SUPPLEMENTAL SPECIFICATIONS
FOR
ROWAN UNIVERSITY
EDGEOOOD PARK APARTMENTS PARKING LOT
PAVEMENT RESURFACING
BOROUGH OF GLASSBORO, GLOUCESTER COUNTY, NEW JERSEY

CES-3694

MAY 2018

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SPECIAL PROVISIONS

SPECIFICATIONS TO BE USED

The 2007 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation and as amended herein, will govern the construction of this Project and the execution of the Contract.

WAGE RATES

General wage determinations issued under Davis-Bacon and related acts, published by US Department of Labor, may be obtained from the Wage Determinations online website at http://www.wdol.gov/dba.aspx. Select state, county and construction type heading: HIGHWAY where the Project is to be performed then click Search.

Pay the prevailing wage rates determined by the United States Secretary of Labor and the New Jersey Department of Labor and Workforce Development. If the prevailing wage rate prescribed for any craft by the United States Secretary of Labor is not the same as the prevailing wage rate prescribed for that craft by the New Jersey Department of Labor and Workforce Development, pay the higher rate.

State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development’s website at http://lwd.dol.state.nj.us/labor/wagehour/wagerate/prevailing_wageDeterminations.html

The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (N.J.S.A. 34:11-56.25 et seq.)

If an employee of the Contractor or subcontractor has been paid a rate of wages less than the prevailing wage, the Department may suspend the Work, and declare the Contractor in default.

The NJDOT must report all suspected or reported violations to the federal agency providing the funding for the project.

Contractor’s compliance is required with the Copeland “Anti-Kickback” Act, (40 U.S.C. 3145), as supplemented by the Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or In Part by Loans or Grants from the United States”). Each contractor or subcontractor is prohibited from inducing by any means, any person employed in the construction, completion or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The NJDOT must report all suspected or reported violations to the federal agency providing the funding for the project.

GENERAL

Award of contract and subletting will not be permitted to, materials will not be permitted from, and use of equipment will not be permitted that is owned and/or operated by, firms and individuals included in the report of suspensions, debarments and disqualifications of firms and individuals as maintained by the Department of the Treasury, General Services Administration, CN-039, Trenton NJ 08625 (609-633-3990).
Payment for a pay item in the proposal includes all the compensation that will be made for the work of that item as described in the contract documents unless the "basis of payment" clause provides that certain work essential to that item will be paid for under another pay item.

Whenever any section, subsection, subpart or subheading is amended by such terms as changed to, deleted or added it is construed to mean that it amends that section, subsection, subpart or subheading of the 2007 Standard Specifications unless otherwise noted.

Whenever reference to page number is made, it is construed to refer to the 2007 Standard Specifications unless otherwise noted.

Henceforth in this supplementary specification whenever reference to the State, Commissioner, Department, Engineer or Inspector is made, it is construed to mean the agency executing this contract.

Whenever reference to Title 27 is made, it is construed to mean Title 40.

**BASELINE DOCUMENT CHANGES**

Baseline Document Change (BDC) Announcements are notices that a Baseline Document has been modified in part or in whole. A Baseline document is defined as any official document that has gone through an initial approval process and was approved for use as intended. Thus, a BDC is an alteration to or rewriting of any officially approved document. New documents are also announced with a BDC.

For additional BDC’s to the 2007 specs that are not covered in this document:

[http://www.state.nj.us/transportation/eng/documents/BDC/](http://www.state.nj.us/transportation/eng/documents/BDC/)
DIVISION 100 – GENERAL PROVISIONS

SECTION 101 – GENERAL INFORMATION

101.02 ABBREVIATIONS

THE FOLLOWING ABBREVIATIONS ARE ADDED:

ADA     Americans with Disabilities Act
CFR     Code of Federal Regulations
CUF     Commercially Useful Function
DCR/AA  New Jersey Department of Transportation, Division of Civil Rights and Affirmative Action
EEO     Equal Employment Opportunity
GFE     Good Faith Effort
OJT     On-The-Job-Training
USC     United States Code
USDOL   United States Department of Labor

101.03 TERMS

THE FOLLOWING IS ADDED:

All references to "Commissioner", "Department", "State", "ME", "RE", "Inspector", or "Engineer" shall be interpreted to mean the contracting agency, or their designated representative.

All references to “Standard Specifications” shall be interpreted to mean the Standard Specifications for Road and Bridge Construction 2007 as published and amended by the New Jersey Department of Transportation.

Department: Shall be defined as the contracting agency.

Resident Engineer (RE) shall be defined as a representative of the contracting agency.

THE FOLLOWING TERMS ARE CHANGED:

Completion.

(3) IS CHANGED TO:

3. the Contractor has satisfactorily executed and delivered to the RE all documents, including CC-257R, certifications, and proofs of compliance required by the Contract Documents, it being understood that the satisfactory execution and delivery of documents, certificates, and proofs of compliance is a requirement of the Contract.

Contractor. The individual, firm, partnership, corporation, joint venture, or any acceptable combination thereof contracting with the Department for performance of the Contract. For the purpose of carrying out the Contract, it also means the Contractor’s representative.

Pavement Structure. The combination of pavement, base courses, and when specified, a subbase course, placed on a subgrade to support the traffic load and distribute it to the roadbed (see Figure 101-1). These various courses are defined as follows:

1. Pavement. One or more layers of specified material of designed thickness at the top of the pavement structure.
2. Base Course. One or more layers of specified material of designed thickness placed on the subgrade or subbase.
3. **Subbase.** One or more layers of specified material of designed thickness placed on the subgrade.

**Subcontractor.** An individual, firm, partnership, corporation, joint venture, or any acceptable combination thereof, to which the Contractor subcontracts part of the Work pursuant to 108.01.

**The Following Terms Are Added.**

**Commercially Useful Function.** Occurrences in which the subcontractor is be responsible for the execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing, and supervising the work involved., and with respect to materials and supplies used on the contract, prepares the estimate, negotiates price, determines quality and quantity, orders the material, arranges delivery, installs (where applicable), and pays for the material and supplies itself for the project.

**Discrimination.** That act (or action) whether intentional or unintentional, through which a person in the United States, solely because of race, creed, color, national origin, age, ancestry, nationality, sex (including pregnancy and sexual harassment), marital status, domestic partnership or civil union status, affectional or sexual orientation, gender identity or expression, atypical hereditary cellular or blood trait, genetic information, liability for military service, or disability has been otherwise subjected to unequal treatment.

**Special Provisions.** Project specific specifications, non-standard specifications, and requirements for the performance of prescribed work which, in addition to the Standard Specifications, is part of the Contract documents.

**SECTION 102 – BIDDING REQUIREMENTS & CONDITIONS**

**Note:** All references to the electronic bidding procedure, Department website, software, and digital signatures are deleted from Section 102, as this bidding process is not utilized by the contracting agency. Bidding procedures shall be as described in the front-end bid documents.

**SECTION 103 – AWARD AND EXECUTION OF CONTRACT**

**Note:** Award and Execution of Contract shall be in accordance with the contracting agency’s standard procedures as described in the front-end bid documents.

**103.07 ACQUISITION OF DOCUMENTS**

The following is added:

After award of the Contract, a maximum of three (3) free copies of plans and specifications will be provided to the successful bidder upon request. It shall be the responsibility of the Contractor to keep at least one (1) set of plans and specifications at the project site at all times, and to provide plans and specifications to each and every Subcontractor as needed. Additional copies of plans and specifications will be furnished upon request, at a charge in accordance with standard County rates.

**SECTION 104 – SCOPE OF WORK**

**104.01 INTENT**

The following is added:
The work to be performed under this contract shall include hot-mix asphalt pavement resurfacing, and all appurtenant work, as presented within the bid documents.

**104.02 VALUE ENGINEERING**

THIS SUBSECTION IS DELETED.

**104.03 CHANGES TO THE CONTRACT**

**104.03.03 Types of Changes**

3. Changes in the Character of Work.

   a. Differing Site Condition.

THE SECOND PARAGRAPH IS CHANGED TO:

The Department will make payment for increased costs resulting from a Type 1 or Type 2 Differing Site Condition as a change in the character of work; however, the Department will not consider making payment for a differing site condition unless the resulting change in cost exceeds $7,500. Except, if the Contractor incurs cost as the result of multiple differing site conditions, with the cost of each separate differing site condition having a value of at least $1,500 but not more than $7,500, the Department will consider making payment for such costs if the aggregate cost of the multiple differing site conditions exceeds $7,500. If the change in cost exceeds these amounts, the Department will base the modification on the total cost of the change, and the Department will not deduct the threshold amount of $7,500 from the cost of the change.

**104.03.04 Contractual Notice**

THE SECOND PARAGRAPH IS CHANGED TO:

Immediately provide written notice to the RE of a circumstance that is believed to be a change to the Contract. If notice is not provided on Contractual Notice (Form DC-161), include the following in the initial written notice:

1. A statement that this is a notice of a change.
2. The date when the circumstances believed to be a change were discovered.
3. A detailed and specific statement describing the nature and circumstances of the change.
4. If the change will or could affect costs to the Department.
5. If the change will or could affect Contract Time as specified in 108.11.01.C.

In addition to the hard copy of the notice, email the notice to the RE. It is not necessary to attach listed documents to the email.

THE FOLLOWING IS ADDED:

All parties to promptly provide written notice to the other party when circumstances are believed to constitute a change to the Contract.

**104.03.08 Force Account**

7. Equipment.

   a. Contractor-Owned Equipment.
PART 1 IS CHANGED TO:

1. The Department will calculate the “rental” hourly rates by dividing the monthly rate by 176. The Department will not use weekly, daily, or hourly rates. The Department will apply rental hourly rates for every hour the equipment is in active use, except that for any 30-day period, the Department will limit the total amount paid for each piece of equipment to a maximum of the monthly rate.

THE FOLLOWING PART IS ADDED:

6. The Department will make payment for costs for transporting equipment to and from the work site, if said costs are solely required as a direct result of the Force Account activity.

THE SECOND PARAGRAPH IS CHANGED TO:

The payment established is full payment for all equipment costs, including the cost of fuel, repairs, maintenance, depreciation, storage and incidentals.

10. Subcontractors.

THE SECOND PARAGRAPH IS CHANGED TO:

The Department will make payment for markup on subcontracted work at the rate of 5 percent applied on the total amount of all costs for subcontracted force account work up to $500,000 and 2% applied on the total amount of all costs for subcontracted force account work over $500,000.

104.03.09 Delay Damages

1. Non-Productive Activity.

e. Equipment.

THE FIRST SENTENCE IS CHANGED TO:

If as the result of the delay, equipment cannot be used for any active work, and is directed by the RE to remain on the work site during the delay, the Department will make payment as specified in 104.03.08.7.a.5.

SECTION 105 – CONTROL OF WORK

105.01 AUTHORITY OF THE DEPARTMENT

105.01.01 RE

THE LAST PARAGRAPH IS CHANGED TO:

The RE has the authority to suspend the Work wholly or in part and to suspend Estimates, as specified in 109.05, for failure of the Contractor to correct conditions unsafe for the workers or the general public, for failure to carry out provisions of the Contract, including but not limited to DBE/ESBE/SBE program regulations in the administration of the Contract, or for failure to comply with RE direction. The RE also has the authority to suspend the Work wholly or in part for unsuitable weather, for conditions considered unsuitable for the prosecution of the Work or portion of the Work, or for any other condition or reason deemed to be in the interest of the public.

105.02 RESPONSIBILITIES OF THE CONTRACTOR

105.02.01 Labor and Equipment

THE FIRST PARAGRAPH OF PART 1 IS CHANGED TO:
1. **Labor.** Employ workers that have sufficient skill and experience to properly perform the work assigned to them. Do not engage or employ current Department employees or workers that would cause the worker to be in violation of N.J.S.A. 52:13D-17. Do not engage or employ any former federal, state, or municipal worker who has been personally or individually debarred or subject to a forfeiture of public office pursuant to N.J.S.A. 2C:51-2.

THE FOLLOWING SUBPART IS ADDED:

**105.02.05 Civil Rights Requirements**
The Contractor is obligated to comply with Title VI of the Civil Rights Act of 1964, 49 CFR Part 21 and 28 CFR Section 50.3, 2 C.F.R. Part 200 and 2 C.F.R. Part 200 Appendix II and any other Rules relative to Nondiscrimination as they may be amended from time to time, which are herein and incorporated by reference and made part of the Contract. The Contractor in the performance of the Contract agrees to comply with nondiscrimination regulations and other requirements as specified in Section 107. Failure of a Contractor to comply with the nondiscrimination provisions of the Contract may result in the actions as set forth as specified in Sections 105, 108 and 109.

**105.05 WORKING DRAWINGS**

THIS SECTION IS REVISED WHERE APPROPRIATE TO INCLUDE THE FOLLOWING:

Four (4) hardcopies of working drawing submissions shall be submitted to the RE on 8-1/2 by 11-inch sheets, unless otherwise approved. Working drawings shall not be submitted to the Department via email for approval.

**105.07 COOPERATION WITH UTILITIES**

THE FOLLOWING IS ADDED:

Bidders are hereby notified of the information available regarding the existing utility structures which may be encountered within and adjacent to the limits of the work and of the corporations owning or controlling them.

The contractor shall also comply with the State's underground facility protection act and notify the State's one call system and identity itself as the State's contractor and specify the route and section number of the project before performing work on the project. The one call system can be reached by calling 1-800-272-1000.

**UTILITIES**

**105.07.01 Working in the Vicinity of Utilities**

THE FOLLOWING IS ADDED:

Bidders are advised to verify the utility information as its accuracy and completeness is not guaranteed.

The locations and information regarding subsurface utilities are not guaranteed by this Department and the Contractor shall ascertain the location and depth of all utilities by his own investigation and determine on the site of the work and from information from the respective owners of the utilities.

The Contractor shall prosecute his work carefully and skillfully and he shall exercise the necessary precautions and employ such procedures and methods as may be necessary to protect these utilities from damage.
The Contractor shall cooperate with the Utility Companies in the protection and any necessary adjustments of their facilities.

Before the Contractor begins any work or operation he shall carefully locate existing structure and conduct his operations to avoid damaging it. If the Contractor wishes to have any utilities relocated for his own convenience, he shall make the necessary arrangements with the owners and reimburse them at his own expense for the cost of the work.

The Contractor shall permit the owners of utilities access to the site at all times to relocate or protect their lines and he shall cooperate with them in every way.

The Contractor shall notify the Utility Company well in advance of the time he proposes to perform any work which would endanger their facilities during the construction operation.

No specific payment will be made for the maintaining, relocating and protecting of utilities except as specifically provided herein and all cost of this work will be assumed to have been included items of the Contract.

Whenever utility services are encountered in which the private property owner also directly owns the utility service, said utility service shall be relocated by the Contractor. Separate payment will not be made for this relocation, but all such costs shall be included in the unit prices bid for the various items of the Contract as listed in the Proposal.

Whenever the temporary relocation or temporary support of public or private facilities is necessitated in order to complete the Project, all such temporary relocation or temporary support costs shall be borne by the Contractor.

When water, sewer and gas house connections, boxes, cleanouts and valves must be relocated or replaced to carry out this Project, the cost of such work shall be included in the prices bid for the various pay items.

Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, utility manholes, light standards, cableways, signals, railroad lines, and all other utility appurtenances within the limits of the project which are to be relocated or adjusted are to be moved by the owners at their expense, except as otherwise provided for in the Supplemental Specifications or as noted on the Plans.

The Contractor shall be responsible to provide water, for any purpose, at their own expense. The Contractor shall be responsible for providing uninterrupted water service to each home in the project area at all times.

The Contractor shall be responsible for locating all existing structures and utilities, which the Contractor deems necessary, both above and below the ground surface before equipment enters the construction site.

The Contractor shall make final inquiries to Underground Utilities telephone number 1-800-272-1000 within seven (7) days of entering the site. The Contractor shall coordinate and verify the method of utility locations with the appropriate utility company.

If a Utility is to be relocated, the Contractor will be responsible for paying all fees required by the Utility Company due to the relocation. The County will not be responsible for any down time incurred by the Contractor due to the Utility Company work.

The Contractor is responsible to ascertain and schedule the utility companies required work effort. The Contractor shall also be required for coordination with the utility companies in order to expedite any and all required utility relocations, installation of new facilities, utility modifications, etc., necessary to
complete the project. If any company’s work affects the construction schedule as to create any project delay, the Contractor shall notify the Engineer and the utility companies in writing relative to the cause of the delay and the effect on the progress schedule. The Contractor is the main contact with utility companies during construction.

It is understood and agreed that the Contractor has considered in their bid all of the permanent and temporary utility facilities in their present and/or relocated positions as may be shown on plans, described in supplementary specifications, and as revealed by site investigation, is cognizant of the limited ability of the County to control the actions of the utilities, and has made allowances in their bid for the fact that additional compensation will not be allowed for any delays, inconvenience, or damage sustained due to any interference from utility facilities or the operation of moving them.

