SPECIFICATIONS

FOR

Hamilton Street Bridge over Robinson's Branch of the Rahway River Scour Protection County Structure RA-29
City of Rahway, County of Union, New Jersey
BA#20-2022; UNION COUNTY ENGINEERING PROJECT #2018-008

June 2022

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Facilities Management

COUNTY ENGINEER DIVISION OF ENGINEERING

Ricardo Matias, PE, CME, CFM

Prepared by:

Michael J. McClelland, PE CME Associates 3141 Bordentown Avenue Parlin, NJ 08859

Phone: (732) 727-8000 Fax: (732) 727-3989

Revised: 2020.02.19

COUNTY OF UNION NOTICE TO BIDDERS

Sealed bids will be received by the assistant director of the Division of Purchasing, or her designee, at the County of Union, New Jersey on July 19, 2022 at 10:30 a.m., prevailing time, in the 3rd Floor Conference Room, U.C. Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey for:

HAMILTON STREET BRIDGE OVER ROBINSON'S BRANCH OF THE RAHWAY RIVER SCOUR PROTECTION COUNTY STRUCTURE RA-29 CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY BA#20-2022; UNION COUNTY ENGINEERING PROJECT #2018-008

Bid Packages may be obtained at no charge by registering and downloading at http://ucnj.org/bid-specs. Bid Packages may also be obtained in person from the Division of Engineering at 2325 South Avenue, Scotch Plains, New Jersey 07076 between 8:30 a.m. and 4:00 p.m. weekdays upon payment of a non-refundable money order or bank check in the amount of \$275.00 made payable to the County of Union. No Personal / Company checks will be accepted. Requests for mailing of specifications will not be honored. For further information please call 908-789-3675.

The County reserves the right to reject any and all bids and to waive any and all informalities in the bid in accordance with the New Jersey Local Public Contracts Law.

Bids shall be submitted in a sealed envelope and clearly marked with the subject of the bid, name and address of the bidder, phone & fax number, and date of the bid opening. Each bid must be delivered to reach the Division of Purchasing prior to the stated time of the opening of the bids. The County will not be responsible for late delivery by the U.S. Mail or any other carrier. If hand delivered, please note that parking and security access at the County Complex may cause delays and bidders should take them into consideration in order to submit a timely bid. **No** late bids will be accepted.

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27.

MICHELE HAGOPIAN, ASSISTANT DIRECTOR OF PURCHASING

UNION COUNTY BOARD OF CHOSEN FREEHOLDERS

We're Connected to You!

Hamilton Street Bridge over Robinson's Branch of the Rahway River Scour Protection County Structure RA-29 City of Rahway, County of Union, New Jersey BA#20-2022; UNION COUNTY ENGINEERING PROJECT #2018-008

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Revised: 2022.01.03

UNION COUNTY BOARD OF COUNTY COMMISSIONERS INSTRUCTIONS TO BIDDERS AND FORMS

DEFINITIONS

Wherever reference is made to the County, Title of Project, Bidder, or Vendor/Contractor they shall be as follows:

OWNER/COUNTY:

Union County Board of County Commissioners UC Administration Building, 6th Floor 10 Elizabethtown Plaza Elizabeth, New Jersey 07207

ADDRESS INQUIRIES TO:

Union County Division of Purchasing UC Administration Building, 3rd Floor 10 Elizabethtown Plaza Elizabeth, NJ 07207

Attn: Michelle Hagopian, Assistant Director, Division of Purchasing

Telephone: 908-527-4130 Facsimile: 908-558-2548

ucbids@ucnj.org

ADDRESS BIDS AND SUBMIT TO:

Union County Division of Purchasing UC Administration Building, 3rd Floor 10 Elizabethtown Plaza Elizabeth, NJ 07207

Attn: Michelle Hagopian, Assistant Director, Division of Purchasing

Telephone: 908-527-4130 Facsimile: 908-558-2548

ucbids@ucnj.org

TITLE OF PROJECT: Hamilton Street Bridge over Robinson's Branch of the Rahway River Scour Protection County Structure RA-29
City of Rahway, County of Union, New Jersey
BA#20-2022; UNION COUNTY ENGINEERING PROJECT #2018-008

BIDDER: Bidder shall be a single overall contract bidder

ENGINEER: CME Associates

COUNTY ENGINEER AND/OR CONSTRUCTION MANAGER (as applicable):

COUNTY ENGINEER:

Ricardo S. Matias, PE, CME, CFM Union County, Division of Engineering

Revised: 2022.01.03

CONSTRUCTION MANAGER:

GENERAL SPECIFICATIONS

1. BID FORM

Bids for this Work will be enclosed in a sealed envelope addressed to the Purchasing Division, County of Union, New Jersey, Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey 07207, with the full name of the Project clearly marked on the outside. Refer to the sheet marked "Notice of Bid (Advertisement)" for the correct name of the Project. Bidders must submit their bids on the attached pricing sheet (Bid Form), in a sealed envelope addressed to the County and bearing on the outside: the name of the Bidder, Bidder's business address, and the title of the Project.

The Division of Purchasing will receive the bids for this Work at the Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey on the date and time noted on the sheet marked "Notice of Bid (Advertisement)".

The County will not assume responsibility for bids forwarded by mail. It is the individual's responsibility to see that the bids are presented to the Purchasing Division at the time and at the place designated.

Bids will be accepted only on the Bid Form supplied. Bids on forms other than the original supplied herein will be rejected. The "complete" Bid Documents includes the Bid Bond, Bid Form, Bidder's Checklist, Consent of Surety, Ownership Disclosure Certification, Non-Collusion Affidavit, and any other documents noted in these Instructions to Bidders or Contract Document to be submitted with this Bid.

The bidder will state in the bidding sheet the price per unit of measure for each scheduled Item of Work for which he will agree to carry out the Work, and the Total Bid Price for the construction of the Project.

The prices in the Bid Form shall be typed or written in pen and ink. Erasures or alterations must be initialed by the bidder in ink.

The bidding sheet for this Project may include a fixed amount as a Bid Allowance. If applicable, all bidders are required to add this fixed amount to their base bid and to include this additional amount in their Bid Bond. This sum will be included in the Contract as well as the performance, labor and materials bond. Payment by the County will be made to the Contractor from these funds only upon the completion of extra Work pursuant to a written Change Order(s) signed by the County's Engineer or his designee and the

G-2 Revised: 2022.01.03 Contractor, prior to the commencement of such Work. Work commenced prior to written approval by the County shall be done at Contactor's risk. Such payment will only be in the amount agreed to by the parties, in writing in the Change Order(s). See Section 37, Change Orders, of these general specifications for further details.

Refer to Bid Document Submission Checklist for all required documents.

In the event there is a discrepancy between the unit price given and the extended total, the unit price will govern. Any discrepancies will be mathematically adjusted.

Insert applicable alternates, if any have been specified, applicable to the Bidder's Work. All alternates MUST be bid upon. Any Bidder's failure to do so will be deemed a material, non-waivable defect and shall render the bid nonresponsive. The Bidder shall clearly designate whether the change in price is an addition or subtraction, by using either a "+" sign or the word "addition", or in the alternative, a "-"sign or the word "minus". If there is no other change in price, the Bidder shall insert "NC" or "No Charge".

When two or more low bids are equal in all respects, awards will be made according to the provisions of N.J.S.A. 40A:11-6.1(d).

Where unit prices have already been established by the Contract Documents, the Bidder agrees that such unit prices shall prevail. All unit prices, whether filled in by the Bidder or established by the Contract Documents, shall become part of the Contract. No bid will be considered or award made, unless applicable unit prices, as required, are filled in.

The County reserves the right to reject any or all bids and also reserves the right to waive any minor informalities or non-material exceptions in the bids.

The County of Union has the right to reject any and all bids from any bidder that is in, or contemplates bankruptcy of any chapter of nature. Said bidder shall notify the County, in writing, of any condition or knowledge of the same.

Conditional bids will not be accepted. Bids may be withdrawn prior to the advertised time for the opening of bids or authorized postponement thereof or in accordance with the provisions of N.J.S.A. 40A:11-23.3 discussed below. Bids received after the advertised time shall not be considered. Bidders shall be solely responsible for premature opening or late delivery of bids not properly marked, addressed, or directed.

2. WITHDRAWAL OF BID DUE TO MISTAKE

N.J.S.A. 40A:11-23.3 authorizes a bidder to request withdrawal of a public works bid due to a mistake on the part of the bidder. A mistake is defined by N.J.S.A. 40A:11-

G-3 Revised: 2022.01.03 2(42) as a clerical error that is an unintentional and substantial computational error or an unintentional omission of a substantial quantity of labor, material, or both, from the final bid computation.

A bidder claiming a mistake under N.J.S.A. 40A:11-23.3 must submit a request for withdrawal, **in writing**, by certified or registered mail to Michele Hagopian, Assistant Director, Division of Purchasing, County of Union, New Jersey, Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey 07207. The bidder must request withdrawal of a bid due to a mistake, as defined by the law, within five business days after the receipt and opening of the bids. Since the bid withdrawal request shall be effective as of the postmark of the certified or registered mailing, Michele Hagopian, Assistant Director of the Division of Purchasing or his designee may contact all bidders, after bids are opened, to ascertain if any bidders wish to, or already have exercised a request to withdraw their bid pursuant to N.J.S.A. 40A:11-23.3.

A bidder's request to withdraw the bid **shall** contain evidence, including any pertinent documents, demonstrating that a mistake was made. Such documents and relevant written information shall be reviewed and evaluated by the County's designated staff pursuant to the statutory criteria of N.J.S.A. 40A:11-23.3.

The County will not consider any written request for a bid withdrawal for a mistake, as defined by N.J.S.A. 40A:11-2(42), by a bidder in the preparation of a bid proposal unless the postmark of the certified or registered mailing is within the five business days following the opening of bids.

3. QUALIFICATIONS OF BIDDERS AND REQUIRED SUBMISSIONS

The County may make such investigation as it deems necessary to determine the ability of the Bidders to perform the Work, which includes investigation of any and all subcontractors listed with the bid. The Bidder shall furnish any information and data for this purpose as the County may request.

4. INTERPRETATIONS AND ADDENDA

Any explanation desired by a bidder regarding the meaning or interpretation of the Contract Documents must be requested in writing to the Assistant Director, Division of Purchasing at ucbids@ucnj.org with reasonable time allowed for a reply to reach bidders before submission of their bids. Any interpretation or instruction made by the County Engineer will be in the form of an addendum to the Contract Documents or clarification and will be furnished to all prospective bidders. Oral explanations or instructions given before the award of the Contract will not be binding. Bidders are required to bring to the attention of the Assistant Director, Division of Purchasing at

ucbids@ucnj.org, the discovery of any apparent ambiguity, inconsistency, error, discrepancy, omission in the Contract Documents for interpretation and correction at least ten (10) working days before opening of bids with the exception of Saturdays, Sundays and holidays.

All Addenda issued through the Office of the Division of Purchasing are amendments to the Contract Documents and shall be considered in preparing bids. Same shall become part of the Contract Documents.

Addenda take precedence over all earlier documents and over each other according to the latest date. Addenda unless themselves interpretive remain subject to interpretation the same as any other document incorporated in the Contract.

Addenda may be issued by the Assistant Director, Division of Purchasing up to seven (7) working days prior to the opening of bids. Failure of any bidder to receive an addendum shall not relieve such bidder from the obligation imposed by such addendum. Bidders are to keep themselves currently acquainted with the Contract Documents during the entire bidding period and make inquiry on their own initiative as to issuance of any Addenda. Receipts of all Addenda shall be acknowledged on the "Acknowledgement of Receipt of Changes" included in the bid package and must be submitted with the bid.

5. OBLIGATION OF BIDDER TO INSPECT SITE AND CONTRACT DOCUMENTS

At the time of the opening of bids, each Bidder will be presumed to have inspected the site(s) and to have read, and be thoroughly familiar with the Contract Documents. The failure or neglect of any Bidder to receive or examine any form, instrument, or document shall in no way relieve any Bidder from any obligation in respect to its bid.

The Bidder shall examine the contents of the Project Manual and the set of Drawings and assure itself that all pages of the Specifications, Drawings, and other Contract Documents are included in the documents obtained for bidding purposes. Should the Specifications, Drawings, and other Contract Documents be incomplete, the Bidder shall notify the County Engineer in writing, who will supply the Bidder with any missing pages of Specifications, Drawings, or other Contract Documents. The lack of such written notification by the Bidder will be construed as evidence that the Specifications, Drawings, or other Contract Documents supplied it for bidding purposes are full and complete and as a waiver of any subsequent claim to the contrary.

6. BID AND PERFORMANCE GUARANTEE

Each bidder must furnish a Bid Bond, Certified Check or Bank Cashier's Check in the amount of ten percent (10%) of the Bid. Checks shall be drawn to the order of the County of Union, New Jersey, not to exceed \$20,000.

Each bidder must furnish with the bid a certificate from a Surety Company, i.e. Consent of Surety, stating that in the event of the contract being awarded to said bidder, such Surety Company will provide the Contractor with bonds guaranteeing the faithful performance of the Work in accordance with the plans and specifications, and the payment for labor, materials, and all other indebtedness which may accrue on the account of this Work. A Performance, Labor and Materials Bond will be furnished by the Contractor upon an award of Contract, and will be in the amount of 100% of the contract price.

A one-year Maintenance Bond will be required upon acceptance of the Project by the County in the amount as stated in Section 15 of the General Specifications. Bonds will be written by a firm authorized to issue the bonds under the laws of the State of New Jersey and be in a form acceptable to the County Counsel.

N.J.S.A. 40A:11-1 *et seq.* allows the prime Contractor to furnish the Performance Security for his Subcontractors. The County of Union requires Performance Security to be furnished by the prime contractor for the entire job in the total amount of the contract.

The County will return all certified checks or cashier's checks after the proposals have been opened, tabulated and reviewed except those of the three (3) bidders lowest responsible bidders. The County will return the checks of these bidders when a contract is awarded to the successful bidder within ten (10) days after the award of the contract.

If the successful bidder refuses or neglects to sign an agreement and furnish the required bonds, the Bid Bond will be held and used by the County to offset any damages for such refusal or neglect.

7. COMMENCEMENT AND COMPLETION

Work will not commence until a Notice to Proceed is received from the County Engineer.

Upon substantial completion of the Project, the Contractor must request a joint inspection with the County Engineer. Upon completion of this inspection, the County Engineer will prepare a list of incomplete or incorrect items (punch list) and have

Contractor initial and date same. The Contractor shall rectify all deficiencies noted on the punch list within 30 calendar days of receipt of the list. The County Engineer may approve extensions for extenuating circumstances.

8. BIDDER AFFIDAVIT

All Bidders are required to complete, sign, and submit with their Bid, the attached "Affidavit Regarding List of Debarred, Suspended or Disqualified Bidders". (See form enclosed)

9. LABOR AND MATERIALS

The prices will cover all costs of any nature incident to and growing out of the Work, including all labor, material, equipment, transportation, loss by damage or destruction of the Project, settlement of damages, and for replacement of defective work or materials. N.J.S.A. 54:32B-1 et seq. exempts all materials sold to the County of Union from sales or use taxes and should not be included in the prices provided on the Bidding Sheet.

10. INSURANCE REQUIREMENTS

The County of Union requires all contractors to be able to comply with the following insurance requirements. In the event a bid is accepted by the County, the contractor must accept the applicable insurance requirements, as set forth below, as part of any contract awarded to it by the County.

Contractor shall carry and maintain at all times while the contract is in full force and effect, the following insurance coverage with an insurance company or companies acceptable to the County, with limits not less than those shown below. A Certificate of Insurance shall be filed with the County <u>prior</u> to commencement of any Work indicating the following:

- a) Commercial General Liability (CGL): Coverage for all operations including, but not limited to, contractual, products and completed operations, and personal injury with limits no less than \$5,000,000 per occurrence/\$10,000,000 aggregate. The County of Union, its Board of County Commissioners, officers, employees, agents and servants shall be included as an additional insured. Coverage is provided on a primary and non-contributory basis to the County of Union, et al.
- b) Automobile Liability: Coverage for all owned, non-owned and hired vehicles with limits not less than \$5,000,000 per occurrence, combined single limits (CSL) or its equivalent.

- c) Workers Compensation: As required by the State of New Jersey and Employers Liability with limits not less than \$1,000,000 per accident for bodily injury or disease.
- d) Professional Liability (if design/build): Coverage with limits not less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate
- e) Contractor's Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors & Omissions (if project involves environmental hazards): Coverage with limits no less than \$1,000,000 per occurrence or claim/\$2,000,000 aggregate.
- f) Builders Risk (for major renovations): During the course of construction utilizing an "All Risk" coverage form with limits equal to the completed value of the project and no coinsurance penalty provisions.

Where applicable, a waiver of subrogation in favor of the County of Union, its Board of County Commissioners, officers, employees, agents, servants and the State of New Jersey is to be included in those policies of insurance where permitted by law.

Notice of Cancellation: Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the Entity.

Special Risks or Circumstances: The County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

11. INDEMNIFICATION REQUIREMENTS

The County of Union requires all bidders to accept the following indemnification requirements in the event the County accepts their bid. The Contract awarded by the County to the successful bidder will contain the following provision:

"To the fullest extent permitted by law the Contractor shall indemnify, defend, and hold harmless the owner and the owner's consultants, agents, representatives, and employees from and against any and all claims, damages, losses, costs, and expenses, including, but not limited to attorneys' fees, legal costs and legal expenses arising out of or resulting from the performance of the Contractor's work under this contract, provided that such claim, damage, loss, cost, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) caused or alleged to be caused by

G-8 Revised: 2022.01.03 the negligent acts, negligent omissions, and/or fault of the Contractor, anyone directly or indirectly employed or retained by the Contractor, or anyone for whose acts the Contractor may be liable regardless of whether caused in part by the negligent act or omission of a party indemnified hereunder provided it is not caused by the sole negligence of a party indemnified hereunder. Contractor shall further indemnify and hold harmless the County and the County's consultants, agents, representative, and employees from and against any and all claims, damages, losses, costs, and expenses, including, but not limited to attorneys' fees, legal costs and legal expenses, arising out of or resulting from performance of the work, provided that such claim, damage, loss, cost, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) caused or alleged to be caused by the negligent acts, negligent omissions, and/or fault of the County or the County's consultants, agents, representatives, or employees and arises out of this project and provided such claim, damage, loss, cost, or expense is not caused by the sole negligence of a party indemnified hereunder."

12. ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall hold the County harmless from loss on account thereof.

13. PLANS AND SPECIFICATIONS

In carrying out the Work, the plan(s) and the specifications will be followed by the Contractor. Minor alterations in the plan may be made or permitted by the County Engineer from time to time and, if no additional Work is necessary, there will be no additional charge for carrying out such minor alterations.

The Contractor shall provide the County Engineer a set of reproducible as-built drawings upon completion of the Project. The Contractor shall maintain an updated construction progress plan in the Project field office at all times.

When applicable, The New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, as amended, and Supplemental Specifications for State Aid Projects, herein after referred to as the "Standard Specifications", are made a part of these specifications and contract for the improvements, and will govern the construction of this Project, the material used and the execution of this Project, except as revised and modified herein. The references to these specifications are given herein for the purpose of aiding in the rapid location of the description of the various items herein specified. The entire Work must be carried on and

completed to the satisfaction of the County. The Standard Specifications are amended as follows:

"Any reference to the Commissioner, Department, Department Laboratory, Engineer or Inspector should be redefined to be the County of Union".

14. GUARANTEE AGAINST DEFECTIVE WORK

Prior to final payment being made or before the release of the performance security required by Section 3 above, the Contractor and Surety shall execute and deliver to the County an original Maintenance Bond with an original signature and seal having a penal sum equal to:

- A) One hundred percent (100%) of the final adjusted Contract amount, if such amount is \$50,000.00 or less;
- B) Fifty percent (50%) of the final adjusted Contract amount, if such amount be greater than \$50,000.00 but less than \$250,000.00; and,
- C) Twenty-five percent (25%) of the final adjusted contract amount, if such amount is \$250,000.00 or more.

The Bond and Surety shall be satisfactory to the Union County Counsel. The Surety shall hold a Certificate of Authorization to do business in the State of New Jersey and shall conform to P.L. 1995 c.384, codified as N.J.S.A. 2A:44-143, 144. The Surety Disclosure Statement and Certification required by N.J.S.A. 2A: 44-143, 144, shall be attached to the Bond. Such Maintenance Bond shall remain in full force and effect for a period of one (1) year from the date of Final Completion. Such Maintenance Bond shall also provide that the Contractor and the Surety guarantee to replace for the said period of one (1) year from the date of Final Completion, all Work performed and/or all materials furnished that were not performed or were not furnished in accordance to the terms and performance requirements of the Contract Documents, and will make good any defects thereof which become apparent before the expiration of one (1) year. If, during that period, any part of the Project, in the judgment of the Engineer, is found defective, the Contractor will repair or replace same within five (5) days of receipt of notice from the County Engineer. If the Contractor refuses or neglects to do such Work in the time specified, the County Engineer may have the Work done by others and the Contractor or his Surety thereof will pay the cost.

The Contractor will furnish the County a Maintenance Bond for a percentage of the final adjusted contract price, as stated above. The one (1) year period will start the day of Final Completion of Project by the County. Final payment is conditional on the receipt of a maintenance bond in a form acceptable to County Counsel.

15. TRAFFIC AND STREET MAINTENANCE

The Work must be started and performed by the Contractor in such a manner as to minimize delays to the traveling public. It must be completed in a timely fashion, with little or no inconvenience to traffic and pedestrians, where such inconvenience may be avoided.

All municipal, county, and state roadways shall remain open to traffic unless otherwise provided for in the technical specifications.

If modified traffic patterns are authorized in order to provide a safe working or traveling environment, the Contractor is responsible for providing all equipment, barrels, cones, signs, and barricades to implement the work zone and detours, unless otherwise specified in the technical specifications. All work zones and detours shall be established in accordance with the technical plans and specifications if provided or in strict compliance with the current version of the Manual for Uniform Traffic Control Devices (MUTCD). The Contractor shall obtain approval for these work zones and detour plans from the Municipal Police or applicable police agency and the Union County Bureau of Traffic Maintenance prior to implementation.

All traffic control plans shall provide for safe movement of vehicular, bicycle, and pedestrian traffic. Particular attention shall be given to requirements of the Americans with Disabilities Act.

No portion of any street or alleyway may be used for the storage of any materials or equipment without the approval of the Municipal Police or other applicable police agency. Sidewalks, gutters, drains, fire hydrants and private drives shall be maintained for their intended use unless specifically approved by the County Engineer.

Upon suspension of Work, at the end of the day or for protracted periods, the Contractor shall remove all rubbish and materials from the Work site to the approved storage/staging location. All road cuts, saw cuts, and trenches that may pose hazard to vehicular, pedestrian, or bicycle traffic, to include handicapped users, shall be filled to the surface of the roadway or sidewalk. At no time will steel plates or settled trenches be allowed at the daily suspension of Work, unless specifically approved by the County Engineer.

Use of Traffic Control Officers shall be determined by the County in accordance with the provisions of N.J.S.A. 40A:11-23.1(c). If applicable to the Project, the County shall have provided an allowance for same as set forth in the Bid Form.

With respect to pedestrian traffic, the Contractor shall install signs restricting access of the general public and, as necessary, Union County employees to the area of construction. The Contractor shall provide safe access to required areas and place physical barriers to restricted areas. These barriers may range from caution tape to actual barriers, at the direction of the County Engineer.

16. CONTRACTOR'S EMPLOYEES

The Contractor must employ only suitable and competent labor in the Work, and must remove from the Work any incompetent, unsuitable, or disorderly person upon complaint from the County Engineer.

The parties to any contract resulting from this proposal do hereby agree that the provisions of N.J.S.A. 10:2-1 through 10:2-4 (discrimination in employment on public works contracts): 34:11-56.25 et seq. (payment of prevailing rate of wages determined pursuant to N.J.S.A. 34:11-56.30 by the Commissioner), and the Rules and Regulations promulgated pursuant thereto, are hereby made a part of any contract and are binding upon them.

There will be no discrimination against any employee who is employed in the Work to be covered by any contract resulting from this bid because of age, race, creed, color, national origin, ancestry, marital status or sex.

Any person, firm, or corporation violating the provisions of this Section will be deemed and judged a disorderly person.

17. OWNERSHIP DISCLOSURES REQUIRED

Pursuant to P.L. 2016, c. 43, codified as N.J.S.A. 52:25-24.2.no corporation, partnership, or limited liability company shall be awarded any contract nor shall any agreement be entered into for the performance of any work or the furnishing of any materials or supplies the County unless prior to the receipt of the bid or accompanying the bid, of said corporation, said partnership, or said limited liability company there is submitted a statement setting forth the names and addresses of all stockholders in the corporation who own ten percent (10%) or more of its stock, of any class, or of all individual partners in the partnership who own a ten percent (10%) or greater interest therein, or of all members in the limited liability company who own a ten percent (10%) or greater interest therein, as the case may be. If one or more such stockholder or partner or member is itself a corporation or partnership or limited liability company, the stockholders holding ten percent (10%) or greater interest in that partnership, or the members owning ten percent (10%) or greater interest in that limited liability company, as

the case may be, shall also be listed. The disclosure shall be continued until names and addresses of every non corporate stockholder, and individual partner, and member, exceeding the ten percent (10%) ownership criteria has been listed.

To comply with this section, a bidder with any direct or indirect parent entity which is publicly traded may submit the name and address of each publicly traded entity and the name and address of each person that holds a ten percent (10%) or greater beneficial interest in the publicly traded entity as of the last annual filing with the federal Securities and Exchange Commission ("SEC") or the foreign equivalent, and, if there is any person that holds a ten percent (10%) or greater beneficial interest, also shall submit links to the websites containing the last annual filings with the federal SEC or the foreign equivalent and the relevant page numbers of the filings that contain the information on each person that holds a ten percent (10%) or greater beneficial interest.

(See forms attached)

18. NON-COLLUSION AFFIDAVIT

The Bidder shall submit with its bid either the attached completed "Non-Collusion Affidavit" or a statement of non-collusion with verbiage similar to same.

19. EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCES

The successful bidder shall be required to complete and submit an Initial Project Workforce Report, New Jersey Department of Treasury Form AA-201, upon notification of award. Failure to submit this completed form may result in the Contract being terminated.

The successful bidder shall also be required to submit a copy of its Monthly Project Workforce Report, New Jersey Department of Treasury Form AA-202, to the New Jersey Department of Treasury's Division of Public Contracts Equal Employment Opportunity Compliance and to the Board.

20. COMPLIANCE WITH NEW JERSEY PREVAILING WAGE ACT

The County of Union, in order to fulfill the requirements of N.J.S.A. 34:11-56.25 et seq, requires that the following additional conditions be strictly followed. The bidders represent that he is not listed or is not on record in the Office of the Commissioner or the Department of Labor and Workforce Development as one who failed to pay prevailing wages in accordance with the provisions of this Act. The bidder agrees to the inclusion of a contract provision upon award which specifically requires said Contractor to fully comply with each and all of the requirements of the aforesaid Act as it relates to prevailing

rates of wages on public contracts as set forth in the New Jersey Prevailing Wage Act, P.L. 1963, Chapter 150 and P.L. 1974, Chapter 64.

A Copy of the Prevailing Wage Rates is attached for your reference. Applicable rates are those wages and fringe benefit rates in effect on the date the contract is awarded. All predetermined rate increases listed at the time the contract award must also be paid, beginning on the dates specified. Rates may change between the time of issuance of this determination and the award of the public works contract. Therefore, prior to the award of the contract, verification must be made with the Public Contracts section, to insure that the rates contained in this determination are still prevailing.

The Contractor agrees to abide and be bound by each and all of the said statutory provisions with respect to the payment of prevailing rates of wages, and acknowledges that the County reserves the right to terminate the Contractor's (or his subcontractors') right to proceed with the scope of Work, or such portion thereof that relates to the failure to pay prevailing rates of wages. In such event or under the terms of N.J.S.A. 34:11-56.27, the Contractor and his surety will be liable to the County of Union for any excess costs occasioned by such a violation.

The Contractor or subcontractors for this Project will post the Prevailing Wage Rates for each craft and classification involved as determined by the Commissioner of Labor and Industry, including the effective date of any changes thereof, in prominent and easily accessible places at the site of the Work or at such place or places as are used by them to pay workmen their wages.

The County of Union requires a copy of payroll records from the Contractor and subcontractors. Payroll records shall be submitted with each voucher request for payment. Prevailing wage rates may be obtained from the New Jersey Labor, Division of Workplace Standards, Public Contracts Section, (609-292-2259).

In addition to compliance with the New Jersey Prevailing Wage Act, the County requires compliance with procedures established by Resolution No. 2014-0408 adopted by the Union County Board of County Commissioners on May 8, 2014. The resolution is furnished in Section 56 of these General Specifications.

UNION LABOR IS PREFERRED ON ALL COUNTY WORK

The foregoing reference to specific laws will not be deemed to be a limitation of obligation of the Contractor to perform his obligations in full compliance with the provisions and requirements of all federal and state statues and local ordinances applicable to the Work to be done under the contract.

It is agreed and understood that any contracts and/or orders placed as a result of this proposal will be governed and construed and the rights and obligations of the parties hereto will be determined in accordance with the laws of the State of New Jersey.

Upon completion of the Work, the Contractor will furnish a Certification of Compliance with the New Jersey Prevailing Wage Act. The certificate in a form acceptable to County Counsel is a condition of the final payment. (See form attached)

21. BRAND NAME OR EQUAL

When the Specifications, Forms, and other Contract Documents use "brand name or equivalent" or similar language, the listed brand name shall serve as a reference or point of comparison for the functional or operational characteristic desired for the goods or services being requested. Where a bidder attempts to submit an equivalent product for a brand name, it shall be the responsibility of the bidder to fully describe and document the product to be provided with the bid in order to establish the equivalence claim.

- A. If the Bidder proposes to offer substitute goods as an equal to those specified herein, the bidder shall so indicate with the Bid Proposal. For the purposes of this paragraph, a proposed item shall be considered equal to goods specified herein if:
 - 1. The County, in its sole discretion, determines that: (i) the goods conform substantially, even with deviations, to the brand name goods specified herein; (ii) the goods are equal to or greater than the brand name goods specified herein in terms of quality, durability, functionality, appearance, strength and design; (iii) the goods are capable, at least as well as the brand name goods specified herein, or performing with existing equipment; and (iv) the goods do not cost the County more than the brand name goods specified herein costs the County.
- B. To offer substitute goods as an equal to those specified herein, it is necessary that:
 - The Bidder submits sufficient information with its bid to permit the County to determine that the goods are equivalent to the brand name goods specified herein, including, but not necessarily limited to the brand, catalog number and specifications/data sheets;

- The Bidder fully identifies and describes the variations of the goods from the brand name goods specified herein on a separate sheet that is to be submitted with the bid proposal. Bidder's literature WILL NOT suffice in explaining exceptions to these specifications.
- 3. The Bidder certifies that the goods (i) are similar in substance to the brand name goods specified, and (ii) are suited to the same use as the item specified;
- C. The County shall be allowed a reasonable time within which to evaluate the Bidder's proposal to offer substitute goods as an equal to those specified herein. The County shall be the sole judge of acceptability. No "or-equal" goods shall be ordered, delivered, assembled, set-up or utilized until the County's evaluation is complete. The County's determination as to equivalency shall be deemed final and absolute.

In the event the Bidder does not provide sufficient supporting documentation with the bid, it will be presumed and required that the brand name goods and services as described in the specifications will be provided.

22. LINES AND GRADES

Normally, horizontal and vertical control points will be provided in the technical specifications. All other surveying will be the responsibility of the Contractor unless otherwise noted.

23. NUMBER OF WORKING DAYS

In accordance with N.J.S.A. 40A:11-17, the Work for the within Project shall be completed as specified on the Time of Completion Form. See form attached

There shall be taken a deduction from the contract price, or any wages paid by the County, to any inspector(s) necessarily employed by it on the Work, for any number of days in excess of the number allowed in the specifications.

24. PROMPT PAYMENT OF CONSTRUCTION CONTRACTS (NJ Prompt Payment Act)

Pursuant to N.J.S.A. 2A:30A-1 et seq., payment to the Contractor, other than for Work done pursuant to a contact allowance, where applicable, shall be processed and paid as follows:

- 1. All contractor bills shall be either approved for payment, or notice provided as to why the bill or any portion of it will not be approved by the representative(s) of the governing body no later than the public meeting following 20 calendar days of the billing date as defined in the statute.
- 2. If the billing is approved, said bill shall be paid in the payment cycle following the meeting.

25. STOPPING WORK ON ACCOUNT OF BAD WEATHER

Work must only be performed in weather suitable for the type of construction planned or underway. Extremes in temperature, humidity, precipitation, evaporation, etc. can detrimentally affect the constructed product. Refer to the Standard and Technical Specifications for specific items.

26. ACCESS FOR OTHER CONTRACTORS

The Contractor for this Work will give proper access to other contractors who may be employed upon the Project and must not hinder or delay unnecessarily any Work that may be progressing under other contracts.

27. CONDEMNED MATERIALS AND WORK

Any materials and or part of the Work that may be condemned by the County Engineer will be removed and replaced by the Contractor or otherwise rectified, as may be directed by the County Engineer. No payment will be made upon the Work until such faulty work has been made good as may be directed. In the event the Contractor refuses or neglects to make good such faulty work, he will be deemed to have abandoned the contract and proceedings may be taken against him as provided herein.

28. STORAGE

In the event that it is necessary for the Contractor to stockpile or store materials or equipment on the job site, the Contractor shall inform the County of such necessity and the County may offer available space, if any, for storage of such materials or equipment. The Contractor shall use said space only for such purpose. Any and all materials which may be stored in such space or which may be brought onto the job site at any time by the Contractor will be at the Contractor's sole risk. The County will not be responsible for loss of or damage to said materials or equipment for any cause whatsoever. The

Contractor shall take necessary measures to protect any such storage area and shall be responsible for any and all damages.

29. FINAL CLEAN UP

Upon completion of the Work, the Contractor will remove all equipment, unused materials, rubbish, etc., and will repair, or replace in an a manner acceptable to the County Engineer, all areas that may have been damaged in the prosecution of the Work. Same shall be a condition precedent to final payment. Should said Contractor fail to comply with this requirement, the County shall undertake the clean-up with its own forces and charge the cost of same against the Contractor's contract balance.

30. SUB-LETTING OF WORK

Except for the List of Subcontractors, pursuant to N.J.S.A. 40A:11-16 (See form attached), no portion of the Work will be sublet by the Contractor to any other entities, except with the consent of the County Engineer. A complete list of subcontractors must be submitted to the County Engineer at the preconstruction meeting. If the job does not warrant a preconstruction meeting, the Contractor must submit such list prior to the start of Work.

All Subcontractors will be subject to N.J.S.A. 34:11-56 et al.

N.J.S.A. 40A:11-16 requires the bidder to list in the bid sheets the name or names of all subcontractors involved in the following types of Work: plumbing and gas fitting and all kindred work, steam and hot water heating, ventilating apparatus, steam power plants and kindred work, electrical work, ornamental iron work, and structural steel. In addition, the County may require the identification of specific additional subcontractors. If these trades are expected to be part of the contract, such subcontractors should be listed on the "Subcontractor Identification Statement List of Subcontractors" and Bidder shall certify same on the accompanying sheet titled "Subcontractor Identification Certification". (See forms attached) Bidder's failure to submit these two forms shall be considered a material defect and result in rejection of Bidder's bid. Substitutions of any listed subcontractors pursuant to N.J.S.A. 40A:11-16 will not be permitted except with the consent of the County Engineer.

31. SAFETY

The Contractor shall observe all rules and regulations of the Federal, State, and local health officials. Attention is directed to Federal, State, and local laws, rules, and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to the worker's health or safety.

G-18 Revised: 2022.01.03 The Contractor shall admit to the site, without delay and without the presentation of an inspection warrant, any inspector of OSHA or other legally responsible agency involved in safety and health administration upon presentation of proper credentials.

The Contractor shall make available to the Contractor's employees, subcontractors, the County Engineer, and the public, all information pursuant to OSHA 29 CFR Part 1926.59 of The Hazard Communication Standard 29 CFR 1910.1200, and shall also maintain a file on each job site containing all Material Safety Data Sheets (MSDS) for products in use at the Project. These Material Safety Data Sheets shall be made available to the Engineer upon request.

The Contractor shall at all times conduct the Work to provide for the safety and convenience of the general public and protection of persons and property. The safety provisions of applicable laws, OSHA regulations, building and construction codes, and the rules and regulations of the New Jersey Department of Labor and Workforce Development shall be observed.

32. QUALITY, SAFETY AND PERFORMANCE STANDARDS

All goods and services must be constructed and provided with the highest quality materials and workmanship. It is the intent of these specifications that only equipment equal to, or exceeding, the standard specified will be acceptable in order to protect the safety of the occupants of the Building.

33. MATTERS NOT MENTIONED IN CONTRACT DOCUMENTS

Any Work, material, or method, not specifically described in these specifications, but shown upon the plans of the Work, will be carried out as shown on said plan.

34. PERMITS

The Contractor will obtain all necessary permits required by law and provide the County with necessary approvals prior to commencement of permitted Work.

35. CONTRACTOR TO PROVIDE PROOF OF PAYMENT

Upon the completion of the Work, the Contractor will furnish a General Release as proof that all claims for labor, materials, etc., have been settled by the Contractor. The General Release, in a form acceptable to County Counsel, is a condition of final payment.

36. CHANGE ORDERS

The applicability of change orders and change order procedures shall comply with *N.J.S.A.* 40A:11-16.7 and *N.J.A.C.* 5:30-11.1 *et seq.*, "Change Orders and Open End Contracts".

37. SUPPLEMENTAL WORK

In case any supplemental work is necessary, it will be performed by the Contractor at a price fixed by agreement between the Contractor and the County Engineer and approved by the County as specified in Section 36. The Contractor will do no supplemental work on any character, for which the Contractor will demand pay, except upon the written order of the County.

38. FORM OF CONTRACT

The Contract will be subject to all statutory provisions on the matter of Public Works, Public Contracts, The Law Against Discrimination, the Laws Governing Affirmative Action and Prevailing Rates of Wages under the laws of New Jersey.

The Agreements shall be executed by both parties not later than twenty-one (21) days from the date of the award by the County (Sundays and holidays excluded); however, such time frame may be extended by agreement of the parties.

39. PROGRESS PAYMENTS

Monthly progress payments will be made based on the value of labor and materials incorporated in the Work and of materials suitably stored at the site. An itemized schedule of values shall be submitted with each Application for Payment.

(Refer to the Owner/Contractor Agreement for Retainage and other conditions pertaining to payment and the application of N.J.S.A. 2A:30A-1 et seq.)

All Applications for Payment shall be accompanied by paid invoices for materials incorporated in the Work and for materials suitably stored at the site, and affidavit(s) by Subcontractors whose Work was included in the next to the last application to the effect such Work and such materials have been paid for.

No payment shall be made without Contractor having provided all submittals set forth in this Section, and the approval of same by the County.

For contracts exceeding \$100,000.00, monthly payments will be made on the Work to the extent of 98% of the value of the Work done which is considered to be retainage.

For contracts less than \$100,000.00, monthly payments will be on the Work to the extent of 90% of the value of the Work done. In lieu of the retainage, the Contractor will, at his option, deposit with the County Counsel negotiable bearer bonds of the State of New Jersey or any political subdivision thereof, equal to the amount otherwise withheld as retainage.

When the Project is completed, the final cost of the Project will be based on actual quantities of authorized Work done under each item scheduled in the bidding sheet and approved Change Orders, if any. The money due to the Contractor as determined by said final certificate after deduction of previous monthly payments on account, will be paid to the Contractor in accordance with the terms of the contract dealing with Prompt Payment, providing, however that before such final payment is made, all outstanding claims against the Contractor must be satisfied. Before final payment is released, the Contractor must furnish: a) Maintenance Bond (see Section 6 of these general specifications); b) Certification of Compliance, New Jersey Prevailing Wage Act (see Sections 21 and 51); and c) General Release (see Section 36) in a form satisfactory to County Counsel; d) complete set of as-built plans in the latest AutoCad on compact disc; and e) a complete set of in-progress photos in jpg, jpeg, or bmp digital format on a compact disc.

40. INSPECTION

The Work must be done in accordance with the plans and specifications, and will be inspected by the County Engineer. An inspector may be placed upon the Work at any time by the County Engineer to see that the plans, specifications, and instructions of the County Engineer are carried out. In connection herewith, bidders are referred to N.J.S.A. 40A:11-17.

41. DAMAGES

The Contractor will be held responsible for all damages that may occur to Work, or to persons or property by reason of the nature of the Work or from the elements, or by reason of inadequate protection of the Work, or from any carelessness or negligence on his part or on the part of his employees. The County will withhold payments on the Work until all suits or claims for damages sustained on, or by reason of, this Work will have been settled by the Contractor.

The construction and final completion of this Work will be guaranteed by the Contractor. Any damages that may be done to the Work or any part thereof, by the elements or otherwise, during its construction, will be made good by the Contractor.

42. LIQUIDATED DAMAGES

If the Project is not completed within the time specified herein or within such further time as may have been granted by the County Engineer, then the Contractor hereby agrees to pay to the County as liquidated damages, but not as a penalty, \$1,000.00 per day for each and every calendar day that he is in default on time to complete the Work. The said sum will be deducted from moneys due the Contractor and if the damages exceed this amount, then the Contractor or his Surety Company will pay the excess. These damages may be waived at the option of the County.

43. AFFIRMATIVE ACTION REQUIREMENTS

(REVISED 01/2022)

EXHIBIT B

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)

N.J.A.C. 17:27-1.1 et seq.

CONSTRUCTION CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will

G-22 Revised: 2022.01.03 receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to <u>N.J.S.A.</u> 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program, may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B, and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or

subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

- (B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:
 - (1) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
 - (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
 - (3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
 - (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
 - (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and nondiscrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;
 - (6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:
 - (i) The contactor or subcontractor shall interview the referred minority or women worker.
 - (ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in

G-24 Revised: 2022.01.03 order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.

- (iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
- (iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.
- (7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Dept. of LWD, Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program upon request.
- (C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or

apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA-201) electronically provided to the public agency by the Dept. of LWD, Construction EEO Monitoring Program, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Dept. of LWD, Construction EEO Monitoring Program, and to the public agency compliance officer.

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women. (D) The contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.

44. INVESTMENT ACTIVITIES IN IRAN

Pursuant to *N.J.S.A.* 52:32-55 *et seq.*, prohibits State and local public contracts with persons or entities engaging in certain investment activities in energy or finance sectors of Iran.

45. COMPLIANCE WITH THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT - (N.J.S.A. 34:11-56.48 et. seq.)

Pursuant to the above-referenced law, Bidders are required to be registered with the New Jersey Department of Labor and Workforce Development and to possess a current certificate by said Department indicating compliance with the Act prior to the time and date that bids are received. Bidders are notified of this requirement of their compliance. Such certificates or applications shall also be provided for each Subcontractor furnishing plumbing and gas fitting, steam and hot water heating and ventilating apparatus, and all kindred work, steam power plants and kindred work, electrical work, structural steel and ornamental iron work, and such other subcontractors as the specifications require relative to prior identification.

46. UTILITIES

Attention of the bidder is directed to the fact that the approximate locations of known utility structures and facilities that may be encountered within and adjacent to the limits of the Work are shown on the plans and described herein. The accuracy and completeness of this information is not guaranteed by the County Engineer and the bidder is advised to ascertain for himself all the facts concerning the location of these and other utilities.

The Contractor will not proceed with his Work until he has made diligent inquiries of all public utility and municipal officials to determine the exact location of all-underground structures and pipes within the site of the Project. The Contractor will notify utility owners not less than ten (10) days in advance of the time he proposes to perform any Work that will endanger or affect their facilities in compliance with **New Jersey One-Call.** In excavating in any part of the Work, care must be taken not to remove or damage any gas, water, sewer, or other pipe, conduit, or structure, - public or private - without the concurrence of the owner and the County Engineer. The Contractor will, at his own expense, shore up, secure and maintain a continuous flow in such structures, and will keep them in repair until final acceptance of the Work.

When pipes or other structures are encountered or when the removal, relocation or protection of these utilities are necessary in carrying out the Project as planned, the Contractor will cooperate with the owner of said utilities and will permit the owners or their agents access to the site of the Work in order to relocate or protect their facilities and not hinder or delay unnecessarily the Work of the owners in moving same. No extra allowance of payment will be made to the Contractor for the use of any materials, equipment, etc., or for the performance of any Work in connection with the moving of said structures unless the Contractor is specifically ordered by the County Engineer to furnish such materials, equipment, or services. If directed by the County Engineer to do any Work or furnish any

materials or equipment, payment will be allowed the Contractor in accordance with the unit prices bid for such Work, or, if such items are not scheduled in the proposal, such Work shall be allowed "Supplemental Work" as provided in Section 39 of these general specifications. The corporations, companies, agencies or municipalities owning or controlling the utilities, and the name, and telephone numbers are listed in the beginning of the Technical Specifications.

47. MATERIAL COMPLIANCE AND SHOP DRAWINGS

The Contractor will require the manufacturer or supplier to furnish three (3) copies of Certification of Compliance with each delivery of materials, components and manufactured items for the Project. Two (2) copies will be furnished to the County Engineer; one copy will be retained by the Contractor. Certificates of Compliance will contain the following information:

- Project to which material is consigned;
- 2. Name of the Contractor to which the material is supplied;
- 3. Kind of material supplied;
- Quantity of material represented by the Certificate;
- 5. Means of identifying the consignment, such as label marking, seal number, etc.:
- 6. Date and method of shipment;
- 7. That the material is in conformity with the pertinent specifications stated in the certificate; and
- 8. Signature of a person having legal authority to bind the supplier.

The Contractor will submit to the County Engineer for his approval five (5) copies of complete and fully detailed shop or working drawings for those items listed in the beginning of the technical specifications.

Each drawing will identify the name of the job, location and Contractor.

All drawings will be approved in accordance with the standard specifications. Refer to the Technical Specifications for specific items.

All materials or articles used in the Work will be of American manufacture, insofar as same are available, in conformance with N.J.S.A. 40A:11-18.

48. PRECONSTRUCTION

In order to provide full coordination of this Project among the parties concerned, the County Engineer will arrange for a preconstruction meeting between the Contractor, County Engineer and other interested parties as soon as possible after the contract is executed. At this meeting the Contractor will present his proposed schedule of Work which shall be subject to review and approval of the County through its designated representatives.

49. DISPUTES UNDER THE CONTRACT

A dispute arising under the Contract shall be submitted in writing to the County Engineer with all facts and supporting data. The County Engineer will review the dispute and issue his decision or request additional facts or documentation after which he will render his decision.

In the event the dispute is not then resolved, the matter shall, pursuant to law, be submitted to mediation before being submitted to a court of competent jurisdiction venued in Union County.

The County Engineer will notify the County Counsel when a matter is to be submitted to mediation. The County Counsel will communicate with the parties and inform them of the procedures to be followed in making such a submission.

50. CONTRACTOR BUSINESS REGISTRATION CERTIFICATE

Pursuant to N.J.S.A. 52:32-44, the County of Union is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the County of Union with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

Proof of registration must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids. If subcontractors are named on the bid, proof of

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the business registration for each must be provided prior to the award of a contract. Similarly, to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

During the course of contract performance:

- the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
- 2) the contractor shall maintain and submit to the County of Union a list of subcontractors and their addresses that may be updated from time to time.
- 3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at

http://www.state.nj.us/treasury/revenue/busregcert.shtml.

Before final payment is made under the contract, the contractor shall submit to the County of Union a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency.

51. BID PROTEST - LEGAL FEES AND COSTS

In the event a Bidder unsuccessfully challenges a Bid Submission by filing an action in a court of law concerning same, said Bidder shall be responsible for payment of reasonable legal costs and fees incurred by the County relating to said protest.

52. AMERICAN GOODS AND PRODUCTS WHERE POSSIBLE

Bidder shall comply with the requirements of N.J.S.A. 40A:11-18 and use only manufactured and farm products of the United States, wherever available, for the Project.

53. NEW JERSEY PAY-TO-PLAY REQUIREMENTS

This Contract is required by law to be publicly advertised for bids. As such, lists of political contributions pursuant to N.J.S.A. 19:44A-1 et seq. are NOT REQUIRED to be provided with the bids.

54. STATEMENT OF EQUIPMENT TO BE USED IN CONSTRUCTION

Pursuant to N.J.S.A. 40A:11-20 entitled Certificate of Bidder Showing Ability to Perform Contract, the County requires a Certification from all bidders submitting a bid showing that the Bidder owns, leases, or controls all necessary equipment required by the Project Plans and Specifications. All bidders shall provide this information at the time of the bid opening using the attached form entitled, "CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT".

