

# PROPOSAL

FOR

TAN 24-12

D214948

PAVEMENT REHABILITATION AND MISCELLANEOUS  
WORK ON I-190, NIAGARA THRUWAY  
FROM MP N0.7 TO MP N4.2

## BOOK 1 OF 1

THIS BOOK CONTAINS SPECIFICATIONS AND  
BID PROPOSAL WORKSHEETS

SUBMITTED IN ACCORDANCE WITH THE NEW YORK STATE  
DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS  
OFFICIALLY ADOPTED MAY 1, 2024 EXCEPT AS MODIFIED  
IN THE PLANS AND/OR PROPOSAL AND ANY CHANGES WITH  
ARTICLE 2, TITLE 9 OF THE PUBLIC AUTHORITIES LAW.

LETTING OF  
JULY 3, 2024

BIDS DUE: 10:30 A.M.

BIDS OPEN: 11:00 A.M.



**Thruway  
Authority**

200 Southern Blvd., Albany, NY 12209

**NOTICE**  
**TO**  
**BIDDERS**

**In addition to the bid deposit requirement, this Proposal shall be accompanied by a Statement of Surety's Consent on the form furnished by the Authority. (See last page).**

**BIDDERS ARE SUBJECT TO LOSS OF BID DEPOSIT FOR FAILURE TO OBTAIN PROPER BONDING.**

# Thruway Authority Designated Contacts

Pursuant to NYS Finance Law Sections 139-j and 139-k, the following people are the designated contacts for this procurement process:

For all technical or engineering related questions:

- Keith Gawronski  
Project Designer  
[Keith.Gawronski@thruway.ny.gov](mailto:Keith.Gawronski@thruway.ny.gov)

Or

- Bob Cournoyer, P.E.  
Project Manager  
[Robert.Cournoyer@thruway.ny.gov](mailto:Robert.Cournoyer@thruway.ny.gov)

For all procurement contract process related questions:

- Ronald Smith  
Office of Procurement Services  
[Ronald.Smith@thruway.ny.gov](mailto:Ronald.Smith@thruway.ny.gov)


Or

- Andrew Trombley  
Office of Procurement Services  
[Andrew.Trombley@thruway.ny.gov](mailto:Andrew.Trombley@thruway.ny.gov)

For more information about NYS Finance Law Sections 139-j and 139-k, please see the New York State Thruway Authority Guidelines for Lobbying included in this Proposal.

# NEW YORK STATE THRUWAY AUTHORITY

## NOTICE TO BIDDERS

The Thruway Authority conducts public bid openings. Visitors who choose to hand deliver a bid and/or witness the bid opening are limited to one person. The Thruway Authority also uses  YouTube to broadcast its live bid openings. The link to live streams are available from the Thruway website here: <https://www.thruway.ny.gov/news/meetings/bid-openings.html>

or directly from  YouTube at:

<https://www.youtube.com/@nysthruwayauthority6263/streams>

Sealed bids must be hand delivered, or delivered by first class mail, USPS Express or Priority Mail, or overnight delivery service (e.g., FedEx, UPS) to the New York State Thruway Authority Headquarters Building, at the following address only: New York State Thruway Authority, 200 Southern Boulevard Albany, NY 12209.

Sealed bids should not be sent or delivered to any other address or location, and the Authority is not responsible for any late deliveries or misdirected bids.

Regardless of the delivery method selected, all sealed bids, whether paper or electronic form, must be delivered by 10:30 A.M. on Wednesday, July 3, 2024, where they will be opened publicly and read aloud at 11:00 A.M. Any bids sent or delivered to an address or location other than the one specified above, or received after this time, will not be accepted.

Contract TAN 24-12/D214948 Pavement Rehabilitation and Miscellaneous Work on I-190, Niagara Thruway from Milepost N0.7 to Milepost N4.2 in Erie County in accordance with the Plans and Specifications.

**Your bid must be secured with either a Bid Bond or a Bid Deposit.** A Bid Bond must be in the amount of 5% of the total bid and must be on the Authority's Bid Bond Form (TA-44117) which is included in the Proposal. A Bid Deposit must be a certified check or cashier's check made payable to the New York State Thruway Authority in the amount of **\$2,750,000.00.**

Plans, proposals, and information on how to download Contract Bid Data are available on the Authority's Website at [www.thruway.ny.gov](http://www.thruway.ny.gov).

### SPECIAL NOTE

**The New York State Thruway Authority has discontinued the practice of reproducing and furnishing full-size and half-size plans to Contractors after contract award. Contractors shall be responsible for their own hard copies of plans and proposals at no additional cost to the Authority.**

## **New York State Can Help You Secure Surety Bonding**

The NYS Surety Bond Assistance Program (NYSBAP) provides technical and financial assistance to help contractors secure surety bonding. Contractors may be eligible to receive a guarantee of up to 30% to secure a surety bond line, bid bond or a performance and payment bond on State projects. Training is also available to contractors requiring technical support on how to become bond-ready. For more information and to fill out a NYSBAP application, visit <http://esd.ny.gov/BusinessPrograms/BondingAssistance.html> or contact Ms. Huey-Min Chuang at Empire State Development at 212-803-3238 or [BAP@esd.ny.gov](mailto:BAP@esd.ny.gov).

**SPECIAL NOTE**  
**REQUEST FOR INFORMATION (RFI)**

A **request for information (RFI)** is a written process used to clarify a detail, specification, or note in the contract documents, provide notification of a possible error or omission, or request a minor modification due to possible unforeseen issues that may occur during construction.

However, during the period between project advertisement and award of contract, the prospective Bidder/Contractor shall submit all RFIs to the appropriate "Designated Contact" via e-mail, as listed elsewhere in the Proposal. The prospective Bidder's/Contractor's RFI shall be forwarded to the designated contact. The Bidder Request for Information, Thruway Authority form TA-W44137, can now be found on the Authority's website at:

<http://www.thruway.ny.gov/business/contractors/documents/ta-w44137.pdf>

This form should be filled out as completely and accurately as possible, numbered sequentially, as may be necessary, and saved in pdf format. Any supporting information that may help describe the issue more clearly, as well as any suggestions or recommendations for possible resolution, should also be provided. The form once complete shall be forwarded to the designated contact as instructed in the form.

Responses by the Authority to RFI's will be documented as Questions and Answers and posted for all bidders' reference, under each respective project, on the Thruway Authority's website at:

<http://www.thruway.ny.gov/business/contractors/documents/index.shtml>

Questions and Answers posted to the Authorities internet page may not be memorialized as amendments. Thus, prospective bidders are advised to check the Thruway Authority's website regularly before letting (or proposals are due), for Questions and Answers updates. Please be advised that RFI's submitted the week of the letting may not be answered.

Any changes to the Contract documents that result from an RFI will be addressed via an amendment.

# New York State Thruway Authority

## Contract No. TAN 24-12

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# **PROJECT INFORMATION**

**NEW YORK STATE THRUWAY AUTHORITY**  
**DEPARTMENT OF ENGINEERING**  
**PROPOSAL ESTIMATE FOR**  
**PAVEMENT REHABILITATION**  
**AND MISCELLANEOUS WORK ON I-190, NIAGARA THRUWAY**  
**FROM**  
**MILEPOST N0.7 TO MILEPOST N4.20**  
**IN THE**  
**BUFFALO DIVISION**  
**OF THE**  
**NEW YORK STATE THRUWAY**  
**IN**  
**ERIE COUNTY**

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<b>TYPE</b>	<b>LIMITS</b>
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**Pavement Rehabilitation and  
Miscellaneous Work including Ramps  
within Project Limits**

**3.5± miles plus advance signing**

**DEPOSIT REQUIRED**           \$2,750,000.00          

**COMPLETION DATE**           October 30, 2026

**PRE-AWARD NOTICE**

A Pre-Award Meeting has not been scheduled for this project. If a Pre-Award Meeting is deemed necessary, notice of the date and time will be provided.

To assist the Authority in its award process, the successful low bidder must furnish the following items upon request:

1. A current New York State Uniform Contracting Questionnaire (NYSUCQ) CCA-2 form must be on file;
2. A list of current contracts giving the firm or agency for which they are being performed, the name and phone number of someone therein familiar with the contractor's work, the contract amount, and percent of completion;
3. Pre-Award Project Schedule;
4. Documentation of the actions taken to comply with the Minority/Women's Business Enterprise Utilization goals (Non-Federal), or Disadvantaged Business Enterprise goals (Federal) as defined in the Proposal;
5. A "Schedule of Participation of Minority/Women's Business Enterprise" (Form TA-1022), or Disadvantaged Business Enterprise" (Form TA-1022F);
6. AAPHC-89 Approval to Subcontract.

Contract Documents will be supplied with the Authority's notice to the successful low bidder and must be executed and returned to the Authority within ten (10) days of receipt.

If a Pre-Award Meeting is held, it is requested that the Project Superintendent be present. The Contractor should be prepared to provide, upon request by the Authority, information regarding, among other things, the following:

1. Use of subcontractors, including who they will be and what items of work they will perform;
2. Suppliers and manufacturers;
3. Traffic control and safety;
4. Any anticipated problems that could affect the progression of the project.

**CONTRACT AWARD**

The award process cannot begin until the executed Contract Documents have been returned to the Authority and the successful Low Bidder has provided acceptable documentation with regard to his actions taken to comply with the M/WBE goals of this Contract or DBE Goals for Federally Aided Contracts.

**ALL BIDDERS****PRE-BID INSPECTION**

The prospective bidder must have in its possession the Contract Plans/Proposal and a Work Permit for identification purposes when conducting a pre-bid inspection of the Thruway facility.

The prospective bidder shall inform the appropriate Division Point of Contact (listed below) prior to visiting the site and shall strictly comply with all instructions and requirements.

- **The New York State Thruway Authority Permit Application (TA-W5124)** and information on required insurance documentation is available at <http://www.thruway.ny.gov/business/realproperty/permits.html>. The application along with insurance documentation shall be submitted to the appropriate Thruway Authority Division Permit Coordinator as indicated on page 2 of the application. The fee is waived for this Pre-Bid Inspection.

<b><u>Division</u></b>	<b><u>Point of Contact</u></b>	<b><u>Phone</u></b>
New York	Timothy Mathew	(845) 918-2510
Albany	Gary Raylinsky	(518) 436-2710
Syracuse	Jerrin George	(315) 438-2391
Buffalo	Nicholas Przybylski	(716) 635-6253

Provisions of Section 107-05, Equipment Safety Procedures, contained in the Contract Proposal shall apply to all Pre-Bid Inspectors and shall be strictly adhered to while performing the pre-bid inspection.

**PRECONSTRUCTION MEETING**

A Pre-Construction Meeting will be held prior to the start of construction. The time, date and location will be coordinated by the Division Construction Engineer who will provide this information to the successful low bidder as soon as it is available.

**WITHDRAWAL OF BID**

A Contractor may at any time, upon at least fifteen (15) days written notice, withdraw its bid on a date sixty (60) days after bid opening or thirty (30) days after the properly executed contract documents have all been received by the Authority, whichever is later. The bid bond, bid deposit, and/or performance bond shall remain in effect until such period of written notice has expired provided the contract has not been approved by the Office of the State Comptroller in the interim.

The Contractor and the Authority may agree in writing to extend the date upon which the bid may be withdrawn if the contract has not been approved by the Office of the State Comptroller.

**WORK TO BE DONE**

The following is a general description of the work to be done under this Contract. This list is intended to give the Contractor a general description of the work involved in this Contract and is not a complete listing of all work to be done. All work shall be done in accordance with the Contract Documents even though not specifically mentioned in this list.

1. Provide basic work zone traffic control according to the contract documents and as ordered by the Engineer.
2. Perform concrete repairs on existing concrete pavement.
3. Overlay repaired concrete pavement with warm mix asphalt.
4. Reconstruct portions of roadway indicated on plans for vertical clearance under bridges as well as transition to indicated bridge decks.
5. Waterproof and overlay bridge decks and replace bridge joints.
6. Install guiderail/barrier.
7. Install new system of overhead lighting.
8. Install new foundations and new sign structures and remove old sign structures.
9. Repair drainage structures as indicated on plans.
10. Restore disturbed areas and clean-up as directed by the Engineer.

## SCHEDULE AND SUSPENSION OF WORK

The New York State Thruway is a limited access, high-speed, high-volume highway. Traffic shall be maintained in accordance with the *Manual on Uniform Traffic Control Devices (MUTCD)*, the *Work Zone Traffic Control Plans*, the *Standard Specifications* Section 619 and the following provisions:

### **A. WORK ZONE TRAFFIC CONTROL**

1. Lane closures on the Thruway shall only be allowed in accordance with the traffic management table(s), available on the Thruway Authority website at <http://www.thruway.ny.gov/business/contractors/standard-sheets/index.shtml>, unless indicated otherwise in the contract documents. If more than one table is applicable to a work zone location, the most restrictive requirements shall be used. Traffic management tables do not guarantee lane closure availability; the requirements of Section B. *Work Restrictions* shall supersede these tables, when applicable.
2. Lane closures on the Thruway will be permitted for work site access, delivery of materials and equipment, and work operations. Personal vehicles will **NOT** be allowed to park along the Thruway or within lane closures on the Thruway at any time. During non-working hours, all equipment and materials shall be stored at least 30 feet from the edge of pavement (both mainline and ramps) or be protected by a physical barrier approved by the Engineer.
3. Lane closures will **NOT** be permitted during holiday periods or when unforeseen circumstances arise, as described in Section B. *Work Restrictions*, unless indicated otherwise in the contract documents.
4. Lane closures will **NOT** be permitted for the sole convenience of the Contractor. Lane closures will be permitted in order to protect traffic from an actual hazard, as determined by the Engineer.
5. Permanent lane closures will **NOT** be permitted for the duration of the contract.
6. Simultaneous closure of right and left shoulders will **NOT** be permitted unless indicated otherwise in the contract documents. Either right or left shoulder must remain clear and available through all work zones. The open shoulder shall not be used for the storage of vehicles, equipment, supplies or any other obstructions, or for any work activity.
7. Ramp closures will **NOT** be permitted, unless indicated otherwise in the contract documents. Access to interchanges, service areas and parking areas shall be maintained at all times.
8. Traffic will **NOT** be permitted to drive on milled pavement, unless indicated otherwise in the contract documents.

### **B. WORK RESTRICTIONS**

1. **HOLIDAY PERIODS.** Lane closures will **NOT** be permitted during holiday periods, unless indicated otherwise in the contract documents. The Authority may permit work on Thruway facilities only if operations do not inhibit or distract traffic. Access to work sites from state and local roads will be permitted provided the municipality having jurisdiction for the road gives written permission. Holiday periods for this project shall be as follows:

**SCHEDULE AND SUSPENSION OF WORK****\*\*\*BUFFALO DIVISION\*\*\***

<b>2024</b>						
<b>HOLIDAY</b>	<b>FROM</b>			<b>TO</b>		
	<b>TIME</b>	<b>DAY</b>	<b>DATE</b>	<b>TIME</b>	<b>DAY</b>	<b>DATE</b>
Canada Day	Noon	Friday	06/28/2024	11:00 p.m.	Monday	07/01/2024
Independence Day	Noon	Wednesday	07/03/2024	11:00 p.m.	Sunday	07/07/2024
Labor Day	Noon	Thursday	08/29/2024	11:00 p.m.	Monday	09/02/2024
Columbus Day/ Thanksgiving (Canada)	Noon	Friday	10/11/2024	11:00 p.m.	Monday	10/14/2024
Veterans Day	Noon	Friday	11/08/2024	11:00 p.m.	Monday	11/11/2024
Thanksgiving	6:00 a.m.	Wednesday	11/27/2024	11:00 p.m.	Sunday	12/01/2024
Christmas/New Year's Day	6:00 a.m.	Tuesday	12/24/2024	6:00 a.m.	Thursday	01/02/2025

<b>2025</b>						
<b>HOLIDAY</b>	<b>FROM</b>			<b>TO</b>		
	<b>TIME</b>	<b>DAY</b>	<b>DATE</b>	<b>TIME</b>	<b>DAY</b>	<b>DATE</b>
Dr. Martin Luther King, Jr. Day	Noon	Friday	01/17/2025	11:00 p.m.	Monday	01/20/2025
Presidents' Day	Noon	Friday	02/14/2025	11:00 p.m.	Monday	02/17/2025
Easter	Noon	Friday	04/18/2025	11:00 p.m.	Monday	04/21/2025
Victoria Day (Canada)	Noon	Friday	05/16/2025	11:00 p.m.	Monday	05/19/2025
Memorial Day	Noon	Thursday	05/22/2025	11:00 p.m.	Monday	05/26/2025
Independence Day	Noon	Thursday	07/03/2025	11:00 p.m.	Sunday	07/06/2025
Labor Day	Noon	Thursday	08/28/2025	11:00 p.m.	Monday	09/01/2025
Columbus Day/ Thanksgiving (Canada)	Noon	Friday	10/10/2025	11:00 p.m.	Monday	10/13/2025
Veterans Day	6:00 a.m.	Tuesday	11/11/2025	11:00 p.m.	Tuesday	11/11/2025
Thanksgiving	6:00 a.m.	Wednesday	11/26/2025	11:00 p.m.	Sunday	11/30/2025
Christmas/New Year's Day	6:00 a.m.	Wednesday	12/24/2025	6:00 a.m.	Friday	01/02/2026

<b>2026</b>						
<b>HOLIDAY</b>	<b>FROM</b>			<b>TO</b>		
	<b>TIME</b>	<b>DAY</b>	<b>DATE</b>	<b>TIME</b>	<b>DAY</b>	<b>DATE</b>
Dr. Martin Luther King, Jr. Day	Noon	Friday	01/16/2026	11:00 p.m.	Monday	01/19/2026
Presidents' Day	Noon	Friday	02/13/2026	11:00 p.m.	Monday	02/16/2026
Easter	Noon	Friday	04/03/2026	11:00 p.m.	Monday	04/06/2026
Victoria Day (Canada)	Noon	Friday	05/15/2026	11:00 p.m.	Monday	05/18/2026
Memorial Day	Noon	Thursday	05/21/2026	11:00 p.m.	Monday	05/25/2026
Independence Day	Noon	Thursday	07/02/2026	11:00 p.m.	Sunday	07/05/2026
Labor Day	Noon	Thursday	09/03/2026	11:00 p.m.	Monday	09/07/2026
Columbus Day/ Thanksgiving (Canada)	Noon	Friday	10/09/2026	11:00 p.m.	Monday	10/12/2026
Veterans Day	6:00 a.m.	Wednesday	11/11/2026	11:00 p.m.	Wednesday	11/11/2026
Thanksgiving	6:00 a.m.	Wednesday	11/25/2026	11:00 p.m.	Sunday	11/29/2026
Christmas/New Year's Day	6:00 a.m.	Thursday	12/24/2026	11:00 p.m.	Sunday	01/03/2027

**SCHEDULE AND SUSPENSION OF WORK**

2. Proposed lane closure schedules shall be submitted to the Engineer for review and approval at least one week in advance of the earliest closure.
3. The Contractor shall **NOT** be allowed to establish any lane closures during periods of inclement weather, wet or icy pavement, reduced visibility, traffic accident, emergency, or if the lane closure is causing excessive delay to the public. The Authority reserves the right to alter any lane closure and/or direct the Contractor to immediately remove a lane closure during such circumstances. The Authority shall be the sole judge of when conditions warrant these lane closure restrictions, and such restrictions will not entitle the Contractor to file a claim for additional compensation.
4. **BUFFALO DIVISION:** Work operations shall be scheduled to avoid interference with increased traffic volumes generated by Buffalo Bills home games or Canadian holidays.
5. **WINTER SHUTDOWN.** A winter shutdown shall be in effect from 3:00 p.m. **November 15** to 6:00 a.m. **April 1**. During this period, the Contractor shall **NOT** be permitted to have lane closures. All temporary tape lines shall be removed, temporary concrete barrier shall be set in its winter shutdown location, and all traffic shall be re-established to its pre-construction configuration on permanent alignment. Mobilization for the following construction season may begin prior to **April 1** with permission from the Authority.
6. The Contractor shall submit a Plan of Operations to the Engineer prior to working on any full-depth repair area shown in the contract documents. The Plan of Operations shall list all full-depth repair areas and the estimated duration to complete each location. The Contractor shall also identify any full-depth repair area that may not be completed within the timeframes allowed by the traffic management table(s). For such location(s), the Contractor may request a waiver of restrictions to complete the repair(s). The Authority will review the request and determine whether or not a waiver will be granted. The Authority has the right to divide repair areas into smaller sections in lieu of granting a waiver.
7. The Contractor shall have 45 calendar days to replace the Milled in Audible Roadway Delineators (MIARDs; Formerly referred to as Shoulder Treatment for Accident Reduction (STAR) groove pattern) where more than 1,500 contiguous feet have been removed by other contract work. The Contractor shall also ensure that MIARDs are installed prior to the official shutdown period, regardless of the 45 calendar day requirement or the length removed. Exceptions to this requirement are shoulders protected by temporary traffic control devices installed as part of a work zone traffic control plan developed in the contract documents or areas directly adjacent to detour pavement that will be used in subsequent phase(s) of the project.

The Contractor shall consider these requirements when preparing bids and scheduling/sequencing the work for this contract. Failure to comply with the time frames specified will be considered a substantial deficiency in work zone traffic control and result in the non-payment for the Basic Work Zone Traffic Control Item for each calendar day during which MIARDs (formerly referred to as STARS) remain incomplete. Liquidated Damages will also be assessed at rates shown in Table 108-1 of the NYSDOT Standard Specifications.

8. Work restrictions may be modified if:
  - a. The Contractor has received permission through the Engineer, from the Division Director or designee, to progress construction operations contained entirely behind temporary concrete barrier. There shall be no hauling of materials in or out of the work site during restricted periods, and open lane availability requirements shall not be violated or compromised.
  - b. The Contractor has received permission through the Engineer, from the Division Director or designee, for temporary modification of the lane availability restrictions for performance of specific



## SCHEDULE AND SUSPENSION OF WORK

construction operations for a specific time period.

**NOTE:** Such requests must be based on current traffic volumes which would permit the requested temporary modification with little probability of causing disruption or delay to the public.

The Contractor shall include full explanation of the benefits to the Public and to the Authority, which would accrue in granting a temporary waiver for performance of the specific operations including calculations for any credit that may be offered. A contingency plan for action to be taken, should an unexpected traffic backup occur, shall accompany this presentation and will be one prime consideration in evaluating the request.

- c. The Contractor has received written authorization from the Division Director or designee to perform specific construction operations, violating the lane availability restrictions or other work restrictions during a specifically prohibited time period.

**NOTE:** The Contractor shall submit a written request to the Authority's Division Director, with copy to the Engineer, for permission to perform specific construction operations at specific locations and times, including a detailed explanation of why the work cannot be performed in conformance with the contract. Such requests must be received at the Division Office at least one full week before the date of the requested variance, and at least two full weeks should granting the waiver require making notice to the public regarding potential disruptions and delays.

If written authorization to work is granted by the Authority, the Contractor shall be strictly limited to those operations approved in the authorization. In making application for a waiver, the Contractor agrees that any waiver of restrictions granted by the Authority is exclusively for the Authority's benefit and purposes, and as such is subject to revocation without requirement for advance notice. Also, the disapproval of requests for waiver of contract requirements is not subject to administrative review or appeal under the contract.

### **C. GENERAL CONDITIONS**

The Contract is to be completed on or before the specified completion date. If, for any reason, the Contractor fails to fulfill this obligation and requests an extension of time and the request is granted, the Authority, as a condition for extending the time of completion, shall retain the right to limit the Contractor's hours and/or days of work and/or impose conditions under which the work shall be performed in order that the traffic may not be unduly inconvenienced.

All the required liability and property damage insurance with the limits stated in this Proposal shall be effective and shall be continued in force throughout the life of this Contract including the stated periods of the suspension of the work.

The Contractor shall consider the foregoing requirement when preparing its "Schedule of Operations".

**ADDITIONAL INSURED PARTIES**

The following is a list of additional insured parties:

City of Buffalo  
 NYS Department of Transportation  
 City of Buffalo Sewer Authority

**NON-REVENUE CONTRACTOR TRAVEL**

NYS Thruway has converted to Cashless Tolling, Non-revenue pass plates will no longer be furnished to the Contractor.

Contractors and Consultants must have a properly mounted E-Z Pass transponder and must submit their EZ-Pass information to the Thruway to avoid charges for contract related business on the Thruway. The Project Engineer will provide the form used to record and submit EZ Pass information. Initial information shall be submitted to the Project Engineer prior to the start of work on the project. The initial form and any changes shall be submitted 5 working days prior to intended travel.

Non-Revenue travel will be provided within the limits of **I-190, Niagara Thruway** from Interchange **1** to Interchange **5**. Travel originating or ending outside of these limits will be subject to toll charges for the entire trip.

The Contractor shall be responsible for any and all tolls charged to contractor owned vehicles with (or without) E-ZPass Transponders not registered with the Authority.

**OTHER CONTRACTS**

The Contractor will be required to coordinate work with other Contractors and NYSTA Maintenance Forces. The following contracts have been let and may have work in progress during the duration of this contract:

<b><u>CONTRACT NO.</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>COMPLETION DATE</u></b>
TAB 23-6 / D214910	Buffalo Division On-Demand Repair Contract	December 31, 2024
TAB 23-1 / D214884	Buffalo Division Various Culvert Rehabilitation, Drainage Repairs and Miscellaneous Work on I-90 and I-190	November 22, 2024
TAB 23-12B / D214915	Substructure Repairs on Various Bridges on I-90 from MP 352.7 to 462.82 and on I-190, MP N2.84	November 22, 2024
TAN 23-15B / D214897	Structural Steel Repairs, Seismic Retrofits & Light Pole Replacements of the North Grand Island Bridges at MP N20.35 and MP N21.12 and Light Pole Replacements of the South Grand Island Bridges at MP N14.35 and MP N14.99	July 26, 2026
TAN 24-3B / D214947	South and North Grand Island Bridges Maintenance Cleaning for Steel Preservation	September 30, 2024

**OTHER CONTRACTS** (... continued)

<b><u>CONTRACT NO.</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>COMPLETION DATE</u></b>
TAB 24-17 / D214971	Pavement Repairs at Various Locations Between MP 420.34 and MP 467.0 on I-90 and MP N4.65 and MP N18.61 on I-190, Niagara Thruway	November 14, 2025

The following contracts are anticipated to be let and may have work in progress during the duration of this contract:

<b><u>DESCRIPTION</u></b>	<b><u>COMPLETION DATE</u></b>
TAB 24-23 / D214981, 2" Mill and Inlay from MP 430.6 to MP 438.5 E/W including Full Depth Repairs, Shoulders, and Interchanges 56 and 57	July 31, 2025

**ENGINEER'S OFFICE AND CONTRACTOR'S FIELD OFFICE**

The location of the Engineer's Office and Contractor's Field Office will be determined during the Pre-Construction Meeting. The site will be approved by the Engineer prior to placing the offices and the area shall be kept in a neat, clean condition at all times. The area shall not be used as a staging, storage, equipment or employee parking area.

**U-TURNS/CROSSOVERS**

The Contractor may be permitted to use official median openings for U-turns and crossovers with written authorization from Division Traffic Supervision. Official median openings are available at the following locations:

- MP N0.63

Tractor trailer combinations are prohibited from U-turns at any location on the Thruway system. These vehicles must exit the Thruway system and re-enter for all direction changes. U-turns may be permitted within a maintenance facility, however, with prior approval from both Division Traffic Supervision and the Thruway Maintenance Supervisor 2 for that facility. All applicable traffic laws must be followed.

**SPOIL AREA**

There is no identified spoil area within the Thruway Authority's right-of-way for this contract. Therefore, the Contractor shall remove all surplus material and waste from Thruway Authority (Authority) property. The Contractor shall bid accordingly for this condition.

The Contractor shall provide the Authority a copy of all easements and/or access agreement letters received from landowner(s) of off-site disposal area(s) prior to disposal of any material. The easements and/or access agreement letters must include a statement by the Contractor and the landowner that the disposal of the material is in compliance with all applicable federal, state and local laws and regulations.

Should a mutually approved spoil use area within the Authority's right-of-way be identified for Contractor use after the project letting, a credit in the amount of 50% of the unclassified excavation unit bid price will be deducted for each cubic yard spoiled within the Authority right-of-way. If the contract does not contain an unclassified excavation item, the credit will be determined using either 50% of the item generating the spoil or 50% of the Division/Regional weighted average bid price for unclassified excavation, whichever is less. This credit may be waived, either wholly or in part, by the Division Director in writing if it is determined that permitting spoil on Authority right-of-way is in the best interest of the Authority (ie: slope flattening resulting in elimination of guide rail).

## **SHOULDER MAINTENANCE**

During the course of the project, the Contractor may be required to repair shoulders that have deteriorated. The Contractor shall remove the deteriorated shoulder surface and place new asphalt shoulders. The Contractor shall be paid using the appropriate contract items for excavation and asphalt. The exact limits for this work shall be as directed by the Engineer.

## **OVERHEAD GANTRY**

### **SIGNING**

Signs shall be installed within the project limits when any component of equipment will be operating above 14'-6" in elevation and within 100 linear feet of an overhead gantry. Overhead gantries may have electric powered wires and special equipment, therefore, vehicle and equipment operations must be planned and proposed equipment safety procedures included in a Project Safety and Health Plan.

As mentioned in the Thruway Addendum to the Standard Specifications (TA), specifically in **Section 107-05 SAFETY AND HEALTH REQUIREMENTS, O. Equipment Safety Procedures. 6. Work Operations. d.** Dump truck boxes may be raised only under the control of a spotter, unless the vehicle is in an area clearly marked to be free of overhead wires and safe for dumping.

Refer to Thruway Standard Sheet **TA 619-27** for additional information and signing requirements.

## **OVERHEAD GANTRY**

### **TRAFFIC SHIFT RESTRICTIONS**

The Contractor shall not shift traffic at any toll gantry such that vehicles are traveling between lanes or between lanes/shoulders when passing under the gantry centerline (treadle). Traffic shifts, for purposes of staging work, shall be done prior to or after the gantries, such that vehicles are traveling within a complete lane or shoulder when passing under the gantry centerline (treadle). All work zone traffic control shall be provided in accordance with the 619 Standard Specifications and the Thruway Addendum to the 619 Standard Specifications, the National Manual on Uniform Traffic Control Devices and NYS Supplement, any provisions contained within the contract documents, and as ordered by the Engineer.

## **OVERHEAD GANTRY**

### **PARKING RESTRICTIONS**

The Contractor shall not park any vehicle or construction equipment directly beneath overhead gantries, within a complete lane or between a lane/shoulder, unless it is required to perform project specific related work, as directed by the Engineer in Charge and after coordination with the Authority's Intelligent Transportation System Management unit.

## Thruway U-Turn Authorization Letter (TA-N68160) Required

Highway	Location	Use Code	Notes
I-90	351.39	3	
I-90	354.20	1	
I-90	356.60	4	
I-90	359.03	4	
I-90	362.08	1	
I-90	363.00	1	
I-90	365.31	4	
I-90	366.20	1	
I-90	369.21	1	
I-90	371.00	1	
I-90	371.59	4	
I-90	374.77	4	
I-90	375.97	4	
I-90	378.23	4	
I-90	379.04	4	
I-90	381.40	4	
I-90	382.19	4	
I-90	383.80	4	
I-90	385.00	4	
I-90	387.65	1	
I-90	389.61	1	
I-90	390.47	1	
I-90	393.71	4	Harloff Road Access Gate on Westbound Side
I-90	397.01	1	
I-90	397.72	1	
I-90	399.42	4	
I-90	401.21	1	Use of Exit 48A Preferred
I-90	402.40	3	
I-90	404.90	4	County Line Stone Access Gate on Eastbound Side
I-90	406.35	4	
I-90	409.34	4	
I-90	409.50	4	Thruway Salt Shed on Eastbound Side
I-90	411.20	1	
I-90	412.87	4	
I-90	414.67	4	Barton Road Access Gate on Westbound Side
I-90	416.40	3	
I-90	417.70	3	
I-90	418.63	4	
I-90	429.30	3	
I-90	431.90	2	
I-90	432.87	1	
I-90	434.10	4	
I-90	435.88	3	
I-90	436.82	2	
I-90	440.46	4	
I-90	441.98	4	
I-90	443.96	4	
I-90	445.28	4	

Thruway U-Turn Authorization Letter (TA-N68160) Required

Highway	Location	Use Code	Notes
I-90	446.88	4	Angola Service Area
I-90	448.35	4	
I-90	451.59	4	
I-90	452.30	4	
I-90	453.58	4	
I-90	454.40	3	
I-90	454.57	3	
I-90	455.19	3	
I-90	456.06	3	
I-90	458.31	1	
I-90	460.28	1	
I-90	461.67	1	
I-90	463.62	1	
I-90	467.13	1	
I-90	468.10	1	
I-90	470.45	4	
I-90	474.07	4	
I-90	475.70	4	
I-90	478.37	4	
I-90	479.02	3	Not Paved
I-90	481.50	4	
I-90	484.47	4	
I-90	485.75	4	
I-90	488.35	1	
I-90	490.97	4	
I-90	493.12	4	
I-90	495.97	4	

I-190	0.62	3	
I-190	14.20	3	
I-190	15.10	3	
I-190	16.80	1	
I-190	17.80	3	
I-190	19.00	3	
I-190	20.20	3	

Usage Codes

1	No commercial trucks. Passenger style vehicles & pickup trucks only
2	No usage during commuter hours
3	Emergency Use Only
4	No Restrictions

**SUPPLEMENTAL INFORMATION FOR BIDDERS**

Supplemental information is available to bidders. As indicated below, information is either available on the Thruway Authority's website with the contract plans and proposal or available in electronic format from the Thruway Authority upon request prior to or after the letting date.

The bidder's signature on this proposal certifies that they have made themselves aware of the availability of the information indicated below prior to the letting date.

<b>INFORMATION</b>	<b>NOT AVAILABLE</b>	<b>AVAILABLE ON THRUWAY AUTHORITY WEBSITE</b>
Engineer Estimate Quantity Workups		X
Utility Estimate Sheets with Names of Utility Officials	X	
Earthwork Cross Section Sheets	X	
Earthwork Sheets	X	
Drainage Estimate Sheets	X	
Sign Face Layouts	X	
Subsurface Exploration Logs		X
Rock Core Evaluation Logs and Photographs	X	
Compression Test Data from Rock Samples	X	
Pavement Core Logs and Photographs	X	
Logs Showing Laboratory Description of Soil Samples	X	
Laboratory Test Data from Soil Samples	X	
Rock Outcrop Maps	X	
Record Plans		X
Applicable Asbestos Blanket Variances	X	
Storm Water Pollution Prevention Plan	X	
Shop Drawings	X	
CADD Files of Contract Plans (Unofficial - Not signed or stamped)	X	
Special Reports or Other Information	X	

Hard copies of the supplemental information indicated above are not available. Contractors shall be responsible for their own hard copies of this information at no additional cost to the Authority.

**REVISIONS TO  
NYSDOT  
STANDARD  
SPECIFICATIONS**



## **NEW YORK STATE THRUWAY AUTHORITY ADDENDUM TO THE STANDARD SPECIFICATIONS**

The Standard Specifications published by the New York State Department of Transportation shall form a part of the agreement. The dated edition that applies to this contract is provided on the front cover of the Proposal. All work contemplated under this contract is to be covered by, and be in conformance with, the Standard Specifications as modified by The New York State Thruway Authority Addendum (TA) to the Standard Specification Books.

The officially adopted Thruway Authority Addendum (TA) to the NYSDOT Standard Specification Books is available on the Thruway Authority website at:

<http://www.thruway.ny.gov/business/addendum/index.html>

The most recent version of the TA, prior to the project Letting Date, shall apply to this agreement.

All special notes bound in this proposal shall be incorporated. If a conflict exists between the special specifications and/or provisions set forth in this proposal and the specifications and/or provisions set forth in the New York State Department of Transportation's Standard Specifications, those in the Proposal shall govern.

# **SPECIAL SPECIFICATIONS**

**SPECIAL NOTE**  
**SPECIAL SPECIFICATION PAY ITEM NUMBERS**

The Contractor's attention is directed to the special specification pay item formats used in this contract. Special specification pay items may be presented in two (2) different formats:

Format 1: Pay items for a special specification will have three (3) digits to the left of the decimal point and up to eight (8) digits to the right of the decimal. Spaces may appear in the third to sixth places after the decimal. The 7<sup>th</sup> and 8<sup>th</sup> digits to the right of the decimal will represent the origin of the specification.

Format 2: Pay items for a special specification will have three (3) digits to the left of the decimal point and up to eight (8) digits to the right of the decimal. Dashes may appear in the third to sixth places after the decimal. The 7<sup>th</sup> and 8<sup>th</sup> digits to the right of the decimal will represent the origin of the specification.

Where items in this contract appear in multiple formats, the formats shall be equated to each other as illustrated below:

**FORMAT 1**

XXX.XX XX  
 XXX.XXXX XX  
 XXX.XXXXXXX

**FORMAT 2**

XXX.XX-----XX  
 XXX.XXXX---XX  
 XXX.XXXXXXXX

**ITEM 203.2400025 – SHOULDER BACKUP MATERIAL****1. DESCRIPTION:**

- 1.01 This work shall consist of furnishing, placing, grading, compacting and trimming shoulder backup material in conformance with payment lines, grades, thicknesses and typical sections specified in the contract documents or as directed by the Engineer.

**2. MATERIALS:**

- 2.01 **General.** Subsection 304-2 shall apply except as indicated below. Wherever the term “subbase course” is used, substitute “shoulder backup material.”

Material does not need to be stockpiled. The Authority may sample and test for plasticity, soundness and gradation at its discretion. Material shall be uncontaminated and free of glass.

Unless noted otherwise in the contract documents, the Contractor may choose the type(s) of material from the list given below. Intermixing types will be subject to the approval of the Engineer.

Material deemed inappropriate or impractical by the Engineer for placing, grading, compacting and trimming shall not be used.

- A. **Type A (Crusher run, crushed gravel, or crushed stone).** Material shall consist of well-graded crusher run from a stone quarry or gravel source, or crushed Portland cement concrete. The material shall not have particles greater than 1 inch in maximum dimension. Material will be accepted on the basis of a Magnesium Sulfate Soundness Loss of 20 percent or less after four cycles.
- B. **Type B (Subbase Course, Type 2).** Material shall meet the requirements of Subbase Course, Type 2. The Engineer will examine each proposed source of material for compliance with the specification requirements.
- C. **Type C (Subbase Course, Type 4).** Material shall meet the requirements of Subbase Course, Type 4, except the material furnished shall consist of sand and gravel or a blend of sand, gravel and stone. The Engineer will examine each proposed source of material for compliance with the specification requirements.
- D. **Type D (Recycled Asphalt Concrete).** Material shall consist of recycled asphalt concrete pavement produced on the contract or from other sources approved by the Engineer. The recycled asphalt concrete pavement shall not have particles greater than 1½ inches in maximum dimension.
- E. **Type E (Select Structural or Granular Fill).** Material shall conform to the soundness, gradation and pH requirements for Select Structural Fill or Select Granular Fill, except the top size shall not exceed that for Type C above.

**3. CONSTRUCTION DETAILS:**

- 3.01 The Contractor’s equipment, procedures and compaction method shall be approved by the Engineer. The material shall be placed on the grade so as to minimize segregation. Uncontrolled spreading resulting in segregation will not be permitted. The maximum loose lift thickness prior to compaction shall be 6 inches. After compaction, the finished surface shall not extend above, or be more than 0.4 inches below, the edge of shoulder. The maximum deviation from the specified depth shall otherwise not exceed 1½ inches. All surfaces shall be graded to drain.

**ITEM 203.24000025 – SHOULDER BACKUP MATERIAL**

- 3.02 The final grade of the material shall be in reasonable close conformity to the lines and grades shown in the contract documents, or to those directed by the Engineer. Additional material shall be placed to fill deficiencies and excess material (trimmings) shall be removed. Trimmings may be incorporated into shoulder backup work at other locations along the project provided the material remains in conformance with the gradation requirement for the selected option. If trimmings cannot be incorporated into shoulder backup work, the material shall become the Contractor's property for disposal or other use in the contract as approved by the Engineer.

**4. METHOD OF MEASUREMENT:**

- 4.01 The quantity will be measured for payment as the number of tons of shoulder backup material placed, graded, compacted, and trimmed along the edge of shoulder in accordance with the contract documents or as directed by the Engineer.
- 4.02 A delivery ticket indicating the total quantity in tons being delivered must accompany each delivery vehicle supplying shoulder backup material. When truck scales are not available within reasonable distance of the material source, as determined by the Engineer, the loose volume of shoulder backup material will be computed using dump truck body measurements and conversion factors. The trucks used for material delivery shall be approved by the Engineer. The trucks shall be uniformly loaded to the satisfaction of the Engineer.
- 4.03 Additional material used to fill deficiencies will be measured for payment. Trimmings not incorporated into shoulder backup work at other locations along the project will not be measured for payment under this item. The Engineer will adjust the measured quantity accordingly.
- 4.04 The conversion factor will be 0.05 tons per cubic foot, loose measure, unless otherwise noted in the contract documents.

**5. BASIS OF PAYMENT:**

- 5.01 The unit price bid per ton shall include the cost of all labor, equipment and material necessary to satisfactorily complete the work.

**ITEM 206.0312--25 - CONDUIT INSTALLATION ON ABOVE GRADE STRUCTURES****1. DESCRIPTION:**

1.01 The Contractor shall attach conduit to structures as shown on the plans and as directed by the Engineer including: overpasses, underpasses, retaining walls, bridge railings, and concrete barriers. The work shall include excavation and restoration in kind, as required and as shown by the Contract Documents and as directed by the Engineer.

**2. MATERIALS:**

2.01 Galvanized steel clamps, U-bolts, and backplates shall be in accordance with subsection 723-20. PVC coating shall be in accordance with Subsection 723-23. Stainless steel bolts shall be in accordance with Subsection 715-16.

**3. CONSTRUCTION DETAILS:**

3.01 The Contractor shall install conduit, at locations shown on the Contract Documents, utilizing one or more of the following attachment methods:

- Conduit clamps with expansion anchors and bolts
- Conduit clamps with bolts
- U-bolts with backplates
- Details shown on the plans.

3.02 Excavation and restoration of disturbed areas shall be performed in accordance with the details shown on the plans and as ordered by the Engineer.

**4. METHOD OF MEASUREMENT:**

4.01 The work shall be measured by the number of linear feet of conduit actually installed in accordance with the Contract Documents and as directed by the Engineer.

**5. BASIS OF PAYMENT:**

5.01 The unit price bid per foot shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work, as specified, including but not limited to: clamps, bolts, expansion anchors, U-bolts, excavation and restoration at conduit terminations.

**ITEM 304.00010018 - FINE GRADING OF EXISTING SUBBASE**

**DESCRIPTION.** Prepare a fine grade on the existing subbase course to receive new pavement and/or shoulders. Clean, regrade, shape, and compact the subbase surface to the line and grade in the contract documents.

**MATERIALS.**

Cushion Sand ..... §703-06

**CONSTRUCTION DETAILS.**

Remove and dispose of sod, permeable base, concrete, and/or other loose, unsuitable or excess material.

Grade the existing surface to a uniform cross slope such that, after compaction, the top surface is at true grade and surface at any location, ± ¼ inch. Remove excess material where the existing subbase is high or has insufficient slope. Build up the existing subbase with cushion sand where the existing subbase is low or has excessive cross slope.

Compact the subbase to the satisfaction of the Engineer using equipment meeting §203-3.03C, Compaction.

Do not allow traffic on the exposed subbase.

**METHOD OF MEASUREMENT.** The work will be measured for payment as the number of square feet of subbase satisfactorily fine graded, measured to the nearest square foot.

**BASIS OF PAYMENT.** Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Fine Grading of Existing Subbase. No additional payment will be made for extra work required to repair damage to the adjacent pavement or subbase that occurred during any operation. Additional payment will be made if the original repair area did not completely extend into sound pavement or stable subbase. Pavement and shoulder removal are paid for under separate pay items.

**ITEM 402.25020018 - SAWING AND SEALING JOINTS IN NEW HOT MIX ASPHALT OVERLAYS USING HOT APPLIED SEALANT**

**DESCRIPTION.**

Saw cut, clean and seal transverse joints in new Hot Mix Asphalt (HMA) overlays and shoulders. Construct transverse HMA pavement joints over, and in line with, the existing underlying transverse Portland cement concrete joints contained in the contract documents and as directed by the Engineer.

**MATERIALS.**

**Sealant.** Use a sealant meeting the requirements of §705-02, Highway Joint Sealants, and ASTM D6690 Type II; Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements. Deliver the sealant in the manufacturer's original sealed container legibly marked with the following information:

- Manufacturer's name.
- Trade name of sealant.
- Manufacturer's batch or lot number.
- ASTM D6690, Type II.
- Minimum application temperature.
- Maximum (or Safe) heating temperature.

Provide the Engineer with a copy of the manufacturer's recommendations pertaining to heating and application of the sealant prior to commencing work.

**Bond Breaker Tape.** Use ordinary masking tape or a suitable bond breaker tape designed for use with hot poured sealants. The width of the tape shall be equal to the width of the saw cut (-1/8 in., + 0 in.).

**CONSTRUCTION DETAILS.**

**General.** Saw cut, clean and seal transverse joints as a single operation within seven (7) days after placing the top course of the HMA pavement. Saw cut, clean and seal joints that are damaged by traffic at no additional cost to the State.

If the top course is to be placed the following Spring, saw cut all underlying courses to provide a 1 inch deep by 1/8 inch wide channel to facilitate and control reflective cracking. Provide a means of properly referencing the saw cut to be made in the top course. Saw cut all underlying courses within seven (7) days after they are placed and before any evidence of reflective cracking has developed. Do not seal these saw cuts. Include saw cutting underlying courses in the unit bid price.

**Saw Cutting of Transverse Joints.** Saw cut transverse joints to the appropriate dimensions shown in Figure I and Figure II. Locate saw cut joints directly over the existing Portland cement concrete pavement joints using a pins and stringline method. The details of the method for locating the saw cuts are to be approved by the Engineer. Saw cutting blades shall be of such size and configuration that the desired dimensions of the saw cut can be made with one pass. Either dry or wet cutting will be allowed. No spacers between blades will be allowed.

Extend transverse saw cut joints the full width of the pavement and into the asphalt shoulder to a distance 1 foot beyond the edge of the underlying Portland cement concrete pavement edge or as shown in the contract documents. Transverse joints that are offset at the longitudinal joint by more than 1 inch measured between the centers of the joint cavities require separate saw cuts terminating at the longitudinal joints.



**ITEM 402.25020018 - SAWING AND SEALING JOINTS IN NEW HOT MIX ASPHALT OVERLAYS USING HOT APPLIED SEALANT**

**Joint Preparation.** Prepare joints for sealing on the same day that they are to be sealed.

Wash wet saw cut joints with a water blast (50 psi minimum) after sawing to remove any sawing slurry, dirt, or deleterious matter adhering to the joint walls or remaining in the joint cavity. Wash slurry from the pavement surface when the wet process is used. Blow or brush dry dust and material from the pavement surface when the dry saw cut process is used.

Use a high pressure air lance or hot air lance to thoroughly clean and dry saw cut joints of dust, dirt, foreign material, sand and any other extraneous materials immediately prior to sealing joints. Do not burn, scorch or ignite the adjoining pavement when using a hot air lance.

Install suitable traps or devices on the compressed air equipment to prevent moisture and oil from contaminating the joint crack surfaces. Maintain these devices and see that they are functioning properly. Protect the public from potentially objectionable and/or hazardous airborne debris.

**Bond Breaking.** Place bond breaker tape in the bottom of the saw cut joint after it is cleaned and dried. Sealant Melting. Heat and melt the sealant in a melter constructed either as a double boiler filled with a heat-transfer medium between the inner and outer shells, or with internal tubes or coils carrying the sealant through a heated oil bath and into a heated double wall hopper. The melter will be equipped with separate thermometers to indicate the temperature of the heat transfer medium and the sealant material, positive temperature controls and with a mechanical agitator or a recirculating pump to assure a homogeneous blend of the sealant. Maintain the sealant at the pouring temperature  $\pm 10^{\circ}$  F indicated on the material packaging.

Check the discharge temperature of the sealant with a non-contact infrared thermometer. Discharge the sealant at a temperature between the manufacturer's recommended pouring and safe heating temperatures indicated on the material packaging. Submit an alternate method for measuring the discharge temperature to the Engineer for approval if desired.

Sealing is not permitted if the melter and discharge temperatures do not meet the requirements described above. Equip the discharge hose with a thermostatically controlled heating apparatus or insulate it to maintain the proper sealant pouring temperature. Holster the discharge hose to the melter if it is not thermostatically heat controlled. Circulate the sealant from the discharge hose and the melter to maintain the proper sealant pouring temperature.

Do not use sealant material heated beyond the safe heating temperature.

If the manufacturer's recommendations allow the sealant to be reheated or heated in excess of six hours, recharge the melter with fresh material amounting to at least 20 percent of the volume of the material remaining in the melter.

**Sealing.** Sealing is to be done when ambient air temperature is at or above 40° F

Seal the joint by placing the applicator wand in the recess and carefully discharge the sealant. Strike-off the sealant flush with the pavement surface using a squeegee or sealing shoe pressed firmly against the pavement. The level of the sealer will not be greater than 1/8 inch below the pavement or shoulder

**ITEM 402.25020018 - SAWING AND SEALING JOINTS IN NEW HOT MIX ASPHALT OVERLAYS USING HOT APPLIED SEALANT**

surface after the sealant has cooled. If the sealant sinks into the joint more than 1/8 inch below the pavement surface, clean it with high pressure air and fill it to 1/8 inch below the pavement surface. Properly sealed joints shall be watertight and present a neat fine line.

Do not allow traffic on the sealed joint until the sealant has cured so as not to track. Use a low pressure, light spray of water to accelerate cooling of the sealant. Blotting the sealant with fine aggregate is not allowed.

Remove and dispose sealant in excess of the amount depicted in Figure I or that has not bonded to both sides of the reservoir. Clean sealed joints damaged from traffic with high pressure air and reseal them to meet the specified amount at no additional cost to the State.

**METHOD OF MEASUREMENT.**

The Engineer will measure the number of feet of joints properly saw cut and sealed in conformance with this specification.

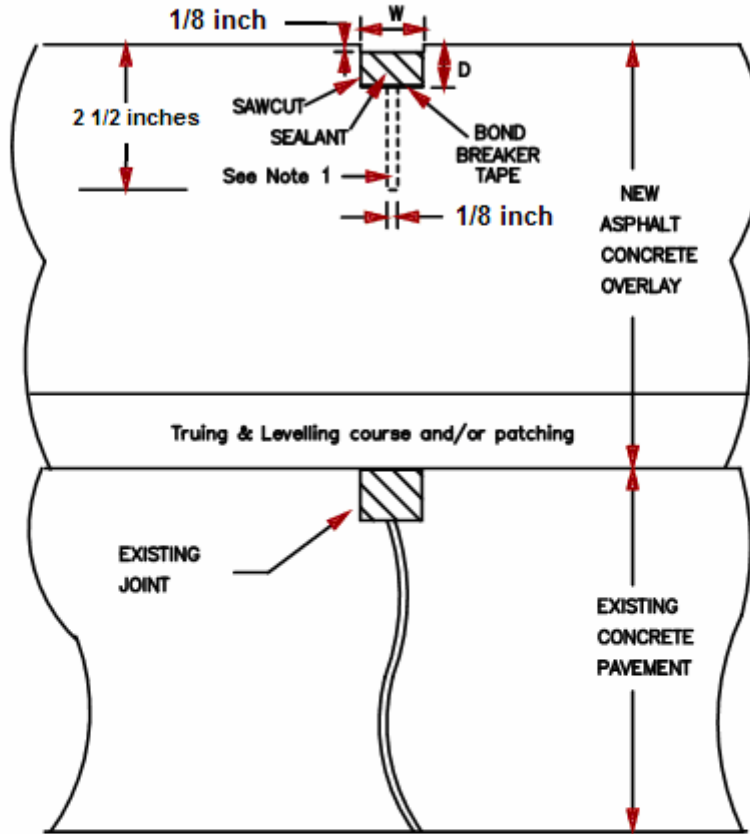
**BASIS OF PAYMENT.**

In the unit bid price, include the cost of all material, equipment and labor necessary to complete the work.

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
402.25020018	Sawing and Sealing Joints in New Hot Mix Asphalt Overlays Using Hot Applied Sealant	Feet

**ITEM 402.25020018 - SAWING AND SEALING JOINTS IN NEW HOT MIX ASPHALT OVERLAYS USING HOT APPLIED SEALANT**

**DETAILS FOR TRANSVERSE JOINTS IN ASPHALT CONCRETE OVERLAYS**

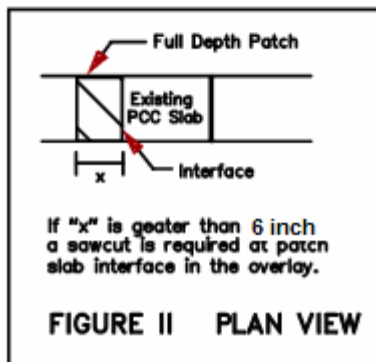


**FIGURE I**

**SAWCUT DIMENSIONS**

SLAB LENGTH (ft.)	w (in.)	D (in.)
< 50	1/2	5/8
51 to 61	5/8	5/8
62 to 75	3/4	5/8
76 to 88	7/8	3/4
89 to 100	1	7/8

Note 1: When the total thickness of asphalt concrete over the existing joint exceeds 4 1/2 in., a 1/8 in. wide sawcut shall be included in the joint geometrics to a minimum depth 2 1/2 inches.



**ITEM 407.01040009 NON-TRACKING TACK COAT****DESCRIPTION**

This work shall consist of preparing and treating Portland cement concrete or asphalt surfaces with a non-tracking tack coat in accordance with the Contract documents or as directed by the Engineer.

