

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION



DIVISION 10 DISTRICT 2

CONTRACT PROPOSAL

WBS ELEMENT: WBS#34601.3.11 COUNTY Mecklenburg

LOCATION: Metrolina Regional Transportation Center, Charlotte

TYPE OF WORK: Replacement of Lightning and Surge Protection Systems

BID OPENING April 18th, 2012 at 10:30 a.m.

PROJECT No. TIP# R-4049J, F.A. # STP-000S(202)

DATE of AVAILABILITY May 9, 2012

COMPLETION DATE August 24, 2012

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. 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

*****DO NOT SEPARATE THE BID SHEET FROM THE PROPOSAL!*****

RETURN BIDS TO:

Ms. Ann Lorscheider, P.E.
NC Department of Transportation - MRTMC
2327 Tipton Dr.
Charlotte, NC 28206

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 may 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 thereto 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 of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number
 - e. Contractor's License Number
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. A bid bond or deposit is not required when submitting a bid for this project.
12. **THE PROPOSAL WITH THE BID SHEET STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED AT THE MRTMC AT: 2327 Tipton Dr Charlotte, NC 28206 BY 10:30 A.M. ON Wednesday April 18th , 2012.**
13. If delivered by mail, the sealed envelope shall be addressed as follows:

**Ms. Ann Lorscheider, P.E., P.T.O.E.
NC Department of Transportation
2327 Tipton Dr
Charlotte, NC 28206**

14. **The sealed bid must display the following statement on the bottom left-hand corner of the sealed envelope:
QUOTATION FOR WORK ORDER NUMBERS WBS# 34601.3.11 TO BE OPENED
April 18th, 2012 AT 10:30 P.M.**

The award of the contract, if it is awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (excluding 102-2 and 102-10) of the 2012 Standard Specifications for Roads and Structures. 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.

DIVISION CONTRACT

Standard Provisions

GENERAL

This contract is for the **Replacement of the Lightning and grounding system and the Uninterruptible Power Supply at the Metrolina Regional Transportation Management Center in Charlotte, NC in Mecklenburg.**

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 2012 Standard Specification for Roads and Structures, the North Carolina Department of Transportation Roadway Standards Drawings, 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.

AUTHORITY OF THE ENGINEER

The Engineer for this project shall be the Division Engineer, Division 10, 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.

The Contractor will be required to obtain written approval from the Engineer for any subcontract work performed on this project prior to the subcontracted work being performed in accordance with Article 108-6 of the NC DOT Standard Specifications for Roads and Structures.

MATERIALS AND TESTING

The Engineer reserves the right to perform all sampling and testing in accordance with Section 106 of the Standard Specifications and the Department's "Materials and Tests Manual." However the Engineer may reduce the frequency of sampling and testing where he deems it appropriate for the project under construction.

All steel products which are permanently incorporated into this project shall be domestically produced. The Contractor shall furnish a notarized certification certifying that steel products conform to this requirement.

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the Standard Specifications. Material which is not properly certified will not be accepted.

Delivery tickets for all material paid by weight, shall be furnished in accordance with Section 106-7 of the Standard Specifications and shall include the following information:

1. NCDOT Work Order Number
2. Date
3. Time issued
4. Type of material
5. Gross weight
6. Tare weight
7. Net weight of material
8. Plant location
9. Truck number
10. Contractor's name
11. Public weighmaster's stamp or number
12. Public weighmaster's signature or initials in ink
13. Job mix formula number

BASIS OF PAYMENT AND CLAIMS

The quantity of unit or lump sum prices and payment will be full compensation for all work, including, but not limited to supervision, labor, transportation, fuels, lubricants, repair parts, equipment, machinery and tools, materials necessary for the prosecution and completion of the work. The quantities contained herein are estimated only and the quantity to be paid for shall be the actual quantities which were used on the project.

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. All invoices for payment shall be completely and legibly filled out with all appropriate information supplied and shall be signed by an authorized representative of the Contractor.

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. Unless otherwise specified, all contract pay items will be produced, placed and paid in accordance with the Standard Specifications. In no case will the total amount paid to the contractor exceed the total contract quote by more than ten percent without prior written request from the Division Engineer to Fiscal Section.

CLAIMS FOR ADDITIONAL COMPENSATION OR EXTENSION OF TIME

The Contractor's attention is directed to the fact that Article 104-5 pertaining to revised contract unit prices will not apply to this contract.

Any claims for additional compensation and/or extension of the completion date shall be submitted to the Division Engineer with detailed justification with the final invoice. The failure to submit the claim(s) with the final invoice may be a bar to recovery.

Please be advised that General Statute 136-29 of the Road and Highway Laws of North Carolina provides that a contractor who has not received the amount he claims he is due under the contract may submit a written verified claim to the State Highway Administrator within sixty (60) days after receipt of the final statement. The mailing address for the State Highway Administrator is: N. C. Department of Transportation, 1536 Mail Service Center, Raleigh, NC 27699-1536.

CONTRACTOR CLAIM SUBMITTAL FORM:

(9-16-08)

SP1G140

If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted on the *Contractor Claim Submittal Form (CCSF)* available through the Construction Unit or http://ncdot.org/doh/operations/dp_chief_eng/constructionunit/formsmanuals/.

VENDOR NUMBERS

Attention Contractors

Effective immediately, NCDOT will begin tracking the work of **all** subcontractors including DBE/MB/WB subcontractors. When the bids are prepared, **all** subcontractors, their vendor number, and other information must be shown on the “Listing of Subcontractors” sheet found in the bid package. Most subcontractors have already been assigned a vendor number by the Raleigh office. If the subcontractor does not have an NCDOT vendor number, he must complete a W-9 form and may submit it to Mr. Ritchie Hearne, P.E. Project Manager; 716 W. Main St. Albemarle, NC 28001. A vendor number will then be issued.

If you have questions regarding vendor numbers, you may contact Ms. Cindy Iorlano at (704) 982-0101.

If you have questions regarding this process, please call Mr. Ritchie Hearne, P.E. at (704) 983-4400.

SUPERVISION BY CONTRACTOR

At all times during the life of the project the Contractor shall provide one permanent employee who shall have the authority and capability for overall responsibility of the project and who shall be personally available at the work site within 24 hours notice. Such employee shall be fully authorized to conduct all business with the subcontractors, to negotiate and execute all supplemental agreements, and to execute the orders or directions of the Engineer.

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract, and plans; and receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

The Contractor may, at his option, designate one employee to meet the requirements of both positions. However, whenever the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

CONTRACT PAYMENT AND PERFORMANCE BOND

The successful bidder will be required to execute both a payment bond and a performance bond for a contract of \$300,000 or more. The successful bidder, within 14 calendar days after the notice of award is received by him, shall provide the Department with a contract payment bond and a contract performance bond each in an amount equal to 100 percent of the amount of the contract. All bonds shall be on the State bond forms which will can be located @ **WWW.NCDOT.org**. The corporate surety furnishing the bonds shall be authorized to do business in the State. The successful bidder's failure to file acceptable bonds within 14 calendar days after the notice of award is received by him shall be just cause for rescinding the award of the contract.

NOTIFICATION OF OPERATIONS

The Contractor shall notify the Engineer 48 hours 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.

GIFTS FROM VENDORS AND CONTRACTORS

(12-15-09)

RG 152

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.

CERTIFICATION FOR FEDERAL-AID CONTRACTS

(3-21-90)

SP1 G85

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, *Disclosure Form to Report Lobbying*, in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by *Section 1352, Title 31, U.S. Code*. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

U.S. DEPARTMENT OF TRANSPORTATION HOTLINE

(11-22-94)

SP1 G100

To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free *hotline* Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the *hotline* to report such activities.

The *hotline* is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

REVISION TO FHWA-1273 CONCERNING PERSONAL INFORMATION ON PAYROLL SUBMISSIONS:

(1-20-09) (Rev. 1-17-12)

SP1 G59

Revise the *Standard Special Provision FHWA-1273 Required Contract Provisions Federal-Aid Construction Contracts* as follows:

The first sentence of Section V, Paragraph 2b is replaced with the following:

The payroll records shall contain the name, and the last four digits of the social security number of each such employee, his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid.

CONTRACTOR'S LICENSE REQUIREMENTS

(7-1-95)

SP1 G88

If the successful bidder does not hold the proper license to perform any plumbing, heating, air conditioning, or electrical work in this contract, he will be required to sublet such work to a contractor properly licensed in accordance with *Article 2 of Chapter 87 of the General Statutes* (licensing of heating, plumbing, and air conditioning contractors) and *Article 4 of Chapter 87 of the General Statutes* (licensing of electrical contractors).

MAINTENANCE OF THE PROJECT

(11-20-07) (Rev. 1-17-12)

104-10

SP1 G125

Revise the *2012 Standard Specifications* as follows:

Page 1-35, Article 104-10 Maintenance of the Project, line 25, add the following after the first sentence of the first paragraph:

All guardrail/guiderail within the project limits shall be included in this maintenance.

Page 1-35, Article 104-10 Maintenance of the Project, line 30, add the following as the last sentence of the first paragraph:

The Contractor shall perform weekly inspections of guardrail and guiderail and shall report damages to the Engineer on the same day of the weekly inspection. *Where damaged guardrail or guiderail is repaired or replaced as a result of maintaining the project in accordance with this article*, such repair or replacement shall be performed within 7 consecutive calendar days of such inspection report.

Page 1-35, Article 104-10 Maintenance of the Project, lines 42-44, replace the last sentence of the last paragraph with the following:

The Contractor will not be directly compensated for any maintenance operations necessary, except for maintenance of guardrail/guiderail, as this work will be considered incidental to the work covered by

the various contract items. The provisions of Article 104-7, Extra Work, and Article 104-8, Compensation and Record Keeping will apply to authorized maintenance of guardrail/guiderail. Performance of weekly inspections of guardrail/guiderail, and the damage reports required as described above, will be considered to be an incidental part of the work being paid for by the various contract items.

BID DOCUMENTATION

(1-1-02) (Rev. 10-19-10)

SP1 G142

General

The successful Bidder (Contractor) shall submit the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation used to prepare the bid for this contract to the Department within 10 days after receipt of notice of award of contract. Such documentation shall be placed in escrow with a banking institution or other bonded document storage facility selected by the Department.

The Department will not execute the contract until the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation has been received by the Department.

Terms

Bid Documentation – Bid Documentation shall mean all written information, working papers, computer printouts, electronic media, charts, and all other data compilations which contain or reflect information, data, and calculations used by the Bidder in the preparation of the bid. The term *bid documentation* includes, but is not limited to, contractor equipment rates, contractor overhead rates, labor rates, efficiency or productivity factors, arithmetical calculations, and quotations from subcontractors and material suppliers to the extent that such rates and quotations were used by the Bidder in formulating and determining the bid. The term *bid documentation* also includes any manuals, which are standard to the industry used by the Bidder in determining the bid. Such manuals may be included in the bid documentation by reference. Such reference shall include the name and date of the publication and the publisher. *Bid Documentation* does not include bid documents provided by the Department for use by the Bidder in bidding on this project.

Contractor's Representative – Officer of the Contractor's company; if not an officer, the Contractor shall supply a letter signed and notarized by an officer of the Contractor's company, granting permission for the representative to sign the escrow agreement on behalf of the Contractor.

Escrow Agent – Officer of the select banking institution or other bonded document storage facility authorized to receive and release bid documentation.

Escrow Agreement Information

A copy of the Escrow Agreement will be mailed to the Bidder with the notice of award for informational purposes. The Bidder and Department will sign the actual Escrow Agreement at the time the bid documentation is delivered to the escrow agent.

Failure to Provide Bid Documentation

The Bidder's failure to provide the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation within 10 days after the notice of award is received by him may be just cause for rescinding the award of the contract and may result in the removal of the Bidder from the Department's list of qualified bidders for a period of up to 180 days. Award may then be made to the next lowest responsible bidder or the work may be readvertised and constructed under the contract or otherwise, as the Department may decide.

Submittal of Bid Documentation

- (A) Delivery - A representative of the Bidder shall deliver the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation to the Department, in a container suitable for sealing, within 10 days after the notice of award is received by him. Bid documentation will be considered a certified copy if the Bidder includes a letter to the Department from a chief officer of the company stating that the enclosed documentation is an *EXACT* copy of the original documentation. The letter shall be signed by a chief officer of the company, have the person's name and title typed below the signature, and the signature shall be notarized at the bottom of the letter.
- (B) Packaging – The container shall be no larger than 15.5 inches in length by 12 inches wide by 11 inches high and shall be water resistant. The container shall be clearly marked on the face and the back of the container with the following information: Bid Documentation, Bidder's Name, Bidder's Address, Date of Escrow Submittal, Contract Number, TIP Number if applicable, and County.

Affidavit

In addition to the bid documentation, an affidavit signed under oath by an individual authorized by the Bidder to execute the bid shall be included. The affidavit shall list each bid document with sufficient specificity so a comparison may be made between the list and the bid documentation to ensure that all of the bid documentation listed in the affidavit has been enclosed. The affidavit shall attest that the affiant has personally examined the bid documentation, that the affidavit lists all of the documents used by the Bidder to determine the bid for this project, and that all such bid documentation has been included.

Verification

Upon delivery of the bid documentation, the Department's Contract Officer and the Bidder's representative will verify the accuracy and completeness of the bid documentation compared to the affidavit. Should a discrepancy exist, the Bidder's representative shall immediately furnish the Department's Contract Officer with any other needed bid documentation. The Department's Contract Officer upon determining that the bid documentation is complete will, in the presence of the Bidder's representative, immediately place the complete bid documentation and affidavit in the container and seal it. Both parties will deliver the sealed container to the escrow agent for placement in a safety deposit box, vault, or other secure accommodation.

Confidentiality of Bid Documentation

The bid documentation and affidavit in escrow are, and will remain, the property of the Bidder. The Department has no interest in, or right to, the bid documentation and affidavit other than to verify the contents and legibility of the bid documentation unless the Contractor gives written notice of intent to file a claim, files a written claim, files a written and verified claim, or initiates litigation against the Department. In the event of such written notice of intent to file a claim, filing of a written claim, filing a written and verified claim, or initiation of litigation against the Department, or receipt of a letter from the Contractor authorizing release, the bid documentation and affidavit may become the property of the Department for use in considering any claim or in litigation as the Department may deem appropriate.

