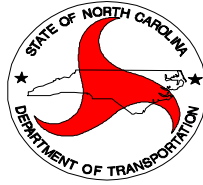


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION



DIVISION 3 DISTRICT 3
CONTRACT PROPOSAL

SMALL BUSINESS ENTERPRISE

WBS Element: *BRN*: **3.101011, 3.101012, & 3.201011**

NH: **3.106511, 3.106512, 3.206511 & 3.206512**

ROUTE: Various

COUNTY: Brunswick and **New Hanover**

DESCRIPTION: **Construction of Various Concrete Items, Various Routes in Brunswick and New Hanover County.**

BID OPENING: **Thursday, September 5, 2013 at 2:00 P.M.**

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD OR SBE PROJECT. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA.

NAME OF BIDDER

N.C. CONTRACTOR'S LICENSE NUMBER

ADDRESS OF BIDDER

RETURN BIDS TO:

Mr. Lloyd Royall Jr., PLS
N.C. Department of Transportation
5501 Barbados Blvd.
Castle Hayne, N.C. 28429

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INSTRUCTIONS TO BIDDERS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

1. The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner. **DO NOT SEPARATE THE BID SHEET FROM THE PROPOSAL!**
2. All entries on the bid sheet, including signatures, shall be written in ink.
3. The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures.
4. An amount bid shall be entered on the bid sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the sheet.
5. The total amount bid shall be written in figures in the proper place on the bid sheet. The total amount shall be determined by adding the amounts bid for each item.
6. Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent there to in ink. A representative of the Bidder shall initial the change in ink.
7. The bid shall be properly executed. All bids shall show the following information:
 - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
 - b. Name and signature of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number (or Social Security Number of Individual)
 - e. Contractor's License Number (if Applicable)
8. Bids submitted by corporations shall bear the seal of the corporation.
9. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
10. The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
11. **THE PROPOSAL WITH THE BID SHEET STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE Division Office at 5501 Barbados Blvd., Castle Hayne, N.C. 28429 BY 2:00 p.m. on Thursday, September 5, 2013.**
12. The sealed bid must display the following statement on the front of the sealed envelope:

QUOTATION FOR WBS NUMBER: 3.101011, 3.101012, 3.201012, 3.106511, 3.106512, 3.206511 & 3.206512, Construction of Various Concrete Items, Various Routes in Brunswick and New Hanover County.

TO BE OPENED AT 2:00 PM Thursday, September 5, 2013.

13. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

**N.C. Department of Transportation
Mr. Lloyd Royall, Jr., PLS
Division 3 Engineer's Office
5501 Barbados Blvd.
Castle Hayne, N.C. 28429**

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (*excluding 102-2 and 102-11*) of the Standard Specifications for Roads and Structures 2012. The lowest responsible Bidder will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject all bids.

PURCHASE ORDER CONTRACT

General Provisions

This contract is for:

1. Construction of Various Concrete Items, Various Routes in Brunswick and New Hanover County.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the North Carolina Department of Transportation Standard Specifications for Roads and Structures 2012, the North Carolina Department of Transportation Roadway Standards Drawings 2012, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall keep himself fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the Standard Specifications.

CONTRACT TIME AND LIQUIDATED DAMAGES

(7-20-99) (Rev. 12-18-07)

SP1 G04

The date of availability for this contract is **October 1, 2013** except that work in jurisdictional waters and wetlands shall not begin until a meeting between the DOT, Regulatory Agencies, and the Contractor is held as stipulated in the permits contained elsewhere in this proposal. This delay in availability has been considered in determining the contract time for this project.

The completion date for this contract is **September 30, 2014**.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

Because of the 'on-call' nature of this work, no liquidated damages are included as part of this contract; however, failure to complete assigned projects in a timely manner shall be justification for early termination of this contract.

INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to a 2-lane, 2-way traffic pattern.

DAY AND TIME RESTRICTIONS

To be determined by the County Maintenance Engineer

In addition, the Contractor shall not narrow or close a lane of traffic during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS:

1. For **New Year's Day**, between the hours of 6: 00 p.m. December 31st to 6:00 a.m. January 2nd. If New Year's Day is on Saturday or Sunday, then until 6:00 a.m. the following Tuesday.
2. For **Easter**, between the hours of 6:00 p.m. Thursday and 6:00 a.m. Monday.
3. For **Memorial Day**, between the hours of 6:00 p.m. Friday and 6:00 a.m. Tuesday.
4. For **Independence Day**, between the hours of 6:00 p.m. the Friday **before the week of Independence Day** and 6:00 a.m. the following Monday **after the week of Independence Day.**
5. For **Labor Day**, between the hours of 6:00 p.m. Friday and 6:00 a.m. Tuesday.
6. For **Thanksgiving Day**, between the hours of 6:00 p.m. Tuesday and 6:00 a.m. Monday.
7. For **Christmas**, between the hours of 6:00 p.m. the Friday **before the week of Christmas Day** and 6:00 a.m. the following Monday **after the week of Christmas Day.**

Holidays and holiday weekends shall include New Years, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

AUTHORITY OF THE ENGINEER

The Engineer for this project shall be the Division Engineer, Division 3, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representatives.

The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to enforce and make effective such decisions and orders as the Contractor fails to carry out promptly.

AVAILABILITY OF FUNDS - CONTRACT TERMINATION

Payments on this contract are subject to availability of funds as allocated by the General Assembly. If the General Assembly fails to allocate adequate funds, the Department reserves the right to terminate this contract.

In the event of termination, the Contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the Contractor shall be paid for the work already performed in accordance with the contract specifications.

BANKRUPTCY

The Department of Transportation, at its option, may terminate the contract upon filing by the Contractor of any petition for protection under the provisions of the Federal Bankruptcy Act.

SMALL BUSINESS ENTERPRISE PROGRAM

(8-13-2013)

DIV 3 – SBE

Bids are being solicited for this project under the provisions of the NCDOT's Small Business Enterprise Program.

Your firm does not have to be formally identified as a minority, woman or disabled business to qualify for this Program, but you must have had an annual gross income of \$1.5 million or less, exclusive of materials, for the previous calendar year.

The maximum contract limit is set at \$500,000. If the total bid amount of the contract exceeds this amount, the bid will not be considered for award.

Under the provisions of this Program, a NC General Contractor's License **is not required** nor are Contract Payment and Contract Performance Bonds required. Bidders shall comply with all other applicable laws, including but not limited to, those regulating the practices of electrical, plumbing, heating and air conditioning and refrigeration contracting as contained in Chapter 87 of the General Statutes of North Carolina.

Only contractors currently certified as a SBE Contractor by the Contractual Services Unit of NCDOT and is listed in the Directory of Transportation Firms at bid opening will be eligible to bid on this project.

Prospective bidders who qualify for the SBE Program and are not currently certified should submit a completed application packet prior to bid submittal to allow for review time. The application packet and additional information on the program may be obtained online at:

Contractual Services Unit

ATTN: SBE

1509 Mail Service Center

Raleigh, NC 27699-1509

Additional information on the program may be obtained online at:

<http://www.ncdot.org/business/ocs/sbe/>

DEFAULT OF CONTRACT

The Department of Transportation shall have the right to declare a default of contract for breach by the Contractor of any material term or condition of the contract. Default of contract shall be in accordance with the terms, conditions, and procedures of Article 108-9 of the Standard Specifications.

ENGINEERING CONTROL

Engineering control and inspection will be by the North Carolina Department of Transportation. The Contractor will cut test samples as directed by the Engineer. The North Carolina Department of Transportation will set all necessary grades for pipe, ditches, or masonry drainage structures. All other field engineering will be the responsibility of the Contractor and considered as incidental to the project bid.

EROSION, SILTATION, AND POLLUTION CONTROL

The Contractor shall exercise every reasonable precaution and take all necessary measures throughout the life of the project to prevent erosion, siltation, and pollution in accordance with Section 107-13 of the Standard Specifications. Silt fence and erosion control measures shall be installed in accordance with the plans for this project, Section 1605 of the Standard Specifications, and in locations directed by the Engineer or his representative.

GIFTS FROM VENDORS AND CONTRACTORS

(12-15-09)

SP1 G152

By Executive Order 24, issued by Governor Perdue, and *N.C. G.S. § 133-32*, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and *G.S. § 133-32*.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

LIABILITY INSURANCE

(11-18-08)

SP1 G80

Page 1-68, Article 107-16 is amended to include the following as the first, second, third and fourth paragraphs:

The Contractor shall be liable for any losses resulting from a breach of the terms of this contract. The Contractor shall be liable for any losses due to the negligence or willful misconduct of its agents, assigns and employees including any sub-contractors which causes damage to others for which the Department is found liable under the Torts Claims Act, or in the General Courts of Justice, provided the Department provides prompt notice to the Contractor and that the Contractor has an opportunity to defend against such claims. The Contractor shall not be responsible for punitive damages.

The Contractor shall at its sole cost and expense obtain and furnish to the Department an original standard ACORD form certificate of insurance evidencing commercial general liability with a limit for bodily injury and property damage in the amount of \$5,000,000.00 per occurrence and general aggregate, covering the Contractor from claims or damages for bodily injury, personal injury, or for property damages which may arise from operating under the contract by the employees and agents of the Contractor. The required limit of insurance may be obtained by a single general liability policy or the combination of a general liability and excess liability or umbrella policy. The State of North Carolina shall be named as an additional insured on this commercial general liability policy. The policy may contain the following language as relates to the State as an additional insured: "This insurance with respect to the additional insured applies only to the extent that the additional insured is held liable for your or your agent's acts or omissions arising out of and in the course of operations performed for the additional insured."

The Contractor shall maintain all legally required insurance coverage, including without limitation, worker's compensation and vehicle liability, in the amounts required by law. Providing and maintaining adequate insurance coverage is a material obligation of the contractor and is of the essence of this contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Contractor shall at all times comply with the terms of such insurance policies.

Upon execution of the contract, provide evidence of the above insurance requirements to the Engineer.

MATERIALS

(2-21-12) (Rev. 5-21-13)

1000, 1005, 1050, 1074, 1078, 1080, 1081, 1087, 1092

SP10 R01

Revise the 2012 Standard Specifications as follows:

Page 10-1, Article 1000-1, DESCRIPTION, line 14, add the following:

Use materials which do not produce a mottled appearance through rusting or other staining of the finished concrete surface.

Page 10-5, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1000-1 REQUIREMENTS FOR CONCRETE											
Class of Concrete	Min. Comp. Strength at 28 days	Maximum Water-Cement Ratio				Consistency Max. Slump		Cement Content			
		Air-Entrained Concrete		Non Air-Entrained Concrete		Vibrated	Non-Vibrated	Vibrated		Non- Vibrated	
		Rounded Aggregate	Angular Aggregate	Rounded Aggregate	Angular Aggregate			Min.	Max.	Min.	Max.
<i>Units</i>	<i>psi</i>					<i>inch</i>	<i>inch</i>	<i>lb/cy</i>	<i>lb/cy</i>	<i>lb/cy</i>	<i>lb/cy</i>
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	-	-
AA Slip Form	4,500	0.381	0.426	-	-	1.5	-	639	715	-	-
Drilled Pier	4,500	-	-	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	800
A	3,000	0.488	0.532	0.550	0.594	3.5	4	564	-	602	-
B	2,500	0.488	0.567	0.559	0.630	2.5	4	508	-	545	-
B Slip Formed	2,500	0.488	0.567	-	-	1.5	-	508	-	-	-
Sand Lightweight	4,500	-	0.420	-	-	4	-	715	-	-	-
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-	-	-
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flowable	-	-	40	100
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	-	Flowable	-	-	100	as needed
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	-	-
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	-	564	as needed	-	-

Page 10-65, Article 1050-1, GENERAL, line 41, replace the first sentence with:

All fencing material and accessories shall meet Section 106.

Page 10-23, Table 1005-1, AGGREGATE GRADATION-COARSE AGGREGATE, replace with the following:

TABLE 1005-1 AGGREGATE GRADATION - COARSE AGGREGATE													
Percentage of Total by Weight Passing													
Std. Size #	2"	1 1/2"	1"	3/4"	1/2"	3/8"	#4	#8	#10	#16	#40	#200	Remarks
4	100	90-100	20-55	0-15	-	0-5	-	-	-	-	-	A	Asphalt Plant Mix
467M	100	95-100	-	35-70	-	0-30	0-5	-	-	-	-	A	Asphalt Plant Mix
5	-	100	90-100	20-55	0-10	0-5	-	-	-	-	-	A	AST, Sediment Control Stone
57	-	100	95-100	-	25-60	-	0-10	0-5	-	-	-	A	AST, Str. Concrete, Shoulder Drain, Sediment Control Stone
57M	-	100	95-100	-	25-45	-	0-10	0-5	-	-	-	A	AST, Concrete Pavement
6M	-	-	100	90-100	20-55	0-20	0-8	-	-	-	-	A	AST
67	-	-	100	90-100	-	20-55	0-10	0-5	-	-	-	A	AST, Str. Concrete, Asphalt Plant Mix
78M	-	-	-	100	98-100	75-100	20-45	0-15	-	-	-	A	Asphalt Plant Mix, AST, Str. Conc, Weep Hole Drains
14M	-	-	-	-	-	100	35-70	5-20	-	0-8	-	A	Asphalt Plant Mix, AST, Weep Hole Drains, Str. Concrete
9	-	-	-	-	-	100	85-100	10-40	-	0-10	-	A	AST
ABC	-	100	75-97	-	55-80	-	35-55	-	25-45	-	14-30	4-12 ^B	Aggregate Base Course, Aggregate Stabilization
ABC (M)	-	100	75-100	-	45-79	-	20-40	-	0-25	-	-	0-12 ^B	Maintenance Stabilization
Light-weight ^C	-	-	-	-	100	80-100	5-40	0-20	-	0-10	-	0-2.5	AST

- A. See Subarticle 1005-4(A).
- B. See Subarticle 1005-4(B).
- C. For Lightweight Aggregate used in Structural Concrete, see Subarticle 1014-2(E)(6).

Page 10-115, Subarticle 1074-7(B), Gray Iron Castings, lines 10-11, replace with the first two sentences with the following:

Supply gray iron castings meeting all facets of AASHTO M 306 excluding proof load. Proof load testing will only be required for new casting designs during the design process, and conformance to M306 loading (40,000 lbs.) will be required only when noted on the design documents.

Page 10-126, Table 1078-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1078-1 REQUIREMENTS FOR CONCRETE		
Property	28 Day Design Compressive Strength 6,000 psi or less	28 Day Design Compressive Strength greater than 6,000 psi
Maximum Water/Cementitious Material Ratio	0.45	0.40
Maximum Slump without HRWR	3.5"	3.5"
Maximum Slump with HRWR	8"	8"
Air Content (upon discharge into forms)	5 + 2%	5 + 2%

Page 10-151, Article 1080-4 Inspection and Sampling, lines 18-22, replace (B), (C) and (D) with the following:

- (B) At least 3 panels prepared as specified in 5.5.10 of AASHTO M 300, Bullet Hole Immersion Test.
- (C) At least 3 panels of 4"x6"x1/4" for the Elcometer Adhesion Pull Off Test, ASTM D4541.
- (D) A certified test report from an approved independent testing laboratory for the Salt Fog Resistance Test, Cyclic Weathering Resistance Test, and Bullet Hole Immersion Test as specified in AASHTO M 300.
- (E) A certified test report from an approved independent testing laboratory that the product has been tested for slip coefficient and meets AASHTO M253, Class B.

Page 10-162, Subarticle 1081-1(A) Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A.

Page 10-162, Subarticle 1081-1(B) Requirements, lines 26-30, replace the second paragraph with the following:

For epoxy resin systems used for embedding dowel bars, threaded rods, rebar, anchor bolts and other fixtures in hardened concrete, the manufacturer shall submit test results showing that the bonding system will obtain 125% of the specified required yield strength of the fixture. Furnish certification that, for the particular bolt grade, diameter and embedment depth required, the anchor system will not fail by adhesive failure and that there is no movement of the anchor bolt. For certification and anchorage, use 3,000 psi as the minimum Portland cement concrete compressive strength used in this test. Use adhesives that meet Section 1081.

List the properties of the adhesive on the container and include density, minimum and maximum temperature application, setting time, shelf life, pot life, shear strength and compressive strength.

Page 10-169, Subarticle 1081-3(G) Anchor Bolt Adhesives, delete this subarticle.

Page 10-179, Subarticle 1087-4(A) Composition, lines 39-41, replace the third paragraph with the following:

All intermixed and drop-on glass beads shall not contain more than 75 ppm arsenic or 200 ppm lead.

Page 10-180, Subarticle 1087-4(B) Physical Characteristics, line 8, replace the second paragraph with the following:

All intermixed and drop-on glass beads shall comply with NCGS § 136-30.2 and 23 USC § 109(r).

Page 10-181, Subarticle 1087-7(A) Intermixed and Drop-on Glass Beads, line 24, add the following after the first paragraph:

Use X-ray Fluorescence for the normal sampling procedure for intermixed and drop-on beads, without crushing, to check for any levels of arsenic and lead. If any arsenic or lead is detected, the sample shall be crushed and repeat the test using X-ray Fluorescence. If the X-ray Fluorescence test shows more than a LOD of 5 ppm, test the beads

using United States Environmental Protection Agency Method 6010B, 6010C or 3052 for no more than 75 ppm arsenic or 200 ppm lead.

Page 10-204, Subarticle 1092-2(A) Performance and Test Requirements, replace Table 1092-3 Minimum Coefficient of Retroreflection for NC Grade A with the following:

Observation Angle, degrees	Entrance Angle, degrees	White	Yellow	Green	Red	Blue	Fluorescent Yellow Green	Fluorescent Yellow
0.2	-4.0	525	395	52	95	30	420	315
0.2	30.0	215	162	22	43	10	170	130
0.5	-4.0	310	230	31	56	18	245	185
0.5	30.0	135	100	14	27	6	110	81
1.0	-4.0	120	60	8	16	3.6	64	48
1.0	30.0	45	34	4.5	9	2	36	27

MINIMUM WAGES

(7-21-09)

Z-5

FEDERAL: The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

STATE: The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, Federal or State. It is the responsibility of the Contractor to keep fully informed of all Federal and State Laws affecting his contract.

ON-THE-JOB TRAINING

(10-16-07) (Rev 7-21-09)

Z-10

Description

The North Carolina Department of Transportation will administer a custom version of the Federal On-the-Job Training (OJT) Program, commonly referred to as the Alternate OJT Program. All contractors (existing and newcomers) will be automatically placed in the Alternate Program. Standard OJT requirements typically associated with individual projects will no longer be applied at the project level. Instead, these requirements will be applicable on an annual basis for each contractor administered by the OJT Program Manager.