**MATERIALS**

Non-tracking tack coat shall be agitated or circulated to ensure a homogenous tack coat prior to sampling or application of material. The consistency of the non-tracking tack coat shall be appropriate for pumping and uniform application. Non-tracking tack coat shall not be diluted with water and must meet the physical requirements of the following table:

<b>NON-TRACKING TACK COAT</b>		
<b>Test Property</b>	<b>Test Method</b>	<b>Result</b>
Residue by Distillation,	AASHTO T59	50% minimum
Oil Distillate, Volume of Total Emulsion		2% maximum
Penetration on Residue from Distillation, @77°F, 100 g, 5s, 0.1 mm	AASHTO T49	40 maximum
Softening Point on Residue from Distillation	AASHOT T53	140°F minimum

Use an approved non-tracking tack coat or approved equivalent as determined by the Director of Materials Bureau.

<b>Approved Products</b>	<b>Supplier</b>	<b>Location</b>
EM-50-TT	Seaboard Asphalt Products Company	Baltimore, MD
CNTT	Midland Asphalt Materials Inc.	Woodland, PA
SK-TT	Suit-Kote Corporation	Cortland, NY
Non-Tracking Tack	Vestal Asphalt Inc.	Vestal, NY
EE-NTT	Empire Emulsions	Chester, NY
NTT	Peckham Materials Corporation	New Windsor, NY

Other products must be submitted to the Materials Bureau for evaluation.

**CONSTRUCTION DETAILS**

The provisions of §407-3, Construction Details, shall apply except as modified herein:

Required spray nozzle size, distributor and nozzle settings per manufactures written recommendations.

The application rate shall be as determined in Table 407-1 *Tack Coat Application Rates*. These are recommended application rates for tack coat on various surface types and may be modified by the Engineer.

<b>TABLE 407-1 – TACK COAT APPLICATION RATES</b>	
<b>Surface Type</b>	<b>Application Rate (gal/yd<sup>2</sup>)</b>
New Asphalt Pavement	0.04-0.05
Milled Surfaces and Existing Asphalt Pavement	0.06-0.07
Portland Cement Concrete Pavement	0.06-0.07
Vertical Surfaces (curbs, drainage structures, and appurtenances)	0.07-0.08

**ITEM 407.010400XX NON-TRACKING TACK COAT**

The application is considered satisfactory when the material is applied uniformly with no visible evidence of streaking or ridging.

**METHOD OF MEASUREMENT**

The quantity to be paid for will be to the nearest whole gallon of Trackless Tack Coat asphalt emulsion for tack coat measured at 60°F. The following formula will be used to calculate material quantity at 60°F:

$$\text{Volume}_{@60^{\circ}\text{F}} = \text{Volume}_D \times [1 - (\Delta T \times 0.00025)]$$

$$\Delta T = \text{Delivered Temperature } (^{\circ}\text{F}) - 60$$

$$\text{Volume}_D = \text{Quantity Delivered (gal)}$$

**BASIS OF PAYMENT**

The unit price bid per gallon for tack coat shall include the cost of furnishing all labor, materials and equipment necessary to complete the work.

The Regional Materials Engineer will evaluate material represented by failing samples. If the Engineer elects to leave the material in place, the Contractor shall receive a pay reduction of 75% of the tack bid price, for the pavement section represented by the failing sample.

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
407.01040009	Non-Tracking Tack Coat	Gallon

**ITEM 502.10010018 - PORTLAND CEMENT CONCRETE PAVEMENT REPAIR  
EVALUATION AND MARK-OUT**

**DESCRIPTION.** Evaluate and tabulate pavement repair needs, develop a repair referencing system, and mark repair boundaries.

**MATERIALS.** None specified.

**CONSTRUCTION DETAILS.**

**Reference Slabs.** Develop a referencing system for the pavement slabs within the project limits and mark every 5th slab (maximum) with a unique designation visible from a shoulder. Maintain the referencing system throughout the project duration. Re-mark slabs with the same designations after diamond grinding, if necessary. In addition to marking slabs, mark and maintain plan stationing on or near the pavement to correlate repairs to the plans.

**Pavement Evaluation and Mark-out.** Coordinate evaluation and mark-out to ensure the Engineer's presence. Recommend a repair type and limits for each repair area identified in the contract documents. Use the repair items, quantities, and limits in the contract documents as a starting point for the repair recommendations. Modifying or grouping repairs is subject to the approval of the Engineer. Mark the repair type and limits on the pavement after approval by the Engineer. Ensure that the marked repair is not in conflict with the contract's maintenance and protection of traffic plan.

After repair types and limits are marked, develop a repair table for the Engineer's review and verification which includes station, slab designation, repair type, and quantity. If repair types are detailed in the contract plans, note additions, deletions, and changes from the plans. The Engineer will review the repair table within 2 work days of receipt. If necessary, modify the table until it meets the Engineer's approval and note any unresolved differences with the Engineer in repair type or quantity. Refer to the appropriate specifications for quantity determination.

Make no repairs until the Engineer approves the repair table and mark-outs. Do not alter the table or mark outs without the Engineer's approval. Any alteration, addition, or subtraction requires re-submission and approval of the Engineer.

**Full-Depth Repair Joint Layout.** Transverse joint layout for full-depth repairs is the Contractor's responsibility. Submit a proposed layout for multiple slab replacements and obtain the Engineer's approval before placing concrete.

**METHOD OF MEASUREMENT.** The work under PCC Pavement Repair Evaluation and Mark-out will be measured for payment on the lump sum basis.

**BASIS OF PAYMENT.** Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the lump sum bid for PCC Pavement Repair Evaluation and Mark-out. No additional payment will be made for re-tabulating or re-marking concrete repair areas.

**ITEM 502.15PFX25 – PRE-CAST CONCRETE PAVEMENT SLABS****1. DESCRIPTION:**

- 1.01 Fabricate and install precast concrete pavement slabs in accordance with the contract documents. The precast slab system selected must appear on the NYS Department of Transportation's Approved List entitled "Precast Concrete Pavement Slab Systems (704-15)."
- 1.02 The work shall include fine grading, fabrication and installation of the approved system.

**2. MATERIALS:**

- 2.01 Precast Concrete Pavement Slab Systems..... 704-15

**3. CONSTRUCTION DETAILS:**

- 3.01 Convene a pre-placement meeting 7 to 14 calendar days before the planned start of slab installation with the Engineer, manufacturer, supplier, system designer, and any relevant subcontractors to review and coordinate all aspects of placement and inspection including personnel requirements.
- 3.02 **Technical Assistance.** Several processes in this specification are performed in accordance with the system designer's instructions. The system designer must supply on-site technical assistance at the beginning of the installation until the Engineer determines the assistance is no longer required. Provide approved system designer instructions to the Engineer at least 30 calendar days before starting work associated with slab installation.
- 3.03 **Weather Limitations.** Apply §502-3.01, Weather Limitations.
- 3.04 **Subbase Course.** Apply Section 304, Subbase Course, for new construction and add-on lanes. For pavement repair, prepare the subbase course in accordance with the contract documents. Fine grade the subbase to achieve the required grading tolerance for maximum uniform support. Follow the system designer's instruction for any final subbase preparation prior to slab installation. Do not disturb the prepared surface before installation.
- 3.05 **Slab Installation.** Install the slabs in accordance with the system designer's instructions. Set grade supported slabs to achieve maximum contact with the prepared subbase. Installed slabs shall match the slope of existing pavement and set vertically matching adjacent pavement from 0 in. to + ¼ in. only. The slabs shall not be set lower than adjacent pavement.

- A. **Joints.** Submit a proposed joint layout with the Fabricator Working Drawings, submitted in accordance with §704-15, Precast Concrete Pavement Slab Systems. Align joints both transversely and longitudinally between abutting precast slabs, i.e., do not stagger joints, except where approved on the joint layout. When tying precast slabs to existing concrete pavement, such as an add-on lane, joint alignment is not required.

However, do not drill and anchor longitudinal joint ties when required within 24 in. of a transverse joint in the existing pavement.

- B. **Joint Widths.** For pavements remaining concrete surfaced, install slabs such that joint widths are 0 in – 1/2 in. for transverse joints and 0 in. – 3/4 in. for longitudinal joints. For pavements receiving hot mix asphalt (HMA) overlays, install slabs such that joint widths are 0 in – 3/4 in. These dimensions apply to joints between adjacent precast slabs or joints between precast slabs and existing pavement.

**ITEM 502.15PFXX25 – PRE-CAST CONCRETE PAVEMENT SLABS**

- C. Bed and Level Slabs. Bed and level slabs in accordance with the system designer's instructions. Bedding material thickness shall be in accordance with the contract details. Bedding material shall consist of the material required for the precast system. Fine grade the bedding material to the required tolerance. The vertical differential between the set slab and adjacent slabs shall be no greater than 1/4 inches.
- D. Backfill Pavement Hardware. Backfill around pavement hardware in accordance with the system designer's instructions and approved material.
- E. Bedding Grout. Place bedding grout after the pavement hardware grout (Backfill material) is placed.
- F. Lifting Equipment. Wheel loads need to be considered in choosing lifting equipment. The wheel loads of the equipment chosen shall be within the legal load limits and approved by the Engineer.
- G. The Contractor shall have selected personnel designated as Certified Installers that shall be present during the installation of the slabs. Training and certification is issued by the System Designer.

3.06 **Smoothness (Pavements Remaining Concrete Surfaced)**. Apply §502-3.15, Hardened Surface Test, for nonprofilographed pavement or §502-3.16, Profilograph, for profilographed pavement. No Smoothness Quality Adjustment is paid for precast slab pavement construction.

3.07 **Opening to Traffic (Grade-Supported Slabs)**. Do not open precast slabs to traffic until after the backfill material around the pavement hardware obtains 2500 psi compressive strength.

Slabs may be opened before backfill material and/or bedding grout is placed. In this case, backfill material and bedding grouts must be placed as soon as possible, preferably during the next work shift after the first slab's placement. Remove and reset any slabs having a vertical differential between adjacent slabs greater than 1/4 in. across any joint.

The longer slabs are opened to loads before backfilling and grouting, the greater the potential for slab movement. Schedule work to minimize the amount and duration of ungrouted slabs open to traffic.

3.08 **Opening to Traffic (Grout-Supported Slabs)**. Open precast slabs to traffic after the:

- Backfill material around the pavement hardware obtains 2500 psi compressive strength.
- Bedding and/or slab leveling materials obtains sufficient strength to support loads without deflection.
- Joints are addressed in accordance with §502-3.12, Sealing Joints.

Slabs may be opened before backfill material around the pavement hardware has been placed. In this case, backfill material must be placed within 24 hours of the first slab's placement. Remove and reset any slabs having a vertical differential between adjacent slabs greater than 1/4 in. across any joint.

The longer slabs are opened to loads before backfilling, the greater the potential for slab movement. Schedule work to minimize the amount and duration of ungrouted slabs open to traffic.

3.08 **Damaged or Defective Concrete**. Apply §502-3.14, Damaged or Defective Concrete.



**ITEM 502.15PFXX25 – PRE-CAST CONCRETE PAVEMENT SLABS****4. METHOD OF MEASUREMENT:**

- 4.01 The work will be measured for payment as the number of cubic yards of each fabricated precast concrete pavement slab satisfactorily installed measured to the nearest 0.1 cubic yard of each pavement slab.

**5. BASIS OF PAYMENT:**

- 5.01 Include the cost of all labor, material, bedding material, fine grading bedding material and equipment necessary to satisfactorily perform the work, including technical assistance from the system designer, in the unit price bid for Precast Concrete Pavement Slabs.
- 5.02 Filler materials and fine grading of the material required below the bedding material shall be paid under separate items as noted in the contract plans.
- 5.03 Re-grading existing subbase shall be included in the unit bid price for Precast Concrete Pavement Slabs.

*Payment will be made under:*

<u>Item Number</u>	<u>Description</u>	<u>Unit</u>
502.15PFXX25	Precast Concrete Pavement Slabs	CY
<u><i>P – Profilograph</i></u>	<u><i>F – Friction Type</i></u>	<u><i>XX – Nominal Depth of Slab</i></u>
<i>0 – Non-profilographed</i>	<i>1 – Type 1</i>	<i>09 – Nine inches</i>
<i>1 – Level 1</i>	<i>2 – Type 2</i>	<i>10 – Ten inches</i>
<i>2 – Level 2</i>	<i>3 – Type 3</i>	<i>11 – Eleven inches</i>
	<i>9 – Type 9</i>	<i>12 – Twelve inches</i>
		<i>13 – Thirteen inches</i>

**ITEM 502.31010018 - FULL-DEPTH PORTLAND CEMENT CONCRETE (PCC) LIFT-OUT DESCRIPTION.** Mark the area to be lifted, saw cut, lift, and dispose of:

- PCC.
- Permeable base.
- PCC patched with hot mix asphalt (HMA).
- Full-depth HMA within the marked area.

**MATERIALS.**

Anchoring Material and Dispensing Equipment. Use a pourable, 2 component, 100% solids structural epoxy meeting §701-07, Anchoring Materials - Chemically Curing, dispensed:

- From side-by-side cartridges by manual or pneumatically powered injection guns.
- Through a static nozzle that homogeneously mixes the material without any hand mixing.

**CONSTRUCTION DETAILS.** Schedule all full-depth repair operations (from lift-out to concrete placement) to minimize the total time to complete any individual repair. As the time frame from saw cutting to placement increases, the potential for damage to the surrounding pavement scheduled to remain in place also increases, particularly in hot weather or as the temperature rises. No time frame to completion is specified in this item due to contract variability.

Mark the boundaries of the area to be lifted out. Do not cut until the Engineer approves the marked boundaries. Saw cut full-depth around the removal area at the approved boundaries, including through the permeable base, if any. These cuts will become the transverse and longitudinal joints that define the repair. Use a diamond blade saw equipped with cutting guides, blade guards, water cooling systems, dust controls, and cut depth control. Set the cut depth to minimize subbase disturbance. Make straight saw cuts around the repair perimeter that result in smooth faces that are perpendicular to the pavement surface. Make transverse cuts perpendicular to the longitudinal joint.

Over cut the saw cut intersections a distance equal to the pavement thickness, including the permeable base, if any. After lift-out and before placing the full-depth repair material, fill the over cuts in concrete to remain in place with anchoring material. Place the anchoring material as deep as possible into the over cut, starting at the deepest portion of the over cut and proceeding to the shallowest portion. Block the deepest portion of the over cut such that the anchoring material does not enter into the lift-out area. Finish the anchoring material flush to the pavement surface. When using new cartridges of anchoring material, ensure that the initial material exiting the nozzle appears uniformly mixed. If it is not uniformly mixed, waste the material until uniformly mixed material extrudes.

Additional saw cuts within the repair boundaries to facilitate lift-out without damaging the repair boundaries are permitted. Use any saw for these cuts. Set the cut depth to minimize subbase disturbance. Do not over cut into adjacent concrete that is not scheduled for removal. (Be advised that the longer partial-width cuts remain in place without removal and replacement, the greater the potential for damaging the surrounding concrete scheduled to remain in place, particularly in hot weather or as temperatures are rising. No payment will be made for repairing damage to the surrounding pavement scheduled to remain in place.) Over cutting is allowed if the adjacent concrete is scheduled for removal.

If traffic is to be maintained on the pavement after cutting, remove all debris from the pavement before traffic is restored.

**ITEM 502.31010018 - FULL-DEPTH PORTLAND CEMENT CONCRETE (PCC) LIFT-OUT**

Drill holes and insert lift pins into the concrete to be removed. Lift and dispose of the concrete such that there is:

- No damage to the surrounding pavement to remain in place.
- Minimal disturbance to the subbase.
- No damage to any adjacent curb, drainage structure, or utility.

Pavement sections too deteriorated to lift-out as determined by the Engineer and full-depth HMA may be excavated rather than lifted. Excavate the pavement such that there is minimal disturbance to the subbase.

Dispose of all material in accordance with §203-3.02B, Disposal of Surplus Excavated Material.

**METHOD OF MEASUREMENT.** The work will be measured for payment as the number of square yards of pavement satisfactorily lift-out or excavated, measured to the nearest 0.1 yd<sup>2</sup> based on the Engineer-approved removal areas marked on the pavement prior to saw cutting.

**BASIS OF PAYMENT.** Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Full-Depth PCC Lift-Out. No additional payment will be made for:

- Extra work required to repair damage to the adjacent pavement that occurred during any operation.
- Additional saw cuts made inside the repair boundaries to facilitate lift-out.

Additional payment will be made if the original repair area did not completely extend into sound concrete.

Subbase removal and replacement or drainage enhancement identified before or after removal are paid under separate items.

**ITEM 502.3205--25 - DRILL AND ANCHOR DOWELS FOR FULL-DEPTH PORTLAND CEMENT CONCRETE PAVEMENT REPAIRS**

**1. DESCRIPTION:**

- 1.01 This work shall consist of furnishing and installing dowel load transfer devices into full-depth saw cut concrete faces that will become transverse joints.

**2. MATERIALS AND EQUIPMENT:**

- 2.01 **Dowels:** Obtain dowels from a supplier appearing on the Approved List for §705-15, Transverse Joint Supports. Dowels shall be 18 inches long, 1 ¼” or 1 ½” diameter as shown on the plans or in accordance with Table 4 on NYSDOT Standard Sheet 502-02, smooth, epoxy-coated, Grade 60 steel dowels coated with a bond breaker. Use an epoxy coating appearing on the Approved List for “Epoxy Coatings for Longitudinal Joint Ties” or “Epoxy Coatings for Steel Reinforcing Bars” that is applied by an applicator appearing on the Approved List for “Applicators for Steel Reinforcing Bars”. The Contractor shall provide the Engineer with the following information 10 working days prior to drilling.

- The name and address of the joint support assembly suppliers.
- Material certification from the supplier that dowels meet the “Test” and “Material Requirements” portion of §705-15, except Grade 60 steel is supplied.
- Material certification from the rolling mill as to type and grade of steel used.
- The brand of epoxy coating and the name and address of the manufacturer.
- The name and address of the epoxy coating applicator.
- Material certification from the epoxy coating applicator that the bars have been coated, tested, and meet the requirements of § 705-14, Longitudinal Joint Ties.
- The brand of bond breaker and the name and address of the manufacturer.

Epoxy coating field repairs are not permitted. The Authority may perform supplementary sampling and testing of the dowels to ensure conformance with §705-14 and §705-15.

- 2.02 **Anchoring Material and Dispensing Equipment.** Use a pourable, 2 component, 100% solids structural epoxy meeting §701-07, Anchoring Materials – Chemical Curing, dispensed:

- From side-by-side cartridge by manual or pneumatically powered injection guns.
- Through a static nozzle that homogeneously mixes the material without hand mixing.

- 2.03 **Drills.** Use hydraulic gang drills with a minimum of 2 independently powered and driven drills. Use tungsten carbide drill bits. Control the forward and reverse travel of the drills by mechanically applied pressure. Mount the drill on a suitable piece of equipment such that it is quickly transported and positioned. Rest and reference the drill rig frame on and to the pavement surface such that the drill holes are cylindrical, perpendicular to the surface being drilled, and repeatable in terms of position and alignment on the surface being drilled. Hand held drills are not permitted.

- 2.04 **Grout Retention Disk.** Use plastic grout retention disks, 1/8 inch thick, of sufficient diameter to prevent grout from entering the joint. The hole in the center of the disk shall have the same diameter as the dowel.

**ITEM 502.3205--25 - DRILL AND ANCHOR DOWELS FOR FULL-DEPTH PORTLAND CEMENT CONCRETE PAVEMENT REPAIRS**

**3. CONSTRUCTION DETAILS:**

- 3.01 **Drilling Holes.** Drill eleven (11) holes per transverse repair face (12 foot wide typical) spaced at 12 inches. Pavement slabs of that have a width other than 12 feet will require an adjustment in the number of required holes based on a maximum spacing of 12 inches. Determine the location and length of existing longitudinal joint ties in the concrete to remain in place outside the repair area. Use a pachometer or other device capable of locating steel embedded in concrete.

If a longitudinal joint tie is within 12 inches of the surface being drilled, drill the outer holes 3 – 4 inches from the end of the tie. If no ties are within 12 inches of the surface being drilled, drill the outer holes 18 inches from a longitudinal joint between 2 travel lanes and 12 inches from a longitudinal joint between travel lanes and a shoulder.

For slabs of nonstandard widths, or pavements with longitudinal joints offset from permanent longitudinal pavement markings that define travel lanes, drill the outer hole 18 inches from the nearest edge of the permanent longitudinal marking between 2 travel lanes and 12 inches from the markings between a travel lane and a shoulder. In any case do not drill within 3 inches of the end of a longitudinal joint.

Drill holes such that:

- The hole diameters are in accordance with the anchoring materials Manufacturer's written recommendations. Provide those recommendations to the Engineer before drilling any holes.
- The hole depth is 9 inches (+/- 3/8 inch).
- When the dowels are anchored, the longitudinal axes of the protruding dowels are parallel to the pavement centerline, the pavement surface, and each other, the maximum misalignment in either direction shall not be greater than 1/8 inch, measured from the saw cut face and the dowel end.

When the dowels are anchored, they protrude 8 5/8 – 9 inches from the saw cut face. The Contractor shall replace worn bits when necessary to ensure the proper diameter hole is drilled.

If the drilling operation cracks or damages the pavement to remain, the Contractor shall extend the repair boundary to sound concrete. The resulting cost of concrete removal, concrete placement and drilling new holes shall be borne by the Contractor.

- 3.02 **Cleaning Holes.** Follow the anchoring material Manufacturer's written recommendations for cleaning the holes. Provide these recommendations to the Engineer. As a minimum, clean the drilled holes with oil-free and moisture-free compressed air. The Engineer shall check the compressed air stream purity with a clean white cloth. Use a compressor that delivers air at a minimum of 120 cfm and develops a minimum nozzle pressure of 90 psi. Insert the nozzle to the back of the hole to force out all dust and debris.
- 3.03 **Dowel Installation.** When using new cartridges of anchoring material, ensure that the initial material exiting the nozzle appears uniformly mixed. If it is not uniformly mixed, waste the material until, uniformly material exits the nozzle. Place the anchoring material at the back of the hole using a nozzle of sufficient length. Push the dowel into the hole while twisting such that the air pocket within the hole is heard to burst and the anchoring material is evenly distributed around the dowel. Use sufficient amounts of anchoring material such that it slightly extrudes out of the hole as the dowel is inserted. Place a grout retention disk over the dowel and tight against the exposed concrete face such that the anchoring material does not enter the joint.

**ITEM 502.3205--25 - DRILL AND ANCHOR DOWELS FOR FULL-DEPTH PORTLAND CEMENT CONCRETE PAVEMENT REPAIRS**

**4. METHOD OF MEASUREMENT:**

4.01 The work will be measured for payment as the number of dowels satisfactorily installed.

**5. BASIS OF PAYMENT:**

5.01 The price bid per each shall include the cost of all labor, material and material necessary to satisfactory complete the work. No additional payment will be made for extra work require to repair damage to the adjacent pavement

## **ITEM 502.33010018 - DRILL AND ANCHOR LONGITUDINAL JOINT TIES FOR FULL-DEPTH PORTLAND CEMENT CONCRETE PAVEMENT REPAIRS**

**DESCRIPTION.** Drill holes and anchor longitudinal joint ties into concrete faces that will become longitudinal joints.

### **MATERIALS AND EQUIPMENT.**

**Longitudinal Joint Ties.** Use 1 piece drop in type longitudinal joint ties depicted in the M502 Standard Sheet, Longitudinal Joint Ties, except substitute 28 inch long ties for 36 inch long ties. Use an epoxy coating appearing on the Approved List for “Epoxy Coatings for Longitudinal Joint Ties” or “Epoxy Coatings for Steel Reinforcing Bars” that is applied by an applicator appearing on the Approved List for “Applicators for Steel Reinforcing Bars”. At least 7 days prior to drilling holes, provide the Engineer:

- Material certification from the rolling mill as to the type and grade of steel used.
- The brand of epoxy coating and the name and address of the Manufacturer.
- The name and address of the epoxy coating applicator.
- Material certification from the epoxy coating applicator that the bars have been coated, tested, and meet the requirements of §705-14, Longitudinal Joint Ties.

The Department may perform supplementary sampling and testing of the ties to ensure conformance with §705-14.

**Anchoring Material and Dispensing Equipment.** Use a pourable, 2 component, 100% solids structural epoxy meeting §701-07, Anchoring Materials - Chemically Curing, dispensed:

- From side-by-side cartridges by manual or pneumatically powered injection guns.
- Through a static nozzle that homogeneously mixes the material without any hand mixing.

**Drills.** Use hydraulic gang drills with a minimum of 2 independently powered and driven drills. Use tungsten carbide drill bits. Control the forward and reverse travel of the drills by mechanically applied pressure. Mount the drill on a suitable piece of equipment such that it is quickly transported and positioned. Rest and reference the drill rig frame on and to the pavement surface such that the drilled holes are cylindrical, perpendicular to the surface being drilled, and repeatable in terms of position and alignment on the surface being drilled.

When allowed by the Engineer, hand-held drills may be used if the drill rig discussed above can not be positioned without being in conflict with the contracts maintenance and protection of traffic plan.

### **CONSTRUCTION DETAILS.**

**Drilling Holes.** Drill holes such that:

- The end ties in a slab are placed 12 – 15 inches from the transverse joints.
- The ties between the end ties are placed 24 inches apart, maximum.
- 10 inches of tie is embedded in the existing concrete and 18 inches of tie protrudes from the drilled concrete face.
- The hole diameters are in accordance with the anchoring material Manufacturer’s written recommendations. Provide those recommendations to the Engineer before drilling any holes.

Extend the full depth repair boundaries as indicated in the contract documents if drilling cracks or damages the pavement to remain in place. Replace worn bits when necessary to ensure the proper hole diameter is drilled.

**ITEM 502.33010018 - DRILL AND ANCHOR LONGITUDINAL JOINT TIES FOR FULL-DEPTH PORTLAND CEMENT CONCRETE PAVEMENT REPAIRS**

**Cleaning Holes.** Follow the anchoring material Manufacturer's written recommendations for cleaning the holes. Provide those recommendations to the Engineer. As a minimum, clean the drilled holes with oil-free and moisture-free compressed air. The Engineer will check the compressed air stream purity with a clean white cloth. Use a compressor that delivers air at a minimum of 120 ft<sup>3</sup> per minute and develops a minimum nozzle pressure of 90 PSI. Insert the nozzle to the back of the hole to force out all dust and debris.

**Tie Installation.** When using new cartridges of anchoring material, ensure that the initial material exiting the nozzle appears uniformly mixed. If it is not uniformly mixed, waste the material until uniformly mixed material extrudes. Place the anchoring material at the back of the hole using a nozzle of sufficient length. Push the tie into the hole while twisting such that the air pocket within the hole is heard to burst and the anchoring material is evenly distributed around the tie. Use sufficient amounts of anchoring material such that it slightly extrudes out the hole as the tie is inserted.

**METHOD OF MEASUREMENT.** The work will be measured for payment as the number of longitudinal joint ties satisfactorily anchored.

**BASIS OF PAYMENT.** Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Drill and Anchor Longitudinal Joint Ties for Full-Depth PCC Pavement Repairs. No additional payment will be made for extra work required to repair damage to the adjacent pavement that occurred during drilling.



**ITEM 502.34010018 - TRANSVERSE HINGE JOINTS IN PORTLAND CEMENT CONCRETE (PCC) PAVEMENT**

**DESCRIPTION.** Construct a transverse hinge joint in a PCC pavement where indicated in the contract documents.

**MATERIALS.**

Hinge Joint Support Assembly. Obtain the assembly from a supplier appearing on the Approved List for §705-15, Transverse Joint Supports. Use 24 inches long, ¾ inch diameter, deformed, epoxy-coated, Grade 60 bar reinforcement fabricated into an assembly such that, when positioned, the:

- Longitudinal axes of adjacent bars are spaced 3 – 18 inches apart on center.
- Entire longitudinal axis of each bar is located at the middepth of the pavement slab ( $\pm 1$  inch).
- Longitudinal axes of the bars are aligned parallel with the pavement centerline and pavement surface such that the maximum misalignment of one bar end relative to the other is 2 inches.
- Midpoint of the longitudinal axis of each bar is at the center of the joint ( $\pm 1$  inch).
- Longitudinal axes of the two end bars are 4 – 10 inches from the longitudinal joints.

Use an epoxy coating appearing on the Approved List for “Epoxy Coatings for Longitudinal Joint Ties” or “Epoxy Coatings for Steel Reinforcing Bars” that is applied by an applicator appearing on the Approved List for “Applicators for Steel Reinforcing Bars”. Use 0.3 inch diameter steel wire to construct the assembly.

At least 7 days before placing the hinge joint assemblies, provide the Engineer:

- The name and address of the joint support assembly supplier.
- The name and address of the joint support assembly Manufacturer.
- Material certification from the rolling mill as to the type and grade of steel used.
- The brand of epoxy coating and the name and address of the Manufacturer.
- The name and address of the epoxy coating applicator.
- Material certification from the epoxy coating applicator that the bars have been coated, tested, and meet the requirements of §705-14, Longitudinal Joint Ties.

The Department may perform supplementary sampling and testing of the bars and assemblies to ensure conformance with §705-14.

**CONSTRUCTION DETAILS.** Submit a proposed joint layout for full-depth concrete placement that clearly identifies transverse joint locations, including hinge joints, and obtain the Engineer’s approval. Do not place any hinge joints without the Engineer’s approval.

Place hinge joint assemblies perpendicular to longitudinal joints (or free edges). Do not align hinge joints with other types of transverse joints. Locate hinge joints such that:

- They are equally spaced between other types of transverse joints.
- The maximum spacing between any type of transverse joint is 15 feet.

**ITEM 502.34010018 - TRANSVERSE HINGE JOINTS IN PORTLAND CEMENT CONCRETE (PCC) PAVEMENT**

Affix the assemblies to the subbase (or permeable base) in accordance with the approved Materials Details submitted with other transverse joint supports used on the contract. If there are no other transverse joint supports used on the contract, obtain such an approved Materials Detail from the Supplier and affix the assemblies in accordance with that Materials Detail. Provide that Materials Detail to the Engineer before positioning any hinge joint.

After placing concrete, construct a joint through the assembly in accordance with §502-3.06A1, Transverse Contraction Joints.

**METHOD OF MEASUREMENT.** The work will be measured for payment as the number of feet of hinge joints satisfactorily constructed, measured to the nearest 1 foot.

**BASIS OF PAYMENT.** Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Transverse Hinge Joints in PCC Pavement. Sealing or filling the joint is paid under separate item.

**ITEM 502.35010018 - PORTLAND CEMENT TREATED PERMEABLE BASE****ITEM 502.36RC0018 - PORTLAND CEMENT CONCRETE (PCC) PLACEMENT FOR FULL-DEPTH PAVEMENT REPAIRS****ITEM 502.37010018 - TRANSVERSE JOINTS****ITEM 502.38010018 - LONGITUDINAL JOINTS**

**DESCRIPTION.** Place Class C, Class F, or High-Early-Strength (HES) PCC as indicated in the contract documents in a previously prepared full-depth repair area.

**MATERIALS AND EQUIPMENT.**

Portland Cement Concrete (Class C and Class F) .....	501
High-Early-Strength (HES) Concrete .....	502-2.02
Portland Cement Treated Permeable Base .....	502-2.03
Longitudinal Joint Ties .....	.705-14
Transverse Joint Supports .....	.705-15
Wire Fabric for Concrete Reinforcement .....	709-02
Epoxy-Coated Bar Reinforcement, Grade 60 .....	.709-04
Quilted Covers (for Curing) .....	.711-02
Plastic Coated Fiber Blankets (for Curing) .....	.711-03
Polyethylene Curing Covers (White Opaque) .....	.711-04
Membrane Curing Compound .....	.711-05
Form Insulating Materials for Winter Concreting .....	711-07
Water .....	.712-01

HES concrete mix design and all details related to HES concrete production and discharge must be approved by the Regional Materials Engineer before placement.

Transit Mix HES Concrete. Accelerating admixtures may be batched into the concrete at the plant in accordance with §501-2.03F, Admixture Dispensing Systems, or added at the site depending on the amount of acceleration required and the haul time. When adding accelerating admixtures at the site, equip truck mixers with an air pressurized tank that:

- Contains the correct volume of admixture (for the volume of concrete in the truck) dispensed through the plant's Admixture Dispensing System.
- Discharges the required admixture quantity into the truck mixer drum in less than 1 minute.
- Has a clear plastic tank output hose that leads into the truck mixer drum.
- Has a properly working relief valve.

Twice daily, or more frequently if weather conditions change significantly as determined by the Engineer, determine the fine and coarse aggregate moisture contents. Compute the corresponding water added to the concrete in the truck from aggregate moisture. Subtract that quantity, as well as the water portion of the admixture in the tank and water added at the plant, from the design water for the truck. Submit these calculations to the NYSDOT plant inspector for approval. Upon approval, write the maximum volume of water to be added to the truck at the site on the delivery ticket. Upon arrival at the site, provide the delivery ticket to the Engineer.

Discharge the accelerating admixture into the truck mixer drum during or after any water additions at the site. Do not add more water than the maximum volume indicated on the delivery ticket. Add all of the

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accelerating admixture in 1 uninterrupted operation in 1 minute or less. Apply a maximum of 200 total mixing revolutions before discharge.

Truck Mix HES Concrete. Add the accelerating admixture and water at the site. Equip trucks with an air pressurized tank for accelerating admixtures as described above in Transit Mix HES Concrete and an in-line water flow meter that:

- Resets easily to "0".
- Is mounted to allow easy reading.
- Withstands water temperatures up to 200°F.
- Is equipped with air strainers capable of removing entrapped air within the system.
- Has a batching delivery tolerance of 1% by weight or volume.
- Has a manufacturer’s certified flow rate capacity of 70 gpm.
- Has a minimum actual flow rate of 50 gpm.

The Regional Materials Engineer will measure the actual flow rate and inspect the flow meter prior to use. Do not place any concrete without the Regional Materials Engineer’s approval.

Twice daily, or more frequently if weather conditions change significantly as determined by the Engineer, determine the fine and coarse aggregate moisture contents. Compute the corresponding water added to the concrete in the truck from aggregate moisture. Subtract that quantity, as well as the water portion of the admixture in the tank, from the design water for the truck. Submit these calculations to the NYSDOT plant inspector for approval. Upon approval, write the exact volume of water to be added to the truck at the site on the delivery ticket. Upon arrival at the site, provide the delivery ticket to the Engineer.

Before adding water into the truck mixer, execute twenty dry revolutions at 12 to 18 rpm and reset the flow meter to 0. Add water in 1 uninterrupted operation. No water is to be removed from the truck mixer for any purpose while water is being added to the drum. After the required water designated on the delivery ticket has been added to the concrete in the truck, add all the accelerating admixture in 1 uninterrupted operation in 1 minute or less. Apply a maximum of 200 mixing revolutions before discharge.

Use equipment meeting:

Forms .....	§502-2.04B1
Paving Irregular Areas ..	§502-2.04B3
Vibrators .....	§502-2.04C
Permeable Base Paving Equipment .....	§502-2.04D
Saw Cutting Equipment .....	§502-2.04E
Curing Compound Applicators ..	§502-2.04F

**CONSTRUCTION DETAILS.** Apply the following from Section 502, Portland Cement Concrete Pavement, as modified herein:

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Weather Limitations.....	§502-3.01
Portland Cement Treated Permeable Base.....	§502-3.03
Use permeable base if the pavement being repaired was constructed with permeable base or if shown in the contract documents. Place permeable base 4 inches thick. Apply fixed form paving requirements.	
Fixed Form Paving.....	§502-3.05
Consider full-depth repairs to be irregular areas.	
Joint Construction.....	§502-3.06
Apply a bond breaker, such as form oil, to untied longitudinal joints immediately before placing concrete.	
Finishing.....	§502-3.09
Finish short repairs (those less than the length of the finishing equipment) transversely.	
Texturing.....	§502-3.10
Do not texture the plastic concrete if it will be diamond ground. The Engineer may require longitudinal astroturf drag if that was the original pavement texture.	
Curing.....	§502-3.11
Pavement Protection.....	§502-3.13
Damaged or Defective Concrete.....	§502-3.14
Hardened Surface Test.....	§502-3.15
If the pavement is to be diamond ground, the maximum deviation is 3/8 inch in 10 feet. If the pavement will not be diamond ground, the maximum deviation is 1/8 inch in 10 feet.	
Opening to Traffic.....	§502-3.18
When determining concrete strength for opening to traffic, apply the following rather than §502-3.18C, Project Strength Determination:	

**Project Strength Determination.** Provide an ACI Certified Concrete Field Testing Technician, Grade I, or higher, to cast all cylinders. Unless otherwise noted in the contract documents, use an agency accredited by the AASHTO Accreditation Program (AAP) in the field of construction materials testing of portland cement concrete to perform compressive strength testing. Cast and test in the presence of the Engineer, or the Engineer's representative. Provide acceptable proof of ACI Certification and AASHTO Accreditation to the Engineer before placing any concrete. The Engineer, or the Engineer's representative, will complete the Concrete Cylinder Report as cylinders are cast and tested.

Cast a minimum of 3 cylinder pairs (6 total) from each scheduled placement operation in accordance with Materials Method 9.2, Field Inspection of Portland Cement Concrete. Cast each pair from different delivery trucks with 1 of the 3 pairs cast from the last truck of the operation. Develop an Engineer-approved marking system that allows a cylinder to be readily associated with the corresponding placement location and placement time. Mark the cylinders and place them adjacent to the pavement under similar curing conditions. Determine the concrete compressive strength in accordance with ASTM C39, Standard Test Method for Compressive

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Strength of Cylindrical Concrete Specimens. Test all cylinder pairs at the same time relative to when they were cast. The testing time must be within the time frame needed to open the last concrete placed in the operation to traffic. The placement may be opened to traffic if all the following apply:

- Average compressive strength of all cylinder pairs exceed 2500 PSI.
- Average compressive strength of each cylinder pair exceeds 2000 PSI.
- Appropriate time frame has elapsed for the entire area to be opened.

If these conditions are not met, test 3 additional cylinder pairs at a later time, provided the appropriate number of additional cylinders were cast and the placement has not been opened to traffic. If the above conditions are not met after additional testing, or, if the required number of additional cylinders were not cast, open the placement to traffic after 5 days, or when directed by the Engineer, provided this time frame is not in conflict with the work zone closure time restrictions stipulated in the contract documents. If the placement is opened to traffic (in accordance with the work zone closure time restrictions stipulated in the contract documents) before it has achieved the required strength, the placement will be considered Damaged or Defective Concrete and will be replaced at no additional cost to the State.

Contract testing for 28 day compressive strength is not required. If subsequent trial batches are required, the Engineer may waive the 28 day compressive strength testing.

**METHOD OF MEASUREMENT.**

Portland Cement Treated Permeable Base. The work will be measured for payment as the number of cubic yards of permeable base satisfactorily placed, measured to the nearest 0.1 yard<sup>3</sup>, based on the Engineer-approved repair area marked on the pavement prior to repair and the thickness of permeable base placed.

Portland Cement Concrete, Unreinforced, All Classes. The work will be measured for payment as the number of cubic yards of concrete satisfactorily placed, measured to nearest 0.1 yard<sup>3</sup>, based on the Engineer-approved repair area marked on the pavement prior to repair and the thickness of concrete placed. Deductions, and separate payment, will be made for catch basins, manholes, or other similar pavement obstructions requiring either mesh reinforced or heavily reinforced placements.

Portland Cement Concrete, Mesh or Heavily Reinforced, All Classes. The work will be measured for payment as the number of cubic yards of concrete satisfactorily placed, measured to the nearest 0.1 yard<sup>3</sup>, based on the Engineer-approved repair area marked on the pavement prior to repair and the thickness of concrete placed. No deductions will be made for drainage and utility structures or other similar pavement obstructions being isolated from the surrounding pavement.

Transverse Joints. The work will be measured for payment as the number of feet of transverse joints satisfactorily constructed within the repair boundary, measured to the nearest 0.1 foot. Separate

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measurement will be made for transverse joints that define the repair boundary and drilling and anchoring dowels into those joints.

Constructing Longitudinal Joints. The work will be measured for payment as the number of feet of longitudinal joints satisfactorily constructed within the repair boundary, measured to the nearest 0.1 foot. Separate measurement will be made for longitudinal joints that define the repair boundary and drilling and anchoring longitudinal joint ties in those joints.

**BASIS OF PAYMENT.**

Portland Cement Treated Permeable Base. Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Portland Cement Treated Permeable Base. No additional payment will be made for extra work required to repair damage to the adjacent permeable base or pavement that occurred during any operation. Additional payment will be made if the original repair area did not completely extend into sound concrete.

Portland Cement Concrete, Unreinforced, All Classes. Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Portland Cement Concrete, Unreinforced, All Classes. No additional payment will be made for Contractor-requested HES concrete mixes or extra work required to repair damage to the adjacent pavement that occurred during any operation. Additional payment will be made if the original repair area did not completely extend into sound concrete.

Portland Cement Concrete, Mesh or Heavily Reinforced, All Classes. Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Portland Cement Concrete, Mesh or Heavily Reinforced, All Classes. No additional payment will be made for Contractor-requested HES concrete mixes or extra work required to repair damage to the adjacent pavement that occurred during any operation. Additional payment will be made if the original repair area did not completely extend into sound concrete.

Transverse Joints. Include the cost of all labor, material, equipment, and labor necessary to satisfactorily perform the work in the unit price bid for Transverse Joints. Separate payment will be made for constructing transverse joints that define the repair boundary and drilling and anchoring dowels into those joints. Separate payment will be made for joint sealing or joint filling.

Longitudinal Joints. Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Longitudinal Joints. Separate payment will be made for constructing longitudinal joints that define the repair boundary and drilling and anchoring ties into those joints. Separate payment will be made for joint sealing or joint filling.

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***Payment Will Be Made Under:***

<b>Item No.</b>	<b>Item</b>	<b>Pay Unit</b>
502.35010018	Portland Cement Treated Permeable Base	Cubic Yard
502.36RC0018	Portland Cement Concrete (PCC) Placement for Full-Depth Repair	Cubic Yard
	<i><u>R - Reinforcement</u></i>	
	<i>0 - Unreinforced</i>	
	<i>1 - Isolated, Mesh Reinforced</i>	
	<i>2 - Isolated, Heavily Reinforced</i>	
	<i><u>C - Concrete Class</u></i>	
	<i>1 - Class C</i>	
	<i>2 - Class F</i>	
	<i>3 - HES</i>	
502.37010018	Transverse Joints	Foot
502.38010018	Longitudinal Joints	Foot



**ITEM 502.4MR00018 - PORTLAND CEMENT CONCRETE PAVEMENT PARTIAL-DEPTH REPAIRS**

**ITEM 502.46010018 - PORTLAND CEMENT CONCRETE PAVEMENT PARTIAL-DEPTH REPAIRS USING EPOXY RESIN SYSTEMS**

**DESCRIPTION.** Remove 2 – 4 inches of portland cement concrete (PCC) pavement, prepare the removal area, and repair it using Class D concrete, High-Early-Strength (HES) concrete, Concrete Repair Material, Rapid Hardening Concrete Repair Material, Rapid Hardening Polymer Concrete, or Epoxy Resin System as required by the contract documents.

**MATERIALS AND EQUIPMENT.**

Portland Cement Concrete, Class D.....	501
Concrete Repair Material.....	.701-04
Rapid Hardening Concrete Repair Material.....	.701-09
Coarse Aggregate.....	.703-02
Premoulded Resilient Joint Filler.....	.705-07
Portland Cement Mortar Bonding Grout .....	.705-22
Membrane Curing Compound ...	.711-05
Admixtures.....	.711-08
Water .....	.712-01
Epoxy Resin Systems.....	.721-01
Rapid Hardening Polymer Concrete .....	.721-20
Non-Chloride Accelerator Admixture .....	Approved
List	

HES Concrete. Apply §502-2.02, High-Early-Strength (HES) Concrete, except:

- Design the HES mix to satisfy the opening to traffic time requirements of the contract and Table 1, High-Early-Strength Concrete Mix Requirements, rather than Table 502-1.
- Use coarse aggregate having a 1A gradation.
- Produce and place a 1.0 yard<sup>3</sup> (minimum) trial batch rather than a 4.0 yard<sup>3</sup> trial batch.

**TABLE 1 - HIGH-EARLY-STRENGTH CONCRETE MIX REQUIREMENTS**

Property	Minimum	Desired	Maximum
28 Day Compressive Strength (Trial Batch Only)	4,350 PSI	-	-
Opening Compressive Strength	3,000 PSI <sup>1</sup>	-	-
Plastic Air Content	5.0%	6.5%	8.0%
Slump	1½ inch	-	4 inch

<sup>1</sup> See Opening to Traffic below.

Determine the compressive strength of the trial batch concrete at the desired time as discussed below in Project Strength Determination. Mix design approval does not relieve the Contractor’s responsibility of achieving the specified requirements during the contract.

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HES concrete mix design and all details related to HES concrete production and discharge must be approved by the Regional Materials Engineer before placement.

Transit Mix HES Concrete. Accelerating admixtures may be batched into the concrete at the plant in accordance with §501-2.03F, Admixture Dispensing Systems, or added at the site depending on the amount of acceleration required and the haul time. When adding accelerating admixtures at the site, equip truck mixers with an air pressurized tank that:

- Contains the correct volume of admixture (for the volume of concrete in the truck) dispensed through the plant's Admixture Dispensing System.
- Discharges the required admixture quantity into the truck mixer drum in less than 1 minute.
- Has a clear plastic tank output hose that leads into the truck mixer drum.
- Has a properly working relief valve.

Twice daily, or more frequently if weather conditions change significantly as determined by the Engineer, determine the fine and coarse aggregate moisture contents. Compute the corresponding water added to the concrete in the truck from aggregate moisture. Subtract that quantity, as well as the water portion of the admixture in the tank and water added at the plant, from the design water for the truck. Submit these calculations to the NYSDOT plant inspector for approval. Upon approval, write the maximum volume of water to be added to the truck at the site on the delivery ticket. Upon arrival at the site, provide the delivery ticket to the Engineer.

Discharge the accelerating admixture into the truck mixer drum during or after any water additions at the site. Do not add more water than the maximum volume indicated on the delivery ticket. Add all of the accelerating admixture in 1 uninterrupted operation in 1 minute or less. Apply a maximum of 200 total mixing revolutions before discharge.

Truck Mix HES Concrete. Add the accelerating admixture and water at the site. Equip trucks with an air pressurized tank for accelerating admixtures as described above in Transit Mix HES Concrete and an in-line water flow meter that:

- Resets easily to "0".
- Is mounted to allow easy reading.
- Withstands water temperatures up to 195°F.
- Is equipped with air strainers capable of removing entrapped air within the system.
- Has a batching delivery tolerance of 1% by weight or volume.
- Has a manufacturers certified flow rate capacity of 70 gpm.
- Has a minimum actual flow rate of 50 gpm.

The Regional Materials Engineer will measure the actual flow rate and inspect the flow meter prior to use. Do not place any concrete without the Regional Materials Engineer's approval.

Twice daily, or more frequently if weather conditions change significantly as determined by the Engineer, determine the fine and coarse aggregate moisture contents. Compute the corresponding water added to the concrete in the truck from aggregate moisture. Subtract that quantity, as well as the water portion of the

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admixture in the tank, from the design water for the truck. Submit these calculations to the NYSDOT plant inspector for approval. Upon approval, write the exact volume of water to be added to the truck at the site on the delivery ticket. Upon arrival at the site, provide the delivery ticket to the Engineer.

Before adding water into the truck mixer, execute twenty dry revolutions at 12 to 18 rpm and reset the flow meter to 0. Add water in 1 uninterrupted operation. No water is to be removed from the truck mixer for any purpose while water is being added to the drum. After the required water designated on the delivery ticket has been added to the concrete in the truck, add all the accelerating admixture in 1 uninterrupted operation in 1 minute or less. Apply a maximum of 200 mixing revolutions before discharge.

Concrete Repair Material or Rapid Hardening Concrete Repair Material. Use only cementitious repair materials appearing on the Approved List. Provide the Engineer the Manufacturer's written instructions for mixing, bonding, placing, and curing the material. Follow the Manufacturer's instructions. Do not exceed the prescribed water amount. Extend concrete repair materials with coarse aggregate having a 1A gradation. Use a maximum aggregate extension rate of 60% of the dry, pre-packaged weight of repair material.

Rapid Hardening Polymer Concrete. Use rapid hardening polymer concrete appearing on the Approved List. Provide the Engineer the Manufacturer's written instructions for mixing, bonding, placing, and curing the material. Follow the Manufacturer's instructions, including all aspects of the Manufacturer's Safety Data Sheets when handling rapid hardening polymer concrete and their primers.

Extend rapid hardening polymer concrete with coarse aggregate having a 1A gradation. Use a maximum aggregate extension rate of 75% of the dry component weight of the repair material. Extension aggregates must contain no moisture at the time of mixing.

Epoxy Resin System. Use an epoxy resin system from a stock lot accepted by the Materials Bureau. Provide the Engineer the Manufacturer's written instructions for aggregate extension rates and type, substrate preparation, mixing, bonding, placing, and curing the material. Follow the Manufacturer's instructions, including all aspects of the Manufacturer's Safety Data Sheets when handling epoxy resin system. Extension aggregates must contain no moisture at the time of mixing.

Coring Equipment. Use trailer or truck mounted core rigs with diamond impregnated bits capable of coring 4 inches into the pavement. Use a core rig shaft capable of moving in multiple directions to readily position the bit over the removal area. Use a bit of sufficient diameter to remove the entire repair area to sound concrete. Maintain equipment and supplies to ensure uninterrupted operation. Supply a template equal in diameter to the bit outer diameter to mark removal areas prior to coring. Supply a steel sleeve having an outer diameter equal to the core bit outer diameter that is inserted into the core to protect the surrounding pavement during Concrete Removal described below.

Saw Cutting Equipment. Use diamond blade saws capable of making straight, 4 inch deep, saw cuts. Use saws equipped with cutting guides, blade guards, water cooling systems, dust control, and cut depth control. Maintain equipment and supplies to ensure uninterrupted operation.

Chipping Hammers. Use chipping hammers weighing no more than 30 pound (including bit and muffler) equipped with sharp spade bits. Provide the Engineer hammer specifications from the Manufacturer before sawing or coring. Use a maximum air pressure of 100 PSI (measured at the compressor) to power the

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hammer. Supply an air pressure gauge at the compressor that allows the Engineer to easily monitor air pressure. Maintain equipment and supplies to ensure uninterrupted operation. The Engineer may halt operations if concrete to remain in place is damaged by the hammers.

Milling Machines. Use a milling machine with a 12 inch (minimum) wide milling head and equipped with a mechanism that maintains the milling operation at a preset depth.

Vibrators. Use hand-held vibrators having a maximum diameter of 1 inch and capable of operating through a frequency range of 6000 - 9000 vibrations per minute.

**CONSTRUCTION DETAILS.** Meet with the Engineer 7 to 14 days before the planned start of removal to coordinate all aspects of removal, preparation and material placement including mixing, transport, and discharge, material requirements and testing, and personnel requirements. Perform all operations within the allowable work zone closure time frame included in the contract documents, if any.

Epoxy resin systems typically do not require coring or sawing the repair boundary or removing concrete. This material is used at very small, shallow repairs with sound underlying concrete. An epoxy resin system is the only repair material that can be feathered to meet concrete to remain in place.

Determine Repair Boundary - Coring Method. Determine the repair boundary by placing the template described above in Coring Equipment over the repair area and marking the boundary. Position the template such that the repair boundary extends completely into sound concrete. If a joint or crack crosses the repair boundary, position the template such that the joint or crack crosses through the middle  $\frac{1}{3}$  of the repair boundary. If the template can not be positioned such that the repair boundary extends completely into sound concrete, or a joint or crack can not be accommodated in the middle  $\frac{1}{3}$ , determine the repair area in accordance with Determine Repair Boundaries - Saw Cut Method.

Determine Repair Boundary - Saw Cut Method. Sound the area surrounding the repair with a 2 – 3 pound hammer to identify delaminated areas and include them within the repair boundary. Extend repair areas 3 – 6 inches beyond the visible deterioration or delaminations, whichever is larger. Combine repair areas within 6 inches of each other into one repair. Keep repair areas as square as possible. Avoid irregular repair shapes. Mark the repair boundary outlines.

Core Repair Boundary. Do not core until the Engineer approves the repair boundary. Core 2 – 4 inches into the pavement. Core sufficiently deep to ensure sound concrete is reached and new concrete faces are exposed.

Saw Cut Repair Boundary. Do not saw cut until the Engineer approves the repair boundary. Diamond blade saw cut the repair boundaries 2 – 4 inches deep. Cut at right angles to the pavement joints and the pavement surface. Over cut intersecting saw cuts such that the entire repair area is cut to the same depth.

Concrete Removal - Coring Method. Use the steel sleeve described above in Coring Equipment and a chipping hammer to remove concrete within the core. Remove concrete such that the repair bottom is at a uniform depth,  $\pm$  1 inch, and sound concrete is exposed along all faces. Discontinue removal if:

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- Pavement joint hardware is encountered.
- The required repair depth exceeds 4 inches.
- The PCC surrounding or below the removal area is unsound.

In this instance the Engineer will determine the required repair, typically full-depth removal and replacement or partial-depth removal by the saw cutting method.

Concrete Removal - Saw Cuts. Use chipping hammers or a combination of chipping hammers and milling machines to remove concrete within the saw cuts. Remove concrete such that the repair bottom is at a uniform depth,  $\pm 1$  inch, and sound concrete is exposed along all faces. Do not operate milling machines within 25 mm of the saw cuts. Use chipping hammers in these locations to establish the proper repair depth. Discontinue removal if:

- Pavement joint hardware is encountered.
- The required repair depth exceeds 4 inches.
- The PCC surrounding or below the removal area is unsound.

In this instance the Engineer will determine the required repair, typically full-depth removal and replacement.

Clean the Repair Bottom and Vertical Faces. As close to repair material placement as possible, thoroughly abrasive blast all concrete surfaces that will be in contact with the repair material such that they are uniformly abraded and free of any dirt, laitance, oil, or other material that may prevent bond. Immediately before placement, air blast the repair to remove any remaining debris and moisture. The Engineer will check the:

- Air stream with a clean, white cloth to ensure no oil or contaminants are in the air blast.
- Repair surfaces for dust by wiping the repair faces with a dark cloth or glove.

Re-clean the repair if dust is found on the surfaces.

Some repair materials require a completely dry substrate to properly bond. Consult the Manufacturer's instructions and completely dry the substrate, if required, before placing the repair material.

