

ROCKDALE COUNTY, GEORGIA

INVITATION TO BID #25-16

**ROCKDALE COUNTY
SPLOST 5C RESURFACING PROGRAM**

**8.26 Miles of Roadway Resurfacing, including Milling,
Patching, Asphalt Paving, and Striping on Numerous
Roadway in Rockdale County**

For



Rockdale County Department of Transportation

**ROCKDALE COUNTY
DEPARTMENT OF TRANSPORTATION (RDOT)**

CONTRACT # C-2025-_____

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BIDDING DOCUMENTS

For

**ROCKDALE COUNTY
DEPARTMENT OF TRANSPORTATION (RDOT)**

CONTRACT # C-2025-_____

INVITATION TO BID #25-16

ROCKDALE COUNTY, GEORGIA

The Rockdale County Board of Commissioners is soliciting sealed bids to furnish all labor, material, and equipment for approximately **8.26 Miles of Roadway Resurfacing, including Milling, Patching, Asphalt Paving, and Striping on Numerous Roadway in Rockdale County.**

Bids will be accepted until the bid opening date and time on **July 17, 2025 at 2:00 p.m.** in the Department of Finance, 958 Milstead Avenue, Conyers, Georgia 30012. The bid package and specifications are available at the Department of Finance, 958 Milstead Avenue, Conyers, Georgia 30012.

The SPLOST 5C program rehabilitation contracts goals include several objectives from the Rockdale County Board of Commissioners , their selected Road Committee members and RDOT engineering staff that will enhance the safety, ride, longevity and drainage of our network of roadways in the County. Special attention should therefore be given to the entirety of the scope of the enclosed ITB during the bidding stages of this project. The contractors bidding on this ITB are encouraged to visit the individual sites prior to the submittal of their bid.

A Mandatory Pre-Bid Conference will be held on **June 25, 2025, at 10:00 a.m., at the Rockdale County Department of Transportation, 2570 Old Covington Highway SW, Conyers, Ga. 30012.** Prime Bidders who arrive more than 5 minutes after the start of the meeting (as stated in the solicitation and by the Procurement representative's watch) or after the discussion portion of the meeting (whichever comes first) may not be permitted to submit a bid on the project. *Any contractor who intends to submit a Bid is required to attend this meeting.*

Submit questions and/or requests for clarifications regarding this bid no later than **July 10, 2025 by 2:00 p.m.** Written responses from the County to the questions it receives will be issued in an addendum. Any questions and/or misunderstandings that may arise from this BID must be submitted in writing and forwarded to Adrienne Brown at Adrienne.m.brown@rockdalecountyga.gov.

It shall be the Bidders responsibility to seek clarification as early as possible prior to the due date and time.

A 5% Bid Bond will be required. A Payment and Performance Bond in the amount of 100% will be required from the awarded vendor.

NOTICE: LIQUIDATED DAMAGES

Per GDOT Definition 101.35 Liquidated Damages:

The fixed charges assessed against the successful Bidder or the Contractor for failure to execute the Contract or to complete the Contract within the Contract Time.

As such please note the following type of Liquidated Damages for this ITB and subsequent contract:

- A. For each day after the allotted time frame in the contract that the work is not competed in full, with the punch list finished to the satisfaction of the RDOT Director and the County a per calendar day penalty will be deducted from the payment to the Contractor per GDOT Current edition of the Standard Specifications. Please refer to Section 108.08, In the 2024 GDOT Supplemental Specifications for further details.

NOTICE TO CONTRACTORS

Sealed proposals will be received by the Rockdale County Board of Commissioners until **TBD, 2025 at 2:00 PM**, at the Rockdale County Department of Finance, located at 958 Milstead Avenue, Conyers, Georgia 30012. The **Bids** will be publicly opened and read aloud. No submitted **Bid** may be withdrawn after the scheduled closing time or receipt of **Bids** for a period of ninety (120) days.

The **Work** to be done consists of the following:

8.26 Miles of Roadway Resurfacing, including Milling, Patching, Asphalt Paving, and Striping on Numerous Roadway in Rockdale County

The **Bidder** is required to submit only the **Bid Proposal** with each part signed accordingly, which includes:

1. Completed **Bid** Proposal Form Page
2. **Bid** Bond or Certified Check
3. Certification by Contractor Regarding Non-Segregated Facilities
4. Non-collusion Affidavit of Prime **Bidder**
5. Non-collusion Affidavit of Subcontractor
6. Affidavit Verifying Status for County Public Benefit Application
7. Certifications
8. Contractor Affidavit under O.C.G.A. §13-10-91(b) (1)
9. Subcontractor Affidavit under O.C.G.A. §13-10-91(b) (3) S
10. Subcontractor Affidavit under O.C.G.A. §13-10-91(b) (4)
11. Subcontractor Notification List
12. Completed **Bid** Schedule of Items

Two (2) hard copies and one (1) USB Flash Drive with a copy of the Bid in Adobe PDF format will be required for review purposes.

Unless otherwise directed, all work performed shall be in accordance with the Georgia Department of Transportation Standard Specifications Construction of Transportation Systems, 2021 Edition, the 2024 Supplemental Specifications modifying the 2021 Standard Specifications, General Conditions, Supplements thereto (Published and Not Published) and Special Provisions modifying them. All materials used in the process of completion of the work included in the contract will be furnished from Georgia Department of Transportation certified suppliers only.

It is the intent of this Bid to include all items of construction, and all Work indicated on the Drawings and called for in the Specifications.

In accordance with the foregoing, the undersigned proposes to furnish and construct the items listed in the attached Schedule of Items for the unit prices stated.

The Bidder agrees that the cost of any work performed, materials furnished, services provided, or expenses incurred, which are not specifically delineated in the Contract Documents, but which are incidental to the scope, intent, and completion of the Contract, shall be deemed to have been included in the prices bid for the various items scheduled.

The **Bidder** shall be responsible for performing with his own organization at least fifty percent (50%) of the **Work** in this contract. The **Bidder** shall not subcontract, transfer, assign, or otherwise dispose of the contract or any portion thereof, without the written consent of the County.

The successful **Bidder** shall secure and pay for necessary approvals, permits, assessments, and changes required for the construction and installation of this project as required by local, state, and federal regulations.

Bidders must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, the Contract Work Hour Standard Act, and the National Occupational Safety and Health Act of 1970.

Bidders must certify that they do not and will not maintain or provide for their employees any facilities that are segregated on a basis of race, color, creed, or national origin.

The Rockdale County Board of Commissioners reserves the right to reject all **Bids** and to waive formalities. Any claims for cost incurred by any **Bidder** in preparation of any part of or total package for this project will not be considered for reimbursement by Rockdale County.

The Construction Documents consist of the following, including all addenda issued therewith and forms referenced therein:

Bidding Documents, Sample Contract Agreement, General Conditions, Special Provisions, Appendices.

As part of the **Construction Documents**, Appendices are provided for the **Bidder's** use, which consist of individual roadway bid schedules indicating estimated quantities for each road. These are for bidding purposes only and do not have to be filled out and submitted. Only the two-page Bid Schedule on pages BD.24-26 are required for submittal with this ITB package. The **Bidder** is responsible for locating the various project sites based on the termini provided for each roadway in Appendix A. The individual itemized quantity sheets in Appendix A are not, nor are intended to be, an exact measurement of each quantity for each roadway of the **Work**, rather, they are merely included as information to assist the **Bidder** in understanding the probable estimated quantities used to determine the pay quantities for the **Bid Schedule of Items (BD.24-26)**. **The County may decrease or increase the quantities of work based on the unit prices in the awarded contract and the allocated budget for funding this project.**

All questions concerning this invitation and all questions arising subsequent to award are to be addressed to the Procurement Officer at the email listed below:

Rockdale County Finance Department Purchasing Division

Attn: Adrienne Brown, Buyer

958 Milstead Avenue

Conyers, GA 30012

Phone: (770) 278-7557

E-mail: adrienne.brown@rockdalecountyga.gov

TORT IMMUNITY:

No officer, employee, or agent of the County acting within the scope of his/her employment or function shall be held personally liable in tort or named as a defendant in any action for injury or damage suffered because of any act, event, or failure to act.

SILENCE OF SPECIFICATIONS

The apparent silence of these specifications and any supplemental specifications as to any details, or the omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size and design are to be used. All workmanship is to be first quality. All interpretations of this specification shall be made upon the basis of this statement, with County interpretation to prevail.

OPTION TO AUDIT

Successful bidder will be required to maintain complete records during the life of the contract and for a period of one year after completion of the contract. Such records are to be made available to the County if officially requested, to be audited by a designated County auditing staff. In such audits reveal overcharges and/or undercharges, such will be adjusted and compensation made by either party to correct charges.

BID PROPOSAL, page 1 of 3

Proposal of _____ (hereinafter called "**Bidder**"), a contractor organized and existing under the laws of the State of Georgia, *an individual, a corporation, a partnership doing business as: _____.

TO: Rockdale County
(Hereinafter called "**County**")

To Whom It May Concern:

The **Bidder** in compliance with your Notice to Contractors and all Bidding Documents for the following work: **8.26 Miles of Roadway Resurfacing, including Milling, Patching, Asphalt Paving, and Striping on Numerous Roadway in Rockdale County.**

Having examined the plans and specifications with related documents and the site of the proposed **Work**, and being familiar with all of the conditions surrounding the construction of the proposed projects, including the availability of materials and supplies to construct the projects in accordance with the contract documents, within the time set forth herein, and at the prices stated below, proposes to enter into a Contract with Rockdale County to provide the necessary machinery, tools, apparatus, all materials and labor, and other means of construction necessary to complete the **Work**. The undersigned proposes to furnish and construct the items listed in the attached Schedule of Items for the unit prices stated.

Bidder agrees that the cost of any **Work** performed, materials furnished, services provided, or expenses incurred, which are not specifically delineated in the Contract Documents, but which are incidental to the scope, intent, and completion of the Contract, shall be deemed to have been included in the prices **Bid** for the various items scheduled.

Bidder further proposes and agrees hereby to promptly commence the **Work** with adequate force and equipment within ten (10) calendar days from receipt of Notice to Proceed, or as may be specified by Special Provision, and to complete the **Work in 180 Days from Notice to Proceed**, or as may be specified by Special Provisions.

BID PROPOSAL, page 2 of 3

Bidder assumes the responsibility to download all addenda published on the Rockdale County website prior to submittal of his **Bid** and accepts that failure to acknowledge receipt of every addendum individually is grounds for finding the **Bid** non-responsive. **Bidder** hereby acknowledges receipt of the following addenda:

The undersigned further agrees that in case of failure on his part to execute said contract and bond, or provide satisfactory proof of carriage of the insurance required, within ten (10) calendar days after the award thereof, the **Bid Bond** or certified check accompanying his **Bid** and the money payable thereon shall be forfeited to the **County** as liquidated damages; otherwise, the check or Bond accompanying this proposal shall be returned to the **Bidder**.

The **Bidder** declares that they understand that the quantities shown on the proposal are subject to adjustment by either increase or decrease, and that should the quantities of any of the items of **Work** be increased, the undersigned proposes to do the additional **Work** at the unit prices stated herein; and should the quantities be decreased, he also understands that payment will be made on actual quantities at the unit price **Bid** and will make no claim for anticipated profits for any decrease in the quantities, and that actual completed, final quantities will be determined upon completion of **Work** and acceptance by the **County**, at which time adjustment will be made to the Contract amount by direct increase or decrease.

Attached hereto is a **Bid** bond or certified check on the (Bank) _____ in the amount of _____, (Five percent (5%) of Total Amount **Bid**).

The full name and residence of persons or parties interested in the foregoing **Bid** as contractors are named as follows:

BID PROPOSAL, page 3 of 3

Rockdale County, Georgia

Signed, sealed, and dated this _____ day of _____, 2025.

Bidder: _____(SEAL)
(Company Name)

By: _____

Title: _____

Mailing Address:

BID BOND, page 1 of 2

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

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

_____, as **Contractor**, and

_____, as **Surety**, are

hereby held and firmly bound unto ROCKDALE COUNTY, GEORGIA, as **County**, in the penal sum of _____ Dollars.

(\$_____) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed this _____ day of _____, 2025.

The condition of the above obligation is such that whereas the **Contractor** has submitted to ROCKDALE COUNTY, GEORGIA a certain **Bid** attached hereto and hereby made a part hereof to enter into a contract in writing for the following work:

Furnish all labor, materials, and equipment for 8.26 Miles of Roadway Resurfacing, including Milling, Patching, Asphalt Paving, and Striping on Numerous Roadway in Rockdale County.

NOW, THEREFORE,

- (a) If said **Bid** shall be rejected or in the alternate,
- (b) If said **Bid** shall be accepted and the **Contractor** shall execute and deliver a Contract in the Form of Contract attached hereto (properly complete in accordance with said **Bid**) and shall furnish a bond for his faithful performance of said Contract and for the payment of all persons performing labor or furnishing material in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said **Bid**, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the **Surety** for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The **Surety**, for value received, hereby stipulates and agrees that the obligations of said **Surety** and its bond shall be in no way impaired or affected by any extension of the time within which the **County** may accept such **Bids**, and said **Surety** does hereby waive notice of any such extension.

BID BOND, page 2 of 2

IN WITNESS WHEREOF, the **Contractor** and the **Surety** have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Contractor (SEAL)

By: _____

Surety (SEAL)

By: Georgia Representative

INSURANCE:

Before starting any work, the successful contractor must furnish to Rockdale County certificate(s) of insurance from companies doing business in Georgia. The Company shall maintain in full force and effect the following insurance during the term of the Agreement:

<u>Coverages:</u>	<u>Limits of Liability:</u>
Workers' Compensation	Statutory
Employers' Liability	\$1,000,000.00
Bodily Injury Liability	\$1,000,000.00 each occurrence
except Automobile	\$1,000,000.00 aggregate
Property Damage Liability	\$1,000,000.00 each occurrence
except Automobile	\$1,000,000.00 aggregate
Personal & Advertising Injury Limit	\$1,000,000.00
Products / Completed Ops.	\$2,000,000.00 aggregate
Automobile Bodily Injury	\$1,000,000.00 each person
Liability	\$1,000,000.00 each occurrence
Automobile Property Damage	\$1,000,000.00 each occurrence
Liability	

(If hazardous substances are involved)

Contractor's Pollution Liability (with 1-year extended reporting period)	
Each Occurrence	\$1,000,000.00
Aggregate	\$2,000,000.00

Environmental Impairment Liability (with 1-year extended reporting period)

Each Occurrence	\$1,000,000.00
Aggregate	\$2,000,000.00

General Liability

\$1,000,000.00

Excess Umbrella Liability

\$3,000,000.00

All insurance shall be provided by an insurer(s) acceptable to the County and shall provide for thirty (30) days prior notice of cancellation to the County. Upon contract award, Contractor shall deliver to the County a certificate or policy of insurance evidencing Contractor's compliance with this paragraph. Contractor shall abide by all terms and conditions of the insurance and shall do nothing to impair or invalidate the coverage.

Rockdale, GA shall be named as Additional Insured under any General Liability, Business Auto and Umbrella Policies using ISO Additional Insured Endorsement forms CG 2010 or its equivalent. Coverage shall apply as Primary and non-contributory with Waiver of Subrogation in favor of Rockdale County, Georgia.

The insurance carrier must have a minimum rating of A or higher as determined by the rating firm A.M. Best.

Certificates must contain policy numbers, policy limits, and policy expiration date of all policies. The Invitation to Bid (ITB) number and project name must be inserted in the Description of Operations section of the certificate.

Certificates are to be issued to:
Rockdale County, Georgia
958 Milstead Avenue
Conyers, GA 30012

CERTIFICATION BY CONTRACTOR
Regarding
NON-SEGREGATED FACILITIES

The **Bidder** certifies that he does not, and will not, provide and maintain segregated facilities for his employees at his establishments and, further that he does not, and will not, permit his employees to perform their services at those locations, under his control, where segregated facilities are provided and maintained. Segregated facilities include, but are not necessarily limited to, drinking fountains, transportation, parking, entertainment, recreation, and housing facilities; waiting, rest, wash, dressing, and locker rooms, and time clock, **Work**, storage, restaurant, and other eating areas which are set apart in fact, or by explicit directive, habit, local custom, or otherwise, on the basis of color, creed, national origin, and race. The **Bidder** agrees that, except where he has obtained identical certifications from proposed subcontractors for specific time periods, he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000.00 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certifications in his files.

The **Bidder** agrees that a breach of this certification is a violation of the Equal Opportunity clause in this Contract. The penalty for making false statements is prescribed in 18 U.S.C. 1001.

Bidder (Print)

(Signature)

Name of Signer (Print)

Title of Signer

Date

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____)

County of _____)

_____, being first duly sworn,
deposes and says that:

1. He is _____ (Owner, Partner, Officer, Representative, or Agent) of the **Bidder** that has submitted the attached **Bid**;
2. He is fully informed respecting the preparation and contents of the attached **Bid** and of all pertinent circumstances respecting such **Bid**;
3. Such **Bid** is genuine and is not a collusive or sham **Bid**;
4. Neither the said **Bidder** nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other **Bidder**, firm or person to submit a collusive or sham **Bid** in connection with the Contract for which the attached **Bid** has been submitted to or refrain from bidding in connection with such Contract, or has in any collusion or communication or conference with any other **Bidder**, firm or person to fix the price or prices in the attached **Bid** or of any other **Bidder**, or to fix any overhead, profit or cost element of the **Bid** price or the **Bid** price of any other **Bidder**, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against Rockdale County or any person interested in the proposed Contract; and,
5. The price or prices quoted in the attached **Bid** are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the **Bidder** or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Name _____ (Print)

Title _____ (Print)

Subscribed and Sworn to before me

this _____ day of _____, 20____.

(SEAL)

Title

NON-COLLUSION AFFIDAVIT OF SUB-CONTRACTOR

State of _____)

County of _____)

_____, being first duly sworn,
deposes and says that:

1. He is _____ (Owner, Partner, Officer, Representative, or Agent) of the **Bidder** that has submitted the attached **Bid**;
2. He is fully informed respecting the preparation and contents of the attached **Bid** and of all pertinent circumstances respecting such **Bid**;
3. Such **Bid** is genuine and is not a collusive or sham **Bid**;
4. Neither the said **Bidder** nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other **Bidder**, firm or person to submit a collusive or sham **Bid** in connection with the Contract for which the attached **Bid** has been submitted to or refrain from bidding in connection with such Contract, or has in any collusion or communication or conference with any other **Bidder**, firm or person to fix the price or prices in the attached **Bid** or of any other **Bidder**, or to fix any overhead, profit or cost element of the **Bid** price or the **Bid** price of any other **Bidder**, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against Rockdale County or any person interested in the proposed Contract; and,
5. The price or prices quoted in the attached **Bid** are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the **Bidder** or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Name _____ (Print)

Title _____ (Print)

Subscribed and Sworn to before me

this _____ day of _____, 20____.

(SEAL)

Title

**Affidavit Verifying Status
for County Public Benefit Application**

By executing this affidavit under oath, as an applicant for the award of a contract with Rockdale, County Georgia, I_____. [Name of natural person applying on behalf of individual, business, corporation, partnership, or other private entity] am stating the following as required by O.C.G.A. Section 50-36-1:

1) _____ I am a United States citizen

OR

2) _____ I am a legal permanent resident 18 years of age or older or I am an otherwise qualified alien or non-immigrant under the Federal Immigration and Nationality Act 18 years of age or older and lawfully present in the United States.*

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of Code Section 16-10-20 of the Official Code of Georgia.

Date

Signature of Applicant:

Printed Name:

*_____
Alien Registration number for non-citizens

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_____ DAY OF _____, 20____.

Notary Public
My commission Expires:

***Note:** O.C.G.A. § 50-36-1(e)(2) requires that aliens under the federal Immigration and Nationality Act, Title 8 U.S.C., as amended, provide their registration number. Because legal permanent residents are included in the federal definition of “alien”, legal permanent residents must also provide their alien registration number. Qualified aliens that do not have an alien registration number may supply another identifying number below.

CERTIFICATIONS

Page 1 of 2

Failure to complete appropriate certification requirements identified below or submission of a false certification shall render the **Bid** non-responsive.

EXAMINATION OF PLANS AND SPECIFICATIONS

I certify that I have carefully examined the Construction Documents for this project and the Georgia Department of Transportation Standard Specifications, 2021 Edition, and the Supplemental Specifications and Special Provisions included in and made a part of this Proposal, and have also personally examined the sites of the **Work**. On the basis of the said Specifications and Documents, I proposed to furnish all necessary labor, machinery, tools, apparatus and other means of construction, and do all the **Work** and furnish all the materials in the manner specified.

I understand that any quantities mentioned or provided are approximate only and are subject to either increase or decrease and hereby propose to perform any increased or decreased quantities of **Work** or extra **Work** on the basis provided for in the specifications.

I also hereby agree that Rockdale County would suffer damages in a sum equal to at least the amount of the enclosed Proposal Guaranty, in the event my Proposal should be accepted and a Contract tendered me thereunder and I should refuse to execute same and furnish bond as herein required, in consideration of which I hereby agree that, in the event of such failure on my part to execute said Contract and furnish bond within ten (10) days after the date of the letter transmitting the Contract to me, the amount of said Proposal Guaranty shall be and is hereby, forfeited to Rockdale County as liquidated damages as the result of such failure on my part.

I further propose to execute the Contract agreement described in the Specifications as soon as the **Work** is awarded to me, and to begin and complete the **Work** within the time limit provided. I also propose to furnish a Contract Bond, approved by the Rockdale County Board of Commissioners as required by the laws of the State of Georgia. This bond shall not only service to guarantee the excellence of both workmanship and materials until the **Work** is finally accepted, as well as to fully comply with all the laws of the State of Georgia.

CERTIFICATIONS

page 2 of 2

CONFLICT OF INTEREST

By signing and submitting this Contract I hereby certify that employees of this company or employees of any company supplying material or subcontracting to do **Work** on this Contract will not engage in business ventures with employees of Rockdale County or Consulting Engineers nor shall they provide gifts, gratuities, favors, entertainment, loans or other items of value to employees of this Department.

Also, by signing and submitting this Contract, I hereby certify that I will notify Rockdale County of through its Director of Transportation of any business ventures entered into between employees of this company or employees of any company supplying material or subcontracting to do **Work** on this Contract with a family member of Rockdale County employees.

Contractor

(Signature)

Name of Signer

Title of Signer

Date

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

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. §13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of (name of public employer) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. §13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. §13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Name of Project

Name of Public Employer

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

Executed on _____, ___, 202__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 202__.

NOTARY PUBLIC
My Commission Expires:

Subcontractor Affidavit under O.C.G.A. § 13-10-91(b) (3)

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with (name of contractor) on behalf of (name of public employer) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the subcontractor with the information required by O.C.G.A. § 13-10-91(b). Additionally, the undersigned subcontractor will forward notice of the receipt of an affidavit from a sub-subcontractor to the contractor within five business days of receipt. If the undersigned subcontractor receives notice that a sub-subcontractor has received an affidavit from any other contracted sub-subcontractor, the undersigned subcontractor must forward, within five business days of receipt, a copy of the notice to the contractor. Subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Subcontractor

Name of Project

Name of Public Employer

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

Executed on _____, _____, 20__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 20__.

NOTARY PUBLIC

My Commission Expires:

Sub-subcontractor Affidavit under O.C.G.A. §13-10-91(b) (4)

By executing this affidavit, the undersigned sub-subcontractor verifies its compliance with O.C.G.A. §13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract for (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract) and (name of contractor) on behalf of (name of public employer) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. §13-10-91. Furthermore, the undersigned sub-subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned sub-subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the sub-subcontractor with the information required by O.C.G.A. §13-10-91(b). The undersigned sub-subcontractor shall submit, at the time of such contract, this affidavit to (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Additionally, the undersigned sub-subcontractor will forward notice of the receipt of any affidavit from a sub-subcontractor to (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Sub-subcontractors hereby attest that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Sub-Subcontractor

Name of Project

Name of Public Employer

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

Executed on_____,____, 20___in_____(city),_____(state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE_____DAY OF_____, 20___.

NOTARY PUBLIC

My Commission Expires: _____

SUBCONTRACTOR NOTIFICATION LIST

Required information on Subcontractors doing work in Rockdale County:

Please list any Subcontractors, their address, Business License number, scope of work and start date, and percent of work assigned for each Subcontractor who may be doing work in the County.

General Contractor/Developer: _____

License Number: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

cc: Rockdale County Department of Transportation
Rockdale County Department of Finance

CONTRACTOR'S QUALIFICATION STATEMENT AND QUESTIONNAIRE

NAME OF PROPOSED CONTRACTOR: _____

I. INSTRUCTIONS

- A. All questions are to be answered in full. If copies of other documents will answer the question completely, they may be attached and clearly labeled. If additional space is needed, additional pages may be attached and clearly labeled.
- B. The owner, Rockdale County, Georgia, its agents and representatives, shall be entitled to contact each and every reference listed in response to this questionnaire, and each entity referenced in any response to any question in this questionnaire. By completing this questionnaire, the contractor expressly agrees that any information concerning the contractor in possession of said entities and references may be made available to the owner.
- C. Only complete and accurate information shall be provided by the contractor. The contractor hereby warrants that, to the best of its knowledge and belief, the responses contained herein are true, accurate, and complete. The contractor also acknowledges that the owner is relying on the truth and accuracy of the responses contained herein. If it is later discovered that any material information given in response to a question was provided by the contractor, knowing it was false, it shall constitute grounds for immediate termination or rescission by the owner of any subsequent agreement between the owner and the contractor. The owner shall also have and retain any other remedies provided by law.
- D. The completed form shall be submitted with contractor's proposals.
- E. This form, its completion by the contractor, and its use by the contractor, and its use by the owner, shall not give rise to any liability on the part of the owner to the contractor or any third party or person.

II. GENERAL BACKGROUND

- A. Current address of contractor: _____

- B. Previous Name or address of contractor: _____

- C. Current president or CEO and years in position: _____
- D. Number of permanent employees: _____
- E. Name and address of affiliated companies: _____

III. FINANCIAL STATUS

- A. Please attach financial statements for the past three years for which they are complete. If such statements are not available, please furnish the following information:
 - 1. LAST COMPLETE FISCAL YEAR:

A. Revenues (Gross) _____

B.	Expenditures (Gross)	_____
C.	Overhead & Admin (Gross)	_____
D.	Profit (Gross)	_____

2. YEAR PRIOR TO “1” ABOVE:

A.	Revenues (Gross)	_____
B.	Expenditures (Gross)	_____
C.	Overhead & Admin (Gross)	_____
D.	Profit (Gross)	_____

3. YEAR PRIOR TO “2” ABOVE:

A.	Revenues (Gross)	_____
B.	Expenditures (Gross)	_____
C.	Overhead & Admin (Gross)	_____
D.	Profit (Gross)	_____

B. BANKRUPTCIES

1. Has the Contractor, or any of its parents or subsidiaries, ever had a Bankruptcy Petition filed in its name, voluntarily or involuntarily? (If yes, specify date, circumstances, and resolution).

2. Has any Majority Shareholder ever had a Bankruptcy Petition filed in his/her name, voluntarily or involuntarily? (If yes, specify date, circumstances, and resolution).

C. BONDING

1. What is the Contractor’s current bonding capacity? _____
2. What is the value of the Contractor’s work currently under contract? _____

IV. COMPANY EXPERIENCE – SIMILAR PROJECTS

- A. List three projects of reasonably similar nature, scope, and duration performed by your company in the last five years, specifying, where possible, the name and last known address of each owner of those projects:

Reference/Project #1:

Name and Address: _____

Date of Construction/Project: _____

Type of Construction/Project: _____

Contract Price: _____

Owner contact info: _____

Architect/Engineer contact info:
(if applicable)

Reference/Project #2:

Name and Address:

Date of Construction/Project:

Type of Construction/Project:

Contract Price:

Owner contact info:

Architect/Engineer contact info:
(if applicable)

Reference/Project #3:

Name and Address:

Date of Construction/Project:

Type of Construction/Project:

Contract Price:

Owner contact info:

Architect/Engineer contact info:
(if applicable)

V. ARBITRATIONS, LITIGATIONS, AND OTHER PROCEEDINGS

Has your company been involved in any construction
arbitration demands filed by, or against, you in the last five years?

Has your company been involved in any construction-related
lawsuits (other than labor or personal injury litigation) filed by, or against,
you in the last five years?

Has your company been involved in any lawsuits,
proceedings, or hearings initiated by the National Labor Relations Board

or similar state agency in the past seven years?

Has your company been involved in any lawsuits, proceedings, or hearings initiated by the Occupational Safety and Health Administration concerning the project safety practices of the Contractor in the last seven years?

Has your company be involved in any lawsuits, proceedings, or hearings initiated by the Internal Revenue Service, or any state revenue department, concerning the tax liability of the Contractor (other than audits) in the last seven years?

Have any criminal proceedings or investigations been brought against the Contractor in the last ten years?

If you answered yes to any of the questions above, please identify the nature of the claim, the amount in dispute, the parties, and the ultimate resolution of the proceeding (attach documentation if needed):

VI. COMMENTS

Please list any additional information that you believe would assist the Owner in evaluating the possibility of using the Contractor on this Project. You may attach such additional information as an Exhibit to this Statement and Questionnaire.

I certify to the Owner that the information and responses provided on this Questionnaire are true, accurate and complete. The Owner, or its designated representative, may contact any entity or reference listed in this Questionnaire. Each entity or reference may make any information concerning the Contractor available to the Owner, or its designated representative.

Contractor:

Signature

Date

Title

Sworn to and subscribed before me
This _____ day of _____

Signature

Notary Public

My Commission Expires:

ITB #25-16

SPLOST 5C RESURFACING PROGRAM

Contract Scope: 8.26 Miles of Roadway Resurfacing, including Milling, Patching, Asphalt Paving, and Striping on Numerous Roadway in Rockdale County.