On the Job Training shall meet the requirements of 23 CFR 230.107 (b), 23 USC – Section 140, this provision and the On-the-Job Training Program Manual.

The Alternate OJT Program will allow a contractor to train employees on Federal, State and privately funded projects located in North Carolina. However, priority shall be given to training employees on NCDOT Federal-Aid funded projects.

Minorities and Women

Developing, training and upgrading of minorities and women toward journeyman level status is a primary objective of this special training provision. Accordingly, the Contractor shall make every effort to enroll minority and women as trainees to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

Assigning Training Goals

The Department, through the OJT Program Manager, will assign training goals for a calendar year based on the contractors' past three years' activity and the contractors' anticipated upcoming year's activity with the Department. At the beginning of each year, all contractors eligible will be contacted by the Department to determine the number of trainees that will be assigned for the upcoming calendar year. At that time the Contractor shall enter into an agreement with the Department to provide a self-imposed on-the-job training program for the calendar year. This agreement will include a specific number of annual training goals agreed to by both parties. The number of training assignments may range from 1 to 15 per contractor per calendar year. The Contractor shall sign an agreement to fulfill their annual goal for the year. A sample agreement is available at www.ncdot.org/business/ocs/ojt/.

Training Classifications

The Contractor shall provide on-the-job training aimed at developing full journeyman level workers in the construction craft/operator positions. Preference shall be given to providing training in the following skilled work classifications:

Equipment Operators	Office Engineers
Truck Drivers	Estimators
Carpenters	Iron / Reinforcing Steel Workers
Concrete Finishers	Mechanics
Pipe Layers	Welders

The Department has established common training classifications and their respective training requirements that may be used by the contractors. However, the classifications established are not all-inclusive. Where the training is oriented toward construction applications, training will be allowed in lower-level management positions such as office engineers and estimators. Contractors shall submit new classifications for specific job functions that their employees are performing. The Department will review and recommend for acceptance to FHWA the new classifications proposed by contractors, if applicable. New classifications shall meet the following requirements:

Proposed training classifications are reasonable and realistic based on the job skill classification needs, and

The number of training hours specified in the training classification is consistent with common practices and provides enough time for the trainee to obtain journeyman level status.

The Contractor may allow trainees to be trained by a subcontractor provided that the Contractor retains primary responsibility for meeting the training and this provision is made applicable to the subcontract. However, only the Contractor will receive credit towards the annual goal for the trainee.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman level status or in which they have been employed as a journeyman.

Records and Reports

The Contractor shall maintain enrollment, monthly and completion reports documenting company compliance under these contract documents. These documents and any other information as requested shall be submitted to the OJT Program Manager.

Upon completion and graduation of the program, the Contractor shall provide each trainee with a certification Certificate showing the type and length of training satisfactorily completed.

Trainee Interviews

All trainees enrolled in the program will receive an initial and Trainee/Post graduate interview conducted by the OJT program staff.

Trainee Wages

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

60 percent	of the journeyman wage for the first half of the training period
75 percent	of the journeyman wage for the third quarter of the training period
90 percent	of the journeyman wage for the last quarter of the training period

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NC Department of Labor (NCDOL) and the Department.

Achieving or Failing to Meet Training Goals

The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor’s scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT’s Bidders List.

Measurement and Payment

No compensation will be made for providing required training in accordance with these contract documents.

PAYMENT AND RETAINAGE

P&R_DDC
8-06-2009

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the Standard Specifications. The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period.

All requests for payment shall be made on the form furnished to the Contractor by the Department of Transportation. The form shall be completely and legibly filled out with all appropriate information supplied and shall be signed by an authorized representative of the Contractor.

All invoices must be accompanied with the DBE-IS form even if no Subcontractors payments were made. Payment request shall not be processed without said form filled out and attached.

If the request for payment is made by Contractor’s Invoice, the Invoice shall be submitted in triplicate to:

**North Carolina Department of Transportation
Attention: Anthony Law
300 Division Dr.
Wilmington, NC 28401**

POSTED WEIGHT LIMITS

The Contractor's attention is directed to the fact that many primary and secondary roads and bridges are posted with weight limits less than the legal limit. The Contractor will not be allowed to exceed the posted weight limits in transporting materials or equipment to the project. The Contractor should make a thorough examination of all maps and haul routes on this project.

SAFETY AND ACCIDENT PROTECTION

In accordance with Article 107-22 of the Standard Specifications, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

UTILITY CONFLICTS

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

The Contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public.

WORKERS' COMPENSATION INSURANCE

Pursuant to N.C.G.S. § 97-19, all contractors of the Department of Transportation are, prior to beginning services, required to show proof of coverage issued by a workers' compensation insurance carrier, or a certificate of compliance issued by the Department of Insurance for self-insured subcontractors stating that it has complied with N.C.G.S. § 97-93 irrespective of whether subcontractors have regularly in service fewer than three employees in the same business within the State of North Carolina, and subcontractors shall be hereinafter liable under the Workers' Compensation Act for payment of compensation and other benefits to its employees for any injury or death due to an accident arising out of and in the course of performance of the work insured by the subcontractor.

ERRATA

(1-17-12) (Rev. 9-18-12)

Z-4

Revise the *2012 Standard Specifications* as follows:

Division 2

Page 2-7, line 31, Article 215-2 Construction Methods, replace “Article 107-26” with “Article 107-25”.

Page 2-17, Article 226-3, Measurement and Payment, line 2, delete “pipe culverts.”

Page 2-20, Subarticle 230-4(B), Contractor Furnished Sources, change references as follows: Line 1, replace “(4) Buffer Zone” with “(c) Buffer Zone”; **Line 12**, replace “(5) Evaluation for Potential Wetlands and Endangered Species” with “(d) Evaluation for Potential Wetlands and Endangered Species”; and **Line 33**, replace “(6) Approval” with “(4) Approval”.

Division 4

Page 4-77, line 27, Subarticle 452-3(C) Concrete Coping, replace “sheet pile” with “reinforcement”.

Division 6

Page 6-7, line 31, Article 609-3 Field Verification of Mixture and Job Mix Formula Adjustments, replace “30” with “45”.

Page 6-10, line 42, Subarticle 609-6(C)(2), replace “Subarticle 609-6(E)” with “Subarticle 609-6(D)”.

Page 6-11, Table 609-1 Control Limits, replace “Max. Spec. Limit” for the Target Source of $P_{0.075}/P_{be}$ Ratio with “1.0”.

Page 6-40, Article 650-2 Materials, replace “Subarticle 1012-1(F)” with “Subarticle 1012-1(E)”

Division 10

Page 10-74, Table 1056-1 Geotextile Requirements, replace “50%” for the UV Stability (Retained Strength) of Type 5 geotextiles with “70%”.

Division 12

Page 12-7, Table 1205-3, add “FOR THERMOPLASTIC” to the end of the title.

Page 12-8, Subarticle 1205-5(B), line 13, replace “Table 1205-2” with “Table 1205-4”.

Page 12-8, Table 1205-4 and 1205-5, replace “THERMOPLASTIC” in the title of these tables with “POLYUREA”.

Page 12-9, Subarticle 1205-6(B), line 21, replace “Table 1205-4” with “Table 1205-6”.

Page 12-11, Subarticle 1205-8(C), line 25, replace “Table 1205-5” with “Table 1205-7”.

Division 15

Page 15-6, Subarticle 1510-3(B), after line 21, replace the allowable leakage formula with the following: $W = LD\sqrt{P} \div 148,000$

Page 15-6, Subarticle 1510-3(B), line 32, delete “may be performed concurrently or” and replace with “shall be performed”.

Page 15-17, Subarticle 1540-3(E), line 27, delete “Type 1”.

Division 17

Page 17-26, line 42, Subarticle 1731-3(D) Termination and Splicing within Interconnect Center, delete this subarticle.

Revise the *2012 Roadway Standard Drawings* as follows:

1633.01 Sheet 1 of 1, English Standard Drawing for Matting Installation, replace “1633.01” with “1631.01”.

Project Special Provisions

NOTES TO CONTRACTOR

The Contractor's attention is directed to the following:

The Contractor shall not close more than one lane of traffic without prior approval of the Engineer.

Portable "Road Construction Ahead" signs may be used in lieu of post mounted signs, as directed by the Engineer.

No work will be allowed on Sundays or legal State Holidays without the Engineer's approval.

Traffic Control is incidental to the various bid items.

Safety Vests shall be worn by all personnel on the project at all times.

The quantities appearing in the bid form are approximate only and are to be used for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of the various items that are completed and accepted in accordance with the terms of the contract.

The North Carolina Department of Transportation shall be responsible for rough grading all project sites prior to fine grading and concrete construction by the Contractor. Rough grading shall be defined as the grading necessary to achieve grade within 2/10ths of a foot.

Because of the 'on-call' nature of this work, no liquidated damages are included as part of this contract; however, failure to complete assigned projects in a timely manner shall be justification for early termination of this contract. Contractor must respond to the County Maintenance Engineer's request within 5 (five) working days.

COOPERATION WITH STATE FORCES AND OTHER CONTRACTORS

The Contractor must cooperate with State forces and other contractors working within the limits of this project as directed by the Engineer.

DAMAGE TO EXISTING PAVEMENT, BASE, SUBGRADE, AND PROPOSED PAVEMENT

In addition to the requirements of the Standard Specifications concerning this subject, the Contractor is cautioned that he will be held responsible for all damages to the pavement, base, and subgrade caused by his operations, including but not limited to, rutting and shoving of the existing or proposed pavement and yielding or rutting of the existing base and subgrade.

The Contractor is cautioned to limit the weight of his equipment and the frequency of hauls so as to not damage the existing pavement, base, subgrade and the proposed pavement.

Any subgrade or base failures which the Contractor finds prior to the beginning of his operations or during the conditioning of the existing base are to be brought to the attention of the Engineer in writing. Repairs to those areas will be made by DOT forces. Once these deficient areas have been repaired, the requirements of this Special Provision will fully apply.

DRIVEWAYS AND PRIVATE PROPERTY

The Contractor shall maintain access to driveways for all residents and property owners throughout the life of the project.

The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract. Any driveway paved by a Contractor which ties into a NCDOT system road being paved by the Contractor must be paved either prior to the road paving project or after its completion.

NIGHT OPERATIONS

The Contractor may, with the approval of the Engineer, conduct his operations during night hours. For the purposes of this contract, night hours shall be defined as the period between dusk and dawn when natural light, as determined by the Engineer or his representative, is insufficient to safely and effectively perform contract operations.

If the Contractor elects to perform any phase of this contract during night hours, he shall submit, in writing, to the Engineer, a full and complete plan for traffic control and construction lighting which shall be approved prior to beginning construction.

All traffic control devices shall meet the requirements for night use as set forth in the North Carolina Department of Transportation Standard Specifications for Roads and Structures, North Carolina Department of Transportation Roadway Standards Drawings, and the current Manual of Uniform Traffic Control Devices (MUTCD).

NOTIFICATION OF OPERATIONS

The Contractor shall notify the Engineer one week in advance of beginning work on this project. The Contractor shall give the Engineer sufficient notice of all operations for any sampling, inspection or acceptance testing required. It should be noted that grading, draining, and stabilizing operations on the subject routes will be performed by Departmental Forces. All routes may not be available by the above listed date.

PLAN, DETAIL AND QUANTITY ADJUSTMENTS

The Department reserves the right to make, at any time during the progress of the work, such alterations in plans or the details of construction as may be found necessary or desirable by the Engineer to complete the project.

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)

(3-18-03)

Z-04a

Within quarantined area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

Originating in a quarantined county

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or <http://www.ncagr.com/plantind/> to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
2. Plants with roots including grass sod.
3. Plant crowns and roots.
4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
5. Hay, straw, fodder, and plant litter of any kind.
6. Clearing and grubbing debris.
7. Used agricultural cultivating and harvesting equipment.
8. Used earth-moving equipment.
9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

SUBSURFACE INFORMATION

(7-1-95)

SPI G112

There is **no** subsurface information available on this project. The Contractor shall make his own investigation of subsurface conditions.

MAINTENANCE OF PROJECT

The Contractor shall be responsible for maintaining the project as directed by Section 104-10 in the Standard Specifications.

PRECONSTRUCTION CONFERENCE

In accordance with Section 108-3 of the Standard Specifications, a preconstruction conference will be required prior to beginning work.

PROSECUTION AND PROGRESS

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods of construction as may be required to complete the work described in the contract by the completion date and in accordance with Section 108 of the Standard Specifications.

Work shall only be performed when weather and visibility conditions allow safe operations.

The Contractor shall temporarily remove his equipment from the travelway for emergency vehicles and school buses as directed by the Engineer.

COMPREHENSIVE GRADING / SITE PREPARATION

Perform all work covered in this item including preparing, grading, shaping, stripping vegetation, excavating, placing borrow, and compacting the sub-base suitable for placement of various concrete items in this contract. Shape the sub-base to conform to the lines, grades, and typical sections shown on plans.

No payment will be allowed in areas prepared by NCDOT forces and/or areas where various concrete items have been removed and placed in the same location. Basis of payment will be incidental to various concrete items.

CONCRETE APRON FOR DROP INLET

Construct concrete aprons for drop inlets in accordance with this provision, *Roadway Standard Drawings* 840.17, 840.18, and 840.19, and section 840 of the *Standard Specifications*, at locations as directed by the Engineer. Payment for the work shall be made on a per each basis completed (*that at each structure, the apron all around it is considered as 1 (one)*) and accepted by the Engineer. The cost for removal and disposal of the existing drop inlet apron shall be considered incidental to the work and shall be included in the cost of the new apron.

CONCRETE ISLAND CHANNEL POST

04-18-07

All concrete or paved channelization islands shall have a 12 inch diameter round or square smooth wall hole drilled, cored, formed or air hammered to the sub-grade and back-filled with soil placed a minimum of 10 feet from the nose of each end of the island (see Rdy Std Dwg 904.50), or as directed by the Engineer. All sign supports that are to be erected in either existing or proposed concrete or paved channelization islands shall meet the same requirements.

DDC904.50

CONSTRUCTION OF VARIOUS CONCRETE ITEMS

The contractor is to furnish all materials, equipment, labor and incidentals to construct various concrete items in Brunswick County as requested per the attached drawings and specifications. Bid items may include, but are not limited to: 8"x 18" concrete curb, 1'- 6" concrete curb and gutter, 2'- 0" concrete curb and gutter, 2'- 6" concrete curb and gutter, shoulder berm gutter, 4" concrete sidewalk, concrete wheelchair ramp, truncated warning domes, 6" concrete driveway, 4" concrete paved ditch, and 5" monolithic concrete island.

All work requested must be completed within 30 days of notification. The North Carolina Department of Transportation shall request no less than a minimum of five hundred dollars (\$500.00) worth of work per request.

DETECTABLE WARNINGS TO RETROFIT EXISTING CURB RAMPS

(10-21-03) (Rev. 8-16-11)

848

SP8 R125

Description

Construct detectable warnings consisting of raised truncated domes to retrofit existing curb ramps in accordance with the plan details, Section 848 of the *2012 Standard Specifications*, the requirements of the *28 CFR Part 36 ADA Standards for Accessible Design* and these provisions.

Materials

Detectable warning for retrofitting existing curb ramps shall consist of raised truncated domes. The description, size and spacing shall conform to Section 848 of the *2012 Standard Specifications*.

Use material for detectable warning systems as shown herein. Material and coating specifications must be stated in the Manufacturers Type 3 Certification and all Detectable Warning systems must be on the NCDOT Approved Products List.

Install detectable warnings created from one of the following materials: precast concrete blocks or bricks, clay paving brick, gray or ductile iron castings, mild steel, stainless steel, and engineered plastics, rubber or composite tile. Only one material type for detectable warning will be permitted per project, unless otherwise approved by the Engineer.

- (A) Detectable Warnings shall consist of a base with integrated raised truncated domes, and when constructed of precast concrete they shall conform to the material requirements of Article 848-2 of the *2012 Standard Specifications*.
- (B) Detectable Warnings shall consist of a base with integrated raised truncated domes, and may be comprised of other materials including, but not limited to, clay paving brick, gray iron or ductile iron castings, mild steel, stainless steel, and engineered plastics, rubber or composite tile, which are applied directly to the curb ramps by incorporating into or attaching to the existing ramp floor. The material shall have an integral color throughout the thickness of the material. The detectable warning shall include fasteners, anchors, or adhesives for attachment in the existing ramp and shall be furnished as a system from the manufacturer.

Prior to installation, the Contractor shall submit to the Engineer assembling instructions from the manufacturer for each type of system used in accordance with Article 105-2 of the *2012 Standard Specifications*. The system shall be furnished as a kit containing all consumable materials and consumable tools, required for the application. They shall be capable of being affixed to or anchored in the concrete curb ramp, including green concrete (concrete that has set but not appreciably hardened). The system shall be solvent free and contain no volatile organic compounds (VOC). The static coefficient of friction shall be 0.8 or greater when measured on top of the truncated domes and when measured between the domes in accordance with ASTM C1028 (dry and wet). The system shall be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to degradation by motor fuels, lubricants and antifreeze.

- (C) When steel or gray iron or ductile iron casting products are provided, only products that meet the requirements of Subarticle 106-1(B) of the *2012 Standard Specifications* may be used. Submit to the Engineer a Type 6 Certification, catalog cuts and installation procedures at least 30 days prior to installation for all.

Construction Methods

- (A) Prior to placing detectable warnings in existing concrete curb ramps, saw cut to the full depth of the concrete, for other material remove as necessary, and adjust the existing subgrade to the proper grade and in accordance with Article 848-3 of the *2012 Standard Specifications*.
- (B) Install all detectable warning to retrofit existing curb ramps in accordance with the manufacturer's recommendations.

Measurement and Payment

Retrofit Existing Curb Ramps with detectable warnings constructed of any type material will be paid as the actual number of retrofitted curb ramps, completed and accepted. Such price and payment will be full compensation for excavating and backfilling; sawing, repairing and replacing portions of the existing curb ramp within the pay limits for retrofit shown on the detail; pavement repairs; furnishing and placing detectable warnings, construction joints and removing

and disposing of portions of the existing curb ramp when required and for all materials, labor, equipment, tools and incidentals necessary to complete the work.