Place Joint or Crack Insert. Fill joints or cracks that abut or cross the repair with a commercial caulk such that no repair material enters the joint or crack. Align premoulded resilient joint filler or commercial waxed corrugated cardboard with joints or cracks that abut or cross the repair area. Use an insert of the same thickness as the joint or crack width,  $\pm 1/8$  inch. Place inserts into the caulk before it sets such that no repair material enters the joint or crack. Leave the filler in place after the repair is complete.

Apply Bonding Agent. Use Portland Cement Mortar Bonding Grout if the repair material is Class D concrete or HES concrete. Mix the grout in small quantities to ensure freshly mixed grout is routinely placed. Mix the grout to a consistency that can be applied to the prepared surfaces without running or puddling. Evenly apply a thin coat of grout with a stiff bristle brush or broom to all surfaces receiving the repair material such that all cavities are coated. Slightly overlap the surrounding pavement surfaces. Do not apply bonding agent to the joint filler.

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Follow the Manufacturer's instructions regarding the type and application of bonding agent, including water, for all other repair materials. If water is used, blow excess from the repair such that no standing water remains.

Placement. Small construction mixers or paddle mixers may be used, provided the proper slump and air is obtained and all Manufacturer's instructions are followed. Ready mix trucks may be used if quantities are sufficient. Use wheelbarrows, buggies, or other transporting vehicles to bring the repair material to the prepared area. Use shovels for very small patches. Place Class D concrete or HES concrete before the bonding grout dries. Consolidate cementitious material with a hand-held vibrator.

Finishing. Finish repairs flush with the surrounding pavement. Keep hand finishing to a minimum. Hand trowel from the center of the patch outward toward the edges. Force repair material into the intersecting over cuts. Do not add any additional water to the repair surface.

Curing. Immediately after finishing, thoroughly coat Class D and HES concrete with a double coat of curing compound meeting §711-05, Membrane Curing Compound at a minimum rate of 80 FT<sup>2</sup>/Gal. Cure other materials in accordance with the Manufacturer's instructions.

Opening Class D or HES Concrete to Traffic. If no opening to traffic time frame is specified in the contract documents, open Class D concrete to traffic 5 days after placement. If an opening to traffic time frame is specified in the contract documents, open Class D or HES concrete to traffic after it has achieved a compressive strength of 3,000 PSI as discussed below in Project Strength Determination. The 5 day opening to traffic time frame may also be reduced if cylinders cast and tested as discussed below in Project Strength Determination indicate a compressive strength of 3,000 PSI has been achieved and the joints and cracks are sealed or filled in accordance with the contract documents.

Project Strength Determination. Provide an ACI Certified Concrete Field Testing Technician, Grade I, or higher, to cast all cylinders. Unless otherwise noted in the contract documents, use an agency accredited by the AASHTO Accreditation Program (AAP) in the field of construction materials testing of portland cement concrete to perform compressive strength testing. Cast and test in the presence of the Engineer, or the Engineer's representative. Provide acceptable proof of ACI Certification and AASHTO Accreditation to the Engineer before placing any concrete. The Engineer, or the Engineer's representative, will complete the Concrete Cylinder Report as cylinders are cast and tested.

Cast a minimum of 3 cylinder pairs (6 total) from each scheduled placement operation in accordance with Materials Method 9.2, Field Inspection of Portland Cement Concrete. Cast each pair from different delivery trucks with 1 of the 3 pairs cast from the last truck of the operation. Develop an Engineer-approved marking system that allows a cylinder to be readily associated with the corresponding placement location and placement time. Mark the cylinders and place them adjacent to the pavement under similar curing conditions.

Determine the concrete compressive strength in accordance with ASTM C39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens. Test all cylinder pairs at the same time relative to when they were cast. The testing time must be within the time frame needed to open the last concrete placed in the operation to traffic. The placement may be opened to traffic if all the following apply:

- Average compressive strength of all cylinder pairs exceed 2,500 PSI.

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- Average compressive strength of each cylinder pair exceeds 2,000 PSI.
- Appropriate time frame has elapsed for the entire area to be opened.

If these conditions are not met, test 3 additional cylinder pairs at a later time, provided the appropriate number of additional cylinders were cast and the placement has not been opened to traffic. If the above conditions are not met after additional testing, or, if the required number of additional cylinders were not cast, open the placement to traffic after 5 days, or when directed by the Engineer, provided this time frame is not in conflict with the work zone closure time restrictions stipulated in the contract documents. If the placement is opened to traffic (in accordance with the work zone closure time restrictions stipulated in the contract documents) before it has achieved the required strength, the placement will be considered Damaged or Defective Concrete and will be replaced at no additional cost to the State.

Contract testing for 28 day compressive strength is not required. If subsequent trial batches are required, the Engineer may waive the 28 day compressive strength testing.

Opening Other Materials to Traffic. Open other repair materials as follows:

Material	Time to Opening
Concrete Repair Material (701-04)	24 hours after placement
Rapid Hardening Concrete Repair Material (701-09)	3 hours after placement
Rapid Hardening Polymer Concrete (721-20)	3 hours after placement
Epoxy Resin System (721-01)	See Manufacturer's Instructions

**METHOD OF MEASUREMENT.** The work will be measured for placement as the number of square feet of partial-depth repairs satisfactorily placed, measured to the nearest 0.1 feet<sup>2</sup>, based on the Engineer-approved repair areas marked on the pavement prior to repair.

**BASIS OF PAYMENT.** Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Portland Cement Concrete Pavement Partial-Depth Repairs. 50% of the unit price bid will be paid if the Engineer changes the required repair after removal to a full-depth repair. No additional payment will be made for extra work required to repair damage to the adjacent pavement that occurred during any operation.

*Payment will be made under:*

Item No.	Item	Pay Unit
502.4MR00018	Portland Cement Concrete Pavement Partial-Depth Repairs	Square Feet

M - Material

1 - Class D Concrete

2 - HES Concrete

R - Repair Method

1 - Coring Method

2 - Saw Cutting Method

**ITEM 502.4MR00018 - PORTLAND CEMENT CONCRETE PAVEMENT PARTIAL-DEPTH REPAIRS**

**ITEM 502.46010018 - PORTLAND CEMENT CONCRETE PAVEMENT PARTIAL-DEPTH REPAIRS USING EPOXY RESIN SYSTEMS**

*3 - Concrete Repair Material*

*4 - Rapid Hardening Concrete Repair Material*

*5 - Rapid Hardening Polymer Concrete*

502.46010018	Portland Cement Concrete Pavement Partial-Depth Repairs Using Epoxy Resin Systems	Square Feet
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**ITEM 502.70010018 - RETROFIT DOWELS IN PORTLAND CEMENT CONCRETE (PCC) PAVEMENT**

**DESCRIPTION.** Install new load transfer devices (LTDs) at transverse cracks and joints where indicated in the contract documents.

**MATERIALS.**

Retrofit LTDs. Obtain retrofit LTDs from a supplier appearing on the Approved List for §705-15, Transverse Joint Supports. Each retrofit LTD consists of 1 dowel, 2 expansion caps providing ¼ inch of expansion room each, a joint forming medium, and 2 epoxy coated or non-metallic supporting chairs having a width equal to the channel width, 2½ - 2¾ inches.

Use 18 inches long, 1½ inch diameter, smooth, epoxy coated, Grade 60 steel dowels coated with a bond breaker. Use an epoxy coating appearing on the Approved List for “Epoxy Coatings for Longitudinal Joint Ties” or “Epoxy Coatings for Steel Reinforcing Bars” that is applied by an applicator appearing on the Approved List for “Applicators for Steel Reinforcing Bars”.

At least 14 days before saw cutting channels, provide the Engineer:

- The name and address of the retrofit LTD supplier.
- Material certification from the supplier that dowels meet the “Tests” and “Material Requirements” portions of §705-15, except Grade 60 steel is supplied.
- Material certification from the rolling mill as to the type and grade of steel used.
- The brand of epoxy coating and the name and address of the Manufacturer.
- The name and address of the epoxy coating applicator.
- The brand of bond breaker and the name and address of the Manufacturer.
- Material certification from the epoxy coating applicator that the bars have been coated, tested, and meet the requirements of §705-14, Longitudinal Joint Ties.
- At least 2 shop drawings from the supplier that detail the:
  - Expansion caps.
  - Width, type, and positioning of chairs used to support and align the LTD.
  - Material used as a joint forming medium.

The Engineer will transmit a shop drawing to the Director, Materials Bureau, for approval. The Materials Bureau will approve, approve as noted, or reject the drawing within 14 days of submission to the Engineer. Revise rejected drawings as required by the Materials Bureau and re-submit them to the Engineer. Do not saw cut channels until the Materials Bureau approves the drawings.

Epoxy coating field repairs are not permitted. The Department may perform supplementary sampling and testing of the bars and assemblies to ensure conformance with §705-14 and §705-15.

Use a joint forming medium that is:

- Compressible, yet rigid enough to maintain it’s shape during installation and backfilling.
- Treated with a release agent that prevents bond to the backfill material.
- Deep enough to extend from the channel bottom to the pavement surface.
- Equal to the joint or crack width (+ ¼ inch/ - 0 inch).
- Capable of being routed to accommodate joint or crack sealing.

Different widths of joint forming material are required for cracks of different crack widths.

## **ITEM 502.70010018 - RETROFIT DOWELS IN PORTLAND CEMENT CONCRETE (PCC) PAVEMENT**

**Backfill Material.** Use DBR Retrofit Mortar, HD-50, Five Star Highway Patch, or an alternate prepackaged portland cement based patching material submitted for use as an approved equal. Extend the prepackaged material with clean, surface dry crushed stone or crushed gravel meeting §703-02, Coarse Aggregate, and having a 1A gradation, maximum. Use an extension rate of 50 - 60 % by weight of the prepackaged material. Do not use crushed slag aggregate. Follow the Manufacturer's mixing instructions. Provide those instructions to the Engineer.

Submit alternate patching material and extension aggregate in 60 pound (maximum) bags to the Engineer for transmittal to the Materials Bureau for approval. Provide the same aggregate that will be used on the contract. Alternate material must meet the requirements of Table 1, Backfill Material Requirements. The Materials Bureau will render a decision on material acceptability within 45 days of submission to the Engineer.

**TABLE 1 - BACKFILL MATERIAL REQUIREMENTS**

Property	Extension	Minimum	Maximum
3 Hour Compressive Strength	None	3,500 PSI	-
24 Hour Compressive Strength	None	5,000 PSI	-
Contraction	None	-	0.05 %
Freeze - Thaw Loss	60 %	-	1.0 %
Bond to SSD PCC	60 %	400 PSI	-
Bond to Dry PCC	60 %	300 PSI	-
Working Time	60 %	15 Minutes	-
Chloride Content		-	0.0 %
Magnesium Phosphate Content		-	0.0 %

### **CONSTRUCTION DETAILS.**

**Channel Construction.** Construct 4 channels per wheelpath (8 per lane). Space channels 12 inches apart on center. Determine the location and length of longitudinal joint ties in the concrete to remain in place outside the repair area. Use a pachometer or other device capable of locating steel embedded in concrete.

If a longitudinal joint tie is within 12 inches of the joint or crack being retrofit, construct the outer channels 3 – 4 inches from the end of the tie. If no ties are within 12 inches of the joint or crack being retrofit, construct the outer channels 18 inches from a longitudinal joint between 2 travel lanes and 12 inches from a longitudinal joint between a travel lane and a shoulder.

For 14 feet wide slabs, slabs with nonstandard widths, or pavements with longitudinal joints offset from permanent longitudinal pavement markings that define a travel lane, construct the outer channels 18 inches from the nearest edge of the permanent longitudinal marking between 2 travel lanes and 12 inches from the marking between a travel lane and a shoulder. In any case, do not construct a channel within 3 inches of the end of a longitudinal joint tie. The Engineer may require additional dowel bar retrofit construction in nonstandard slab widths to ensure 4 dowels are placed in each wheelpath.

Make saw cuts with a diamond blade concrete saw equipped with a minimum of 3 saw blades of the same diameter. Space the blades on the saw arbor such that resulting channel width equals the supporting chair width. Make the saw cuts parallel to the pavement longitudinal joint and to each other, with equal lengths on either side of the crack. Make the saw cuts sufficiently deep such that, when placed, the longitudinal axes of the dowels are at midslab and ½ - ¾ inches of backfill material will surround the dowels and expansion caps.

**ITEM 502.70010018 - RETROFIT DOWELS IN PORTLAND CEMENT CONCRETE (PCC) PAVEMENT**

Remove concrete between the outer saw cuts with a chipping hammer weighing no more than 30 pound, including muffler and bit. Remove concrete burrs such that the dowels will sit parallel to the pavement surface and the backfill material will completely encase the dowel. Schedule operations such that the concrete between saw cuts is removed as close to dowel installation as possible. Do not allow traffic on the channels after the concrete has been removed.

Cleaning Channels. As close to backfill placement as possible, thoroughly abrasive blast all faces of the channel to remove all residue and roughen the surface. Immediately before placement, air blast the channel to remove any remaining debris. The Engineer will check for dust by wiping the channel faces with a dark cloth or glove. Immediately after cleaning, apply a commercial caulk to all crack faces within the channel.

LTD Installation. Apply bonding agents, including water, to the channel faces in accordance with the backfill Manufacturer's instructions. Provide those instructions to the Engineer. If water is used, blow the excess from the repair such that no standing water remains. Do not place primer or backfill material when the concrete substrate is outside the temperature range of 45°F to 100°F.

Immediately after applying the bonding agent, place and support the LTDs in accordance with the approved shop drawings such that the:

- Joint forming medium is aligned with the crack or joint such that no backfill material can enter the joint or crack.
- Supporting chair abuts the vertical channel faces to prevent movement during backfilling.
- Longitudinal axis of each dowel is at the mid-depth of the pavement slab ( $\pm 1/4$  inch).
- Longitudinal midpoint of each dowel is within 1 inch of the crack.
- Longitudinal axis of each dowel is aligned parallel with the pavement centerline and pavement surface such that the maximum misalignment of one dowel end relative to the other is 1/8 inch.

Backfill Placement. After the dowel is positioned, slightly overfill the entire channel with backfill material. Follow Manufacturer's instructions regarding placement time limits, including those of the bonding agent. Provide those instructions to the Engineer. Thoroughly consolidate the material using narrow (less than 1 inch), hand-held spud vibrators. Do not touch the LTD with the vibrator.

Fill whole channels with each batch of material. Discard the remaining portion of a mixed batch if it will not completely fill a channel, if placement time limits are exceeded, or if the material is not uniformly consolidating under vibration.

Finish the backfill material flush with the surrounding pavement surface with as little hand finishing as possible.

Cure the backfill material in accordance with the Manufacturer's instructions. Provide those instructions to the Engineer.

Opening to Traffic. Open the repairs to traffic no sooner than 3 hours after finishing.

**METHOD OF MEASUREMENT.** The work will be measured for payment as the number of dowels satisfactorily retrofit into the pavement.

**ITEM 502.70010018 - RETROFIT DOWELS IN PORTLAND CEMENT CONCRETE (PCC) PAVEMENT**

**BASIS OF PAYMENT.** Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Retrofit Dowels in Portland Cement Concrete Pavement. No additional payment will be made for extra work required to repair damage to the adjacent pavement that occurred during any operation.

**ITEM 502.90010018 - CLEAN AND FILL CRACKS AND JOINTS IN PORTLAND CEMENT  
CONCRETE (PCC) PAVEMENT, ASTM D 6690 TYPE IV**

**DESCRIPTION.** Clean and fill the following cracks and joints that are 1/4 - 1 inch wide at the locations indicated in the contract documents:

- New transverse contraction joints within full depth repairs.
- Existing transverse and longitudinal joints outside new full depth repairs.
- Existing cracks.

Do not clean and fill:

- Transverse and longitudinal joints that define new full depth repair boundaries.
- New longitudinal joints within full depth repairs.

**MATERIALS.**

Highway Joint Sealants (ASTM D 6690 Type IV)..... 705-02  
Backer Rods..... ASTM D5249 (Type 1)

In addition to meeting the requirement of ASTM D5249 (Type 1), backer rods must have a diameter at least 25% wider than the location of the crack it is placed into.

The Department may perform supplementary sampling and testing of the sealant. Deliver sealant in the Manufacturer's original sealed container legibly marked with the:

- Manufacturer's name.
- Trade name of the sealant.
- Manufacturer's batch or lot number.
- ASTM D 6690, Type IV.
- Minimum application temperature.
- Maximum (or Safe) heating temperature.

**CONSTRUCTION DETAILS.** If diamond grinding is included in the contract documents, prepare the joints and cracks, diamond grind the pavement, then clean and fill the joints and cracks.

Prepare New Transverse Contraction Joints Within Full Depth Repairs. Widen the joint to 1/4 – 3/8 inch for a depth of 1 inch if the first stage saw cut is less than 1/4 inch wide. Use diamond blade saws equipped with cutting guides, blade guards, water cooling systems, dust controls, and cut depth control. Immediately wash the slurry from the pavement such that it does not re-enter the joint. Do not place backer rod in these joints.

Prepare Existing Transverse and Longitudinal Joints. Use a 1/8 – 1/4 inch wide, 1 5/8 inches deep saw cut to dislodge debris and existing sealant or filler from the joint without damaging the joint faces. Follow the saw cut with a compressed air blast to remove the dislodged debris to the bottom of the existing joint sealant reservoir or to a depth of 3 inches if there is no existing reservoir. Install a trap or other device on the compressed air equipment to prevent oil from contaminating the joint surfaces. Supplement the air blast with mechanical removal, such as a screwdriver, if it is not sufficient to remove the debris. Do not damage the joint faces. Immediately wash or sweep the dislodged debris from the pavement such that it does not re-enter the joint. Do not place backer rod in these joints.

Prepare Existing Cracks. Remove all debris from existing cracks as deep as possible using a compressed air blast supplemented with mechanical removal. Install a trap or other device on the compressed air

**ITEM 502.90010018 - CLEAN AND FILL CRACKS AND JOINTS IN PORTLAND CEMENT  
CONCRETE (PCC) PAVEMENT, ASTM D 6690 TYPE IV**

equipment to prevent oil from contaminating the crack surfaces. Immediately wash or sweep the dislodged debris from the pavement such that it does not re-enter the joint. Backer rod may be placed after cleaning provided it is at least 25 % wider than the crack everywhere along the crack and is placed 2 inches beneath the pavement surface.

Cleaning. Clean the joints and cracks by abrasive blasting before filling. Do not allow any traffic on the pavement between cleaning and filling. Reclean if it rains between cleaning and filling.

Sealant Melting. Provide the Engineer a copy of the sealant Manufacturer's recommendations for heating and application at least 24 business hours before filling. Follow those recommendations for heating and application. Unless stated otherwise, the recommended pouring temperature is 10°F below the Manufacturer's designated safe heating temperature, with an allowable variation of  $\pm 10^\circ\text{F}$ . Heat the sealant in a melter constructed either:

- As a double boiler with the space between inner and outer shells filled with a heat-transfer medium.
- With internal tubes or coils carrying the sealant through a heated oil bath and into a heated double wall hopper.

Do not use direct heating. Use a melter capable of maintaining the pouring temperature that is equipped with:

- Positive temperature controls.
- Mechanical agitation or a re-circulation pump capable of providing homogeneous sealant.
- Separate thermometers indicating the temperatures of the heat transfer medium and the sealant in the hopper. Do not place any sealant if the thermometers are defective or missing.

Prior to any sealing, measure the sealant temperature at discharge from the applicator wand. The temperature must be equal to or above the Manufacturer's recommended minimum pouring temperature and equal to or below the Manufacturer's recommended safe heating temperature. Discharge sealant into a vessel and measure the sealant temperature in the presence of the Engineer or the Engineer's representative. Provide 2 thermometers each having an 18 inches stem. Alternate methods to measure the sealant discharge temperature are subject to the Engineer's approval.

Use a discharge hose equipped with a thermostatically controlled heating apparatus or sufficiently insulated to maintain the proper sealant pouring temperature.

Do not use sealant heated beyond the safe heating temperature. Sealant may be reheated or heated in excess of six hours if allowed by the Manufacturer's heating and application recommendations. In these cases, recharge the melter with fresh sealant amounting to at least 20 % of the sealant volume remaining in the melter.

Filling. Fill within 8 hours of cleaning. Fill the joint or crack to within  $\frac{1}{4}$  -  $\frac{3}{8}$  inch of the pavement surface. Fill when the:

- Air and surface temperatures are 40°F or warmer.
- Air temperature is above the dew point.
- Pavement surface and vertical joint\crack surfaces are dry.

Open to traffic after the sealant has cured to prevent tracking. A water mist may be used to accelerate curing. Do not blot with fine aggregate.

**ITEM 502.90010018 - CLEAN AND FILL CRACKS AND JOINTS IN PORTLAND CEMENT  
CONCRETE (PCC) PAVEMENT, ASTM D 6690 TYPE IV**

**METHOD OF MEASUREMENT.** The work will be measured for payment as the number of feet of joints/cracks satisfactorily filled.

**BASIS OF PAYMENT.** Include the cost of all labor, material, and equipment necessary to satisfactorily perform the work in the unit price bid for Clean and Fill Cracks and Joints in Portland Cement Concrete (PCC) Pavement, ASTM D 6690, Type IV.

**ITEM 555.01010004 - HIGH EARLY STRENGTH (HES) CEMENT CONCRETE FOR FULL DEPTH SLAB REPAIR, CONCRETE PARAPET REPAIR, AND LONGITUDINAL JOINT REPAIR**

**DESCRIPTION**

This work shall consist of the placement of High Early Strength (HES) cement concrete for full depth structural slab repair, concrete parapet repair and for longitudinal joint repair. Repair areas shall be where indicated on the plans.

**MATERIALS**

The requirements of Subsection 501-2 Materials shall be met, except as modified herein.

Portland Cement	Type III	701-01
Fine Aggregate		703-07
Coarse Aggregate	Type CA 2	501-2.02 B.2
Water		712-01
Air Entraining Agent	(Neutralized vinsol resin based only)	711-08
Membrane Curing Compound		711-05
Polyethylene Film		ASTM C171
Admixtures		NYSDOT Approved Materials List
Preformed Closed Cell Foam Material		705-08

The maximum allowable total chloride content in concrete shall not exceed 0.10 percent by weight of cement. Testing shall be done in accordance with written procedural directives of NYSDOT.

**Proportioning Concrete:**

- A. The High Early Strength (HES) concrete mix design shall be submitted by the Contractor and approved by the Engineer prior to placing any HES cement concrete. Include admixture brands and dosages as well as mixing, transporting, placing, curing, and anticipated strength gain details. The mix shall meet the requirements of Table 502-1 in Subsection 502-2.02 High Early Strength Concrete, with the exception that the Opening Compressive Strength shall be 2500 psi after the curing period indicated on the plans.
- B. Produce and place a 1.0 cubic yard (minimum) trial batch at an off-contract location selected by the Contractor, and agreed upon by the Engineer. Produce the trial batch using the same materials and processes as those to be used to produce concrete for the contract. Provide the Engineer a 7-day minimum advance notification of trial batch production. Produce and place the trial batch in the presence of the Engineer, the Regional Materials Engineer, and Materials Bureau personnel. Provide an American Concrete Institute (ACI) Certified Concrete Field Testing Technician, Grade I, or higher, to:
  - Measure slump, air content, and unit weight of trial batch.



**ITEM 555.01010004 – HIGH EARLY STRENGTH (HES) CEMENT CONCRETE  
FOR FULL DEPTH SLAB REPAIR, CONCRETE PARAPET  
REPAIR, AND LONGITUDINAL JOINT REPAIR**

- Cast cylinders from the trial batch for compressive strength and freeze-thaw resistance testing.

Determine the compressive strength of the trial batch concrete at the desired time as discussed in Subsection 502-3.18C, Project Strength Determination.

The Materials Bureau will render a decision on mix acceptability, curing, and opening to traffic requirements within 45 calendar days of trial batch production. Changes other than minor fluctuations in admixture dosage rates require a new mix design and trial batch. The Engineer will reject the concrete if the specified slump or plastic air content are not achieved.

### **Concrete Batching Facility**

The requirements of Subsection 501-2.03 shall be met, except as modified herein.

- A. All equipment proposed for use shall have the Engineer's approval prior to the start of the work. The specific method and equipment that the Contractor proposes to use for finishing shall be subject to the approval of the Regional Construction Engineer. Specific equipment requirements follow:
1. Finishing Equipment. This shall meet the requirements of Subsection 584-2.04B except a finishing machine shall be required only for pour areas exceeding 500 ft<sup>2</sup>.
  2. Surface Texturing Equipment. The specific equipment to be used shall be approved by the Engineer. Prior to approval, the Contractor shall demonstrate to the Engineer's satisfaction that the equipment is capable of providing the required surface texture.

### **Concrete Mixer and Delivery Unit**

The requirements of Subsection 501-2.04 shall be met, except as modified herein.

The Contractor shall furnish a recording thermometer, for monitoring batch temperatures, to the Engineer prior to initiating any contract work under this item. The thermometer shall meet the requirements of Subsection 584-2.04C, except that it shall be capable of recording temperatures in the 32°F to 170°F range.

## **CONSTRUCTION DETAILS**

### **General**

Limitation of Operations – The requirements of Subsection 584-3.01 shall apply.

Blast Cleaning – The requirements of Subsection 584-3.02 shall apply.

Preplacement Wetting – The requirements of Subsection 584-3.03 shall apply. No bonding grout shall be used.

**ITEM 555.01010004 - HIGH EARLY STRENGTH (HES) CEMENT CONCRETE  
FOR FULL DEPTH SLAB REPAIR, CONCRETE PARAPET  
REPAIR, AND LONGITUDINAL JOINT REPAIR**

The locations to be repaired shall be shown on the plans or will be designated by the Engineer. Repairs shall conform to the details shown on the drawings.

A four mil polyethylene film shall be installed to act as a bond breaker where required by this item, or where directed by the Engineer.

Preformed Closed Cell Foam Material shall be installed in longitudinal joints as shown or scheduled on the Contract Drawings.

### **Reinforcement**

Existing reinforcement designated to remain in place after removal of structural concrete shall be cleaned in accordance with the requirements of Section 584-3.02A.

Existing reinforcement designated to remain in place that has greater than 25% section loss, in the opinion of the Engineer, shall be replaced with the same size and type of the existing reinforcement (uncoated or epoxy) according to the details in the contract drawings.

Bar reinforcement shall be placed at the locations indicated on the plans, and at all additional locations determined by the Engineer.

### **Forms**

Forms shall meet the requirements of Subsections 555-3.03 and 557-3.03.

### **Concrete Placement**

All surfaces receiving new concrete shall be blast cleaned in accordance with the requirements of Section 584-3.02.

Concrete shall be placed meeting the requirements of Subsection 584-3.05 and Subsection 557-3.05. Concrete may be placed directly from an approved mixer. Chutes used to place the concrete in final position shall be steel lined. The concrete shall be consolidated by internal vibration.

Concrete shall be finished with equipment meeting the requirements of Subsection 584-3.06A. The required macrotexture shall be achieved by longitudinal tining. The tining shall be commenced after a smooth, dense, and even surface has been achieved. Texture resulting from tining will stop within 12 inches of curbs or barrier.

To insure that the concrete is discharged and placed in the shortest possible time, the Contractor shall have sufficient labor force available to insure the rapid and expeditious incorporation of the concrete into the project. The provisions of Subsection 557-3.06 Cold Joints shall apply.

**ITEM 555.01010004 – HIGH EARLY STRENGTH (HES) CEMENT CONCRETE  
FOR FULL DEPTH SLAB REPAIR, CONCRETE PARAPET  
REPAIR, AND LONGITUDINAL JOINT REPAIR**

Under no circumstances shall the Contractor use more than one truck per repair area unless the second truck is standing by and has commenced its mixing cycle.

**Cylinder Testing**

For each day of production, six 6 x 12 inch cylinders will be taken by the Engineer during placement of a representative repair area and shall be immediately placed in autogenous (insulated) curing boxes furnished by the Engineer. The repair areas from which cylinders are taken shall have a minimum size of 50 ft<sup>2</sup>. The cylinders will be tested by the Engineer for compressive strength.

**Curing**

Curing shall consist of continuous wet burlap curing as described in Subsection 557-3.11.

If at any time during the curing period, the air temperature falls outside the range specified for curing, the concrete shall be inspected for damage. Concrete damaged by temperature, as determined by the Engineer, shall be removed and replaced by the Contractor at no cost to the Owner.

**Opening to Traffic**

When the repair area has achieved the specified strength requirement, established by the cylinder testing, the repair area may be opened to traffic.

**METHOD OF MEASUREMENT**

This work will be measured as the number of cubic yards of ITEM 555.01010004 – HIGH EARLY STRENGTH (HES) CEMENT CONCRETE FOR FULL DEPTH SLAB REPAIR, AND PARAPET REPAIR AND LONGITUDINAL JOINT REPAIR satisfactorily furnished and installed.

**BASIS OF PAYMENT**

The unit price bid per cubic yard shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work, including cleaning and blast cleaning. All sawcutting and concrete removal will be paid for under their appropriate items. Repairs to existing reinforcement designated to remain in place shall be paid for in accordance with 109-05. In locations where placement of new reinforcement is designated, the reinforcement shall be paid for separately under its appropriate item.

**ITEM 595.50000018 – SHEET-APPLIED WATERPROOFING MEMBRANE****DESCRIPTION**

Furnish and install a manually or machine-applied sheet waterproofing membrane in accordance with the contract documents. Include all surface preparation.

**MATERIALS**

Use a sheet-applied waterproofing membrane meeting the requirements of §717-02.

**CONSTRUCTION DETAILS**

**General** - On new structural concrete, the provisions of §557-3.11, Curing, shall be met prior to membrane system placement. Work will not be done during wet-weather conditions. No work will be done when the concrete structural slab surface temperature is below 50°F, or ambient temperatures are below 50°F. The concrete structural slab shall be surface dry at the time of application of the membrane. The Engineer will verify that atmospheric conditions are favorable for placement of the system based on the manufacturer's recommendations.

Arrange for the membrane manufacturer to have a competent technical representative at the job site during all phases of preparation and installation.

Supply Material Safety Data Sheets (MSDS) and approved Material Detail Sheets prepared by the membrane manufacturer to the Engineer a minimum of two (2) weeks prior to the scheduled commencement of work. The Material Detail Sheets will contain all material requirements and installation information for each specific waterproofing membrane. The Material Detail Sheets will be accessible at the Department's Approved List website for reference.

**(Bridge Decks)** – Begin work no less than (7) calendar days after placement of Portland cement concrete, Portland cement mortar, or epoxy mortar for structural concrete repair. The Engineer may waive the seven-day requirement if the areas of repair can sustain loads without damage or deformation. Subject to the concurrence of the Engineer, if an alternate concrete repair material is used, follow the manufacturer's instructions for allowable loading.

**(Culverts)** - Fill the joints between precast culvert sections flush to the culvert slab and sidewall surfaces with a grout conforming to §701-08 Vertical and Overhead Patching Material. In areas where the joints do not line up evenly, taper the grout with a maximum slope of 2:1, from the high side of the joint to the low side, to provide a smooth transition from one unit to the next.

Place the waterproofing membrane over the joints of precast or cast-in-place units following the guidelines of Chapter 19 of the Highway Design Manual, or as indicated on the contract plans and Material Detail Sheets.

1. On vertical surfaces, the waterproofing membrane will be covered with material conforming to §705-07 Premoulded Resilient Joint Filler.
2. On horizontal surfaces.

**ITEM 595.50000018 – SHEET-APPLIED WATERPROOFING MEMBRANE**

**Membrane Protection (Culverts)** – To protect the waterproofing membrane from punctures, the following procedures will be used:

- a. If select granular fill is specified over the culvert, a 6 inch thick protective layer of concrete sand, meeting the requirements of §703-07 Concrete Sand, will be placed on the membrane.

Or

- b. If asphalt pavement using aggregate larger than 3/8 inch is specified directly above the membrane, or if clearances don't allow for 6 inches of concrete sand, a 1 inch thick (minimum) course of HMA with a maximum nominal aggregate size of 3/8 inch will be placed on top of the membrane. The hot mix asphalt will be thoroughly compacted with mechanical tampers.

**METHOD OF MEASUREMENT**

This work will be measured as the number of square feet of sheet-applied, waterproofing membrane satisfactorily installed (measured to the nearest 1 sq ft.). No separate measurement of the vertical faces of curbs, joints, concrete barriers, headers, scuppers, or for the inside surfaces of subdrainage outlets, shall be made. No deductions will be made for holes less than 1 square foot in area.

**BASIS OF PAYMENT**

The unit price bid per square foot for this item shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work.

No additional payments will be made for any re-priming done in conformance with the requirements of the manufacturer's detail sheets.

**ITEM 606.1001--25 - BOX BEAM GUIDE RAILING (ATTACHED TO CONCRETE BARRIER)****1. DESCRIPTION:**

- 1.01 This work shall consist of installing Box Beam Guide Railing on existing concrete Barrier as indicated in the Plans and in accordance with these Special Specifications and/or as directed by the Engineer.

**2. MATERIALS:**

- 2.01 The provisions of §606-2 of the Standard Specifications shall apply.

**3. CONSTRUCTION DETAILS:**

- 3.01 Railing shall be erected in the position and manner indicated on the Plans and as directed by the Engineer.
- 3.02 All required 7/8" diameter holes in the Concrete Barrier shall be Core Drilled.
- 3.03 Thru bolts for attachment of the box beam at 6'-0" max. centers shall be installed as shown on the Plans. Holes in the box beam for the thru bolts shall be field drilled to assure proper alignment.

**4. METHOD OF MEASUREMENT:**

- 4.01 The quantity shall be measured as the number of linear feet of box beam guide railing installed on concrete barrier as measured in the field.

**5. BASIS OF PAYMENT:**

- 5.01 The unit price bid per linear foot for this Item shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work.

**ITEM 606.2650NN08 – SPECIAL TRANSITION****DESCRIPTION:**

This work shall consist of installing barrier and/or guide railing transitions as shown in the Contract Documents.

**MATERIAL:**

All applicable provisions of §606-2 shall apply.

**CONSTRUCTION DETAILS:**

Railing and/or barrier shall be erected and attached as specified in the Contract Documents. All applicable provisions of §606-3 shall apply.

**METHOD OF MEASUREMENT:**

Transitions will be measured by the actual number installed. The pay limits for each special transition are shown in the Contract Documents.

**BASIS OF PAYMENT:**

The price shall include the cost of all labor, material and equipment, including field work necessary to adjust existing barrier.

Note: NN denotes items serialized by each transition type.

**ITEM 606.59200125 - RESETTING END TERMINALS FOR BOX BEAM GUIDE RAIL AND MEDIAN BARRIER**

**1. DESCRIPTION:**

- 1.01 Under this item the Contractor shall reset Type III Box Beam Guide Rail and Type C Box Beam End Terminals at the location(s) shown on the plans and in accordance with these specifications, applicable Standard Sheets, Contract Drawings and Manufacturer's directions and drawings. The Engineer will be sole determiner in the event there are differences between the Specifications, Standard Sheets, Manufacturer's directions and drawings.

**2. MATERIALS:**

- 2.01 Subsection 606-2.08 of the Standard Specifications shall apply.

**3. CONSTRUCTION DETAILS:**

- 3.01 The Contractor shall remove, store, clean and reset the box beam end terminal as shown on the plans or as directed by the Engineer. The construction details of Subsection 606-3.06 and 606-3.12 of the Standard Specifications shall apply.

**4. METHOD OF MEASUREMENT:**

- 4.01 The quantity measured for this item shall be the number of end terminals reset in accordance with the requirements of the Contract Documents and in a manner approved by the Engineer.

**5. BASIS OF PAYMENT:**

- 5.01 The unit price bid for each end assembly reset shall include the cost of furnishing all labor, materials and equipment necessary to complete the work. Progress payments for the quantity reset will be made in accordance with Subsection 606-5.05(A).



**ITEM 606.8103--25 - REMOVING AND DISPOSING GUIDE RAIL TRANSITION CORRUGATED BEAM TO BOX BEAM (ONE OR TWO WAY OPERATION) INCLUDING TRANSITION ANCHORAGE UNIT**

**1. DESCRIPTION:**

1.01 This work shall consist of the removal and disposal of guide railing transition corrugated beams to box beam, posts and component parts including transition anchorage unit in accordance with these specifications and as shown on the plans or as established by the Engineer.

**2. MATERIALS:**

2.01 None specified.

**3. CONSTRUCTION DETAILS:**

3.01 The Contractor shall remove the existing transition corrugated beam to box beam including transition anchorage unit and remove them from the site of the work. Holes shall be backfilled with a suitable material and compacted in a manner approved by the Engineer. Proper precautions shall be taken to protect traffic at all times.

**4. METHOD OF MEASUREMENT:**

4.01 Transitions for guide railing including transition anchorage unit will be considered as one unit and will be measured by the number of units removed and disposed of as herein specified or ordered by the Engineer.

**5. BASIS OF PAYMENT:**

5.01 The unit price bid for the removal and disposal of guide rail transition, including transition anchorage unit shall include the cost of excavation, backfill, furnishing all labor, materials and equipment necessary to complete the work.

**ITEM 608.01010125 - WORK PAD****1. DESCRIPTION:**

1.01 This work shall consist of construction and placement of a work pad in accordance with the plans and specifications or as ordered by the Engineer.

**2. MATERIALS:**

The Contractor shall have the option of using a Portland Cement Concrete (P.C.C.) or manufactured “plastic/fiberglass” material.

2.01 Material for P.C.C. work pads shall meet the requirements of Section 608-2 of the NYSDOT Standard Specifications.

2.02 Manufactured “plastic/fiberglass” materials shall be based on catalog cuts submitted to, and approved by the Engineer.

**3. CONSTRUCTION DETAILS:**

3.01 P.C.C. construction details shall meet the requirements of Section 608-3.01 of the NYSDOT Standard Specifications.

3.02 Work pad shall be installed on a level, compacted base, free of topsoil or other unsuitable materials. Top of work pad to be approximately flush with surrounding grade.

3.03 Work pad size shall be a minimum of four feet (4') x four feet (4') unless otherwise indicated on the Plans. P.C.C. pads shall be a minimum thickness of four inches (4”).

**4. METHOD OF MEASUREMENT:**

4.01 This work shall be measured as the number of work pads installed in accordance with the plans, specifications and/or as ordered by the Engineer.

**5. BASIS OF PAYMENT:**

5.01 The unit price bid for each work pad shall include the cost of all labor, material and equipment, including excavation and disposal of unsuitable material, and fill material if needed, to complete the work to the satisfaction of the Engineer.

**ITEM 619.0801xx25 – REMOVE PAVEMENT MARKING STRIPES (6 INCHES)****1. DESCRIPTION:**

1.01 The provisions of Section 619-1.05 shall apply.

**2. MATERIALS:**

2.01 The provisions of Section 619-2.05 shall apply.

**3. CONSTRUCTION DETAILS:**

3.01 The provisions of Section 619-3.05 shall apply.

**4. METHOD OF MEASUREMENT:**

4.01 The provisions of Section 619-4.05 shall apply except as follows:

- A. The quantity to be measured for payment will be in feet to the nearest whole foot along the centerline of the pavement stripes covered or removed and will be based on a 6-inch wide stripe. No measurement will be made for the gaps between broken and dotted line segments.
- B. Measurement for covering or removal of striping with a width greater than 6 inches will be made by the following method:

$$\frac{\text{Width of Striping (in)} \times \text{Number of Feet}}{6 \text{ (in)}}$$

**5. BASIS OF PAYMENT:**

5.01 The provisions of Section 619-5.05 shall apply except as follows:

xx = Material

01 = Traffic Paint

02 = Epoxy Paint

03 = Removable Tape

04 = Removable Wet Reflective Tape

05 = Traffic Paint Supplemented with Raised Markers

**ITEM 619.1001xx25 – INTERIM PAVEMENT MARKINGS, STRIPES (6 INCHES)****1. DESCRIPTION:**

1.01 All applicable provisions of Standard Specification §619-1 shall apply.

**2. MATERIALS:**

2.01 All applicable provisions of Standard Specification §619-2 shall apply.

**3. CONSTRUCTION DETAILS:**

3.01 All applicable provisions of Standard Specification §619-3 shall apply.

**4. METHOD OF MEASUREMENT:**

4.01 The provisions of Section 619-4.07 shall apply except as follows:

- A. The quantity to be measured for payment will be in feet to the nearest whole foot along the centerline of the pavement stripes installed and will be based on a 6-inch wide stripe. No measurement will be made for the length of skips in the dashed line.
- B. Measurement for installation of striping with a width greater than 6 inches will be made by the following method:

$$\frac{\text{Width of Striping (in)} \times \text{Number of Feet}}{6 \text{ (in)}}$$

**5. BASIS OF PAYMENT:**

5.01 All applicable provisions of Standard Specification §619-5 shall apply.

**NOTE:** xx = Material

- 01 = Traffic Paint
- 02 = Epoxy Paint
- 03 = Removable Tape
- 04 = Removable Wet Reflective Tape
- 05 = Traffic Paint Supplemented with Raised Markers

**ITEM 619.96----25 – SPEED DISPLAY TRAILER****1. DESCRIPTION:**

- 1.01 Under this item the Contractor shall furnish, install, maintain, relocate, and remove an all LED, two digit, and trailer mounted speed display sign. The system shall be equipped with traffic radar operating in an “approach only” mode such that only the speeds of approaching vehicles will be displayed. The unit must be capable of displaying all speeds between ten miles per hour (10 MPH) and ninety-nine miles per hour (99 MPH). The system shall provide for the display of a static speed limit sign meeting the requirements of the National Manual on Uniform Traffic Control Devices (MUTCD) and NYS Supplement, mounted above, or adjacent to, the LED display.

**2. MATERIALS:****2.01 Changeable Display:**

- A. **Description:** The changeable display shall be mounted within a sign panel meeting the layout, text size, and reflectivity requirements of National MUTCD and NYS Supplement on a white background. The sign panel shall match the static sign panel described in Section 2.06. The text of the sign shall be “**Your Speed**”. The changeable display shall consist of an LED pixel matrix meeting the following requirements:

1. Two (2) Individual Characters are to be a minimum of (18 inches high each).
2. LED’s shall be Amber colored (Florescent yellow optional)
3. Minimum of 4 LED’s per pixel
4. LED Characters must be visible from 885 feet.
5. 100% Solid state configuration with no moving parts
6. The LED matrix shall have a protective cover such as Lexan or similar
7. Brightness control of the LED’s which can be adjusted for daytime/nighttime use.

For the purposes of this specification, the “Display Panel” refers to the combination of the changeable changeable LED display and the sign panel it is mounted within.

- B. **Display Power Supply:** The power supply for the LED display is to be sufficient to operate the LED pixels for both daylight and nighttime conditions, be suitably regulated and temperature-stable and fully operational in the temperature range of -22°F to 150°F. In addition, the power supply shall satisfy the following requirements:

1. All wiring to be comprised of standardized wiring harnesses and locking connectors.
2. Self-contained 12 volt DC battery system operated with sufficient power to operate the sign for a period of 14 consecutive days before requiring a recharge.

**2.02 Charging System:**

- A. **Description:** The charging system is to be arranged in such a manner as to easily facilitate recharging of the battery system. The 110 volt AC charging system shall initiate charging automatically when 110 volt AC service is connected, and must be capable of completely charging the battery pack within a 72 hour time period. The recharging system is to be designed so that a fully charged unit can remain plugged-in without damaging the system. The trailer must also be equipped with a standard 110 volt AC receptacle as well as a temperature stable 110 volt AC battery trickle charger and ammeter. Incorporation of a solar

**ITEM 619.96----25 – SPEED DISPLAY TRAILER****2. MATERIALS:** (cont'd)**2.02 Charging System:** (cont'd)

powered option must include the necessary provisions to allow switching the recharging mode between the 110 volt AC and the solar panel with minimal effort. The solar powered option shall be fully integrated into the unit power system.

**2.03 Display Control Unit**

- A. **Description:** The display control unit shall be 100% solid state with no moving parts or switches, shall be operable in 0-95% non-condensing humidity conditions at temperatures from minus -22°F to 150°F, and shall include provision(s) for protection against damage should the 12 volt DC power source be incorrectly connected with the leads reversed.
- B. **Mounting:** The display control unit shall be mounted in such a manner as to minimize potential damage from the elements, including road salt and road spray. The LED display unit is to be contained in a vandal resistant housing.
- C. **Wiring:** The control unit shall contain all of the terminal connectors for the display panel wiring harnesses and the keyboard terminal harness.

**2.04 Display Operating Software:**

- A. **Description:** The display operating software shall provide for operator interaction with the sign system and must include industry standard levels of security and access. Password protection and/or access codes are to be included in order to limit access to the sign control menus to authorized persons.
- B. **Diagnostics:** The display operating software shall provide sufficient diagnostic monitoring for the following elements:
  - 1. LED Status – Including LED brightness (as % of maximum) for corresponding photocell ambient light levels.
  - 2. Sign Status – Diagnostic information on the power system and sign performance.
  - 3. Radar Status – Raw (serial) data from the radar unit for diagnostic purposes.
  - 4. Solar Status – System Diagnostic information (for units provided with a Solar Powered Option).
- C. **Main Menu:** The software shall provide full control of the LED display. The software and control keys shall include the ability to perform the following:
  - 1. User-defined “minimum” and “maximum” speed to display.
  - 2. Control of LED display to provide “Steady burn” and at least one “flash” mode.
  - 3. Allow for a minimum of two (2) “trigger” speeds to be preset. When the trigger speeds are reached, the display shall automatically switch to a user-set display mode, which may include, flash mode 1, flash mode 2, “Blank-out”, and displaying “XX”, as well as other display modes.

**ITEM 619.96----25 – SPEED DISPLAY TRAILER****2. MATERIALS:** (cont'd)**2.04 Display Operating Software:** (cont'd)**C. Main Menu:** (cont'd)

4. Display control that allows the sign to be automatically powered up and down based on time and date or a 7-day programmable feature which allows pre-set control of the sign based on a 7 day repeating schedule.
5. A flashing strobe light shall **NOT** be allowed on the system.
6. Radar data logging capabilities must be incorporated into the system which allows, at a minimum, the collection of the following:
  - Average Speeds
  - Number of readings within specified ranges
  - Number of violations
  - Highest speeds

**2.05 Case and Housings:**

- A. The sign case and all housings on the Speed Display Trailer shall be of all aluminum construction and be fabricated to provided full protection from moisture intrusion to sensitive parts due to rain and snow, including road spray.
- B. The lens and/or cover of the LED displays are to be weather proof and provide full protection for the display unit. The lens and/or cover shall be modular and interchangeable. All cases and housings are to be vandal resistant and lockable.

**2.06 Static Speed Limit Sign:** The system shall provide for the display of a Regulatory static speed limit sign above, or adjacent to, the Display Panel. The speed limit sign shall be a minimum of 3 feet in width by 4 feet in height with interchangeable numerals to allow the display of speed limits ranging from forty-five miles per hour (45 MPH) to sixty-five miles per hour (65 MPH) in five miles per hour (5 MPH) increments. The mounting system for the interchangeable numerals shall be provided with vandal resistant connectors. The static speed limit sign shall comply with the provisions of National MUTCD and NYS Supplemental.

**2.07 Sign Support Structure:** The configuration of the sign support structure shall be such that the static sign and the Display Panel will remain in place during all weather conditions that the display trailer is likely to incur, including gusts up to 75 MPH. The static speed limit sign shall be affixed to the support with a positive connection, similar to a permanent roadside installation. The static speed limit sign and Display Panel must be mounted to meet the following minimum heights when the unit is fully deployed:

- a. Static Speed Limit above Display Panel:  
 Speed Limit – 7 feet – 6 inches                      Display Panel – 4 feet – 7 inches
- b. Static Speed Limit Adjacent to Display Panel:  
 Speed Limit – 5 feet – 6 inches                      Display Panel – 5 feet – 6 inches

**ITEM 619.96----25 – SPEED DISPLAY TRAILER****2. MATERIALS:** (cont'd)2.07 **Sign Support Structure:** (cont'd)

**Note:** Minimum heights are measured from the ground surface below the sign/panel to the bottom of each when mounted adjacent to the Display Panel; the static sign must be mounted on the left-side, as viewed by oncoming traffic. When the unit is fully deployed, the support structure shall be stabilized and locked into position.

2.08 **Trailer:**

- A. The trailer is to be constructed of rectangular structural tubing (ASTM A500-B) or welded steel channel (ASTM A36). The trailer shall be designed for safe transport at normal highway speeds of 55 MPH and shall be equipped for use on public highways in accordance with NYS Vehicle and Traffic Law.

Lights, reflectors, and splash guards shall be provided to comply with NYS regulations. Wiring shall be continuous with no splices, and shall be adequately secured approximately.

Every 18 inches with all connections to be made in a watertight junction box, using watertight light fixtures and watertight connections (Truck-Lite 50800/50400 or equal). Reflectors shall be mechanically fastened (not stick-on).

B. **Stabilizing Outriggers:**

Each corner of the trailer shall be fitted with screw leveling jacks to stabilize the trailer when in the display position.

**3. CONSTRUCTION DETAILS:**

- 3.01 The Contractor shall furnish, install, maintain, and relocate speed display trailers at the locations shown and for the usage indicated in the contract documents. When in use, the trailers shall be properly aligned to provide optimum viewing by approaching motorists.
- 3.02 The Contractor shall be responsible for maintenance, repair and relocation of the trailers until progress of work no longer requires their use, as determined by the Engineer. The trailers may be relocated in contracts with multiple work zones, AOB. The speed display shall only be displayed when directed by the Engineer. It is anticipated that the speed display will be in operation 35% of the time.
- 3.03 When not in operation, the speed display trailer shall be removed from the traffic control pattern and replaced with the appropriate static speed limit sign. The speed display trailer shall be stored behind guide rail or a minimum of 9 meters from the edge of pavement.



**ITEM 619.96----25 – SPEED DISPLAY TRAILER****4. METHOD OF MEASUREMENT:**

- 4.01 Speed Display Trailers will be measured as the number of units furnished, installed, maintained, relocated, and removed in accordance with the plans, specifications and as directed by the Engineer. Relocations of Speed Display Trailers will not be measured as additional Speed Display Trailers for payment purposes.

**5. BASIS OF PAYMENT:**

- 5.01 The unit price shall include the cost of all labor, materials and equipment necessary to complete the work; including furnishing, installing, maintaining, relocating and removing Speed Display Trailers in accordance with the plans, specifications and as directed by the Engineer.
- 5.02 Seventy-five percent of the unit price shall be paid when each unit has been delivered to the job site and is operational; the balance shall be paid upon completion of the project or when the Engineer authorizes their removal.

**ITEM 621.51050003 - GRADING MAINTENANCE, CLEANING, TRIMMING & RESHAPING EXISTING ROADSIDE SECTION**

**DESCRIPTION:**

This work shall consist of grading, cleaning, trimming and reshaping existing shoulders, foreslopes, ditches and backslopes, adjacent to the existing travel lanes, so that adequate unobstructed free flowing drainage is restored. The contractor shall accomplish the following appropriate descriptions of work to fit the existing field conditions, AOB E:

- A. Trim, grade and reshape existing shoulders from edge of existing travel lanes to the breakpoint, including behind all guiderail, at the slope and width specified on the typical sections AOB E, including removal of excess material.
- B. Trim, grade and reshape existing slopes (front and back) to the lines and grades shown on the typical sections AOB E, including removal of excess material.
- C. Trim, grade and reshape existing shoulder, from edge of existing travel lanes, and backslope in cut section at the slope and width specified on the typical sections AOB E, including removal of excess material.
- D. Grade, clean and shape ditches and backslopes, including removal of excess material as per typical section, to establish and restore proper drainage AOB E.
- E. Trim, grade and reshape existing slopes behind existing curbs or gutters, including removal of excess material, as per typical sections AOB E.

**Materials:**

Materials shall meet the material requirements of the Standard Specification section 610-2.02 Establishing Turf.

**Construction Details:**

This work shall include the following, as appropriate:

1. Removing and disposing of sod, deteriorated shoulder stabilization material and other loose, unsuitable or excess material on the shoulder.
2. Grading the existing shoulder to a uniform cross slope so that the top surface shall provide positive, uninterrupted surface flow drainage.
3. Grading and removing excess material beyond the existing shoulder break as detailed on the typical sections AOB E.
4. Removing excess material where the existing shoulders are high or have insufficient slope AOB E.
5. Grading and reshaping of existing slopes (front and back), shall include removal of earth, sod, brush (up to 3 inches in diameter) and debris to limits shown on the typical sections or AOB E.
6. The grading, cleaning and shaping of existing ditches and backslopes shall consist of rendering the ditches and backslopes free of obstructions including the removal of earth, sod, brush (up to 3 inches in diameter) and debris to the limits shown on the typical sections or AOB E.
7. Material removed from existing ditches, shoulders, and slopes (front and back) shall be disposed of in conformance with the provisions of subsection 203-3.02B Disposal of Surplus Excavated Materials. No material will be disposed of within the right of way.

8. The contractor shall exercise due care to protect all trees, fences, markers, culverts, underground structures, utilities and appurtenances within and adjacent to the work area. Any damaged facilities shall be replaced in kind at the contractor's expense.
9. Disturbed earth areas within the work limits shall be graded in a manner approved by the Engineer and seeded AOB in accordance with section 610-2.02 Establishing Turf.

**Method of Measurement:**

This work shall be measured as the number of linear feet measured along each outside edge of shoulder along which such work is performed. No payment will be made for intersections or driveways. The Engineer will determine the areas where work is not required, in advance of work operations.

**Basis of Payment:**

The unit price bid per foot shall include the cost of all labor, material and equipment necessary to satisfactorily complete the work. Refer to section 107-08 of the Standard Specifications for seeding and mulching of disturbed areas within the ROW.

**ITEM 627.50140008 - CUTTING PAVEMENT****DESCRIPTION:**

The contractor shall cut existing asphalt pavement, concrete pavement, asphalt surface course, or asphalt concrete overlay on concrete pavement at the locations indicated and detailed on the plans and as directed by the Engineer.

**MATERIALS:**

None specified.