Any portion or portions of the bid documentation designated by the Bidder as a *trade secret* at the time the bid documentation is delivered to the Department's Contract Officer shall be protected from disclosure as provided by *G.S. 132-1.2*.

Duration and Use

The bid documentation and affidavit shall remain in escrow until 60 calendar days from the time the Contractor receives the final estimate; or until such time as the Contractor:

- (A) Gives written notice of intent to file a claim,
- (B) Files a written claim,
- (C) Files a written and verified claim,
- (D) Initiates litigation against the Department related to the contract; or
- (E) Authorizes in writing its release.

Upon the giving of written notice of intent to file a claim, filing a written claim, filing a written and verified claim, or the initiation of litigation by the Contractor against the Department, or receipt of a letter from the Contractor authorizing release, the Department may obtain the release and custody of the bid documentation.

The Bidder certifies and agrees that the sealed container placed in escrow contains all of the bid documentation used to determine the bid and that no other bid documentation shall be relevant or material in litigation over claims brought by the Contractor arising out of this contract.

Release of Bid Documentation to the Contractor

If the bid documentation remains in escrow 60 calendar days after the time the Contractor receives the final estimate and the Contractor has not filed a written claim, filed a written and verified claim, or has not initiated litigation against the Department related to the contract, the Department shall instruct the escrow agent to release the sealed container to the Contractor.

The Contractor will be notified by certified letter from the escrow agent that the bid documentation will be released to the Contractor. The Contractor or his representative shall retrieve the bid documentation from the escrow agent within 30 days of the receipt of the certified letter. If the Contractor does not receive the documents within 30 days of the receipt of the certified letter, the Department will contact the Contractor to determine final disposition of the bid documentation.

Payment

The cost of the escrow will be borne by the Department. There will be no separate payment for all costs of compilation of the data, container, or verification of the bid documentation. Payment at the various contract unit or lump sum prices in the contract will be full compensation for all such costs.

SUBLETTING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of this contract or any portion thereof; or his right, title, or interest therein; without written consent of the Engineer. Subletting of this contract or any portion of the contract shall conform to the requirements of Article of 108-6 of the Standard Specifications.

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.

EXTENSION OF CONTRACT TIME

Failure on the part of the Contractor to furnish bonds or certifications, or to satisfy preliminary requirements necessary to issue the purchase order will not constitute grounds for extension of the contract time. If the Contractor has fulfilled all preliminary requirements for the issuance of a purchase order, and the purchase order authorization is not available by the date of availability, the Contractor shall be granted an extension equal to the number of calendar days the purchase order authorization is delayed after the date of availability.

EMPLOYMENT

(11-15-11) (Rev. 1-17-12)

108, 102

SP1 G184

Revise the *2012 Standard Specifications* as follows:

Page 1-20, Subarticle 102-15(O), delete and replace with the following:

(O) Failure to restrict a former Department employee as prohibited by Article 108-5.

Page 1-65, Article 108-5 Character of Workmen, Methods, and Equipment, line 32, delete all of line 32, the first sentence of the second paragraph and the first word of the second sentence of the second paragraph.

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. Utilities damaged by the Contractor due to his negligence will be repaired at the Contractor's expense.

FINAL INVOICE

The Contractor shall submit all information to the NCDOT Engineer that is needed for payment through the NCDOT Purchase Order process.

DIVISION CONTRACT

Special Provisions

SCOPE OF WORK

This Contract consists of Replacement of grounding and surge protection system including the Uninterruptable Power Supply at the Metrolina Regional Transportation Management Facility including the radio tower and hut, electrical panels, generator en=unciator lines, etc.. in Mecklenburg and Cabarrus County.

CONTRACT TIME AND LIQUIDATED DAMAGES

The date of availability for this project is May 9th, 2012. If the Contractor has not received written authorization by this date, he shall contact the Department representative for verbal authorization. Any ensuing delay in issuance of the purchase order or division contract number shall not constitute a valid reason for extending the completion date.

The Contractor may begin work prior to the date of availability upon approval of the Engineer or his duly authorized representative. If such approval is given, and the Contractor begins work prior to the date of availability, the Department of Transportation will assume no responsibility for any delays caused prior to this date by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date.

No work will be permitted and no authorization will be issued until all required bonds and prerequisite conditions and certifications have been satisfied.

The completion date for this project is August 24, 2012. No extensions will be authorized except as authorized by Article 108-10 of the Standard Specifications.

Liquidated damages for this contract are Five Hundred Dollars (\$500.00) per calendar day.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES

The Contractor shall not shut off any electrical service or system on or during peak hour highway traffic which is 6am thru 9am and 4pm thru 7pm Monday thru Friday.

The Contractor shall not shut off any electrical service or system on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND SPECIAL EVENT TIME RESTRICTIONS

1. For any unexpected occurrence that create unusually high roadway traffic volumes, as directed by the Engineer, which require full use of the center's resources, such as a major Interstate closure due to an accident.
2. For New Year's, between the hours of 8:00 P.M. December 31st to 6:00 A.M. January 2nd. If New Year's Day is on Friday, Saturday, Sunday or Monday then until 6:00 A.M. the following Tuesday.

3. For Memorial Day, between the hours of 6:00 A.M. Thursday to 9:00 P.M. Tuesday.
4. For Independence day, between 6:00 AM July 3rd thru 9:00 AM July 5th.
5. For Labor Day, between the hours of 8:00 P.M. Friday and 6:00 A.M. Tuesday.
6. For Thanksgiving Day, between the hours of 8:00 P.M. Tuesday to 6:00 A.M. Monday.
7. For Christmas, between the hours of 8:00 P.M. the Friday before the week of Christmas Day and 6:00 A.M. the following Tuesday after the week of Christmas.
8. For NASCAR and NHRA events at Charlotte Motor Speedway, between the hours of 6:00 a.m. the Wednesday before the event and 8:00 p.m. the Monday after the event.
9. For any event at Bank of America Stadium in Charlotte, from 3 hours before the event until 3 hours after the event.
10. During the Democratic National Convention, from Midnight August 27th until Midnight September 7th.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that power disruptions or disruptions to systems will not be required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to disrupt electrical services according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to restore power and have all systems restored to operation according to the time restrictions stated above.

The liquidated damages are **One Thousand Five Hundred Dollars (\$ 1500.00)** per hour.

NOTE: Contractors and all NCDOT personnel should be aware that any reference in this contract to the 2006 “Standard Specifications for Roads and Structures” shall be superseded by the January 2012 “Standard Specifications for Roads and Structures” along with the 2012 “Roadway Standard Drawings”.

**PROJECT SPECIAL PROVISIONS
REPLACEMENT OF
METROLINA REGIONAL
TRANSPORTATION MANAGEMENT CENTER
LIGHTNING AND SURGE PROTECTION SYSTEMS**

Mecklenburg County



Prepared for:

North Carolina Department of Transportation
Highway Division 10

Prepared by:

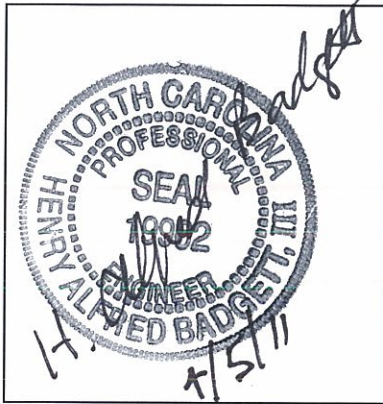
ATKINS

5200 Seventy-Seven Center Drive, Suite 500
Charlotte, NC 28217
(704) 522-7275
NC BEES #F-0326

April 5, 2011



H. Alfred Padgett



Project Special Provisions
Based On
NCDOT ITS Project Special Provisions
Version 06.7

Prepared by:
ATKINS
 5200 Seventy-Seven Center Drive
 Suite 500
 Charlotte, NC 28217
 NC BEES #F-0326

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1. GENERAL REQUIREMENTS

1.1 DESCRIPTION

(A) Summary of Work

This project provides Metrolina Regional Transportation Management Center (MRTMC) with a new grounding and surge protection system.

The project provides:

- Radio tower grounding system upgrade,
- Primary and secondary surge protection on electric panels,
- Surge protection for fire main backflow preventer and security gate assembly,
- Surge protection for the RS-485 radio controls and audio circuits,
- Surge protection for T-1 and RS-232 dial-up modem communications,
- Surge protection for the generator enunciator lines,
- New power supply from the building to the radio hut, and
- Miscellaneous wiring and cabling improvements.

(B) Specifications and Special Provisions

Conform to these Project Special Provisions and the North Carolina Department of Transportation (NCDOT) *Standard Specifications for Roads and Structures*, dated July 2006, herein after referred to as the “*Standard Specifications*”, the NCDOT *Roadway Standard Drawings*, dated 2006 and the Plans. Conform to the regulations and codes described in Section 1700 of the *Standard Specifications*.

In the event of conflict between these Project Special Provisions and the *Standard Specifications*, these Project Special Provisions shall govern.

(C) Other Codes and Standards

All communications and electrical conduit system materials must conform to the latest version of the applicable standards of the National Electric Manufacturer's Association (NEMA), the Underwriters' Laboratories, Inc. (UL), the Electronic Industries Association (EIA), the National Electric Code (NEC), the International Municipal Signal Association (IMSA), and the National Electrical Safety Code (NESC). All materials must conform to the standards of the American Society for Testing and Materials (ASTM) and American National Standards Institute (ANSI).

1.2 MATERIALS

(A) Qualified Products

Furnish new equipment, materials, and hardware unless otherwise required. Inscribe manufacturer's name, model number, serial number, and any additional information needed for proper identification on each piece of equipment housed in a case or housing.

The Signal Equipment Qualified Products List (QPL) is available on the North Carolina Department of Transportation's website. Certain categories of communications and electrical conduit equipment, material, and hardware shall be pre-approved on the latest version of the QPL by the date of installation. These categories are defined in these Project Special Provisions. Equipment, material, and hardware not pre-approved when required will not be allowed for use

on the project. Consult the QPL web site to obtain pre-approval procedures at <http://www.ncdot.org/doh/preconstruct/traffic/ITSS/SMS/qpl/>

(B) Observation Period

Prior to final acceptance, all Contractor-furnished equipment shall successfully complete a 90-day Observation Period.

The 90-day Observation Period is considered to be part of the work but will not be included in the total contract time and will be completed after final acceptance of the project.

Final acceptance will occur following the successful completion of the 90-day Observation Period and after all documentation requirements have been fully satisfied.

Refer to the “Testing and Acceptance” section of these Project Special Provisions for additional requirements.

(C) Wire and Cable

Furnish wire and cable on reels. When requested by NCDOT, furnish samples of wire and cable to NCDOT at no additional cost.

1.3 CONSTRUCTION METHODS

(A) General

No work will be allowed within the MRTMC site during holidays, special event periods and times listed in Contract Time Number 1 unless otherwise authorized in writing.

Develop a plan to upgrade the surge protection and grounding system. Key to the plan is the minimization of downtime of MRTMC operations. The plan shall describe in detail the sequence and steps in replacing the surge protection and conversion of the radio hut power supply. No work will be allowed within the MRTMC during the following special event periods:

- April 7-11, 2011: Food Lion AutoFair
- April 14-17, 2011: NHRA 4-Wide Nationals
- May 20-28, 2011: NASCAR Coca Cola 600 and Charlotte 300 Activities

In addition, as directed by the Department, work may be limited due to other major special events. The plan shall describe what activities of any type of work that will be accomplished prior to any weekend work and those that must occur that weekend. The plan shall describe durations of activities, staffing and equipment provisions necessary to accomplish the work.

As part of the migration plan, the Contractor shall prepare a migration/pre-installation checklist that will be used by the Contractor and NCDOT to document the operational status and condition of all existing equipment prior to the Contractor beginning construction and assuming maintenance for that equipment. Submit the plan within 30 days of the notice to proceed for review and approval to:

- Facilitate review and approval by NCDOT,
- Allow NCDOT to complete their related activities.

(B) Regulations and Codes

Furnish material and workmanship conforming to the *National Electric Code* (NEC), *National Electric Safety Code* (NESC), Underwriters Laboratories (UL), or other listing agencies

approved by the North Carolina Department of Insurance, and all local safety codes in effect on the date of advertisement. Comply with Article 4, Chapter 87 of the *North Carolina General Statutes* (Licensing of Electrical Contractors). Comply with all previously referenced specifications, and all applicable local ordinances and regulations before and during all stages of the electrical work.

When required by the local ordinances and governmental agencies, upon completion of the work, have all systems inspected and approved in writing by the authorized governmental electrical inspector for the area. Furnish written certification of the authorized inspector's approval to the Engineer. Inspection by the authorized governmental electrical inspector must neither eliminate nor take the place of the inspections by the Engineer. Upon the Engineer's receipt of written certification and the Contractor's written request for a final inspection of the installations, the Engineer will perform a final inspection.

Where required, conform to AASHTO and ASTM standards in effect on the date of advertisement.

Notify the Engineer, local traffic enforcement agency, local utility company, and affected railroad companies seven business days before operational shutdowns to coordinate connection or disconnection to an existing utility or system.

(C) Maintenance and Repair of Material

Ensure that a qualified technician is standing by to provide emergency maintenance services whenever work is being performed. Standby status is defined as being able to arrive, fully equipped, at the work site within two (2) hours ready to provide maintenance services.

Furnish the Engineer with the name, office telephone number, cellular (mobile) telephone number, and pager number of the supervisory employee who will be responsible for maintenance and repair of equipment during all hours.

Maintain and repair all cabling and communications and electrical related equipment affected by the Contractor's work until completion of the observation period and receipt of written notification of final acceptance of the project.

For all failures, malfunctions, or damages to equipment, begin necessary repairs within four (4) hours of notification. Complete repairs within eight (8) hours of notification. The inability to contact the supervisory employee or prearranged alternate will not extend repair time requirements.

Remove and replace all cabling and communications and electrical related equipment that fail.