If the Bidder is not the actual owner of the equipment, it shall state the source from which the equipment will be obtained and shall attach a certificate from the owner or person in control of the equipment demonstrating that the equipment owner has granted the Bidder control of the requisite equipment during such time as may be necessary for completion of the portion of the contract for which the equipment is necessary.

55. NEW JERSEY SALES AND USE TAX REQUIREMENTS,

Contractors are required to comply with the following:

New Jersey Sales and Use Tax Requirements: All contractors with subcontractors, or any of their affiliates, who enter into contracts for the provision of goods or services with or for New Jersey local government entities, are required to collect and remit to the New Jersey Director of Taxation in the Department of the Treasury the use tax due on all of their sales of tangible personal property delivered into the State of New Jersey pursuant to the "Sales and Use Tax Act," (N.J.S.A. 54:32B-1 et seq.), regardless of whether the tangible personal property is intended for a contract with the contracting agency. This tax shall be remitted for the term of the Contract.

For purposes herein "affiliate" shall mean any entity that: (a) directly, indirectly, or constructively controls another entity, (b) is directly, indirectly, or constructively controlled by another entity, or (c) is subject to the control of a common entity. For purposes of the immediately preceding sentence, an entity controls another entity if it owns, directly or indirectly, more than fifty percent (50%) of the ownership interest in that entity. NJSA 52:32-44(g)(3).

56. RESOLUTION NO. 2014-408

WHEREAS, the County of Union recognizes there is a need to ensure that all work on significant public construction and maintenance contracts is performed by responsible, qualified firms that maintain the capacity, expertise, personnel, and other qualifications and resources necessary to successfully perform public contracts in a timely, reliable, and cost-effective manner; and

WHEREAS, in order to effectuate the purpose of selecting responsible contractors for significant public contracts and to protect Union County's capital investments in such contracts prospective contractors and subcontractors should be required to meet pre-established, clearly-defined, minimum standards relating to contractor responsibility, including retirements and criteria concerning qualifications, competency) expertise, adequacy of resources, including equipment, financial and personnel, and satisfactory records regarding past project performance, safety, legal compliance and business integrity; and

WHEREAS, the County has a compelling interest in assuring that its Public Works Projects meet the highest standard of safety and quality; and

WHEREAS, due to the critical impact that skilled construction craft labor has on public works projects, and due to the limited availability of skilled construction craft labor and imminent craft labor skill shortages, it is necessary to require contractors and subcontractors to participate in established, formal apprenticeship training programs for the purpose of both promoting successful project delivery and ensuring future workforce development; and

WHEREAS, an apprenticeship program is a structured system of training designed to prepare individuals for occupations and lifelong careers in skilled trades and crafts by providing a wage-paying job that incorporates extensive workplace and classroom training under the supervision of experienced workers, in preparation for highly skilled occupations; and

WHEREAS, apprenticeship programs are a critical component in public safety, by ensuring that workers on public projects are properly trained, able, competent and capable craftsmen, and provide assurance of compliance with the County's bid specifications and achieve high quality standards; and

WHEREAS, for an apprenticeship program to be fully effective, the public and private sectors must recognize its value and commit to supporting its mission; and

G-32 Revised: 2022.01.03 WHEREAS, Union County has long recognized the value of apprenticeship programs through its support of the Union County Vocational-Technical Schools, which offer training programs to help ensure that Union County will continue to produce a skilled and educated work force in the trade specialties, and thus, strengthen Union County's economy by fostering the development of highly paid trade and craft careers; and

WHEREAS, the use of apprenticeship programs or apprenticeship trained employees on Union County Public Works Projects will serve the dual goal of providing the County with assurance that its public works projects are completed with a well-trained workforce, in a highly skilled and timely fashion, while creating opportunities for careers in the skilled trades and craft industry for County residents; and

WHEREAS, the County of Union also recognizes that it is beneficial to their employees to utilize fair business, employment, and training practices that have a positive impact on local communities affected by such contracts:

NOW, THEREFORE, BE IT RESOLVED by the Board of Chosen Freeholders of the County of Union as follows:

- 1. The County of Union shall require compliance with the provisions of this Resolution by business entities seeking to provide services to the County of Union as specified herein. The requirements of this Resolution are intended to supplement, not replace, existing contractor qualifications and performance standards or criteria currently required by law, public policy or contracting documents, including but not limited to Union County's DPMC classification and Project Labor Agreement policies
- All contractors and subcontractors that perform significant work on any public facility or public works project, including construction, alteration, renovation, repair, service, or maintenance work, shall meet the requirements of this Resolution. For purposes of this Resolution, the term "significant work" shall be defined as any work or activity covered under the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.25 et seq.
- 3. All firms engaged in contracts covered by this Resolution shall be qualified responsible contractors or subcontractors that have sufficient capabilities in all respects to successfully perform contracts on which they

G-33 Revised: 2022.01.03 are engaged, including the necessary experience, equipment, technical skills and qualifications and organizational, financial and personnel resources. Firms bidding on public contracts shall also be required to have a satisfactory past performance record and a satisfactory record of legal compliance, integrity and business ethics. Compliance with these standards shall be established by compliance with the requirements set forth in paragraph 8 of this Resolution.

- 4. As a condition of performing work on public works contracts over the public works threshold, the general contractor shall provide certification that he and each subcontractor working on the project shall have at least one (I) employee who has successfully completed the OSHA 10-hour construction safety and health course. As a condition of performing work on public works contracts of \$500,000.00 or more total cost of project, the general contractor shall provide certification that each subcontractor working on the project shall have at least one (1) employee who has successfully completed the OSHA 30-hour construction safety and health course.
- 5. All contractors and subcontractors that perform significant work on any public facility or public works project shall be required to affirmatively provide evidence of and confirm compliance with proof of participation in an Apprenticeship Program currently registered and approved by the United States Department of Labor ("USDOL"), the New Jersey Department of Labor ("NJDOL") or any state having equal to or higher requirements as either the USDOL or NJDOL apprenticeship programs. Additionally, Apprenticeship Programs shall meet the criteria set forth in Section 8(i) of this Resolution.
- 6. As a condition of performing work on public works contracts subject to this Resolution, a general contractor seeking award of a contract shall submit a Contractor Responsibility Certification at the time it submits its bid for contract.
- 7. The Contractor Responsibility Certification shall be completed on a form provided by the Union County Purchasing Department and shall reference the project for which a bid is being submitted by name and contract or project number.
- 8. In the Contractor Responsibility Certification, general contractors and subcontractors shall certify the following facts regarding their past performance and work history and its current qualifications and

performance capabilities:

- a. The firm has all valid, effective licenses, registrations or certificates required by federal, state, county, or local law, including, but not limited to, licenses, registrations, certificates required to: (1) do business in the designated locale; and (2) perform the contract work it seeks to perform. These shall include, but not be limited to, licenses, registrations or certificates for any type of trade work or specialty work, which the firm proposes to self-perform.
- b. The firm meets the bonding requirements for the contract, as required by applicable law or contract specifications and any insurance requirements, as required by applicable law or contract specifications, including general liability insurance, workers compensation insurance and unemployment requirements.
- c. The firm has not been debarred by any federal, state or local government agency or authority in the past three (3) years.
- d. The firm has not defaulted on any project in the past three (3) years.
- e. The firm has not had any type of business, contracting or trade license, registration, or other certification suspended or revoked in the past three (3) years.
- f. The firm has not been cited and found guilty for a willful violation of federal or state safety laws in the past three (3) years.
- g. The firm and/or its owners have not been convicted of any crime relating to the contracting business by a final decision of a court or government agency in the past three (3) years.
- h. The firm will pay all craft employees that it employs on the project the current wage rates and benefits as required under applicable Federal or State prevailing wage laws.
- i. The firm participates in an Apprenticeship Program that is currently registered with the USDOL, the NJDOL or any state having equal to or higher requirements as either the USDOL or

NJDOL apprenticeship programs, for each craft or trade in which it apprentices. The firm shall provide proof of meeting this qualification standard by submitting appropriate documentation as an attachment to this Certification. The firm shall continue to participate in applicable apprenticeship programs for the full duration of the contract work. The apprenticeship program in which the firm participates shall have graduated at least one (1) enrollee in each of the past three (3) years.

- 9. The County of Union may conduct any additional inquiries to verify that the prospective awardee and its subcontractors have the technical qualifications and performance capabilities necessary to successfully perform the contract and that the firms have a sufficient record of legal compliance and business integrity to justify the award of a public contract. In conducting such inquiries, the County of Union may seek relevant information from the firm, its prior clients or customers, its subcontractors or any other relevant source.
- 10. If any provision of this Resolution shall be held to be invalid or unenforceable by a court of competent jurisdiction, any such holding shall not invalidate any other provisions of this Resolution and all remaining provisions shall remain in full force and effect.

NOW, THEREFORE, BE IT RESOLVED by the Board of Chosen Freeholders of the County of Union that it hereby establishes and adopts the Responsible Contractor Policy, and it hereby authorizes the County Manager to sign any and all documents necessary to make said Policy effective immediately.

57. FEDERAL TERMS

TERMS AND CONDITIONS APPLICABLE TO ALL CONTRACTS/PURCHASES FUNDED, IN WHOLE OR IN PART, BY FEDERAL FUNDS.

The provisions set forth below apply to all contracts funded, in whole or in part, by Federal funds as required by 2 CFR 200.317.

1. <u>CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS</u>

Pursuant to 2 CFR 200.321, the State must take all necessary affirmative steps to assure that minority businesses, women's business enterprises,

and labor surplus area firms are used when possible. Accordingly, if subawards are to be made the Contractor shall:

- (1) Include qualified small and minority businesses and women's business enterprises on solicitation lists;
- (2) Assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- (3) Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (4) Establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and,
- (5) Use the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

2. DOMESTIC PREFERENCE FOR PROCUREMENTS

Pursuant to 2 CFR 200.322, where appropriate, the State has a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). If subawards are to be made the Contractor shall include a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). For purposes of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

3. PROCUREMENT OF RECOVERED MATERIALS

Where applicable, in the performance of contract, pursuant to 2 CFR 200.323, the contractor must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials

practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$ 10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

To the extent that the scope of work or specifications in the contract requires the contractor to provide recovered materials the scope of work or specifications are modified to require that as follows.

- i. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
 - 1. Competitively within a timeframe providing for compliance with the contract performance schedule;
 - 2. Meeting contract performance requirements; or
 - 3. At a reasonable price.
- ii. Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.
- iii. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act."

4. EQUAL EMPLOYMENT OPPORTUNITY

Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor." See, 2 CFR Part 200, Appendix II, para. C.

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the contractor's noncompliance with the

nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate. or suspend in whole or in part this grant (contract, loan, insurance, quarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

5. DAVIS-BACON ACT, 40 U.S.C. 3141-3148, AS AMENDED

When required by Federal program legislation, all prime construction contracts in excess of \$2,000 shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable. Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. Additionally, contractors are required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

COPELAND ANTI-KICKBACK ACT

Where applicable, the Contractor must comply with Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants

from the United States").

- a. Contractor. The Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into the OGS centralized contract.
- b. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- c. Breach. A breach of the clauses above may be grounds for termination of the OGS centralized contract, and for debarment as a Contractor and subcontractor as provided in 29 C.F.R. § 5.12.
- 7. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, 40 U.S.C. 3701-3708

Where applicable, all contracts awarded by the non-Federal entity in excess of \$ 100,000 that involve the employment of mechanics or laborers must comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5).

- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of

- the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The unauthorized user shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

8. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT

If the Federal award meets the definition of "funding agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

9. CLEAN AIR ACT, 42 U.S.C. 7401-7671Q, AND THE FEDERAL WATER POLLUTION CONTROL ACT, 33 U.S.C. 1251-1387, AS AMENDED

Where applicable, Contracts and subgrants of amounts in excess of \$150,000, must comply with the following:

Clean Air Act

- The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- 2. The contractor agrees to report each violation to the Division of Purchase and Property and understands and agrees that the Division of Purchase and Property will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- 3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

Federal Water Pollution Control Act

- 1. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- 2. The contractor agrees to report each violation to the Division of Purchase and Property and understands and agrees that the Division of Purchase and Property will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- 3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

10. DEBARMENT AND SUSPENSION (EXECUTIVE ORDERS 12549 AND 12689)

- (1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- (2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- (3) This certification is a material representation of fact relied upon by the State or authorized user. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State or authorized

- user, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- (4) The bidder or proposer agrees to comply with the requirements of C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

11. BYRD ANTI-LOBBYING AMENDMENT, 31 U.S.C. 1352

Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

12. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

- (a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:
 - (1) Procure or obtain;
 - (2) Extend or renew a contract to procure or obtain; or
 - (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115–232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and

surveillance and video other national security purposes, Hvtera telecommunications equipment produced by Digital Hangzhou Hikvision Corporation, Communications Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

13.CONTRACTS FOR MORE THAN THE SIMPLIFIED ACQUISITION THRESHOLD

Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriat

14. TERMINATION FOR CONVENIENCE PROVISION

All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

15. BONDING REQUIREMENTS

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

(a) A bid guarantee from each bidder equivalent to five percent of the bid price. The "bid guarantee" must consist of a firm commitment such as a bid

bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.

- (b) A performance bond on the part of the contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's requirements under such contract.
- (c) A payment bond on the part of the contractor for 100 percent of the contract price. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

EDWARD T. OATMAN COUNTY MANAGER

DATE COMPLETED: _____

MICHELLE HAGOPIAN, ASSISTANT DIRECTOR DIRECTOR / DIVISION OF PURCHASING

BID DOCUMENT SUBMISSION CHECKLIST

ALL SIGNATURES AND SEALS SHALL BE ORIGINALS UNLESS OTHERWISE SPECIFIED BID SHEETS SHOULD NOT BE SUBMITTED DOUBLE SIDED PAGES, (SINGLE SIDE ONLY)

EACH BIDDER SHOULD COMPLETE THIS FORM AND INITIAL EACH ENTRY.

	ASE SUBMIT BID DOCUMENTS ON SINGLE SIDED PAPER ONLY, WITH THE EXCEPTION OF THE SURETY BID BOND DOCUMENTS.
IN AC	CCORDANCE WITH THE BID SPECIFICATIONS I HAVE REVIEWED, COMPLETED / EXECUTED AND INCLUDED FOLLOWING FORMS:
	_ Bid Form Page (Signed, Dated and Bid on all alternatives applicable to the Work).
	Security in the form of: Bid bond in an amount equal to 10% of the total amount of this bid not to exceed \$20,000.00; or Certified check or cashier's check in the amount of 10% of this bid not to exceed \$20,000.00
	Consent of Surety form signed by a Surety Company if the total amount of your Bid is over \$36,000.00. If your bid is accepted, the Surety Company that provided the Consent shall be required to furnish a Performance, Labor and Materials Bond in the amount of 100% of the award of the contract. The County of Union has provided its Consent of Surety form for your use. The use of this form by your Surety Compan will expedite the bid review process and eliminate the possibility of having your bid rejected. If, however, you should need to use another form, please use language similar to that used on the Union County form and avoid making any additions or deletions to the Union County form language. In lieu of the Consent of Surety you may submit a Certified Check in the full amount of the bid.
	_ STATEMENT OF BIDDER OWNERSHIP. Pursuant to N.J.S.A. 52:25-24.2, which includes BOTH of the following documents:
	 Bidder Signature Page Bidder Disclosure Statement (Fill out 2 pages completely)
	_SUBCONTRACTOR IDENTIFICATION. Pursuant to N.J.S.A. 40A:11-16, which includes <u>BOTH</u> of the following documents:
	 Subcontractor Identification Statement: List of Subcontractors (only for certain types of work) Subcontractor Identification Certification
	_ Acknowledgement of Addendum form: (This form is to be used only when an addendum has been added to the specifications).
	A copy of the State of New Jersey Department of the Treasury, Division of Revenue, Business Registration Certificate ("BRC") may be included with the bids to expedite the contract process because the bidder is required to provide the County of Union with its proof of business registration and that of any named subcontractor(s) prior to contract award or authorization.
<u></u>	A copy of the State of New Jersey Department of the Treasury, Division of Revenue, Business Registration Certificate ("BRC") of all named or listed subcontractors (List of Subcontractors) in a Construction bid may be included with the bid as the BRC(s) for each named or listed subcontractors in order to expedite the contract process. Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

Affirmative Action Requirement
Experience Statement
Certificate of Bidder showing ability to perform Contract
Non-Collusion Affidavit – Fill out completely and notarize
Certificates from New Jersey Department of Labor and Workforce Development – Public Works Contractor Registration Act. (Only for certain types of work)
Federal Attachments (If applicable)
NJDPMC Certificate / Notice of Classification (If applicable)
Americans with Disabilities Act
Statement of Bidder's Qualifications
Contractor Performance Record
Affidavit Regarding List of Debarred, Suspended or Disqualified Bidders
Prior Negative Experience Questionnaire
Contractor's Certification of Compliance – New Jersey Prevailing Wage Act
Uncompleted Contracts Affidavit (For Bidder, if applicable) MUST ALSO PROVIDE DPMC FORM 701
Certificate of Insurance Statement
Collection of Use Tax on Sales to Local Government Statement
Time of Completion
Disclosure of Investment Activities in Iran Certification Form
Federal Non-Debarment Certification
BYRD Anti-Lobbying Amendment Certification
Certification regarding Lobbying
Disclosure of Lobbying Activities (LLL Form)
I HAVE TAKEN THE FOLLOWING ACTIONS:
Visited the site and attended the Pre-Bid Meeting (Where applicable)
Reviewed the Contract Documents (including any permits the County or its professionals may have obtained), Work, Site, Locality, and Local Conditions and Laws and Regulations that in any manner may affect Cost, Progress, Performance or Furnishing of Work.
Reviewed Bond Requirements
Provided Proof of Compliance with New Jersey Prevailing Wage Act
Reviewed Form of Owner/Contractor Agreement and General Conditions to the Contract

NOTE: QUESTIONS PERTAINING TO THIS BID ARE TO BE DIRECTED TO THE DIVISION OF PURCHASING AT <u>ucbids@ucnj.org</u>.

BIDDING DOCUMENTS

The Bidding Documents consist of the following items:

- ADDENDA, if issued
- CLARIFICATIONS, if issued
- INSTRUCTION TO BIDDERS
- BID FORM
- SPECIFICATIONS: As outlined in the Table of Contents and included in the Project Manual.
- DRAWINGS:
 As per List of Drawings, indicated on the Project Title Sheet.

BID FORM

I/We have carefully examined the plans, specifications, and advertisement for bid for the

Hamilton Street Bridge over Robinson's Branch of the Rahway River Scour Protection County Structure RA-29

City of Rahway, County of Union, New Jersey BA#20-2022; UNION COUNTY ENGINEERING PROJECT #2018-008

that is on file in the Union County Division of Engineering. I/We have inspected the site of the work and will contract to do all the work and furnish all materials mentioned in said plans and specifications. Work will be accomplished in the manner prescribed therein.

BASE BID ITEMS:

ITEM NO	SPEC. ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	AMOUNT
1	154	Mobilization	LS	LS		
2	158	Inlet filter type 1	SF	18		
3	158	Floating turbidity barrier, type 3	LF	148		
4	158	Concrete washout facility	LS	LS		
5	158	Oil only emergency spill kit, type 1	UN	2		
6	159	Breakaway barricade	UN	10		
7	159	Drum	UN	10		
8	159	Traffic cone	UN	20		
9	159	Construction signs	SF	157		
10	159	Construction barrier curb	LF	520		
11	159	Temporary crash cushion, compressive barrier, type 3, width narrow	UN	2		
12	159	Traffic director, municipal police allowance	ALL	ALL	\$30,000.00	\$30,000.00
13	159	Temporary pavement markings	SF	30		
14	160	Fuel price adjustment	DOL	DOL	\$200.00	\$200.00
15	201	Clearing site	LS	LS		
16	202	Excavation, test pit	CY	8		
17	202	Excavation, unclassified	CY	120		
18	202	Excavation, regulated material	CY	120		
19	202	Disposal of regulated material	TON	180		
20	203	Geotextile	SY	800		
21	203	I-14 Soil aggregate	CY	10		
22	301	Subbase	CY	10		
23	302	Dense graded aggregate base course, 6" thick	SY	90		
24	302	Coarse aggregate, size no. 57	CY	120		
25	401	Hot mix asphalt pavement repair	SY	10		
26	401	Polymerized Joint Adhesive	LF	220		
27	401	Tack coat	GAL	160		
28	401	HMA milling, 3" or less	SY	1,030		
29	401	Hot mix asphalt 12.5 m 64 surface course	TON	155		
30	501	Temporary cofferdam	LS	LS		
31	556	Concrete spall repair	SF	30		
32	556	Pressure injection, concrete cracks	LF	75		
33	557	Masonry repointing	SF	20		
34	602	Reset existing casting	UN	4		
35	603	Articulated concrete block matting	SY	600		
36	603	Riprap stone channel protection, 30" thick (D50 = 15")	SY	100		
37	606	Concrete sidewalks, 4" thick	SY	40		

38	606	Concrete driveway, reinforced, 6" thick	SY	20	
39	607	9" X 20" Concrete vertical curb	LF	40	
40	610	Traffic stripes, 4"	LF	230	
41	610	Traffic marking lines, 24"	LF	20	
42	612	Regulatory and warning sign	SF	16	
43	651	Reset water valve box	UN	2	
44	652	Reset manhole, sanitary sewer, using existing casting	UN	2	
45	802	Tree Removal, Over 6" to 12" Diameter	UN	4	
46	804	Topsoil spreading, 4" thick	SY	10	
47	804	Borrow topsoil	CY	2	
48	808	Sodding	SY	10	
49	811	Large deciduous tree, 2-2 1/2" caliper, B&B	UN	4	

TOTAL BASE BID AMOUNT:	
Written	Figures
BID CONTINGENCY: (To be used if and when directed by the	County)
Sixty Thousand Dollars Written	\$60,000.00 Figures
**************************************	, (3
TOTAL BASE BID ITEMS PLUS BID CONTINGENCY AMOUNT:	
Written	Figures

NOTE: Bid Contingency may include one-half of one percent of contract amount set aside for local training if and when directed by the County.

CONSENT OF SURETY TO ACCOMPANY PROPOSAL (BID)

	(hereinafter called	Surety),	organized	and	existing	under	the	laws	of	the	State	of
	duly authorized and q	ualified to	transact bu	ısines	s in the S	tate of N	New J	ersey,	in c	onsic	leration	of
the sum of One Dollar (\$	1.00), lawful money of	the Unite	d States of	Ameri	ica, to it iı	n hand i	paid,	receip	t wh	ereof	is here	by
acknowledged, and in cor	isideration, hereby cer	tifies and a	agrees that	if the o	contract fo	or which	the a	attache	d pr	opos	al is ma	de
be awarded to	(herein	after calle	d Contracto	r) for t	the perfor	mance	of cer	tain w	ork a	and la	bor or t	.he
supplying of certain mate	rials, or both, as more	e particula	rly set fortl	n in sa	aid propos	sal and	desc	ribed f	or p	urpos	ses of t	his
instrument as a proposal	for	t	o the COU	NTY C	F UNION	l and if	Cont	ractor	shal	II ente	er into t	he
contract, Surety will beco												
Contractor with a perform	ance, labor and mater	ial payme	nt bond in t	he full	amount o	of the co	ontrac	t price				
NOTE:	NAME OF INS	URANCE	COMPANY	,								
Expiration date												
Needed if Annual	ADDRESS: _											
Surety	-											
							-					
	ORIGINAL SIG			ANCE	CO		-					
	ORIGINAL SIG			ANCE	CO.							

NOTE: PROOF OF AUTHORITY OF OFFICERS OF SURETY COMPANY TO EXECUTE THIS DOCUMENT MUST BE SUBMITTED.

BIDDER SIGNATURE PAGE

THE BIDDER MUST READ THE FOLLOWING INSTRUCTIONS TO COMPLETE THIS PAGE:

- 1. If doing business under a <u>trade name, partnership or a sole proprietorship</u>, you must submit the bid under exact title of the trade name, partnership, or proprietorship, and the bid must be signed by either the <u>owner</u>, or a <u>partner</u> and <u>witnessed</u> by a <u>notary public</u>.
- 2. If a <u>Corporation</u>, the bid must be signed by the <u>President</u> or <u>Vice President</u> and <u>witnessed</u> by a <u>Corporate Secretary</u> (corporate title must be exact) and <u>affix corporate seal</u>. If a Corporate Secretary does not exist, President or Vice President's signature shall be witnessed by a Notary Public.
- 3. Other persons <u>authorized</u> by <u>corporate resolution</u> to execute agreements in its behalf may also sign the bid documents (pages). <u>Copy of a resolution must accompany the bid</u>.
- 4. The person who signs this bid form **must also** sign the **Non-Collusion Affidavit**.

You cannot witness your own signature.

5.

		NAME OF BIDDER
ORIGINAL SIGNATURE CORPORATE SECRETARY		ADDRESS OF BIDDER
PRINT NAME AND TITLE CORPORATE SECRETARY		TEL: FAX: E-Mail:
	BY:	ORIGINAL SIGNATURE
Corporate Seal		
		PRINT OR TYPE NAME AND TITLE

WARNING: IF YOU FAIL TO FULLY, ACCURATELY, AND COMPLETELY SUPPLY THE INFORMATION REQUESTED ON THIS PAGE, YOUR BID MAY BE REJECTED.

STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

Name of Organization:
Organization Address:
\underline{Part} I Check the box that represents the type of business organization:
Sole Proprietorship (skip Parts II and III, execute certification in Part IV)
Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)
For-Profit Corporation (any type)
Partnership Limited Partnership Limited Liability Partnership (LLP)
Other (be specific):
Part II
The list below contains the names and addresses of all stockholders in the corporation who own percent or more of its stock, of any class, or of all individual partners in the partnership who own a percent or greater interest therein, or of all members in the limited liability company who own a percent or greater interest therein, as the case may be. (COMPLETE THE LIST BELOW IN THIS SECTION)
OR
No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limit liability company owns a 10 percent or greater interest therein, as the case may be. (SKIP TO PART IN
(Please attach additional sheets if more space is needed):
Name of Individual or Business Entity Home Address (for Individuals) or Business Address

<u>Part III</u> DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. Attach additional sheets if more space is needed.

Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II other than for any publicly traded parent entities referenced above. The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. Attach additional sheets if more space is needed.

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Home Address (for Individuals) or Business Address

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the *County of Union* is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with *County of Union* to notify the *County of Union* in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the *County of Union* to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):	Title:	
Signature:	Date	

SUBCONTRACTOR IDENTIFICATION STATEMENT

LIST OF SUBCONTRACTORS

This form is ONLY required for plumbing and gas fitting, steam and hot water heating and ventilating apparatus, steam power plants, electrical work, structural steel, ornamental iron work, and any other trades required to be identified by the specifications (including, but not limited, to satisfying any DPMC Classification requirements).

CHECK THIS BOX IF NONE OF THE ABOVE LISTED TRADES OR THOSE REQUIRED TO BE IDENTIFIED IN THE SPECIFICATIONS ARE TO BE USED TO PERFORM THE WORK

In compliance with N.J.S.A. 40A:11-16 and the bid specifications, the undersigned hereby lists the name or names of the following subcontractors:

Company Name:		
Address:	· · · · · · · · · · · · · · · · · · ·	
Telephone:	Subcontract Amount: \$	
License No.	_	
Company Name:		
Address:		
Telephone:	Subcontract Amount: \$	
,		
License No.		
Company Name:		
Address:		
Telephone:	Subcontract Amount: \$	
	·	
License No.		
IF MORE THAN THREE SUBCONTRA BID PACKAGE.	ACTORS, PLEASE COPY THIS SHEET AS NECESSARY	AND ATTACH TO THE
(Continued on following page)		

SUBCONTRACTOR IDENTIFICATION CERTIFICATION

Note the law does not permit the listing of alternate subcontractors. However, multiple subcontractors for the same trade are permitted to be named provided the bidder meets the following requirements:

- Bidder identifies each subcontractor named for that category;
- Bidder states the scope of work, goods and services (the portion of the work) to be performed by each subcontractor; and
- Bidder provides the price quote provided by each subcontractor.

The bidder is advised that any change of subcontractor(s) from ones listed herein is subject to the County's approval. Change of subcontractor(s) will be approved only if made for good cause and not as a result of an arbitrary purpose.

The undersigned Bidder certifies and declares that the subcontractors listed above shall be used as subcontractors to complete certain portions of the work in this project as set forth in N.J.S.A. 40A: 11-16.

Witness		NAME OF BIDDER
Date		
		ADDRESS
	Ву:	ORIGINAL SIGNATURE ONLY
		PRINT NAME AND TITLE

ACKNOWLEDGMENT OF ADDENDUM

COUNTY OF UNION

(Name of Construction /Public \	Norks Project)	(Project o	r Bid Number)	
Pursuant to N.J.S.A. 40A:11-23.1: revisions, or addenda to the bid a acknowledges the submitted bid tak of Union's record of notice to bidders may be subject for rejection of the base of	dvertisement, specif es into account the p s shall take preceden	ications or bid rovisions of the	documents. By indicatir notice, revision or addence	ng date of receipt, bidder lum. Note that the County
Local Unit Reference Number	How Received (m	ail, fax, pick-	Date Received	
or Title of Addendum/Revision	up, etc.)			
ACKNOWLEDGMENT BY BIDDER	₹:			
NAME OF BIDDER:				
ORIGINAL SIGNATURE:				
PRINTED NAME AND TITLE:				
DATE:				

CONTRACTOR BUSINESS REGISTRATION CERTIFICATE

New Mandatory Requirement - Effective 1/18/2010

The recently enacted **P.L. 2009, c.315**, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each subcontractor must be provided prior to the award of bid. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

	siness registration shall be
	A copy of a Business Registration Certificate issued by the Department of the Treasury, Division of Revenue
or	A serve of the web version provided by the NT Division of Povenue, or
	A copy of the web version provided by the NJ Division of Revenue, or

Register online at www.nj.gov/treasury/revenue/taxreg.htm. Click the "online" link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-1730.

Note: A NJ Certificate of Authority is <u>not</u> acceptable.

FAILURE to submit proof of registration of the bidder or any subcontractor named on the bid prior to the award of a contract shall be cause to reject the bids.

FAILURE of the bidder or any subcontractor named on the bid to be <u>registered</u> prior to the receipt of bids is cause for a **MANDATORY REJECTION** of bids. (A NON-WAIVABLE DEFECT). This covers construction work as well as non-construction bids.

IN ADDITION:

The contractor shall provide written notice to all **subcontractors and suppliers** not specifically named on the bid of the responsibility to register and submit proof of business registration to the contractor. The requirement of proof of business registration extends down through all levels (tiers) of the project.

Before final payment on the contract is made by the contracting agency, the contractor shall submit an accurate list and the proof of business registration of each subcontractor or supplier used in the fulfillment of the contract, or shall attest that no subcontractors were used.

For the term of the contract, the contractor and each of its affiliates and a subcontractor and each of its affiliates [N.J.S.A. 52:32-44(g)(3)] shall collect and remit to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act on all sales of tangible personal property delivered into this State, regardless of whether the tangible personal property is intended for a contract with a contracting agency.

A business organization that fails to provide a copy of a business registration as required pursuant to section 1 of P.L.2001,c.134 (C.52:32-44 et al.) or subsection e. or f. of section 92 of P.L.1977,c.110 (C.5:12-92), or that provides false business registration information under the requirements of either of those sections, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration copy not properly provided under a contract with a contracting agency.

BUSINESS REGISTRATION

Pursuant to N.J.S.A. 52:32-44, the County of Union is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the County of Union with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

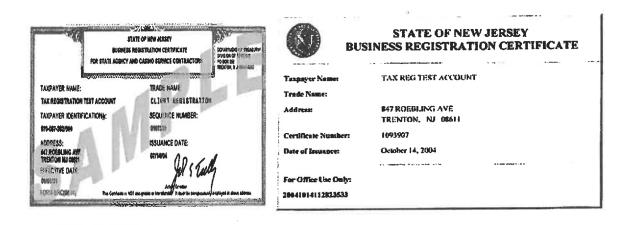
Proof of registration must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids. If subcontractors are named on the bid, proof of the business registration for each must be provided prior to the award of a contract. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

During the course of contract performance:

- (1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
- (2) the contractor shall maintain and submit to the County of Union a list of subcontractors and their addresses that may be updated from time to time.
- (3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at http://www.state.nj.us/treasury/revenue/busregcert.shtml.

Before final payment is made under the contract, the contractor shall submit to the County of Union a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency.



ATTACH BRC HERE

AFFIRMATIVE ACTION REQUIREMENT

REQUIRED AFFIRMATIVE ACTION EVIDENCE

General Requirements of P.L. 1975, c. 127: You are hereby put on notice that:

CONSTRUCTION CONTRACTS: The successful contractor must submit within three (3) days of the notice of intent to award or the signing of the contract the initial project manning report (A.A.201). This report should be submitted at the time the signed contract is returned to the County of Union. Attention: Affirmative Action Officer.

If the successful contract <u>does not submit the initial project manning report</u> (A.A.201) within the three (3) days from the time the signed contract is returned to the County of Union, the County of Union <u>WILL</u> declare the contractor non-responsive and award the contract to the next lowest responsible bidder.

NAME OF BIDDER
ORIGINAL SIGNATURE
PRINT OR TYPE NAME AND TITLE
PRINT OR TYPE NAME AND TITLE
DATE THIS FORM IS COMPLETED

EXPERIENCE STATEMENT

I hereby certify that my company has performed the following private or public work, which is relevant to this bid.

I further certify that my prior defaults, please	y company has never defaulte provide details on an attached	ed under any contract. Should I sheet.	d you not sign this form due to
Witness	e.	NAME OF BIDDER	
Date			
		ADDRESS	
	Ву:	ORIGINAL SIGNATURE ONI	L Y
		PRINT NAME AND TITLE	

YOU MAY ATTACH ADDITIONAL SHEETS, BUT YOU MUST SIGN AND WITNESS THIS SHEET.

CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT

STATE OF NEW JERSEY /	Specify, if Other) SS:	
		, of the (City luly sworn according	, Town, Borough, etc.) of g to law on my oath depose and say that:
I am	of the firm of		, the Bidder making
the proposal for the above name	d Project ("Contractor'), a	nd that I executed s	said proposal with full authority to do so; and
that said Contractor, pursuant to required by the Plans, Specificat			ases or controls all the necessary equipment asked for.
			e Bidder shall attach to this Certificate
information identifying the source	from which the equipment	nt will be obtained,	and such information shall be accompanied
by a certificate from the owner or	person in control of the e	equipment definitive	ly granting to the Bidder the control of the
equipment required during such	time as may be necessary	y for the completion	of that portion of the contract.
(Also type or print name of affian	t under signature)		
D.a.			

NON-COLLUSION AFFIDAVIT

(N.J.S.A. 52:34-15)

STATE OF) SS:		
COUNTY OF		
, of the City of, of full age, being duly sworn age of the firm of of the said proposal five the said proposal five full authority to do so; that said bidder has not, directly collusion, or otherwise taken any action in restraint of project; and that all statements contained in said proposal knowledge that the COUNTY OF UNION, NEW JERS proposal and in the statements contained in the affidate. I further warrant that no person or selling agency has an agreement or understanding for a commission, per or bonafide established commercial or selling agencies.	for the above name ectly or indirectly, free, competitive losal and in this Af EY relies upon the vit in awarding the been employed or centage, brokerage	, the bidder making the proposal for the above ed project, and that I executed the said proposal entered into any agreement, participation in any bidding in connection with the above named fidavit are true and correct, and made with full e truth of the statements contained in said e contract for the said project.
		NAME OF BIDDER
		ORIGINAL SIGNATURE ONLY
		erson who signed the bidder signature page should sign this form also.
Subscribed and sworn to before me		
this day of	, 20	
(Seal) Notary Public of New Jersey/Specify Other	r State	
My Commission Expires	, 20	
WARNING: IF YOU FAIL TO FULLY, ACCURAT	TELY, AND COM	PLETELY FILL OUT THIS AFFIDAVIT OF NON-

COLLUSION, YOUR BID MAY BE REJECTED.

Contractor Registration Advisement

For Public Works Projects

A new law, known as "The Public Works Contractor Registration Act" (P.L. 1999, c.238), became effective April 11, 2000. Under the Act, no contractor/subcontractor will be permitted to bid on or engage in any contract for public work, as defined in Section 2 of P.L. 1963, c.150 (C:34:11-56.26), unless that contractor/subcontractor is registered with the New Jersey Department of Labor and Workforce Development. The Act provides that upon registration with the Department, a public works contractor/subcontractor will be issued a certificate by the Department indicating compliance with the Act's requirements. The registration fee has been set at \$300.00 per year. Upon the effective date of the Act, public bodies will be expected to request production of such a certificate from those bidding on or engaging in public works projects.

It is important to note that the term "contractor," is defined in the, Act as, "a person, partnership, association, joint stock company, trust, corporation or other legal business entity or successor thereof who enters into a contract which is subject to the provision of the "New Jersey Prevailing Wage Act," P.L. 1963, c.150 (C.34:11-56.25, et seq.) for the construction, reconstruction, demolition, alteration, repair or maintenance of a public building regularly open to and used by the general public or a public institution, and includes any subcontractor or lower tier subcontractor as defined herein: except that, for the purposes of the act, no pumping station, treatment plant or other facility associated with utility and environmental construction, reconstruction, demolition, alteration, repair or maintenance shall be regarded as a public building regularly open to and used by the general public or a public institution."

Registration forms, copies of the Act, and other relevant information can be obtained by contacting:

Contractor Registration Unit
New Jersey Department of Labor and Workforce Development
Division of Wage & Hour Compliance
PO Box 389
Trenton, New Jersey 08625-0389
Telephone: 609-292-9464

Fax: 609-633-8591 E-mail: contreg@dol.state.nj.us

AMERICANS WITH DISABILITIES ACT EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES

The contractor and the County of Union (hereafter "Owner") do hereby agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 US.C. S12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the Owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the Owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the Owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the Owner's grievance procedure, the contractor agrees to abide by any decision of the Owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the Owner, or if the Owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

The Owner shall, as soon as practicable after a claim has been made against it, give written notice thereof to the contractor along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the Owner or any of its agents, servants, and employees, the Owner shall expeditiously forward or have forwarded to the contractor every demand, complaint, notice, summons, pleading, or process received by the Owner or its representatives.

It is expressly agreed and understood that any approval by the Owner of the services provided by the contractor pursuant to this contract will not relieve the contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the Owner pursuant to this paragraph.

It is further agreed and understood that the Owner assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the Owner from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

Name	(Please print or type)
Signature	Date

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. <u>This statement must be notarized</u>. Questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

	en engaged etion work ha	in construction			esent f
e incorporated) organization has bee	en engaged etion work ha	in construction	or contracting b		esent f
e incorporated) organization has bee	en engaged etion work ha	in construction	or contracting b		esent 1
e incorporated) organization has been	en engaged	in construction	or contracting be		esent 1
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ork performed by yo	ou				
complete any work	awarded to	vou?			
d on a Contract?		_lf so, complete	e details, includir	ng where and wh	y?
-	ork performed by you	ork performed by you o complete any work awarded to	ork performed by you o complete any work awarded to you?	ork performed by you o complete any work awarded to you?	ork performed by you complete any work awarded to you? ed on a Contract? If so, complete details, including where and why

STATEMENT OF BIDDER'S QUALIFICATIONS - (continued)

ist your major equipment	available for this Co	ontract.		
xperience in the construct	tion work similar in	importance to this Proje	ct	_
		,		_
lave you had any material	adverse changes t		in NJ Notice of Class	sification with
o) years?				
			ation, including the of	ficers.
			Magnitude & Type of Work	In What
ackground and experienc	e of the principal m Present Position	Yrs. of Construction	Magnitude &	In What
ackground and experienc	e of the principal m Present Position	Yrs. of Construction	Magnitude &	In What
ackground and experienc	e of the principal m Present Position	Yrs. of Construction	Magnitude &	In What
ackground and experienc	e of the principal m Present Position	Yrs. of Construction	Magnitude &	In What

18.	The undersigned, hereby author requested by the proper agency Qualifications.	rizes and requests any person, firm or corporation to furnish any information y in verification of the responses comprising this Statement of Bidder's
19.	Bidder's telephone number, fax	number and e-mail address (if applicable).
	Phone	_
	Fax	_
	E-mail	_
	Mobile	_
Dated	at	_ this day of _, 20
BIDDE	R (Signature)	-
BIDDE	R (Print Name)	_
Subscr	ibed and sworn to before me	
this	day of	, 20
(Seal)	Notary Public of New Jersey/	Specify Other State
Му Со	mmission Expires	, 20

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

CONTRACTOR PERFORMANCE RECORD

List all contracts completed by you below or provide separate form.

Name of Owner	Name & Location of Project: Type Of Work	Prime or Sub- Cont.	Engineer or Architect in Charge for Owner	Contract Price (Omit Cost)	Date Completed	Was Time* Extension Necessary	Were Any Penalties Imposed	Were Liens* Claims or Stop Notice Filed

^{*} If answer is YES, provide explanation of details in connection with non-completion of contracts, time extensions, penalties imposed, labor troubles, liens, claims and notices filed against contracts listed in preceding item "Performance Record" on an attached sheet.

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

CONTRACTOR PERFORMANCE RECORD CERTIFICATION

The information above is true and complete to the best of my knowledge and belief.

		(Name of Organization)	
		(Signature)	
		(Title)	
Subscribed	d and sworn to before me		
this	day of		
(Seal) Nota	ary Public of New Jersey/	Specify Other State	
My Commi	ission Expires	, 20	

AFFIDAVIT REGARDING LIST OF DEBARRED, SUSPENDED OR DISQUALIFIED BIDDERS

this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State	STATE OF NEW JERSEY /		_)	
		Specify, if Other) SS:	
am	COUNTY OF		_)	
am of the firm of, the Bidder making the Proposal for the above named Project. I have executed the said Proposal with full authority to do so. Said Bidder is not at the time of the making this bid included on the New Jersey State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency. Name of Contractor				
am of the firm of, the Bidder making the Proposal for the above named Project. I have executed the said Proposal with full authority to do so. Said Bidder is not at the time of the making this bid included on the New Jersey State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency. Name of Contractor	1		of the (City, Town, Borough, etc.) of	
am of the firm of, the Bidder making the Proposal for the above named Project. I have executed the said Proposal with full authority to do so. Said Bidder is not at the time of the making this bid included on the New Jersey State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency. Name of Contractor	State of	of full age, being duly sw	orn according to law on my oath depose	and say that:
not at the time of the making this bid included on the New Jersey State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency. Name of Contractor By: (Signature of Authorized Representative) Subscribed and sworn to before me this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State				
not at the time of the making this bid included on the New Jersey State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency. Name of Contractor By: (Signature of Authorized Representative) Subscribed and sworn to before me this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State	I am	of the firm of _	, the	Bidder making
Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency. Name of Contractor By: (Signature of Authorized Representative) Subscribed and sworn to before me this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State	the Proposal for the above named Projection	ect. I have executed the	said Proposal with full authority to do so.	Said Bidder is
Name of Contractor By:	not at the time of the making this bid in	cluded on the New Jersey	State Treasurer's or the Federal Govern	ment's List of
By:	Debarred, Suspended or Disqualified B	idders as a result of actio	in taken by any State of Federal Agency.	
By:				
By:				
Subscribed and sworn to before me this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State			Name of Contractor	
Subscribed and sworn to before me this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State				
Subscribed and sworn to before me this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State		-		
Subscribed and sworn to before me this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State		By:	f Authorized Penrocentative)	
this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State		(Signature o	Authorized Representative)	
this day of, 20 (Seal) Notary Public of New Jersey/ Specify Other State				
(Seal) Notary Public of New Jersey/Specify Other State	Subscribed and sworn to before me			
(Seal) Notary Public of New Jersey/Specify Other State				
Specify Other State	this day of	, 20	ži.	
Specify Other State				
Specify Other State	(Saal) Notary Dublic of New Jorsey		- :	
	(Seal) Notary Public of New Jersey/	Specify Other State		
		oposity office office		
My Commission Expires, 20,	My Commission Expires	, 20	_*	

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

PRIOR NEGATIVE EXPERIENCE QUESTIONNAIRE (N.J.S.A. 40A:11-4)

Within the past ten (10) years, have you been found, through either court adjudication, arbitration, mediation, or other contractually stipulated alternate dispute resolution mechanism, to have: failed to provide or perform goods or services; or failed to complete a contract in a timely manner; or otherwise performed unsatisfactorily under a prior contract with a public entity?
yes no If yes, please provide full, detailed explanation.
Within the past ten (10) years, have you defaulted on a contract, thereby requiring a public entity to utilize the services of another contractor to provide the goods or perform the services or to correct or complete the contract
yes no If yes, please provide full, detailed explanation.
Within the past ten (10) years, have you defaulted on a contract, thereby requiring a public entity to look to your surety for completion of the contract or tender of the costs of completion?
yes no If yes, please provide full, detailed explanation.
Within the past ten (10) years, have you been debarred or suspended from contracting with any of the agencies of department of the executive branch of the State of New Jersey at the time of the contract award, where the action was based on failure to perform a contact for goods or services with a public entity?
yes no If yes, please provide full, detailed explanation.

PRIOR NEGATIVE EXPERIENCE CERTIFICATION

I hereby certify that the above statements are true and accurate as of this, 20	day of	
Name of Contractor		
By(Signature of Authorized Representative)		
Subscribed and sworn to before me		
this, 20		
(Seal) Notary Public of New Jersey/Specify Other State		
My Commission Expires, 20		

NOTE:

FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

TO BE COMPLETED ONLY WHEN FINAL PAYMENT IS REQUESTED

CONTRACTOR'S CERTIFICATION OF COMPLIANCE - NEW JERSEY PREVAILING WAGE ACT

TO:	County of Union	CONTRACT:
	Division of Engineering 2325 South Avenue	
	Scotch Plains, New Jersey 07076	
	Scotch Flams, New Sersey 67070	
PRO.	JECT:	
	cordance with the requirements of the actor on the public work being performe	New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56 et al *, the undersigned of for:
		COUNTY OF UNION
hereb wage:	y certifies that he/she has complied wi s established under "The New Jersey F	th the contract requirements regarding the payment of the minimum prevailing Prevailing Wage Act" N.J.S.A. 34:11-56 et al.
	CONTRACTOR:	
	ADDRESS:	
	BY:	ORIGINAL SIGNATURE ONLY
		ONIONAL DISTANTONE SINE
	E OF NEW JERSEY NTY OF	
Being	by me duly sworn according to law, or	his oath deposes
and s	ays thatis the above name	
of	the above name	d contractor, and that
the ta	cts set forth in the above statement are	true.
Subso	cribed and sworn to before me	
this_	day of	, 20
(Seal	Notary Public of New Jersey/	
	Spe	cify Other State
My C	ommission Expires	, 20
-		

* N.J.S.A. 34:11-56.33 requires the contractor and subcontractor to file written statements with the public body in form satisfactory to the Commissioner certifying to the amounts then due and owing from such contractor and subcontractor filing such statement to any and all workmen for wages due on account of the public work, setting forth therein the names of the persons whose wages are unpaid and the amount due to each respectively. Union County will withhold the amount so deducted for the benefit of the workmen whose wages are unpaid as shown by the verified statement filed, and will pay directly to any workman the amount shown by such statement to be due to him for such wages. Such payment shall thereby discharge the obligation of the contractor to the person receiving such payment to the extent of the amount thereof.

UNCOMPLETED CONTRACTS AFFIDAVIT (To be Submitted with DPMC Form 701)

UNCOMPLETE	PURSUANT TO N.J.A.C. 17:19-2.13, BIDDER DECLARES THE FOLLOWING WITH RESPECT TO ITS UNCOMPLETED CONTRACTS, ON ALL WORK, FROM WHATEVER SOURCE (PUBLIC AND PRIVATE), BOTH IN NEW JERSEY AND FROM OTHER GOVERNMENTAL JURISDICTIONS					
ENTITY	PROJECT TITLE	ORIGINAL CONTRACT AMOUNT	UNCOMPLETED AMOUNT AS OF BID OPENING DATE	NAME AND TELEPHONE NUMBER OF PARTY TO BE CONTACTED FROM ENTITY FOR VERIFICATION		

TOTAL AMOUNT OF UNCOMPLET	ED CONTRACTS \$	
	BIDDER:	
	(Signature)	
	(Print Name)	
Subscribed and sworn to before me		
this day of	, 20	
(Seal) Notary Public of New Jersey/_	Specify Other State	
My Commission Expires	, 20	

FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT NOTE: IN A REJECTION OF YOUR BID.

CERTIFICATE OF INSURANCE STATEMENT

The Bidder fully understands the County of Union insurance requirements as stated in the Instructions to Bidders as well as the Owner/Contractor Agreement and agrees to provide all insurance required by these documents <u>prior</u> to the issuance of the Notice to Proceed.