B. Locating Existing Facilities

THE FOLLOWING IS ADDED:

The Contractor shall not proceed with any excavation operations until it has determined the exact location of the existing utility facilities within the Project from examination of the Contract Documents and information provided in Subsection 102.04, through inquiries to the respective Utility(s), and through its own subsurface site investigations, including test pits. Test Pits shall be as specified in Subsection 202.03. The Contractor shall notify the Engineer if their examinations determine any conflicts to completing the Work.

C. Protection of Utilities

THE FOURTH PARAGRAPH IS CHANGED TO:

Access within railroad right-of-way is restricted. Before beginning work within the railroad ROW or on railroad facilities, obtain the railroad’s written approval for access, the method of construction, and the schedule of the work. Provide a copy of the submittal and approval to the RE. Comply with the railroad’s requirements for working within the railroad right-of-way.

THE FOLLOWING IS ADDED TO the SIXTH PARAGRAPH:

Ensure that the work is performed following the railroad’s access and safety restrictions.

(NOTE: There are no known ITS or railroad facilities within the project limits.)

E. Damage

THE FOLLOWING IS ADDED:

The Contractor shall protect, support, and secure all in-place utility facilities so as to avoid damage to them and any interruption of service. The Contractor shall not temporarily move existing or completed utility facilities without the Utility(s) written consent, and the facilities shall be as safe and permanent at completion as they were before the Contractor’s involvement. In the event the Contractor damages a utility facility, including property service connections, the Contractor shall notify the Utility(s) immediately. The Utility(s) may complete the repairs or allow the Contractor to complete the repairs, with the Contractor responsible for any applicable time and expense.

Should the Contractor, for its own convenience, cause the Utility(s) to incur costs not covered by the utility agreement, or delay the Utility(s), or incur costs without prior written approval of the Resident Engineer, the Contractor shall be responsible for these costs and delays. The Contractor shall pay the Utility(s) within 30 days of the Utility(s) request for cost reimbursement of any repairs and other incurred costs. If payment has not been made within 30 days, the County may reimburse the Utility(s) for the Contractor generated costs and deduct these expenses from partial or final payment due the Contractor.
SECTION 106 – CONTROL OF MATERIALS

106.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS
THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that materials furnished for the Project are new, unless otherwise specified in the contract. Comply with 2 CFR 200.322 Procurement of Recovered Materials “to the highest percentage of recovered materials practicable” where the purchase price of the covered item listed exceeds $10,000. Use materials that conform to the requirements of the contract. When required by the Contract, use only products and suppliers listed on the QPL. Use sources of materials that have been approved by the Department on a Materials Questionnaire as specified in 106.04.

106.02 Department Furnished Materials

THE FOLLOWING IS ADDED:
There are no Department furnished materials for this project.

106.05 MATERIALS, INSPECTIONS, TESTS, AND SAMPLES

THIS SECTION IS REVISED WHERE APPROPRIATE TO INCLUDE THE FOLLOWING:

The Contractor shall retain an independent certified testing agency to conduct required testing of materials before and during construction. In addition, the Contractor shall schedule the work to allow for the review of certifications, inspections, sampling, and laboratory testing to be accomplished as needed. Delays due to lacking, incomplete, or unacceptable material certifications, testing, etc. shall be at the sole expense of the Contractor and shall not be deemed reasonable grounds for an extension of time.

Results of tests made by the Contractor’s testing entity shall be furnished to the Engineer. Testing shall be performed according to NJDOT, AASHTO, and ASTM methods where applicable.

No separate payment will be made for the cost of material sampling, testing, certifications etc., the cost of which shall be included in the various other bid items.

THE ENTIRE SECOND PARAGRAPH SHALL BE CHANGED TO:

All materials being used are subject to inspection, testing, or rejection at any time prior to acceptance of the project. Samples may be taken by a representative of the Department. Results of tests made with Certified Testing Laboratory apparatus conforming to the requirements specified in the prescribed methods of test shall be official and copies of test results will be furnished upon request.

106.07 CERTIFICATION OF COMPLIANCE

THE FOLLOWING IS ADDED:
The Contractor shall supply the County with Letters of Certifications from the Manufacturer or Supplier of materials used on the project stating that the materials conform to the Standard Specifications and Supplementary Specifications.

106.07.01 Certification of Compliance
THE ENTIRE TEXT IS CHANGED TO:

Submit manufacturer’s Certifications of Compliance stating that the materials and/or assemblies fully
comply with the requirements of the Contract when required by the Contract or requested by the Department.

Ensure that Manufacturer’s Certification of Compliance contains the following information:

1. Project Name.
2. Name of the Contractor.
4. Quantity of material represented by the certification.
5. Means of identifying the consignment, such as label marking or seal number.
6. Date and method of shipment.
7. A statement that the material conforms to the Contract material requirements and that representative samples have been sampled and tested.
8. If the submission is for an assembly of materials, a statement that the assembly conforms to the Contract.
9. Signature of a person having legal authority to bind the supplier.
10. Typed or printed name of the person who signed the certification.

Before incorporating the materials into the Project, obtain 3 copies of the manufacturer’s Certifications of Compliance for materials, components, and manufactured items that are accepted by certification. Retain 1 copy and submit 2 copies to the RE. With the Certification of Compliance, provide a transmittal identifying the Item for which it is submitted. For products that contain steel or iron, attach additional documents as required by the certification procedures as specified in 106.07.02. The Contractor may submit the Certifications of Compliance electronically to the RE in a scanned document. Include the transmittal and all backup documentation in the scanned document.

The Department has the right to sample and test materials or assemblies accepted on the basis of Certifications of Compliance at any time. The Department will reject materials or assemblies, whether in place or not, if found not to be in conformance with the Contract requirements.

The Department will not make payment for an Item for which material is accepted on the basis of a Certification of Compliance until the RE has received the required Certification of Compliance and has inspected and accepted the material or assembly.

**106.07.02 Certification for Iron and Steel**

THE ENTIRE TEXT IS CHANGED TO:

**A. Precast Concrete Steel and Concrete Pipe Certification of Compliance.** For precast concrete and concrete pipe items, a Buy America Compliance Plan is required to confirm that the material meets the Buy America requirements as specified in 106.03. The ME will periodically audit compliance with the program at the precast plant. If the precast concrete item is not inspected by ME, submit a Certification of Compliance for the precast concrete item as required in 106.07.01. When a Certification of Compliance is submitted, ensure that the Certification of Compliance contains a statement that the reinforcing steel used in the precast concrete item complies with the Buy America requirements as specified in 106.03

**B. Step Certification of Compliance.** For products that contain steel or iron components and are not covered in 106.07.02.A, step Certification of Compliance is required to confirm that the item meets the Buy America requirements as specified in 106.03. A step certification is a process under which each handler (e.g., supplier, fabricator, manufacturer, processor, coating facility) of the iron and steel components certifies that the steel and iron components were of domestic origin and that their step in the process was domestically performed.

Every step in the process from melting to coating must be performed in the United States in order for the steel or iron component to be considered domestic and must be documented by step certification. If a domestic source for a steel or iron component cannot be found, submit a request
for waiver to the Department. Do not purchase non-domestic steel or iron components without the express written consent of the Department.

Ensure that 3 copies of the Contractor’s Certification of Compliance (Form DC-17) and the step Certifications of Compliance are provided for items containing steel or iron. Retain 1 copy and submit 2 copies to the RE. The Contractor may submit the DC-17 and the step certifications electronically in a scanned document.

Ensure that step Certifications of Compliance contain the following information:

1. Name of the Company supplying the material.
2. Name and location of the Company the material was shipped to.
4. Quantity of material represented by the Certification.
5. Means of identifying the consignment, such as label marking or seal number.
6. Date and method of shipment.
7. A statement that the material conforms to the Contract material requirements and to the Buy America requirements in 106.03.
8. A statement that all steel or iron components in the material or assembly were “melted and manufactured in the US”, unless there is non-domestic steel or iron in the material or assembly.
9. If there is non-domestic steel or iron in the assembly, describe in detail the non-domestic steel or iron material and the quantity. Attach a copy of the Department’s approval for the use of non-domestic steel or iron components.
10. Signature of a person having legal authority to bind the supplier.
11. Typed or printed name of the person who signed the certification.

SECTION 107 – LEGAL RELATIONS

107.01 LEGAL JURISDICTION

107.01.02 Permits, Licenses, and Approvals

THE FOLLOWING IS ADDED:

No work may begin until all permits have been received.

The Contractor is put on notice that all permits necessary and required under the State specifications, EPA, OSHA Regulations, NIOSH recommendations, State of New Jersey regulations and any other applicable federal, state and local government regulations must be obtained prior to commencement of work.

The contractor shall obtain and pay for all necessary permits, including, but not limited to, municipal Road Opening Permits if required. No separate payment will be made for permits. All costs thereof shall be included in the various items of the proposal.

The Sales Tax exemption does not apply for equipment used for contract work or for force account work whether the equipment is to be purchased or rented.

107.02 DISCRIMINATION IN EMPLOYMENT ON PUBLIC WORKS

THE TITLE AND ENTIRE SUBSECTION IS CHANGED TO:

107.02 NONDISCRIMINATION
It is the policy of the Department that anyone performing work under any program, activity, or Contract with the Department, shall not discriminate on the basis of race, creed, color, national origin, age, ancestry, nationality, marital or domestic partnership status, gender, disability, affectional or sexual orientation, gender identity or expression, religion, liability for military service, veteran’s status, income level or ability to read, write or speak English.

Pursuant to N.J.S.A. 10:2-1, the Contractor agrees that in the hiring of persons for the performance of work under this Contract or any subcontract hereunder, or for the procurement, manufacture, assembling, or furnishing of any such materials, equipment, supplies, or services to be acquired under this Contract, no contractor, nor any person acting on their behalf of such contractor or subcontractor, shall by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;

No Contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling, or furnishing of any such materials, equipment, supplies, or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex.

There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of $50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and this contract may be terminated by the Department, and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the Contractor from the Department of any prior violation of this section of the contract.

**Standard Title VI Assurance.** During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”), in accordance with Title VI /Nondiscrimination Assurance – Appendix A, USDOT Order 1050.2A agrees as follows:

1. **Compliance with Regulations:** The Contractor will comply with the Acts and Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which herein incorporated by reference and made a part of this Contract.

2. **Nondiscrimination:** The Contractor, with regard to the Work performed by it during the Contract, will not discriminate on the grounds race, creed, color, national origin, age, ancestry, nationality, marital or domestic partnership status, gender, disability, affectional or sexual orientation, gender identity or expression, religion, liability for military service, veteran’s status, income level or ability to read, write or speak English in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and Regulations, including employment practices when the Contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. **Solicitations for Subcontracts, Including Procurement of Materials and Equipment:** In all solicitations, either by competitive bidding, negotiation made by the Contractor for Work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor’s obligations under this Contract and the Acts and Regulations relative to nondiscrimination on the grounds of race, creed, color, national origin, age, ancestry, nationality, marital or domestic partnership status, gender, disability, affectional or sexual orientation, gender identity or expression, religion, liability for military service, veteran’s status, income level or ability to read, write or speak English.
4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA, to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Non-Compliance:** In the event of a Contractor’s noncompliance with the Nondiscrimination provisions of this Contract, the Recipient will impose such Contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

1. Withholding payments to the Contractor under the Contract until the Contractor complies; and/or
2. Cancelling, terminating, or suspending a Contract, in whole or in part.

6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interest of the United States.

During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) in accordance with the Title VI /Nondiscrimination Assurance – Appendix E, USDOT Order 1050.2A, agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

2. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601);
7. The Civil Rights Restoration Act of 1987, (PL 100-209);
8. Title II and III of the Americans with Disabilities Act (42 U.S.C. § 12131- - 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
9. The Federal Aviation Administration’s Nondiscrimination statut (49 U.S.C. § 47123);
10. Executive Order 12898, Federal Actions to address Environmental Justice in Minority Populations and Low Income Populations;
11. Executive Order 13166, Improving Access to services for Persons with Limited English Proficiency (70 Fed. Reg. at 74087 to 74100);
12. 23 CFR Part 230 (EEO, Affirmative Action & JLT)
13. 49 CFR Part 26
14. Executive Order 11246 as amended
15. Section 503 of the Rehabilitation Act of 1973 as amended
16. Section 4212 of the Vietnam Era Veteran’s Readjustment Assistance Act, as amended
18. New Jersey P.L. 1975 Chapter 27

107.03 AFFIRMATIVE ACTION, DISADVANTAGED BUSINESS ENTERPRISES, OR EMERGING SMALL BUSINESS ENTERPRISE

THE TITLE AND ENTIRE SUBSECTION IS CHANGED TO:

107.03 AFFIRMATIVE ACTION, DISADVANTAGED BUSINESS ENTERPRISES OR EMERGING SMALL BUSINESS ENTERPRISES, AND SMALL BUSINESS ENTERPRISES

It is the public policy of the State and of the United States that no individual, group, firm, corporation or joint venture working on or seeking to work on a Public Works Project should be discriminated against on the basis of race, creed, color, national origin, age, ancestry, nationality, marital or domestic partnership status, gender, disability, liability for military service, affentional or sexual orientation, atypical cellular or blood trait, or genetic information (including the refusal to submit to genetic testing). The Department has developed Affirmative Action, Disadvantaged Business Enterprise, or Emerging Small Business Enterprise Programs to implement this policy, and the regulations and requirements applicable to the Contract are contained in the Special Provisions. The Department will resolve conflicts between these regulations and requirements and the other provisions of the Contract to further the above stated public policy.

Contract Assurance. The Contractor, sub-recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this contract or such other remedy as the Department deems appropriate, which may include, but is not limited to:

1. Withholding monthly progress payments;
2. Assessing sanctions;
3. Liquidated damages; and/or
4. Disqualifying the Contractor from future bidding as non-responsive.

107.04 NEW JERSEY CONTRACTUAL LIABILITY ACT
THE FOURTH PARAGRAPH IS CHANGED TO:

For purposes of determining the date of “completion of the contract” pursuant to N.J.S.A. 59:13-5, “completion of the contract” occurs on the date that the Contractor provides written notice to the Department of acceptance of the Proposed Final Certificate or conditional acceptance of the Proposed Final Certificate or the 30th day after the Department issues the Proposed Final Certificate, whichever event occurs first.

107.09 INDEPENDENT CONTRACTOR
THE ENTIRE SUBSECTION IS CHANGED TO:

The relationship of the Contractor to the State is that of an independent contractor. Conduct business consistent with such status. Do not hold out or claim to be an officer or employee of the Department by reason hereof. Do not make a claim, demand, or application to or for the rights or privileges applicable to an officer or employee of the Department, including, but not limited to, Workers Compensation Insurance, unemployment insurance benefits, social security coverage, or retirement membership or credit.

107.12 THE CONTRACTUAL CLAIM RESOLUTION PROCESS

Claims will be reviewed in accordance with the method outlined in the Standard Specifications,
contracting agency procedures, and applicable laws.

The Contractor agrees that they shall have no right to nor shall make any claim whatsoever for damage or additional compensation by reason of the Engineer revising the stage construction or the maintenance of traffic requirements of the Contract. An extension of time may, however, be granted if appropriate under Subsection 108.11.01

107.17 COMMUNICATION WITH THE NEWS MEDIA

Do not communicate with the news media or issue a news release without obtaining a prior written approval from the Department.

SECTION 108 – PROSECUTION AND COMPLETION

108.01 SUBCONTRACTING

THE FOLLOWING PARAGRAPH IS ADDED BEFORE THE FIRST PARAGRAPH:

Do not discriminate on the grounds of race, creed, color, national origin, age, ancestry, nationality, marital/domestic partnership/civil union status, gender, disability, religion, affectional or sexual orientation, gender identity or expression, family status, atypical cellular or blood trait, genetic information, military service, or veterans status, in the selection and retention of subcontractors, including procurement of materials and leases of equipment. In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurement of materials, or leases of equipment, each potential subcontractor or firm will be notified by the Contractor of the Contractor’s obligations under this Contract and the Acts and Regulations relative to Nondiscrimination.

THE FOLLOWING IS ADDED:

The Department will not permit subcontractors without prior approval. In addition to the documentation required under Section 108.01, the contractor shall provide a list of all proposed subcontractors for the project with the bid package.

1. Values and Quantities.

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

There are no Specialty Items in this Project.

THE THIRD PARAGRAPH IS CHANGED TO:

If a partial quantity of work for a unit price Item is subcontracted, the Department will determine the value of the work subcontracted by multiplying the price of the Item by the quantity of units to be performed by the subcontractor.

THE FOURTH PARAGRAPH IS CHANGED TO:

If only a portion of work of an Item is subcontracted, the Department will determine the value of work subcontracted based on the value of the work subcontracted as indicated in the subcontract agreement and as shown in a breakdown of cost submitted by the Contractor.