**CONSTRUCTION DETAILS:**

Existing pavement and overlay shall be cut perpendicular to the roadway surface along neat lines, and to the depth indicated on the plans and typical sections, using appropriate equipment. After the pavement has been cut through, the Contractor may use pry bars, pneumatic tools or other methods, to pry loose the pavement to be removed from the pavement that is to remain. A pavement breaker may be used to break up the pavement to be removed after the pavement has been completely cut through and completely free from the pavement to remain.

When pavement cutting is called for in the Contract documents, if a neat vertical face with minimal shatter is obtained by performing an adjacent operation (such as milling) which eliminates the need to perform a separate pavement cutting operation, payment will be made for both the pavement cutting item and the item for the adjacent operation.

Any existing pavements and curbs not indicated to be removed that are damaged by the contractor's operations, shall be repaired at no additional cost to the State. Pavement cutting that the contractor chooses to do for his/her own convenience shall not receive any additional payment from the State.

**METHOD OF MEASUREMENT:**

The quantity to be measured will be the number of linear feet of pavement cutting satisfactorily completed.

**BASIS OF PAYMENT:**

The unit price bid per linear foot of pavement cutting shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

Payment for prying, breaking, removal and disposal of cut pavement shall be made through other appropriate items.

**634.07060001 - VIDEO INSPECTION OF PIPE LINES****DESCRIPTION:**

This work shall consist of de-watering, video inspection, survey, inspection report, survey report and video recordings of the existing pipe line. The inspection report, survey report and video recordings will become property of the Owner. Video Inspection of pipe lines will be required at locations as shown on the plans or as ordered by the Engineer.

**MATERIALS**

**De-watering:** The Contractor shall furnish all materials, labor, machinery and services necessary for the bypass pumping of storm water when necessary and as directed by the Engineer to conduct the video inspection and survey effectively. Bypassed storm water will not be discharged to open ground, street or curb areas, unless approved by the EIC.

**Video Inspection:** The video camera used for inspection shall be one specifically designed and constructed for sewer inspection. Lighting for the camera shall be suitable to allow a clear picture for the entire periphery of the pipe. The camera shall be operative in 100% humidity conditions. Picture quality and definition shall be to the satisfaction of the Engineer. The camera shall be able to move through the sewer line in either direction at a uniform slow rate of about 0.5 feet per second.

The video recording shall be furnished on DVD or current technology of the day and shall be compatible for playback on a Windows 7 personal computer or newer as approved by the Engineer. The Contractor shall submit the video recordings and logs to the Engineer daily. Tapes must be of reasonable video clarity that is acceptable to the Engineer.

**CONSTRUCTION DETAILS:**

**De-watering:** De-watering shall be accomplished by the Contractor when pipe line flows are above the minimum requirements or inspection of the complete periphery of the pipe is necessary to conduct inspection operations effectively. De-watering techniques shall not include mopping, or any other technique resulting in a completely dry pipe.

**Video Inspection:** During the actual video inspection, a log shall be maintained by the Contractor's Operating Technician. This log will be a complete record of all structural defects, connections, abnormal conditions and other pertinent data observed, with the distance of each measured from a tether cable or other method acceptable to the Engineer. This log will be maintained on forms to be supplied by the Contractor.

The video recording shall be recorded such that the video inspection may be played back later. This recording shall have an audio channel, which will be used by the Operating Technician to record distance to each item noted in the log. The video recording and log will become the property of the owner.

The number of trips shall be as specified in the contract documents or as ordered by the Engineer.

**634.07060001 - VIDEO INSPECTION OF PIPE LINES****METHOD OF MEASUREMENT:**

This work will be measured as the length in linear feet of culvert or pipe or both satisfactorily televised. Measurement shall be the total length measured end to end along the invert of the culvert or pipe being inspected. For closed drainage systems, the length shall be determined by the measuring from inside wall surface to inside wall surface of adjacent manholes or other drainage structures.

**BASIS OF PAYMENT:**

The unit price bid per linear foot shall include the cost of furnishing all labor, equipment, instruments and material necessary to satisfactorily complete the work. No payment will be made for additional video inspection due to unacceptable portions of the video inspection.

**ITEM 635.04030225 - RECESS DIAMOND GRINDING FOR INLAID PAVEMENT MARKINGS****1. DESCRIPTION:**

- 1.01 This work shall consist of grinding bituminous or portland cement concrete pavement surfaces for recessing pavement markings.

**2. MATERIALS:**

- 2.01 None specified.

**3. EQUIPMENT:**

- 3.01 Grinding equipment shall have free-floating cutting heads to provide a consistent groove slot depth over irregular pavement surfaces. The cutting heads shall have diamond saw blades only; no other type will be permitted. Grinding equipment shall be capable of producing a final pavement surface that has perpendicular vertical sides and a smooth, flat bottom free of ridges.

**4. CONSTRUCTION DETAILS:**

- 4.01 The work required to grind pavement surfaces for inlaid pavement surfaces shall be performed in accordance with these specifications, the contract documents and to the satisfaction of the Engineer.
- 4.02 Areas receiving pavement markings shall be ground to a depth of 80± mils. The grinding width shall exceed the pavement marking width by a total of 1 inch.
- 4.03 Line segments in broken lines and dotted lines shall be ground to provide the ±80-mil depth along the entire specified length of the marking.
- 4.04 **Wet Saw Blade Operation.** If grinding is done with water, the groove shall be immediately flushed with high pressure water to avoid build-up and hardening of slurry. The pavement surface shall be dry prior to application of the pavement markings.
- 4.05 **Dry Saw Blade Operation.** If grinding is done with dry saw blades, dust and debris shall be immediately removed by vacuuming.
- 4.06 The pavement shall be returned to a debris-free condition prior to re-opening to traffic.
- 4.07 **Disposal of Material.** Millings and/or grinding slurry shall be removed and disposed as non-hazardous industrial waste according to Section 107-10.

**5. METHOD OF MEASUREMENT:**

- 5.01 Recess diamond grinding will be measured in feet along the centerline of the prepared surface and will be based on a 7-inch-wide groove (6-inch-wide stripe plus ½ inch each side).

**6. BASIS OF PAYMENT:**

- 6.01 The unit price bid shall include the cost of all labor, materials, and equipment necessary to complete the work. The cost of maintaining and protecting traffic during recess diamond grinding operations and cleaning and drying the grooved surfaces shall be included in the price bid.
- 6.02 No payment will be made for grinding beyond the specified length of the line segments in broken lines and dotted lines.

- ITEM 637.11---25 – ENGINEER’S FIELD OFFICE – TYPE 1**  
**ITEM 637.12---25 – ENGINEER’S FIELD OFFICE – TYPE 2**  
**ITEM 637.13---25 – ENGINEER’S FIELD OFFICE – TYPE 3**  
**ITEM 637.14---25 – ENGINEER’S FIELD OFFICE – TYPE 4**  
**ITEM 637.15---25 – ENGINEER’S FIELD OFFICE – TYPE 5**

1. **DESCRIPTION.** This work shall consist of providing, for the Engineer’s use a building, or a portion thereof, or a modular trailer of a specified type erected at a location approved by the Engineer. In addition, all computer hardware, software and internet communications described in this specification shall be provided for the duration of the contract.
2. **MATERIALS:**

- 2.01 **Engineer’s Field Office.** The Engineer’s Field Office shall be within a secured, weatherproof building or mobile trailer. If two (2) or more mobile trailer units are provided, they shall be joined with weatherproof connections. Mobile trailers shall be in new or like new condition. The Contractor may furnish equivalent facilities in an existing building, provided that the building is located to provide convenient service. The Contractor shall supply the Engineer with a copy of the Certificate of Occupancy for the existing building.

The Engineer’s Field Office shall be in accordance with the requirements of the New York State Uniform Fire Prevention and Building Code, 19 NYCRR, and any applicable local codes.

The Engineer’s Field Office shall be in a location with access to high-speed broadband (non-satellite) Internet service, as determined by the Engineer.

The electrical system shall be able to continuously operate all equipment and be provided with adequate receptacles. To accommodate computer equipment, the field office shall be provided with a dedicated 20 amp electrical service and a vacant floor-to-ceiling area with a 39 inch by 39 inch footprint along a wall for the installation of a computer hardware rack/cabinet. Electric light shall be provided by non-glare type luminaires to provide a minimum illumination level of 1,000 lux at desk-height level. An ambient air temperature of 70 °F ±10 °F shall be maintained.

Fire extinguishers and smoke and carbon monoxide detectors shall be provided and installed.

The Engineer’s Field Office shall be partitioned to provide separate rooms, defined as either “small” or “large”, with adjoining doors. Table 637-1 contains the minimum area requirements for each of the office types.

<b>TABLE 637-1 ENGINEER’S FIELD OFFICE AREA REQUIREMENTS</b>					
<b>Physical Requirement</b>	<b>Engineer’s Field Office Type</b>				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Min. total floor area (ft <sup>2</sup> )	540	860	1300	2475	2700
Min. number of small rooms	2	3	2	3	6
Min. floor area of each small room (ft <sup>2</sup> )	100	100	120	150	175
Min. number of large rooms	1	1	2	2	2
Min. floor area of each large room (ft <sup>2</sup> )	200	200	240	300	350

- A. **Potable Water.** From a local municipal water supply, certified well or bottled with a heating/refrigerator unit to provide hot and cold water. An exterior frost-free hose bib shall be



- ITEM 637.11---25 – ENGINEER’S FIELD OFFICE – TYPE 1**  
**ITEM 637.12---25 – ENGINEER’S FIELD OFFICE – TYPE 2**  
**ITEM 637.13---25 – ENGINEER’S FIELD OFFICE – TYPE 3**  
**ITEM 637.14---25 – ENGINEER’S FIELD OFFICE – TYPE 4**  
**ITEM 637.15---25 – ENGINEER’S FIELD OFFICE – TYPE 5**

provided in a location adjacent to the Engineer’s Field Office. The hose bib need not be installed on a potable water line, and if the water in the line is not potable, it shall be clearly marked as such.

- B. **Restroom.** A separately enclosed room, lockable from the inside, that is properly ventilated and in compliance with applicable sanitary codes. The Contractor shall provide all lavatory amenities, necessary paper and soap products, hot and cold running water and a toilet. The toilet shall be flush type where sanitary facilities are available, and a type approved by the Engineer prior to installation where sanitary facilities are not available. The minimum required number of restrooms to be provided is specified in Table 637-2.
- C. **Parking Area.** The Contractor shall provide and/or construct paved or hard surfaced (gravel or bankrun material) secure parking area with dedicated parking spaces adjacent to the Engineer’s Field Office. Each parking space shall be 9 feet by 18 feet, and the minimum required number of spaces to be provided is specified in Table 637-2.
- D. **Field Office Signs.** The sign panel material shall be aluminum, fiberglass, plywood or lightweight plastic. The sign sheeting shall be ASTM Type III. The sign panel shall be 36 inches high by 48 inches wide with white legend on green background with the phrases as positioned and described below. If erected at a location where the sign might be struck by an errant vehicle, the sign support shall be a breakaway type.

The letters in the phrase "FIELD OFFICE" shall be 6 inch C series with the top of the letters 6 inches below the top of the panel. The letters in the phrase "ENGINEER-IN-CHARGE" shall be 6 inch B series with the top of the letters 18 inches below the top of the panel. The letters in the phrase "N.Y.S. THRUWAY AUTHORITY" shall be 1½ inch E series with the top of the letters 30 inches below the top of the panel. All phrases shall be centered horizontally on the panel.

If the Engineer’s Field Office is not located within or adjacent to the contract limits, two (2) additional signs shall be displayed conspicuously within the contract limits. The signs shall be similar to the above description, except that they shall be 48 inches high by 64 inches wide and have an additional bottom line of text containing the street address of the Engineer’s Field Office. The letters in the street address shall be 6 inch B series with the top of the letters 36 inches below the top of the panel and centered horizontally on the panel.

- E. **Mailbox.** Standard mailbox (with post if necessary) or post office box meeting the requirements of the U.S. Postal Service.
- F. **Telephone and Answering System.** A separate telephone and digital answering system for the exclusive use of the inspection staff. The minimum required number of telephone voice lines to be provided is specified in Table 637-2 (these lines are in addition to the separate lines to be provided for the dial-up computer access if high speed internet access is not available where the field office is located, as determined by the Engineer). The telephone and answering system shall provide the ability to answer all voice lines from each voice line, transfer calls to all voice lines and be equipped with a single, dedicated answering system.

A minimum of one (1) telephone shall be cordless and a minimum of one (1) telephone shall be equipped with speaker and conference call capability. The remaining telephones, at least one (1) per required voice line, shall be extension telephones with minimum 25 foot long cords. The digital answering system shall be capable of recording outgoing messages up to 60 seconds long and

- ITEM 637.11----25 – ENGINEER’S FIELD OFFICE – TYPE 1**  
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receiving a minimum of 40 incoming messages of 60 seconds duration. The system must include automated voice marking of time and day of each message received and provide a message mark so that new messages may be played back without erasing old messages. The system shall include remote programming of playback, backspace, and outgoing message re-record and allow for the retrieval of messages without a remote control unit.

- G. **Photocopier.** Heavy duty, electric, dry-process photocopying machine. The machine shall be an all-in-one copy machine with black & white and color copying, black & white and color printing and black & white and color scanning capabilities. Machine shall have at least three paper bins (8½ x 11 inches, 8½ x 14 inches and 11 x 17 inches), enlarging and reducing capabilities, and collating, sorting stapling and double-sided copying. Set-up, printer drivers, software and networking are required. All on-site staff email addresses shall be set up and programmed for ease of scanning. Maintenance shall be provided, as required, including repairs and all necessary toner cartridges and staples for the life of the contract and until final completion. One (1) case (5,000 sheets, 20 lb, white) of each paper size shall be provided as initial stock.
- H. **Paper Shredder.** Automatic start, heavy duty cross-cut paper shredder. The shredder shall be able to receive 8½ inch wide paper and shred a minimum of 15 sheets simultaneously along with CDs and staples.
- I. **Pencil Sharpener.** Manual or electric pencil sharpener, minimum of 1, throughout duration of the project.
- J. **Interior Bulletin Board.** An installed, wall-mounted 4 foot by 6 foot bulletin board made of cork or similar material in a large room, and one (1) 2 foot by 4 foot wall mounted bulletin board installed per room.
- K. **Dry Erase Board.** Installed, wall-mounted 2 foot by 4 foot dry erase boards, minimum one (1) per room.
- L. **Storage Locker.** Metal or wood storage locker with shelves, a tumbler lock and two (2) keys for the storage of survey, GPS and testing equipment. The total locker space footprint provided shall be a minimum of 9 square feet with a minimum height of 6 feet.
- M. **Fire Resistant Cabinet.** Fire resistant, legal size filing cabinet with locks and two (2) keys each, meeting the requirements of ANSI/UL Standard 72 for Insulated Filing Devices, Class 350-1 hour. Each office shall be provided with two (2) 2-drawer cabinets, and the required number of additional 4-drawer cabinets as specified in Table 637-2.
- N. **Bookcase.** Self-standing, 3-shelf metal or wood bookcase, approximately 4 feet high, 4 feet wide and 1 foot deep. The minimum required number of bookcases to be provided is specified in Table 637-2.
- O. **Wastebasket.** Minimum 7 gallon wastebasket, minimum one (1) per desk.
- P. **Refrigerator.** Electric, top-freezer type providing a minimum storage space of 15 cubic feet for Engineer’s Field Office Types 1 and 2, and a minimum storage space of 21 cubic feet for Types 3, 4 and 5.

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- Q. **Kitchenette.** To include a minimum 1 cubic foot, 1,300 watt microwave oven, a sink with hot and cold running water with minimum dimensions of 15 inch by 15 inch by 6 inch deep, usable counter space with minimum dimensions of 5 feet long by 2 feet deep and cabinet space with minimum dimensions of 5 feet long by 1½ feet deep by 2½ feet high. If the water in the sink is not potable, it shall be clearly marked as such.
- R. **First Aid Kit.** A Type III kit in accordance with ANSI Z308.1 *Minimum Requirements for Workplace First Aid Kits*. The minimum number of first aid kits to be provided is specified in Table 637-2.
- S. **Thermometer.** A minimum-maximum thermometer displaying in degrees Fahrenheit and mounted with an external probe to give the temperature both indoors and outdoors.
- T. **Coat Rack.** A metal or wood coat rack or closet capable of holding at least 4 coats. The minimum required number of coat racks to be provided is specified in Table 637-2. A single coat rack may be provided as long as it holds the minimum number of coats as per Table 637-2.
- U. **Office Desk and Chair.** Fully assembled freestanding office desks and chairs. Each desk shall have a 5 foot long by 2½ foot wide work surface and a height of 30 inches, at least 2 lockable drawers and include an adjustable shelf approximately 1 foot wide and no less than 2½ feet long. Each desk shall also be provided with an adjustable chair with arms, 5 legs with casters and be adjustable from approximately 16 inches to 24 inches in height. Each desk shall have a dedicated electrical outlet receptacle. The required number of office desks and chairs to be provided is specified in Table 637-2.

<b>TABLE 637-2 ENGINEER’S FIELD OFFICE FURNISHING REQUIREMENTS</b>					
<b>Furnishing Description</b>	<b>Required Number per Engineer’s Field Office Type</b>				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Restrooms	1	1	2	2	3
Parking Spaces	6	8	12	18	22
Telephone Voice Lines	2	3	4	4	5
Telephone Line for Computers (when high speed internet is unavailable)	1	1	1	1	1
Fire Resistant Cabinets (4-drawer)	2	3	4	6	8
Bookcases	5	7	10	12	16
First Aid Kits	1	1	1	2	2
Coat Racks	1	2	3	4	5
Office Desks and Chairs	4	8	12	18	22
Office/Conference Tables	2	2	3	4	5
Folding Chairs	8	10	10	12	15
Flatbed Scanner	1	1	1	1	1
Personal Computer (Hardware and Software)	2	4	6	8	8
LaserJet printer	1	2	3	3	3
Additional Software	1	1	2	2	3

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V. **Office/Conference Table.** Commercial-grade rectangular table with weather/spill resistant top a minimum of 8 feet long by 2½ feet wide by 30 inches high. The minimum required number of office/conference tables to be provided is specified in Table 637-2.

W. **Folding Chair.** Commercial-grade, folding steel chair with approximate overall dimensions of 30 inches by 19 inches wide by 21 inches deep. The minimum required number of folding chairs to be provided is specified in Table 637-2.

2.02 **Information Technology.** The minimum required number of personal computers to be provided is specified in Table 637-2. The minimum requirements for each personal computer are:

A. **Hardware** (Note: Information in yellow highlight below has been updated from previous version of special specification.)

- CPU to operate Windows 10 for Business (64-bit edition) and all other software listed in this specification;
- Optical Drive – CD-RW/DVD-RW;
- 1 TB (terabyte) minimum hard drive;
- 8 GB (gigabytes) minimum RAM;
- USB Port(s);
- 24” LCD monitor (1920 x 1080 resolution minimum);
- One (1) 1 TB (terabyte) External Hard Drive;
- Locking cabinet(s) which encloses all computer hardware;
- Surge protection device;
- External 3 button optical scroll mouse;
- External Speakers;
- Modem with separate phone line for computer (if high speed internet service is unavailable, as determined by the Engineer), (minimum 56K baud rate).
- USB Microphone and web camera for online tele-conferencing.

B. **Software.** Substitutions for the specified software shall not be permitted unless noted otherwise. All manuals shall be provided.

- Windows 10 for Business (64-bit edition);
- Microsoft Word (2016 version or later);
- Microsoft Excel (2016 version or later);
- 7-ZIP;
- Norton Internet Security (latest version for Windows 10) set up to run in Auto-Protect Mode and Auto Update Mode (monthly), or McAfee Internet Security Suite (latest version);

Note: Microsoft Office 2016 Standard Edition, or later version, may be used in lieu of Word 2016 and Excel 2016.

C. **Additional Software.** The following software shall also be provided on the number of personal computers specified in Table 637-2:

- Microsoft Photo Editor (latest version);

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- Adobe Acrobat XI Professional (latest version);

**D. Internet Communication.**

- **Cable Internet Service.** 10/100 Ethernet cable network card and high-speed cable modem capable of transferring data at a minimum of 50 megabits per second;
- Subscription to an Internet Service Provider capable of providing high-speed Internet service;
- Network/Wireless – Ethernet or wireless card to be compatible with the selected internet and office network connections.

3. **CONSTRUCTION DETAILS.** The Contractor shall be responsible, until use and occupancy is relinquished by the Authority, for any and all damage, direct or indirect, of whatever nature, occurring to the property of the Authority and property of the inspection staff which is kept in the Engineer's Field Office. The Engineer will provide the Contractor with a detailed list of items kept in the office, with corresponding dollar values, and will provide the Contractor with updates when something on the list changes. Non-Authority-owned property shall only be those items used in the performance of contract-related work activities. Such property shall be replaced within 30 days of the reported damages and would include any loss caused by, but not limited to, fire, theft, vandalism or malicious mischief. The Contractor shall not be responsible for items kept in the Engineer's Field Office that are not on this list.

The Contractor shall install the Engineer’s Field Office sign at a location approved by the Engineer. If the Engineer’s Field Office is not located within or adjacent to the contract limits, two (2) additional signs shall be displayed conspicuously within the contract limits in locations directed by the Engineer.

The Engineer’s Field Office shall be fully equipped and made available for use and occupancy by the inspection staff prior to the start of any contract work, and shall be made available after contract final acceptance as directed in writing by the Division Construction Engineer.

All furniture and equipment shall be fully assembled, operational, clean and serviceable. The Engineer’s Field Office shall be cleaned weekly or more often if required, and the timing of the cleaning operations shall be coordinated with the Engineer. The Contractor shall remove and dispose of all rubbish generated in the office and shall keep the office free from pests. The Contractor shall remove snow from all areas subject to vehicular circulation and parking.

After completion, all portable buildings or trailers, fencing, surfacing and utilities shall be removed from the location and the areas cleaned, loamed and restored as required. The Contractor shall be responsible for providing all necessary computer hardware, software and peripheral devices as well as high-speed Internet service to the Engineer’s Field Office until use and occupancy of the Engineer’s Field Office is relinquished by the Authority. Only internet services that can provide a minimum data transfer rate of 50 megabits per second will be considered acceptable. The Contractor shall be responsible for providing all necessary service connections to the Engineer’s Field Office and Engineer’s Field Office computer(s). In addition, the Contractor shall provide a cable or DSL modem and any other equipment necessary to provide the minimum specified data transfer rate.

4. **METHOD OF MEASUREMENT.** The Engineer’s Field Office will be measured for payment as the number of months satisfactorily provided, measured to the nearest 0.25 months.

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5. **BASIS OF PAYMENT.** The unit price bid per month for the Engineer’s Field Office shall include the cost of all labor, materials and equipment necessary to complete the work including property rental, utility charges and incidental expenses. Payment will be made for each month of availability for occupancy by the Engineer and inspection field staff.

No payment will be made under Engineer's Field Office when deficiencies in compliance with these requirements are not promptly addressed by the Contractor after notification by the Engineer. Should the aggregate of non-compliance days exceed 3 days in any one month, no payment shall be made for the entire month in which deficiencies were cited.

Monthly payments may be terminated prior to contract final acceptance by written notification by the Division Construction Engineer that such office will no longer be required on the contract. Payment for each month's occupancy of the Engineer’s Field Office after the date of contract final acceptance will be made as part of the final contract payment. Failure of the Contractor to supply documentation required to complete the final estimate may result in nonpayment during this delaying period.

During periods of contract extension of time where Engineering Charges are assessed, no payment will be made for occupancy and services, except that payment for each month's occupancy after the date of final acceptance will be made as part of the final estimate.

**ITEM 644.7038nn25 – MONOPIPE OVERHEAD CANTILEVER SIGN STRUCTURE**

**ITEM 644.7080nn25 – MONOPIPE OVERHEAD SPAN SIGN STRUCTURE (Up to 80 feet)**

**ITEM 644.7120nn25 – MONOPIPE OVERHEAD SPAN SIGN STRUCTURE (81 feet to 120 feet)**

**ITEM 644.7160nn25 – MONOPIPE OVERHEAD SPAN SIGN STRUCTURE (121 feet to 160 feet)**

**1. DESCRIPTION:**

- 1.01 This work shall consist of fabricating, delivering, and erecting monopipe sign structure(s) for overhead signs in accordance with the Contract Plans and in a manner satisfactory to the Engineer.

**2. MATERIALS:**

- 2.01 **Structural Steel.** Structural Steel for sign structures shall be as specified in the Contract Plans and meet the requirements of the New York State Steel Construction Manual.
- 2.02 All steel material greater than ½ inch thick shall meet the Charpy V-Notch toughness requirements of §715-01, Structural Steel.
- 2.03 **Galvanizing of Steel Components.** Galvanizing of steel components shall be after fabrication in accordance with ASTM A123, *Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products*.
- 2.04 **Steel Hardware.** Material for steel hardware shall be as specified in the Contract Plans.
- 2.05 **Galvanizing of Steel Hardware.** Galvanizing of steel hardware (high strength steel bolts, nuts, & washers, and U-Bolts shall be in accordance with §644-2, Materials.

**3. CONSTRUCTION DETAILS:**

- 3.01 Construction shall be performed in accordance with the Contract Plans, the requirements of §644-3, Construction, and the New York State Steel Construction Manual.

**4. METHOD OF MEASUREMENT:**

- 4.01 The work will be measured as the number of linear feet of sign structure completely installed, measured horizontally to the limits as indicated on the Contract Plans.

**5. BASIS OF PAYMENT:**

- 5.01 The unit price bid per foot shall include all labor, materials, and equipment necessary to complete the work. Foundations and anchor bolts shall be paid for under separate pay items in the contract.

<u>ITEM 646.0603--25 -</u>	<u>INSTALL DELINEATOR OR TENTH MILE MARKER ON POST</u>
<u>ITEM 646.0604--25 -</u>	<u>INSTALL DELINEATOR OR TENTH MILE MARKER, BACK-TO-BACK ON POST</u>
<u>ITEM 646.0610--25 -</u>	<u>INSTALL DELINEATOR OR TENTH MILE MARKER, BAND OR BRACKET MOUNTED</u>
<u>ITEM 646.0612--25 -</u>	<u>INSTALL DELINEATOR OR TENTH MILE MARKER, BACK-TO-BACK, BAND OR BRACKET MOUNTED</u>
<u>ITEM 646.0801--25 -</u>	<u>INSTALL SNOWPLOW MARKER, SINGLE UNIT</u>
<u>ITEM 646.0802--25 -</u>	<u>INSTALL SNOWPLOW MARKER, DOUBLE UNIT</u>

1. **DESCRIPTION:**

- 1.01 The work shall consist of furnishing and installing delineator and/or snowplow marker posts, bands, brackets and all necessary hardware for mounting delineators or snowplow markers as shown on the plans.

2. **MATERIALS:**

- 2.01 The posts shall conform to the requirements of Section 646-2 of the Standard Specifications and as shown on the plans.

3. **CONSTRUCTION DETAILS:**

- 3.01 The Contractor shall install the delineators or snowplow markers in accordance with Section 646-3 of the Standard Specifications and as shown on the plans.

4. **METHOD OF MEASUREMENT:**

- 4.01 The work shall be measured as the number of complete delineators or snowplow markers installed.

5. **BASIS OF PAYMENT:**

- 5.01 The unit price bid for each delineator or snowplow marker shall include the cost of all equipment, labor and materials including posts, bands, brackets and hardware necessary to satisfactorily mount and install the delineator or snowplow marker. Also included is the cost to pick up the delineator or snowplow marker panels from the Authority.



**ITEM 646.0626--25 - INSTALL MILE MARKERS****1. DESCRIPTION:**

1.01 The work shall consist of furnishing and installing mile marker posts and hardware for mounting mile markers as shown on the plans. The mile marker panels will be furnished to the Contractor by the Authority.

**2. MATERIALS:**

2.01 The posts shall conform to the requirements of Section 646-2 of the Standard Specifications.

**3. CONSTRUCTION DETAILS:**

3.01 The Contractor shall install the posts in accordance with Section 646-3 of the Standard Specifications at locations shown on the plans and as directed by the Engineer.

**4. METHOD OF MEASUREMENT:**

4.01 The work shall be measured on an each basis for installation of the markers.

**5. BASIS OF PAYMENT:**

5.01 The unit bid price for each mile marker installed shall include the cost of all equipment, labor, and materials including posts and mounting hardware necessary to mount the panel and install the marker. Also included is the cost to pick up the marker panels from the Authority.

**ITEM 646.50----25 - REMOVE AND DISPOSE DELINEATORS AND MARKERS****1. DESCRIPTION:**

1.01 This work shall consist of removing and disposing delineators, mile markers, tenth-mile markers and snowplow markers, including posts, in accordance with the contract documents and as directed by the Engineer.

**2. MATERIALS:**

2.01 None specified.

**3. CONSTRUCTION DETAILS:**

3.01 The Contractor shall remove and dispose delineators, mile markers, tenth-mile markers and snowplow markers, including posts, in a manner satisfactory to the Engineer.

**4. METHOD OF MEASUREMENT:**

4.01 The quantity to be measured for payment will be the number of delineators and/or markers removed and disposed.

**5. BASIS OF PAYMENT:**

5.01 The unit price bid for removal and disposal of each delineator and/or mile marker shall include the cost of all labor and equipment necessary to complete the work.

**ITEM 647.25000004 – REMOVE AND DISPOSE OF BRIDGE – MOUNTED SIGN  
PANEL, SIGN PANEL ASSEMBLY**

**DESCRIPTION**

This work shall consist of removing and disposing of individual bridge-mounted sign panels and sign panel assemblies.

**MATERIALS**

No materials required.

**CONSTRUCTION DETAILS**

Existing bridge-mounted sign panels and sign panel assemblies shall be removed in accordance with the contract documents. All stringers, vertical brackets and hardware (other than sign supports) used solely for the support of the designated sign panels shall be carefully removed to prevent damage to the bridge or bridge mounted sign supports. Any damage shall be repaired or the damaged part(s) replaced to the satisfaction of the Engineer at the Contractor's expense.

The bridge-mounted sign panels, sign panel assemblies and hardware shall become the property of the Contractor and shall be removed from the work site.

**METHOD OF MEASUREMENT**

The work will be measured as the number of bridge-mounted sign panels, sign panel assemblies removed and disposed from bridge-mounted sign supports that will not be removed.

**BASIS OF PAYMENT**

The unit price bid for each bridge-mounted sign panels and sign panel assemblies removed and disposed shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

**ITEM 649.2599--25 - MILLED-IN AUDIBLE ROADWAY DELINEATOR (MIARD) REMOVAL BY COLD MILLING**

**1. DESCRIPTION:**

1.01 Under this item, the Contractor shall remove the existing Milled-In Audible Roadway Delineators depression pattern (MIARDs) in the shoulder adjacent to the edge of pavement. Work shall consist of cold milling and replacing the milled area with asphalt pavement to the same elevation as the adjacent pavement and shoulders in locations shown in the plans or as directed by the Engineer.

**2. MATERIALS:**

2.01 Asphalt pavement shall meet the material requirements of Section 404 of the Standard Specifications for a truing and leveling course asphalt pavement.

2.02 Tack coat shall meet the material requirements of Section 407 of the Standard Specifications.

2.03 Cold milling shall meet the material requirements of Section 490 of the Standard Specifications.

**3. CONSTRUCTION DETAILS:**

3.01 Cold milling shall be in accordance with the requirements of Section 490-3, Construction Details, of the Standard Specifications. Milling width shall be the Contractor's option but shall be of sufficient width to completely remove the "MIARDs" depression patterns in one pass of the milling machine. Refer to Standard Sheet 649-02 for standard width of existing MIARDs and offset from edge of traveled way. Depth of milling shall be a minimum of 1 1/2" deep unless otherwise noted in the plans.

3.02 After milling and cleaning operations are completed, the Contractor shall apply straight tack coat to the milled area at a rate of 0.05 – 0.06 gallons per square yard of milled surface. The area shall then be paved with asphalt truing and leveling course to the same elevation as the adjacent pavement and shoulder areas.

3.03 The Contractor shall use care during removal operations and tack coat application so as not to damage any traffic marking lines adjacent to the work site. Any damage to traffic lines to remain shall be repaired at the Contractor's expense.

**4. METHOD OF MEASUREMENT:**

4.01 The quantity shall be measured on a linear foot basis, measured parallel to the edge of pavement, for the entire length of milling required by contract or as directed by the Engineer, to remove and replace the MIARDs depression with asphalt pavement.

**5. BASIS OF PAYMENT:**

5.01 The unit price bid per linear foot of "MIARDs" removal and replacement shall include the cost of furnishing all labor, equipment and materials necessary to complete the work.

5.02 Included in the price bid shall be the milling, cleaning, tack coat application, and placement of the asphalt truing and leveling course.

**ITEM 654.51xx0015 MASH-COMPLIANT REUSEABLE IMPACT ATTENUATOR****DESCRIPTION**

This work shall consist of furnishing and installing MASH-Compliant Reusable Impact Attenuators, including the manufacturer's recommended transition to the shielded feature or barrier system(s), in accordance with the contract drawings and as directed by the Engineer.

**MATERIALS**

Reusable Impact Attenuator components shall meet the following requirements:

- Impact attenuators that use liquid or other materials as a filler or to provide ballast will be evaluated for potential environmental impacts and/or seasonal limitations. Impact attenuators will be approved for use in shielding an object of a maximum width as specified in the Approved List, and specific configurations may be approved for maximum speeds.
- Covers shall be provided by the manufacturer for all units where ingress of debris from the top will result in deterioration of performance.
- Metal parts shall be fabricated from M1020 Merchant Quality or ASTM A36M steel.
- All Galvanization shall be in accordance with §719-01 *Galvanized Coatings and Repair Methods, Type I*.
- All welding shall be performed by AWS D1.1 certified welders.
- Manufacturer shall design and provide the appropriate transition to the shielded feature.

MASH-Compliant Reusable Impact Attenuators shall be manufactured by:

<b>Manufacturer's Name</b>	<b>Products</b>
Work Area Protection Corp. St. Charles, IL	SCI-100GM (TL-3) SCI-70GM (TL-2)

**BASIS OF APPROVAL**

Impact attenuator systems shall have successfully passed MASH tests 3-30 through 3-37 to be accepted as TL-3 devices. TL-3 devices are acceptable for TL-3 and TL-2.

Impact attenuation systems that will only be used as TL-2 devices shall have successfully passed MASH tests 2-30 through 2-37 or the corresponding TL-3 tests. Impact attenuators meeting only the requirements of MASH TL-2 are acceptable only as TL-2 devices.

Manufacturers or material suppliers desiring to have impact attenuators approved shall prepare and submit copies of Materials Details, specifications, test reports, and Federal acceptance letters, to the Director of the Design Quality Assurance Bureau. The review process requires a minimum of 45 calendar days.

As a condition for approval as a reusable attenuator, Manufacturer shall certify and provide factual data showing that the maximum (materials only) present-day cost for the repair needs incurred, during any one of the MASH crash tests listed above, will not exceed a maximum material cost per incident of \$1000. The time required for the average repair shall not exceed 4 person-hours, exclusive of work zone traffic control. In some circumstances, the Director may accept an In-Service Evaluation Report conforming to the guidelines of MASH Chapter 7 in lieu of the standard crash test costs. Such a report shall include contact information from the originating agency(ies). Additionally, the manufacturer shall describe the system that the attenuator has been designed to connect to and certify that the transition provided is appropriate for making that connection.

**ITEM 654.51xx0015 MASH-COMPLIANT REUSEABLE IMPACT ATTENUATOR**

The Department reserves the right to withdraw approval of an item as “reusable” if the in-service repair costs regularly exceed the posted maximum.

**BASIS OF ACCEPTANCE**

MASH-Compliant Reusable Impact Attenuators will be accepted at the contract site based the manufacturer’s name and product appearing in the above table, conformance to the approved Materials Details, and the manufacturer’s certification that the product and transition delivered is in conformance with these specifications. Additionally, the manufacturer shall certify that the transition provided is appropriate for making that connection.

**CONSTRUCTION DETAILS**

All provisions of 654-3 *Construction Details* shall apply except as modified in this specification.

**METHOD OF MEASUREMENT**

This work will be measured as the number of MASH-Compliant Reusable Impact Attenuators satisfactorily furnished and installed.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work, including the cost of designing, providing, and installing the manufacturer’s recommended transition to the shielded feature.

***Payment will be made under:***

<b>Item Number</b>	<b>Description</b>	<b>Pay Unit</b>
654.51200015	MASH-Compliant Reusable Impact Attenuator, TL 2, ≤ 2 ft obstruction width	Each
654.51220015	MASH-Compliant Reusable Impact Attenuator, TL 2, > 2 ft obstruction width ≤ 5ft	Each
654.51250015	MASH-Compliant Reusable Impact Attenuator, TL 2, > 5 ft obstruction width	Each
654.51300015	MASH-Compliant Reusable Impact Attenuator, TL 3, ≤ 2 ft obstruction width	Each
654.51320015	MASH-Compliant Reusable Impact Attenuator, TL 3, > 2 ft obstruction width ≤ 5ft	Each
654.51350015	MASH-Compliant Reusable Impact Attenuator, TL 3, > 5 ft obstruction width	Each

**ITEM 670.40230008 - SERVICE CABINET****DESCRIPTION:**

This work shall consist of furnishing a service cabinet as shown in the contract documents.

**MATERIALS:**

Cabinet shall be cast aluminum alloy 356 with door fully gasketed and mounted with internal stainless steel hinges, equipped with three point latch lock to provide a maximum tamper proof assembly. Electrical components shall be mounted on an internal mounting board of 3/4 inch exterior grade plywood. Electrical devices and service equipment shall conform to the ratings and sizes detailed in the contract documents.

**CONSTRUCTION DETAILS:**

The service cabinet shall be installed as shown in the contract documents.

**METHOD OF MEASUREMENT:**

This work will be measured as the number of service cabinets acceptably provided and installed.

**BASIS OF PAYMENT:**

The unit price bid shall cover the cost of furnishing and installing the cabinet, circuit breakers, contactor, panel, switches, grounding, heaters and all equipment, labor and materials necessary to complete the work including all internal wire and wiring and connections and components.

**ITEM 670.5075 --25 – LUMINAIRE – LED TYPE-HIGHWAY****1. DESCRIPTION:**

- 1.01 This work shall consist of all labor, materials, tools and equipment for furnishing and installing Light Emitting Diode (LED) luminaires in accordance with the Contract Documents and as directed by the Engineer.

**2. MATERIALS:**

- 2.01 The luminaire shall be Philips Gardco Pureform Models P21 and P32 as indicated on the lighting plans or approved equal (OAE) with mounting hardware to be permanently mounted as a pole-top fixture for roadway or parking lighting applications, as required. Luminaires shall carry a 5-year warranty on the luminaire, light engine and driver(s).
- 2.02 Luminaire Construction:
- A. Housing shall be die-cast aluminum, ready to mount directly to pole with all necessary options and hardware required for a complete installation. Color shall be painted textured grey and shall be an electrostatically applied, thermally cured polyester powdercoat that is fade and abrasion resistant. Luminaires shall be 3G vibration rated in all three axes, conforming to ANSI C136.31.
- 2.03 Optics:
- A. The luminaire shall be solid state (LED) with a Type II or Type IV full-cutoff asymmetrical distribution with backspill control, specific type as specified per location on lighting plans. The color temperature shall be 4000 degrees K with a minimum CRI of 70.
- 2.04 Electrical:
- A. LED drivers mounted to die-cast aluminum back casting for optimal heat sinking and operation efficiency shall be utilized. Operating range shall be 120-277V 50/60Hz. Circuit module shall be designed to withstand 10kV of transient line surge. The luminaire shall be suitable for operation in -30 degrees C to 40 degrees C ambient environments. Light engines and fixture shall be rated IP66 at a minimum. Minimum expected service life shall be 50,000 hours at >70% lumen maintenance. Luminaires shall be UL rated for wet locations.

**3. CONSTRUCTION DETAILS:**

- 3.01 The provisions of Subsections 670-3.01, 670-3.02 and 670-3.10 of the NYSDOT Standard Specifications shall apply.

**4. METHOD OF MEASUREMENT:**

- 4.01 Measurement will be per each luminaire of the type and wattage specified furnished and installed in accordance with the Contract Documents or as ordered by the Engineer.

**5. BASIS OF PAYMENT:**

- 5.01 The price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work described, including all incidentals.



**ITEM 670.94120004 – REMOVE AND DISPOSE OF EXISTING CABLE IN CONDUIT****DESCRIPTION**

This work shall consist of removing and disposing existing cable from existing conduits in anticipation of conduit abandonment.

**MATERIALS**

None specified.

**CONSTRUCTION DETAILS**

Abandoned cables (any type) shall be removed from conduits and pull boxes as shown in the contract documents. Method of removal is not specified. Any damage caused by cable removal to any system components to remain shall be repaired at no additional cost to the State.

**METHOD OF MEASUREMENT**

This work will be measured as the number linear feet of conduit with cables removed. Payment made once regardless of the number of cables in the conduit. Multiple parallel conduit runs will be measured separately.

**BASIS OF PAYMENT**

The unit price bid shall include the cost of all labor, equipment, and materials necessary to complete the work. No additional payment will be made for excess cable removed that is looped in the pull box. Payment for removal of pull boxes, if so indicated, will be made under a separate item.

- ITEM 680.52080225 - ¾ NPS CONDUIT, FLEXIBLE, LIQUIDTIGHT PVC  
ITEM 680.52080325 - 1 NPS CONDUIT, FLEXIBLE, LIQUIDTIGHT PVC  
ITEM 680.52080525 - 1 ½ NPS CONDUIT, FLEXIBLE, LIQUIDTIGHT PVC  
ITEM 680.52080625 - 2 NPS CONDUIT, FLEXIBLE, LIQUIDTIGHT PVC

**1. DESCRIPTION:**

- 1.01 This work shall consist of furnishing and installing new flexible, liquidtight PVC conduit as indicated on the Plans or as directed by the Engineer.

**2. MATERIALS:**

- 2.01 Flexible, liquidtight PVC conduit shall meet the National Electrical Code, Article 356, Type LFNC-B.
- 2.02 Conduit shall be Carflex Liquidtight conduit, Ultratite Type NM, Thomas & Betts, Liguatite Type-NM, Ameritite, or an approved equal.
- 2.03 Fittings shall be liquidtight. One piece PVC fittings are prohibited.

**3. CONSTRUCTION DETAILS:**

- 3.01 All of the provisions of Section 680-3.13 of the NYS Standard Specifications shall apply.

**4. METHOD OF MEASUREMENT:**

- 4.01 This work shall be measured as the number of linear feet of conduit installed in accordance with the Plans, specifications and/or A.O.B.E. Measurement shall be along the centerline of the conduit.

**5. BASIS OF PAYMENT:**

- 5.01 The unit price bid for each foot of conduit installed shall include the cost of all labor, material (including fittings) and equipment necessary to complete the work.
- 5.02 Excavation and backfill for buried conduit shall be paid for under Item 206.03.

**ITEM 680.5840--25 – PREFORMED INDUCTANCE LOOP DETECTOR (CUT-IN APPLICATION) INSTALLATION**

**1. DESCRIPTION:**

- 1.01 This work shall consist of furnishing and installing a preformed inductance loop detector at the locations shown in the contract plans or as ordered by the Engineer.

**2. MATERIALS:**

- 2.01 The preformed inductance loop detector supplied for this work shall be one of the following:

A. Never-Fail Loop Detector, Model F:

Manufactured by:

Never-Fail Loop Systems, Inc.  
5300 SE Johnson Creek Blvd., Bldg. A  
Milwaukie, OR 97222  
(503) 408-9248  
[www.nfloops.com](http://www.nfloops.com)

Distributed by:

ACT Traffic Solutions, Inc.  
23585 Yellowstone Trail  
Shorewood, MN 55331  
[www.acttrafficsolutions.com](http://www.acttrafficsolutions.com)

B. Patriot Detection, Model CG9.5MM:

Manufactured by:

Patriot-Detection, LLC  
P.O. Box 1879  
Pflugerville, TX 78691  
(512) 846-1387  
[www.patriotdetection.com](http://www.patriotdetection.com)

Or equal as approved by the NYS Thruway Authority.

The Contractor shall notify the Engineer of the name and address of the manufacturer according to Section 106-01 *Sources of Supply*.

- 2.02 The specific components used in construction of new preformed loop detectors shall meet the following requirements:
- A. Only 3/8-inch trade size schedule 80 polypropylene conduit having a maximum outside diameter of 11/16 inch shall be used for the loop portion of the detector.
- B. Only 3/8-inch trade size rated Nylon-polypropylene flex hose shall be used to connect the loop to the conduit, first pullbox or equipment cabinet.

**ITEM 680.5840--25 – PREFORMED INDUCTANCE LOOP DETECTOR (CUT-IN APPLICATION) INSTALLATION**

- C. The detector wire shall be 16-gauge TFFN or THHN stranded, single conductor wire with PVC insulation and nylon exterior jacket. Loops shall have 5 turns of wire or as shown on Plans.
- D. The filler/sealant used within the loop conduit shall be an asphalt-rubber type.

**3. CONSTRUCTION DETAILS:**

- 3.01 Each loop shall be constructed at the factory to the dimensions and configuration as shown on the plans. The loop wire and lead-in cable shall be constructed from a continuous length of wire.
- 3.02 The wire ends shall be protected at their ends to prevent moisture and non-compressibles from reaching encased wires. Such materials shall be UL approved shrink tube of acceptable size. Silicone or similar sealing compounds should be used to achieve moisture protection.
- 3.03 The preformed inductance loop detector shall be composed of detector wire encased in a polypropylene conduit internally filled and sealed to prevent the vibration of wires within the conduit. The sealing material shall allow the wire to move transversely over long-time periods to help relieve thermal and pavement shift stress that may be placed on the system. The sealant shall adhere to both the wire and the conduit.
- 3.04 The preformed inductance loop detector conduit and fittings shall be constructed as to allow a minimum variation of  $\pm 1\%$ . The internal construction of the fittings and joints shall allow no water to penetrate into the conduit or to reach any part of the wire insulation. Conduit fittings shall be made fast with glue approved by the manufacturer of the preformed loop.
- 3.05 The loop lead-in wires (home run) extending from the loop portion of the detector to the connection point shall be twisted together at a rate of three turns per foot. The lead-in wire shall be routed through a flexible Nylon-polypropylene flex hose from the preformed loop to rigid conduit. The flex hose shall be filled with the same filler/sealer used in the preformed loop.
- 3.06 The conduit, fittings and sealant shall protect the twisted pair wire in the same manner against water intrusion and mechanical damage as the conduit encasing the wires of the loop portion of the detector.
- 3.07 Prior to placing final pavement, the preformed loop shall be installed in the proper location and depth as shown on the Plans or A.O.B.E. The loops shall be connected to the rigid conduit and the twisted wire pair is to be pulled through to the pullbox.
- 3.08 Wire splices shall only be permitted within the pullbox or equipment cabinet. Splices shall be made according to Section 680-3.26.
- 3.09 The resistance of the installed loop shall be tested before the final pavement is placed and after the splice is made between the loop wires (twisted pair) and shielded lead-in. Resistance to ground shall be tested according to the Insulation Resistance Test in Section 680-3.32, except as noted in this specification. This test shall be repeated 24 hours or more after the concrete is placed for the pavement.

**4. METHOD OF MEASUREMENT:**

- 4.01 Work will be measured as the number of preformed inductance loop detectors furnished, assembled and installed according to the contract documents or as ordered by the Engineer.

**ITEM 680.5840--25 – PREFORMED INDUCTANCE LOOP DETECTOR (CUT-IN APPLICATION) INSTALLATION**

**5. BASIS OF PAYMENT:**

- 5.01 The requirements of Section 680-5.01 *General* shall apply. The unit price bid for each installation shall include all materials, equipment, labor and supplies required to complete the installation as detailed in this specification. The unit price shall include the loop detector portion and the home-run portion of the detector extending from the loop detector portion to the point of termination.

**ITEM 680.77000001 - MODIFY TRAFFIC SIGNAL EQUIPMENT**  
**ITEM 680.78000001 - MODIFY AND REMOVE TRAFFIC SIGNAL EQUIPMENT**  
**ITEM 680.79000001 - REMOVE TRAFFIC SIGNAL EQUIPMENT**

**DESCRIPTION:**

Under these items the contractor shall modify and/or remove traffic signal equipment at the locations shown and as detailed on the contract plans or as ordered by the Engineer.

**MATERIALS:**

The materials used in this work shall meet the requirements of Subsection 680-2, "Materials" of the Standard Specifications.

**CONSTRUCTION DETAILS:**

Where shown on the contract plans or specified by the Engineer, traffic signal equipment shall be either modified or removed and disposed of as specified in the contract documents.

Care shall be exercised in removing and salvaging electrical equipment so that it will remain in its original form and existing conditions whenever possible. The contractor will be required to replace, at his expense, any traffic signal equipment which is determined by the Engineer to have been damaged or destroyed by reason of the contractors operations.

Existing material required to be relocated and found to be unsatisfactory by the Engineer shall be replaced by new material and the cost, therefore, will be paid for as extra work.

**METHOD OF MEASUREMENT:**

The work will be measured for payment on a lump sum basis for the work completed in accordance with the contract documents and as ordered by the Engineer.

**BASIS OF PAYMENT:**

The unit price bid shall include the cost of furnishing all labor, material and equipment necessary to complete the work in accordance with the contract documents and as ordered by the Engineer.

**ITEM 680.7751--25 - TRANSMIT COAXIAL CABLE – TYPE A****1. DESCRIPTION:**

- 1.01 Under this item, the Contractor shall furnish and install coaxial cables and connectors where shown on the plans in accordance with the Contract Documents, and as ordered by the Engineer. Coaxial cable and connectors shall be for outdoor use and shall be provided with lightning surge protection and electrical noise filtering. For use in TRANSMIT sites where the distance from the antenna to the reader is up to 200 feet.

**2. MATERIALS:**

- 2.01 The coaxial cable shall be Times Microwave Systems Model LMR-400DB or approved equal with the following characteristics:

**A. Physical:**

- |    |                               |   |                              |
|----|-------------------------------|---|------------------------------|
| 1. | Diameter over jacket          | - | 0.405 inch, maximum          |
| 2. | Diameter over outer conductor | - | 0.32 inch                    |
| 3. | Cable Weight                  | - | 0.069 lb/ft                  |
| 4. | Center Conductor              | - | Copper Clad Aluminum, 0.108" |
| 5. | Outdoor Conductor             | - | Aluminum Tape                |

**B. Mechanical:**

- |    |                        |   |            |
|----|------------------------|---|------------|
| 1. | Cable Tensile Strength | - | 160 pounds |
| 2. | Minimum Bending Radius | - | 1 inch     |

**C. Electrical:**

- |    |   |   |                          |
|----|---|---|--------------------------|
| 1. | Impedance                               | - | 50 ohms                  |
| 2. | Velocity of Propagation                 | - | 85%                      |
| 3. | Capacitance                             | - | 24 Picofarads per foot   |
| 4. | Max. Attenuation at 900 MHz. and 75°F:  |   | 3.9 dB / 328 feet        |
| 5. | Center conductor DC Resistance at 68°F: |   | 1.39 ohms per 1,000 feet |

**D. Temperature:**

1. Installation & Operating Temperature Range: -40°F to 176°F.

- E. **Coaxial Connectors:** The Contractor shall install weatherproof coaxial connectors at each end of the coaxial cable with the following specifications:

At the reader antenna:

Type -	N connector male
Size	½ inch
Impedance	50 ohms
Plating Coat	Silver plated body and gold plated pin

At Field Cabinet:

Type	N connector male
Size	Compatible with surge protector
Impedance	50 ohms
Plating Coat	Silver plated body and gold plated pin.

The connectors shall be Times Microwave Systems Model EZ-400-NMH-X. The connection shall be covered with a waterproof boot, Model WSB-400.

**ITEM 680.7751--25 - TRANSMIT COAXIAL CABLE – TYPE A**

Attach a surge suppressor at the end of each coaxial cable in the field controller cabinet. Refer to Transmit Cabinet Specification for Surge Suppressor requirement.

**3. CONSTRUCTION DETAILS:**

- 3.01 **Installation:** The Contractor shall install coaxial cable as shown on the plans or as directed by the Engineer. The coaxial cable shall be installed in the conduit or attached directly to an overhead sign structure.

The installation techniques and procedures of the coaxial cable shall not degrade the electrical and mechanical characteristics of the coaxial cable in any manner. The Contractor shall use appropriate cable hoisting grips, lubricant, and entry guide chutes, winch and corner rollers as specified by the cable manufacturer. The Contractor shall submit coaxial cable installation techniques and procedures for approval by the Engineer prior to any cable installation.

All coaxial cable runs shall be continuous from reader antennas to the field cabinets without any intermediate connectors or splices. A cable slack of one meter shall be supplied in the field cabinet for each coaxial cable run. A weatherproof and permanent label shall be attached to each coaxial cable end at the field cabinet so that each coaxial cable can be identified to a reader antenna. The Contractor shall submit a label sample and labeling procedure for approval by the Engineer prior to the installation of any coaxial cable or reader antenna installation.

The cable shall be handled with care. It shall not be pulled along the ground and shall be taken from the reel only as it is placed. Bends of small radii and twists shall be avoided and shall not exceed the Manufacturer's recommended bending radius.

All observed damage to the cable, whether prior to its installation, during construction or by testing subsequent to installation shall be immediately called to the attention of the Engineer. The method of repair or correction of such damage shall be approved by the Engineer. The Contractor shall promptly repair such damage or make such correction in accordance with the approved method.

Cable attached directly to an overhead sign structure shall be secured with heavy duty, weather resistant cable ties every four (4) feet or less.

- 3.02 **Cable Moisture Sealing:** Each end of the cable shall be protected from water entry at all times. Immediately after installation and after the Interconnection Test, the cable shall be fitted with a water sealant consisting, as a minimum, of a heat shrinkable end cap. The shrinkable end cap shall have a specified recovered inside diameter less than the cable diameter. The length of the end cap shall be a minimum of three (3) inches. The materials used and the installation procedure shall be demonstrated successfully to the Engineer.

- 3.03 **Testing:** The Contractor shall perform the following tests as a minimum to ensure that the reader antenna and coaxial cable are ready for communications:

- A. **Reel Test:** At the Contractor's shop, each coaxial cable reel shall be inspected for any physical damage and a DC resistance test, a megger test and a TDR tests shall be performed. A frequency sweep shall also be performed for the 850 to 950 MHz. bandwidth. This test shall be included in the Factory Acceptance Test.