Except for damages and malfunctions caused by the Contractor's work activities, the Contractor will not be held responsible for pre-existing conditions reported to the Engineer before starting any work at the specific location. The Contractor shall assume responsibility for all maintenance and emergency services necessary once work has begun at an existing device location and for all damages and malfunctions caused either directly or indirectly by the Contractor's work activities.

In the event the Contractor fails to perform in accordance with the Plans and these Project Special Provisions within the period specified, NCDOT reserves the right to perform maintenance and emergency service necessary to ensure continuous operation. Further, all

expenses incurred by NCDOT in implementing this option will be deducted from payment due the Contractor, plus \$2,500 liquidated damage per occasion, per day, or any portion thereof, until corrected.

Maintain system equipment until the completion of the 90-day observation period and the receipt of written notification from the Engineer of final acceptance of the project.

(D) Removal of Existing Equipment and Material

Remove all NCDOT-owned related equipment and material that will not be used or salvaged by the Department. The Contractor shall dispose of all removed equipment and materials at no additional cost.

(E) Wire and Cable

For installation in a conduit system, lubricate cable and wires before installing in conduit. Use lubricant that will not physically or chemically harm cable jacket, wire insulation, and conduit.

Do not splice any electrical wire nor cable at recessed-screw, barrier type terminal blocks. Unless specifically allowed, connect no more than two conductors to the same terminal screw.

Maintain color-coding of wires through splices.

Protect ends of wire and cable from water and moisture.

Permanently label each jumper, cable, and patch cord at each end with a waterproof tag or label to designate to what it is connected. Do not reuse any cabling in the MRTMC except when noted; provide only new cables, jumpers and patch cords.

(F) Electrical Bonding

Using an approved termination means, connect a No. 14 AWG minimum 19-strand copper conductor (Type THWN) with green insulation to serve as an equipment ground conductor to metallic components, which are not otherwise, bonded through means approved by the Engineer.

(G) Raised Flooring

Do not cut holes in the raised floor without permission of the Engineer.

1.4 DOCUMENTATION

(A) General

Provide all as-built documentation. All as-built plans and documentation shall be reviewed and accepted by the Engineer prior to final acceptance of the project. All documentation, except as otherwise specifically approved by the Engineer, must meet the following requirements:

1. Provide no documentation larger than 11" x 17" paper.
2. No documentation smaller than 8.5" x 11" for as-built plans will be accepted.
3. Do not fold or crease reproducible drawings.

As a minimum, provide the documentation described in the paragraphs below.

(B) Plan of Record Documentation

Provide as-built drawings that depict any changes of components, measurement or layout of the Plans. Show all construction changes, with the final location and depth of conduits, wiring, etc., in detail in a reproducible format. Submit as-built construction changes as soon as a change is complete. Note and date each change on the drawings. Failure to revise as-built documentation to reflect current work may result in withholding of payments until the as-built documentation is brought current. The submitted as-built documentation may be field-checked by the Engineer at his discretion. If the as-built documentation is found to have an unacceptable number of inaccuracies, the Engineer may withhold payment until the as-built plans are corrected.

For underground conduit systems that house communications or electrical cable, furnish the Engineer with a plan of record drawing detailing the locations of the conduit system, including junction boxes.

The Department will provide the Contractor one reproducible and one electronic copy of the Plans for his use in developing the as-built drawings. Modify the original electronic file such that all changes are marked with callout boxes or other method approved by the Engineer. Any other base maps that may be necessary for the Contractor to prepare the as-built drawings in accordance with these Project Special Provisions will be the Contractor's responsibility. Use CADD conventions that are consistent with those used on the original plans.

Before final acceptance, furnish one reproducible copy of the draft as-built plans in hard copy format for review. Provide draft hard copy as-built drawings on 11"x 17" bond plan sheets.

Upon receipt of review comments from the Engineer, correct any errors and make all necessary revisions to the draft as-built plans prior to final acceptance of the project. Submit final as-built plans in electronic and hard copy format. Provide electronic plans in MicroStation (latest release in use by the Department) format on CD or DVD.

(C) Manuals

Provide at least five hard copies along with one electronic copy (on CD or DVD) of the following manuals:

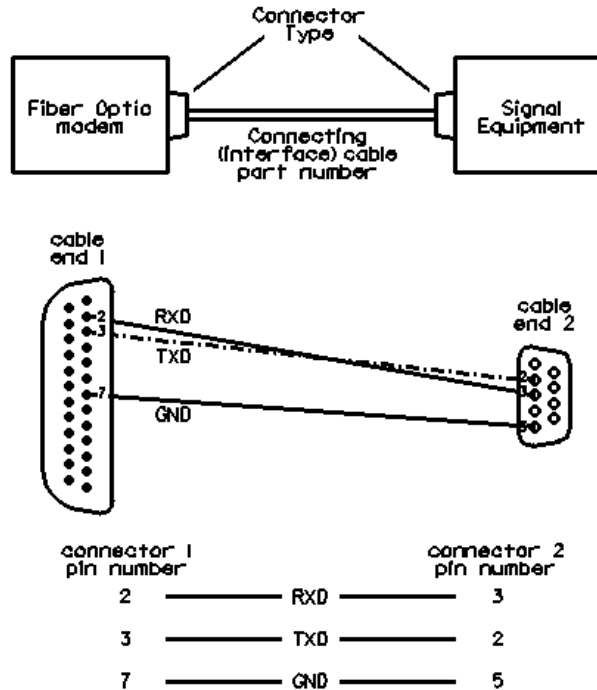
- Maintenance/installation and programming manuals containing detailed operating instructions for each different type of model of equipment. Ensure that manuals contain instructions for possible modification to equipment.
- Maintenance procedures manuals containing detailed preventative and corrective maintenance procedures and troubleshooting procedures for each different type of model of equipment.
- Make, model, and serial numbers of all equipment furnished.
- Warranty materials; and
- Technical support and warranty telephone numbers.

(D) Wiring Diagrams

Provide detailed wiring diagrams that include interconnection (wired and wireless) of equipment with pin-out configurations, pin functions, and cable parts numbers. This includes

configuration at each field equipment cabinet or equipment cabinet at central locations. Provide two copies of system connection diagrams showing system interconnection cables and associated terminations. Use naming convention approved by the Engineer and conforming to Belcore standards. Provide one electronic copy of the wiring diagrams in MicroStation format.

Example:



1.5 MEASUREMENT AND PAYMENT

There will be no direct payment for work covered in this section. Payment at the contract unit prices for the various items in the contract will be full compensation for all work covered by this section. Include the incidental costs for furnishing and/or installing materials and equipment expressly required under the contract for successful completion of the contract, but whose measurement and payment is not specifically stated under any of the contract pay items, into the unit cost(s) for the various items in the contract.

2. CONDUIT

2.1 DESCRIPTION

Furnish and install conduit for underground installation with miscellaneous fittings, all necessary hardware, marker tape, backfill, graded stone, paving materials, and seeding and mulching.

Furnish and install EMT conduit for electrical cable under the raised floor and on the wall in the communications and electrical rooms and in the radio hut as shown in the Plans.

Furnish and install flexible metal conduit (FMT) for electrical cable in the security gate assembly shown in the Plans.

2.2 MATERIALS

(A) General

Except for EMT and FMT conduit, material, equipment, and hardware furnished under this section shall be pre-approved on the Department's QPL.

Refer to the following articles of the *Standard Specifications*:

- Backfill 1018-2
- Graded Stone 545-2 and 545-3

Use conduit bodies, boxes, and fittings that meet UL Standard 514B Conduit, Tubing, and Cable Fittings for electrical and communications installations.

All materials in plenum area shall be rated for UL 886, Outlet Boxes and Fittings for Use in Hazardous (Classified) Locations.

(B) Conduit Types

(1) Electrical Metallic Tubing (EMT) Conduit

Provide high-strength galvanized conduit. Provide EMT that meets UL 797, Electrical Metallic Tubing, Zinc Coating.

(2) Liquid Tight Flexible Metallic Conduit (FMT)

Provide liquid-tight flexible metallic conduit also referred to as flexible metal conduit (FMT) fabricated with continuous length of spiral wound interlocking zinc-coated strip steel. Provide FMT that meets UL 360, Flexible Metal Conduit.

(3) Polyvinyl Chloride Conduit (PVC)

Provide polyvinyl chloride conduit in accordance with Section 1098-4 of the *Standard Specifications*. Provide non-metallic conduit and duct including associated couplings, approved for above and below ground use with or without concrete encasement in accordance with UL Standard 651A, Type EB and A Rigid PVC Conduit and HDPE Conduit. Provide Schedule 40 conduit unless otherwise specified.

(4) Rigid Metallic Conduit

Provide rigid metallic conduit also referred to as rigid galvanized steel (RGS) conduit in accordance with Section 1098-4 of the *Standard Specifications*. Provide rigid hot dipped galvanized steel conduit that meets UL Standard 6, Electrical Rigid Metal Conduit-Steel with rigid full weight sherardized or galvanized threaded fittings.

(C) Conduit Plugs, Sealing Putty, Pull Line

Furnish duct plugs that provide a watertight barrier when installed in conduit. Furnish duct plugs sized in accordance with conduit. Ensure duct plug provides a means to secure a pull line to the end of the plug. Provide removable and reusable duct plugs.

Furnish mechanical sealing devices that provide a watertight barrier between conduit and cables in conduit. Furnish mechanical sealing devices sized in accordance with conduit and with appropriately sized holes to accommodate and seal cables. Provide removable and re-usable mechanical sealing devices.

Furnish moldable sealing putty that has the following characteristics:

- Contains no asbestos,
- Designed for use with electrical and telecommunications cables house in conduits,
- Adheres to various conduit materials, including PVC and galvanized steel,
- Forms a moisture barrier,
- Requires no mixing or additives (single-component) and requires no volatile solvents, and
- Can be applied by hand.

Furnish 1/2", pre-lubricated, woven polyester tape, pull line with minimum rated tensile strength of 2,500 lb.

Comply with Subarticle 1400-2(H) Duct and Conduit Sealer of the *Standard Specifications*.

2.3 CONSTRUCTION METHODS

(A) General

Comply with Section 1715-3 of the *Standard Specifications*.

Except where the Plans call for a specific installation method or where the Engineer directs otherwise, underground conduit shall be installed by trenching.

Seal the ends of conduit that is for future use (spare) or where cable is not immediately installed.

Extend ends of conduit 2 to 4 inches above concrete surfaces and 4 inches above crushed stone bases. For metallic conduit, install metallic bushings and bond conduits.

(1) Ground Surface Restoration

Upon completion of conduit installation and backfilling of all trenches and other excavations, restore the disturbed ground to its original condition as determined and approved by the Engineer. For paved areas, replace removed or damaged pavement with in kind materials, matching the elevation, color, texture/finish and general appearance of the surrounding

pavement. For unpaved areas, backfill excavations with removed material, tamp the backfilled material and rake smooth the top 1½ inches. Finish unpaved areas flush with surrounding natural ground and to match the original contour of the ground. Seed with same type of grass as surrounding area and mulch the newly seeded area. If unpaved area was not grassed, replace the original ground cover in kind as directed by the Engineer.

Complete repairs to and restoration of all ground (paved and unpaved) disturbed by construction within five consecutive calendar days following initial removal. If the Contractor fails to repair and restore the ground in accordance with these Project Special Provisions within the time frame specified, the Department reserves the right to make the necessary repairs, and all expenses incurred by the Department in making the repairs and restoring the ground will be deducted from payment due the Contractor, plus \$500 liquidated damages per occasion, per day, or any portion thereof, until corrected.

(B) Unpaved Trenching

Install PVC conduit for all underground runs as specified in the Plans. Install rigid metallic conduit for all outdoor risers. Clean existing underground conduit to be incorporated into a new system. Bond all metallic conduit.

If more than one conduit is required between the same points, install conduit in one common trench.

Install non-detectable marker tape longitudinally in the trench 6 to 12 inches below the unpaved ground surface or below the underside of the paved surface.

Install longitudinal runs of conduit a minimum of 1 foot from back of curb or 6 feet from edge of pavement in the absence of curb.

Upon completion, restore surface to like-original condition within five calendar days of occurrence of damage. Remove all rock and debris from backfill material. Remove excess material from site and compact area according to Article 300-7 of the *Standard Specifications*. Backfill with excavated material and compact to 95% of original density.

Backfill trench at locations along the trench path where non-movable objects, such as rocks and boulders, cannot be avoided. The purpose of the backfill is to provide a gradual change in elevation of the trench, so that excessive bending and stress will not be transferred to conduits once underground conduit system is installed.

After installation of conduits and upon completion of tamping and backfilling, perform a mandrel test on each conduit to ensure no conduit has been damaged. Furnish a non-metallic mandrel having a diameter of approximately 50% of the inside diameter of the conduit in which it is to be pulled through. If damage has occurred, replace the entire length of conduit. Ensure pull line is re-installed.

Install conduit in unpaved areas. Rake smooth the top 1-1/2 inches and seed with same type of grass as surrounding area. Restore damaged grassed areas. Seed and mulch, using methods and material approved by the Engineer, within five consecutive calendar days following initial damage to grassed areas, unless the Engineer approves otherwise due to weather and soil conditions. If the Contractor fails to repair the grassed areas in accordance with these Project Special Provisions within the time frame specified, the Department reserves the right to make the necessary repairs, and all expenses incurred by the Department in making the repairs and

restoring the grassed area will be deducted from payment due the Contractor, plus \$500 liquidated damages per occasion, per day, or any portion thereof, until corrected.

Adapt operations to variations in weather of soil conditions as necessary for the successful establishment and growth of the grasses. When the Engineer determines that weather and soil conditions are unfavorable, including but not limited to extremely wet or frozen soil, do not distribute any limestone or fertilizer and do not sow any seed. During seasons of the year when temperatures are not conducive to germination and growth of the type of grass seed to be planted, seed and mulch the disturbed areas with temporary seeding that will germinate and grow under the prevailing temperatures until such time that permanent seeding can be established, as approved and directed by the Engineer.