2. Limits and Restrictions.

PART 3 IS CHANGED TO:
3. The Contractor is barred from subcontracting to firms and individuals suspended or
debarred by the Department or included in the State of New Jersey Consolidated
Debarment Report maintained by the Department of the Treasury, Division of Building
and Construction, Bureau of Contractor Prequalification. The Contractor must certify that
neither the individual, partnership, corporation, joint venture, or limited liability
corporation applying to do subcontract work nor any of its corporate officers,
stockholders, partners, or members are collectively or individually suspended, debarred,
proposed for debarment, disqualified, declared ineligible, or voluntarily excluded from
doing business by this or any other State or sub-division thereof or listed in the Federal
Government’s System for Award Management (SAM), located at:

108.02 COMMENCEMENT OF WORK

THE SUBPART 4 IN THE FIRST PARAGRAPH IS CHANGED TO:

4. Progress schedule as specified in 153.03.03

THE FIFTH PARAGRAPH IS REPLACED WITH THE FOLLOWING:

The Contractor shall commence work within ten (10) calendar days after date of mailing fully executed
Contract and shall continue without interruption until the work is completed unless otherwise directed
by the contracting agency. The Contractor shall give the Engineer not less than three (3) days notice
of the time and place or places he will start the work.

THE FOLLOWING IS ADDED:

The Contractor shall be responsible to obtain all necessary construction State, County, and local
permits, licenses, approvals and inspections. Contractor shall be responsible for all charges and fees,
as well as give notices necessary for all incidentals for the project.

No specific payment will be made for obtaining permits, permit fees, inspections, etc. All such costs
shall be included in the costs of the various items in the proposal.

108.04 WORK SITE AND STORAGE

THE FOLLOWING IS ADDED:

Materials shall be stored to assure the preservation of their quality and fitness. Stored materials, even
though approved before storage, may again be inspected prior to their use on the Project. Stored
materials shall be located so as to facilitate their prompt inspection. With the approval of the
Engineer, areas on-site may be used for storage purposes and for the placing of the Contractor’s
equipment. Off-site private property and/or right-of-way shall not be used for storage purposes
without written permission. Copies of such written permission shall be furnished to the Engineer prior
to storage. Storage sites shall be restored to their original condition at no cost to the Owner.

108.05 SANITARY AND SAFETY PROVISIONS

THE FOLLOWING IS ADDED:

The contractor shall make available to the contractors, employees, subcontractors, the Engineer and
the public, all information pursuant to OSHA 29 CFR part 1926.59 of the hazard communication
standard 29 CFR 1910.1200 and shall also maintain a file on each job site containing all material
safety data sheets (MSDS) for products in use at the project. These material safety data sheets shall
be made available to the Engineer upon request.
108.06 NIGHT OPERATIONS

THE FOLLOWING IS ADDED:

Any nighttime operations after normal working hours or weekend or holiday operations that require the presence of inspection and/or engineering personnel shall include any compensation for said personnel. The necessity of their presence shall be directed by the Engineer. The contractor shall be responsible for the compensation.

2. Visibility Requirements for Workers and Equipment.

THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that workers wear a 360° high-visibility retroreflective safety garment meeting ANSI/ISEA Class 3, Level 2 standards.

108.09 MAINTENANCE WITHIN THE PROJECT LIMITS

THE FOLLOWING IS ADDED:

The contractor shall be responsible for maintenance within the project limits until acceptance. This maintenance shall consist of continuous and effective work prosecuted day by day, with adequate equipment and forces to the end that the roadway is kept in satisfactory condition at all times.

On any section opened to traffic, whether provided for in the contract documents or opened as directed, any damage to the roadway due to the contractor’s operations shall be repaired at no cost.

In case of a contract requiring placing of a course upon a course or subgrade previously constructed, the contractor shall maintain the previous course or subgrade during all construction operations.

In order to prevent damage to the contractors’ equipment and traffic control set up, all maintenance, snow plowing, mowing, road patching, etc. shall be the responsibility of the Contractor with the project limits. No separate payments shall be made for any maintenance, mowing, patching, or repair work within these limits.

108.10 CONTRACT TIME

THE FOLLOWING IS ADDED:

Substantial Completion is met when all work is complete, with the exception of landscaping Items listed in 811.04, removal of SESC measures, FINAL CLEANUP, and repair of unacceptable work; provided the RE has determined that:

1. The Project is safe and convenient for use by the public.
2. Failure to complete work and repairs excepted above will not result in the deterioration of other completed work.
3. The value of the remaining landscaping work, removal of SESC measures, repairs, and FINAL CLEANUP is less than 2 percent of the Total Adjusted Contract Price.

Completion is met when all of the following have occurred:

1. The Work has been satisfactorily completed in all respects according to the Contract.
2. The Project is ready for use by the Department as required by the Contract.
The Contractor has satisfactorily executed and delivered to the RE all documents, certificates, and proofs of compliance required by the Contract including the Notice of Completion.

*The project must be completed within the time stipulated in the front-end bid documents.*

### 108.11 MODIFICATIONS TO CONTRACT TIME

THE FOLLOWING IS ADDED:

When the Contractor deems that additional compensation or extension of time is due him for work required to be performed or materials required to be furnished which in his opinion cannot be classified under the schedule items of work and which have not been covered by a Change Order as hereinafter specified in Article 104.03 and it is his intention to make claim therefore, he shall notify the Engineer in writing of such intention before he begins the work or furnishes the materials in question. If such notice be given the Engineer shall be afforded the opportunity to modify the design or construction procedure, or both, before the Contractor begins the work or furnishes the materials in question, and the opportunity and proper facilities for keeping account of the actual cost of such work and materials after the work begins. If such notice be not given, in writing, or if the Engineer be not afforded such opportunity and facilities, then the Contractor shall and hereby agrees to waive the claim for such additional compensation or extension of time or both. However, if the Contractor has complied with all the foregoing provisions, this circumstance in no way shall be construed as proving the validity of the claim.

The claim will be passed on by the Engineer, and if he finds it to be justifiable under the provisions of the Contract, the work or materials in question will be paid for under an appropriate Change order. Attention is directed to the provisions of Article 104.03 and 109. regarding limitation of increase and reduction of quantities of major schedule items.

Extension of time stipulated in the Contract for completion of the project will be made if and as the Engineer may deem proper, when work under a Change order as herein-after provided is added to the work of the Contract, when the work is suspended as provided in Article 108.13,14,15 and when the work of the Contractor is delayed on account of conditions, other than daily weather conditions which in the opinion of the Engineer warrant such extension; provided however, that no extension on account of delay will be granted unless notice of such delay and of the Contractor's intention to claim an extension of time be given the Engineer, in writing, within five (5) days after the beginning of such delay, and said notice shall give complete information of the nature, cause and probable extent of the delay. Extensions of time shall be binding only when issued in writing.

#### 108.11.01 Extensions to Contract Time

**B. Types of Delays.**

1. **Non-Excusable Delays.**

THE FOLLOWING IS ADDED:

   For work performed by Utilities, delays up to 30 percent of the estimated duration specified in 105.07.02 are considered non-excusable. The duration includes both the advance notice and the completion of the work by the Utility.

   For delays caused by Railroads, delays up to 30 percent of the estimated availability specified in 105.07 are considered non-excusable.

2. **Excusable, Non-Compensable Delays.**

   **b. Utilities.**
THE FOLLOWING IS ADDED:
For delays caused by Railroads, when the availability to access is reduced by more than 30 percent greater than the estimated availability specified in 105.07.

THE LAST PARAGRAPH IS CHANGED TO:
If approved excusable, non-compensable delays exceed a total of 90 days, the time in excess of 90 days will become excusable and compensable as specified in 108.11.01.B.3.

108.12 RIGHT-OF-WAY RESTRICTIONS

THE FOLLOWING IS ADDED:
Right-of-way acquisitions are not proposed for the project.

108.14 DEFAULT AND TERMINATION OF CONTRACTOR’S RIGHT TO PROCEED

THE FOLLOWING LISTS UNDER THE FIRST PARAGRAPH IS CHANGED TO:

11. Fails to comply with Contract requirements regarding minimum wage payments, 49 CFR Part 26 et seq., the DBE program requirements, SBE program requirements, and equal employment opportunity requirements.

THE FOLLOWING IS ADDED AFTER THE 2ND PARAGRAPH:
If the Department directs the Surety to complete the Contract, and the Surety elects to use a completion-contractor to perform the Work, the Surety must promptly submit to the Department a request for approval of the proposed completion-contractor as a subcontractor as per Section 108.01. The Department has the right to reject a request by the Surety to use the Contractor as the completion-contractor, either directly or under the direction of a consultant to the Surety. In addition, the Department has the right to reject a request by the Surety to contract with employees of the Contractor, directly or under the direction of a consultant to the Surety, to complete the Contract. The Department’s right to reject contained in this paragraph is based on the sole discretion of the Department.

108.15 TERMINATION OF CONTRACT

THE FOLLOWING IS ADDED:
The contracting agency also reserves the right to terminate the Contract or any portion thereof, at any time, upon a determination by the agency, in their sole discretion, that such termination is in the best interests of the agency.

108.19 COMPLETION AND ACCEPTANCE

THE FOLLOWING IS ADDED:
No Incentive Payment for Early Completion is specified for this project.

THE FIRST THOROUGH FOURTH PARAGRAPHS ARE CHANGED TO:
Notify the Department, in writing, when the Work is complete. When the Department receives written notice, the Department will perform an inspection. If the Department determines that the Work is complete, the Department will prepare a Final Change Order; obtain Freeholder Approval of the Final Change Order and make Final Payment with release of retainage.
If the Department determines that the Work is not complete, the Department will respond within 30 days and provide the Contractor with the necessary instructions for completion and correction. Final Inspection by New Jersey Department of Transportation will be according to their availability and schedule. The New Jersey Department of Transportation may provide comments and instructions for corrections separate from the Department. Complete the Work and re-notify the Department. Repeat this procedure until all of the Department and New Jersey Department of Transportation comments and instructions (punch list) are completed and no corrective action is required.

The date of the Department Final Payment Check Date is the date of Completion and date of Acceptance.

After Acceptance, the Contractor is relieved of the duty of maintaining and protecting the project.

In addition, the Contractor is relieved of its responsibility for damage to the work that may occur beyond one full year after Acceptance.

108.20 LIQUIDATED DAMAGES

THE FOLLOWING IS ADDED:

Liquidated damages will be assessed in accordance with the front-end bid documents.

SECTION 109 – MEASUREMENT AND PAYMENT

109.01 MEASUREMENT OF QUANTITIES

THE SECOND PARAGRAPH IS DELETED.

THE LAST SENTENCE OF THE LAST PARAGRAPH IS CHANGED TO:

The Department will measure quantities for Proposal Items that are designated on the Plans as “if and where directed” for payment when the RE directs work using the “if and where directed” quantity.

109.02 SCOPE OF PAYMENT

THE THIRD SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Department will not make additional or separate payment for work or portion of work unless specifically provided for in the “MEASUREMENT AND PAYMENT” Subsection.

109.05 ESTIMATES

THE FOLLOWING IS ADDED AFTER THE FIRST PARAGRAPH:

Pay subcontractors and suppliers for satisfactory performance of their work no later than 30 days from receipt of each payment made by the Department.

Pay subcontractors and suppliers the full amount of retainage no later than 30 days from receipt of payment made by the Department for the subcontractor’s or supplier’s work.

THE SECOND PARAGRAPH IS CHANGED TO:
The RE will provide a summary of the Estimate to the Contractor. Before the issuance of each payment, certify, on forms provided by the Department, that:

1. Each subcontractor or supplier has been paid the amount due, including retainage, from the previous progress payment and will be paid the amount due from the current progress payment, including retainage, for the subcontractor or supplier’s work that was paid by the Department.
2. There exists a valid basis under the terms of the subcontractor’s or supplier’s contract to withhold payments from the subcontractor or supplier, and therefore payment is withheld.

THE FOLLOWING IS ADDED AFTER THE FOURTH PARAGRAPH:

If the Contractor fails to pay the subcontractor or supplier within 30 days after the subcontractor or supplier satisfactorily completes the specified work, the Department may withhold progress payments from the Contractor, until the Contractor pays the subcontractor or supplier all delinquent amounts due, or the Contract is terminated, or the matter is resolved under N.J.S.A. 52:32-40 and N.J.S.A. 52:32-41.

If the Department receives an allegation from a subcontractor or a supplier that the Contractor has not paid the subcontractor or supplier the amount due from a previous progress payment, including retainage, submit to the RE within 10 days of a request made by the RE, evidence that payment has been made.

THE EIGHTH PARAGRAPH IS CHANGED TO:

From the total Estimate amount, excluding amounts for subcontracted work on Federal aid projects, the Department will deduct and retain 2 percent until Substantial Completion.

THE NINTH PARAGRAPH IS CHANGED TO:

In the first Estimate following Substantial Completion, the Department will reduce the retainage withheld to one percent of the Total Adjusted Contract Price, excluding subcontracted work on Federal aid projects, unless it has been determined by the Department that the withholding of additional retainage is required. If retainage is held in cash withholdings, the reduction is to be accomplished by payment under the next Estimate. If retainage is held in bonds, the Department will authorize a reduction in the escrow account.

THE TENTH PARAGRAPH IS CHANGED TO:

The RE has the right to not process an Estimate when, in the judgment of the RE, the Work is not performed or proceeding as specified in the Contract or following the Department giving the Contractor and Surety notice of default as specified in 108.14.

THE FOLLOWING IS ADDED:

PREVAILING WAGE
The Contractor shall pay the minimum prevailing wage rates as required. In the event it is found that any employee of the Contractor or any subcontractor covered by the Contract has been paid a rate of wages less than the minimum wage required to be paid by the Contract., the County may terminate the Contractor’s or subcontractor's right to proceed with the work or such part of the work as to which there has been a failure to pay required wages and to prosecute the work to completion or otherwise. The Contractor and his sureties shall be liable to the County for any excess costs occasioned thereby.

109.06 MATERIALS PAYMENT AND STORAGE

THIS SECTION IS DELETED.
Material payments will not be made; payment will be limited to unit price or lump sum bid price for items completed.

109.07 BONDS POSTED IN LIEU OF RETAINAGES

THIS SECTION IS DELETED.

109.09 AUDITS

THE FOLLOWING IS ADDED:

Pursuant to N.J.S.A. 52:15C-14(d), relevant records of private vendors or other persons entering into contracts with the Department are subject to audit or review by the New Jersey Office of the State Comptroller. Therefore, the Contractor shall maintain all documentation related to products, transactions or services under the Contract for a period of five years from the date of final payment. Such records shall be made available to the New Jersey Office of the State Comptroller upon request.

109.11 FINAL PAYMENT AND CLAIMS

THE FOLLOWING IS ADDED:

Final payment will be made after the satisfactory completion of all work including punch list items. However, payment will not be processed until approval of the final change order by the County and satisfactory completion of the field audit by the Engineer or his agent.

The following documents and/or statements shall be submitted together with the final voucher:

1. Certification of payment of prevailing wages and compliance with prevailing wage law.
2. Statement of outstanding claim, due obligations & final release.
3. Any documents specifically required for the project such as manufacturers guarantees, certifications, operating instructions, etc.
4. Affirmative action certificates, if required by law.
5. Maintenance Bond.
6. Any other documents required by the contracting agency.

All statutory references and requirements, which pertain only to the state, shall be construed to mean corresponding statutory provisions applicable to municipalities or counties.

Upon receipt of written approval, release and a surety corporation bond as warranty against defective work, the Engineer will certify the completed project and recommend acceptance. Payment will be made in accordance with the contracting agency’s policy following final acceptance.
DIVISION 150-CONTRACT REQUIREMENTS

SECTION 151- PERFORMANCE BOND AND PAYMENT BOND

151.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

No separate payment will be made for required Performance and Payment Bonds. The cost of all bonds shall be included in the various other bid items in the contract.

SECTION 152 – INSURANCE

152.03 PROCEDURE

THE FOLLOWING IS ADDED:

*Personal Liability of Public Officials*

There shall be no liability upon the municipality, or their employees, agents or representatives within the limits of the project either personally or in an official capacity.

152.03.01 OWNER’S AND CONTRACTOR’S PROTECTIVE LIABILITY INSURANCE

A. Policy Requirements.

THE FOURTH SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that policies are underwritten by companies with a current A.M. Best rating of A- with a Financial Size Category of VII or better.

B. Types

THE FOLLOWING IS ADDED:

*This Subsection is revised, as needed, to meet the contracting agency’s insurance requirements for this project. See the front-end bid documents for the various minimum insurance requirements.*

152.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

No separate payment will be made for required insurance coverage. The cost of insurance shall be included in the various other bid items in the contract.
SECTION 153 – PROGRESS SCHEDULE

153.03 PROCEDURE

THE FOLLOWING IS ADDED:

A CPM schedule in accordance with the Standard Specifications is not required for this project. However, the Contractor shall submit an anticipated bar chart progress schedule to the Engineer prior to construction. Schedule shall include duration for each work task. Contractor shall notify the Engineer of any changes in the schedule.