BIDDER (Signature)	
BIDDER (Print Name)	

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

COLLECTION OF USE TAX ON SALES TO LOCAL GOVERNMENTS STATEMENT

The Bidder fully understands the requirements of the use tax on sales to local governments as stated in the General Conditions to the Contract for Construction and the Instructions to Bidders, and agrees at all times to comply with the "Contractor Use Tax Collection Legislation", as defined therein, and the terms relating thereto contained in the Contract Documents.

BIDDER (Signature)	
BIDDER (Print Name)	

NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.

TIME OF COMPLETION

The state of the state of the Combined the community	as af work will be started within top (10)
The undersigned proposed that if awarded the Contract, the scop	be of work will be started within ten (10)
calendar days and will be substantially completed within <u>ninety (</u>	90) calendar days from the date of
the notice to proceed.	
of.	
I,ofOMPANY	J. 1-7
Agree to complete work in the time frame specified	
	SIGNATURE
SITE VISIT – GENERAL CONTRACTOR	
l,of	
NAME (Print or type) COMPANY	
Visited the site of the work on	
	SIGNATURE

COUNTY OF UNION NEW JERSEY Division of Purchasing DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

Solicitation Num	mber:Vende	or/Bidder:
	PAR	<u>r 1</u>
	CERTIFIC VENDOR/BIDDER MUST COMPLETE PAR FAILURE TO CHECK ONE OF THE BOXES WILI	T I BY CHECKING ONE OF THE BOXES
certification below Jersey, Department website at http://wythe certification will will be a violation of the law	v to attest, under penalty of perjury, that neither the person nor entite of the Treasury's Chapter 25 list as a person or entity engaged will render a Vendor's/Bidder's proposal non-responsive. If the	posal or otherwise proposes to enter into or renew a contract must complete the y, nor any of its parents, subsidiaries, or affiliates, is identified on the State of New in investment activities in Iran. The Chapter 25 list is found on the Department's ust review this list prior to completing the below certification. Failure to complete Director of the Division of Purchase and Property finds a person or entity to be in ale or contract, including but not limited to, imposing sanctions, seeking compliance, on of the party.
	CHECK THE APP	ROPRIATE BOX
□ A. OR	affiliates is listed on the N.J. Department of Treasury's	er the Vendor/Bidder listed above nor any of its parents, subsidiaries, or is list of entities determined to be engaged in prohibited activities in Iran and Part 2 and complete and sign the Certification below.
Ы В.	the Department's Chapter 25 list. I will provide a detail	der and/or one or more of its parents, subsidiaries, or affiliates is listed on led, accurate and precise description of the activities in Part 2 below and rovide such information will result in the proposal being rendered as nonons will be assessed as provided by law.
	PLEASE PROVIDE ADDITIONAL INFORMATION R ox "B" above, provide a detailed, accurate and precise description of ment activities in Iran by completing the information below.	
DESCRIPTION OF DURATION OF E ANTICIPATED C VENDOR/BIDDE VENDOR/BIDDE	TO VENDOR/BIDDER: DF ACTIVITIES: ENGAGEMENT: CESSATION DATE: ER CONTACT NAME:	
	CERTIFIC	CATION
the best of my kno Vendor/Bidder is u of Union in writing certification. If I do	d, certify that I am authorized to execute this certification on behalf nowledge are true and complete. I acknowledge that the County cunder a continuing obligation from the date of this certification through of any changes to the information contained herein; that I am away	of the Vendor/Bidder, that the foregoing information and any attachments hereto, to f Union, New Jersey is relying on the information contained herein, and that the agh the completion of any contract(s) with the County of Union to notify the County or that it is a criminal offense to make a false statement or misrepresentation in this it will constitute a material breach of my agreement(s) with the County of Union,
Signature		Date

Revised 10/19/17

Print Name and Title

STANDARD BID DOCUMENT REFERENCE		
Name of Form:	FEDERAL NON-DEBARMENT CERTIFICATION	
Statutory Reference:	N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)	
Description:	Meets statutory criteria for certification of non-debarment by a federal government agency.	

Summary of the Certification Requirements under N.J.S.A. 52:32-44.1

Pursuant to state law any natural person, company, firm, association, corporation, or other entity prohibited, or "debarred," from contracting with the federal government agencies, shall also be prohibited from contracting for public work in the state of New Jersey. This prohibition also extends to any affiliate organization(s) held by or subject to the control of an entity of that prohibited person or entity.

Prior to awarding a contract for public work a local units must obtain written certification from the contracting person or entity through the form below, attesting to their non-debarment from contracting with federal government agencies. Contracting units are reminded that they must fill-in the boilerplate information in the certification sections of Parts II through IV regarding their name and type of contracting unit before using the form.

CERTIFICATION OF NON-DEBARMENT

FOR FEDERAL GOVERNMENT CONTRACTS

N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)

This certification shall be completed, certified to, and submitted to the contracting unit prior to contract award, except for emergency contracts where submission is required prior to payment.

PART I: VENDOR INFORMATION

Individual or Organization Name

Address of Individual						
or Organization						
DUNS Code	DUNS Code					
(if applicable)						
CAGE Code						
(if applicable)	(if applicable)					
Ch	eck the box that represents the type	of business orga	anization:			
□Sole Propri	etorship (skip Parts III and IV) □Non-	-Profit Corporation	on (skip Parts III and IV)			
□For-Prof	it Corporation (any type) □Limited I	Liability Compan	y (LLC) □Partnership			
	□Limited Partnership □Limited I	Liability Partnersl	hip (LLP)			
□Othe	er (be specific):					
PART II – C	ERTIFICATION OF NON-DEBAR	MENT: Individ	ual or Organization			
government from contraction the information concertification through the writing of any changes make a false statement prosecution under the	e individual or organization listed all racting with a federal agency. I further on on behalf of the above-named organization depends and that I am under a content of contract award by the Country to the information contained herein; to or misrepresentation in this certification and that it will constitute a material award of Union to declare any content of the country of Union to declare any conte	er acknowledge: to mization; that the partinuing obligation by of Union to not that I am aware the ion, and if I do so all breach of my a	hat I am authorized to County of Union is relying on from the date of this tify the County of Union in hat it is a criminal offense to o, I am subject to criminal greement(s) with the County			
Full Name (Print):		Title:				
Signature:		Date:				

PART III – CERTIFICATION OF NO Organization	ON-DEBARMENT: Individual or Entity Owning Greater than 50 Percent of
Section A (Check the Box that a	pplies)
	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of its voting stock, or of the partner in the partnership who owns more than 50 percent interest therein, or of the member of the limited liability company owning more than 50 percent interest therein, as the case may be.
Name of Individual or Organization	
Home Address (for Individual) or Business Address	
	OR
0	No one stockholder in the corporation owns more than 50 percent of its voting stock, or no partner in the partnership owns more than 50 percent interest therein, or no member in the limited liability company owns more than 50 percent interest therein, as the case may be.
Section B (Skip if no Business entity is listed in Section A above)
	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization's parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization's parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization's parent entity, as the case may be.
Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity	
Home Address (for Individual) or Business Address	
	OR

	No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be.
--	--

Section C – Part III Certification		
Section C – Part III Certification		
I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the Organization listed above in Part I or, if applicable, owns greater than 50 percent of a parent entity of <name of="" organization=""> </name>		
Full Name (Print):	Title:	
Signature:	Date:	
h		

Part	: IV — CERTIFICATION OF NON	I-DEBARMENT: Contractor – Controlled Entities
		Section A
	listed in Part I owns mo in which the Organization therein, or of the limite	address of the corporation(s) in which the Organization are than 50 percent of voting stock, or of the partnership(s) on listed in Part I owns more than 50 percent interest d liability company or companies in which the Organization was more than 50 percent interest therein, as the case may
Name	e of Business Entity	Business Address

Add additional she	ets if necessary			
		OR		
	The Organization listed above in Part I does not own greater than 50 percent of the voting stock in any corporation and does not own greater than 50 percent interest in any partnership or any limited liability company.			
Sec	tion B (skip if no business e	ntities are liste	d in Secti	on A of Part IV)
		percent of the v	oting sto	in which an entity listed in Part ck (corporation) or owns greater oility company).
	intity Controlled by Entity ection A of Part IV		Bus	iness Address
	at di			
Add additional She	eets if necessary			
		OR		
	No entity listed in Part III A owns greater than 50 percent of the voting stock in a corporation or owns greater than 50 percent interest in any partnership or limite liability company.			
	Section C –	Part IV Certifica	ation	
I hereby certify that the Organization listed above in Part I does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the County of Union is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the County of Union to notify the County of Union in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.				
Full Name (Print):			Title:	
Signature:			Date:	

BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION (To be submitted with each bid, proposal or offer exceeding \$100,000)

The undersigned, [Company]that:	certifies, to the best of his or her knowledge,
person for influencing or attempting to influe officer or employee of Congress, or an empl any Federal contract, the making of any Fed	been paid or will be paid, by or on behalf of the undersigned, to any ence an officer or employee of an agency, a Member of Congress, are oyee of a Member of Congress in connection with the awarding of eral grant, the making of any Federal loan, the entering into of any continuation, renewal, amendment, or modification of any Federal nt.
influencing or attempting to influence an off or employee of Congress, or an employee of	ropriated funds have been paid or will be paid to any person for ficer or employee of any agency, a Member of Congress, an officer of a Member of Congress in connection with this Federal contract undersigned shall complete and submit Standard Form - LLL eccordance with its instructions.
3. The undersigned shall require that the lang subawards at all tiers (including subcontract agreements) and that all subrecipients shall c	guage of this certification be included in the award documents for all cts, subgrants, and contracts under grants, loans, and cooperative ertify and disclose accordingly.
made or entered into. Submission of this certification imposed by 31, U.S.C. § 1352 (as amended	n of fact upon which reliance was placed when this transaction was ification is a prerequisite for making or entering into this transaction by the Lobbying Disclosure Act of 1995). Any person who fails to a civil penalty of not less than \$10,000 and not more than \$100,000.
The Contractor, [Company]statement of its certification and disclosure, provisions of 31 U.S.C. § 3801 et seq., apply	, certifies or affirms the truthfulness and accuracy of each if any. In addition, the Contractor understands and agrees that the to this certification and disclosure, if any.
Signature of Contractor's Authorized Repres	entative
Name and Title of Contractor's Authorized F	Representative
Date	

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization:		
Street address:		
City, State, Zip:		
CERTIFIED BY: (type or print)		
TITLE:		
(signature)	(date)	

DISCLOSURE OF LOBBYING ACTIVITIES (LLL Form)
Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352 0348-0046

N/A – My agency does not engage in any lobbying activities			
a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	2. Status of Federal Action: a. bid/offer/application b. Initial award c. Post-award		a. initial filing b. material change For Material Change Only: year quarter date of last report
	Subawardee Tier, if known.		rict, if known:
6. Federal Department/Agency:		J	f applicable
8. Federal Action Number, if known:		\$	y known.
10. a. Name and address of Lobbying Registrant (if individual, last name, first name, MI):			orming Services (including address if 0a) (las name, first name, MI):
11. Information request through this form is authorized by title 31 U.S.C. Section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.		Print Name:	
Federal Use Only:			Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

Bidder's Name	
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INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer of employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a Federal action.
- 2. Identify the status of the covered Federal action.
- Identify the appropriate classification of this report. If this is a follow-up report caused by a
 material change to the information previously reported, enter the year and quarter in which the
 change occurred. Enter the date of the last previously submitted report by this reporting entity for
 this covered Federal action.
- 4. Enter the full name, address, city, state and zip code of the reporting entity include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract, grant, or loan award number, the application/proposal control number assigned by the Federal agency.) Include prefixes, e.g. "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
- 10. A) Enter the full name, address, city, state and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.
 - B) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter last name, first name and middle initial (MI).
- 11. The certifying official shall sign and date the form; print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-10046), 'Washington, DC 20503.

STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of New Jersey Department of Transportation, 2019 Edition; is added to and/or amended elsewhere herein by the Notice to Contractors (Advertisement), Proposal, Information for Bidders, General Conditions, Supplemental Conditions, Project Plans, and Supplementary Specifications; shall, insofar as technical requirements are involved, govern in the execution of this project.

Such Standard Specifications are made a part of these Specifications by this reference and will not be repeated herein. It is the responsibility of prospective bidders to familiarize themselves with these Standard Specifications, copies of which may be examined at the office of the Engineer and may be obtained, upon payment of the cost thereof, from:

Department of Transportation State of New Jersey 1035 Parkway Avenue Trenton, New Jersey 08625

The Notice to Contractors (Advertisement), Proposal, General Conditions, Special Provisions, Project Plans and/or Supplementary Specifications shall govern and prevail in the case of conflict between them and the Standard Specifications.

In these Standard Specifications the words "COMMISSIONER" or "DEPARTMENT" shall refer to and mean the person, persons, body, board or agent legally empowered to enter into contracts and otherwise legally act for the Owner. The word "STATE" shall refer to and mean the professional engineering representative of the Owner as hereinbefore defined and the word "ENGINEER" shall refer to and mean the professional engineering representative of the Owner as hereinbefore defined and the word "INSPECTOR" shall mean the authorized project representative of the Engineer with the authority as hereinbefore defined. The word "LABORATORY" shall mean and refer to the Engineer who may, at his discretion, and with the consent of the Owner, employ qualified technical personnel or testing laboratories to assist him in fulfilling the duties normally assigned to the "LABORATORY" in these Standard Specifications.

When reference is made herein to the bulletins, standards, specifications, publications or requirements of the American Association of State Highway Official (AASHO), the American Concrete Institute (ACI), the American Society of Civil Engineers (ASCE) or similar national or regional societies, associations, institutes or organizations; the requirements of the bulletins, specifications, publications or requirements referred to shall be considered a part of these Specifications by such reference and shall not be repeated herein but shall have the same import and be as binding as if herein set forth in full.



STATE OF NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

DIVISION OF WAGE AND HOUR COMPLIANCE
PUBLIC CONTRACTS SECTION
PO BOX 389
TRENTON NJ 08625-0389

THIS FORM MUST BE COMPLETED BY THE PUBLIC BODY (Owner)

Date of Determination:	Confirmation No.:
Please provide the below information as so Contracts Section at the above mailing add	oon as it is available. Return this completed form to the Public dress or fax to (609) 695-1174.
Owner-Department Agency:	
Description of Work:	
Municipality:Cou	unty: Contract Amount:
Certified Payroll Official:	
Contractors:	
Date job to start (or started):	



STATE OF NEW JERSEY

Department of Labor and Workforce Development
Division of Wage and Hour Compliance - Public Contracts Section
PO Box 389
Trenton, NJ 08625-0389

PREVAILING WAGE RATE DETERMINATION

The New Jersey Prevailing Wage Act (N.J.S.A. 34:11-56.25 et seq.) requires that the Department of Labor and Workforce Development establish and enforce a prevailing wage level for workers engaged in public works in order to safeguard their efficiency and general well being and to protect them as well as their employers from the effects of serious and unfair competition.

Prevailing wage rates are wage and fringe benefit rates based on the collective bargaining agreements established for a particular craft or trade in the locality in which the public work is performed. In New Jersey, these rates vary by county and by the type of work performed.

Applicable prevailing wage rates are those wages and fringe benefits in effect on the date the contract is awarded. All pre-determined rate increases listed at the time the contract is awarded must also be paid, beginning on the dates specified. Rates that have expired will remain in effect until new rates are posted.

Prevailing Wage Rate

The prevailing wage rate for each craft will list the effective date of the rate and the following information:

W =Wage Rate per Hour

B = Fringe Benefit Rate per Hour*

T = Total Rate per Hour

* Fringe benefits are an integral part of the prevailing wage rate. Employers not providing such benefits must pay the fringe benefit amount directly to the employee each payday. Employers providing benefits worth less than the fringe benefit amount must pay the balance directly to the employee each payday.

Unless otherwise stated in the Prevailing Wage Rate Determination, the fringe benefit rate for overtime hours remains at the straight time rate.

When the Overtime Notes in the Prevailing Wage Rate Determination state that the overtime rates are "inclusive of benefits," the benefit rate is increased by the same factor as the wage rate (i.e. multiplied by 1.5 for time and one-half, multiplied by 2 for double time, etc.).

Apprentice Rate Schedule

An "apprentice" is an individual who is registered with the United States Department of Labor - Office of Apprenticeship and enrolled in a certified apprenticeship program during the period in which they are working on the public works project.

The apprentice <u>wage</u> rate is a percentage of the journeyman wage rate, unless otherwise indicated. The apprentice <u>benefit</u> rate is the full journeyman benefit rate, unless otherwise indicated.

If there is no apprentice rate schedule listed, the individual must be paid at least the journeyman rate even if that individual is in a certified apprentice program for that trade.

If there is no ratio of apprentices to journeymen listed for a particular craft, then the ratio shall be one (1) apprentice to every four (4) journeymen.

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Comments/Notes

For each craft listed there will be comments/notes that cover the definition of the regular workday, shift differentials, overtime, recognized holidays, and any other relevant information.

Public Works Contractor Registration

The Public Works Contractor Registration Act (N.J.S.A. 34:11-56.48, et seq.) requires that **all** contractors, subcontractors, or lower tier subcontractors who are working on or who bid on public works projects register with the Department of Labor and Workforce Development. Applications are available at www.nj.gov/labor (click on Wage & Hour and then go to Registration & Permits).

Pursuant to N.J.S.A. 34:11-56.51:

No contractor shall bid on any contract for public work as defined in section 2 of P.L.1963, c. 150 (C.34:11-56.26) unless the contractor is registered pursuant to this act. No contractor shall list a subcontractor in a bid proposal for the contract unless the subcontractor is registered pursuant to P.L.1999, c.238 (C.34:11-56.48 et seq.) at the time the bid is made. No contractor or subcontractor, including a subcontractor not listed in the bid proposal, shall engage in the performance of any public work subject to the contract, unless the contractor or subcontractor is registered pursuant to that act.

Snow Plowing

Snow plowing contracts are <u>not</u> subject to the New Jersey Prevailing Wage Act or the Public Works Contractor Registration Act.

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County - UNION

Craft: Air Conditioning & Refrigeration - Service and Repair

PREVAILING WAGE RATE

	03/01/22
Journeyman (Mechanic)	W42.98 B27.48 T70.46

Craft: Air Conditioning & Refrigeration - Service and Repair

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
As Shown	1st Year	2nd Year	3rd Year	4th Year	5th Year	Wage = %	of Jnymn	Wage		
Wage and Bene	40%	50%	60%	70%	80%	Bene = %	of Jnymn	Bene		

Ratio of Apprentices to Journeymen - 1:4

Craft: Air Conditioning & Refrigeration - Service and Repair

COMMENTS/NOTES

THESE RATES MAY BE USED FOR THE FOLLOWING:

- Service/Repair/Maintenance Work to EXISTING facilities.
- Replacement or Installation of air conditioning and refrigeration equipment when the combined tonnage does not exceed 15 tons for refrigeration, or 25 tons for air conditioning.
- Replacement or Installation of "packaged" or "unitary" rooftop-type units when the combined tonnage of the units does not exceed 75 tons.

NOTE: These rates may NOT be used for any work in new construction (including work on new additions).

The regular workday shall consist of 8 hours, starting between 6:00 AM and 10:00 AM, Monday through Friday.

SHIFT DIFFERENTIALS:

- The second and third shifts shall be paid an additional 15% of the hourly rate.
- All shifts must run for a minimum of 5 consecutive days.

OVERTIME:

Hours worked in excess of 8 per day or before or after the regular workday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day.

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County - UNION

Craft: Boilermaker PREVAILING WAGE RATE

	01/01/22
Foreman	W53.13
	B46.00
	T99.13
General Foreman	W55.13
	B47.05
	T102.18
Journeyman	W48.13
	B44.29
	T92.42
	I

Craft: Boilermaker APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1000 Hours	65%	70%	75%	80%	85%	90%	95%			
Benefit =	37.57	38.51	39.49	40.44	41.41	42.37	43.32			

Ratio of Apprentices to Journeymen - *

* 1 apprentice will be allowed for the first 5 journeymen, 1 apprentice for the next 10 journeymen and 1 apprentice for each succeeding 20 journeymen up to a maximum of 5 apprentices per contractor on any one job.

Craft: Boilermaker COMMENTS/NOTES

HIGH WORK: All apprentices working on the erection, repair, or dismantling of smoke stacks, standpipes, or water towers shall be paid the Journeyman rate.

The regular workday shall consist of 8 hours, between 8:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall work 7½ hours and receive 8 hours pay, at a rate equal to the regular hourly rate plus 10%.
- The third shift shall work 7 hours and receive 8 hours pay, at a rate equal to the regular hourly rate plus 20%.
- For "Municipal Water Works" projects only, the following shall apply: Two, four day, 10 hour shifts may be worked at straight time Monday through Thursday. The day shift shall work four days, at 10 hours, for 10 hours pay. The second shift shall work four days, at nine and a half hours, for 10 hours pay, plus 10% the hourly rate for new work and .25 cents on repair work. Friday may be used as a make-up day at straight time, due to weather conditions, hoilday or any other circumstances beyond the employer's control.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays (except Labor Day) shall be paid at double the hourly rate. All hours on Labor Day shall be paid at four times the hourly rate.
- If any other craft employed by the same contractor, or a subcontractor thereof, receives double time in lieu of time and one-half, then the Boilermaker shall receive double time in lieu of time and one-half.
- For "Municipal Water Works" projects only, the following shall apply: Four 10 hour days may be worked Monday through Thursday at straight time. Friday may be used as a make-up day for a day lost to inclement weather, holiday or other conditions beyond the control of the employer. Overtime shall be paid for any hours that exceed 10 hours per day or 40 hours per week.

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County - UNION

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

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County - UNION

Craft: Boilermaker - Minor Repairs PREVAILING WAGE RATE

	01/01/22
Foreman	W35.19
	B17.67
	T52.86
General Foreman	W35.69
	B17.67
	T53.36
Mechanic	W33.69
	B17.67
	T51.36

Craft: Boilermaker - Minor Repairs

COMMENTS/NOTES

NOTE: These rates apply to MINOR REPAIR WORK ONLY (repair work in the field for which the contract amount does not exceed \$125,000.00), for boilers that do not produce electric or are not used in the heating of petroleum products.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays (except Labor Day) shall be paid at double the hourly rate. All hours on Labor Day shall be paid at four times the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Thanksgiving Day, day after Thanksgiving, Christmas Day. Saturday holidays observed the following Monday.

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County - UNION

Craft: Bricklayer, Stone Mason PREVAILING WAGE RATE

	05/25/22
Deputy Foreman	W49.30
	B34.13
	T83.43
Foreman	W52.30
	B34.13
	T86.43
Journeyman	W46.30
	B34.13
	T80.43

Craft: Bricklayer, Stone Mason APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	40%	50%	55%	60%	65%	70%	75%	80%		
Benefits	4.00	5.00	5.50	6.00	22.37	23.86	25.34	26.82		

Ratio of Apprentices to Journeymen - 1:5

Craft: Bricklayer, Stone Mason COMMENTS/NOTES

The regular workday shall consist of 8 hours, between 6:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the first, or day shift, shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 10%, inclusive of benefits
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 10%, inclusive of benefits, and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 10%, inclusive of benefits, and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 10%, inclusive of benefits.

OVERTIME:

- The first 2 hours in excess of 8 per day, or before or after the regular workday that are not shift work, Monday through Friday, shall be paid at time and one-half the regular rate, inclusive of benefits. Any additional overtime shall be paid at double the regular rate, inclusive of benefits. The first 10 hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. Any additional overtime shall be paid at double the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Saturday may be used as a make-up day for hours lost to inclement weather.
- When Bricklayers/Stone Masons work on Saturday with Laborers, and no other crafts are working on the project for the day, benefits may be paid at straight time. If other crafts are present, the applicable overtime rate for benefits shall be paid.

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County - UNION

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

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County - UNION

Craft: Carpenter PREVAILING WAGE RATE

	05/16/22
Foreman	W61.30 B36.10 T97.40
Journeyman	W53.30 B31.47 T84.77

Craft: Carpenter APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES								
Yearly	40%	55%	65%	80%	90%				
Benefit	58% of	Appren	tice	Wage Rate	for all	intervals	+ \$0.55		

Ratio of Apprentices to Journeymen - 1:3

Craft: Carpenter COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- When there are 2 or more Carpenters on a job, 1 shall be designated as a Foreman.
- When there are 21 or more Carpenters on a job, 2 shall be designated as Foremen.

The regular workday shall consist of 8 hours, starting between 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 10%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:

- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturdays shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

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County - UNION

Craft: Carpenter - Resilient Flooring PREVAILING WAGE RATE

	06/06/22
Foreman	W61.30 B36.01 T97.31
Journeyman	W53.30 B31.38 T84.68

Craft: Carpenter - Resilient Flooring APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES										
Yearly	40%	55%	65%	80%	90%						
Benefit	58%	of	Appren	tice	Wage Rate	for all	intervals	+ \$0.46			

Ratio of Apprentices to Journeymen - *

Craft: Carpenter - Resilient Flooring

COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- On any job where there are 4 or more Carpenters of Resilient Flooring, 1 must be designated a Foreman.

FOR SYNTHETIC TURF INSTALLATION ONLY:

- The rate shall be 90% of the wage and benefit rate.

The regular workday consists of 8 hours, starting between 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the day shift, shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular wage rate plus 10%.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular wage rate, the second shift shall receive the regular wage rate plus 10% and the third shift shall receive the regular wage rate plus 15%.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular wage rate plus 10% and the third shift shall receive the regular wage rate plus 15%.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:

- Hours in excess of 8 per day or 40 per week, or before or after the regular workday, Monday through Friday, shall be paid at time and one-half the wage rate. Saturday may be used as a make-up day, at straight time, up to 8 hours, for hours lost to reasons beyond the control of the employer, up to a total of 40 hours per week; hours in excess of 8 on Saturday shall then be paid at time and one-half the wage rate. If Saturday is not a make-up day, all hours on Saturday shall be paid at time and one-half the wage rate. All hours on Sundays and holidays shall be paid at double the wage rate.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for hours lost to reasons beyond the control of the employer. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the wage rate.

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^{* 1} apprentice shall be allowed to every 2 journeymen or major fraction therof. No more than 3 apprentices on any one job or project.

County - UNION

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

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County - UNION

Craft: Cement Ma	ason	PREVAILING	WAGE RATI	E							
See "Bricklayer, Stone Mason" Rates											
Craft: Cement Mason APPRENTICE RATE SCHEDULE											
INTERVAL	PERIOD AND RATES										
Ratio of Apprentices to Journeymen - 1:4											
Craft: Cement Mason COMMENTS/NOTES											
See "Bricklayer, Stone Mason" Rates											

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County - UNION

Craft: Commercial Painter PREVAILING WAGE RATE

	05/18/22
Foreman	W47.19
	B28.21 T75.40
General Foreman	W51.48
	B28.21
	T79.69
Journeyman	W42.90
	B28.21
	T71.11

Craft: Commercial Painter APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	40%	45%	55%	65%	70%	75%	80%	80%		
Benefits	8.40	8.40	10.40	10.40	11.40	11.40	14.15	14.15		

Ratio of Apprentices to Journeymen - 1:4

Craft: Commercial Painter COMMENTS/NOTES

* Commercial Painters perform work on all commercial structures such as offices, schools, hotels, shopping malls, restaurants, condominiums, etc.

Spraying, sandblasting, lead abatement work on commercial buildings, work performed above 3 stories or 30 feet in height, or using swing scaffolds requires an additional 10% of the wage rate.

FOREMEN REQUIREMENTS:

- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.
- Four 10-hour days may be worked, at straight time, Monday through Friday.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, General Election Day,

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County - UNION

Veterans' Day, Thanksgiving Day, Christmas Day.

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County - UNION

Craft: Diver PREVAILING WAGE RATE

	05/01/22
Diver	W61.99 B50.47 T112.46
Tender	W50.25 B50.47 T100.72

Craft: Diver COMMENTS/NOTES

NOTE: All dive crews must consist of a Tender, a Diver, and a standby Diver (standby Diver is the same rate as a Diver).

DEPTH & PENETRATION RATES: Divers shall be paid the following depth and penetration rates, in addition to the regular hourly rate, when applicable:

AIR DIVES: MIXED GAS DIVES:

0-59 feet: No additional wage 60-74 feet: + \$0.25 per foot 75-125 feet: + \$1.00 per foot 75-125 feet: + \$2.00 per foot

PENETRATION DIVES:

126-200 feet: + \$1.50 per foot 201-275 feet: + \$1.75 per foot 276-350 feet: + \$2.00 per foot 351-425 feet: + \$2.50 per foot

SHIFT DIFFERENTIAL:

- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis and receive an additional 113% of the wage rate.
- When a three shift schedule is established, all three shifts shall be established on an 8 hour basis, but the second and third shifts shall receive an additional 113% of the wage rate.
- Benefits on shift work shall be paid at the straight-time rate.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day, Christmas Day. Veterans' Day may be switched with the day after Thanksgiving.

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County - UNION

Craft: Dockbuilder PREVAILING WAGE RATE

	05/01/22
Foreman	W57.79
	B50.47
	T108.26
Foreman	W56.70
(Concrete Form Work)	B37.11
	T93.81
Journeyman	W50.25
	B50.47
	T100.72
Journeyman	W49.30
(Concrete Form Work)	B37.11
	T86.41
I .	1

Craft: Dockbuilder APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
Yearly	20.10	25.13	32.66	40.20						
Benefit	33.18	for all	intervals							

Ratio of Apprentices to Journeymen - *

* When there are 4 or fewer Dockbuilders on a job, no more than 1 may be an apprentice. When there are 5 or more Dockbuilders, there may be 1 apprentice for every 5 Dockbuilders.

Craft: Dockbuilder COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR CONCRETE FORM WORK ONLY:

INTERVAL PERIOD AND RATES
Yearly 19.72 24.65 32.05 39.44

Benefits 25.24 for all intervals

CREOSOTE HANDLING:

When handling creosote products on land piledriving, floating marine construction, and construction of wharves, the worker shall receive an additional \$0.25 per hour.

HAZARDOUS WASTE WORK:

- Hazardous waste removal work on a state or federally designated hazardous waste site where Level A, B, or C personal protection is required: an additional 20% of the hourly rate, per hour.
- Hazardous waste removal work in Level D, or where personal protection is not required: an additional \$1.00 per hour.

CERTIFIED WELDER: When required on the job by the project owner, a Certified Welder shall receive an additional \$1.00 per hour.

FOREMAN REQUIREMENTS:

The first Dockbuilder on the job shall be designated a Foreman.

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County - UNION

SHIFT DIFFERENTIAL:

- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis and receive an additional 113% of the wage rate.
- When a three shift schedule is established, all three shifts shall be established on an 8 hour basis, but the second and third shifts shall receive an additional 113% of the wage rate.
- Benefits on shift work shall be paid at the straight-time rate.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day, Christmas Day. Veterans' Day may be switched with the day after Thanksgiving.

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County - UNION

Craft: Drywall Finisher PREVAILING WAGE RATE

	05/01/21
Foreman	W44.43 B27.68 T72.11
General Foreman	W46.45 B27.68 T74.13
Journeyman	W40.39 B27.68 T68.07

Craft: Drywall Finisher APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
6 Months	40%	50%		60%	70%		80%	90%		
Benefits	Intervals	1 to 2 =	10.75	Intervals	3 to 4 =	13.52	Intervals	5 to 6 =	17.13	

Ratio of Apprentices to Journeymen - 1:4

Craft: Drywall Finisher COMMENTS/NOTES

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, and the third shift shall receive 8 hours pay for 7 hours of work.
- Shift work must run for a minimum of 5 consecutive workdays.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

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County - UNION

Craft: Electrician PREVAILING WAGE RATE

	05/31/21
Cable Splicer	W64.51
	B39.68
	T104.19
Foreman (11-20	W68.62
Journeymen)	B42.21
	T110.83
Foreman (1-3	W64.51
Journeymen)	B39.68
	T104.19
Foreman (4-10	W67.45
Journeymen)	B41.49
	T108.94
General Foreman (21-30	W70.38
Journeymen)	B43.29
	T113.67
General Foreman (31-60	W76.24
Journeymen)	B46.90
	T123.14
General Foreman (61+	W77.41
Journeymen)	B47.62
	T125.03
Journeyman	W58.65
	B36.08
	T94.73
Sub-Foreman	W66.86
	B41.13
	T107.99

Craft: Electrician APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	49%	58%	68%	80%		of Jour	neyman	Wage	Rate
Benefit	40%	49%	58%	68%	80%		of Jour	neyman	Benefit	Rate

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician COMMENTS/NOTES

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County - UNION

THESE RATES ALSO APPLY TO THE FOLLOWING:

- -All burglar and fire alarm work.
- -All fiber optic work.
- -Teledata work in new construction.
- -Teledata work involving 16 Voice/Data Lines or more.

The regular workday shall be 8 hours, between 8:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:

- 1 to 3 Journeymen- 1 must be a Foreman (Foreman/1-3 Journeymen rate).
- -4 to 10 Journeymen- 1 must be a Foreman (Foreman/4-10 Journeymen rate).
- -11 to 20 Journeymen- 1 must be Foreman (Foreman/11-20 Journeymen rate) and 1 must be a Sub-Foreman.
- -21 to 30 Journeymen- 1 must be a General Foreman (General Foreman/21-30 Journeymen rate) and 2 must be a Sub-Foreman.
- -31 to 40 Journeymen- 1 must be a General Foreman (General Foreman/31-40 Journeymen rate) and 3 must be a Sub-Foreman.
- -41 to 50 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 4 must be a Sub-Foreman.
- -51 to 60 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 5 must be a Sub-Foreman.
- -61+ Journeymen- 1 must be a General Foreman (General Foreman/61+ Journeymen rate) and 6 must be a Sub-Foreman.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.
- 2nd Shift (4:30 PM to 12:30 AM) shall receive 8 hours pay for 7.5 hours work + an additional 10% of the regular rate, per hour, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM) shall receive 8 hours pay for 7 hours work + an additional 15% of the regular rate, per hour, inclusive of benefits.

OVERTIME:

Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, and all hours on Saturdays, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

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County - UNION

Craft: Electrician - Teledata (15 Voice/Data Lines & Less)

PREVAILING WAGE RATE

	12/10/21	11/28/22	12/04/23	12/02/24
Journeyman Technician	W44.50	W45.86	W47.08	W48.21
(1-2 Workers on Job)	B26.26	B27.05	B27.78	B28.45
	T70.76	T72.91	T74.86	T76.66
Master Tech/General	W57.85	W59.62	W61.20	W62.67
Foreman	B34.14	B35.16	B36.12	B36.99
(26 + Workers on Job)	T91.99	T94.78	T97.32	T99.66
Senior Technician/Lead	W52.96	W54.57	W56.03	W57.37
Foreman	B31.24	B32.19	B33.05	B33.86
(16-25 Workers on Job)	T84.20	T86.76	T89.08	T91.23
Technician A/Foreman	W50.73	W52.28	W53.67	W54.96
(9-15 Workers on Job)	B29.94	B30.84	B31.67	B32.43
	T80.67	T83.12	T85.34	T87.39
Technician B/Working	W48.51	W49.99	W51.32	W52.55
Foreman	B28.62	B29.48	B30.28	B31.01
(4-8 Workers on Job)	T77.13	T79.47	T81.60	T83.56
Technician C/Foreman	W46.28	W47.69	W48.96	W50.14
(3 Workers on Job)	B27.31	B28.14	B28.89	B29.59
	T73.59	T75.83	T77.85	T79.73

Craft: Electrician - Teledata (15 Voice/Data Lines & Less)

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
6 Months	35%	35%	40%	43%	48%	54%	61%	67%	74%	81%
Benefits	7.45	7.45	8.51	9.15	10.22	11.49	12.98	14.26	15.76	17.24

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician - Teledata (15 Voice/Data Lines & Less)

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 11-28-22:

NTERVAL PERIOD AND RATES

6 Months 35% 35% 40% 43% 48% 54% 61% 67% 74% 81% Benefits 7.67 7.67 8.76 9.43 10.52 11.84 13.38 14.69 16.22 17.76

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 12-4-23:

NTERVAL PERIOD AND RATES

6 Months 35% 35% 40% 43% 48% 54% 61% 67% 74% 81% Benefits 7.88 7.88 9.00 9.68 10.80 12.15 13.73 15.09 16.66 18.23

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 12-2-24:

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County - UNION

NTERVAL PERIOD AND RATES
6 Months 35% 35% 40% 43% 48% 54% 61% 67% 74% 81%
Benefits 8.07 8.07 9.22 9.91 11.07 12.45 14.06 15.44 17.06 18.68

NOTES:

- These rates are for service, maintenance, moves, and/or changes affecting
- 15 Voice/Data (teledata) lines or less. These rates may NOT be used for any teledata work in new construction (including additions) or any fiber optic work.
- The number of Teledata workers on the jobsite is the determining factor for which Foreman category applies .

The regular workday shall be 8 hours, between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.
- 2nd Shift (4:30 PM to 12:30 AM) shall receive 8 hours pay for 7.5 hours work + an additional 10% of the regular rate, per hour, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM) shall receive 8 hours pay for 7 hours work + an additional 15% of the regular rate, per hour, inclusive of benefits.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, that are not shift work, and the first 10 hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 10 on Saturday and all hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.

- Four 10-hour days may be worked Monday through Friday, between the hours of 7:00 AM and 5:30 PM. A make-up day may be used for a day not being worked during the four 10-hour day schedule if a holiday occurs during the week or for any other conditions that prevent an employee from working the four 10-hour day schedule.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. Saturday holidays will be observed the preceding Friday.

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County - UNION

Craft:	Electrician - Teledata (16 Instruments & More)	PREVAILING WAGE RATE
	See "Electrician" Rates	
Craft:	Electrician - Teledata (16 Instruments & More)	COMMENTS/NOTES
See	ELECTRICIAN Rates	

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County - UNION

Craft: Electrician- Outside Commercial

PREVAILING WAGE RATE

Cable Splicer W64.81 B39.38 T104.19 Certified Welder W61.87 B37.60 T99.47 Equipment Operator W58.92 B35.80 T94.72 Foreman (1-3 Journeymen workers on job) Foreman (4-10 Journeymen workers on job) General Foreman (11-20 Journeymen workers on job) General Foreman (21-30 Journeymen workers on job) General Foreman (31-60 Journeymen workers on job) General Foreman (61+ Journeymen workers on job) General Foreman (31-60 Journeymen workers on job) General Foreman (61+ Journeymen workers on job) General Foreman (61+ Journeymen workers on job) General Foreman (61+ Journeymen workers on job) Groundman W35.35 B21.49 T56.84 Journeyman Lineman/Technician W58.92 Sub-Foreman W67.17 B40.83 T108.00		
B39.38 T104.19 Certified Welder W61.87 B37.60 T99.47 Equipment Operator W58.92 B35.80 T94.72 Foreman (1-3 W64.81 Journeymen workers on job) T104.19 Foreman (4-10 W67.76 B41.17 T108.93 General Foreman (11-20 W68.94 Journeymen workers on job) T110.83 General Foreman (21-30 W70.71 Journeymen workers on job) T113.68 General Foreman (31-60 W76.60 Journeymen workers on job) T13.14 General Foreman (61+ W77.78 Journeymen workers on job) T125.04 Groundman W35.35 B21.49 T56.84 Journeyman Lineman/Technician W58.92 B35.80 T94.72 Sub-Foreman W67.17 B40.83		05/31/21
Certified Welder W61.87	Cable Splicer	W64.81
Certified Welder W61.87 B37.60 T99.47 Equipment Operator W58.92 B35.80 T94.72 Foreman (1-3 Journeymen workers on job) Foreman (4-10 Journeymen workers on job) General Foreman (11-20 Journeymen workers on job) General Foreman (21-30 Journeymen workers on job) General Foreman (31-60 Journeymen workers on job) General Foreman (61+ Journeymen workers on job) General Foreman (61+ Journeymen workers on job) General Foreman (61+ Journeymen workers on job) Groundman W35.35 B21.49 T56.84 Journeyman Lineman/Technician W67.17 B40.83		B39.38
Equipment Operator Equipment Operator W58.92 B35.80 T94.72 Foreman (1-3 Journeymen workers on job) Foreman (4-10 Journeymen workers on job) General Foreman (11-20 Journeymen workers on job) General Foreman (21-30 Journeymen workers on job) General Foreman (31-60 Journeymen workers on job) General Foreman (61+ Journeymen workers on job) Groundman W35.35 B21.49 T56.84 Journeyman Lineman/Technician W67.17 B40.83		T104.19
Equipment Operator Equipment Operator W58.92 B35.80 T94.72 Foreman (1-3 Journeymen workers on job) Foreman (4-10 Journeymen workers on job) General Foreman (11-20 Journeymen workers on job) General Foreman (21-30 Journeymen workers on job) General Foreman (31-60 Journeymen workers on job) General Foreman (61+ Journeymen workers on job) Groundman W35.35 B21.49 T56.84 Journeyman Lineman/Technician W67.17 B40.83	Certified Welder	W61.87
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B35.80 T94.72		T99.47
B35.80 T94.72	Equipment Operator	W58.92
Foreman (1-3		B35.80
Journeymen workers on job) B39.38 T104.19 Foreman (4-10 Journeymen workers on job) W67.76 B41.17 T108.93 General Foreman (11-20 Journeymen workers on job) W68.94 B41.89 T110.83 General Foreman (21-30 Journeymen workers on job) W70.71 B42.97 T113.68 General Foreman (31-60 Journeymen workers on job) W76.60 B46.54 T123.14 General Foreman (61+ Journeymen workers on job) W77.78 B47.26 T125.04 Groundman W35.35 B21.49 T56.84 Journeyman Lineman/Technician W58.92 B35.80 T94.72 Sub-Foreman W67.17 B40.83		T94.72
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job) T113.68 General Foreman (31-60 Journeymen workers on job) W76.60 B46.54 T123.14 General Foreman (61+ Journeymen workers on job) W77.78 B47.26 T125.04 Groundman W35.35 B21.49 T56.84 Journeyman Lineman/Technician W58.92 B35.80 T94.72 Sub-Foreman W67.17 B40.83	,	B42.97
Journeymen workers on job) B46.54 T123.14 T123.14 General Foreman (61+ Journeymen workers on job) W77.78 B47.26 job) T125.04 Groundman W35.35 B21.49 T56.84 Journeyman Lineman/Technician W58.92 B35.80 T94.72 Sub-Foreman W67.17 B40.83	_	T113.68
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General Foreman (61+ W77.78 Journeymen workers on job) B47.26 Groundman W35.35 B21.49 T56.84 Journeyman W58.92 Lineman/Technician B35.80 T94.72 W67.17 Sub-Foreman W67.17 B40.83	,	B46.54
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Journeymen workers on job) B47.26 T125.04 T125.04 Groundman W35.35 B21.49 T56.84 Journeyman W58.92 Lineman/Technician B35.80 T94.72 Sub-Foreman W67.17 B40.83	General Foreman (61+	W77.78
Groundman W35.35 B21.49 T56.84 Journeyman W58.92 Lineman/Technician B35.80 T94.72 Sub-Foreman W67.17 B40.83	,	B47.26
B21.49 T56.84 Journeyman W58.92 Lineman/Technician B35.80 T94.72 Sub-Foreman W67.17 B40.83	job)	T125.04
T56.84 Journeyman W58.92 Lineman/Technician B35.80 T94.72 Sub-Foreman W67.17 B40.83	Groundman	W35.35
Journeyman W58.92 Lineman/Technician B35.80 T94.72 Sub-Foreman W67.17 B40.83		B21.49
Lineman/Technician B35.80 T94.72 Sub-Foreman W67.17 B40.83		T56.84
Lineman/Technician B35.80 T94.72 Sub-Foreman W67.17 B40.83	Journeyman	W58.92
Sub-Foreman W67.17 B40.83		B35.80
B40.83		T94.72
	Sub-Foreman	W67.17
T108.00		B40.83
		T108.00

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County - UNION

Craft: Electrician- Outside Commercial APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
1000 Hours	60%	65%	70%	75%	80%	85%	90%			
Benefits	60.75% of	Journey	man	wage	+ \$.01					

Craft: Electrician- Outside Commercial COMMENTS/NOTES

* FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

The regular worday shall be 8 hours, between 8:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:

- 1 to 3 Journeymen- 1 must be a Foreman (Foreman/1-3 Journeymen rate).
- -4 to 10 Journeymen- 1 must be a Foreman (Foreman/4-10 Journeymen rate).
- -11 to 20 Journeymen- 1 must be Foreman (Foreman/11-20 Journeymen rate) and 1 must be a Sub-Foreman.
- -21 to 30 Journeymen- 1 must be a General Foreman (General Foreman/21-30 Journeymen rate) and 2 must be a Sub-Foreman.
- -31 to 40 Journeymen- 1 must be a General Foreman (General Foreman/31-40 Journeymen rate) and 3 must be a Sub-Foreman.
- -41 to 50 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 4 must be a Sub-Foreman.
- -51 to 60 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 5 must be a Sub-Foreman.
- -61+ Journeymen- 1 must be a General Foreman (General Foreman/61+ Journeymen rate) and 6 must be a Sub-Foreman.

SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

2nd Shift (4:30 PM to 12:30 AM): 8 hrs. pay for 7.5 hrs. work + an additional 10% of the regular rate, inclusive of benefits.

3rd Shift (12:30 AM to 8:00 AM): 8 hrs. pay for 7 hrs. work + an additional 15% of the regular rate per hour, inclusive benefits.

OVERTIME:

Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, and all hours on Saturdays, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS:

New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day.

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County - UNION

Craft: Electrician-Utility Work (North) PREVAILING W.	<i>N</i> AGE KATE
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Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (North)

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
* 6 Months	60%	65%	70%	75%	80%	85%	90%			
Benefits	69% of	Appren	tice	Wage	Rate	for all	intervals			

Craft: Electrician-Utility Work (North) COMMENTS/NOTES

Electrician-Utility Work (North) rates are located in the "Statewide" rate package.

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^{*} The apprentice wage rate is paid at the percentage of the Journeyman Lineman wage rate located in the "Statewide" rate package.

County - UNION

Craft: Electrician-Utility Work (South) PF	REVAILING WAGE RATE
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Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (South)

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
6 Months	30.60	33.15	35.70	38.25	40.80	43.35	45.90			
Benefits	26.90	28.42	29.93	31.47	32.98	34.52	36.01			

Craft: Electrician-Utility Work (South)

COMMENTS/NOTES

Electrician-Utility Work (South) rates are located in the "Statewide" rate package.

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County - UNION

Craft: Elevator Constructor PREVAILING WAGE RATE

03/17/22	03/17/23
W75.14	W77.49
B43.91	B45.57
T119.05	T123.06
	W75.14 B43.91

Craft: Elevator Constructor APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
Yearly	29.85	36.82	43.52	50.21						
Benefits	32.71	33.51	34.80	36.09						

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Constructor COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 3-17-20: INTERVAL PERIOD AND RATES
Yearly 31.03 38.26 45.21 52.17

Benefits 33.38 34.20 35.55 36.89

APPRENTICE RATE SCHEDULE AS OF 3-17-21:

 INTERVAL
 PERIOD AND RATES

 Yearly
 32.27
 39.76
 46.99
 54.22

 Benefits
 34.05
 34.91
 36.30
 37.70

APPRENTICE RATE SCHEDULE AS OF 3-17-22:

 INTERVAL
 PERIOD AND RATES

 Yearly
 33.56
 41.33
 48.84
 56.36

 Benefits
 34.72
 35.61
 37.05
 38.50

APPRENTICE RATE SCHEDULE AS OF 3-17-23:

 INTERVAL
 PERIOD AND RATES

 Yearly
 34.60
 42.62
 50.37
 58.12

 Benefits
 36.02
 36.94
 38.50
 39.95

The regular workday shall consist of either 7 or 8 hours to be established at the beginning of the project, between 7:00 AM and 4:30 PM.

OVERTIME:

For all hours worked before or after the regular workday, Monday through Friday, and all hours on Saturday and Sunday, shall be paid at double the hourly rate. Holiday pay is one days wages (8 hours) plus double the hourly rate for all hours worked.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus

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County - UNION

Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Saturday holidays shall be observed on the previous Friday and Sunday holidays shall be observed on the following Monday.

