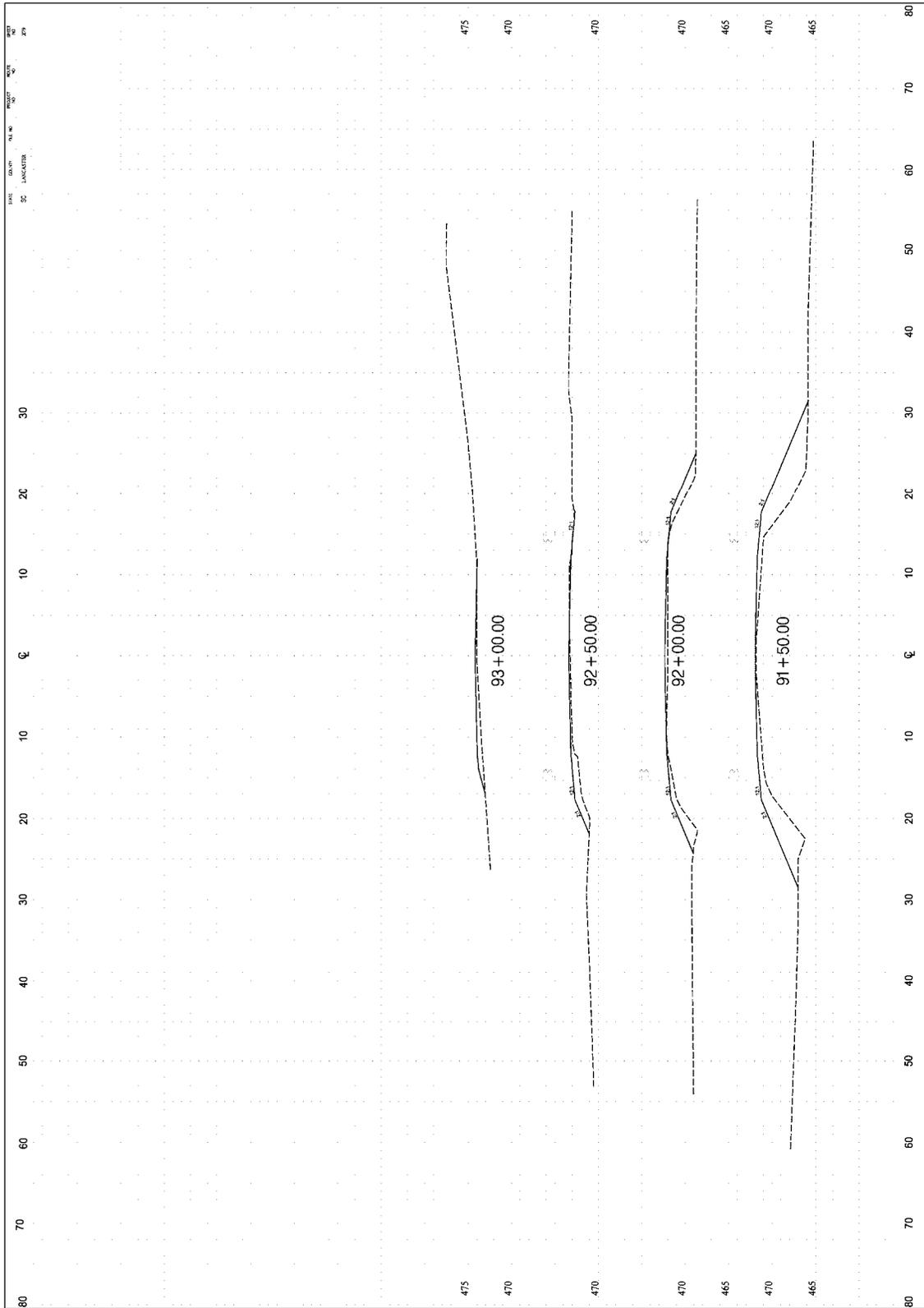


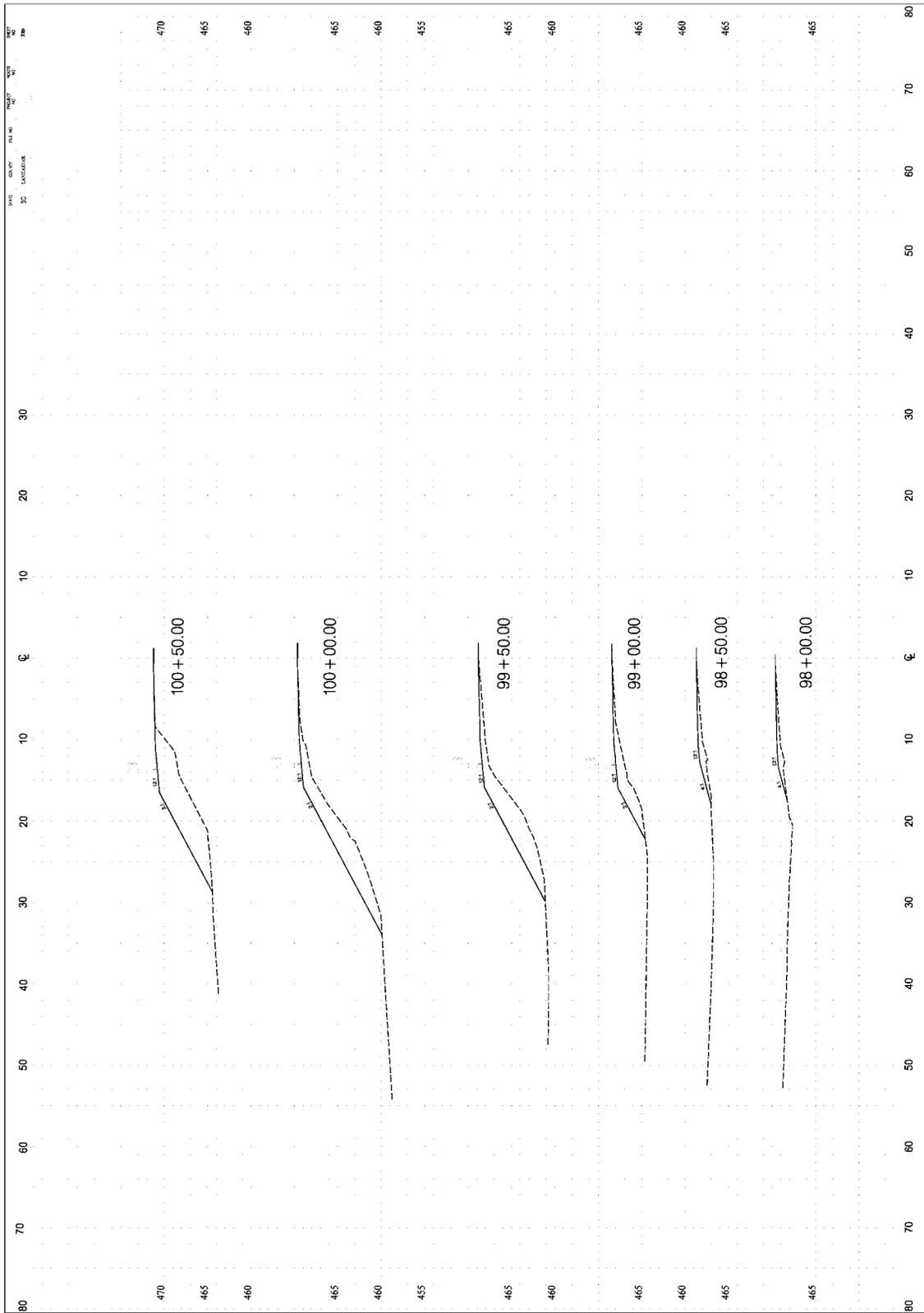


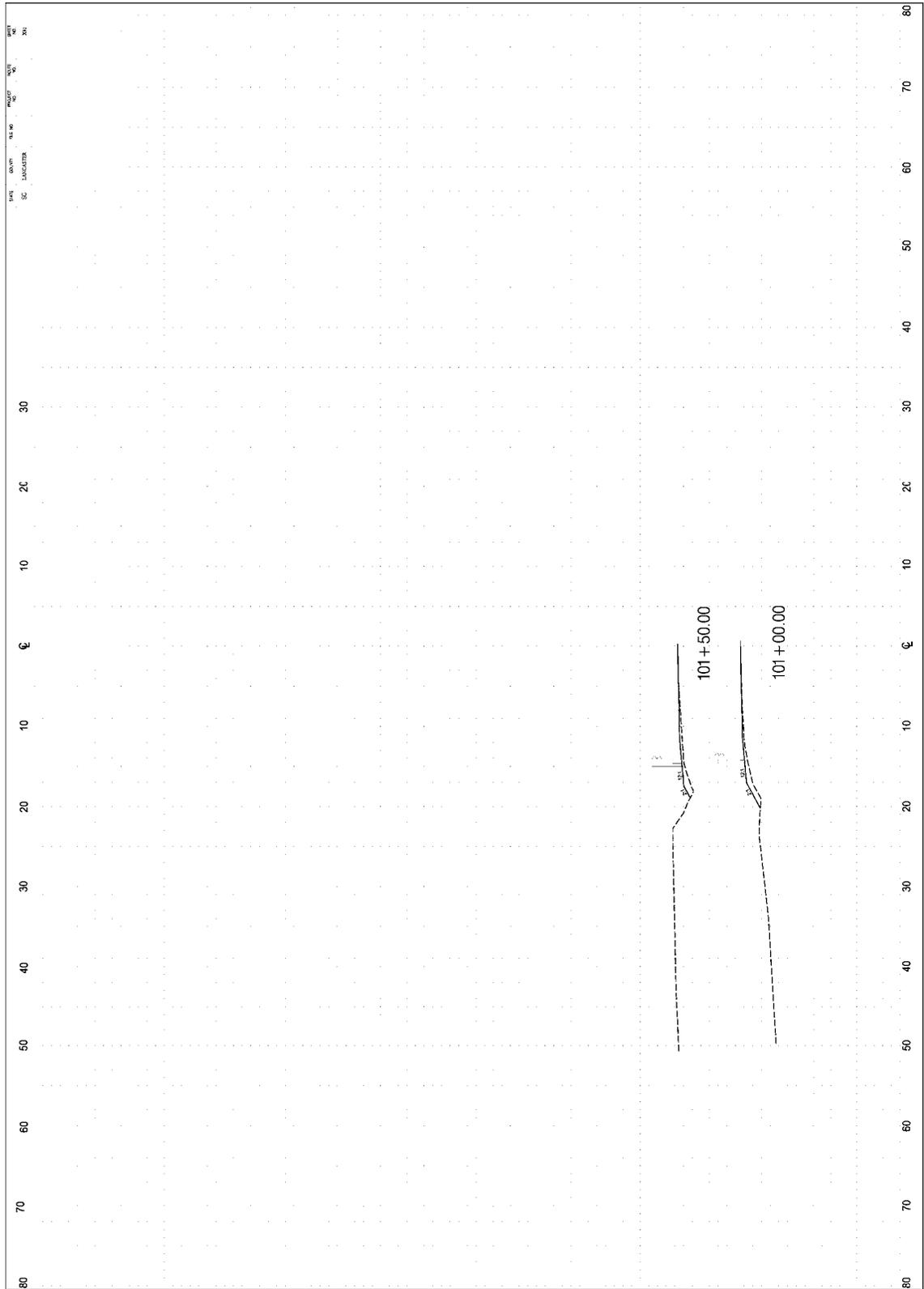












**SALES TAX SIGN DETAIL**

**Lancaster**  
County  
South Carolina

**Your penny sales tax at work!**

*Special thanks to Lancaster County Council Members:*

<b>Larry McCullough, Chairman, District 1</b>	<b>Steve Harper, District 5</b>
<b>Charlene McGriff, District 2</b>	<b>Jack Estridge, District 6</b>
<b>Bob Bundy, District 3</b>	<b>Brian Carnes, District 7</b>
<b>Larry Honeycutt, District 4</b>	