153.03.03 Bar Chart Progress Schedule and Updates

THIS SECTION IS DELETED AND REPLACED WITH THE FOLLOWING:

A. Schedule

Provide a detailed bar chart schedule showing the most feasible work sequence that meets the Contract requirements. Ensure that the schedule includes ROW availability dates, permits, submittals, working drawings, procurement, fabrication, delivery of materials, construction, and other activities necessary to complete the Work. Schedule the Work to complete the project within the contract completion duration specified by the Contract.

The bar chart schedule does not constitute notice and does not satisfy the notice requirements as specified in 104.03.04. Approval of the schedule by the RE does not modify the Contract or constitute Acceptance of the feasibility of the Contractor’s logic, activity durations, or assumptions used in creating the schedule. If the schedule reflects a completion date different than that specified in 108.10, this does not change the specified completion date. If the RE approves a schedule that reflects a completion date earlier than that specified as the Contract Time, the Department will not accept claims for additional Contract Time or compensation as the result of failure to complete the Work by the earlier date shown on the CPM schedule.

Ensure that the bar chart schedule approval includes the following:
1. Provide 1 activity for each discrete component of work
2. Provide activity descriptions to ensure that the status of work is readily identifiable.
3. No construction activity shall have a construction duration greater than 30 days, unless approved by the RE.
4. Identify the critical work path on the bar schedule.
5. Include time frames when work is restricted in sensitive areas, such as wetlands, floodplains.
6. Ensure that seasonal constraints are reflected for items of work such as seeding and planting.
7. Ensure that the progress schedule is of suitable scale to clearly indicate the duration of each activity.

Submit 6 paper copies of the baseline schedule to the RE for approval. The Notice to Proceed will not be issued and construction operations cannot begin until the RE approves the baseline schedule submission. Allow 14 days for the RE to review and approve or reject and return the baseline schedule submission. If the baseline schedule submission is rejected by the RE, revise and resubmit to the RE for approval within 7 days.

B. Updates

Update the progress schedule to reflect changing conditions for each project progress meeting. At the progress review meeting, present and review the progress since the previous progress meeting and the work anticipated before the next scheduled progress meeting.
Provide a minimum of 6 copies of the bar chart schedule update to the RE at each progress meeting. Ensure that each schedule update conforms to the scheduling requirements specified in 153.03.03 and includes the following:

1. One activity for each discrete component of work remaining.
2. Activity descriptions to ensure that the status of work is readily identifiable.
3. Identify current and anticipated delaying problem areas and their estimated schedule effect.
4. Identify the status of all milestones specified in the Contract.
5. Identify the schedule slippage, pay revisions, and progress along the critical path of days ahead or behind previously established dates approved in the initial bar chart schedule.

Within 7 days, the RE will review the update schedule and approve or reject the submission. If rejected, revise and resubmit the schedule update, within 7 days, to the RE for review and approval. The RE will review the revised schedule update submissions and approve or reject the resubmission within 7 days.

**153.04 MEASUREMENT AND PAYMENT**

THIS SECTION IS DELETED AND REPLACED WITH THE FOLLOWING:

The Department will not measure and will not make payment for Schedule and Updates. The cost of Schedule and Updates shall be included in the various Items scheduled in the Proposal.

**SECTION 154 – MOBILIZATION**

**154.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

No separate payment will be made for mobilization. The cost of which shall be included in the various items in the proposal.

**SECTION 155 – FIELD OFFICE**

THIS SECTION IS DELETED.

*(A Field Office is not required for this project.)*

**SECTION 156 – MATERIALS FIELD LABORATORY AND CURING FACILITY**

THIS SECTION IS DELETED.

*(Materials Field Laboratory and Curing Facility are not required for this project.)*

**SECTION 157 – CONSTRUCTION LAYOUT AND MONUMENTS**

**157.03 PROCEDURE**

**157.03.01 Construction Layout**

THE FOLLOWING IS ADDED:

The contractor shall be responsible for layout of all work. Positive drainage shall be maintained throughout the project. If any drainage problems are identified, the Contractor shall report the issue to the Engineer
in writing and wait for direction from the Engineer prior to completing the work in that area.

Contractor shall assist the Engineer as needed to check/verify grades at any time during construction.

SECTION 158 – SOIL EROSION AND SEDIMENT CONTROL AND WATER QUALITY

158.01 DESCRIPTION

THE FOLLOWING IS ADDED:

Soil Erosion Control shall include the installation and maintenance of inlet sediment control devices and the carrying out of such other soil erosion control measures as may be described elsewhere herein, or asked by Engineer or Soil Conservation District.

All soil erosion and sediment control facilities shall be constructed in conformance with the “Standards for Soil Erosion and Sediment Control in New Jersey”, current edition.

158.03.02 SESC MEASURES

8. INLET FILTERS

THE FOLLOWING IS ADDED:

Inlet sediment control devices shall be constructed in accordance with the details in the Plans, and shall be placed where indicated in the Plans. They shall be securely fastened in place, and shall be maintained in good working order by the Contractor as long as they are needed.

A sediment control device no longer needed at one location may be reset at another, provided that it is in good condition and functions properly. All sediment control facilities shall be ultimately removed from the Project site, by the Contractor.

a. Type 1

THE ENTIRE TEXT IS CHANGED TO:

For an existing inlet structure without exposed exterior walls, place geotextile under the grate and extend the geotextile for a minimum of 6 inches beyond the grate.

For an inlet with a curb piece and without exposed exterior walls, ensure that the opening in the curb piece has a height of 2 inches. If the opening is greater than 2 inches, achieve the 2 inch opening size by wrapping the geotextile around an appropriately sized piece of lumber. Place the lumber against the vertical opening.

19. OIL-ONLY EMERGENCY SPILL KIT

THE SECOND SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Include Oil-Only Emergency Spill Kit, Type 1 consisting of the following:

THE FOLLOWING ITEMS ARE ADDED TO SECTION 158.03.02:
20. DUST CONTROL

When calcium chloride is used for dust control, the calcium chloride shall be Grade 2 in the form of loose dry granules or flakes and be fine enough to feed through commonly used spreaders at a rate of application of approximately 1.5 pounds per square yard. Care shall be exercised when using calcium chloride on steep slopes in order to prevent the calcium chloride from washing into streams or accumulating around plants. Calcium chloride shall not be applied in solution. Permission must be granted by the Engineer.

21. ROADWAY CLEANING

The roads are to be kept clean and dust free. All streets are to be swept daily with a power broom with a water tank or with a water wagon.

The Contractor shall be responsible for maintaining the cleanliness and condition of all roadways over which construction traffic travels. All adjacent roadways and areas shall be kept clean of construction debris, excess materials and trash generated during construction operations.

158.04 MEASUREMENT & PAYMENT

THE FOLLOWING IS ADDED:

No separate payment will be made for soil erosion and sediment control measures that may be necessary. The cost of soil erosion and sediment control measures shall be considered incidental and will not be measured for payment.

SECTION 159 TRAFFIC CONTROL

159.03 PROCEDURE

THE FOLLOWING IS ADDED:

See project plans for traffic control notes.

159.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

No separate payment will be made for traffic control measures.

SECTION 160 – PRICE ADJUSTMENTS

160.03 PROCEDURE

160.03.01 Fuel Price Adjustment

Throughout this subsection, TABLE 161.03.01-1 is CHANGED TO TABLE 160.03.01-1.

THE THIRD PARAGRAPH IS CHANGED TO:

If the as-built quantity of an Item listed in Table 160.03.01-1 differs from the sum of the quantities in the monthly Estimates, and the as-built quantity cannot be readily distributed among the months that the Item listed in Table 160.03.01-1 was constructed, then the Department will determine fuel price
adjustment by distributing the difference in the same proportion as the Item’s monthly Estimate quantity is to the total of the Item’s monthly estimates.

SOIL AGGREGATE BASE COURSE, ___ ” THICK

DENSE-GRADED AGGREGATE BASE COURSE, ___ ” THICK

THE 25TH LINE IN THE TABLE 160.03.01-1 IS CHANGED TO:

HOT MIX ASPHALT ____ ____ ____ BASE COURSE 2.50 Gallons per Ton

THE FOLLOWING ARE ADDED TO TABLE 160.03.01-1:

<table>
<thead>
<tr>
<th>Items</th>
<th>Fuel Usage Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>NON-VEGETATIVE SURFACE, HOT MIX ASPHALT</td>
<td>2.50 Gallons per Ton</td>
</tr>
<tr>
<td>COLOR-COADED NON-VEGETATIVE SURFACE, HOT MIX ASPHALT</td>
<td>2.50 Gallons per Ton</td>
</tr>
</tbody>
</table>

160.03.02 Asphalt Price Adjustment

NOTE 1 OF THE THIRD PARAGRAPH IS CHANGED TO:

1. The Department will determine the weight of asphalt binder for price adjustment by multiplying the percentage of new asphalt binder in the approved job mix formula by the weight of the item containing asphalt binder. If a Hot Mix Asphalt item has a payment unit other than ton, the Department will apply an appropriate conversion factor to determine the number of tons used.

THE FOURTH PARAGRAPH IS CHANGED TO:

For Tack Coat and Prime Coat, the Department will calculate asphalt price adjustments by the following formula:

\[ A = B \times \left(\frac{(MA - BA)}{BA}\right) \times C \times M \times G \]

Where:
- \( A \) = Asphalt Price Adjustment
- \( B \) = Bid Price for Tack Coat/Prime Coat
- \( MA \) = Monthly Asphalt Price Index
- \( BA \) = Basic Asphalt Price Index
- \( C \) = Petroleum Content of the Tack Coat and Prime Coat in Percent by Volume:
  - Use 100% for cutbacks and Tack Coat 64-22
  - 60% for Polymer Modified Tack Coat
  - 60% for RS or similar type emulsions
- \( M \) = Percentage of Bid Price Applicable to Materials Only: Use 82%
- \( G \) = Gallons of Tack Coat and Prime Coat Furnished and Applied

160.04 MEASUREMENT AND PAYMENT

THE ENTIRE SECTION IS CHANGED TO THE FOLLOWING:

The Department will measure and make payment for Items as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Pay Unit</th>
</tr>
</thead>
</table>
SECTION 161 – FINAL CLEANUP

161.03 PROCEDURE

161.03.01 Final Cleanup

THE FOLLOWING IS ADDED:

Final Cleanup with demobilization shall consist of the complete removal of all personnel, equipment, supplies, materials and incidentals from the project site and storage areas. A final cleanup of all areas disturbed or used as part of the project by the Contractor and/or Subcontractor shall be performed as part of the demobilization. This final clean up should include the removal of all rubbish, excess materials, temporary structures and equipment. All work areas shall be left in an acceptable condition and is subject to the Engineer’s inspection and approval.

161.04 MEASUREMENT AND PAYMENT

No separate payment will be made for Final Cleanup. The cost shall be included in the various other items in the Proposal.
DIVISION 200-EARTHWORK

THE FOLLOWING IS ADDED:

The testing of earthwork items shall be done by the contractor using an approved testing laboratory. Certification of compliance shall be obtained prior to scheduling work and field testing, as specified and as directed. All test results shall be forwarded to the Engineer. No separate payment will be made for this testing, but the cost shall be included in the price bid for the various items in the proposal.

SECTION 201 – CLEARING SITE

201.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This work shall also include relocation, removal, and replacement of any items necessary to complete the work, including but not limited to, sidewalk, driveways, hedges, shrubs, landscaping, retaining walls, trees and stumps (of the sizes not specified as a pay item), fences, lights, signs, sign posts, storm sewer piping, inlets, manholes, sprinkler systems, steps, railings, mailboxes, etc. All work shall be performed to the satisfaction of the Engineer. Any item damaged by the contractor shall be replaced with a new item equivalent to the existing damaged item, at the contractors own expense. Contractor shall ascertain the extent of such items prior to bidding. No separate payment will be made for this work.

Note: Before trees, hedges, shrubs, and privately-owned signs and fences, brick pillars, household light posts, mail boxes, lawn sprinkler systems, and other appurtenances are removed, the contractor shall determine whether the owner of same desires to reclaim it and if so, the contractor shall use care in removing and storing the item so removed beyond the limits of grading. Any item to be reclaimed that is damaged by its removal shall be replaced by the contractor at their own expense.

The Contractor shall determine the manufacturer and model of existing underground irrigation systems prior to disturbance. Sprinklers shall be reset or relocated to the surrounding proposed elevations in accordance with the procedures recommended by the manufacturer. Materials which require replacement shall be replaced with materials of equal or greater quality.

Clearing Site shall also include the resetting of all utility items so that they are flush with the proposed grade, including valves, junction boxes, meter pits, clean outs, vents.

Clearing Site shall also include the removal abandoned underground utility piping and valves, service risers that are abandoned. Dispose of removed materials and debris.

Clearing Site shall include pruning, trimming, or removal of any minor portions of landscape features which, in the opinion of the Engineer, may interfere with the work, by means and methods and within limits satisfactory to the Engineer.

The contractor shall exercise extreme care when working near existing trees that are to remain. Any damage shall be promptly repaired by cutting, cleaning and treating as directed by the Engineer. Any tree severely damaged in the opinion of the Engineer shall be removed and replaced. This work shall be done at the Contractor's own expense.

No dumping in streams, flood plains or wetlands shall be permitted. All excess and waste materials shall be removed from the site and disposed of according to the specifications.
The contractor shall daily police the area for removal of all trash and debris. Final cleanup shall meet with the approval of the Engineer.

When indicated on the Plans or shown to contractor by Department in field, existing concrete slabs and/or asphalt paving shall be saw-cut at the limits of work. This shall be a full depth saw-cut, the purpose of which is to prevent damage to the existing structures and surfaces to remain, and to provide a neat, straight joint between the new and existing construction.

Sawcutting shall be to the lines and grades at the location as directed by the Engineer or representative thereof. Necessary precautions shall be taken to cut the joints straight and true so that the surface edge of the pavement or concrete does not crack or spall. The Contractor shall sawcut all surfaces along a neat line to prevent damage to the structure and/or surface to remain and to promote a neat and smooth transition between surfaces. Any damage to the material to remain due to carelessness of the Contractor shall be replaced at the Contractor’s expense.

201.03 CONSTRUCTION

201.03.01 Clearing Site

B. Clearing and Grubbing.

THE FOLLOWING IS ADDED:

Dispose of material and debris as specified in 201.03.09.

201.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

No separate payment will be made for Clearing Site.

SECTION 202 – EXCAVATION

202.01 DESCRIPTION

THE FOLLOWING IS ADDED:

Excavation, Unclassified shall include the excavation and removal of all on-site materials as required for construction of the Project, exclusive of those provided for under other items scheduled in the Proposal. It shall also include the transportation of excavated materials, the disposal of excavated materials, and other work necessary.

Excavation shall be unclassified, and shall include the excavation and removal of all earth, rock, boulders, concrete, masonry, small structures, sidewalks, drive aprons, paving, drainage improvements, existing concrete gutter, concrete surface, tree roots, tree stumps and other materials which require removal prior to construction of improvements, topsoil stripping, and all other materials encountered, of whatever nature.

Work shall include excavation to whatever depth necessary, dewatering, protecting and shoring of excavation walls, protecting existing utilities, structures, and property, and all else incidental and necessary to complete the work.

202.02 MATERIALS
THE FIRST ITEM IN THE LIST IS CHANGED TO:

Coarse Aggregate (No. 57 or 67) ............................................................... 901.03

202.03 CONSTRUCTION

THE FOLLOWING IS ADDED:

Under proposed paved areas, including roadways, sidewalks, curbs, drive aprons and driveways, topsoil will be stripped completely. Complete topsoil stripping is defined as removal of all topsoil regard-less of depth.

Excavation shall be carried to the lines, grades and slopes indicated in the Plans. Where the walls or foundations lie within paved areas, dedicated street rights-of-way, utility rights-of-way, or building areas, the structure shall be completely removed.

Excavation shall be carried out in such a manner that the site is kept properly drained at all times.

Except for the specific exceptions listed below, all excavated materials shall become the property of the Contractor, and he shall be responsible for their transportation and disposal. Disposal shall take place at sites provided by the Contractor which are licensed by N.J.D.E.P. to accept the particular material(s).

202.03.03 Excavating Unclassified Material

A. Excavating.

THE FIRST PARAGRAPH IS CHANGED TO:

The Department, as the generator, is solely responsible for the designation of excavated material. Unclassified excavation consists of excavation and management of material of whatever nature encountered, except for regulated material, pavement removal and acid producing soil.

B. Temporarily Storing.

THE FOLLOWING SENTENCE IS ADDED AFTER THE SECOND SENTENCE OF THE FIRST PARAGRAPH:

Do not commingle different types or classifications of material.

202.03.04 Excavating Regulated Material

3. Temporarily Storing.

THE FIRST PARAGRAPH IS CHANGED TO:

Temporarily store regulated or hazardous material in stockpiles within the Project Limits and as shown on the Plans. Construct stockpiles on polyethylene sheeting. Contain stockpiles with haybales or silt fence placed continuously at the perimeter of the stockpiles. For hazardous material, if a stockpile area is not available within the Project Limits, sample and analyze materials in-situ for disposal. Excavate and place the hazardous regulated material directly into trucks, and haul it directly to the approved disposal facility.