As directed by the Engineer, apply additional seed or completely reseed areas which have been previously seeded and mulched but which have been damaged, have failed to successfully establish a stand of vegetation or have an unsatisfactory cover of vegetation. Perform supplemental and repair seeding promptly at all locations and times as directed by the Engineer.

(C) Interior Conduit

(1) General

Use fittings made with the same materials and type of coatings. Use only set screw/compression fittings. If conduit passes over an expansion joint, provide an expansion joint fitting over the expansion joint.

Ream all conduit ends before attaching fitting and couplings.

Fasten EMT or FMT conduit to the permanent structure with approved galvanized conduit hangers or straps in accordance with NEC and State Building Code.

(2) EMT Conduit

Use EMT conduit only inside buildings or in the radio hut. Bend conduit with a bending machine or conduit bending tool designed for EMT conduit. Provide LB conduit bodies at 90-degree turns in conduit through walls.

(3) Flexible Metal Conduit

Use FMT conduit only in the security gate assembly. Disconnect the end of the existing FMT conduit containing electrical service to the security gate assembly; pull back the conductors and cut off conduit above the foundation. Connect additional FMT conduit and route to the surge protection device/electrical junction box. Secure this conduit firmly at both ends using screw/compression fittings. Connect the electrical junction box and GFCI outlet with FMT conduit. Firmly strap the FMT conduit to the DIN rail in the security gate assembly as shown in the Plans.

(D) Plan of Record Drawings

Upon completion of the conduit system for communications, furnish the Engineer with a plan of record drawing detailing both the horizontal and vertical (i.e. depth) locations of the conduit system.

(E) Clear Existing Obstructed Underground Conduit

Use compressed air, water jetting, rod and mandrel or other Engineer-approved method to clear an obstruction or blockage in a segment of existing underground conduit between adjacent junction boxes. Once obstruction/blockage has been substantially cleared, draw a mandrel through the conduit followed by a swab to clean out any remaining materials which may cause cable abrasions. Use a mandrel that is 12 inches in length and has a diameter that is 1/2 inch less than the inside diameter of the conduit being cleared.

(F) Repair Existing Obstructed Underground Conduit

This procedure will only be used when the Contractor has first performed the procedures described in the “Clear Existing Obstructed Underground Conduit” subsection above without success and excavation is needed to repair the conduit, as approved by the Engineer. Locate the obstruction in a blocked or damaged conduit and mark the approximate limits on ground above for Engineer approval. Once the obstruction has been located, carefully excavate to expose the damaged section of conduit. Take care when excavating to avoid further damage to the conduit to be repaired and to avoid damage to parallel “good” conduits in multiple run installations. Remove the damaged or blocked segment of conduit and replace it with new, in-kind conduit materials of the same diameter. Draw a mandrel through the repaired conduit followed by a swab to clean out any materials that may cause cable abrasions. Use a mandrel that is 12 inches in length and has a diameter that is 1/2 inch less than the inside diameter of the conduit. Backfill and restore ground to its original condition in accordance with the preceding “Ground Surface Restoration” subsection of this Project Special Provision.

2.4 MEASUREMENT AND PAYMENT

Electrical conduit (type) (size) will be measured in linear feet of conduit installation of each type furnished, installed, and accepted, without regard to the installation method. Measurement will be along the approximate centerline of the conduit system. Payment will be in linear feet.

No measurement will be made of cable straps, expansion joints, conduit bodies, cover plates and other miscellaneous hardware, as these will be considered incidental to furnishing and installing conduit.

No measurement will be made of restoration of paved and unpaved ground surfaces with like materials, including but not limited to backfill, graded stone, paved materials, seeding and mulching, as this work will be considered incidental to conduit installation. No measurement will be made of restoration of the works site, as this work will be considered incidental to the interior conduit installed in buildings, the security gate assembly or the backflow preventer. The Department will make no payment for a given conduit run until all repairs to paved and unpaved surfaces damaged/disturbed during the installation of the underground and FMT conduit, and EMT and RGS risers have been completed and accepted.

No additional payment will be made for cleaning existing obstructed conduits, as they will be considered incidental to construction. Payment will be made for repairing existing obstructed conduits as the cost of size and type conduit furnished, installed, and accepted.

Payment will be made under:

Pay Item

Pay Unit

Electrical Conduit (EMT) (1")	Linear Foot
Electrical Conduit (EMT) (2")	Linear Foot
Electrical Conduit (PVC) (2")	Linear Foot
Electrical Conduit (RGS) (2")	Linear Foot
Electrical Conduit (FMT) (1")	Linear Foot

3. SECURITY GATE AND BACKFLOW PREVENTER IMPROVEMENTS

3.1 DESCRIPTION

Provide grounding, surge protection and electrical improvements described below and as shown in the Plans.

3.2 MATERIALS

(A) Grounding

Furnish ground rods, ground wire, and hardware to ground the existing pull box adjacent to the security gate assembly. Comply with the requirements of Page 10-265 article 1097-16 of the *Standard Specifications*.

(B) Surge Protection Devices

Provide 120-volt surge protection devices to protect the heater for the fire main backflow preventer and for the security gate assembly. Provide surge protection devices meeting the following requirements:

- UL 1449 Type 2 SPD listed,
- UL tested 10kA nominal current (In),
- 120 volt single phase applications (2 wire),
- Surge current capacity of a minimum of 100 kA,
- No integrated safety disconnect,
- All MOV suppression elements,
- Status indicators, green LED per phase, red LED failure indicator, and
- Unconditional five-year free replacement warranty.

(C) 120-volt GFCI Outlets

Provide GFCI outlets with galvanized cast-metal conduit boxes with threaded conduit entrances sized to house the cable and equipment contained therein. Provide boxes with removable covers.

(D) Locking Security Gate Cover Plates

Furnish two steel lockable and removable covers with a locking bar as shown in the Plans for the open area under the gate motor to cover the proposed electrical work described in these Project Special Provisions. Fabricate the covers and locking bar from 1/8" steel.

Ensure the cover plates do not interfere with the operation of the gate assembly or the installation of the existing top cover plate.

In the cover plates, provide a slot below the height of the DIN rail mounted equipment to slide a locking bar to padlock the lower area. In the cover plate on the south side of the assembly, provide a notch for the gate motor clutch safety chain.

The locking bar will slide through the cover plate slots. Fabricate a locking bar with an L-shaped bend in one end and a hole for a padlock in the other end.

Powder coat the plates with a color to match the existing cover plate over the upper half of the assembly.

3.3 CONSTRUCTION METHODS

(A) Security Gate Pull Box

Install a 30-foot ground rod assembly in the existing pull box adjacent to the security gate assembly. Connect a No. 4 ground wire to the ground rod; run the ground wire through the existing conduit; and ground the backflow preventer 120-volt outlet.

Mount a galvanized metal DIN rail to the gate assembly frame in the open area under the gate motor assembly. Ground the DIN rail to the ground rod in the pull box. Mount a SPD to the DIN rail and ground the SPD. Install a quad junction box to the DIN rail to house the 120-volt electrical connections to the motor, loop detectors, and GFCI outlet.

Mount a 120-volt GFCI outlet to the DIN rail and splice the line side wiring in the junction box and ground the outlet to the pull box ground. Plug the existing low voltage power supplies into the GFCI outlets and route power wire to their respective devices.

Construct two galvanized steel lockable and removable covers as shown in the Plans for the open area under the gate motor to cover the proposed electrical work described in these Project Special Provisions.

(B) Backflow Preventer

Install a surge protection device on the existing 4" x 4" wood post supporting the 120-volt outlet in the backflow preventer enclosure.

Replace the existing 120-volt outlet in the backflow preventer enclosure with a 120-volt GFCI outlet. Reuse the existing wiring.

(C) Electrical Room

In the electrical room of the MRTMC, break the existing EMT conduit, install a 4"x 4" electrical junction box and cover and install separate wall-mounted surge protection devices on 120-volt lines to the fire main backflow preventer and for the security gate assembly. Bond the surge protection devices to the existing building ground.

(D) Locking Security Gate Cover Plates

Install the steel covers with a locking bar as shown in the plans to secure the area below the security gate assembly. Ensure the cover plates do not interfere with the operation of the gate assembly or the installation of the existing top cover plate.

3.4 MEASUREMENT AND PAYMENT

Measurement and payment for the No 4. AWG ground wire is described in Section 6 of these Project Special Provisions.

Surge protection devices (120-volt) will be measured and paid as the actual number of 120-volt surge protection devices furnished, installed, and accepted.

Electrical junction boxes will be measured and paid as the actual number of electrical junction boxes furnished, installed, and accepted.

GFCI outlets will be measured and paid as the actual number of GFCI outlets furnished, installed, and accepted. GFCI outlets will include a GFCI outlet, outdoor enclosure, cover plate and any connectors and wire necessary for complete installation.

Generic signal item (cover plates) will be measured as lump sum price for the galvanized steel DIN rail, steel cover plates, and locking bar furnished, installed, and accepted.

Payment will be made under:

Pay Item	Pay Unit
Surge Protection Devices (120-volt)	Each
Electrical Junction Boxes	Each
GFCI Outlets	Each
Generic Signal Item (Cover Plates)	Lump Sum

4. TELECOMMUNICATIONS SURGE PROTECTION

4.1 DESCRIPTION

Provide grounding, surge protection and electrical improvements described below.

4.2 MATERIALS

(A) T-1 Telephone and Data Line Surge Protection Devices

Provide T-1 telephone and data line surge protection devices to protect the telecommunications lines into the building. Provide surge protection devices meeting the following requirements:

- UL 497 SPD listed,
- Multi-stage hybrid with at least three defined stages,
- 3 kA surge current capacity per line tested with an 8/20 impulse per line,
- Clamp voltage of a maximum of 130v tested with a 1kA 8/20 pulse,
- Rated for 75vDC,
- 50 MHz bandwidth,
- Inline resistance to be less than 10 ohms,
- Four wires protected,
- DIN rail mounted device,
- Connection to be terminal strip, and
- Unconditional five-year free replacement warranty.

(B) RS-485 Surge Protection Devices

Provide RS-485 surge protection devices to protect the radio control and voice circuit cable between the radio hut and communications room. Provide surge protection devices meeting the following requirements:

- UL 497 SPD listed,
- Multi-stage hybrid with at least three defined stages,
- 3 kA surge current capacity per line tested with an 8/20 impulse per line,
- Clamp voltage of a maximum of 30v tested with a 2kA 8/20 pulse,
- Rated for 15vDC,
- 5 MHz bandwidth,
- Inline resistance to be less than 4 ohms,
- Maximum load of 1 amperes,
- DIN rail mounted device,
- Connection to be terminal strip,
- Four wires protected, and
- Unconditional five-year free replacement warranty.

(C) 24v DC power Surge Protection Devices

Provide 24v DC power surge protection devices to protect the enunciator circuits between the generator and the electrical room. Provide surge protection devices meeting the following requirements:

- UL 497 SPD listed,
- Multi-stage hybrid with at least three defined stages,
- 3 kA surge current capacity per line tested with an 8/20 impulse per line,
- Clamp voltage of a maximum of 60v tested with a 3kA 8/20 pulse,
- Rated for 30vDC,
- Inline resistance to be less than 5 ohms,
- Maximum load of 2 amperes,
- DIN rail mounted device,
- Connection to be terminal strip,
- Two wires protected, and
- Unconditional five-year free replacement warranty.

(D) No. 8 AWG Insulated Conductors

Provide No. 8 AWG insulated conductors to connect all phase, neutral and earth connections. Use insulated THW wire for all conductors.

4.3 CONSTRUCTION METHODS

(A) T-1 Telephone and Data Line Surge Protection Devices

Remove the existing surge protection devices on the three T-1 and ten RS-232 data lines in the communications room.

Mount DIN rails as close as possible to each group of lines but so no leads exceed 12” to the punch down blocks for the existing incoming cables in both the communications room and in the radio hut as shown in the Plans. Bond the DIN rail to the building ground using a No. 8 AWG ground wire.

Mount the surge protection devices on the DIN rail and connect to the telephone lines. Bond the new devices to the building ground using a minimum of a No. 8 AWG ground wire. Do not use any individually derived ground points. Install the SPD’s in the lines between the “punch down block” and the modem equipment. Ensure that the wiring ports are as follows:

- “Unprotected” port to the smart jack and
- “Protected” port to the telephone system.

(B) RS-485 Surge Protection Devices

Remove the existing surge protection devices on the sixteen total radio RS-485 data and audio cables in the communications room and sixteen total radio RS-485 data and audio cables in the radio hut.

Mount a DIN rail as close as possible to each group of lines but so no leads exceed 12” to the punch down blocks for the existing incoming cables in both the communications room and in the radio hut as shown in the Plans. Bond the DIN rail to the building ground using a No. 8 AWG ground wire.

Mount the surge protection devices eight each radio RS-485 data and eighteen each audio cables on the DIN rail and connect to the incoming RS-485 lines in the respective locations. Bond the new devices to the building ground using a minimum of a No. 8 AWG ground wire. Do not use any individually derived ground points. Ensure that the wiring ports are as follows:

- “Unprotected” port to the smart jack and
- “Protected” port to the telephone system.

(C) 24v DC Power Surge Protection Devices

Remove the existing surge protection devices for the 24v DC enunciator lines for the generator.

Mount a DIN rail as close as possible to each group of lines but so no leads exceed 12” to the punch down blocks for the existing incoming cables in both the communications room and in the radio hut as shown in the Plans.

Mount the surge protection devices on the DIN rail and connect to the incoming 24v enunciator lines in the respective locations. Bond the new devices to the building ground using a minimum of a No. 8 AWG insulated conductor. Install the SPDs between the equipment and field terminations in both the electrical room and the generator.

4.4 MEASUREMENT AND PAYMENT

Surge protection devices (T-1/RS-232) will be measured and paid as the actual number of T-1 and RS-232 surge protection devices furnished, installed, and accepted.

Surge protection devices (RS-485/Audio) will be measured and paid as the actual number of RS-485 surge protection devices furnished, installed, and accepted.

Surge protection devices (24v DC) will be measured and paid as the actual number of 24v DC surge protection devices furnished, installed, and accepted.

No additional payment will be provided for mounting hardware, wire and connectors. The cost for furnishing and installing the DIN rails shall be incidental to the surge protection devices.