**ITEM 680.7751--25 - TRANSMIT COAXIAL CABLE – TYPE A****3. CONSTRUCTION DETAILS:** (cont'd)**3.03 Testing:** (cont'd)

**B. Stand Alone Test:** Prior to connecting the reader antenna and coaxial cable at the location, the Contractor shall successfully test each item separately. The Contractor shall submit a test procedure for approval by the Engineer that includes the following as a minimum:

1. Coaxial cable and reader antenna physical inspection for any damage during transport and installation.
2. Coaxial Cable Time Domain Reflectory (TDR) Test, DC ohm test and megger test as recommended by the coaxial cable manufacturer.
3. Reader Antenna Impedance Measurement.

**C. Connection Test:** After installation of the coaxial cable and providing end connectors and the connection to reader antenna, inspect coaxial cable for any damage and complete a frequency sweep for the 850 to 950 MHz. bandwidth and a TDR test from the cabinet. This test shall be included in the Site Acceptance Test.

Test Procedures and expected test results shall comply with the manufacturers' specifications and General Provisions. The Contractor shall inform the Engineer three (3) days prior to performing any tests so that the Engineer may witness tests and approve the coaxial cable for installation and payment.

**4. METHOD OF MEASUREMENT:**

4.01 The coaxial cable will be measured for payment as per the number of feet installed, made fully operational and tested.

**5. BASIS OF PAYMENT:**

5.01 The unit price bid per linear foot shall include all costs for furnishing and installing the coaxial cables including connectors to connect each reader antenna, testing and all materials, labor, equipment and tools necessary to complete the work.

5.02 Progress payments will be made as follows:

- Seventy Five percent (75%) of the bid price for the item will be paid when the cable is installed and the Stand Alone Test has been successfully completed.
- Twenty-Five percent (25%) of the bid price for the item will be paid when the Connection Test has been successfully completed.

No payment will be made for repair or replacement of damaged material, which was made necessary due to the contractor's operations.

**ITEM 683.1050--25 - RELOCATE TRAFFIC MONITORING SITE EQUIPMENT****1. DESCRIPTION:**

- 1.01 This work shall consist of removing Traffic Monitoring Site (TMS) cabinet from the existing structure, storing if necessary and replacing on the existing or replacement structure. The work shall be done in accordance with this specification and the plans.

**2. MATERIALS:**

- 2.01 Existing equipment to be relocated.
- 2.02 Ground wire shall meet the requirements of NYSDOT Standard Specifications Section 723-75.
- 2.03 Ground rods shall be 5/8" x 10 feet, copper clad.

**3. CONSTRUCTION DETAILS:**

- 3.01 System shall be tested and shown to be functioning to the satisfaction of the Engineer and the Contractor before removal.
- 3.02 TMS cabinet and enclosed equipment shall be relocated as indicated in the plans and as ordered by the Engineer.
- 3.03 New ground rods and ground wire shall be installed and the cabinet grounded in accordance with National Electric Code provisions.
- 3.04 The cabinet shall be carefully removed to avoid damage to the components and connectors.
- 3.05 Internal and external cables shall be inspected for cracks, splits and other signs of wear that could be detrimental to the functioning of the system. Cables and connectors shall be replaced as needed. Costs for any replaced cables shall be included in this item unless stated otherwise in the plans.
- 3.06 Any external antennas or weather sensors shall be moved with the cabinet.
- 3.07 External connectors and struts shall be reused or replaced as approved by the Engineer. Cost to be included in this item.
- 3.08 System shall be tested and shown to be functioning to the satisfaction of the Engineer and the Contractor after installation.

**4. METHOD OF MEASUREMENT:**

- 4.01 This work will be measured by each number of TMS cabinets relocated.

**5. BASIS OF PAYMENT:**

- 5.01 The unit price bid for each relocated TMS cabinet shall include the cost of all labor, material, and equipment necessary to satisfactory complete the work.
- 5.02 Any damage to the equipment to be relocated due to the Contractor's operations shall be replaced by the Contractor at no additional cost to the Authority.

**ITEM 683.8070--25 - RELOCATE TRANSMIT SITE EQUIPMENT****1. DESCRIPTION:**

1.01 This work shall consist of removing TRANSMIT antennae, cables and cabinet from the existing structure, storing if necessary and replacing on the existing or replacement structure. The work shall be done in accordance with this specification and the plans.

**2. MATERIALS:**

2.01 Existing equipment to be relocated.

2.02 Ground wire shall meet the requirements of NYSDOT Standard Specifications Section 723-75.

2.03 Ground rods shall be 5/8" x 10 feet, copper clad.

**3. CONSTRUCTION DETAILS:**

3.01 System shall be tested and shown to be functioning to the satisfaction of the Engineer and the Contractor before removal.

3.02 TRANSMIT antennae, cables and cabinet shall be relocated as indicated in the plans and as ordered by the Engineer.

3.03 New ground rods and ground wire shall be installed and the cabinet grounded in accordance with National Electric Code provisions.

3.04 The cabinet shall be carefully removed to avoid damage to the components and connectors.

3.05 Cables shall be inspected for cracks, splits and other signs of wear that could be detrimental to the functioning of the system. Cables and connectors shall be replaced as needed.

3.06 System shall be tested and shown to be functioning to the satisfaction of the Engineer and the Contractor after installation.

**4. METHOD OF MEASUREMENT:**

4.01 This work will be measured by each number of TRANSMIT sites relocated.

**5. BASIS OF PAYMENT:**

5.01 The unit price bid for each relocated set of TRANSMIT antennae, cables and cabinet shall include the cost of all labor, material, and equipment necessary to satisfactory complete the work.

5.02 Any damage to the equipment to be relocated due to the Contractor's operations shall be replaced by the Contractor at no additional cost to the Authority.

**ITEM 685.XX06--25 - EPOXY REFLECTORIZED PAVEMENT STRIPES, 6 INCH WIDTH**

**1. DESCRIPTION:**

- 1.01 Under this work the Contractor shall furnish and apply epoxy reflectorized pavement markings in accordance with these specifications, the Contract Documents, the Manual on Uniform Traffic Control Devices (MUTCD) with the NYS Supplement, or as ordered by the Engineer. Unless otherwise indicated, payment will be for increments of 6 inches of stripe width.
- 1.02 The epoxy marking material shall be hot applied by spray methods onto bituminous and Portland cement concrete pavement surfaces at the thickness and width shown on the Contract Documents and/or as indicated by the Pay Item Number. Following an application of glass beads, the cured epoxy marking shall be an adherent reflectorized stripe.
- 1.03 The EPOXY REFLECTORIZED PAVEMENT STRIPE, 6 INCH WIDTH Work Item shown in the plans will be the appropriate Item number for stripe color and application at a 15± 1 mil wet thickness on concrete and aged asphalt, or at a 20± 1 mil wet thickness on new asphalt cement.

**ALL PROVISIONS OF SECTION 685 - EPOXY REFLECTORIZED PAVEMENT MARKINGS SHALL APPLY EXCEPT AS MODIFIED BY ADDENDA AND BELOW:**

**4. METHOD OF MEASUREMENT:**

- 4.01 Shall be as in Section 685 except:

Pavement striping will be measured in linear feet along the centerline of the pavement stripe, and will be based on a 6 inch wide stripe. Measurement for striping with a width greater or lesser than the basic 6 inches, as shown on the plans or directed by the Engineer, will be made by calculating payment length using the following method:

$$\frac{\text{Plan Width of Striping (inches)} \times \text{Feet}}{6 \text{ inches}}$$

**5. BASIS OF PAYMENT:**

- 5.01 All provisions of Standard Specification §685-5 shall apply.

*Payment will be made under:*

<u>Item Number</u>	<u>Item</u>	<u>Pay Unit</u>
685.0106--25	White Epoxy Reflectorized Pavement Stripes – 6 in x 15 mils	LF
685.0206--25	Yellow Epoxy Reflectorized Pavement Stripes – 6 in x 15 mils	LF
685.1106--25	White Epoxy Reflectorized Pavement Stripes – 6 in x 20 mils	LF
685.1206--25	Yellow Epoxy Reflectorized Pavement Stripes – 6 in x 20 mils	LF
685.1306--25	White Epoxy Reflectorized Pavement Letters	EA
685.1406--25	White Epoxy Reflectorized Pavement Symbols	EA

**ITEM 685.17XX--25 - HIGHLY REFLECTORIZED TRIPLE DROP EPOXY PAVEMENT STRIPES, 6 INCH WIDTH**

**1. DESCRIPTION:**

- 1.01 Under this work, the Contractor shall furnish and apply highly reflectORIZED epoxy pavement markings in accordance with the contract documents or as ordered by the Engineer, and in conformance with the MUTCD and these specifications.

The epoxy marking material shall be hot-applied by spray methods onto bituminous or portland cement concrete pavement surfaces at a 6-inch width and a 20-mil wet thickness as indicated in the contract documents. The cured epoxy marking shall be an adherent, highly reflectORIZED stripe.

- 1.02 The triple drop system shall consist of a combination of highly reflective composite optics, defined as a structural center core surrounded by high index microcrystalline ceramic beads or glass spheres, wet/night visibility beads, and standard glass beads.

**2. MATERIALS:**

- 2.01 All provisions of Section 727-03 *Epoxy Paint* shall apply.
- 2.02 The highly reflective composite optics, as defined in Section 1.02, shall contain high index beads with a refractive index (R.I.) between 1.8 and 2.4.
- 2.03 When the highly reflective composite optics are tested in accordance with ASTM E2177 Bucket method, the test method for measuring wet recovery under the standard conditions for wetness, the minimum test results shall be 275 mcd/m<sup>2</sup>/lux for white and 225 mcd/m<sup>2</sup>/lux for yellow.
- 2.04 The glass spheres of the highly reflectORIZED triple drop shall consist of Wet/Night Visibility Beads and Standard Glass Beads as defined in Section 727-05 *Glass Beads for Pavement Markings*.
- 2.05 The highly reflective composite optics shall match the color of the line they are being dropped in, so to not significantly alter the color appearance of the line and shall be either 3M Connected Roads ALL Weather Elements, Potters VISIMAX, or approve equal.
- 2.06 Wet/Night Visibility Beads shall be Visibead Plus, or approved equal.

**3. CONSTRUCTION DETAILS:**

- 3.01 All provisions of Standard Specification §685-3 shall apply.
- 3.02 Beads shall be applied as follows:
- A. **6 inch by 20 mil applications.** The first drop shall be highly reflective composite optics at a rate per manufacturer's recommendation; the second drop shall be Wet/Night Visibility Beads at a rate of 5 pounds per gallon; and the third drop shall be Standard Glass Beads at a rate of 8 pounds per gallon.

**ITEM 685.17XX--25 - HIGHLY REFLECTORIZED TRIPLE DROP EPOXY PAVEMENT STRIPES,  
6 INCH WIDTH**

**4. METHOD OF MEASUREMENT:**

- 4.01 Pavement striping will be measured in feet along the centerline of the pavement stripe and will be based on a 6-inch wide stripe. Measurement for striping with a plan width greater or lesser than the 6 inches as shown on the plans or directed by the Engineer, will be made by the following method:

$$\frac{\text{Plan Width of Striping (inches)} \times \text{Feet}}{6 \text{ inches}}$$

**5. BASIS OF PAYMENT:**

- 5.01 All provisions of Standard Specification §685-5 shall apply.

*Payment will be made under:*

<u>Item Number</u>	<u>Item</u>	<u>Pay Unit</u>
685.1707--25	White Highly ReflectORIZED Triple Drop Epoxy Pavement Stripes – 6 in x 20 mils	LF
685.1708--25	Yellow Highly ReflectORIZED Triple Drop Epoxy Pavement Stripes – 6 in x 20 mils	LF

**ITEM 699.04----25 - MOBILIZATION**

**1. DESCRIPTION:**

- 1.01 Under this work the Contractor shall provide the following:
  - A. Necessary bonds, insurance, and prefinancing and set-up of necessary general plant, including shops, storage areas, Engineer’s and Contractor’s offices and such sanitary and other facilities as are required by local or state law or regulation.
  - B. Critical path method (CPM) schedule of operations as described in §108-01 of the TA Addendum.
  - C. M/WBE participation program meeting the M/WBE goals of the contract as described in §109-06 *Contract Payments* and in accordance with §102-12 *D/M/WBE Utilization*.

**2. MATERIALS:**

- 2.01 Unless otherwise specified, such materials as required for mobilization and are not to be part of the completed contract shall be as determined by the Contractor, except that they shall conform to any pertinent local or state law, regulation or code.

**3. CONSTRUCTION DETAILS:**

- 3.01 The work required to provide the above facilities and service for mobilization shall be done in a safe and workmanlike manner and shall conform with any pertinent local or state law, regulation or code. Good housekeeping consistent with safety and other requirements of this contract shall be maintained.

**4. METHOD OF MEASUREMENT:**

- 4.01 Payment for mobilization will be made on a lump sum basis.

**5. BASIS OF PAYMENT:**

- 5.01 The amount bid for mobilization shall not exceed four percent (4%) of the total contract bid price excluding the bid price for mobilization. Should the bidder exceed the foregoing four percent (4%), the Authority will make the necessary adjustment to determine the total amount bid based on the arithmetically correct proposal.

The amount bid shall include the furnishing and maintaining of services and facilities noted under Section 1.01 to the extent and at the time the Contractor deems them necessary for its operations, consistent with the requirements of this work and the contract.

The amount bid shall be payable to the Contractor with the first contract payment made for other contract work following acceptable completion of all requirements noted under Section 1.01.

*Payment will be made under:*

<u>Item Number</u>	<u>Item</u>	<u>Pay Unit</u>
699.04----25	Mobilization	Lump Sum

# **SPECIAL NOTES**



### CONFIDENTIAL INFORMATION

1. **Confidential Information:** “Confidential Information” means any information not generally known to the public, whether oral or written, that the Authority claims is confidential and discloses to Contractor for the purposes of performing work on the Project. Confidential Information may include, but is not limited to, operational and infrastructure information relating to: bid documents, plans, drawings, specifications, reports, product information and data, business and security processes and procedures; personnel and organizational data, and financial statements; information system IP addresses, passwords, security controls, architectures and designs; and such other data, information and images that the authority deems confidential. The Authority will identify written Confidential Information by marking it with the word “Confidential” and will identify oral Confidential Information as confidential at the time of disclosure to the Contractor.
2. **Exempt Materials:** Confidential Information does not include information which, at the time of the Authority disclosure to Contractor; (a) is already in the public domain or becomes publicly known through no act of Contractor; (b) is already known by Contractor free of any confidentiality obligations; (c) is information that the Authority has approved in writing for disclosure; or (d) is required to be disclosed by Contractor pursuant to law so long as Contractor provides the Authority with notice of such disclosure requirement and an opportunity to defend prior to any such disclosure.
3. **Permitted Use:** Contractor may use Confidential Information solely for the purposes of performing work on the Project. Contractor may share Confidential Information with its employees, consultants, sub-consultants, sub-contractors, suppliers, and agents that are necessary to perform work on the Project (“Authorized Personnel”), but must ensure that such Authorized Personnel execute a Confidentiality and Non-Disclosure Agreement as set forth in the Minimum requirements for the Handling and Treatment of Confidential Information. The Authority’s disclosure of Confidential Information to Contractor shall not convey to Contractor any right to or interest in such Confidential Information and the Authority shall retain all right and title to such Confidential Information at all times.
4. **Protections:** Contractor shall hold Confidential Information confidential to the maximum extent permitted by law. Contractor shall safeguard Confidential Information in accordance with the Minimum Requirements for the Handling and Treatment of Confidential Information.
5. **Return of Confidential Information:** Upon the written request of the Authority, Contractor shall return all written Confidential Information to the Authority.

### EXTERNAL CONNECTIONS

If in order to perform work on the Project, Contractor must make an external connection to the Authority’s data communications infrastructure and/or access Authority information systems, Contractor shall in all respects comply with all Authority policies and procedures regarding such connections and information systems access and undertake whatever actions are necessary in the discretion of the Authority to ensure such compliance. Contractor shall be responsible for all costs associated with ensuring that its own network security measures comply with all Authority policies and procedures regarding external connections.

**MINIMUM REQUIREMENTS FOR THE  
HANDLING AND TREATMENT OF CONFIDENTIAL INFORMATION**

Contractor shall meet the following minimum requirements relative to project information that is identified as **CONFIDENTIAL**.

**Authorized Personnel:**

Contractor shall require that all authorized individuals or entities (e.g., employees, consultants, sub-consultants, sub-contractors, suppliers and agents) (“Authorized Personnel”) to which it discloses **CONFIDENTIAL** information sign a Confidentiality and Nondisclosure Agreement (“Agreement”). Such Agreement shall provide that Authorized Personnel: are personally responsible at all times for protecting **CONFIDENTIAL** information that is in their possession or control; must always use proper precautions to safeguard against the unauthorized access and disclosure of **CONFIDENTIAL** information; must notify Contractor of any known or suspected instances of loss or theft of, or unauthorized access to, **CONFIDENTIAL** information; and must return all **CONFIDENTIAL** information to Contractor upon completion of the project. Contractor shall be responsible for enforcing the provisions of such Agreement through personal observation and supervision of Authorized Personnel and utilization of appropriate processes.

Contractor shall maintain a list of all Authorized Personnel which have access to **CONFIDENTIAL** information and must provide the Authority with such list upon the Authority’s request. Contractor shall update such list monthly and notify the Authority of any changes in such list.

**Inventory Control:**

Contractor shall create and maintain an inventory of all **CONFIDENTIAL** information that it provides to Authorized Personnel. Upon completion of the project, Contractor shall check all **CONFIDENTIAL** information returned from Authorized Personnel against the inventory. Contractor shall provide a copy of the checked inventory to the Authority.

**Use and Storage:**

Contractor shall implement reasonable processes during normal working hours to prohibit unauthorized individuals from gaining access to **CONFIDENTIAL** information that is within the Contractor’s custody and control. At times other than normal working hours, Contractor shall store **CONFIDENTIAL** information in a secure area, such as a fire-proof safe, locked desk, cabinet or other secure storage facility, where access can be controlled. Contractor shall control the access that Authorized Personnel have to **CONFIDENTIAL** information stored in such secure areas through the use of manual or automated locks and keys. Contractor shall maintain a list of Authorized Personnel who have access to such secure areas and the specific **CONFIDENTIAL** information therein.

**Reproduction:**

Contractor may reproduce **CONFIDENTIAL** information only to the extent necessary to carry out contract performance. Contractor must stamp/mark all **CONFIDENTIAL** information that is reproduced with the word **CONFIDENTIAL** and protect it in the same manner as the original.

**Transportation:**

To the extent feasible and reasonable, Contractor shall hand deliver **CONFIDENTIAL** information with instructions that only the addressee is allowed to open or view it. Contractor may send **CONFIDENTIAL** information that cannot be hand delivered via the U.S. Postal Service or express mail services (e.g., FEDEX) provided: it is packaged and sealed in a way that does not disclose its contents or the fact that it is **CONFIDENTIAL** information, and a signature from the recipient is required.

Under no circumstances shall a transportation method be used that cannot guarantee that **CONFIDENTIAL** information is accessed only by the intended recipient.

**Disposal:**

Contractor shall dispose of all **CONFIDENTIAL** information, regardless of its form or format, using a destruction method that prevents its unauthorized retrieval (e.g., crosscut or micro shredding, degaussing).

**Loss, Theft or Unauthorized Access:**

Contractor shall provide timely notice to the Authority upon discovery of any incident involving the loss or theft of, or unauthorized access to, **CONFIDENTIAL** information.

**SPECIAL NOTE:**  
**CONTROL OF MATERIALS**

The Contractor's attention is directed to the TA Addendum, Section 106 – CONTROL OF MATERIAL, available from the Authority's website at: <http://www.thruway.ny.gov/business/addendum/index.html>. The Contractor understands and agrees that some or all of the off-site inspection and approval of material such as precast concrete items, structural steel, bridge bearings, concrete structural elements and/or their components to be used on this project will be done by the New York State Department of Transportation (NYSDOT) as the Authority's agent.

The Contractor agrees to the following conditions:

1. Whenever the Contractor receives direction from the NYSDOT regarding the approval/rejection of material that direction constitutes direction by the Authority under the contract and, shall be final and accepted as such by the Contractor.
2. The Contractor will not allow off-site materials subject to inspection and approval of NYSDOT to be shipped to the project site without direct authorization from the NYSDOT.
3. At the Pre-Award Meeting or as soon as practicable, but in any case, before the Pre-Construction Conference, the Contractor will provide the following information to the Thruway Authority's Director, Office of Construction Management, for transmittal to NYSDOT to arrange off-site inspections:
  - A. The name and address of each Manufacturer of all materials, and portions thereof, requiring off-site quality assurance to be incorporated into this highway project.
  - B. The name and address of each Fabricator fabricating each steel item or any portion thereof to be incorporated into this highway project.
  - C. The name and address of each Fabricator manufacturing structural pre-cast/pre-stressed items or any portion thereof to be incorporated into this highway project.
4. The Contractor agrees that it and its Subcontractors and Suppliers will acquire all materials to be incorporated into this Thruway project **only** through Manufacturing, Batching and Fabrication facilities approved by NYSDOT.

## AVAILABILITY OF ELECTRONIC BID DATA

### 1. SUMMARY:

The New York State Thruway Authority (NYSTA) uses Project Bids Software for electronic bidding. Project Bids is a product of the American Association of State Highway and Transportation Officials (AASHTO) that is currently used by the majority of State Departments of Transportation. It is provided free of charge and can be used on almost any Windows-compatible PC. It integrates with many existing electronic bid preparation software and has import/export capability for use with database and spreadsheet systems.

Project Bids allows bidders to receive electronic proposal bid item information from the NYSTA's internet web site and to produce both an electronic and a paper-based bid.

For additional information and downloads, see the NYSTA website at:

<http://www.nysthruway.gov/business/contractors/expedite/index.html>.

### 2. PARTICIPATION AND RELATIONSHIP TO PAPER DOCUMENTS:

The Authority's adoption of electronic bidding does not force any Contractor to bid electronically. Rather, participation is voluntary. If submitting a bid using infotech's Bid Express internet bidding service, no paper is required. If submitting an electronic bid on a CD, DVD or USB device delivered to the Authority in person or via a courier service, **bidders must also submit print outs that match the electronic file**. Project Bids prints a check code on every bid page that must match the check code in the computer file. As the check code changes every time the electronic file is modified, matching the codes verifies that the data on the printed bid is the same as in the electronic file. **In case of discrepancy, the printouts always prevail and are the primary legal document. Therefore, the printouts can be used to make any last-minute changes.**

### 3. THIRD-PARTY SOFTWARE:

The NYSTA endorses no particular product but expects all such vendors and individuals to voluntarily keep pace with changes in NYSTA specifications.

### 4. PROPOSAL NOTES AND CHANGES BY AMENDMENT:

**Contractors are solely responsible for recognizing and properly responding to any and all special notes and circumstances printed in the Contract Proposal and any and all changes by amendment from the amendment documents and/or notices communicated to them by the NYSTA's Contracts Unit.**

**Amendments are posted online at:** [www.thruway.ny.gov/business/contractors/documents/index.shtml](http://www.thruway.ny.gov/business/contractors/documents/index.shtml).

Whenever an amendment is issued, a Project Bids amendment file will also be issued and must be applied to your electronic bid. Do not bid without carefully reviewing the printed proposal and any and all changes by amendment. Proposal notes and circumstances include, but are not limited to, printed information on alternate, fixed and/or limited cost items and/or special circumstances regarding item placement and use.

**SPECIAL NOTE:****REQUIREMENTS FOR CONTRACTOR'S UTILIZATION OF AREAS  
OUTSIDE OF THE RIGHT-OF-WAY**

1. Before the Contractor can utilize any area outside of the NYS Thruway Authority (NYSTA) Right of Way (or outside of a temporary easement obtained for the project by the NYSTA, for any work associated with this project, written approval to do so shall be obtained from the NYS Thruway Authority through the Project Engineer. The Contractor's request for approval shall be in writing and the Authority shall be allowed 2 weeks to review the request and respond.
2. This requirement applies to areas such as, but not limited to: borrow areas, spoil areas, equipment and/or material storage areas, haul roads, batching areas, water points, shop areas, and all similar areas. This requirement does not apply to the Contractor's established and permanent headquarters, commercial borrow sources, commercial gravel pits, commercial quarries, and all similar areas.
3. The Contractor's written request for approval shall include a letter report prepared by an Environmental Professional, acceptable to the Authority, documenting the investigation of the proposed site. The expectation is that an Environmental Professional visits the site, performs an assessment of the proposed use against all applicable environmental requirements, and then documents their findings and recommendations. The letter report shall include the following unless otherwise authorized by the Authority:
  - a) A written description of the activities the contractor wishes to perform at the proposed site, including timeframes.
  - b) Maps showing Federal and State regulated wetlands. The area proposed for use shall be depicted on each map.
  - c) A site location map which accurately shows the area proposed for use, adjacent property boundaries/owners, the location of all wetland boundaries observed, and any required erosion and sediment control measures. If present, wetlands shall be delineated in the field by the Environmental Professional with stakes and ribbon, and wetland delineation data forms shall be completed.
  - d) A written statement prepared by the Environmental Professional regarding the presence of any rare animals or plants or significant natural communities. The Environmental Professional shall use the NYSDEC Environmental Resource Mapper to make this determination. If any rare species are identified, then determine if the rare species are listed as endangered or threatened and whether the NYSDEC determines the proposed use may be harmful to the species or their habitat. If so, address to the satisfaction of the NYSDEC.
  - e) A copy of the applicable SPDES permit and any local municipal permits related to use of the site.
  - f) A listing of other Environmental Permits which were obtained by the Authority for the project. These are referenced in the contract proposal.
  - g) A completed NYSTA Property Release form. The form is available through the Project Engineer.
  - h) A plan showing all restoration work. This includes, but is not limited to, plans for grading, surface restoration details, and erosion and sediment control.
4. This requirement does not waive other provisions of the contract related to use of lands outside the Right of Way. Rather, it shall be viewed as supplementary. The following contract provisions still remain in effect:

§107-08 Protection and Restoration of Property and Landscape, Subsection B. Outside the Right of Way  
§107-10 Managing Surplus Material and Waste

**COMPLIANCE WITH SPDES REGULATIONS**

The Contractor is advised that the NYS Thruway Authority has evaluated Stormwater requirements for this project and has determined that coverage is not warranted under NYS Department of Environmental Conservation's SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). The Contractor shall read and understand the requirements of GP-0-20-001. In the event the Contractor's operations, e.g., clearing and grubbing, expanded staging area; will cause an increase in ground disturbance beyond the amount identified in the Contract Documents, coverage under GP-0-20-001 may be required. Prior to commencing these operations, the Contractor should immediately advise the Project Engineer, who will in turn discuss the request with the Project Designer and Division Environmental Specialist or Environmental Point of Contact.

- In the event coverage is required under GP-0-20-001 as a result of these operations, the Contractor will be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) and submit a Notice of Intent (NOI) with the NYS Department of Environmental Conservation.
- In the event coverage is required under GP-0-20-001 as a result of changes made by the Authority, the Authority will be required to prepare a SWPPP and submit a NOI.

In either case, the Contractor will not be allowed to proceed until verification of coverage under GP-0-20-001 has been provided to the Project Engineer. The Contractor shall make no claim against the Authority for delays resulting from preparing a SWPPP, filing a NOI, and seeking verification of permit coverage.

**SPECIAL NOTE****DIESEL EMISSION REDUCTION ACT (DERA) REGULATORY COMPLIANCE**

All New York State Thruway Authority (NYSTA) Contractors are made aware that Environmental Conservation Law (ECL) 19-0323 and the New York State Department of Environmental Conservation (NYSDEC) regulation 6 NYCRR Part 248 *Use of Ultra Low Sulfur Diesel (ULSD) Fuel and Best Available Retrofit Technology (BART) for Heavy Duty Vehicles* requires 100% compliance as of December 31, 2019 of all regulated heavy duty diesel vehicles working on all State awarded contracts. A link to NYSDEC's Part 248 Annual Reporting Requirements which states the current deadlines is located at: <http://www.dec.ny.gov/chemical/118127.html>. NYSTA and its Contractors are responsible for annual reporting.

All NYSTA Contractors shall make determinations of regulatory applicability for vehicles in their inventory used on active NYSTA contracts during each reporting year. These determinations shall be based on the definition of Heavy Duty Vehicle (HDV) including on and off road diesel vehicles having gross vehicle weights in excess of 8,500 pounds, excluding vehicles that are exempt as defined in 6 NYCRR 248-1.1(b)(14). Contractors shall also quantify ULSD fuel used by regulated vehicles in active contract work during the reporting year.

An electronic copy of 6 NYCRR Part 248 can be accessed at <http://www.dec.ny.gov/regs/2492.html>. Electronic copies of the Regulated Entity Vehicle Inventory Form and the Regulated Entity and Contractors Annual Report Form can be accessed under Part 248 – Use of Ultra Low Sulfur Diesel Fuel and Best Available Retrofit Technology for Heavy Duty Vehicles at the following link: [www.dec.ny.gov/chemical/4754.html](http://www.dec.ny.gov/chemical/4754.html).

To allow for required reports to be submitted to NYSDEC by the regulatory deadline of November 1, each year, NYSTA Contractors shall submit DERA annual reports to NYSTA by October 1, of every year reporting the required information from the previous reporting year (i.e., all 2019/2020 information to NYSTA by October 1, 2020, etc.). The following numbered information shall be submitted:

1. Inclusion of “DERA” and calendar year being reported in subject line of email
2. Contact information including firm name, contact person, phone number and e-mail
3. Estimated annual total quantity of ULSD fuel used by covered vehicles on NYSTA contracts
4. Required Fleet information for covered vehicles on NYSTA contracts

Electronic mail submissions can be sent to [dieselreport@thruway.ny.gov](mailto:dieselreport@thruway.ny.gov)



**SPECIAL NOTES****GREEN CONSTRUCTION REQUIREMENTS****ULTRA LOW SULFUR DIESEL FUEL**

In order to reduce diesel emissions, the Contractor shall use Ultra Low Sulfur Diesel (ULSD) fuel to operate all diesel engines used to complete the work that will operate for 10 hours or more on the contract site. ULSD fuel requirements shall apply to:

- All diesel engines/equipment.
- Stationary and mobile equipment.
- Owned, leased and rented equipment.

The hours the piece of equipment is used to complete the work is defined as the actual time the engine is running. The time may be continuous or discontinuous and includes warm-up periods idling, in traffic periods, etc.

The Contractor shall correct any non-compliance when any diesel powered construction equipment is in non-compliance. The Contractor shall correct any non-compliance within a 24-hour period.

**SPECIAL NOTES****GREEN CONSTRUCTION REQUIREMENTS****CONTROLLING EXPOSURE TO DIESEL EXHAUST**

The Contractor shall exercise measures to protect “Sensitive Receptors” from the impacts of diesel exhaust fumes. Sensitive Receptors include, but are not limited to: hospitals, schools, daycare facilities, building fresh air or ventilation intakes, elderly housing or convalescent facilities. The Contractor shall ensure that diesel powered engines are located away from building air conditioners and windows.

The goal is to minimize exposure of Sensitive Receptors in close proximity to diesel exhaust, in terms of both concentration and time. In general, close proximity is defined as within 15 meters of a Sensitive Receptor. Mitigation techniques include positioning stationary equipment exhausts greater than 15 meters from Sensitive Receptors, extension of equipment exhausts through the use of flexible tubing; protecting building air intakes; and the use of moving operations.

Idling time for diesel powered equipment shall be limited to three consecutive minutes for delivery and dump trucks and all other diesel powered equipment except as follows:

- When a “mobile source” (vehicle) is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control.
- When it is necessary to operate a loading, unloading or processing device.
- When the outdoor temperature is less than - 3°C (27°F).
- When the “mobile source” is being repaired.

Arrow panels and portable variable message signs shall be solar powered wherever possible or practical.

Whenever possible and practicable, the Contractor shall establish staging areas for diesel powered vehicles waiting to load or unload materials at the work site. Such areas shall be located where diesel emissions have the least impact on Sensitive Receptors and the general public.

**SPECIAL NOTES****GREEN CONSTRUCTION REQUIREMENTS****DUST CONTROL**

The Contractor shall minimize dust from disturbed soil surfaces or other materials that can cause off-site damage, health hazards and traffic safety problems. Dusty conditions resulting from the Contractor's operations shall be corrected at no additional cost to the State. Buffer areas of vegetation should be left where practical. Water quality shall be considered when selecting materials for dust control. An approved dust palliative may be used in conformance with applicable conditions placed on its use. A list of acceptable dust palliatives is available at: [www.nysdot.gov/divisions/engineering/technical-services/geotechnical-engineering-bureau/dust-palliatives](http://www.nysdot.gov/divisions/engineering/technical-services/geotechnical-engineering-bureau/dust-palliatives) .

For areas not subject to traffic, products and materials may be applied or placed on soil surfaces to prevent airborne migration of soil particles, including:

- Vegetative Cover –provides the most practical method of dust control.
- Mulch (including rolled erosion control products) –provides a fast, effective method of dust control.
- Spray Adhesives –Generally composed of polymers in a liquid or solid form mixed with water to form an emulsion that is sprayed on the soil surface. The mixing ratios and application rates will be in accordance with the manufacturer’s recommendations for the specific soils on the site. Adhesives shall not be applied to wet soils or if there is a probability of precipitation within 48 hours.

For areas subject to traffic (traveling public or construction traffic) products and materials may be applied or placed on soil surfaces to prevent airborne migration of soil particles, including:

- Water Sprinkling – The site may be sprayed with water until the surface is wet. This is especially effective on haul roads and access routes.
- Polymer Additives –Polymers shall be mixed with water and applied to the driving surface using mixing ratios and application rates in accordance with the manufacturer’s recommendations. No application of the polymer will be made if there is a probability of precipitation within 48 hours of its proposed use. Any polymers must be used in accordance with the NYSDEC issued “Conditions for Use” and “Application Instructions.” This information can be obtained from the NYSDEC website.
- Barriers – Woven geotextiles or stone can be placed on the driving surface to effectively reduce dust throw and particle migration on haul roads.
- Windbreak – A silt fence or similar barrier can control air currents at horizontal intervals equal to ten times the barrier height. Preserve existing vegetation that acts as a wind barrier as much as practical.
- Wheel Washing – Mechanical or manual wet-method cleaning of on-road construction vehicle tires prior to leaving site.

**SPECIAL NOTE****GENERATOR KNOWLEDGE FOR DISPOSAL OF TREATED WOOD**

The U.S. Environmental Protection Agency (EPA) and New York State Department of Environmental Conservation (NYSDEC) technique for evaluating whether a material is hazardous for toxicity is the Toxicity Characteristic Leaching Procedure (TCLP). TCLP testing of pentachlorophenol (“penta”) and creosote treated wood by the Electric Power Research Institute, Association of American Railroads, and others has conclusively demonstrated that treated wood products are not a hazardous waste. Under EPA’s and NYSDEC’s rules, such “generator knowledge” can be utilized in place of testing to determine that a waste is not hazardous. This information can be used as evidence that treated wood products can be disposed as non-hazardous waste, based on generator knowledge, in lieu of physical testing.

Generator knowledge information, obtained from the American Wood Preservers Institute (AWPI) can be viewed at their web site located at [www.awpi.org](http://www.awpi.org) . AWPI’s information comes from studies conducted by the Electric Power Research Institute (EPRI), the Washington Public Ports Association (WPPA), and the Association of American Railroads (AAR). EPRI test results are for both penta-treated and creosote-treated wood. WPPA and AAR test results are for creosote-treated wood.

*NOTE:* Arsenically-treated (*e.g.*, chromated copper arsenate [CCA]) wood products disposed by the end user are exempt from classification as a federal hazardous waste regardless of the TCLP results for specified constituents from any individual sample. Also, wood products treated with preservatives that contain no TCLP constituents (*e.g.*, Kodiak Preserved Wood containing Copper Dimethyldithiocarbamate) are not hazardous waste.

**SPECIAL NOTES**  
**FOREST INSECT DISEASE CONTROL**

**MOVEMENT OF WOOD MATERIALS FROM PROJECT SITES**

Pursuant to New York State Department of Environmental Conservation (NYSDEC) Regulations, 6NYCRR, part 192.5, *Firewood Restrictions to Protect Forests from Invasive Species*, it is unlawful to transport any firewood material more than 50 miles from its point of origin to limit the spread of invasive insect species. “Firewood” shall mean all wood of any species, cut or not cut, split or not split, regardless of length which is (a) in a form and size appropriate for use as a fuel, or (b) which is destined for use as a fuel. Firewood shall not include kiln-dried dimensional lumber, wood that has been chipped to a maximum piece size that is no greater than 1-inch in two dimensions, or logs or wood being transported to sawmills or other manufacturing facilities for use in their primary operations. All Thruway Authority (TA) projects are subject to this requirement. Additional information can be found at the following link: <http://www.dec.ny.gov/regs/4079.html>

If firewood is to be moved within 50 miles of its point of origin a “Self-Issued Certificate of Origin for Transport and Possession of Untreated Firewood” must be completed. This form can be found at the following link: [http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/selfisscert.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/selfisscert.pdf)

**INVASIVE SPECIES AND QUARANTINE MATERIALS MOVEMENT**

NYSDEC Regulations, 6NYCRR, part 192.6, *Quarantine Orders*, No person shall fail to comply with the provisions of any quarantine order issued by the Department pursuant to Environmental Conservation Law (ECL) section 9-1303. To the extent the provisions of section 192.5 *Firewood Restrictions to Protect Forests from Invasive Species* and such quarantine order are in conflict, the more restrictive provision shall apply. TA is under New York State and Federal ash quarantines where it is unlawful to transport any ash material outside of several counties (see quarantine maps at [http://www.agriculture.ny.gov/PI/eab/emerald\\_ash\\_borer\\_quarantine.pdf](http://www.agriculture.ny.gov/PI/eab/emerald_ash_borer_quarantine.pdf) and <http://www.dec.ny.gov/animals/47761.html>). Therefore, any parts of ash trees, including leaves, bark, stumps, limbs, branches, roots, and ash logs of any length, and firewood (see above for definition of firewood) from ANY tree species, are all considered regulated articles and must be handled properly. Tree-felling, clearing and grubbing operations at project sites may result in the contractor’s need to handle materials from ash tree species and/or firewood or chips from ANY tree species. To the greatest extent possible in areas of clearing and grubbing, ash trees should be pre-identified and marked prior to commencement of construction to promote the proper handling of these materials.

Un-infested ash materials in any form may be moved offsite, but only within the quarantine zone. Firewood from ANY tree species may never be moved more than 50 miles and never from the quarantine area, into non-quarantine areas. Transport of any wood needs the required transport certificate: [http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/selfisscert.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/selfisscert.pdf)

Note: According to the quarantine maps, several parts of the Thruway are the boundary between the quarantine area (south) and the non-quarantine area (north). Therefore, transport of any wood material would be prohibited across the roadway from south to north, but acceptable from north to south.

Note: Any ash materials that are known or suspected to be infested with live emerald ash borer pests in any life stage must be reported immediately to the EIC and/or designee for further appropriate action and coordination with regulatory agencies.

**SPECIAL NOTES**  
**FOREST INSECT DISEASE CONTROL**

Any ash materials chipped to a size no greater than 1-inch in at least two dimensions is considered safe to be transported outside the quarantine zone, but only in accordance with a Chip/Mulch Agreement and Transport Agreement received from the NYS Department of Agriculture and Markets (NYSDAM). If any regulated ash materials must be moved outside of the currently quarantined area, a certification from the NYS Department of Agriculture and Markets (NYSDAM) or USDA Animal & Plant Health Inspection Service (APHIS) must be obtained. For further information see the following links:

<http://www.dec.ny.gov/animals/47761.html>

<http://www.agriculture.ny.gov/PI/eab.html>

**MARKER RELOCATION DURING CONSTRUCTION**  
**EXISTING MILE MARKERS AND TENTH-MILE MARKERS AND DELINEATORS**

All mile markers and tenth-mile markers are to be maintained during construction of this project. The Contractor will be allowed to temporarily relocate them to avoid damage to them or for constructability purposes. The mile markers and tenth-mile markers may be moved but the new location must be visible to traffic and be reasonably close to their original location. The mile markers must be returned to their original location upon completion of construction at that location. Cost for this work shall be included in the bid price for the various pay items in the contract, unless the work is specifically called for in the contract documents.

If the contract calls for replacement of existing mile markers and/or tenth-mile markers, they shall remain in place, or reset to a location reasonably close to their original location, until the new markers are installed.

**SPECIAL NOTE****BIRD / BAT WASTE AWARENESS**

The Contractor should be aware that there may be bird/bat waste in the work area. The waste may contain trace amounts of metals and the fungus *Histoplasma capsulatum*. Exposure to this fungus can result in the disease histoplasmosis. Proper health and safety precautions shall be identified in the contractor's health and safety plan in accordance with section 107-05. The disposal facility that accepts the bird/bat waste may need documentation as to its composition to determine that it is non-hazardous and/or otherwise suitable for disposal at that location.



## BRIDGE (BIN) PLATE

One Bridge Identification Number (BIN) plate will be required for each bridge in this contract. For each bridge there may, or may not, be an existing BIN plate.

Therefore, one of the following conditions will exist with regard to BIN plates for any particular structure:

Condition No. 1. A BIN plate is attached to the structure but the nature of the work to be done does not require its removal.

Condition No. 2. A BIN plate is attached to the structure and the nature of the work to be done requires its removal.

Condition No. 3. A BIN plate is attached to the structure and is defaced, or otherwise damaged.

Condition No. 4. A BIN plate is not attached to the structure.

Under Condition No. 1. the Contractor's sole obligation shall be to protect the plate from damage during the course of the work.

Under Condition No. 2. the Contractor shall be required to remove and store the BIN plate until such time as the BIN plate may be reinstalled without danger of damage. This requirement shall also apply if the BIN plate is being transferred from an existing abandoned bridge to a new in-service bridge. The Contractor shall furnish all necessary expansion anchors.

Under Condition No. 3. the Contractor shall be required to furnish and install a new BIN plate, and remove the damaged BIN plate. The Contractor shall furnish the panel with reflective background, numerals and expansion anchors. IF the BIN number cannot be deciphered the Engineer will supply the number.

Under Condition No. 4. the Contractor shall be required to furnish and install a BIN plate on the completed structure. The Engineer will supply the Bridge Identification Number. The Contractor shall furnish the panel with reflective background, numerals and expansion anchors.

Regardless of which condition governs the BIN plate installation, should damage occur to the BIN plate and the Engineer determines it cannot be repaired, the Contractor shall furnish a new plate consisting of the panel with reflective background, numerals, and expansion anchors at no expense to the State. If the Engineer determines the BIN plate may be repaired, repair shall be done at no expense to the State. This requirement applies to all four conditions.

The material requirements for the three parts of the BIN plate are:

Panel with reflective background. The aluminum panel and reflective background shall conform to the material and fabrication requirements of Material Specification 730-01, Aluminum Sign Panels. The background material shall be green reflective sheeting conforming to Materials Specification 730-05.01 (Class A Sheeting). The size of the panels shall be 1/8 inch thick by 3 inch by 12 inch. The panels shall

## BRIDGE (BIN) PLATE

have two 5/16 inch drilled or punched holes for mounting, located 1/2 inch from the ends of the panel and 1 1/2 inch from the top or bottom of the panel. The reflective sheeting used to form the background shall be a minimum of 3 inches wide by 10 inches long, or may be a full 12 inches long.

Numbers. The numbers shall be reflective sheeting conforming to Materials Specification 730-05.01 (Class A Sheeting), except that the adhesive shall be pressure-sensitive such that the numbers can be applied to the background in the field. The numbers shall be 2 inches high and silver-white in color conforming to FHWA series C dimensions.

Prior to placing the cutout numbers on the panel, the reflective background shall be clean and free of dirt and oil which may adversely affect proper adhesion. The numbers shall be placed on the reflective background, perpendicular to the longitudinal axis of the panel, and vertically centered. The reflective background and numbers shall be coated and/or edge sealed in accordance with the recommendations of the sheeting manufacturer.

Expansion Anchors. 1/4 inch diameter by 1 1/2 inch long stainless steel nail drive expansion anchors meeting GSA Specification FF-S-325, #3.2.5.2 shall be used to attach the BIN plates to concrete and masonry surfaces.

The BIN plates shall be attached to the beginning abutment of the bridge using expansions anchors. The plate shall be placed high on the abutment, near the fascia of the bridge.

The cost of this work shall be included in the various items of the contract.

**MATERIAL TRANSFER VEHICLE (MTV)**

The Contractor is required to use a self-propelled Material Transfer Vehicle (MTV) to transfer asphalt pavement from the hauling units to the paving equipment when placing asphalt for mainline paving.

The MTV system shall be specifically designed and constructed for the purpose of unloading delivery vehicles, storing, and remixing asphalt materials, and transferring materials to the paver. No substitutes such as pick-up machines will be allowed. The MTV shall have a storage bin and a conveyor system to deliver the asphalt mixture to the paving equipment. In addition to the MTV, the asphalt paver shall be equipped with a paver hopper insert. The paver hopper insert, or MTV shall have a remixing auger system capable of continuously blending the asphalt for the purposes of eliminating segregation in the finished mat. The combined minimum storage capacity of the MTV and paver hopper insert shall be 30 tons. The Engineer shall approve all equipment prior to commencement of paving.

Use of the MTV system for paving on bridge structures is not required. The MTV system shall not exceed maximum legal loadings when crossing structures.

An MTV will not be required when placing Truing and Leveling pavement courses.

Operation of the MTV shall be non-contact with the paver and controlled by an auto tracking mechanism that synchronizes the machine's forward speed with the paver. The MTV shall provide continuous flow of asphalt to the paver during daily paving operations. If a discontinuous flow of asphalt occurs or if excessive segregation is evident in the finished surface, paving shall be halted and the Contractor must take necessary corrective actions prior to the resumption of paving.

General operation and cleaning restrictions of the MTV shall meet the requirements of Section 404 for Pavers.

The cost for the MTV and paver hopper insert shall be included under the appropriate asphalt pavement items.

## SPECIAL NOTE

### PG BINDER AND MIX DESIGN LEVEL

Requirements of this note apply to all Section 404 Asphalt Pavement items in this contract, except for shim, permeable base, temporary pavements, and miscellaneous, which may use non-modified PG binders such as PG 64S-22 and PG 64H-22.

#### PG BINDER

Use polymer or Terminal Blend Crumb Rubber modified **PG 64V-22** (Very High) meeting the requirements of AASHTO M 332, *Standard Specification for Performance Graded Asphalt Binder using Multiple Stress Creep Recovery (MSCR)*, for the production of asphalt mixtures for this project. In addition, the binder grade must also meet the **elastomeric** properties as indicated by one of the following equations for %R<sub>3.2</sub>:

1. For  $J_{nr3.2} \geq 0.1$ ,  $\%R_{3.2} > 29.371 * J_{nr3.2}^{-0.2633}$
2. For  $J_{nr3.2} < 0.1$ ,  $\%R_{3.2} > 55$

Where:

R<sub>3.2</sub> is % recovery at 3.2 kPa

J<sub>nr3.2</sub> is the average non-recoverable creep compliance at 3.2 kPa

When terminal blend CRM PG binder is used, the following shall apply:

- Crumb rubber particles shall be finer than #30 sieve size.
- The CRM PG binder shall be storage-stable and homogeneous.
- The Dynamic Shear Rheometer (DSR) shall be set at 2-mm gap.
- The CRM PG binder shall be 99% free of particles retained on the 600 µm sieve as tested in accordance with Section 5.4 of M 332.

Use of polyphosphoric acid (PPA) to modify the PG binder properties is prohibited for mixtures under this contract. This prohibition also applies to the use of PPA as a cross-linking agent for polymer modification.

#### MIX DESIGN

The mixture designs must be developed in accordance with the criteria specified in the asphalt pavement items that are appropriate for the Mixture Design Level of **75 Gyration**s.

**Note:** The PG binder for this project will be modified with polymer or CRM additives to meet the requirements stated above. Handling of the asphalt mixtures shall be discussed at pre-construction and pre-paving meetings.

## HMA WITH CRUSHED GLASS

**SCOPE.** This specification covers the requirements for the addition of crushed glass to hot mix asphalt mixtures. The provisions of Section 402 - Hot Mix Asphalt (HMA) Pavements applies except that the Contractor has the option of blending of the crushed glass in the following mixes:

- 1 1/2 inch Nominal Max. Size
- 1 inch Nominal Max. Size
- 3/4 inch Nominal Max. Size
- Truing and Leveling Course

If the Contractor chooses the crushed glass option, the following modifications to the Standard Specifications shall apply:

### MATERIAL REQUIREMENTS

Crushed glass shall be subject to the approval of the Regional Materials Engineer prior to its use. The crushed glass shall contain no more than 1% (by weight) contaminants and shall meet the following gradation:

Sieve Size	Percent Passing
3/8 inch	100
1/4 inch	90 - 100
No. 30	0 - 20

Note: The gradation requirements may be modified upon approval by the Regional Materials Engineer.

Crushed glass may be included in the mixture up to 5%, maximum, of the total aggregate weight. The crushed glass, aggregate, and Performance-Graded Binder (PGB) shall meet the requirements specified in the Standard Specification §401-2.01 Hot Mix Asphalt Designs and §401-2.04 Performance-Graded Binder.

### CONSTRUCTION DETAILS

The crushed glass shall be proportioned from a separate feed bin approved by the Regional Materials Engineer. In addition, all requirements pertaining to aggregate shall apply to crushed glass including the equipment requirements for automatic proportioning and recording as stipulated for aggregate in §401-3.08.

**METHOD OF MEASUREMENT.** The provisions of §401-4 and §402-4, Method of Measurement, shall apply.

**BASIS OF PAYMENT.** The provisions of §402-5, Basis of Payment, shall apply.

## USE OF RECLAIMED ASPHALT SHINGLES (RAS) IN THE PRODUCTION OF ASPHALT MIXTURES

**DESCRIPTION.** The requirements below cover the use of Reclaimed Asphalt Shingles (RAS) in the production of asphalt mixtures. Sections 401 and 402 of the NYS Standard Specifications apply except as modified herein.

### MATERIAL REQUIREMENTS

The Contractor has the option of using the following:

- Manufactured Waste (MW) RAS may be used in shim, base, binder, and top courses (excluding 6.3 HMA Top Course, Waterproofing Bridge Deck Overlay, and Ice Retardant mixtures).
- Post Consumer Waste (PCW) RAS and may be used in shim, base and binder courses.

The RAS must be stockpiled at the plant facility and shall be subject to the approval of the Regional Materials Engineer (RME) prior to its use. RAS shall meet the following requirements:

- Shall be from a source that has obtained a beneficial use determination (BUD) from the NYS Department of Environmental Conservation (DEC) as specified in 6 NYCRR 360-1.15.
- Shall be certified to be asbestos free.
- Shall be completely free of nails. In addition, it shall contain no more than 1% by weight of other deleterious materials such as glass, wood, plastic, etc.
- Shall meet the following gradation:

Sieve Size	Percent Passing	
	Min.	Max.
¼ inch (6.3 mm)	100	-
#4 (4.75 mm)	90	100
#8 (2.36 mm)	75	90
#16 (1.18 mm)	50	70
#30 (0.600 mm)	30	55
#50 (0.300 mm)	15	40
#100 (0.150 mm)	5	25
#200 (0.075 mm)	-	15

The maximum RAS allowed in the mixture is 2% by weight of the total mixture. A Control Plan for using shingles in HMA shall be developed and submitted to the Regional Materials Engineer detailing the control and testing of the stockpiles. RAS shall be uniformly blended with RAP to reduce clumping and must be stockpiled separate from other stockpiles. Other methods of reducing RAS clumping can be utilized with the approval of the RME.

**Rejuvenator.** A rejuvenator shall be added to PCW RAS using a pugmill or similar equipment to pre-blend and stockpile the rejuvenated PCW RAS. Alternatively, a spray system may be used to spray the rejuvenator onto the PCW RAS prior to its introduction into the plant mixer. The

## USE OF RECLAIMED ASPHALT SHINGLES (RAS) IN THE PRODUCTION OF ASPHALT MIXTURES

rejuvenator shall meet the requirements of ASTM D 4552, *Standard Practice for Classifying Hot-Mix Recycling Agents*. Other liquid products or methods which facilitate softening of the PCW RAS binder may be used with the approval of the Regional Materials Engineer. The application rate shall be as recommended by the rejuvenator supplier.

**Mixture Design.** Prior to production of the HMA, the mixture design shall be developed to meet all the requirements in the latest Materials Method (MM) 5.16, *Hot Mix Asphalt (HMA) Mixture Design and Mixture Verification Procedures*, available on the Department's website. The mixture design shall also meet the performance test criteria listed in the table below. The testing must be performed by an AASHTO Materials Reference Laboratory (AMRL) approved laboratory that has the capability of performing these tests. When RAS is used in conjunction with RAP, the total percentage of reclaimed material shall not exceed the maximum of 20% for Top Course and Binder Course, and 30% for Base Course currently allowed under the specifications during the production of HMA.

### Mixture Performance Test Requirements

Tests	Specification Criteria
Dynamic Modulus, AASHTO TP 79	Report
Flow Number, AASHTO TP 79	200, min.
Flexural Beam Fatigue, AASHTO T 321, 750 $\mu$ -Strains	10,000 cycles, min.
Overlay Tester, TxDOT TEX-248F	300 cycles, min.

**Reclaimed PG Binder Ratio:** The ratio of reclaimed PG binder from the RAP and RAS to the total PG binder content shall not exceed 0.2.

### CONSTRUCTION DETAILS

The provisions of Section 401 and Section 402 apply except that the RAP/RAS stockpile shall be tested at a frequency of at least once per day of production to determine the asphalt content and the gradation of the combined reclaimed material.

## SPECIAL NOTE

### Effective PG Binder Content

1. **9.5 HMA Mixture Design:** The mixture design shall be formulated in accordance with Materials Method 5.16. Additionally, the mixture shall meet the minimum effective asphalt,  $P_{be}$ , in the table below. The  $P_{be}$  shall be calculated using the specific gravities of aggregates tested within 14 days prior to production.