202.03.07 Reuse or Disposal of Excess Material
A. Reuse.

THE THIRD PARAGRAPH IS CHANGED TO:

Upon RE’s approval, reuse excavated soil to widen or flatten slopes of embankment, to fade embankments into cuts, or as approved at other locations. Ensure that the excess material is not reused within a wetland, a transition area, a riparian zone, a flood hazard area or other regulated area without obtaining an appropriate NJDEP permit.

B. Disposal.

PARTS 1 AND 2 UNDER THE FIRST PARAGRAPH ARE CHANGED AND PART 3 IS ADDED:

1. At least 10 days before disposing, submit the disposal procedure and location to the RE for approval. Do not dispose of excavation on property proposed to be or used for parks, playgrounds, and other recreational purposes; residential facilities; educational facilities; environmentally sensitive areas such as wetlands; historic sites; or within sight of a State highway during all seasons.

2. Obtain the potential owner’s notarized authorization of the acceptance of the excess material. If the potential owner requires environmental material sampling, obtain RE’s approval at least 7 days before sampling for oversight only. Approval of the sampling does not imply agreement with the sampling results and the Department reserves the right to sample the material for classification. Provide the RE all testing results and documentation associated with the sampling.

3. Load and transport excess material that the RE determines to be excess, unusable or unsuitable for the project according to Federal, State, and local law, rules and regulations.

202.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

No separate payment will be made for sawcutting, stripping, removal of pavement, and/or excavation of any type which is necessary to complete the project. These costs shall be included in various items in the proposal.

SECTION 203 – EMBANKMENT

203.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section shall also include furnishing and installing any borrow material that may be required to backfill trenches where the existing material is deemed unsuitable by the Engineer.

203.02 MATERIALS

203.02.01 Materials

THIS SUBSECTION IS CHANGED TO:

Provide materials as specified:

Soil Aggregate (I-7, I-9, I-10, I-11, I-13, and I-14).......................... 901.11
203.03 CONSTRUCTION

203.03.02 PLACING AND COMPACTING METHODS.

THE FOLLOWING IS ADDED:

Contractor shall compact all materials in accordance with NJDOT, ASTM, and/or AASHTO standards, subject to approval by the Engineer. Compaction test results shall be submitted to the Engineer for approval. No separate payment will be made for compaction testing, but the cost shall be included in the various other bid items in the contract.

203.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

No separate payment will be made for Soil Aggregate.
DIVISION 300-SUBBASE AND BASE COURSES

SECTION 302 – AGGREGATE BASE COURSE

302.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

<table>
<thead>
<tr>
<th>Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENSE-GRADED AGGREGATE BASE COURSE, 6” THICK</td>
<td>CUBIC YARD</td>
</tr>
</tbody>
</table>
401.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section shall also include construction of hot-mix asphalt leveling course to be installed where necessary to achieve the proposed grade, cross slope, and thickness shown on the plans. Leveling course may be installed as a separate course, or with the surface course, subject to maximum lift thickness and approval by the Engineer.

Leveling course shall be HMA surface course or HMA base course, depending on Contractor's proposed paving sequence and lift thicknesses (subject to approval by the Engineer).

401.02 MATERIALS

401.02.01 Materials

THE FIRST PARAGRAPH IS CHANGED TO:

Provide materials as specified:

- Tack Coat 64-22, PG 64-22..................................................................................902.01.01
- Prime Coat, Grade CSS-1.....................................................................................902.01.03
- Tack Coat:
  - Emulsified Asphalt, Grade RS-1, RS-1h, CRS-1, or CRS-1h .........................902.01.03
- Polymer Modified Tack Coat:
  - Polymer Modified Emulsified Asphalt.........................................................902.01.04
- HMA................................................................................................................902.02
- HMA HIGH RAP.................................................................................................902.13
- Joint Sealer, Hot-Poured..................................................................................914.02
- Polymerized Joint Adhesive..............................................................................914.03

401.02.02 Equipment

THE LAST PARAGRAPH IS CHANGED TO:

When an MTV is used, install a paver hopper with a minimum capacity of 14 tons in the hopper of the HMA paver.

401.03 CONSTRUCTION

401.03.01 Preparing Existing Pavement

A. Milling of HMA.

THE FOLLOWING IS ADDED TO THE THIRD PARAGRAPH:

If unbound aggregate material is encountered within the specified milling depth, mill unbound aggregate material without damaging the underlying material.

THE FOLLOWING IS ADDED AFTER THE FOURTH PARAGRAPH:
Sawcut at the limit of paving in driveways and at other limits requiring a neat edge between new and existing HMA.

THE FOLLOWING IS ADDED:

Contractor shall determine exact limits of milling and leveling course in the field in order to construct

If the milled material is to be recycled, the milling equipment, where practical, shall be operated in such a manner as to produce milled material of which 95% will pass a 2-1/2 inch sieve.

If the milled material is to be recycled, the area of milling shall be cleared of all debris and power broomed to remove fine particles prior to milling. Before brooming, earth berms shall be removed, as necessary, within the area to be milled to prevent soil and grass from contaminating the milled material. Disposal of earth and debris shall be in accordance with the Specifications.

401.03.02 Tack Coat and Prime Coat

THE ENTIRE TEXT IS CHANGED TO:

Clean the surface where the HMA is to be placed of foreign and loose material. Immediately before beginning paving operations, ensure that the surface is dry. Do not place tack coat or prime coat unless the weather restrictions, as specified in 401.03.03.B, are met.

Do not apply tack coat or prime coat to asphalt-stabilized drainage course.

For curbs, gutters, manholes, and other similar structures, do not apply tack coat or prime coat. Clean the exposed surfaces of these structures and apply a uniform coating of polymerized joint adhesive to contact surfaces before paving.

In areas inaccessible to distributor spray bars, use hand spraying equipment for tack and prime coat. Do not allow traffic on tack coated or prime coated surfaces. Treat surfaces as follows:

1. **Tack Coat.** Uniformly spray tack coat when placing HMA on paved surfaces. Apply tack coat only to areas to be paved in the same day. Apply tack coat as specified in **Table 401.03.02-1**:

<table>
<thead>
<tr>
<th>Material</th>
<th>Spraying Temp, °F</th>
<th>Gallons per Square Yard</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Emulsified Asphalt</em>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS-1, RS-1h</td>
<td>125 to 185</td>
<td>0.05 to 0.15</td>
<td>All year</td>
</tr>
<tr>
<td>CRS-1, CRS-1h</td>
<td>125 to 185</td>
<td>0.05 to 0.15</td>
<td>All year</td>
</tr>
</tbody>
</table>

Correct uncoated or lightly coated areas. Blot areas showing an excess of tack coat with sand or other similar material. Remove blotting material before paving. Ensure that the material is not streaked or ribbed.

Before paving, allow tack coat to cure to a condition that is tacky to the touch.

2. **Tack Coat 64-22.** When precipitation has occurred within 24 hours before application, the RE will determine whether to allow the work to proceed, or to wait until the surface is completely dry. Only apply tack coat that can be paved over in the same day. Apply tack coat 64-22 at a rate of 0.06 to 0.14 gallons per square yard and at a spraying temperature of 325 °F. Adjust the spraying temperature and application rate to produce a uniform coating, with no excess material.
Correct uncoated or lightly coated areas and remove excess tack coat from affected areas. Ensure that the material is not streaked or ribboned.

3. **Polymer Modified Tack Coat.** Apply polymer modified tack coat with an ultra-thin paver at a temperature of 140 to 185 °F. Continuously monitor rate of spray, ensuring a uniform application rate over entire width to be overlaid. Apply at the rate of 0.20 ± 0.05 gallons per square yard. Do not allow traffic, equipment, tools, or any other disturbance to the polymer modified tack coat before placing the ultra-thin friction course.

4. **Prime Coat.** Clean the surface of foreign and loose material where the HMA is to be placed. Immediately before beginning paving operations, ensure that the surface is dry. Do not place prime coat unless the weather restrictions, as specified in 401.03.03.B, are met.

Do not apply prime coat to asphalt-stabilized drainage course. For curbs, gutters, manholes, and other similar structures, do not apply prime coat. Clean the exposed surfaces of these structures and apply a uniform coating of polymerized joint adhesive to contact surfaces before paving.

In areas inaccessible to distributor spray bars, use hand spraying equipment for. Do not allow traffic on prime coated surfaces. Treat surfaces as follows:

Apply prime coat of emulsified asphalt on unpaved surfaces as follows:

<table>
<thead>
<tr>
<th>Table 401.03.02-2 Prime Coat Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
</tr>
<tr>
<td>Emulsified Asphalt:</td>
</tr>
<tr>
<td>CSS-1</td>
</tr>
</tbody>
</table>

Apply prime coat at least 12 hours before placement of the HMA and when the base courses are not saturated or frozen. Unless the prime coat is under asphalt-stabilized drainage course, the RE may waive the application of prime coat if more than 5 inches of HMA is placed on the unbound aggregate course before the roadway is opened to traffic. Take measures to prevent prime coat from entering into the drainage system or extending beyond the area to be paved.

**401.03.03 HMA COURSES**

**A. Paving Plan.**

THE PARTS 3, 5 & 9 ARE CHANGED TO:

3. Number, type, and model of equipment. Innovative equipment features to be utilized such as but not limited to intelligent compaction rollers, paver mounted infrared thermal profile system, and other Global Position System (GPS) located construction equipment.

5. Longitudinal joint layout plan, quality control and construction practices.

9. Paving sequence and paver automation use plan. Ensure that the HMA surface course is constructed for the full width of the traveled way, shoulder, and auxiliary lanes as a single paving operation.

THE FOLLOWING IS ADDED AT THE END OF THE FIRST PARAGRAPH:

15. If applicable, the warm mix asphalt additive or process being used.

THE FOLLOWING PARAGRAPH IS ADDED:

When using HMA HIGH RAP submit for Department approval a plan of the location for the HMA HIGH RAP on the project.

C. Test Strip.

THE FIRST SENTENCE IN THE FIRST PARAGRAPH IS CHANGED TO:

Construct a test strip for each HMA mix for contracts with more than a total of 5500 tons of HMA.

D. Transportation and Delivery of HMA.

THE ENTIRE TEXT IS CHANGED TO:

Deliver HMA using HMA trucks in sufficient quantities and at such intervals to allow continuous placement of the material. Do not allow trucks to leave the plant within 1 hour of sunset unless nighttime lighting is provided as specified in 108.06. The RE will reject HMA if the HMA trucks do not meet the requirements specified in 1009.02. The RE will suspend construction operations if the Contractor fails to maintain a continuous paving operation. Before the truck leaves the plant, obtain a weigh ticket from a fully automatic scale. Before unloading, submit for each truckload a legible weigh ticket that includes the following:

1. Name and location of the HMA plant.
2. Contractor
3. Project title.
4. Load time and date.
5. Truck number.
7. Item name and number
8. Plant lot number.
9. Tare, gross, and net weight.

Ensure that weigh tickets are signed and sealed by a certified weighmaster.

In the event of breakdown of an automatic printer system, the RE will accept weigh tickets showing the tare, gross, and net weight of each truck, as entered and certified by a weighmaster for a period not exceeding the necessary repair time as certified by a licensed repairman.

When using an automated batching plant, obtain weigh tickets from the printer used in conjunction with an automated batching and mixing system. Ensure the printed ticket shows the individual weights of the various components of the HMA in a batch, the total weight of each batch, and the sum of all batch weights in the truckload. At the completion of each day’s work provide certification from the weighmaster that the total net weight supplied was correct.

E. Spreading and Grading.

THE ENTIRE TEXT IS CHANGED TO:

Use a stringline or other linear reference system to ensure proper line and grade when spreading material. Ensure that the system is in place and approved by the RE before placing HMA. Ensure that the underlying surface meets line and grade as specified in 202.03.03.C. Before placing HMA, ensure that the tack coat or prime coat has been placed as specified in 401.03.02 to the full width.
of the HMA. Obtain RE approval of the underlying surface far enough in advance of spreading HMA to allow 1 day’s paving operations.

Ensure that the certified APCT is present during paving operations.

Ensure that an MTV independently delivers HMA from the HMA trucks to the HMA paver.

Before beginning, ensure that the temperature of the screed on the HMA paver is heated to at least the laydown temperature of the HMA. Using the MTVs and HMA pavers, construct paving courses in lifts of at least 4 times the nominal maximum aggregate size of the HMA being constructed. Ensure the paver vibratory screed is on when paving and that the paver automation is used as per the paving plan. Ensure the paver and auger speed are coordinated and operated at the proper speed to allow for a uniform head of material across the entire width of the paver. Ensure that the proper paver and auger speed are maintained. Ensure that the grade and profile are maintained.

Use HMA having a nominal maximum aggregate size of 3/8 inch or less in transition (run out) areas. On areas where irregularities or unavoidable obstacles make use of a paver impractical, spread, rake, and lute HMA with hand tools. For these areas, dump, spread, and screed the HMA to obtain the required compacted thickness.

When paving HMA HIGH RAP record the laydown temperature (temperature immediately behind the paver) at least once per hour during paving. Submit the temperatures to the RE and the HMA Plant producing the HMA HIGH RAP.

Construct joints as follows:

1. **Longitudinal Joints.** Perform paving with the spring-loaded end plates of the paver in the “down” position and ensure that they are firmly seated on the pavement surface. Ensure augers and tunnels are extended to within 12 to 18 inches of the end plates and that a continual supply of hot material flows out to the end plates and the material is not segregating. Ensure the longitudinal joint in 1 lift offsets that in the lift immediately below by approximately 6 inches. Offset the joint in the surface course from the lane lines by 6 inches. When constructing a joint between lanes of opposing traffic, offset the joint by 6 inches into either lane.

   a. **Echelon Paving.** If a single paver does not spread the HMA the entire width of the roadway, use 2 or more pavers in echelon. Ensure that the trailing paver follows within 300 feet of the lead paver. Extend the screed and end gate of the trailing paver 1 inch over the uncompacted HMA placed by the lead paver. Ensure that the uncompacted HMA elevation from the trailing paver is equal to that from the lead paver at the joint. The Contractor may construct either a butt joint or a wedge joint. Do not rake the joint.

   b. **Cold Joint Paving.** If echelon paving is not possible, construct the pavement using cold longitudinal joints. When constructing the first lane, compact so the line and grade of the edges of the HMA are not displaced. Construct longitudinal joints parallel to the centerlines within a tolerance of ±1 inches per 100 linear feet. If this tolerance is not met, trim or mill the edge of the HMA mat as necessary. Before paving the abutting lane, ensure longitudinal joints are straight, and free from dust and debris. For surface course only, uniformly apply polymerized joint adhesive to longitudinal cold joint. Apply a 1/8-inch-thick coating of polymerized joint adhesive over the entire joint face. Apply slowly to ensure an even coating thickness. Apply polymerized joint adhesive to the vertical faces, curb and utility structures. When maintaining traffic with a lift thickness greater than 2 inches, construct a wedge joint. The RE will permit a butt joint for lift thickness 2 inches or less when maintaining
traffic, or for lift thickness greater than 2 inches when maintaining traffic is not required. Maintain a uniform width and depth of overlapped material at all times. Position the paver so that the HMA overlaps the edge of the lane previously placed by 1/2 to 1 inch. Leave the material sufficiently high to allow for compaction. Do not lute the HMA material. Do not broadcast HMA material at the joint across the new HMA mat. When compacted, ensure that the new mat at the joint is even or slightly higher (maximum 1/8 inch) than the previously placed adjoining mat. If the newly compacted mat results in a depression at the joint of more than 1/8 inch, suspend paving operations until corrective action is taken to prevent reoccurrence.

2. **Transverse Joints.** Construct transverse joints to provide a smooth riding surface. When using a bulkhead to form the joint, ensure that the bulkhead forms a straight line and vertical face. If a bulkhead is not used to form the joint, make the joint by sawing the compacted HMA for a sufficient distance behind the end of the placement to ensure full thickness and a smooth surface at the joint. Remove the full lift thickness of HMA ahead of the sawed joint. In either case, paint the joint face with polymerized joint adhesive before the fresh material is placed against it. Unless prohibited by field conditions, cross roll to obtain thorough compaction of these joints.

G. **Opening to Traffic.**

THE ENTIRE TEXT IS CHANGED TO:

Remove loose material from the traveled way, shoulder, and auxiliary lanes before opening to traffic. Open HMA courses to traffic or construction equipment, including paving equipment, only after the surface temperature has cooled to less than 140 °F.

H. **Air Void Requirements**

THIS SUBSECTION IS REPLACED BY THE FOLLOWING:

*See project plans for notes regarding HMA density testing requirements.*

I. **Thickness Requirements**

**(FOR RESURFACING PROJECTS)**

THIS SUBSECTION IS DELETED. IN NO INSTANCE WILL A COMPACTED AVERAGE THICKNESS OF LESS THAN 1.25 INCHES BE ACCEPTABLE.

**401.03.04 SAWCUTTING AND SEALING OF JOINTS IN HMA OVERLAYS**

THE TEXT OF THIS SUBPART IS DELETED.