Payment will be made under:

Pay Item	Pay Unit
Retrofit Existing Curb Ramp	Each

DETECTABLE WARNINGS FOR PROPOSED CURB RAMPS

(6-15-10) (Rev. 8-16-11)

848

SP8 R126

Description

Construct detectable warnings consisting of integrated raised truncated domes on proposed concrete curb ramps in accordance with the *2012 Standard Specifications*, plan details, the requirements of the *28 CFR Part 36 ADA Standards for Accessible Design* and this provision.

Materials

Detectable warning for proposed curb ramps shall consist of integrated raised truncated domes. The description, size and spacing shall conform to Section 848 of the *2012 Standard Specifications*.

Use material for detectable warning systems as shown herein. Material and coating specifications must be stated in the Manufacturers Type 3 Certification and all Detectable Warning systems must be on the NCDOT Approved Products List.

Install detectable warnings created from one of the following materials: precast concrete blocks or bricks, clay paving brick, gray or ductile iron castings, mild steel, stainless steel, and engineered plastics, rubber or composite tile. Only one material type for detectable warning will be permitted per project, unless otherwise approved by the Engineer.

- (A) Detectable Warnings shall consist of a base with integrated raised truncated domes, and when constructed of precast concrete they shall conform to the material requirements of Article 848-2 of the *2012 Standard Specifications*.
- (B) Detectable Warnings shall consist of a base with integrated raised truncated domes, and may be comprised of other materials including, but not limited, to clay paving brick, gray iron or ductile iron castings, mild steel, stainless steel, and engineered plastics, rubber or composite tile, which are cast into the concrete of the curb ramps. The material shall have an integral color throughout the thickness of the material. The detectable warning shall include fasteners or anchors for attachment in the concrete and shall be furnished as a system from the manufacturer.

Prior to installation, the Contractor shall submit to the Engineer assembling instructions from the manufacturer for each type of system used in accordance with Article 105-2 of the *2012 Standard Specifications*. The system shall be furnished as a kit containing all consumable materials and consumable tools, required for the application. They shall be

capable of being affixed to or anchored in the concrete curb ramp, including green concrete (concrete that has set but not appreciably hardened). The system shall be solvent free and contain no volatile organic compounds (VOC). The static coefficient of friction shall be 0.8 or greater when measured on top of the truncated domes and when measured between the domes in accordance with ASTM C1028 (dry and wet). The system shall be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to degradation by motor fuels, lubricants and antifreeze.

- (C) When steel or gray iron or ductile iron casting products are provided, only products that meet the requirements of Subarticle 106-1(B) of the *2012 Standard Specifications* may be used. Submit to the Engineer a Type 6 Certification, catalog cuts and installation procedures at least 30 days prior to installation for all.

Construction Methods

- (A) Prior to placing detectable warnings in proposed concrete curb ramps, adjust the existing subgrade to the proper grade and in accordance with Article 848-3 of the *2012 Standard Specifications*.
- (B) Install all detectable warning in proposed concrete curb ramps in accordance with the manufacturer's recommendations.

Measurement and Payment

Detectable Warnings installed for construction of proposed curb ramps will not be paid for separately. Such payment will be included in the price bid for *Concrete Curb Ramps*.

REMOVE AND REPLACE CURB RAMPS:

(8-16-11)(Rev. 8-21-12)

848

R8 R127

Description

Remove and replace curb ramps as directed by the Engineer. Perform all work in accordance with Section 848 of the *2012 Standard Specifications*. Construct detectable warnings consisting of integrated raised truncated domes on curb ramps in accordance with the *2012 Standard Specifications*, plan details, the requirements of the *28 CFR Part 36 ADA Standards for Accessible Design* and this provision.

Materials

Detectable warning for curb ramps shall consist of integrated raised truncated domes. The description, size and spacing shall conform to Section 848 of the *2012 Standard Specifications*.

Use material for detectable warning systems as shown herein. Material and coating specifications must be stated in the Manufacturers Type 3 Certification and all Detectable Warning systems must be on the NCDOT Approved Products List.

Install detectable warnings created from one of the following materials: precast concrete blocks or bricks, clay paving brick, gray or ductile iron castings, mild steel, stainless steel, and engineered plastics, rubber or composite tile. Only one material type for detectable warning will be permitted per project, unless otherwise approved by the Engineer.

- (A) Detectable Warnings shall consist of a base with integrated raised truncated domes, and when constructed of precast concrete they shall conform to the material requirements of Article 848-2 of the *2012 Standard Specifications*.
- (B) Detectable Warnings shall consist of a base with integrated raised truncated domes, and may be comprised of other materials including, but not limited, to clay paving brick, gray iron or ductile iron castings, mild steel, stainless steel, and engineered plastics, rubber or composite tile, which are cast into the concrete of the curb ramps. The material shall have an integral color throughout the thickness of the material. The detectable warning shall include fasteners or anchors for attachment in the concrete and shall be furnished as a system from the manufacturer.

Prior to installation, the Contractor shall submit to the Engineer assembling instructions from the manufacturer for each type of system used in accordance with Article 105-2 of the *2012 Standard Specifications*. The system shall be furnished as a kit containing all consumable materials and consumable tools, required for the application. They shall be capable of being affixed to or anchored in the concrete curb ramp, including green concrete (concrete that has set but not appreciably hardened). The system shall be solvent free and contain no volatile organic compounds (VOC). The static coefficient of friction shall be 0.8 or greater when measured on top of the truncated domes and when measured between the domes in accordance with ASTM C1028 (dry and wet). The system shall be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to degradation by motor fuels, lubricants and antifreeze.

- (C) When steel or gray iron or ductile iron casting products are provided, only products that meet the requirements of Subarticle 106-1(B) of the *2012 Standard Specifications* may be used. Submit to the Engineer a Type 6 Certification, catalog cuts and installation procedures at least 30 days prior to installation for all.

Construction Methods

- (A) Prior to placing detectable warnings in concrete curb ramps, adjust the existing subgrade to the proper grade and in accordance with Article 848-3 of the *2012 Standard Specifications*.
- (B) Install all detectable warning in concrete curb ramps in accordance with the manufacturer's recommendations.

Measurement and Payment

Detectable Warnings installed where curb ramps are to be removed and replaced will not be paid separately. Such payment will be included in the price bid for *Remove and Replace Curb Ramps*.

Remove and Replace Curb Ramps will be measured and paid in units of each. Such price includes, but is not limited to, excavating and backfilling, sawing the existing sidewalk or driveway and furnishing and installing truncated domes. Removal and disposal of existing curb ramps will be incidental to the work performed.

Payment will be made under:

Pay Item	Pay Unit
Remove and Replace Curb Ramps	Each

FLASHING ARROW PANELS

The contractor shall furnish all flashing arrow panels used on the project. Basis of payment will be the unit bid price under flashing arrow panels per day. Any portion of a calendar day, which requires the use of an arrowboard, will constitute payment for a full day.

MOBILIZATION

In Article 800-2 of the Standard Specifications, “Measurement and Payment”, is deleted; therefore; payment for Mobilization will be considered incidental to the various bid items.

PORTABLE LIGHTING

The contractor shall furnish all portable lighting used on the project. Basis of payment will be the unit bid price under Portable Lighting per day. Any portion of a calendar day, which requires the use of portable lighting, will constitute payment for a full day.

REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK, DRIVEWAY, MONOLITHIC ISLAND, AND PAVED DITCH

The contractor shall furnish all equipment and labor necessary for removing existing curb and gutter, sidewalk, driveway, monolithic island, and paved ditch when applicable, and as directed by the Engineer. Saw cutting of asphalt pavement as necessary for the removal shall be incidental to the bid item. The Contractor will be required to dispose of all curb and gutter, sidewalk, driveway, monolithic island, or paved ditch material removed. The Contractor will only be allowed to remove all the above items that he can replace in the same day. If the Contractor removes more of the above items than he can replace on a given day then the Contractor shall backfill all open trenches prior to halting operations for that day. Once the trench is open, backfilling and reopening the trench shall be done at no cost to the Department.

Basis of payment will be the unit bid price under Removal of Existing Curb and Gutter per linear foot, Removal of Existing Sidewalk per square yard, Removal of Existing Driveway per square yard, Removal of Monolithic Island per square yard, Removal of Paved Ditch per square yard and will cover all incidentals involved in executing said work.

2'-6" CONCRETE CURB AND GUTTER (Special)

(7-1-95) (Rev 7-18-06)

SP8 R40

Description

Construct 2'-6" Concrete Curb and Gutter (Special) in accordance with the requirements of Section 846 of the *Standard Specifications* and to the dimensions in accordance with the details in the plans as directed by the Engineer.

Measurement and Payment

2'-6" Concrete Curb and Gutter (Special) will be measured and paid for in linear feet in accordance with Article 846-4 of the *Standard Specifications*. Such price and payment will be full compensation for all work of constructing curb and gutter, including but not limited to excavating and backfilling, furnishing and placing concrete, and constructing joints.

Payment will be made under:

Pay Item	Pay Unit
2'-6" Concrete Curb and Gutter (Special)	Linear Foot

WORK ZONE TRAFFIC CONTROL GENERAL REQUIREMENTS

TEMPORARY TRAFFIC CONTROL (TTC)

(7-16-13)

RWZ-1

Maintain traffic in accordance with Divisions 10, 11 and 12 of the *2012 Standard Specifications* and the following provisions:

Install Work Zone Advance Warning Signs in accordance with the detail drawing provided in these plans prior to beginning any other work. Use a lane closure or slow moving operation to complete the work, as necessary, unless otherwise indicated. Refer to Standard Drawing No. 1101.02, 1101.11, 1110.01, 1110.02, 1130.01, 1135.01 and 1180.01 of the *2012 Roadway Standard Drawings*. Use a moving operation only if the minimum speed maintained at all times is 3 mph with no stops that narrow or close a lane of travel. If the moving operation is progressing slower than 3 mph at any time, install a lane closure. Maintain the existing traffic pattern at all times, except in the immediate work zone where lane closures are allowed as determined by the Engineer.

Refer to attached details and Standard Drawing No. 1101.02, 1101.03, 1101.04, 1101.05, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, and 1180.01 of the *2012 Roadway Standard Drawings* when closing a lane of travel in a stationary work zone such as pavement patching resurfacing, or pavement marking removal. Properly ballasted cones

and skinny drums may be used instead of drums. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of 1 mile in length at any given time on 2 Lane, 2 Way facilities unless otherwise approved by the Engineer. A pilot vehicle operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material, which does not damage the sign sheeting. Replace any obliterated markings as required by other sections of the *2012 Standard Specifications* and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to and within 5 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the *2012 Roadway Standard Drawings*. When personnel and/or equipment are working within a lane of travel of an undivided facility, close the lane according to the traffic control plans, *2012 Roadway Standard Drawings* or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

When utilizing a slow-moving operation for such items as pavement marking and marker placement, as a minimum the slow moving operation caravan shall consist of the vehicles and devices shown on the Moving Operation Caravan Details according to Roadway Standard Drawing No. 1101.02, sheet 11 of the *2012 Roadway Standard Drawings*. Traffic cones may be used when necessary to provide additional protection of wet pavement markings. Ballast all traffic cones so they will not be blown over by traffic.

TRAFFIC OPERATIONS:

1) Drop-Off Requirements and Time Limitations:

Do not exceed a difference of 2 inches in elevation between open lanes of traffic for nominal lifts of 1.5 inches

During a resurfacing only operation, bring all newly resurfaced lanes to the same elevation within 72 hours for nominal lifts of 1.5 inches or less of asphalt course and by the end of each work day for nominal lifts of greater than 1.5 inches of asphalt course

Backfill at a 6:1 slope up to the edge and elevation of existing pavement in areas adjacent to an open travel lane that has an edge of pavement drop-off as follows:

- (A) Drop-off that exceeds 2 inches on roadways with posted speed limits of 45 mph or greater.
- (B) Drop-off that exceeds 3 inches on roadways with posted speed limit less than 45 mph.

For drop-offs that exceed the above requirements, backfill the unacceptable drop-off with suitable compacted material, as approved by the Engineer. The material, equipment and labor associated with this operation will be at no expense to the Department. This work is not considered part of shoulder reconstruction.

2) Project Requirements:

Failure to comply with the following requirements will result in a suspension of all other operations:

1. Before working on ANY MAP, the Contractor shall submit a written construction sequence for traffic control and construction lighting for ALL MAPS to the Engineer at the first pre-construction meeting and the sequence must be approved before closing a lane of traffic. The Contractor and Engineer will coordinate with the Traffic Management Unit at 919-773-2800 or Traffic Services for additional traffic control guidance, as necessary.
2. Coordinate the installation of items required by the contract documents and resurfacing operations such that these operations are completed in the order as agreed upon with the Engineer at the first pre-construction meeting. Refer to the Provisions, Typicals and Details unless otherwise directed by the Engineer.
3. Once the Contractor has started work at a location, the Contractor should prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance unless determined otherwise by the Engineer.
4. Obtain written approval of the Engineer before working in more than one location or setting up additional lane closures.
5. Mainline pavement shall not be left milled, unmarked or uneven at the end of a paving season.
6. Contractor shall mill and pave lanes in an order such that water shall not accumulate.
7. Traffic Control for the milling and/or paving of ramps is to be done according to Standard Drawing Number 1101.02, Sheets 9 & 10 unless otherwise approved to be closed by the Engineer. If approved, Contractor will provide plans and devices for the detour at no additional cost to the department.
8. If lane closure restrictions apply, see Special Provision, "Intermediate Contract Times and Liquidated Damages".

Notify the Engineer 15 consecutive calendar days before resurfacing a bridge or its approaches. Patch and make repairs to bridge surface and its approaches before resurfacing occurs. Coordinate all operations on the bridge and its approaches with the Engineer.

Notify the Engineer 48 hours before resurfacing the areas of existing pavement that require patching. Patch these areas before resurfacing occurs. Allow full depth asphalt patching to cool to the point of supporting traffic without displacement or rutting before reopening closed lane. Coordinate the resurfacing operations of the patched areas with the Engineer.

Notify the Engineer 48 hours before milling or resurfacing will interfere with the existing Signal Loops. Loops may need to be placed in milled surface before resurfacing occurs. Coordinate all signal loop operations with the Engineer.

For partial or wheel track milling operations on two-way, two-lane facilities, mill and pave back by the end of each work day. For Partial or wheel track milling operation on multi-lane facilities, the lane being milled may be left closed and paved back within 72 hours.

The following options are available during Resurfacing and milling operations on two-way, two-lane facilities when the entire roadway or entire lane is to be milled:

- (A) Mill a single lane and pave back by the end of each work day.
- (B) Mill the entire width of roadway and pave back within 72 hours.

The following options are available during Resurfacing and milling operations on multi-lane facilities when all lanes or a single lane in one direction are to be milled:

- (A) Mill a single lane and pave back by the end of each work day.
- (B) Mill the entire width of pavement for all lanes to be milled in any direction daily and pave back within 72 hours.

Slope the pavement at the beginning and ending of the daily milling operation as directed by the Engineer. Sweep and remove all milled material from the roadway as soon as the daily milling operation is completed. Continue milling operations until the particular section of roadway being milled is complete. Remove any existing pavement adjacent to the milled area that has been damaged and replace with patch material as directed by the Engineer.

Operate equipment and conduct operations in the same direction as the flow of traffic. Maintain vehicular access in accordance with Article 1101-05 of the *2012 Standard Specifications* using suitable backfill material approved by the Engineer.

Provide appropriate lighting in accordance with Section 1413 of the *2012 Standard Specifications*.

Review and record the existing pavement markings and markers prior to resurfacing. Use the record of existing pavement markings and markers in accordance with the *2012 Roadway Standard Drawings* to identify “no passing zones” and to re-establish the proposed pavement markings and markers unless otherwise directed by the Engineer.

Remove existing pavement markers in preparation for paving. Repair any pavement damage due to existing pavement marker removal prior to the end of the work day. Dispose of existing pavement markers as directed by the Engineer. No direct payment will be made for this work, as it will be incidental to the paving operation.

3) Work Zone Signing:

Description

Install advance/general warning work zone signs according to the Detail Drawing provided in these plans prior to beginning of work. Install and maintain signing in accordance with the attached drawings and Divisions 11 and 12 of the *2012 Standard Specifications*.

(A) Installation

Install all Advance/General warning work zone signs before beginning work on a particular map. If signs are installed more than seven (7) calendar days prior to the beginning of work on a particular map, cover the signs until the work begins. Install each work zone Advance/General warning sign separately and not on the same post or stand with any other sign except where an advisory speed plate or directional arrow is used.

All stationary signing is to be installed as shown on the detail drawing unless otherwise directed by the Engineer. Once the signs have been installed, any sign relocations requested by the Department will be compensated in accordance with Section 104-7. Any additional signs other than the ones shown in the drawing will be compensated in accordance with Section 104-7.

No -Y- Line advance warning signage is required unless there's more than 1,000 feet of resurfacing along the -Y- line. Whenever work proceeds through an intersection, portable signs shall be used for traffic control. There will be no direct compensation for any portable signing.

If there is a period of construction inactivity longer than 14 calendar days, remove or cover advance/general warning work zone signs. Uncover advance/general warning work zone signs no more than 7 calendar days before work resumes. All other operations may be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

(B) Sign Removal

All stationary work zone signs shall be removed once the project is substantially complete. The project is substantially complete when the resurfacing operations are completed and the shoulders are brought up to the same elevation as the proposed pavement and when pavement markings are installed. The pavement marking doesn't have to be the final marking material to be considered substantially complete. Any remaining punch list items are to be completed with portable work zone signing. There will be no compensation for any portable signing. Sign removal is a condition of final project acceptance.

(C) Lane Closure Work Zone Signs

Install any required lane closure signing needed during the life of the project in accordance with the Standard Drawing No. 1101.02, 1101.11 and 1110.02 of the *2012 Roadway Standard Drawings*. Any required portable signs for lane closures are compensated in the contract pay item for *Temporary Traffic Control*.

4) Measurement and Payment:

Temporary traffic control work, including, but not limited to installation and removal of portable signs, cones, drums, skinny drums, flaggers, AFAD's, changeable message boards, truck mounted attenuators, flashing arrow panels, and pilot vehicles will be paid at the contract lump sum price for *Temporary Traffic Control*. The *Temporary Traffic Control* pay item does not

include work zone advance or general warning signs. Partial payments for *Temporary Traffic Control* will be made as follows: The cumulative total of the lump sum price for temporary traffic control will be equal to the percent complete (project) as calculated for each partial pay estimate. Additional flashing arrow panels and message boards beyond those shown in the contract, detail drawings or *Roadway Standard Drawings* required by the Engineer will be paid as extra work in accordance with Article 104-7 of the Standard Specifications.