No direct compensation will be provided for the removal of the existing surge protection devices. The cost will be considered incidental to the installation of new surge protection devices.

Electrical conductors (No. 8 AWG insulated conductor) will be measured and paid as the actual linear feet of No. 8 AWG insulated conductor furnished, installed, and accepted.

No direct compensation will be provided for the removal of any existing electrical conductors. The cost will be considered incidental to the installation of new electrical conductors.

Payment will be made under:

Pay Item	Pay Unit
Surge Protection Devices (T-1/RS-232)	Each
Surge Protection Devices (RS-485/Audio)	Each
Surge Protection Devices (24v DC)	Each
Electrical Conductors (No. 8 AWG Insulated Conductor)	Linear Feet

5. AC POWER SURGE PROTECTION

5.1 DESCRIPTION

Furnish and install surge protection in the electrical, control and computer rooms for AC power surge protection. Install equipment on the main switchgear, panels RP1, RP1A, UDPA, and UDPB in their respective rooms as described below.

5.2 MATERIALS

(A) 277/480 Volt Primary Power Surge Protection Devices

Furnish 277/480 volt AC primary power surge protection devices with wire leads meeting the following requirements:

- UL 1449 Type 1 or 2 SPD listed,
- UL tested 20kA nominal current (In),
- Voltage 277/480v three phase applications ,
- Rotary safety disconnect switch included in the SPD,
- Surge current capacity of a minimum of 100 kA,
- All MOV suppression elements,
- Wall mounted, external to electrical panel,
- Status indicators, green LED per phase, red LED failure indicator,
- Form “C” dry contacts for remote monitoring, and
- Unconditional five-year free replacement warranty.

(B) 120/208 Volt Secondary Power Surge Protection Devices

Furnish 120/208 volt AC secondary power surge protection devices meeting the following requirements:

- UL 1449 Type 1 or 2 SPD listed,
- UL tested 20kA nominal current (In),
- Voltage 120/208v three phase applications,
- Rotary safety disconnect switch included in the SPD,
- Surge current capacity of a minimum of 100 kA,
- All MOV suppression elements,
- Wall mounted, external to electrical panel,
- Status indicators, green LED per phase, red LED failure indicator,
- Form “C” dry contacts for remote monitoring, and
- Unconditional five-year free replacement warranty.

(C) 120/240 Power Surge Protection Devices

Furnish 120/240 volt AC secondary power surge protection devices meeting the following requirements:

- UL 1449 Type 2 SPD listed,
- UL tested 20kA nominal current (In),
- Voltage 120/240 volt two phase applications (3 wire),
- Without integrated safety disconnect,

- Surge current capacity of a minimum of 100 kA,
- All MOV suppression elements,
- Wall mounted, external to electrical panel,
- Status indicators, green LED per phase, red LED failure indicator,
- Form “C” dry contacts for remote monitoring, and
- Unconditional five-year free replacement warranty.

(D) No. 6 AWG Conductors

Provide No. 6 AWG insulated THW conductors to connect all phase, neutral and earth connections. Use green insulated wire for ground conductors.

5.3 CONSTRUCTION METHODS

(A) General

Furnish all tools, equipment, materials, supplies, and hardware necessary to install a fully operational grounding and surge protection system. Install the cable according to the latest version of the manufacturer’s cable installation procedures and the industry accepted installation standards, codes, and practices, or as directed by the Engineer.

Take all precautions necessary to ensure the cable is not damaged during storage and installation. Do not step on the cable nor run over the cable with equipment. Do not pull the cable over or around obstructions.

Provide bushings and cable guides to protect the cable.

Install cable in the building using the cable manufacturer’s recommended methods approved by the Engineer.

Label each end of all cables with the Department’s existing numbering scheme.

Install cable in conduit where shown in the Plans. For cable under floor and not in conduit, neatly bundle and wire tie all cable between two locations together.

Use No. 6 conductors to make all the phase, neutral and ground connections. Ensure the conductors are no longer than 10 feet from the phase bus to the neutral/ground bus. Bond the new device to the ground bus. Reconnect the existing surge counter meter.

(B) 277/480 Power Panels

Remove the existing 277/480 surge protection device connected to the electrical distribution panel in the electrical room.

Install a new surge protection device on the line side of the electrical distribution panel. Reuse the existing EMT conduit.

Install 1” EMT conduit out of Panel LP1 and install a surge protection device on the line side of the Panel LP1.

(C) 120/208 Power Panels

Remove the existing 120/208 surge protection devices connected to RP1 and RP1A (electrical room), UDPA (control room) and UPPB (computer room).

Install 1” EMT conduit out of each panel RP1 and RP1A. Reuse the existing 1” EMT conduit out of Panels UDPA and UDPB. For Panels RP1, RP1A, UDPA, and UPPB, install new surge protection device on the line side of each panel.

(D) 120/240 Power Panels

Install 1” EMT conduit out of the electrical panel in the radio hut and install a new surge protection device on the line side of the panel.

5.4 MEASUREMENT AND PAYMENT

Surge protection devices (277/480 volts) will be measured and paid as the actual number of surge protection devices (277/480 volts) furnished, installed, and accepted.

Surge protection devices (120/208 volts) will be measured and paid as the actual number of surge protection devices (120/208 volts) furnished, installed, and accepted.

Surge protection devices (120/240 volts) will be measured and paid as the actual number of surge protection devices (120/240 volts) furnished, installed, and accepted.

No direct compensation will be provided for the removal of the existing surge protection devices. The cost will be considered incidental to the installation of new surge protection devices.

Electrical conductors (No. 6 AWG insulated conductor) will be measured and paid as the actual linear feet of No. 6 AWG conductors furnished, installed, and accepted.

No direct compensation will be provided for the removal of any existing electrical conductors. The cost will be considered incidental to the installation of new electrical conductors.

Payment will be made under:

Pay Item	Pay Unit
Surge Protection Devices (277/480 Volts)	Each
Surge Protection Devices (120/208 Volts)	Each
Surge Protection Devices (120/240 Volts)	Each
Electrical Conductors (No. 6 AWG Insulated Conductor)	Linear Feet

6. RADIO SYSTEM GROUNDING AND POWER SUPPLY MODIFICATIONS

6.1 DESCRIPTION

Furnish and install new tower grounding system and modify the power supply as shown in the Plans.

6.2 MATERIALS

All materials and work shall conform to the National Electrical Code and the National Electrical Safety Code. All materials shall be UL listed.

(A) Grounding

Furnish and install new grounding to the radio tower as shown in the Plans. Install new ground rods and interconnecting No. 2 AWG ground wire.

(B) Junction Box

Comply with Article 1098-5, Junction Boxes. Do not provide sealant compound between junction boxes and covers.

Junction boxes, material, equipment, and hardware furnished under this section shall be pre-approved on the Department's QPL.

Refer to Section 545, "Graded Stone," of the *Standard Specifications*.

Provide standard size junction boxes with minimum inside dimensions of 16"(l) x 10"(w) x 10"(d) that meet or exceed the Tier 15 requirements of ANSI/SCTE 77. Provide certification that testing methods are compliant with ANSI/SCTE 77. Vertical extensions of 6" to 12" shall be available from the junction box manufacturer.

(C) 277/480 to 120/240 Step Down Transformer

Provide a 277/480 to 120/240 step down transformer meeting the following requirements:

- NEMA TP1 rated,
- UL Listed,
- Input Voltage: 480 volts AC,
- Output Voltage: 240 Volts AC Delta with 120 volt CT,
- KVA rating: 112,
- Phase: Three,
- Mounting: Concrete pad,
- Enclosure Type: Outdoor, and
- Exterior Finish: Powder coated.

(D) Service Disconnect/Safety Switch

Material, equipment and hardware furnished under this section must be pre-approved on the Department's QPL by the date of equipment installation.

Furnish new external electrical service disconnect/safety switch, Furnish external electrical service disconnect/safety switch with one double-pole 100 ampere circuit breaker rated for 480 volts in a lockable NEMA 3R enclosure.

Ensure the service disconnect/safety switch are listed as meeting UL Standard UL-489 and

marked as being suitable for such application. Fabricate enclosure from galvanized steel and electrostatically apply dry powder paint finish, light gray in color, to yield a minimum thickness of 2.4 mils. Provide ground bus and neutral bus with a minimum of four terminals with minimum wire capacity as called for in these plans.

(E) Electrical Circuit Breakers

Furnish 480-volt breakers in the electrical distribution panel to provide electrical service to the radio hut. Provide Type EHD thermal magnetic double pole circuit breakers with non-interchangeable trip units. Include load and line terminals on the breakers. Provide breakers rated for 100 amps maximum continuous ampere rating at 104 degrees F. Ensure the breakers are compatible with the existing electrical distribution panel.

(F) 3/0 Electrical Cable

Provide 3/0 insulated THW electrical cable to provide 277/480 volt power from the proposed step down transformer next to the radio hut to the electrical panel in the radio hut.

(G) No. 2 AWG Electrical Cable

Provide No. 2 AWG insulated THW electrical cable to provide 277/480 volt power from the electrical distribution panel to the proposed step down transformer next to the radio hut.

(H) No. 4 AWG Ground Wire

Provide No. 4 AWG ground wire to connect the proposed transformer to the building ground. Use green insulated THW wire for ground conductors.

(I) No. 2 AWG Ground Wire

Provide No. 2 AWG bare tinned copper wire to connect the radio tower ground rods to the tower.

6.3 CONSTRUCTION METHODS

(A) Grounding

Install two 75' radial ground radials from two tower legs. Connect one end of the radial to the tower leg. Connect the far end of each radial to 30' of copper-clad steel ground rod using No. 2 AWG copper wire. Exothermically weld the ground wire to ground rod in a non-conductive junction box. Exothermically weld the ground wire to the tower leg by grinding the paint and protective finish from a location on the associated tower leg for a maximum area of 6" x 8". Weld the #2 AWG bare, tinned copper wire to the tower leg using an exothermic process using a minimum # 65 charge. Spray the cleaned area and joint with a liquid cold plating solution ensuring that all bare areas are covered.

Measure and record the resistance of each ground when driven in the earth. The resistance of the total array shall be measured when completely installed and recorded. The measured resistance shall be less than 20 ohms.

(B) Junction Box

Comply with Article 1411-3 Electrical Junction Boxes of the *Standard Specifications*, except as follows:

Install junction boxes flush with finished grade. Do not install sealant compound between junction boxes and covers.

Upon completion of junction box installation and backfilling of all excavations, restore the disturbed ground to its original condition as determined and approved by the Engineer. For paved areas, replace removed or damaged pavement with in kind materials, matching the elevation, color, texture/finish and general appearance of the surrounding pavement. For unpaved areas, backfill excavations with removed material, tamp the backfilled material and rake smooth the top 1½ inches. Finish unpaved areas flush with surrounding natural ground and to match the original contour of the ground. Seed with same type of grass as surrounding area and mulch the newly seeded area. If unpaved area was not grassed, replace the original ground cover in kind as directed by the Engineer.

Complete restoration of all ground disturbed during junction box installation within five consecutive calendar days following initial removal and excavation. If the Contractor fails to repair and restore the disturbed ground in accordance with these Project Special Provisions within the time frame specified, the Department reserves the right to make the necessary repairs, and all expenses incurred by the Department in making the repairs and restoring the ground will be deducted from payment due the Contractor, plus \$500 liquidated damage per occasion, per day, or any portion thereof, until corrected.

(C) 277/480 to 120/240 Step Down Transformer

Construct a 6” thick concrete pad extending 6” beyond the width and length of the transformer, Install galvanized steel anchor bolts to secure the transformer. Install 2” PVC conduits in the foundation to connect the transformer to the radio hut and to the building.

Ground the transformer to the radio hut ground and to the ground wire from the building.

Mount the transformer on a concrete pad as shown in the Plans adjacent to the radio hut. Secure the transformer with the anchor bolts to the concrete foundation.

(D) Disconnect/Safety Switch

Coordinate installation with Duke Energy and the Department to minimize downtime. Reuse conduit entrance through the radio hut wall into the existing electrical panel. Ensure the service disconnect is grounded to the radio hut ground and the ground from the building.

Furnish new external service disconnect/safety switch, and replace the electrical service conductors and conduits between the electrical panel in the radio hut and the transformer.

(E) Electrical Circuit Breakers

Coordinate installation with the Department to minimize any downtime to the building. Install the breakers in the main switchgear electrical panel in the electrical room of the building. Transfer service from the Duke Energy meter to the new building service upon approval of the Engineer.

6.4 MEASUREMENT AND PAYMENT

Ground Rod Assembly (30’-5/8”copper clad steel) will be measured and paid as the actual number of ground rod assemblies furnished, installed, and accepted.

Junction box (standard size) will be measured and paid in actual number of standard size junction boxes furnished, installed, and accepted.

Electrical conductors (3/0 insulated conductor) will be measured and paid as the actual linear feet of 3/0 insulated electrical conductors furnished, installed, and accepted.

Electrical conductors (No 2 AWG insulated conductor) will be measured and paid as the actual linear feet of 3/0 insulated electrical conductors furnished, installed, and accepted.

Electrical conductors (No. 2 AWG ground wire) will be measured and paid as the actual linear feet of No. 2 AWG ground wire furnished, installed, and accepted.

Electrical conductors (No. 4 AWG ground wire) will be measured and paid as the actual linear feet of No. 4 AWG ground wire furnished, installed, and accepted.

Cable measurement will be made by calculating the difference in length markings located on outer jacket from start of run to end of run as such work is considered incidental to installing the cable.

No direct compensation will be provided for the removal of any existing electrical conductors. The cost will be considered incidental to the installation of new electrical conductors.

Transformer (277/480 to 120/240 step down) will be measured and paid as the actual number of 277/480 to 120/240 step down transformers furnished, installed, and accepted.

Disconnect/safety switch will be measured and paid as the actual number of service disconnect/safety switches furnished, installed, and accepted. No direct compensation will be provided for the removal of the existing service disconnect. The cost will be considered incidental to the installation of new disconnect/safety switch.

Electrical circuit breakers will be measured and paid as the actual number of electrical breakers furnished, installed, and accepted.