THIS SUBPART IS INTENTIONALLY LEFT BLANK

**401.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

<table>
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<tr>
<th>Item</th>
<th>Pay Unit</th>
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<tbody>
<tr>
<td>HOT MIX ASPHALT 9.5M64 SURFACE COURSE</td>
<td>SY</td>
</tr>
<tr>
<td>HOT MIX ASPHALT 19M64 BASE COURSE</td>
<td>SY</td>
</tr>
</tbody>
</table>

Tack Coat and joint adhesive will not be measured for payment (cost shall be included in the HMA surface course.)
DIVISION 600 – MISCELLANEOUS CONSTRUCTION

SECTION 602 - DRAINAGE STRUCTURES

602.03 CONSTRUCTION

THE FOLLOWING IS ADDED:

Excavations shall be shored, braced, and sheathed as conditions warrant. If close to existing features including, but not limited to, curbing, pavement, sidewalks, curbs, pipes, railroads, or structures of any kind, the excavation shall be secured so that such facilities and structures are protected. No separate payment will be made for these protective measures. The cost of this work shall be included in the unit price bid for the stormwater piping bid items in the proposal.

The cost for any risers or inlet head spacers required to install new curb pieces to grade must be included in the associated pay item(s).

The ‘Name Plate Option’ for all curb pieces shall read “Drains to Waterways”.

It is the contractor's responsibility to verify the curb piece dimensions prior to ordering. If a discrepancy exists, the contractor should immediately notify the Engineer.

All manhole covers must be measured in the field by the contractor, and contractor shall confirm size, style and pattern with the appropriate utility company prior to furnishing and installing.

SECTION 606 – SIDEWALKS, DRIVEWAYS, AND ISLANDS

606.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section also describes the requirements for constructing detectable warning surfaces.

This section also describes the requirements for surveying and providing lines, grade, elevations, and reference marks necessary to construct elements of construction and to provide an as-built survey to verify compliance with the construction plans and the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way - July 26, 2011 (PROWAG).

This section also describes the requirements for constructing and resetting concrete brick paver sidewalks.

606.02 MATERIALS

606.02.01 Materials

THE FOLLOWING IS ADDED TO THIS SECTION FOR DETECTABLE WARNING SURFACES (DWS):

DWS shall be ADATILE cast in place truncated dome detectable warning system manufactured by ADA Solutions, Inc. (or approved equal).

606.03 CONSTRUCTION

THE FOLLOWING IS ADDED:
Layout all proposed curb ramps, landings, vertical concrete curb, drainage improvements, monolithic concrete curb, foundations, and push buttons in conformance with the construction plans and PROWAG/ADA guidelines.

Detectable warning surfaces shown on the plans to be constructed along a radius shall be constructed using a DWS manufactured for the appropriate radius, if available. If a DWS is not available for the proposed curb radius the DWS may be cut to fit, subject to approval by the Engineer. No additional payment will be made for detectable warning surfaces that are cut. 

*Permission will not be granted for monolithic pours. All concrete curb of various types must be poured separately from concrete sidewalk and/or concrete driveway.*

**606.03.02 Concrete Sidewalks, Driveways, and Islands**

**F. Placing Concrete.**

THE ENTIRE PART F. IS CHANGED TO:

Obtain RE approval of forms and joint placement before placing concrete. Place concrete according to the limitations specified in 504.03.02.C. To place concrete between November 1 and March 15, submit to RE for approval a plan detailing the method of protecting the concrete from salt for at least 30 days after placing. Do not begin placing concrete until this plan is approved. Place concrete across the formed area to minimize rehandling. Ensure that concrete is not discharged into windrows or piles. Continuously place concrete between transverse joints without the use of intermediate bulkheads. To prevent bowing or misalignment of the transverse joints, place concrete simultaneously on both sides of transverse joints without disturbing the joints. Consolidate the concrete by hand spading or using internal mechanical vibrators. If a slab is not completed from transverse joint to transverse joint, remove the incomplete slab and replace. Terminate each day’s placement at a transverse joint. If concrete becomes segregated during placement, cease operations and correct handling operations. Protect concrete as specified in 504.03.02.I.

**H. Protection and Curing.**

THE LAST SENTENCE IS CHANGED TO:

Ensure vehicles and other loads are not placed on sidewalks, islands, and driveways until the concrete has attained compressive strength of 3000 pounds per square inch, as determined from 2 concrete cylinders field cured according to AASHTO T 23.

**606.03.03 Detectable Warning Surface**

THIS SUBSECTION IS CHANGED TO THE FOLLOWING:

Detectable warning surfaces shall be handled and installed in accordance with the manufacturer’s recommendations.

**606.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

<table>
<thead>
<tr>
<th>Pay Item</th>
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</thead>
<tbody>
<tr>
<td>CONCRETE DRIVEWAY, REINFORCED, 8&quot; THICK</td>
<td>SQUARE YARD</td>
</tr>
</tbody>
</table>

Dense-Graded Aggregate (DGA) Base Course for sidewalks, islands, and driveways will not be measured for payment. The cost of which shall be included in the associated sidewalk, island, or driveway pay item.
Contractor shall layout and construct proposed sidewalk at proposed driveways to meet ADA/PROWAG requirements to the greatest extent practicable. If additional sidewalk or driveway quantities are warranted to tie into existing grades, the additional work will be paid under the respective pay items if and where directed by the Engineer.

SECTION 607 – CURB

607.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section also describes the requirements for constructing concrete gutter.

607.03 CONSTRUCTION

Contractor shall exercise care during removal and replacement of concrete curb to minimize disturbance to the roots of any trees that are not scheduled to be removed. If root damage can not be prevented, trees shall be removed where directed by the Engineer.

Any drains encountered during the removal and/or installation of curb (e.g. sump drains and roof drains) must be reset to acceptable grade as needed. The work, including but not limited to, material, labor, and equipment to complete any reset/reconstructed drains must be included in the cost for the curb items included in the Proposal.

607.03.02 Concrete Vertical Curb and Concrete Sloping Curb

D. Placing Concrete.

THE ENTIRE TEXT IS CHANGED TO:

Place concrete for vertical curb and sloping curb as specified in 607.03.01.D, except that consolidation may be achieved by hand spading or internal mechanical vibrators.

607.03.04 Concrete Vertical Curb and Concrete Sloping Curb, Dowelled

D. Placing Concrete.

THE ENTIRE TEXT IS CHANGED TO:

Place concrete for vertical and sloping curb as specified in 607.03.02.D.

607.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>8&quot; X 18&quot; CONCRETE VERTICAL CURB</td>
<td>LINEAR FOOT</td>
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</tbody>
</table>

SECTION 610 – TRAFFIC STRIPES, TRAFFIC MARKING, AND RUMBLE STRIPS

610.02.01 Materials

THE FOLLOWING MATERIALS ARE RENAMED TO:
610.03.01 Long-Life Traffic Stripes

THE SUBPART HEADING AND THE ENTIRE TEXT IS CHANGED TO:

610.03.01 Traffic Stripes

A. Striping Plan. At least 20 days before beginning the work, submit to the RE for approval a striping plan that includes:

1. Schedule of operations for applying traffic stripes.
2. Number and type of equipment.
3. Manufacturer’s recommendations for use of the materials, including, but not limited to, mixing ratios and application temperatures.
4. Details on the means and methods for surface preparation
5. Details on the means and methods for premarking
6. Details on the proposed test strip such as location, length, etc.

B. Surface Preparation. Immediately before striping the pavement surface, clean the surface of dirt, oil, grease, and foreign material, including curing compound on new concrete. Clean the surface 2 inches beyond the perimeter of the stripes to be placed.

C. Striping Test Strip. Before beginning striping operations, construct 1 or more striping test strips to demonstrate the Contractor’s ability to meet the requirements specified in 610.03.01.D. For each striping test strip, apply striping to approximately 500 linear feet of pavement with the same striping procedure that will be used for the Project. Construct a test strip for each applicator unit and epoxy resin material used. Provide the RE with 50 test cards made of heavy stock paper measuring 8 inches by 2 inches, and two wet film thickness gauges. Construct additional test strips when major equipment repairs or adjustments are made or when the traffic stripes are determined to be defective. Construct additional test strips when traffic striping operations are performed on multiple, non-continuous occasions. Perform additional test strips as requested by the RE. When the test strip is in compliance, as determined by the RE, proceed with striping operations. Each test strip may remain in place and become part of the finished stripes subject to the requirements of 610.03.01.E.

D. Applying Striping. Mix epoxy resin with an automatic proportioning and mixing machine, and hot-spray the compound at a temperature of between 100 and 130 °F onto dry surfaces. Apply the compound with a wet film thickness of 20 ± 1 mil. Apply the material during dry weather conditions when the ambient temperature is a minimum of 45 °F and the surface temperature is a minimum of 50 °F. Adjust operations as required for the prevailing ambient and surface conditions to achieve a no-track drying time of 30 minutes or less. Immediately after, or in conjunction with, the compound application, uniformly apply 12 pounds of large glass beads per gallon of epoxy resin to the compound. After applying the large glass beads, uniformly apply 12 pounds of small glass beads per gallon of epoxy resin to the compound. Remove all compound that has been tracked or spilled outside of the intended placement areas.

E. Performance. Ensure that the traffic stripes, show no fading, lifting, cracking, chipping for any reason including but not limited to traffic wear, maintenance activities including snow plowing, until Acceptance. Ensure that 60 days after application, traffic stripes have a minimum retroreflectance value of:

- 375 millicandels per square meter per lux for white traffic stripe
- 250 millicandels per square meter per lux for yellow traffic stripe
THE FIRST SENTENCE IN THE FOURTH PARAGRAPH IS CHANGED TO:

Replace traffic stripes that are determined by the RE before Acceptance to be defective or that are damaged during construction. Remove defective stripes as specified in 610.03.08.

Replace an entire 10-foot skip line if the RE determines the stripe to have a deficiency.

If the RE determines, based upon calculated and measured yields, that the striping has a wet film thickness of less than 19 mils, restripe the entire length with 20 mils of new compound.

Provide the RE with a Reflectometer that meets a 30 meter geometry as specified in ASTM E 1710, capable of measuring wet and dry conditions as specified in ASTM E 2176 and ASTM E 2177, and that has been certified by the manufacturer as being calibrated within the last two years. The RE will test the retroreflectance of traffic stripes. Replace traffic stripes that do not meet the retroreflectance values indicated in 610.03.01.E. Replace the entire length of striping where improper curing or discoloration has occurred. Discoloration is localized areas or patches of brown or grayish colored compound. Where improper curing or discoloration occurs intermittently in intervals of 100 feet or less throughout the striping length, replace the entire length of striping from the beginning of the first occurrence until the end of the last occurrence, plus 5 feet on each end.

Replace the entire length of striping that has failed to bond to the pavement, or has chipped or cracked. Where more than 25 spots of chipping, cracking, or poor bonding have occurred within 1000 linear feet of striping, replace the entire 1000 foot length of striping as indicated in 610.03.01.E.

G. Opening to Traffic. Complete each application of all types of traffic stripes and allow to thoroughly dry before opening to traffic. At a minimum, delineate center lines on undivided roadways and broken lines between lanes before the traveled way is opened. The RE will determine when the traveled way can be opened to traffic.

610.03.02 Thermoplastic Traffic Markings

THE SUBPART HEADING AND THE ENTIRE TEXT IS CHANGED TO:

610.03.02 Traffic Markings Lines, Traffic Markings Symbols and Traffic Markings Route Symbols

A. Marking Plan. At least 20 days before beginning the work, submit to the RE for approval a marking plan that includes:

1. Schedule of operations for applying traffic markings,
2. Number and type of equipment,
3. Manufacturer's recommendations for use of the materials, including mixing ratios and application temperatures.
4. Details on the means and methods for surface preparation
5. Details on the means and methods for premarking

B. Surface Preparation. Immediately before marking the pavement surface, clean the surface of dirt, oil, grease, and foreign material, including curing compound on new concrete. Clean the surface 2 inches beyond the perimeter of the marking to be placed.

C. Applying Traffic Markings. Place preformed thermoplastic or hot extruded thermoplastic traffic markings on thoroughly dry surfaces and during dry weather conditions. Apply using equipment
and procedures that produce markings of the specified color, width, and thickness with well-defined edges, uniform retroreflectivity, and proper bonding to the pavement. Apply the thermoplastic material as follows:

1. **Preformed Thermoplastic.** Melt the preformed thermoplastic tape to bond the traffic markings permanently in position according to the manufacturer’s recommendations. Meet the minimum initial retroreflectance value, as specified in 610.03.01.D for thermoplastic tape, by applying additional glass beads to the hot-wet material in a uniform pattern as necessary.

2. ** Extruded Thermoplastic.** Uniformly heat the thermoplastic material. When the ambient and surface temperatures are at least 50 °F, apply the melted material at a temperature of between 400 and 425 °F. Extrude the thermoplastic traffic markings on the HMA or concrete pavement ensuring a thickness of 90 ± 1 mils. Immediately after, or in conjunction with the thermoplastic extrusion, uniformly apply glass beads to the wet material at a minimum rate of 10 pounds per 100 square feet of markings. Apply glass beads by mechanical means only.

**D. Performance.** Ensure that the traffic markings show no fading, lifting, cracking, chipping for any reason including but not limited to traffic wear, maintenance activities including snow plowing, until Acceptance. Ensure that 60 days after application, traffic markings have a minimum retroreflectance value of: 375 millicandela per square meter per lux for white traffic markings 250 millicandela per square meter per lux for yellow traffic markings

**E. Defective work.**

THE FIRST SENTENCE IN THE FOURTH PARAGRAPH IS CHANGED TO:

Replace thermoplastic traffic markings that are determined by the RE before Acceptance to be defective or that are damaged during construction. Remove defective markings as specified in 610.03.08.

Replace the entire area of thermoplastic traffic markings determined to be less than the required thickness, to have incorrect color or width, to have failed to bond to the pavement, or to have chipped or cracked. The minimum replacement area is an individual word or symbol, or for longitudinal lines the entire length from where the deficiency first occurs to where it no longer exists.

The RE will determine initial retroreflectance as follows:

Provide the RE with a Reflectometer that meets a 30 meter geometry as specified in ASTM E 1710, capable of measuring wet and dry conditions as specified in ASTM E 2176 and ASTM E 2177, and that has been certified by the manufacturer as being calibrated within the last two years. The RE will test the retroreflectance of traffic markings. Replace traffic markings that do not meet the retroreflectance values indicated in 610.03.02.D.

**F. Opening to Traffic.** Complete each application of thermoplastic traffic markings and allow to thoroughly dry before opening to traffic. The RE will determine when the traveled way can be opened to traffic.

**610.03.04 Removal of RPMs**

THE ENTIRE TEXT IS CHANGED TO:
Remove RPMs as directed by the RE. Dispose of RPMs as specified in 201.03.09. If directed by the RE, fill the hole with HMA patch as specified in 159.03.07 except sawcutting is not required.

### 610.03.06 Ground Mounted Flexible Delineators

THE FIRST PARAGRAPH IS CHANGED TO:

Use white retroreflective sheeting for delineators located on the right side when facing in the direction of traffic. Use yellow retroreflective sheeting for delineators located on the left side when facing in the direction of traffic.

### 610.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

<table>
<thead>
<tr>
<th>Pay Item</th>
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</tr>
</thead>
<tbody>
<tr>
<td>TRAFFIC STRIPES, EPOXY RESIN 4”</td>
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</tr>
<tr>
<td>TRAFFIC MARKINGS, EPOXY RESIN</td>
<td>SQUARE FOOT</td>
</tr>
</tbody>
</table>

THE SECOND PARAGRAPH IS CHANGED TO:

The Department will measure TRAFFIC STRIPES by the linear foot for each specified width of stripe. The Department will not measure gaps in striping.

### SECTION 612 – SIGNS

### 612.02 MATERIALS

THE FOLLOWING IS DELETED FROM THE MATERIALS LIST:

Non-Breakaway Sign Supports ................................................................. 911.02.03

THE SECOND PARAGRAPH IS DELETED.

### 612.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

<table>
<thead>
<tr>
<th>Pay Item</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ACCESSIBLE PARKING SIGN ASSEMBLY</td>
<td>UNIT</td>
</tr>
</tbody>
</table>

The Pay Item ACCESSIBLE PARKING SIGN ASSEMBLY shall include all labor and materials (including all sign panels, breakaway post, and hardware) required to install the sign assemblies shown on the plans.
DIVISION 650 – UTILITIES

THE FOLLOWING IS ADDED:

GENERAL UTILITY NOTES

The contractor shall take extreme care when working in the vicinity of underground utilities. Particular care shall be taken when completing excavation, backfill, and compaction in the vicinity of the existing water pipes and sewer pipes.

Any damage caused by the contractor’s operations shall be repaired at the contractor's expense.

All construction materials and methods of construction related to water and sanitary sewer shall be in accordance with the requirements of the appropriate utility company. The contractor shall coordinate with these agencies for any necessary permits, submittals, inspections, etc.