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County - UNION

Craft: Elevator Modernization & Service

PREVAILING WAGE RATE

	03/17/22	03/17/23
Journeyman	W59.09 B42.79 T101.88	W60.89 B44.41 T105.30

Craft: Elevator Modernization & Service

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
Yearly	29.85	28.84	34.09	39.33						
Benefits	32.66	33.13	34.36	35.58						

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Modernization & Service

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 3-17-20: INTERVAL PERIOD AND RATES
Yearly 31.03 30.01 35.46 40.92

Benefits 33.33 33.82 35.09 36.36

APPRENTICE RATE SCHEDULE AS OF 3-17-21:

 INTERVAL
 PERIOD AND RATES

 Yearly
 32.27
 31.22
 36.90
 42.58

 Benefits
 34.00
 34.50
 35.83
 37.15

APPRENTICE RATE SCHEDULE AS OF 3-17-22:

 INTERVAL
 PERIOD AND RATES

 Yearly
 33.56
 32.50
 38.41
 44.32

 Benefits
 34.67
 34.20
 35.20
 37.94

APPRENTICE RATE SCHEDULE AS OF 3-17-23:

 INTERVAL
 PERIOD AND RATES

 Yearly
 34.60
 33.49
 39.58
 45.67

 Benefits
 35.97
 36.53
 37.95
 39.38

MODERNIZATION (addition, replacement, refurbishing, relocation, or changes in design or appearance, of elevator equipment in existing buildings):

- The regular workday consists of 8 hours, between 7:00 AM and 4:30 PM.

- Overtime:

Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturday and Sunday shall be paid at time and one-half the hourly rate. Holiday pay is one days wages (8 hours) plus time and one-half the hourly rate for all hours worked.

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County - UNION

SERVICE (repair or replacement of parts for the purpose of maintaining elevator equipment in good operating condition):

- The regular workday consists of 8 hours, between 6:00 AM and 6:00 PM.

Overtime:

Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS (Modernization and Service): New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Saturday holidays shall be observed on the previous Friday and Sunday holidays shall be observed on the following Monday.

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County - UNION

Craft: Glazier PREVAILING WAGE RATE

	05/18/22
* Leadman	W51.48
	B29.13
	T80.61
Foreman	W53.48
	B29.37
	T82.85
General Foreman	W55.48
	B29.61
	T85.09
Journeyman	W49.48
	B28.89
	T78.37

Craft: Glazier APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
6 Months	50%	55%	60%	65%	70%	75%	80%	90%		
Benefits	9.75	9.75	12.36	12.36	15.60	15.60	17.02	17.02		

Ratio of Apprentices to Journeymen - 1:4

Craft: Glazier COMMENTS/NOTES

Hazard/Height Pay: +\$1.00 per hour

* When there are three (3) men working on a jobsite for three (3) days or longer, 1 Journeyman may be designated as a Leadman for the duration of the job, provided he has his OSHA certification.

FOREMAN REQUIREMENTS:

- When there are 4 or more Glaziers on a job, 1 must be designated a Foreman.
- When there are 15 or more Glaziers on a job, 1 must be designated a General Foreman.

The regular workday shall consist of 8 hours, between 7:00 AM and 5:30 PM, Monday to Friday.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, and the third shift shall receive 8 hours pay for 7 hours of work.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular

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County - UNION

rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, General Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

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County - UNION

Craft: Heat & Frost Insulator PREVAILING WAGE RATE

	09/28/21
Foreman	W59.97
	B34.97
	T94.94
General Foreman	W62.31
	B36.08
	T98.39
Journeyman	W57.69
	B34.41
	T92.10
	1

Craft: Heat & Frost Insulator APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
Yearly	27.00	32.04	38.60	45.11							
Benefits	20.24	23.98	26.54	29.01							

Ratio of Apprentices to Journeymen - 1:3

Craft: Heat & Frost Insulator COMMENTS/NOTES

NOTE: These rates apply to the installing of insulation on hot and cold mechanical systems.

The regular workday shall be 8 hours between 7:00 AM and 3:30 PM. In addition, the regular workday may also be 8 hours between 6:00 AM and 2:30 PM.

SHIFT DIFFERENTIAL:

- Shift work must run for a minimum of 5 consecutive workdays.
- Second Shift shall work 7.5 hours and receive 8 hours pay, at the regular rate, plus 25% per hour.
- Third Shift shall work 7 hours and receive 8 hours pay, at the regular rate, plus 30% per hour.

OVERTIME:

The first 2 hours in excess of 8 per day, hours outside of the regular workday Monday through Friday that are not shift work, and the first 10 hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours in excess of 10 per day, and all hours on Sunday and holidays (except Labor Day) shall be paid at double the regular rate, inclusive of benefits. All hours on Labor Day shall be paid at triple the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day and Christmas Day. Sunday holidays observed the following Monday.

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County - UNION

Craft: Heat & Frost Insulator - Asbestos Worker PREVAILING WAGE RATE

)9/28/21
W36.89
B24.97
T61.86

Craft: Heat & Frost Insulator - Asbestos Worker APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
	SEE										
				OK .							

Ratio of Apprentices to Journeymen - 1:3

Craft: Heat & Frost Insulator - Asbestos Worker COMMENTS/NOTES

NOTE: These rates apply only to the removal of insulation materials/asbestos from mechanical systems, including containment erection and demolition, and placing material in appropriate containers.

The regular workday shall be 8 hours between 7:00 AM and 3:30 PM. In addition, the regular workday may also be 8 hours between 6:00 AM and 2:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.
- The second shift shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 25% per hour.
- The third shift shall work 7 hours and receive 8 hours pay at the regular rate, plus 30% per hour.

OVERTIME: The first 2 hours in excess of 8 per day, hours outside of the regular workday Monday through Friday that are not shift work, and the first 10 hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours in excess of 10 per day, and all hours on Sunday and holidays (except Labor Day) shall be paid at double the regular rate, inclusive of benefits. All hours on Labor Day shall be paid at triple the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day and Christmas Day. Sunday holidays observed the following Monday.

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County - UNION

Craft: Industrial Painter- Bridges PREVAILING WAGE RATE

	06/08/22	02/01/23	02/01/24	02/01/25	02/01/26
Foreman	W62.23	W0.00	W0.00	W0.00	W0.00
	B33.77	B0.00	B0.00	B0.00	B0.00
	T96.00	T98.20	T100.20	T102.20	T104.20
General Foreman	W64.73	W0.00	W0.00	W0.00	W0.00
	B33.77	B0.00	B0.00	B0.00	B0.00
	T98.50	T100.70	T102.70	T104.70	T106.70
Journeyman	W57.23	W0.00	W0.00	W0.00	W0.00
	B33.77	B0.00	B0.00	B0.00	B0.00
	T91.00	T93.20	T95.20	T97.20	T99.20

Craft: Industrial Painter- Bridges APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
6 Months	50%	70% 90%									
Benefits	13.05	19.66	26.28								

Ratio of Apprentices to Journeymen - 1:4

Craft: Industrial Painter- Bridges

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as bridges, water tanks, waste water facilitites, refineries, any structural steel work, etc.

These rates apply to: All bridges that span waterways, roadways, railways and canyons. All tunnels, overpasses, viaducts and all appurtenances.

FOREMEN REQUIREMENTS:

- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except Veterans Day, which shall be paid at time and one-half the regular rate.
- During a regular work week schedule, Saturday may be used as a make-up day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be

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paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

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Craft: Industrial Painter- Structural Steel

PREVAILING WAGE RATE

	06/08/22	02/01/23	02/01/24	02/01/25	02/01/26		
Foreman	W50.97	W0.00	W0.00	W0.00	W0.00		
	B31.42	B0.00	B0.00	B0.00	B0.00		
	T82.39	T84.59	T86.59	T88.59	T90.59		
General Foreman	W53.47	W0.00	W0.00	W0.00	W0.00		
	B31.42	B0.00	B0.00	B0.00	B0.00		
	T84.89	T87.09	T89.09	T91.09	T93.09		
Journeyman	W45.97	W0.00	W0.00	W0.00	W0.00		
	B31.42	B0.00	B0.00	B0.00	B0.00		
	T77.39	T79.59	T81.59	T83.59	T85.59		

Craft: Industrial Painter- Structural Steel

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
	SEE	EE INDUST RIAL PAINTER BRIDGES									

Ratio of Apprentices to Journeymen - 1:4

Craft: Industrial Painter- Structural Steel

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as bridges, water tanks, waste water facilitites, refineries, any structural steel work, etc.

These rates apply to: All work in power plants (any aspect). On steeples, on dams, on hangers, transformers, substations, on all open steel, in refineries, tank farms, water/sewerage treatment facilities and on pipelines.

FOREMEN REQUIREMENTS:

- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except for Veterans Day, which shall be paid at time and one-half the regular rate.
- During the regular work week schedule, Saturday may be used to make-up a day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

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RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

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Craft: Industrial Painter- Water Tanks

PREVAILING WAGE RATE

	06/08/22	02/01/23	02/01/24	02/01/25	02/01/26			
Foreman	W52.02	W0.00	W0.00	W0.00	W0.00			
	B31.07	B0.00	B0.00	B0.00	B0.00			
	T83.09	T85.29	T87.29	T89.29	T91.29			
General Foreman	W54.52	W0.00	W0.00	W0.00	W0.00			
	B31.07	B0.00	B0.00	B0.00	B0.00			
	T85.59	T87.79	T89.79	T91.79	T93.79			
Journeyman	W47.02	W0.00	W0.00	W0.00	W0.00			
	B31.07	B0.00	B0.00	B0.00	B0.00			
	T78.09	T80.29	T82.29	T84.29	T86.29			

Craft: Industrial Painter- Water Tanks

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
6 Months	50%	90% 70% 90%									
Benefits	13.05	19.66	26.28								

Ratio of Apprentices to Journeymen - 1:4

Craft: Industrial Painter- Water Tanks

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as bridges, water tanks, waste water facilitites, refineries, any structural steel work, etc.

These rates apply to: All new and repaint water tanks (interior and exterior).

FOREMEN REQUIREMENTS:

- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except Veterans Day, which shall be paid at time and one-half the regular rate.
- During a regular work week schedule, Saturday may be used to make-up a day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

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RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

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Craft: Ironworker PREVAILING WAGE RATE

	07/08/21
Rod /Fence Foreman	W47.14
	B48.17
	T95.31
Rod/Fence Journeyman	W44.14
	B48.17
	T92.31
Structural Foreman	W49.44
	B48.17
	T97.61
Structural Journeyman	W46.44
	B48.17
	T94.61
	1

Craft: Ironworker APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
6 Months	50%	90% Yearly 70% 80% 90%								

Ratio of Apprentices to Journeymen - 1:4

Craft: Ironworker COMMENTS/NOTES

HAZARDOUS WASTE WORK: On hazardous waste removal work on a state or federally designated hazardous waste site where the Ironworker is required to wear Level A,B, or C personal protection: +\$3.00 per hour

The regular workday consists of 8 hours between 6:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:

When there are 2 or more Ironworkers on a job, 1 shall be designated a Foreman.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule is established, the first, or day shift, shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 15%.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 15%, and the third shift shall receive the regular rate plus 20%.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis.
- When an irregular shift is established for the Ironworker (Structural) classification, the rate shall be paid at time and one-half the regular rate, inclusive of benefits. When an irregular shift is established for the Rod/Fence classification, the shift shall be established on an 8 hour basis and receive the regular rate, plus 20%.

OVERTIME:

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- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the hourly rate, inclusive of benefits. Saturday may be used as a make-up day for a day lost to inclement weather. If Saturday is not a make-up day, all hours on Saturday shall be paid at time and one-half the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day.

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Craft: Laborer - Asbestos & Hazardous Waste Removal

PREVAILING WAGE RATE

	10/20/20
Journeyman (Handler)	W32.98 B23.66 T56.64

Craft: Laborer - Asbestos & Hazardous Waste Removal

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES										
Yearly	19.79	23.09	26.38	29.68							
Benefits	21.51	for	all	intervals							

Ratio of Apprentices to Journeymen - *

Craft: Laborer - Asbestos & Hazardous Waste Removal

COMMENTS/NOTES

NOTE: These rates apply to work in connection with Asbestos, Radiation, Hazardous Waste, Lead, Chemical, Biological, Mold Remediation and Abatement.

The regular workday shall be 8 hours.

OVERTIME:

- Hours in excess of 8 per day, Monday through Saturday, and all hours on Sunday and holidays shall be paid at time and one-half the regular rate.
- Benefits on ALL overtime hours shall be paid at straight time.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Easter, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. (Holidays start at 12:00 am).

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^{*} Ratio of apprentices to journeymen shall not be more than one apprentice for the first journeyman and no more than (1) apprentice for each additional three (3) journeymen.

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Craft: Laborer - Building PREVAILING WAGE RATE

	05/19/22
Class A Journeyman	W36.50
	B30.62
	T67.12
Class B Journeyman	W35.75
	B30.62
	T66.37
Class C Journeyman	W30.39
	B30.62
	T61.01
Foreman	W41.06
	B30.62
	T71.68
General Foreman	W45.63
	B30.62
	T76.25

Craft: Laborer - Building APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES											
6 Months	60%	70%	80%	90%									
Benefit	27.37	27.37	27.37	27.37									

Ratio of Apprentices to Journeymen - *

Craft: Laborer - Building COMMENTS/NOTES

CLASS A: Specialist laborer including mason tender or concrete pour crew; scaffold builder (scaffolds up to 14 feet in height); operator of forklifts, Bobcats (or equivalent machinery), jack hammers, tampers, motorized tampers and compactors, vibrators, street cleaning machines, hydro demolition equipment, riding motor buggies, conveyors, burners; and nozzlemen on gunite work.

CLASS B: Basic laborer - includes all laborer work not listed in Class A or Class C.

CLASS C: Janitorial-type light clean-up work associated with the TURNOVER of a project, or part of a project, to the owner. All other clean-up work is Class B.

The regular workday shall be 8 hours between 6:00 AM and 6:00 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.
- When a 2-shift schedule is worked, including a day shift, both shifts shall be established on the basis of 8 hours pay for 8 hours worked. The second shift shall receive the regular rate plus an additional 10%.
- When a 3-shift schedule is worked, the day shift shall be established on the basis of 8 hours pay for 8 hours worked, the second shift shall be established on the basis of 8 hours pay for 7.5 hours worked, and the third shift shall be established

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^{*} Ratio of apprentices to journeymen shall not be more than one apprentice for the first journeyman and no more than (1) apprentice for each additional three (3) journeymen.

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on the basis of 8 hours pay for 7 hours worked. The day shift shall receive the regular rate, the second shift shall receive the regular rate plus an additional 10%, and the third shift shall receive the regular rate plus an additional 15%.

- When a second or third shift is worked with no day shift, the second or third shift shall be established on the basis of 8 hours pay for 8 hours worked. The second shift shall receive the regular rate plus an additional 10%, and the third shift shall receive the regular rate plus an additional 15%.

OVERTIME:

- Hours in excess of 8 per day, or outside the regular workday that are not shift work, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. Saturday may be used as a make-up day (paid at straight time) for a day lost to inclement weather, or for a holiday that is observed during the work week, Monday through Friday. All hours on Sundays and holidays shall be paid at double the regular rate.
- Four 10-hour days may be worked Monday to Thursday, at straight time, with Friday used a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the regular rate.
- Benefits on ALL overtime hours shall be paid at time and one-half.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

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Rates are located in the "Statewide" rate package

Craft: Laborer - Heavy & General

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES										
1000 Hours	60%	70%	80%	90%							
Benefit	23.38	for	all	intervals							

Ratio of Apprentices to Journeymen - *

Craft: Laborer - Heavy & General

COMMENTS/NOTES

Heavy & General Laborer rates are located in the "Statewide" rate package.

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^{*} No more than 1 apprentice for the first journeyman and no more than 1 apprentice for each additional 3 journeymen.

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Craft: Laborer-Residential and Modular Construction

PREVAILING WAGE RATE

	04/01/22	04/01/23
* Skilled Tradesman (only	W27.55	W27.90
applies to Modular	B5.45	B5.45
Construction)	T33.00	T33.35
Foreman (person directing	W31.55	W31.90
crew, regardless of his	B5.45	B5.45
skill classification)	T37.00	T37.35
Laborer (for single family	W17.50	W17.85
and stand-alone duplex	B2.95	B2.95
owned by single owner)	T20.45	T20.80
Residential and Modular	W23.55	W23.90
Construction Laborer	B5.45	B5.45
	T29.00	T29.35

Craft: Laborer-Residential and Modular Construction

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
As shown	800 hours	600 hours	600 hours									
wage & benefits	70%	80%	90%									

Ratio of Apprentices to Journeymen-

One (1) apprentice shall be allowed for the first journeyman on site and no more than one (1) additional apprentice for each additional three (3) journeymen on site.

Craft: Laborer-Residential and Modular Construction

COMMENTS/NOTES

* SKILLED TRADESMAN-

any worker doing work not typically done by a Building Laborer. Some examples are installing interior doors, sheet rock, hooking up appliances, installing light fixtures, installing railing systems, etc. Please note where local building codes require that certain work be performed under the supervision of a licensed tradesman (i.e. Plumber, Electrician, etc.) Laborers shall work under such supervision.

RESIDENTIAL CONSTRUCTION- All residential construction (not commercial), single-family, stand-alone duplex houses, townhouses and multi-family buildings of not more than four (4) floors. Each housing unit must be fully and independently functional; each housing unit must have its own kitchen and bathroom. The definition includes all incidental items such as site work, parking areas, utilities, streets and sidewalks. Please note the construction must be Residential in nature. A First Floor at or below grade may contain commercial space not to exceed 50% square footage of the floor; at least 50% of the First Floor must contain living accommodations or related nonresidential uses (e.g. laundry space, recreation/hobby rooms, and/or corridor space). Basement stories below grade used for storage, parking, mechanical systems/equipment, etc., are considered basement stories which are not used in determining the building's height even if used for storage purposes. In addition, barracks and dormitories are not considered residential projects.

MODULAR RESIDENTIAL CONSTRUCTION- all aspects of modular residential construction (not commercial) at the site of installation of structures of no more than four (4) stories, including all excavation and site preparation, footings and

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foundation systems whether poured on-site or prefabricated, all underground waterproofing, underground utilities, concrete slabs, sidewalks, driveways, paving, hardscape and landscaping. Please note the construction must be Residential as defined above. All work performed by the Set Crew (the crew of workers who set the modular boxes on the foundation), including the rigging, setting, attaching and assembly of all modules and structural members, preparation of the foundation to accept modules, such as sill plates, connection of all in-module and under-module connections including, but not limited to, plumbing, electrical, HVAC, fire suppression, CATS, telephone, television/internet, and fiber optic, the building or installation of any porches or decks regardless of material or method of construction, the on-site installation of, or completion of any roof system, doors, windows and fenestrations, including flashing, gutter and soffit systems, waterproofing, insulation and interior and exterior trim work, and painting. Please note that modular construction does not include on-site stick built construction, tip up construction or panel built construction.

The regular workday shall be 8 hours between 6:00 AM and 6:00 PM.

OVERTIME:

Hours worked in excess of 8 per day/40 per week, Monday through Saturday, and all hours worked on Sunday and holidays shall be paid at time and one-half the hourly rate.

RECOGNIZED HOILDAYS:

New Year's Day, Martin Luther King Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day.

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Craft: Millwright PREVAILING WAGE RATE

	05/01/21
Foreman	W59.87 B35.32 T95.19
Journeyman	W52.06 B30.79 T82.85

Craft: Millwright APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES								
6 Months	40%	55%	65%	80%	90%				
Benefits	58% of	Appren	tice	Wage	Rate	for all	intervals	+ \$.60	

Ratio of Apprentices to Journeymen - 1:3

Craft: Millwright COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- When there are 2 or more Millwrights on a job, 1 shall be designated as a Foreman.

The regular workday shall consist of 8 hours, starting between 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 15%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 15% and the third shift shall receive the regular rate plus 20%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 15% and the third shift shall receive the regular rate plus 20%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:

- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturdays shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

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Craft: Operating Engineer	PREVAILING WAGE RATE

Rates are located in the "Statewide" rate package

Craft: Operating Engineer APPRENTICE RATE SCHEDULE

INTERVAL		PERIO	DD AND RAT	ES			
Yearly	60%	70%	80%	90%			

Ratio of Apprentices to Journeymen - *

Craft: Operating Engineer COMMENTS/NOTES

Operating Engineer rates are located in the "Statewide" rate package.

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^{* 1} apprentice for each piece of heavy equipment. At least 10 pieces of heavy equipment or a minimum of 5 Operating Engineers must be on site.

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Craft:	Operating Engineer - Field Engineer	PREVAILING WAGE RATE
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Rates are located in the "Statewide" rate package

Craft: Operating Engineer - Field Engineer

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES							
Yearly	70%	75%	of Rod/	Chainman	Wage				
Yearly			80%	90%	Transit/	Instrument	man	Wage	

Ratio of Apprentices to Journeymen - *

Craft: Operating Engineer - Field Engineer

COMMENTS/NOTES

Operating Engineer - Field Engineer rates are located in the "Statewide" rate package.

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^{*} No more than 1 Field Engineer Apprentice per Survey Crew.

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Craft: Painter - Line Striping PREVAILING WAGE RATE

	02/03/22
Apprentice (1st year)	W28.35
	B13.80
	T42.15
Apprentice (2nd year)	W32.35
	B24.75
	T57.10
Foreman (Charge Person)	W41.00
	B25.53
	T66.53
Journeyman 1 (at least 1	W36.23
year of working exp. as a	B25.53
journeyman)	T61.76
Journeyman 2 (at least 2	W40.00
years of working exp. as a	B25.53
journeyman)	T65.53

Craft: Painter - Line Striping COMMENTS/NOTES

OVERTIME:

Hours in excess of 8 per day, Monday through Saturday, and all hours on Sundays and holidays shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day and Christmas Day. Veterans Day may be substituted for the day after Thanksgiving.

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Craft: Paperhanger PREVAILING WAGE RATE

	05/18/22
Foreman	W51.90 B28.21 T80.11
Journeyman	W47.19 B28.21 T75.40

Craft: Paperhanger APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
	SEE	COMME	CIAL	PAINTER						
		K								

Craft: Paperhanger COMMENTS/NOTES

FOREMEN REQUIREMENTS:

- When there are 4 or more Paperhangers on a job, 1 shall be designated a Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.
- Four 10-hour days may be worked, at straight time, Monday through Friday.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, General Election Day, Veterans Day, Thanksgiving Day, Christmas Day

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Craft: Pipefitter PREVAILING WAGE RATE

	05/01/22
Foreman	W57.85 B48.11 T105.96
Journeyman	W53.60 B44.58 T98.18

Craft: Pipefitter APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES							
Yearly	35%	45%	55%	65%	75%				
Benefit	25.22	28.06	30.90	33.75	36.59				

Ratio of Apprentices to Journeymen - 1:5

Craft: Pipefitter COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- When there are 2 or more Journeyman Pipefitters on a job, 1 shall be designated a Foreman.
- There shall be a Foreman for every 8 Journeyman Pipefitters on a job.

The regular workday shall be 8 hours between 7:00 AM and 3:30 PM.

SHIFT DIFFERENTIAL:

- 2nd Shift (3:30 PM-11:30 PM) shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 10% per hour on the total rate.
- 3rd Shift (11:30 PM-7:00 AM) shall work 7 hours and receive 8 hours pay at the regular rate, plus 15% per hour on the total rate.

OVERTIME:

- All hours worked in excess of 8 per day, Monday through Friday, and all hours worked on Saturday, shall be paid at time and one-half, inclusive of benefits. All hours on Sunday and holidays shall be paid at double time, inclusive of benefits.
- By mutual agreement, employees may work four 10-hour days, Monday to Thursday, at straight time rate. Friday may be used as a make-up day for a day lost to inclement weather, and may be paid at straight time. If Friday is not a make-up day, the first 8 hours shall be paid at time and one-half, inclusive of benefits; hours in excess of 8 shall be paid at double time, inclusive of benefits.

SHIFT DIFFERENTIAL (Maintenance Work Only):

- 2nd Shift (3:30 PM-11:30 PM) shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 10% per hour on the total rate.
- 3rd Shift (11:30 PM-7:00 AM) shall work 7 hours and receive 8 hours pay at the regular rate, plus 15% per hour on the total rate.

OVERTIME (Maintenance Work Only):

- All hours in excess of 8 per day, Monday through Saturday, shall be paid at time and one-half, inclusive of benefits. All

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hours on Sundays and holidays shall be paid at double time, inclusive of benefits.

NOTE: Maintenance work is work to repair, restore, or improve the efficiency of existing facilities. This does NOT apply to ANY new construction.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays are observed the following Monday.

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Craft:	Plasterer	PREVAILING WAGE RATE

See Bricklayer, Stone Mason Rates

Craft: Plasterer COMMENTS/NOTES

See BRICKLAYER, STONE MASON Rates

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County - UNION

Craft: Plumber PREVAILING WAGE RATE

	05/05/21
Foreman	W61.77
	B38.82
	T100.59
General Foreman	W65.77
	B38.82
	T104.59
Journeyman	W57.19
	B38.82
	T96.01

Craft: Plumber APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
Yearly	30%	30% 45% 55% 65% 75%									
Benefits	16.17	22.06	23.99	25.95	27.87						

Ratio of Apprentices to Journeymen - *

Craft: Plumber COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- On any job having 2 or more Plumbers, 1 must be designated a Foreman.
- On any job having 9 or more Plumbers, 2 shall be designated as Foremen.

The regular workday shall consist of 8 hours between 7:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must continue for a minimum of 5 consecutive workdays.
- When two shifts are worked, the second shift shall work 7.5 hours and receive 8 hours pay, at a rate equal to the hourly rate plus 10%, inclusive of benefits.
- When a third shift is worked, the third shift shall work 7 hours and receive 8 hours pay, at a rate equal to the hourly rate plus 15%, inclusive of benefits.

OVERTIME:

- All hours in excess of 8 per day, or before of after the regular workday that are not shift work, Monday through Friday, and all hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays, shall be paid at double the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

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^{*} Employers may employ 1 apprentice on any job where 1 or 2 journeymen are employed. Thereafter, 1 apprentice may be employed for every 4 journeymen.

County - UNION

Craft: Roofer PREVAILING WAGE RATE

	06/01/22
Foreman	W45.52
	B29.81
	T75.33
Journeyman	W42.52
	B29.81
	T72.33

Craft: Roofer APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
6 Months	17.00	7.00 21.26 25.51 27.64 29.76 31.89 34.01 38.27									
Benefits	2.16	2.16	26.56	26.56	26.56	26.56	26.56	26.56			

Ratio of Apprentices to Journeymen - *

- * A) For roofing jobs that are of the 1 or single ply nature: 1:2 or fraction thereof
- B) For roofing jobs on new built up roofs: 1:3 or fraction thereof
- C) For roofing jobs that are of a tear-off nature: 1:2 or fraction thereof
- D) For roofing jobs (not requiring complete removal of existing systems, installation done over existing roof): 1:3 or

fraction thereof

Craft: Roofer COMMENTS/NOTES

Pitch: +.50 per hour

Mop Man: +.30 per hour

The regular workday consists of 8 hours between 8:00 AM and 4:30 PM.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays, Sundays, and holidays shall be paid at time and one-half the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

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County - UNION

Craft: Sheet Metal Sign Installation PREVAILING WAGE RATE

	04/01/22
Foreman	W41.29 B38.97 T80.26
Journeyman	W39.29 B38.97 T78.26

Craft: Sheet Metal Sign Installation APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
1000 hours	35%	5% 40% 45% 50% 55% 60% 65% 70% 75% 80%								80%	
Benefits	13.19	15.02	16.88	18.74	21.06	22.94	24.83	26.73	28.62	30.50	

Ratio of Apprentices to Journeymen - 1:3

Craft: Sheet Metal Sign Installation COMMENTS/NOTES

FOREMAN REQUIREMENT:

When there are 6 or more Sheet Metal Sign Installers on a job, 1 shall be designated a Foreman.

The regular workday consists of 8 hours, between 7:00 AM and 3:30 PM.

OVERTIME:

Hours before or after the regular workday, Monday though Friday, and all hours worked on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

Four(4) 10 hour days may be worked, Monday through Friday, at straight time, for projects lasting at least one week in duration. The fifth day may be used as a make-up day at straight time for a day lost due to inclement weather. However, if the fifth day is not a make-up day, all hours worked will be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Saturday holidays observed the preceding Friday, Sunday holidays observed the following Monday.

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County - UNION

Craft: Sheet Metal Worker PREVAILING WAGE RATE

	06/06/22
Foreman	W56.98
	B48.69
	T105.67
General Foreman	W57.98
	B48.69
	T106.67
Journeyman	W53.48
	B48.69
	T102.17

Craft: Sheet Metal Worker APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
Yearly	35%	5% 45% 55% 65% of Journey man Wage Rate									
Benefit	35%	45%	55%	65%	of	Journey	man	Benefit	Rate		

Ratio of Apprentices to Journeymen - 1:4

Craft: Sheet Metal Worker COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- When there are 2 or more Sheet Metal Workers on a project, 1 must be designated a Foreman.
- When there are 17 or more Sheet Metal Workers on a project, 1 must be designated a General Foreman.
- When there is only 1 Sheet Metal Worker (1 Journeyman) on a project, he/she shall receive \$1.00 more than the regular Journeyman's rate.

The regular workday is 8 hours between 7:00 AM and 4:30 PM.

SHIFT DIFFERENTIAL:

- 2nd Shift (3:30 PM 12:00 AM): +17% of regular hourly rate
- Shift work must run for a minimum of 5 consecutive workdays.

OVERTIME:

- Hours in excess of 8 per day, or before or after the regular workday, that are not shift work, and the first 10 hours on Saturdays shall be paid at time and one-half of the regular rate, inclusive of benefits. Hours in excess of 10 per day on Saturday, and all hours on Sundays and holidays shall be at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Friday, at straight time, with hours in excess of 10 per day, and hours in excess of 40 per week paid at the overtime rates listed above.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

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County - UNION

Craft: Sprinkler Fitter PREVAILING WAGE RATE

	01/01/22
Foreman	W67.63
	B34.19
	T101.82
General Foreman	W70.98
	B34.19
	T105.17
Journeyman	W63.38
	B34.19
	T97.57

Craft: Sprinkler Fitter APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1000 Hours		80% 85%								85%
Benefits							Intervals	9 to 10	Jourymn	Ben.

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES REGISTERED AS OF 7-1-13:

INTERVAL PERIOD AND RATES

1000 hours 25% 30% 40% 45% 55% 60% 70% 75% 85% 90%

Benefits 12.65 12.65 26.65 26.65 26.65 Intervals 7 to 10 receive Journeyman Ben.

Craft: Sprinkler Fitter COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 1-1-22:

Apprentice rate schedule for those apprentices registered prior to 7-1-13-

Interval Period and Rates

1000 Hours 80% 85% Benefits Intervals 9 and 10 Journeyman Ben.

Apprentice rate schedule for those apprentices registered as of 7-1-13:

Interval Period and Rates

The regular workday consists of 8 consecutive hours between 6:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:

- The first Sprinkler Fitter on the job must be designated a Foreman.
- On any job having 12 or more Sprinkler Fitters, one must be designated a General Foreman.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 2 consecutive workdays.

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County - UNION

- 2nd and 3rd shift shall receive an additional 15% of the regular rate, per hour.
- Any "off hours" shift starting at 8:00 PM or later shall receive an additional 25% of the regular rate, per hour.

OVERTIME:

The first 2 hours in excess of 8 per day, after the regular workday that are not shift work, Monday through Friday, shall be paid at time and one-half the regular rate. Hours worked in excess of 10 per day, Monday through Friday, and all hours on Saturday, Sunday and holidays, shall be paid double the regular rate.

Four 10 hour days may be worked, Monday through Friday, at straight-time.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day.

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County - UNION

Craft: Tile Finisher-Marble PREVAILING WAGE RATE

	01/03/22
Finisher	W48.97 B35.91 T84.88

Craft: Tile Finisher-Marble APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
750 Hours	40%	45% 50% 55% 60% 65% 70% 75% 85% 95%								95%	

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Finisher-Marble COMMENTS/NOTES

OVERTIME:

Hours in excess of 7 per day, Monday through Friday, and the first 7 hours on Saturdays shall be paid at time and one half the regular rate, inclusive of benefits. Hours in excess of 7 on Saturdays and all hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.

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County - UNION

Craft: Tile Setter - Ceramic PREVAILING WAGE RATE

	06/06/22
Finisher	W47.60 B32.11 T79.71
Setter	W62.01 B35.28 T97.29

Craft: Tile Setter - Ceramic APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
750 Hours	35%	40%	50%	55%	60%	65%	70%	75%	80%	90%

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Setter - Ceramic COMMENTS/NOTES

OVERTIME:

Hours in excess of 7 per day, and the first 10 hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Saturdays after 10 hours shall be paid double the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day.

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County - UNION

Craft: Tile Setter - Marble PREVAILING WAGE RATE

	01/03/22
Tile Setter	W62.17
	B38.42
	T100.59

Craft: Tile Setter - Marble APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
750 Hours	40%	45%	50%	55%	60%	65%	70%	75%	85%	95%

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Setter - Marble COMMENTS/NOTES

OVERTIME:

Hours in excess of 7 per day, Monday through Friday, and the first 7 hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 7 on Saturdays, and all hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.

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County - UNION

Craft: Tile Setter - Mosaic & Terrazzo PREVAILING WAGE RATE

01/01/22
W57.60 B38.18 T95.78
W59.21 B38.19 T97.40
W49.46 B30.91 T80.37

Craft: Tile Setter - Mosaic & Terrazzo APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
750 Hours	50%	55%	60%	65%	70%	75%	85%	95%	100%	

Ratio of Apprentices to Journeymen - 1:5

Craft: Tile Setter - Mosaic & Terrazzo COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 7-1-17:

INTERVAL PERIOD AND RATES

1500 Hours 35% 45% 60% 70% 80% 90% 100%

The regular workday consists of 7 hours, between 8:00 AM and 3:30 PM.

OVERTIME:

- Hours in excess of 7 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Monday after Easter, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.

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County - UNION

Craft: Truck Driver PREVAILING WAGE RATE

	05/16/22	05/01/23	05/01/24
Bucket, Utility,	W41.71	W43.56	W45.41
Pick-up, Fuel	B40.28	B41.78	B43.28
Delivery trucks	T81.99	T85.34	T88.69
Dump truck, Asphalt	W41.71	W43.56	W45.41
Distributor, Tack	B40.28	B41.78	B43.28
Spreader	T81.99	T85.34	T88.69
Euclid-type vehicles	W41.81	W43.66	W45.51
(large, off-road	B40.28	B41.78	B43.28
equipment)	T82.09	T85.44	T88.79
Helper on Asphalt	W41.71	W43.56	W45.41
Distributor truck	B40.28	B41.78	B43.28
	T81.99	T85.34	T88.69
Low Boy Driver	W43.31	W45.16	W47.01
	B40.28	B41.78	B43.28
	T83.59	T86.94	T90.29
Slurry Seal,	W41.71	W43.56	W45.41
Seeding/Fertilizing/	B40.28	B41.78	B43.28
Mulching truck	T81.99	T85.34	T88.69
Straight 3-axle truck	W41.71	W43.56	W45.41
	B40.28	B41.78	B43.28
	T81.99	T85.34	T88.69
Tractor Trailer	W41.81	W43.66	W45.51
(all types)	B40.28	B41.78	B43.28
	T82.09	T85.44	T88.79
Vacuum or Vac-All	W41.71	W43.56	W45.41
truck (entire unit)	B40.28	B41.78	B43.28
	T81.99	T85.34	T88.69
Winch Trailer	W41.91	W43.76	W45.61
	B40.28	B41.78	B43.28
	T82.19	T85.54	T88.89

Craft: Truck Driver COMMENTS/NOTES

BLENDED RATE:

When a truck driver is performing work on the site and also serving as a material delivery driver, the driver shall be paid a "blended rate" which shall be 80% of the above-listed wage rates, plus the full benefit rate. This rate shall be used when the driver "round robins" for a minimum of 6 hours during the work day.

HAZARDOUS WASTE REMOVAL:

- On hazardous waste removal work on a State designated hazardous waste site where the driver is in direct contact with hazardous materials and when personal protective equipment is required for respiratory, skin, and eye protection, the driver shall receive an additional \$3.00 per hour (with or without protective gear).
- A hazardous waste related certified worker at a designated hazardous waste site who is not working in a zone requiring level A, B or C personal protection shall receive an additional \$1.00 per hour.

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County - UNION

TRUCK FOREMAN: \$.75 cents per hour above regular rate. Overtime shall be increased accordingly.

The regular workday shall be 8 hours, starting between 6:00 AM and 8:00 AM.

SHIFT DIFFERENTIAL:

- Shifts starting at 4:00 PM (2nd Shift): + \$3.00 per hour.
- Shifts starting at 12:00 AM (midnight/3rd Shift): time and one-half the hourly rate.
- Shifts starting at a time other than from 6:00 AM to 8:00 AM, when such hours are mandated by the project owner: + \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, that are not shift work, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Employees may work four 10-hour days at straight time, Monday through Thursday, with Friday used as a make-up day for a lost day. If Friday is not a make-up day, then all hours on Friday shall be paid at time and one-half the hourly rate.
- -Benefits on overtime shall be \$40.03.
- As of 5-1-23, benefits on overtime shall be \$41.53.
- As of 5-1-24, benefits on overtime shall be \$43.03.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day (Decoration Day), July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. The day after Thanksgiving may be substituted for Veteran's Day.

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County - UNION

Craft: Truck Driver-Material Delivery Driver

PREVAILING WAGE RATE

	05/10/22	05/01/23	05/01/24
Driver	W34.02	W35.87	W37.62
	B40.28	B41.78	B43.28
	T74.30	T77.65	T80.90

Craft: Truck Driver-Material Delivery Driver COMMENTS/NOTES

BLENDED RATE:

When a truck driver is performing work on the site and also serving as a material delivery driver, the driver shall be paid a "blended rate". See the "Truck Driver" craft for the blended rates.

Truck Foreman/Shop Steward: +\$0.25 per hour

SHIFT DIFFERENTIALS:

- 2nd Shift shall receive an additional \$0.50 per hour
- 3rd Shift shall receive time and one-half the hourly rate.

OVERTIME:

- Hours in excess of 8 per day, or before or after the regular workday that are not shift work, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day (Decoration Day), July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. The day after Thanksgiving may be substituted for Veterans Day.

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County - UNION

Craft:	Welder	PREVAILING WAGE RATE				
	Welder					
Craft:	Welder	COMMENTS/NOTES				
Welder	Welders rate is the same as the craft to which the welding is incidental.					

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STATEWIDE RATES

TERRITORY ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS Rates Expiration Date:

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

Hydro-Blaster

Effective Dat	es:								
	07/01/2021		07/01/2022						
Rate 54.43	Fringe 35.60	Total 90.03	Total 92.28						
CLASSIFIC		70.03)2. <u>2</u> 0						
A-Frame									
Backhoe (co	mbination)								
	Boom Attachment on loaders (Except pipehook)								
		(Except pipeliot	ж)						
Boring & Di	rilling Machine								
Brush Chop	per, Brush Shred	der, Tree Shredd	er, Tree Shearer						
Bulldozer, fi	nish grade								
Cableway									
Carryall									
Concrete Pu	mp								
Concrete Pu	mping System (F	Pumpcrete & sim	ilar types)						
Conveyor, 1	25 feet or longer								
Drill Doctor	(Duties include	dust collector an	d maintenance)						
Front End L	oader (2 cu. yds.	but less than 5 c	u. yds.)						
Grader, finis	h								
Groove Cutt	ing Machine (rid	le-on type)							
Heater Plane	er								
hydraulic, s snorkle roo	Hoist: Outside Material Tower Hoist (all types including steam, gas, diesel, electric, air hydraulic, single and double drum, concrete, brick shaft caisson, snorkle roof, and other similar types, Except Chicago-boom type) * receives an additional \$1.00 per hour on 100 ft. up to 199 ft. total height, and an additional \$2.00 per hour on 200 ft. and over total height.								
Hydraulic C	rane (10 tons & ı	under)							
Hydraulic D	redge								
Hydro-Axe									

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date:

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
54.43	35.60	90.03	92.28
LASSIFIC	CATIONS:		

CL

Jack (screw, air hydraulic, power-operated unit, or console type, Except hand jack or pile load test type)

Log Skidder

Pan

Paver, concrete

Plate & Frame Filter Press

Pumpcrete (unit type)

Pumpcrete, Squeezecrete, or Concrete Pumping machine (regardless of size)

Scraper

Side Boom

Straddle Carrier (Ross and similar types)

Whiphammer

Winch Truck (hoisting)

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

Concrete Vibrator

Effective Dates:							

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

Rates Expiration Date:

OPERATING ENGINEERS Effective Dates:

	07/01/202	1	07/01/2022
Rate	Fringe	Total	Total
52.52	35.60	88.12	90.37
I ASSIEIC	· ATIONS ·		

Rate 52.52	Fringe 35.60	Total 88.12	Total 90.37
CLASSIFIC	ATIONS:		
Conveyors -	under 125 fee	t	
Crane Signa	lman		
Crushing M	achine		
Directional 1	Boring Machir	ne	
Ditching Ma	achine - Small	(Ditchwitch, Vermee	er or similar types)
Dope Pot - N	Mechanical (w	ith or without pump)	
Dumpster			
Elevator			
Fireman			
Fork Lift (E	conomobile, L	ull & similar types)	
Front End L	oader (1 cu. yo	l. and over but less tl	nan 2 cu. yds.)
Generator (2	2 or 3 battery)		
Giraffe Grin	der		
Goldhofer/H	Iydraulic Jacki	ng Trailer	
Grader & M	otor Patrols		
Grout Pump			
Gunnite Ma	chine (Excludi	ng nozzle)	

Hammer - Vibratory (in conjunction with generator)

Heavy Equipment Robotics - Operator/Technician

Hoist (roof, tugger, aerial platform hoist, house car)

Hopper

Hopper Doors (power operated)

Ladder (motorized)

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

Tractor

Transfer Machines

Effective Dat	tes:		
	07/01/2021		07/01/2022
Rate 52.52	Fringe 35.60	Total 88.12	Total 90.37
CLASSIFIC		00.12	70.57
Laddervator			
Locomotive	(Dinky-type)		
Maintenance	e Utility Man		
Master Envi	ironmental Main	tenance Technicia	nn
Mechanic			
Mixer (Exce	ept paving mixer	rs)	
Pavement B ride-on typ		ounted or small se	elf-propelled
Pavement B	reaker - mainten	nance of compress	or or hydraulic unit
Pipe Bendin	ng Machine (pow	ver)	
Pitch Pump			
Plaster Pum	p (regardless of	size)	
Post Hole D	igger (post pour	nder, auger)	
Rod Bendin	g Machines		
Roller (black	k top)		
Scale (power	er)		
Seamen Pul	verizing Mixer		
Shoulder W	idener		
Silo			
Skimmmer l	Machine (boom	type)	
Steel Cutting	g Machine (serv	ice & maintenanc	e)
Tamrock Dr	ill		

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date:

Effective Dates:

	07/01/202	07/01/2022	
Rate	Fringe	Total	Total
52.52	35.60	88.12	90.37

CLASSIFICATIONS:

Tug Captains

Tug Master (Power Boats)

Ultra High Pressure Waterjet Cutting Tool System - Operator/Maintenance Technician

Vacuum Blasting Machine - Operator/Maintenance Technician

Vibrating Plant (used with unloading)

Welder & Repair Mechanic

Effective Dates:

	07/01/202	07/01/2022	
Rate	Fringe	Total	Total
49.18	35.60	84.78	87.03

CLASSIFICATIONS:

Assistant Engineer/Oiler

Driller's Helper

Field Engineer - Transit man or Instrument man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Mechanic's Helper

Off Road Back Dump

Tire Repair & Maintenance

Effective Dates:

	07/01/202	07/01/2022	
Rate	Fringe	Total	Total
46.60	35.60	82.20	84.45

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

	07/01/202	07/01/2022	
Rate	Fringe	Total	Total
56.76	35.60	92.36	94.61

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (minimum)

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date :

Mucking Machine

JI EKATING E	HUITEERS	Rates Expiration D	rate.	
Effective Date	s:			
	07/01/2021		07/01/2022	
Rate	Fringe	Total	Total	
56.02	35.60	91.62	93.87	
CLASSIFICA	TIONS:			
Autograde Pa	vement Profiler	(CMI & similar type	es)	
Autograde Patypes)	vement Profiler	- Recycle Type (CM	I & similar	
Autograde Pla similar types		preader Combination	(CMI &	
Autograde Sli	pform Paver (C	CMI & similar types)		
Backhoe (Exc	avator)			
Central Power	r Plant			
Concrete Pavi	ng Machine			
Cranes, Derric	cks, Pile Driver	s (all types), under 10	00 tons with a boom ((including jib and/or leads) under 100 ft.
Draglines				
Drill, Bauer, A	AMI and similar	r types		
Drillmaster, Q	uarrymaster			
		own-the-hole drill), roll, self-powered drill	otary drill,	
Elevator Grad	er			
Field Enginee	r-Chief of Party	7		
Front End Loa	ader (5 cu. yard	s or larger)		
Gradall				
Grader, Rago				
Helicoptor Co	-Pilot			
Helicoptor Co	ommunications	Engineer		
Juntann Pile I	Driver			
Locomotive (large)			

TERRITORY ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS Rates Expiration Date:

Effective Dates:

	1	07/01/2022	
Rate	Fringe	Total	Total
56.02	35.60	91.62	93.87
CLASSIFIC	CATIONS:		
Pavement &	concrete Brea	ker (Superhammer &	t Hoe Ram)
Pile Driver			

Prentice Truck

Roadway Surface Grinder

Scooper (loader & shovel)

Shovel (Excavator)

Trackhoe (Excavator)

Tree Chopper with boom

Trenching Machine (cable plow)

Tunnel Boring Machine

Vacuum Truck

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

Sprinkler & Water Pump Trucks

Effective Dat	es:		
	07/01/2021		07/01/2022
Rate 50.89	Fringe 35.60	Total 86.49	Total 88.74
CLASSIFIC		00.15	00.71
Chipper			
Compressor	(single)		
Concrete Spr	reader (small typ	pe)	
Conveyor Lo	oader (Except ele	evator graders)	
Engines, Lar	ge Diesel (1620	HP) & Staging F	ump
Farm Tractor	r		
Fertilizing E	quipment (opera	tion & maintena	nce)
Fine Grade M	Machine (small t	ype)	
Form Line C	rader (small typ	e)	
Front End Lo	oader (under 1 c	ubic yard)	
Generator (s	ingle)		
Grease, Gas,	Fuel, & Oil Sup	pply Trucks	
Heaters (Nel	son or other type	e)	
Lights - port	able generating l	light plant	
Mixer, Conc	rete (small)		
Mulching Ed	quipment (operat	ion & maintenan	ce)
Power Broom	n or Sweeper		
Pump (diese	l engine & hydra	nulic - regardless	of power)
Pump (large	than 2 inch suc	tion, including su	ubmersible pumps)
Road Finishi	ng Machine (sm	all type)	
Roller - grad	e, fill, or stone b	pase	
Seeding Equ	ipment (operation	on & maintenance	e)

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date:

Effective Dates:

	07/01/202	07/01/2022	
Rate	Fringe	Total	Total
50.89	35.60	86.49	88.74

CLASSIFICATIONS:

Steam Generator or Boiler

Stone Spreader

Tamping Machine (vibrating ride-on type)

Temporary Heating Plant (Nelson or other type, including proprane, natural gas, and flow-type units)

Water or Sprinkler Truck

Welding Machine (gas, diesel, or electric convertor, of any type)

Welding System - Multiple (rectifier transformer type)

Wellpoint Systems (including installation by bull gang and maintenance)

Effective Dates:

	07/01/202	07/01/202	
Rate	Fringe	Total	Total
57.84	35.60	93.44	95.69

CLASSIFICATIONS:

Helicoptor Pilot/Engineer

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
62.52	35.60	98.12	100.37

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with boom (including jib and/or leads) 140 ft. and over

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
61.52	35.60	97.12	99.37

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with boom (including jib and/or leads) from 100 ft. to 139 ft.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
58.02	35.60	93.62	95.87

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), under 100 tons with a boom (including jib and/or leads) 140 ft. and over

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
60.52	35.60	96.12	98.37

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with a boom (including jib and/or leads) under 100 ft.