The work of satisfactorily installing and removing work zone advance and/or general warning signs, including, but not limit to, furnishing, locating, installing, covering, uncovering and removing stationary signs will be measured for each required sign and paid at the contract price for *Work Zone Advance/General Warning Signing (SF)*. Payment for *Work Zone Advance/General Warning Signing* will be limited to a maximum of 90% of the total installed quantity. The remaining 10% will be paid once all signs have been removed.

The Lump Sum price for *Temporary Traffic Control* will include the work of four (4) flaggers per operation per map being utilized at the same time on any day. If a pilot vehicle is used for an operation, the Lump Sum Price for *Temporary Traffic Control* will include the work of five (5) flaggers. The operator of a pilot vehicle will be considered one of the five flaggers. Payment will be made per hour at a rate of \$20.00 per hour for each flagger over the included amount (four or five) that is approved by the Engineer as *Supplemental Flagging*.

Payment will be made under:

Pay Item	Pay Unit
Temporary Traffic Control	Lump Sum
Work Zone Advance/General Warning Signing	Square Foot
Supplemental Flagging	Hour

**TIME LIMITATION FOR PAVEMENT MARKINGS AND MARKERS ON
NEWLY RESURFACED AREAS:**

Markings: Two-Lane, Two-Way Facilities

For all two-lane, two-way facilities, place all edge lines and other symbols within 30 calendar days after they have been obliterated by the resurfacing operation. This 30 day requirement is an exception to the 15 day requirement in the *2012 Standard Specifications*. All other pavement marking shall be installed in accordance with the *2012 Standard Specifications* and the 2012 Roadway Standard Drawings 1205.01 through 1205.13.

Markings: All Facilities

Final pavement markings on a specific map are subject to an observation period that begins with the satisfactory completion of all pavement markings required on a specific map in accordance with Subarticle 1205-3(H) of the *2012 Standard Specifications*. Pavement markings shall be installed in accordance with the *2012 Standard Specifications* and the 2012 Roadway Standard Drawings 1205.01 through 1205.13 with the exception of the 30 day edge line requirement for 2 lane roads as described above.

All characters, symbols and stop bars on concrete shall be either Type 2 or Type 3 Cold Applied Plastic or Heated-In-Place Thermoplastic as shown on NCDOT Approved Product List. The quantity for characters, symbols and stop bars on concrete will be included in the pay items for Type 2 Cold Applied Plastic.

All characters, symbols and stop bars on asphalt shall be either Heated-In-Place Thermoplastic or Extruded Thermoplastic as shown on NCDOT Approved Product List. The quantity for characters, symbols and stop bars on asphalt will be included in the pay items for Heated-In-Place Thermoplastic.

Markers: All Facilities

Install permanent pavement markers within 60 calendar days after completing the resurfacing on each map. Pavement markers shall be installed in accordance with the 2012 *Standard Specifications* and the 2012 Roadway Standard Drawing 1205.12 and 2012 Roadway Standard Drawings 1250.01 through 1253.01.

Milled Rumble Strips:

When utilized, milled rumble strips shall be installed in accordance with the 2012 *Standard Specifications* and the 2012 Roadway Standard Drawing 665.01.

STANDARD DRAWINGS:

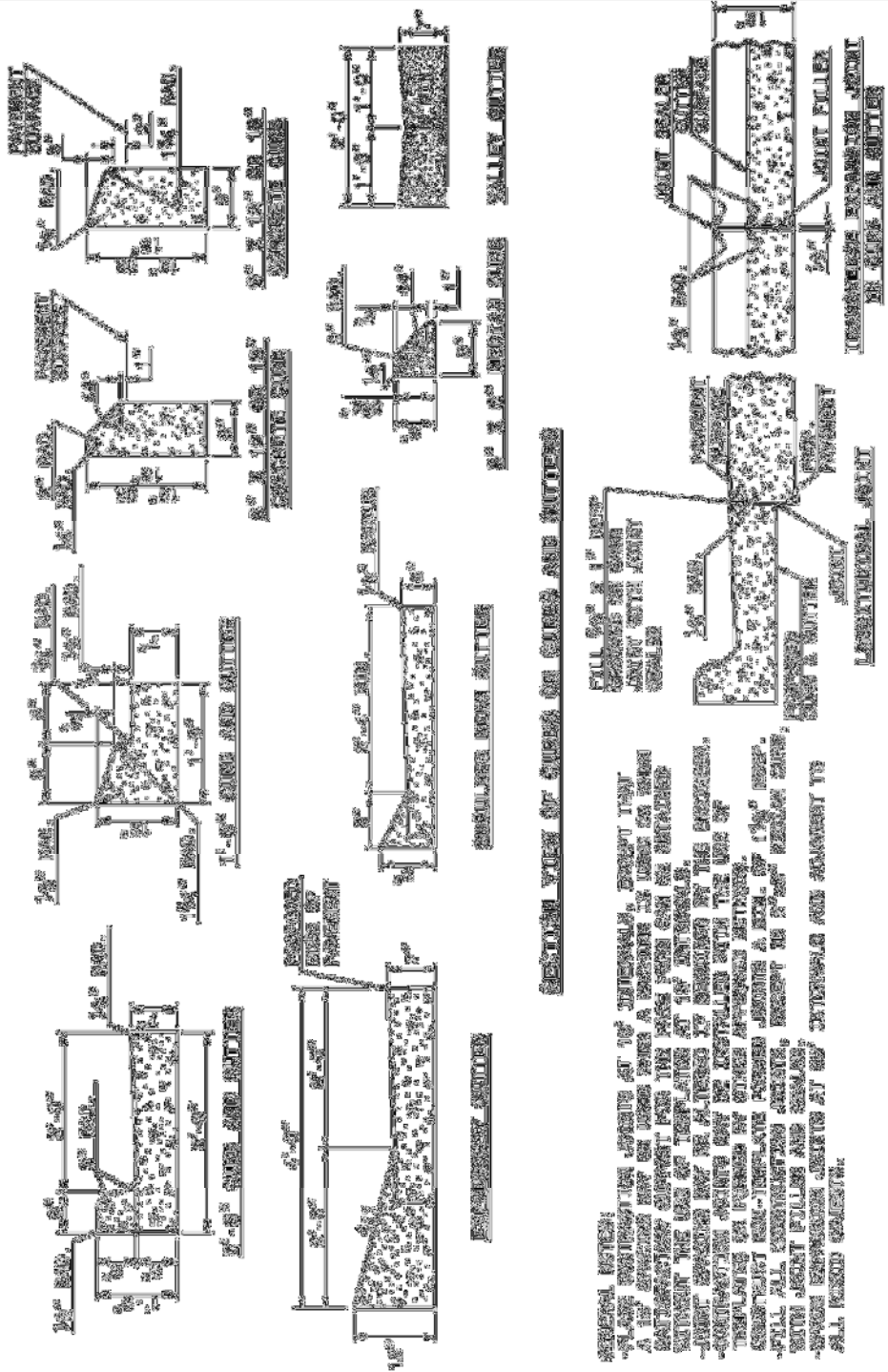
http://www.ncdot.org/doh/preconstruct/ps/std_draw/default.html

- **Roadway Standard Drawing 840.18 sheet 1, Concrete Grated Drop Inlet Type “B” (12” thru 36” Pipe)**
- **Roadway Standard Drawing 846.01 sheets 1-3, Concrete Curb, Gutter and Curb & Gutter**
- **Roadway Standard Drawing 848.01 sheet 1, Concrete Sidewalk**
- **Roadway Standard Drawing 848.02 sheet 1, Driveway Turnout (Radius Type)**
- **Roadway Standard Drawing 848.02 sheet 2, Driveway Turnout (Driveway Grades)**
- **Roadway Standard Drawing 848.03 sheet 1, Driveway Turnout (Drop Curb Type)**
- **Roadway Standard Drawing 848.03 sheet 2, Driveway Turnout (Driveway Grades)**
- **Roadway Standard Drawing 848.04 sheet 1, Street Turnout**
- **Roadway Standard Drawing 848.05 sheets 1-3, Curb Ramp (Proposed Curb and Gutter)**
- **Roadway Standard Drawing 848.06 sheets 1-5, Curb Ramp (Existing Curb and Gutter)**
- **Roadway Standard Drawing 850.01 sheet 1, Concrete Paved Ditches**
- **Roadway Standard Drawing 852.01 sheet 1, Concrete Islands**
- **Roadway Standard Drawing 852.02 sheet 1, Concrete Mountable Median (For Use with Rigid or Flexible Pavement)**
- **City of Wilmington SD7-01, Standard Curb Section Type “A”**
- **City of Wilmington SD7-02, Standard Curb Section Type “D”**

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

ENGLISH STANDARD DRAWING FOR
 CONCRETE CURB, GUTTER
 AND CURB & GUTTER

SECTION 1 OF 1
 846.01



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

ENGLISH STANDARD DRAWING FOR
 CONCRETE CURB, GUTTER
 AND CURB & GUTTER

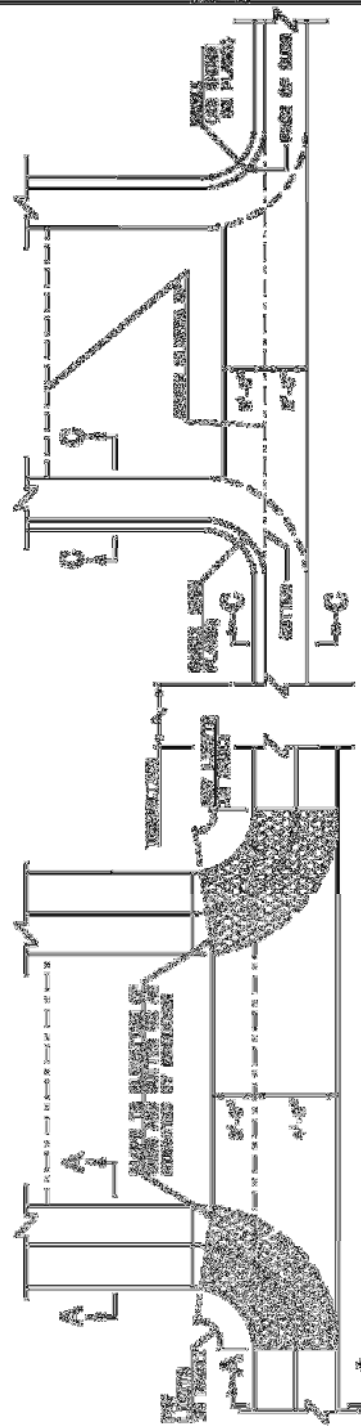
SECTION 1 OF 1
 846.01

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH STANDARD DRAWING FOR CONCRETE CURB, GUTTER AND CURB & GUTTER	SHEET 2 OF 3 646.01
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH STANDARD DRAWING FOR CONCRETE CURB, GUTTER AND CURB & GUTTER	SHEET 2 OF 3 646.01

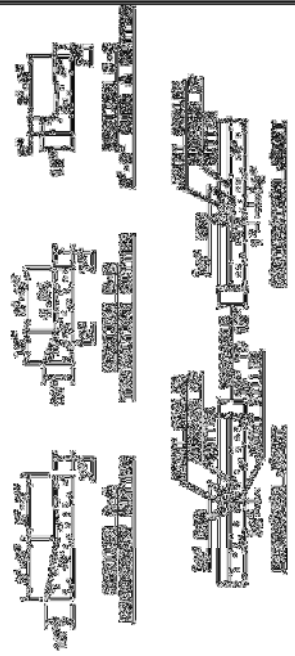
STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
 CONCRETE CURB, GUTTER
 AND CURB & GUTTER

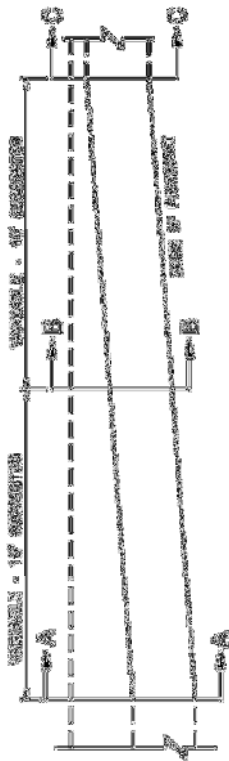
SCALE: 3/8" = 1'-0"



PLAN VIEW OF TYPICAL CURB AND GUTTER



NOTE: THE CURB SHALL BE CONCRETE AND SHALL BE 4'-0" WIDE AT THE TOP AND SHALL BE 1'-0" HIGH AT THE TOP. THE GUTTER SHALL BE 1'-0" WIDE AT THE TOP AND SHALL BE 1'-0" HIGH AT THE TOP. THE CURB SHALL BE 1'-0" HIGH AT THE TOP AND SHALL BE 1'-0" HIGH AT THE TOP.



PLAN VIEW OF TRANSITION

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

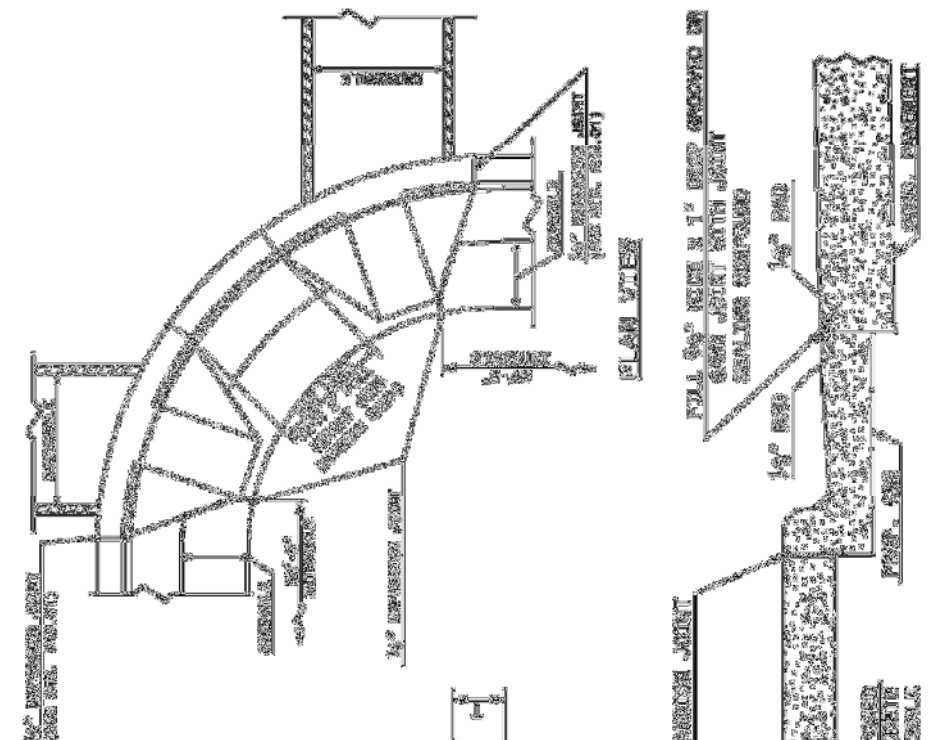
ENGLISH STANDARD DRAWING FOR
 CONCRETE CURB, GUTTER
 AND CURB & GUTTER

SCALE: 3/8" = 1'-0"

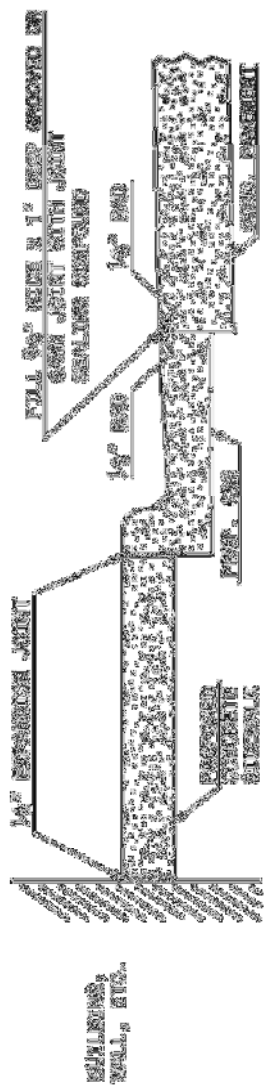
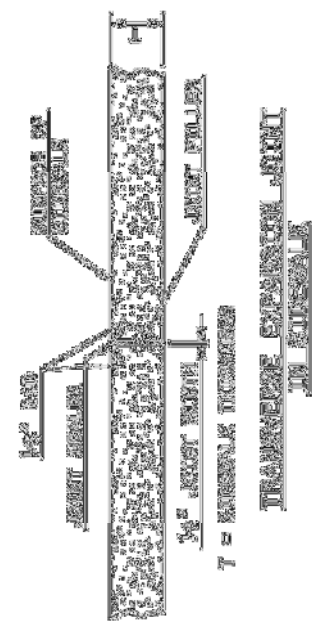
STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
 CONCRETE SIDEWALK

SECTION 101
 542.01



NOTES:
 1. CONCRETE SIDEWALK SHALL BE 4" THICK UNLESS OTHERWISE SPECIFIED ON PLANS.
 2. PLACE A GROUND JOINT 1" DEEP WITH 1/2" RADIUS AT THE GROUND SURFACE AT 2' INTERVALS.
 3. ONE 1/2" EXPANDED JOINT SHALL BE PROVIDED AT EVERY INTERVAL. A 1/2" EXPANDED JOINT SHALL BE PROVIDED WHERE THE SIDEWALK CHANGES ANY KIND OF FINISHING.
 4. SEE SPEC. DIV. 500.00 FOR REQUIREMENTS FOR LOCATION, MATERIALS AND CONSTRUCTION DETAILS.