Payment will be made under:

Pay Item	Pay Unit
Ground Rod Assembly (30'-5/8" Copper Clad Steel)	Each
Junction Box (Standard Size)	Each
Electrical Conductors (3/0 Insulated Conductor)	Linear Feet
Electrical Conductors (No. 2 AWG Insulated Conductor)	Linear Feet
Electrical Conductors (No. 2 AWG Ground Wire)	Linear Feet
Electrical Conductors (No. 4 AWG Ground Wire)	Linear Feet
Transformer (277/480 to 120/240 Step Down)	Each
Disconnect/Safety Switch	Each
Electrical Circuit Breakers	Each

7. SUBMITTAL DATA AND DOCUMENTATION

7.1 DESCRIPTION

Provide project submittal data and documentation as described below.

7.2 SUBMITTALS

(A) General

All written documentation will be either 11" x 17" or 8½" x 11" format. No documentation may be smaller or larger than these formats. Except for standard bound manuals, bind all 8 1/2" x 11" documentation, including 11" x 17" drawings folded to 8 1/2" x 11", in logical groupings in either 3-ring or plastic slide-ring loose-leaf binders. Permanently label each grouping of documentation.

All submittals will be reviewed and approved the Department. Absence of comment will not grant approval.

(B) Qualified Products

Furnish new equipment, materials, and hardware. Inscribe manufacturer's name, model number, serial number, and any additional information needed for proper identification on each piece of equipment housed in a case or housing.

Equipment Qualified Products List (QPL) is available on the North Carolina Department of Transportation's Website. Equipment, material, and hardware not pre-approved when required will not be allowed for use on the project. Consult the QPL Website to obtain pre-approval procedures.

(C) UL Certifications

Furnish the UL certifications and test results for submitted products. Ensure they meet the latest UL standards (UL 1449 3rd edition for power and UL 497 for data and communications)

(D) Submittal Requirements

Provide certification that all Contractor-furnished material is in accordance with the contract. When requested by NCDOT, provide additional certifications from independent testing laboratories and sufficient data to verify item meets applicable specifications. Ensure additional certification states that the testing laboratory is independent of the material manufacturer and neither the laboratory nor the manufacturer has a vested interest in the other.

The intent of submittals is to show completely the materials meet the requirements of the Plans and these Project Special Provisions and how the Contractor intends to construct or configure the materials. The Contractor shall clearly demonstrate in the submittals that the desired materials shall meet or exceed the requirements of the Plans and these Project Special Provisions. Each submittal shall be sufficiently complete and detailed for the Department to review and approve the submittal. If NCDOT deems the submittal insufficient in detail or completeness for review or approval, the submittal will be returned as rejected. Additional time will not be granted for re-submittal.

Before material submittal data begins, provide to NCDOT for approval a list of all submittals with approximate dates of submission that the Contractor intends to make. It is incumbent upon the Contractor to schedule reviews in a timely manner that will not delay his schedule.

Certain groups of materials are related in function and operate as a subsystem together. To ensure individual and subsystem compliance with the project requirements materials shall be submitted as packages as follows:

Submittal Package	Description
Electrical	Electrical conductor cable, circuit breakers, outlet boxes, surge protection devices
Field Infrastructure	Conduit, raceways, electrical boxes, ground rods, junction boxes, ground wire

Submit cabinet layout and wiring diagrams for all cabinets.

Identify all proprietary parts in furnished material. The Department reserves the right to reject material that uses proprietary components not commercially available through electronic supply houses.

For furnished material listed on the QPL, furnish submittals in the format defined by the QPL.

For furnished material not on the QPL, furnish the equipment list including catalog cuts. Identify proposed material on catalog cuts by a reproducible means. Ensure material lists contain material description, brand name, manufacturer’s address and telephone number, model number, size, identifying trademark or symbol, and other appropriate ratings. For submittals showing a variety of models and parts available from the manufacturer, clearly identify by circles, marking or other means the specific materials for which approval is requested.

Allocate 40 days for the Department to review and respond to a submittal. Submittal approval will be granted only to specific materials; do not deviate from what is approved without approval by the Department. Do not fabricate or order material until receipt of the Department’s approval. All submittals will be returned as either “Approved (as submitted)”, “Approved as Noted” or “Rejected”. The Contractor may proceed with fabrication or ordering for items marked “Approved”. If an item is marked “Approved as Noted” without any stipulation for re-submittal, then the Contractor may proceed with fabrication or ordering. For any other notations, the Contractor shall revise the submittal, address comments, and resubmit for approval.

8. TESTING AND ACCEPTANCE

8.1 GENERAL

Identify the test organization including the roles and responsibilities of the quality assurance organization. For each piece of equipment that requires testing, a test plan must delineate the following:

- Test procedures with test values and desired outcomes,
- Submittal schedule of test procedures,
- Start time of each level of testing,
- Test duration including any re-tests that are required or anticipated, and
- Submittal of the completed and signed off test report.
- Revisions to the test plan must be provided to NCDOT at the Monthly Progress Meeting.

All testing must be performed by the Contractor and will be observed by the Engineer. The Engineer may perform additional testing at any time during the project.

Conduct and complete successfully the following progressive series of tests before acceptance: independent certification testing, field demonstration test prior to installation, installed standalone device tests, system test of the hardware and an observation period. Develop a comprehensive series of test plans for each device to determine the equipment was correctly installed and meets the requirements of materials, workmanship, performance, and functionality required in the Plans and these Project Special Provisions. The test plans shall describe the functions to be tested, purpose of test, setup requirements, procedures to be followed, any inputs and expected outputs for each test, criteria for pass/fail and any required tools or test equipment. Any software testers shall be pre-approved by NCDOT.

Conduct wiring insulation tests and correct any faults in compliance with Section 1400-6 of the *Standard Specifications* with prior to placing new conductors in service.

Develop as part of the test plan a traceability matrix of all the individual subsystem functional requirements to be used to cross-reference each planned test to a specific contract requirement to be verified. This Test Evaluation/Traceability Matrix shall be used by the Engineer to crosscheck the functional requirements and the results.

Tests will be performed by the Contractor and witnessed by NCDOT. No deviation from the approved test procedure shall be permitted without approval from the Engineer. Any changes to the approved test procedure to accommodate unforeseen events during the time of testing shall be documented in the master test procedure. Immediately following the conclusion of each test, NCDOT and the Contractor shall meet to agree on the results observed and recorded during the testing. This will form the basis for the conclusions reported in the test plan. All test results, notes, and observations shall be maintained in electronic form. Maintain complete records of all test results during all stages of testing.

8.2 PRE-INSTALLATION TESTING

(A) Product Examination Test

Examine each device carefully to verify that the materials, design, construction, markings, and workmanship comply with all applicable standards, specifications, and requirements. Perform the following tests as a minimum:

- Verify that all surfaces are free of dents, scratches, weld burns, or abrasions. Round sharp edges and corners.
- Verify bend radius of cables is not excessive or could potentially cause damage.
- Verify all modules, lamps, and components are properly secured. and
- Verify that there are no exposed live terminals.

(B) Continuity Test

Check the wiring to determine conformance with the applicable standards, specifications, and requirements.

(C) Operational Test

Operate each device long enough to permit equipment temperature stabilization, and to check and record an adequate number of performance characteristics to ensure compliance with applicable standards, specifications, and requirements.

8.3 INSTALLED SITE TESTS

(A) Earth Grounding System

Conduct a test of the fall of potential grounding method. Test the earth resistance using the three point measuring method from each “new” ground rod assembly. This is a three-terminal test with the ground rod disconnected from the system. Place a reference test ground rod as far from the installed earth ground rod as practical from the earth ground rod under test. Connect the test instrument to the earth ground rod under test.

Place a potential fall test ground rod at a number of points roughly on a straight line between the earth ground rod assembly and the reference ground rod. Record the resistance readings for pair of test points. Draw a curve of resistance vs. distance. The correct earth resistance is found on the curve where it flattens out. The curve gradient will increase after this flat area as the reference test ground rod probe influences the reading.

Conduct the test at least the 62% test method with three documented readings for each ground rod:

- At the 62% point,
- At the 62% point plus 10 feet, and
- At the 62% point minus 10 feet.

This will verify that the 62% point is on the plateau of the theoretical plotted graph of the earth resistance test.

If the +/- resistance measurements are greater or lesser than the 62% point measurement, then the tests must be redone at a further distance from the ground rods.

(B) SPD Grounding

Test the resistance to ground for each AC power SPD. If 20 ohm resistance is not obtained, repair and retest.

(C) Miscellaneous Copper Wiring

Test installed cable for continuity, opens, shorts, split pairs, mis-wiring and reversed pairs. Test for DC resistance, impedance, and line capacitive loading. Correct any faults and retest. If retest fails, replace defective cable or connectors.

8.4 FINAL ACCEPTANCE

Final system acceptance is defined as the time when all work and materials described in the Plans and these Project Special Provisions have been furnished and completely installed by the Contractor, and all parts of the work have been approved and accepted by the Engineer.

The project will be ready for final acceptance upon the satisfactory completion of all operational tests. In addition, final acceptance shall not occur until all punch-list discrepancies have been rectified, all documentation has been delivered, and all required training has been completed.

8.5 MEASUREMENT AND PAYMENT

There will be direct payment for testing, as it will be considered incidental to construction.

9. UNINTERRUPTIBLE POWER SUPPLY

9.1 DESCRIPTION

Furnish and install replacement APC Symmetra PX 20kW Scalable to 40 kW N+1, 208V uninterruptible power supply or equivalent within the MRTMC electrical room to protect the servers and other system equipment within the computer room from sudden power loss, surges and voltage transients. Provide all necessary electrical connections in accordance with NEC code.

9.2 MATERIALS

Furnish an uninterruptible power supply with the following power distribution units:

- Input: 480V 3PH
- Output of 120V, 208V 3PH type PDU
- Type B PDU includes 480V step down transformer
- 120V type & amp distribution circuit breakers
- Branch current monitoring
- A load test port for full testing
- Airflow management
- Installation Guide Kit & user manual

Functional Requirements

Provide an UPS that meets the functional requirements as follows:

- Output Power capacity 20 kW/ 20 kVA
- Max Configurable Power 40 kW / 40kVA
- Nominal Input Voltage 480V
- Nominal Output Voltage 120V, 208V, 208V 3PH
- Maximum Total Current 139 Amps Draw per Phase
- Maximum Input Current 67Amps per phase
- Output Voltage Distortion Less than 5% at full load
- Output frequency (sync 57 – 63 Hz for 60 Hz nominal to mains)
- Crest Factor Unlimited
- Waveform Type Sine wave
- Output Connections (1) Hardwire 5-wire (3PH + N + G), (1) Screw Terminals
- Bypass Built-in Static Bypass
- Nominal Input Voltage 208V 3PH
- Input Frequency 50/60 Hz +/- 5 Hz (auto sensing)
- Input Connections Hardwire 5-wire (3PH + N + G)
- Input voltage range for main operations 177 – 240V
- Wrap Around System Bypass (3) Breaker maintenance bypass panel to isolate the UPS from critical load
- Battery Type Maintenance-free sealed Lead-Acid battery with suspended electrolyte: leak proof
- Control panel Multi-function LCD status and control console
- Audible Alarm , alarm when on battery: distinctive low battery alarm: configurable delays

- Emergency Power Off (EPO)
- Operating Environment 0 – 40 *C
- Operating relative Humidity 0 – 95%
- Protection Class NEMA 1

Features

The UPS should incorporate or have the equivalent of the following features and benefits:

- Configurable for N +1 internal redundancy
- Provides high availability through redundancy by allowing configuration with one more Power Module than is necessary to support the connected load
- Power Modules connected in parallel
- Enhances availability by allowing immediate, seamless recovery from isolated module failures
- Battery modules connected in parallel
- Hot-swappable power modules
- Ensures clean, uninterrupted power to protected equipment during Power Module replacement
- Hot-swappable intelligence modules
- Ensures clean, uninterrupted power to protected equipment during Intelligence Module replacement
- Hot-swappable batteries
- Ensures clean, uninterrupted power to protected equipment while batteries are being replaced
- Provides fast serviceability and reduced maintenance requirements via self=diagnosing, field-replaceable modules
- Network manageable, provides remote management of UPS over network
- Automatic internal bypass, supplies utility power to connected loads in the event of a UPS overload condition or fault.
- Scalable power capacity, reduces UPS over-sizing costs today by allowing quick upgrades later
- Scalable runtime, allows additional run time to be quickly added as needed
- Front access servicing, simplifies installation and maintenance while minimizing space requirements
- Battery replacement without tools

9.3 CONSTRUCTION METHOD

All electrical materials and workmanship shall conform to the latest version of the applicable standards of the National Electric Manufacturer's Association (NEMA), the Underwriters' Laboratories, INC. (UL), the Electronic Industries Association (EIA), the National Electric Code (NEC), and the National Electrical Safety Code (NESC). All materials must conform to the standards of the American Society for Testing and Materials (ASTM) and the National Standards Institute (ANSI).

The UPS shall be installed by a manufacturer approved installer and they shall be documented as a subcontractor.

The UPS Installer shall perform a load bank test and provide test result to Department. Installer shall have schedule upgrade to 24x7 for existing startup service for up to the 40kVA or Battery Frame. Installer shall coordinate site.

All existing UPS in Electrical room shall be properly recycled and disposed of.

9.4 METHOD OF MEASUREMENT

The UPS will be paid as a lump sum unit price. Lump Sum will include all materials, installation, testing, documentation, and disposal of existing including batteries. Existing batteries will be disposed of/ recycled in an approved manner. Electronic equipment shall be disposed of in an approved manner.

No direct compensation will be made for the removal and disposal of the existing equipment and batteries. The cost will be considered incidental to the installation of the new UPS.

Pay Item	Pay Unit
Uninterruptible Power Supply	Lump Sum

DISADVANTAGED BUSINESS ENTERPRISE (DIVISIONS):

(10-16-07)(Rev. 1-17-12)

102-15(J)

SP1 G62

Description

The purpose of this Special Provision is to carry out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with Federal funds. This provision is guided by 49 CFR Part 26.