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
57.02	35.60	92.62	94.87

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), under 100 tons with a boom (including jib and/or leads) from 100 ft. to 139 ft.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

STRUCTURAL STEEL ERECTION Rates Expiration Date:

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

Effective Dates:

07/01/2021			07/01/2022
Rate Fringe Total			Total
59.65	35.60	95.25	97.50

CLASSIFICATIONS:

Helicopter Co-Pilot & Communications Engineer

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

STRUCTURAL STEEL ERECTION Rates Expiration Date :

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
55.59	35.60	91.19	93.44

CLASSIFICATIONS:

A-Frame

Cherry Picker -10 tons or less (Over 10 tons use crane rate)

Hoist (all types Except Chicago-boom)

Jack (screw, air hydraulic, power-operated unit or console type, Except hand jack or pile load test type)

Side Boom

Straddle Carrier

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

STRUCTURAL STEEL ERECTION Rates Expiration Date:

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
52.93	35.60	88.53	90.78
CLASSIFIC	CATIONS:		
Aerial Platf	orm Used On H	oists	

CL

Apprentice Engineer/Oiler with Compressor or Welding Machine

Captain (Power Boats)

Compressor (2 or 3 in battery)

Concrete Cleaning/Decontamination Machine Operator

Conveyor or Tugger Hoist

Directional Boring Machine

Elevator or House Car

Fireman

Forklift

Generator (2 or 3)

Heavy Equipment Robotics, Operator/Technician

Maintenance Utility Man

Master Environmental Maintenance Technician

Tug Master (Power Boats)

Ultra High Pressure Waterjet Cutting Tool System Operator/Maintenance Technician

Vacuum Blasting Machine Operator/Maintenance Technician

Welding Machines, Gas or Electric Converters on any type-2 or 3 in battery including diesels

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

STRUCTURAL STEEL ERECTION Rates Expiration Date:

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
51.40	35.60	87.00	89.25

CLASSIFICATIONS:

Compressor (Single)

Generators

Welding Machines, Gas, Diesel, Or Electric Converters of any type-single

Welding System, Multiple (Rectifier Transformer Type)

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
49.64	35.60	85.24	87.49

CLASSIFICATIONS:

Assistant Engineer/Oiler

Drillers Helper

Field Engineer - Transit/Instrument Man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Off Road Back Dump

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
57.21	35.60	92.81	95.06

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
46.60	35.60	82.20	84.45

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

STRUCTURAL STEEL ERECTION Rates Expiration Date:

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
56.35	35.60	91.95	94.20

CLASSIFICATIONS:

Field Engineer-Chief of Party

Vacuum Truck

Effective Dates:

07/01/2021 Rate Fringe Total			07/01/2022
			Total
64.54	35.60	100.14	102.39

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms, including jib, 140 ft. and over, above ground). Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), and Pile Drivers (all types) 100 tons and over and Tower Cranes.

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
62.88	35.60	98.48	100.73

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. above ground), Derricks (all derricks. land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), 100 tons and over and Tower Crane.

Effective Dates:

07/01/2021			07/01/2022
Rate Fringe Total			Total
60.04	35.60	95.64	97.89

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, 140 ft. and over, above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), Pile Drivers (all types), under 100 tons.

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
58.38	35.60	93.98	96.23

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), under 100 tons.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

STRUCTURAL STEEL ERECTION Rates Expiration Date:

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
60.04	35.60	95.64	97.89

CLASSIFICATIONS:

Helicopter Pilot & Engineer

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

TEST BORING PRELIMINARY TO CONSTRUCTION-SOUTH/WEST Rates Expiration Date:

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Hunterdon, Mercer, Monmouth, Ocean, Salem, Sussex, Warren

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

Effective Dates:

07/01/2021			07/01/2022
Rate Fringe Total			Total
56.02	35.60	91.62	93.87

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
49.18	35.60	84.78	87.03

CLASSIFICATIONS:

Driller's Helper

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

FREE AIR TUNNEL JOBS Rates Expiration Date :

{For apprentice rates refer to "Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$3.00/hr
- -other Hazardous Waste site: + \$1.00/hr

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
48.65	34.88	83.53	86.03

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
48.35	34.88	83.23	85.73

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrician Foreman, Rigging Foreman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

FREE AIR TUNNEL JOBS Rates Expiration Date :

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
47.85	34.88	82.73	85.23

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Cleanup Foreman, Grout Foreman

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
50.35	34.88	85.23	87.73

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
47.30	34.88	82.18	84.68

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.95	34.88	81.83	84.33

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Manitenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Tod Man)

Effective Dates:

	03/01/202	2	03/01/2023
Rate	Fringe	Total	Total
46.80	34.88	81.68	84.18

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man Top or Bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

FREE AIR TUNNEL JOBS Rates Expiration Date :

Effective Dates:

	03/01/202	2	03/01/2023
Rate	Fringe	Total	Total
46.40	34.88	81.28	83.78

CLASSIFICATIONS:

All Others (including Powder Watchman, Change House Attendant, Top Laborer)

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

DRILL FOR GROUND WATER SUPPLY Rates Expiration Date:

The well driller and/or helper may perform all work relative to the construction, finishing, and servicing of wells, pumps and borings for ground water supply. The present methods of well drilling entailing as they do, many diverse job operations calling for drilling, pump discharge, piping, and the operation of various types of related power equipment, shall all be within the job duties and functions of the well driller and/or helper. In the event that an extension of work should occur beyond water well drilling functions, into the field of general construction work, such extension of work would come under the appropriate rates listed elsewhere in this wage determination.

- For Work Hours, Shift Differentials, Overtime Rates, and Recognized Holidays see the "Operating Engineers" section of this wage determination.

Effective Dates:

	07/01/202	1	07/01/2022
Rate	Fringe	Total	Total
54.77	35.60	90.37	92.62

CLASSIFICATIONS:

Driller

Effective Dates:

	07/01/202	1	07/01/2022
Rate	Fringe	Total	Total
47.93	35.60	83.53	85.78

CLASSIFICATIONS:

Driller's Helper

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS MARINE-DREDGING Rates Expiration Date:

NOTE: These wage rates only apply to dredging and other marine construction activities occurring in navigable waters and their tributaries.

Boat crews carrying explosive material (dynamite, pourfex, and other similar materials) shall be paid at 120% of the hourly wage rate for hours engaged in handling of said materials. Employees required to possess a Hazardous Material Certification as a condition of employment shall be compensated at 120% of the hourly wage rate.

OVERTIME:

Hours in excess of 40 per week, and all hours on Saturdays and Sundays, shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

10/18/2021		10/01/2022	10/01/2023	
Rate	Fringe	Total	Total	Total
42.66	14.01	56.67	58.48	60.48

CLASSIFICATIONS:

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

Effective Dates:

10/18/2021		10/01/2022	10/01/2023	
Rate	Fringe	Total	Total	Total
36.89	13.66	50.55	52.18	53.93

CLASSIFICATIONS:

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

Effective Dates:

10/18/2021		10/01/2022	10/01/2023	
Rate	Fringe	Total	Total	Total
34.73	13.53	48.26	49.82	51.47

CLASSIFICATIONS:

Certified Welder

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS MARINE-DREDGING Rates Expiration Date :

Effective Dates:

10/18/2021		10/01/2022	10/01/2023	
Rate	Fringe	Total	Total	Total
33.78	13.18	46.96	48.53	50.14

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

10/18/2021		10/01/2022	10/01/2023	
Rate	Fringe	Total	Total	Total
32.69	13.11	45.80	47.34	48.91

CLASSIFICATIONS:

Boat Operator

Effective Dates:

10/18/2021		10/01/2022	10/01/2023	
Rate	Fringe	Total	Total	Total
27.16	12.58	39.74	41.30	42.63

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

Effective Dates:

10/18/2021		10/01/2022	10/01/2023	
Rate	Fringe	Total	Total	Total
38.02	13.73	51.75	53.41	55.20

CLASSIFICATIONS:

Crane Operator

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

MICROSURFACING/SLURRY SEAL Rates Expiration Date :

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem
IN ALL OTHER COUNTIES use the Heavy and General Laborers - North "Slurry Seal Laborer" rates.

SHIFT DIFFERENTIALS:

Any shift starting at 3:30 PM or later shall receive an additional \$0.35/hr

OVERTIME:

Hours in excess of 8 per day or 40 per week shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

Effective Dates:

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Rate	Fringe	Total
36.50	21.27	57.77

CLASSIFICATIONS:

Foreman

Effective Dates:

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Rate	Fringe	Total
33.80	21.27	55.07

CLASSIFICATIONS:

Box man

Effective Dates:

03/01	1/2017
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Rate	Fringe	Total
31.75	21.27	53.02

CLASSIFICATIONS:

Microsurface/Slurry Preparation

Effective Dates:

03/01/2017

Rate	Fringe	Total
31.75	21.27	53.02

CLASSIFICATIONS:

Squeegee man

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

MICROSURFACING/SLURRY SEAL Rates Expiration Date :

Effective Dates:

03/01/2017

Rate Fringe Total 30.30 21.27 51.57

CLASSIFICATIONS:

Cleaner, Taper

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ASPHALT LABORERS - SOUTH Rates Expiration Date :

"THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY: Atlantic, Burlington, Camden, Cape May, Cumberland,

Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$5.00/hr
- -other Hazardous Waste site: + \$1.00/hr

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
49.15	34.88	84.03	87.53

CLASSIFICATIONS:

Paving Foreman

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.70	34.88	81.58	84.08

CLASSIFICATIONS:

Head Raker

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.85	34.88	81.73	84.23

CLASSIFICATIONS:

Screedman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ASPHALT LABORERS - SOUTH Rates Expiration Date :

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.30	34.88	81.18	83.68

CLASSIFICATIONS:

Tampers, Smoothers, Kettlemen, Painters, Shovelers, Roller Boys

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.40	34.88	81.28	83.78

CLASSIFICATIONS:

Milling Controller

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.60	34.88	81.48	83.98

CLASSIFICATIONS:

Traffic Control Coordinator

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	
46.55	34.88	81.43	83.93

CLASSIFICATIONS:

Raker, Luteman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

TEST BORING PRELIMINARY TO CONSTRUCTION-NORTH Rates Expiration Date :

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset, Union

SHIFT DIFFERENTIAL:

Employees on a shift other than between the hours of 8:00 AM and 5:00 PM shall receive an additional \$2.00 per hour.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Hazardous Waste Pay (for Levels A, B, and C): an additional 15% of the hourly rate, per hour.

A newly hired Helper with no experience in the industry shall be paid as follows:

1st year on the job - 70% of Helper wage rate

2nd year on the job - 80% of Helper wage rate

3rd year on the job - 90% of Helper wage rate

All helpers receive full fringe benefit rate.

Effective Dates:

10/18/2021			10/18/2022
Rate Fringe Total			Total
33.47	30.70	64.17	65.92

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

10/18/2021			10/18/2022
Rate Fringe Total			Total
42.54	30.70	73.24	75.24

CLASSIFICATIONS:

Driller

Effective Dates:

10/18/2021			10/18/2022
Rate	Fringe	Total	Total
48.58	30.70	79.28	81.28

CLASSIFICATIONS:

Foreman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS - NORTH Rates Expiration Date :

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$5.00/hr
- -other Hazardous Waste site: + \$1.00/hr

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
45.90	34.88	80.78	83.28

CLASSIFICATIONS:

"D" Rate:

basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofer; timberman; wagon drill or drill master helper; powder carrier; magazine tender; signal man; power buggy operator; tree cutter; operator of basic power tools

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
46.60	34.88	81.48	83.98

CLASSIFICATIONS:

"C" Rate:

pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning; wagon drill, directional drill, or hydraulic drill operator; drill master; core driller; traffic control coordinator; asphalt raker or lute man

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS - NORTH Rates Expiration Date :

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.85	34.88	81.73	84.23

CLASSIFICATIONS:

"B" Rate:

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; asphalt screedman; rammer; hardscaping; gunite nozzle man

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
50.40	34.88	85.28	87.78

CLASSIFICATIONS:

"A" Rate:

blaster

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
49.15	34.88	84.03	87.53

CLASSIFICATIONS:

"FOREMAN" Rate:

labor foreman, asphalt foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
50.15	34.88	85.03	88.53

CLASSIFICATIONS:

"GENERAL FOREMAN" Rate

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

HEAVY & GENERAL LABORERS - SOUTH Rates Expiration Date :

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM. OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$5.00/hr
- -other Hazardous Waste site: + \$1.00/hr

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
45.90	34.88	80.78	83.28

CLASSIFICATIONS:

basic, landscape, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofers; tree cutter, timberman

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
45.90	34.88	80.78	83.28

CLASSIFICATIONS:

wagon drill or drill master helper; powder carrier; magazine tender; signal man

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

HEAVY & GENERAL LABORERS - SOUTH Rates Expiration Date :

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.60	34.88	81.48	83.98

CLASSIFICATIONS:

pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning

Effective Dates:

03/01/2022			03/01/2023
Rate Fringe Total			Total
46.60	34.88	81.48	83.98

CLASSIFICATIONS:

wagon or directional drill operator; drill master

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
50.40	34.88	85.28	87.78

CLASSIFICATIONS:

blaster

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
49.15	34.88	84.03	87.53

CLASSIFICATIONS:

labor foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
50.15	34.88	85.03	88.53

CLASSIFICATIONS:

general foreman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE PREVAILING WAGE RATE DETERMINATION

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.85	34.88	81.73	84.23

HEAVY & GENERAL LABORERS - SOUTH

CLASSIFICATIONS:

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; rammer; gunite nozzle man

Rates Expiration Date:

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date :

These rates apply to the following: welding on Transportation Mainline pipe lines (cross-country pipe lines, or any segments thereof, transporting coal, gas, oil, water or other transportable materials, vapors or liquids, including portions of such pipe lines within private property boundaries up to the final metering station or connection - the point where a valve, consumer connection, or town border station divides mainline transmission lines or higher pressure lateral and branch lines from lower pressure distribution systems).

PER DIEM PAYMENT:

In addition to the total wage rate paid for each craft, the following per diem (per day) amounts must also be paid - Pipeline Journeyman: \$80.50; Pipeline Journeyman Welder: \$140.50; and Pipeline Helper: \$64.50. Note: in order to receive the per diem payment an employee must work a minimum of 8 hours in a 24 hour period.

NOTES:

- Journeymen employed as "stringer bead" welders and journeymen who are regularly employed as "hot-pass" welders shall receive \$1.00 per hour more than other journeymen.
- Welders running "stringer bead" or "hot-pass" on "cutouts" or "tie-ins" on a production basis shall be paid \$1.00 per hour above the journeymen rate.
- Whenever a welder helper is employed using a power buffer or power grinder immediately behind the stringer bead and/or hot-pass welders, and the pipe gang is set on a production basis, the helper shall be paid \$2.00 per hour above the helper rate.
- If back welding is performed inside a pipe under either or both of the following conditions, the welder engaged in the welding will receive \$3.00 per hour above the regular rate for the job only for the days on which such back welding is performed:
 - The employer elects, as a regular procedure, to back weld each line-up. This condition is not intended to apply to occasional back welding performed by the pipe gang to repair a bead, to rectify a "high-lo" condition or wall thickness, etc.
 - A welder is required to back weld a completed weld behind the firing line.
- If the welder helper is required to go inside the pipe for the purpose of brushing, buffing and grinding the weld, they shall receive a wage rate \$1.00 per hour above the regular

helper rate for the days involved.

- Welders working on "hot work" shall be paid \$2.00 per hour above the regular rate for each day engaged in such work. "Hot work' is defined as work on lines in service where there is the danger of fire or explosion.

The regular workday shall be 8 hours, between 8:00 AM and 4:30 PM.

OVERTIME:

Hours in excess of 8 per day, and all hours on Sundays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

06/01/2022

Rate	Fringe	Total
55.34	34.65	89.99

CLASSIFICATIONS:

Pipeline Journeyman Welder

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date :

Effective Dates:

06/01/2022

Rate Fringe Total 55.34 34.65 89.99

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

06/01/2022

Rate Fringe Total 33.84 24.27 58.11

CLASSIFICATIONS:

Pipeline Helper

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

PIPELINE - GAS DISTRIBUTION Rates Expiration Date :

These rates apply to the following: welding on gas line distribution systems (that portion of the gas distribution system placed in streets, roads, subways, tunnels, viaducts, highways and easements which serves the users of gas).

SHIFT DIFFERENTIALS:

An "irregular" shift may start any time from 5:00 PM to 12:00 AM, Monday through Friday, and shall receive an additional 15% of the regular rate per hour, inclusive of benefits.

OVERTIME:

Hours in excess of forty per week, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

11/09/2021			11/01/2022
Rate	Fringe	Total	Total
62.50	28.73	91.23	93.73

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

11/09/2021			11/01/2022
Rate	Fringe	Total	Total
62.50	28.73	91.23	93.73

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

11/09/2021			11/01/2022
Rate	Fringe	Total	Total
39.96	21.05	61.01	62.68

CLASSIFICATIONS:

Pipeline Helper

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ASPHALT LABORERS- NORTH Rates Expiration Date:

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren {For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$5.00/hr
- -other Hazardous Waste site: + \$1.00/hr

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
49.15	34.88	84.03	87.53

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.85	34.88	81.73	84.23

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
46.60	34.88	81.48	83.98

CLASSIFICATIONS:

Asphalt Raker or Lute Man

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ASPHALT LABORERS- NORTH Rates Expiration Date :

Effective Dates:

03/01/2022			03/01/2023
Rate	Fringe	Total	Total
45.90	34.88	80.78	83.28

CLASSIFICATIONS:

Asphalt Laborer

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date:

Electrician-Utility Work (North)

(For apprentice rates refer to Electrician-Utility Work (North) in any county rate package).

These rates apply to work contracted for by the following utility companies:

Public Service Electric & Gas Co. of NJ, GPU Energy, Borough of Madison Electric Department, Sussex Rural

Electric Cooperative, Rockland Utilities, and Butler Municipal Electric Co.

These rates do not apply to work on substations or switching stations.

For Utility work contracted for by a utility company other than those listed above or those listed under "Electrician-

Utility Work (South), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 6:00 AM and 6:00 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)-all hours of work shall be paid at double the hourly rate.

SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

2nd shift (between the hours of 4:30 PM and 1:00 AM): 8 hours of work + 17.3% of the regular rate, inclusive of benefits.

3rd shift (between the hours of 12:30 AM and 9:00 AM): 8 hours of work + 31.4% of the regular rate per hour, inclusive of benefits.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular wokday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.

Four 10-hour days may worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday.

RECOGNIZED HOLIDAYS:

New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day, or day on which they are legally observed.

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
59.18	40.83	100.01	103.20	106.36	109.56

CLASSIFICATIONS:

Chief Lineman

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
55.83	38.52	94.35	97.36	100.35	103.36

CLASSIFICATIONS:

Journeyman Lineman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date:

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₽.tte	ctive	Dates	

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
55.83	38.52	94.35	97.36	100.35	103.36

CLASSIFICATIONS:

Special License Operator

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
55.27	38.13	93.40	96.38	99.35	102.32

CLASSIFICATIONS:

Transit Man

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
53.60	36.98	90.58	93.47	96.33	99.21

CLASSIFICATIONS:

Line Equipment Operator

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
46.90	32.36	79.26	81.77	84.29	86.81

CLASSIFICATIONS:

Dynamite Man

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
69.79	48.15	117.94	121.69	125.44	129.20

CLASSIFICATIONS:

General Foreman

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
64.20	44.29	108.49	111.96	115.41	118.85

CLASSIFICATIONS:

Assistant General Foreman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date :

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12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
62.53	43.14	105.67	109.03	112.40	115.76

CLASSIFICATIONS:

Line Foreman

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
45.22	31.20	76.42	78.85	81.28	83.72

CLASSIFICATIONS:

Street Light Mechanical Leader

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
42.99	29.66	72.65	74.96	77.26	79.58

CLASSIFICATIONS:

Groundman Winch Operator

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
42.99	29.66	72.65	74.96	77.26	79.58

CLASSIFICATIONS:

Groundman Truck Operator

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
42.43	29.27	71.70	73.98	76.26	78.55

CLASSIFICATIONS:

Street Light Mechanic

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
42.43	29.27	71.70	73.98	76.26	78.55

CLASSIFICATIONS:

Line Equipment Mechanic

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date :

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
36.29	25.04	61.33	63.29	65.23	67.17

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
33.50	23.11	56.61	58.42	60.21	62.02

CLASSIFICATIONS:

Groundman 1st Year

Effective Dates:

12/05/2021		12/04/2022	12/03/2023	12/01/2024	
Rate	Fringe	Total	Total	Total	Total
55.27	38.13	93.40	96.38	99.35	102.32

CLASSIFICATIONS:

Line Equipment Foreman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date:

Electrician-Utility Work (South)

(For apprentice rates refer to Electrician-Utility Work (South) in any county rate package).

These rates apply to work contracted for by the following utility company:

Atlantic City Electric.

These rates do not apply to work on substations or switching stations.

For utility work contracted for by a utility company other than the one listed above or those listed under "Electrician-

Utility Work (North), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 7:00 AM and 4:30 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)- all hours of work shall be paid at double the hourly rate.

SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

When two (2) or three (3) shifts are worked the following shall apply:

1st shift (between the hours of 8:00 AM and 4:30 PM)

2nd shift (between the hours of 4:30 PM and 12:30 AM): 8 hours of work + 10% of the regular rate of pay for 7.5 hours worked.

3rd shift (between the hours of 12:30 AM and 8:00 AM): 8 hours of work + 15% of the regular rate of pay for 7 hours worked.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular wokday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and Holidays shall be paid double the hourly rate.

Four 10-hour days may be worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday with Friday used as a make-up day.

RECOGNIZED HOLIDAYS:

New Year's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day or on days celebrated.

WORKING RULES:

There shall be a Foreman in charge of each work crew. No crews are to exceed twelve (12) men, including Foremen.

There shall be a General Foreman designated for transmission work when three (3) or more crews are on the same job and for distribution work where there are are more than twenty (20) employees on site.

A small job crew shall consist of five (5) or less employees, one (1) of the Journeyman Linemen in the crew shall be designated as a Small Job Foreman.

Work performed from ladders and/or mechanical lift equipment shall be the work of Linemen and/or Apprentices.

On new construction, fitting and framing poles, towers or structures may be done by Journeymen and/or Apprentices. Groundmen may assist, but may not perform any work which would be performed by Linemen if assembled in the air.

There shall be a Journeyman Lineman in each pole setting, erection, grounding, wire and cable-pulling crew of more than three (3) men.

Effective Dates:

12/05/2021

Rate	Fringe	Total
65.28	53.00	118.28

CLASSIFICATIONS:

General Foreman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date:

Effective Dates:

12/05/2021

Rate Fringe Total 58.14 48.74 106.88

CLASSIFICATIONS:

Foreman

Effective Dates:

12/05/2021

Rate Fringe Total 55.08 46.90 101.98

CLASSIFICATIONS:

Small Job Foreman

Effective Dates:

12/05/2021

Rate Fringe Total 51.00 44.47 95.47

CLASSIFICATIONS:

Heavy Equipment Operator

Effective Dates:

12/05/2021

Rate Fringe Total 51.00 44.47 95.47

CLASSIFICATIONS:

Cable Splicer

Effective Dates:

12/05/2021

Rate Fringe Total 51.00 44.47 95.47

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/05/2021

Rate Fringe Total 51.00 44.47 95.47

CLASSIFICATIONS:

Journeyman Welder

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date:

Effective Dates:

12/05/2021

Rate Fringe Total 51.00 44.47 95.47

CLASSIFICATIONS:

Journeyman Painter

Effective Dates:

12/05/2021

Rate Fringe Total 40.80 38.24 79.04

CLASSIFICATIONS:

Light Equipment Operator

Effective Dates:

12/05/2021

Rate Fringe Total 35.70 35.33 71.03

CLASSIFICATIONS:

Groundman Truck Driver

Effective Dates:

12/05/2021

Rate Fringe Total 33.15 33.82 66.97

CLASSIFICATIONS:

Groundman 3rd Year

Effective Dates:

12/05/2021

 Rate
 Fringe
 Total

 30.60
 32.30
 62.90

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/05/2021

Rate Fringe Total 28.05 30.77 58.82

CLASSIFICATIONS:

Groundman 1st Year

TERRITORY

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date :

Effective Dates:

12/05/2021

Rate Fringe Total 21.78 27.02 48.80

CLASSIFICATIONS:

Flagman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date :

THESE RATES APPLY TO CONSTRUCTION ON NEW TRANS HUDSON TUNNELS ONLY

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- -where Level A, B, or C protection is required: + \$3.00/hr
- -other Hazardous Waste site: + \$1.00/hr

Effective Dates:

	03/01/202	2	03/01/2023
Rate	Fringe	Total	Total
72.98	34.88	107.86	111.19

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

	03/01/202	22	03/01/2023
Rate	Fringe	Total	Total
72.53	34.88	107.41	110.74

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrical Foreman, Rigging Foreman

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

ENTIRE STATE

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date :

Effective Dates:

	03/01/202	2	03/01/2023
Rate	Fringe	Total	Total
71.78	34.88	106.66	109.99

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Clean-up Foreman, Grout Foreman

Effective Dates:

	03/01/202	22	03/01/2023
Rate	Fringe	Total	Total
75.53	34.88	110.41	113.74

CLASSIFICATIONS:

Blaster

Effective Dates:

	03/01/202	22	03/01/2023
Rate	Fringe	Total	Total
70.95	34.88	105.83	109.16

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

	03/01/202	22	03/01/2023
Rate	Fringe	Total	Total
70.43	34.88	105.31	108.64

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Maintenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Rod Man)

Effective Dates:

	03/01/202	22	03/01/2023
Rate	Fringe	Total	Total
70.20	34.88	105.08	108.41

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man top or bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

TERRITORY
ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date :

Effective Dates:

	03/01/202	2	03/01/2023
Rate	Fringe	Total	Total
69.60	34.88	104.48	107.81

CLASSIFICATIONS:

All others (including Powder Watchman, Change House Attendant, Top Laborer, Job Steward)

SPECIAL PROVISIONS

HAMILTON STREET BRIDGE OVER ROBINSON'S BRANCH OF THE RAHWAY RIVER SCOUR PROTECTION COUNTY STRUCTURE RA-29 CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY UNION COUNTY ENGINEERING PROJECT #2018-008 JUNE 2022

AUTHORIZATION OF CONTRACT

The Contract for this project is authorized by the provisions of local public contracts law, NJSA 40A: 11-1 et seq.

SPECIFICATIONS TO BE USED

The 2019 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation (Department) as amended herein will govern the construction of this Project and the execution of the Contract.

These Special Provisions consist of the following:

Pages 1 to 89 inclusive.

The following additional project specific Attachments are located at the end of these Special Provisions:

State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development's website at https://www.nj.gov/labor/wagehour/wagerate/prevailing wage determinations.html. The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (N.J.S.A. 34:11-56.25 et seq.).

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

GENERAL

All awards shall be made subject to the approval of the New Jersey Department of Transportation. No construction shall start before approval of said award by the New Jersey Department of Transportation. Prior to the start of construction the contractor must submit a Material Questionnaire (SA-11) listing all sources of materials. Any materials used on the project from a non-approved New Jersey Department of Transportation source will be considered non-participating. The contractor is also notified that the District Office, Division of Local Aid and Economic Development must be notified of the construction commencement date at least three (3) calendar days prior to the start of construction.

Award of contract and subletting will not be permitted to, materials will not be permitted from, and use of equipment will not be permitted that is owned and/or operated by, firms and individuals included in the report of suspensions, debarments and disqualifications of firms and individuals as maintained by the Department of the Treasury, Division of Purchase & Property, Contract Compliance & Administration, Trenton NJ 08625 (609-292-5400).

Payment for a pay item in the proposal includes all the compensation that will be made for the work of that item as described in the contract documents unless the "measurement and payment" clause provides that certain work essential to that item will be paid for under another pay item.

Whenever any section, subsection, subpart or subheading is amended by such terms as changed to, deleted or added it is construed to mean that it amends that section, subsection, subpart or subheading of the 2019 Standard Specifications unless otherwise noted.

Whenever reference to page number is made, it is construed to refer to the 2019 Standard Specifications unless otherwise noted.

Henceforth in this supplementary specification whenever reference to the State, Department, ME, RE or Inspector is made, it is construed to mean the particular municipality or county executing this contract.

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

The following information is located at the end of these Special Provisions:

- 1. Small Business Enterprise Utilization on Wholly State Funded Projects. (State Funded Project Attachment 1)
- 2. State of New Jersey Equal Employment Opportunity Special Provisions for Wholly State Funded Projects. (State Funded Project Attachment 2)
- 3. Requirements for Affirmative Action to Ensure Equal Employment Opportunity on Wholly State Funded Projects. (State Funded Project Attachment 3)
- 4. Investigating, Reporting and Resolving Employment Discrimination and Sexual Harassment Complaints on Wholly State Funded Projects. (State Funded Project Attachment 4)
- 5. Americans with Disabilities Act Requirements for Wholly State Funded Contracts. (State Funded Project Attachment 5)

100 - GENERAL PROVISIONS

SECTION 101 – GENERAL INFORMATION

101.01 INTRODUCTION

THE FOLLOWING IS ADDED:

Pursuant to N.J.S.A. 27:1B-21.6, the Department intends to enter into a contract for the advancement of the Project. However, sufficient funds for the Project may not have been appropriated, and only amounts appropriated by law may be expended. Payment under the Contract is restricted to the amounts appropriated for a fiscal year (FY).

Governing bodies have no legal obligation to make such an appropriation. There is no guarantee that additional funds will be appropriated. Failure by governing bodies to appropriate additional funds will not constitute a default under, or a breach of, the Contract. However, if the Department terminates the Contract or suspends work because funds have not been appropriated, the parties to the Contract will retain their rights for suspension and termination as provided in 108.13, 108.14, and 108.15; except as indicated below.

Do not expend or cause to be expended any sum in excess of the amount allocated in the current fiscal year's Capital Program (as specified below). The Department will notify the Contractor when additional funding has been appropriated. Any expenditure by the Contractor which exceeds the amount appropriated is at the Contractor's risk and the Contractor waives its right to recover costs in excess of that appropriated amount.

101.03 TERMS

THE FOLLOWING TERM IS ADDED:

Full Traffic Access. All work is complete to allow safe unencumbered use of the final paved portion of roadway throughout the project including but not limited to striping, RPMs, rumble strips, highway lighting, and traffic signals as determined by the RE.

THE FOLLOWING IS OMITTED:

Federal Aid Project. Any agreement or modification thereof between NJDOT and any applicant and a person for construction work which is paid for in whole or in part with funds obtained from the Federal government or borrowed on the credit of the Federal government pursuant to any program involving a grant, contract, loan, insurance or guarantee under which the NJDOT itself participates in the construction work.

Federal Aid Project Attachments. Attachments to the Contract Special Provision document, used for Federal Aid Projects.

ADD THE FOLLOWING TERM:

Wholly State Funded Project: Any agreement, contract or modification thereof between local public agencies and a person for construction work which is paid for in whole or in part with funds obtained from the State government or borrowed on the credit of the State government pursuant to any program involving a grant agreement, contract, loan, insurance or guarantee. This term excludes any agreement, contract or modification for construction work which is paid for in whole or in part with funds obtained from the Federal government.

REVISE THE FOLLOWING TERM:

actual cost: The computed cost using calculations of direct labor, labor fringe benefits, indirect labor costs, insurance, materials, extraordinary expenses, equipment, profit, overhead, and subcontractors.

101.04 INOUIRIES REGARDING THE PROJECT

2. After Award of Contract.

The County, but not the Contractor may contact the NJDOT Local Aid Office for inquires regarding the project after the award of the Contract.

Ricardo Matias, PE County Engineer Division of Engineering 2325 South Avenue Scotch Plains, NJ 07076 Phone: 908-789-3675

Fax: 908-789-3674

SECTION 102 – BIDDING REQUIREMENTS AND CONDITIONS

102.04 EXAMINATION OF CONTRACT AND PROJECT LIMITS

Project Manager: Ricardo Matias, PE Email Address: Ricardo.Matias@ucnj.org

Mailing Address: County Engineer

Division of Engineering 2325 South Avenue Scotch Plains, NJ 07076 Phone: 908-789-3675 Fax: 908-789-3674

The following is a list of structures and the location(s) of lead paint:

Structure #/Location	Lead Paint Location(s)
Hamilton Street Bridge Ra-29	None

1. Evaluation of Subsurface and Surface Conditions.

THE FOLLOWING IS ADDED:

	International Rough	ness Index (IRI) Value	s of the Existing R	Coadway
Route	7044	Mile Post		Existing IRI Value
	Direction	From	To	Existing IXI value

This information is the latest available IRI data of the right most through lane from the Pavement Management Unit. The pavement information shown herein was obtained by the Department and is made available to the authorized users only so that they may have access to the same information available to the Department. It is presented in good faith, but is not intended as a substitute for investigations, interpretation, or judgment of such authorized users.

102.07 PREPARATION OF THE BID

102.10 SUBMISSION OF THE BID

THE FOLLOWING IS OMITTED:

8. For federal aid projects exceeding a bid amount of \$100,000 or more, Bidder shall certify to the Byrd Anti-lobbying Act requirements under 31 USC 1352.

102.13.01 BIDDER PRE-AWARD REQUIREMENTS

A. Federal Aid Projects

This section intentionally left blank.

SECTION 103 – AWARD AND EXECUTION OF CONTRACT

103.05 ESCROW BID DOCUMENTS

103.05.A ESCROW BID DOCUMENTS

REVISE SECTION 103.05.A TO THE FOLLOWING:

A. **Purpose.** The bid documents are the supporting information, calculations, quotes, and other information used to prepare the bid. The Department may use the Contractor's bid documents to negotiate changes and claims if they are escrowed and a signed custody agreement is provided. The information contained in the bid documents does not modify the terms and conditions of the Contract. If the Contractor fails to escrow bid documents within the time specified in 103.04, the Department will not make payment for a disproportionate allocation of costs for work for which no Item is provided in the Contract, as specified in 102.08, in the renegotiation of costs of Items when there is a major decrease in quantity.

SECTION 104 – SCOPE OF WORK

104.02 VALUE ENGINEERING

104.02.01 Purpose and Scope

THE FOLLOWING IS ADDED:

The Department will not consider the following as (a) VE Proposal(s):

104.03 CHANGES TO THE CONTRACT

This section intentionally left blank.

SECTION 105 - CONTROL OF WORK

105.01 AUTHORITY OF THE DEPARTMENT

105.01.01 RE

REVISE THE SECOND PARAGRAPH TO:

Unless otherwise specified, send correspondence with the Department to the RE. Where correspondence is specified to be directed to persons other than the RE, send a copy to the RE. Ensure that correspondence complies with the following:

- 1. Assign every correspondence sent to the Department a unique correspondence serial number in the subject line, numbered sequentially beginning with Contractor Correspondence No. 1.
- 2. If the correspondence includes a request for information or asks for an interpretation of the Contract, also assign a unique RFI serial number in the subject line numbered sequentially beginning with RFI-1.
- 3. If the correspondence constitutes a notice of change, assign a unique change notice serial number in the subject line numbered sequentially beginning with Change Notice No. 1. For subsequent correspondence referring to a change notice or to the events that are the subject of a previous change notice, refer in the subject line to the original change notice number.

105.01.03 Contractor Performance Evaluation

REVISE SECTION 105.01.03 TO:

This section intentionally left blank.

105.02 RESPONSIBILITIES OF THE CONTRACTOR

105.02.05 Civil Rights Requirements

REVISE SECTION 105.02.05.1 TO THE FOLLOWING:

1. Federal Aid projects. This section intentionally left blank.

REVISE THE FIRST LINE OF SECTION 105.02.05.2 TO THE FOLLOWING:

2. Wholly State Funded Contracts. When applicable for wholly State Funded contracts under the jurisdiction of New Jersey Statutes N.J.S.A. 10:5-31 et seq., State EEO regulations and goals apply as specified in State Funded Project Attachments 1 to 5 of the Special Provisions.

105.03 CONFORMITY WITH THE CONTRACT

REVISE THE FIRST SENTENCE OF THE FIRST PARAGRAPH TO: In the event the Contractor discovers a discrepancy, error, omission, or ambiguity in the Contract, or if the Contractor has any doubt or question as to the intent or meaning of the Contract, the Contractor must immediately notify the RE.

REVISE THE FOURTH SENTENCE OF THE SIXTH PARAGRAPH TO: If the Department loses funding for the nonconforming work, on the basis of permitting nonconforming work to remain, the Department will not pay for the work permitted to remain in place.

105.05 WORKING DRAWINGS

1. Certified Working Drawings.

THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Department will require ten (10) working days for review and certification or rejection and return of certified working drawings.

2. Approved Working Drawings.

The Department will require ten (10) working days for review and approval or rejection and return of working drawings.

105.07.01 Working in the Vicinity of Utilities

A. Initial Notice.

Suez Rahway

Mr. Kevin Bamburak Suez Rahway 1045 Westfield Avenue Rahway, NJ 07065 Telephone: (201) 538-0369

1 cicphone. (201) 556-050

Verizon

Mr. Ian Chan Verizon 999 W. Main Street Freehold, NJ 07728 Telephone: (732) 683-5146

Email: ian.chan@one.verizon.com

Elizabethtown Gas Company

Mr. Kevin A. Escobar Elizabethtown Gas Company 520 Green Lane Union, NJ 07083 Telephone: (908) 662-8370

Email: kescobar@sjindustries.com

PSE&G (Electric)

Mr. Burke Lambertson Engineering Supervisor Public Service Electric & Gas Company 472 Weston Canal Road Somerset, NJ 08873 Telephone: (732) 764-3160

Rahway Valley Sewerage Authority

Mr. James Meehan Rahway Valley Sewerage Authority 1050 East Hazelwood Avenue Rahway, NJ 07065

Comcast

Mr. Robert Knoepfel Construction Surveyor Comcast Cable 800 Rahway Avenue Union, NJ 07083 Telephone: (908) 851-8857

Fax: (908) 851-8892

Email:Robert knoepfel@cable.comcast.com

Locating Existing Facilities.

C. Protection of Utilities.

Facility Daily Access Request Form is available at: http://www.state.nj.us/transportation/eng/elec/ITS/access.shtm. Frequency of Trains Speed **Number Per Day** Time Location 105.07.02 Work Performed by Utilities Number of Day/s Advance Notice Company Name & Address **Contact Person** Stage # **Work Duration** Restriction **Utility Company Name Work Description** (Day/s)

Stage Total

105.09 LOAD RESTRICTIONS

THE FOLLOWING IS ADDED:

			Material Transfe	r Vehicles Stru	ctural Load Re	striction		
Bridge Structures					Materi	al Transfer V	ehicles	
Route			Structure Name	MTV SB- 2500C by Roadteck	MTV MC- 330 by Blaw-Knox	MTV SB- 1500B by Roadteck	MTV SB- 1000B by Roadteck	
	Number	Mile Post		Gross Weight 125,500 lbs	Gross Weight 114,100 lbs	Gross Weight 92,000 lbs	Gross Weight 74,000 lbs	

SECTION 106 – CONTROL OF MATERIAL

106.02 DEPARTMENT-FURNISHED MATERIAL

106.03 FOREIGN MATERIALS

1. Wholly State Funded Projects

THE ENTIRE TEXT IS CHANGED TO:

Due to the requirements of MAP-21 (Moving Ahead for Progress in the 21st Century Act), comply with the Federal Aid Project requirements specified under Subpart 2.

REMOVE SECTION 106.03.2 Federal Aid Projects

106.09 SUBSTITUTES FOR PROPRIETARY ITEMS

106.10 USE OF UNITED STATES FLAG VESSELS

THE ENTIRE TEXT IS CHANGED TO: This section intentionally left blank.

SECTION 107 – LEGAL RELATIONS

107.02 NONDISCRIMINATION

THE ENTIRE TEXT OF SECTION 107.02.1 CHANGED TO:

Compliance with Regulations: This section intentionally left blank.

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

FOR WHOLLY STATE FUNDED PROJECTS, MAKE THE FOLLOWING REVISIONS:

REMOVE THIS SENTENCE FROM PARAGRAPH TWO: The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts.

107.12 THE CONTRACTUAL CLAIM RESOLUTION PROCESS

REPLACE THIS SECTION WITH: This section intentionally left blank.

107.13 LITIGATION OF CLAIMS BY THE CONTRACTOR

REPLACE THIS SECTION WITH: The Department will not participate in litigation between the RE and the Contractor.

107.14 PATENED DEVICES, AMTERIALS, AND PROCESSES

REMOVE THE SECOND PARAGRAPH OF THIS SECTION

107.15 TAXES

REVISE THE THIRD SENTENCE OF THE FIRST PARAGRAPH OF THIS SECTION TO: The sales tax exemption does not apply to equipment used for Contract work.

SECTION 108 – PROSECUTION AND COMPLETION

108.01 SUBCONTRACTING

REMOVE SENTENCE FOUR OF PARAGRAPH TWO OF THIS SECTION.

1. Values and Quantities.

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

a. There are no Specialty Items in this Project.

REMOVE PARAGRAPH FOUR OF SECTION 108.01

REVISE SECTION 108.01.3.a TO THE FOLLOWING:

a. Federal Aid Projects. This section intentionally left blank.

REVISE SECTION 108.01.3.b TO THE FOLLOWING:

- **b.** Wholly State Funded Projects. When subcontracting work on a wholly State Funded Project, physically incorporate the following in the subcontract agreement, and inform subcontractors of their requirement to physically incorporate the information in lower tier subcontract agreements.
 - 1. Small Business Enterprise Utilization on Wholly State Funded Projects (State Funded Project Attachment 1).
 - 2. State of New Jersey Equal Employment Opportunity Special Provisions for Wholly State Funded Projects (State Funded Project Attachment 2).
 - 3. Requirements for Affirmative Action to Ensure Equal Employment Opportunity on Wholly State Funded Projects (State Funded Project Attachment 3)
 - 4. Investigating, Reporting and Resolving Employment Discrimination and Sexual Harassment Complaints on Wholly State Funded Projects (State Funded Project Attachment 4)
 - 5. Americans with Disabilities Act Requirements for Wholly State Funded Projects (State Funded Project Attachment 5).
 - 6. New Jersey Department of Labor Prevailing Wage Rate Determination.
 - 7. New Jersey Department of Transportation Code of Ethics for Vendors.
 - 8. Subsection 107.04 as amended or supplemented.
 - 9. The Standard Title VI Assurance found in Subsection 107.02, as amended or supplemented.

THE FOLLOWING NEW SUBPART IS ADDED:

108.07.03 Lane Rental

Lane and shoulder closures are restricted to the schedule provided in the Traffic Control Details of the plans, and as specified in 108.07.01. The Contractor may extend the allowable hours for lane and shoulder occupancy as provided by Table 108.07.03-1 with the RE's written approval. Submit a written request to the RE to rent lanes and shoulders for an extended period at least 14 days prior to the anticipated use. In the request, provide the following information:

- 1. Route, direction, and milepost limits
- 2. Closure Description (Lane type/shoulder)
- 3. Date(s)/Days
- 4. Start Time(s)
- 5. Finish Time(s)
- 6. Reason
- 7. Calculation of Lane Rental Cost for each closure

The Department will assess the lane rental charge for each hour the Contractor occupies a lane in accordance with Table 108.07.03-1. If the Contractor does not occupy the lane during the extended hours, the Department will not assess a lane rental charge. If the Contractor occupies the lane for fewer hours than requested, the Department will only assess a lane rental charge for the time that the Contractor has actually occupied the lane. If the Contractor occupies a lane for a portion of an hour, the Department will round the occupancy time to the next highest half hour.

The Department will assess a lane rental charge for lane and/or shoulder occupancy of the roadway at the rates provided in Table 108.07.03-1.

		Table 108.07.03-1 Lane R	ental Availal	oility and Charg	e	
Roadway			Closure Time			Rental Time
	Direction	Closure Description	D ()	Start Time	Finish Time	Kentai iini
			Day(s)	Hours	Hours	\$ per hour

Do not occupy a lane or shoulder beyond the RE's approved extension of the allowable hours for lane and shoulder occupancy. If the Contractor's lane closure exceeds the allowable time period, the Department will assess Lane Occupancy Charges in accordance with 108.08.

108.08 LANE OCCUPANCY CHARGES

THE FOLLOWING IS ADDED:

The rate to calculate the Lane Occupancy Charge is as follows:

Description	Rate	

108.10 CONTRACT TIME

- A. Complete all work required for Substantial Completion in ninety (90) calendar days.
- B. Achieve Completion in one hundred calendar (100) calendar days.

108.11.01 Extensions to Contract Time

108.11.01.A

REVISE THE SECOND PARAGRAPH TO:

The Department will not extend Contract Time due to Extra Work or other type of delay unless an approved progress schedule and updates are current as specified in 153.03. The Department will not make payment for delay damages, unless an approved progress schedule and updates are current as specified in 153.03.

B. Types of Delays.

- 2. Excusable, Non-Compensable Delays.
 - b. Utilities.

THE LAST PARAGRAPH IS CHANGED TO:

If approved excusable, non-compensable delays exceed a total of 90 days, the time in excess of 90 days will become excusable and compensable as specified in 108.11.01.B.3.

CHANGE SECTION 108.11.01.B.3 TO:

3. Excusable, Compensable Delays. Excusable, compensable delays are delays that are the Department's fault or responsibility. For excusable, compensable delays, the Department will grant an extension of Contract Time and will make payment for delay damages.

CHANGE SECTION 108.11.01.B.4 TO:

4. Concurrent Delays. Concurrent delays are separate delays on the critical path that occur at the same time. When an excusable, non-compensable delay is concurrent with an excusable, compensable delay, the Department will grant an extension of Contract Time but will not make payment for delay damages. When a non-excusable delay

is concurrent with an excusable delay, the Department will not grant an extension of Contract Time or make payment for delay damages.

C. Submitting Time Impact Evaluation. If an excusable delay occurs, notify the RE, detailing how the event or cause is affecting the approved progress schedule that is current at the time the delay occurred. When the full extent of the impact on the approved progress schedule can be determined, submit a request for an extension of Contract Time to the RE with a Time Impact Evaluation Form and a CPM fragnet diagram including all additional work, and the fragnet's relationship to the approved progress schedule that is current at the time the delay occurred. Clearly identify how each change or delay is represented by an activity or group of activities. Ensure that the fragnet shows logic revisions, duration changes, and new activities, including the predecessor and successor relationships.

The Contractor is considered to have waived its rights to claim an extension of Contract Time, if the Contractor fails to provide written notice or fails to provide the time impact evaluation.

The RE will evaluate the time impact evaluation. The Department will only extend Contract Time when delay causes the work to be extended beyond the scheduled Contract Time as specified in 108.10. If the Contractor is already behind schedule and an excusable delay delays the work beyond the Contract Time as specified in 108.10, the Department will only extend Contract Time for the amount of time that directly results from the excusable delay. If the Department determines that an extension of Contract Time is warranted, the Department will extend Contract Time by a Change Order.

For excusable, compensable delays, submit a request for and documentation supporting the entitlement to compensable delay damages associated with the delay.

108.12 RIGHT-OF-WAY RESTRICTIONS

The Department has not obtained the following ROW parcels. The anticipated availability dates are provided:

Properties and Vacation/Availability Dates				
Demolition and/or Parcel No.	Approximate Baseline Station	Offset/Direction	Date	

108.14 DEFAULT AND TERMINATION OF CONTRACTOR'S RIGHT TO PROCEED LIST (1) OF THE FIRST PARAGRAPH IS CHANGED TO:

1. Fails to begin construction operations within days of execution of the Contract.

108.15 FOR CONVENIENCE

:

108.15.02 For Cause

REVISE PARAGRAPH FIVE TO:

The Department will not make payment for profit and overhead not included in the Contract price for Items for work completed or partially completed except that the Department may make payment for profit and overhead on work.

108.19 COMPLETION AND ACCEPTANCE

THE FOLLOWING IS ADDED:

No Incentive Payment for Early Completion is specified for this project.

108.20 LIQUIDATED DAMAGES

Liquidated damages are as follows:

For each day that the Contractor fails to achieve Completion as specified in Subsection 108.10 of these Special Provisions, the Department will assess liquidated damages in the amount of \$1,000.00 per calendar day.

SECTION 109 – MEASUREMENT AND PAYMENT

REVISE THE ENTIRE TEXT OF SECTION 109.03 TO THE FOLLOWING:

109.03 PAYMENT FOR FORCE ACCOUNT

This section intentionally left blank.

109.04 PAYMENT FOR DELAY DAMAGES

REVISE THE FIRST SENTENCE OF SECTION 109.04 TO:

For eligible extensions, the department will make payment for the costs allowed based on the following documentation submitted by the contractor:

109.05 ESTIMATES

THE FOURTH PARAGRAPH IS CHANGED TO:

The RE will provide a summary of the Estimate to the Contractor. Before the issuance of each payment, certify, on forms provided by the Department, whether:

- 1. No subcontractor or supplier was used on the project; or
- 2. Each subcontractor and supplier used on the project has been paid the amount due, excluding retainage, from the previous progress payment and will be paid the amount due from the current progress payment, excluding retainage, for the subcontractor or supplier's work that was paid by the Department; or
- 3. There exists a valid basis under the terms of the subcontractor's or supplier's contract to withhold payments from the subcontractor or supplier. Therefore, the following subcontractors and suppliers have not been paid for work performed or materials supplied to the project from the proceeds of the previous progress payment or will not be paid for work performed or materials supplied to this project from the proceeds of the current progress payment, or both.

REVISE THE TWELTH PARAGRAPH TO:

From the total Estimate amount, the Department will deduct and retain 2 percent until Substantial Completion.

THE THIRTEENTH PARAGRAPH IS CHANGED TO:

In the first Estimate following installation of all landscape work, the Department will reduce the retainage withheld to 1 percent of the Total Adjusted Contract Price, unless it has been determined by the Department that the withholding of additional retainage is required. If retainage is held in cash withholdings, the reduction is to be accomplished by payment under the next Estimate. If retainage is held in bonds, the Department will authorize a reduction in the escrow account.