<b>Minimum Effective AC</b>	
<b>Aggregate SG, <math>G_{sb}</math></b>	<b><math>P_{be}</math></b>
2.250 to 2.274	6.2
2.275 to 2.324	6.1
2.325 to 2.374	6.0
2.375 to 2.424	5.9
2.425 to 2.474	5.8
2.475 to 2.524	5.7
2.525 to 2.574	5.6
2.575 to 2.624	5.5
2.625 to 2.674	5.4
2.675 to 2.724	5.3
2.725 to 2.774	5.2
2.775 to 2.824	5.1
2.825 to 2.874	5.0
2.875 to 2.924	4.9
2.925 to 2.974	4.8
2.975 to 3.024	4.7
3.025 to 3.074	4.6

2. **Mixture Production:**

- a. At no point shall the mixture be produced below the design asphalt content with a production tolerance of 0.1%. If the design asphalt content falls below the allowable target, the subplot will be given a QAF of 1.00 or less, and necessary changes shall be made to the production to meet the target.
- b. The effective asphalt shall be calculated for every subplot during production. If the effective asphalt falls below the minimum, the subplot will be given a QAF of 1.00 or less.



**SPECIAL NOTE****Fine Aggregate Blend**

Requirements of this note apply to Item 404.12X2, 12.5 F2 Top Course Asphalt and/or Item 404.09X2, 9.5 F2 Top Course Asphalt in this contract.

All of the requirements of Section 401 - Plant Production, and Section 404 - Asphalt Pavements, shall apply except, the fine aggregate component of the Asphalt Design Mix shall be a blend of crushed stone screenings and natural sand (manufactured or non-manufactured). All other criteria in Section 703-01 Fine Aggregate shall apply. The fine aggregate component shall not contain more than 50 percent natural sand (manufactured or non-manufactured) by weight of the total fine aggregate component.

**REINFORCEMENT FOR CEMENT CONCRETE**

Bar reinforcement and wire fabric specified in the Contract Documents shall be in accordance with the following:

**Bar Reinforcement** used on this project shall meet the requirements of Section 709-01 *Bar Reinforcement, Grade 60*, or Section 709-14 *Bar Reinforcement, Grade 75*, as detailed on the plans. No substitutions will be allowed. Bar reinforcement (for the items listed below) shall be galvanized and fabricated in accordance with ASTM A767 and meet the requirements of Section 709-11 *Galvanized Bar Reinforcement*. The requirements of ASTM A767 Section 6.8 (Chromating) will not be waived.

**Wire Fabric Reinforcement** used on this project (for the items listed below) shall meet the requirements of Section 709-02 *Wire Fabric for Concrete Reinforcement*. Any Wire Fabric Reinforcement required for the items listed below shall be galvanized in accordance with Section 719-01 *Galvanized Coatings and Repair Methods*, Type I. Galvanized Wire Fabric Reinforcement shall be fabricated and galvanized in accordance with ASTM A123 and ASTM A767. The requirements of ASTM A767 Section 6.8 (Chromating) will not be waived.

Item Numbers that require the use of **Galvanized Bar Reinforcement** and/or **Galvanized Wire Fabric Reinforcement** on this project are as follows:

644.11

644.20



**Reinforcement for Reinforced Concrete Pipe and Related Drainage Structures** shall meet the requirements of Section 706 – *Concrete, Clay, and Plastic Pipe*.

**ARCHIVING**

**DELETE** Section 202.10 of the New York State Steel Construction Manual in its entirety and **ADD** the following:

**ARCHIVING** – After successful erection of the steel components and prior to final acceptance, the Contractor shall deliver two (2) complete sets of final signature approved shop drawings in the Tag Image File Format (tiff). CCITT group IV, 2D compression minimum 200 dpi on two (2) separate compact discs. Thereafter, these shall remain the property of the New York State Thruway Authority.

For a list of Items requiring archiving disc of final signature approved shop drawings see Appendix G of the New York State Steel Construction Manual.

The Contractor shall also deliver the original signature approved hard copy of all drawings requiring a Professional Engineer's signature and stamp.

Items requiring a Professional Engineer's signature and stamp include, but are not limited to, erection, demolition, and transportation drawings.

Final payment will be held until the above requirements are met.

**SPECIAL NOTE****BRIDGE WASHING WASTE**

The solid waste material generated by the debris collection and pressure washing operation may contain organic and non-organic matter such as sand, soil, loose pavement material, paper, bird nests, animal droppings, other trash and debris, and loose rust and paint. The collection, storage, transport and disposal of waste generated by this work shall be managed in accordance with the provisions of §107-10 Managing Surplus Material & Waste. All sand, dirt, cinders, and other trash and debris collected from the bridge shall be disposed of at a suitable disposal facility.

**REQUIRED DOCUMENTATION FOR**  
**ALL ATTENUATING TERMINALS FOR GUIDE RAIL**  
**AND ALL ATTENUATORS**

A minimum of two (2) weeks prior to installing any materials required under these items, the Contractor shall submit to the Engineer two (2) copies of the Manufacturer's Drawings, Design Manuals, Installation Manuals, and Maintenance Manuals prepared for the product and one (1) copy of the same manuals intended for the Section Supervisor of the Section where the unit is being installed. The project being installed shall be the manufacturer's most current approved unit. The submitted drawings and manuals shall match the provided product. The Contractor shall install the crash-cushion only after receiving authorization from the Engineer to do so. No payment shall be made until all the above drawings and manuals have been transmitted to the Engineer and the Section Supervisor.

Reflective sheeting shall be applied to the nose of each attenuating device installed. If sheeting is not specified, it shall consist of alternating 4-inch-wide yellow retroreflectorized stripes and black opaque stripes placed diagonally at 45 degrees or in chevron formation as directed by the Engineer. The retroreflectorized stripes shall conform to §730-05, Reflective Sheeting, ASTM Type IX (Class E). The reflective sheeting shall be rectangular in shape and cover the entire approach end of the attenuating terminal or attenuator. The cost of the reflective sheeting shall be included in the bid price for each attenuator and attenuating terminal.

**SPECIAL NOTES:****BOX BEAM GUIDERAIL ITEMS 606.1203 AND ITEM 606.1403**

The Contractor shall only use the Box Beam Guide Rail End Assembly – Type III or Box Beam Median Barrier End Assembly – Type C that employs a box beam bursting type mandrel to absorb the energy of the impacting vehicle, otherwise known as the MASH MBEAT (MASH Box Beam Bursting Energy Absorbing Terminal) for 6"x6" Box Beam guide rail or the (NCHRP-350) BEAT-MT (Median Terminal) for 6"x8" Box Beam Median Barrier.

Vendor contact information is as follows:

**ROAD SYSTEMS, INC.**

Central Headquarters and Manufacturing

3616 Old Howard County Airport

Big Spring, TX 79720

Phone: (432) 263-2435

FAX: (432) 267-4039

Website: <http://www.roadsystems.com/contactus.htm>

**SPECIAL NOTE:****SECTION 644 – DRILLED SHAFT FOUNDATIONS FOR OVERHEAD SIGN STRUCTURES**

1. The drilled shaft foundations for these structures derive some or all of their capacity from side friction along the length of the shaft. The development of side friction is dependent upon fluid concrete being placed directly against soil along the length of the shaft. Under no circumstances shall temporary casings be left in place. All temporary casings shall be removed as the concrete is placed.
2. Due to the presence of groundwater and loose cohesionless soil at the base of the drilled shaft, it may not be possible to dewater the shaft and place Class A concrete in the dry, as specified in Subsection 644-3.05 A. For these situations, the shaft excavation shall not be dewatered and shall be concreted with Class G tremie concrete in accordance with Subsection 555-3.05 *Depositing Structural Concrete Under Water*. The bottom of the shaft excavation shall be cleaned of loose material to the satisfaction of the Engineer immediately prior to concreting. The cost of this work shall be included in the unit price bid for Drilled Shaft for Overhead Sign Structures.

## Anchor Rod Installation and Nut Tightening and Re-tightening Procedure for Sign Structures and High Mast Lighting

(Excerpted & Modified from FHWA NHI 05-036)

### Installation of Anchor Rods:

Proper installation of the anchor rods is the responsibility of the foundation contractor, and inspection and testing is to be performed by the foundation contractor. Records shall be kept of the dates and results of testing and inspection, and these records shall be available for the Design Engineer or their representative to review. The Design Engineer may require that their representative witness the inspection and testing.

Prior to placing the anchor rods in the concrete, an anchor rod rotation capacity test shall be run with at least one anchor rod from every lot. This test shall be run in a Skidmore-Wilhelm device. The test consists of Steps 2 through 14 of the tightening procedures (presented later), adapted as necessary because there is no post or crane, and there is only one anchor rod. NCHRP Report 469 recommends that the nut be rotated at least to the required rotation given in Table 1. After the test, the nuts shall be removed and inspected for damage to their threads.

Then the anchor rod is removed from the test plate and restrained while the nuts are turned onto the bolts well past the location of the leveling nut and top nut in the test and backed off by one worker using an ordinary wrench (without a cheater bar). The threads are considered damaged if more than minimal effort is required to turn the nut. If there is no damage to the anchor rod or nut during this test, they may be used in the foundation. If there is damage to the threads or an inability to attain at least the verification torque, the lot of anchor rods shall be rejected.

**TABLE 1**

**Nut Rotation for Turn-Of-Nut Pretensioning**

Anchor Rod Diameter, in.	Nut Rotation from Snug-Tight Condition a, b, c	
	F1554 Grade 36	F1554 Grades 55 and 105 A615 and A706 Grade 60
≤1 1/2	1/6 Turn	1/3 Turn
>1 1/2	1/12 Turn	1/6 Turn
a. Nut rotation is relative to anchor rod. The tolerance is plus 20 degrees. b. Applicable only to double-nut-moment joints. c. Beveled washer shall be used if: The faying surface of the base plate is sloped more than 1:20 (2.86°).		

The recommended procedure for installing anchor rods in the foundation is as follows:

1. Anchor rods shall be installed as a group and shall be secured against relative movement and misalignment, such as with a template set composed of rings with nuts on both sides at two locations along the length of the anchor rods. One of the plates or rings is usually above the top of concrete and is reused as a template, see Figures 1 and 2. Where Structures require two posts, such as quad-truss span sign structures and cashless tolling gantries, a template shall also be required to verify the locations of the two anchor rod assemblies in the two separate foundations.
2. The template set with anchor rods shall be secured in its correct position in accordance with the drawings.



## Anchor Rod Installation and Nut Tightening and Re-tightening Procedure for Sign Structures and High Mast Lighting

(Excerpted & Modified from FHWA NHI 05-036)

3. The concrete shall be placed and cured.



**Figure 1. Four Anchor Rod Group in a Template.**



**Figure 2. Template Secured to the Forms to Ensure Proper Alignment.  
Note Anchor Rod Threads Taped to Prevent Contamination by Concrete.**

4. If a top template is above the concrete surface, it may be removed 24 hours after placing the concrete.
5. The exposed part of the anchor rods shall be cleaned with a wire brush or equivalent and lubricated with beeswax or toilet-ring wax.

## Anchor Rod Installation and Nut Tightening and Re-tightening Procedure for Sign Structures and High Mast Lighting

(Excerpted & Modified from FHWA NHI 05-036)

6. After at least 24 hours, the anchor rods shall be inspected visually to verify that there is no visible damage to the threads and that their position, elevation, and projected length is within the tolerances of the *AISC Code of Standard Practice for Steel Buildings and Bridges*; and that the misalignment from vertical is no more than 1:40. It is good practice to use a steel or wood template with the hole pattern to check the base of the post and the anchor rods. The nuts shall be turned onto the rods well past the elevation of the bottom of the leveling nut and backed off by one worker using an ordinary wrench without a cheater bar.
  
7. Once the concrete has reached required strength, anchor rods are ready to be subjected to erection loads.

### **Procedure for Anchor Rod Nut Tightening and Follow-Up Re-tightening:**

Anchor rod connections require some level of pretensioning. Only installation of double-nut-moment joints (the "double-nut" in this connection is the Lower Top Nut and the Leveling Nut as shown on the contract drawings) is covered in this section since single-nut joints are not permitted for these types of structures. Requirements for fatigue-loaded, threaded-shear-and-uplift joints may be derived from the installation requirements of double-nut-moment joints.

The "turn-of-the-nut" method is primarily relied upon to achieve a certain pretension between the double nuts of the anchor rods. Although torque is a poor way to install bolts and anchor rods, it is the only alternative for defining snug-tight conditions, inspection, and retightening. Lubrication of the threads of the anchor rod, the threads of the nut, and the bearing surface of the nut is required for proper installation. Beeswax and toilet-ring wax have been shown to provide good lubrication. In this document, the snug-tight condition for anchor rods is defined as nuts tightened to a torque between 20 and 30 percent of the verification torque computed using the following equation:

$$T_v = 0.12d_bF_I$$

Where

$T_v$  = verification torque (inch-kips)

$d_b$  = nominal body diameter of the anchor rod (inches)

$F_I$  = installation pretension (kips) equal to 50 percent of the specified minimum tensile strength of F1554 Grade 36 rods, and 60 percent for the rest of threaded fasteners.

Research by Till and Lefke has shown that a value of 0.12 in this relationship is adequate for common sizes and coatings of anchor rods. (Note: the torque in "in-kips" can be multiplied by 83.3 to get ft-lb).

## Anchor Rod Installation and Nut Tightening and Re-tightening Procedure for Sign Structures and High Mast Lighting

(Excerpted & Modified from FHWA NHI 05-036)

Very large torque may be required to properly tighten anchor rods greater than 1 inch in diameter. A “cheater bar” such as a pipe or extension handle as much as 10 feet long may be required for the torque wrench. For snugging the leveling nuts, an open-end wrench with a 10-foot-long pipe or extension handle will typically suffice. Tightening the Lower Top Nuts for anchor rods greater than 1 inch in diameter may require either of the following:

- A hydraulic torque wrench (Figure 3) or
- A box end "slug" or "knocker" wrench with a 10-foot-long pipe or extension handle.



**Figure 3. A Hydraulic Torque Wrench Tightening Anchor Rod Nuts to Achieve Needed Rotation.**

The box end wrench may be moved by impact with a sledgehammer or by the efforts of several workers. Inadequately tightened bolts can lead to fatigue failures and further loosening of the nuts under cyclic loading. A less likely outcome of failure to follow the tightening procedure is over-tightened rods and associated plastic deformation and stripping of the threads, which may require removal and replacement.

The following steps provide a recommended anchor rod-nut installation tightening and re-tightening procedure:

1. The proper position of the anchor rods and the proper hole pattern on the post are verified (with a template).
2. It shall be verified that the nuts can be turned onto the rods well past the elevation of the bottom of the leveling nut and backed off by one worker using an ordinary wrench without a cheater bar.
3. If the threads of anchor rods were lubricated more than 24 hours before placing the leveling nut or have been wet since they were lubricated, the exposed threads of the anchor rods shall be re-lubricated. Leveling nuts shall be cleaned, threads and bearing surfaces lubricated.

## Anchor Rod Installation and Nut Tightening and Re-tightening Procedure for Sign Structures and High Mast Lighting

(Excerpted & Modified from FHWA NHI 05-036)

4. The leveling nuts are placed on the anchor rods and made level.
5. Leveling nut washers shall be placed.
6. Next, the post or end frame is brought in and positioned with a crane.
7. The post or end frame is set plumb and base plate leveled (or as shown on the erection drawings) and the nuts are tightened. The following is the installation sequence for double-nut-moment joints using the "turn-of-the-nut" method of pretensioning.
8. Lower Top Nut washers shall be placed.
9. Threads and bearing surfaces of the Lower Top Nuts shall be lubricated, placed, and tightened to the snug-tight condition in the star pattern as indicated on the erection drawings.
10. Leveling nuts shall be tightened to the snug-tight condition in the same star pattern.
11. At this point, the installation crew shall verify if beveled washers are necessary. Beveled washers are necessary under the leveling and Lower Top Nuts if the faying surfaces of the base plate have a slope greater than 1:20 (2.86°) and/or any nut could not be brought into firm contact with the flat washer/base plate due to anchor rod vertical misalignment. If any beveled washer is required, the installation crew shall disassemble the joint as necessary, add the beveled washer(s) and retighten (in a star pattern) to the snug-tight condition, the Lower Top Nuts and leveling nuts.
12. Before tensioning the anchor rods, the reference position of the Lower Top Nuts in the snug-tight condition shall be marked with a suitable marking on one flat location on the top of the nut, with a corresponding reference mark on the base plate at each rod. Lower Top Nuts shall be turned in increments in a star pattern (at least two full tightening cycles) to the nut rotation specified in Table 1. After tightening, the nut rotation shall be verified by verifying the angle between the mark on the Lower Top Nuts and the base plate marks. **For cantilever structures, this tensioning shall not be performed until the entire structure is erected. Refer to plan sheet notes for more erection information regarding cantilever structures.**
13. The load may be released from the crane.
14. A torque wrench shall be used to verify that a torque at least equal to the computed verification torque,  $T_v$ , has been achieved, or requires additional tightening of the leveling nuts and Lower Top Nuts. An inability to achieve this torque shall be interpreted to indicate that the threads have stripped and shall be reported to the Design Engineer.

**Anchor Rod Installation and Nut Tightening  
and Re-tightening Procedure for Sign  
Structures and High Mast Lighting**

(Excerpted & Modified from FHWA NHI 05-036)

15. After at least 48 hours, the torque wrench shall be used to verify that a torque of at least 110 percent of the verification torque,  $T_v$ , has been achieved, or requires additional tightening of the leveling nuts and Lower Top Nuts. An inability to achieve this torque shall be interpreted to indicate that the threads have stripped and shall be reported to the Design Engineer.
16. The nuts on the anchor rods shall be prevented from loosening. Upper Top Nuts shall be installed "Snug Tight" against the Lower Top Nuts after full tensioning and re-tightening as described in #15 above to prevent nut loosening. Refer to contract drawings for details. Tack welding in lieu of installation of the Upper Top Nut will not be permitted.

**DELIVERY AND PICK-UP**  
**OF**  
**SIGN PANELS, MILE MARKERS, DELINEATORS AND SNOWPLOW MARKERS**

Overhead and ground-mounted sign panels, mile markers, delineators and/or snowplow markers included in the project will be supplied by the Thruway Authority and delivered to I-190, Niagara Thruway Interchange 15, to the Niagara Section Maintenance facility located at approximately Milepost N13.0 (Southbound) for pick-up by the Contractor. The Contractor shall request the signs from the Engineer a minimum of 45 days prior to the scheduled installation. The Contractor shall inspect the condition of the signs and notify the Engineer of any defects prior to pick-up.



## US CUSTOMARY ASPHALT PRICE ADJUSTMENT

ASPHALT PRICE ADJUSTMENT <sup>1</sup> CONVERSION FACTORS		
MATERIAL DESCRIPTION	CONVERSION FACTOR	ITEM NUMBER <sup>2</sup>
Bituminous Stabilized Course	0.065 t PGB/yd <sup>3</sup>	302.01
Asphalt Treated Permeable Base, Type 2	0.035 t PGB/t	402.01190X, 404.01190X
Shim Course	0.0825 t PGB/t	402.05890X, 404.05890X
6.3 Top Course	0.067 t PGB/t	402.06XXXX, 404.06XXXX
9.5 Top Course, T&L, Shoulder Course	0.062 t PGB/t	402.09XXXX, 402.41890X, 404.09XXXX, 404.41890X
12.5 Top Course, T&L, Shoulder Course	0.055 t PGB/t	402.12XXXX, 402.42890X, 404.12XXXX, 404.42890X
19 Binder Course	0.049 t PGB/t	402.19XXXX, 402.43890X, 404.19XXXX, 404.43890X
25 Binder Course	0.045 t PGB/t	402.25XXXX, 402.44890X, 404.25XXXX, 404.44890X
37.5 Base Course	0.040 t PGB/t	402.37XXXX, 404.37XXXX
Paver Placed Surface Treatment, Types A, B, and C	0.064 t PGB/t	415.0X0F0118
Micro-Surfacing, Quick-Set Slurry	0.078 t PGB/t	413.0X0F0118, 414.0X0F0118
Straight Tack Coat	0.0026 t PGB/gal	407.0103
Asphaltic Sealants (ASTM 6690)	0.0027 t PGB/gal	402.75XXXX18, 402.76XX0018
Chip Seal	0.0027 t PGB/gal	410.30, 410.02030006
Asphalt Emulsion for Cold Recycling	0.0027 t PGB/gal	416.02XX00RR, 416.20XX00RR, 416.2X, 416.21XX00RR
Fog Seal and Dilute Tack Coat	0.0016 t PGB/gal	407.0102407.01XXXXRR, 410.40, 416.30, 416.040000RR, 416.300000RR
PG Binder for Cold Recycling	0.0043 t PGB/gal	416.22, 416.030000RR, 416.22000018
Asphaltic Sealant – Clean & Seal	0.00004 t PGB/LF 0.225 t PGB/LNMI	402.76XX0008, 412.76XX0001
Asphaltic Sealant – Treating Cracks	0.240 t PGB/LNMI	412.76040001
Asphaltic Sealant – Rout & Seal	0.00005 t PGB/LF 0.270 t PGB/LNMI	402.760100RR, 412.760100RR, 412.760300RR
Repair of HMA Pavement, Temporary Asphalt	See Note 4	633.14, 633.15, 633.16, 619.06xx
Truing and Leveling, Asphalt Sidewalks, Driveways, Bike Paths, Gutters	See Note 5	402.01790X, 402.01890X, 404.01790X, 404.01890X, 608.020102, 624.02XXXX
Waterproof Bridge Deck Overlay	0.0725 t PGB/t	402.907X0X18

**US CUSTOMARY ASPHALT PRICE ADJUSTMENT****ASPHALT PRICE ADJUSTMENT<sup>1</sup> CONVERSION FACTORS****Notes:**

1. In accordance with Standard Specification §698-3.01, the index value for the asphalt price adjustment is the average posted price of Performance Graded Binder (PGB) for the month of bid letting.
2. Item Number - This is the contract pay item number under which these materials are most frequently paid. Unless indicated otherwise, materials similar to those indicated under the column entitled "Material Description" are also eligible for adjustment using the factor listed for a similar material with the same pay unit regardless of the actual contract pay item number.
3. Quality Adjustment Items (402/404/608/624) are not eligible for asphalt price adjustment.
4. Asphalt Price Adjustment Conversion Factor based on unit of TON of asphalt placed, not the pay unit of this item. The conversion factor for HMA Pavement Repair and Temporary Asphalt will be based on the actual asphalt mixture used.
5. The conversion factor for Truing and Leveling, Driveways, and other items that allow asphalt mix options, will be based on the actual asphalt mixtures used.
6. A two-digit suffix (RR) at the end of a contract pay item indicates a special specification.
7. The conversion factors for HMA mixed with slag shall be increased by 25%.
8. t = ton; LF = linear feet; LNMI = lane miles



## US CUSTOMARY FUEL PRICE ADJUSTMENT

FUEL PRICE ADJUSTMENT <sup>1</sup> CONVERSION FACTORS		
MATERIAL DESCRIPTION	CONVERSION FACTOR	ITEM NUMBER <sup>2</sup>
Unclassified Excavation	0.35 gal/yd <sup>3</sup>	203.02
Embankment	0.10 gal/yd <sup>3</sup>	203.03, 620.XX
Fill	0.45 gal/yd <sup>3</sup>	203.05, 203.06, 203.07, 203.08XX, 203.20, 203.21, 203.25
Controlled Low Strength Material	1.00 gal/yd <sup>3</sup>	204.01, 204.02, 204.03, 204.04
Trench/Culvert/Structure Excavation	0.50 gal/yd <sup>3</sup>	206.01, 206.0201
Bituminous Stabilized Course	1.40 gal/yd <sup>3</sup>	302.01, 307.01
Subbase Course	1.00 gal/yd <sup>3</sup>	304 Items
Asphalt Mixtures	2.50 gal/ton	402 Items <sup>3</sup> , 404 Items <sup>3</sup> , 405.01, 608.020102 <sup>3</sup> , 619.0601 <sup>4</sup> , 624.02XXXX <sup>3,4</sup> , 633.14 <sup>3,4</sup> , 633.15 <sup>3,4</sup> , 633.16 <sup>3,4</sup>
Milling	0.10 gal/yd <sup>2</sup>	490 Items
Portland Cement Concrete Pavement	1.00 gal/yd <sup>3</sup>	502 Items <sup>3</sup> , 503.0101, 503.1011, 503.1012
Fill Type Retaining Walls	0.45 gal/yd <sup>3</sup>	554.30XX <sup>5</sup> , 554.31 <sup>5</sup> , 554.4X <sup>5</sup>
Footing Concrete & Concrete for Structures – All classes	1.00 gal/yd <sup>3</sup>	555 Items, 582.05
Approach Slabs	0.33 gal/yd <sup>2</sup>	557.2001, 557.2002, 557.2003, 557.2009, 557.22
Structural Slabs with bottom formwork	0.25 gal/yd <sup>2</sup>	557.01XX, 557.07, 557.30, 557.41XX
Structural Slabs - no bottom formwork	0.15 gal/yd <sup>2</sup>	557.05XX, 557.09, 557.43XX
Class D and Overlay Concrete	0.05 gal/yd <sup>2</sup>	557.13, 584 Items
Concrete Barrier, Type A	0.16 gal/ft	606.3001, 606.3021, 606.3031
Concrete Barrier, Type B	0.19 gal/ft	569.01, 606.3002, 606.3022, 606.3032
Concrete Barrier, Type C	0.22 gal/ft	606.3003, 606.3023, 606.3033
Concrete Barrier, Half Section	0.11 gal/ft	569.02, 569.06, 606.3004, 606.3024, 606.3034
Concrete Barrier, Single Slope	0.23 gal/ft	569.05, 569.07, 606.3041, 606.3043, 606.3044
Concrete Barrier Texas & Wide, Single Slope	0.28 gal/ft	569.08, 606.3051, 606.3053, 606.3054
Concrete Barrier Half Section, Single Slope	0.17 gal/ft	569.04, 606.3061, 606.3063, 606.3064
Vertical Faced Concrete Parapet	0.10 gal/ft	569.03
Gravel, Stone, Slag	1.00 gal/yd <sup>3</sup>	411.01, 411.02, 411.03, 623.1X
Concrete Sidewalks and Driveways	1.00 gal/yd <sup>3</sup>	608.01XX
Topsoil	0.45 gal/yd <sup>3</sup>	610.10, 610.11XX, 610.14XX
Turf Establishment - Performance	0.05 gal/yd <sup>2</sup>	610.16010020

## US CUSTOMARY FUEL PRICE ADJUSTMENT

FUEL PRICE ADJUSTMENT<sup>1</sup> CONVERSION FACTORS**Notes:**

1. In accordance with Standard Specification §698-3.02, the index value for the fuel price adjustment is the posted price for the month of bid letting.
2. Item Number - This is the contract pay item number under which these materials are most frequently paid. Unless indicated otherwise, materials similar to those indicated under the column entitled "Material Description" are also eligible for adjustment using the factor listed for a similar material with the same pay units regardless of the actual contract pay item number.
3. Quality Adjustment Items (402/404/502/608/624) are not eligible for fuel price adjustment.
4. Fuel Price Adjustment Conversion Factor based on units of TONS of asphalt placed, not the pay units of this item.
5. Fuel Price Adjustment Conversion Factor based on units of CY of backfill paid under this item, not the pay units of this item.

**SPECIAL NOTE:**  
**CONCRETE BARRIER TO GUIDE RAIL AND MEDIAN BARRIER**

Concrete barrier sections that connect to other types of guide rail or median barrier (box beam, corrugated beam, thrie beam, etc.) shall be pre-cast in accordance with Section 704-05.



# **Compliance Requirements and Procedures**

*For Participation of  
Disadvantaged/Minority/Women/Service-Disabled Veteran-Owned  
Business Enterprises  
and  
Equal Employment Opportunity  
on  
NYS Thruway Authority Contracts*

**(DBE/MWBE/SDVOB/EEO)**

**CONTRACT GOALS FOR DBE/MWBE/SDVOB PARTICIPATION**

The New York State Thruway Authority herein after, (“Authority”) is committed to providing and ensuring Minority-owned Business Enterprises (MBE), Women-owned Business Enterprises, (WBE) Service-Disabled Veteran-owned Business Enterprises (SDVOB) and Disadvantaged Business Enterprises (DBE) with opportunities to participate in the Authority’s contracting and procurement processes in accordance with Title 49, Part 26 of the United States Code of Federal Regulations (CFR), New York State Executive Law, Articles 15-A, 17-B, and all applicable federal and state laws, rules, regulations and Executive Orders, including but not limited to Executive Order 177 - Prohibiting State Contracts with Entities that Support Discrimination, as incorporated herein and/or contained in the NYS Department of Transportation Standard Specifications Section 102, “Bidding Requirements and Conditions” to the extent applicable to the contract.

Goal(s) have been established for this Contract/Agreement, expressed as a percentage of the total Contract/Agreement amount as follows:

**Disadvantaged Business Enterprise - DBE** (Federal-Aid)

Disadvantaged Business Enterprise (DBE) Participation Goal: \_\_\_\_\_%

Directories and/or Information related to the current certification status of Disadvantaged Business Enterprises can be obtained from the New York State Certified DBEs website at: <https://nysucp.newnycontracts.com>

**Minority/Women-Owned Business Enterprise - MWBEs** (Non Federal-Aid)

Minority Business Enterprise (MBE) Participation Goal \_\_\_\_\_%

Women's Business Enterprise (WBE) Participation Goal \_\_\_\_\_%

Directories and/or information related to the current certification status of Minority/Women Business Enterprises can be obtained from the New York State Certified MWBE website at: <ny.newnycontracts.com>

**Service-Disabled Veteran-Owned Business Enterprise (SDVOB)**

Service-Disabled Veteran-Owned Business Participation Goal \_\_\_\_\_%

Directories and/or information related to the current certification status of Service-Disabled Veteran Business Enterprises can be obtained from the New York State Certified SDVOB website at: <ogs.nv.gov/veterans/>

**Equal Employment Opportunity**

Minority \_\_\_\_\_%

Female \_\_\_\_\_%

For more information about the development of the goals, see Federal Register, Vol. 45, No. 194, at 65976-65991 (October 3, 1980) (minorities) and Federal Register, Vol. 45, No. 251 at 85750-85751 (December 30, 1980) (females). The text of these Federal Register notices can be found: • Federal Register Notice: Vol. 45, No. 194, at 65976-65991 (October 3, 1980)

Training Special Provisions  Yes  No

Training/Special Provision supplements each of the foregoing prescribed specific Equal Employment Opportunity percentage goals for utilization of minorities and women in the performance of work for the geographic location of the contract, included in this Proposal entitled “Equal Employment Opportunity (EEO) Requirements.”

CHART A

GOALS FOR MINORITY PARTICIPATION

County	%	County	%	County	%
Albany .....	3.2	Herkimer .....	2.1	* Richmond	
Allegany.....	6.3	Jefferson .....	2.5	Rockland .....	22.6
Broome .....	1.1	* Kings		St. Lawrence .....	2.5
* Bronx		Lewis .....	2.5	Saratoga .....	3.2
Cattaraugus .....	6.3	Livingston .....	5.3	Schenectady .....	3.2
Cayuga .....	2.5	Madison .....	3.8	Schoharie .....	2.6
Chautauqua .....	6.3	Monroe .....	5.3	Schuyler .....	1.2
Chemung .....	2.2	Montgomery .....	3.2	Seneca .....	5.9
Chenango .....	1.2	Nassau .....	5.8	Steuben .....	1.2
Clinton .....	2.6	* New York		Suffolk .....	5.8
Columbia .....	2.6	Niagara .....	7.7	Sullivan .....	17.0
Cortland .....	2.5	Oneida .....	2.1	Tioga .....	1.1
Delaware .....	1.2	Onondaga .....	3.8	Tompkins .....	1.2
Dutchess .....	6.4	Ontario .....	5.3	Ulster .....	17.0
Erie .....	7.7	Orange .....	17.0	Warren .....	2.6
Essex .....	2.6	Orleans .....	5.3	Washington .....	2.6
Franklin .....	2.5	Oswego .....	3.8	Wayne .....	5.3
Fulton .....	2.6	Otsego .....	1.2	Westchester .....	22.6
Genesee .....	5.9	Putnam .....	22.6	Wyoming .....	6.3
Greene .....	2.6	* Queens		Yates .....	5.9
Hamilton .....	2.6	Rensselaer .....	3.2		

\* The following goal ranges are applicable to the indicated trades in the Counties of Bronx, Kings, New York, Queens and Richmond.

Electricians.....	9.0 to 10.2	Bricklayers.....	13.4 to 15.5
Carpenters .....	27.6 to 32.0	Asbestos workers.....	22.8 to 28.0
Steam fitters .....	12.2 to 13.5	Roofers .....	6.3 to 7.5
Metal lathers.....	24.6 to 25.6	Iron workers (ornamental).....	22.4 to 23.0
Painters.....	26.0 to 28.6	Cement masons.....	23.0 to 27.0
Operating engineers .....	25.6 to 26.0	Glaziers.....	16.0 to 20.0
Plumbers .....	12.0 to 14.5	Plasterers .....	15.8 to 18.0
Iron workers (structural) .....	25.9 to 32.0	Teamsters.....	22.0 to 22.5
Elevator constructors .....	5.5 to 6.5	Boilermakers .....	13.0 to 15.5
		All others .....	16.4 to 17.5

GOALS FOR FEMALE PARTICIPATION

Goal \_\_\_\_\_ 6.9%

## **COMPLIANCE REQUIREMENTS AND PROCEDURES**

It is the policy of the New York State Thruway Authority (“Authority”) to comply with the provisions of Article 15-A of the New York State Executive Law, which requires that every contract over \$25,000 will afford equality of economic opportunities for minority group members and women, the facilitation of participation by minority-owned business enterprises and women-owned business enterprises. The Authority shall establish separate goals for participation of certified minority-owned business enterprises and women-owned business enterprises on all Authority contracts where applicable.

In addition, it is the policy of the Authority to ensure participation of DBEs on Federal-Aid contracts, pursuant to the provisions of Title 49, Part 26 of the United States Code of Federal Regulations.

Article 17-B of the New York State Executive Law provides for more meaningful participation in public procurement by certified Service-Disabled Veteran-Owned Business Enterprises (“SDVOBs”); thereby further integrating such businesses into New York State’s economy. The Authority recognizes the need to promote the employment of service-disabled veterans and to ensure that certified SDVOBs have opportunities for maximum feasible participation in the performance of Authority contracts.

The Authority is further committed to providing equal training and employment opportunities to minorities and women to participate in the Authority’s contracting and procurement processes, and by ensuring nondiscrimination in accordance with Appendix A - Standard Clauses for New York State Thruway Authority Contracts, including Clause 4 – Non-Discrimination Requirements, Clause 11 - Equal Employment Opportunities for Minorities and Women, Executive Order 11246, Executive Order 177, Training/Special Provisions and/or all applicable, federal, state, laws, rules, regulations and Executive Orders.

### **1. GENERAL PROVISIONS**

- A. The Contractor and/or all subcontractors/subconsultants, shall comply with the applicable laws, rules, regulations and provisions governed by this Contract/Agreement, in addition to any nondiscrimination or diversity practices and provisions of the Contract/Agreement at no additional cost to Authority.
- B. These provisions and requirements shall be included in all subcontracting/subconsultant contracts/agreements so that these requirements and provisions shall be binding upon all subcontractors/subconsultants, performing work under this Contract/Agreement.
- C. The Contractor/Consultant represents and warrants that, as a condition for award of the Contract, the Contractor/Consultant has submitted a Statewide Utilization Management Plan (“SUMP”) via the NYS Contract System (NYSCS) if required by Authority, which lists all proposed Subcontractors/ subconsultants including an identification of the NYS certified DBE/MWBE/SDVOB subcontractors/subconsultants/ suppliers the Contractor/Consultant intends to use to perform the Work of the Contract and to achieve the DBE/MWBE/SDVOB Contract Goals established in the Contract Documents. In addition, or alternatively, Contractor/Consultant may have submitted a request for a waiver. Prior to award of the Contract, the Authority approved Contractor’s/Consultant’s plan to achieve the DBE/MWBE/SDVOB Contract Goals established in the Contract Documents (DBE/MWBE/SDVOB Utilization Plan) to the extent the Authority did not approve Contractor’s/Consultant’s request for a waiver of part or all of the DBE/MWBE/SDVOB Contract Goals. The Authority approval of the DBE/MWBE/SDVOB Utilization Plan approves a Subcontractor/Subconsultant only for the purpose of the DBE/MWBE/SDVOB Utilization Plan.

**MBE PROVISIONS FOR NON-FEDERAL AID CONTRACTS AND AGREEMENTS****2. MINORITY/WOMEN-OWNED BUSINESS ENTERPRISES (MWBEs)**

In accordance with Article 15-A of the Executive Law, including regulations promulgated thereunder, the Authority has established the Minority-Owned Business Enterprise (“MBE”) and/or Women-Owned Business Enterprise (“WBE”) participation goals for this Contract/Agreement.. Contractor shall facilitate MWBE participation for the scopes of work to be performed under this Contract/Agreement, to satisfy the participation goals, or document good faith efforts taken to fulfill the goals in a manner prescribed by the Authority in accordance with the Compliance Requirements and Procedures specified herein.

The goals are applicable to the total amount payable under any Contract/Agreement awarded from this procurement and any changes made to the Contract/Agreement.

1. The Authority establishes MWBE goals for all applicable contracts. The MWBE goals for this Contract/Agreement are located on the “Contract Goals” page of this document and can also be found in the contractors/consultants documents for this Contract/Agreement.
2. For purposes of providing meaningful participation to certified MWBEs on this Contract/Agreement and in an effort to attain the certified MWBEs contract goals identified for this Contract/Agreement, the Contractor should reference the directory of MWBEs at the following internet address: [ny.newnycontracts.com](http://ny.newnycontracts.com).
3. The Contractor understands that only sums paid to MWBEs for the performance of a Commercially Useful Function, as that term is defined in 5 NYCRR § 140.1, may be applied towards the achievement of the applicable MWBE participation goal.

In the performance of this Contract/Agreement, the monetary value of fees, or markup percentage, charged by the MWBE shall be deemed to represent the Commercially Useful Function of the MWBE serving as a broker.

4. The Contractor agrees to provide, upon request by the Authority, documentation and/or evidence of actions taken to demonstrate “Good Faith Efforts,” in accordance with 5 NYCRR § 142.8, to provide meaningful participation by MWBEs as subcontractors and suppliers in the performance of this Contract/Agreement.

**3. MWBE UTILIZATION REQUIREMENTS**

The Contract’s/Agreement’s MWBE goals have been established by the Authority based on certified MWBE availability, job assignments, services to be performed and/or type of work to be performed under the Contract/Agreement.

In the performance of this Contract/Agreement, 60% of the total participation value shall be deemed to represent the Commercially Useful Function of the MWBE serving as a supplier and the mark up and/or broker’s fee shall represent the Commercially Useful Function of the MWBE serving as a broker.

- A. The Contractor shall certify that the Utilization Plan identifies all subcontractors/subconsultants reflected on Exhibit D of the Contract/Agreement.
- B. The Contractor agrees to adhere to the approved MWBE Utilization Plan in the performance of the Contract/Agreement.



- C. The Contractor further agrees that failure to submit and/or adhere to such MWBE Utilization Plan shall constitute a material breach of the terms of the Contract/Agreement. Upon the occurrence of such a material breach, the Authority shall be entitled to any remedy provided herein, including but not limited to, a finding that the Contractor is non-responsible.

#### **Utilization Plan - All Subcontractors (TA-W1022)**

#### **4. REPORTING**

The Contractor is required to submit forms TA-1023 or TA-W1059 on or before the 10<sup>th</sup> of each month, following the month being reported. Monthly reports must be submitted via email, to [Compliance@thruway.ny.gov](mailto:Compliance@thruway.ny.gov), however, during the term of the contract, the Contractor may arrange to provide such reports via a non-electronic method to the Authority by the 10<sup>th</sup> day following the end of each month during the term of the Contract/Agreement.

#### **TA-W1023 Payments to DBE/MWBE Subcontractor Firms**

#### **5. COMPLIANCE**

The Contractor will comply with any procedures and guidelines established by the Director of the Division of Minority and Women-Owned Business Enterprise (hereinafter the Director) under the authority of New York State Governor's Executive Order 8, issued August 3, 1983 (hereinafter Executive Order 8) and will comply with any rules, regulations and orders of the Director as may be promulgated pursuant to or under the authority of Executive Order 8, or other applicable law or order.

#### **6. MWBE WAIVERS**

- A. Prior to submission of a request for a partial or total waiver, Contractor shall speak to someone from the Authority's Office of Compliance for guidance.
- B. In accordance with 5 NYCRR § 142.7, a Contractor that is able to document good faith efforts to meet the goal requirements, as set forth herein, may submit a request for a partial or total waiver on Form TA-W1077, accompanied by supporting documentation. A Contractor may submit the request for waiver at the same time it submits its MWBE Utilization Plan.

Supporting documentation of good faith efforts shall include, but not be limited to:

1. Evidence of targeted and specific outreach to MWBEs;
2. Logs, written correspondence, records of telephone contacts and other information to document responses from MWBEs to the Contractor outreach;
3. Copies of advertisements for participation by MWBEs in appropriate general circulation, trade, and minority or women-oriented publications;
4. The dates of attendance at any pre-bid, pre-award, or other meetings, if any, scheduled by the Authority with MWBEs; and,

5. Information describing specific steps undertaken by the Contractor to reasonably structure the Agreement's scope of work to maximize opportunities for MWBE participation.
- C. If a request for waiver is submitted with the MWBE Utilization Plan and is not approved by the Authority at that time, the provisions of clauses (C - H) will apply.
- If the documentation included with the Contractor waiver request is complete, the Authority shall evaluate the request and issue a written notice of acceptance or denial within 20 business days of receipt.
- D. Contractor shall attempt to utilize, in good faith, certified MWBEs, during the performance of the Contract/Agreement. Requests for a partial or total waiver of established goal requirements may be made to the Authority, at time of bid/proposal submission, subsequent to award of the Contract/Agreement or at any time during the term of the Contract/Agreement, but must be made no later than prior to the submission of a request for final payment on the Contract/Agreement.
- E. If the Authority, upon review of the MWBE Utilization Plan and Monthly MWBE Form TA-1023 – Payments to DBE/MWBE/SDVOBs, determines that Contractor is failing or refusing to comply with the Contract's/Agreement's MWBE goals and no waiver has been granted in regards to such non-compliance, the Authority may issue a notice of deficiency to the Contractor.
- F. The Contractor must respond to the notice of deficiency within seven business days of receipt. Such response may include a request for partial or total waiver of the Contract's/Agreement's MWBE goals.
- G. If the Contractor, after making good faith efforts, is unable to achieve the MWBE goals stated herein, the Contractor may submit a request for a waiver to the Office of Compliance. Such waiver request must be supported by evidence of the good faith efforts by the Contractor to achieve the maximum feasible MWBE participation towards the applicable MWBE goals. If the documentation included with the waiver request is complete, the Authority shall evaluate the request and issue a written notice of approval or denial within twenty (20) business days of receipt.
- H. If the Authority, upon review of the MWBE Utilization Plan and the forms TA-W1023 or TA-W1059 as described in Section 4, or any other relevant information, determines that the Contractor is noncompliant, deficient or failing to document the good faith efforts to meet the Contract's/Agreement's MWBE goals or requirements and no waiver has been issued in regards to such non-compliance, the Authority may issue a notice of deficiency to the Contractor. The Contractor must respond to the notice of deficiency letter within seven (7) business days of receipt. Such response may include a request for partial or total waiver of the Contract's/Agreement's MWBE goals.

Waiver requests shall be sent to the Authority's Office of Compliance at [Compliance@thruway.ny.gov](mailto:Compliance@thruway.ny.gov).

**Contractor Forms:**

Forms are located at: [thruway.ny.gov/business/contractors/forms/index.html](http://thruway.ny.gov/business/contractors/forms/index.html)

Questions regarding compliance with MWBE participation goals, requirements and provisions should be directed to the Authority's Office of Compliance.

**7. NON-COMPLIANCE**

- A. Where the Authority determines that the Contractor is not in compliance with the requirements specified herein and/or other contract requirements, refuses to comply with such requirements, or if the Contractor is found to have willfully and intentionally failed to comply with the MWBE participation goals, the Contractor may be found in breach of the contract, which may result in withholding of any mobilization pay item and monthly estimates, a delay in award of the Contract/Agreement, a finding that the Contractor is non-responsible, and/or the Authority may impose liquidated damages.
- B. Such liquidated damages shall be calculated as an amount equaling the difference between:
  1. All sums identified for payment to MWBEs had the Contractor achieved the contractual MWBE goals; and
  2. All sums actually paid to MWBEs for work performed or materials supplied under the Contract/Agreement.
- C. In the event a determination has been made by the Authority, after Contractor has been afforded due process, which requires the payment of liquidated damages, Contractor shall pay such liquidated damages to the Authority within sixty (60) days after such determination or the Authority shall have the ability to withhold such amount from Contractor unless prior to the expiration of such sixtieth day, the Contractor has filed a complaint with the Director of the Division of Minority and Women's Business Development pursuant to 5 NYCRR § 142.12, in which event the liquidated damages shall be payable or withheld from the Contractor only in the event of a determination adverse to the Contractor following the complaint process.

**SERVICE-DISABLED VETERAN-OWNED BUSINESS ENTERPRISES (SDVOB)**

Article 17-B of the New York State Executive Law provides for meaningful participation in public procurement by certified Service-Disabled Veteran-Owned Business Enterprises ("SDVOB"), thereby further integrating such businesses into New York State's economy. The Authority recognizes the need to ensure that certified SDVOBs have opportunities for maximum feasible participation in the performance of Authority contracts. In recognition of the service and sacrifices made by service-disabled veterans and in recognition of their economic activity in doing business in New York State, Contractor is required to foster participation of SDVOBs in the fulfillment of the requirements of the Contract/Agreement.

In accordance with Article 17-b of the Executive Law, including regulations promulgated thereunder, the Authority has established the SDVOB participation goals for this Contract/Agreement, set forth in the "Contract Goals" page of this agreement.

Contractor shall facilitate SDVOB participation for the scopes of work to be performed under this Contract/Agreement, and/or document good faith efforts taken to achieve the goals in a manner prescribed by the Authority in accordance with the Compliance Requirements and Procedures specified herein.

**1. SDVOB GOALS**

The goals are applicable to the total amount payable under this Contract/Agreement and any changes made to the Contract/Agreement.

1. The Authority establishes SDVOB goals for all applicable contracts/agreements. The SDVOB goals for this Contract/Agreement are located on the "Contract Goals" page of this document and can also be found in the procurement documents pertaining to this Contract/Agreement.
2. For purposes of providing meaningful participation to certified SDVOBs on this Contract/Agreement and in an effort to attain the certified SDVOB goals for this Contract/Agreement, the Contractor should reference the directory of SDVOBs at the following internet address: [online.ogs.ny.gov/SDVOB/search](http://online.ogs.ny.gov/SDVOB/search)
3. Contractor must document "Good Faith Efforts" to provide meaningful participation by SDVOBs as subcontractors or suppliers in the performance of the Contract/Agreement (see clause 4 below).

**2. SDVOB UTILIZATION PLANS**

A. In accordance with 9 NYCRR § 252.2(i), Bidders/Proposers are required to submit a completed SDVOB Utilization Plan on Form TA-W1022 within 10 business days of letting.

B. The Utilization Plan shall list the certified SDVOBs that the Contractor intends to use to perform work on the Contract/Agreement, a description of the work that the Contractor intends the SDVOB to perform to meet the goals on the Contract/Agreement, the estimated dollar amounts to be paid to a certified SDVOB, or, if not known, an estimate of the percentage of Contract/Agreement work the SDVOB will perform. By signing the Utilization Plan, the Contractor acknowledges that making false representations or providing information that shows a lack of good faith as part of, or in conjunction with, the submission of a Utilization Plan is prohibited by law and may result in penalties including, but not limited to, termination of a

contract for cause, loss of eligibility to submit future bids, and/or withholding of payments. Any modifications or changes to the agreed participation by SDVOBs after the award of the Contract/Agreement and during the term of the Contract/Agreement must be reported on a revised Utilization Plan and submitted to the Authority's Chief Compliance Officer for approval.

C. The Authority will review the submitted SDVOB Utilization Plan and advise the Contractor of the Authority's acceptance or issue a notice of deficiency within 20 business days of receipt.

D. If a notice of deficiency is issued, Contractor agrees that it shall respond to the notice of deficiency, within seven business days of receipt, by submitting to the Authority a written remedy in response to the notice of deficiency. If the written remedy that is submitted is not timely or is found by the Authority to be inadequate, the Authority shall notify the Contractor and direct the Contractor to submit, within five business days of notification by the Authority, a request for a partial or total waiver of SDVOB participation goals on Form TA-W1077 Contractor/Consultant Waiver Request. Failure to file the waiver request form in a timely manner may be grounds for disqualification of the bid or proposal.

E. The Authority may disqualify a Contractor's bid/proposal/letter of interest as being non responsive under the following circumstances:

- (a) If a Contractor fails to submit a SDVOB Utilization Plan;
- (b) If a Contractor fails to submit a written remedy to a notice of deficiency;
- (c) If a Contractor fails to submit a request for waiver; or
- (d) If the Authority determines that the Contractor has failed to document and/or demonstrate good faith efforts.

F. If Contractor is awarded a Contract/Agreement, Contractor certifies that it will follow the submitted SDVOB Utilization Plan for the performance of SDVOBs on the Contract/Agreement in accordance with the prescribed SDVOB compliance requirements and procedures for the Contract/Agreement goals set forth in this agreement.

G. Contractor further agrees that failure to use SDVOBs as agreed in the Utilization Plan shall constitute a material breach of the terms of the Contract/Agreement. Upon the occurrence of such a material breach, the Authority shall be entitled to any remedy provided herein, including but not limited to, a finding of Contractor non-responsibility.

### **3. SDVOB WAIVER**

A. Prior to submission of a request for a partial or total waiver, Contractor shall speak with someone from the Authority's Office of Compliance for guidance.

B. In accordance with 9 NYCRR § 252.2(m), a Contractor that is able to document good faith efforts to meet the goal requirements, as set forth herein, may submit a request for a partial or total waiver on Form TA-W1077, accompanied by supporting documentation. A Contractor may submit the request for waiver at the same time it submits its SDVOB Utilization Plan.

If a request for waiver is submitted with the SDVOB Utilization Plan and is not approved by the Authority at that time, the provisions of clauses 2 (C), (D) & (E) will apply. If the documentation

included with the Contractor's waiver request is complete, the Authority shall evaluate the request and issue a written notice of acceptance or denial within 20 days of receipt.

C. Contractor shall attempt to utilize, in good faith, certified SDVOBs, during the performance of the Contract/Agreement. Requests for a partial or total waiver of established goal requirements may be made to the Authority, at time of bid submission, subsequent to Contract/Agreement award or at any time during the term of the Contract/Agreement, but must be made no later than prior to the submission of a request for final payment on the Contract/Agreement.

D. If the Authority, upon review of the SDVOB Utilization Plan and Monthly SDVOB Form TA-1023 Payments to DBE/MWBE/SDVOBs determines that Contractor is failing or refusing to comply with the contract goals and no waiver has been granted in regards to such non-compliance, the Authority may issue a notice of deficiency to the Contractor.

The Contractor must respond to the notice of deficiency within seven business days of receipt. Such response may include a request for partial or total waiver of the Contract/Agreement SDVOB goals.

Waiver requests shall be sent to the Authority's Office of Compliance at [Compliance@thruway.ny.gov](mailto:Compliance@thruway.ny.gov).

#### **4. GOOD FAITH EFFORTS**

In accordance with 9 NYCRR § 252.2(n), Contractor must document their good faith efforts toward utilizing SDVOBs on the Contract/Agreement. Evidence of required good faith efforts shall include, but not be limited to, the following:

- (1) Copies of solicitations to SDVOBs and any responses thereto.
- (2) Explanation of the specific reasons each SDVOB that responded to Contractor's solicitation was not selected.
- (3) Dates of any pre-bid, pre-award or other meetings attended by Contractor, if any, scheduled by the Authority with certified SDVOBs which the Authority determined were capable of fulfilling the SDVOB goals set in the Contract/Agreement.
- (4) Information describing the specific steps undertaken to reasonably structure the Contract/Agreement scope of work for the purpose of subcontracting with, or obtaining supplies from, certified SDVOBs.
- (5) Other information deemed relevant to the waiver request.

#### **5. MONTHLY SDVOB CONTRACTOR COMPLIANCE REPORT**

In accordance with 9 NYCRR § 252.2(q), Contractor is required to report Monthly SDVOB Contractor Compliance to the Authority during the term of the Contract/Agreement for the preceding month's activity, documenting progress made towards achieving the Contract/Agreement SDVOB goals.

This information must be submitted by the Contractor, using Form TA-1023 Payments to DBE/MWBE/SDVOBs available on the Authority's website, reflecting the preceding month's activities. Timely, complete and accurate forms must be submitted to

[Compliance@thruway.ny.gov](mailto:Compliance@thruway.ny.gov), by the 10th day of each month, with a courtesy copy to Thruway Project Engineer (TPE)/Engineer in Charge (EIC).

## **6. NON-COMPLIANCE**

Where the Authority determines that the Contractor is not in compliance with the requirements specified herein and/or other contract requirements, refuses to comply with such requirements, or if the Contractor is found to have willfully and intentionally failed to comply with the SDVOB participation goals, the Contractor may be found in breach of the contract, which may result in withholding of any mobilization pay item and monthly estimates, a delay in award of the Contract/Agreement, a finding that the Contractor is non-responsible, and/or the Authority may impose other breach of contract damages.

## **7. BREACH OF CONTRACT AND DAMAGES**

In accordance with 9 NYCRR § 252.2(s), any Contractor found to have willfully and intentionally failed to comply with the SDVOB participation goals set forth in the Contract/Agreement, shall be found to have breached the Contract/Agreement and Contractor shall pay damages equivalent to the Authority's expenses for personnel, supplies and overhead related to establishing, monitoring, and reviewing certified Service-Disabled Veteran-Owned Business Enterprise programmatic goals for the specific Contract/Agreement.