Vendor: _____

Signature: _____

BID SCHEDULE OF ITEMS:

Line No.	Pay Item No.	Item	Unit	Approx Qty	Unit Price	Amount
5	150-1000	TRAFFIC CONTROL – (Incl Temporary Striping)	LS	1		
10	210-0200	GRADING, ADJUST SHOULDER TO GRADE - (2 Ft. Min Width, Incl Cutting Down High Shoulders, Grassing in Kind)	LM	7		
15	310-5060	GR AGGR BASE CRS, 6 INCH, INCL MATL (USED FOR PATCHING); Additional Quantities Included for Contingency Work.	SY	1,500		
20	402-3103	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME (1.5 IN)	TN	6,620		
25	402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (1.5 IN)	TN	6,520		
30	415-1010	ASPH CONC OPEN GRADED CRACK RELIEF INTERLAYER, GP 1 OR 2, INCL BITUM MATL & H LIME (2.0 IN)	TN	6,600		
35	413-0750	TACK COAT	GL	12,000		
40	432-0206	MILL ASPH CONC PVMPT, 1 1/2 IN DEPTH	SY	69,955		
45	432-0214	MILL ASPH CONC PVMPT, 3 1/2 IN DEPTH	SY	49,422		
50	647-6090	LOOP DETECTION 6' x 40' (CONTINGENCY ITEM)	EA	8		

Line No.	Pay Item No.	Item	Unit	Approx Qty	Unit Price	Amount
55	653-0120	THERMOPLASTIC PVMT MARKING, ARROW TP 2	EA	7		
60	653-0130	THERMOPLASTIC PVMT MARKING, ARROW TP 3	EA	2		
65	653-0230	THERMOPLASTIC PVMT MARKING, WORD, TP 3A ("SCHOOL")	EA	3		
70	653-0231	THERMOPLASTIC PVMT MARKING, WORD, TP 4 ("AHEAD")	EA	3		
75	653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	LF	400		
80	653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	LF	500		
85	653-1501	THERMOPLASTIC SOLID TRAFFIC STRIPE, 5 IN, WHITE	LF	74,100		
90	653-1502	THERMOPLASTIC SOLID TRAFFIC STRIPE, 5 IN, YELLOW	LF	82,800		
95	653-3501	THERMOPLASTIC SKIP TRAFFIC STRIPE, 5 IN, WHITE	GLF	300		
100	653-6004	THERMOPLASTIC TRAF STRIPING, WHITE	SY	200		
105	653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW	SY	55		
110	654-1001	RAISED PAVEMENT MARKERS (TP 1, TP 2, TP 3)	EA	100		
115	999-0001	SPEED TABLE - COMPLETE	EA	1		
120	N/A	REMOVE/REPLACE CONC CURB & GUTTER (MATCH EXISTING IN KIND) (CONTINGENCY ITEM)	LF	100		
121	611-8050	MANHOLES TO GRADE	EA	1		
122	611-8140	ADJUST WATER VALVE BOX TO GRADE	EA	15		
123	205-0210	EXCAVATION ROCK	CY	100		
					TOTAL:	

Signature/Firm _____
ITB #25-16

Addenda Acknowledgements (if applicable)

Each vendor is responsible for determining that all addenda issued by the Rockdale County Finance Department – Purchasing Division have been received before submitting a bid.

Addenda	Date Vendor Received	Initials
"1"		
"2"		
"3"		
"4"		
"5"		
"6"		

Vendor Information:

Vendor Name	
Address	
Telephone	
E-Mail	
Representative (print name)	
Signature of Representative	
Date Submitted	

ROCKDALE COUNTY, GEORGIA

INVITATION TO BID #25-16

SPLOST 5C RESURFACING PROGRAM

**8.26 MILES OF ROADWAY RESURFACING,
INCLUDING MILLING, PATCHING, ASPHALT PAVING, AND
STRIPING ON NUMEROUS ROADWAY IN ROCKDALE
COUNTY**

CONTRACT AGREEMENT

For

Rockdale County Department of Transportation (RDOT)

CONTRACT # C-2025 - _____

CONTRACT AGREEMENT

THIS AGREEMENT made by and between ROCKDALE COUNTY, GEORGIA, hereinafter called "**County**", and _____ a contractor doing business as a corporation of the City of _____, County of _____, and State of _____, hereinafter called "**Contractor**".

WITNESSETH: that for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the **County**, the **Contractor** hereby agrees to commence and complete the construction described as follows:

8.26 Miles of Roadway Resurfacing, Including Milling, Patching, Asphalt Paving, And Striping on Numerous Roadway in Rockdale County

hereinafter called the "Project", for the sum of \$XXX,XXX.XX (XXX, XX, and XX Cents) and all extra work in connection therewith, under the terms as stated in the General Conditions, Special Provisions, Appendices and Detailed Specifications of the Contract, and at **Contractor's** own cost and expense necessary to furnish all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services to complete the said project in accordance with the conditions and prices stated in the proposal, the General Conditions, Special Provisions, Appendices, and Detailed Specifications of the Contract, the plans, which include all explanatory matter thereof, as prepared by Rockdale County, the specifications and contract documents as enumerated in Section 105.04 of the General Conditions, hereinafter called the "**Work**", all of which are made a part hereof and collectively constitute the Contract.

The **Contractor** shall promptly commence the Work with adequate force and equipment within ten (10) calendar days from receipt of Notice to Proceed, or as may be specified by Special Provision, and to complete the Work by **180 days from Notice to Proceed** or as may be specified by Special Provision.

The **Contractor** agrees that any millings are to be considered the property of Rockdale County and are to be returned by Contractor to Rockdale County Department of Transportation, located at 2570 Old Covington Hwy, SW, Conyers, GA 30012.

The **County** agrees to pay the **Contractor** in current funds for the performance of the Contract subject to additions and deductions as provided in the General Conditions of the Contract, and to make payments on account thereof as provided in Section 109 of the Specifications, as modified in the General Conditions and Special Provisions.

CONTRACT
page 2 of 2

IN WITNESS WHEREOF, the parties to those presents have executed this Contract in two (2) counterparts, each of which shall be deemed an original.

Executed this ____ day of _____, 20__.

ROCKDALE COUNTY, GEORGIA

ATTEST: _____ Ex-Officio Clerk	By: _____ JaNice Van Ness, Chair & CEO, Board of Commissioners
-----------------------------------	--

CONTRACTOR

ATTEST: _____ Secretary or Assistant	By: _____ (Seal) _____ (Print) President or Vice President
---	---

Approved as to Form:

County Attorney

100% PERFORMANCE BOND

page 1 of 2

KNOW ALL MEN BY THESE PRESENTS: that, _____, as Principal, hereinafter called **Contractor**, and _____, a corporation organized and existing under the laws of the State of _____, hereinafter called **Surety**, are held and firmly bound unto ROCKDALE COUNTY, GEORGIA, as obligee, hereinafter called **County**, in the amount of **\$XXX,XXX.XX (XXX, XXX, XXX and XX Cents)** 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 by written agreement dated _____, 20____, entered into a contract with the **County** to:

Furnish all labor, materials, and equipment for 8.26 Miles of Roadway Resurfacing, Including Milling, Patching, Asphalt Paving, and Striping on Numerous Roadway in Rockdale County.

in accordance with drawings and specifications prepared by Rockdale County, 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 will remain in full force and effect.

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

Whenever **Contractor** shall be, and declared by **County** to be, in default under the Contract, the **County** having performed **County's** obligation thereunder, the **Surety** may promptly remedy the default, or shall promptly:

1. Complete the Contract in 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 bidder, or, if the **County** elects, upon determination by the **County** and **Surety** jointly of the lowest responsible bidder, arrange for a Contract between such Bidder and the **County**, and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contract 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 the **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 **County** to **Contractor** under the Contract and any amendments hereto, less the amount properly paid by **County** to **Contractor**.

100% PERFORMANCE BOND
page 2 of 2

No action can be instituted on this bond after one year from the completion of the Contract and the acceptance by the **County** of the work thereunder.

Signed and sealed this ____ day of _____, 20____.

in the presence of:

Contractor

Witness By: _____(SEAL)

Surety

Witness By: _____(SEAL)

100% LABOR AND MATERIAL PAYMENT BOND
page 1 of 2

KNOW ALL MEN BY THESE PRESENTS: that, _____, as Principal, hereinafter called **Contractor**, and _____, a corporation organized and existing under the laws of the State of _____, hereinafter called **Surety**, are held and firmly bound unto ROCKDALE COUNTY, GEORGIA, as obligee, hereinafter called **County**, in the amount of **\$XXX,XXX.XX (XXX, XXX, XXX, XXX, and XX cents)** 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 as by written agreement dated _____, 20__, entered into a Contract with County to:

8.26 Miles of Roadway Resurfacing, Including Milling, Patching, Asphalt Paving, and Striping on Numerous Roadway in Rockdale County.

In accordance with drawings and specifications prepared by Rockdale County, which contract is by reference made a part hereof, and is hereafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that if the Contractor shall promptly make payment to all claimants as is herein below defined, for all labor and materials used or reasonably required for use in the performance of the Contract, this obligation shall be null and 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 Contractor or with a Subcontractor of the Contractor 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, heating oil, gasoline, telephone service, rental of equipment, or repair of equipment directly applicable to the Contract.
2. The above-named Contractor and Surety hereby jointly and severally agree with the County that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (120) 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 County 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 Contractor, shall have given written notice to any two of the following: the Contractor, the County, or the Surety above-named, within ninety (120) 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 Contractor, the County, or the Surety, at any 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.

100% LABOR AND MATERIAL PAYMENT BOND
page 2 of 2

- B. After one year from the completion of the Contract and the acceptance by County of the Work thereunder; 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.
- C. Other than in a state court of competent jurisdiction in and for the County or other political subdivision of the State in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated and not elsewhere.
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 for mechanics' liens which may be filed on record against improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this _____ day of _____, 20____.

Contractor

Witness By: _____ (Seal)

Surety

Witness By: _____ (Seal)
Georgia Representative

This bond is issued simultaneously with Performance Bond in favor of the County.

SUBCONTRACTOR NOTIFICATION LIST

Required information on Subcontractors doing work in Rockdale County:

Please list any Subcontractors, the address, Business License number, scope of work and start date, and percent of work assigned for each Subcontractor who may be doing work in the County.

General Contractor/Developer: _____

License Number: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

Subcontractor: _____

License Number: _____ Start Date: _____

Scope of Work: _____ Percent of Work: _____

cc: Rockdale County Department of Transportation
Rockdale County Department of Finance

NON-COLLUSION AFFIDAVIT OF SUBCONTRACTOR

State of _____)

County of _____)

_____, being first duly sworn, deposes, and says that:

1. He is _____ (Owner, Partner, Officer, Representative, or Agent) of _____, hereinafter referred to as the "Subcontractor";
2. He is fully informed respecting the preparation and contents of the Subcontractor's Proposal submitted by the Subcontractor to _____, the Contractor, for certain work in connection with the _____ Contract pertaining to the Project in Rockdale County, Georgia;
3. Such Subcontractor's Proposal is genuine and is not a collusive or sham Proposal;
4. Neither the Subcontractor nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Proposal in connection with such Contract or to refrain from submitting a Proposal in connection with such Contract or has in any manner, directly or indirectly, sought by unlawful agreement or connivance with any other Bidder, firm, or person to fix the price or prices in said Subcontractor's Proposal, or to secure through collusion, conspiracy, connivance, or unlawful agreement any advantage against Rockdale County or any person interested in the proposed Contract; and,
5. The price or prices quoted in the Subcontractor's Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Name _____ (Print)

Title _____

Subscribed and Sworn to before me

this _____ day of _____, 20____.

_____(SEAL)

Title

FINAL AFFIDAVIT

TO: ROCKDALE COUNTY, GEORGIA

I, _____, hereby certify that all suppliers of materials, equipment and service, Subcontractors, mechanics, and laborers employed by _____ or any of his Subcontractors in connection with the construction of

8.26 Miles of Roadway Resurfacing, Including Milling, Patching, Asphalt Paving, and Striping on Numerous Roadway in Rockdale County.

In ROCKDALE COUNTY have been paid and satisfied in full as of _____, 20__, and that there are no outstanding obligations or claims of any kind for the payment of which Rockdale County on the above named project might be liable, or subject to, in any lawful proceeding at law or in equity.

Signature _____

Title _____

Personally appeared before me this _____ day of _____, 20__.

_____, who under oath deposes and says that he is of the firm of that he has read the above statement and that to the best of his knowledge and belief same is an exact true statement.

Notary Public _____

My Commission Expires _____

Date _____

ITB #25-16
SPLOST 5C RESURFACING PROJECT

CONTRACT SCHEDULE OF ITEMS

Contract Scope: 8.26 Miles of Roadway Resurfacing, including Milling, Patching, Asphalt Paving,
and Striping on Numerous Roadway in Rockdale County

Vendor: _____

Signature: _____

**A COPY OF THE BID SCHEDULE WILL BE DUPLICATED
AS PART OF THE CONTRACT.**

END OF SECTION

ROCKDALE COUNTY, GEORGIA

INVITATION TO BID #25-16

SPLOST 5C RESURFACING PROGRAM

**8.26 MILES OF ROADWAY RESURFACING, INCLUDING
MILLING, PATCHING, ASPHALT PAVING, AND
STRIPING ON NUMEROUS ROADWAY IN ROCKDALE
COUNTY**

GENERAL CONDITIONS

For

Rockdale County Department of Transportation (RDOT)

CONTRACT # C-2025-_____

GENERAL CONDITIONS

Unless otherwise directed, all work performed shall be in accordance with the Georgia Department of Transportation Standard Specifications Construction of Transportation Systems, 2021 Edition, the 2024 Supplemental Specifications modifying the 2021 Standard Specifications, General Conditions, Supplements thereto (Published and Not Published) and Special Provisions modifying them. All materials used in the process of completion of the work included in the contract will be furnished from Georgia Department of Transportation certified suppliers only.

MODIFICATIONS OF STANDARD SPECIFICATIONS:

SECTION 101 - DEFINITION AND TERMS

Section 101.10 BOARD

Delete as written and substitute the following:

- "BOARD OF COMMISSIONERS OF ROCKDALE COUNTY, GEORGIA";

Section 101.13 CHIEF ENGINEER

Delete as written and substitute the following:

- "THE ROCKDALE COUNTY DIRECTOR OF TRANSPORTATION"

Section 101.14 COMMISSIONER

Delete as written and substitute the following:

- "THE CHAIRMAN OF THE BOARD OF COMMISSIONERS OF ROCKDALE COUNTY"

Section 101.16 CONTRACT

Delete the second paragraph and substitute the following:

- "The Contract Documents shall be composed of the Advertisement for Bid; Notice to **Contractors**; Form of Bid Proposal; General Conditions; Special Provisions; Detail Specifications, as identified in Section 105.04; Form of Contract; Form of Bond(s); Addenda; the drawings, including all changes incorporated herein before their execution; and also any Change Orders and Supplemental Agreements that are required to complete the construction of The Work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument. No oral agreement or orders are to be considered as valid or as a part of the Contract."

Section 101.22 DEPARTMENT

Delete as written and substitute the following:

- "THE ROCKDALE COUNTY DEPARTMENT OF TRANSPORTATION"

Section 101.24 ENGINEER

Delete as written and substitute the following:

- "THE ROCKDALE COUNTY DIRECTOR OF TRANSPORTATION, ACTING DIRECTLY OR THROUGH HIS DULY AUTHORIZED REPRESENTATIVES."

Section 101.62 STATE HIGHWAY ENGINEER

Delete as written and substitute the following:

- "THE ROCKDALE COUNTY DIRECTOR OF TRANSPORTATION, ACTING DIRECTLY OR THROUGH HIS DULY AUTHORIZED REPRESENTATIVES."

Section 101.74 SUPPLEMENTAL AGREEMENT

Retain as written and add the following:

- "Any Supplemental Agreement that has a dollar value amount that is less than \$25,000.00 shall not require the assent of the Surety."

Section 101.81 TREASURER

Delete as written and substitute the following:

- "THE ROCKDALE COUNTY DIRECTOR OF FINANCE"

Add Section 101.84:

- Section 101.84 "COUNTY: THE ROCKDALE COUNTY BOARD OF COMMISSIONERS"

SPECIFICATIONS INCLUDE, BUT ARE NOT LIMITED TO:

- Section 101 Definition and Terms
- Section 106 Control of Material
- Section 108 Prosecution and Progress
- Section 150 Traffic Control

SCOPE OF WORK ROADWAYS:

The loop and pulse detectors specified in the Bid Schedule will be replaced as necessary. While the plan is not to mill thru the existing loops and replace all, but should a loop need to be replaced due to construction operations, it will be as directed by the Engineer or Inspector.

The typical sections to be used on each roadway segment can be discussed at the Mandatory Pre-Bid Meeting. The individual sheets in the Appendix section depict estimated quantities for the project. The overarching goal of this resurfacing contract is to provide smooth, safe, well-draining roadways for the County. As such special emphasis will be placed on bringing the in situ grade back to 2% cross slope with center crown wherever possible. The successful bidder of this contract will always be required to have a 4-foot digital smart level on the project to ensure that the milling, binder/leveling, and final riding surface are performed in a consistent manner to achieve this overarching goal for the County. All milling shall occur in advance of the deep patching operations in all areas where both treatments are required.

Georgia Department of Transportation standard details are to be used as applicable, or as directed by Engineer. Milling and paving crew shall always have a fully functional calibrated 4-foot digital smart level on the project to rehabilitate the roadway sections to the proper cross slope and super elevation. Please refer to the Appendix Section for additional specification information on the treatments called out in this ITB.

A complete listing of the road segments to be resurfaced under this Contract can be found in the Appendix. The list, includes the name of the roadway; the subdivision, if any, it is in; and the approximate termini of the segment to be resurfaced. Total quantities of each pay item have been included for estimate only and require that the Contractor verify the quantities.

The Contractor is responsible for visiting the actual proposed construction sites where the roadways are to be resurfaced to familiarize themselves with the logistics that will be required to perform this subsequent contract.

The Contractor is responsible for building at minimum 2-foot-wide shoulders and clipping high shoulders up to 4-foot-wide or more to allow positive drainage off the new roadway. Complete earth and shoulder filling work within thirty (30) days, after completion of the final roadway.

All shoulder building and clipping operations must be completed prior to the thermoplastic striping operations.

Temporary striping is required in accordance with section 150.04 of the GDOT specifications. Placement of permanent pavement markings shall not begin until final surface course has been completed for more than fifteen (15) days and will be completed within forty-five (45) calendar days after the final surface course has been completed.

Notify utility companies a minimum of 60 days in advance of any proposed work for utility companies to begin clearing conflicts with scheduled work.

The Contractor shall be responsible for all erosion control measures to ensure all compliance with all state and federal laws and guidelines, the cost to be considered incidental and be included in the overall bid price. No additional payments shall be made to the contractor for erosion control.

The Contractor shall be responsible for removing, relocating, and maintaining the property owner's mailbox to an area outside the construction limits during the life of the contract where necessary. The location should be convenient to both the mail carrier and the resident or business owner. The move should not interfere with the proposed work. It may be necessary for the Contractor to confer with the post office serving the area. All costs incurred for the compliance to these requirements shall be incidental to the work being bid on.

All primary entrances into properties will always be maintained as accessible.

SEQUENCE OF OPERATIONS

GENERAL:

The purpose of this Special Provision is to provide a Sequence of Operations for construction of this project. This Special Provision also provides specific procedures that will permit vehicle and pedestrian traffic to pass area safely and with minimum inconvenience.

This Special Provision sets forth specific procedures and does not relieve the Contractor of any responsibilities required by Specification Section 150, other Specifications, Plans, or the MUTCD.

Planned off-site detours are not required for this Project.

Where traffic is permitted through the work area under stage construction, the Contractor may choose to construct, at no additional expense to the County, temporary on-site bypasses, or detours in order to expedite the Work. Plans for such temporary bypasses or detours shall be submitted to the Engineer for approval a minimum of at least fourteen (14) calendar days prior to proposed construction. Such bypasses or detours shall be removed promptly when in the opinion of the Engineer are no longer necessary for the satisfactory progress of the Work.

The Contractor's trucks and other vehicles shall travel in the direction of normal roadway traffic unless separated from the through traffic by positive construction barriers approved by the Engineer.

When construction operations necessitate an existing traffic signal to be out of service, the Contractor shall furnish off-duty police officers to regulate and maintain traffic control at the site.

There shall be no reduction in the total number of available traffic lanes except as specifically allowed by the Contract and as approved by the Engineer. The Contractor shall not perform work or move equipment or materials on the traveled way that visibly interferes with traffic flow on the roadways listed below between the hours of 6:00 to 9:00 AM and 3:00 to 6:00 PM, Monday through Friday, unless authorized by the Engineer prior to work being performed. Equipment or materials moved on or across the traveled way at other times shall be done in a manner that does not unduly interfere with traffic. Be aware that RDOT receives numerous complaints about early work in subdivisions interfering with the school's bus traffic, and a 9:30 am start date may be imposed for that area of work.

The Contractor shall schedule and arrange the Work to ensure the least inconvenience and the utmost in safety for the traveling public and to the Contractor's and the Department's forces. The Engineer shall have discretion to further limit the hours of construction activities with or near school zones or residences in order to provide the safest possible facilities for the traveling public. The Contractor shall not Work in residential areas from dusk to dawn.

The Contractor shall submit to the Engineer at the preconstruction meeting a list identifying the priority order in which the project will be completed. A schedule shall be submitted to the Engineer every week thereafter showing which roads will be completed for that week. Every effort to complete the roads/streets in the order of the list should be made. The Engineer shall be notified immediately if the order of the roads/street changes. The Engineer will be notified 24 hours in advance when the Contractor moves to a road/street to Work. The schedule as a minimum shows the timeline for milling, paving, grading and striping operations as these items may relate to the respective roadway. Please refer to Section 108.11 for more information regarding scheduling and cancellations.

In the prosecution of the Work, if it becomes necessary to remove any existing signs, markers, guardrail, etc. not covered by a specific pay item, they shall be removed, stored, and reinstalled, when directed by the Engineer, to line and grade, and in the same condition as when removed. Separate payment will not be made for this Work. All costs associated with the removal and resetting of incidental items shall be included in the overall price bid.

The Contractor shall develop a detailed staging and traffic control plan, if deemed necessary, for performing Work in specific areas of the Work, including but not limited to all traffic shifts, detours, pacing, lane closures or other activities that disrupt traffic flow. When required by the Engineer, the Contractor shall submit his staging and traffic control plan to the Department at least seven (7) business days prior to commencing Work in a specific area so that a decision on its acceptability can be made. The Department shall review and issue its decision within three (3) business days of receipt and, if approved, shall

give the Contractor a written Notice to Proceed (NTP) for that portion of the Work. The Contractor shall not commence Work prior to issuance of the NTP.

Contractor shall construct a 30- or 45-degree safety wedge, as required by GDOT, at the edge of all new asphalt overlays. This is to ensure that vehicular traffic will have a traversable edge that will allow for a smooth transition if the vehicle should leave the road unexpectedly and over-correct. See Section 400 for more details.

Any salvageable millings shall be the property of the Rockdale County Department of Transportation.

ORDER OF WORK:

Non-Interstate Divided Highways

The Contractor shall not simultaneously perform Work on both the inside shoulder and outside shoulder on either direction of traffic flow when the Work is within 12 feet of the traveled way, unless such areas are separated by at least 3000 feet of distance in rural areas or at least 500 feet of distance in urban areas.

Non-Divided Highways

The Contractor shall not simultaneously perform Work on opposite sides of the roadway when the Work is within 12 feet of the traveled way, unless such areas are separated by at least 3000 feet of distance in rural areas or at least 500 feet of distance in urban areas.

Pilot vehicles will be required during foaming operations, placement of bituminous surface treatment or asphaltic concrete on two-lane roadways unless otherwise specified.

On two-lane projects where full-width sections of the existing subgrade, base or surfacing are to be removed, and new base subgrade or surfacing is to be constructed, the Contractor shall maintain one lane traffic through the construction areas by removing and replacing the undesirable material for half the width of the existing roadway at a time. Replacement shall be made such that paving is completed to the level of the existing pavement in the adjacent lane by the end of the Workday.

Excavation

All areas within the limits of the Project, which are determined by the Engineer to be damaged, due either directly or indirectly to the process of construction, shall be cleaned up, redressed, and grassed. All surplus materials shall be removed and disposed of as required. Materials to be wasted shall be disposed of in accordance with Subsection 201.3.05.E of the current Specifications.

When trenching is required for minor roadway or shoulder widening, all operations at one site shall be completed to the level of the existing pavement in the same Workday.

SPECIAL CONDITIONS

The special conditions contained herein are Project Specific. When there is a conflict between the General Conditions of the Contract Documents and these Special Conditions, the Special Conditions will govern the Work.

The roads and streets impacted by this construction may require restrictions on one-lane traffic and/or temporary closure. The Department prior to start of construction for such restrictions MUST approve all restrictions on normal traffic flow patterns.

The Contractor shall provide off-road parking areas within the construction area and away from the intersecting streets or roads. The unauthorized parking of employees' vehicles and/or equipment will not be permitted along the shoulders or adjacent to the active traffic on any road or street in Rockdale County. It will be the Contractor's responsibility to prevent the violation of this provision. Failure to comply with the terms of this provision will result in the suspension of the Work.

The Contractor shall provide staging areas for equipment, materials and personnel which do not hinder public access or traffic movements. Debris and trash will be cleaned up in these areas to the acceptance of the inspector prior to vacating the area. Any soil contaminated by fuel or oil spills will be excavated and disposed of in accordance with EPA and State requirements for hazardous materials. The Contractor shall make every effort to prevent fuel and oil spills.

The Contractor shall notify the County three business days prior to beginning Work and 24 hours in advance when moving resurfacing/repaving operations from one location to another.

When construction begins on this project, the Contractor will be required to continuously pursue the Work without interruption to the completion of each stage of Work. The time duration between reconstruction of the base and paving operation shall be kept to a minimum to maintain a safe surface for motorists and shall be at the direction of the Engineer. Shoulder rehabilitation, including seeding of grass, shall be completed within two (2) weeks of main line paving. Cessation of Work without authorization will be considered as justification to deny the Contractor's request for an extension of time. Payment of asphalt will be authorized when all Work is complete on a section of roadway.

Wherever the proposed Work calls for excavation of portions of the existing graded aggregate base (GAB), soil cement, and or soil, the material that is retained shall be compacted to meet the requirements set forth in the Construction and Preparation subsections of the applicable section of the Standard Specifications relating to the particular material, and/or structure, to be implemented immediately upon the retained material

The Contract completion date shall be 180 from Notice to Proceed, or as approved by Rockdale County Department of Transportation. If additional streets or emergency work is added to the contract the Contractor will be granted an additional time extension.

The work performed under Pay Item 210-0020: GRADING – ADJUST SHOULDER TO GRADE shall cover only that work required to add and grade any additional material required to bring the shoulder up to finished grade at the edge of pavement and includes the material. By definition, this work will apply only to those rural-section roadways where the proposed grade at the edge of pavement is higher than that of the existing roadway or as directed by the Inspector or Engineer. This item also includes CUTTING BERMS DOWN to proper elevation to allow surface water on the road to drain to the ditches. The contractor is responsible for utility locates.

As no roadway grade is expected to be raised in excess of approximately 3 inches, the intent of this Work is not to rehabilitate the shoulders; rather the intent is simply to fill and feather the shoulder at the edge of pavement to tie as quickly to the existing as possible. The feathering could extend horizontally up to 48 inches, but not past the existing shoulder break point. Measurement for payment will be measured by the lane mile. Any area contiguous with the pavement where there is a drop-off will require shoulder grading. This will be as directed by the Inspector. This Work shall also include the establishment of permanent grassing on the newly placed material (sod where sodded). Payment for sodding, seeding/grassing, mulching, etc. is considered subsidiary to the grading.

At times the Contractor may have to cut the high shoulders down to allow water to move off the roadway and up to four (4) feet out on the shoulder. There may be limited occasions where the motor grader will have to extend their moldboard out past four feet in order to provide positive drainage across the profile of the in-situ roadway. Care must also be exercised to avoid damage to the new pavement edges with heavy equipment. If new roadway edge is damaged due to heavy equipment the Contractor will be required to cut and patch and restripe any of these areas.

In conjunction with the grading operations, any erosion control devices or measures that need to be installed to protect adjacent properties is the responsibility of the Contractor and is considered subsidiary to the cost of the grading. Special care shall be taken to prevent the edge of pavement from breaking while shouldering.

This work shall also include the establishment of permanent grassing on the newly placed material. Payment for in-kind seeding/grassing, mulching, etc. is considered subsidiary to the grading. In conjunction with the grading operations, any erosion control devices or measures that need to be installed to protect adjacent properties is the responsibility of the Contractor and is considered incidental to the cost of grading.

Where directed by the Engineer, transitions for driveways will be constructed to improve the driveway slope and break-over. The cost of this Work will be measured and paid for based on the top course of asphaltic concrete pavement per ton. Where complete removal and replacement of driveways in-kind is required, it will be paid for under that line item in the contract.

Along rural areas where mailboxes have been setback from the edge of pavement and the mail truck is required to pull off the pavement to deposit mail, these areas shall be covered with the respective surface and base course depths of new pavement in order to prevent the edge of pavement to ravel off by the mail truck. This additional pavement shall be included in the pay items for asphaltic concrete.

The Contractor shall notify the Engineer 48 hours in advance if the Contractor intends to Work on the Saturday or Sunday so that the Engineer can provide adequate inspection staff to oversee the Work. Failure to provide notice as required may result in denial of weekend work.

The Contractor shall notify the Engineer 72 hours in advance regarding the roadway project on which resurfacing and/or reconstruction will occur so that the Engineer in writing can notify occupants.