109.09 AUDITS

THE FIRST SENTENCE IS REVISED TO:

All claims filed are subject to audit at any time following the filing, whether or not part of a suit pending in the courts of this State pursuant to N.J.S.A. 59:13-1, et seq.

109.09 FINAL PAYMENT AND CLAIMS

REVISE THE FOURTH PARAGRAPH TO THE FOLLOWING:

Include in the release the specific monetary amounts and the specific nature of the claims being reserved. Failure to state specific monetary amounts and the specific nature of the claim shall result in a waiver of such claims. The Contractor may reserve only those claims properly filed with the Department and not previously resolved. The Contractor waives all claims for which the required notice has not been filed with the Department.

DIVISION 150 – CONTRACT REQUIREMENTS

SECTION 152 – INSURANCE

152.03.01 Railroad Protective Liability Insurance

Procure and maintain insurance coverage for the following railroad(s):

SECTION 153 – PROGRESS SCHEDULE

153.03.01 CPM PROGRESS SCHEUDLE

REVISE THE SIXTH PARAGRPAH TO:

The progress schedule does not constitute notice and does not satisfy the notice requirements. Approval of the schedule by the RE does not modify the contract or constitute acceptance of the feasibility of the contractor's logic, activity durations, or assumptions used in creating the schedule. If the schedule reflects a completion date different than that specified in 108.10, this does not change the specified completion date. If the re approves a schedule that reflects a completion date earlier than that specified as the contract time, the department will not accept claims for additional contract time or compensation as the result of failure to complete the work by the earlier date shown on the CPM schedule. Float is the amount of time that an activity may be delayed from its early start without delaying completion. Float belongs to the project and is not for the exclusive use of the contractor or the department.

153.03.03 BAR CHART PROGRESS SCHEULE UPDATE

REVISE THE THIRD PARAGRPAH TO:

Approval of the schedule by the RE does not modify the Contract or constitute Acceptance of the feasibility of the Contractor's logic, activity durations, or assumptions used in creating the schedule. The progress schedule does not constitute notice and does not satisfy the notice requirements. Provide 3 color paper copies of a bar chart progress schedule or similar type that is acceptable to the RE for approval as follows:

SECTION 154 - MOBILIZATION

154.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Item Pay MOBILIZATION Unit LUMP SUM

SECTION 155 – CONSTRUCTION FIELD OFFICE

REPLACE THIS SECTION WITH THE FOLLOWING:

This section intentionally left blank.

SECTION 156 - MATERIALS FIELD LABORATORY AND CURING FACILITY

REPLACE THIS SECTION WITH THE FOLLOWING:

This section intentionally left blank.

SECTION 158 – SOIL EROSION AND SEDIMENT CONTROL AND WATER QUALITY CONTROL

158.03.02 SESC Measures

19. Oil-Only Emergency Spill Kit.

158.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Item PayUnitINLET FILTER TYPE 1SQUARE FOOTFLOATING TURBITY BARRIER, TYPE 3LINEAR FOOTCONCRETE WASHOUT FACILITYLUMP SUMOIL ONLY EMERGENCY SPILL KIT, TYPE 1UNIT

SECTION 159 – TRAFFIC CONTROL

159.02.02 Equipment

THE FOLLOWING IS ADDED TO THE LIST OF EQUIPMENT REFERENCES:

Portable Variable Message Sign w/Remote Communication	1001.04
Portable Trailer Mounted CCTV Camera Assembly	

159,03.01 Traffic Control Coordinator

THE FIRST PARAGRAPH BEFORE THE LIST IS CHANGED TO:

Before starting Work, submit to the RE the name, training, work experience, and contact information of an employee assigned as the on-site Traffic Control Coordinator (TCC). The TCC must be certified as having successfully completed the Rutgers CAIT Traffic Control Coordinator Program, or an equivalent course as approved by the NJDOT Office of Capital Project Safety. The TCC must also successfully complete an approved Traffic Coordinator refresher course every 2 years. The TCC is a full-time position and the employee designated as TCC must be available on a 24 hour a day, 7 days a week basis. The TCC shall have the responsibility for and authority to implement and maintain all traffic

operations for the Project on behalf of the Contractor. Ensure that the TCC is present at the work site at all times while the Work is in progress. The TCC's responsibilities and duties shall include the following:

159.03.02 Traffic Control Devices

THE FIRST PARAGRAPGH IS CHANGED TO:

Ensure that FHWA category 1, 2, 3, and 4 traffic control devices (TCDs) conform to the requirements of the 2016 Edition of the Manual for Assessing Safety Hardware (MASH), except that TCDs manufactured on or before December 31, 2019 must have been purchased by the Contractor on or before December 31, 2019, and conform to the requirements of NCHRP 350, MASH 2009, or MASH 2016. Provide each device's applicable MASH 2016, MASH 2009, or NCHRP 350 test results and FHWA Eligibility letter, if issued by the FHWA, to the RE. Provide the RE with the purchase date certification for devices not meeting the MASH 2016 requirements upon delivery to the site. Ensure that traffic control devices meet or exceed an acceptable condition as described in the ATSSA guide Quality Standards for Work Zone Traffic Control Devices. Traffic control devices need not be new but must be in good condition. Provide traffic control devices according to MUTCD.

2. Construction Barrier Curb.

THE SECOND PARAGRAPH IS CHANGED TO:

At least 30 days before delivering construction barrier curb to the Project Limits, provide the RE notice that the barrier curb is available for inspection. Ensure the barrier curb is not stacked for this inspection. The RE will inspect the barrier curb, along with a Contractor representative, to determine what pieces are not approved for delivery to the Project Limits. Final determination of construction barrier approval will be made at the time of placement at the Project.

9. Portable Trailer Mounted CCTV Camera Assembly (PTMCCA).

159.03.08 Traffic Direction

B. Police.

THE SECOND PARAGRAPH PART 2 IS CHANGED TO:

2. Temporary closure of all lanes on state highways and interstates.

The following subpart is added to this subsection:

c. Traffic Directors

Traffic safety services shall consist of the use of the local police in the enforcement of the approved TCP, if any, and applicable laws to provide a safe worksite for both construction personnel, and the traveling vehicular and pedestrian public. Where a TCP is not provided the requirements of the MUTCD shall govern.

Police providing traffic safety services shall be off-duty police officers from the municipality within which the Work of the Project is to be accomplished.

Police will be assigned during construction hours at locations and times designated by the Contractor. The Contractor agrees that it shall make no claims against the County for extra costs resulting from any delays or interruptions to its operations attributable to the actions or inactions of police in the performance of traffic safety services. The Contractor further agrees that it has incorporated in its Proposal any costs that maybe incurred by

the Contractor as a result of delays attributable for the actions or inactions of police in the performance of traffic safety services, and agrees to bear the risk of loss for any costs not included in its Proposal.

The use of police on the Project will be as determined by the Contractor and the Police Department. Assignment of police to the Project will be on the basis of the Contractor's operations, and the needs of the worksite, and will be made solely by the local police.

The Contractor's failure to give complete, detailed, timely and proper notice of its operations shall not be cause for claims for extra costs by the Contractor, nor shall the number of police assigned to a project constitute a valid basis for a claim by the Contractor. The Contractor agrees that the TCP is a stand-alone document, and that the Contractor is solely responsible for the safety of the Project, the continuity of movement of traffic through the worksite, and the impact of traffic on its work.

The Contractor is advised that there may be emergency situations when police are not available, or when police do not arrive at the job site until after the scheduled arrival time or leave before the scheduled departure time. The Contractor agrees that it shall make no claims against the Township for any costs associated with failure of police to be on the job site at a scheduled time. The Contractor further agrees that it shall assume risk of the possibility of such occurrences and shall factor the associated costs into the Proposal.

The Contractor shall be fully responsible for the set-up and maintenance of the TCP except as required by Local and State law or as specifically set forth in the Contract. The use of police in the providing of traffic safety services is supplemental to the TCP and their presence shall not relieve the Contractor of its responsibility to maintain the TCP and safety on the Project.

The Contractor shall notify the Resident Engineer of any work cancellations at least 24 hours before start of work with the sole exception of unforeseen weather cancellations that occur after the start of work or less than 24 hours before the start of work.

When police have been assigned to a project by the Contractor, it is the Contractor's obligation to notify the Engineer of all cancellations of projected or scheduled operations. Police reporting for work will be reimbursed for a minimum of four hours. If projected work has been canceled, for whatever reason, including but not limited to foreseen weather conditions, and the Resident Engineer was not notified of the cancellations at least 24 hours before by the Contractor, except as noted above, the police will each be reimbursed for four hours of work.

The persons to contact at the Rahway Police Department for the pre-construction conference, or as needed, are Lt. Desordi at (732) 827-2111 or Lt. Deering at (732) 827-2179. To specifically request Police Traffic Directors for this Contact, call "Jobs for Blue" at (877) 425-8330.

These payments will be made by the Contractor and the amount will be deducted from Contractor invoices for the reason of his failure to notify.

159.04 MEASUREMENT AND PAYMENT

159.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay ItemPay UnitBREAKAWAY BARRIADEUNITDRUMUNITTRAFFIC CONEUNIT

CONSTRUCTION SIGNS SQUARE FOOT CONSTRUCTION BARRIER CURB SQUARE FOOT

 $TEMPORARY\ CRASH\ CUSHION,\ COMPRESSIVE\ BARRIER,\ TYPE\ 3,$

NARROW WIDTH UNIT

TRAFFIC DIRECTOR, MUNICIPAL POLICE ALLOWANCE
TEMPORARY PAVEMENT MARKINGS
ALLOWANCE
SQUARE FOOT

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

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

SECTION 160 – PRICE ADJUSTMENTS

160.03.01 FUEL PRICE ADJUSTMENT

THE FIFTH PARAGRAPH IS CHANGED TO:

The Department will calculate fuel price adjustment on a monthly basis using the following formula:

$$F = (MF - BF) \times G$$

Where:

F = Fuel Price Adjustment

MF = Monthly Fuel Price Index for work performed from the first day of the month to the last day of the month for the month prior to the estimate cutoff date

BF = Basic Fuel Price Index

G = Gallons of Fuel for Price Adjustment

THE SEVENTH PARAGRAPH IS CHANGED TO:

The basic fuel price index is the previous month's fuel price index before receipt of bids. The Department will use the fuel price index for the month before the regular monthly estimate cutoff date as the Monthly Fuel Price Index for work performed in the previous calendar month. If the Monthly Fuel Price Index increases by 50 percent or more over the Basic Fuel Price Index, do not perform any work involving Items listed in Table 160.03.01-1 without written approval from the RE.

160.03.02 ASPHALT PRICE ADJUSTMENT

THE THIRD PARAGRAPH IS CHANGED TO:

The Department will calculate the asphalt price adjustment by the following formula:

$A = (MA - BA) \times T$

Where:

- A = Asphalt Price Adjustment
- MA = Monthly Asphalt Price Index for work performed from the first day of the month to the last day of the month for the month prior to the estimate cutoff date
- BA = Basic Asphalt price Index
- T = Tons of new Asphalt Binder
- 1. The Department will determine the weight of asphalt binder for price adjustment by multiplying the new asphalt in the approved job mix formula by the weight of the item containing asphalt binder. If a Hot Mix Asphalt Item has a payment unit other than ton, the Department will apply an appropriate conversion factor to determine the number of tons of asphalt binder used.

THE SIXTH PARAGRAPH IS CHANGED TO:

The basic asphalt price index is the asphalt price index for the month before the opening of bids. The Department will use the asphalt price index for the month before the regular monthly estimate cutoff date as the monthly asphalt price index for work performed in the previous calendar month.

160.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Item Pay
FUEL PRICE ADJUSTMENT

Unit DOLLAR

DIVISION 200 – EARTHWORK

SECTION 201 – CLEARING SITE

201.03.01 Clearing Site

Remove trees and branches within 15 feet of the end of JCP&L pole cross arms. If the resulting tree is rendered hazardous, then remove the entire tree according to Section 802.

201.03.02 Clearing Site, Bridge and Clearing Site, Structure

THE FOLLOWING IS ADDED:

The procedure is described below:

- Prestressed Concrete Stringers and Concrete Diaphragms. Repair damage to prestressed concrete stringers and concrete diaphragms using nonshrink grout conforming to 903.08 before deck placement.
- 2. Steel Stringers, Floorbeams, Cross Frames, and Diaphragms.
 - a. Repair procedures to tensile components in conformance with ASTM A6/A6M and the following:
 - 1 Repair gouges up to 1/8 inch by grinding flush in the direction of principal stress.
 - 2 Repair gouges deeper than 1/8 inch by first grinding; then, depositing weld metal and grinding flush with the surface of the metal in the direction of principal stress. Weld using low hydrogen electrodes conforming to current AWS Specifications A5.1 and A5.5.
 - Repair kinks and deformations by flame straightening or a combination of flame straightening and jacking. Ensure flame straightening is performed by personnel having a minimum of three years of documented experience. Submit the names of the personnel to the RE for review and approval prior to performing the work.
 - b. Repair procedures to compression components for kinks and deformations as outlined in 2.a.3 above. Where more than 5 percent of the cross-sectional area of the member is damaged, submit a repair procedure to the RE for review and approval.

Clean and paint exposed existing top flanges of beams with prime coat as specified in 554.03.

1. Grounding for Electrified Railroad. Submit a list of required grounding materials to the RE for approval 21 days before construction operation. In the list, include the material description, manufacturer, and catalog number. After obtaining the RE's approval, submit the list to the railroad for review and approval. Do not order the materials prior to obtaining the railroad's approval. Furnish and deliver the grounding materials to the railroad. Obtain a receipt for the materials from the railroad and provide a copy to the RE.

List of Materials				
Description	Quantity Required			
U-bolt, 7/8 inch diameter by 4 inch, BS fastener	-			
Strap, clevis, 1 1/4 by 2 inches stock, 12 inch connecting length, 1 inch diameter hole, 5/8 inch diameter bolt, ultimate strength 25 psi, Brewer Tilchener Corp3074 C				
Dead end eye bolt, compression type steel, use DIE 6010SH, compression tool, 60A ALCOA 9190-332				

	List of Materia	ıls	
Description			Quantity Required
Jumper cable, compression type alum 60A ALCOA 5120-781	inum, use DIE 6020AH, compression	n tool	£
Terminal - Bundy AK2C39B1 to 336	400 Cable (1)		
Ground terminal - Bundy AK2C39B1	to 336400 Cable (2)		
Terminal - solid barrier to 0.17 square	e inch cable Bundy KC28B1		*******
Compound, aluminum to copper conr	ection (ALNOX) CANS		
Termination, dead end strand clamp,	ALCO 336 4 KCM		
Clip, bronze, complete type BC, Ohio	brass		
Thimble-Bronx 336 4 KCM			
U-bolt, 1 1/4 inch diameter by 1 1/2 is aluminum cable having a diameter of	nch loop 336 4 KCM 11, 30/7 STR A 0.17 square inches, ANACONDA	CSR, ANACONDA insulated	
Remove following: Parcel No.	Tank Size	Contents	Tank Registration No.
201.03.08 Removal of Asbestos			
201.04 MEASUREMENT AND	PAYMENT		
THE FOLLOWING IS ADDED:			
The Department will measure and	make payment for Items as follo	ows:	
<i>PAY ITEM</i> CLEARING SITE			PAY UNIT LUMP SUM
The Department will not make pa	yment for the Item CLEARING S	SITE in excess of \$30,000.00	until Completion.
The Department will not make pountil Substantial Completion.	syment for the Item CLEARING	SITE, BRIDGE () in ex	cess of \$
The Department will not make pay until Substantial Completion.	ment for the Item CLEARING SI	TE, STRUCTURE () in ex	xcess of \$

SECTION 202 – EXCAVATION

202.03.01 Stripping

THE SECOND PARAGRAPH IS CHANGED TO:

Strip vegetation and underlying soil to a depth of 4 to 6 inches below the existing ground surface. Confirm the thickness of stripping with the RE based on field conditions. Temporarily store in stockpiles, as specified in 202.03.03.B, stripped material including excess that is determined suitable for the future use of the Department. The Department will sample and analyze stripped material in stockpiles to determine suitability for use as topsoil. Reuse or dispose of unsuitable stripped material as specified in 202.03.03.C.

202.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item
EXCAVATION, TEST PIT
EXCAVATION, UNCLASSIFIED
EXCAVATION, REGULATED MATERIAL
DISPOSAL OF REGULATED MATERIAL

Pay Unit CUBIC YARD CUBIC YARD CUBIC YARD TON

SECTION 203 – EMBANKMENT

203.02 MATERIALS

203.02.01 Materials

THE FOLLOWING IS ADDED:

Geotextile filter fabric material shall be in accordance with the recommendation of the manufacturer of the Articulate Concrete Block Matting, or approved equal.

203.03 CONSTRUCTION

THE FOLLOWING IS ADDED:

203.03.03 Geotextile

Geotextile filter fabric material shall be installed in accordance with the manufactrer's recommendations.

203.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item Pay Unit

SQUARE YARD CUBIC YARD

GEOTEXTILE I-14 SOIL AGGREGATE

DIVISION 300 – SUBBASE AND BASE COURSES

SECTION 301 – SUBBASE

301.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Item **SUBBASE** Pav Unit **CUBIC YARD**

SECTION 302 – AGGREGATE BASE COURSE

302.02.01 Materials

Provide materials as specified:

No. 57 Course Aggregate.....901.03

302.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

DENSE GRADED AGGREGATE BASE COURSE, 6" THICK COURSE AGGREGATE, SIZE NO. 57

Unit **SQUARE YARD CUBIC YARD**

SECTION 304 – CONCRETE BASE COURSE

304.03.01 Concrete Base Course

ADD THE FOLLOWING SENTENCE TO THE END OF THE FIRST PARAGRAPH:

If the concrete thickness lot area is less than 5000 square yards, the Regional District Local Aid Office may waive the test strip requirements.

SECTION 305 – RUBBLIZING CONCRETE PAVEMENT

305.03.01.F Rubblization

ADD THE FOLLOWING THIRD PARAGRAPH TO THE END OF THIS SECTION:

If the rubblized concrete thickness lot area is less than 5000 square yards, the Regional District Local Aid Office may	
waive the test strip requirements.	

DIVISION 400 – PAVEMENTS

SECTION 401 - HOT MIX ASPHALT (HMA) COURSES

	Stage	Max. Time Interval Allowed
C. Micro-Milling a	nd Profile Milling.	
C. Micro-Milling an For projects with a post traffic operations SME	sted speed limit of 45 miles per h	our or greater the time interval is to be 0 unless approved by the

401.03.07 HMA Courses

C. Test Strip

REPLACE THE FIRST PARAGRAPH OF THIS SECTION WITH THE FOLLOWING:

Test Strip. Construct a test strip for each HMA mix for contracts with more than a total of 5,500 tons of HMA. For HMA HIGH RAP, construct the test strip at least 14 days prior to production. Test strips are not necessary for temporary pavement. Ensure that the tack coat or prime coat has been placed as specified in 401.03.05 and 401.03.06, before placing HMA. Transport and deliver, spread and grade, and compact as specified in 401.03.07.D, 401.03.07.E, and 401.03.07.F, respectively, and according to the approved paving plan. Construct a test strip for the first 700 to 1,200 square yards placed for each job mix formula. If the paving lot area is less than 700 square yards, the District Local Aid Office may waive the coring requirements. While constructing the test strip, record the following information and submit to the RE:

E. Spreading and Grading.

G. Opening to Traffic.

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure that RPMs are installed and rumble strips are constructed within 14 days of opening each day's surface paving to traffic.

H. Air Void Requirements

FOR LOCAL AID PROJECTS, THIS SUBSECTION IS REPLACED BY THE FOLLOWING.

Pavement lots are defined as approximately 15,000 square yards of pavement in Surface area. If pavement lot area is

less than 5000 square yards, the District Local Aid Office may waive the air voids requirements.

The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209.

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

The Laboratory will determine air voids from 5 (Five) 6 inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The HMA Core Sampling Plan form provided on the Local Aid Website must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Core Sampling Plan form to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts, or the specifications defined herein. The coring locations must be designated by a station and offset, and offsets are taken from the left edge of the pavement in the direction of travel within the lane lines. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

The Laboratory will determine air voids of cores from the values for the maximum specific gravity of the mix and the bulk specific gravity of the core. The Laboratory will determine the maximum specific gravity of the mix according to NJDOT B-3 and AASHTO T 209, except that minimum sample size may be waived in order to use a 6-inch diameter core sample. The Laboratory will determine the bulk specific gravity of the compacted mixture by testing each core according to AASHTO T 166.

The Laboratory will calculate the percent defective (PD) as the percentage of the lot outside the acceptable range of 2 percent air voids to 8 percent air voids. The acceptable quality limit is 15 percent defective. For lots in which PD > 15, the Department will assess a negative pay adjustment.

The Laboratory will use and submit to the RE <u>form DS8S-PD</u> provided from The Local Aid District Office and verify manually the PD calculation.

The Laboratory will calculate pay adjustments based on the following:

1. Sample Mean (\overline{X}) and Standard Deviation (S) of the N Test Results (X1, X2,..., XN).

$$\overline{X} = \frac{(X_1 + X_2 + \dots + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \overline{X})^2 + (X_2 - \overline{X})^2 + \dots + (X_N - \overline{X})^2}{N - 1}}$$

2. Quality Index (Q).

$$Q_{L} = \frac{(\overline{X} - 2.0)}{S}$$

$$Q_{U} = \frac{(8.0 - \overline{X})}{S}$$

- 3. **Percent Defective (PD).** Using NJDOT ST for the appropriate sample size, the Laboratory will determine PD_L and PD_U associated with Q_L and Q_U , respectively. $PD = PD_L + PD_U$
- 4. Reduction Per Lot. Calculate the reduction per lot as specified in Table 401.03.07-3:

	Tal	able	401.0	3.07-3	;			
Reduction in Pay	ment for No	Vonce	onfori	nance	to Air	Void 1	Requirem	ents

Percent Defective (PD) Per Lot	Reduction Per Lot (%)
0 < PD ≤ 15	0
15 < PD ≤ 30	0.5
30 < PD ≤ 35	2
35 < PD ≤ 40	10
40 < PD ≤ 45	15
45 < PD ≤ 50	20
$50 < PD \le 60$	30
60 < PD ≤ 75	45
PD > 75	Remove & Replace

- **Outlier Detection.** If PD < 10, the Laboratory will not screen for outliers. If PD \geq 10, the Laboratory will screen acceptance cores for outliers using a statistically valid procedure. The following procedure applies only for a sample size of 5 or 10.
 - 1. The Laboratory will arrange the core results in ascending order, in which X_1 represents the smallest value and X_N represents the largest value.
 - 2. If X_N is suspected of being an outlier, the Laboratory will calculate:

$$R = \frac{X_N - X_{(N-1)}}{X_N - X_1}$$

3. If X_1 is suspected of being an outlier, the Laboratory will calculate:

$$R = \frac{X_2 - X_1}{X_N - X_1}$$

4. For N = 5 if R > 0.642, the value is judged to be statistically significant and the core is excluded.

For N = 10 if R > 0.412, the value is judged to be statistically significant and the core is excluded.

If an outlier is detected for N=5 and no retest is warranted, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If an outlier is detected and a retest is justified, take a replacement core for the outlier at the same time as the 5 additional retest cores are taken. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine reduction per lot.

If an outlier is detected for N = 10, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine the reduction per lot.

- 6. Retest. If the initial series of 5 cores produces a percent defective value of PD ≥ 30 for mainline or ramp lots, or PD ≥ 50 for other pavement lots, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the HMA Core Sampling Plan form. Take the additional cores within 15 days of receipt of the initial core results. If the additional cores are not taken within the 15 days, the Laboratory will use the initial core results to determine the PPA. If the additional cores are taken, the Laboratory will recalculate the reduction per lot using the combined results from the 10 cores.
- 7. Removal and Replacement. If the final lot PD ≥ 75 (based on the combined set of 10 cores or 5 cores if the Contractor does not take additional cores), remove and replace the lot and all overlying work. The replacement work is subject to the same requirements as the initial work.

For shoulder lots, the Department will assess the calculated reduction per lot instead of removal and replacement. Fog seal the lot as specified in 422.03.01.

I. Thickness Requirements

DELETE THIS SUBSECTION AND REPLACE THIS SUBSECTION'S CONTENTS WITH THE FOLLOWING: This subsection is deleted. In no instance will a compacted average thickness of less than 1.25 inches be acceptable.

DELETE THIS SUBSECTION AND REPLACE THIS SUBSECTION'S CONTENTS WITH THE FOLLOWING:

Thickness requirements will apply when full-depth, uniform-thickness HMA pavement construction is shown.

Pavement lots are defined as approximately 15,000 square yards of pavement area. The Engineer will not include areas consisting of different HMA mixtures or thicknesses in the same lot. If thickness lot area is less than 5000 square yards, the District Local Aid Office may waive the thickness requirements.

The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209.

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

The Laboratory will test for thickness using the full-depth cores taken for surface course air voids, evaluated according to NJDOT B-4. The Laboratory will base acceptance on total thickness and thickness of the surface course.

Total Thickness. The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is
less than the design thickness. The Laboratory will consider 25 percent defective as the acceptable quality limit.
For lots where PD < 25, the Department will award a positive pay adjustment. For lots where PD > 25, the
Department will assess a negative pay adjustment.

The Department will base total thickness acceptance on the percentage of the lot estimated to fall below the specified thickness as follows

a. Sample Mean (\bar{X}) and Standard Deviation (S) of the N Test Results $(X_1, X_2, ..., X_N)$. Calculate as specified in 401.03.07.H.1.

$$\overline{X} = \frac{(X_1 + X_2 + \dots + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \overline{X})^2 + (X_2 - \overline{X})^2 + \dots + (X_N - \overline{X})^2}{N - 1}}$$

b. Quality Index (Q_I)

$$Q_L = \frac{(\overline{X} - T_{des})}{S}$$

Where $T_{des} = design thickness$.

- c. Percent Defective (PD). Using NJDOT ST for the appropriate sample size, determine the percentage of material (PD) falling below the design thickness associated with Q_L (lower limit).
- **d.** Reduction in Payment. The Department will determine the reduction in payment based on the quantity of the surface course multiplied by the percent reduction in payment from Table 401.03.07-5.

	: Nonconformance to Requirements for Total kness
Percent Defective	Percent Reduction
0 to 25.0	0
25.1 to 30.0	2
30.1 to 35.0	5
35.1 to 40.0	10
40.1 to 45.0	20
Over 45.0	Remove & Replace

- e. **Retest.** If the initial series of 5 cores produces a percent defective value of PD ≥ 30, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the RE. Notify the RE within 15 days of receipt of the initial core results to take the additional cores. If the RE is not notified within the 15 days, the Laboratory will use the initial core results to determine the reduction in payment for nonconformance requirements. If the additional cores are taken, the ME will recalculate the reduction in payment for nonconformance requirements using the combined results from the 10 cores.
- f. Removal and Replacement. If the lot $PD \ge 45$, remove and replace, or mill and overlay, the lot. The replacement work is subject to the same requirements as the initial work.
- 2. Surface Course Thickness. The Laboratory will evaluate the surface course solely to determine whether a remove- and-replace or an overlay condition exists, not for pay adjustment. The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the allowable thickness for the nominal maximum aggregate used in the surface course. The Laboratory will accept pavement lots with PD ≤ 30 and will reject pavement lots with PD > 30.

The Laboratory will base surface thickness acceptance on the percentage of the lot estimated to fall below the allowable thickness as follows:

- a. Sample Mean (X) and Standard Deviation (S) of the N Test Results (X1, X2,..., XN). Calculate using the formula as specified in 401.03.03.I.1.
- b. Quality Index (Q).

 $Q_L = (X - T_{all})/S$, where T_{all} is the minimum allowable thickness from Table 401.03.07-6.

Table 401.03.07-6 Surface	Table 401.03.07-6 Surface Course Thickness Requirements		
HMA Mix Design Size Designation	$\begin{array}{c} \textbf{Minimum Allowable Compacted Lift} \\ \textbf{Thickness (T_{all})} \end{array}$		
4.75 MM	0.50 inch		
9.5 MM	1.00 inch		
12.5 MM	1.25 inches		
19 MM	2.00 inches		

- c. Percent Defective. Using NJDOT ST Statistical Tables (NJDOT Standard Specs for Roads and Bridges 2019-NJDOT TEST METHODS) for the appropriate sample size, determine the percentage of material (PD) falling below the allowable thickness associated with Q_L (lower limit).
- d. Retest. If the initial series of 5 cores produces a percent defective value of PD > 30, the Contractor may take an additional 5 cores at random locations determined by the Laboratory. Notify the RE within 15 days of receipt of the initial core results to take the additional cores. If the RE is not notified within the 15 days, the Laboratory will use the initial core results to determine the PPA. When the additional cores are taken, the Laboratory will recalculate the reduction in payment for nonconformance requirements using the combined results from the 10 cores to obtain the total PD.
- e. Removal and Replacement. If the surface course fails to meet the acceptance requirement with a PD ≤ 45, the Department will require removal and replacement of the lot. The replacement work is subject to the same requirements as the initial work.

J. Ride Quality Requirements.

The Department will evaluate the ride quality of the final riding surface of all constructed pavement on the project, for routes designated as National Highway System (NHS) and routes under NJDOT jurisdiction, using the International Roughness Index (IRI) according to ASTM E 1926. All NHS roadways are listed on the Department's website here. The Department may evaluate ride quality of other routes not designated as NHS or under NJDOT jurisdiction. The final riding surface is defined as the last lift of the pavement structure where traffic will be allowed. The pavement will be evaluated using the current average IRI (C) to select the target IRI (T) from Table 401.03.07-8. The current average IRI (C) is defined as the preconstruction ride quality measured not more than two years from the start of the project pavement construction.

The RE will designate an independent testing agency to perform the ride quality testing and analysis. The testing agency is required to comply with testing and certification requirements according to NJDOT R-1. If the current average IRI (C) is not available, then the testing agency will test, analyze and report ride quality before pavement construction to measure current average IRI (C). The testing agency will use and submit to the RE the IRI Testing Summary Report form provided from The Local Aid District Office and verify manually the pay adjustment calculation.

Current IRI data for paving routes designated NHS or NJDOT jurisdiction can be made available by request by contacting Simon Nwachukwu at Simon.Nwachukwu@dot.nj.gov.

For projects paving routes designated NHS or NJDOT jurisdiction on mainline travel lanes equal to or greater than 2,500 feet length and any lane within the project of at least 1,000 feet length, the Department will evaluate the ride quality of the final riding surface of the mainline travel lanes using IRI. The Department will use the measured IRI to calculate the pay adjustment (PA) using pay adjustment equation (PAE) type PA1 as specified in Table 401.03.07-7. PA will be based on lots of 0.01 mile length. The PA will be zero for acceptable quality and negative for inferior quality work.

For projects paving routes designated NHS or NJDOT jurisdiction on mainline travel lanes of less than 2,500 feet length, the RE will visually inspect the final riding surface. Based on visual inspection, if the RE determines that the work may not conform to the ride quality requirements, then the Department will evaluate the ride quality of the final riding surface using IRI. Visual inspection by the RE is considered sufficient grounds for such evaluation. The Department will use the measured IRI to calculate the PA using pay equation type PA1 as specified in Table 401.03.07-7.

For paving on ramps and shoulders, the RE will visually inspect the final riding surface. Based on visual inspection, if the RE determines that the work may not conform to the ride quality requirements, then the Department will evaluate the ride quality of the final riding surface using IRI. Visual inspection by the RE is considered sufficient grounds for such evaluation. The Department will use the measured IRI to calculate the pay adjustment using pay equation type PA2 as specified in Table 401.03.07-7.

When paving over bridge structures on NHS or NJDOT jurisdiction roadways, the Department will use the measured IRI to calculate the pay adjustment using pay equation type PA3 as specified in Table 401.03.07-7.

For paving on Local roadways other than NHS and NJDOT jurisdiction on mainline travel lanes equal to or greater than 2,500 feet length and any lane within the project of at least 1,000 feet length, the Department may evaluate the ride quality of the final riding surface of the mainline travel lanes using IRI. Local roadways are defined as municipal and county roads that are not designated as part of the NHS. The Department will use the measured IRI to calculate the pay adjustment (PA) using pay adjustment equation (PAE) type PA4 as specified in Table 401.03.07-7.

1. Smoothness Measurement. The Department will test the longitudinal profile of the final riding surface for ride quality with a Class 1 Inertial Profiling System according to NJDOT R-1. If project conditions preclude

- the use of the Class 1 Inertial Profiling System, the Department will use a Class 1 Walking Profiler or lightweight profiler.
- 2. Quality Control Testing. Perform quality control testing during lift placement to ensure compliance with the ride quality requirements specified in Table 401.03.07-8.
- 3. Preparation for IRI Testing. Notify the RE when all paving is complete and the RE will request IRI testing by independent testing agency. Provide traffic control when the independent testing agency performs IRI testing. Perform mechanical sweeping of the surface before IRI testing. To facilitate auto triggering on laser profilers, place a single line of temporary pavement marking tape perpendicular to the roadway baseline at the beginning and end of each lane, shoulder, and ramp to be tested or as per direction of the independent testing agency. Submit the actual stationing for each temporary pavement marking tape location to the RE.
- 4. Quality Acceptance. The Department will determine acceptance and provide PA based on the following:
 - a. Pay Adjustment. The acceptable IRI for the roadway pavement will be the target IRI (T) from Table 401.03.07-8 rounded to the nearest whole number for which full payment will be made and will be determined using the latest available current average IRI (C) data. The number of lots for final pay adjustment will be reduced by the number of lots excluded for each segment shown in Table 401.03.07-7. Lots excluded from final PA will be those with the highest recorded IRI numbers for respective roadway and bridge deck segments. A single average IRI value and the corresponding PA for each 0.01 mile lot will be reported. IRI units are in inches per mile.

As snown in the Special Provisions able 401.03.07-7A	$IRI < T$ $T \le IRI \le 170$ $IRI > 170$ $IRI > 120$ $120 < IRI \le 170$ $IRI > 170$ $IRI > 170$ $IRI > 170$	PA1=0 ² PA1=PAE PA1=-A or Corrective action PA2 =0 ² PA2 = (IRI – 120) x (–\$5.00) Maximum Negative Pay or Corrective action PA3=0 ²
Special Provisions able 401.03.07-7A ill include, if tested	IRI>170 IRI ≤ 120 120 < IRI ≤ 170 IRI>170	PA1= -A or Corrective action PA2 = 0 ² PA2 = (IRI - 120) x (-\$5.00) Maximum Negative Pay or Corrective action
ill include, if tested	IRI ≤ 120 120 < IRI ≤ 170 IRI>170	PA2 =0 ² PA2 = (IRI – 120) x (–\$5.00) Maximum Negative Pay or Corrective action
ill include, if tested	120 < IRI ≤ 170 IRI>170	PA2 = (IRI – 120) x (–\$5.00) Maximum Negative Pay or Corrective action
:	IRI>170	Maximum Negative Pay or Corrective action
		Maximum Negative Pay or Corrective action PA3=0 ²
	IRI≤120	PA3=0 ²
ill include, if tested	120 <iri≤170< td=""><td>PA3=PAE</td></iri≤170<>	PA3=PAE
,	IRI>170	PA3= -A or Corrective action
	IRI ≤ T	PA4=0 ²
ill include, if tested	T < IRI ≤ T+80 or 170 whichever is higher	$PA4 = (IRI - T) \times (-\$1.25)$
	IRI>T+80 or 170 whichever is higher	Maximum Negative Pay or Corrective action
Α		A
$7.75347 \times \log_e(T)$	+ 194.87 -37.75	$5347 \times \log_e(IRI) + 194.87$
	$A = \frac{A}{7.75347 \times \log_e(T)}$	IRI \leq T T $<$ IRI \leq T+80 or 170 whichever is higher IRI>T+80 or 170 whichever is higher

P = Bid price of last lift of the pavement structure to be evaluated or price listed in table 401.03.07-7B, whichever is higher, per Ton

 D^1 = Design thickness of last lift to be evaluated, Inch

M = Bid price of Milling, per Square Yard

T = Target IRI

1. For various design thicknesses of last lift to be evaluated within a segment, calculate the thickness using the following equation:

Design thickness of last lift to be evaluated (D) =
$$\frac{D_1 N_1 + D_2 N_2 + \cdots D_N N_N}{N_1 + N_2 + N_3 + \cdots N_N}$$

Where:

D_N = Design thickness of the last lift to be evaluated of N sections having same mix, Inch

N_N = Number of lots of N section with design thickness D_N of last lift to be evaluated

2. Positive pay adjustment will be used to offset negative pay adjustment. Total pay adjustment will not be greater than zero.

THE FOLLOWING IS ADDED:

Table 401.03.07	-7A Exclusions for Resurfacing or Re	econstruction
Roadway	Lane Number	Exclusion

Table 401.03.07-7B Minimum Value of P			
Surface Course Mix	P		
Hot Mix Asphalt (Dense Graded) with PG 64-22 binder	\$60.00		
Hot Mix Asphalt (Dense Graded) with PG 64E-22 binder	\$70.00		
Stone Matrix Asphalt, High Performance Thin Overlay, Ultra-Thin Friction Course, Open Graded or Gap Graded Mixes not specified in this table	\$80.00		
Bridge Deck Waterproof Surface Course	\$250.00		

T	able 401.03.07-8 Ta	rget IRI for Resurfac	ing or Reco	nstruction ($(\mathbf{T})^3$	
	Current average	rrent average New Construction or Reconstruction	Number of Operation for other than New Construction or Reconstruction ⁵			
Roadway Type	IRI (C)		One ⁴	Two ⁴	Three ⁴	Four or More ⁴
			Targe	t IRI (T)		
NHS & NJDOT 96 to <17	≤ 60		50	50	50	50
	61 to ≤95		53	50	50	50
	96 to ≤170		55	53	50	50
Freeways or Limited Access Highways		50		55	53	50
Access Highways	201 to ≤285		0.64C ⁷	58	55	50
	>2868			60	58	53
NHS & NJDOT	≤ 60	60	60	60	60	60
Roadways other than	61 to ≤95	60	63	60	60	60

						~
Freeways or Limited	96 to ≤170		66	63	60	60
Access Highways with	171 to≤200			66	63	60
speed limit > 35 MPH	201 to ≤285		0.64C ⁷	69	66	60
	>2868			72	69	63
	≤ 60		70	70	70	70
NHS & NJDOT Roadways other than Freeways or Limited Access Highways with speed limit ≤ 35 MPH 61 to ≤ 95 96 to ≤ 170 171 to ≤ 200	61 to ≤95		74	70	70	70
	96 to ≤170	70	77	74	70	70
	171 to≤200		0.64C ⁷	77	74	70
	201 to ≤285			81	77	70
•	>2868			84	81	74
Local Roadway with Posted Speed ≥45 MPH	С	80	0.7C or 80 whichever is higher	0.49C or 80 whichever is higher	0.34C or 80 whichever is higher	0.24C or 80 whichever is higher
Local Roadway with Posted Speed <45 MPH	С	100	0.84C or 100 whichever is higher	0.59C or 100 whichever is higher	0.41C or 100 whichever is higher	0.29C or 100 whichever is higher

The Department will determine target IRI (T) of roadways containing multiple speed limits of greater than 35

The Department will determine target IRI (T) of roadways containing multiple speed limits of g MPH and less than or equal to 35 MPH based on the following equation:

Target IRI of a roadway consists of N Roadway type (T) =
$$\frac{T_1L_1 + T_2L_2 + \cdots ... T_NL_N}{L_{1+}L_{2+}L_{3+}....L_N}$$

Where T_N is the Target IRI of N section and L_N is the length of N section in miles to the nearest 0.01 mile

- Current average IRI (C) is the average of the latest available preconstruction IRI data.
- The target IRI (T) is selected or calculated from the table and rounded to the nearest whole number.
- Multiply T with 1.05 for HMA over Concrete, if total HMA after proposed treatment is less than 8 inch thick.
- Milling is one operation. Paving each layer of asphalt mix is an individual operation unless plans specify paving a mix in two lifts. In such case, each lift is considered as an operation.
- Construction or reconstruction of full pavement box on subgrade is new construction or reconstruction.
- Use Pay Equation as below:

IRI<T PA=0IRI>T PA=PAE

- For paving over rubblized concrete, use C >286 to determine target IRI, then multiply T with 1.05 if total HMA after proposed treatment is less than 8-inch thick.
- Paving in one lift with no corrective work such as milling, grinding or pre-levelling of at least 25 percent of surface area of existing pavement is one operation.
- Corrective Action. The Department may require corrective action or assess the maximum negative pay adjustment as computed in Table 401.03.07-7, if the average IRI after testing is performed of NHS or NJDOT jurisdiction roadway is greater than 170 inches per mile, or average IRI local roadway is greater than T+80 or 170 whichever is higher. If the Department requires corrective action submit a plan for corrective action. If the plan for corrective action is approved and the lot is corrected, the Department will retest and evaluate the corrected area as a new lot that must meet the same requirements as the initial work. If the plan for corrective action is not approved, the Department may require removal and replacement. The replacement work is subject to the same requirements as the initial work.

401.03.08 Core Samples

REPLACE THIS SUBSECTION WITH THE FOLLOWING:

The LPA will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209. The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

Upon completion of an HMA lot, the Laboratory shall drill cores at random locations at least 12 hours after paving. Take cores in the presence of the RE. The Laboratory will determine air voids from 5 (Five) 6 inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The HMA Core Sampling Plan form provided on the Local Aid Website must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Core Sampling Plan form to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts, or the specifications defined herein. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

The Laboratory shall use drilling equipment with a water-cooled, diamond-tipped masonry drill bit that produces 6 inch nominal diameter cores for the full depth of the pavement. The Laboratory shall remove the core from the pavement without damaging it. After the Laboratory removes the core, the Laboratory shall remove all water from the hole. The Laboratory shall apply an even coating of tack coat to sides of the hole. The Laboratory shall place cold patching material or HMA in maximum lifts of 4 inches in the hole and compact each lift. If cold patching material is utilized to fill the coring hole, then it is not necessary to apply tack coat to the sides of the hole. The Laboratory shall ensure that the final surface is 1/4 inch above the surrounding pavement surface.

HMA cores are to be taken from the HMA lot for quality assurance sampling, testing and analysis within seven (7) days of completing the HMA lot. For test strip lots and the first traveled way lot, the Laboratory shall deliver cores from the field to the testing Laboratory within 48 hours of completing the lot. The Laboratory shall deliver all other acceptance cores within 7 days of completing the lot.

After each air void lot is placed, the Laboratory shall drill cores so that the full depth of the course is recovered for air void acceptance testing. If thickness acceptance testing is required as specified in 401.03.07.I, the Laboratory shall drill the surface course air void cores for the full depth of pavement.

The Laboratory shall utilize a tamper proof core sample box for core storage and transportation. The Laboratory shall ensure that the core sample box can be locked and sealed and is tamper proof in such a manner that it cannot be opened without removing the seals. The Laboratory shall ensure that the core sample box provides protection for the cores from being disturbed or damaged during transit. The Laboratory shall mark the assigned core number on the side of the sample. The Laboratory shall place core samples in the core sample box. The Laboratory shall transport the sealed core sample boxes to the testing Laboratory.

The Laboratory will not accept damaged core samples for testing. If the core sample box exhibits indications of tampering, the core samples will be rejected. If any core samples are rejected, drill a replacement core at the same offset and within 5 feet of the original station and deliver to the Laboratory as specified above within 48 hours.

If the project is utilizing quality control cores, the Laboratory shall provide the results of the quality control core testing to the Contractor in a timely manner which will not unnecessarily impede construction.

401.04 Measurement and Payment

REPLACE THIS SUBSECTION WITH THE FOLLOWING:

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

Item HMA MILLING, 3" OR LESS HOT MIX ASPHALT PAVEMENT REPAIR POLYMERIZED JOINT ADHESIVE TACK COAT HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE Pay Unit **SQUARE YARD SQUARE YARD** LINEAR FOOT **GALLON** TON

The specified depth of the milling is measured from the original surface to the top of the high spots of the textured surface.

The RE will measure HOT MIX ASPHALT PAVEMENT REPAIR before overlay by the square yard of area bounded by the sawcuts.

The RE will measure TACK COAT by the volume delivered, converted to the number of gallons at 60 °F as calculated by the temperature-volume correction factors specified in 902.01.

The RE will measure HOT MIX ASPHALT 12.5 m 64 by the ton as indicated on the certified weigh tickets, excluding unused material. When nominal maximum aggregate size 3/8 inch HMA surface course is directed for use in transition (run out) areas, the Department will include this weight with the weight for HOT MIX ASPHALT 12.5 m 64 SURFACE COURSE.

The Department will not include payment for polymerized joint adhesive in the various paving Items. The Department will make payment for polymerized joint adhesive under POLYMERIZED JOINT ADHESIVE.

The Department will make a payment adjustment for HMA air void quality per lot by the following formula:

Pay Adjustment Per HMA Lot = $-Q \times BP \times Reduction Per Lot (\%)$

Where:

BP =

Bid Price of HMA

Quantity of HMA in lot receiving payment adjustment Reduction Per Lot (%) = Air void Reduction (%) per lot as specified in 401.03.07.H.

The Department will make a payment adjustment for HMA thickness quality per lot by the following formula:

Pay Adjustment Per HMA Lot = - Q x BP x Percent Reduction (%)

Where:

BP =

Bid Price of HMA

Q = Quantity of HMA in lot receiving payment adjustment

Percent Reduction (%) = Thickness Percent Reduction (%) per lot as specified in 401.03.07.I.

The Department will make a payment adjustment for HMA ride quality, as specified in 401.03.07.J.

SECTION 403 – ULTRA-THIN FRICTION COURSE

403.03.01 Ultra-Thin Friction Course

REPLACE THE FIRST PARAGRAPH OF SECTION 401.03.01.F WITH THE FOLLOWING:

Test Strip. Construct a test strip for the first 700 to 1,200 square yards placed of ultra-thin friction course. If the ultrathin friction course paving lot area is less than 700 square yards, the Regional District Local Aid Office may waive the

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coring requirement. Operate spray paver without mix to determine tack coat application rate for the project. Ensure that the polymer modified tack coat has been placed as specified in 401.03.05. Transport and deliver, spread and grade, and compact as specified in 403.03.01.D, 403.03.01.E, and 403.03.01.F, respectively, and according to the approved paving plan. While constructing the test strip, record the following information and submit to the RE:

SECTION 405 – CONCRETE SURFACE COURSE

405.03.02 Concrete Surface Course

I. Thickness Requirements.

ADD THE FOLLOWING AS THE LAST SENTENCE OF THE FIRST PARAGRAPH OF SECTION 405.03.02.I:

If the total thickness course paving lot area is less than 5000 square yards, the Regional District Local Aid Office may waive the coring requirement.

- J. Ride Quality Requirements.
 - 4. Quality Acceptance.
 - a. Pay Adjustment.

THE FOLLOWING IS ADDED:

	A Exclusions for Concrete Surfa	
Roadway	Lane Number	Exclusion

DIVISION 420 – PAVEMENT PRESERVATION TREATMENTS

SECTION 421 – MICRO SURFACING AND SLURRY SEAL

421.03.03 Micro Surfacing Aggregate and Micro Surfacing Emulsion

- J. Ride Quality Requirements.
 - 4. Quality Acceptance.
 - a. Pay Adjustment.

THE FOLLOWING IS ADDED:

Roadway	Lane Number	Exclusion

DIVISION 450 – CONCRETE PAVEMENT REHABILITATION

SECTION 454 - DIAMOND GRINDING EXISTING CONCRETE PAVEMENT

454.03.02 Ride Quality Requirements

- 4. Quality Acceptance. The Department will determine acceptance and provide PA based on the following:
 - a. Pay Adjustment.

THE FOLLOWING IS ADDED:

	Table 454.03.2-1A Exclusions for Diamond Grind	ing
Roadway	Lane Number	Exclusion

DIVISION 500 – BRIDGES AND STRUCTURES

SECTION 501 – SHEETING AND COFFERDAMS

501.04 Measurement and Payment

THE FOLLOWING IS ADDED:

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

Item
TEMPORARY COFFERDAM

Pay Unit LUMP SUM

DIVISION 550 – STRUCTURE REHABILITATION

The following new Section is added:

SECTION 556 - CONCRETE REPAIR

556.01 Description

The work under this section of the specification will include but is not limited to:

- A. Preparation of the existing precast parapets for application of repair materials, as indicated or as specified herein.
- B. Coordination with the Engineer for his inspection of the condition of the concrete and identification of concrete repair areas in accordance with the ACI standards for evaluation of concrete in service.
- C. Provision of material submittals as required by the specifications.
- D. Removal of deteriorated concrete identified in the inspection of the concrete condition.
- E. Repair of exposed reinforcing where required.
- F. Preparation of the concrete surface for application of repair materials in accordance with the manufacturer's recommendations.
- G. Furnishing, storing, and mixing of each specified repair and/or coating material delivered in accordance with the manufacturer's recommendations and material safety data provided with the materials.
- H. Application and finishing of concrete repair materials.
- I. Preparation of concrete surfaces for coatings where indicated on the drawings.
- J. Application and finish of coatings

The contractor will be compensated based on actual type and amount of repairs provided based on the unit prices for those types of repairs or as negotiated should the repairs be of a different method from those specified. The costs of cleaning, and coordination with the inspection and testing, however, shall be included in the lump sum price bid for the cleaning and preparation work should the repairs be of a different type.