Questions regarding compliance with SDVOB participation goals should be directed to the Authority's Office of Compliance.

### **All forms are available at:**

For Contractors: [thruway.ny.gov/business/contractors/forms/index.html](http://thruway.ny.gov/business/contractors/forms/index.html)

For Consultants: [thruway.ny.gov/business/consultants/forms/index.html](http://thruway.ny.gov/business/consultants/forms/index.html)

For Purchasers: [thruway.ny.gov/business/consultants/forms/index.html](http://thruway.ny.gov/business/consultants/forms/index.html)

## **EQUAL EMPLOYMENT OPPORTUNITY AND REMOVAL OF INSTITUTIONAL POLICIES OR PRACTICES THAT FAIL TO ADDRESS THE HARASSMENT AND DISCRIMINATION OF INDIVIDUALS**

Contractor agrees to comply with all Authority Compliance Requirements and Procedures, in accordance with the terms and conditions of Appendix A – Standard Clauses for New York State Thruway Authority Contracts including Clause 4 – Non-Discrimination Requirements and Clause 11 - Equal Employment Opportunities for Minorities and Women.

Equal Employment Opportunities for minority group members and women (“EEO”) and related provisions shall be deemed supplementary to, and not in lieu of, the nondiscrimination provisions required by New York State Executive Law Article 15 (the “Human Rights Law”) and other applicable federal, state, and local laws.

In the performance of this Contract/Agreement, Contractor shall demonstrate compliance with the Work Force Diversity Requirements and Procedures Regarding Equal Employment Opportunities for Minority Group Members and Women, pursuant to 5 NYCRR § 143, Executive Order 177, and all other applicable federal, state and local laws, rules and regulations.

The Contractor will be required to submit its written Policy Statement ensuring “Equal Employment Opportunity and Removal of Institutional Policies or Practices That Fail to Address the Harassment and Discrimination of Individuals,” to the Authority within 10 business days after the letting/bid opening.

During the performance of this contract, the Contractor agrees to comply with the Equal Employment Opportunity (EEO) requirements specified herein.

**1. DEFINITIONS** – As used in these requirements, the following definitions will apply:

A. “Covered Area” means the geographical area described in the solicitation from which this contract resulted or the geographic area within which this contract will be performed.

B. “Authority” means the New York State Thruway Authority.

C. “Executive Director” means the Executive Director of the New York State Thruway Authority, or his/her duly authorized representative.

D. “Office of Compliance” means the Thruway Authority’s Office of Compliance or his/her duly authorized representative.

E. “Employer Identification Number” means the Federal Social Security Number used on the Employer’s Quarterly Federal Tax Return, U.S. Treasury Department form 941.

F. “Minority” includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (a person of Mexican, Puerto Rican, Dominican, Cuban, Central or South American descent of either Indian or Hispanic origin, regardless of race;

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast, Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification. Identification may be made by any suitable authority in the community such as an educational institution, religious organization, or a state agency).

## **2. NON-DISCRIMINATION CLAUSE**

The Contractor will ensure equal employment opportunity by not discriminating against any applicant for employment because of race, color, religion, sex, national origin, age, disability, or marital status, regarding, (among other things) the following: upgrading, demotion, transfer, recruitment, recruitment advertising, layoff, termination, rates of pay or other forms of compensation and selection for training, including apprenticeship.

## **3. MINORITY AND WOMEN EMPLOYMENT GOALS**

The Contractor shall make a good faith effort to ensure equal employment opportunity by taking the affirmative action’s set forth in paragraph 5A through P of these requirements. The Bidder’s/Proposer’s/Contractor’s/Consultant’s/Engineer’s success in achieving or bettering the goals set forth on the contract goals page, shall be a substantial factor in any determination of



whether the Contractor has complied with its obligation to ensure equal employment opportunity in the performance of this Contract/Agreement. The goals are expressed as percentages of the total hours of employment and training that the Contractor should reasonably be able to give to female or minority employees in a certain covered area. The hours of minority and female employment and training must be substantially uniform throughout the length of the Contract/Agreement, and in each trade. These goals were established from materials published by the NYS Department of Economic Development based on appropriate workforce, demographic or other relevant data or labor force developed by the Division of Minority & Women's Business Development utilizing the 1990 Census Data.

#### **4. AFFIRMATIVE ACTION STEPS AND NON-FEDERAL TRAINING REQUIREMENTS**

The Contractor shall implement affirmative action steps at least as extensive as the following:

A. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority and female individuals working at such sites or in such facilities.

B. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

C. Maintain a current file of the name, address, and telephone number of each minority and female off-the street applicant and minority or female referral from a union, a recruitment source, or community organization and of the action which was taken with respect to each such individual.

If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or if referred, not employed by the Contractor, this shall be documented in writing to the Office of Compliance and noted in the file with the reasons therefore, along with whatever additional actions the Contractor may have taken.

D. Provide immediate written notification to the Office of Compliance when the Contractor has information that the union referral process has impeded the Contractor's efforts to meet its obligation.

E. Develop on-the-job training opportunities and/or participation in training programs which expressly include minorities and women, including upgrading programs and apprenticeships and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the United States Department of Labor, the New York State Department of Labor, or the New York State Thruway Authority and appropriate for utilization on New York State Thruway Authority projects. The Contractor shall provide notice of these programs to the sources compiled under 5B. above. If the Contractor fails to develop or participate in such apprentice or training programs, its failure to meet the goal set forth herein will be presumed to be noncompliance with these requirements.

F. Disseminate the Contractor's equal employment opportunity policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its equal employment opportunity obligations, by including it in any

policy, annual and collective bargaining agreement, by publicizing it in the company newspaper, annual report, and other similar items, by specific review of the policy with all management personnel and with all minority and female at least once a year, and by posting the Contractor's equal employment opportunity policy on bulletin boards accessible to all employees at each location where work under this contract is performed.

G. Review, at least annually, the Contractor's equal employment opportunity policy and affirmative action obligations under this requirement with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decision, including specific review of these items with on-site supervisory personnel such as superintendents, general forepersons, etc., prior to the initiation of work at any job site.

A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

H. Disseminate the Contractor's equal employment opportunity policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to, and discussing the Contractor's equal employment opportunity policy with, other Contractors and subcontractors with whom the Contractor does or anticipates doing business.

I. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above describing the openings, screening procedures, and tests to be used in the selection process.

J. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

K. State in all solicitations or advertisements for employees placed by or on behalf of the Contractor that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, disability, or marital status.

L. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for such opportunities through appropriate training or other similar activities.

M. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the equal employment opportunity policy and the Contractor's obligations under this requirement are being carried out.

N. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

O. Send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representative of the Contractor's commitments under this requirement

and post copies of the notice in conspicuous places available to employees and applicants for employment.

P. Conduct a review, at least annually, of all supervisors' adherence to, and performance under, the Contractor's equal employment opportunity policies and affirmative action obligations.

## **5. CONTRACTOR/CONSULTANT ASSOCIATIONS**

Contractor is encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations. The efforts of a contractor association, joint contractor union, contractor community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling one or more of its obligations under this requirement provided that the Contractor actively participates in the group, makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

## **6. TRANSFER OF MINORITY OR FEMALE EMPLOYEES**

Through implementing the affirmative action's set forth above and the Contractor's other efforts to ensure equal employment opportunity, the Contractor must have made a commitment to employ minorities and women throughout the life of the contract. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be violation of the contract.

## **7. CREDITING NON-WORKING TRAINING HOURS TOWARD EMPLOYMENT GOALS**

In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the United States Department of Labor, the New York State Department of Labor or the New York State Thruway Authority and appropriate for utilization on the New York State Thruway Authority projects.

## **8. REQUIRED RECORDS**

A. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the Contractor's equal employment opportunity policy is being carried out and to keep records. The records shall include the names, address, telephone number, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay and locations at which the work was performed for each employee.

Records shall be maintained in an understandable and retrievable form. To the extent that records kept by the Contractor for other purposes satisfy the requirements of this paragraph, the Contractor need not maintain separate records.

B. Contractor shall submit on a monthly basis “Monthly Workforce Utilization Composite” (Form TA-W1017) to the TPE/EIC for approval and submitted electronically upon approval to [Compliance@thruway.ny.gov](mailto:Compliance@thruway.ny.gov). The report shall reflect a monthly composite of the total cumulative hours of work for the entire project workforce (including all subcontractors) from the start of the contract through the contract ending date. For the purpose of composite reporting, the employment and training hours for females and minorities shall be calculated separately. Female utilization hours (minority and non-minority) shall be counted towards female utilization and minority female utilization hours shall also be counted towards minority utilization hours.

C. All records required by this Section must be retained for a period of six years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the Authority or the Office of Compliance.

## **9. GOALS NOT TO BE USED TO DISCRIMINATE**

The Contractor shall not use the goals or affirmative action requirements to discriminate against any person because of race, color, religion, sex, national origin, age disability, or marital status.

## **10. AVAILABILITY OF CONTRACTOR’S RECORDS**

The Contractor will furnish all information and reports as may be required by the Authority or by rules, regulations and orders incorporated herein by the Authority and will permit access to its books, records and accounts by the Authority’s Office of Compliance for purposes of monitoring and investigating compliance with these requirements and such rules, regulations, orders, procedures and guidelines.

## **11. ENFORCEMENT**

In order to determine whether the Contractor has complied with the requirements, the Authority may proceed by order to show cause, compliance conference, hearing or any other lawful procedure upon due notice in writing to the Contractor. In the event the Authority finds that the Contractor has failed to comply with these requirements, this contract may be canceled, terminated, or suspended in whole or in part or liquidated damages may be imposed in accordance with the procedures authorized in Section 312 of Executive Law 15-A, Section 40 of the Highway Law, provisions of this Contract/Agreement, relevant laws and statutes as deemed appropriate by the Authority, at no cost or liability to the Authority.

In accordance with EO 177 entitled “Prohibiting State Contracts with Entities that Support Discrimination”, provisions of this Contract/Agreement and Section 40 of the Highway Law, the Contractor may be declared ineligible for further New York State government contract or construction contracts, and such other sanctions may be imposed and remedies invoked as deemed appropriate by the Authority by rule, regulation, or order of the Authority, or as otherwise provided by law.

## **12. CONTRACTOR’S RESPONSIBILITY REGARDING COLLECTIVE BARGAINING AGREEMENT**

Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor’s obligations under these requirements, any rules, regulations, procedures and guidelines promulgated or established pursuant to Executive Order 21.

### **13. APPLICABILITY TO SUBCONTRACT**

As per Section 312 of Executive Law 15-A the Contractor will physically include the document Equal Employment Opportunity Requirements as part of every subcontract or purchase order unless exempted by rules, regulations, or orders of the Director, pursuant to the Executive Order 8, and such requirements shall be binding upon each subcontractor, service provider, or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Authority may direct as a means of enforcing such provisions, including sanctions for

noncompliance; provided, however that in the event the Contractor becomes involved in or is threatened with litigation by a subcontractor or vendor as a result of any provision or direction issued pursuant to these requirements or by the Authority, the Contractor may request the State of New York to enter into such litigation or dispute to protect the interests of the State of New York.

### **14. EQUAL EMPLOYMENT OPPORTUNITY OFFICER**

The Contractor will designate and make known to the Office of Compliance who will have the responsibility for and must be capable of effectively administering and promoting an active Contractor program of equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

### **15. COMPLAINTS OF ALLEGED DISCRIMINATION/SEXUAL HARASSMENT**

The Contractor will promptly investigate all complaints of alleged discrimination/sexual harassment made to the Contractor in connection with his/her obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination/sexual harassment may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor will inform every complainant of all of his or her avenues of appeal, including the New York State Division of Human Rights and Equal Employment Opportunity Commission.

The Contractor shall inform the Office of Compliance (within 24 hours) in writing of any formal or informal complaint, incident or any issue of discrimination/sexual harassment. Results of investigation must be submitted to the Office of Compliance within ten (10) days of the complaint.

### **TRAINING SPECIAL PROVISIONS**

**TA-1041 – Training Report**

**TA-1046 – Monthly Training Report**

This work shall consist of the employment and meaningful and effective training of minority and women in New York State Thruway Authority approved training programs leading to their qualification as journeyworkers in the skilled trades required in highway construction. This Training/Special Provision supplements the Equal Employment Opportunity requirements included elsewhere in this Proposal entitled “Equal Employment Opportunity (EEO) Requirements”. Each of the foregoing prescribed specific percentage goals for utilization of minorities and women in the performance of work for the geographic location of the contract.

**GENERAL:** The primary objective of this Training/Special Provision is to provide training opportunities to minorities and women in construction trades for two purposes:

1. To maintain a pool of qualified minorities and women to replace those journeyworkers who, in the natural course of events, will leave the workforce; and
2. To provide minorities and women as indentured apprentices or trainees in those geographic areas where shortages in minorities and women journeyworkers are recognized because of the Contractor's inability to meet the EEO goals set forth in this contract.

Each contract which contains this Training/Special Provision shall require the training of at least one minority or woman indentured apprentice or trainee. Such individual shall be approved by the Authority. Other than this initial training obligation, to be undertaken and provided by the Contractor, no additional training obligations will exist under this Training/Special Provision unless the goals for minority and women employment and training in the skilled workforce are not continuously met on the contract and generally distributed amongst the trades. In the five counties of New York City, the goals specified for each trade are applicable and must be met. Whenever the goals are not met, additional minorities and/or women indentured apprentices and/or trainees will be assigned or approved in numbers necessary to meet the goals. Data necessary to determine if goals are being met will be provided on Contractor and Subcontractor Employment Utilization Reports (Form TA-1017-9). The data will be verified by the visual observance of the Project Engineer, or designated project inspectors, and hours of employment reported on Contractor or Subcontractor certified weekly payrolls.

The number of minorities and women indentured apprentices and trainees required to be trained under this item shall not exceed 12% of the total journeyworker workforce on the contract, i.e. no more than 1 in 8 of the skilled workforce is required to be a minority or woman indentured apprentice or trainee. This limitation applies regardless of minority and women representation in the trades. However, this limit on required training in no way absolves the Contractor of the responsibility to comply with the EEO requirements.

**PRE-AWARD MEETING:** Before the Contractor will be allowed to begin work, the Contractor shall attend a Pre-award Meeting and shall submit for Authority use and acceptance, a Workforce and Training Utilization Schedule (Form TA-1024) which shall be correlated to the Contractor's contract work schedule. The Schedule shall include at least the following information:

1. A work schedule for the entire contract,
2. An estimate of the work force required to conform to the work schedule on a monthly basis including an estimate of the workforce in each trade and/or work classification projected to be used including Subcontractors,
3. Separate estimates of the number of minorities and women indentured apprentices or trainees that would be required in each skilled trade to meet the contract EEO employment goals for that trade assuming no minorities or women journeyworkers in the workforce,
4. The proposed training programs to be used and the starting dates for training in each trade and/or work classification,
5. An estimate of the availability of minorities and women journeyworkers in numbers sufficient to meet the EEO contract goals, and

6. Any proposal by the Contractor to use trainees or indentured apprentices to make up for anticipated EEO goal shortfalls. Such proposals shall include the name and craft of any individual proposed by the Contractor as the required trainee or indentured apprentice. In the case of an indentured apprentice, evidence of indentureship and registration of the approved apprenticeship program must be included.

No contract work may be undertaken until the Authority has accepted the Workforce and Training Utilization Schedule. The Contractor shall submit a revised Workforce and Training Utilization Schedule at such times as major changes in the contract work schedule occur which substantially affect the previously submitted schedule.

**RECRUITMENT:** Although the training requirements of this Training/Special Provision are not intended, and shall not be used to discriminate against any applicant for training, whether a member of a protected class or not, it is recognized that non-minority males have traditionally been and continue to be trained, either formally or on-the-job in an informal manner, for work in the trades utilized in construction work. Therefore, until such time that representative numbers of minorities and women complete training and their utilization as journeyworkers is demonstrated to the extent of the participation goals as set forth in the Authority's construction contract, training required under this Training/Special Provisions will be primarily limited to minorities and women.

Thus, the Contractor shall demonstrate compliance with the intent of this Training/Special Provision by affording the Authority the opportunity to:

1. First, approve the use of a minority or woman indentured apprentice known to the Contractor through an existing Joint Apprenticeship Training program, or
2. Second, provide a partially trained minority or woman trainee who is currently enrolled in a New York State Department of Labor approved training program, or
3. Third, work cooperatively with the Contractor in recruitment of new minorities or women trainees, when needed.

In conformance with the foregoing, the Authority's Form TA-1018 (Request for Personnel), should be submitted to the TPE/EIC for submission to the Authority's Office of Compliance. The Contractor shall allow reasonable time for the Authority's Office of Compliance to ensure on-the-job orientation for approved apprentices or assigned trainees within their first month of employment.

**WORK HISTORY:** No individual shall be employed as a trainee in any trade and/or work classification in which such person has successfully completed a training course providing journeyworker status in the same trade or work classification, or in which such person has been gainfully employed as a journeyworker by virtue of informal on-the-job training. Detection of individuals in the above categories may be accomplished by including appropriate questions on employee application forms, inquiries to the Authority's Office of Compliance, checking personal references, or by other suitable means. Regardless of the method used, the Contractor shall document the finding for each indentured apprentice or trainee provided training under this requirement. A copy of the finding shall be given to the Authority's Office of Compliance. In the case of indentured apprentices, evidence of indentureship in a registered approved apprenticeship program shall also be submitted.

**SUBCONTRACTING:** In the event the Contractor subcontracts a portion of the contract work, the Contractor shall ensure the requirements of this Training/Special Provision are physically incorporated in such subcontracts to ensure the workforce utilization by the Subcontractor meets the goals for minorities and women employment and training, either independently or in combination with the prime Contractor's workforce. The Contractor must determine the hours of training, if any, and in which trade or work classification, minorities or women indentured apprentices or trainees are to be trained by the Subcontractor(s). However, the Contractor shall retain the primary responsibility for meeting the training requirements of this Training/Special Provision. Subcontractors are herewith advised that disregard of these requirements may result in the Authority either rescinding approval for work on this contract or disapproving their use on subsequent Authority contracts.

**TRAINING PROGRAMS:** The minimum length, type of training, and rate of pay for the trade or the work classification of the trade will be specified in the training program approved or sanctioned by the New York State Department of Labor.

Where training is to be provided under this Training/Special Provision, the Contractor shall obtain acceptance and/or approval of the training program to be used, and the starting time for training, prior to commencing training. The Contractor shall provide on-the-job training directed toward developing journeyworkers in the trade, or work classification(s) of the trade involved. To the extent the work involved on the contract permits, such training should include all phases and facets of a trade, or work classification of a trade, to satisfy usual construction industry requirements for continued or future employment therein.

It is the intent of this Training/Special Provision that training will be provided in construction trades rather than clerical type positions. Training may be permitted, in unique circumstances, in lower level management positions such as office engineers, where the training is oriented toward construction related activities. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of an overall training program. Both off-site and lower level management training are subject to the Authority's approval.

**TRAINEE WAGES:** An employee on any New York State Public Works Contract must be paid the full journeyworker prevailing wage unless such employee is individually registered in an approved and registered New York State Department of Labor Apprenticeship Program. It is the responsibility of the Contractor to ascertain the status of any employee utilized to satisfy the trainee requirements under this contract, and to ensure that all New York State Department of Labor apprenticeship requirements are met.

Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyworker wage rate on the wage determination which provides for less than full benefits for apprentices.

**DURATION OF TRAINING:** Once an indentured apprentice is approved or a trainee is assigned to the contract under the Training/Special Provision, that individual shall be trained in the designed trade throughout the duration of the contract whenever such trade is in use on the



contract until the trainee or apprentice has completed the approved training program. Where training is provided under a multiphase apprenticeship or training program, it is expected that training will be provided continually through all phases to the extent that opportunities for such training exist in the work under contract. Upon satisfactory completion of a phase of training under a multiphase training program, if further appropriate and required training is not available and work in the work classification of the completed phase is available, the minority or woman indentured apprentice or trainee shall continue employment, and be compensated at the prevailing journeyworker wage rate for such work. Hours of employment as a journeyworker described above will not be credited toward training hours required by the approved training or apprenticeship program.

If an indentured apprentice or trainee is terminated before completion of the contract for any reason other than seasonal lay-off or completion of work in that trade, the Contractor shall hold a counseling session with the Authority's Chief Compliance Officer and the individual to explain the reasons for termination. Documentation that the counseling session was held and the reasons for termination shall be given to the Authority's Chief Compliance Officer.

**REQUIRED RECORDS:** The Contractor shall provide each minority or woman trained under this provision with a certification showing the type and length of training satisfactorily completed. In addition, the Contractor shall keep records on the job site indicating the nature and hours of training provided to each trainee or indentured apprentice and furnish weekly reports documenting performance under this Training/Special Provision to the Project Engineer. No measurement will be made of training provided to indentured apprentices or trainees for whom no work history has been provided to the Project Engineer. In addition, no measurement will be made of training provided to apprentices for whom no evidence of indentureship in a registered apprenticeship program has been provided to the Project Engineer.

**NO PAYMENT FOR TRAINING:** No payment will be made for the training required of the Contractor under this Training/Special Provision. The required training is a labor cost which is included in the lump sum bid by the Contractor for the items of work comprising the contract.

*(1) Journeyworker means a person who is capable of performing all the duties within a trade or a given work classification of a trade.*

## **WORKFORCE UTILIZATION/GROSS WAGES REPORTING**

In accordance with the requirements pursuant to Executive Order (EO) 162, Contractors must report employee workforce utilization on a monthly basis and gross wages on a quarterly basis for its company and all subcontractors in accordance with EO 162, as follows:

### **A. EO 162 (Monthly/Quarterly) Workforce Utilization/Gross Wages Reporting**

Construction Contractors/Subcontractors are required to submit (Monthly) Workforce Utilization and (Quarterly) Workforce Utilization/Gross Wages Reports for their firm and all subcontractors.

(Monthly) Workforce Utilization/ (Quarterly) Gross Wages Reports are required to be electronically submitted to [WorkforceUtilizationReportConstruction@thruway.ny.gov](mailto:WorkforceUtilizationReportConstruction@thruway.ny.gov).

(Monthly) Workforce Utilization report for the preceding month must be submitted by the 10th of each month, for the Contractor and all subcontractors.

The (Monthly) EO 162 Workforce Utilization/Gross Wages Reporting are located on the Thruway website @ [thruway.ny.gov/business/dmwbe/eo-162-monthly-construction.xls](http://thruway.ny.gov/business/dmwbe/eo-162-monthly-construction.xls)

(Quarterly) - Workforce Utilization, including Gross Wages Reports for quarterly reporting must be submitted by 10th of April, July, October and January, for the Contractor and all subcontractors.

The (Quarterly) EO 162 Workforce Utilization/Gross Wages Reporting are located on the Thruway website @ [thruway.ny.gov/business/dmwbe/eo-162-quarterly-construction.xls](http://thruway.ny.gov/business/dmwbe/eo-162-quarterly-construction.xls)

#### B. Form TA-1017 Monthly Workforce Utilization Composite Report

Form TA-1017 (Monthly) Workforce Utilization Composite report must be completed for each calendar month by the Contractor reflecting the cumulative total work hours of employment to date for the entire workforce.

Form TA-1017 (Monthly) - Workforce Utilization Composite Report, must be approved by the TPE/EIC and electronically submitted prior to the 10<sup>th</sup> of the month to [Compliance@thruway.ny.gov](mailto:Compliance@thruway.ny.gov).

Form TA-1017 (Monthly) - Workforce Utilization Composite Report is located on the Thruway website @ [thruway.ny.gov/business/dmwbe/ta-w1017.xls](http://thruway.ny.gov/business/dmwbe/ta-w1017.xls)

#### **NONDISCRIMINATION**

The Contractor shall comply with the provisions of the Human Rights Law, and all other state and federal statutory and constitutional non-discrimination provisions. The Contractor and its subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status, and shall also follow the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal conviction and prior arrest.

Questions regarding compliance with Workforce Utilization/Gross Wages Reporting should be directed to the Authority's Office of Compliance.

#### **MOBILIZATION AND PAYMENT OF ESTIMATES/INVOICES**

Processing of mobilization, estimates and/or invoices is contingent upon Contractor demonstration and/or documentation of compliance with **all** of the Authority's Disadvantaged Business/Equal Employment Opportunity/Minority/Women and Service-Disabled Veteran Owned-Business Enterprise Contract/Agreement requirements and provisions.

Forms listed herein may be revised, updated, at the Authority's sole discretion and are required during the covered period, under the reporting schedules established by the Authority.

DBE/EEO/MWBE/SDVOB forms, requirements and reporting schedules will be discussed during the pre-award meeting or by contacting the Authority's Office of Compliance.

**REPORTING AND SUBMISSION SCHEDULES**

Contractors are required to submit the following forms or reports by the 10<sup>th</sup> of each month, for the preceding month's activities to: [Compliance@thruway.ny.gov](mailto:Compliance@thruway.ny.gov)

TA-W1017 Monthly Workforce Utilization Composite  
TA-W1023 Payments to D/M/WBE Subcontracting Firms  
TA-1024 Workforce and Training Utilization Schedule  
TA-W1046-9 Weekly Training Progress Report

The above forms or reports must accurately reflect the information reported on the following forms:

TA-W1022-9 Utilization Plan  
TA-W1024-9 Workforce and Training Utilization Schedule  
TA-W1041-9 Training Report  
TA-W1064-9 Construction Contractors Annual EEO Report

Contractors are also required to submit the following forms or reports by the 10<sup>th</sup> of each month, for the preceding month's activities to:

[WorkforceUtilizationReportConstruction@thruway.ny.gov](mailto:WorkforceUtilizationReportConstruction@thruway.ny.gov)

EO 162 - Monthly Workforce Utilization/Gross Wage Report  
EO 162 - Workforce Utilization/Quarterly Gross Wage Report

All Authority Forms are available at:

<http://www.thruway.ny.gov/business/contractors/forms/index.html>

Timely, complete and accurate reports shall be submitted as required and/or upon request.

**STATE  
WAGE RATE  
INFORMATION**

## **WAGE RATES**

The New York State Thruway Authority does not represent or warrant that the accompanying schedule of wages with the classification of workmen, mechanics and laborers, as required by Section 220 of the Labor Law, is complete and it reserves the right to revise such schedule when required.

In the event that revisions are made before the letting date, an amendment will be issued by the Department of purchasers of plans. In the event that the current wage rate schedule should expire before the contract for this project becomes effective the said wage rate schedule will be recertified and the Contractor will be bound by such revised schedule as recertified.

Labor classifications not appearing on this rate sheet can be used only with the consent of the Chief Engineer of the Authority and then the rate to be paid will be given by the Chief Engineer of the Authority after consulting with the State Department of Labor.

All requests for minimum wage rates for additional occupations shall be directed through the Chief Engineer, Thruway Authority.

By legislation effective August 9, 1975, if the prevailing rate of wages or the prevailing practices for supplements as determined by the State Labor Department changes after the contract is let, the Thruway Authority shall request of the State Labor Department a redetermination of the schedules of wages and supplements and such revised wage rates and supplements shall be annexed to and form a part of the contract for the work. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the work is being performed. The bidder shall take into account in his bid prices all changes in wage rates and supplements that may be forthcoming during the time the contract is in force.

The bidder shall take into account in his bid prices all changes in wage rates and supplements that may be forthcoming during the time the contract is in force.

Pursuant to Section 220-A of the New York State Labor law, the prime Contractor must provide each approved subcontractor with a copy of the schedule of wages and any supplements as specified in this Contract.

The prime Contractor must immediately obtain from each approved subcontractor a certification (TA-44105) of their receipt of, and agreement to pay the applicable prevailing wages as specified in this contract. The prime Contractor shall retain all Subcontractor certifications and provide these certifications to the Authority prior to the processing of the final payment.

The prime Contractor must submit an affidavit (TA-44115) verifying the proper payment of wages to its own employees prior to the processing of the final payment. All completed certifications and affidavits must be originals and be properly signed and notarized.

## **SPECIAL NOTICE TO BIDDERS IN RELATION TO OVERTIME DISPENSATION**

All bidders, in submitting their bids, should base their bids and work progression on the assumption that Overtime Dispensation pursuant to Article 8 of the New York State Labor Law, for any workmen, laborers and mechanics to work more than 8 hours in any one calendar day or more than five days in any one week will not be granted for any operation for the contract duration. Subsequent to award, where the contract documents have imposed specific scheduling and/or phasing requirements or where it is determined by the Authority to be in the best interest of the public, the Authority may process, for approval by the new York State Department of Labor, requests for Overtime Dispensation on certain specific operations and, in the event approval is granted, there shall be no adjustments therefore in any bid prices.

**SPECIAL NOTE**  
**STATE PREVAILING WAGE RATES**

The Contractor shall ensure that workers are paid the appropriate wages and supplemental (fringe) benefits. Throughout the contract, the Contractor shall obtain and pay workers in accordance with periodic wage rate schedule updates from the NYS Department of Labor (NYSDOL). Wage rate amendments and supplements are available on the NYSDOL web site at [www.labor.ny.gov](http://www.labor.ny.gov). All changes or clarification of labor classification(s) and applicability of prevailing wage rates shall be obtained in writing from the Office of the Director, NYSDOL Bureau of Public Work.

The NYSDOL prevailing wage rate schedule for this contract has been determined and is available on the internet. The prevailing wage rate schedule is accessed by visiting the NYSDOL web site, navigating to the appropriate web page, and entering the Prevailing Rate Case No. (PRC#). The PRC# is provided on NYSDOL Form PW-200 included in this contract Proposal.

A copy of the project specific prevailing wage rate schedule will be provided to the successful bidder upon award of the contract. Upon written request, the schedule will be provided by the Thruway Authority to prospective bidders without internet access.



Kathy Hochul, Governor

Roberta Reardon, Commissioner

NYS Thruway Authority

Antonio Melendez, Professional Engineer 1  
200 Southern Boulevard  
Albany NY 12209-0189

Schedule Year 2023 through 2024  
Date Requested 05/16/2024  
PRC# 2024005823

Location MP N0.7 to MP N4.2 N/S  
Project ID# D214948  
Project Type Pavement Rehabilitation and Miscellaneous Work on I-190, Niagara Thruway from Milepost N0.7 to Milepost N4.2 in Erie County

### PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2023 through June 2024. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website [www.labor.ny.gov](http://www.labor.ny.gov). Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

#### NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed: \_\_\_\_\_ Date Cancelled: \_\_\_\_\_

Name & Title of Representative: \_\_\_\_\_

Phone: (518) 457-5589 Fax: (518) 485-1870  
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12226

## General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

### Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

### Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission; a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion [online](#).

### Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

### Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12226; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website [www.labor.ny.gov](http://www.labor.ny.gov).

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website [www.labor.ny.gov](http://www.labor.ny.gov).

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website [www.labor.ny.gov](http://www.labor.ny.gov).

### Payrolls and Payroll Records

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. As per Article 6 of the Labor law, contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemporaneous, true, and accurate payroll records. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.



The filing of payrolls to the Department of Jurisdiction is a condition of payment. Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8 . Section 220-a).

### **Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties**

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYS DOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

### **Withholding of Payments**

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

### **Summary of Notice Posting Requirements**

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "[Public Work Project](#)" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

## **Apprentices**

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12226 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

## **Interest and Penalties**

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

## **Debarment**

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

## **Criminal Sanctions**

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

## **Discrimination**

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c) ).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d) ).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

### **Workers' Compensation**

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

### **Unemployment Insurance**

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.



Kathy Hochul, Governor

Roberta Reardon, Commissioner

NYS Thruway Authority

Antonio Melendez, Professional Engineer 1  
200 Southern Boulevard  
Albany NY 12209-0189

Schedule Year 2023 through 2024  
Date Requested 05/16/2024  
PRC# 2024005823

Location MP N0.7 to MP N4.2 N/S  
Project ID# D214948  
Project Type Pavement Rehabilitation and Miscellaneous Work on I-190, Niagara Thruway from Milepost N0.7 to Milepost N4.2 in Erie County

### Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

### Contractor Information

All information must be supplied

Federal Employer Identification Number: _____		
Name: _____		
Address: _____ _____		
City: _____	State: _____	Zip: _____
Amount of Contract: \$ _____	Contract Type:	
Approximate Starting Date: ____/____/____	[ ] (01) General Construction	
Approximate Completion Date: ____/____/____	[ ] (02) Heating/Ventilation	
	[ ] (03) Electrical	
	[ ] (04) Plumbing	
	[ ] (05) Other : _____	

Phone: (518) 457-5589 Fax: (518) 485-1870  
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12226

### **Social Security Numbers on Certified Payrolls:**

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concern regarding inclusion of this information on payrolls if another identifier will suffice.

For these reasons, the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor. This change does not affect the Department's ability to request and receive the entire social security number from employers during its public work/ prevailing wage investigations.

### **Construction Industry Fair Play Act: Required Posting for Labor Law Article 25-B § 861-d**

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site. Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense. The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, <https://dol.ny.gov/public-work-and-prevailing-wage>

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: [dol.misclassified@labor.ny.gov](mailto:dol.misclassified@labor.ny.gov) .

### **Worker Notification: (Labor Law §220, paragraph a of subdivision 3-a)**

#### **Effective June 23, 2020**

This provision is an addition to the existing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage and supplement rate* for their particular job classification *on each pay stub*\*. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her job classification. The required notification will be provided with each wage schedule, may be downloaded from our website [www.labor.ny.gov](http://www.labor.ny.gov) or be made available upon request by contacting the Bureau of Public Work at 518-457-5589. \*In the event the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

(12.20)

**To all State Departments, Agency Heads and Public Benefit Corporations  
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND**

## **Budget Policy & Reporting Manual**

# **B-610**

### **Public Work Enforcement Fund**

*effective date December 7, 2005*

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#### **1. Purpose and Scope:**

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, maintenance and repair, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

#### **2. Background and Statutory References:**

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

#### **3. Procedures and Agency Responsibilities:**

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

**To all State Departments, Agency Heads and Public Benefit Corporations  
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND**

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor  
Administrative Finance Bureau-PWEF Unit  
Building 12, Room 464  
State Office Campus  
Albany, NY 12226

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.

Required Notice under Article 25-B of the Labor Law

## **Attention All Employees, Contractors and Subcontractors: You are Covered by the Construction Industry Fair Play Act**

### **The law says that you are an employee unless:**

- You are free from direction and control in performing your job, **and**
- You perform work that is not part of the usual work done by the business that hired you, **and**
- You have an independently established business.

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

**It is against the law for an employer to misclassify employees as independent contractors or pay employees off the books.**

**Employee Rights:** If you are an employee, you are entitled to state and federal worker protections. These include:

- Unemployment Insurance benefits, if you are unemployed through no fault of your own, able to work, and otherwise qualified,
- Workers' compensation benefits for on-the-job injuries,
- Payment for wages earned, minimum wage, and overtime (under certain conditions),
- Prevailing wages on public work projects,
- The provisions of the National Labor Relations Act, and
- A safe work environment.

It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

**Independent Contractors:** If you are an independent contractor, **you must pay all taxes and Unemployment Insurance contributions required by New York State and Federal Law.**

**Penalties** for paying workers off the books or improperly treating employees as independent contractors:

- **Civil Penalty**
  - First offense: Up to \$2,500 per employee
  - Subsequent offense(s): Up to \$5,000 per employee
- **Criminal Penalty**
  - First offense: Misdemeanor - up to 30 days in jail, up to a \$25,000 fine and debarment from performing public work for up to one year.
  - Subsequent offense(s): Misdemeanor - up to 60 days in jail or up to a \$50,000 fine and debarment from performing public work for up to 5 years.

**If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at (866) 435-1499 or send an email to [dol.misclassified@labor.ny.gov](mailto:dol.misclassified@labor.ny.gov). All complaints of fraud and violations are taken seriously. You can remain anonymous.**

**Employer Name:**

IA 999 (09/16)



**WE ARE YOUR DOL**Department  
of LaborNew York State Department of Labor  
Bureau of Public Work

# Attention Employees

## THIS IS A: **PUBLIC WORK PROJECT**

If you are employed on this project as a **worker, laborer, or mechanic** you are entitled to receive the **prevailing wage and supplements rate** for the classification at which you are working.

Your pay stub and wage notice received upon hire must clearly state your wage rate and supplement rate.

Chapter 629 of the Labor Laws of 2007:

**These wages are set by law and must be posted at the work site. They can also be found at:**  
**<https://dol.ny.gov/bureau-public-work>**



If you feel that you have not received proper wages or benefits, please call our nearest office.\*

Albany	(518) 457-2744	Patchogue	(631) 687-4882
Binghamton	(607) 721-8005	Rochester	(585) 258-4505
Buffalo	(716) 847-7159	Syracuse	(315) 428-4056
Garden City	(516) 228-3915	Utica	(315) 793-2314
New York City	(212) 932-2419	White Plains	(914) 997-9507
Newburgh	(845) 568-5287		

\* For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov) – click on Bureau of Labor Law.

Contractor Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

## Requirements for OSHA 10 Compliance

Article 8 §220-h requires that when the advertised specifications, for every contract for public work, is \$250,000.00 or more the contract must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training "prior to the performing any work on the project."

### **The Bureau will enforce the statute as follows:**

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (*Note: Completion cards do not have an expiration date.*)
- Training roster, attendance record or other documentation from the certified trainer pending the issuance of the card.
- Other valid proof

\*\*A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-457-5589.

(07.19)

## Introduction to the Prevailing Rate Schedule

### Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

#### Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

#### Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

#### Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

#### Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

#### Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

#### Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website ([www.labor.ny.gov](http://www.labor.ny.gov)) for current wage rate information.

#### Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor  
Bureau of Public Work  
State Office Campus, Bldg. 12  
Albany, NY 12226

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

**AGREEMENT,  
FAITHFUL  
PERFORMANCE  
BOND,  
AND  
LABOR AND  
MATERIAL  
BOND**

199

CONTRACT NO:

COUNTY:

**NEW YORK STATE  
THRUWAY AUTHORITY**

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**A G R E E M E N T**

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## NEW YORK STATE THRUWAY AUTHORITY

## AGREEMENT

## CONTRACT NO:

This **AGREEMENT**, entered into this day of \_\_\_\_\_, by the **NEW YORK STATE THRUWAY AUTHORITY** (hereinafter referred to as the "**AUTHORITY**") having its principal office at 200 Southern Blvd. (P. O. Box 189, Albany, NY 12201) in the County of Albany and State of New York and hereinafter called the "**CONTRACTOR**",

- a corporation organized and existing under the laws of the State of \_\_\_\_\_
- a partnership, consisting of \_\_\_\_\_
- an individual conducting business as \_\_\_\_\_

the location of whose principal office is \_\_\_\_\_

**WITNESSETH:** That the Authority and the Contractor for the consideration hereinafter named agree as follows:

**ARTICLE 1. WORK TO BE DONE.**

The Contractor shall (a) furnish all the materials, appliances, tools and labor of every kind required, and construct and complete in the most substantial and skillful manner, the construction, improvement or reconstruction of the project on or before the completion date of the as further described in ARTICLE 4, and as generally identified and shown on the plans entitled:

in accordance with the "Standard Specifications" of the New York State Department of Transportation, which contain the information for bidders; form of proposal, agreement, and bonds; general specifications and conditions or contract; materials of construction; and payment items; and (b) do everything required by the Contract (Contract Documents) as defined herein.

The Contractor agrees that its proposal contained herein is based upon performing all the work of the Contract in accordance with a schedule that will result in the completion of the total works by the Date of Completion of the Contract and all intermediate stage and phase completion requirements of the contract, while adhering to all restrictions set forth in the Schedule and Suspension of Work, the Thruway Traffic Plan, and the General and Special Notes, and that the work will be performed at the unit bid prices, as shown on the contract documents and as detailed in the specifications and notes, utilizing the Labor Force, Qualified Disadvantaged, Women Owned and Minority Owned Subcontractor Entrepreneurs and Methods and Materials of Construction as described in the Contract Documents and any incorporated Addenda thereto, and conduct its operations in accordance with the Vehicle and Traffic Law, the Rules and Regulations of the NYS Thruway Authority, and the Thruway Operating Rules and General and Special Notes that are part of this proposal. The Contractor further agrees its proposal is not based upon the assumption that any specifications, traffic restrictions, scheduling or phasing/staging requirements will be waived, an extension of Contract Completion Date will be granted, a labor dispensation will be granted, substitution of non-approved products, alternatives or claimed functional equivalents for Specified Construction Materials and Methods will be allowed, or any Value Engineering Proposals will be entertained and approved by the New York State Thruway Authority, and any requests for a substitution, equivalent or alternate, which it proposes, will be accompanied by an agreed price analysis establishing an applicable credit or illustrating cost equal to or greater than the bid amount.

#### **ARTICLE 2. DOCUMENTS FORMING THE CONTRACT.**

The Contract (and Contract Documents) shall be deemed to include the advertisement for proposals; the contractor's proposal; the Schedule for Participation By Disadvantaged Business Enterprise Participation goals; the agreement; the "Standard Specifications" including all addenda thereto referred to above; the plans; any addenda and/or amendments to specifications if the same are issued prior to date of receipt of proposal and all provisions required by law to be inserted in the contract whether actually inserted or not. Appendix A, standard clauses for all N.Y State contracts, is attached hereto and is hereby made a part of this agreement as if set forth fully herein.

#### **ARTICLE 3. EXAMINATION OF DOCUMENTS AND SITE.**

The Contractor agrees that before making its proposal it carefully examined the contract documents, together with the site of the proposed work, as well as its surrounding territory, and is informed regarding all of the conditions affecting the work to be done and labor and materials to be furnished for the completion of this contract, including the existence of poles, wires, pipes, and other facilities and structures of municipal and other public service corporations on, over or under the site, except latent conditions that meet the requirements of §104-04 and §109-05, and that its information was secured by personal investigation and research.

#### **ARTICLE 4. DATE OF COMPLETION.**

The Contractor further agrees that it will begin the work herein embraced within ten days of the effective date hereof, unless the consent of the Authority, in writing, is given to begin at a later date, and that it will prosecute the same so that it shall be entirely completed and performed on or before the completion date shown in Article 1.



No extension beyond the date of completion fixed by the terms of this contract shall be effective unless in writing signed by the Authority. Such extension shall be for such time and upon such terms and conditions as shall be fixed by the Authority, which may include the assessment of liquidated damages and a charge for engineering and inspection expenses actually incurred upon the work, including engineering and inspection expenses incurred upon the work by railroad companies on contracts for grade crossing elimination. Notice of application for such extension shall be filed with the Chief Engineer, Department of Engineering of the Authority at least fifteen days prior to the date of completion fixed by the terms of this agreement.

#### **ARTICLE 5. ALTERATIONS AND OMISSIONS.**

The said work shall be performed in accordance with the true intent and meaning of the contract documents without any further expense of any nature whatsoever to the Authority other than the consideration named in this agreement.

The Authority reserves the right at any time during the progress of the work, to alter the plans or omit any portion of the work as it may deem reasonably necessary for the public interest; making allowances for additions and deductions with compensation made in accordance with the Standard Specifications, for this work without constituting grounds for any claim by the contractor for allowance for damages or for loss of anticipated profits, or for any variations between the approximate quantities and the quantities of the work as done.

#### **ARTICLE 6. NO COLLUSION OR FRAUD.**

The Contractor hereby agrees that the only person or persons interested as principal or principals in the bid or proposal submitted by the Contractor for this contract are named therein, and that no person other than those mentioned therein has any interest in the above-mentioned proposal or in securing of the award, and that this contract has been secured without any connection with any person or persons other than those named, and that the proposal is in all respects fair and was prepared and the contract was secured without collusion or fraud and that neither any officer nor employee of the New York State Thruway Authority or the State Department of Transportation or either of them has or shall have a financial interest in the performance of the contract or in the supplies, work or business to which it relates, or in any portion of the profits thereof. (See also Section 139-a and 139-b of the State Finance Law referred to in the Standard Specifications, which are made a part of this contract.)

#### **ARTICLE 7. CONTRACT PAYMENTS.**

As the work progresses in accordance with the contract and in a manner that is satisfactory to the Authority, the Authority hereby agrees to make payments to the Contractor therefore, based upon the proposal attached hereto and made a part hereof, as follows: The Authority shall, once in each month and on such days as it may fix, make an estimate of the quantity of work done and of material which has actually been put in place in accordance with the terms and conditions of the contract, during the preceding month, and compute the value thereof and pay to the Contractor the moneys due in accordance with Public Authorities Law Section 2880, as detailed in 21 NYCRR Part 109 (Prompt Payment). No monthly estimate shall be rendered unless the Contractor has provided acceptable documentation with regard to actions taken to comply with the M/WBE goals of the contract (see also §109-06 Contract Payments) and the value of the work done equals 5% of the contract amount or \$1,000, whichever is the lesser. Semi-monthly estimates may be rendered provided (a) the value of the work performed in two successive weeks is more than \$100,000 or (b) the Chairman of

the Authority deems it to be for the best interest of the Authority to do so.

Contractor understands and agrees that payments will only be rendered electronically unless payment by paper check is expressly authorized by the Authority, in its sole discretion, due to extenuating circumstances. Contractor shall comply with the Authority's procedures to authorize electronic payments. Authorization forms are available at <http://www.thruway.ny.gov/business/purchasing/epayments/index.html>, by e-mail at [suppliermgmt@thruway.ny.gov](mailto:suppliermgmt@thruway.ny.gov), or by telephone at (518) 436-2859. Contractor acknowledges that it will not receive payment of any estimates submitted under this Agreement if it does not comply with the Authority's electronic payment procedures, except where the Authority has expressly authorized payment by paper check as set forth above.

#### **ARTICLE 8. PAYMENT DUE TO CONTRACTOR'S NON-COMPLIANCE.**

It is further agreed that so long as any lawful or proper direction concerning the work or material given by the Chief Engineer, Department of Engineering of the New York State Thruway Authority, or his/her representative, shall remain uncomplied with, the Contractor shall not be entitled to have any estimate made for the purpose of payment, nor shall any estimate be rendered on account of work done or material furnished until such lawful or proper direction aforesaid has been fully and satisfactorily complied with.

#### **ARTICLE 9. FINAL ACCEPTANCE OF WORK.**

When in the opinion of the Thruway Division Director, a Contractor has fully performed the work under the contract, the Thruway Division Director shall recommend to the Chief Engineer, Department of Engineering of the New York State Thruway Authority, the acceptance of the work so completed. If the Chief Engineer, Department of Engineering accepts the recommendation of the Thruway Division Director, he/she shall thereupon by letter notify the Contractor of such acceptance. Copies of such acceptance shall be sent to other interested parties. Prior to the final acceptance of the work by the Chief Engineer, Department of Engineering of the New York State Thruway Authority or a designee, the contract work may be inspected, accepted and approved by other agencies and/or municipalities who will have jurisdiction of the work after final acceptance.

Final acceptance shall be final and conclusive except for defects not readily ascertainable by the New York State Thruway Authority, actual or constructive, fraud, gross mistakes amounting to fraud or other errors which the Contractor knew or should have known about as well as the New York State Thruway Authority's rights under any warranty or guarantee. Final acceptance may be revoked by the New York State Thruway Authority at any time prior to the issuance of the final check, upon the New York State Thruway Authority's discovery of such defects, mistakes, fraud or errors in the work.

#### **ARTICLE 10. FINAL PAYMENT.**

After the final acceptance of the work, the Engineer shall prepare a final agreement of the work performed and the materials placed and shall compute the value of such work and materials under and according to the terms of the contract.

This agreement shall be certified, as to its correctness, by the Engineer. Upon approval of such final agreement by the Director, Office of Construction Management, it shall be submitted to the Chief Engineer,

Department of Engineering for final approval. The right, however, is hereby reserved to the Chief Engineer, Department of Engineering to reject the whole or any portion of the final agreement, should the said certificate of the Engineer be found or known to be inconsistent with the terms of the agreement or otherwise improperly given. All certificates, upon which partial payments may have been made being merely estimates, shall be subject to correction in the final certificate or final agreement.

## **ARTICLE 11. RIGHT TO SUSPEND WORK AND CANCEL CONTRACT.**

### **Article 11.1 General Right to Suspend and Cancel Contract.**

It is further mutually agreed that if at any time during the prosecution of the work the Authority shall determine that the work is not being performed in accordance with the Contract or for the best interest of the Authority, the Chief Engineer, Department of Engineering, may proceed in any of the following ways:

- 1) Temporarily suspend the execution of the work by the Contractor, and the Chief Engineer of the Authority may then proceed with the work under his/her own direction in such manner as will accord with the Contract Documents and be for the best interests of the Authority; or
- 2) Terminate the Contract while it is in progress, and thereupon proceed with the work by a new contract negotiated or publicly advertised, by the use of his/her own forces, by calling upon the Surety to complete the Work in accordance with the Contract Documents, or by a combination of any such methods; or
- 3) Cancel the Contract and re-advertise and re-procure in accordance with applicable law; or
- 4) Complete the Work under the Authority's direction in such a manner as will accord with the Contract Documents and be for the best interests of the Authority.

Any excess in the cost of completing the Contract beyond the Contract Price for which it was originally awarded shall be charged to and paid by the Contractor failing to perform the Work or its Surety, all pursuant to the provisions of Section 40 of the New York State Highway Law.

In the event of suspension or termination, the Contractor shall be paid its costs, including contract close-out costs, and profit on work satisfactorily performed and project design costs actually incurred up to the time of termination, less an amount necessary to satisfy any claims, liens or judgments against the Contractor. The Contractor shall promptly submit its termination claim. The Contractor will only be paid the contract price for materials delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract, less an amount necessary to satisfy any claims, liens or judgments against the Contractor.

Whenever the Authority determines to suspend or stop Work under this Contract, a written notice sent by mail to the Contractor at its address and to its Sureties at their respective addresses shall be sufficient notice of its action in the premises.

### **Article 11.2 Termination for Cause.**

- A. If at any time during the prosecution of the work the Chief Engineer shall determine that the work under the Contract is not being performed according to the Contract or any

provision of the Contract is violated by the Contractor or by any subcontractor or that an Event of Default (as defined below) has occurred hereunder, the Chief Engineer, in his or her sole and absolute discretion, may proceed in any of the following ways:

- (1) Suspend or stop work by the Contractor, and the Chief Engineer may then complete the Work under his/her own direction in such manner as further described in the Contract Documents and as determined by the Chief Engineer to be in the best interests of the Authority; or
- (2) Terminate the Contract while it is in progress, and thereupon complete the work by: a new contract negotiated or publicly advertised; use of the Authority's own forces; calling upon the Surety to complete the Work in accordance with the Contract; or a combination of any such methods; or
- (3) Terminate the Contract and re-advertise as provided in law or if applicable, demand upon the Surety to complete any and all remaining work pursuant to the terms of the Contract and the Faithful Performance Bond.

As used herein, an "Event of Default" shall mean a material breach of the Contract by the Contractor which, without limitation, the following has occurred: (i) the Contractor has failed to begin the work in accordance with the Contract requirements; (ii) performance of this Contract has been unnecessarily or unreasonably delayed, (iii) the Contractor has willfully violated any of the provisions of the Contract or has not executed the same in good faith and in accordance with this Contract; (iv) the Contractor has abandoned the work; (v) the Contractor has become insolvent (other than as a bankrupt), or has assigned the proceeds of this Contract for the benefit of creditors, or taken advantage of any insolvency statute or debtor or creditor law or if his property or affairs have been put in the hands of a receiver; (vi) the Contractor has failed to obtain an approval required by the Contract; (vii) the Contractor has failed to provide the required insurances; (viii) the Contractor has failed to provide "adequate assurance" as required; or (ix) the Contractor is found to be non-responsible.

- B. Any excess in the cost of completing the Contract beyond the price for which it was originally awarded shall be charged to and paid by the Contractor failing to perform the work or by the Contractor's Surety, pursuant to the terms and conditions of Section 40 of the New York State Highway Law and the Faithful Performance Bond.
- C. Whenever the Authority determines to suspend, stop work, or terminate under this provision of the Contract, the Contractor and Surety shall receive written notice specifying the basis for such default (the "Default Notice"). Contractor shall have fifteen (15) days from the date of the Default Notice to cure such default, except that, at Authority's sole discretion, the Authority may extend such fifteen (15) day period for such additional period as the Authority shall deem appropriate without waiver of any of its rights hereunder. The Default Notice shall specify the date the Contractor is to discontinue all work if such default is not timely cured (the "Termination Date"). If the Event of Default is not cured or arrangements satisfactory to the Authority are not made (as evidenced in writing by the Authority) within the designated cure period, then Contractor shall suspend work and/or the Contract shall terminate, as the case may be, upon the Termination Date.

- D. Upon occurrence of an Event of Default or a termination for cause pursuant to this Article, the Authority has the remedies set forth in the Faithful Performance Bond, the Contract, and all remedies at law or in equity.
- E. In the event the termination for cause is determined to be improper, the termination shall be deemed a Termination for Convenience as identified in Article 11.3.

### **Article 11.3 Termination for Convenience.**

- A. The Authority, at any time, may terminate the Contract in whole or in part. Any such termination shall be effected by delivering to the Contractor a written notice of termination specifying the extent to which performance of work under the Contract is terminated and the date upon which the termination becomes effective. Upon receipt of the notice of termination, the Contractor shall act promptly to minimize the expenses resulting from the termination.
- B. The Authority shall pay the Contractor for work of the contract performed by the Contractor and accepted by the Authority for the period extending from the end of the period covered by the last approved Application for Payment up to the effective date of the termination, an amount determined in accordance with the Contract Documents. In no event shall the Contractor be entitled to compensation in excess of the total consideration of the Contract. In no event shall the Contractor be entitled to overhead or profit on the work not performed.
- C. In the event of such termination, the Authority may take over the work and prosecute the Contract to completion and may take possession of and may utilize such materials, appliances, and equipment on the site and necessary or useful in completing the work. The Authority also has the right to suspend the execution of the Work for convenience and/or to terminate the Contract for convenience.

Whenever the New York State Thruway Authority determines to suspend or stop work under the contract, a written notice sent by mail to the Contractor at its address and to the sureties at their respective addresses, shall be sufficient notice of its action in the premises.