STATE OF NORTH CAROLINA
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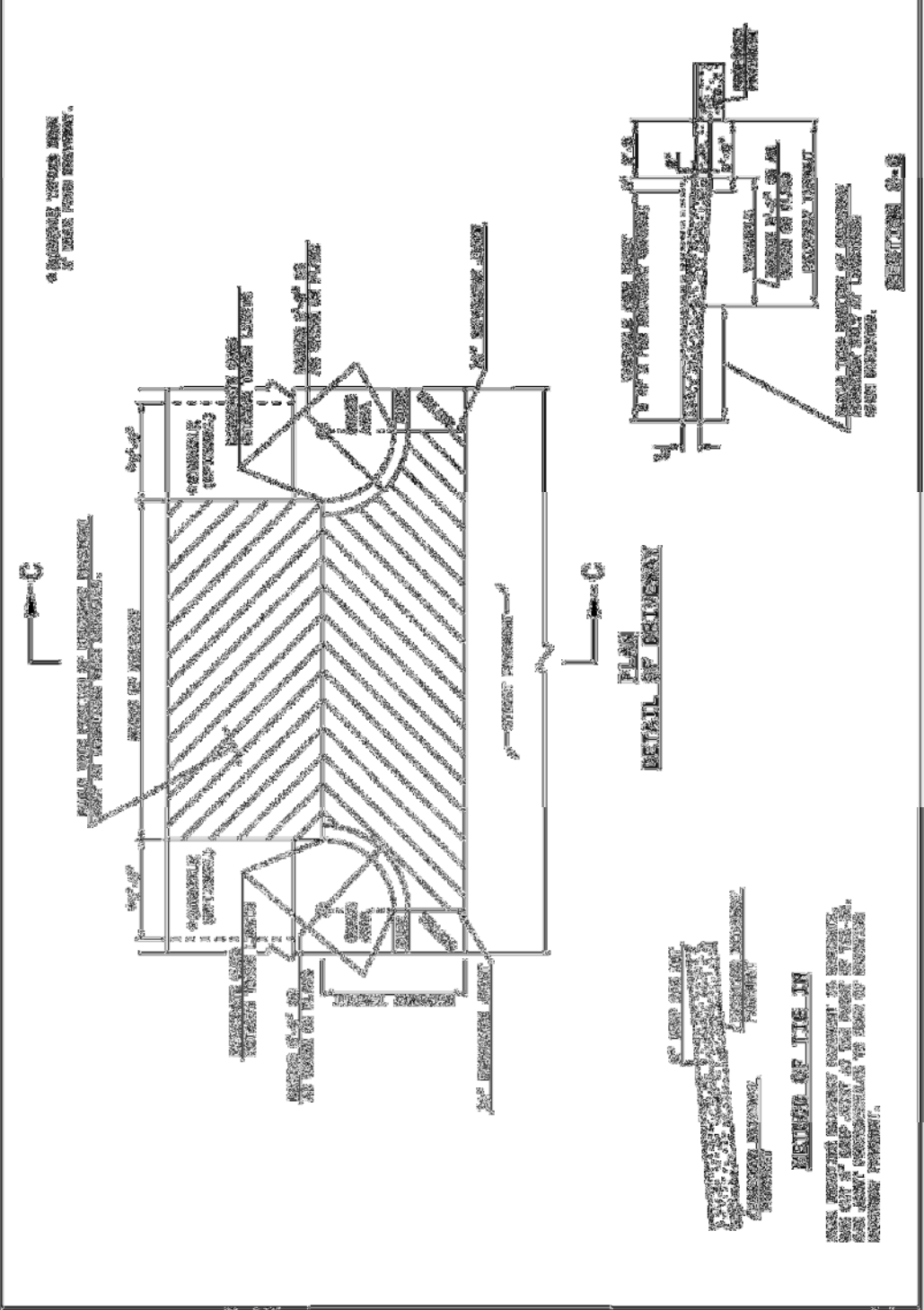
ENGLISH STANDARD DRAWING FOR
 CONCRETE SIDEWALK

SECTION 101
 542.01

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

ENGLISH STANDARD DRAWING FOR
 DRIVEWAY TURNOUT
 RADIUS TYPE

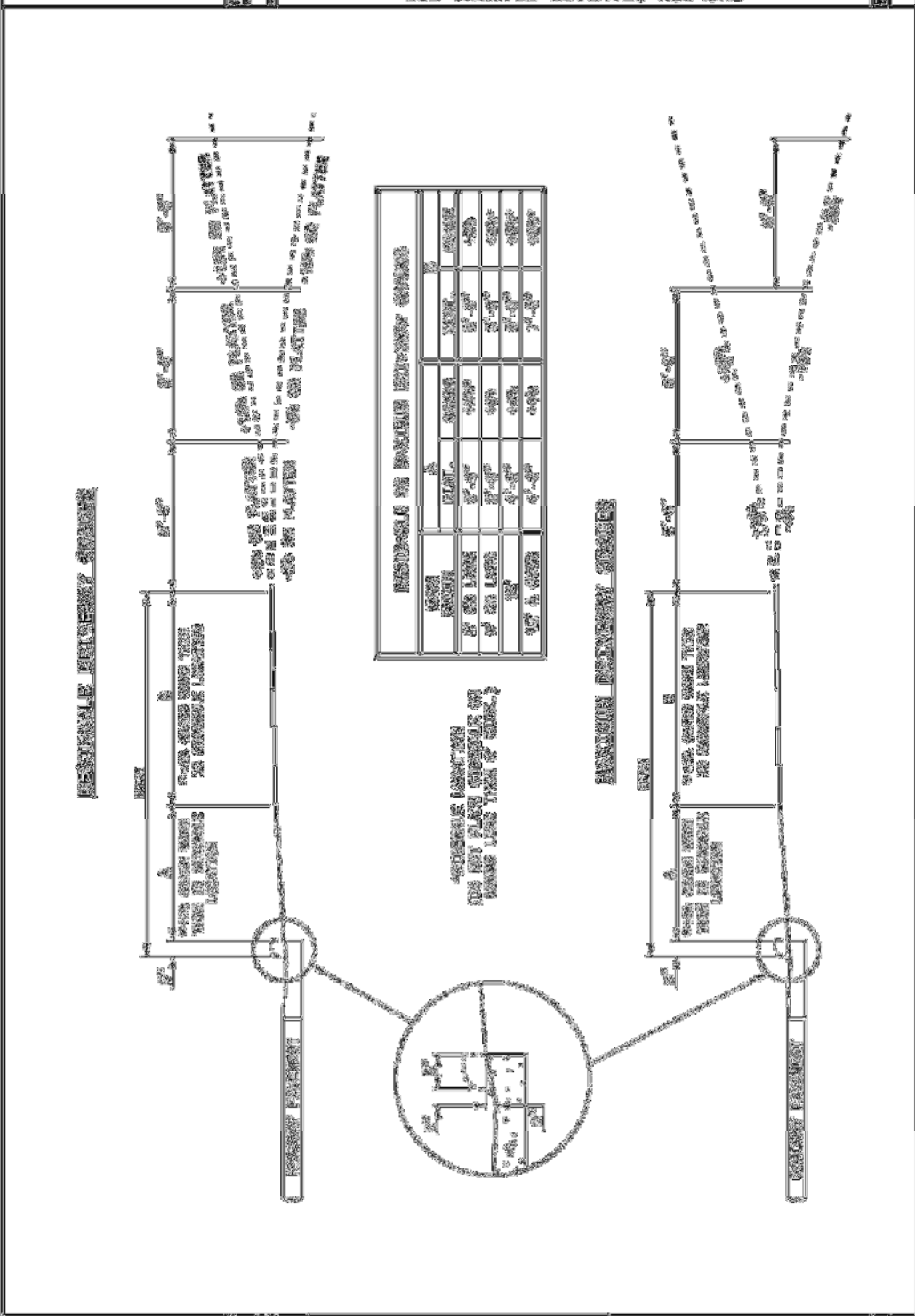
SCALE 1" = 10'-0"



STATE OF NORTH CAROLINA
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ENGLISH STANDARD DRAWING FOR
 DRIVEWAY TURNOUT
 RADIUS TYPE

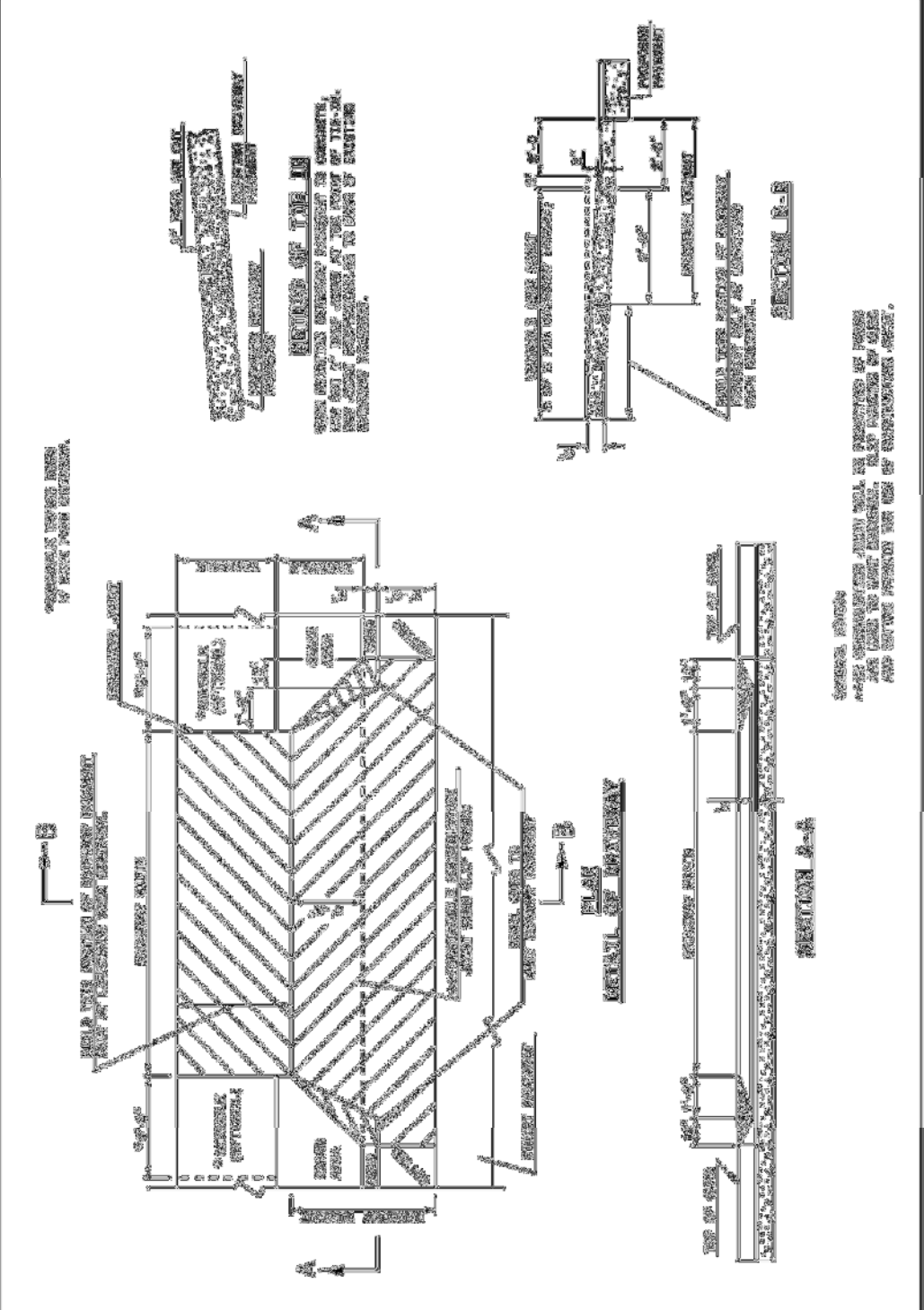
SCALE 1" = 10'-0"



STATE OF NORTH CAROLINA
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ENGLISH STANDARD DRAWING FOR
 DRIVEWAY TURNOUT
 DROP CURB TYPE

Sheet 1 of 2
 846.03



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 RALEIGH, N.C.

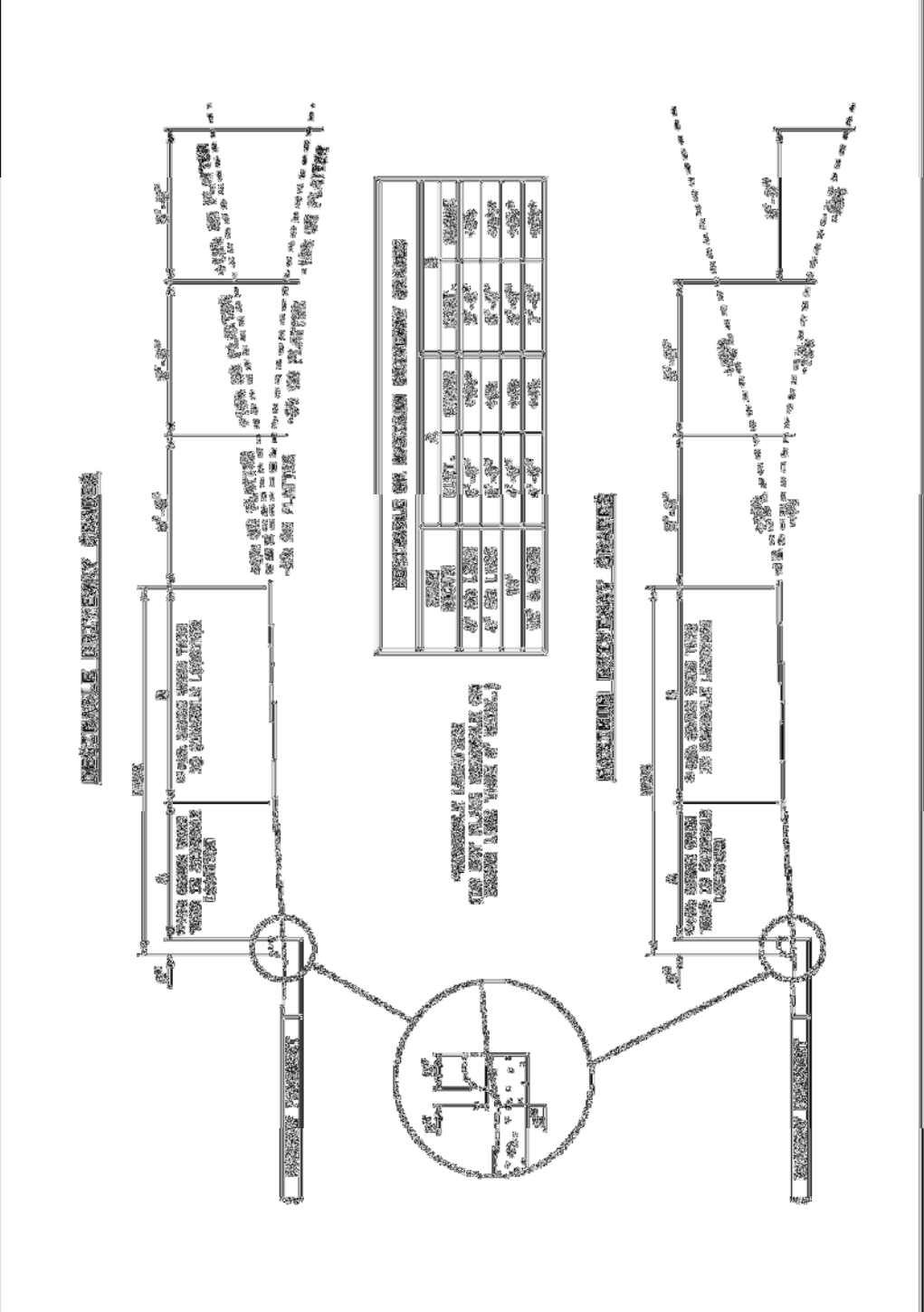
ENGLISH STANDARD DRAWING FOR
 DRIVEWAY TURNOUT
 DROP CURB TYPE

Sheet 1 of 2
 846.03

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

ENGLISH STANDARDS DRAWING FOR
 DRIVEWAY TURNOUT
 DRIVEWAY GRADES

SHEET 2 OF 2
 84-0102



STATE OF NORTH CAROLINA
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 RALEIGH, N.C.

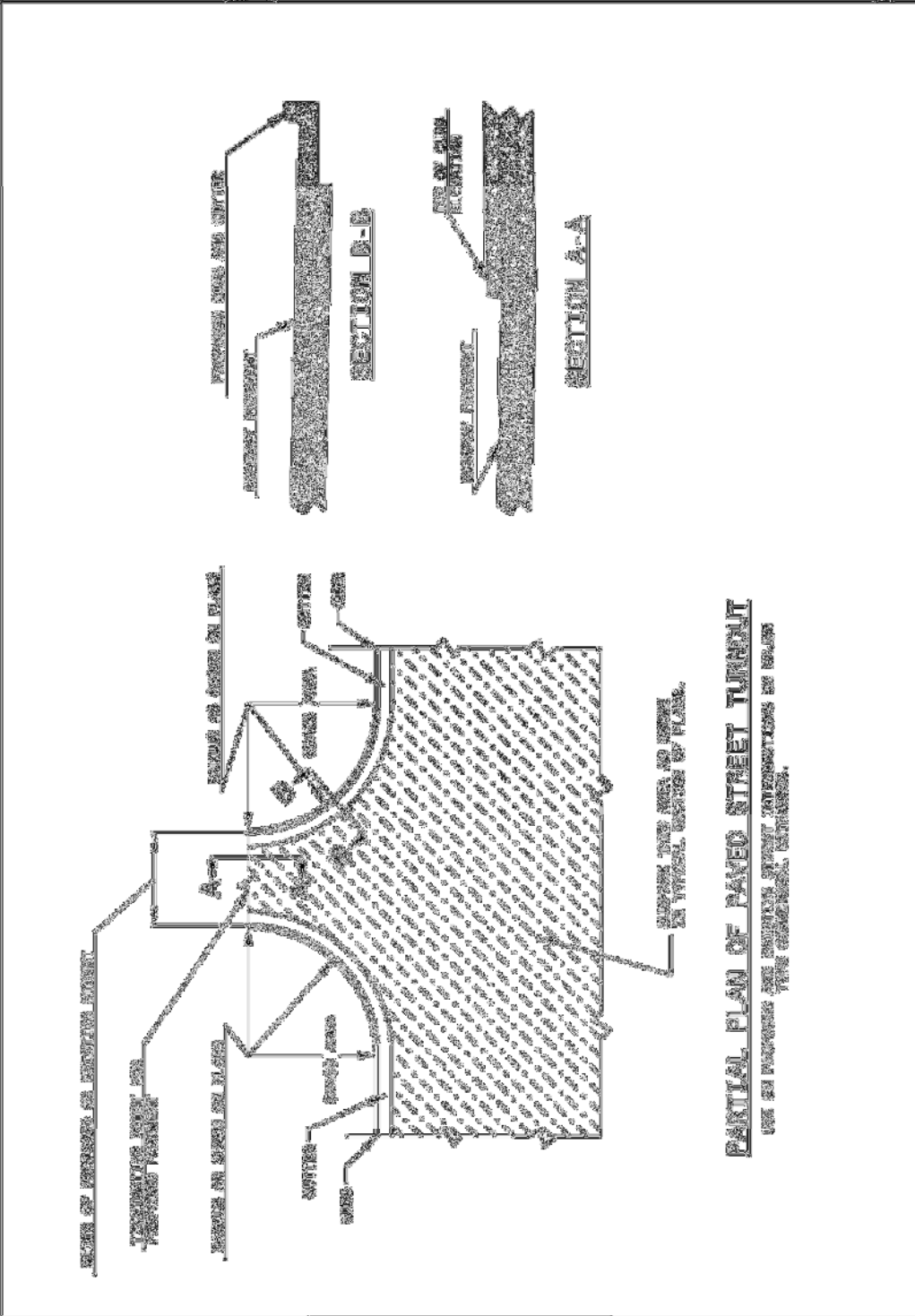
ENGLISH STANDARDS DRAWING FOR
 DRIVEWAY TURNOUT
 DRIVEWAY GRADES

SHEET 2 OF 2
 84-0102

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

ENGLISH STANDARD DRAWING FOR
 STREET TURNOUT

SCALE 1" = 10'
 246.04



PARTIAL PLAN OF PAVED STREET TURNOUT

USE AS INDICATED AND SHOW THE INTERSECTIONS AS BELOW THE CROSS-SECTION DRAWINGS.