EQUIPMENT NOISE AND OPERATION:

All equipment used on the Work shall come equipped with factory installed mufflers or manufacturer's recommended equivalent in good condition. These mufflers shall be maintained in good condition throughout the life of the Contract. The equipment should be in good Working order without fuel leaks, damages, worn parts or broken parts which might create a hazard to the environment or personnel. Any equipment noted by the Inspector to the Contractor shall be fixed or removed immediately and any spills should be dealt with in accordance with EPA standards

UTILITY CONFLICTS

Utility companies having known facilities that conflict with the construction of this project will be directed by the County to adjust or relocate their facilities and will be notified of the Contract award. It is the Contractor's duty to notify the County of known conflicts.

It will be the Contractor's responsibility to conform with all the requirements of the Specifications as they relate to cooperation with utility owners and the protection of utility installations that exist on the Project. The Contractor's attention is directed to the requirement of Section 107, LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC, with particular attention to Article 107.21. F

It shall be the responsibility of the Contractor to coordinate his Work with any Work to be performed by others in a Right-of-Way clearance and arrange a schedule of operations that will allow for completion of the Project without undue delay. Where stage construction is required, it shall be the Contractor's responsibility to notify the utility owner when each stage of Work is completed, and the site is available for utility Work to proceed.

It shall be the responsibility of the Contractor to determine the estimated time for relocation and adjustment of facilities of all utility companies and to consider in his bid all such relocations and adjustments.

In accordance with Article 105.6 of the specifications, the County shall not be liable for payment of any costs due to utility delays, inconvenience or damage sustained by the Contractor due to interference of any utilities or appurtenances, or the operation of moving them. Delays by utilities will continue to be considered by the County in charging Contract time in accordance with Article 107.21.G.

The Contractor will not be paid for any delays or extra expense caused by utility facilities, obstructions, or any other items not being removed or relocated to clear construction in advance of his Work.

Georgia law requires that a telephone call or adequate notice must be given to the Utilities Protection Center (UPC) at 770-623- 4344 a minimum of three (3) days before Work is to begin. The notice will remain in effect for 10 Working days from the date the Utilities Protection Center is notified. Any milling, pulverizing, or excavation Work on the roadways requires that UPC be notified prior to Work being performed. If emergencies occur it is the responsibility of the Contractor to notify the respective utility company immediately and then the inspector.

ADDENDA

The contents of Addendums will be incorporated into the respective sections of the final CONTRACT AGREEMENT, GENERAL CONDITIONS, and/or SPECIAL PROVISIONS. The Contractor's submitted Bid Proposal at the time of bid opening will also be incorporated into the Special Provisions as Appendix C, which will be part of the Contract. The Contractor shall include as part of his/her Bid Proposal the completed form on page BD.6 of the Bid Documents verifying that he/she has included all addendums as part of the Bid Proposal.

**INVITATION TO BID
#25-16
SPLOST 5C RESURFACING PROGRAM**

APPENDIX A

ROADWAY NAMES

FY 2025 – ROCKDALE COUNTY SPLOST 5C PROGRAM

**Black Shoals Road NE (Acorn Ct to Booth Road)
Blacklawn Road SW (Dogwood to Old Covington Hwy)
Farmer Road (General Arts to Sigman)
Farmer Road (Sigman to Rockbridge Rd)
Farmer Road (Rockbridge to Irwin Bridge Rd)
Mc Cart Road (Old Covington Rd to Dead end)
Zingara Drive (W Hightower Trl to Hi-Roc Rd)
Zingara Drive (Hi-Roc Rd to US-20)
Rockdale Industrial Drive (Old Covington Hwy to Conyers city limit)
Plunkett Road (Old Covington Hwy to Lester Rd)
Sigman Industrial Ct NW (Chambers Dr to Cul-de-sac)**

**INVITATION TO BID #25-16
SPLOST 5C RESURFACING PROGRAM**

APPENDIX B

ITEMIZED QUANTITIES

2025 SPLOST 5C RESURFACING ROCKDALE COUNTY					SUBDIVISIONS 1-5	MAIN 1-5	MAIN 2																			
	LIN #	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125
	ITEM CODE	150-1000	210-0200	310-5060	402-3103	402-3130	402-3190	413-0750	432-0206	432-0214	647-6090	653-0120	653-0130	653-0230	653-0231	653-1704	653-1804	653-1501	653-1502	653-3501	653-6004	653-6006	654-1001	999-0001	N/A	611-805
	ITEM DESC	TRAFFIC CONTROL -- (Incl Temporary Striping	GRADING , ADJUST SHOULDER TO GRADE -- (2 Ft Min Width, Incl Cutting Down High Shoulders, Grassing in Kind)	GR AGGR BASE CRS, 6 INCH, INCL MATL (USED FOR PATCHING)	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATERIAL AND H LIME (2 INCH)	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATERIAL AND H LIME (2 INCH)	RECYCLED ASPH CONC 19 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATERIAL AND H LIME (2 INCH)	TACK COAT	MILL ASPH CONC PVMT, 1 1/2 IN DEPTH	MILL ASPH CONC PVMT, 3 1/2 IN DEPTH	LOOP DETECTOR 6 FT X 40 FT	THERMOPLASTIC PVMT MARKING, ARROW TP 2	THERMOPLASTIC PVMT MARKING, ARROW TP 3	THERMOPLASTIC PVMT MARKING WORD, TP 3A ("SCHOOL")	THERMOPLASTIC PVMT MARKING WORD, TP 4 ("AHEAD")	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN WHITE	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN WHITE	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN WHITE	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN YELLOW	THERMOPLASTIC SHIP TRAF STRIPE, 5 IN WHITE	THERMOPLASTIC TRAF STRIPING WHITE	THERMOPLASTIC TRAF STRIPING YELLOW	RAISED PAVEMENT MARKERS (TP 1, TP2, TP3)	SPEED TABLE - COMPLETE	REMOVE & REPLACE CONC CURB & GUTTER (MATCH EXISTING IN KIND) (CONTINGENCY ITEM IF NEEDED)	ADJUST MANHOLES TO GRADE
BLACK SHOALS ROAD																										
	Estimate Quantity	0.03	0.20	44.0		450.0	225.0	410		4,094		0	0	0	0	0	0	2,850	3,180	0	0	0	0	0	0	0
BLACKLAWN ROAD																										
	Estimate Quantity	0.06	0.40	78.0		786.0	393.0	714		7,144		0	0	0	0	0	0	3,030	3,390	0	0	0	0	0	0	0
FARMER ROAD																										
	Estimate Quantity	0.08	0.45	100.0		980.0	490.0	890		8,907		0	0	0	0	0	0	4,540	5,080	0	0	0	0	0	0	0
FARMER ROAD																										
	Estimate Quantity	0.12	0.75	161.0		1630.0	815.0	1,482		14,817		0	0	0	0	0	0	7,560	8,440	0	0	0	0	0	0	0
FARMER ROAD																										
	Estimate Quantity	0.21	1.25	274.0		2765.0	1383.0	2,513		25,133		0	0	0	0	0	0	12,820	14,330	0	0	0	0	0	0	0
McCART ROAD																										
	Estimate Quantity	0.08	1.25	107.0		1082.0	541.0	983		9,834		0	0	0	0	0	0	6,840	7,640	0	0	0	0	0	0	0
ZINGARA DRIVE																										
	Estimate Quantity	0.19	0.50	252.0		2554.0	1277.0	2,322		23,216		0	0	0	0	0	0	17,760	19,850	0	0	0	0	0	0	0
ZINGARA DRIVE																										
	Estimate Quantity	0.07	0.40	86.0		862.0	431.0	784		7,835		0	0	0	0	0	0	6,000	6,700	0	0	0	0	0	0	0
ROCKDALE INDUSTRIAL DRIVE																										
	Estimate Quantity	0.06	0.40	83.0		846.0	423.0	769		7,693		0	0	0	0	0	0	4,900	5,480	0	0	0	0	0	0	0
PLUNKETT ROAD																										
	Estimate Quantity	0.06	0.40	83.0		843.0	422.0	767		7,667		0	0	0	0	0	0	5,860	6,550	0	0	0	0	0	0	0
SIGMAN INDUSTRIAL COURT NW																										
	Estimate Quantity	0.03	0.15	32.0		334.0	167.0	304		3,037		0	0	0	0	0	0	1,940	2,160	0	0	0	0	0	0	0
ROCKDALE COUNTY CONTINGENCY																										
	Estimate Quantity		2.00	200.0		0.0	33.0	0		0	8	7	2	3	3	400	300	0	0	300	200	55	100	1	100	20
ROCKDALE COUNTY TOTALS																										
	Bid Estimated Quantities	1.0	8.0	1500.0		13132.0	6600.0	11,938		119377	8	7	2	3	3	400	300	74,100	82,800	300	200	55	100	1	100	20

**INVITATION TO BID #25-16
SPLOST 5C RESURFACING PROGRAM**

APPENDIX C

AWARDED CONTRACTOR'S BID PROPOSAL

ITB #25-16
SPLOST 5C RESURFACING PROGRAM

APPENDIX D

**ADDITIONAL SPECIAL PROVISIONS, TYPICAL
SECTIONS & LOCATION MAPS**

- **Special Provision 150 – Traffic Control**
- **Special Provision 415 - Asphaltic Concrete
Open Graded Crack Relief Interlayer**
- **Typical Sections (2)**
 - **Major Roads**
 - **Subdivision Streets**
- **Rockdale County Map (Roads Highlighted)**

February 01, 2017
Revised October 22, 2018
Revised December 7, 2020
Revised June 22, 2022
Revised January 24, 2024

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

SPECIAL PROVISION

Section 150—Traffic Control

150.1 General Description

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

The Contractor shall be responsible for the maintenance of traffic signals and Advanced Traffic Management System (ATMs) devices from the time that the system is modified until final acceptance. The maintenance of traffic signals and ATMs devices that are not a part of the Work and that are not in conflict with any portion of the Work shall not be the responsibility of the Contractor. However, the Contractor is still responsible for damages to all devices that they or their subcontractors cause, in accordance with Section 107 and other Specifications.

When any provisions of this Specification or the Plans do not meet the minimum requirements of the [MUTCD](#), the [MUTCD](#) shall control. The 2023 Edition of the [MUTCD](#) including revisions shall be in effect for the duration of the project.

All traffic control devices used during the construction of the project shall meet the standards utilized in the [MUTCD](#), and shall comply with the requirements of these Specifications, Georgia Construction Standards and Details, Project Plans, Design Manuals, and Special Provisions.

The needs and control of all road users (motorists, bicyclists and pedestrians within the highway right-of-way and easements, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA), Title II,) through a Temporary Traffic Control (TTC) zone shall be an essential part of highway construction, utility work, maintenance operations and management of traffic incidents.

Utilities included in the Contract are bound by Special Provision 150 and shall follow its requirements. For utilities not included in the Contract but working within the project limits, they shall, at a minimum follow the [MUTCD](#). Moreover, in accordance with [Utility Accommodation Policy and Standards Manual dated 2016](#), the Engineer reserves the right to require additional certified flaggers, signs, warning lights, channelization devices, and other safety devices as may be necessary to properly protect, warn, and safeguard the traveling public. In addition, the Department reserves the right to place time restrictions or moratoriums on all utility work covered under a permit when, in the opinion of the Department, the continuance of the Work would seriously hinder traffic flow, be needlessly disruptive, or would unnecessarily inconvenience the traveling public. In case of emergencies, Utilities shall be provided access in accordance with [Utility Accommodation Policy and Standards Manual](#).

150.1.01 Definitions

For Special Provision 150, the definitions for “shall”, “should”, and “may” will be in accordance with [MUTCD \(1A.13\) \(1C.02\)](#).

Shall (Standard) - a statement of required, mandatory, or specifically prohibitive practice regarding a traffic control device.

Should (Guidance) - a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate.

May (Option) - a statement of practice that is a permissive condition and carries no requirement or recommendation.

150.1.02 Content

150.1 General Description

150.1.01 Definitions

150.1.02 Content

150.1.03 Related References

- A. Standard Specification
- B. Reference Documents

150.1.04 Submittals/Preconstruction

- A. Worksite Traffic Control Supervisor
- B. Sequence of Operations
- C. Pedestrian Considerations
 - 1. Pedestrian Signage
 - 2. Temporary Pedestrian Facilities

150.2 Materials and Traffic Control Devices

150.2.01 Traffic Control Devices

- A. NCHRP 350 and MASH
- B. Approval
- C. Quality Guidelines for All Temporary Traffic Devices

150.2.02 Reflectorization Requirements

- A. Signs
- B. Channelization Devices

150.2.03 Arrow Panels

150.2.04 Channelization Devices

A. General

B. Drums

1. Design
2. Application
3. Longitudinal Channelization
4. Removal

C. Vertical Panels

1. Design
2. Application

D. Cones

1. Design
2. Applications

E. Barricades

1. Design
2. Application

F. Warning Lights

1. Design
2. Application

150.2.05 Flashing Beacon

150.2.06 Guardrail

150.2.07 Interim Signs

A. Posts

B. Sign Blanks and Panels

150.2.08 Pavement Markings

- A. All Traffic Striping for Forty-Five (45) Days or Less (≤ 45 Days)
- B. All Temporary Striping Beyond Forty-Five (45) days (> 45 Days)
- C. All Temporary Traffic Striping on Final Surface

150.2.09 Portable Changeable Message Signs

150.2.10 Portable Impact Attenuators

150.2.11 Portable Temporary Traffic Control Signals

150.2.12 Raised Pavement Markers

150.2.13 Rumble Strips

150.2.14 Temporary Barriers

- A. Design
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150.2.15 Temporary Guardrail Anchorage- Type 12

150.2.16 Temporary Traffic Signal

150.3 Construction Requirements

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- B. Maintenance of Traffic Control Devices
- C. Traffic Interruption Restrictions
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 - 2. Non-Interstate Divided Highways
 - 3. Non-Divided Highways
- E. Work Zone Geometric Restrictions
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150.3.03 Signage – General

- A. Signing Requirements of the Temporary Traffic Control (TTC) Plan
- B. Conflicting or Non-Applicable Signs
- C. Removal of Existing Signs and Supports
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- E. Existing Special Guide Signs
 - 1. Special Guide Signs
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 - 4. Permanent Special Guide Signs
- F. Stop Sign Regulated Intersections
- G. Low Shoulder Signage
 - 1. Low Shoulder for Construction/Reconstruction/Resurfacing Projects
 - 2. Shoulder Drop-Off for Construction/Reconstruction/Resurfacing Project
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A. Project Signs - All Type of Highways

1. State Routes
2. Interstate, Limited Access and Multilane Divided Highways
3. Ramp Work on Limited Access Highways

B. Highway Work Zone

1. No Reduction in the Existing Posted Speed Limit in Highway Work Zone
2. Reducing the Speed Limit in a Highway Work Zone
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150.3.05 Shoulder/Lane Closure

A. Approval/Restrictions

1. Closure Length
2. Duration

B. Shoulder Closure

C. Lane Closure

1. Advance Warning Signs
2. Transition Area – Taper
3. Activity Area
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D. Removal of Lane Closures

E. Exit and Entrance Ramps

150.3.06 Traffic Pacing Method

A. Pacing of Traffic

B. Methods of Signing for Traffic Pacing

150.3.07 Flagging Operation

A. Flaggers

B. Flagger Certification

C. Flagger Appearance and Equipment

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150.3.08 Traffic Signals

A. Responsibility/Cost

B. Law Enforcement Officer Requirement

150.3.09 Mobile Operations

150.3.10 Pavement Markings

A. General

1. Resurfacing Projects

2. Widening and Reconstruction Projects

3. New Location Construction Projects

B. Installation and Removal of Pavement Markings

1. Installation

2. Removal

3. Intermediate Surface

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5. Pay Factor Reduction for Asphaltic Concrete Final Surfaces

6. Preparation and Planning for Traffic ShiftsC. Raised Pavement Markers

1. Supplementing Lane Lines

2. Supplementing Ramp Gore Lines

3. Other Lines

D. Exceptions for Interim Markings

1. Two-Lane, Two-Way Roadway

2. Multi-Lane Highway - with No Paved Shoulder(s) or Paved Shoulder(s) Four Feet or Less ($\leq 4'$)

3. Limited Access Roadways and Roadways with Paved Shoulder Greater than Four Feet ($>4'$)

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150.3.11 Differences in Elevation between Travel Lanes and Shoulders

A. Differences in Elevations

1. Difference of Two Inches ($\leq 2''$) or Less Between Adjacent Travel Lanes

2. Difference of Two Inches ($\leq 2''$) or Less Between Adjacent Travel Lane and Paved Shoulder

3. Difference of Greater Than Two Inches ($>2''$) is Permitted for Continuous Operations

4. Difference of Greater Than Two Inches ($>2''$) Between Travel Lanes and/or Shoulders for Non-Continuous Operations

B. Healed Section

C. Emergency Situations

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E. Asphaltic Concrete Resurfacing Projects

1. Shoulder Construction Included as a Part of the Contract

2. Shoulder Construction Not Included as a Part of the Contract

150.3.12 Work Zone Law Enforcement

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150.4.01 Traffic Control Items

A. Traffic Control

B. Changeable Message Sign, Portable

C. Flashing Beacon Assembly

D. Pavement Markings

E. Portable Impact Attenuators

F. Signs

1. Interim Ground Mounted or Interim Overhead Special Guide Signs

2. Remove and Reset Existing Special Guide Signs, Ground Mount or Overhead

3. Modify Special Guide Signs, Ground Mount or Overhead

G. Temporary Audible Information Device

H. Temporary Barrier

I. Temporary Curb Cut Wheelchair Ramps

J. Temporary Guardrail Anchorage, Type 12

K. Temporary Walkways with Detectable Edging

L. Traffic Signal Installation - Temporary

M. Work Zone Law Enforcement

150.5 Reserved

150.6 Special Conditions

150.7 Payment

150.7.01 Enforcement and Adjustments

150.1.03 Related References

A. Standard Specifications

Section 104 - Scope of Work

Section 105 - -Control of Work-Legal Regulations and Responsibility to the Public

Section 107 - Legal Regulations and Responsibility to the Public

Section 108 - Prosecution and Progress

Section 209 - Subgrade Construction

Section 400 - Hot Mix Asphaltic Concrete Construction

Section 441 - Miscellaneous Concrete

Section 429 - Rumble Strips

Section 620 - Temporary Barrier

Section 632 - Portable Changeable Message Signs

Section 641 - Guardrail

Section 647 - Traffic Signal Installation

Section 648 - Traffic Impact Attenuator

Section 652 - Painting Traffic Stripe

Section 653 - Thermoplastic Traffic Stripe

Section 654 - Raised Pavement Markers

Section 656 - Removal of Pavement Markings

Section 657 - Preformed Plastic Pavement Markings

Section 658 - Polyurea Traffic Strip

Section 659 - Hot Applied Preformed Plastic Pavement Markings

Section 911 - Sign Posts

Section 912 - Sign Blanks and Panels

Section 913 - Reflectorizing Materials

B. Referenced Documents

ASTM D4956-13 (Retro-reflectivity)

American Traffic Safety Services Association (ATSSA)

Construction Detail A-3 Curb Cut (Wheelchair) Ramps Concrete Sidewalk Details

Construction Detail A-4 Detectable Warning Surface Truncated Dome Size, Spacing and Alignment Requirements

Construction Detail T-3A (Type 7, 8, and 9 Square Tube Post Installation Detail)

GDOT Signing and Marking Design Guidelines

Georgia Standard 4000W “Lengths of Advancement, Clear Zone Distances, Fill Height Embankment”

Georgia Standard 4960 “Temporary Barrier (End Treatment Options)”

Georgia Standard 9102 “Traffic Control Detail for Lane Closure on Two-Lane Highway”

Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway”

Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”

Georgia Standard 9121 “Tapers, Signs, and Markings for Passing Lanes”

Manual for Assessing Safety Hardware (MASH)

Manual on Uniform Traffic Control Devices (MUTCD)

National Cooperative Highway Research Program (NCHRP) 350

National Safety Council

Qualified Product List #29 (QPL-29) Reflective Sheeting

Qualified Product List #34 (QPL-34) Work Zone Traffic Control Devices (Drums, Type III Barricades, Vertical Panels, and Portable Sign Systems)

Qualified Product List #35 (QPL-35) Drive Type Galvanized Steel Sign Posts

Qualified Product List #46 (QPL-46) Traffic Pavement Markings

Qualified Product List #64 (QPL-64) Attenuator Units (Compression Crash Cushion) and Guardrail End Treatments

Qualified Product List #76 (QPL-76) Raised Pavement Markers and Channel Markers

Qualified Product List #79 (QPL-79) Portable Arrow Boards

Qualified Product List #82 (QPL-82) “Portable Changeable Message Signs”

Utility Accommodation Policy and Standards Manual

Work Zone Safety and Mobility Policy

150.1.04 Submittals/Preconstruction

A. Worksite Traffic Control Supervisor

The Contractor shall designate a qualified individual as the Worksite Traffic Control Supervisor (WTCS). The WTCS shall be responsible for selecting, installing, and maintaining all traffic control devices in accordance with the Plans, Specifications, Special Provisions and the [MUTCD](#). The WTCS shall be currently certified by the [American Traffic Safety Services Association \(ATSSA\)](#) Work Site Traffic Supervisor Certification program or the [National Safety Council](#) Certification program. On-line classes will not be accepted.

The WTCS shall be available on a twenty-four (24) hour basis to perform their duties. If the Work requires traffic control activities to be performed during the daylight and nighttime hours, it may be necessary for the Contractor to designate an alternate WTCS. An alternate WTCS must meet the same requirements and qualifications as the primary WTCS and be accepted by the Engineer prior to beginning any traffic control duties. The Worksite Traffic Control Supervisor's traffic control responsibilities shall have priority over all other assigned duties.

As the representative of the Contractor, the WTCS shall have full authority to act on behalf of the Contractor in administering the TTC Plan. The WTCS shall have appropriate training in safe traffic control practices in accordance with Part 6 of the [MUTCD](#). In addition to the WTCS, all other individuals making decisions regarding traffic control shall meet the training requirements of the Part 6 of the [MUTCD](#).

The Worksite Traffic Control Supervisor (WTCS) shall have a copy of Part 6 of the [MUTCD](#) and the Contract on the job site. Copies of the current MUTCD may be obtained from the FHWA web page at <http://mutcd.fhwa.dot.gov>.

The WTCS shall supervise the initial installation of traffic control devices. The Engineer, prior to the beginning of construction, will review the initial installation. Modifications to traffic control devices as required by sequence of operations or staged construction shall be reviewed by the WTCS.

Any work performed on the interstate or limited access highway right-of-way that requires traffic control shall be supervised by a submitted/approved certified Worksite Traffic Control Supervisor. No work requiring traffic control shall be performed unless the certified WTCS is on the worksite. Failure to maintain a Certified Worksite Traffic Control Supervisor on the Work will be considered as non-performance under [Subsection 150.7.01](#).

The WTCS or alternate WTCS shall be available on a full-time basis to maintain traffic control devices with access to all personnel, materials, and equipment necessary to respond effectively to an emergency situation within forty-five (45) minutes of notification of the emergency.

The WTCS shall perform inspections, at a minimum once a month, to ensure that traffic control is maintained. For all interstate and limited access highways, the WTCS shall perform, as a minimum, weekly traffic control inspections. The inspections will start with the installation of the advance warning signs and will stop when a maintenance acceptance is issued or when the corrective list is completed.

An inspection shall include both daytime and nighttime reviews. The inspection shall be reported to the Engineer on a Traffic Control Inspection Report, (TC-1). Unless modified by the special conditions or by the Engineer, routine deficiencies shall be corrected within a twenty-four (24) hour period. Failure to comply with these provisions shall be grounds for dismissal from the duties of WTCS and/or removal of the WTCS from the project. Failure of the WTCS to execute their duties shall be considered as non-performance under [Subsection 150.7.01](#).

The Engineer will periodically review the Work for compliance with the requirements of the TTC plan.

On projects where traffic control duties will not require full time WTCS supervision, the Engineer may allow the Contractor's Project superintendent, foreman, subcontractor, or other designated personnel to serve as the WTCS as long as satisfactory results are obtained. Nevertheless, the individual shall meet the requirements and perform the duties of a WTCS.

TRAFFIC CONTROL INSPECTION REPORT (TC-1)

Project No.: _____ County: _____

Contractor: _____ Date: _____ Daytime: _____

Nighttime: _____

PURPOSE: To provide adequate warning, delineation, and channelization to assist in guiding road users in advance of and through the work zone by utilizing proper pavement markings, signs, and other MUTCD compliant devices.

RESPONSIBILITY: The Worksite Traffic Control Supervisor (WTCS) has the duty of ensuring that all traffic control devices are installed and maintained according to the requirements of the Traffic Control Plan.

DEFICIENCIES: Items noted below require corrective measures be performed within the next _____ hours/days.

<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>ACTION REQUIRED</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
(use additional sheets if needed)		

Signature: _____ WTCS or DOT performing inspection

DOT inspection presented to WTCS Date: _____ Time: _____

TO BE COMPLETED BY THE WTCS

The attached deficiencies were corrected by Date: _____ Time: _____

Signature _____ Return TC-1 to DOT inspector.

The WTCS certifies that all traffic control devices in use on the project are MASH/NCHRP 350 crashworthy compliant.

Traffic Control Checklist

Satisfactory Unsatisfactory Non-applicable

Signs

S

U

N

- Are the signs correctly installed?
- Signs are in place according to TTC Plans. Signs are plumb and level. Signs are at the proper height.
- Are the signs visible and readable to the public both daytime and nighttime?
- Is retroreflectivity good?
- Are signs not in use including PCMS properly stored?

TTC Devices

S

U

N

- Are they MASH/NHCRP 350 approved? Do they meet MUTCD and Special Provision 150 requirements?
- Are they installed according to manufacture recommendation?
- Are they in acceptable/marginal condition? Are they stable? Is the retroreflectivity good?

Clear Zone

S

U

N

- Are all material and equipment stored beyond the clear zone?
- If stored in clear zone, are they protected by positive barrier?
- Are drop-offs marked and healed according to Special Provision 150?

Positive Barriers

S

U

N

- Are the barriers in acceptable/marginal condition and FHWA approved?
- Are the barrier reflectors proper and in good condition?
- Do the barriers extend to the proper advancement length? Are the tapers according to GA Standards?

Attenuators and Guardrails

S

U

N

- Are the proper attenuator assemblies in use?
- Gating - Is the recovery area free of debris and provide the necessary recovery area?
- Is the assembly in accordance with manufacture's recommendation?
- Are the guardrails properly anchored and/or attached to the barrier?
- Are shoes and transition sections in accordance with Standards?

Pavement Markings

S

U

N

- Are the pavement markings visible and legible?
- Can they be seen during the daytime and nighttime?
- Are there no conflicting pavement markings?
- Are the pavement markings including RPM installed and maintained according to section 150?

B. Sequence of Operations

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

Where traffic is permitted through the work area under stage construction, the Contractor may choose to construct, at no additional expense to the Department, temporary on-site bypasses, or detours in order to expedite the Work. Plans for such temporary bypasses or detours shall be submitted to the Engineer for review and approval thirty (30) calendar days prior to the proposed construction. Such bypasses or detours shall be removed promptly when in the opinion of the Engineer; they are no longer necessary for the satisfactory progress of the Work. Bypasses and detours shall meet the minimum requirements of Subsection 150.3.01.E.

As an option to the Sequence of Operations in the Contract, the Contractor may submit an alternative Sequence of Operations for review and approval. Alternate Sequence of Operations for pedestrian facilities shall be in compliance with the MUTCD and ADA. Pedestrian needs identified in the preconstruction phase shall be included in the proposed alternate plan.

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

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

Some additional traffic control details will be required prior to any major shifts or changes in traffic. The traffic control details shall include, but not be limited to, the following:

1. A detailed drawing showing traffic locations and lanes for each step of the change.
2. The location, size, and message of all signs required by the MUTCD, Plan, Special Provisions, and other signs as required to fit conditions. Any portable changeable message signs used shall be included in the details.
3. The method to be used in, and the limits of, the obliteration of conflicting lines and markings.
4. Type, location, and extent of new lines and markings.
5. Horizontal and vertical alignment and superelevation rates for detours, including cross-section and profile grades along each edge of existing pavement.
6. Drainage details for temporary and permanent alignments.
7. Location, length, and/or spacing of channelization and protective devices (temporary barrier, guardrail, barricades, etc.)
8. Starting time, duration, and date of planned change.
9. For each traffic shift, a paving plan, erection plan, or work site plan, as appropriate, detailing workforce, materials, and equipment necessary to accomplish the proposed Work. This will be the minimum resource allocation required in order to start the Work.

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

C. Pedestrian Considerations

All existing pedestrian facilities, including access to transit stops, shall be maintained. Where pedestrian routes are closed, alternate routes shall be provided. Closures of existing, interim, and final pedestrian facilities shall have the prior written approval of the Engineer. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility. Pedestrian facilities are considered improvements and provisions made to accommodate or encourage walking. Whenever a sidewalk is to be closed, the Engineer shall notify the maintaining agency two (2) weeks prior to the closure. Prior to closure, detectable barriers (that are detectable by a person with a visual disability traveling with the aid of a long cane), as described by the MUTCD, shall be placed across the full width of the closed sidewalk. Barriers and channelizing devices used along a temporary pedestrian route shall be in compliance with the MUTCD.

Temporary Traffic Control devices used to delineate a Temporary Traffic Control Zone Pedestrian Walkway shall be in compliance with Subsection 150.3.01.A. Appropriate signs as described in the MUTCD shall be maintained to allow safe passage of pedestrian traffic or to advise pedestrians of walkway closures (Refer to MUTCD Figures TA-28 and TA-29 for guidance). Advance closure signing should be placed at intersections rather than midblock locations so that pedestrians are not confronted with midblock work sites that will induce them to attempt skirting the work site or making a midblock crossing. Temporary Traffic Control devices and construction material shall not intrude into the usable width of the pedestrian walkway. Signs and other devices shall be placed such that they do not narrow or restrict any pedestrian passage to less than forty-eight inches ($\geq 48"$).