The Engineer shall evaluate the results of the inspection and recommend repairs including but not limited to epoxy injection at cracks, chipping and removal of loose concrete, repair of reinforcement, including drilling of anchorages, application of bonding agents to concrete and application of repair materials identified herein based on the type of the repair. Modification of repair types may be required based on conditions encountered and will be covered

References

- A. Concrete Reinforcement
 - ANSI/ASTM A82 Cold Drawn Steel Wire for Concrete Reinforcement.
 - 2. ANSI/AWS D1.4 Structural Welding Code for Reinforcing Steel.
 - 3. ASTM A615 Deformed and Plain Billet Steel Bars for Concrete Reinforcement.

- B. Standard Portland Cement Concrete Repair Material.
 - 1. ASTM C33 Specifications for Concrete Aggregates.
 - 2. ASTM C150 Portland Cement.
 - 3. ASTM C404 Aggregates for Masonry Grouts.
- C. Epoxy Resin Crack Repair Adhesives
 - 1. ASTM D-570 Total Water Absorption
 - 2. ASTM D-638 Test Method for Tensile Properties of Plastics
 - 3. ASTM D-648 Deflection Temperature
 - 4. ASTM D-695 Compressive Properties.
 - 5. ASTM D-732 Shear Strength.
 - 6. ASTM D-790 Flexural Properties
 - 7. ASTM D-882 Bond Strength of Epoxy Resin Systems used with Concrete
- D. Polymer Modified Repair Mortars and Plasters
 - 1. ASTM C78 Flexural Strength
 - 2. ASTM C109 Compressive Strength
 - 3. ASTM C496 Splitting Tensile Strength
 - 4. ASTM C882 Bond Strength of Epoxy Resin Systems used with Concrete.
- E. Polymer Modified Cementitious Coating
 - 1. ASTM D968 Abrasion Resistance
 - 2. Elcometer Test for Adhesion
- F. High Build Epoxy Coating
 - 1. ASTM 570 Total Water Absorption
 - 2. ASTM D638 Test Method for Tensile Properties of Plastics.
 - 3. ASTM D968 Abrasion Resistance
 - 4. ASTM D3359 Adhesion Classification.
- G. Epoxy bonding grouting and anchoring adhesives
 - 1. ASTM D-570 Total Water Absorption
 - 2. ASTM D-638 Test Method for Tensile Properties of Plastics
 - 3. ASTM D-648 Deflection Temperature
 - 4. ASTM D-695 Compressive Properties.
 - 5. ASTM D-732 Shear Strength.
 - 6. ASTM D-790 Flexural Properties
 - 7. ASTM D-882 Bond Strength of Epoxy Resin Systems used with Concrete

Submittals

A. Product Data: Indicate product standards, physical and chemical characteristics, technical

- specifications, limitations, maintenance instructions, material safety data sheets and general recommendations regarding each material.
- B. Manufacturer's Certificate: Certify that repair materials to be provided meet or exceed specified requirements.

Project Record Documents

A. Accurately record actual locations for structural reinforcement repairs and repair patches, type of repair and measurement of repair volume or area as appropriate.

Quality Assurance

- A. Manufacturer Qualifications: the manufacturer of the specified product shall be a nationally recognized manufacturer of concrete repair products of the type specified for a minimum period of 5 years. The manufacturer shall be prepared to provide on-site consultation and review of the substrate preparation, product mixing methods and project conditions.
- B. Contractor Experience: The contractor shall be experienced in the application of concrete repair materials and shall submit at least 3 job references indicating that they have successfully applied materials of the type specified in similar applications.
- C. All reinforcing splices and/or drilled in dowels shall be reviewed by the engineer. Provide splices and/or drilled in dowels as indicated on the drawings, and/or recommended by the engineer.

Test Patches and Coatings

- A. Test patches and coating strips shall be performed prior to performing large scale repair operations and may remain as part of the work, if installed properly. No patches or coatings shall be applied until test areas have been reviewed by the Owner/engineer.
- B. Provide test patch of each typical patch and repair indicated on the plans. Test patch installation procedures including application of bonding agents, buildup of mortar and finish shall be reviewed by the engineer.

Delivery, Storage and Handling

- A. Deliver, store, protect and handle products in accordance with the manufacturer's recommendations.
- B. Deliver the specified product in original, unopened containers with manufacturer's labels, product identification and batch numbers.

Job Conditions

- A. No repair materials shall be placed unless job conditions conform to manufacturer's recommendation.
- B. Conform to manufacturer's recommended range of application temperature, surface wetness or dryness.
- C. Do not apply surface coatings when it is raining or threatening to rain in the time required for initial setting and curing.
- D. Provide coating panes illustrating the coating method, color and texture of the repair surface.

556.01 Materials

Acceptable Manufacturers and Products

Manufacturers and their products shall meet the experience and quality assurance standards as described under Ouality Assurance in this specification.

Polymer Modified Cementitious Patching Materials

- A. Polymer Modified Repair Mortars and concretes: Two-part polymer modified Portland cement, fast setting, trowel grade and/or non-sag repair materials. The material must have compatible coefficient of thermal expansion with concrete, good freeze thaw durability and must be placeable from 1/8 inch to 1-inch depth and extendable to greater depths by adding aggregate.
- B. Component Systems:
 - 1. Component "A" shall be a liquid polymer emulsion of an acrylic copolymer base and additives with the following properties:
 - a. pH: 4.5-6.5
 - b. Film forming Temperature: 73 deg. F. Maximum
 - c. Tear strength: 950 psi min.
 - d. Elongation at break: 500 pct.
 - e. Particle size: less than 0.1 micron.
 - 2. Component "B" shall be a blend of selected portland cements, specially graded aggregates, admixtures for controlling setting time, water reducers for workability, a corrosion inhibitor and an organic accelerator.
 - 3. The ratio of component A to B shall be 1:7.2 by weight.
 - 4. The material shall not contain asbestos, chlorides, nitrates, added gypsum, added lime or high aluminum cements.
 - 5. The materials shall be non-combustible, both before and after cure.
 - 6. The polymer modified repair mortar shall be provided in a factory proportioned unit.
- C. Polymer Modified Repair Mortars
- D. Sikatop 122 (Trowel Grade) and Sikatop 123 Non-Sag mortars as manufactured by the Sika Corporation meet the above specifications. These products or approved equals meeting the manufacturer qualifications and the performance criteria on Table No. 1 may be used:

TABLE NO. 1: PERFORMANCE CHARACTERISTIC SPECIFICATIONS FOR POLYMER MODIFIED REPAIR MORTAR

CHARACTERISTIC	TEST METHOD	RESULTS
Bond Strength	ASTM C882	2,200 psi. min.
Tensile Strength	ASTM C496	880 psi
Flexural Strength	ASTM C78	1,600 psi min.
Compressive Strength	ASTM C109	7,000 psi min.
Freeze/Thaw Durability	ASTM C666 Method A	90 min. @ 300 cycles relative durability
Abrasion	Taber Test H22 Wheel	7.0 gm. maximum 1000 gm. load
Thermal Compatibility	ASTM C884	Passes Test

TABLE NO. 2: PERFORMANCE CHARACTERISTIC SPECIFICATIONS FOR POLYMER MODIFIED REPAIR CONCRETE

CHARACTERISTIC	TEST METHOD	RESULTS
Bond Strength	ASTM C882	2,200 psi. min.
Tensile Strength	ASTM C496	600 psi
Flexural Strength	ASTM C78	1,100 psi min.
Compressive Strength	ASTM C109	6,000 psi min.
Freeze/Thaw Durability	ASTM C666 Method A	90 min. @ 300 cycles relative durability
Abrasion	Taber Test H22 Wheel	7.0 gm. maximum 1000 gm. load
Thermal Compatibility	ASTM C884	Passes Test

E. Polymer Modified Repair Concrete

Two-part polymer modified concrete for mortar patches exceeding 1-inch depth. The material shall be composed of polymer modified repair mortar extended with coarse aggregate. The concrete must have compatible coefficient of thermal expansion with concrete, good freeze thaw durability and must not function as a vapor barrier. Acceptable materials shall meet the following minimum characteristics indicated on Table No. 2

F. Coarse Aggregate Extender

Coarse aggregate extender for repair mortars greater than 1-inch thick shall consist of minus 1/2-inch or 3/8 inch clean well graded, saturated surface dry material, having low absorption and high density. Limestone aggregate shall not be used. Aggregate must be approved for use by the Engineer.

Concrete Patch Materials

- A. Portland Cement Concrete may be used for patches in excess of 5 cubic feet provided that a bonding agent shall be used on the patch surfaces. Concrete may be placed as a drypack or cast-in-place in forms.
- B. Concrete patch material for repairs of less than 1 cubic yard may be job mixed concrete meeting the requirements of section 03100 of this specification.

Polymer Modified Cementitious Coating

- A. Coating: Two-part Polymer modified Portland cement coating with propertied providing a non-vapor barrier, damp-proofing/waterproofing protective coat to the underlying concrete. The material must be thermally compatible with portland cement mortars and concrete.
- B. Component System
 - 1. Component "A" shall be a liquid polymer emulsion of an acrylic copolymer base and additives with the following properties:
 - a. pH: 4.5-6.5
 - b. Film forming Temperature: 73 deg. F. max.
 - c. Tear Strength: 950 psi min.
 - d. Elongation at break: 500 pct. min.
 - e. Particle size: less than 0.1 micron.
 - 2. Component B shall be a blend of selected portland cements, specially graded aggregates, admixtures for controlling setting time and workability.
 - 3. The ratio of component A to B shall be 1:1.647 by weight.
 - 4. The material shall not contain asbestos, chlorides, nitrates, added gypsum, added lime or high aluminum cements.
 - 5. The material shall be non-combustible, both before and after cure.
 - 6. The polymer modified cementitious coating shall be provided in a factory proportioned unit
- C. Sikatop 144 as manufactured by the Sika Corporation is considered to conform to the requirements of this specification. This material or equal product conforming to the manufacturer's quality assurance procedures and to the following performance criteria may be used in the construction.

D. Performance Criteria:

- 1. Abrasion Resistance (ASTM D698) at 7 days: 45 l/mil. min.
- 2. Adhesion (Elcometer) at 7 days: 100 % concrete substrate failure.
- 3. Water Vapor Transmission at 7 days:
- a. Coat: 23 grams/hr./sq. ft. min.
- b. 2 coat: 20 grams/hr./sq. ft. min.

High Build Epoxy Coating

- A. High Build Epoxy Coating: Coating shall be 2-component solvent free high solids, moisture insensitive epoxy resin coating. The material shall produce a high build, corrosion resistant protective water proofing system to protect the tops only of horizontal concrete structures. It shall not be used to encapsulate the structures.
- B. Component System:
- 1. Component "A" shall be a modified epoxy resin of the epichlorohydrin bisphenol A type containing suitable viscosity control agents. It shall not contain butyl glycidyl ether.
- 2. Component "B" shall be a mainly a reaction type product of a selected amine blend with an epoxy resin of the epichlohydrin bisphenol A type containing suitable viscosity control agents, pigments, and accelerators.
- 3. The ratio of component A to component B shall be 1:1 by volume.
- 4. The material shall not contain asbestos.
- C. Sikagard 62 as manufactured by the Sika Corporation is considered to conform to the requirements of this specification. This material or equal product specified with manufacturer's qualifications conforming to the following performance criteria shall be used in the construction.
- D. Performance Criteria of the mixed coating:
 - 1. Pot Life: 25-40 minutes
 - 2. Tack free time to touch (4-7 mils): 3-4.5 hours
 - 3. Initial viscosity (Brookfield Viscosimeter, spindle no. 3, speed 100): 2200-3400 cps.
 - Color; Gray
 - 5. Solids 100 percent.
- E. Performance of the cured Epoxy Resin:
- 1. Total water absorption at 7 days (ASTM D570): 1.5 % maximum, 2-hour boil.
- 2. Elongation (ASTM D522) at 14 days: 5% minimum.
- 3. Abrasion Resistance (ASTM D968) at 14 days: 40 l/mil minimum.
- 4. Adhesion Classification (ASTM D3359) at 14 days: 4A minimum.
- 5. Bond Strength (ASTM C-88A) hardened concrete to hardened concrete:

- a. 2-day dry cure: 2000 psi minimum
- b. 14-day moist cure: 1500 psi minimum.
- 6. Shrinkage (ASTM C883): Passes test
- 7. Abrasion (Taber Abrader) at 14 days.
 - a. Weight loss: 0.7 gm. max. (H22 wheel; 100 gm. wt., 1000 cycles).

Polymer Modified Cementitious Bonding Agent

A. Bonding agent for polymer modified repair mortars shall be the mortar itself scrubbed into the substrate.

Bonding Agent for New to Old Concrete

A. Bonding agent for standard concretes shall be a high modulus/ high strength epoxy bonding/grouting adhesive.

B. Component Systems:

- 1. Component "A" shall be a modified epoxy resin of the epichlorhydrin bisphenol A type containing suitable viscosity control agents. It shall not contain butyl glycidyl ether.
- 2. Component "B" shall be mainly a reaction type product of a selected amine blend with an epoxy resin of the epichlorohydrin bisphenol A type containing suitable viscosity control agents, pigments, and accelerators.
- 3. The ratio of component "A" to component "B" shall be 1:1 by volume.
- 4. The material shall not contain asbestos.
- C. Sikagard 32 as manufactured by the Sika Corporation is considered to conform to the requirements of this specification. This material or equal product conforming to the following performance criteria shall be used in the construction.
- D. Performance Criteria of the mixed coating:
 - 1. Pot Life: 25-35 minutes
 - 2. Tack free time to touch (4-7 mils): 3-5 hours
 - 3. Initial viscosity (Brookfield Viscosimeter, spindle no. 3, speed 100): 1900 3700 cps.
 - 4. Color: Gray
- E. Performance of the mixed epoxy resin adhesive:
 - 1. Total water Absorption at 7 days (ASTM D570): 1% maximum, 2 hour boil.
 - 2. Compressive Properties (ASTM D695) at 28 days
 - a. Compressive strength: 8500 psi. min.
 - b. Modulus of Elasticity: 370,000 psi. min.
 - 3. Tensile Properties (ASTM D638) at 14 days.
 - a. Tensile strength: 4000 psi min.
 - b. Elongation at break: 1-3%
 - 4. Flexural Properties (ASTM D790) at 14 days
 - a. Flexural Strength (modulus of rupture): 6300 psi minimum.

- b. Tangent Modulus of elasticity in bending: 400000 psi minimum.
- 5. Shear Strength (ASTM D732) at 14 days: 5000 psi min.
- 6. Bond Strength (ASTM C882) at 14-day moist cure
 - a. Plastic concrete to hardened concrete: 1700 psi.
 - b. Plastic concrete to steel: 1700 psi min.
- 7. Deflection temperature (ASTM D648) at 14 days: 102-degree Fahrenheit minimum (fiber stress loading=264 psi)
- 8. The epoxy resin adhesive shall conform to ASTM C881, Type II Grade 2, Class B or C.

Epoxy Resin Adhesive for Pressure Injection of Cracks and to Anchor Bolts, Dowels and Pins

- A. Multi-Purpose moisture-insensitive low viscosity high-strength epoxy grouting/sealing/binder adhesive suitable pressure injection of vertical or overhead cracks.
- B. Component Systems:
 - 1. Component "A" shall be a modified epoxy resin of the epichlorhydrin bisphenol A type containing suitable viscosity control agents. It shall not contain butyl glycidyl ether.
 - 2. Component "B" shall be mainly a reaction type product of a selected amine blend with an epoxy resin of the epichlorohydrin bisphenol A type containing suitable viscosity control agents, pigments, and accelerators.
 - 3. The ratio of component "A" to component "B" for pressure injection of cracks shall be 2:1 by volume
 - 4. The material shall not contain asbestos.
- C. Sikagard 35 as manufactured by the Sika Corporation is considered to conform to the requirements of this specification. This material or equal product conforming to the following performance criteria shall be used in the construction.
- D. Properties of the mixed epoxy resin adhesive used for pressure injection grouting:
- 1. Pot Life: 20-30 minutes
- 2. Tack free time to touch (3-5 mils): 2.5-4.0 hours
- 3. Initial viscosity (Brookfield Viscosimeter, spindle no. 3, speed 100): 350 450 cps.
- 4. Color: clear, amber
- E. Performance of the mixed epoxy resin adhesive used for pressure injection grouting:
- 1. Total water Absorption at 7 days (ASTM D570): 1.5 % maximum, 2-hour boil.
- 2. Compressive Properties (ASTM D695) at 28 days
 - a. Compressive strength: 10,000 psi. min.
 - b. Modulus of Elasticity: 340,000 psi. min.
- 3. Tensile Properties (ASTM D638) at 14 days.
 - a. Tensile strength: 7000 psi min.
 - b. Elongation at break: 3-5%
- 4. Flexural Properties (ASTM D790) at 14 days
 - a. Flexural Strength (modulus of rupture): 12,000 psi minimum.

- b. Tangent Modulus of elasticity in bending: 400000 psi minimum.
- 5. Shear Strength (ASTM D732) at 14 days: 4500 psi min.
- 6. Bond Strength (ASTM C882)
 - a. 2-day dry cure: 2400 psi
 - b. 14 day (moist cure): 2300 psi
- 7. Deflection temperature (ASTM D648) at 14 days: 108-degree Fahrenheit minimum (fiber stress loading=264 psi)
- 8. The epoxy resin adhesive shall conform to ASTM C881, Type I Grade 1, Class B or C.

Epoxy Resin Adhesive for Sealing Cracks and Sealing Grout Ports for Injection Grouting

- A. Multi-Purpose moisture-insensitive low viscosity high-strength epoxy grouting/sealing/ binder adhesive suitable sealing of horizontal and vertical cracks and sealing of surface of cracks around grout ports.
- B. Component Systems:
- 1. Component "A" shall be a modified epoxy resin of the epichlorhydrin bisphenol A type containing suitable viscosity control agents. It shall not contain butyl glycidyl ether.
- 2. Component "B" shall be mainly a reaction type product of a selected amine blend with an epoxy resin of the epichlorohydrin bisphenol A type containing suitable viscosity control agents, pigments, and accelerators.
- 3. The ratio of component "A" to component "B" for pressure injection of cracks shall be 1:1 by volume
- 4. The material shall not contain asbestos.
- C. Sikagard 33 as manufactured by the Sika Corporation is considered to conform to the requirements of this specification. This material or equal product conforming to the following performance criteria shall be used in the construction.
- D. Properties of the mixed epoxy resin adhesive used for sealing of cracks and anchorages:
- 1. Pot Life: 10-20 minutes
- 2. Tack free time to touch (3-5 mils): 20-35 minutes
- 3. consistency (1/2-inch-thick): non-sag
- 4. Initial viscosity (Brookfield Viscosimeter, spindle no. 3, speed 100): 350 450 cps.
- 5. Color: gray
- E. Performance of the mixed epoxy resin adhesive used for pressure injection grouting:
 - 1. Total water Absorption at 7 days (ASTM D570): 1.0% maximum, 2-hour boil.
 - 2. Compressive Properties (ASTM D695)
 - a. Compressive strength: 4700 psi. min. at 1 hour; 8,000 psi min at 28 days
 - b. Modulus of Elasticity: 820,000 psi. min.
 - 3. Tensile Properties (ASTM D638) at 1 day.
 - a. Tensile strength: 2850 psi min.
 - b. Elongation at break: 0.1-0.5%

- c. Modulus of elasticity: 710,000 psi
- 4. Flexural Properties (ASTM D790) at 1 day
 - a. Flexural Strength (modulus of rupture): 4150 psi minimum.
 - b. Tangent Modulus of elasticity in bending: 1,000,000 psi minimum.
- 5. Shear Strength (ASTM D732) at 1 day: 1950 psi min.
- 6. Bond Strength (ASTM C882)
 - a. 2 day dry cure: 2600 psi
 - b. 14 day (moist cure): 2300 psi
- 7. Deflection temperature (ASTM D648) at 1 day: 100-degree Fahrenheit minimum (fiber stress loading = 264 psi)
- 8. The epoxy resin adhesive shall conform to ASTM C881, Type I Grade 1, Class B or C.

Miscellaneous Materials

- A. Portland Cement: ASTM C150, Type I gray.
- B. Sand: ASTM C33; uniformly graded, clean.
- C. Water: Clean and potable.
- D. Cleaning Agent: Commercial muriatic acid.

Reinforcement Materials

- A. Reinforcing Steel: ASTM A615, 60 ksi yield grade billet-steel deformed bars.
- B. Stainless steel wire reinforcement
- C. Mechanical reinforcement splicers

Mixing Repair Materials

- A. Mix repair materials in accordance with manufacturer's instructions for the purpose intended.
- B. Mix components in clean equipment or containers. Conform to pot life and workability limits.

556.03 Construction

Dental Removal of Poor and Deteriorated Concrete If and Where Ordered

- A. Provide shoring as required during dental removal.
- B. Remove loose concrete and deep pockets of segregated aggregate as indicated on the plans and as determined by additional survey and soundings during construction.
- C. Use light masonry demolition hammers to perform the removal to avoid damaging the substrate.
- D. Depth of removal and approved substrate shall be evaluated by the Engineer.
- E. Protect and preserve existing reinforcement. Clean reinforcement prior to applying repair materials. Report any broken or damaged reinforcement to the Engineer for evaluation.
- F. Trim all repair surfaces so that minimum depth of repair at the edges as 1/8-inch.

G. Clean concrete surfaces of dirt, laitance, corrosion, or other contamination; wire brush using water or acid as required; rinse surface and allow to dry.

Examination

- A. Verify that temperature and weather is in accordance with manufacturer's limitations as indicated on the instructions for use.
- B. Mix two-part materials strictly in accordance with manufacturer's instruction manuals as submitted to the engineer. Add gravel extender to make polymer modified concrete where repair depth is greater than 1-inch.
- C. Verify that substrate is saturated surface dry with no standing water.
- D. Scrub bonding coat of polymer modified mortar into surface to fill all pours and voids for effective bonding.
- E. While scrub coat is still plastic, force material against the edge of the repair working towards the center. After filling, consolidate and screed.
- F. Allow mortar to set to desired stiffness for trowel finish. Finish smooth to match surface adjacent to repair.
- G. Clean work area and remove evidence of spillovers. Mechanical methods shall be used where spillover materials have been allowed to harden.

Portland Cement Concrete Repairs

- A. Verify that temperature and weather conditions are within the limitations established by the manufacturer for the approved bonding agent.
- B. Verify that the substrate is dry or damp without standing water or vapor transmission.
- C. Prepare forms and reinforcement as required.
- D. Mix two-part compound in accordance with manufacturers current written instructions. Mix only the amount of material that can be used within the pot life.
- E. Apply bonding agent at an approximate application rate of 80 square feet per gallon.
- F. Mix and place concrete before bonding agent becomes tack free to touch. If the bonding agent becomes tack free prior to placement, it must be cleaned of contamination and recoated.
- G. Leave work and work area clean without evidence of spillovers.

Sandblasting and Preparation for Coatings

- A. Provide protective barriers as required to protect personnel and passersby from dust or injury, and the adjacent structure against damage.
- B. Sandblast all above grade original concrete to clean it and repair it for surface coatings.
- C. Fill deep cracks flush with surface with repair mortars.
- D. Cleanup and remove sand and debris from the preparation operations.

Application of Polymer Modified Cementitious Coating

- A. Verify that temperature and weather conditions are within the limitations listed in the manufacturer's current literature.
- B. Mix two-part coating material strictly in accordance with the manufacturer's current written instructions and verify the consistency is appropriate for application.
- C. Apply coating with high quality brushes, rollers or hopper type spray equipment. Surface shall be saturated surface dry prior to application. Wet down hot surfaces exposed to sunlight and allow to dry before coating.
- D. Apply materials in two coats at approximately 8 to 16 mils thickness per coat. Second coat must be applied after at least two hours cure of the first coat. Allow longer at low temperatures.
- E. If sags or runs occur, they shall be sanded and recoated.
- F. Exterior surfaces shall be coated in one continuous operation. Do not interrupt coatings except at and edge.
- G. Leave finished work area neat and clean.

Application of High Build Epoxy Coating

- A. Verify that temperature and weather conditions are within the limitations listed in the manufacturer's current literature.
- B. Mix two part coating material strictly in accordance with manufacturer's current written instructions and verify the consistency is appropriate for application.
- C. Apply coating with high quality brushes, or rollers. Surface shall be surface dry prior to application. Substrate temperature shall be between 50 and 90 degrees Fahrenheit.
- D. Apply materials in two coats at approximately 4 to 7 mils thickness per coat. Second coat may be applied within 48 hours of the first coat.
- E. If sags or runs occur, they shall be sanded and recoated.

- F. Exterior surfaces shall be coated in one continuous operation. Do not interrupt coatings except at an edge.
- G. Leave finished work area neat and clean.

Pressure Injection of Cracks with Epoxy Resin Adhesives

- A. Verify that temperature and weather conditions are within the limitations in the manufacturer's current literature.
- B. Verify that cracks to be sealed are prepared for grouting. Surface adjacent to the cracks must be clean, and sound. Cracks may be dry or damp, but free of standing water and frost. Remove dust, laitance, grease, curing compounds, waxes, impregnations, foreign particles, coatings, efflorescence and disintegrated material from the surface adjacent to the cracks by mechanical mean (for example sand blasting, or high-pressure water blasting, etc., as approved by the Engineer.
- C. Grouting ports shall conform to the material manufacturer's recommendations. Ports for grouting using automated methods shall conform to the manufacturer's recommendations. Ports shall be set in accordance with the manufacturer's recommendations. Spacing of ports along the crack to be grouted shall be less than the thickness of the substrate and shall be at the distance required to achieve the travel of the epoxy resin adhesive for pressure injection grouting between ports and fill the cracks to the fullest extent possible. Where the structures are visible on both sides of the cracks, stagger the grout ports on each side of the structure.
- D. Mix both the two-part crack sealant, and the pressure injected resin materials strictly in accordance with manufacturer's current written instructions and verify the consistency is appropriate for application.
- E. Apply the mixed epoxy resin crack sealing adhesive over the cracks and around each porting device so that an adequate seal is develop to prevent escape of the pressure injected resin. Where required by the engineer, apply the epoxy resin adhesive for sealing in such a manner that minimal defacing or discoloration of the substrate shall result.
- F. Inject grout strictly in accordance with the manufacturer's recommendations using manual or automated grouting equipment. Inject the prepared cracks with a constant pressure in order to achieve maximum filling and penetration without the inclusion of air pockets or voids in the epoxy resin adhesive. Begin the pressure injection at the lowest port and continue until there is the appearance of the epoxy resin adhesive at an adjacent port, indicating travel of the adhesive. The decision of whether to continue injecting or to shift the injection port shall be made by the prequalified contractor, based on his experience, with the approval of the Engineer. The procedure shall be continued until all pressure injectable cracks have been filled.
- G. If penetration of any cracks is not possible, consult the Engineer before discontinuing the procedure. If modification of the proposed procedure is required to fill the cracks, submit said modification in writing to the Engineer for review prior to proceeding.

- H. Adhere to all limitations and cautions for the epoxy resin adhesives tin the manufacturer's current printed literature.
- I. After the adhesive has cured, removal of the epoxy resin adhesive for sealing and porting devices shall be removed as required by the Engineer. Clean the substrate in a manner to produce a finish appearance acceptable to the Owner. Leave finished work and work area in a neat, clean condition without spillovers onto adjacent areas.

Field Quality Control

- A. Field evaluation of all substrates and test patches shall be made prior to completing production work.
- B. Contractor shall arrange for manufacturer's technical representative to evaluate conditions and product performance prior to construction. The manufacturer shall provide technical consultation on product performance and application if necessary during the work.

556.04 Measurement and Payment

The initial estimate of repair types and quantities is based on limited visual review of surface condition of the concrete and interpretation of photographs. The actual type, length, area and/or volume shall be computed based on average length, width and depth of repairs as measured in the field by the Engineer in the presence of the Contractor. Bid quantities for repairs not specifically located on the contract plans are based on the Engineer's experience with similar structures and are anticipated to vary.

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

Pay Item
CONCRETE SPALL REPAIR
PRESSURE INJECTION, CONCRETE CRACKS

Pay Unit SQUARE FOOT LINEAR FOOT

The following new Section is added:

SECTION 557 - MASONRY REPOINTING

557.01 DESCRIPTION

The work shall consist of removing existing mortar from joints and exposed surfaces of stones, and repointing joints in rubble masonry, where indicated on the contract plans or as ordered by the Engineer. Replacement of missing or damaged stones and grouting of voids is also included.

557.02 MATERIALS

Portland Cement shall be Type 6 (white) cement meeting the material requirements of the Standard Specifications, except that the maximum permissible alkali content shall be 0.60 percent. All Portland Cement used for this item shall be supplied by the same manufacturer.

Hydrated lime shall meet the requirements of ASTM C 207, Type SA. All hydrated lime used for this item shall be supplied by the same manufacturer.

Masonry sand shall be obtained from a natural local source, and graded per ASTM C144. The sand shall be free of impurities, such as salts, organic impurities, and other deleterious materials in accordance with ASTM C144. The Contractor shall provide a sample of the masonry sand to the Engineer for approval prior to commencing work.

Water used for mixing and curing mortar shall meet the requirements of the Standard Specifications.

New stones shall match or replicate the existing masonry and native stone as closely as possible in kind, sizes, quality, color, texture, and finish. All stones shall be clean and free from structural defects. Samples of the new stone shall be submitted to the Engineer for approval.

Medium or fine grit material shall be used as an abrasive for blast cleaning.

557.03 CONSTRUCTION

Cleaning and repointing work shall be performed by skilled masons with a minimum of five (5) years' experience restoring historic masonry structures. The Contractor shall provide the Engineer with specific documentation of each mason's experience.

The Contractor shall prepare a masonry cleaning and repointing sample at a representative location selected by the Engineer. The sample area shall measure 1.0 square yard for the masonry repointing item. The sample cleaning and repointing shall be completed in accordance with the plans and this specification. The completed sample shall be subject to approval by the Engineer in writing, prior to commencing cleaning and repointing work throughout the structure. The approved sample will be the standard by which completed stone patching work will be accepted. The approved sample repair shall remain as part of the finished work. In the event that the cleaning and repointing sample is not approved, a new sample shall be prepared at a new location selected by the Engineer. The rejected sample areas shall be cleaned and repointed as directed by the Engineer.

For the masonry repointing item, all existing pointing mortar shall be removed to a minimum uniform depth of 2 inches, or 2.5 times the joint width; whichever is greater. Any loose or disintegrated mortar beyond this minimum depth shall also be removed as ordered by the Engineer. Removal of mortar from joints shall be accomplished using hand tools and small pneumatically-powered chisels, such as Chicago Pneumatic Model CP 0456 or equivalent, and small electric grinders. If electric grinders are utilized for cleaning vertical joints, special care shall be used at the ends of the joints to prevent damage to adjacent stones. For masonry repointing, small electric grinders will be permitted for removal of mortar from narrow portions of horizontal joints only. All tools shall be subject to approval by the Engineer prior to commencing work. If, in the opinion of the Engineer, the Contractor's methods of mortar removal are found to be damaging to the masonry, work shall be stopped until acceptable corrective action is taken.

The face of the stones shall be cleaned to remove existing mortar smears and plastered over areas, exposing the natural stone faces. The mortar removal shall be accomplished using hand tools and small pneumatically-powered chisels. Once the bulk of the mortar has been removed to the satisfaction of the Engineer, a light abrasive blast cleaning shall be utilized to remove chisel marks and any remaining cement film.

After cleaning and removal work is complete, the joints shall be rinsed with water and brushed out to remove any loose particles and dust. The rinsing action should not scour additional bedding mortar material out of the joint.

For masonry repointing, missing or damaged stones shall be replaced with new stones as directed by the Engineer. New stones shall be placed such that the natural stratification is parallel to the bedding plane. Loose stones shall be carefully removed, cleaned, and reset in their original position. Bedding mortar for setting stones shall be proportioned and mixed as specified for pointing mortar.

For masonry repointing, if loose stones are encountered, or if stones become loose during the work, wedges shall be carefully installed in the transverse joints, as approved by the Engineer. Installed wedges shall be slightly recessed from the surface of the joint.

After mortar removal and cleaning work is complete, but prior to pointing, grout injection ports shall be installed in joints at the void locations identified by the Engineer. Where a void is evident or suspected, but there is not an adequate opening for grout injection, the Contractor shall drill through the bedding mortar as directed by the Engineer to create a sufficient opening for grout injection. Grout injection ports shall be of a size and type approved by the Engineer. The joints around the injection ports shall be sealed using pointing mortar, or as approved by the Engineer. After pointing is complete and the mortar has cured for a minimum of 72 hours, grout shall be placed through the previously installed injection ports. Immediately prior to and during grout injection, the surface of the wall shall be kept wet to deter adhesion of spilled grout. A water hose and brush shall be kept on hand during injection for cleaning any grout spills from the masonry surface. Where injection ports are located in groups, injection shall begin at the lowest injection port and work upwards. Grout shall be injected at a consistent and uninterrupted pressure to uniformly force grout into voids. The maximum injection pressure shall be 4.35 psi, unless otherwise approved by the Engineer. Grout placement shall continue until the flow of grout completely stops at the maximum injection pressure, or until grout exits from an adjacent port. If grout exits from an adjacent port, the adjacent port shall be temporarily plugged and injection continued to achieve maximum penetration. Injection ports shall be sealed immediately after the feed line is removed to prevent leakage of grout. If grout exits from an adjacent port, the injection operations shall resume at that port prior to setting of the grout. Grout placement equipment and procedures shall be approved by the Engineer prior to commencing grouting work. Once the grout has cured, the injection ports shall be carefully removed and the holes filled with pointing mortar.

Pointing mortar shall consist of 1 part Portland Cement, 2 parts lime, and 8 parts sand. Dry ingredients shall be measured by volume and thoroughly mixed prior to the addition of any water. Add sufficient water to the dry ingredients to produce a mortar that retains its form when hand-squeezed and released. Mix for approximately 5 minutes. Allow this mortar to stand covered for not less than 1 hour or more than 1-1/2 hours for dehydration. Add additional water in small portions until a stiff, but workable consistency is reached. The use of pigments or other mortar additives will not be permitted. Mortar shall be used within 30 minutes of final mixing. Retempering of mortar will not be permitted.

Pointing shall not be done when the ambient temperature is 40° F or below, nor when the stone contains frost. At the time of pointing, the joints shall be damp, but with no standing water present. All pointing mortar shall be placed by hand. Where the existing mortar has been removed to a depth greater than 2 inches, these deeper areas shall be filled first, compacting mortar to fill all voids. Once a uniform joint depth is attained, the joint shall be filled by applying several layers of mortar, packing it well into the back corners. The thickness of the individual layers shall not exceed 1/2", and each successive layer of mortar shall be permitted to reach thumb-print hardness before application of the next layer. The final layer of mortar shall be recessed slightly behind the face of the stones, and finished with an approved flat pointing tool. Feathered edges should be avoided. After the mortar has dried, but before it is initially set (1 to 2 hours), excess mortar shall be removed from the edge of the joint by brushing with a natural bristle or nylon brush.

Repointed surfaces shall be kept moist by water-misting at least three times a day, or as directed by the Engineer, and protected from extreme heat, freezing, high winds, and direct sunlight for a seventy-two hour period after finishing. Repointed areas shall be protected from rain for at least 12 hours after finishing.

At the completion of the project, masonry surfaces shall be cleaned using plain water and natural bristle or nylon brushes as directed by the Engineer. Use of chemical detergents will not be permitted for cleaning masonry.

557.04 MEASREMENT AND PAYMENT

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

Pay Item
MASONRY REPOINTING

Pay Unit SQUARE FOOT

MASONRY REPOINTING shall include the cost of furnishing all labor, materials, and equipment necessary to complete the

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work. No separate payment will be made for the placement of grout material into voids.

MASONRY REPOINTING will include joints within the stone masonry, measured along the plane of the exposed surfaces of the stone masonry. Exposed horizontal surfaces at the top of walls will not be considered in computing the payment area.

No payment will be made for areas of rejected repointed samples.

DIVISION 600 – MISCELLANEOUS CONSTRUCTION

SECTION 601 PIPE

601.04 Measurement And Payment

REVISE THE SECOND PARAGRAPH TO:

When the RE directs undercutting of unstable material in a pipe trench, the Department will make payment for the additional excavation. The Department will also make payment, for the additional bedding if there is not an excess of excavation available.

SECTION 602 – DRAINAGE STRUCTURES

602.04 Measurement and Payment

THE FOLLOWING IS ADDED:

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

Item
RESET EXISTING CASTING

Pay Unit UNIT

SECTION 603 - SLOPE AND CHANNEL PROTECTION

603.01 DESCRIPTION

Add the following to this subsection of the standard specifications:

This Section also describes the requirements for constructing Articulated Concrete Block Matting as scour protection beneath the Hamilton Street Bridge (Ra-29), in the City of Rahway, Union County, New Jersey, in accordance with the lines, grades, design, and dimensions as shown on the Contract Plans, as specified herein, and as directed by the RE.

603.02 MATERIALS

603.02.01 Materials

Add the following to this subsection of the standard specifications:

The Articulated Concrete Block Matting shall be "ArmorFlex Block and a Half", as manufactured by:

ARMORTEC, A Contech Company 9025 Centre Pointe Dr., Suite 400 West Chester, OH 45269

Phone: 1-800-645-7000 Fax: 1-513-645-7993

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URL: http://www.conteches.com/Products/Erosion-Control/Hard-Armor/ArmorFlex

or an approved equal.

Performance (Open-Channel Flow): The design of the Articulated Concrete Block Matting shall be in accordance with the Factor-of-Safety design methodology as described in "Erosion and Sedimentation" by Pierre Julien, Cambridge University Press, Second Ed. 2010. The minimum designed safety factor shall be 1.5 by utilizing the following equation.

$$SF = ((9_2 / 9_1) \alpha_0) / ((1 - \alpha_0^2)^{0.5} \cos \beta + \eta (9_2 / 9_1) + (9_3 F_d^2 \cos \delta + 9_4 F_1^2) / 9_1 W_s) \ge 1.5$$

where ϑ_1 , ϑ_2 , ϑ_3 , and ϑ_4 are geometric properties of the block, α_θ , β , and δ are angles characteristic of the site and application, η is the stability number for a sloped surface, F_d and F_1 are the drag and lift forces, respectively, and W_s is the submerged weight of the block.

The analysis shall be performed based upon the stability of the Articulated Concrete Block Matting due to gravity forces alone, neglecting conservative forces added by cabling, mechanical anchorage, contact with adjacent blocks, or other restraints not attributable to gravity based forces. The analysis must account for a 0.5-inch block projection, in accordance with ASTM D 6884, "Standard Practice for Installation of Articulating Concrete Block (ACB) Revetment Systems", Section 6.3.3. Site grading requirements may not be used to omit this requirement for standard (non-tapered) block.

All design calculations submitted must be based upon the smallest block utilized in the mats. Partial "half blocks" must be analyzed separately.

In order to analyze the performance of the unit, the hydraulic information listed below is required:

ARTICULATED CONCRETE BLOCK MATTING HYDRAULIC INFORMATION

Design Volumetric Flow Rate (ft ³ /sec)	4000
Minimum Shear Stress (lb/ft²)	1.66
Channel Friction or Bed Slope (ft/ft)	0.004
Channel Side Slopes (H:1V)	2
Channel Bottom Width (ft)	50
Allowable Unit Protrusion (in)	0.5

Articulated Concrete Block Matting shall be prefabricated as an assembly of concrete blocks having specific hydraulic capacities, and laced with revetment cables. The Articulated Concrete Block Matting system may also be assembled on-site by hand-placing the individual units either with or without subsequent insertion of cables.

<u>Anchors</u>. The Engineer may require, at their discretion, permanent anchoring of the mats, e.g., by the use of ancillary earth anchors or attachment to other structures using the lifting cable loops, or through the open cells of an open-cell block. The system shall provide hydraulic stability without the use of such anchors; consequently, any such anchor shall be by others as approved by the Engineer.

603.03 CONSTRUCTION

603.03.03 Riprap Stone Slope Protection

Add the following to this subsection of the standard specifications:

603.03.03.01 Site Preparation

General: All subgrade preparation shall be performed in accordance with ASTM D 6884, "Standard Practice for Installation of Articulating Concrete Block Revetment Systems", as updated and amended.

Grading: The slope shall be graded to a smooth plane surface to ensure that intimate contact is achieved between the slope face and the geotextile (filter fabric), and between the geotextile and the entire bottom surface of the individual Articulated Concrete Block Matting. All slope deformities, roots, grade stakes, and stones which project normal to the local slope face must be re-graded or removed. No holes, "pockmarks", slope board teeth marks, footprints, or other voids greater than 0.5 inch in depth normal to the local slope face shall be permitted. No grooves or depressions greater than 0.5 inches in depth normal to the local slope face with a dimension exceeding 1.0 foot in any direction shall be permitted. Where such areas are evident, they shall be brought to grade by placing compacted homogeneous material. The slope and slope face shall be uniformly compacted, and the depth of layers, homogeneity of soil, and amount of compaction shall be as required by the Engineer.

Excavation and preparation for all termination trenches or aprons shall be done in accordance to the lines, grades and dimensions shown in the Contract Drawings. The termination trench hinge-point at the top of the slope shall be uniformly graded so that no dips or bumps greater than 0.5 inches over or under the local grade occur. The width of the termination trench hinge-point shall also be graded uniformly to assure intimate contact between all Articulated Concrete Block Matting and the underlying grade at the hinge-point.

Inspection: Immediately prior to placing the filter fabric and Articulated Concrete Block Matting, the prepared subgrade shall be inspected by the Engineer as well as the owner's representative. No fabric or blocks shall be placed thereon until that area has been approved by each of these parties.

Subgrade soil shall be stable and compacted to the lines, grades and cross sections shown on the Contract Plans. The transitions between slopes, termination trenches, benches, embankment crests shall be compacted, shaped and uniformly graded to ensure intimate contact between the Articulated Concrete Block system and the underlying subgrade section.

The following requirements shall be met:

- 1. Subgrade compaction shall be 90% Standard Proctor density (ASTM D 698)
- 2. Unsuitable subgrade material shall be removed, including:
- a. Excessive in-place moisture content
- b. Clods, roots, or other organic material
- c. All removed material shall be backfilled with acceptable soils and compacted, as approved by the RE.

603.03.03.02 Geotextile Placement

Placement of Geotextile Filter Fabric

General. All placement and preparation should be performed in accordance with ASTM D 6884, "Standard Practice for Installation of Articulating Concrete Block (ACB) Revetment Systems", as updated and amended. Filter Fabric, or filtration geotextile, as specified elsewhere, will be placed within the limits of Articulating Concrete Block Matting shown on the Contract Drawings.

Placement. The filtration geotextile will be placed directly on the prepared area, in intimate contact with the subgrade, and free of folds or wrinkles. The geotextile will not be walked on or disturbed when the result is a loss of intimate contact between the Articulating Concrete Block Matting and the geotextile or between the geotextile and the subgrade. The geotextile filter fabric will be placed so that the upstream strip of fabric overlaps the downstream strip. The longitudinal and transverse joints will be overlapped at least one and a half (1.5) feet for dry installations and at least three (3) feet for below-water installations. The geotextile will extend at least one (1) foot beyond the top and bottom revetment termination points, or as required by the Engineer. If Articulating Concrete Blocks are assembled and placed as large mattresses, the

top lap edge of the geotextile should not occur in the same location as a space between Articulating Concrete Block Matting unless the space is concrete filled.

Prior to placing geotextile, the prepared subgrade will be inspected by the RE. Geotextile shall be place directly on the prepared surface. The Geotextile is to be free of folds or wrinkles. The Geotextile shall be placed so upstream strips overlap downstream strips and so upstope strips overlap downslope strips, and overlaps shall be in the direction of flow. All longitudinal and transverse joins shall be overlapped a minimum of 3 feet for below-water installations and a minimum of 1.5 feet for dry installations. There shall be no voids or "bridging" between geotextile and subgrade. The geotextile is to extend beyond the top, toe and side termination points of the Articulate Concrete Block system, as detailed by the manufacturer or as directed by the RE.

603.03.03.03 Articulated Concrete Block Matting Placement

Placement of ACBs/Mats

General. Articulate Concrete Block Matting placement and preparation should be performed in accordance with ASTM D 6884, "Standard Practice for Installation of Articulating Concrete Block (ACB) Revetment Systems", as amended and updated.

Articulate Concrete Block Matting, as specified, will be constructed within the specified lines and grades shown on the Contract Drawings.

Placement. The subgrade shall be prepared in such a manner as to produce a smooth plane surface prior to placement of the Articulate Concrete Block Matting. No individual block within the plane of placed Articulate Concrete Block Matting will protrude more than one-half inch or as otherwise specified by the Engineer. Articulate Concrete Block Matting shall be flush and develop intimate contact with the subgrade section, as approved by the Engineer. Proposed hand placing is only to be used in limited areas, specifically identified by the Engineer or manufacturers' mat layout drawings, as approved by the Engineer.

If assembled and placed as large mattresses, the Articulate Concrete Block Matting will be attached to a spreader bar or other approved device to aid in the lifting and placing of the mats in their proper position by the use of a crane or other approved equipment. The equipment used should have adequate capacity to place the mats without bumping, dragging, tearing or otherwise damaging the underlying fabric. The mats will be placed side-by-side, so that the mats abut each other, and/or end-to-end. Mat seams or openings between mats greater than two (2) inches will be backfilled with 4000 p.s.i. non-shrink grout, concrete or other material approved by the Engineer. Whether placed by hand or in large mattresses, distinct changes in grade that results in a discontinuous revetment surface in the direction of flow will require backfill at the grade change location so as to produce a continuous surface.

Termination trenches will be backfilled and compacted flush with the top of the blocks. The integrity of the trench backfill must be maintained so as to ensure a surface that is flush with the top surface of the Articulate Concrete Block Matting for its entire service life. Termination trenches will be backfilled as shown on the Contract Drawings. Backfilling and compaction of trenches will be completed in a timely fashion. No more than 500 linear feet of placed Articulate Concrete Block Matting with non-completed termination trenches will be permitted at any time.

Finishing. The cells or openings in the Articulate Concrete Block Matting will be backfilled and compacted with suitable material, as specified by the Engineer. Backfilling and compaction will be completed in a timely manner so that no more than 500 feet of exposed mats exist at any time. Finishing requirements are explicitly at the discretion of the Engineer.

A two (2) unit embedment shall be installed; however, additional units shall be utilized if directed by the RE.

The Articulated Concrete Block Matting shall be installed utilizing a staggered bond interlocking matrix or a nested bond interlocking matrix. Either a staggered and nested bond shall be installed as per the manufacturer's recommendations, minimizing gaps and voids between units.

If necessary to facilitate material coverage, cutting of full concrete blocks shall be done with a block splitter or masonry saw to obtain true angles and even edges.

603.03.03.04 Terminations

Terminations shall be installed at the limits of all Articulated Concrete Block Matting areas of protection.

Termination trenches will be backfilled with a loose stone riprap, as approved by the RE, and compacted flush with the top of the blocks. The integrity of the trench backfill must be maintained so as to ensure a surface that is flush with the top surface of the Articulate Concrete Block Matting for its entire service life. Termination trenches will be backfilled as shown on the Contract Drawings. Backfilling and compaction of trenches will be completed in a timely fashion. No more than 500 linear feet of placed Articulate Concrete Block Matting with non-completed termination trenches will be permitted at any time.

Where the Articulated Concrete Block Matting transitions to a hard structure point, such as a bridge abutment, pier, etc., terminations shall be accomplished by placing or cutting Articulated Concrete Block Matting units as close as possible to the hard point, as approved by the RE, embedding into the subgrade at a depth determined by the RE, and backfilling with approved material. Any void adjacent to structure greater than 2" requires backfill.

In armoring areas where channel alignment or radii occur, a transition shall be constructed. Where approved by the RE, transitions can be accomplished by field cutting Articulated Concrete Block Matting units within a 2" tolerance or backfilled.

603.03.03.05 Finishing and Backfilling

As directed by the RE, suitable soil backfill or I-14 soil aggregate shall be placed within the voids of the Articulated Concrete Block Matting units after block installation has been completed. The type of soil shall be approved by the RE.