The contractor shall reset or relocate all gas valves, water valves, water meters, curb stops, sewer vents/cleanouts, and utility service connections as needed for construction. No separate payment will be made for this work.

If new valve boxes and/or vents are deemed necessary by the County or other agency representative, it is the Contractor’s responsibility to obtain and install materials provided by the appropriate utility company. Cost to do such shall be included in various items in the Proposal.

SECTION 651 – WATER

651.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section shall also describe the requirements for offsetting existing water mains and/or water service connections to address linear utility conflicts with proposed drainage pipes and structures.

All construction materials and methods of construction shall be in accordance with the requirements of the appropriate utility company. The contractor shall coordinate with the appropriate utility company for any necessary permits, submittals, inspections, etc.

651.04 MEASUREMENT AND PAYMENT

No specific payment will be made for the item Reset Water Valve Box. The cost shall be included in the various other items in the proposal.

No specific payment will be made for resetting/relocating/offsetting water service connections. The cost (including all necessary labor and materials) shall be included in the unit price bid for the stormwater piping items in the proposal.

652 - SANITARY SEWERS

652.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section shall also describe the requirements for resetting/relocating sanitary sewer service connections to address linear utility conflicts with proposed drainage pipes and structures.
All construction materials and methods of construction shall be in accordance with the requirements of the appropriate utility company. The contractor shall coordinate with the appropriate utility company for any necessary permits, submittals, inspections, etc.

If manhole castings are scheduled to be reset, the Contractor shall notify the utility company 24-hours in advance of the work of resetting the said manhole castings, which will be subject to the inspection and approval of the appropriate utility company.

652.03 CONSTRUCTION

F. Thrust Blocks.

THE THIRD SENTENCE IS CHANGED TO:

Ensure that thrust blocks do not come in contact with other utilities or structures without the approval of the RE.

652.04 MEASUREMENT AND PAYMENT

No specific payment will be made for the resetting sanitary sewer cleanouts and/or vents. The cost shall be included in the various other items in the proposal.

No specific payment will be made for resetting/relocating sanitary sewer service connections. The cost (including all necessary labor and materials) shall be included in the unit price bid for the stormwater piping items in the proposal.

SECTION 653 - GAS

653.01 DESCRIPTION

THE FOLLOWING IS ADDED:

All construction related to gas utilities (e.g. relocating or offsetting gas piping, valves, and/or laterals) shall be completed by the gas company. Contractor shall coordinate this work with the gas company as needed to avoid construction delays.

Upon determination of the need to reset and/or relocate an encountered gas service connection, the Contractor shall promptly notify the gas service provider and coordinate with the provider to perform the necessary work.

653.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

No specific payment will be made for the resetting gas valve boxes. The cost shall be included in the various other items in the proposal.

No specific payment will be made for coordinating with the gas company to reset/relocate gas service connections. The cost shall be included in the unit price bid for the stormwater piping bid items in the proposal and shall include all work necessary, including but not limited to obtaining necessary permits, submittals, inspections and fees.

The Contractor shall not seek additional fees due to delays that may be caused by the utility service provider. The Contractor shall, however, be entitled to an adjustment to the contract times equal to the time lost due to such delay.
DIVISION 800 – LANDSCAPING

THE FOLLOWING IS ADDED:

No separate payment will be made for topsoiling, fertilizing and seeding, or straw mulching that may be necessary to restore disturbed areas (cost shall be included in the various bid items in the proposal).
DIVISION 900 – MATERIALS

SECTION 901 - AGGREGATES

901.11 SOIL AGGREGATE

1. Composition of Soil Aggregate.

THE FOLLOWING IS ADDED TO THE LAST PARAGRAPH:

For Designation I-14, the Contractor may use up to 30 percent steel slag by weight of the coarse aggregate portion of the soil aggregate. Obtain steel slag from a source listed on the QPL as specified in 901.01. Use steel slag that was produced as a co-product of the steel making process. Ensure that the steel slag consists of tough, durable pieces that are uniform in density and quality. Stockpile steel slag as specified in 901.02. Ensure steel slag for blending with I-14 Soil Aggregate does not exceed 0.50 percent expansion from hydration when tested according to ASTM D 4792.

SECTION 902 - ASPHALT

902.01 BITUMINOUS MATERIALS

THE ENTIRE TEXT IS CHANGED TO:

Use the following temperature-volume correction (TVC) factors to convert the volume of bituminous materials, measured at the temperature at the point of use, to the volume at 60 °F:

1. For PG Binder, use the following equation:

   \[
   TVC = 1.0211326242 - 3.548988118 \times 10^{-4} [T (^{\circ}F)] + 4.49881 \times 10^{-8} [T (^{\circ}F)]^2
   \]

2. For emulsified asphalts, use Table 902.01-1.
Table 902.01-1 TVC Factors for Emulsified Asphalt Material (40 – 103 °F)

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<th>Temp (°F)</th>
<th>Factor</th>
<th>Temp (°F)</th>
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<td>136</td>
<td>0.9814</td>
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<td>0.9718</td>
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<td>139</td>
<td>0.9807</td>
<td>158</td>
<td>0.9761</td>
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<td>0.9716</td>
</tr>
<tr>
<td>73</td>
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<td>159</td>
<td>0.9758</td>
<td>178</td>
<td>0.9713</td>
</tr>
<tr>
<td>74</td>
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<td>141</td>
<td>0.9802</td>
<td>160</td>
<td>0.9756</td>
<td>179</td>
<td>0.9711</td>
</tr>
</tbody>
</table>

902.01.01 Asphalt Binder

THE SECOND PARAGRAPH IS CHANGED TO:

When specified, use PG 64E-22 asphalt binder that is a storage-stable and conforms to AASHTO M 332 including compliance with the elastic response requirement in Appendix X1.1.

902.01.02 Cutback Asphalts

THE ENTIRE SUBPART IS DELETED.
902.01.03 Emulsified Asphalts

THE ENTIRE TEXT IS CHANGED TO:

Use undiluted anionic emulsified asphalts of the rapid-setting (RS) and medium-setting (MS) types conforming to AASHTO M 140. Use undiluted cationic emulsified asphalts of the rapid-setting (CRS), quick-setting (CQS), and medium-setting (CMS) types conforming to AASHTO M 208.

For prime coats, use an anionic emulsified asphalt of the slow-setting (SS) type conforming to AASHTO M140 or cationic emulsified asphalt of the slow-setting (CSS) type confirming to AASHTO M 208.

The emulsified asphalt producer shall provide the emulsified asphalt quality control plan annually to the ME for approval. Ensure that the quality control plan conforms to AASHTO R77.

Submit to the ME a certification of compliance, as specified in 106.07, for the emulsified asphalt. The ME will perform quality assurance sampling and testing of each emulsified asphalt lot as defined in the approved quality control plan.

902.01.04 Polymer Modified Tack Coat

THE TITLE AND ENTIRE TEXT IS CHANGED TO:

902.01.04 Polymer Modified Emulsified Asphalt

Use undiluted polymer modified emulsified asphalt of the rapid-setting (RS), cationic rapid-setting (CRS), medium-setting (MS), and cationic quick-setting (CQS) types conforming to AASHTO M 316. The polymer modified emulsified asphalt producer shall provide the polymer modified emulsified asphalt quality control plan annually to the ME for approval. Ensure that the quality control plan conforms to AASHTO R77.

Submit to the ME a certification of compliance, as specified in 106.07, for the polymer modified emulsified asphalt. The ME will perform quality assurance sampling and testing of each polymer modified emulsified asphalt lot as defined in the approved quality control plan.

902.02.01 Mix Designations

THE ENTIRE SUBPART IS CHANGED TO:

The requirements for specific HMA mixtures are identified by the abbreviated fields in the Item description as defined as follows:

HOT MIX ASPHALT 12.5ME SURFACE COURSE

1. "HOT MIX ASPHALT” “Hot Mix Asphalt” is located in the first field in the Item description for the purpose of identifying the mixture requirements.
2. "12.5” The second field in the Item description designates the nominal maximum size aggregate (in millimeters) for the job mix formula (sizes are 4.75, 9.5, 12.5, 19, 25, and 37.5 mm).
3. "M” The third field in the Item description designates the design compaction level for the job mix formula based on traffic forecasts as listed in Table 902.02.03-2 (levels are L=low and M=medium).
4. "E” The fourth field in the Item description designates the high temperature designation of the performance-graded binder. Options are "64" for PG 64-22 and "E" for PG 64E-22.
5. "SURFACE COURSE” The last field in the Item description designates the intended use and location within the pavement structure (options are surface, intermediate, or base course).
902.02.02 Composition of Mixtures

THE ENTIRE SUBPART IS CHANGED TO:

Provide materials as specified:

- Aggregates for Hot Mix Asphalt ................................................................. 901.05
- Asphalt Binder ......................................................................................... 902.01.01
- Warm Mix Additives and Processes (optional) ........................................ 902.01.05

If a WMA additive is pre-blended in the asphalt binder, ensure that the asphalt binder meets the requirements of the specified grade after the addition of the WMA additive. If a WMA additive is added at the HMA plant, ensure that the addition of the additive will not negatively impact the grade of asphalt binder. Follow the manufacturer’s recommendations for percentage of WMA additive needed.

Mix HMA in a plant that is listed on the QPL and conforms to the requirements for HMA Plants as specified in 1009.01.

Composition of the mixture for HMA surface course is coarse aggregate, fine aggregate, and asphalt binder, and may also include mineral filler, WMA additive, and up to 15 percent Reclaimed Asphalt Pavement (RAP). For controlled asphalt foaming system WMA, the Department may require an anti-stripping additive. Ensure that the finished mix does not contain more than a total of 1 percent by weight contamination from Crushed Recycled Container Glass (CRCG).

The composition of the mixture for HMA base or intermediate course is coarse aggregate, fine aggregate, and asphalt binder, and may also include mineral filler, WMA additive and up to 35 percent of recycled materials. For controlled asphalt foaming system WMA, the Department may require an anti-stripping additive. The 35 percent of recycled materials may consist of a combination of RAP, CRCG, Ground Bituminous Shingle Material (GBSM), and RPCSA, with the following individual limits:

<table>
<thead>
<tr>
<th>Recycled Material</th>
<th>Maximum Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAP</td>
<td>25</td>
</tr>
<tr>
<td>CRCG</td>
<td>10</td>
</tr>
<tr>
<td>GBSM</td>
<td>5</td>
</tr>
<tr>
<td>RPCSA</td>
<td>20</td>
</tr>
</tbody>
</table>

Combine the aggregates to ensure that the resulting mixture meets the grading requirements specified in Table 902.02.03-1. In determining the percentage of aggregates of the various sizes necessary to meet gradation requirements, exclude the asphalt binder.

Ensure that the combined coarse aggregate, when tested according to ASTM D 4791, has less than 10 percent flat and elongated pieces retained on the No. 4 sieve and larger. Measure aggregate using the ratio of 5:1, comparing the length (longest dimension) to the thickness (smallest dimension) of the aggregate particles.

Ensure that the combined fine aggregate in the mixture conforms to the requirements specified in Table 902.02.02-2. Ensure that the material passing the No. 40 sieve is non-plastic when tested according to AASHTO T 90.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Test Method</th>
<th>Minimum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncompacted Void Content of Fine Aggregate</td>
<td>AASHTO T 304, Method A</td>
<td>45</td>
</tr>
<tr>
<td>Sand Equivalent</td>
<td>AASHTO T 176</td>
<td>45</td>
</tr>
</tbody>
</table>
902.02.03 Mix Design

TABLES 902.02.03-2, AND 902.02.03-3 ARE CHANGED TO:

<table>
<thead>
<tr>
<th>Table 902.02.03-2 Gyratory Compaction Effort for HMA Mixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compaction Level</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>L</td>
</tr>
<tr>
<td>M</td>
</tr>
</tbody>
</table>

1. Design ESALs (Equivalent (80kN) Single-Axle Loads) refer to the anticipated traffic level expected on the design lane over a 20-year period.

<table>
<thead>
<tr>
<th>Table 902.02.03-3 HMA Requirements for Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compaction Levels</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>L</td>
</tr>
<tr>
<td>M</td>
</tr>
</tbody>
</table>

1. For 37.5-mm nominal maximum size mixtures, the specified lower limit of the VFA is 64 percent for all design traffic levels.
2. As determined from the values for the maximum specific gravity of the mix and the bulk specific gravity of the compacted mixture. Maximum specific gravity of the mix is determined according to AASHTO T 209. Bulk specific gravity of the compacted mixture is determined according to AASHTO T 166. For verification, specimens must be between 95.0 and 97.0 percent of maximum specific gravity at \(N_{\text{des}}\).

THE FOURTH PARAGRAPH IS CHANGED TO:

At the ME’s request, test the mix design to ensure that it meets a minimum tensile strength ratio of 80 percent, when tested according to AASHTO T 283. The ME will require tensile strength ratio testing for new aggregate sources and for aggregates or mixes suspected of stripping susceptibility.

902.02.04 Sampling and Testing

THE ENTIRE TEXT IS CHANGED TO:

A. General Acceptance Requirements. The RE or ME may reject and require disposal of any batch or shipment that is rendered unfit for its intended use due to contamination, segregation, improper temperature, lumps of cold material, or incomplete coating of the aggregate. For other than improper temperature, visual inspection of the material by the RE or ME is considered sufficient grounds for such rejection.

For PG 64-22, ensure that the temperature of the mixture at discharge from the plant or surge and storage bins is at least 290 °F when the ambient temperature is less than 50 °F or is at least 275 °F when the ambient temperature is greater than or equal to 50 °F. For PG 64E-22, ensure that the temperature of the mixture at discharge from the plant or surge and storage bins is at least 10 °F above the manufacturer's recommended laydown temperature. For mixes produced using a WMA additive or process, ensure that the temperature of the mixture at discharge from the plant or surge and storage bins is at least 10 °F above the WMA manufacturer’s recommended laydown temperature.

Do not allow the mixture temperature to exceed 330 °F at discharge from the plant.
Combine and mix the aggregates and asphalt binder to ensure that at least 95 percent of the coarse aggregate particles are entirely coated with asphalt binder as determined according to AASHTO T 195. If the ME determines that there is an on-going problem with coating, the ME may obtain random samples from 5 trucks and will determine the adequacy of the mixing on the average of particle counts made on these 5 test portions. If the requirement for 95 percent coating is not met on each sample, modify plant operations, as necessary, to obtain the required degree of coating.

If used, ensure that the equipment for controlled asphalt foaming system is running according to the manufacturer’s recommendations. Ensure that the metering of water to foam the asphalt is controlled to produce a uniform mixture.

**B. Sampling.** The ME will take a random sample from each 700 tons of production for volumetric acceptance testing and to verify composition. The ME will perform sampling according to AASHTO T 168, NJDOT B-2, or ASTM D 3665. During production at the plant, a sample of asphalt binder will be taken once every 3500 tons or as directed by the ME.

**C. Quality Control Testing.** The HMA producer shall provide a quality control (QC) technician who is certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Technician, Level 2. The QC technician may substitute equivalent technician certification by the Mid-Atlantic Region Technician Certification Program (MARTCP). Ensure that the QC technician is present during periods of mix production for the sole purpose of quality control testing and to assist the ME. The ME will not perform the quality control testing or other routine test functions in the absence of, or instead of, the QC technician.

The QC technician shall perform sampling and testing according to the approved quality control plan, to keep the mix within the limits specified for the mix being produced. The QC technician may use acceptance test results or perform additional testing as necessary to control the mix.

To determine the composition, perform ignition oven testing according to AASHTO T 308 and aggregate gradation according to AASHTO T 30.

For each acceptance test, perform maximum specific gravity testing according to AASHTO T 209 on a test portion of the sample taken by the ME. Sample and test coarse aggregate, fine aggregate, mineral filler, and RAP according to the approved quality control plan for the plant.

When using RAP, ensure that the supplier has in operation an ongoing daily quality control program to evaluate the RAP. As a minimum, this program shall consist of the following:

1. An evaluation performed to ensure that the material conforms to 901.05.04 and compares favorably with the design submittal.
2. An evaluation of the RAP material performed using a solvent or an ignition oven to qualitatively evaluate the aggregate components to determine conformance to 901.05.
3. Quality control reports as directed by the ME.

**D. Acceptance Testing and Requirements.** The ME will determine volumetric properties at Ndes for acceptance from samples taken, compacted, and tested at the HMA plant. The ME will compact HMA to the number of design gyrations (Ndes) specified in Table 902.02.03-2, using equipment according to AASHTO T 312. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166. The ME will use the most current QC maximum specific gravity test result in calculating the volumetric properties of the HMA.

The ME will determine the dust-to-binder ratio from the composition results as tested by the QC technician.
Ensure that the HMA mixture conforms to the requirements specified in Table 902.02.04-1, and to the gradation requirements in Table 902.02.03-1. If 2 samples in 5 consecutive samples fail to conform to the gradation or volumetric requirements, immediately initiate corrective action.