STATE OF NORTH CAROLINA
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 RALEIGH, N.C.

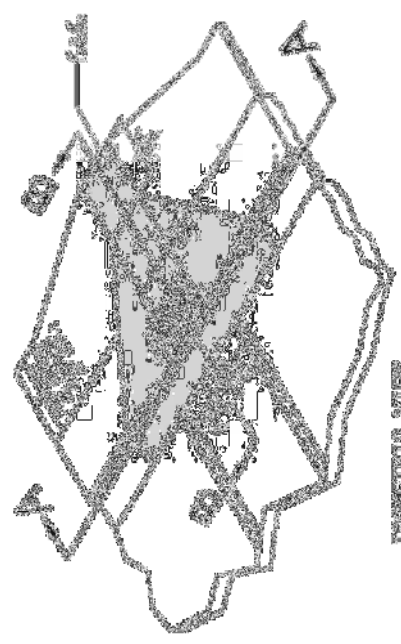
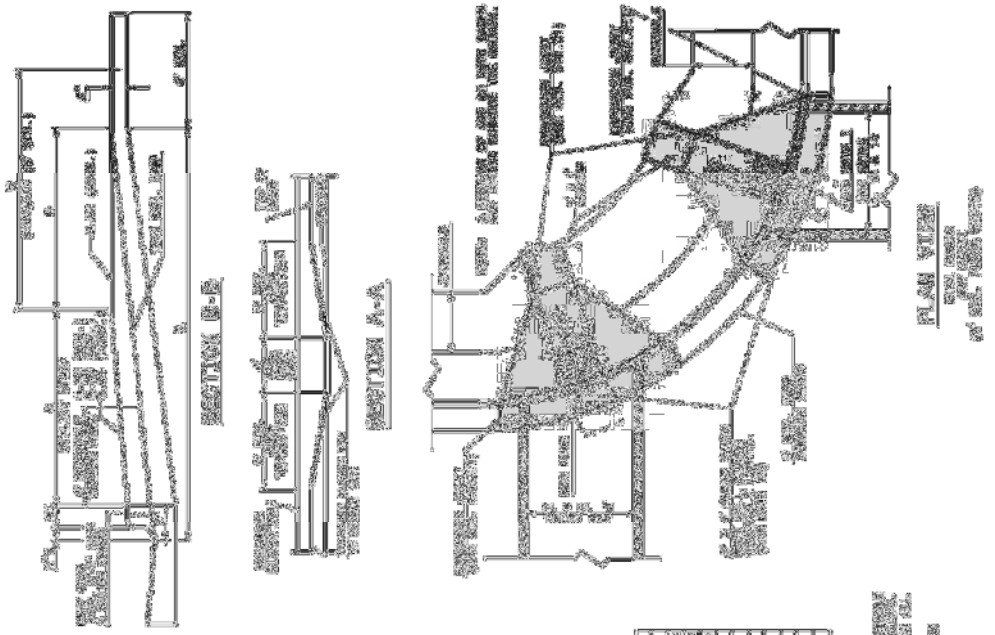
ENGLISH STANDARD DRAWING FOR
 STREET TURNOUT

SCALE 1" = 10'
 246.04

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

ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 PROPOSED CURB AND GUTTER

SCALE: 1/8" = 1'-0"
 248.08

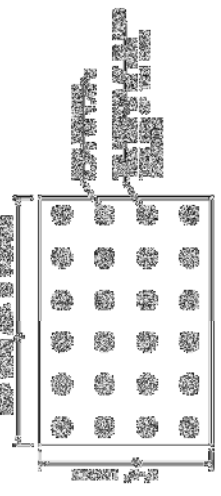


DETAILED VIEW

1. THE CURB SHALL BE 4" HIGH AND 12" WIDE AT THE TOP.
 2. THE GUTTER SHALL BE 1/2" DEEP AND 12" WIDE AT THE TOP.
 3. THE CURB AND GUTTER SHALL BE CONCRETE OR EQUIVALENT MATERIAL.

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE CURB	100	LINEAL FEET
2	CONCRETE GUTTER	100	LINEAL FEET
3	ASPHALT PAVEMENT	100	SQ. FEET
4	GRAVEL	100	CY
5	REINFORCING BARS	100	LINEAL FEET
6	FORMWORK	100	SQ. FEET
7	PAINT	100	GALLONS
8	LABOR	100	HOURS

NOTES:
 1. THE CURB AND GUTTER SHALL BE CONCRETE OR EQUIVALENT MATERIAL.
 2. THE CURB AND GUTTER SHALL BE 4" HIGH AND 12" WIDE AT THE TOP.
 3. THE GUTTER SHALL BE 1/2" DEEP AND 12" WIDE AT THE TOP.
 4. THE CURB AND GUTTER SHALL BE CONCRETE OR EQUIVALENT MATERIAL.



ELEVATION VIEW

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

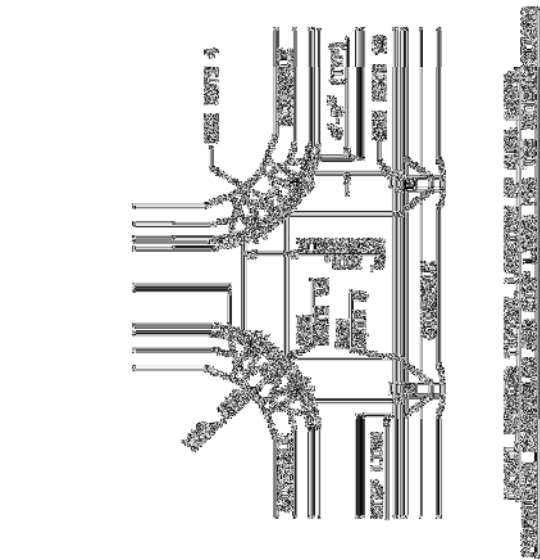
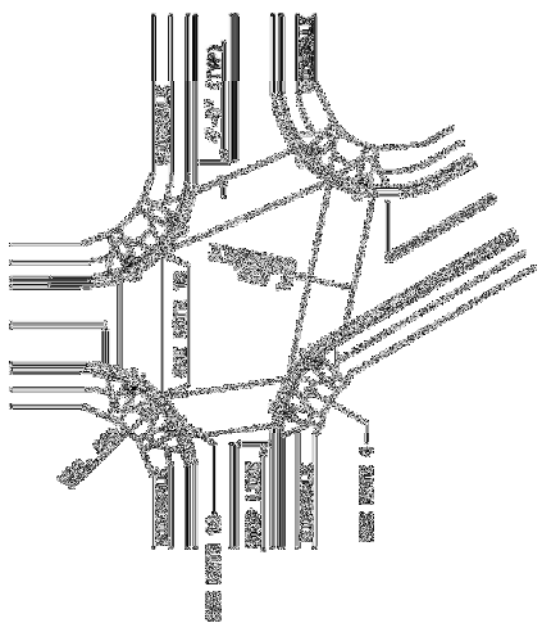
ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 PROPOSED CURB AND GUTTER

SCALE: 1/8" = 1'-0"
 248.08

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

ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 PROPOSED CURB AND GUTTER

50,048,00
 SHEET 2 OF 2



ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES AND DECIMALS THEREOF.
 DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.

PROPOSED CURB AND GUTTER
 PROPOSED CURB RAMP



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

ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 PROPOSED CURB AND GUTTER

50,048,00
 SHEET 2 OF 2

NOTES:

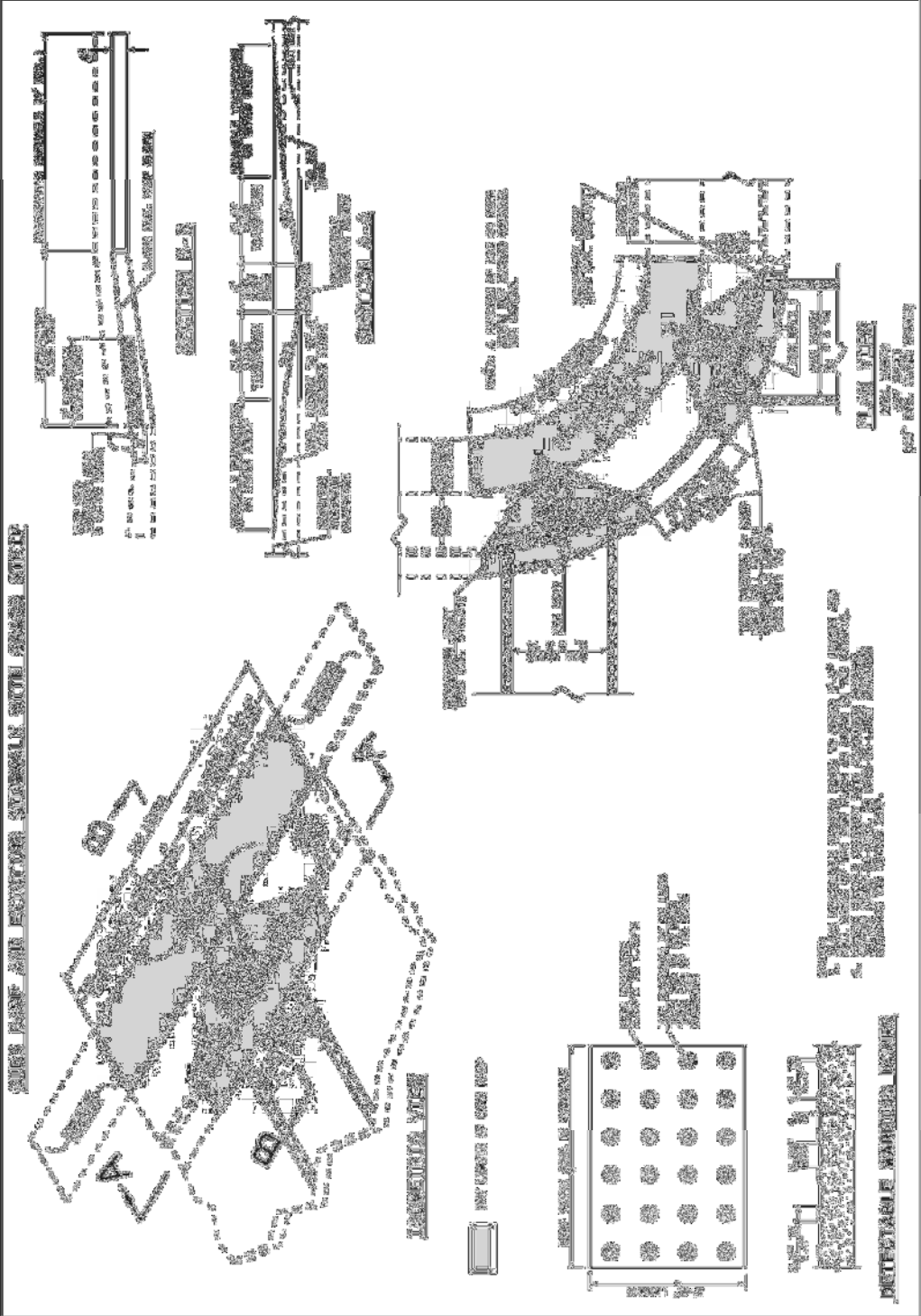
1. CONSTRUCT THE RAMP SURFACE TO BE STABLE, FIRM, AND SLIP RESISTANT. CONSTRUCT THE CURB RAMP TOP AS SHOWN IN THE PRESENT WORKING PLANS OR AS DIRECTED BY THE ENGINEER.
2. LOCATE CURB RAMPS AND PLACE PEDESTRIAN CROSSWALK MARKINGS AS SHOWN IN THE PRESENT WORKING PLANS. MARKING REQUIREMENTS REQUIRE MOVING CURB RAMPS OR MARKINGS AS SHOWN, CONTACT THE STOP BAR LAYOUT AND DELINEATION UNIT FOR REVISIONS BY THE ENGINEER.
3. COORDINATE THE CURB RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO A 4"x4" CLEAR SPACE AT THE END OF THE CURB RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES.
4. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL LANE IS 4' MINIMUM.
5. REFER TO THE PAVEMENT MARKING PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS. IF A NEAREST WORKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL DESIGN SECTION FOR THE STOP BAR LOCATIONS OR LOCATE AS INDICATED AT THE INTERSECTION.
6. TERMINATE PARKING A MINIMUM OF 20' BACK OF A PEDESTRIAN CROSSWALK.
7. CONSTRUCT CURB RAMPS A MINIMUM OF 4' WIDE.
8. CONSTRUCT THE RUNNING SLOPE OF THE RAMP 8.33% MAXIMUM.
9. ALLOWABLE CROSS SLOPE OR SLOTTABLES AND CURB RAMPS WILL BE 2% MAXIMUM.
10. CONSTRUCT THE SIDE FLARE SLOPE A MAXIMUM OF 10% MEASURED ALONG THE CURB LINE.
11. CONSTRUCT THE COUNTER SLOPE OF THE CUTTER OR STREET AT THE BASE OF THE CURB RAMP A MINIMUM OF 2% AND MAXIMUM OF 4% SMOOTH TRANSITION.
12. CONSTRUCT LANDINGS FOR SIDEWALK A MINIMUM OF 4'x4' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. MINIMUM LANDINGS FOR MEDIAN ISLANDS A MINIMUM OF 5'x5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
13. TO USE A MEDIAN ISLAND AS A PEDESTRIAN REFUGE AREA, MEDIAN ISLANDS WILL BE A MINIMUM OF 7' WIDE. SUFFICIENT MEDIAN ISLANDS TO PROVIDE PARALLEL OVER OR THROUGH THE ISLAND.
14. SMALL CHARVELIZATION ISLANDS THAT CAN NOT PROVIDE A 5'x5' LANDING AT THE TOP OF A CURB, WILL BE SET THROUGH LANE WITH THE SURFACE STREET.
15. CURB RAMPS WITH ROUNDED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY REAR APPROX THE RAMP. THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE ON THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED.
16. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE CURB RAMP JOINS THE CURB AS SHOWN IN PRESENT WORKING PLANS.
17. PLACE ALL PEDESTRIAN PUSH BUTTON SPACINGS AND CROSSING SIGNALS AS SHOWN IN THE PLANS OR AS SHOWN IN THE NOTES.
18. CURB RAMPS THROUGH MEDIAN ISLANDS, SINGLE RAMPS OR LIMITED SLOPE SITUATIONS, WILL BE SHOWN BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR THE DETAILS OR FOR A SPECIAL NOTING.

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

ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 EXISTING CURB AND BUTTES

1-12

848.06



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

ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 EXISTING CURB AND BUTTES

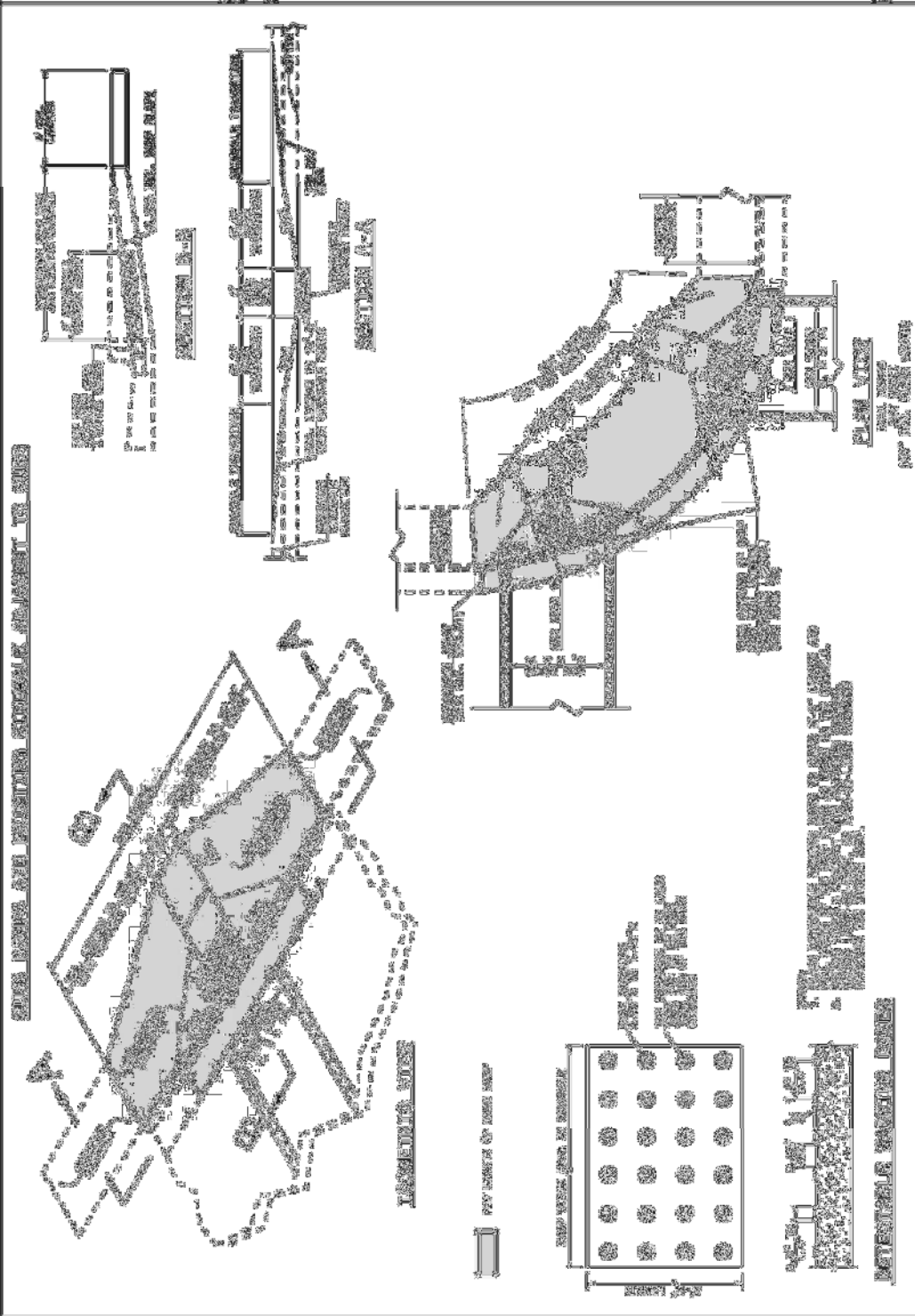
1-12

848.06

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

ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 EXISTING CURB AND GUTTER

SCALE: 1" = 4'-0"