Definitions

Additional DBE Subcontractors - Any DBE submitted at the time of bid that will not be used to meet the DBE goal. No submittal of a Letter of Intent is required.

Committed DBE Subcontractor - Any DBE submitted at the time of bid that is being used to meet the DBE goal by submission of a Letter of Intent. Or any DBE used as a replacement for a previously committed DBE firm.

Contract Goal Requirement - The approved DBE participation at time of award, but not greater than the advertised contract goal.

DBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed DBE subcontractor(s).

Disadvantaged Business Enterprise (DBE) - A firm certified as a Disadvantaged Business Enterprise through the North Carolina Unified Certification Program.

Goal Confirmation Letter - Written documentation from the Department to the bidder confirming the Contractor's approved, committed DBE participation along with a listing of the committed DBE firms.

Manufacturer - A firm that operates or maintains a factory or establishment that produces on the premises, the materials or supplies obtained by the Contractor.

Regular Dealer - A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns and operates distribution equipment for the products. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for DBE certification, such that an applicant is required to apply only once for a DBE certification that will be honored by all recipients of USDOT funds in the state and not limited to the Department of Transportation only. The Certification Program is in accordance with 49 CFR Part 26.

United States Department of Transportation (USDOT) - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

Forms and Websites Referenced in this Provision

DBE Payment Tracking System - On-line system in which the Contractor enters the payments made to DBE subcontractors who have performed work on the project.
<https://apps.dot.state.nc.us/Vendor/PaymentTracking/>

DBE-IS Subcontractor Payment Information - Form for reporting the payments made to all DBE firms working on the project. This form is for paper bid projects only.
<http://www.ncdot.org/doh/forms/files/DBE-IS.xls>

RF-1 DBE Replacement Request Form - Form for replacing a committed DBE.
https://apps.dot.state.nc.us/_includes/download/external.html?pdf=http%3A//www.ncdot.gov/doh/forms/files/RF-1.pdf

SAF Subcontract Approval Form - Form required for approval to sublet the contract.
http://www.ncdot.org/doh/operations/dp_chief_eng/constructionunit/saf.xls

JC-1 Joint Check Notification Form - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.
https://apps.dot.state.nc.us/_includes/download/external.html?pdf=http%3A//www.ncdot.gov/doh/forms/files/JC-1.pdf

Letter of Intent - Form signed by the Contractor and the DBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed DBE for the amount listed at the time of bid.
<http://www.ncdot.org/doh/preconstruct/ps/contracts/letterofintent.pdf>

Listing of DBE Subcontractors Form - Form for entering DBE subcontractors on a project that will meet this DBE goal. This form is for paper bids only.

<http://www.ncdot.gov/doh/preconstruct/ps/word/MISC2.doc>

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where DBEs quoted on the project. This sheet is submitted with good faith effort packages.
http://www.ncdot.gov/business/ocs/goodfaith/excel/Ex_Subcontractor_Quote_Comparison.xls

DBE Goal

The following DBE goal for participation by Disadvantaged Business Enterprises is established for this contract:

Disadvantaged Business Enterprises **0 %**

- (A) *If the DBE goal is more than zero*, the Contractor shall exercise all necessary and reasonable steps to ensure that DBEs participate in at least the percent of the contract as set forth above as the DBE goal.
- (B) *If the DBE goal is zero*, the Contractor shall make an effort to recruit and use DBEs during the performance of the contract. Any DBE participation obtained shall be reported to the Department.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as DBE certified shall be used to meet the DBE goal. The Directory can be found at the following link. <https://partner.ncdot.gov/VendorDirectory/default.html>

The listing of an individual firm in the directory shall not be construed as an endorsement of the firm's capability to perform certain work.

Listing of DBE Subcontractors

At the time of bid, bidders shall submit all DBE participation that they anticipate to use during the life of the contract. Only those identified to meet the DBE goal will be considered committed, even though the listing shall include both committed DBE subcontractors and additional DBE subcontractors. Additional DBE subcontractor participation submitted at the time of bid will be used toward the Department's overall race-neutral goal. Only those firms with current DBE certification at the time of bid opening will be acceptable for listing in the bidder's submittal of DBE participation. The Contractor shall indicate the following required information:

Blank forms will not be deemed to represent zero participation. Bids submitted that do not have DBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.

- (A) *If the DBE goal is more than zero*,
 - (1) Bidders, at the time the bid proposal is submitted, shall submit a listing of DBE participation, including the names and addresses on *Listing of DBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered

responsive. Bidders shall indicate the total dollar value of the DBE participation for the contract.

- (2) If bidders have no DBE participation, they shall indicate this on the *Listing of DBE Subcontractors* by entering the word “None” or the number “0.” This form shall be completed in its entirety.
- (3) The bidder shall be responsible for ensuring that the DBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that DBE’s participation will not count towards achieving the DBE goal.

(B) *If the DBE goal is zero*, bidders, at the time the bid proposal is submitted, shall enter the word “None”; or the number “0”; or if there is participation, add the value on the *Listing of DBE Subcontractors* contained elsewhere in the contract documents.

DBE Prime Contractor

When a certified DBE firm bids on a contract that contains a DBE goal, the DBE firm is responsible for meeting the goal or making good faith efforts to meet the goal, just like any other bidder. In most cases, a DBE bidder on a contract will meet the DBE goal by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the DBE bidder and any other DBE subcontractors will count toward the DBE goal. The DBE bidder shall list itself along with any DBE subcontractors, if any, in order to receive credit toward the DBE goal.

For example, if the DBE goal is 45% and the DBE bidder will only perform 40% of the contract work, the prime will list itself at 40%, and the additional 5% shall be obtained through additional DBE participation with DBE subcontractors or documented through a good faith effort.

DBE prime contractors shall also follow Sections A or B listed under *Listing of DBE Subcontractor* just as a non-DBE bidder would.

Written Documentation – Letter of Intent

The bidder shall submit written documentation for each DBE that will be used to meet the DBE goal of the contract, indicating the bidder’s commitment to use the DBE in the contract. This documentation shall be submitted on the Department’s form titled *Letter of Intent*.

The documentation shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed DBE to be used toward the DBE goal, or if the form is incomplete (i.e. both signatures are not present), the DBE participation will not count toward meeting the DBE goal. If the lack of this participation drops the commitment below the DBE goal, the Contractor shall submit evidence of good faith efforts, completed in its entirety, to the Engineer no later than 12:00 noon on the eighth calendar day following opening of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Submission of Good Faith Effort

If the bidder fails to meet or exceed the DBE goal the apparent lowest responsive bidder shall submit to the Department documentation of adequate good faith efforts made to reach the DBE goal.

One complete set and (No. of Copies) copies of this information shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Note: Where the information submitted includes repetitious solicitation letters, it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Consideration of Good Faith Effort for Projects with DBE Goals More Than Zero

Adequate good faith efforts mean that the bidder took all necessary and reasonable steps to achieve the goal which, by their scope, intensity, and appropriateness, could reasonably be expected to obtain sufficient DBE participation. Adequate good faith efforts also mean that the bidder actively and aggressively sought DBE participation. Mere *pro forma* efforts are not considered good faith efforts.

The Department will consider the quality, quantity, and intensity of the different kinds of efforts a bidder has made. Listed below are examples of the types of actions a bidder will take in making a good faith effort to meet the goal and are not intended to be exclusive or exhaustive, nor is it intended to be a mandatory checklist.

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices through the use of the NCDOT Directory of Transportation Firms) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the DBEs to respond to the solicitation. Solicitation shall provide the opportunity to DBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
- (B) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
- (C) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D) (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of

such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

- (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
- (G) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs. Contact within 7 days from the bid opening the Business Development Manager in the Business Opportunity and Work Force Development Unit to give notification of the bidder's inability to get DBE quotes.
- (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the DBE goal.

In addition, the Department may take into account the following:

- (1) Whether the bidder's documentation reflects a clear and realistic plan for achieving the DBE goal.
- (2) The bidders' past performance in meeting the DBE goals.
- (3) The performance of other bidders in meeting the DBE goal. For example, when the apparent successful bidder fails to meet the DBE goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the DBE goal, but meets or exceeds the average DBE participation obtained by

other bidders, the Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the Department that the DBE goal can be met or that an adequate good faith effort has been made to meet the DBE goal.

Non-Good Faith Appeal

The Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting DBE Participation Toward Meeting DBE Goal

(A) Participation

The total dollar value of the participation by a committed DBE will be counted toward the contract goal requirement. The total dollar value of participation by a committed DBE will be based upon the value of work actually performed by the DBE and the actual payments to DBE firms by the Contractor.

(B) Joint Checks

Prior notification of joint check use shall be required when counting DBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1 (*Joint Check Notification Form*) and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

(C) Subcontracts (Non-Trucking)

A DBE may enter into subcontracts. Work that a DBE subcontracts to another DBE firm may be counted toward the contract goal requirement. Work that a DBE subcontracts to a non-DBE firm does not count toward the contract goal requirement. If a DBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the DBE is not performing a commercially useful function. The DBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption is subject to review by the Federal Highway Administration but is not administratively appealable to USDOT.

(D) Joint Venture

When a DBE performs as a participant in a joint venture, the Contractor may count toward its contract goal requirement a portion of the total value of participation with the DBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the DBE performs with its forces.

(E) Suppliers

A contractor may count toward its DBE requirement 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from a DBE regular dealer and 100 percent of such expenditures from a DBE manufacturer.

(F) Manufacturers and Regular Dealers

A contractor may count toward its DBE requirement the following expenditures to DBE firms that are not manufacturers or regular dealers:

- (1) The fees or commissions charged by a DBE firm for providing a *bona fide* service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
- (2) With respect to materials or supplies purchased from a DBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

Commercially Useful Function

(A) DBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to DBEs that perform a commercially useful function in the work of a contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and any other relevant factors.

(B) DBE Utilization in Trucking

The following factors will be used to determine if a DBE trucking firm is performing a commercially useful function:

- (1) The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting DBE goals.
- (2) The DBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) The DBE may subcontract the work to another DBE firm, including an owner-operator who is certified as a DBE. The DBE who subcontracts work to another DBE receives credit for the total value of the transportation services the subcontracted DBE provides on the contract.
- (5) The DBE may also subcontract the work to a non-DBE firm, including from an owner-operator. The DBE who subcontracts the work to a non-DBE is entitled to credit for the total value of transportation services provided by the non-DBE subcontractor not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE subcontractors receives credit only for the fee or commission it receives as a result of the subcontract arrangement. The value of services performed under subcontract agreements between the DBE and the Contractor will not count towards the DBE contract requirement.
- (6) A DBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the DBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. This type of lease may count toward the DBE's credit as long as the driver is under the DBE's payroll.
- (7) Subcontracted/leased trucks shall display clearly on the dashboard the name of the DBE that they are subcontracted/leased to and their own company name if it is not identified on the truck itself. Magnetic door signs are not permitted.

DBE Replacement

When a Contractor has relied on a commitment to a DBE firm (or an approved substitute DBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the DBE for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another DBE subcontractor, a non-DBE subcontractor, or with the Contractor's own forces or those of an affiliate. A DBE may only be terminated after receiving the Engineer's written approval based upon a finding of good cause for the termination.

All requests for replacement of a committed DBE firm shall be submitted to the Engineer for approval on Form RF-1 (*DBE Replacement Request*). If the Contractor fails to follow this procedure, the Contractor may be disqualified from further bidding for a period of up to 6 months.

The Contractor shall comply with the following for replacement of a committed DBE:

(A) Performance Related Replacement

When a committed DBE is terminated for good cause as stated above, an additional DBE that was submitted at the time of bid may be used to fulfill the DBE commitment. A good faith effort will only be required for removing a committed DBE if there were no additional DBEs submitted at the time of bid to cover the same amount of work as the DBE that was terminated.

If a replacement DBE is not found that can perform at least the same amount of work as the terminated DBE, the Contractor shall submit a good faith effort documenting the steps taken. Such documentation shall include, but not be limited to, the following:

- (1) Copies of written notification to DBEs that their interest is solicited in contracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with DBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of DBEs who were contacted.
 - (b) A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed.
- (3) A list of reasons why DBE quotes were not accepted.
- (4) Efforts made to assist the DBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

(B) Decertification Replacement

- (1) When a committed DBE is decertified by the Department after the SAF (*Subcontract Approval Form*) has been received by the Department, the Department will not require the Contractor to solicit replacement DBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.
- (2) When a committed DBE is decertified prior to the Department receiving the SAF (*Subcontract Approval Form*) for the named DBE firm, the Contractor shall take all necessary and reasonable steps to replace the DBE subcontractor with another DBE subcontractor to perform at least the same amount of work to meet the DBE goal requirement. If a DBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

Changes in the Work

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed DBE, the Contractor will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a DBE based upon the Contractor's commitment, the DBE shall participate in additional work to the same extent as the DBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Contractor shall seek additional participation by DBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction, and a portion or all of the work had been expected to be performed by a committed DBE, the Contractor shall seek participation by DBEs unless otherwise approved by the Engineer.

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a DBE, the Contractor shall seek additional participation by DBEs equal to the reduced DBE participation caused by the changes.

Reports and Documentation

A SAF (*Subcontract Approval Form*) shall be submitted for all work which is to be performed by a DBE subcontractor. The Department reserves the right to require copies of actual subcontract agreements involving DBE subcontractors.

When using transportation services to meet the contract commitment, the Contractor shall submit a proposed trucking plan in addition to the SAF. The plan shall be submitted prior to beginning construction on the project. The plan shall include the names of all trucking firms proposed for use, their certification type(s), the number of trucks owned by the firm, as well as the individual truck identification numbers, and the line item(s) being performed.

Within 30 calendar days of entering into an agreement with a DBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Contractor shall furnish the Engineer a copy of the agreement. The documentation shall also indicate the percentage (60% or 100%) of expenditures claimed for DBE credit.

Reporting Disadvantaged Business Enterprise Participation

The Contractor shall provide the Engineer with an accounting of payments made to all DBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

- (A) Withholding of money due in the next partial pay estimate; or
- (B) Removal of an approved contractor from the prequalified bidders' list or the removal of other entities from the approved subcontractors list.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to DBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from being approved for work on future projects until the required information is submitted.