1. Pedestrian Signage

A pedestrian walkway shall not be severed or relocated for non-construction activities, such as parking for construction vehicles and equipment. Movement by construction vehicles and equipment across designated pedestrian walkways should be minimized. When necessary, construction activities shall be controlled by flaggers. Pedestrian walkways shall be kept free of mud, loose gravel, or other debris.

When temporary covered walkways are used, they shall be lighted during nighttime hours. When temporary traffic barrier is used to separate pedestrian and vehicular traffic, the temporary barrier shall meet Manual for Assessing Safety Hardware (MASH) Test Level 3 and/or NCHRP-350 Test Level Three. The barrier ends shall be protected in accordance with Georgia Standard 4960. Curbing shall not be used as a substitute for temporary traffic barriers when temporary traffic barriers are required. Tape, rope, or plastic chain strung between temporary traffic control devices are not considered as detectable and shall not be used as a control for pedestrian movements.

The WTCS shall inspect the activity area daily to ensure that effective pedestrian TTC is being maintained. The inspection of TTC for pedestrian traffic shall be included as part of the TC-1 report.

2. Temporary Pedestrian Facilities

Temporary pedestrian facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. The geometry, alignment and construction of the facility should meet the applicable requirements of the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)".

a. Temporary Walkways with Detectable Edging

A smooth, continuous hard surface (firm, stable and slip resistant) shall be provided throughout the entire length of the temporary pedestrian facility. Compacted soils, sand, crushed stone, or asphaltic pavement millings shall not be used as a surface course for walkways.

Temporary walkways shall include detectable edging as defined in the MUTCD. When temporary traffic barrier is included as a pay item in the Contract and where locations identified on the Plans for positive protection will also allow them to serve as pedestrian detectable edging, payment will be made for the temporary traffic barrier in accordance with [Section 620](#). No payment will be made for temporary walkways with Detectable Edging where existing pavements or existing edging (that meets the requirements of MUTCD) are utilized as temporary walkways. Payment for temporary detectable edging, including approved barriers and channelizing devices, installed on existing pavements shall be included in Traffic Control-Lump Sum.

Regardless of the materials used, temporary walkways shall be constructed with sufficient thickness and durability to withstand the intended use for the duration of the construction project. If concrete or asphalt is used as the surface course for the walkway, it shall be a minimum of one and one-half inches ($\geq 1\frac{1}{2}$ ") thick. Temporary walkways constructed across unimproved streets and drives shall be a minimum thickness of four inches (≥ 4 ") for concrete and three inches (≥ 3 ") for asphalt. Joints formed in concrete sidewalks shall be in accordance with [Section 441](#). Concrete surfaces shall have a broom finish.

If plywood is used as a walkway, it must be a minimum of three quarters of an inch ($\geq 3/4$ ") thick, pressure treated and supported with pressure treated longitudinal joists spaced a maximum of sixteen inches (≤ 16 ") on center. The plywood shall be secured to the joist with galvanized nails or galvanized deck screws. Nails and screws shall be countersunk to prevent snagging or tripping the pedestrians. A slip resistant friction course shall be applied to any plywood surface that is used as a walkway. Any slip resistant material used shall have the prior written approval of the Engineer.

The Contractor may propose alternate types of Temporary Walkways provided that the Contractor can document that the proposed walkway meets the requirements of the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)". Alternate types of Temporary Walkways shall have the prior written approval of the Engineer.

Temporary walkways shall be constructed and maintained so there are no abrupt changes in grade or terrain that could cause a tripping hazard or could be a barrier to wheelchair use. The Contractor shall construct and maintain the walkway to ensure that joints in the walkway have a vertical difference in elevation of no more than one quarter ($\leq 1/4$ ") of an inch and that the horizontal joints have gaps no greater than one half ($\leq 1/2$ ") of an inch. The grade of the temporary walkway should parallel the grade of the existing walkway or roadway and the cross slope should be no greater than two percent ($\leq 2\%$). A width of sixty inches (60"), if practical, should be provided throughout the entire length of any temporary walkway. The temporary walkway shall be a minimum width of forty eight (48") inches. When it is not possible to maintain a minimum width of sixty (60") inches throughout the entire length of temporary walkway, a sixty (60") inch by sixty (60") inch passing space should be provided at least every two hundred feet (200 ft.), to allow individuals in wheelchairs to pass.

Temporary walkways shall be constructed on firm subgrade. Compact the subgrade according to [Section 209](#). Furnish and install any needed temporary pipes prior to constructing any walkway to ensure positive drainage away from or beneath the temporary walkway. Once the walkway is no longer required, remove any temporary materials, and restore the area to the original conditions or as shown in the Plans.

b. Temporary Curb Cut Wheelchair Ramps

Temporary curb cut wheelchair ramps shall be constructed in accordance with [Section 441](#) and [Construction Detail A-3 Curb Cut \(Wheelchair\) Ramps Concrete Sidewalk Details](#). Ramps shall also include a detectable warning surface in accordance with [Construction Detail A-4 Detectable Warning Surface Truncated Dome Size, Spacing and Alignment Requirements](#). Other types of material for the construction of the temporary curb cut wheelchair ramps, including the detectable warning surface, may be used provided the Contractor can provide documentation that the material to be used meets the requirements

of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”. When a wheelchair ramp is no longer required, remove the temporary materials, and restore the area to existing conditions or as shown in the Plans. For the items required to restore the area to original conditions or as shown in the Plans, measures for payment shall be covered by Contract pay items. If pay items are not included in the Contract, then payment for these items shall be included in Traffic Control-Lump Sum.

c. Temporary Audible Information Device

Temporary audible information devices, when shown in the Plans, shall be installed in compliance with the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”. The devices shall be installed in accordance with the manufacturer’s recommendations. Prior to installation, the Contractor shall provide the Engineer with a set of manufacturer’s drawings detailing the proper installation procedures for each device. When no longer required, the devices shall remain the property of the Contractor.

150.2 Materials and Traffic Control Devices

150.2.01 Traffic Control Devices

A. NCHRP 350 and MASH

All devices shall be certified in accordance with the Manual for Assessing Safety Hardware (MASH) Test Level 3 and/or the National Cooperative Highway Research Program (NCHRP) 350 Test Level 3 as applicable unless modified by this Special Provision. In addition, temporary work zone devices, including portable barriers, manufactured after December 31, 2019, must have been successfully tested under 2016 edition of MASH requirements. Such devices manufactured on or before this date, and successfully tested under either NCHRP Report 350 or the 2009 edition of MASH, may continue to be used throughout their normal service lives.

B. Approval

All traffic control devices with applicable Qualified Products List (QPL) categories shall come from the appropriate QPL list. Products not on the QPL may be used with an approval letter from the Georgia Department of Transportation Office of Materials and Testing. If there is no applicable QPL, the Contractor shall provide proof of MASH/NCHRP 350 certification. The proof may be a letter or written statement from the manufacturer that the product is MASH/NCHRP 350 approved. Decal certifications are not proof of certification and are not required.

C. Quality Guidelines for All Temporary Traffic Devices

All traffic control devices found to be unacceptable in accordance with the current ATSSA, “Quality Guidelines for Temporary Traffic Devices and Features” regardless of total numbers shall be replaced within twenty-four (24) hours unless stated otherwise in the Specifications, in the Contract, or as directed by the Engineer.

150.2.02 Retroreflectivity Requirements

A. Signs

Reflective sheeting shall meet the requirements of Section 913 and QPL-29

All construction warning signs (black on fluorescent orange) shall meet the minimum reflectivity and color requirements of ASTM D4956 Type XI regardless of the mounting height. All other signs reflectorization shall be in accordance with the Plans, Contract, and “GDOT Signing and Marking Design Guidelines”.

B. Channelization Devices

Reflective sheeting shall meet the requirements of Section 913 and QPL-29

All channelization devices (white/ fluorescent orange and white/red) shall meet the minimum retroreflectivity requirements of ASTM D4956 Type IV or Type VI.

150.2.03 Arrow Panels

Arrow panels shall meet the requirements for [MUTCD \(6L.06\)](#) and QPL-79.

Portable sequential arrow, sequential chevron, or flashing arrow panels shall be a minimum size of forty-eight inches (48") high by ninety-six inches (96") wide with not less than fifteen (15) lamps used for the arrow. The arrow shall occupy virtually the entire size of the arrow panel and shall have a minimum legibility distance of one (1) mile. The minimum legibility distance is the distance at which the arrow panel can be comprehended by an observer on a sunny day, or clear night. Arrow panels shall be equipped with automatic dimming features for use during hours of darkness. The arrow panels shall also meet the requirements for a Type C panel as shown in the MUTCD (6L.06). The sequential or flashing arrow panels shall not be used for lane closure on two-lane, two-way highways when traffic is restricted to one-lane operations in which case, appropriate signing, flaggers and when required, pilot vehicles will be deemed sufficient.

The arrow panels shall be placed on the shoulder at or near the point where the lane closing transition begins. The panels shall be mounted on a vehicle, trailer, or other suitable support. Vehicle mounted panels shall be provided with remote controls. Minimum mounting height shall be seven feet (7') above the roadway to the bottom of the panel, except on vehicle mounted panels which should be as high as practical.

For emergency situations, arrow display panels that meet the MUTCD requirements for Type A or Type B panels may be used until Type C panels can be located and placed at the site. The use of Type A and Type B panels shall be held to the minimum length of time possible before having the Type C panel(s) in operation. The Engineer shall determine when conditions and circumstances are considered to be emergencies. The Contractor shall notify the Engineer, in writing, when any non-specification arrow display panel(s) is being used in the Work.

150.2.04 Channelization Devices

A. General

Channelization shall clearly delineate the travel way through the work zone and alert drivers and pedestrians to conditions created by work activities in or near the travel way. Channelization shall be in accordance with the Plans, Specifications, MUTCD, QPL-34, and the following requirements.

B. Drums

1. Design

Drums shall meet the minimum requirement of the [MUTCD \(6K.06\)](#). Drums shall have six inch (6") wide stripes – white/fluorescent orange.

2. Application

Drums shall be used as the required channelizing device to delineate the full length of a lane closure, shift, or encroachment, except as modified by this Subsection.

3. Longitudinal Channelization

Drums shall be spaced as listed below for various roadside work conditions except as modified by [Subsection 150.3.11](#). Spacing shall be used for situations meeting any of the conditions listed as follows:

a. FORTY FOOT (40') SPACING MAXIMUM

- For difference in elevation exceeding two inches (> 2").
- For heeled sections no steeper than 4:1 as shown in [Subsection 150.3.11](#), Detail 150-H.

b. EIGHTY FOOT (80') SPACING MAXIMUM

- For difference in elevation of two inches ($\leq 2''$) or less.
- Flush areas where equipment or workers are within ten feet ($\leq 10'$) of the travel lane.

c. 200 FOOT SPACING MAXIMUM: Where equipment or workers are more than ten feet ($> 10'$) from travel lane. Lateral offset clearance to be four feet (4') from the travel lane.

- For paved areas, eight feet ($> 8'$) or greater in width that are paved flush with a standard width travel lane.
- For disturbed shoulder areas not completed to typical section that are flush to the travel lane and considered a usable shoulder.

4. Removal of Drums

Drums may be removed after shoulders are completed to typical section and grassed. Guardrail and other safety devices shall be installed and appropriate signs advising of conditions such as soft or low shoulder shall be posted before the drums are removed.

C. Vertical Panels

1. Design

All vertical panels shall meet the minimum requirements of the [MUTCD \(6K.05\)](#). All vertical panels shall have a minimum of 270 square inches of retroreflective area facing the traffic and be a minimum of thirty-six inches ($\geq 36''$) high. The vertical panels shall be in addition a minimum eight inches ($\geq 8''$) wide with a stripe width of six inches (6") – white/fluorescent orange.

2. Application

Vertical panels with retroreflectivity less than Type VI can only be used when traffic drums reduce the travel lane to less than ten feet ($\leq 10'$); vertical panels shall be used to restore the travel lane to ten feet ($\geq 10'$) or greater. No other application of vertical panels with retroreflectivity less than type VI will be permitted.

Vertical panels with a minimum type VI retroreflectivity and six (6") inch stripe may be used for longitudinal channelization in the activity zone where work takes place for short-term stationary lane closures and intermediate-term stationary lane closures. They can be used for lane closures lasting three (3) days and with Engineer approval up to seven (7) days. They shall not be used in the transition zone including the tapers and the tangent lengths between tapers.

D. Cones

1. Design:

All cones shall be a minimum of twenty-eight inches ($\geq 28''$) in height regardless of application and shall meet the requirements of the [MUTCD \(6K-1\)](#).

Retroreflectivity may be deleted from all cones.

2. Application

On interstates, cones shall be prohibited. On all other routes, cones may only be used for longitudinal channelization in the activity zone where work takes place for short-term stationary lane closures. They shall not be used in the transition zone including the tapers and the tangent lengths between tapers. The use of cones for nighttime work will not be permitted. Cones shall not be stored or allowed to be visible on the worksite during nighttime.

Cones may be used for daytime flagging operations including tapers at flagging stations.

E. Barricades

1. Design

Type 3 barricades shall meet the minimum requirements of the [MUTCD \(6K.07\)](#). The Contractor has the option of choosing Type 3 barricades from the [QPL-34](#) or the Contractor may utilize generic barricades that are approved by the [Federal Highway Administration \(FHWA\)](#). When barricades have been specifically crash tested with signs attached, the Contractor has the responsibility to attach the signs as per the manufacturer's recommendations to ensure crashworthiness. If the barricades were not tested with the signs, crashworthy compliance may require that rigid signs be mounted separate from the Type 3 barricade.

The use of Type 1 and Type 2 barricades will not be permitted.

2. Application

Type 3 barricades shall be placed as required by the Plans, the Standards, and as directed by the Engineer.

When a barricade is placed so that it is subject to side impact from a vehicle, a drum shall be placed at the side of the barricade to add target value to the barricade.

F. Warning Lights

1. Design

All warning lights shall meet the requirements of the [MUTCD \(6L.07\)](#).

2. Application:

- a. Type A low-intensity flashing lights shall be used as shown in the Plans, the Standards, and as directed by the Engineer.
- b. Type C Steady-Burn lights shall be used as shown in the Plans, the Standards, and as directed by the Engineer.

150.2.05 Flashing Beacon

The flashing beacon assembly, when specified, shall be used in conjunction with construction warning signs, regulatory, or guide signs to inform traffic of special road conditions which require additional driver attention. The flashing beacon assembly shall be installed in accordance with the requirements of [Section 647](#).

150.2.06 Guardrail

Guardrail shall comply with [Section 641](#) Guardrail and the guardrail standards.

When the removal and installation of guardrail is required, as a part of the Work, the following time restrictions shall apply unless modified by the special conditions:

From the time that the existing guardrail or temporary positive barrier protection is removed, the Contractor has fourteen (14) days to install the new guardrail and anchors. During the interim, the location without guardrail shall be protected with drums spaced at a maximum spacing of twenty feet (20'). The guardrail blunt end is to be treated as a fixed object and shall be protected. The maximum length of rail that can be removed at any time without being replaced with positive barrier protection is a total of 2000 linear feet of existing rail or the total length of one run of existing rail, whichever is less. Based on existing field conditions, the Engineer may review the Work and require that the guardrail be installed earlier than the maximum time allowed.

The Contractor shall install new guardrail, such that traffic exposure to fixed objects is minimized. Within the same workday, temporary attenuators, as defined in Subsection 150.2.10, should be installed on the approach to fixed objects that can't be protected with guardrail. Truck mounted attenuators may be used to shield exposed fixed objects for periods not to exceed fourteen (14) days. No separate payment will be made for truck mounted attenuators, attenuators, or other methods unless provided for in the Contract.

When the roadway is open to traffic, guardrail panels shall be lapped to comply with the directional flow of traffic. Should the staging of the Work require that the lap of the guardrail be changed, this Work shall be completed before the roadway is opened to traffic. The Work to change the lap of any guardrail shall be included in Traffic Control-Lump Sum.

The laps on anchors shall be in accordance with the manufacturer's recommendations and installation instructions. As a result, a trailing anchor may be lapped opposing the flow of traffic.

Failure to comply with the above time and quantity restrictions shall be considered as non-compliance under Subsection 150.7.01.

150.2.07 Interim Signs

A. Sign Blanks and Panels

All TTC sign blanks and panels should conform to Section 912 of the Specifications. Alternative sign blank materials (composites, polycarbonates, fiberglass reinforced plastics, recycled plastics, etc.) shall have a letter of approval from the Office of Materials and Testing for use as interim construction signs before these materials are allowed to be incorporated into the Work, unless these rigid sign blanks are currently approved as a crashworthy sign blank material under QPL- 34.

Unless specified elsewhere in the Contract, Specifications, Plans, and/or directed by the Engineer, sign sizes are according to the following:

1. All construction signs sizes shall follow the dimensions provided in the MUTCD Table 6G-1, GH-1, and 6I-1 "Temporary Traffic Control Zone Sign and Plaque Sizes" under the column for "Freeway or Expressway".
2. For all other signs used just for staging, the sign sizes shall follow the dimensions provided in the MUTCD Table 2B-1 "Regulatory Sign and Plaque Sizes" for the largest size.
3. Permanent signs used for staging shall be according to Plans.

Plywood blanks or panels will not be permitted.

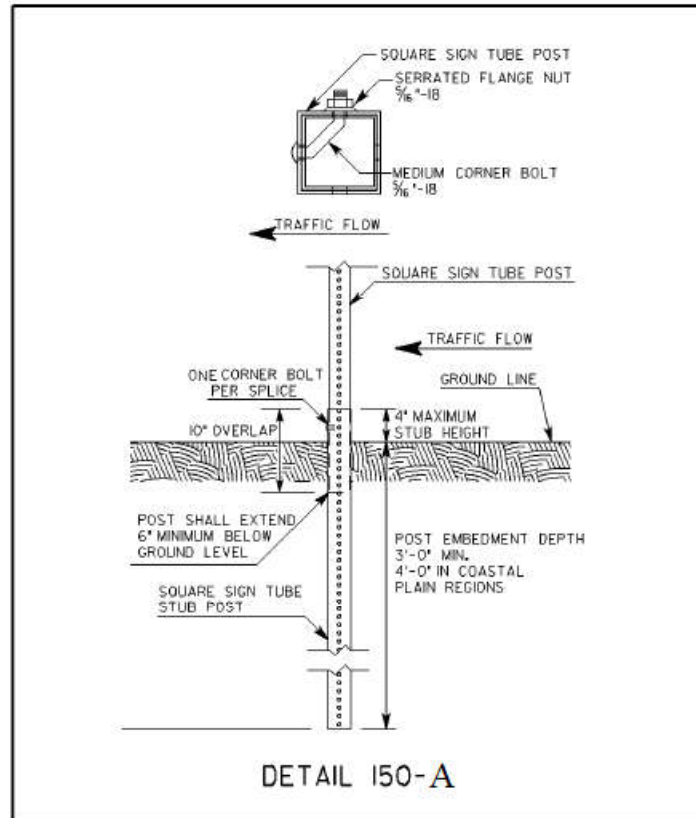
The use of flexible signs will not be permitted.

For utility work not included in the Contract, the utility Contractor may use flexible signs within the project limits.

B. Posts

Permanent mounting height to the bottom of sign shall be seven (7) feet to eight (8) feet measured vertically from the bottom of the sign to the elevation of the near edge of the pavement or from the walkway. Posts for all interim signs should be square tubular post meeting the requirements of Section 911, QPL-35, and Construction Detail T-3A (Type 7, 8, and 9 Square Tube Post Installation Detail). Ground mounted sign(s) that are greater than 48" wide shall be mounted on two posts. For barrier mounted sign, single post mount is allowed. The post(s) shall not extend beyond the top of the sign(s). The sign(s) shall be substantially plumb and leveled.

Unprotected interim posts shall be spliced as shown in Detail 150-A, unless full length unspliced posts are used. Unprotected post splices will not be permitted any higher than four inches above the ground line to lessen the possibility of affecting the undercarriage of a vehicle. Installation of posts may require establishment of openings in existing pavements, islands, shoulders, etc.



150.2.08 Pavement Markings

All temporary traffic striping shall conform to the applicable requirements of Section 652, Section 653, Section 657, Section 658, Section 659, and QPL-46.

A. All Traffic Striping for 45 Days or Less (≤ 45 Days)

All traffic striping that will be in place for 45 days or less shall be 4 inches or greater in width.

B. All Temporary Striping Beyond 45 days (>45 Days)

All traffic striping applied on intermediate surfaces shall be a minimum 5 inches in width or as shown on the Plans. On final surfaces when temporary striping will be overlaid or eradicated, the temporary striping shall be a minimum 5 inches in width.

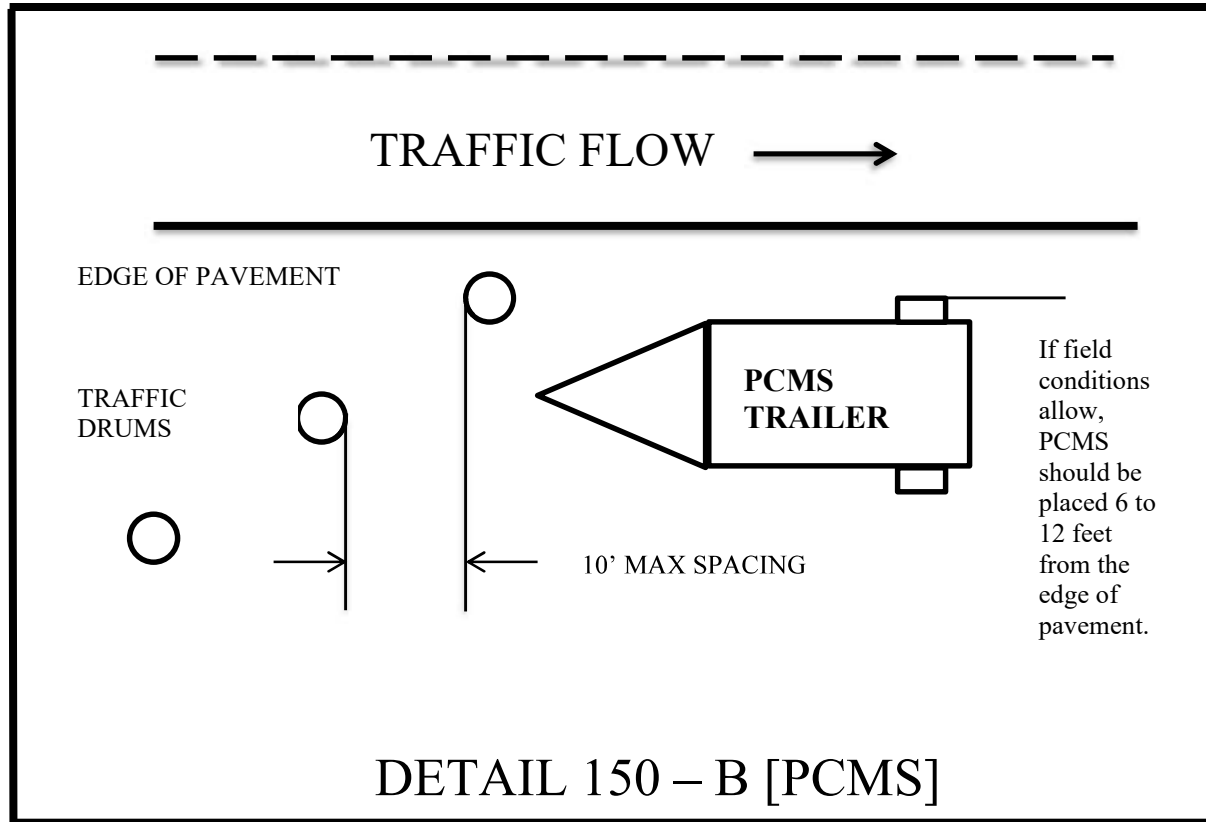
C. All Temporary Traffic Striping on Final Surface

All temporary traffic striping applied to final surfaces which will not be overlaid or grinded may be 4 inches in width or as shown on the Plans.

150.2.09 Portable Changeable Message Signs

When specified, a portable changeable message sign (PCMS) shall meet the minimum requirements of Section 632, MUTCD (6L.05) and be on QPL-82. The maximum amount of messages allowed to be flashed on one PCMS is two phases (flashes). The language and the timing of the messages shall comply with the MUTCD and Section 632. When used as an advanced device, the PCMS should typically be placed ahead of the construction activities. If the PCMS is used as a substitute for another device, then the requirements for the other device apply.

Any PCMS in use, which is not protected by positive barrier protection, shall be delineated by a minimum of three drums that meet the requirement of Subsection 150.2.04.B. The drum spacing shall not exceed a maximum of ten (10') feet as shown in Detail 150-B. When the PCMS is within twenty (20') feet of the opposing traffic flow, the trailing end of the PCMS shall be delineated with a minimum of three drums spaced in the same manner as the approach side of the PCMS.



When not in use, the PCMS shall be removed from the roadway, unless protected by positive barrier protection. If the PCMS is protected by positive barrier protection, the sign panel shall be turned away from traffic when not in use.

150.2.10 Portable Impact Attenuators

This work consists of the furnishing (including spare parts), installation, maintenance, relocation, reuse as required, and removal of Portable Impact Attenuator Units/Arrays.

Portable Impact Attenuator Unit/Arrays installation shall conform to the requirements of Section 648, Manufacturer's recommendations and "(Georgia Standard 4960 "Temporary Barrier (End Treatment Options)" and shall be installed at locations designated by the Engineer, and/or as shown on the Plans. When gating attenuators are used, the Contractor shall maintain the appropriate recovery area in accordance with the manufacturers' recommendations.

Generic sand/water loaded modules are prohibited. Manufacturers' sand/water loaded modules with specific arrays that have been NCHRP 350/MASH approved can be used in appropriate locations.

The test level of protection provided shall equal or exceed the speed limit. Test level 3 shall be used for forty-five (45) mph or above.

150.2.11 Portable Temporary Traffic Control Signals

The use of Portable Temporary Traffic Control Signals shall meet the following minimum requirements:

Only two-lane, two-way roadways will be allowed to utilize Portable Temporary Traffic Control Signals.

All portable traffic control signals shall meet the physical display and operational requirements of conventional traffic signals described in the MUTCD.

Each signal face shall have at least three lenses. The lenses shall be red, yellow, and green in color and shall give a circular type of indication. All lenses shall be twelve (12") inches nominal in diameter. A minimum of two signal faces shall face each direction of traffic. A minimum of one signal head shall be suspended over the roadway travel lane in a manner that will allow the bottom of the signal head housing to be not less than seventeen (17') feet above and not more than nineteen (19') feet above the pavement grade at the center of the travel lane. The second signal head may be located over the travel lane with the same height requirements or the second signal head may be located on the shoulder. When the signal head is located on the shoulder, the bottom of the signal head housing shall be at least eight (8') feet but not more than (15') feet above the pavement grade at the center of highway.

Advance warning signage and appropriate pavement markings shall be installed as part of the temporary signal operation.

The signals shall be operated in a manner consistent with traffic requirements. The signals may be operated in timed-mode or in a vehicle-actuated mode. The signals shall be interconnected in a manner to ensure that conflicting movements cannot occur. To ensure that the appropriate operating pattern, including timing is displayed to the traveling public, regular inspections, including the use of accurate timing devices shall be made by the WTCS. If, at any time, any part of the system fails to operate within these requirements then the use of the signal shall be suspended, and the appropriate flagging operation shall begin immediately.

The (WTCS) shall continuously monitor the portable traffic control signal to ensure compliance with the requirements for maintenance under the MUTCD. The signal shall be maintained in a manner consistent with the intention of the MUTCD, with emphasis on cleaning of the optical system. Timing changes shall be made only by the WTCS. The WTCS shall keep a written record of all timing changes.

The portable temporary traffic signal shall have two power sources and shall be capable of running for seven calendar days continuously.

The Contractor shall have an alternate temporary traffic control plan in the event of failure of the signal.

150.2.12 Raised Pavement Markers

Raised pavement markers (RPMs) shall meet the requirements of [Section 654](#) and QPL-76 .

150.2.13 Rumble Strips

Rumble strips incorporated into the Work shall meet the requirements of [Section 429](#) and the MUTCD. Existing rumble strips that are positioned in the traveled way to warn traffic of a stop condition shall be reinstalled prior to opening to traffic. Based on the following requirements:

Intermediate surfaces that will be in use for more than forty-five (45) calendar days shall have rumble strips reinstalled on the traveled way in the area of a stop condition. Non-refundable deductions in accordance with Subsection 150.7.01 will be assessed for any intermediate surface in place for greater than 45 days without rumble strips.

Rumble strips shall be installed on the final surface within fourteen (14) calendar days of the placement of the final surface in the area of the stop condition. Failure to install within fourteen (14) calendar days will result in assessment of non-refundable deductions in accordance with Subsection 150.7.01.

Prior to the removal of any rumble strips located in the travel lane, stop ahead (W3-1) warning signs shall be double indicated ahead of the stop condition. These warning signs shall be a minimum of 48 inches by 48 inches. These warning signs shall remain in place until the rumble strips have been reinstalled on the traveled way. Any existing warning

signs for the stop ahead condition shall be removed or covered while the 48" X 48" (W3-1) signs are in place. When the rumble strips have been reinstalled, these warning signs should be promptly removed, and any existing signage placed back in service.

150.2.14 Temporary Barriers

A. Design:

Temporary barriers shall meet the requirements of [Sections 620](#). The lengths of advancement should be in accordance with [Georgia Standard 4000W "Lengths of Advancement, Clear Zone Distances, and Fill Height Embankment"](#). The approach end of the taper should have 10:1 or flatter ground slope. Temporary barriers shall not be used as a channelization device. Their use is in accordance with [MUTCD \(6K.09\)](#).