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

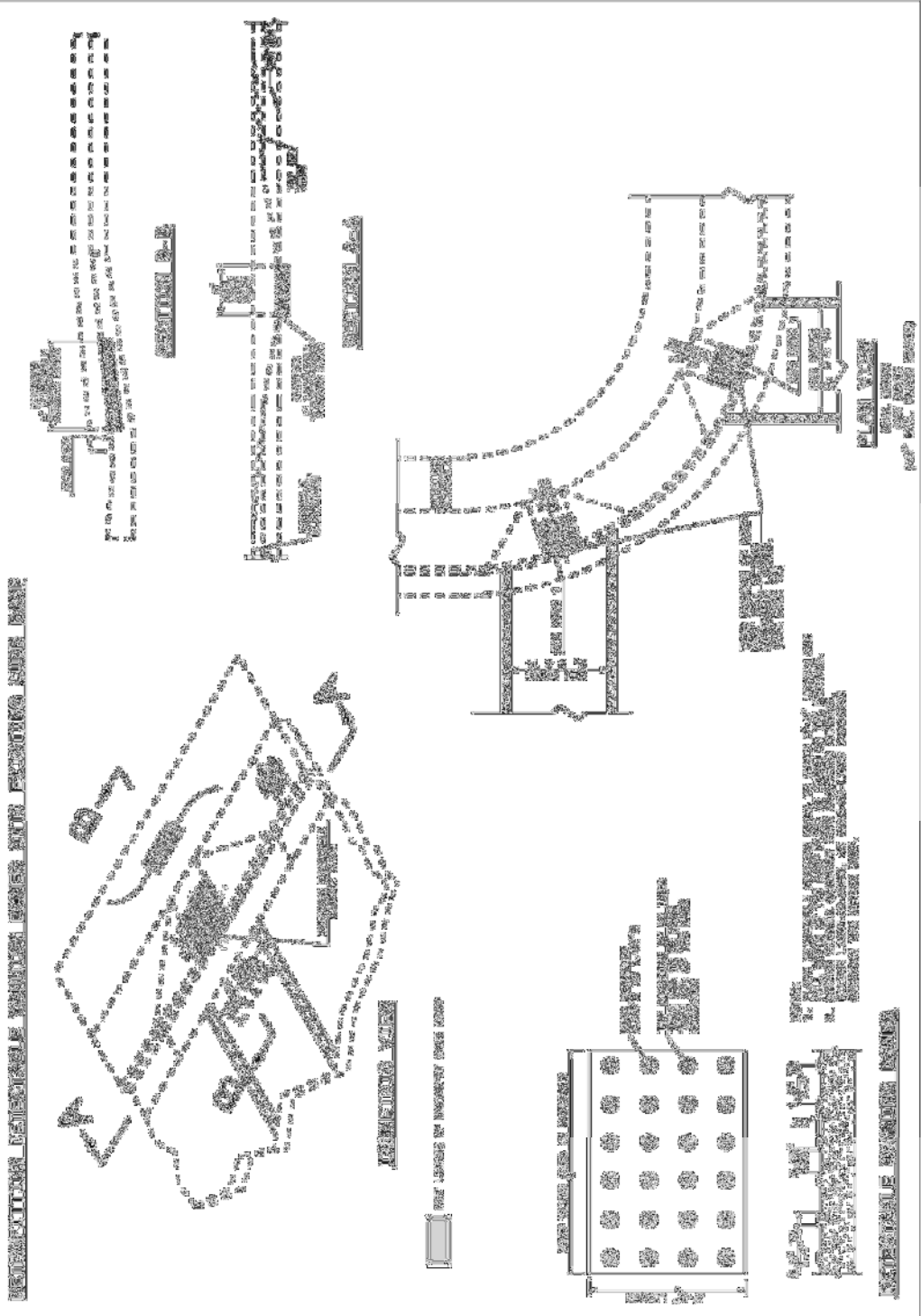
ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 EXISTING CURB AND GUTTER

SCALE: 1" = 4'-0"

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

ENGLISH STANDARD DRAWING FOR
GURD RAMP
EXISTING CURBS AND GUTTER

SHEET 1 OF 1
240.08



SECTIONAL ELEVATION SHOWING CURB AND FLOORING SIDE VIEW

PLAN VIEW
1/4" = 1'-0"

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

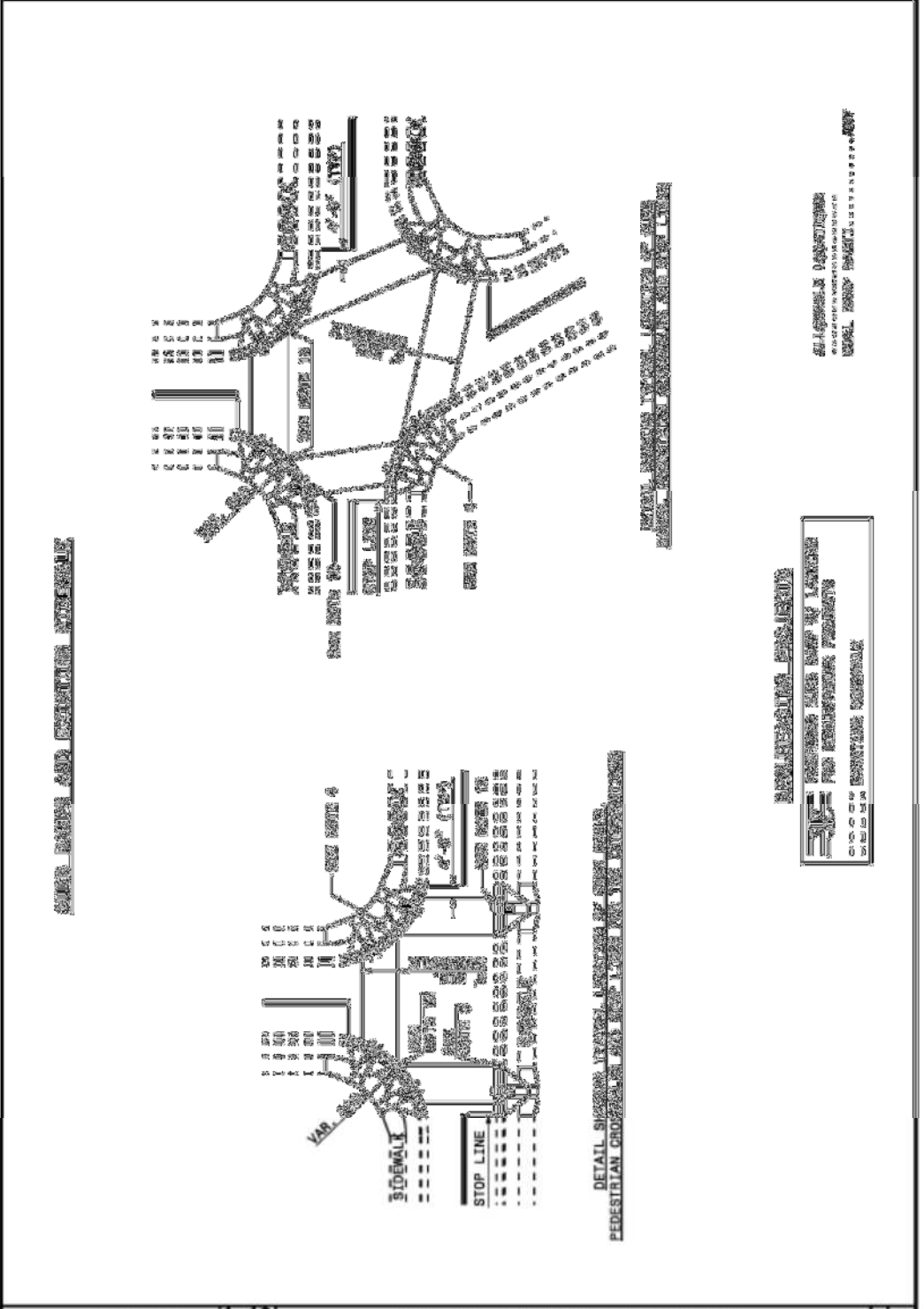
ENGLISH STANDARD DRAWING FOR
GURD RAMP
EXISTING CURBS AND GUTTER

SHEET 1 OF 1
240.08

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

ENGLISH STANDARD DRAWING FOR
 CURB RAMP
 EXISTING CURB AND GUTTER

SHEET 4 OF 5
 848.06



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

ENGLISH STANDARD DRAWING FOR
CURB RAMP
 EXISTING CURB AND GUTTER

SHEET 4 OF 5
 848.06

CURB RAMP AND EXISTING SIDEWALK

- NOTES:
1. CONSTRUCT THE CURB CURVE TO BE STRAIGHT, FIRM, AND SLOPE SUFFICIENT. SUBMIT THE CURB RAMP TYPE AS SHOWN IN THE PRESENT DRAWING PLANS OR AS INDICATED BY THE DRAWING.
 2. LOCATE CURB RAMP AND PLACE SIDEWALK ON EXISTING SIDEWALK OR ON THE EXISTING SIDEWALK. WHEN FORDS OR OBSTRUCTIONS PREVENT MOVING CURB RAMP AND SIDEWALK AS SHOWN, CONTACT THE ENGINEER AND INDICATE THE LOCATION OF THE OBSTRUCTION BY THE DRAWING.
 3. COORDINATE THE CURB RAMP AND THE SIDEWALK WITH THE EXISTING SIDEWALK AND CURB AT THE END OF THE CURB RAMP WILL FALL WITHIN THE PRESENT SIDEWALK LINE.
 4. SET BACK DISTANCE FROM EXISTING SIDEWALK TO CURB RAMP TO BE 12" MINIMUM.
 5. REFER TO THE PRESENT DRAWING FOR THE LOCATION OF THE CURB RAMP. IN A PRESENT DRAWING PLAN IS NOT PROVIDED, CONTACT THE ENGINEER FOR THE CURB RAMP LOCATION AS INDICATED BY THE DRAWING.
 6. TERMINATE CURB RAMP AT END OF A PRESENT SIDEWALK.
 7. CONSTRUCT CURB RAMP A MINIMUM OF 4" HIGH.
 8. CONSTRUCT THE CURB RAMP OF THE CURB RAMP TYPE.
 9. ALLOWABLE CURB RAMP AND CURB RAMP WILL BE AS SHOWN.
 10. CONSTRUCT THE CURB RAMP A MINIMUM OF 12" HEIGHT AT THE END OF THE CURB RAMP.
 11. CONSTRUCT THE CURB RAMP AT THE END OF THE CURB RAMP A MINIMUM OF 12" AND MAINTAIN A SMOOTH TRANSITION.
 12. CONSTRUCT CURB RAMP A MINIMUM OF 4" WITH A MINIMUM CURVE AS IN ANY DIRECTION. CONTACT ENGINEER FOR MEDIAN ISLAND A MINIMUM OF 4" WITH A MINIMUM CURVE AS IN ANY DIRECTION.
 13. TO USE A MEDIAN ISLAND AS A PRESENT SIDEWALK, MINIMUM CURVE WILL BE A MINIMUM OF 12". CONTACT ENGINEER FOR TO PROVIDE FURTHER DATA ON THE CURB RAMP.
 14. SMALL CHANNEL DRAINAGE SYSTEM THAT ONE SET FURTHER A CURB RAMP AT THE TOP OF A CURB, WILL BE OUT THROUGH LEVEL WITH THE SURFACE STREET.
 15. CURB RAMP WITH RETURN CURVE MAY BE USED WITH EXISTING SIDEWALK WITH THE CURB RAMP. THE MINIMUM CURVE IS PLANTING OR OTHER CURB RAMP WITH THE CURB RAMP IN EXISTING SIDEWALK.
 16. PLACE A 1/2" DEPTH CURB RAMP WITH THE CURB RAMP WITH THE CURB RAMP IN EXISTING SIDEWALK.
 17. PLACE ALL EXISTING CURB RAMP AND EXISTING SIDEWALK AS SHOWN IN THE DRAWING.
 18. CURB RAMP WITH RETURN CURVE, SHOULD BE WITH EXISTING SIDEWALK AS INDICATED BY THE DRAWING. WILL BE INDICATED BY SPECIAL DETAILS. CONTACT THE ENGINEER FOR FURTHER DATA ON THE CURB RAMP FOR A SPECIAL DRAWING.

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

1-12

ENGLISH STANDARD DRAWING FOR
CONCRETE PAVED DITCHES

SHEET 1 OF 1
850.01

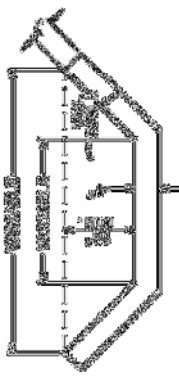
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
CONCRETE PAVED DITCHES

SHEET 1 OF 1
850.01

GENERAL NOTES:
IN THE 4" CASE, PAVED DITCHES, PLACE 2" EXPANSION JOINTS AT 30' INTERVALS AND AT ALL OTHER POINTS WHERE PAVED DITCHES ABUT RIGID OBJECTS. PLACE EXPANSION JOINTS 1" DEEP AT 10' INTERVALS BETWEEN EXPANSION JOINTS.
CONSTRUCT CURB AND CHUTE OF PAVED 6" CONCRETE PAVED DITCHES AS SHOWN OR AS SPECIFIED BY THE ENGINEER.
FOR DITCH PAVED ABOVE OR BELOW CURB, INSTALL BATTING ON BOTH SIDES OF THE CURB FOR 2 FEET FROM EACH END OF AN EXPANSION JOINT BY THE ENGINEER.



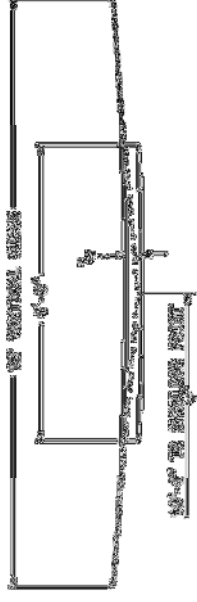
BASE DITCH OR
DRAIN OUTLET DITCH



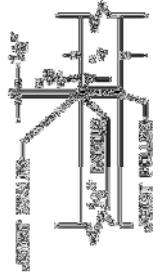
CURB AND DRAIN DITCH



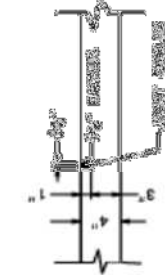
STONE DITCH



12" V.C. ROADWAY DITCH



SHOWING GUTTER JOINT SHOWING EXPANSION JOINT

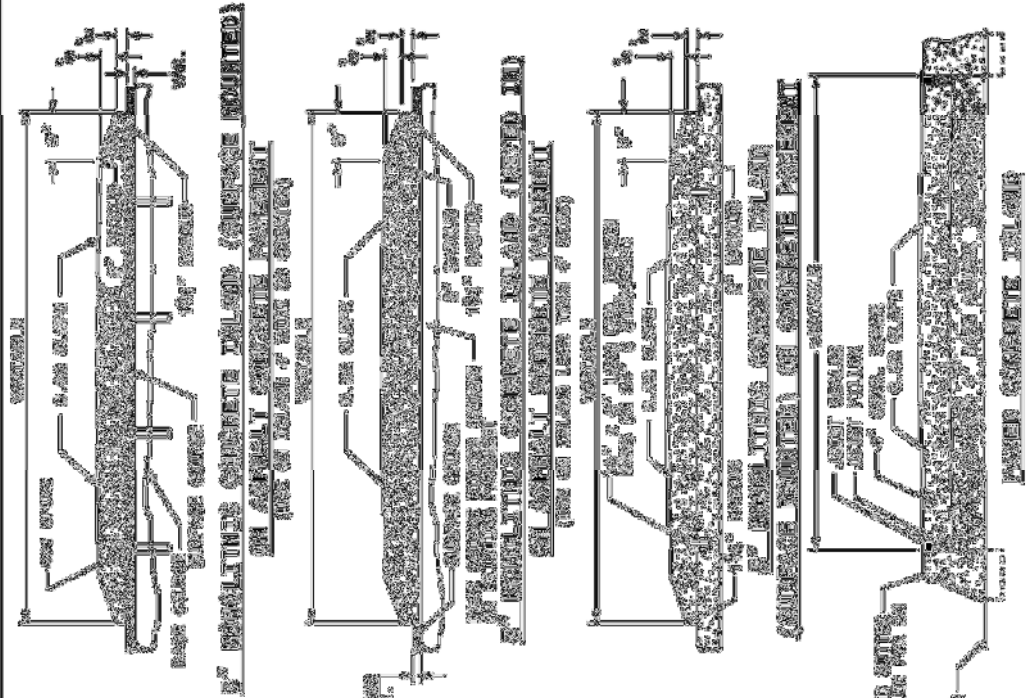


SHOWING GUTTER JOINT SHOWING EXPANSION JOINT



PART LONGITUDINAL SECTION OF PAVED DITCH
SHOWING 1'-0" CURB AND CHUTE WALL REQUIRED AT EACH END

WALL CURB AND CHUTE SHALL BE CONSTRUCTED TO A MINIMUM HEIGHT OF 1'-0" FROM THE FINISHED DITCH BOTTOM. THE CURB AND CHUTE SHALL BE CONSTRUCTED TO A MINIMUM HEIGHT OF 1'-0" FROM THE FINISHED DITCH BOTTOM. THE CURB AND CHUTE SHALL BE CONSTRUCTED TO A MINIMUM HEIGHT OF 1'-0" FROM THE FINISHED DITCH BOTTOM.