Contractors reporting transportation services provided by non-DBE lessees shall evaluate the value of services provided during the month of the reporting period only.

At any time, the Engineer can request written verification of subcontractor payments.

The Contractor shall report the accounting of payments on the Department's DBE-IS (*Subcontractor Payment Information*) with each invoice. Invoices will not be processed for payment until the DBE-IS is received.

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the *2012 Standard Specifications* may be cause to disqualify the Contractor.

STANDARD SPECIAL PROVISIONS

AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(5-20-08)

Z-2

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c)*. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, 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.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Article 108-13(E), of the *North Carolina Department of Transportation Standard Specifications for Roads and Structures*, dated July 1, 2006.

STANDARD SPECIAL PROVISION

ERRATA

(1-17-12)

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 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”.

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

Division 17

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

STANDARD SPECIAL PROVISION

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.

STANDARD SPECIAL PROVISION

AWARD OF CONTRACT

(6-28-77)

Z-6

“The North Carolina Department of Transportation, in accordance with the provisions of *Title VI of the Civil Rights Act of 1964* (78 Stat. 252) and the Regulations of the Department of Transportation (*49 C.F.R., Part 21*), issued pursuant to such act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin”.

STANDARD SPECIAL PROVISION

MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS

Z-7

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (*EXECUTIVE NUMBER 11246*)

1. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, see as shown on the attached sheet entitled "Employment Goals for Minority and Female participation".

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in *41 CFR Part 60-4* shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in *41 CFR 60-4.3(a)*, and its effort to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project or the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the executive Order and the regulations in *41 CFR Part 60-4*. Compliance with the goals will be measured against the total work hours performed.

2. As used in this Notice and in the contract resulting from this solicitation, the "covered area" is the county or counties shown on the cover sheet of the proposal form and contract.

**EMPLOYMENT GOALS FOR MINORITY
AND FEMALE PARTICIPATION**

Economic Areas

Area 023 29.7%

Bertie County
Camden County
Chowan County
Gates County
Hertford County
Pasquotank County
Perquimans County

Area 024 31.7%

Beaufort County
Carteret County
Craven County
Dare County
Edgecombe County
Green County
Halifax County
Hyde County
Jones County
Lenoir County
Martin County
Nash County
Northampton County
Pamlico County
Pitt County
Tyrrell County
Washington County
Wayne County
Wilson County

Area 025 23.5%

Columbus County
Duplin County
Onslow County
Pender County

Area 026 33.5%

Bladen County
Hoke County
Richmond County
Robeson County
Sampson County
Scotland County

Area 027 24.7%

Chatham County
Franklin County
Granville County
Harnett County
Johnston County
Lee County
Person County
Vance County
Warren County

Area 028 15.5%

Alleghany County
Ashe County
Caswell County
Davie County
Montgomery County
Moore County
Rockingham County
Surry County
Watauga County
Wilkes County

Area 029 15.7%

Alexander County
Anson County
Burke County
Cabarrus County
Caldwell County
Catawba County
Cleveland County
Iredell County
Lincoln County
Polk County
Rowan County
Rutherford County
Stanly County

Area 0480 8.5%

Buncombe County
Madison County

Area 030 6.3%

Avery County
Cherokee County
Clay County
Graham County
Haywood County
Henderson County
Jackson County
McDowell County
Macon County
Mitchell County
Swain County
Transylvania County
Yancey County

SMSA Areas

Area 5720 26.6%

Currituck County

Area 9200 20.7%

Brunswick County

New Hanover County

Area 2560 24.2%

Cumberland County

Area 6640 22.8%

Durham County

Orange County

Wake County

Area 1300 16.2%

Alamance County

Area 3120 16.4%

Davidson County

Forsyth County

Guilford County

Randolph County

Stokes County

Yadkin County

Area 1520 18.3%

Gaston County

Mecklenburg County

Union County

Goals for Female

Participation in Each Trade

(Statewide) 6.9%

STANDARD SPECIAL PROVISION

REQUIRED CONTRACT PROVISIONS FEDERAL - AID CONSTRUCTION CONTRACTS

FHWA - 1273 Electronic Version - March 10, 1994

Z-8

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Payment of Predetermined Minimum Wage
- V. Statements and Payrolls
- VI. Record of Materials, Supplies, and Labor
- VII. Subletting or Assigning the Contract
- VIII. Safety: Accident Prevention
- IX. False Statements Concerning Highway Project
- X. Implementation of Clean Air Act and Federal Water Pollution Control Act
- XI. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
- XII. Certification Regarding Use of Contract Funds for lobbying

ATTACHMENTS

- A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendent and to all work performed on the contract by piecework, station work, or by subcontract.
2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:
 - Section I, paragraph 2;
 - Section IV, paragraphs 1, 2, 3, 4, and 7;
 - Section V, paragraphs 1 and 2a through 2g.
5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.
6. **Selection of Labor:** During the performance of this contract, the contractor shall not:
 - a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
 - b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
 - b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."
2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
3. **Dissemination of Policy:** All members of the contractor's staff who are to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
 - d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
 - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
 - c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
 - b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
 - c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
 - d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.
6. **Training and Promotion:**
- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
 - b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
 - c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
 - d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
- a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.
 - d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
8. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
- a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
 - b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
 - c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
 - a. The records kept by the contractor shall document the following:
 1. The number of minority and non-minority group members and women employed in each work classification on the project;
 2. The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
 3. The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
 4. The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
 - b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. **General:**
 - a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.
 - b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
 - c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.
2. **Classification:**
 - a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
 - b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
 1. the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
 2. the additional classification is utilized in the area by the construction industry;
 3. the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
 4. with respect to helpers, when such a classification prevails in the area in which the work is performed.
 - c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary
 - e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.
3. **Payment of Fringe Benefits:**
- a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
 - b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
4. **Apprentices and Trainees (Programs of U.S. DOL) and Helpers:**
- a. Apprentices:
 - 1. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
 - 2. The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
 - 3. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
 - 4. In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.
 - b. Trainees:
 - 1. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.
 - 2. The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
 - 3. Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.
 - 4. In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
 - c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.
5. **Apprentices and Trainees (Programs of the U.S. DOT):**
 Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by

the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. **Withholding:**

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. **Overtime Requirements:**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. **Violation:**

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. **Withholding for Unpaid Wages and Liquidated Damages:**

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. **Compliance with Copeland Regulations (29 CFR 3):**

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. **Payrolls and Payroll Records:**

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof of the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.
- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 1. that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
 2. that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
 3. that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES AND LABOR THIS SECTION DELETED JUNE 4, 2007.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
 - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be 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.
2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).
3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 *et seq.*, as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. 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 clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. 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 clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction 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 to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its 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 3-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 1b of this certification; and

- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. 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 clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction 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 to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

STANDARD SPECIAL PROVISION

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

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.

STANDARD SPECIAL PROVISION
MINIMUM WAGES
GENERAL DECISION NC120090 01/06/2012 NC90

Z-90

Date: January 6, 2012

General Decision Number: NC120090 01/06/2012 NC90

Superseded General Decision Numbers: NC20100127

State: North Carolina

Construction Type: HIGHWAY

COUNTIES:

Anson
Cabarrus
Gaston
Mecklenburg
Union

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects, railroad construction, bascule, suspension and spandrel arch bridges designed for commercial navigation, bridges involving marine construction, and other major bridges).

Modification Number
0

Publication Date
01/06/2012

SUNC2011-071 09/16/2011

	Rates	Fringes
CARPENTER (Form Work Only)	14.70	
CEMENT MASON/CONCRETE FINISHER		
Anson, Cabarrus, and Gaston Counties	12.87	
Mecklenburg County	12.62	
Union County	12.75	
INSTALLER (Guardrail) (includes Guardrail/Post Driver Work)	11.16	
IRONWORKER (Reinforcing)	14.88	
LABORER		
Asphalt, Asphalt Distributor, Raker, and Spreader	11.78	
Common or General		
Anson and Cabarrus Counties	11.14	
Gaston County	10.63	
Mecklenburg County	11.55	
Union County	10.32	
Concrete Saw	14.26	
Landscape	10.35	
Luteman	12.88	
Mason Tender (Cement/Concrete)	11.25	
Pipelayer	12.93	
Traffic Control (Cone Setter)	12.53	
Traffic Control (Flagger)	9.99	
	Rates	Fringes
POWER EQUIPMENT OPERATORS		
Backhoe/Excavator/Trackhoe		
Anson, Cabarrus, and Gaston Counties	14.21	

	Rates	Fringes
Mecklenburg County	13.79	
Union County	14.53	
Broom/Sweeper	13.97	
Bulldozer		
Anson, Cabarrus, and Gaston Counties	15.46	
Mecklenburg County	15.90	
Union County	14.96	
Crane	19.11	
Curb Machine	14.43	
Distributor	14.99	
Drill	16.68	
Grader/Blade		
Anson, Cabarrus, Gaston, and Union Counties	17.99	
Mecklenburg County	18.65	
Loader		
Anson, Cabarrus, Gaston, and Union Counties	14.46	
Mecklenburg County	14.43	
Mechanic	17.13	
Milling Machine	15.80	
Oiler	14.36	
Paver	16.65	
Roller		
Anson, Cabarrus, Gaston, and Union Counties	13.22	
Mecklenburg County	13.29	
Scraper	15.85	
Screed	15.23	
Tractor	14.47	
TRUCK DRIVER		
4 Axle Truck	11.90	
Distributor	16.75	
Dump Truck		
Anson, Cabarrus, and Gaston Counties	13.46	
Mecklenburg County	13.79	
Union County	13.49	
Flatbed Truck	15.02	
Lowboy Truck		
Anson, Cabarrus, Gaston, and Mecklenburg Counties	15.26	
Union County	15.23	
Off the Road Truck	15.00	
Single Axle Truck	12.13	
Tack Truck	16.52	
Water Truck	13.16	

Welders – Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters, PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

LISTING OF DBE SUBCONTRACTORS

Sheet _____ of _____

Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				

This form must be completed in order for the Bid to be considered responsive and be publicly read.

Bidders with no DBE participation must so indicate this on the form by entering the word or number *zero*.

LISTING OF DBE SUBCONTRACTORS

Sheet _____ of _____

Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				

* The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the DBE subcontractor, and these prices will be used to determine the percentage of the DBE participation in the contract.

** Dollar Volume
 of DBE
 Subcontractor \$ _____
 Percentage of Total _____
 Contract Bid Price % _____

** - Must have entry even if figure to be entered is zero.

** - *If firm is a Material Supplier Only, show Dollar Volume as 60% of Agreed Upon Amount from Letter of Intent.*

If firm is a Manufacturer, show Dollar Volume as 100% of Agreed Upon Amount from Letter of Intent.

This form must be completed in order for the Bid to be considered responsive and be publicly read.

Bidders with no DBE participation must so indicate this on the form by entering the word or number *zero*.

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 filed 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.

Replacement of MRTMC Lightning and Surge Protection Systems BID TAB

County: Mecklenburg County Type of Work: Electrical

Line No.	Sec	DESCRIPTION	Quantity	Unit	Unit Price	Total Amount
1	800	MOBILIZATION	1	LS		
2	SP	GROUND ROD ASSEMBLY (30', 5/8" COPPER CLAD STEEL)	3	EA		
3	SP	ELECTRICAL CONDUIT (EMT) (1")	11	LF		
4	SP	ELECTRICAL CONDUIT (EMT) (2")	28	LF		
5	SP	ELECTRICAL CONDUIT (PVC) (2")	215	LF		
6	SP	ELECTRICAL CONDUIT (RGS) (2")	6	LF		
7	SP	ELECTRICAL CONDUIT (FMT) (1")	3	LF		
8	SP	ELECTRICAL CONDUCTORS (NO. 2 AWG GROUND WIRE)	154	LF		
9	SP	ELECTRICAL CONDUCTORS (NO. 4 AWG GROUND WIRE)	636	LF		
10	SP	ELECTRICAL CONDUCTORS (3/0 INSULATED CONDUCTOR)	54	LF		
11	SP	ELECTRICAL CONDUCTORS (NO. 2 AWG INSULATED CONDUCTOR)	676	LF		
12	SP	ELECTRICAL CONDUCTORS (NO. 6 AWG INSULATED CONDUCTOR)	137	LF		
13	SP	ELECTRICAL CONDUCTORS (NO. 8 AWG INSULATED CONDUCTOR)	1,065	LF		
14	SP	ELECTRICAL JUNCTION BOXES	2	EA		
15	SP	GFCI OUTLETS	1	EA		
16	SP	GENERIC SIGNAL ITEM (COVER PLATES)	1	LS		
17	SP	SURGE PROTECTION DEVICES (T-1/RS-232)	13	EA		
18	SP	SURGE PROTECTION DEVICES (RS-485/AUDIO)	34	EA		
19	SP	SURGE PROTECTION DEVICES (24V DC)	6	EA		
20	SP	SURGE PROTECTION DEVICES (120 VOLT)	4	EA		
21	SP	SURGE PROTECTION DEVICES (120/240 VOLTS)	1	EA		
22	SP	SURGE PROTECTION DEVICES (120/208 VOLTS)	4	EA		
23	SP	SURGE PROTECTION DEVICES (277/480 VOLTS)	2	EA		
24	SP	JUNCTION BOX (STANDARD SIZE)	3	EA		
25	SP	TRANSFORMER (277/480 TO 120/240 STEP DOWN)	1	EA		
26	SP	DISCONNECT/SAFETY SWITCH	1	EA		
27	SP	ELECTRICAL CIRCUIT BREAKERS	1	EA		
28	SP	UNINTERRUPTIBLE POWER SUPPLY	1	LS		
TOTAL BID FOR PROJECT						

UPS Vendor/ Subcontractor: _____

Contractor: _____
 Address: _____

 Federal ID No: _____
 Contr. License No.: _____
 Telephone No: _____
 Vendor No: _____
 Authorized Agent: _____
 Signature: _____
 Witness: _____
 Signature: _____

Corporate Seal

Agent's Title _____
 Date: _____
 Witness' Title _____
 Date: _____