### **Article 11.4 Termination for Vendor Responsibility.**

- A. Contractor shall at all times during the Contract term remain responsible. Contractor agrees, if requested by the Authority, to present evidence of its continuing legal authority to do business in New York State, integrity, experience, ability, prior performance, and organizational and financial capacity.
- B. The Authority, in its sole discretion, reserves the right to suspend any or all activities under this Contract, at any time, when it discovers information that calls in to question the responsibility of Contractor. In the event of such suspension, Contractor will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, Contractor shall comply with the terms of the suspension order. Contract activity may resume at such time as the Authority issues a written notice authorizing a resumption of performance under the Contract.
- C. Notwithstanding any other provision of this Contract, if the Authority determines Contractor to be non-responsible, the Authority shall have the right to terminate the Contract for cause pursuant to the terms of Article 11.2 - Termination for Cause herein.

In such event, the Authority shall have all rights and remedies set forth in Article 11.2, including, without limitation, the right to complete Contractor's contractual requirements in any manner the Authority may deem advisable and to pursue available legal or equitable remedies for the breach.

- D. In no event shall termination of the Contract by the Authority for reasons of Contractor's non-responsibility be deemed a breach by the Authority, nor shall the Authority be liable for any damages or lost profits or otherwise that Contractor may incur as a result of such termination.
- E. The Authority may require at any time the removal of a subcontractor to the Contractor that the Authority determines is not responsible.

**ARTICLE 12. DETERMINATION AS TO VARIANCES.**

In any case of any ambiguity in the plans, specifications or maps, or between any of them, the matter must be immediately submitted to the Chief Engineer, Department of Engineering, who shall adjust the same, and his/her decision in relation thereto shall be final and conclusive upon the parties.

**ARTICLE 13. SUCCESSORS AND ASSIGNS.**

This Agreement shall bind the successors, assigns and representatives of the parties hereto.

**ARTICLE 14. INTERNATIONAL BOYCOTT PROHIBITION.**

In accordance with Chapter 406 of the Laws of 1981, the Contractor hereby promises, asserts and represents that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating or shall participate in an international boycott in violation of the provisions of the United States Export Administration Act of 1969, as amended, or the United States Export Administration Act of 1979, or the effective Regulations of the United States Department of Commerce promulgated under either act.

It is understood further that the Authority in awarding a contract does so in material reliance upon the promise and representation made by the Contractor in the foregoing paragraph and that such contract shall be rendered forfeit and void by the State Comptroller if subsequent to the bid execution date, the Contractor or such owned or affiliated person, firm, partnership or corporation has been convicted of a violation of the aforesaid Acts or Regulations or has been found upon final determination of the United States Commerce Department or any other appropriate agency of the United States to have violated such Acts or Regulations.

The Contractor agrees to and shall notify the Chief Engineer, Department of Engineering and the Director of the Office of Construction Management and the Director of State Expenditures in the Office of the State Comptroller of any such conviction or final determination of violation within five (5) days thereof.

**ARTICLE 15. CERTIFICATION OF STATE FINANCE LAW SECTIONS 139-J AND 139-K.**

By execution of this Agreement the Contractor certifies that all information provided with respect to New York State Finance Law Section 139-j and Section 139-k is complete, true and accurate. The Authority shall have a right to terminate this Agreement in the event the Authority finds that the certification made by the Contractor in accordance with New York State Finance Law Sections 139-j and 139-k was intentionally false or intentionally incomplete. This

includes the Authority's right to terminate this Agreement at any time in the event the Authority finds that Contractor is non-responsible or has failed to accurately disclose vendor responsibility information.

#### **ARTICLE 16. WRITTEN NOTICES.**

All notices permitted or required hereunder shall be in writing and transmitted by either:

- a. certified or registered United States mail, return receipt requested;
- b. facsimile transmission;
- c. personal delivery;
- d. expedited delivery service; or
- e. e-mail.

Such notices shall be addressed to the individuals or titles named in the contract documents, or which are designated by the Contractor or the Authority at the pre-construction meeting, or which are designated by the Authority or the Contractor from time to time during the course of the Contract pursuant to the requirements herein.

Any such notice shall be deemed to have been given either at the time of personal delivery or, in the case of expedited delivery service or certified or registered United States mail, as of the date of first attempted delivery at the address and in the manner provided herein, or in the case of facsimile transmission or email, upon receipt.

The parties may, from time to time, specify a new or different address in the United States as their address for the purpose of receiving notice under this Agreement by giving fifteen (15) days written notice to the other party sent in accordance herewith. The parties agree to mutually designate individuals as their respective representatives for the purposes of receiving notices under this Agreement. Additional individuals may be designated in writing by the parties for purposes of implementation and administration/billing, resolving issues and problems and/or for dispute resolution.

#### **ARTICLE 17. SUBCONTRACTING.**

Contractor agrees not to subcontract any of its services without the prior written approval of the Authority.

Contractor retains ultimate responsibility for all services performed under the Agreement and shall pay any subcontractors promptly for work performed under this Agreement. Contractor shall be fully responsible to the Authority for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, just as Contractor is fully responsible to the Authority for the acts and omissions of persons directly employed by Contractor.

All subcontracts shall be in writing and shall contain provisions, which are functionally identical to, and consistent with, the provisions of this Agreement including, but not limited to, the body of this Agreement, Appendix A – Standard Clauses for New York State Thruway Authority Contracts, and the Contract Documents. Unless expressly waived in writing by the Authority, all subcontracts between the Contractor and its subcontractors shall expressly name the Authority, as the sole intended third party beneficiary of such subcontract. The Authority reserves the right to review and approve or reject any subcontract, as well as any amendment to said subcontract(s), and this right shall not make the Authority a party to any subcontract or create any right, claim, or interest in the subcontractor or proposed

subcontractor against the Authority. The Authority shall have the right to withdraw its consent to a subcontractor if, at the sole discretion of the Authority, it appears that the subcontract will delay, prevent, or otherwise impair Contractor's performance of services under this Agreement. Upon request, Contractor shall furnish to the Authority copies of all Contracts between Contractor and its subcontractors used to perform services for this Agreement.

The Authority reserves the right, at any time during the term of the Agreement, to verify that the written subcontract between Contractor and its subcontractors is in compliance with all of the provisions of this Article 17 and any subcontract provisions contained in this Agreement.

Contractor shall give the Authority immediate notice in writing of the initiation of any legal action or suit which relates in any way to a subcontract with a subcontractor or which may affect the performance of the Contractor's duties under the Agreement. Any subcontract shall not relieve the Contractor in any way of any responsibility, duty and/or obligation of the Agreement.

If at any time during performance under this Agreement total compensation to a subcontractor exceeds or is expected to exceed \$100,000, said subcontractor shall be required to electronically submit and certify a new Vendor Responsibility Questionnaire directly to the Office of the New York State Comptroller, or submit and certify all necessary updated information thereof.

Nothing contained in this Agreement shall create any contractual relationship between a subcontractor and the Authority.

#### **ARTICLE 18. CONFIDENTIALITY AND NON-DISCLOSURE.**

- A. "Confidential Information" means any information not generally known to the public, or that the Authority claims is confidential, whether oral, written, or electronic, that the Authority discloses, directly or indirectly, through any means of communication, to Contractor. Confidential Information includes, but is not limited to, operational and infrastructure information relating to: bid documents, plans, drawings, specifications, reports, product information and data; business and security processes and procedures; personnel and organizational data; financial statements; information system IP addresses, passwords, security controls, architectures and designs; and such other data, information and images that the Authority deems confidential.
- B. Confidential Information does not include information which, at the time of the Authority's disclosure to Contractor: (1) is already in the public domain or becomes publicly known through no act of Contractor; or (2) is already known by Contractor free of any confidentiality obligations.

If Contractor wants to disclose Confidential Information, it shall notify the Authority and specify the Confidential Information it wants to disclose. Contractor may only disclose such Confidential Information if the Authority approves such disclosure in writing, subject to such other terms and conditions as the Authority may require. Such approval, if given, shall only apply to the particular request and the specific Confidential Information for



which it is given.

If Contractor is required to disclose or make available, directly or indirectly, Confidential Information pursuant to statute, court or administrative order, subpoena, contractual obligation, or otherwise by law, Contractor shall: (1) notify the Authority that it has received such legal demand as soon as practicable, but in all events prior to any disclosure; (2) permit the Authority to take the steps it deems necessary and appropriate to protect the Confidential Information from disclosure; (3) cooperate to the fullest extent possible under the law with the Authority's efforts to protect the Confidential Information from disclosure; and (4) disclose only such Confidential Information, and only such portions thereof, as is required to satisfy the legal demand, and limit any such disclosure of Confidential Information to the fullest extent permissible under the law.

- C. Contractor may use Confidential Information solely for the purposes of providing services to the Authority pursuant to this Agreement. Contractor may make copies of Confidential Information but only to the extent necessary for the disclosures and uses permitted by this Agreement. Contractor will make commercially reasonable efforts to ensure that any copy of Confidential Information that is made is marked to show that it is or contains Confidential Information. Contractor may share Confidential Information with third parties: (i) that are required for Contractor's provision of services to the Authority pursuant to this Agreement (e.g., Contractors and subcontractors); and (ii) that agree in writing to be bound by the confidentiality provisions of this Agreement; however, Contractor may share only that Confidential Information that is necessary to the third party's contribution to Contractor's provision of services to the Authority pursuant to this Agreement and Contractor must first obtain the Authority's prior written consent.

The Authority's disclosure of Confidential Information to Contractor shall not convey to Contractor any right, title, or interest in or to such Confidential Information, and this Agreement does not transfer ownership of Confidential Information or grant a license thereto. The Authority shall retain all right, title, and interest in and to all such Confidential Information at all times.

- D. Contractor shall hold Confidential Information confidential to the maximum extent permitted by law. Contractor shall safeguard Confidential Information with at least the same level of care and security that Contractor uses to maintain and protect from disclosure its own confidential information, using all reasonable and necessary security measures, devices, and procedures that Contractor uses to maintain its own confidential information, but in all events with not less than reasonable care.

Contractor shall take reasonable steps to prevent unauthorized access to, use of, or disclosure of Confidential Information, including without limitation, by protecting its passwords and other log-in information. Contractor shall notify the Authority immediately of any known or suspected misuse or misappropriation of Confidential Information and shall use its best efforts to stop said misuse or misappropriation.

- E. Upon written request of the Authority, or upon expiration or termination of this Agreement, Contractor shall return all Confidential Information to the Authority, or certify in writing that it has been destroyed and no copies exist.
- F. Contractor agrees that breach of this Article 18 would cause the Authority irreparable

injury, for which monetary damages would not provide adequate compensation, and that in addition to any other remedy, the Authority will be entitled to injunctive relief against such breach or threatened breach, without proving actual damages or posting a bond or other security.

- G. Without limiting the foregoing, the obligations and assurances involving Confidential Information pursuant to this Agreement shall survive termination or expiration of this Agreement.

**ARTICLE 19. NEW YORK STATE HUMAN RIGHTS LAW, ARTICLE 15 OF THE EXECUTIVE LAW.**

The New York State Human Rights Law, Article 15 of the Executive Law, prohibits discrimination (including to refuse to hire or employ or to bar or to discharge from employment an individual or to discriminate against such individual in compensation or in terms, conditions or privileges of employment) and harassment based on age, race, creed, color, national origin, sex, , sexual orientation, gender identity or expression, disability, marital status, familial status, domestic violence victim status, prior arrest or conviction record, military status or predisposing genetic characteristics, or because the individual has opposed any practices forbidden under the Human Rights Law or because the individual has filed a complaint, testified or assisted in any proceeding under the Human Rights Law, regardless of whether such harassment would be considered severe or pervasive under precedent applied to harassment claims. Harassment is an unlawful discriminatory practice when it subjects an individual to inferior terms, conditions or privileges of employment because of the individual's membership in one or more of these protected categories.

The Human Rights Law may also require reasonable accommodation for persons with disabilities and pregnancy-related conditions. A reasonable accommodation is an adjustment to a job or work environment that enables a person with a disability to perform the essential functions of a job in a reasonable manner. The Human Rights Law may also require reasonable accommodation in employment on the basis of Sabbath observance or religious practices.

Generally, the Human Rights Law applies to:

- all employers of four or more people, employment agencies, labor organizations and apprenticeship training programs in all instances of discrimination or harassment;
- employers with fewer than four employees in all cases involving sexual harassment; and,
- any employer of domestic workers in cases involving sexual harassment or harassment based on gender, race, religion or national origin.

In accordance with New York State Executive Order No. 177, by execution of this Agreement, Contractor hereby certifies, that it does not have institutional policies or practices that fail to address the harassment and discrimination of individuals on the basis of their age, race, creed, color, national origin, sex, sexual orientation, gender identity, disability, marital status, military status, or other protected status under the Human Rights Law.

Executive Order No. 177 and the aforementioned certification do not affect institutional policies or practices that are protected by existing law, including but not limited to the First Amendment of the United States Constitution, Article 1, Section 3 of the New York State Constitution, and Section 296(11) of the New York State Human Rights Law.

**ARTICLE 20. DEBARMENT CERTIFICATION.**

- A. The Contractor certifies to the best of its knowledge and belief, that it and its principals:
1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
  2. Have not within a three-year period preceding this contract been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (A)(2) of this certification; and
  4. Have not within a three-year period preceding this application/proposal/contract had one or more public transactions (Federal, State or local) terminated for cause or default.

**ARTICLE 21. CONFLICTS OF INTEREST.**

- A. Contractor has provided as Exhibit V (attached hereto and made a part of this Agreement), the Vendor Assurance of No Conflict of Interest or Detrimental Effect form, signed by an authorized executive or legal representative attesting that Contractor's performance of the services does not and will not create a conflict of interest with, nor position Contractor to breach any other contract currently in force with the Authority or the State of New York, that Contractor will not act in any manner that is detrimental to any Authority or State of New York project for which Contractor is rendering services.
- B. Contractor hereby reaffirms the attestations made in its proposal and covenants and represents that there is and shall be no actual or potential conflict of interest that could prevent Contractor's satisfactory or ethical performance of duties required to be performed pursuant to the terms of this Agreement. Contractor hereby agrees it shall have a continuing affirmative duty and obligation to notify the Authority immediately of any actual or potential conflicts of interest.
- C. In conjunction with any subcontract under this Agreement, Contractor shall obtain and deliver to the Authority, prior to entering into a subcontract, a Vendor Assurance of No Conflict of Interest or Detrimental Effect form, signed by an authorized executive or legal representative of the subcontractor. Contractor shall also require in any subcontracting agreement that the subcontractor, in conjunction with any further subcontracting agreement, obtain and deliver to the Authority a signed and completed Vendor Assurance of No Conflict of Interest or Detrimental Effect form for each of its subcontractors prior to entering into a subcontract.
- D. The Authority and Contractor recognize that conflicts may occur in the future because

Contractor may have existing, or establish new, relationships. The Authority will review the nature of any relationships and reserves the right to terminate this Agreement for any reason, or for cause, if, in the judgment of the Authority, a real or potential conflict of interest cannot be cured.

#### **ARTICLE 22. ETHICS.**

Contractor and subcontractors may hire former State agency or Authority employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of the Authority may neither appear nor practice before the Authority, nor receive compensation for services rendered on a matter before the Authority, for a period of two years following their separation from Authority service. In addition, former Authority employees are subject to a "lifetime bar" from appearing before the Authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with the Authority.

During the term of the Agreement, Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the Authority or New York State to perform services under the Agreement in violation of: the provisions of the Public Officers Law ("POL"); the rules, regulations, opinions, guidelines, or policies promulgated or issued by the New York State Joint Commission on Public Ethics ("JCOPE Regulations"); and any other laws applicable to the service of current or former Authority or New York State employees ("Other Laws," and, together with POL and JCOPE Regulations, collectively, the "Ethics Provisions"). Contractor certifies that all of its employees and employees of any subcontractor who are former employees of the Authority or New York State and who are assigned to perform services under the Agreement shall be assigned in accordance with all Ethics Provisions. Further, during the term of the Agreement, no person who is employed by Contractor or its subcontractors and who is disqualified from providing services under the Agreement pursuant to any Ethics Provisions may share in any net revenues Contractor or its subcontractors derives from the Agreement.

Contractor shall identify and provide the Authority with notice of those employees of Contractor or its subcontractors who are former employees of the Authority or New York State and who will be assigned to perform services under the Agreement, and shall ensure that such employees comply with all applicable laws and prohibitions. The Authority may, request that Contractor provide it with whatever information the Authority deems appropriate about each such person's engagement, work cooperatively with the Authority to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the Authority, instruct any such person to seek the opinion of the Joint Commission on Public Ethics. The Authority shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed hereunder would be in conflict with any of the Ethics Requirements. The Authority shall have the right to cancel or terminate the Agreement at any time if any work performed under the Agreement is in conflict with any Ethics Provisions.

#### **ARTICLE 23. MINORITY AND WOMEN BUSINESS ENTERPRISE GOALS AND SERVICE DISABLED VETERANS OWNED BUSINESS GOALS.**

This Contract is subject to State provisions (including State Executive Law 15-A and 5 NYCRR Parts 140-145) concerning the utilization of Minority-Owned Business Enterprises (MBE) and Women-Owned Business Enterprises (WBE) (collectively M/WBE). All State M/WBE requirements are applicable to this Contract. The approved overall combined MBE and WBE participation goal for the project is established in the Contract Documents.

This Contract is subject to State provisions (including State Executive Law 15-A and 5 NYCRR Parts 140-145) concerning the utilization of Service Disabled Veterans Owned Business (SDVOB). All State SDVOB requirements are applicable to this Contract. The approved overall SDVOB participation goal for the project is established in the Contract Documents.

**ARTICLE 24. IRAN DIVESTMENT ACT- SECTION 2879-C OF THE PUBLIC AUTHORITIES LAW.**

- A. As used in this Article 24, "person" has the meaning set forth in paragraph (e) of subdivision 1 of Section 165-a of the State Finance Law.
- B. As used in this Article 24 "Contract" means this Agreement.
- C. Contractor hereby provides the following certification: By signing this Contract, each person and each person signing on behalf of any other party certifies, and in the case of a joint bid or partnership each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each person is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law.

**ARTICLE 25. COVENANT AGAINST CONTINGENT FEES.**

Contractor warrants that it has not employed or retained any company or person, other than a bona fide employee working for Contractor, to solicit or secure this Agreement, and has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Agreement. In the event Contractor violates this warranty, Authority shall have the right to terminate this Agreement without liability, or, in its discretion, to deduct from payments otherwise owed to the Contractor for services provided pursuant to this Agreement the full amount of such fee, commission, percentage, brokerage fee, gift or other consideration.

**ARTICLE 26. COMPLIANCE MONITORING.**

In the event that the Contractor, its affiliates or any subcontractor is or becomes subject to a compliance monitoring requirement consequent to an agreement with a governmental entity at any time prior to completion of the contract, the Contractor shall promptly notify the Authority of the same. Compliance monitoring means any requirement imposed by a governmental entity arising from an investigation of activities of the Contractor, its affiliates, or any subcontractor concerning alleged compliance violations, pursuant to which the subject entity is obligated to allow an independent third party to review, analyze, investigate or report on that entity's future compliance with governmental rules and/or contractual requirements arising from governmental rules. Said notice shall be in writing and shall include (i) a copy of the order, settlement or other document setting forth the requirement to implement a monitoring program and (ii) the specific requirements and conditions of the required program. If the order, settlement or other document is subject to confidentiality protection that cannot be unilaterally waived by the Contractor or the entity that is subject to the requirement, the Contractor shall cause the subject entity to confirm that it is subject to a compliance monitoring requirement

and to provide a confidential summary of the terms and conditions of the monitoring requirement to the Contractor, with a copy to the Authority.

The Contractor shall further cause the subject entity to promptly notify the Contractor, with a copy to the Authority, of any violations of the monitoring program by the subject entity and of any other concerns expressed by the monitor regarding compliance with the monitoring program requirements. In such event, the Contractor shall provide to the Authority a detailed written report as to whether and to what extent, if any, the violation or concerns expressed by the monitor are relevant to the Contractor's compliance with its Contract obligations, or to the performance of work by the Contractor. The Authority shall at all times have the right to independently investigate whether any matter raised by the monitor will have any effect upon the Contractor's compliance with its Contract obligations or performance of work by the Contractor and/or subject entity. If any such violation occurs or concerns expressed by the monitor involve compliance requirements that are deemed by the Authority to be relevant to the Contract, the Authority shall have the right to require the Contractor to institute, at Contractor expense, additional data keeping, reporting, and/or other safeguard measures, including permitting independent auditing and access to pertinent records of the Contractor or the subject entity to mitigate risk that a similar violation will occur on the project or be a cause for concern with respect to the Contractor's performance of its obligations under the Contract. The Authority's audit rights under the Contract shall include the right to audit and access pertinent records of the Contractor or the subject entity relating to compliance issues described herein.

The Authority agrees to take all reasonable measures to maintain the confidentiality (to the extent permitted by law) of any information provided by Contractor and/or the subject entity pursuant to this Article 26 which the Contractor has reasonably designated as confidential, and the provisions of Appendix A, Section 9 of the New York State Thruway Authority Addendum to the Standard Specifications, of the Agreement shall apply with respect to disclosure of any such Records under the Statute (as defined in such section). Any intra-agency written materials prepared by the Authority, or any written inter-agency materials that are in the possession or control of the Authority, to the extent based on information or records designated as confidential or exempt from disclosure under the Statute as provided in the preceding sentence, shall also be designated and treated as such by the Authority to the fullest extent permitted by law. The Authority may disclose any of the aforementioned information, records and materials to the New York State Department of Transportation, provided that the Department agrees to treat such information, records and material in the same manner as required of the Authority under this paragraph.

The rights and remedies granted to the Authority under this Article 26 are in addition to, and not to the exclusion of, any and all of its rights and remedies under the Contract or at law or in equity.

#### **ARTICLE 27. INDEMNIFICATION.**

The Contractor shall be responsible for all damage to life and property due to negligent or otherwise tortious acts, errors or omissions of the Contractor in connection with its services under the Contract Documents. To the fullest extent permitted by law: (a) the Contractor shall indemnify, hold harmless, and release the Authority, the State of New York, any municipality in which the Work is being performed; and/or any public benefit corporation, railroad or public utility whose property or facilities are affected by the Work from suits, claims, actions, damages, and costs of every name and description resulting from the Work under this Contract and until the Final Acceptance thereof; (b) with respect to personal injury or property damage occurring after Final Acceptance and not covered by the indemnity in clause Article 27 (a), the Contractor shall indemnify, hold harmless, and release the Authority, the State of New York, any municipality in which the Work is being

performed; and/or any public benefit corporation, railroad or public utility from suits, claims, actions, damages, and costs of every name and description resulting from negligent or otherwise tortious acts, errors or omissions of the Contractor in connection with its services under the Contract Documents; and (c) the Contractor shall indemnify, hold harmless, and release the Authority's Inspector from suits, claims, actions, damages, and costs involving personal injury and property damage resulting from the Contractor's Work under the Contract during its prosecution and until the Final Acceptance thereof. The Authority may retain such monies from the amount due the Contractor as may be necessary to satisfy any claim for damages recovered against the Authority, the State of New York, any municipality in which the Work is being performed, any public benefit corporation, railroad, or public utility whose property or facilities are affected by the Work, or the Authority's Inspectors. The Contractor's obligation under this paragraph shall not be deemed waived by the failure of the Authority to retain the whole or any part of such monies due the Contractor, or where such suit, action, damages, and/or costs have not been resolved or determined prior to release of any monies to the Contractor under the Contract. Such obligation shall not be deemed limited or discharged by the enumeration or procurement of any insurance for liability for damages imposed by law upon the Contractor, Subcontractors, the Authority, the State, any municipality in which the Work is being performed, any public benefit corporation, railroad, or public utility whose property or facilities are affected by the Work, or any Department consultants or contractors working relative to the Project.

The Contractor has the obligation, at its own expense, for the defense of any action or proceeding which may be brought against the parties specified in this Article. This obligation shall include the cost of attorney fees, disbursements, costs, and other expenses incurred in connection with such action or proceeding. The provisions of this Article shall survive the expiration or termination of the Contract.

Without limiting the generality of the foregoing, Contractor's obligation to indemnify, save harmless and release the Persons identified in this article specifically includes any suits, claims, actions, damages, and costs of every name and description resulting from any spill or release or threatened spill or release of a Hazardous Material (i) attributable to the negligence, willful misconduct or breach of contract by Contractor, its Subcontractors or agents, or (ii) which was brought onto the Site by Contractor or any of its Subcontractors or agents.

Notwithstanding the foregoing, the Authority reserves the right to join such action, at its sole expense, when it determines there is an issue involving a significant public interest. Such obligation does not extend to those suits, actions, damages, and costs of every name which arise out of the sole negligence of the Authority, the State of New York, any municipality in which the Work is being performed, any public benefit corporation, railroad, or public utility whose property or facilities are affected by the Work of the Project, or any Authority consultants or Contractors working relative to the Project, their agents, or their employees.

#### **ARTICLE 28. NOTICES REGARDING CLAIMS, LITIGATION AND RULINGS.**

The Contractor shall promptly provide written notice to the Authority of all claims, litigation and governmental rulings pertaining to the work where such claims, litigation or rulings could subject the Authority to liability or substantially impair the completion of the Contract work. With such notice, the Contractor shall include a brief summary of the issue involved and the Contractor's position on such issue. Such written notice is additional to and not in place of

any other notices required by the Contract Documents. The Contractor shall cooperate and provide, and shall require all subcontractors to cooperate and provide, such information or records as may be reasonably requested by the Authority concerning such claims, litigation or rulings.

**ARTICLE 29. COOPERATION AND FURTHER ASSURANCES.**

Contractor shall cooperate and provide, and shall cause all subcontractors to cooperate and provide, such information as is necessary or requested by the Authority to assist or facilitate the submission by the Authority of any documentation, reports or analysis required by the State, and/or any other governmental entity with jurisdiction over the work. The Contractor shall promptly execute and deliver to the Authority all such instruments and other documents and assurances as are reasonably requested by the Authority to further evidence the obligations of the Contractor under the Contract.

**ARTICLE 30. SEVERABILITY.**

If any clause, provision, section, article or part of any of the Contract Documents is ruled invalid by a court having proper jurisdiction, the invalidity or unenforceability of any such clause, provision, section, article or part shall not affect the validity or enforceability of the balance of the Contract Documents, which shall be construed and enforced as if the Contract Documents did not contain such invalid or unenforceable clause, provision, section, article or part.



**Contract Number:**

In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract.

IN-WITNESS WHEREOF, the parties hereto have executed this agreement on the day and year first above written.

By: \_\_\_\_\_  
Chief Engineer

: \_\_\_\_\_  
Date

\_\_\_\_\_  
Contractor

Approved as to form

Approved:

Thomas P. DiNapoli  
State Comptroller

\_\_\_\_\_  
New York State Attorney General

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

**(ACKNOWLEDGMENT BY INDIVIDUAL CONTRACTOR)**

STATE OF NEW YORK

COUNTY OF \_\_\_\_\_ ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 202\_,  
before me personally came \_\_\_\_\_ to me  
known and known to me to be the person described in and who executed the foregoing instrument,  
and acknowledged that he executed the same.

\_\_\_\_\_  
*Notary Public*

\_\_\_\_\_

**(ACKNOWLEDGMENT BY CO-PARTNERSHIP CONTRACTOR)**

STATE OF NEW YORK

COUNTY OF \_\_\_\_\_ ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 202  
before me personally came and appeared \_\_\_\_\_ to me known and known  
to me to be the person who executed the above instrument, who, being sworn by me, did for himself  
depose and say that he is a member of the firm of \_\_\_\_\_ consisting of  
himself and \_\_\_\_\_ and that he executed the foregoing instrument in the  
firm name of \_\_\_\_\_ and that he had authority to sign same, and he did duly  
acknowledge to me that he executed the same as the act and deed of said firm of  
\_\_\_\_\_, for the uses and purposes mentioned therein.

\_\_\_\_\_  
*Notary Public*

**(ACKNOWLEDGEMENT OF A CORPORATION)**

STATE OF NEW YORK }  
  }  
COUNTY OF            }

On this \_\_\_\_\_ day of \_\_\_\_\_, 202\_,  
before me personally came \_\_\_\_\_, to me known and known to me to  
be the person who executed the above instrument, who being duly sworn by me, did depose and  
say that he/she resides in \_\_\_\_\_, that he/she is the  
\_\_\_\_\_ of \_\_\_\_\_, the corporation  
described in and which executed the above instrument, and that he/she signed his/her name thereto  
on behalf of said Corporation by order of the Board of Directors of said Corporation.

\_\_\_\_\_  
*Notary Public*

\_\_\_\_\_

**Exhibit V****Vendor Assurance of No Conflict of Interest or Detrimental Effect**

The undersigned entity (“Contractor”), offering to provide services pursuant to this Agreement, as a contractor, joint venture contractor, subcontractor, or consultant, attests that its performance of the services outlined in this Agreement does not and will not create a conflict of interest with nor position the Contractor to breach any other contract currently in force with the New York State Thruway Authority (“Authority”).

Furthermore, the Contractor attests that it will not act in any manner that is detrimental to any Authority project on which the Contractor is rendering services. Specifically, the Contractor attests and certifies that:

1. The fulfillment of obligations by the Contractor does not violate any existing contracts or agreements between the Contractor and the Authority;
2. The fulfillment of obligations by the Contractor does not and will not create any conflict of interest, or perception thereof, with any current role or responsibility that the Contractor has with regard to any existing contracts or agreements between the Contractor and the Authority;
3. The fulfillment of obligations by the Contractor does not and will not compromise the Contractor’s ability to carry out its obligations under any existing contracts between the Contractor and the Authority;
4. The fulfillment of any other contractual obligations that the Contractor has with the Authority will not affect or influence its ability to perform under the Agreement;
5. During the negotiation and execution of any contract, the Contractor will not knowingly take any action or make any decision which creates a potential for conflict of interest or might cause a detrimental impact to the Authority as a whole including, but not limited to, any action or decision to divert resources from one Authority project to another;
6. In fulfilling obligations under each of its Authority contracts, including this Agreement, the Contractor will act in accordance with the terms of each of its Authority contracts and will not knowingly take any action or make any decision which might cause a detrimental impact to the Authority as a whole including, but not limited to, any action or decision to divert resources from one Authority project to another;
7. No former officer or employee of the Authority or State of New York (“State”) who is now employed by the Contractor, nor any former officer or employee of the Contractor who is now employed by the Authority or State, has played a role with regard to the administration of this contract procurement in a manner that may violate section 73(8)(a) of the New York State Public Officers Law; and
8. The Contractor has not and shall not offer to any employee, member or director of the Authority any gift, whether in the form of money, service, loan, travel, entertainment, hospitality, thing or promise, or in any other form, under circumstances in which it could reasonably be inferred that the gift was intended to influence said employee, member or director, or could reasonably be expected to influence said employee, member or director, in the performance of the official duty of said

employee, member or director or was intended as a reward for any official action on the part of said employee, member or director.

Contractor agrees that the Authority recognizes that conflicts may occur in the future because a Contractor may have existing or new relationships. The Authority will review the nature of any such new relationship and reserves the right to terminate the contract for cause if, in its judgment, a real or potential conflict of interest cannot be cured.

This form must be signed by an authorized executive or legal representative.

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Name of Signatory

\_\_\_\_\_  
Title of Signatory

\_\_\_\_\_  
Signature:

\_\_\_\_\_  
Date:

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CONTRACT:

COUNTY:

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**FAITHFUL PERFORMANCE BOND**

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**BOND**

Know all men by these presents, that we (hereinafter called the "Principal")

and \_\_\_\_\_

of \_\_\_\_\_ (hereinafter called the "Surety") are held and firmly bound unto the New York State Thruway Authority, (hereinafter called the "Authority"), in the full and just sum of \_\_\_\_\_ good and lawful money of the United States of America for the payment of which said sum of money, well and truly to be made and done, the said Principal binds himself, his heirs, executors, administrators or assignees and the said SURETY binds itself, its successors or assigns, jointly and severally, firmly by these presents.

Signed, sealed and dated this \_\_\_\_\_ of \_\_\_\_\_, 202\_\_\_\_\_,

Whereas, said Principal has entered into a certain written contract bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 202 with the Authority for:

Now, therefore, THE CONDITION OF THIS OBLIGATION IS SUCH that if the said Principal shall well, truly and faithfully perform the work in accordance with the terms of the contract, and with the plans and specifications, and will commence and complete the work within the time prescribed in the contract, on his part to be kept and performed according to the terms and tenor of said contract, and shall protect the said N.Y.S. Thruway Authority against, and pay any excess of cost as provided in said contract, and all amounts, damages, costs and judgments which may be recovered against said N.Y.S. Thruway Authority, N.Y.S. Dept. of Transportation the Commissioner of Transportation and the State of N.Y. or its or any of their officers or agents or which the said aforementioned may be called upon to pay to any person or corporation by reason of any damages, direct or indirect, arising or growing out of the doing of said work, or from the negligence, non-feasance, misfeasance, or malfeasance of any officer, agent or employee of the aforementioned, or suffered or claimed on account of aforesaid work during the time thereof and until the final completion and acceptance of the work, or the manner of doing the same, or the neglect of the said Principal, or his agents, or servants, or the improper performance of the said work by the said Principal, or his agents, or servants, or from any other cause, then this obligation shall be null and void, otherwise to remain in full force and virtue.

In the event of a failure of performance of the contract by the Principal, which shall include, but not be limited to, any breach or default of the contract by the Principal, or in case said contract is forfeited by the Principal in the manner provided for in the contract and the said Surety, for value received, hereby stipulates and agrees, if requested to do so by the Authority, has the option to either remedy the default, or breach or forfeiture of the Principal or take charge and fully perform and complete the work, mentioned and described in said contract and specifications, pursuant to the terms, conditions and covenants thereof and as may be amended, at its own expense. The procedure by which the surety undertakes to discharge its obligations under the bond shall be subject to the advance written approval of the Authority. If the Surety completes the contract, it shall be paid for the actual items of work performed in accordance with the Principal's contract terms and prices. In the event the Surety assumes the rights and obligations of the Principal.

It shall be the duty of the Surety to give unequivocal notice in writing to the Authority, within forty-five (45) days after receipt of written notice from the Authority to the Surety, of the Surety's election to remedy default(s) or breach(es) or forfeiture(s) promptly or to perform and fully complete the contract promptly as provided herein, time being of the essence of this bond. In said notice of election, the Surety shall state the date on which the remedy or performance shall commence. During the period between the Authority's notice and Surety's performance of the contract or remedy of the default, breach or forfeiture, the Surety shall be liable for and agrees to pay any and all reasonable and necessary costs as determined by the Authority to maintain the project site safe and convenient to the public.

It shall also be the duty of the Surety to give prompt notice in writing to the Authority upon completion of the remedy and/or correction of each breach or default or completion of the contract. The surety shall not assert solvency of its Principal or its Principal's denial of default as justification for its failure to give notice of election or for its failure to promptly remedy the breach or default or to complete the contract.

In the event the Surety shall fail to exercise either option or to act promptly then the Authority shall give ten (10) days notice of such failure, both to the Principal and the Surety, and after the expiration of the 10 days the Authority may cause the work to be completed in accordance with the contract, and the Surety and the Principal shall be jointly and severally liable for the amount of the excess cost of completing the contract work beyond the amounts remaining for this contract adjusted for the work actually performed. When the cost of completion of performance by the Obligee is estimated, the Principal and Surety shall pay, free from all liens and encumbrances, the Authority determined estimated completion costs above funds remaining for this contract, to the Authority within 30 days of receipt of the estimate. Adjustment to the Authority's estimated completion cost will be made upon the Authority's final acceptance of the work and appropriate refunds, if any, will be promptly made to the Surety. Any actual costs in excess of the estimated price shall be paid to the Authority promptly on demand. Additionally, Principal and Surety shall be liable for any applicable liquidated and/or engineering costs or damages.



In addition, the said Principal and Surety further agree, as part of this obligation, to pay all damages of any kind to person or property that may result from a failure in any respect to perform and complete said contract including, but not limited to costs necessary to protect the traveling public or to avoid inconvenience to the traveling public, (liquidated damages as provided above) all repair and replacement costs necessary to rectify construction errors, architectural and engineering costs and fees, all Contractor fees, all testing and laboratory fees, and all interest, legal fees and litigation costs incurred by the Authority.

And the said Surety hereby stipulates and agrees that no change, extension, alteration, deduction of addition in or to the terms of the said contract or the plans or specification accompanying the same shall in any wise affect the obligation of said Surety on its bond.

L.S.

(Corporate seal of \_\_\_\_\_ L.S. Principal

principal if a corporation.) \_\_\_\_\_ L.S.

(Corporate seal of \_\_\_\_\_ L.S.  
surety.) \_\_\_\_\_

\_\_\_\_\_ L.S. Surety

STATE OF NEW YORK  
OFFICE OF THE ATTORNEY GENERAL

I hereby approve the foregoing contract and bond as to form and manner of execution.

Dated \_\_\_\_\_

\_\_\_\_\_  
Attorney General

**(ACKNOWLEDGMENT BY PRINCIPAL, UNLESS IT BE A CORPORATION)**

STATE OF NEW YORK,

COUNTY OF \_\_\_\_\_ ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 202\_, before me personally came \_\_\_\_\_ to me known, to be the person described in and who executed the foregoing instrument and he acknowledged that he executed the same.

\_\_\_\_\_  
*Notary Public*

(Notary's seal to be attached.)

\_\_\_\_\_

**(ACKNOWLEDGMENT BY PRINCIPAL, IF A CORPORATION)**

STATE OF NEW YORK,

COUNTY OF \_\_\_\_\_ ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 202\_, before me personally came \_\_\_\_\_ to me known, who being by me duly sworn, did depose and say that he resides in \_\_\_\_\_, that he is the \_\_\_\_\_ of \_\_\_\_\_, the corporation described in and which executed the foregoing instrument: that he knew the seal of the said corporation: that the seal affixed to said instrument was such corporate seal: that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

\_\_\_\_\_  
*Notary Public*

**(ACKNOWLEDGED BY SURETY COMPANY)**

STATE OF NEW YORK,

COUNTY OF \_\_\_\_\_ ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 202\_, before me personally came \_\_\_\_\_ to me known, who being by me duly sworn, did depose and say that he resides in \_\_\_\_\_, that he is the \_\_\_\_\_ of \_\_\_\_\_, the corporation described in and which executed the foregoing instrument: that he knew the seal of the said corporation: that the seal affixed to said instrument was such corporate seal: that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

\_\_\_\_\_  
*Notary Public*

(Notary's seal to be attached.)

\_\_\_\_\_

(The Surety Company must append statement of its financial condition and a copy of the resolution authorizing the execution of Bonds by officers of the Company.)

NEW YORK STATE THRUWAY AUTHORITY

LABOR AND MATERIAL BOND

Know all men by these presents,

That, \_\_\_\_\_  
(Name of Principal)

of \_\_\_\_\_

(hereinafter called the Principal, and \_\_\_\_\_  
(Name of Surety Company)

a corporation of the State of \_\_\_\_\_, authorized to do business in the State of New York, as Surety and whose principal office is located in the City of \_\_\_\_\_, State of \_\_\_\_\_ (hereinafter called the Surety), are held and firmly bound unto the NEW YORK STATE THRUWAY AUTHORITY, (hereinafter called the Authority), in the full and just sum of

\_\_\_\_\_ good and lawful money of the United States of America, for the payment of which said sum of money, well and truly to be made and done, the said Principal and Surety bind themselves, their and each of their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

Whereas, said Principal has entered into a certain written contract, with the Authority bearing date \_\_\_\_\_ day of \_\_\_\_\_ 202\_, with the New York State Thruway Authority for:

Which contract is hereby referred to and made a part here of as fully and to the same extent as if copied at length herein.

Now therefore, the condition of this obligation is such that if the said Principal shall promptly pay all moneys due to all persons furnishing labor and materials to him or his subcontractors in the prosecution of work provided for in said contract. Then this obligation shall be void, otherwise to remain in full force and effect;

Provided, however, that the Comptroller of the State of New York having required the said Principal to furnish this bond in order to comply with the provisions of Section 137 of the State Finance Law, all rights and remedies on this bond shall inure solely to such persons and shall be determined in accordance with the provisions, conditions and limitations of said Section to the same extent as if they were copied at length herein; and

Further, provided, that the place of trial of any action on this bond shall be in the county in which the said contract was to be performed, or if said contract was to be performed in more than one county, then in any such county, and not elsewhere.

SIGNED, SEALED AND DELIVERED THIS \_\_\_\_\_ day of \_\_\_\_\_, 202\_

(Principal(s) Sign Here)  
(Affix Corporate Seal If a Corporation)

(Surety Signs Here)  
(Affix Corporate Seal of Surety Co.)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**FOR PRINCIPAL'S USE ONLY (Use Only One)**

**(INDIVIDUAL ACKNOWLEDGMENT)**  
UNLESS A CORPORATION

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_ ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 202\_, before me personally came \_\_\_\_\_ to me known and known to me to be the person mentioned and described in and who executed in foregoing instrument and he duly acknowledged to me that he executed the same.

\_\_\_\_\_  
*Notary Public*

**(ACKNOWLEDGEMENT OF A CORPORATION)**

STATE OF NEW YORK     }  
  }  
COUNTY OF                }

On this \_\_\_\_\_ day of \_\_\_\_\_, 202\_, before me personally came \_\_\_\_\_, to me known and known to me to be the person who executed the above instrument, who being duly sworn by me, did depose and say that he/she resides in \_\_\_\_\_, that he/she is the \_\_\_\_\_ of \_\_\_\_\_, the corporation described in and which executed the above instrument, and that he/she signed his/her name thereto on behalf of said Corporation by order of the Board of Directors of said Corporation.

\_\_\_\_\_  
*Notary Public*

**FOR SURETY'S USE ONLY**

**(SURETY ACKNOWLEDGMENT)**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_ ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 202\_, before me personally came \_\_\_\_\_ that he is the \_\_\_\_\_ of the \_\_\_\_\_ the corporation described in and which executed the above instruments; that he knows the seal of said corporation, that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of Said corporation, and that he signed his name thereto by like order.

\_\_\_\_\_  
*Notary Public*

**APPENDIX A**

## Standard Clauses For New York State Thruway Authority Contracts

The parties to the attached contract, license, lease, amendment or other agreement of any kind (“the contract” or “this contract”) agree to be bound by the following clauses which are hereby made a part of the contract (the word “Contractor” herein refers to any party and its agents, successors and assigns, other than the Thruway Authority (“Authority”), whether a contractor, licensor, licensee, lessor, lessee or any other party):

1. **NON-ASSIGNMENT CLAUSE.** This contract may not be assigned by the Contractor nor may its right, title or interest therein be assigned, transferred, conveyed, subcontracted, sublet or otherwise disposed of without the previous consent, in writing, of the Authority and any attempts to assign the contract without the Authority’s written consent are null and void.

2. **COMPTROLLER APPROVAL.** Where required by law, this contract may require approval of the State Comptroller and shall not be valid until it has been approved by the State Comptroller and filed in its office.

3. **WORKERS’ COMPENSATION AND DISABILITY BENEFITS.** This contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the State Workers’ Compensation Law. If employees will be working on, near or over navigable waters, a U.S. Longshore and Harbor Workers’ Compensation Act endorsement must be included.

4. **NON-DISCRIMINATION REQUIREMENTS.** To the extent required by Article 15 of the State Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex (including gender identity or expression), national origin, sexual orientation, military status, age, disability, predisposing genetic characteristics, marital status or domestic violence victim status or because the individual has opposed any practices forbidden under the Human Rights Law or has filed a complaint, testified, or assisted in any proceeding under the Human Rights Law. Furthermore, in accordance with State Labor Law §220-e, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, disability, sex or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and

available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in State Labor Law §230, then, in accordance with §239 thereof, the Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. The Contractor is subject to fines of \$50 per person per day for any violation of State Labor Law §§220-e or 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

5. **WAGE AND HOURS PROVISIONS.** If this is a public work contract covered by Article 8 of the State Labor Law or a building service contract covered by Article 9 thereof, neither the Contractor’s employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the State Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, the Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the State Labor Law. Additionally, effective April 28, 2008, if this is a public work contract covered by Article 8 of the New York State Labor Law, the Contractor understands and agrees that the filing of payrolls in a manner consistent with subdivision 3-a of §220 of the New York State Labor Law shall be a condition precedent to payment by the Authority of any Authority approved sums due and owing for work done on the project.

6. **NON-COLLUSIVE BIDDING CERTIFICATION.** In accordance with State Public Authorities Law §2878, if this contract was awarded based upon the submission of bids, the Contractor warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. The Contractor further warrants that, at the time the Contractor submitted its bid, an authorized and responsible person executed and delivered to the Authority a non-collusive bidding certification on the Contractor’s behalf.

7. **INTERNATIONAL BOYCOTT PROHIBITION.** In accordance with State Labor Law §220-f, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of this contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership, or corporation has participated, is participating, or shall

participate in an international boycott in violation of the Federal Export Administration Act of 1979 (50 USC App. §§2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of the Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the Authority within five (5) business days of such conviction, determination or disposition of appeal.

8. **SET-OFF RIGHTS.** The Authority shall have rights of set-off. These rights shall include, but not be limited to, the Authority's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing by the Contractor to the Authority with regard to this contract, or any other contract with the Authority, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the Authority for any other reason including, without limitation, monetary penalties, adjustments, fees, or claims for damages by the Authority and third parties in connection therewith.

9. **RECORDS.** The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (collectively, "Records") for a period of six (6) years (or any other longer period required by law) following final payment or the termination of this contract, whichever is later, and any extensions thereto. The Authority, State Comptroller, State Attorney General and any other person or entity authorized to conduct an examination shall have access to the Records during normal business hours at an office of the Contractor within New York State, or, if no such office is available, at a mutually agreeable and reasonable venue within the State, during the contract term, any extensions thereof and said six (6) year period thereafter, for purposes of inspection, auditing and copying. As used in this clause, "termination of this contract" shall mean the later of completion of the work of the contract or the end date of the term stated in the contract. The Authority will take reasonable steps to protect from public disclosure those Records which are exempt from disclosure under State Public Officers Law §87 ("Statute") provided that: (i) the Contractor shall timely inform an appropriate Authority official, in writing, that said records should not be disclosed; (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the Authority's right to discovery in any pending or future litigation.

10. **IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION.** All invoices or New York State standard vouchers submitted for payment for the sale of goods or services or the lease of real or personal property to the

Authority must include the payee's identification number, i.e., the seller's or lessor's identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.

The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in State Tax Law §5. Disclosure of this information by the seller or lessor to the Authority is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the State Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.

The above personal information is maintained at the New York State Thruway Authority, Department of Finance and Accounts, P.O. Box 189, Albany, New York 12201.

11. **EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN.** In accordance with State Executive Law §312, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000, whereby the Authority is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the Authority; or (ii) a written agreement in excess of \$100,000 whereby the Authority is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of \$100,000 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, or major repair or renovation of real property and improvements thereon for such project, then the following shall apply and by signing this contract the Contractor certifies and affirms that it is Contractor's equal employment opportunity policy that:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability, or marital status, and shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on Authority contracts and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal

employment opportunities without discrimination. As used in this clause, "affirmative action" shall mean recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, lay-off or termination, and rates of pay or other forms of compensation.

(b) At the request of the Authority, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status, and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein.

(c) The Contractor shall state, in all solicitations or advertisements for employees, that in the performance of this contract all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

The Contractor shall include the provisions of (a), (b) and (c) above in every subcontract over \$25,000 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon except where such work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State. The Authority will consider compliance by a Contractor or its subcontractor with the requirements of any Federal law concerning equal employment opportunity which effectuates the purpose of this section. The Authority shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such Federal law, and if such duplication or conflict exists, the Authority may waive the applicability of §312 of the Executive Law to the extent of such duplication or conflict. The Contractor shall comply with all duly promulgated and lawful rules and regulations of the Department of Economic Development's Division of Minority and Women's Business Development pertaining thereto.

**12. CONFLICTING TERMS.** In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

**13. GOVERNING LAW.** This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

**14. LATE PAYMENT.** Timeliness of payment and any interest to be paid to the Contractor for late payment shall be governed by State Public Authorities Law §2880 and 21 NYCRR Part 109.

**15. NO ARBITRATION.** Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized) but must, instead, be heard in a court of competent jurisdiction of the State of New York.

**16. SERVICE OF PROCESS.** In addition to the methods of service allowed by the State Civil Practice Law & Rules, the Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon the Contractor's actual receipt of process or upon the Authority's receipt of the return thereof by the United States Postal Service as refused or undeliverable. The Contractor must promptly notify the Authority, in writing, of each and every change of address to which service of process can be made. Service by the Authority to the last known address shall be sufficient. The Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

**17. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS.** The Contractor certifies and warrants that all wood products to be used under this contract will be in accordance with, but not limited to, the specifications and provisions of State Finance Law §165 (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the Contractor to establish to meet with the approval of the Authority.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in State Finance Law §165. Any such use must meet with the approval of the Authority; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the Authority.

**18. MACBRIDE FAIR EMPLOYMENT PRINCIPLES.** In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in State Finance Law §165), and shall permit independent monitoring of compliance with such principles.

**19. OMNIBUS PROCUREMENT ACT OF 1992.** It is the policy of New York State to maximize opportunities for the



participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development  
Division for Small Business  
30 South Pearl Street – 7th Floor  
Albany, NY 12245  
Phone: (518) 292-5220  
Fax: (518) 292-5884  
<http://www.esd.ny.gov>

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development Minority and Women's Business Development Division  
30 South Pearl Street – 2nd Floor  
Albany, NY 12245  
Phone: (518) 292-5250  
Fax: (518) 292-5803  
<http://www.esd.ny.gov>

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, the Contractor certifies that whenever the total bid amount is greater than \$1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the Authority;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the NYS Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the Authority upon request; and

(d) The Contractor acknowledges notice that the Authority may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the Authority in these efforts.

**20. RECIPROCITY AND SANCTIONS PROVISIONS.** Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or

political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapters 684 and 383, respectively) require that they be denied contracts which they would otherwise obtain. Contact the Department of Economic Development, Division for Small Business, 30 South Pearl Street, Albany, New York 12245, for a current list of jurisdictions subject to this provision. NOTE: As of October 2019, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii.

**21. NON-PUBLIC PERSONAL INFORMATION.** The Contractor shall comply with the provisions of the New York State Information Security Breach and Notification Act (General Business Law §899-aa; State Technology Law §208). In addition to any relief or damages that may be imposed pursuant to the provisions of this Act, the Contractor shall be liable for the costs imposed upon the Authority which are associated with breach of the Act if caused by Contractor's negligent or willful acts or omissions, or the negligent or willful acts or omissions of the Contractor's agents, officers, employees or subcontractors.

**22. IRAN DIVESTMENT ACT.** In accordance with State Public Authorities Law §2879-c, if this is a contract for work or services performed or to be performed, or goods sold or to be sold, the Contractor subscribes and affirms, under penalty of perjury, that: by signing this contract, each person and each person signing on behalf of any other party certifies, and in the case of a joint bid or partnership each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each person is not on the list created pursuant to paragraph (b) of subdivision 3 of §165-a of the State Finance Law, entitled "Entities Determined to be Non-Responsive Bidders/Offerers pursuant to the New York State Iran Divestment Act of 2012" ("Prohibited Entities List") posted at: <https://ogs.ny.gov/list-entities-determined-be-non-responsive-biddersofferers-pursuant-nys-iran-divestment-act-2012>.

For the purposes of this clause, the term "person" shall be as defined in subdivision (1)(e) of §165-a of the State Finance Law.

Contractor further certifies that it will not utilize on this contract any subcontractor that is identified on the Prohibited Entities List. Contractor agrees that should it seek to renew or extend this contract, it must provide the same certification at the time the contract is renewed or extended. Contractor also agrees that any proposed Assignee of this contract will be required to certify that it is not on the Prohibited Entities List before the contract assignment will be approved by the Authority.

During the term of the contract, should the Authority receive information that a person (as defined in State Finance Law § 165-a) is in violation of the above-referenced certifications, the Authority will review such information and offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment activity which is in violation of the Act within 90 days after the determination of such violation, then the Authority shall take such action as may be appropriate and provided for by law, rule, or contract, including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

**23. OBSERVANCE OF LAWS.** The Contractor agrees to observe all applicable Federal, State and local laws and regulations, and to procure all necessary licenses and permits.

**24. NO WAIVER OF PROVISIONS.** The Authority's failure to exercise or delay in exercising any right or remedy under this contract shall not constitute a waiver of such right or remedy or any other right or remedy set forth therein. No waiver by the Authority of any right or remedy under this contract shall be effective unless made in a writing duly executed by an authorized officer of the Authority, and such waiver shall be limited to the specific instance so written and shall not constitute a waiver of such right or remedy in the future or of any other right or remedy under this contract.

**25. ENTIRE AGREEMENT.** This contract, together with this Appendix A and any other appendices, attachments, schedules or exhibits, constitutes the entire understanding between the parties and there are no other oral or extrinsic understandings of any kind between the parties. This contract may not be changed or modified in any manner except by a subsequent writing, duly executed by the parties thereto.

**26. ADMISSIBILITY OF REPRODUCTION OF CONTRACT.** Notwithstanding the best evidence rule or any other legal principle or rule of evidence to the contrary, the Contractor acknowledges and agrees that it waives any and all objections to the admissibility into evidence at any court proceeding or to the use at any examination before trial of an electronic reproduction of this contract, in the form approved by the State Comptroller, if such approval was required, regardless of whether the original of said contract is in existence.

**27. CERTIFICATION OF REGISTRATION TO COLLECT SALES AND COMPENSATING USE TAX BY CERTAIN STATE CONTRACTORS, AFFILIATES AND SUBCONTRACTORS.** To the extent this agreement is a contract as defined by Tax Law § 5-a, if the Contractor fails to make the certification required by Tax Law § 5-a or if during the term of the contract, the Department of Taxation and Finance or the Authority, as defined by Tax Law § 5-a, discovers that the certification, made under penalty of perjury, is false, then such failure to file or false certification shall be a

material breach of this contract and this contract may be terminated, by providing written notification to the Contractor in accordance with the terms of the agreement, if the Authority determines that such action is in the best interest of the Authority.

**28. CONTRACT INVOLVING STEEL PRODUCTS.** Contracts involving steel products are subject to Public Authorities Law § 2603-a, and steel products to be provided or incorporated by Contractor must be produced or made in whole or substantial part in the United States as set forth therein.