PARTIAL LONGITUDINAL SECTIONS OF PAVED ISLANDS

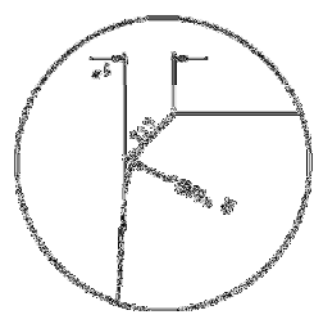
NOTE:
WHEN MONOLITHIC CONCRETE ISLAND IS ON TOP OF SURFACE COURSE, DRIVE 408 SPINER INTO SURFACE USING REINFORCING CONCRETE ISLAND. STAGGER SPINER 20" OF DISTANCE EACH WAY.
IN THE CONCRETE PAVEMENT (ISLAND) AND MONOLITHIC ISLAND (MONOLITHIC) PLACE 1/4" EXPANSION JOINTS AT 12' INTERVALS AND GROOVED JOINTS 1/2" DEEP AT 12' INTERVALS BETWEEN EXPANSION JOINTS.
LINE UP THE JOINTS IN THE CONCRETE PAVEMENT (ISLAND) WITH THE JOINTS IN THE CURB OR CURB AND GUTTER. FILL AND SEAL THE TOP 1/2" OF THE EXPANSION JOINTS AND THE ENTIRE DEPTH OF GROOVED JOINTS WITH JOINT SEALER.
FOR JOINTS IN THE CURB AND/OR CURB AND GUTTER, SEE STANDARD NO. 846.01

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

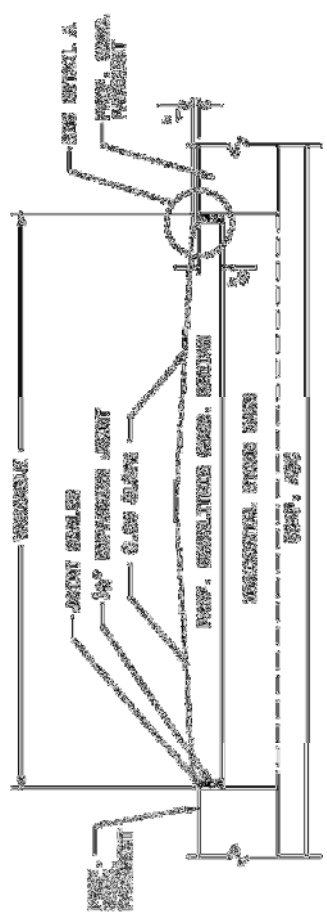
ENGLISH STANDARD DRAWING FOR
 CONCRETE MOUNTABLE MEDIAN
 FOR USE WITH RIGID OR FLEXIBLE PAVEMENT

1-121
 852.02

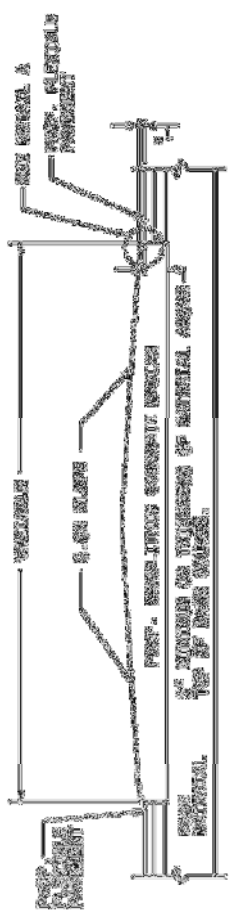
GENERAL NOTES
 PLACE 1/2" EXPANDED JOISTS AT 24" INTERVALS AND AT ALL CORNER POINTS WHERE PAVEMENT MEETS WITH RIGID OBJECTS. PLACE EXPANDED JOISTS 1/2" DEEP AT 18" INTERVALS BETWEEN EXPANDED JOISTS. FILL THE TOP 1/2" OF EXPANDED JOISTS FOR 1/2" COVERED JOINTS WITH JOINT SAND.



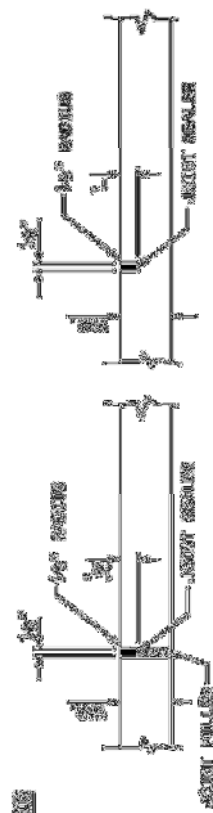
DETAIL "A"



TRANSVERSE SECTION FOR CONCRETE PAVEMENT



TRANSVERSE SECTION FOR FLEXIBLE PAVEMENT

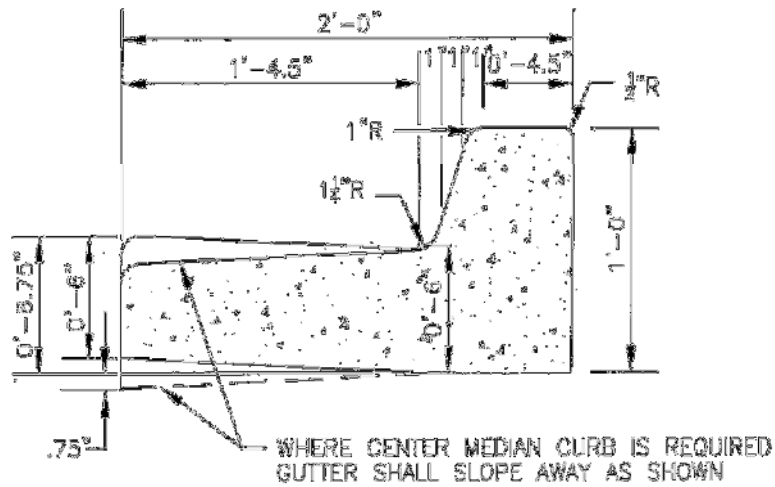


LONGITUDINAL SECTIONS OF CONCRETE MEDIAN


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

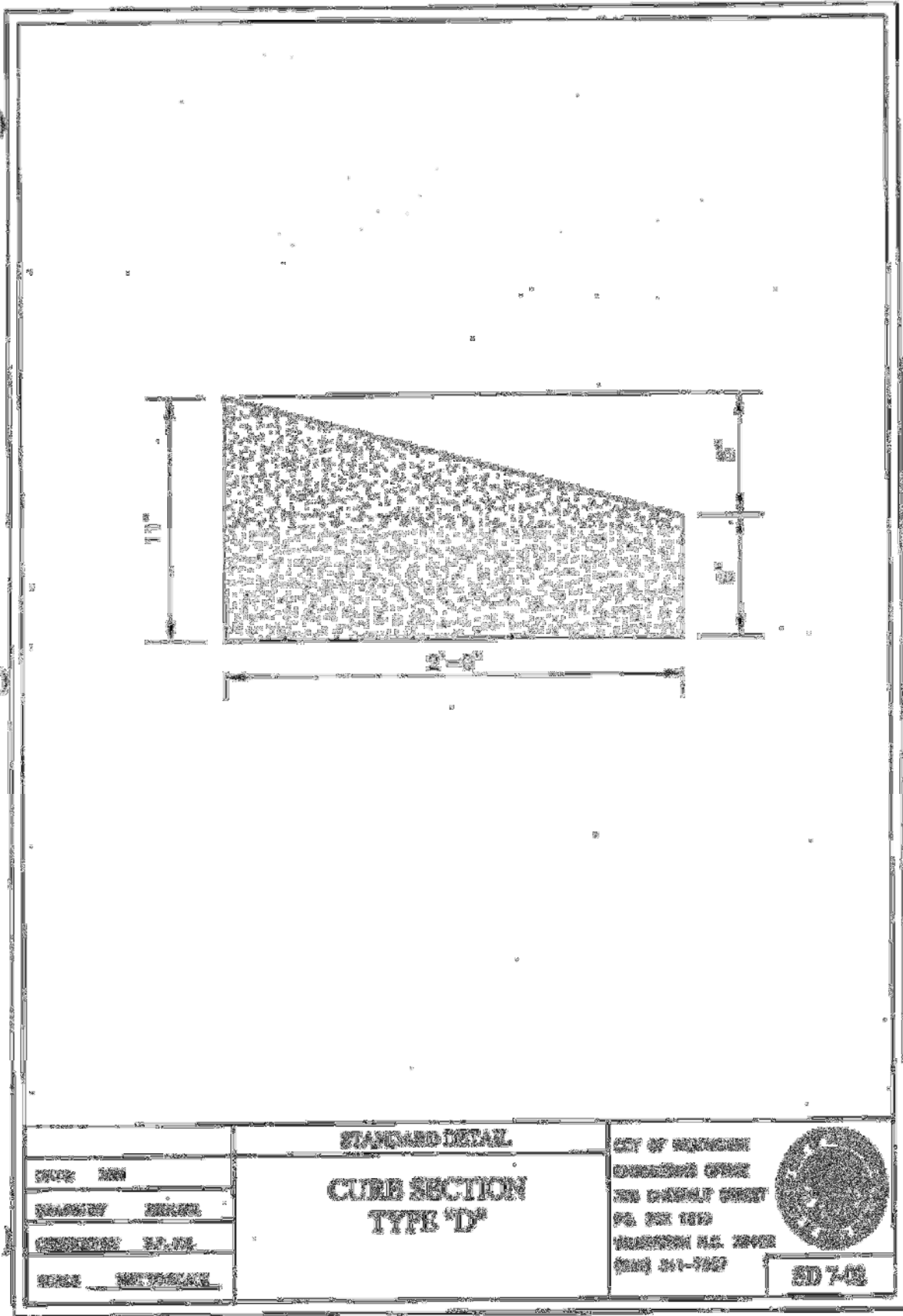
ENGLISH STANDARD DRAWING FOR
 CONCRETE MOUNTABLE MEDIAN
 FOR USE WITH RIGID OR FLEXIBLE PAVEMENT

1-121
 852.02



STANDARD CURB SECTION TYPE "A"

STANDARD DETAIL		CITY OF WILMINGTON ENGINEERING OFFICE 305 CHESTNUT STREET P.O. BOX 1810 WILMINGTON N.C. 28402 (910) 341-7807	
DATE:	2001		
DRAWN BY:	JSR/CMR		
CHECKED BY:	B.P., P.E.		
SCALE:	NOT TO SCALE	SD 7-01	



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
Brunswick and New Hanover County Various Concrete Items 2013-2014
WBS 3.101010, 3.101012, 3.201012; 3.106511, 3.106512, 3.206511 & 3.206512
SUMMARY OF QUANTITIES

ITEM	SECT	ITEM NUMBER	DESCRIPTION	QUANTITY	UNIT
10	SP	0000820000-N	Night Work	10	Day
20	840	2365000000-N	Frame with Two Grates, STD 840.22	5	EA
30	840	2366000000-N	Frame with Two Grates, STD 840.24	5	EA
40	840	2472000000-N	Concrete Apron for Drop Inlets, STD 840.18	10	EA
50	846	2535000000-E	8"x18" Concrete Curb	100	LF
60	846	2538000000-E	2'-0" Concrete Curb and Gutter	100	LF
70	846	2542000000-E	1'-6" Concrete Curb and Gutter	50	LF
80	846	2549000000-E	2'-6" Concrete Curb and Gutter	500	LF
90	846	2556000000-E	Shoulder Berm Gutter	25	LF
100	848	2591000000-E	4" Concrete Sidewalk	300	SY
110	SP	2600000000-E	Retrofit Existing Curb Ramps	10	EA
120	848	2605000000-E	Concrete Curb Ramp	12	EA
130	848	2612000000-E	6" Concrete Driveway	300	SY
140	850	2619000000-E	4" Concrete Paved Ditch	50	SY
150	852	2647000000-E	5" Monolithic Concrete Island (Surface Mounted)	150	SY
160	852	2655000000-E	5" Monolithic Concrete Island (Keyed In)	150	SY
170	SP	2738000000-E	Removal of Sidewalk	150	SY

180	SP	2738000000-E	Removal of Driveway	200	SY
190	SP	2738000000-E	Removal of Concrete Paved Ditch	10	SY
200	SP	2738000000-E	Removal of Monolithic Concrete Island	100	SY
210	SP	2752000000-E	Removal of Existing Curb and Gutter	650	LF
220	SP	4609000000-N	Flashing Arrow Panels "Type C"	20	Day
230	1413	5271000000-N	Portable Lighting	200	HR

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION**

CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

_____ Full name of Corporation

_____ Address as prequalified

Attest _____
Secretary/Assistant Secretary
Select appropriate title

By _____
President/Vice President/Assistant Vice President
Select appropriate title

_____ Print or type Signer's name

_____ Print or type Signer's name

CORPORATE SEAL

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the _____ day of _____, 20_____

NOTARY SEAL

Signature of Notary Public
Of _____ County
State of _____
My Commission Expires _____

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION
PARTNERSHIP**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

_____ Full Name of Partnership

_____ Address as Prequalified

_____ By _____
Signature of Witness Signature of Partner

_____ Print or type Signer's name _____ Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the
day of _____ 20____.

NOTARY SEAL

_____ Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION
LIMITED LIABILITY COMPANY**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

_____ Full Name of Firm

_____ Address as Prequalified

_____ Signature of Manager _____ Individually
Signature of Witness

_____ Print or type Signer's name _____ Print or type Signer's Name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the _____ day of _____ 20__.

NOTARY SEAL

_____ Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION
JOINT VENTURE (2) or (3)**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Instructions: **2 Joint Venturers** Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1) _____
Name of Joint Venture

(2) _____
Name of Contractor

_____ Address as prequalified

Signature of Witness or Attest	By	Signature of Contractor
Print or type Signer's name		Print or type Signer's name

If Corporation, affix Corporate Seal and

(3) _____
Name of Contractor

_____ Address as prequalified

Signature of Witness or Attest	By	Signature of Contractor
Print or type Signer's name		Print or type Signer's name

If Corporation, affix Corporate Seal and

(4) _____
Name of Contractor (for 3 Joint Venture only)

_____ Address as prequalified

Signature of Witness or Attest	By	Signature of Contractor
Print or type Signer's name		Print or type Signer's name

If Corporation, affix Corporate Seal

NOTARY SEAL
Affidavit must be notarized for Line (2)
Subscribed and sworn to before me this
_____ day of _____ 20____

Signature of Notary Public
of _____ County
State of _____
My Commission Expires: _____

NOTARY SEAL
Affidavit must be notarized for Line (3)
Subscribed and sworn to before me this
_____ day of _____ 20____

Signature of Notary Public
of _____ County
State of _____
My Commission Expires: _____

NOTARY SEAL
Affidavit must be notarized for Line (4)
Subscribed and sworn to before me this
_____ day of _____ 20____

Signature of Notary Public
of _____ County
State of _____
My Commission Expires: _____

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION
INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Name of Contractor _____
Individual name

Trading and doing business as _____
Full name of Firm

Address as Prequalified

Signature of Witness

Print or type Signer's name

Signature of Contractor, Individually

Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the _____
_____ day of _____ 20__.

NOTARY SEAL

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION**

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Name of Contractor _____
Print or type Individual name

Address as Prequalified

Signature of Contractor, Individually

Print or type Signer's Name

Signature of Witness

Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the _____
_____ day of _____ 20__.

NOTARY SEAL

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

DEBARMENT CERTIFICATION

Conditions for certification:

1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation that is file with the Department, or has become erroneous because of changed circumstances.
2. The terms *covered transaction*, *debarred*, *suspended*, *ineligible*, *lower tier covered transaction*, *participant*, *person*, *primary covered transaction*, *principal*, *proposal*, and *voluntarily excluded*, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR 1273)* provided by the Department, without subsequent modification, in all lower tier covered transactions.
5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

DEBARMENT CERTIFICATION

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.

**North Carolina Department of Transportation
 BID FORM**

**WBS Element: 3.101011, 3.101012, & 3.201011
 3.106511, 3.106512, 3.206511 & 3.206512**

Contract Number:

Project Description: Construction of Various Concrete Items, Various Routes in Brunswick and New Hanover County

ITEM	DESC NO.	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
10	0000820000-N	SP	Night Work	10	Day		
20	2365000000-N	840	Frame with Two Grates, STD 840.22	5	EA		
30	2366000000-N	840	Frame with Two Grates, STD 840.24	5	EA		
40	2472000000-N	840	Concrete Apron for Drop Inlets, STD 840.18	10	EA		
50	2535000000-E	846	8"x18" Concrete Curb	100	LF		
60	2538000000-E	846	2'-0" Concrete Curb and Gutter	100	LF		
70	2542000000-E	846	1'-6" Concrete Curb and Gutter	50	LF		
80	2549000000-E	846	2'-6" Concrete Curb and Gutter	500	LF		
90	2556000000-E	846	Shoulder Berm Gutter	25	LF		
100	2591000000-E	848	4" Concrete Sidewalk	300	SY		
110	2600000000-E	SP	Retrofit Existing Curb Ramps	10	EA		
120	2605000000-E	848	Concrete Curb Ramp	12	EA		
130	2612000000-E	848	6" Concrete Driveway	300	SY		
140	2619000000-E	850	4" Concrete Paved Ditch	50	SY		
150	2647000000-E	852	5" Monolithic Concrete Island (Surface Mounted)	150	SY		
160	2655000000-E	852	5" Monolithic Concrete Island (Keyed In)	150	SY		
170	2738000000-E	SP	Removal of Sidewalk	150	SY		
180	2738000000-E	SP	Removal of Driveway	200	SY		
190	2738000000-E	SP	Removal of Concrete Paved Ditch	10	SY		
200	2738000000-E	SP	Removal of Monolithic Concrete Island	100	SY		
210	2752000000-E	SP	Removal of Existing Curb and Gutter	650	LF		
220	4609000000-N	SP	Flashing Arrow Panels "Type C"	20	Day		
230	5271000000-N	1413	Portable Lighting	200	HR		
TOTAL BID FOR PROJECT:							

CONTRACTOR _____

ADDRESS _____

Federal Identification Number _____

Contractors License Number _____

Authorized Agent _____

Title _____

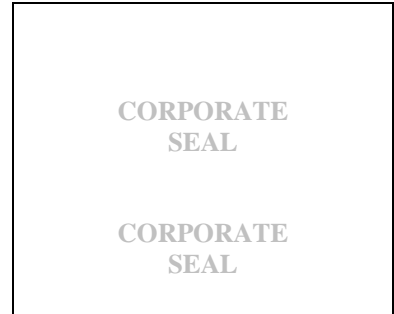
Signature _____

Date _____

Witness _____

Title _____

Signature _____ Date _____



**THIS SECTION TO BE COMPLETED BY NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION**

This bid has been reviewed in accordance with Article 103-1 of the Standard Specifications for Roads and Structures 2012.

Reviewed by _____ *Date* _____

Accepted by NCDOT _____ *Date* _____