B. Application:

Temporary barriers shall be placed as required by the Plans, Standards, and as directed by the Engineer. When Temporary barrier is located twenty feet ($\leq 20'$) or less from a travel lane, yellow reflectors shall be fixed to the top of the barrier at intervals not greater than forty feet ($\leq 40'$) in the longitudinal section and twenty feet ($20'$) in the taper section and shall be mounted approximately two inches ($2''$) above the barrier. If both lanes of a two-lane two-way roadway are within twenty feet ($\leq 20'$) or less of the barrier then the reflectors shall be installed for both directions of traffic.

The reflectors shall be one hundred (100) square inches (ASTM Type VII or VIII/ Type XI) reflective sheeting mounted on flat-sheet blanks. The reflectors shall be mounted approximately two inches above the top of the barrier. The reflectors shall be attached to the barrier with adhesive or by a drilled-in anchor type device. The reflectors shall not be attached to a post or board that is placed between the gaps in the barrier sections.

Approach end of Temporary barrier shall be protected according to [Georgia Standard 4960 "Temporary Barrier \(End Treatment Options\)"](#) or by a portable impact attenuator.

On interstates or other controlled access highways where lane shifts or crossovers cause opposing traffic to be separated by less than forty feet ($<40'$), portable barrier should be used as a separator.

150.2.15 Temporary Guardrail Anchorage- Type 12

This work consists of the furnishing, installation, maintenance, and removal of Temporary Guardrail Anchorage- Type 12 used for Portable Barrier or temporary guardrail end treatment. Materials used in the Temporary Guardrail Anchorage- Type 12 shall meet the requirements of [Section 641](#) of the Specifications and current Georgia Standards and may be new or used. Materials salvaged from the Project, which meet the requirements of Standards, may be utilized if available. The use of any salvaged materials will require prior approval of the Engineer.

Installation of the Temporary Guardrail Anchorage- Type 12 shall conform to the requirements of the Plans, current Georgia Standards and [Section 641](#) of the Specifications. Installation shall also include sufficient additional guardrail and appurtenances to effect the transition and connection to Temporary Concrete Barrier as required by the details in [Georgia Standard 4960 "Temporary Barrier \(End Treatment Options\)"](#).

150.2.16 Temporary Traffic Signals

Temporary traffic signals shall meet the requirements of [Section 647](#) and the MUTCD.

150.3 Construction Requirements

150.3.01 General

A. Implementation Requirements

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

When any shift or change is made to the location of traffic or to the flow patterns of traffic, including pedestrian traffic, the permanent safety features shall be installed and fully operational before making the change. If staging or site conditions prevent the installation of permanent features, then the equivalent interim devices shall be utilized. This work shall also include any necessary removal and reinstallation of guardrail panels to achieve the required panel lap to accommodate the appropriate shift and traffic flow including the final traffic flow configuration. The cost of performing this work shall be included in Traffic Control-Lump Sum.

Any section of the Work that is on a new location shall have all permanent safety features installed and fully operational before the Work is opened to traffic. Safety features shall include, but are not limited to the following items:

Guardrails including anchors and delineation with properly lapped panels

- 1) Cable Barrier
- 2) Impact attenuators
- 3) Traffic signals
- 4) Warning devices
- 5) Pavement markings including, but not limited to, words, symbols, stop bars, arrows, hatching and crosswalks
- 6) Roadway signs including regulatory, warning, and guide

Outdoor lighting shall be considered as a safety feature for welcome centers, rest areas, and weigh station projects. For typical roadway type projects, new street lighting is not considered a safety feature, unless specifically noted in the Plans or in the special conditions.

B. Maintenance of Traffic Control Devices

Traffic control devices shall be in acceptable condition when first erected on the Project and shall be maintained in accordance with [Section 104](#) throughout the construction period. All unacceptable traffic control devices shall be replaced within twenty-four (24) hours. When not in use, all traffic control devices shall be removed, placed or covered so as not to be visible to traffic.

C. Traffic Interruption Restrictions

The Department reserves the right to restrict construction operations when, in the opinion of the Engineer, the continuance of the Work would seriously hinder traffic flow, be needlessly disruptive or unnecessarily inconvenience the traveling public. The Contractor shall suspend and/or reschedule any work when the Engineer deems that conditions are unfavorable for continuing the Work.

Advanced notification requirements to the Contractor to suspend work will be according to the events and the time restrictions outlined below:

Incident management - No advanced notice required

Threatening/Inclement weather - twenty-four (24) hours

Holiday, sporting events, unfavorable conditions - Three (3) calendar days

If the Work is suspended, the Contractor may submit a request for additional Contract time as allowed under [Section 108](#). The Department will review the request and may grant additional Contract time as justified by the impact to the Contractor's schedule. Compensation for loss of productivity, rescheduling of crews, rental of equipment or

delays to the Contractor's schedule will not be considered for payment. Additional Contract time will be the only consideration granted to the Contractor.

D. Work Zone Restrictions

1. Interstate

The Contractor should not simultaneously perform work on both the inside shoulder and outside shoulder on either direction of traffic flow when the Work is within 12 feet of the travel-way. Shoulders can be alternated if areas are separated by at least one-half mile of distance.

2. Non-Interstate Divided Highways

The Contractor should not simultaneously perform work on both the inside shoulder and outside shoulder on either direction of traffic flow when the Work is within 12 feet of the travel-way. Shoulders can be alternated if areas are separated by at least one-half mile distance in rural areas or at least 500 feet of distance in urban areas.

3. Non-Divided Highways

a. The Contractor should not simultaneously perform work on opposite sides of the roadway when the Work is within 12 feet of the travel-way. Shoulders can be alternated if areas are separated by at least one-half mile of distance in rural areas or at least 500 feet of distance in urban areas.

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

E. Work Zone Geometric Restrictions

There should be no reduction in the total number of available traffic lanes including turning lanes that existed prior to construction, except as specifically allowed by the Contract and as approved by the Engineer.

Travel lane Clearances: All portions of the Work should maintain the following minimum requirements:

Horizontal: The combined dimensions of the paved shoulder and the roadway surface remaining outside the Work Zone should be no less than sixteen feet ($\geq 16'$) in width at any location.

Vertical: The overhead clearance should not be reduced to less than fifteen feet ($\geq 15'$) at any location.

The restrictions above apply to all shifts, lane closures, on-site detours and off-site detours whether shown in the Contract or proposed by the Contractor. It shall be the responsibility of the Contractor to verify that these minimum requirements have been met before proceeding with any phase of the Work. Two-lane, two-way roadways may have temporary horizontal restrictions of less than sixteen feet ($\geq 16'$) during flagging operations. The minimum horizontal clearance should be restored before the flagging operation is removed.

F. Clear Zone

At the end of the workday, all equipment, materials, and TTC devices not in use should be moved out of the clear zone or behind positive protection. The clear zone is defined by Georgia Standard 4000W "Lengths of Advancement, Clear Zone Distances, Fill Height Embankment". For urban roadway with curb, the minimum set back is six (6') feet from the curb face. If stored behind positive protection, proper lengths of advancement should be maintained. If stored behind guardrail the items shall be a minimum five feet ($\geq 5'$) from the face of the guardrail and not in the recovery zone of the anchor.

The WTCS shall monitor the Work to ensure that all the rocks, boulders, construction debris, stockpiled materials, equipment, tools, and other potential hazards are kept clear of the travel lane.

G. Milled Surface Restrictions

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

H. Construction Vehicles

The Contractor's vehicles shall travel in the direction of normal roadway traffic and shall not reverse direction except at intersections, interchanges, or approved temporary crossings. The Contractor may submit a plan requesting that construction traffic be allowed to travel in the opposite direction of normal traffic when it would be desirable to modify traffic patterns to accommodate specific construction activities.

Prior approval of the Engineer shall be obtained before any construction traffic is allowed to travel in a reverse direction. If the Contractor's submittal is approved, the construction traffic shall be separated from normal traffic by appropriate traffic control devices.

The parking of Contractor's and/or workers' personal vehicles within the work area or adjacent to traffic is prohibited. It shall be the responsibility of the WTCS to ensure that any vehicle present at the worksite is necessary for the completion of the Work.

I. Environmental Impacts

The Contractor shall ensure that dust, mud, and other debris from construction activities do not interfere with normal traffic operations or adjacent properties.

J. Existing Street Lights

Existing street lighting shall remain lighted as long as practical and until removal is approved by the Engineer.

K. Nighttime Work Lighting

Adequate temporary lighting shall be provided at all nighttime work sites where workers will be immediately adjacent to traffic.

L. Removal/Reinstallation of Miscellaneous Items

In the prosecution of the Work, if it becomes necessary to remove any existing signs, markers, guardrail, etc. not covered by specific pay item, they shall be removed, stored and reinstalled, when directed by the Engineer, to line and grade, and in the same condition as when removed.

150.3.02 Personnel – Worker Safety Apparel

In accordance with MUTCD [\(6D.03\)](#) [\(6C.04\)](#) all workers, within the right-of-way who are exposed either to traffic or to work vehicles and construction equipment within the TTC zone, shall wear high-visibility safety apparel that meets the Performance Class 2 or better.

150.3.03 Signage - General

A. Signing Requirements of the Temporary Traffic Control (TTC) Plan

When existing regulatory, warning or guide signs are required for proper traffic and pedestrian control, the Contractor shall maintain these signs in accordance with the TTC plan. The Contractor shall review the status of all existing signs, interim signs added to the Work, and permanent sign installations that are part of the work to eliminate any conflicting or non-applicable signage in the TTC Plan. The Contractor's review of all signs in the TTC Plan shall establish compliance with the requirements of the MUTCD and Section 150. Any conflicts shall be reported to the Engineer immediately and the WTCS shall take the necessary measures to eliminate the conflict.

The Contractor shall make every effort to eliminate the use of interim signs as soon as the Work allows for the installation of permanent signs.

All existing illuminated signs shall remain lighted and be maintained by the Contractor.

Existing street name signs shall be maintained at street intersections.

Refer to section 150.2.05.B. Sign Blanks and Panels for size and material requirements.

B. Conflicting or Non-Applicable Signs

Any sign(s) or portions of a sign(s) that are not applicable to the TTC plan shall be covered so as not to be visible to traffic or shall be removed from the roadway when not in use. The WTCS shall review all traffic shifts and changes in the traffic patterns to ensure that all conflicting signs have been removed. The review shall confirm that the highest priority signs have been installed and that signs of lesser significance are not interfering with the visibility of the high priority signs. High priority signs include signs for road closures, shifts, detours, lane closures and curves. Any signs, such as speed zones and speed limits, passing zones, littering fines and litter pick up, that reference activities that are not applicable due to the presence of the Work shall be removed, stored and reinstalled when the Work is completed.

Failure to promptly eliminate conflicting or non-applicable signs shall be considered as non-performance under Subsection 150.7.01.

C. Removal of Existing Signs and Supports

The Contractor shall not remove any existing signs and supports without prior approval from the Engineer. All existing signs and supports which are to be removed shall be stored and protected if this material will be required later in the Work as part of the TTC plan. If the signs are not to be utilized in the Work, then the signs will become the property of the Contractor unless otherwise specified in the Contract documents.

D. Interim Guide, Warning and Regulatory Signs

Interim guide, warning, or regulatory signs required to direct traffic and pedestrians shall be furnished, installed, reused, and maintained by the Contractor in accordance with the MUTCD, the Plans, Special Provisions, Special Conditions, or as directed by the Engineer. These signs shall remain the property of the Contractor. When the signs are used for long-term stationary operations as defined MUTCD [\(6G.02\)](#), the bottom of all interim signs shall be mounted seven feet (7') to eight feet (8') above the level of the pavement edge or sidewalk. The signs offset should be six feet (6') to twelve feet (12') from the pavement edge or two feet ($\geq 2'$) minimum for sidewalks according to MUTCD [\(6F-1\)](#) [\(6G-1\)](#), [6H-1](#), and [6I-1](#). Special Conditions under Subsection 150.6 may modify this requirement.

Portable signs may be used when the duration of the Work is less than three (3) days or as allowed by the special conditions in Subsection 150.6. Portable interim signs shall be mounted a minimum of one foot ($\leq 1'$) above the level of the pavement edge for directional traffic of two (2) lanes or less and at seven feet (7') for directional traffic of three (3) or more lanes according to MUTCD [\(6F-2\)](#). Signs shall be mounted at the height recommended by the manufacturer's crashworthy testing requirements.

All sign blanks shall be rigid whether the sign is mounted as a portable sign, on a Type III barricade or as a permanent mount height sign. Utilities and their subcontractors working in the project limits, and not included in the project Contract, may use non-rigid signs.

E. Existing Special Guide Signs

Existing special guide signs on the Project shall be maintained until conditions require a change in location or legend content. When change is required, existing signs shall be modified and continued in use if the required modification can be made within existing sign borders using design requirements (legend, letter size, spacing, border, etc.) equal to that of the existing signs, or of Subsection 150.3.E.2. Differing legend designs shall not be mixed in the same sign.

1. Special Guide Signs

Special guide signs are those expressway or freeway guide signs that are designed with message content (legend) that applies to a particular roadway location. When an existing special guide sign is in conflict with work to be performed, the Contractor shall remove the conflicting sign and reset it in a new, non-conflicting location which has been approved by the Engineer.

2. Interim Special Guide Signs

When it is not possible to utilize existing signs, either in place or relocated, the Contractor shall furnish, erect, maintain, modify, relocate, and remove new interim special guide signs in accordance with the Plans or as directed by the Engineer. Interim special guide signs that may be required in addition to, or a replacement for, existing expressway and freeway (interstate) signs shall be designed and fabricated in compliance with the minimum requirements for guide signing contained in Chapter 2E “Guide Signs – Freeway and Expressway” of the MUTCD. All interstate shields on these signs shall be 48 inches and 60 inches for two-numeral and three-numeral routes, respectively.

The road name of the exit or route shield shall be placed on the exit gore sign.

3. Interim Overhead Guide Sign Structures

Interim overhead special guide sign structures are not required to be lighted unless specifically required by the Plans. If lighting is required, the sign shall be lighted as soon as erected and shall remain lighted, during the hours of darkness, until the interim sign is no longer required. The Contractor shall notify the Power Company at least thirty (30) days prior to desire connection to the power source.

4. Permanent Special Guide Signs

The installation of new permanent special guide signs and the permanent modification or resetting of existing special guide signs, when included in the Contract, shall be accomplished as soon as practical to minimize the use of interim special guide signs. If lighting is required by the Plans, all new permanent overhead special guide signs shall be lighted as soon as erected.

F. Stop Sign Regulated Intersections

For intersections that utilize stop sign(s) to control the flow of traffic and to restrict the movement of vehicles, the stop sign(s) shall be maintained for the duration of the Work or until such time that the stop condition is eliminated or until an interim or permanent traffic signal can be installed to provide proper traffic control. The traffic signal shall be installed and properly functioning before the removal of the existing stop sign(s) is permitted. If the existing intersection is enhanced traffic control features, such as stop lines, double indicated stop signs, oversized signs, advanced warning stop ahead signs, rumble strips on the approaches or flashing beacons located overhead or on

the shoulders then these features shall be maintained for the duration of the project or until the permanent traffic control plan has been implemented.

Whenever the staging of the Work requires that the traveled way be relocated or realigned the Contractor shall reinstall all enhanced traffic control features noted above on the newly constructed sections of the Work. The cost of relocating the stop lines, stop signs, advanced warning signs, the rumble strips and the flashing beacons shall be included in the price bid for Traffic Control - Lump Sum unless individual pay items are included in the Contract for rumble strips and/or flashing beacons. When pay items are included in the Contract for rumble strips or flashing beacons then these items will be paid per each.

When staging requires the relocation or realignment of an existing stop condition, it may be necessary to consider the addition of enhanced traffic control features even though none existed at the original location. Horizontal and vertical alignment changes at a new location may have decreased or restricted sight distance or the stop condition may occur sooner than in the previous alignment. If these conditions occur, then the Engineer and/or the WTCS should consider additional measures to enhance the motorist's awareness of the changes even though the staging plans may not address enhanced features. Stop signs should be a minimum of thirty-six (36") inches for interim situations. The use of forty-eight (48") inch stop signs may be warranted under project specific conditions. Flags may be used on interim/permanent stop signs that are mounted at seven (7') feet in height for a short duration in order to direct additional attention to a new or relocated stop sign(s). Flags should not be used for durations exceeding two weeks unless unusual or site-specific conditions warrant a longer period of time. The use of Type "A" flashing red light(s) attached to the stop sign(s) may be appropriate during the same period that the flags are in use to increase attention.

The use of rumble strips and/or PCMS may be considered. The use of new rumble strips, where none previously existed, shall have the prior approval of District Traffic Operations before being included as part of the temporary traffic control plan. The message(s) displayed on any PCMS shall have the prior approval of the Engineer and the message(s) shall be included as part of the TTC plan for the interim staging.

The placement of any additional interim ground mounted signs and posts or stop lines shall be considered as incidental to the price bid for Traffic Control - Lump Sum. The installation of rumble strips, flashing beacons or the use of Portable Changeable Message Signs (PCMS) shall be considered as Extra Work unless pay items are included in the Contract.

G. Low Shoulder Signage

1. Low Shoulder for Construction/Reconstruction/Resurfacing Projects

"Low Shoulder" (W8-9) signs shall be erected when a difference in elevation less than four (< 4') feet from the traveled way, exceeds one inch (> 1") but does not exceed three inches (≤ 3 ") between the travel lane and any type of shoulder. *For all projects after April 1, 2023*, "Low Shoulder" (W8-9) signs shall be a minimum dimension of forty-eight inches by forty-eight inches (48"x48")

The spacing of the signs shall not exceed one (1) mile and the signs shall be placed immediately past each crossroad intersection. The "Low Shoulder" signs shall remain in place until the difference in elevation is eliminated and the shoulder has been dressed and permanently grassed for a minimum of thirty (30) calendar days. These signs shall be furnished, installed, maintained, and removed by the Contractor as part of Traffic Control-Lump Sum. These signs shall be fluorescent orange with black borders.

2. Shoulder Drop-Off for Construction/Reconstruction/Resurfacing Project

"Shoulder Drop-Off" (W8-17) signs shall be used when a difference in elevation, less than four feet (< 4') from the traveled way, exceeds three inches (> 3") and is not protected by positive barrier protection. These warning signs shall be placed in advance of the drop-off. *For all projects after April 1, 2023*, "Shoulder Drop-Off" (W8-17) shall be a minimum dimension of forty-eight inches by forty-eight inches (48"x48")

The spacing of the signs shall not exceed one (1) mile and the signs shall be placed immediately past each crossroad intersection. The "Shoulder Drop-Off" signs shall remain in place until the difference in elevation is

eliminated and the shoulder has been dressed and permanently grassed for a minimum of thirty (30) calendar days. These signs shall be furnished, installed, maintained, and removed by the Contractor as part of Traffic Control-Lump Sum. These signs shall be black borders on fluorescent orange background.

H. Bump Signage

A bump sign (W8-1) shall be utilized when a transverse joint in the pavement structure has a vertical difference in elevation of three quarters ($\geq 3/4$ ") of an inch or greater in depth with no horizontal taper to ramp the traffic from one elevation to the other. This condition typically occurs at approach slabs during pavement milling operations and at transverse joints in asphaltic pavement lifts. Other conditions include utility and storm drainage repairs that require concrete placement for patching and/or steel plating. *For all projects after April 1, 2023, "Bump" sign (W8-1) shall be a minimum dimension of forty-eight inches by forty-eight inches (48"x48")*

The W8-1 sign shall be placed sufficiently in advance to warn the motorist of the condition.

I. Sign Visibility

All existing, interim, and new permanent signs shall be installed to be completely visible and legible for an advance distance in compliance with the MUTCD. Any clearing required for maintaining the line of sight to existing, interim or permanent signs shall be done as part of the requirements of the TTC plan. The clearing shall include any advance warning signs, both interim and permanent, that are installed as a part of the Work including advance warning signs that are installed outside the limits of the project. Limbs, brush, construction equipment and materials shall be kept clear of the driver's line of sight to all signs that are part of the TTC plan.

150.3.04 Advance Warning Signs

A. Project Signs - All Type of Highways

Advance warning signs shall be placed ahead of the work area in accordance with Part 6 of the MUTCD and unless noted below shall include a series of at least three advance road work (W20-1) signs placed at the termini of the project. The series shall have the legend ROAD WORK (1500 FEET, 1000 FEET, AND 500 FEET).

At grade intersecting roadways and on-ramps shall be signed with a minimum of one ROAD WORK AHEAD sign.

When work terminates at a "T" intersection, a minimum of one "ROAD WORK AHEAD" sign shall be placed in advance of the intersection and one "END ROAD WORK" sign shall be placed at the termination end of the intersection. Field conditions may require the use of additional warning signage.

1. State Routes

Advanced Warning Signs on State Routes shall be a minimum dimension of forty-eight inches by forty-eight inches (48" x 48"). When a State Route intersects a project which consists of adding travel lanes, reconstructing an existing roadway or new location work, the State Route approaches shall have a minimum of three (W20-1) advanced warning signs (1500 ft., 1000 ft., 500 ft.). The termination end of an intersecting State Route shall have END ROAD WORK signage.

The W20-1 signs shall be placed at the termini of the project or sufficiently in advance of the termini to allow for lane shifts, lane closures and other activities which may also require advanced warning signs. The advanced warning signs for the project should not overlap with the advanced warning signs for lane shifts, lane closures, etc.

The length of a work zone should be held to the minimum length required to accomplish the Work. If a project has multiple individual worksites within the overall limits of the project, each site should be signed individually if the advance warning signs for each site can be installed without overlapping an adjacent worksite. As soon as the work is completed at any individual site, the warning signs shall be removed from that site. Clean-up work shall be performed with portable signage.

Project mileage indicated on the G20-1 sign shall be the actual project mileage rounded up to the nearest whole mile. Projects less than two (< 2) miles in length or individual worksites that are part of a multiple worksite project may delete this sign. The G20-1 sign shall be forty-eight inches by twenty-four inches (48" x 24") and the G20-2 sign shall be forty-eight inches by twenty-four inches (48" x 24").

2. Interstate, Limited Access and Multilane Divided Highways

In addition to the W20-1 signs required at 500 ft., 1000 ft. and 1500 ft., multi-lane divided highways shall also have additional advanced warning signs installed with the legend "ROAD WORK (2 MILES, 1 MILE and 1/2 MILE). All construction warning signs on divided highways shall be double indicated (i.e., on the left and right sides of the roadway.) If the use of the half (1/2) mile, one (1) mile and two (2) mile advanced warning signs cause an overlap with other work or do not benefit field conditions then the Engineer may review the use of these signs and eliminate their installation. When the posted speed limit is fifty ($\leq$ 50) mph or less, the one-half (1/2) mile, one (1) mile and two (2) mile signs should be eliminated especially in urban areas.

The W20-1 advance warning signs for ROAD WORK 500 FEET; 1000 FEET; and 1500 FEET shall be temporarily covered when work involving the advanced warning signs for lane shifts and lane closures overlap these signs. The ROAD WORK 1/2 MILE, ROAD WORK 1 MILE, and ROAD WORK 2 MILES shall be in place when the 500, 1000 and 1500 foot signs are temporarily covered.

When the Temporary Traffic Control zone already has advanced warning (W20-1) signs installed the W20-1 signs required for lane closures under Standard 9106 should be eliminated.

3. Ramp Work on Limited Access Highways

The work zone shall not be signed for the entire length of the mainline of a limited access highway when only short individual worksites, interchange or ramp work is being performed.

When work is restricted to ramp reconstruction or widening activities, the advance warning signs on the mainline section of the limited access highway shall be limited to the use of portable advance warning signs. These portable advance warning signs shall only be utilized when work activity is within the gore point of the ramp and the mainline traveled way or work is active in the acceleration/deceleration lane adjacent to the mainline traveled way. Portable advance warning signs (W20-1: 1500 ft. /1000 ft. /500 ft.) shall be installed on the traveled way of the limited access highway when the above conditions are present. The advance warning signs shall be installed only in one direction where work is active. All portable signs shall be double indicated. When work is not active, the ramp work shall be advanced warned by the use of a single forty-eight inches by forty-eight inches (48" x 48") "ROAD WORK AHEAD" (W20-1) with an "ON RAMP" plaque (W13-4p) sign along the right shoulder of the mainline traveled way prior to the beginning of the taper for the deceleration lane. Differences in elevation shall be in compliance with the requirements of Subsection 150.3.11 prior to the removal of the portable (W20-1) advanced warning signs from the mainline.

B. Highway Work Zone

In accordance with Georgia Code, O.C.G.A. § 40-6-188, all sections or segments of the roadway under construction or reconstruction shall be signed as a Highway Work Zone except non-state highway two-lane two-way resurfacing projects. Two conditions can be applied to a Highway Work Zone. Condition 1 is when no reduction in the existing speed limit is required. Condition 2 is when worksite conditions require a reduction of the speed limit through the designated Work Zone. Properly marking a Highway Work Zone shall include the following minimum requirements:

1. No Reduction in the Existing Posted Speed Limit in Highway Work Zone

- a.** Signage shall be posted at the beginning point of the Highway Work Zone warning the traveling public that increased penalties for speeding violations are in effect. The beginning point of Highway Work Zone is at the project limits, start of work zone, or at the start of the first taper. The HWZ-2 sign shall be placed a minimum of 600 feet in advance of the Highway Work Zone and shall not be placed more than 1000 feet in advance of the Work Zone. If no speed reduction is required, it is recommended that the HWZ-2 be placed at 750 feet from the work area between the ROAD WORK 500 FT. and the ROAD WORK 1000 FT. signs.

HWZ-2 signs shall be placed at intervals not to exceed one mile for the length of the project. HWZ-2 signs should be placed on the mainline after all major intersections except State Routes. State Routes shall be signed as per the requirements for intersecting roadways below.

- b. The existing speed limit shall be posted at the beginning of the Work Zone. Existing Speed Limit signs (R2-1) shall be maintained.
- c. Intersecting state routes shall be signed in advance of each intersection with the Work Zone with an HWZ-2 sign to warn motorists that increased fines are in effect. All other intersecting roadways that enter into a designated Highway Work Zone may be signed in advance of each intersection with the Work Zone. When construction equipment and personnel are present in the intersection on the mainline of a multi-lane roadway, the intersecting side roads shall be signed in advance with HWZ-2 signs. As soon as the work operation clears the intersection, the signage may be removed.
- d. Sign HWZ-3 shall be posted at the end of the Highway Work Zone indicating the end of the zone and indicating that increased penalties for speeding violations are no longer in effect.
- e. When a designated Highway Work Zone is no longer necessary, all signs shall be removed immediately.

2. Reducing the Speed Limit in a Highway Work Zone

Highway Work Zone signs shall be posted as required in Condition 1 above and in accordance with Detail 150-C.

A “Reduced Speed Ahead” sign shall be posted 600 feet prior to the reduced speed limit.

Then a “Speed Limit” signage (R2-1) for the reduced speed limit shall be erected at the beginning of the Work Zone. Additional signs shall be placed at whichever is least:

- a. on non-interstate roads after every junction with a numbered (state or U.S.) route.
- b. on interstates entrance ramp 1,500 feet from the end of the entrance taper. Detail 150-D
- c. on non-interstate and interstate, a maximum spacing of no greater than one (1) mile apart.

On interstates and multi-lane divided highways, the speed limit signs shall be double indicated when the reduced speed is in use.

Additional signs may be necessary to adjust for actual field conditions.

For limited access (interstate) highways and controlled access multi-lane divided highways, the posted speed limit shall be reduced as required below.

When any one or more of the following conditions exist and the existing speed limit is sixty-five (65) mph or seventy (70) mph, the speed limit shall be reduced by ten (10) mph. If the existing speed limit is sixty (60) mph, the speed limit should be reduced by five (5) mph. If the existing speed limit is fifty-five (≤ 55) mph or less, the Contractor can only reduce the speed limit with the prior approval of the Engineer. The reduction in the speed limit shall be no greater than ten (10) mph:

- a) Lane closure(s) of any type and any duration.
- b) The difference in elevation exceeds two inches ($> 2''$) adjacent to a travel lane as shown in Subsection 150.3.11, Detail 150-E, Detail 150-F.
- c) Any areas where equipment or workers are within ten feet (10') of a travel lane.
- d) Temporary portable concrete barriers located less than two feet (2') from the traveled way.
- e) As directed by the Engineer for conditions distinctive to this project.

When the above conditions are not present, the speed limit shall be immediately returned to the existing posted speed limit. A speed reduction shall not be put in place for the entire length of the project unless conditions warranting the speed reduction are present for the entire project length. All existing speed limit signs within the temporary speed reduction zone shall be covered or removed while the temporary reduction in the speed limit is in effect. All signs shall be erected to comply with the minimum requirements of the MUTCD.

At a minimum, the following records shall be kept by the WTCS:

- a) Identify the need for the reduction.
- b) Record the time of the installation and removal of the temporary reduction.
- c) Fully describe the location and limits of the reduced speed zone.
- d) Document any accident that occurs during the time of the reduction.