The ME will test a minimum of 1 sample per 3500 tons for moisture, basing moisture determinations on the weight loss of an approximately 1600-gram sample of mixture heated for 1 hour in an oven at 280 ± 5°F. Ensure that the moisture content of the mixture at discharge from the plant does not exceed 1.0 percent.

### Table 902.02.04-1 Hot Mix Asphalt Requirements for Control

<table>
<thead>
<tr>
<th>Compactin Levels</th>
<th>Required Density (% of Theoretical Max. Specific Gravity)</th>
<th>Voids in Mineral Aggregate (VMA), % (minimum)</th>
<th>Nominal Max. Aggregate Size, mm</th>
<th>Dust-to-Binder Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>@Ndes¹</td>
<td></td>
<td>37.5 25.0 19.0 12.5 9.5 4.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L, M</td>
<td>95.0 - 97.0</td>
<td>11.0 12.0 13.0 14.0 15.0 16.0</td>
<td>0.6 - 1.3</td>
<td></td>
</tr>
</tbody>
</table>

1. As determined from the values for the maximum specific gravity of the mix and the bulk specific gravity of the compacted mixture. Maximum specific gravity of the mix is determined according to AASHTO T 209. Bulk specific gravity of the compacted mixture is determined according to AASHTO T 166.

### 902.03.01 Composition of Mixtures

THE ENTIRE TEXT IS CHANGED TO:

Mix OGFC and MOGFC in a plant that is listed on the QPL and conforms to the requirements for HMA plants as specified in 1009.01.

Composition of mixture for OGFC and MOGFC is coarse aggregate, fine aggregate and asphalt binder and may include a WMA additive. Ensure that the mixture conforms to the following requirements:

1. Use aggregate for OGFC and MOGFC that conforms to 901.05, except, for coarse aggregate, use broken stone of gneiss, granite, quartzite, or trap rock. Do not use RAP, CRCG, GBSM, or RPCSA.

2. Use asphalt binder for OGFC and MOGFC that is PG 64E-22 as specified in 902.01.01.

3. If used, ensure that WMA additives or processes conform to 902.01.05. If a WMA additive is pre-blended in the asphalt binder, ensure that the asphalt binder meets the requirements of the specified grade after the addition of the WMA additive. If a WMA additive is added at the HMA plant, ensure that the addition of the additive will not negatively impact the grade of asphalt binder. Follow the manufacturer’s recommendations for percentage of WMA additive needed. For controlled asphalt foaming system WMA, the Department may require an anti-stripping additive.

4. For MOGFC, add a stabilizing additive consisting of mineral fiber or cellulose fiber to the mix. Use a stabilizing additive that conforms to the requirements for stabilizing additives in AASHTO M 325. Use only 1 type per mix design. If using mineral fibers, use a dosage rate of 0.4 percent by weight of total mix. If using cellulose fibers, use a dosage rate of 0.3 percent by weight of total mix. The dosage rate may be increased, as necessary, to prevent draindown as measured by the visual draindown determination of asphalt content in NJDOT B-8. Accurately control proportioning the fibers into the mixture within ±10 percent of the required weight, and use equipment that ensures uniform dispersion of the fibers. Store fibers in a dry location with a storage temperature not to exceed 120 °F. The supplier of the cellulose or mineral fibers shall provide a certification of compliance, as specified in 106.07, that the material supplied conforms to AASHTO M 325. Ensure that a technical representative from the additive supplier is at the work site for the first full day of construction for technical assistance.
902.03.02 Mix Design

THE FOURTH PARAGRAPH IS CHANGED TO:

The ME will test 2 specimens to verify that the final JMF produces a mixture that has a minimum void content as specified in Table 902.03.03-1. The ME will determine percent air voids according to AASHTO T 209, and either NJDOT B-6 or AASHTO T 331.

902.03.03 Sampling and Testing

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material.

THE SECOND PARAGRAPH IS CHANGED TO:

During production, the ME will take one random acceptance sample from each 700 tons of production to verify composition. Conduct air voids and drain down tests as directed by the ME.

THE THIRD AND FOURTH PARAGRAPH ARE CHANGED TO:

If the composition testing results are outside of the production control tolerances specified in Table 902.03.03-2 for an acceptance sample, immediately run a quality control sample. If the quality control sample is also outside of the control tolerances in Table 902.03.03-2, determine if a plant adjustment is needed and take corrective action to bring the mix into compliance. Take additional quality control samples after the corrective action to ensure that the mix is within the production control tolerances. If 2 consecutive acceptance samples are outside the tolerances specified in Table 902.03.03-2, immediately stop production. Obtain ME approval of a plant correction plan before resuming production. Upon restarting production, do not transport mixture to the Project Limits before the results of a QC sample from the mixture indicate that the mixture meets JMF tolerances. The ME will reject mixture produced at initial restarting that does not meet tolerances.

The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308 or NJDOT B-5. Perform testing for air voids according to AASHTO T 209 and either NJDOT B-6 or AASHTO T 331. Perform testing for drain down according to NJDOT B-7 or NJDOT B-8. During production at the plant, a sample of asphalt binder will be taken once every 3500 tons or as directed by the ME.

TABLE 902.03.03-2 IS CHANGED TO:

<table>
<thead>
<tr>
<th>Sieve Sizes</th>
<th>Production Control Tolerances from JMF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>±3.0</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>±4.0</td>
</tr>
<tr>
<td>No. 4</td>
<td>±3.0</td>
</tr>
<tr>
<td>No. 8</td>
<td>±1.0</td>
</tr>
<tr>
<td>No. 200</td>
<td>±1.0</td>
</tr>
<tr>
<td>Asphalt Binder Content, % (AASHTO T 308)</td>
<td>±0.40</td>
</tr>
<tr>
<td>Asphalt Binder Content, % (NJDOT B-5)</td>
<td>±0.15</td>
</tr>
<tr>
<td>Minimum % Air Voids</td>
<td>1.0% less than design requirement</td>
</tr>
</tbody>
</table>

1. Production tolerances may not fall outside of the wide band gradation limits in Table 902.03.03-1.
2. The asphalt binder content may not be lower than the minimum after the production tolerance is
SECTION 903 – CONCRETE

903.02.04 Viscosity Modifying Admixture

THE FIRST SENTENCE IS CHANGED TO:

Use a viscosity modifying admixture that is listed on the QPL and that, when evaluated according to the test methods and mix design proportions in AASHTO M 194, conforms to the following physical requirements:

903.03.05 Control and Acceptance Testing Requirements

E. Acceptance Testing for Strength for Pay-Adjustment Items.

THE FOLLOWING IS ADDED:

There are no Concrete Items which are subject to pay adjustment on this project.

SECTION 905 – REINFORCEMENT METALS

905.01 REINFORCEMENT STEEL

THE ENTIRE SUBPART IS CHANGED TO:

Provide reinforcement steel manufactured at an AASHTO NTPEP (National Transportation Product Evaluation Program) certified mill. For a list of NTPEP certified mills, see the following webpage: https://data.ntpep.org/REBAR/Audits.

For reinforcement steel, submit a certification of compliance as specified in 106.07. Attach copies of the mill certifications for each heat of reinforcement steel. The ME will randomly sample and test heats of reinforcement steel for quality assurance. The ME will randomly inspect and sample galvanized and epoxy coated reinforcement steel for quality assurance.

905.01.03 Welded Wire Reinforcement

THE FIRST PARAGRAPH IS CHANGED TO:

Use plain or deformed steel welded wire reinforcement according to ASTM A1064. When used for concrete pavement, use welded wire reinforcement mats at least 5 feet in width.

THE SECOND PARAGRAPH IS CHANGED TO:

When approved as an alternate to galvanized reinforcement bars, use galvanized welded wire reinforcement that meets the requirements of ASTM A 641, Table 1, Class 1.

905.01.05 Dowels

THE ENTIRE SUBPART IS CHANGED TO:

Use plain reinforcement bars according to ASTM A 615, Grade 60. Galvanize according to ASTM A 123.
**905.03.03 Dowel Bars**

THE FIRST PARAGRAPH IS CHANGED TO:

For dowel bars in transverse joints, use epoxy-coated, Grade 60, plain reinforcement steel according to ASTM A 615. If shown on the Plans, use dowel bars fitted with end caps. Ensure that the end caps are non-metallic and designed to prevent the entrance of grout or mortar into the expansion void.

**SECTION 911 – SIGNS, SIGN SUPPORTS, AND DELINEATORS**

**911.02.02 Breakaway Sign Supports for Ground Mounted Signs**

THE ENTIRE SUBPART IS CHANGED TO:

Fabricate and construct breakaway sign supports for ground mounted signs using materials conforming to the requirements in Table 911.02.02-1.

<table>
<thead>
<tr>
<th>Table 911.02.02-1 Materials for Breakaway Sign Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
</tr>
<tr>
<td>Aluminum Materials (other than bracket)</td>
</tr>
<tr>
<td>Bracket</td>
</tr>
<tr>
<td>Structural steel shapes</td>
</tr>
<tr>
<td>Steel Sheet</td>
</tr>
<tr>
<td>Bolts (except special bolt for coupling)</td>
</tr>
<tr>
<td>Special bolt for coupling</td>
</tr>
<tr>
<td>Cap Screw</td>
</tr>
<tr>
<td>Lock Washer</td>
</tr>
<tr>
<td>Nut</td>
</tr>
<tr>
<td>Coupling</td>
</tr>
</tbody>
</table>
Steel Hinge Plate       AISI 4130       ASTM 123
Anchor Rod             AISI 1045
Anchor Coil            AISI 1008
Anchor Washer          908.04
Anchor Ferrule         908.04

Submit mill certificates for the component materials.

SECTION 912 – PAINTS, COATINGS, TRAFFIC STRIPES, AND TRAFFIC MARKINGS

912.03.01 Epoxy Traffic stripes

THE SUBPART HEADING IS CHANGED TO:

912.03.01 Traffic Stripes

A. Epoxy Resin.

THE FIRST SENTENCE IS CHANGED TO:

For pavement striping, use an epoxy resin that is a 2 component, 100 percent solids formulation conforming to the following requirements:

B. Glass Beads.

THE FIRST PARAGRAPHS IS CHANGED TO:

Submit certifications of compliance as specified in 106.07 for each lot of glass beads used on the Contract. For each lot of glass beads, submit test results indicating the parts per million of lead, antimony and arsenic as determined by testing according to Environmental Protection Agency testing method 3052 and testing method 6010B or 6010C. Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 100 ppm of arsenic.

912.03.02 Thermoplastic Traffic Markings

THE SUBPART HEADING IS CHANGED TO:

912.03.02 Traffic Markings

THE ENTIRE SUBPART TEXT IS CHANGED TO:

For traffic markings, use either preformed or hot extruded thermoplastic conforming to AASHTO M 249, except that for preformed thermoplastic, the minimum thickness requirement is 90 mils. Use beads conforming to AASHTO M 247, Type 1, with a moisture resistant coating. Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 100 ppm of arsenic.

Submit certifications of compliance, as specified in 106.07, for each batch of materials used on the Contract. For each lot of glass beads, submit test results indicating the parts per million of lead, antimony and arsenic as determined by testing according to Environmental Protection Agency testing method 3052 and testing method 6010B or 6010C.
912.04.01 Latex Paint

THE ENTIRE SUBPART TEXT IS CHANGED TO:

Use latex traffic paint that is a fast-drying white, or non-lead yellow, ready-mixed pigmented binder emulsified in water and capable of anchoring reflective glass beads that are separately applied. Ensure that the color matches FED-STD-595B color chip No. 33538 for yellow and No. 37886 for white. Ensure that the paint has a maximum no-track time of 120 seconds when applied in a wet film. In addition, ensure that the finished product meets the following:

1. Volume of solids is a minimum 61 percent.
2. Total solids are a minimum of 77.5 percent total non-volatiles by weight, when tested according to ASTM D 2369.
3. Weight per gallon is a minimum 14 ± 0.2 pounds per gallon for each color.
4. Hegman Grind is a minimum of 2 Hegman when tested according to ASTM D 1210.
5. Viscosity is between 70 and 95 Krebs Units at 77 °F, when tested according to ASTM D 562.

Use glass beads conforming to AASHTO M247, Type 1, with a moisture resistance coating. Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 100 ppm of arsenic.

Submit a certification of compliance, as specified in 106.07, for latex and glass beads. For each lot of glass beads, submit test results indicating the parts per million of lead, antimony and arsenic as determined by testing according to Environmental Protection Agency testing method 3052 and testing method 6010B or 6010C.

SECTION 914 – JOINT MATERIALS

914.03 Polymerized Joint Adhesive

TABLE 914.03-1 IS CHANGED TO:

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cone Penetration, 25 °C</td>
<td>ASTM D 5329</td>
<td>60-100</td>
</tr>
<tr>
<td>Flow, 60 °C</td>
<td>ASTM D 5329</td>
<td>5 mm maximum</td>
</tr>
<tr>
<td>Resilience, 25 °C</td>
<td>ASTM D 5329</td>
<td>30% minimum</td>
</tr>
<tr>
<td>Ductility, 4 °C</td>
<td>ASTM D 113</td>
<td>30 cm minimum</td>
</tr>
<tr>
<td>Tensile Adhesion, 25 °C (^1)</td>
<td>ASTM D 5329</td>
<td>500% minimum</td>
</tr>
<tr>
<td>Softening Point</td>
<td>ASTM D 36</td>
<td>77 °C minimum</td>
</tr>
<tr>
<td>Asphalt Compatibility</td>
<td>ASTM D 5329</td>
<td>Pass</td>
</tr>
</tbody>
</table>

1. A precision estimate for this standard has not been developed, so it should not be used for acceptance or rejection of a material during product approval.

914.04.01 Preformed Elastomeric (Compression Type)

B. Joint Sealer.

THE LAST SENTENCE OF THE SECOND PARAGRAPH IS CHANGED TO:

If splicing of a sealer is allowed, ensure that the sealer at the splice point has no significant
misalignment at its sides or top and that misalignment at the bottom does not exceed half of the bottom wall thickness.

SECTION 919 – MISCELLANEOUS

919.14 DETECTABLE WARNING SURFACE

THIS SUBSECTION IS CHANGED TO THE FOLLOWING:

**DOME GEOMETRY** In accordance with *ADA Regulations for Detectable Warning on Curb Ramps*: raised truncated domes with a diameter of nominal 0.9”, a height of nominal 0.2”, and a center-to-center spacing of 1.67” minimum, and 2.35” maximum.

**PANEL DIMENSIONS** DWS Unit shall be 24”x48” (unless shown on the plans to be installed along a radius). DWS Units measure 0.20” nominal thickness and feature embedment ribs 3” on center.

**MATERIAL** A homogenous glass and carbon reinforced composite which is colorfast and UV stable. Truncated Domes are fiberglass reinforced for enhanced durability. The DWS panel color is uniform throughout and does not rely on any type of paint coating to achieve color stability. “Brick Red” color is to be used.

**INSTALLATION** TWS Units are to be used on new curb ramp locations. The DWS Units can be pre-filled with concrete and set in place or pressed into place in the freshly poured concrete. Contractor is to install ADATILE as per manufacturer’s specifications.

<table>
<thead>
<tr>
<th><strong>PHYSICAL CHARACTERISTICS:</strong></th>
<th>28,900 psi</th>
<th>ASTM D 695</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>29,300 psi</td>
<td>ASTM D 790</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>.07%</td>
<td>ASTM D 570</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>1.18 Dry/1.05 Wet</td>
<td>ASTM C 1028</td>
</tr>
<tr>
<td>Slip Resistance</td>
<td>20</td>
<td>ASTM E 84</td>
</tr>
<tr>
<td>Flame Spread Index</td>
<td>No Change (200 hours)</td>
<td>ASTM B 117</td>
</tr>
<tr>
<td>Salt Spray</td>
<td>No Deterioration</td>
<td>ASTM 1308</td>
</tr>
<tr>
<td>Chemical Stain Testing</td>
<td>549</td>
<td>ASTM C 501</td>
</tr>
<tr>
<td>Abrasion Resistance</td>
<td>Delta E &lt; 5.0 (2,000 hours)</td>
<td>ASTM G 155</td>
</tr>
<tr>
<td>Accelerated Weathering</td>
<td>11,600 psi</td>
<td>ASTM D 638</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>No Delamination or Degradation</td>
<td>ASTM C 903</td>
</tr>
<tr>
<td>Adhesion to Concrete (20° - 180°)</td>
<td>No Disintegration</td>
<td>ASTM C 1026</td>
</tr>
<tr>
<td>Freeze/Thaw/Heat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1009.01 HMA PLANT
A. Requirements for HMA Mixing Plants.
The following is added after the second paragraph:

The HMA producer is required to have a quality control (QC) program plan approved annually by the ME as per Materials Approval Procedure MAP-102. The HMA producer is required to ensure that the QC plan conforms to the requirements outlined in the report entitled “Hot Mix Asphalt Quality Control Program Plan” prepared by the Department of Transportation and New Jersey Asphalt Paving Association. Failure to follow these requirements will result in rejection of HMA materials supplied by the HMA producer and removal of the HMA supplier from the QPL.