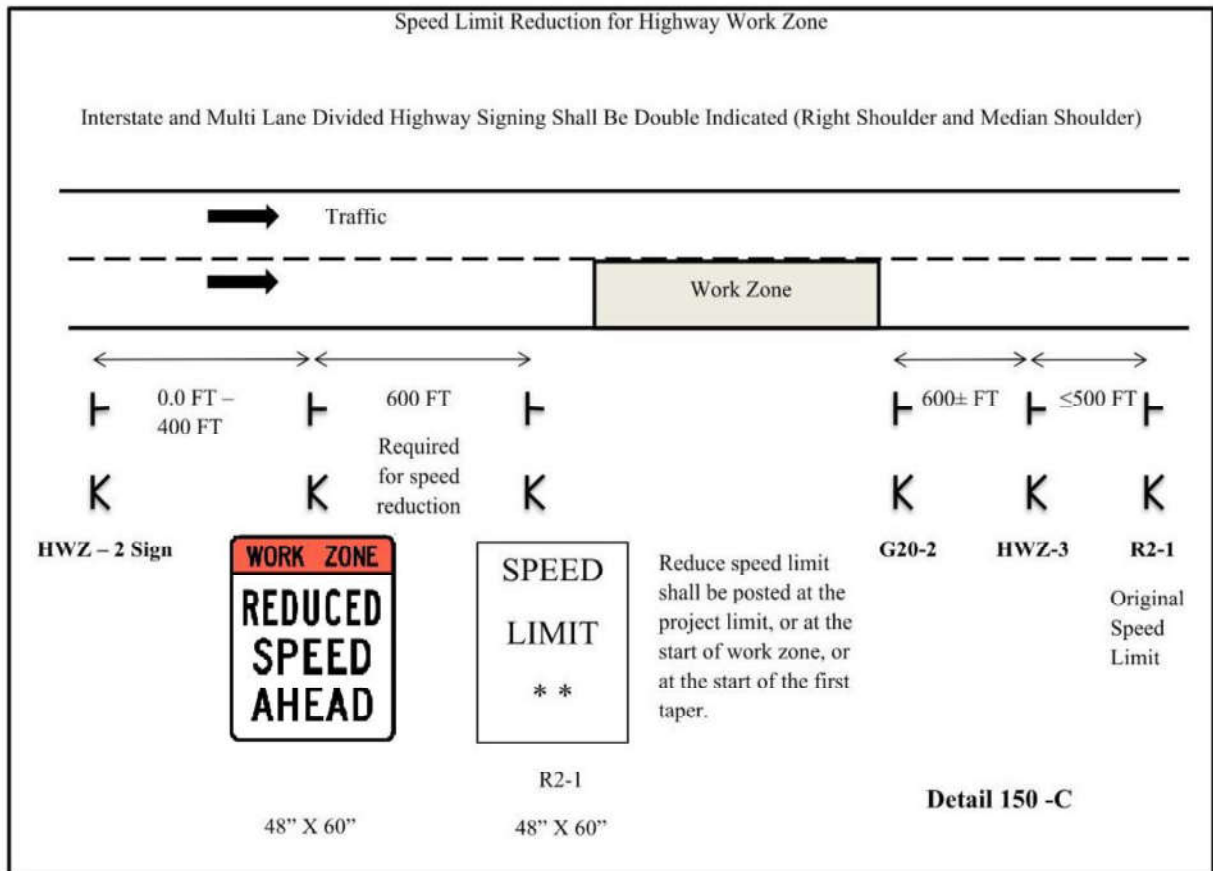
A copy of the weekly records for reduced speed zones shall be submitted to the Engineer.

When a pilot vehicle is used on a two-lane two-way roadway, the speed limit should not be reduced. For special conditions specific to the Work, on two-lane two-way roadways or multi-lane highways, the Contractor may reduce the posted speed limit with the prior approval of the Engineer.

3. Variable Speed Limit Zones

Projects that are within or extends into variable speed limit zones shall be posted according to condition 1 with HWZ-1, HWZ-2, and HWZ-3 signs. No additional "speed limit" signs, (R2-1), shall be posted. Any reduction or increase in speed limits will be controlled by the normal operation of the variable speed limit system.

Upon request, a maximum speed limit of fifty-five (55) mph may be set for the project limits.





HWZ-2;

3" Radius, 1" Border, 1" Indent, Black on Fluorescent orange;
 "WORK ZONE", C 2K specified length;

3" Radius, 1" Border, 1" Indent, Black on White;
 "SPEEDING", C 2K specified length; "FINES", C 2K specified length;
 "INCREASED", C 2K specified length;

3" Radius, 1" Border, 1" Indent, Black on White;
 "MINIMUM", D 2K specified length; "FINE \$100", D 2K specified length;

HWZ-2

1. All HWZ-2 sign panels shall be rigid.
2. The size of the HWZ-2 sign shall not be reduced for use on two-lane roadways.



HWZ-3;

3" Radius, 1" Border, 1" Indent, Black on Fluorescent orange;

"WORK ZONE", C 2K specified length;

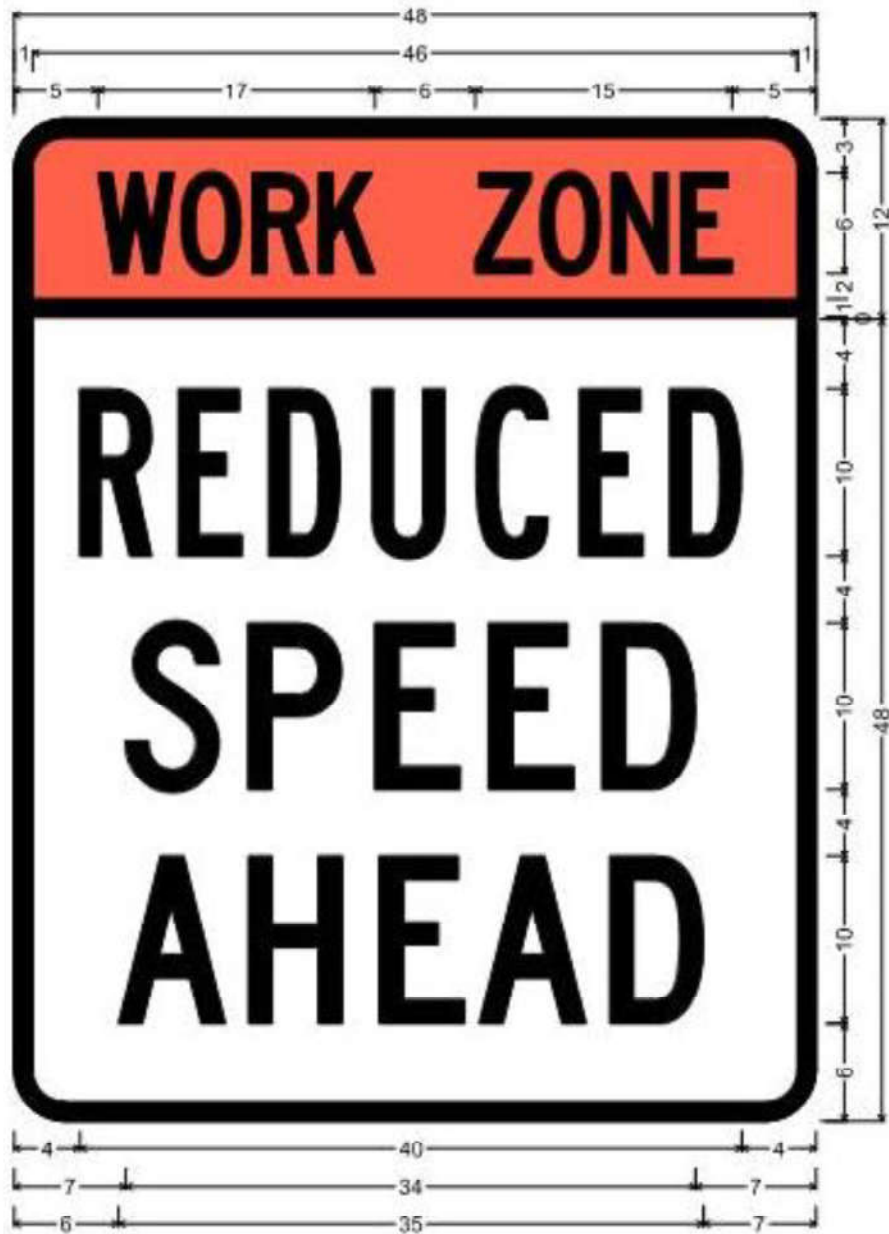
3" Radius, 1" Border, 1" Indent, Black on White;

"END", C 2K specified length; "INCREASED", C 2K specified length;

"SPEEDING", C 2K specified length; "FINES", C 2K specified length;

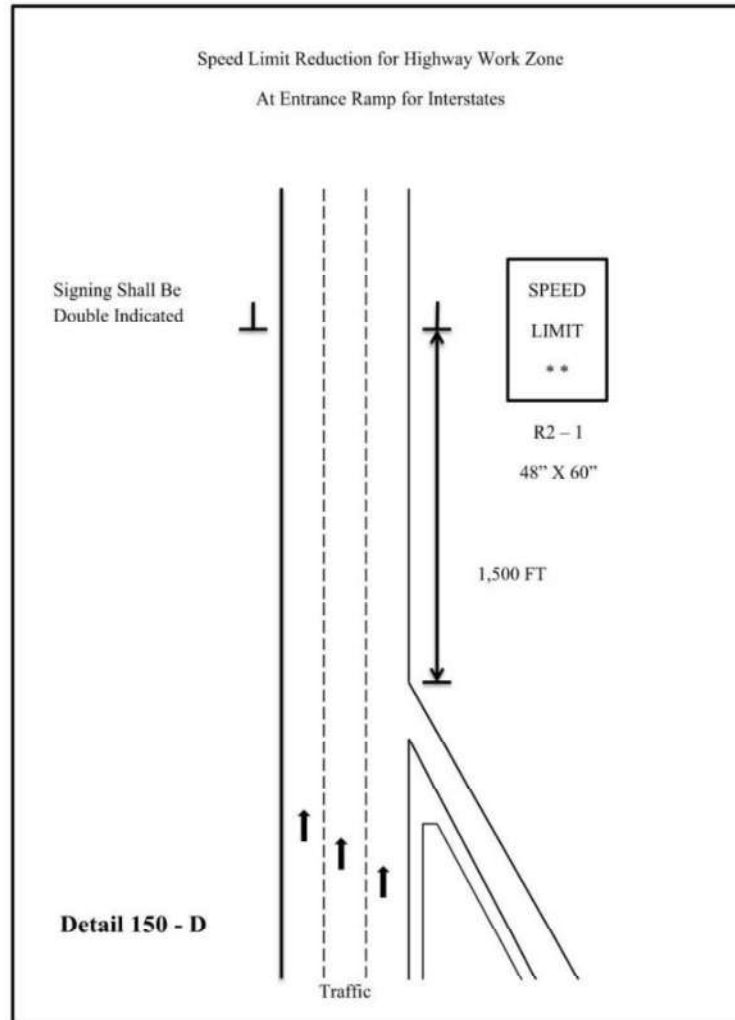
HWZ-3

1. All HWZ-3 sign panels shall be rigid.
2. The size of the HWZ-3 sign shall not be reduced for use on two-lane roadways.



3" Radius, 1" Border, Black on Fluorescent orange:
 "WORK", C 2K 60% spacing; "ZONE", C 2K 60% spacing;

3" Radius, 1" Border, Black on White:
 "REDUCED", B 2K; "SPEED", C 2K; "AHEAD", C 2K;



C. Installation/Removal of Work Area Signage

No payment will be made for Traffic Control-Lump Sum until the Work has actually started on the Project. The installation of traffic control signage does not qualify as the start of work. Advanced warning signs shall not be installed until the actual beginning of work activities. Any permanent mount height signs installed as the work is preparing to start shall be covered until all signs are installed unless all signs are installed within seven (≤ 7) calendar days after beginning installation.

All temporary traffic control devices shall be removed as soon as practical when these devices are no longer needed. When work is suspended for short periods of time, temporary traffic control devices that are no longer appropriate, shall be removed or covered.

All construction warning signs shall be removed within seven (≤ 7) calendar days after time charges are stopped or pay items are complete. If traffic control devices are left in place for more than ten (> 10) calendar days after completion of the Work, the Department shall have the right to remove such devices, claim possession thereof, and deduct the cost of such removal from any monies due, or which may become due, the Contractor.

CORRECTIVE LIST WORK: Portable signs shall be utilized to accomplish the completion of all corrective list items, if the corrective list is the only work being performed. The portable signs shall be removed daily. All permanent mount height signs shall be removed prior to the beginning of the corrective list only work, except "Low/Soft Shoulder" signs and any signs that have the prior written approval of the Engineer to remain in place while the corrective list work is in progress.

Failure to promptly remove the construction warning signs within the seven (7) calendar days after the completion of the Work or failure to remove or cover signs when work is suspended for short periods of time shall be considered as non-performance under Subsection 150.7.01.

150.3.05 Shoulder/Lane Closures

A. Approval/Restrictions

All shoulder closures and lane closures of any type or duration shall have the prior approval of the Engineer.

1. Closure Length

The length of a shoulder closure and a lane closure shall not exceed two (2) miles in length excluding the length of the tapers unless the prior approval of the Engineer has been obtained. The Engineer may extend the length of the closure based upon field conditions; however, the length of a work zone should be held to the minimum length required to accomplish the Work. Shoulder closure and Lane Closures shall not be spaced closer than one mile. The advanced warning signs for the Project should not overlap with the advanced warning signs for lane shifts, lane closures, etc.

2. Duration

The first (7) calendar days in an Urban area and the first three (3) calendar days in a Rural area of any lane closure shall be signed and marked as per Georgia Standard 9106 "Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway" or Georgia Standard 9107 "Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway". However, lane closures that exist for a duration longer than three (> 3) calendar days may be signed and marked as per the details in Georgia Standard 9121 "Tapers, Signs, and Markings for Passing Lanes", provided the prior approval of the Engineer is obtained. The approved lane drop shall utilize a PCMS and only the signs and markings shown for the termination end of the lane drop in Georgia Standard 9121. All warning signs in the lane drop sequence shall be used. Drums may be substituted for the Type I Crystal Delineators at the same spacing.

B. Shoulder Closures

In accordance with MUTCD (6N.06), when paved shoulders, having a width of eight feet ($\geq 8'$) or more are closed, at least one (1) advance warning sign shall be used. The sign(s) should read SHOULDER CLOSED (W21-5a). The signs are only posted on the side with the shoulder closure. Where the downstream end of the shoulder closure extends beyond the distance that can be perceived by road users, a supplementary plaque bearing the message NEXT XX FEET (W16-4P) or MILES (W7-3aP) should be placed below the SHOULDER CLOSED (W21-5a) sign. These signs shall be placed 500 feet prior to the shoulder closure. For multi-shoulder closures, the Shoulder Closed sign shall be repeated after two (2) miles at 500 feet prior to the next shoulder closure.

A shoulder closure will require a shoulder taper of $(1/3) L$ (L =merging taper length). Traffic drums shall be used for the taper. Arrow boards are not required.

If positive barriers are used to close the shoulder, the taper and drums shall be in accordance with Standard 4960, Temporary Barrier (End Treatment Options). The approach end of the barrier taper should be 10:1 or flatter slope.

C. Lane Closure

1. Advance Warning Signs

The Advance Warning signs shall be in accordance with MUTCD and Georgia Standard 9106 "Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway" and Georgia Standard 9107 "Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway".

When the Temporary Traffic Control zone already has advanced warning (W20-1) signs installed the W20-1 signs required for lane closures under Standard 9106 and 9107 should be eliminated.

For Interstate, Limited Access and Multi-lane Divided Highways, an additional PCMS shall be placed one (1) mile in advance of a lane closure with a message denoting the appropriate lane closure one (1) mile ahead. No other message shall be displayed on this PCMS. The PCMS shall be placed on the outside shoulder in accordance with Detail 150-B [PCMS]. This is in addition to the other traffic control devices required by Standard 9106.

At the discretion of the Engineer, the Contractor may start placing advance warning signs a half-hour (1/2 hr.) prior to the lane closure.

2. Transition Area – Taper

Drums shall be used on all transition tapers. If traffic drums with retroreflectivity of less than type VI are used for a merge taper that exists into the night, all drums located in the taper shall have, for the length of the taper only, a six inch (6") fluorescent orange (ASTM Type VI, VII, VIII, IX or X) reflectorized top stripe on each drum. The top six inch (6") stripe may be temporarily attached to the drum while in use in a taper. The Engineer may allow the fluorescent orange reflectorized six inch (6") top stripe on each drum in a merging taper to remain in place during daylight hours provided there is a lane closure(s) with a continuous operation that begins during one nighttime period and ends during another nighttime period. All drums that have the six inch (6") top stripe permanently attached shall not be used for any other conditions.

In accordance with [MUTCD \(6B.08\)](#), the minimum length for a merging taper for a lane closure on the travel way shall be as shown in Table 150-1:

TABLE 150-1

Posted Speed Limit, MPH	Lane Width 9 Feet	Lane Width 10 Feet	Lane Width 11 Feet	Lane Width 12 Feet	Maximum Drum Spacing in Tapers, (Feet)
Minimum Taper Length (L) in Feet					
20	60	70	75	80	20
25	95	105	115	125	25
30	135	150	165	180	30
35	185	205	225	245	35
40	240	270	295	320	40
45	405	450	495	540	45
50	450	500	550	600	50
55	495	550	605	660	55
60	540	600	660	720	60
65	585	650	715	780	65
70	630	700	770	840	70
75	675	750	825	900	75

If site conditions require a longer taper, then the taper shall be lengthened to fit particular individual situations.

The length of shifting tapers should be at least one-half (1/2) L.

Multiple Lane Closures:

- a. A maximum of one (1) lane at a time shall be closed with each merging taper.
- b. A minimum tangent length of two (≥ 2) L shall be installed between each individual lane closure taper. The tangent length is part of the transition area. Therefore, only traffic drums can be used in the tangent.

3. Activity Area

The activity area consists of a buffer and the work space. Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway” states “Buffer zones of 300’ minimum, 500’ desirable are required for tangent sections and shall be increased for horizontal or vertical curves due to sight distance considerations”

Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway” requires a fifty feet (50’) buffer. The buffer shall be increased for horizontal or vertical curves due to sight distance considerations”

The channelization devices are spaced at a maximum of eighty feet (80’).

4. Termination Area

Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway” requires a 150 feet buffer and a minimum 200 feet downstream taper.

Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway” requires 150 feet downstream taper.

D. Removal of Lane Closures

To provide the greatest possible convenience to the public in accordance with [Section 107](#), the Contractor shall remove all signs, lane closure markings, and devices immediately when lane closure work is completed or temporarily suspended for any length of time or as directed by the Engineer. All portable signs and portable sign mounting devices shall be removed from the roadway to an area which will not allow the sign to be visible and will not allow the sign or sign mounting device to be impacted by traffic. All devices shall be stored beyond the clear zone or behind positive protection.

E. Exit and Entrance Ramps

On multi-lane highways, where traffic has been shifted to the inside lanes, the exit and entrance ramps shall have drums placed on both sides of the ramp. This requirement will apply to any situation where traffic is shifted to contra flows or inside staging lanes to facilitate reconstruction work in the vicinity of exit and entrance ramps. The temporary ramp taper length should be greater than, or equal to, the existing taper length. Interim EXIT gore signs shall be placed at the ramp divergence. The “EXIT OPEN” sign shown in Figure TA-42 of the MUTCD shall be utilized. For exit ramps, drums spacing shall be decreased to ten feet (10’) for 200 feet in advance of the temporary gore and be decreased to ten feet (10’) for the first 100 feet of the temporary gore, and throughout the exit ramp. For on-ramps, drums should be used 200 feet prior to the ramp and end 100 feet past the merge taper. The drum spacing for the on ramp may be decreased but should not obstruct the view of the drivers i.e. for the ramp vehicles.

150.3.06 Traffic Pacing Method

A. Pacing of Traffic

With prior approval from the Engineer, traffic may be paced allowing the Contractor up to twenty (20) minutes maximum to work in or above all lanes of traffic for the following purposes:

1. Placing bridge members or other bridge work.
2. Placing overhead sign structures.
3. Other work items requiring interruption of traffic.

The Contractor shall provide a uniformed law enforcement officer with patrol vehicle and blue flashing light for each direction of pacing. The law enforcement officer, Engineer, and flaggers at ramps shall be provided with a radio which will provide continuous contact with the Contractor.

When ready to start the work activity, the law enforcement vehicle will act as a pilot vehicle slowing the traffic, thereby providing a gap in traffic allowing the Contractor to perform the Work. Any on-ramps between the pace and the work area shall be blocked during pacing of traffic, with a flagger properly dressed and equipped with a Stop/Slow paddle. Each ramp should be opened after the law enforcement vehicle has passed.

Pilot vehicles shall travel at a safe pace speed. The Contractor shall provide a vehicle to proceed in front of the law enforcement vehicle and behind the other traffic in order to inform the Contractor's work force when all vehicles have cleared the area.

Traffic should not be permitted to stop during pacing unless approved by the Engineer.

B. Methods of Signing for Traffic Pacing

At a point not less than 1,000 feet in advance of the beginning point of the pace, the Contractor shall place a PCMS sign with the message "TRAFFIC SLOWED AHEAD EXPECT SHORT DELAY".

150.3.07 Flagging Operations

A. Flaggers

Flaggers shall be provided as required to handle traffic, as specified in the Plans or Special Provisions, and as required by the Engineer.

B. Flagger Certification

All flaggers shall meet the requirements of the [MUTCD](#) and shall have received training and a certificate upon completion of the training from one of the following organizations:

National Safety Council
American Traffic Safety Services Association (ATSSA)

On-line classes are not accepted.

Failure to provide certified flaggers as required above shall be reason for the Engineer suspending work involving the flagger(s) until the Contractor provides the certified flagger(s). Flaggers shall have proof of certification and valid identification (photo I.D.) available any time they are performing flagger duties.

C. Flagger Appearance and Equipment

Flaggers shall wear Performance Class 2 or better for daytime activities. Flaggers shall wear Performance Class 3 or better high-visibility clothing for nighttime activities. Flagger stations shall be illuminated at night according to [MUTCD \(6M.08\)](#). They shall use a Stop/Slow paddle meeting the requirements of the [MUTCD \(6D.02\)](#) for controlling traffic. The Stop/Slow paddles shall have a shaft length of seven feet ($\geq 7'$) minimum. The Stop/Slow paddle shall be retroreflectorized for both day and night usage. In addition to the Stop/Slow paddle, a flagger may use a flag as an additional device to attract attention. This flag shall meet the minimum requirements of the [MUTCD \(6D.02\)](#). The flag shall, as a minimum, be twenty-four inches ($\geq 24"$) square and red or red/orange in color.

D. Flagger Warning Signs

Signs for flagger traffic control shall be placed in advance of the flagging operation, in accordance with the [MUTCD](#) and [Georgia Standard 9102 "Traffic Control Detail for Lane Closure on Two-Lane Highway"](#). In addition, signs at

regular intervals, warning of the presence of the flagger shall be placed beyond the point where traffic can reasonably be expected to stop under the most severe conditions for that day's work.

E. Pilot Vehicle Requirements

Pilot vehicles should be required during placement of bituminous surface treatment or asphaltic concrete on two-lane roadways unless otherwise specified. Pilot vehicles shall meet the requirements of the [MUTCD \(6E.04\)](#).

F. Automated Flagger Assistance Devices

The Contractor may request, in writing, the use of Automated Flagger Assistance Devices (AFAD). The equipment shall meet the requirements of [MUTCD \(6L.02\)](#). As a part of this request, the Contractor shall also submit an alternate temporary traffic TTC plan in the event of a failure of the AFAD. Any alternate plan that requires the use of flaggers shall include the use of certified flaggers. The Contractor shall obtain the approval of the Engineer before the use of any AFAD will be permitted.

G. Portable Temporary Traffic Control Signals

The Contractor may request, in writing, the substitution of portable temporary traffic control signals for flaggers on two-lane two-way roadways provided the temporary signals meets the requirements of the MUTCD, [Section 647](#), and [subsection 150.2.11](#). As a part of this request, the Contractor shall also submit an alternate TTC plan in the event of a failure of the signals. Any alternate plan that requires the use of flaggers shall include the use of certified flaggers. The Contractor shall obtain the approval of the Engineer before the use of any portable temporary traffic control signals will be permitted.

150.3.08 Traffic Signals

A. Responsibility/Cost

If the sequence of operations, staging, or the TTC plan requires the relocation or shifting of any components of an existing traffic signal system then any work on these traffic signals will be considered as part of Traffic Control – Lump Sum.

B. Law Enforcement Officer Requirement

In accordance with Georgia law § 40-6-20, law enforcement officers shall be used to regulate and maintain traffic control at functioning signalized intersections when lane closures or traffic shifts block or restrict movements causing interference with road user flows and will not allow the activated traffic signal to guide the traffic through the signal site.

150.3.09 Mobile Operations

A mobile operation is defined by a minimum speed of three (3) mph. When pavement markings (centerlines, lane lines, and edge lines) are applied in a continuous operation by moving vehicles and equipment, the following minimum equipment and warning devices shall be required. These devices and equipment are in addition to the minimum requirements of the MUTCD.

All vehicles shall be equipped with the official slow moving vehicle symbol sign. All vehicles shall have a minimum of two (2) flashing or rotating beacons visible in all directions. All protection vehicles shall have an arrow panel mounted on the rear. All vehicles requiring an arrow panel shall have, as a minimum, a Type B panel. All vehicle mounted signs shall be mounted with the bottom of the sign a minimum height of forty-eight inches (48") above the pavement. All sign legends shall be covered or removed from view when work is not in progress.

The lead vehicle may be a separate vehicle or the work vehicle applying the pavement markings may be used as the lead vehicle. The lead vehicle shall have an arrow panel mounted so that the panel is easily visible to oncoming (approaching) traffic. The arrow panel should operate in the caution mode.

The work vehicle(s) applying markings shall have an arrow panel mounted on the rear. The arrow panel should typically operate in the caution mode. The work vehicle placing cones shall follow directly behind the work vehicle applying the markings.

A protection vehicle shall follow the last work vehicle at all times and shall be equipped with a truck mounted attenuator that shall be certified for impacts not less than sixty-two (62) mph in accordance with MASH/NCHRP350 Test Level Three (3).

150.3.10 Pavement Markings

A. General

Full pattern pavement markings in conformance with Chapter 3A and 3B, except 3B.0 3, of the MUTCD are required on all courses before the roadway is opened to traffic, unless noted in this section. No passing zones shall be marked to conform to Subsection 150.3.10.D.1.b.. During construction and maintenance activities on all highways open to traffic, both existing markings and markings applied under this Section shall be fully maintained until Final Acceptance. If the pavement markings are, or become, unsatisfactory in the judgment of the Engineer due to wear, weathering, or construction activities, they shall be restored immediately.

Markings on the final surface course, which must be removed, shall be a removable type. The Contractor will be permitted to use paint, thermoplastic, or tape on pavement which is to be overlaid as part of the Project, unless otherwise directed by the Engineer. Partial (skip) reflectorization (i.e. reflectorizing only a portion of a stripe) will not be allowed.

1. Resurfacing Projects

Pavement markings shall be provided on all surfaces that are placed over existing markings. Interim and final markings shall conform in type and location to the markings that existed prior to resurfacing unless changes or additions are noted in the Contract. The replacement of parking spaces will not be required unless a specific item or note has been included in the Contract. Any work to make additions to the markings that existed prior to resurfacing is to be considered as extra work.

2. Widening and Reconstruction Projects

If the lane configuration is altered from the preconstruction layout then pavement markings will be as required by the Plans or the Engineer.

3. New Location Construction Projects

Pavement marking plans will be provided.

B. Installation and Removal of Pavement Markings

1. Installation

All pavement markings, both interim and permanent, shall be applied to a clean surface. The Contractor shall furnish the layout and preline the roadway surface for the placement of pavement markings applied as part of the TTC plan. All interim marking tape and RPM's on the final surface shall be removed prior to the placement of the final markings.

The Contractor shall sequence the Work in such a manner as to allow the installation of markings in the final lane configuration at the earliest possible stage of the Work.

2. Removal

Markings no longer applicable shall be removed in accordance with [Section 656](#).

The elimination of conflicting pavement markings by overpainting with unapproved paint or any type of liquid asphalt is not acceptable.

3. Intermediate Surface

Interim markings shall be removed by methods that will cause minimal damage to the pavement surface, while also ensuring that traveling public will not be confused or misdirected by any residual markings remaining on the intermediate surface. The use of approved black-out tape and black-out paint (manufactured for the sole purpose of covering existing pavement markings) may be permitted on some interim surfaces, provided the results are satisfactory to the Engineer.

4. Final Surface

No interim paint or thermoplastic markings will be permitted on any final surface unless the interim markings are in alignment with the location of the permanent markings and the interim marking will not interfere or adversely affect placement of the permanent markings. The proposed method of removal for layout errors that require markings to be removed from the final surface shall have the prior approval of the Engineer. Any damage to the final pavement surface caused by the pavement marking removal process shall be repaired at the Contractor's expense by methods acceptable and approved by the Engineer. [Section 400](#) shall apply when corrective measures are required. The use of black-out tape or black-out paint will not be permitted under any circumstance to correct layout errors on any final surface.

Traffic shifts that are done on the final surface shall be accomplished using interim traffic marking tape that can be removed without any blemishing of the final surface. Interim traffic marking tape shall be used on any of the following final surfaces: asphaltic concrete, Portland cement concrete, and bridge deck surfaces. The Contractor may propose alternate traffic markings and removal methods on the final surface. Submitted proposals shall include the type of material, method of removal and a cost comparison to the traffic marking tape method. Prior to any approval, the Contractor shall field demonstrate to the satisfaction of the Engineer that the proposed traffic markings can be removed without any blemishing of the final surface. If the proposal is determined to be acceptable, a supplemental agreement will be executed prior to the installation of the proposed alternate traffic markings. The supplemental agreement shall denote the type of traffic marking materials, method of removal and any cost and/or time savings to the Department. The Department will not consider or participate in any cost increase that may result from implementing the proposed alternate method.

5. Pay Factor Reduction for Asphaltic Concrete Final Surfaces

When the correction of an error in the layout of the final pavement markings requires the final surface to be grounded, blemished, scarred, or polished the pay factor shall be reduced to 0.95 for the entire surface area of the final topping that has a blemish, polished or a scarred surface. The reduced pay factor shall not be confined to only the width and length of the stripe or the dimensions of the blemished areas, the whole roadway surface shall have the reduced pay factor applied. The area of the reduced pay factor shall be determined by the total length and the total width of the roadway affected. If the affected area is not corrected, the reduction in pay shall be deducted from the final payment for the topping layer of asphaltic concrete. The Engineer shall make the final determination whether correction or a reduced pay factor is acceptable.

The eradication of pavement markings on intermediate and final concrete surfaces shall be accomplished by a method that does not grind, polish, or blemish the surface of the concrete. The method used for the removal of the interim markings shall not spall chip the joints in the concrete and shall not damage the sealant in the joints. Any joint or sealant repairs shall be included in the bid price for Traffic Control-Lump Sum. The proposed method of removal shall have the prior approval of the Engineer.

Failure to promptly remove conflicting or non-applicable pavement markings shall be considered as non-performance under [Subsection 150.7.01](#).

6. Preparation and Planning for Traffic Shifts

When shifting of traffic necessitates removal of centerline, lane lines, or edge lines, all such lines shall be removed prior to, during, or immediately after any change to present the least interference with traffic. Interim traffic marking tape shall be used as a temporary substitute for the traffic markings being removed.

Before any change in traffic lane(s) alignment, marking removal equipment shall be present on the project for immediate use. If marking removal equipment failures occur, the equipment shall be repaired or replaced (including leasing equipment if necessary), so that the removal can be accomplished without delay.

Except for the final surface, markings on asphaltic concrete may be obliterated by an overlay course, when approved by the Engineer. When an asphaltic concrete overlay is placed for the sole purpose of eliminating conflicting markings and the in place asphaltic concrete section will allow, said overlay will be eligible for payment only if designated in the Plans. Overlays to obliterate lines will be paid for only once and further traffic shifts in the same area shall be accomplished with removable markings. Only the minimum asphaltic concrete thickness required to cover lines will be allowed. Excessive build-up will not be permitted. When an overlay for the sole purpose of eliminating conflicting markings is not allowed, the markings no longer applicable shall be removed in accordance with [Section 656](#).

C. Raised Pavement Markers

Retroreflective raised pavement markers (RPMs) shall be placed as listed below for all asphaltic concrete pavements before the roadway is open to traffic, unless noted this section. On the final surface, RPMs shall be placed according to the timeframes specified in [Subsection 150.3.10.D](#) for full pattern pavement markings. When Portland Cement Concrete is an intermediate or final surface and is open to traffic, one (1) calendar day is allowed for cleaning and drying before the installation of RPMs is required.

Raised pavement markers are not allowed on the right edge lines under any situation.

Retroreflective raised pavement markers (RPMs) shall be placed and/or maintained on intermediate pavements surfaces on all highways that the final ride surface is not completed within 45 calendar days which is open to traffic. This includes all resurfacing projects along with widening and reconstruction projects. The RPMs shall be placed as follows:

1. Supplementing Lane Lines:

- a. Eighty foot (80') center on skip lines with curvature less than three degrees. (Includes tangents)
- b. Forty foot (40') centers on solid lines and all lines with curvature between three degrees and six degrees.
- c. Twenty foot (20') centers on curves over six degrees.
- d. Twenty foot (20') centers on lane transitions or shifts.

2. Supplementing Ramp Gore Lines:

- a. Twenty foot (20') centers, two each, placed side by side.

3. Other Lines:

- a. As shown on the Plans or directed by the Engineer.

D. Exceptions for Interim Markings

Some exceptions to the time of placement and pattern of markings are permitted as noted below; however, full pattern pavement markings are required for the completed project.

1. Two-Lane, Two-Way Roadways

a. Skip Lines

If used, interim temporary tape or paint skip (broken) stripe may only be used for a maximum of three (3) calendar days. The stripes shall be at least two feet ($> 2'$) long with a maximum gap of thirty-eight feet ($\leq 38'$). On curves greater than six degrees ($>6^\circ$), a one foot ($1'$) stripe with a maximum gap of nineteen feet ($\leq 19'$) shall be used. In lane shift areas, solid lines will be required.

Interim raised pavement markers may be substituted for the interim skip (broken) stripes. If raised pavement markers are substituted for the two foot ($2'$) interim skip stripe, three (3) markers spaced at equal intervals over a two feet ($2'$) distance will be required. No separate payment will be made if the interim raised pavement markers are substituted for interim skip lines.

Interim raised pavement markers shall be retro-reflective, shall be the same color as the pavement markers for which they are substituted, and shall be visible during daytime.

The type of interim marker and method of attachment to the pavement shall be approved by the Office of Materials and Testing but in no case will the markers be attached by the use of nails. Flexible reflective markers, Type 14 or Type 15, may be used for a maximum of three (3) calendar days as an interim marker. Any flexible reflective markers in use shall be from the QPL-76.

The interim raised pavement markers shall be maintained until the full pattern pavement markings are applied. At the time full pattern markings are applied the interim raised markers shall be removed in a manner that will not interfere with application of the full pattern pavement markings.

b. No Passing Zones Two-Lane, Two-Way Roadways

Passing zones shall be re-established in the locations existing prior to resurfacing unless otherwise noted in the Contract. No changes to the location of passing zones shall be done without the written approval of the Engineer. For periods not to exceed three (3) calendar days where interim skip centerlines are in place, no-passing zones shall be identified by using post or portable mounted DO NOT PASS regulatory signs (R4-1) twenty-four inches by thirty inches ($24'' \times 30''$) at the beginning and at intervals not to exceed one-half ($\leq 1/2$) mile within each no-passing zone. A post or portable mounted PASS WITH CARE regulatory sign (R4-2) twenty-four inches by thirty inches ($24'' \times 30''$) shall be placed at the end of each no-passing zone. Post mounted signs shall be placed in accordance with the MUTCD. Portable signs shall be secured in such a manner to prevent misalignment and minimize the possibility of being blown over by weather conditions or traffic.

On new location projects and on projects where either horizontal or vertical alignments has been modified; the location of No-Passing Zones will be identified by the Engineer.

c. Edge lines

• Bituminous Surface Treatment Paving

Edge lines will not be required on intermediate surfaces (including asphaltic concrete leveling for bituminous surface treatment paving) that are in use for a period of less than sixty (<60) calendar days except at bridge approaches, on lane transitions, lane shifts, and in such other areas as determined by the Engineer. On the final surface, edge lines shall be placed within thirty (≤ 30) calendar days of the time that the final surface was placed.

• All Other Types of Pavement

Edge lines will not be required on intermediate surfaces that are in use for a period of less than thirty (<30) calendar days except at bridge approaches, on lane transitions, lane shifts, and in such other areas as determined by the Engineer. On the final surface, edge lines shall be placed within fourteen (≤ 14) calendar days of the time that the surface was placed.

2. Multi-Lane Highways – With No Paved Shoulder(s) or Paved Shoulder(s) Four Feet or Less ($\leq 4'$)

a. Undivided Highways (Includes Paved Center Turn Lane)

- Centerlines and No-Passing Barrier-Full Pattern centerlines and no-passing barriers shall be restored before opening to traffic.
- Lane lines- Interim skip (broken) stripe as described in Subsection 150.3.10.D.1.a. may be used for periods not to exceed three (≤ 3) calendar days. Skip lines are not permitted in lane shift areas. Solid lines shall be used.
- Edge lines- Edge lines shall be placed on intermediate and final surfaces within three (3) calendar days of obliteration.

b. Divided Highways (Grass or Raised Median)

- Lane lines- Full pattern skip stripe shall be restored before opening to traffic. Skip lines are not permitted in lane shift areas. Solid lines shall be required.
- Centerline/Edge line- Solid lines shall be placed on intermediate and final surfaces within three calendar days of obliteration.

3. Limited Access Roadways and Roadways with Paved Shoulders Greater Than Four Feet ($> 4'$)

a. Same as Subsection 150.3.10.D.2 except as noted in (b) below.

b. Edge lines-

- Asphaltic Concrete Pavement- Edge lines shall be placed on intermediate and final surfaces prior to opening to traffic.
- Portland Cement Concrete Pavement- Edge lines shall be placed on any surface open to traffic no later than one calendar day after work is completed on a section of roadway. All water and residue shall be removed prior to daily striping.

4. Ramps for Multi-Lane Divided Highways

A minimum of one solid line edge stripe shall be placed on any intermediate surface of a ramp prior to opening the ramp to traffic. The other edge stripe may be omitted for a maximum period of three (3) calendar days on an intermediate surface. Appropriate channelization devices shall be spaced at a maximum of twenty-five feet (25') intervals until the other stripe has been installed.

The final surface shall have both stripes placed prior to opening the ramp to traffic.

5. Miscellaneous Pavement Markings

a. Final Surface

School zones, railroads, symbols, words, arrows, and other similar markings shall be placed on final surfaces conforming to [Section 652](#) within fourteen (14) calendar days of completion of the final surface. Final markings shall conform to the type of pay item in the Plans. When no pay item exists in the Plans the final markings shall conform to [Section 652](#) for painted markings.

b. Intermediate Surface

Intermediate surfaces that will be in use for more than forty-five (45) calendar days shall have the miscellaneous pavement markings installed to conform to the requirement of [Section 652](#). Under Subsection 150.6, Special Conditions, or as directed by the Engineer these markings may be eliminated.

c. Stop Line

All stop signs and traffic signals shall have temporary twelve inch (12") stop lines placed in accordance with [MUTCD \(3B. 19\)](#) on all surfaces prior to opening to traffic. Temporary tape may be used.

150.3.11 Differences in Elevations Between Travel Lanes and Shoulders

All time frames and requirements may be changed with the Engineer's approval.

A. Differences in Elevations

Difference in elevations due to construction between travel lanes and/or shoulders within the clear zone should be limited to the following:

1. Difference of two inches ($\leq 2''$) or less between adjacent travel lanes should remain for a maximum period of fourteen (14) calendar days.
2. Difference of two inches ($\leq 2''$) or less between adjacent travel lane and paved shoulder should remain for a maximum of thirty (30) calendar days. Traffic control devices shall be in accordance with [Detail 150-G](#).
3. Difference of greater than two inches ($> 2''$) is permitted for continuous operations. Traffic control devices shall be in accordance with [Detail 150-E](#).
4. Difference of greater than two inches ($> 2''$) between travel lanes and/or shoulders for non-continuous operations will not be allowed for more than a twenty-four (24) hour period. For the first twenty-four (24) hours, traffic control shall be in accordance with [Detail 150-E](#). After twenty-four (24) hours the section should be healed according to [Detail 150 – H](#). This condition can exist for a maximum sixty (60) calendar days.
 - a. A single length of area that does not exceed 1000 feet total length may be left open as a startup area for periods not to exceed forty-eight (48) hours provided the Contractor can demonstrate the ability to complete the Work in a proficient manner. Prior approval of the Engineer shall be obtained before any startup area may be allowed.
 - b. For cement stabilized base, work adjacent to the travel lane and/or shoulders shall be healed as per [Detail 150-H](#) within forty-eight (48) hours after the seven (7) calendar day curing period is complete for each section placed. During the placement and curing period, traffic control shall be in accordance [Detail 150 E](#).

Failure to meet these requirements shall be considered as non-performance of Work under [Subsection 150.7.01](#).

B. Healed Section

Healed section and traffic control devices should be placed in accordance with Detail 150-H. If crushed stone materials are used to provide a healed section no separate payment will be made for the material used to heal any section. The Contractor may submit a plan to utilize existing pay items for crushed stone provided the plan clearly demonstrates that the materials used to heal an area will be incorporated into the Work with minimal waste. Handling and hauling of any crushed stone used to heal shall be kept to a minimum. The Engineer shall determine if the crushed stone used to heal meets the Specifications for gradation and quality when the material is placed in the final location.

C. Emergency Situations

Inclement weather, traffic accidents, and other events beyond the control of the Contractor may prevent the Work from being completed as required above. The Contractor shall notify the Engineer in writing stating the conditions and reasons that have prevented the Contractor from complying with the time limitations. The Contractor shall also outline a plan detailing immediate steps to complete the Work. Failure to correct these conditions on the first calendar day that conditions will allow corrective work shall be considered as non-performance of Work under Subsection 150.7.01.

D. Plating

Plating for drainage structures, utility facilities, etc. is prohibited on the interstates. Plating on State Routes and secondary roads will require the prior approval of the project Engineer. Steel plates shall not be used on highways with a posted speed greater than forty-five (45) mph. The plate shall completely cover the pavement cut or excavation. The plate shall be adequately secured and shall provide a safe and reasonable transition to the adjoining roadway surface. An asphalt wedge can be used to provide a smooth transition over the plate(s). Temporary traffic control warning signs W8-24 shall be posted in advance warning motorist about plates in roadway in accordance with the MUTCD. Plating should not remain in place for more than four (4) calendar days.

E. Asphaltic Concrete Resurfacing Projects

1. Shoulder Construction Included as a Part of the Contract

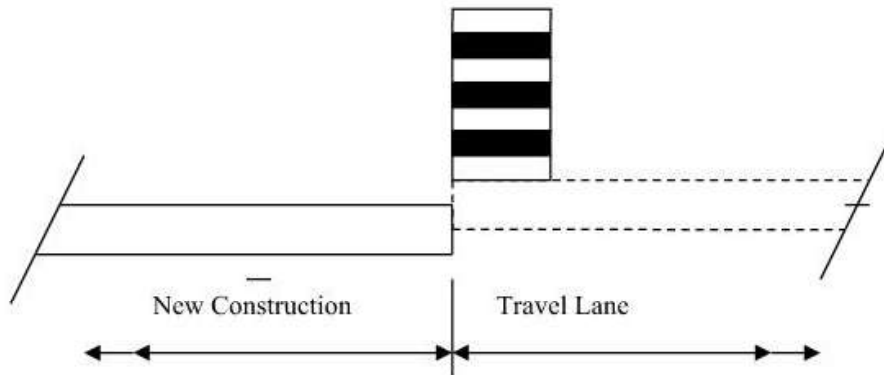
When the placement of asphaltic concrete materials creates a difference in elevation greater than two inches (> 2") between the earth shoulder (grassed or un-grassed) and the edge of travel lane or between the earth shoulder and a paved shoulder that is less than four feet (< 4') in width, the Contractor shall place and maintain drums in accordance with the requirements of Subsection 150.2.04.B.3. When the edge of the paved surface is tapered with a safety edge, drums may be spaced at two (2) times the speed limit in MPH. Drums shall remain in place and be maintained until the difference in elevation has been eliminated by the placement of the appropriate shoulder materials.

2. Shoulder Construction Not Included as a Part of the Contract

When the placement of asphaltic concrete materials creates a difference in elevation greater than two inches (> 2") between the earth shoulder (grassed or un-grassed) and the edge of travel lane or between the earth shoulder and a paved shoulder that is less than four feet (< 4') in width, the Contractor shall notify the Engineer, in writing, when the resurfacing work including all corrective list items has been completed.

Drums spaced at twenty foot (20') intervals. **Note:** If the travel way width is reduced to less than ten feet (< 10') by the use of drums, vertical panels shall be used in lieu of drums.

Location of drums when Elevation Difference exceeds four inches (> 4")

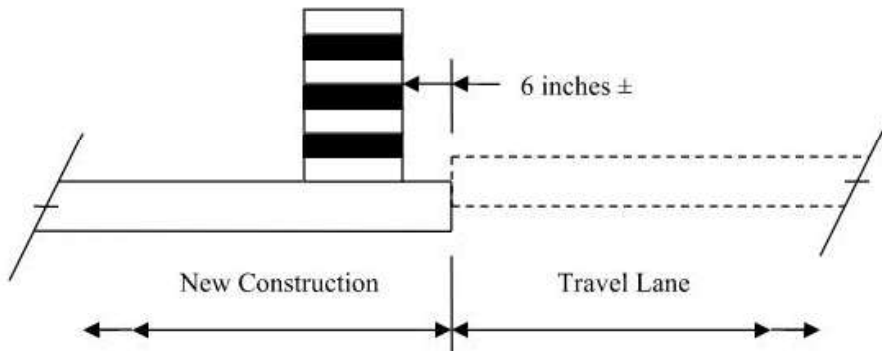


ELEVATION DIFFERENCE GREATER THAN FOUR INCHES (> 4")

DETAIL 150-E

Drums spaced at forty foot (40') intervals.

Location of drums when Elevation Difference is greater than two inches (> 2") to four inches (4")

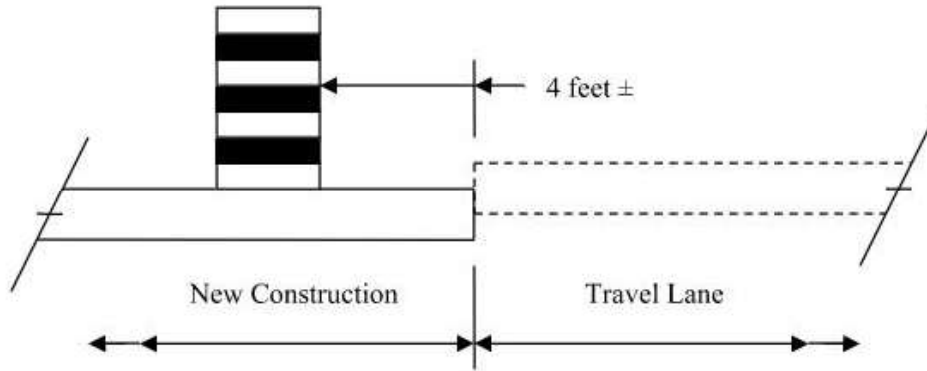


ELEVATION DIFFERENCE GREATER THAN TWO INCHES (> 2") TO
FOUR INCHES (4")

DETAIL 150-F

Drums spaced at eighty foot (80') intervals.

Location of drums when Elevation Difference is two inches ($\leq 2''$) or less.



ELEVATION DIFFERENCE OF TWO INCHES ($\leq 2''$) OR LESS

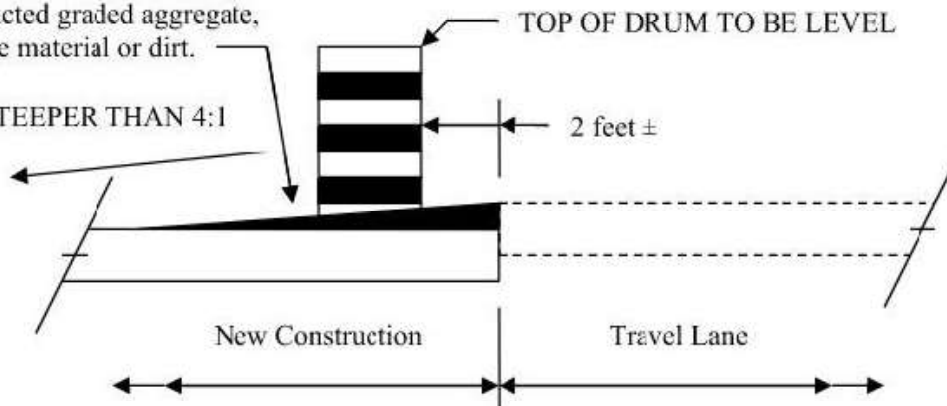
DETAIL 150-G

Location of drums immediately after completion of healed sections spaced at 40 foot (40') intervals

Healed Section

Compacted graded aggregate, subbase material or dirt.

NO STEEPER THAN 4:1



HEALED SECTION

DETAIL 150-H

150.3.12 Work Zone Law Enforcement

Work zone law enforcement consists of utilizing a uniformed law enforcement officer equipped with patrol vehicle and blue flashing lights to enforce traffic laws in construction work zones and the administration of this service. Payment for work zone law enforcement will be made only for the utilization in work zones during lane closures, traffic pacing, or other activities that occur within travel lanes. The Contractor will be responsible for negotiating a rate of reimbursement and making reimbursement to that law enforcement agency.

The Contractor will be responsible for coordinating and scheduling the utilization of the work zone law enforcement. The Engineer may require the use of work zone law enforcement at specific times and locations.

Work zone law enforcement will be required in all work zones during lane closures, traffic pacing, or other activities that occur within travel lanes on the interstate.

150.4 Measurement

150.4.01 Traffic Control Items

A. Traffic Control

When listed as a pay item in the Proposal, payment will be made at the lump sum price bid, which will include all traffic control not paid for separately, and will be paid as follows:

When the first Construction Report is submitted, a payment of twenty-five percent (25%) of the lump sum price will be made. For each progress payment thereafter, the total of the Project percent complete shown on the last pay statement plus twenty-five percent (25%) will be paid (less previous payments), not to exceed one hundred percent (100%).

When no payment item for Traffic Control-Lump Sum is shown in the Proposal, all of the requirements of Section 150 and the Temporary Traffic Control Plan shall be in full force and effect. The cost of complying with these requirements will not be paid for separately but shall be included in the overall bid submittal.

B. Changeable Message Sign, Portable

Portable changeable message sign will be measured as specified in [Section 632](#).

C. Flashing Beacon Assembly

Flashing beacon assemblies will be measured as specified in [Section 647](#).

D. Pavement Markings

Pavement markings will be measured as specified in Section 150.

E. Portable Impact Attenuators

Each portable impact attenuator will be measured by the unit/array which shall include all material components, hardware, incidentals, labor, site preparation, and maintenance, including spare parts recommended by the manufacturer for repairing accident damage. Each unit will be measured only once regardless of the number of locations installed, moves required, or number of repairs necessary because of traffic damage. Upon completion of the project, the units shall be removed and retained by the Contractor.

F. Signs

When shown as a pay item in the Contract, interim special guide signs will be paid for as listed below. All other regulatory, warning, and guide signs, as required by the Contract, will be paid for under Traffic Control Lump Sum or included in the overall bid submitted.

1. Interim ground mounted or interim overhead special guide signs will be measured for payment by the square foot. This payment shall be full compensation for furnishing the signs, including supports as required, erecting, illuminating overhead signs, maintaining, removing, re-erecting, and final removal from the Project. Payment will be made only one time regardless of the number of moves required.
2. Remove and reset existing special guide signs, ground mount or overhead, complete, in place, will be measured for payment per each. Payment will be made only one time regardless of the number of moves required.
3. Modify special guide signs, ground mount or overhead, will be measured for payment by the square foot. The area measured shall include only that portion of the sign modified. Payment shall include materials, removal from posts or supports when necessary, and remounting as required.

G. Temporary Audible Information Device

Temporary audible information devices are measured as the actual number furnished and installed in accordance with the manufacturer's recommendations, which shall include all necessary materials, equipment, labor, site preparation, maintenance, and removal. Each temporary audible information device will be paid for only one time regardless of the number of times it's reused during the duration of the Work. These devices shall remain the property of the Contractor.

H. Temporary Barrier

Temporary barrier shall be measured as specified in [Sections 620](#).

I. Temporary Curb Cut Wheelchair Ramps

Temporary curb cut wheelchair ramps are measured as the actual number formed and poured, complete and accepted, which shall include all necessary materials, equipment, labor, site preparation, maintenance, and removal. No additional payment will be made for sawing existing sidewalk and removal and disposal of removed material for temporary wheelchair ramp construction. No additional payment will be made for constructing the detectable warning surface.

J. Temporary Guardrail Anchorage, Type 12

Temporary guardrail anchorage- Type 12 will be measured by each assembly, complete in place and accepted according to the details shown in the Plans, which shall also include the additional guardrail and appurtenances necessary for transition and connection to temporary concrete barrier. Payment shall include all necessary materials, equipment, labor, site preparation, maintenance, and removal.

K. Temporary Walkways with Detectable Edging

Temporary walkways with detectable edging will be measured in linear feet (meters), complete in place and accepted, which shall include all necessary materials, equipment, labor, site preparation, temporary pipes, passing spaces, maintenance, and removal. Excavation and backfill are not measured separately for payment. No payment will be made for temporary walkways where existing pavements or existing edging (that meets the requirements of MUTCD) are utilized for the temporary walkway. Payment for temporary detectable edging, including approved barriers and channelizing devices, installed on existing pavement shall be included in Traffic Control-Lump Sum.

L. Traffic Signal Installation- Temporary

Temporary traffic signal installation will be measured as specified in [Section 647](#).

M. Work Zone Law Enforcement

When work zone law enforcement is shown as a pay item, work zone law enforcement will be measured for payment by the hour. The Contractor shall provide a daily work record containing the actual number of hours charged by the law enforcement officer. The daily work record shall be complied on a form provided by the Department, signed by the law enforcement officer, signed by the Contractor's Worksite Traffic Control Supervisor attesting that the law enforcement was utilized during the time recorded, and then submitted to the Engineer.

Work zone law enforcement will be measured for payment by the hour up to the maximum number of hours included in the Contract. The Engineer may at their discretion increase the maximum number of hours.

Payment shall be full compensation for reimbursing the law enforcement agency and for all cost incurred by the Contractor in coordinating, scheduling, and administering the item work zone law enforcement.

If no work zone law enforcement pay item is included in the Contract, then all work zone law enforcement cost shall be included in Traffic Control – Lump Sum.

150.5 Reserved

150.6 Special Conditions

Special Conditions, if used, will be included elsewhere in the Contract.

150.7 Payment

When shown in the Schedule of Items in the Proposal, the following items will be paid for separately. Payment will be made under:

Item No. 150	Traffic control -	Lump Sum
Item No. 150	Traffic control, solid traffic stripe __ inch, (color)	Per linear mile
Item No. 150	Traffic control, skip traffic stripe __ Inch, (color)	Per linear mile
Item No. 150	Traffic control, solid traffic stripe, thermoplastic 24 inch, color	Per linear mile
Item No. 150	Traffic control, raised pavement markers –all types	Per each
Item No. 150	Remove and reset, existing special guide signs, overhead, complete-in-place	Per each
Item No. 150	Temporary walkways with detectable edging	Per linear foot
Item No. 150	Temporary curb cut wheelchair ramps	Per each
Item No. 150	Temporary audible information device	Per each
Item No. 150	Work Zone Law Enforcement	Per hour

150.7.01 Enforcement and Adjustments

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

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

SCHEDULE OF DEDUCTIONS FOR EACH CALENDAR DAY OF DEFICIENCIES OF TRAFFIC CONTROL INSTALLATION AND/OR MAINTENANCE		
ORIGINAL TOTAL CONTRACT AMOUNT		
From More Than	To and Including	Daily Charge
\$0	\$100,000	\$250
\$100,000	\$1,000,000	\$650
\$1,000,000	\$5,000,000	\$1,300
\$5,000,000	\$20,000,000	\$2,000
\$20,000,000	\$40,000,000	\$2,600
\$40,000,000	\$-----	\$4,000

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
SPECIAL PROVISION

Section 415—Asphaltic Concrete Open Graded Crack Relief Interlayer

Delete Section 415 and substitute the following:

415.1 General Description

This work includes constructing a bituminous plant produced Asphaltic Concrete Open Graded Crack Relief Interlayer (OGI) over the existing roadway surface. The mixture shall serve as asphaltic concrete leveling over irregular surfaces and provide mitigation for reflective cracking prior to the placement of the final surface pavement. The mixture shall conform to the lines, grades, thicknesses, typical sections and cross sections shown on the Plans or established by the Engineer.

This section includes the requirements for Asphaltic Concrete Open Graded Crack Relief Interlayer mixtures regardless of the gradation of the aggregates, type and amount of bituminous material, or pavement use. Follow the requirements in Section 400, Section 402 and Section 828 for production and placement, materials, equipment, and acceptance plans except as noted or modified in this Specification.

Acceptance of work is on a lot-to-lot basis according to the requirements of this Section, Section 400, Section 402 and Section 106.

415.1.01 Definitions

Asphaltic Concrete Open Graded Crack Relief Interlayer: an open graded mixture placed at a lift thickness that yields stone on stone contact that provides in-place air void content of 18 to 23 percent to mitigate existing cracking within asphaltic concrete pavements.

415.1.02 Related References

A. Standard Specifications

Section 106—Control of Materials
Section 109—Measurement and Payment
Section 152—Field Laboratory Building
Section 400 – Hot Mix Asphaltic Concrete Construction
Section 402 – Hot Mix Recycled Asphaltic Concrete
Section 413—Bituminous Tack Coat
Section 800 – Coarse Aggregate
Section 802 - Aggregate for Asphaltic Concrete
Section 820 – Asphalt Cement
Section 828—Hot Mix Asphaltic Concrete Mixtures
Section 831 – Admixtures
Section 882 – Lime
Section 883 – Mineral Filler

B. Referenced Documents

AASHTO T 209
AASHTO T 202
AASHTO T 49

Section 415—Asphaltic Concrete Open Graded Crack Relief Interlayer

AASHTO T 315

Department of Transportation Standard Operating Procedure (SOP) 27

Department of Transportation Standard Operating Procedure (SOP) 15

Department of Transportation Standard Operation Procedure (SOP) 40

GDT 38

GDT 73

GDT 83

GDT 114

GDT 119

GDT 125

GDT 126

GSP 15

GSP 21

QPL 1

QPL 2

QPL 7

QPL 26

QPL 39

QPL 41

QPL 45

415.1.03 Submittals

A. Invoices

Furnish formal written invoices from a supplier for all materials used in production of HMA when requested by Department. Show the following on the Bill of Lading:

- Date shipped
- Quantity in tons (megagrams)
- Included with or without additives (for asphalt cement)

Purchase asphaltic cement directly from a supplier listed on Qualified Products List 7 and provide copies of Bill of Lading at the Department's request.

B. Paving Plan

Before starting asphaltic concrete construction, submit a written paving plan to the Engineer for approval. Include the following on the paving plan:

- Proposed starting date
 - Location of plant(s)
 - Rate of production
 - Average haul distance(s)
 - Number of haul trucks
 - Paver speed feet (meter)/minute for each placement operation
 - Mat width for each placement operation
 - Number and type of rollers for each placement operation
-

Section 415—Asphaltic Concrete Open Graded Crack Relief Interlayer

- Sketch of the typical section showing the paving sequence for each placement operation
- Electronic controls used for each placement operation
- Temporary pavement marking plan

If staged construction is designated in the Plans or contract, provide a paving plan for each construction stage.

If segregation is detected, submit a written plan of measures and actions to prevent segregation. Work will not continue until the plan is submitted to and approved by the Department.

C. Job Mix Formula

Submit to the Engineer a written job mix formula proposed for each mixture type to be used based on an approved mix design. Furnish the following information for each mix:

- Specific project for which the mixture will be used
- Source and description of the materials to be used
- Mixture I.D. Number
- Proportions of the raw materials to be combined in the paving mixture
- Single percentage of the combined mineral aggregates passing each specified sieve
- Single percentage of asphalt by weight of the total mix to be incorporated in the completed mixture
- Single temperature at which to discharge the mixture from the plant
- Theoretical specific gravity of the mixture at the designated asphalt content
- Name of the person or agency responsible for quality control of the mixture during production

Do the following to have the formulas approved in accordance with SOP 40 “Approval of Contractor Job Mix Formulas” and to ensure their quality:

1. Submit proposed job mix formulas for review at least two weeks before beginning the mixing operations.
2. Do not start hot mix asphaltic concrete work until the Engineer has approved a job mix formula for the mixture to be used. No mixture will be accepted until the Engineer has given approval.
3. Provide mix designs for all Asphaltic Concrete Open Graded Crack Relief Interlayer mixtures to be used.
4. After a job mix formula has been approved, assume responsibility for the quality control of the mixtures supplied to the Department according to Subsection 106.01, “Source of Supply and Quantity of Materials.”

D. Quality Control Program

Submit a Quality Control Plan to the Office of Materials and Testing for approval. The Quality Control Program will be included as part of the certification in the annual plant inspection report.

415.2 Materials

The requirements established in Section 400 are to be followed for Asphaltic Concrete Open Crack Relief Interlayer production and placement, materials, equipment, and acceptance plans except as noted or modified in this Specification.

Ensure that materials comply with the specifications listed in Table 1.

Section 415—Asphaltic Concrete Open Graded Crack Relief Interlayer

Table 1—Materials Specifications

Material	Subsection
Asphalt Cement, Grade Specified	820.2
Coarse Aggregates for Asphaltic Concrete	802.2.02
Fine Aggregates for Asphaltic Concrete	802.2.01
Mineral Filler	883.1
Heat Stable Anti-Stripping Additive	831.2.04
Hydrated Lime	882.2.03
Silicone Fluid (When approved by the Office of Materials and Testing)	831.2.05
Bituminous Tack Coat: PG 58-22, PG 64-22, PG 67-22	820.2
Hot Mix Asphaltic Concrete Mixtures	828

415.2.01 Mix Design Requirements

The Open Graded Crack Relief Interlayer Mixture shall be formulated to contain approximately 18 to 23 percent in-place air voids after compaction. Use approved mixtures that meet the following mixture control tolerances and design criteria:

Table 2 – Asphaltic Concrete Open Graded Crack Relief Interlayer Mixture Design and Control

Sieve Size	Mixture Control Tolerance, %	Design Gradation Limits, % Passing
		Open Graded Crack Relief Interlayer
3/4 in (19 mm) sieve	±0.0	100
1/2 in (12.5 mm) sieve	±6.1	80 - 100
3/8 in (9.5 mm) sieve	±5.6	40 - 65
No. 4 (4.75 mm) sieve	±5.7	10 - 25
No. 8 (2.36 mm) sieve	±4.6	2 - 10
No. 200 (75 µm) sieve	±2.0	2 - 5
Range for % AC	±0.4	4.50 – 5.25
Class of stone (Section 800)		"A" only
Drain-down (AASHTO T305), %		<0.3
Design optimum air voids (%)		20% ± 2%
Control Sieves used in Acceptance Schedule		3/8 in., No. 8 (9.5 mm, 2.36 mm) and Asphalt Cement

Notes:

1. Use only PG 64-22 or PG 67-22 asphalt cement (specified in Section 820).
2. Use no less than 1.0% hydrated lime regardless of aggregates group or source(s) used.
3. Ensure no more than 10 percent Recycled Asphalt Pavement (RAP) is used in Asphaltic Concrete Open Graded Interlayer mixtures.
4. Quality Acceptance Test Results for AC content deviating > ± 0.3 % from the approved Job Mix Formula (JMF) consistently over three Lots may subject the mix to a revised AC content on the project JMF at the discretion of the State Materials Engineer based on statistical trend.
5. Range for % AC is Original Optimum AC (OOAC) at 25 blow Marshall prior to the Corrected Optimum

Section 415—Asphaltic Concrete Open Graded Crack Relief Interlayer

AC (COAC) calculation detailed in SOP 2 (Appendix D).

415.3 Construction Requirements

The requirements established in Section 400 are to be followed for asphaltic concrete mixture production and placement, materials, equipment, and acceptance plans except as noted or modified in this Specification.

415.3.01 Personnel

General Provisions 101 through 150.

415.3.02 Construction

Asphaltic concrete plants that produce mix for Department use are governed by Quality Assurance for Hot Mix Asphaltic Concrete Plants in Georgia, Laboratory Standard Operating Procedure No. 27.

Follow requirements established in Section 400 for production and placement, materials, equipment, acceptance plans and adjustments except as noted or modified in this Specification.

- A. Apply a bituminous tack coat according to Section 413. The Engineer will determine the application rate, which must be within the limits of 0.06 gal/yd² to 0.10 gal/yd² (0.27 L/m² to 0.45 L/m²) (**residual asphalt cement**).
- B. The mix shall be produced and placed at a temperature of 250°F with a tolerance of ± 20°F.
- C. Place the mix to a compacted lift thickness of 1-inch (25 mm). For construction purposes, the target thickness will be converted to spread rate based on the bulk specific gravity of the asphaltic concrete mixture being used as shown in the following equation:

$$\text{Spread rate (lbs/yd}^2\text{)} = t * G_{mb} * 46.8 \qquad \text{(Spread rate (kg/ m}^2\text{)} = t * G_{mb})$$

Where: t = Compacted lift thickness (inches, mm)
G_{mb}= bulk specific gravity of the mix from the approved mix design

The spread rate shall be controlled within 10 lbs/yd² (6 kg/m²).

- D. Do not place mix at air temperatures below 50 °F (10 °C).
- E. The mix shall be compacted in a manner to achieve 18 to 23 percent in-place air voids. Steel wheel rollers operating in static mode **only** will be used to seat the lift of Asphaltic Concrete Open Graded Crack Relief Interlayer mixture. Pneumatic tire rollers shall not be allowed on the Asphaltic Concrete Open Graded Crack Relief Interlayer mat.

415.4. Measurement

Asphaltic Concrete Open Graded Crack Relief Interlayer mixture, complete, in place and accepted, is measured in tons (megagrams). If the spread rate exceeds the upper limits outlined in Subsection 415.3.02.C by > 15 lbs/yd², the mix in excess will not be paid for. If the rate of the spread is ≤ 10 lbs/yd² than the lower limit, the deficient course is subject to correction by overlaying the entire lot. The mixture used for correcting deficient areas is paid for at the Contract Unit Price of the course being corrected and is subject to mixture control requirements established in Table 2 – Asphaltic Concrete Open Graded Crack Relief Interlayer Mixture Design and Control. After the deficient course has been corrected, the total spread rate for that lot is recalculated, and the mix in excess of the upper limits outlined in Subsection 415.3.02.C will not be paid for.

415.5 Payment

Asphaltic Concrete Open Graded Crack Relief-Interlayer mix is paid for at the Contract Unit Price per ton (megagram). Payment is full compensation for furnishing and placing materials including asphalt cement, hydrated lime, approved additives, and for cleaning and repairing, preparing surfaces, hauling, mixing, spreading, rolling, and performing other operations to complete the Contract Item.

Payment will be made under:

Item No. 415	Asphaltic Concrete Open Graded Crack Relief Interlayer, group-blend, Including bituminous materials and hydrated lime	Per ton (megagram)
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Section 415—Asphaltic Concrete Open Graded Crack Relief Interlayer

415.5.01 Adjustments

A. Materials Produced and Placed During the Adjustment Period

Follow requirements established in Section 400 for production and placement, materials, equipment, acceptance plans and adjustments except as noted or modified in this Specification.

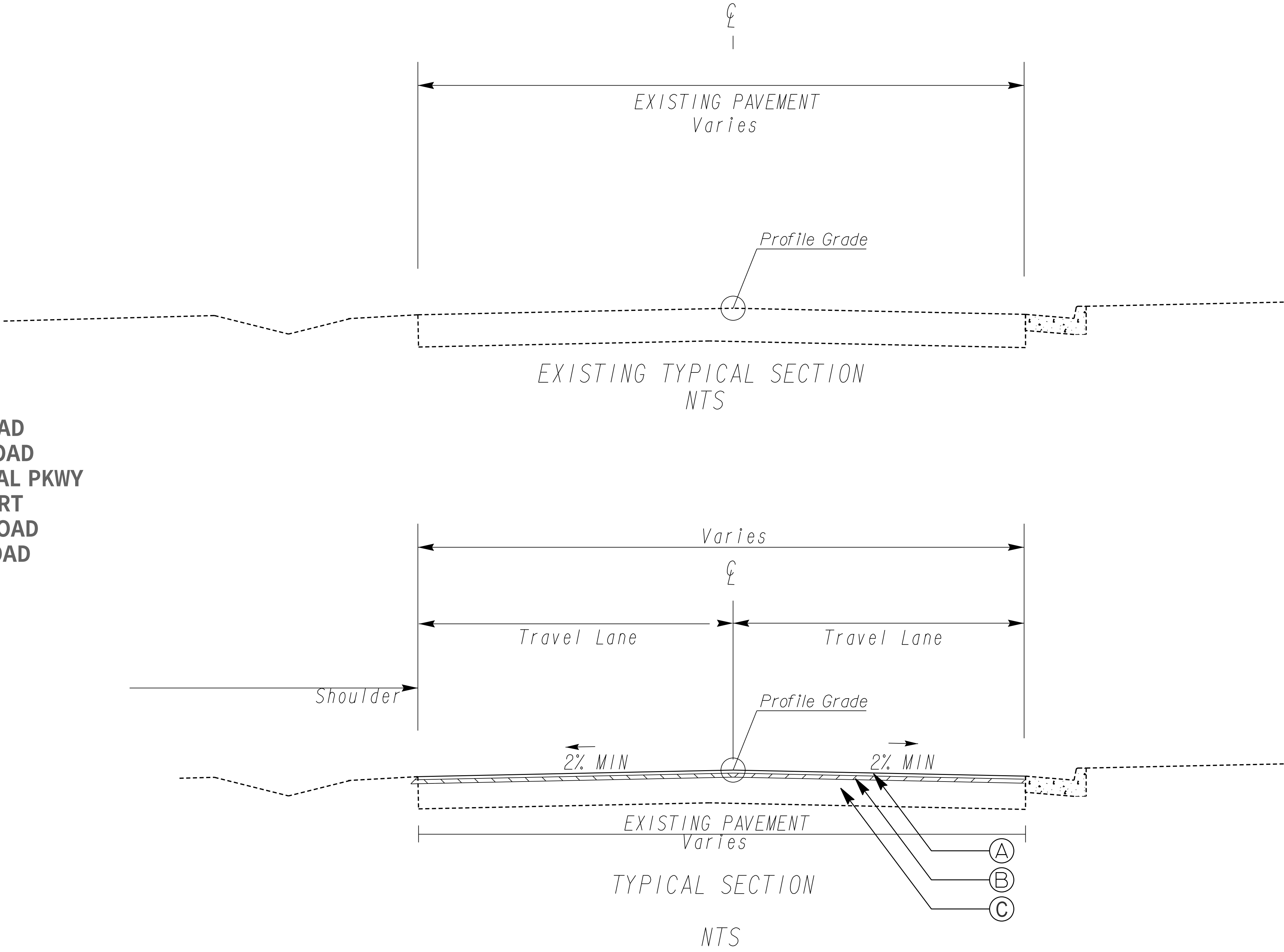
Asphaltic Concrete Open Graded Crack Relief Interlayer shall be granted an adjustment period for the first Lot or day, whichever is less, produced for the Contract. A new adjustment period shall not be granted for a change of producer, mix design or asphalt plant location. The adjustment period is provided to adjust or correct the mix and to establish the construction procedures and sequence of operations. Test the mixture in accordance with Section 400.3.06. Maintain the asphalt cement content and gradation within the limits provided in Table 2 – Asphaltic Concrete Open Graded Interlayer Mixture Design and Control. The Engineer will not use these test results in the acceptance for payment decision but production and placement operations shall cease for failure to meet mixture control tolerances established in Table 2 – Asphaltic Concrete Open Graded Interlayer Mixture Design and Control.

415.5.02 Determine Lot Acceptance

The Engineer will accept the mixture based on visual inspection. The mixture shall be inspected for texture, segregation, bleeding, fat spots, raveling, delamination, tearing, targeted in-place air void content and slippage areas. Remove and replace any areas determined to be unacceptable to the Engineer.

Office of Materials and Testing

ROADS:
MAGNET ROAD
EBENEZER ROAD
KINMOR INDUSTRIAL PKWY
JESSIE COURT
ELLINGTON ROAD
MCCALLA ROAD



NOTE:

- 1. MILL ASPH CONC PVMT, 3 1/2 IN DEPTH (FULL WIDTH)
- 2.

- Ⓐ RECYCLED ASPH CONC 12.5MM SUPERPAVE. GP 2 ONLY, INCL BITUM MATL & H LIME (165 LBS/SY)/1½"
- Ⓑ RECYCLED ASPH CONC 19MM SUPERPAVE. GP 1 OR 2, INCL BITUM MATL & H LIME (220 LBS/SY)/2"
- Ⓒ **GR AGGR BASE CRS, 6 INCH, INCL MATL (USED FOR PATCHING, AS REQUIRED)**

			DATE	REVISIONS	DATE	REVISIONS	
							TYPICAL SECTIONS MAJOR ROADS

Rockdale County **SPLOST 5C** Road MAPPING

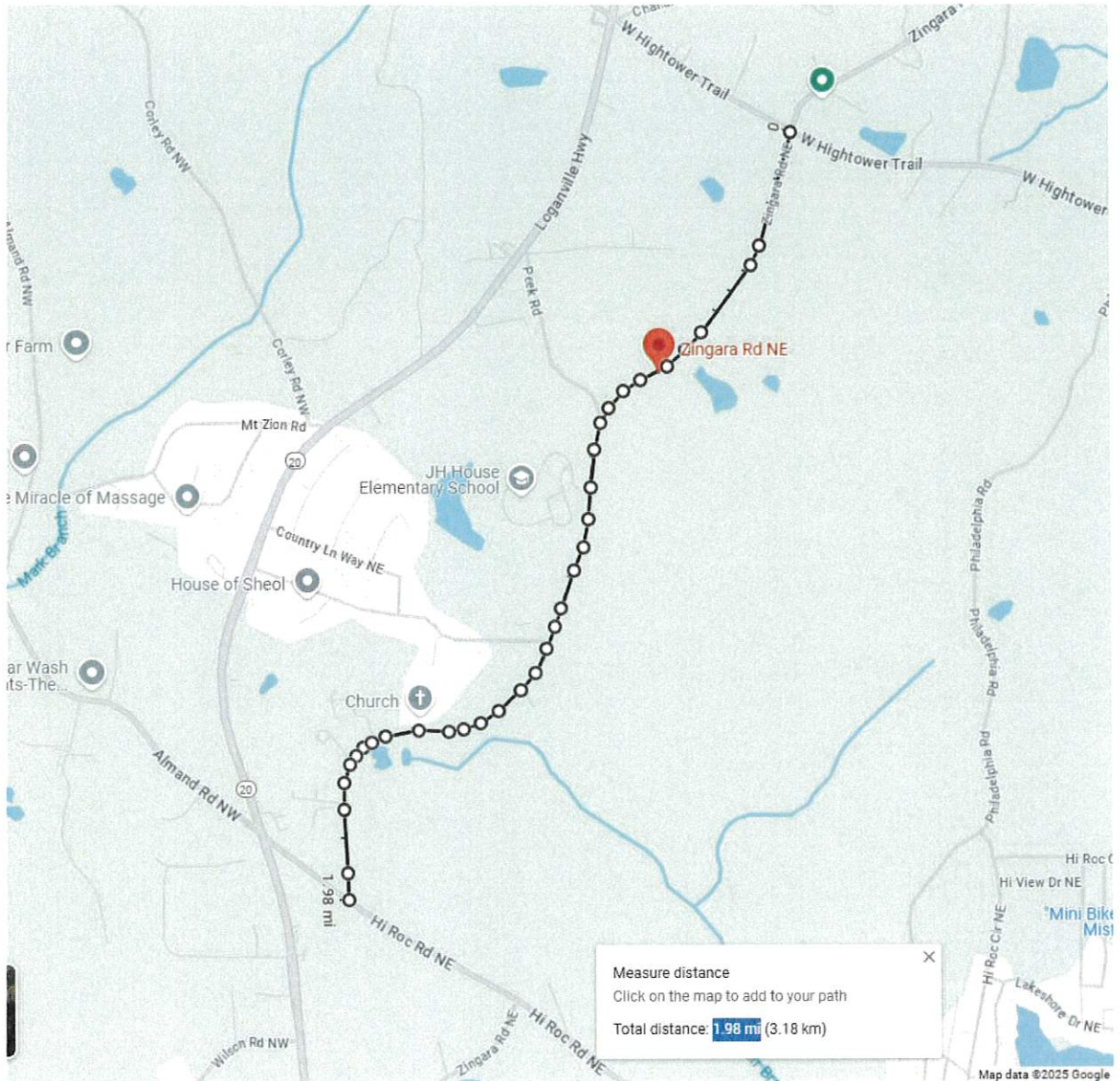
Prepared by

Rockdale County, Engineering Dept.

April 17, 2025



Black Shoals Rd NE from Acorn Ct to Booth Rd: 1,680.36 ft (512.17 m)



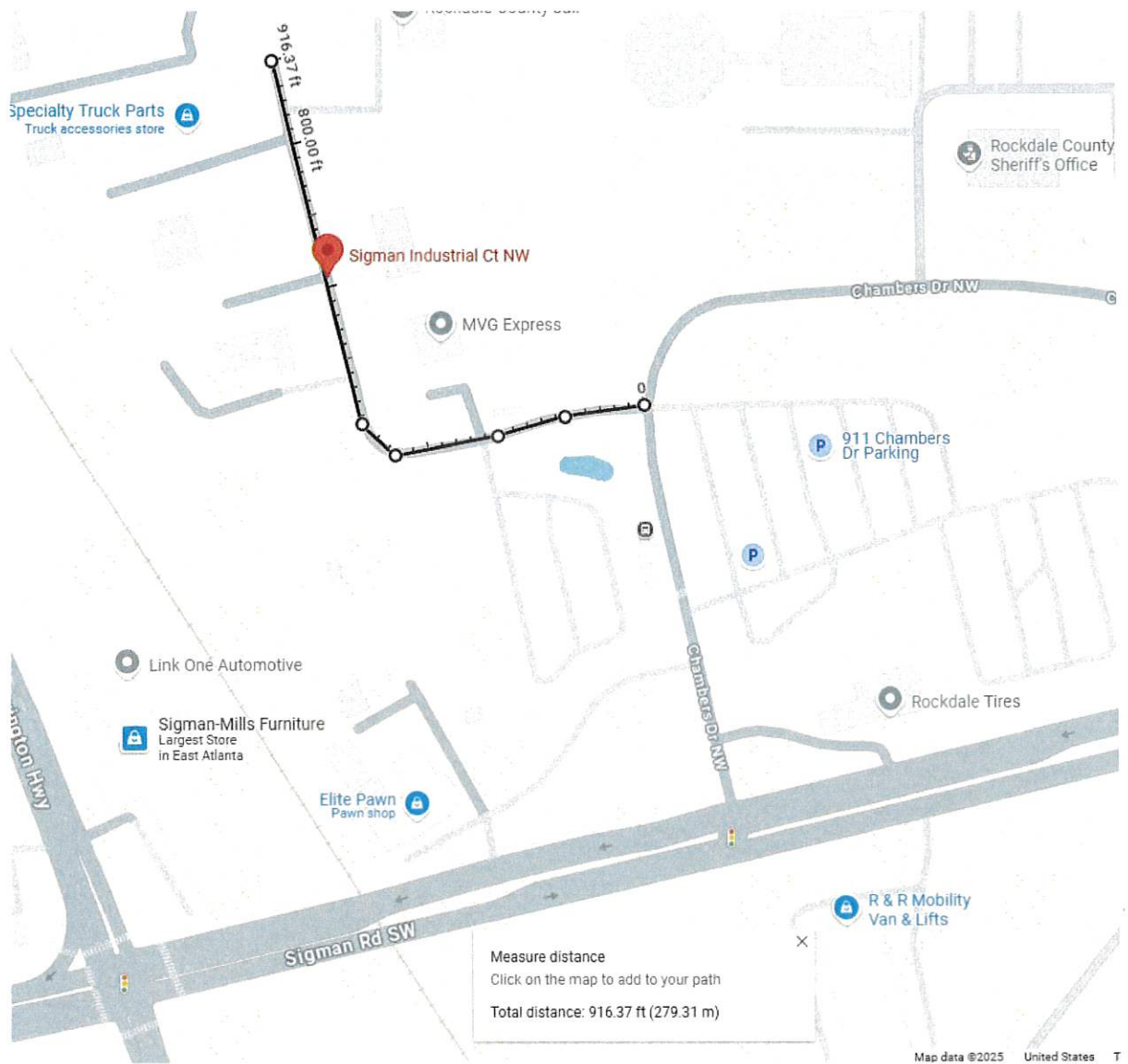
Zingara Rd from W Hightower Trl to Hi-Roc Rd: 1.98 mi (10,454.4 ft) (3.18 km)



Zingara Rd from Hi-Roc Rd to GA-20: 3,567.28 ft (1.09 km)



Plunkett Rd from Old Covington Hwy to Lester Rd: 3,467.77 ft (1.06 km)



Sigman Industrial Ct NW from Chambers Dr to the cul-de-sac: 916.37 ft (279.31 m)

Untitled Map

Write a description for your map.

Legend

- Feature 1
- Feature 2
- Mc Cart Rd - 3300 ft Old Covington to dead end.



Untitled Map

Write a description for your map.

Legend

Rockdale Industrial Pkwy: 5779
ft from Old Covington Hwy to
Conyers City/County line

Google Earth

20

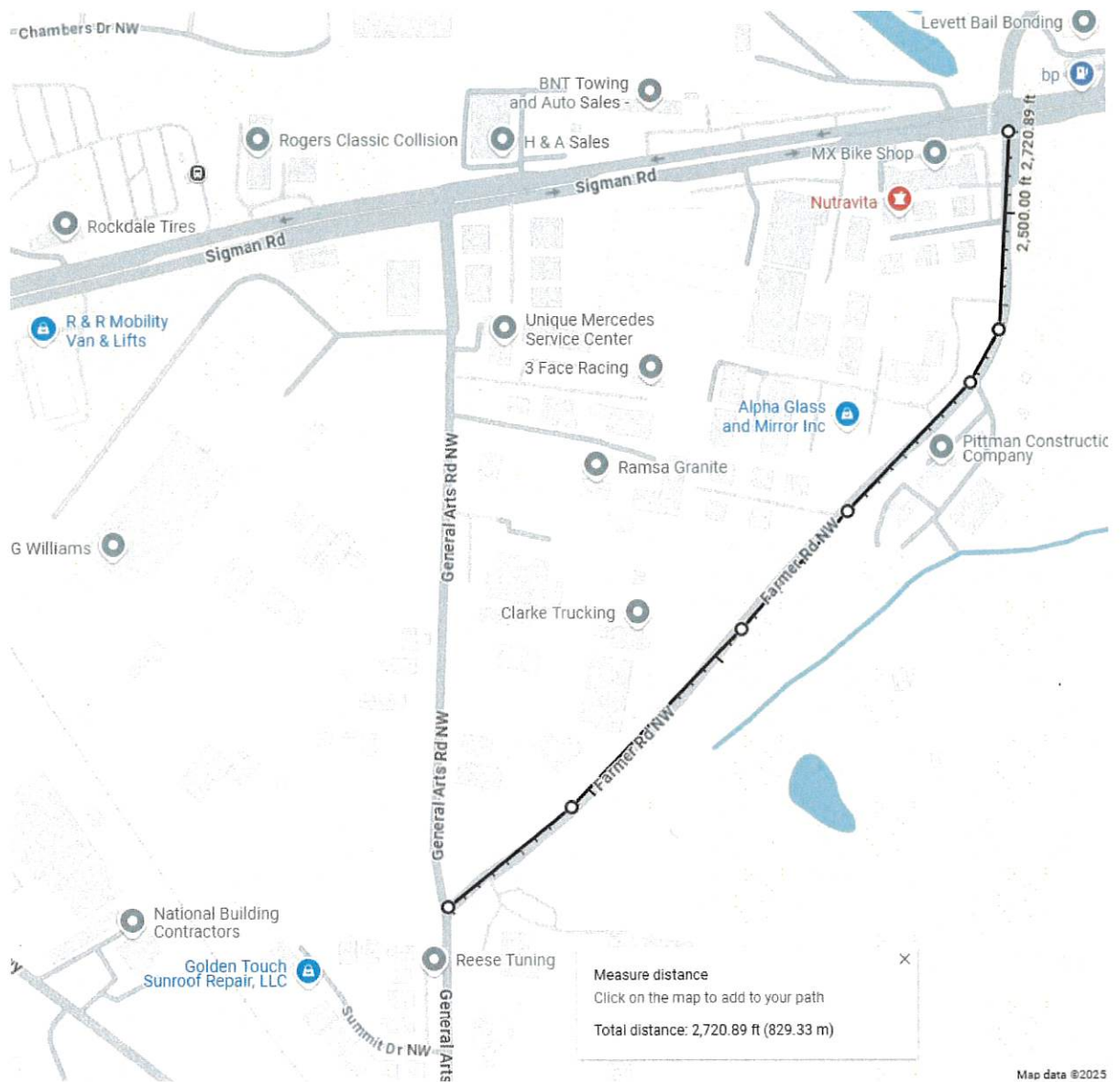
Old Covington Hwy

4000 ft





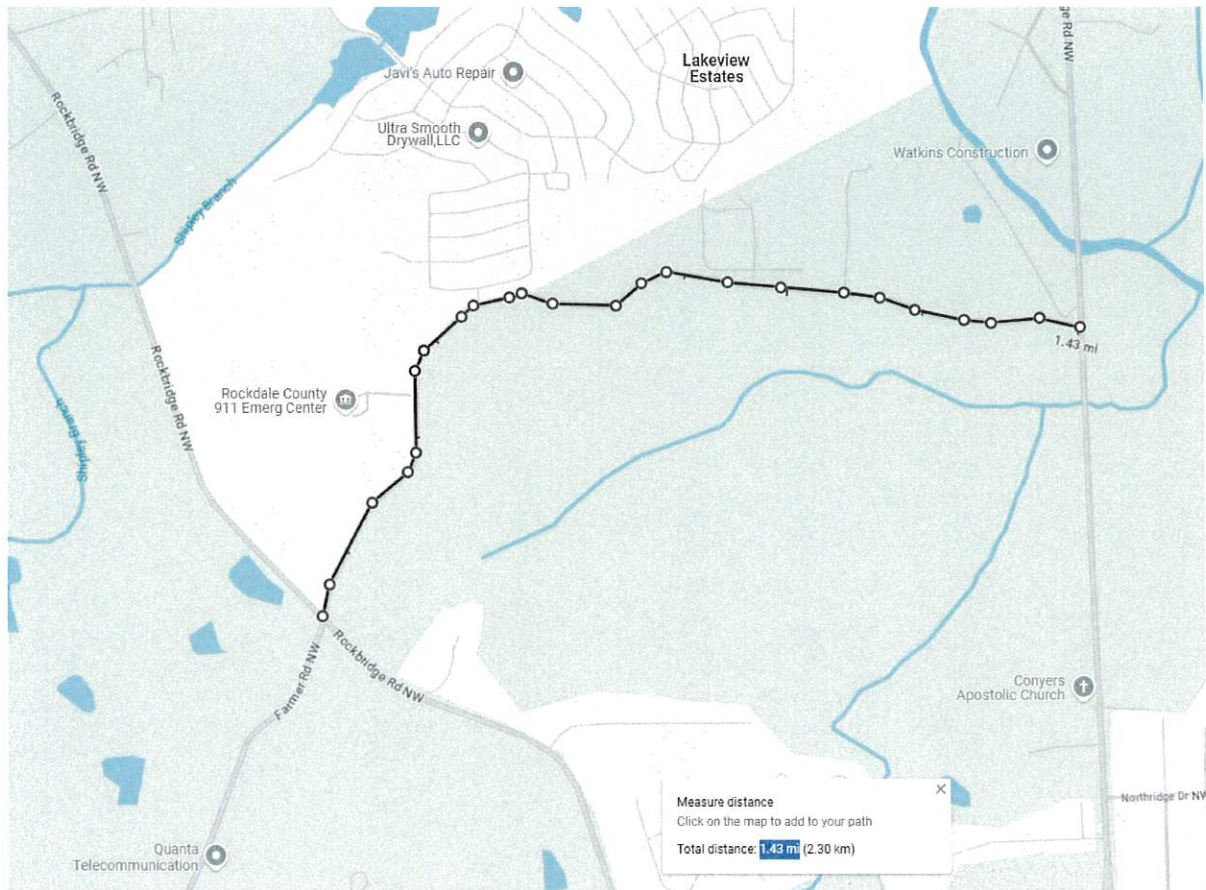
Blacklawn Rd SW from Dogwood to Old Covington Hwy: 1,787.11 ft (544.71 m)



Farmer Rd from Dogwood to Old Covington Hwy: 2,720.89 ft (829.33 m)



Farmer Rd from Sigman to Rockbridge Rd: 4,408.41 ft (1.34 km)



Farmer Rd from Rockbridge Rd to Irwin Bridge Rd: 1.43 mi (7,550.4 ft) (2.30 km)