603.04 MEASREMENT AND PAYMENT

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

Pay Item ARTICULATED CONCRETE BLOCK MATTING RIPRAP STONE CHANNEL PROTECTION, 30" THICK (D_{50} = 15")

Pay Unit SQUARE YARD SQUARE YARD

SECTION 606 SIDEWALKS, DRIVEWAYS, AND ISLANDS

606.04 Measurement And Payment

REVISE THE SECOND PARAGRAPH TO:

When the RE directs undercutting of unstable material in the excavation area, the Department will make payment, for the additional excavation. The Department will also make payment, for the additional bedding if there is not an excess of excavation available.

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

Pay Item
CONCRETE SIDEWALKS, 4" THICK
CONCRETE DRIVEWAY, REINFORCED, 6" THICK

Pay Unit SQUARE YARD SQUARE YARD

SECTION 607 – CURB

607.04 MEASREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item 9" X 20" CONCRETE VERTICAL CURB Pay Unit LINEAR FOOT

SECTION 608 NON-VEGETATIVE SURFACES

608.04 Measurement And Payment

REVISE THE SECOND PARAGRAPH TO:

When the RE directs undercutting of unstable material in the excavation area, the Department will make payment, for the additional excavation. The Department will also make payment, for the additional bedding if there is not an excess of excavated material available for use as bedding.

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

610.03.03 RPMs (Raised Pavement Markers)

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure that RPMs are installed within 14 days of opening each day's surface paving to traffic.

610.03.07 Rumble Strip

Route	Weigh-in-Motion (WIM) Systems Midpoint Station

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure that rumble strips are constructed within 14 days of opening each day's surface paving to traffic.

610.04 MEASREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item TRAFFIC STRIPES, 4" TRAFFIC MARKING LINES, 24" Pay Unit LINEAR FOOT LINEAR FOOT

SECTION 612 – SIGNS

612.04 MEASREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item
REGULATORY AND WARNING SIGN

Pay Unit SQUARE FOOT

DIVISION 650 – UTILITIES

SECTION 651 – WATER

651.02 MATERIALS

651.03.02 Ductile Iron Water Pipe, Bridge

651.04 MEASREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item
RESET WATER VALVE BOX

Pay Unit UNIT

SECTION 652 – SANITARY SEWERS

652.02 MATERIALS

652.03.01 Sewer Pipe

- G. Sewer Pipe Testing.
 - 1. Gravity Main Sewer Testing.

652.03.02 Ductile Iron Sewer Pipe, Bridge

652.04 MEASREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay ItemPay UnitRESET MANHOLE, SANITARY SEWER, USING EXISTING CASTINGUNIT

SECTION 653 – GAS

653.03.01 Gas Main

A. Prequalification.

List of prequalified subcontractors is as follows:

- C. Handling and Storing.
- J. Air-Pressure Test.

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SECTION 654 – JCP&L FACILITY

654.01 DESCRIPTION

This Section describes the requirements for installing, relocating, and removing Jersey Central Power and Light (JCP&L) electric utility facilities including conduits, manholes, transformer vaults, handholes, and appurtenances and also includes the requirements for transferring electric services.

654.02 MATERIALS

Except for the materials noted below, JCP&L will supply all materials necessary for the work at no cost to the Contractor. Provide JCP&L written notice 30 days in advance of when materials will be required. Ensure the electric subcontractor takes delivery of the materials from JCP&L's storage facility within 2weeks of the notice from JCP&L indicating that the material is available. Materials may be located at more than one JCP&L storage facility. If the electric subcontractor fails to take delivery, the material may not be available, and the electric subcontractor may be required to provide an additional request for materials. The Contractor is responsible for compensating the Department for any additional handling costs incurred by JCP&L resulting from the failure to take delivery within the time required.

The electric subcontractor is responsible for loading the material, delivering it to the job site, and all subsequent handling and delivery within the jobsite. Store and protect all materials received from JCP&L. Return and deliver all excess materials furnished by JCP&L to JCP&L's storage facility. Obtain a receipt for all material received from JCP&L, maintain a documented inventory of materials used and obtain a receipt for all material returned to JCP&L.

Provide materials as specified:

Tack Coat 64-22, PG 64-22	902.01.01
Hot Mix Asphalt (HMA)	
Concrete	
Controlled Low Strength Material (CLSM)	
Curing Materials	
Joint Sealer, Hot-Poured	914.02
Polymerized Joint Adhesive	
rolymenzed joint Adhesive	

654.03 CONSTRUCTION

654.03.01 Electric

A. Prequalification. Only a prequalified electric subcontractor, approved by JCP&L, may construct and relocate JCP&L electric facilities.

A list of the prequalified electric subcontractors is available at http://www.njua.com/utility_relocations.

The Contractor is responsible for soliciting from a subcontractor that will be approved by JCP&L when preparing its Bid. Work restricted to the electric subcontractor does not preclude the Contractor from performing the work of layout, traffic control, sawcutting, pavement removal, temporary or final pavement restoration, and landscape restoration associated with the work of installing or relocating JCP&L electrical facilities.

- **B.** Indemnification. The Contractor agrees to indemnify and hold harmless JCP&L, its officers, employees, and agents from liability and claims related to the work described under this Section. This requirement does not establish JCP&L as a third party beneficiary; the provisions specified in 107.10 are unaltered.
- C. Scheduling of Work and Interruption to Utilities. Provide the RE and the designated JCP&L representative with a detailed schedule of when the electric utility work will be performed. Indicate in the schedule for each activity the

following information: the work locations; the number of crews; and whether the work will be performed during a day shift or night shift, or on weekends. Coordinate all electric utility work with the JCP&L representative, and notify the RE and the JCP&L representative at least 2 weeks prior to starting electric utility work. Do not interrupt existing electric service until approved by the JCP&L representative.

Weather conditions may prevent connections to existing systems between June 1 and September 30. Do not perform work which will require electric transmission service interruptions from June 1 through September 30 without the approval of JCP&L. JCP&L may extend this period based on weather conditions and system demand. Notify JCP&L at least 1 month in advance of commencing conductor work.

If service transfers are required, coordinate service transfers with the JCP&L representative. Notify the property owner and all tenants affected by service interruptions or transfers prior to making the service transfer. Minimize disruption to normal operations of existing facilities and minimize any interruption of electric service to JCP&L customers. Protect existing facilities during construction and installation of the service transfer.

- D. Quality Control and Quality Assurance. Provide access to the work for the JCP&L representative at all times. Perform all electric utility work in a manner acceptable to the JCP&L representative. Perform all electric utility work in accordance with JCP&L standards and details.
- **E.** Safety. Perform work in accordance with applicable OSHA regulations, N.J.S.A. 34:6-47.1 et seq. "High Voltage Proximity Act", and JCP&L safety standards.
- F. Abandonment and Removal. Prior to beginning work, review the condition of all existing electric utility facilities noted to be removed with the JCP&L representative. If the JCP&L representative designates the material to be salvaged, remove the material and deliver it to a JCP&L storage facility. Remove and dispose of all other electrical utility material designated for removal.
- G. Excavation. When excavation is required in areas having existing pavement and sidewalk, sawcut to the full depth of the existing pavement and sidewalk. Excavate trenches for conduit, manholes and vaults and appurtenances. Provide vertical sides for excavations within the traveled way, shoulder, sidewalk areas, and where existing facilities require protection. Remove unstable material at the bottom of the excavation and backfill with granular material. Do not excavate trenches more than 300 feet in advance of installing conduit unless approved by the RE. Provide and maintain trench crossings where necessary to maintain access. Do not leave trenches open overnight unless protected by temporary fencing or steel plates. Remove and dispose of excess or unsuitable material as specified in 202.03.03.C.2.
- H. Backfill. Backfill with suitable material in lifts not exceeding 6 inches thick, loose measurement. If the backfill is predominantly granular material, compact the backfill material with a vibratory plate compactor. For material that is not predominately granular, compact the backfill material with a vibratory rammer compactor. If it is not possible to compact the backfill material, the Contractor may backfill with CLSM with the approval of the JCP&L representative. If using CLSM, install as specified in 601.03.01.F.
- I. Restoration. Restore areas disturbed in the performance of electrical utility relocations to its original condition. In areas that are disturbed for which the plans provide final grading, pavement or landscaping, provide temporary restoration to the satisfaction of the RE. If open-cut trenching across a road is required, restore the pavement with in-kind construction.
- J. Field Testing. Perform a high-potential test (also known as a dielectric voltage withstand test) on all cables and splices prior to energizing. Testing must be performed by a person who is qualified to operate the test equipment, and is familiar with the cable system. Ensure that the cables are disconnected from non-cable systems equipment, and that adequate physical clearances are maintained between all cable ends, energized cables, and electrical grounds and all other equipment during the test. Prior to performing the test, verify that all taps or laterals in the circuit are cleared. In the event hot poured compound filled splices and terminations are involved, do not perform testing until they have cooled to ambient temperature. Set the relays in the high voltage direct current test equipment to operate between 5 and 25 milliamperes leakage. The shape of the leakage curve under constant voltage is more important

than the absolute leakage current of a "go or no go" withstand test result. The field test voltage is related to the final factory applied dc potentials using a factor of 80 percent.

Ensure the high potential test is performed in the presence of the JCP&L representative. Apply a direct current field test voltage according to the following table:

	Field	Test Values		
Rated Voltage	dc Hi-Pot	Test	dc Hi-Pot	Test
Phase to		(15	Minutes)	
Phase	Wall - mils	Kv	Wall - mils	kV
5000	90	25	115	35
8000	115	35	140	45
15000	175	55	220	65
25000	260	80	320	95
28000	280	85	345	100
35000	345	100	420	125
46000	445	130	580	170
69000	650	195	650	195

Note: If the leakage current quickly stabilizes, the duration may be reduced to 10 minutes.

After the voltage has been applied and the test level reached, record the leakage current at 1 minute intervals. If the leakage current decreases or stays steady after it has leveled off, the cable is considered satisfactory. If the leakage current starts to increase, excluding momentary spurts due to supply-circuit disturbances, extend the test to see if the rising trend continues. At the conclusion of the test, discharge the circuit through the test set and voltmeter circuit. After the potential drops below 95 percent of the test value, ground the cable, and discharge the circuit. Leave the grounds on all conductors for a minimum of 4 times as long as the test voltage was applied.

Remove and replace cables that fail to meet the requirements of the direct current field test. The Contractor is responsible for reimbursing the Department for any additional material costs incurred by the Department resulting from the failure to meet the requirements of the direct current field test.

- K. Energizing Lines. Energize lines with the guidance of the JCP&L representative. Prior to energizing lines, submit a request to JCP&L. Switching orders may only originate from JCP&L employees. Submit a request for permission to energize transmission lines 10 days in advance of when the work will be performed. Request permission to energize distribution lines in a manner that will permit the JCP&L representative to submit a request to JCP&L's Dispatch Office by 12:00 p.m. the previous working day.
- L. As-builts. Upon completion of the work, submit to JCP&L as-built drawings in accordance with JCP&L standards. Prints of construction drawings, marked to show the final location, are acceptable. Provide a copy of the as-built drawings to the RE.

654.04 MEASUREMENT AND PAYMENT

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

Item
ELECTRICAL UTILITY RELOCATION, JCP&L

Pay Unit LUMP SUM

DIVISION 700 – ELECTRICAL

SECTION 701 – GENERAL ITEMS

701.03.01 Existing Systems

Deliver and unload salvaged ITS materials to:

Mobility Management North (MMN)- ITS Maintenance 670 River Drive Elmwood Park, NJ 07407-1347 Telephone: 732-697-7360

Mobility Management South (MMS) – ITS Maintenance One Executive Suite Route 70 West Cherry Hill, NJ 08002-4106 Telephone: 856-486-6615

THE FOLLOWING IS ADDED:

If new cable or wire is designated to be installed into existing conduit systems, clean and swab the conduit system prior to installing the cable or wire. After cleaning, test each conduit by pulling through a metal ball with a diameter at least 85 percent of the nominal inside diameter of the conduit to ensure the conduit is free of any obstruction or foreign material. If the ball fails to pass through the conduit, repair or replace the defective conduit as directed by the RE. Restore disturbed areas to original condition.

701.03.15 Cable and Wire

C. Connection and Coordination with Utility Services.

THE FOLLOWING IS ADDED:

Obtain and provide for utility services required for testing and operation of ITS systems until interim acceptance of each system or device. Utility Services may be governed by differing Authorities Having Jurisdiction (AHJ). Along with Utility Requirements, comply with all AHJ requirements. Upon successful completion of level C testing and acceptance of any device, provide the RE with a letter requesting transfer of utility services providing the latest copy of the utility bill from each utility company. Such transfers are to be effective beginning the next monthly billing cycle after completion of successful ITS system testing as specified in Section 704 and interim acceptance of the device or as directed by the RE.

Once new utility services have been energized or activated and the utility company has de-energized and unhooked the old service connection; remove existing pole risers and service heads, cut back 1 foot below grade, and plug the conduits.

				Service	e Requests					
Device Site No.	Primary Route	Final MP	Direction	Location	Township	County	Utility Territory	Job No.	Utility Contact Person	Utility Pole No.

701.04 Measurement and Payment

REVISE THE FIFTH PARAGRAPH TO:

If restoration of disturbed areas includes pavement, curb, sidewalk, driveway, or island, the Department will make payment for such work.

REVISE THE SIXTH PARAGRAPH TO:

When the RE directs the installation of a new conduit or a repair to the defective conduit, the Department will make payment for this work.

REVISE THE SEVENTH PARAGRAPH TO:

When the RE directs the contractor to install a tracer wire in existing conduit, the Department will make payment for this work.

REVISE THE EIGHTH PARAGRAPH TO:

The Department will not include payment for restoring disturbed areas in the various items of this section. The Department will pay for restoring disturbed areas (pavement, curb, sidewalk, driveway, or island).

REVISE THE NINTH PARAGRAPH TO:

The Department will not include payment when the re directs the installation of a new conduit or a repair to the defective conduit in the various items of this section. The Department will pay for the installation, when directed by the re, of a new conduit or a repair to the defective conduit.

REVISE THE TENTH PARAGRAPH TO:

The Department will not include payment when the RE directs the installation of a tracer wire in existing conduit in the various items of this section. The Department will pay for the installation, when directed by the RE, of a tracer wire in existing conduit.

SECTION 703 – HIGHWAY LIGHTING

703.03.07 Temporary Highway Lighting System	
The Contractor must design the Temporary lighting system at	
Deliver and unload salvaged materials to:	

SECTION 704 – INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

704.02.01 Materials

704.03.01 General System (GS)

B. Installation.

HAMILTON STREET BRIDGE RA-29, SCOUR PROJECT PUN00624.01

- 1. Junction Box ITS.
 - a. Installation.
- 6. Control Center System.
- 7. Meter Cabinet ITS.

704.03.02 Camera Surveillance System (CSS)

F. Equipment Training.

704.03.03 Fiber Optic Cable

F. Equipment Training.

704.03.04 Controlled Traffic Signal System (CTSS)

- F. Equipment Training.
- G. Warranty.
- H. Networking Requirements.
- I. IT Requirements.

704.03.05 Travel Time Systems (TTS)

F. Equipment Training.

704.03.06 Road Weather Information System (RWIS)

F. Equipment Training.

704.03.07 Dynamic Message System (DMS)

A. Components.

The following are the Model numbers for the various DMS to be provided and installed in this project:

Location	Communication Type	DMS Type	Manufacturer/Model No.

Ensure that the designated Model numbers for the various DMS signs are provided as specified in the Contract documents.

Ensure that Controller, DMS is purchased with pre-installed controller, pre-wired with the equipment listed below along with specialized communications cables (minimum 120 feet Fiber Optic Cable with Connectors for each sign).

As part of the specified model numbers, ensure the DMS manufacturer supplies the cabinet and controller for each DMS sign with pre-installed uninterruptable power supply (UPS), a media converter, and a TCP/IP wireless modem conforming to the wireless provider requirements. Provide other equipment not listed here but required for the remote operation of the DMS.

B. Installation.

Construct the DMS sign mounting structure and foundation as specified in Division 500.

HAMILTON STREET BRIDGE RA-29, SCOUR PROJECT PUN00624.01

- 1. DMS Sign.
- 2. Controller, DMS.
- F. Equipment Training.

704.03.08 Weigh-in-Motion System (WIMS)

- B. Installation.
- F. Equipment Training.

704.03.09 Traffic Volume System (TVS)

B. Installation.

The Department will allow existing TVS system shutdowns from _____.

F. Equipment Training.

704.03.10 Variable Speed Limit System (VSLS)

- B. Installation.
 - 2. Controller, VSLS.

704.04 MEASUREMENT AND PAYMENT

DIVISION 800 – LANDSCAPING

SECTION 802 – TRIMMING AND REMOVING TREES

802.04 ME	ASREMENT	AND PAYMENT
OUZ.UT VIE		

THE FOLLOWING IS ADDED:

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

Pay Item
TREE REMOVAL, OVER 6" TO 12" DIAMETER

SECTION 804 – TOPSOIL SPREADING

804.04 MEASREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item
TOPSOIL SPREADING, 4" THICK
BORROW TOPSOIL

Pay Unit SQUARE YARD CUBIC YARD

Pay Unit

UNIT

SECTION 808 - SODDING

808.04 MEASREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item SODDING Pay Unit SQUARE YARD

SECTION 811 – PLANTING

811.03.02 Plant Establishment and Maintenance Period

The Department will reinspect the plants annually for _____ years.

2. Maintenance Bond.

Provide a bond to the Department in the amount of \$______

HAMILTON STREET BRIDGE RA-29, SCOUR PROJECT PUN00624.01

808.04 MEASREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

Pay Item LARGE DECIDUCOUS TREE, 2-2 ½" CALIPER, B&B

Pay Unit UNIT

DIVISION 900 – MATERIALS

SECTION 902 – CONCRETE

902.02.03 Mix Design

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Unless otherwise approved by the engineer, only one source of supply for hot mix asphalt surface course may be used on the project.

902.02.04 Sampling and Testing

THE FOLLOWING SUBSECTION IS ADDED:

Acceptance of HMA. The Department may accept the HMA as specified in 902.02.04.A through 902-02.04.E by employing staff or an independent testing agency at the HMA plant during production. The inspector who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2. Form "DS-8 HMA Testing Summary Report – State Aid" provided on the Local Aid Website must be utilized by the Laboratory to report their findings to the RE.

Alternatively, the Department may accept the HMA by Certification of Compliance according to 106.07.

SECTION 903 – CONCRETE

903.03.05 Control and Acceptance Testing Requirements

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

Concrete Items which are subject to pay adjustment and the base prices are as follows:

ITEMS	DESCRIPTION	UNIT	BASE PRICE
507021P	CONCRETE BRIDGE DECK	CY	\$500.00
507036P	CONCRETE BRIDGE PARAPET	LF	\$305.00
505039P	PRESTRESSED CONCRETE SLAB BEAM, (TYPE SII-36), 36" X 15"	LF	\$125.00
505042P	PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIII-36), 36" X 18"	LF	\$130.00
505015P	PRESTRESSED CONCRETE BOX BEAM, (TYPE BI-36), 36" X 27"	LF	\$170.00
505045P	PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIV-36), 36" X 21"	LF	\$160.00
505018P	PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-36), 36" X 33"	LF	\$170.00
505021P	PRESTRESSED CONCRETE BOX BEAM, (TYPE BIII-36), 36" X 39"	LF	\$175.00
505024P	PRESTRESSED CONCRETE BOX BEAM, (TYPE BIV-36), 36" X 42"	LF	\$185.00
505003P	PRETENSIONED PRESTRESSED CONCRETE BEAM, 45"	LF	\$155.00

HAMILTON STREET BRIDGE RA-29, SCOUR PROJECT PUN00624.01

505006P PRETENSIONED PRESTRESSED CONCRETE BEAM, 54" LF \$155.00 505048P PRESTRESSED CONCRETE SLAB BEAM, (TYPE SII-48), 48" X 15" LF \$160.00 505051P PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIII-48), 48" X 18" LF \$135.00 505009P PRETENSIONED PRESTRESSED CONCRETE BEAM, 63" LF \$185.00 505027P PRESTRESSED CONCRETE BOX BEAM, (TYPE BI-48), 48" X 27" LF \$215.00 505054P PRESTRESSED CONCRETE BOX BEAM, (TYPE SIV-48), 48" X 21" LF \$215.00 505030P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 33" LF \$185.00 505033P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 39" LF \$220.00 505036P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 42" LF \$230.00 505012P PRETENSIONED PRESTRESSED CONCRETE BEAM, 72" LF \$200.00 502045M CAST-IN-PLACE CONCRETE PILE, DRIVEN, 12" DIAMETER LF \$50.00 502132M PRESTRESSED CONCRETE PILE, DRIVEN, 12" X 12" LF \$50.00 502133M PRESTRESSED CONCRETE PILE, DRIVEN, 14" X 14" LF \$50.00				
505051P PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIII-48), 48" X 18" LF \$135.00 505009P PRETENSIONED PRESTRESSED CONCRETE BEAM, 63" LF \$185.00 505027P PRESTRESSED CONCRETE BOX BEAM, (TYPE BI-48), 48" X 27" LF \$215.00 505054P PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIV-48), 48" X 21" LF \$215.00 505030P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 33" LF \$185.00 505033P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 39" LF \$220.00 505036P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIV-48), 48" X 42" LF \$230.00 505012P PRETENSIONED PRESTRESSED CONCRETE BEAM, 72" LF \$200.00 502045M CAST-IN-PLACE CONCRETE PILE, DRIVEN, 12" DIAMETER LF \$50.00 502090M PRECAST CONCRETE PILE, DRIVEN, 12" X 12" LF \$90.00 502132M PRESTRESSED CONCRETE PILE, DRIVEN, 12" X 12" LF \$50.00 502138M PRESTRESSED CONCRETE PILE, DRIVEN, 16" X 16" LF \$50.00 502144M PRESTRESSED CONCRETE PILE, DRIVEN, 20" X 20" LF \$75.00 <t< td=""><td>505006P</td><td>PRETENSIONED PRESTRESSED CONCRETE BEAM, 54"</td><td>LF</td><td>\$155.00</td></t<>	505006P	PRETENSIONED PRESTRESSED CONCRETE BEAM, 54"	LF	\$155.00
505009P PRETENSIONED PRESTRESSED CONCRETE BEAM, 63" LF \$185.00 505027P PRESTRESSED CONCRETE BOX BEAM, (TYPE BI-48), 48" X 27" LF \$215.00 505054P PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIV-48), 48" X 21" LF \$215.00 505030P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 33" LF \$185.00 505033P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 39" LF \$220.00 505036P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIV-48), 48" X 42" LF \$230.00 505012P PRETENSIONED PRESTRESSED CONCRETE BEAM, 72" LF \$200.00 502045M CAST-IN-PLACE CONCRETE PILE, DRIVEN, 12" DIAMETER LF \$50.00 502090M PRECAST CONCRETE PILE, DRIVEN, 12" X 12" LF \$90.00 502132M PRESTRESSED CONCRETE PILE, DRIVEN, 12" X 12" LF \$50.00 502135M PRESTRESSED CONCRETE PILE, DRIVEN, 14" X 14" LF \$50.00 502144M PRESTRESSED CONCRETE PILE, DRIVEN, 20" X 20" LF \$75.00 502147M PRESTRESSED CONCRETE PILE, DRIVEN, 22" X 22" LF \$75.00 502150M	505048P	PRESTRESSED CONCRETE SLAB BEAM, (TYPE SII-48), 48" X 15"	LF	\$160.00
505027P PRESTRESSED CONCRETE BOX BEAM, (TYPE BI-48), 48" X 27" LF \$215.00 505054P PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIV-48), 48" X 21" LF \$215.00 505030P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 33" LF \$185.00 505033P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIII-48), 48" X 39" LF \$220.00 505036P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIV-48), 48" X 42" LF \$230.00 505012P PRETENSIONED PRESTRESSED CONCRETE BEAM, 72" LF \$200.00 502045M CAST-IN-PLACE CONCRETE PILE, DRIVEN, 12" DIAMETER LF \$50.00 502090M PRECAST CONCRETE PILE, DRIVEN, 12" X 12" LF \$90.00 502132M PRESTRESSED CONCRETE PILE, DRIVEN, 12" X 12" LF \$50.00 502135M PRESTRESSED CONCRETE PILE, DRIVEN, 14" X 14" LF \$50.00 502141M PRESTRESSED CONCRETE PILE, DRIVEN, 18" X 18" LF \$50.00 502147M PRESTRESSED CONCRETE PILE, DRIVEN, 20" X 20" LF \$75.00 502150M PRESTRESSED CONCRETE PILE, DRIVEN, 24" X 24" LF \$75.00 502151M <td>505051P</td> <td>PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIII-48), 48" X 18"</td> <td>LF</td> <td>\$135.00</td>	505051P	PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIII-48), 48" X 18"	LF	\$135.00
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505030P PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 33" LF \$185.00 505033P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIII-48), 48" X 39" LF \$220.00 505036P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIV-48), 48" X 42" LF \$230.00 505012P PRETENSIONED PRESTRESSED CONCRETE BEAM, 72" LF \$200.00 502045M CAST-IN-PLACE CONCRETE PILE, DRIVEN, 12" DIAMETER LF \$50.00 502090M PRECAST CONCRETE PILE, DRIVEN, 12" X 12" LF \$90.00 502132M PRESTRESSED CONCRETE PILE, DRIVEN, 14" X 14" LF \$50.00 502135M PRESTRESSED CONCRETE PILE, DRIVEN, 16" X 16" LF \$50.00 502138M PRESTRESSED CONCRETE PILE, DRIVEN, 18" X 18" LF \$50.00 502141M PRESTRESSED CONCRETE PILE, DRIVEN, 20" X 20" LF \$75.00 502147M PRESTRESSED CONCRETE PILE, DRIVEN, 22" X 22" LF \$75.00 502150M PRESTRESSED CONCRETE PILE, DRIVEN, 24" X 24" LF \$75.00 502151M PRESTRESSED CONCRETE PILE, DRIVEN, 30" X 30" LF \$75.00	505027P	PRESTRESSED CONCRETE BOX BEAM, (TYPE BI-48), 48" X 27"	LF	\$215.00
505033P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIII-48), 48" X 39" LF \$220.00 505036P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIV-48), 48" X 42" LF \$230.00 505012P PRETENSIONED PRESTRESSED CONCRETE BEAM, 72" LF \$200.00 502045M CAST-IN-PLACE CONCRETE PILE, DRIVEN, 12" DIAMETER LF \$50.00 502090M PRECAST CONCRETE PILE, DRIVEN, 12" X 12" LF \$90.00 502132M PRESTRESSED CONCRETE PILE, DRIVEN, 12" X 12" LF \$50.00 502135M PRESTRESSED CONCRETE PILE, DRIVEN, 14" X 14" LF \$50.00 502138M PRESTRESSED CONCRETE PILE, DRIVEN, 16" X 16" LF \$50.00 502141M PRESTRESSED CONCRETE PILE, DRIVEN, 20" X 20" LF \$75.00 502147M PRESTRESSED CONCRETE PILE, DRIVEN, 22" X 22" LF \$75.00 502150M PRESTRESSED CONCRETE PILE, DRIVEN, 24" X 24" LF \$75.00 502151M PRESTRESSED CONCRETE PILE, DRIVEN, 30" X 30" LF \$75.00	505054P	PRESTRESSED CONCRETE SLAB BEAM, (TYPE SIV-48), 48" X 21"	LF	\$215.00
505036P PRESTRESSED CONCRETE BOX BEAM, (TYPE BIV-48), 48" X 42" LF \$230.00 505012P PRETENSIONED PRESTRESSED CONCRETE BEAM, 72" LF \$200.00 502045M CAST-IN-PLACE CONCRETE PILE, DRIVEN, 12" DIAMETER LF \$50.00 502090M PRECAST CONCRETE PILE, DRIVEN, 12" X 12" LF \$90.00 502132M PRESTRESSED CONCRETE PILE, DRIVEN, 12" X 12" LF \$50.00 502135M PRESTRESSED CONCRETE PILE, DRIVEN, 14" X 14" LF \$50.00 502138M PRESTRESSED CONCRETE PILE, DRIVEN, 16" X 16" LF \$50.00 502141M PRESTRESSED CONCRETE PILE, DRIVEN, 18" X 18" LF \$75.00 502144M PRESTRESSED CONCRETE PILE, DRIVEN, 20" X 20" LF \$75.00 502150M PRESTRESSED CONCRETE PILE, DRIVEN, 24" X 24" LF \$75.00 502151M PRESTRESSED CONCRETE PILE, DRIVEN, 30" X 30" LF \$75.00	505030P	PRESTRESSED CONCRETE BOX BEAM, (TYPE BII-48), 48" X 33"	LF	\$185.00
505012P PRETENSIONED PRESTRESSED CONCRETE BEAM, 72" LF \$200.00 502045M CAST-IN-PLACE CONCRETE PILE, DRIVEN, 12" DIAMETER LF \$50.00 502090M PRECAST CONCRETE PILE, DRIVEN, 12" X 12" LF \$90.00 502132M PRESTRESSED CONCRETE PILE, DRIVEN, 12" X 12" LF \$50.00 502135M PRESTRESSED CONCRETE PILE, DRIVEN, 14" X 14" LF \$50.00 502138M PRESTRESSED CONCRETE PILE, DRIVEN, 16" X 16" LF \$50.00 502141M PRESTRESSED CONCRETE PILE, DRIVEN, 18" X 18" LF \$50.00 502144M PRESTRESSED CONCRETE PILE, DRIVEN, 20" X 20" LF \$75.00 502147M PRESTRESSED CONCRETE PILE, DRIVEN, 22" X 22" LF \$75.00 502150M PRESTRESSED CONCRETE PILE, DRIVEN, 24" X 24" LF \$75.00 502151M PRESTRESSED CONCRETE PILE, DRIVEN, 30" X 30" LF \$75.00	505033P	PRESTRESSED CONCRETE BOX BEAM, (TYPE BIII-48), 48" X 39"	LF	\$220.00
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502151M PRESTRESSED CONCRETE PILE, DRIVEN, 24" X 24" LF \$75.00 502151M PRESTRESSED CONCRETE PILE, DRIVEN, 30" X 30" LF \$75.00	502144M	PRESTRESSED CONCRETE PILE, DRIVEN, 20" X 20"	LF	\$75.00
502151M PRESTRESSED CONCRETE PILE, DRIVEN, 30" X 30" LF \$75.00	502147M	PRESTRESSED CONCRETE PILE, DRIVEN, 22" X 22"	LF	\$75.00
JUZISHWI TRESHEDDE CONCRETE TREE, ETA VEN, SO TI SO	502150M	PRESTRESSED CONCRETE PILE, DRIVEN, 24" X 24"	LF	\$75.00
502156M PRESTRESSED CONCRETE PILE, DRIVEN, 54" DIAMETER LF \$200.00	502151M	PRESTRESSED CONCRETE PILE, DRIVEN, 30" X 30"	LF	\$75.00
	502156M	PRESTRESSED CONCRETE PILE, DRIVEN, 54" DIAMETER	LF	\$200.00

SECTION 910 - MASONRY UNITS

910.04 STONE CURB

910.05 STONE FACING FOR PIER SHAFTS

910.06 STONE PAVING BLOCK

SECTION 917 – LANDSCAPING MATERIALS

917.07 SOD

917.08 PLANT MATERIALS

H. Inspection.

Notify the RE at least ____ (hours or days) in advance of delivery to the Project Limits for installation.

SECTION 919 – MISCELLANEOUS

919.05 GEOMEMBRANE LINER

TABLE 919.05-1 IS CHANGED TO:

Table 919.05-1 Requirements for HDPE Resin		
Property	Test Method	Requirements
Specific Gravity (Resin & Carbon Black)	ASTM D 792	> 0.940
Melt Index	ASTM D 1238	< 0.4 g/10 min
Carbon Black Content	ASTM D 1603	2-3%

DIVISION 1000 – EQUIPMENT

SECTION 1001 – TRAFFIC CONTROL EQUIPMENT

1001.03 TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHIONS

THE FIRST PARAGRAPH PART 1 IS CHANGED TO:

1. Meets crash-worthiness requirements as specified in 159.03.02.

THE FOLLOWING SUBSECTION IS ADDED:

1001.04 PORTABLE VARIABLE MESSAGE SIGN WITH REMOTE COMMUNICATION

Provide a NTCIP compliant portable variable message sign as described under 1001.02 with the exceptions noted below and each equipped with broadband cellular modem.

Ensure that the sign panel is color full matrix model that displays a combination of letters and graphic images.

Ensure that the sign panel is capable of displaying 3 lines of text with variable size characters.

Ensure 9 characters are displayed per line for posting travel times. For this 9 character requirement, smaller size characters may be allowed that meets MUTCD guidelines.

Ensure that the panel is also capable of displaying 8 characters per line with a minimum character height of 18 inches.

Ensure that the PVMSRC can be integrated with the Department's central DMS control software for remote operation.

1001.05 PORTABLE TRAILER MOUNTED CCTV CAMERA ASSEMBLY

Provide a Portable Trailer Mounted CCTV Camera Assembly (PTMCCA) with the following:

A. Trailer Platform

- 1. Maximum size, including tongue, 14 feet long by 7 feet wide by 8 feet high.
- 2. NJDOT approved lighting package to include electrical brake and marker lights with wire connections.
- 3. Primed and painted with powder coated orange color.
- 4. Fitted with manual telescoping outriggers with adjustable jacks sized to counter full mast extension.
- 5. Four 3,500 pounds, drop leg, top wind screw jacks.
- 6. All equipment secured to prevent theft or separation from platform.
- 7. 24/7 operation in all weather conditions.
- 8. One locking NEMA-4 equipment box for operational controls.
- 9. Removable wheels (with wheel locks) when trailer is in deployed position.
- 10. Operation manual with a copy placed in the storage bin.

B. Mast

- 1. 150 pounds payload capacity.
- 2. 29 feet to 32 feet of extension with capability to mount antenna at 20 feet, 25 feet or at the top, 10 feet maximum nested length of mast 3 to 9 sections.
- 3. Un-guyed.
- 4. Driven by galvanized steel cable.
- 5. Spiral conduit for cables.
- 6. Compactly retractable when nested into storage container at the bottom, and foldable for easy transport.
- 7. Operated by a power winch with a safety brake.
- 8. Capable of being raised or lowered during sustained wind speeds of 30 miles per hour.

C. Power Source

Equip the PTMCCA with either a diesel charged or a solar charged battery system. Ensure that the PTMCCA is also capable of operating on 120 volt AC electrical service. The Department may require a solar charged battery system in noise sensitive areas. Provide the power with a battery backup system capable of providing continuous operation when the primary power source fails. Ensure that the power source meets the following requirements:

- 1. **Diesel**. Ensure that the fuel tank is capable of operating the sign for a period of 72 hours without refueling. Equip with an exhaust muffler and a United States Department of Forestry approved spark arrester. Ensure that the engine is shock mounted to reduce vibration and locked in a ventilated enclosure.
- Solar. Provide solar panels capable of recharging the batteries at a rate of 4 hours of sun for 24 hours of camera usage. Ensure that the battery capacity is capable of operating the sign for a period of 18 days without sunlight.

D. Electronics

- 1. Cellular (CDMA), microwave, or 802.11 bandwidth option.
- 2. Work lights in all cabinets.
- 3. Remote trailer diagnostics (battery level, charging output, etc.)

E. Camera and Software

Ensure that the camera has the following characteristics:

- 1. Dome Camera in a heavy duty plastic dome or with a weather resistant case.
- 2. Impact resistant viewing window.
- 3. Minimum resolution of NTSC 704 (H) x 480 (V).
- 4. Backlight compensation.
- 5. Image stabilization.
- 6. Light Sensitivity 0.02 lux NIR Mode.
- 7. Auto Focus with Manual Focus capability.
- 8. Auto White Balance with Manual White Balance capability.
- 9. Motorized Zoom up to 16x optical, 10x digital.
- 10. Motorized Pan-Tilt, pan 360°, tilt 180°.
- 11. Thermostatically controlled heater and defroster -50° to 140°F operating range.
- 12. Windshield wiper.
- 13. 24/7 operation in all weather conditions.
- 14. Time and date stamp.

Ensure the software provides the following functionality:

- 1. Remote control of pan, tilt, and zoom.
- 2. Display of streaming video in MPEG format, motion-JPEG, and single snapshot JPEG images, remotely interchangeable by using central software.
- 3. Preset controls of pan/tilt/zoom combinations. Ensure all presets are accessible from a drop-down menu with descriptive name of preset. Set first 8 presets with quick-launch icons with graphical representation of the preset views.
- 4. Display of all the project's webcams in a single view screen.
- 5. Display of local time and weather conditions including temperature and humidity.
- 6. Saving images and sending email images.
- 7. Viewing archived images via a graphical calendar control and storing archived images at least every 5 minutes.
- 8. Three levels of password protection: administrator, user, and guest individual user accounts.
- 9. Monitoring and controlling the cameras using web access.

SECTION 1003 – HMA SITE EQUIPMENT

1003.01 MATERIALS TRANSFER VEHICLE (MTV)

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure the MTVs Gross Weight and maximum speed limit do not exceed the load restrictions as shown in 105.09 Special Provisions.

STATE FUNDED PROJECT ATTACHMENT 1

SMALL BUSINESS ENTERPRISE UTILIZATION ON WHOLLY STATE FUNDED PROJECTS

- A. Utilization of Small Business Enterprises Businesses as Subcontractors, Transaction Expeditors, Regular Dealers, Manufacturers and Truckers. The Department advises the Contractor and subcontractor that failure to carry out the requirements set forth in this attachment constitutes a material breach of Contract and, after notification to the applicable State agency, may result in termination of the agreement or Contract by the Department or such remedy as the Department deems appropriate. Requirements set forth in this section shall also be physically included in all subcontract agreements in accordance with State of New Jersey requirements.
- B. Policy. It is the policy of the Department that Small Business Enterprises (SBE), as defined in N.J.A.C. 12A: 10A-1.2 et seq., and N.J.A.C. 17:14-1.2 et seq., shall have the maximum opportunity to participate in the performance of contracts financed wholly with State funds. In this regard, the Department and all Contractors shall take all necessary and reasonable steps to ensure that registered Small Business Enterprises are utilized on, compete for, and perform on NJDOT construction contracts.

C. Definitions

1. Small Business Enterprise. A businesses which has its principal place of business in the State of New Jersey; is independently owned and operated; has no more than 100 full-time employees; has gross revenues that do not exceed the applicable Federal revenue standards referenced at N.J.A.C. 17:14-2.1; and satisfies any additional eligibility standards under this chapter.

Small businesses with no more than 100 full-time employees will be registered in one of the following three categories:

- a. Small business with gross revenues that do not exceed \$3 million.
- b. Small businesses with gross revenues that do not exceed 50 percent of the applicable annual revenue standards set forth in federal regulation at 13 CFR 121.201, incorporated herein by reference, and as may be adjusted periodically.
- c. Small business with gross revenues that do not exceed the applicable annual revenue standards set forth in federal regulation at 13 CFR 121.201, incorporated herein by reference, as may be adjusted periodically.

The business must be independently owned and operated, with management being responsible for both its daily and long-term operation, as well as owning at least 51 percent interest in the business.

Businesses must be incorporated or registered with the Division of Revenue & Enterprise Services to do business in the State and have its principal place of business in New Jersey, defined when:

- a. 51 percent or more of its employees work in New Jersey supported by paid New Jersey unemployment taxes or;
- b. 51 percent or more of its business operations/activities occur in New Jersey supported by income and/or business tax returns.
- c. The business must be a sole proprietorship, partnership, limited liability company or corporation with 100 or fewer employees in full-time positions, not including:
 - 1. Seasonal and part-time employees employed for less than 90 days, if seasonal and casual part-time employment are common to that industry and
 - Consultants employed under contracts for which the business wants to be eligible as a small business.
- Commercially Useful Function (CUF). A SBE performs a commercially useful function when it is
 responsible for execution of a distinct element of the work of a contract and carrying out its
 responsibility by actually performing, managing and supervising the work involved. To perform a

commercially useful function, the SBE must also be responsible, with respect to materials and supplies used on the contract, for preparing the estimate, negotiating price, determining quality and quantity, ordering the material, arranging delivery, installing (where applicable), and paying for the material and supplies itself for the project.

- 3. Transaction expeditor (broker). A SBE who arranges or expedites transactions and who arranges for material drop shipments.
- 4. SBE regular dealers. A firm that must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. In addition, a regular dealer must own, operate or maintain a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under this Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- 5. SBE manufacturer. A firm that operates or maintains a factory or establishment that produces on the premises, the materials, supplies, articles, or equipment required for the Contract.
- 6. Good faith effort (GFE). Efforts to achieve a SBE goal or other requirement of N.J.A.C. 12A: 10A-1.2 et seq., and N.J.A.C. 17:14-1.2 et seq., which by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement. Efforts to include firms not certified as SBEs in the state where the contract is being let are consequently not good faith efforts to meet a SBE contract goal.
- D. Compliance. The Contractor is responsible for compliance as specified in Section 105.
- Contractor SBE Goal Obligations. Ensure that SBEs have an equal opportunity to receive and participate in contracts and subcontracts financed in whole with State funds in performing work with the Department. Take all necessary and reasonable steps in accordance with the Contract to ensure that SBEs are given equal opportunity to compete for and to perform on the Department's wholly State funded projects. Do not discriminate in the award and performance of any Contract obligation including, but not limited to, performance of obligations on wholly State funded contracts, as specified in Section 107.
 - 1. Post Award Obligations
 - Give SBEs equal consideration with non-small business firms in negotiation for any subcontracts, purchase orders or leases.
 - b. Attempt to obtain qualified SBEs to perform the work. A directory of registered Small Businesses Enterprise firms can be found in the New Jersey Selective Assistance Vendor Information (NJSAVI) database online at: https://www20.state.nj.us/TYTR SAVI/vendorSearch.jsp
 - 2. Affirmative Action After Award of the Contract
 - a. Subletting. If at any time following the award of the Contract, the Contractor intends to sublet any portion(s) of the work under said Contract, or intends to purchase material or lease equipment not contemplated during preparation of bids, take affirmative action:
 - (1) Notify the RE, in writing, of the type and approximate value of the work which the Contractor intends to accomplish by such subcontract, purchase order or lease.
 - (2) Submit the Post-Award SBE Certification Form to the Regional Supervising Engineer with the application to sublet, or prior to purchasing material or leasing equipment. Obtain Post Award SBE Certification forms from the RE.
 - (3) Efforts made to identify and retain a SBE as a replacement subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker when the arrangements with the original SBE prove unsuccessful, shall be followed as specified for SBE subcontractors in Section 108. Work in the category concerned shall not begin until such approval is granted in writing by the Department.
 - (4) Notification of a SBE subcontractor's termination will be the same as for SBE subcontractors, specified in Section 108. Send notice in writing to the Department through the RE, with a copy to DCR/AA. Said termination notice will include the firm's ethnic classification, whether the firm is a SBE and the detailed reason(s) for termination.

- b. Selection and Retention of Subcontractors. Do not discriminate in the selection and retention of subcontractors, including procurement of materials and leases of equipment as specified in 108.01. Provide the RE with a listing of firms, organizations or enterprises solicited and those utilized as subcontractors on the proposed project. Such listing shall clearly delineate which firms are classified as SBEs. Provide the RE with subcontract agreements for all subcontractors performing work on the Contract as specified in Section 108.
 - (1) Efforts made to identify and retain a SBE as a replacement subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker when the arrangements with the original SBE prove unsuccessful, shall be the same as for SBE subcontractors and submitted as specified in Section 108. Work in the category concerned shall not begin until such approval is granted in writing by the Department.
 - (2) Notification of a SBE firm's termination will be as specified in Subsection 108.01. Send notice in writing to the Department through the RE. Said termination notice will include the firm's ethnic classification, whether the firm is a SBE and the detailed reason(s) for termination.
- c. Meeting Contract SBE Goal. Report attainment toward meeting the Contract SBE goal by submitting monthly, all SBE participation, to the Department's RE and DCR/AA Contract Compliance Unit using the CR-267 Monthly Report of Utilization of DBE/ESBE or SBE form. The form is due by the 5th of the month, and must list all SBEs used on the Contract to meet the Contract goal, the specific Contract work items each SBE is performing, whether the SBE is performing full or partial work on the items, and the amount paid to each SBE each month. Failure to report the information, and accurately report it may result in payment being delayed or withheld as specified in Section 105, assessing sanctions, or termination of the Contract as specified in Section 108.
- Termination, Substitution or Replacement of SBEs. Make good faith efforts to replace a SBE that is terminated or has otherwise failed to complete its work on the Contract with another registered SBE, to the extent needed to meet the Contract SBE goal. Notify the DCR/AA immediately of the SBE's inability or unwillingness to perform and provide reasonable documented evidence. Prior to termination, substitution or replacement of a SBE subcontractor, lower-tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker, submit a Revised CR-266 - Schedule of DBE.ESBE/SBE Participation form to the Department naming the replacement SBE firm(s), type of work performed, specific Contract work items, whether the SBE is performing full or partial work on the items, dollar value and percent of total Contract for each SBE firm. Submit detailed written explanation of why each change is being made, including documented evidence of good faith effort(s) with the submission of the revised Form CR- 266. Submit along with the revised CR-266: 1) a completed Confirmation of SBE Firm (Form CR-273) to demonstrate direct written confirmation from each SBE firm participating on the Contract, confirming the kind and amount of work that was provided on the Contractor's CR-266, and if applicable; 2) a completed SBE Regular Dealer/Supplier Verification (Form CR-272) for all SBE Regular Dealers/Suppliers listed on the revised CR-266; and if applicable, 3) a completed SBE Trucking Verification (Form CR-274) for all SBE truckers listed on the revised CR-266 form. The Contractor is not permitted to complete any portion of the CR-273, CR-272 or CR-274 forms. Termination, substitution or replacement of SBEs shall be made as specified in Section 108. Termination or replacement of SBE cannot be made without prior written approval of the Department as per 108.01.
- e. Submission of Good Faith Effort Documentation. If the Contractor is unable to meet the Contract goal for SBE participation, submit to the DCR/AA for review and approval, documented evidence of good faith efforts along with the monthly CR-267 form. This submission must include written details addressing each of the good faith efforts outlined in the Contract. Submittal of such information does not imply DCR/AA approval.

F.	SBE Goals for this Contract. This Contract includes a goal of awarding	g percentage of the Total
	Contract Price to subcontractors qualifying as SBEs.	

NOTE: SUBCONTRACTING GOALS ARE NOT APPLICABLE IF THE PRIME CONTRACTOR IS A REGISTERED SMALL BUSINESS ENTERPRISE (SBE) FIRM.

The Department's DCR/AA has sole authority to determine whether the Contractor met the Contract goal or made adequate good faith efforts to do so. If the DCR/AA determines that the Contractor has failed to meet the Contract SBE goal or made adequate good faith efforts to do so, the Department will follow Section 105.

G. Counting SBE Participation.

- 1. Each SBE is subject to a registration procedure to ensure its SBE eligibility status prior to the award of Contract. All SBEs working on the Contract must be registered SBEs. Only Small Business Enterprises registered prior to the date of bid, or prospective Small Business Enterprises that have submitted to the New Jersey Commerce and Economic Growth Commission on or before the day of bid, a completed "State of New Jersey Small Business Vendor Registration Form" and all the required support documentation, will be considered in determining whether the Contractor has met the established Contract SBE goal. Early submission of required documentation is encouraged.
- The Department determines the percentage of SBE participation that will be counted toward the Contract SBE goal. Once a firm is determined to be a bona fide SBE by the New Jersey Commerce and Growth Commission, the total dollar value of the contract awarded to the SBE is counted toward the applicable goal.
- 3. The Contractor will count SBE participation toward the Contract SBE goal only the value of the work actually performed by a SBE when that SBE performs a commercially useful function in the work of a contract as per Section H of this Special Provision Attachment.
- 4. If a Contractor is part of a Joint Venture and one or more of the Sole Proprietorships, Partnerships, Limited Liability companies or Corporations comprising the Joint Venture is a registered SBE, the actual payments made to the Joint Venture for work performed by the SBE member, will be applied toward the Contract SBE goal. Payments made to the Joint Venture for work performed by a non-small business firm will not be applied toward the Contract SBE goal.
- 5. If the Contractor is a registered SBE, payments made to the Contractor for work that the Contractor is registered to perform, and performed by the Contractor will be applied toward the Contract SBE goal. Payments made to the Contractor for work performed by non-SBEs will not be applied toward the Contract SBE goal.
- 6. When a SBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted towards the SBE goal only if the subcontractor itself is a SBE. Work that a SBE subcontracts to a non-SBE firm does not count toward the Contract SBE goal.

H. Commercially Useful Function

- 1. Performance of Work. The SBE must perform the work with their own permanent employees, or employees recruited through traditional recruitment and/or employment centers. SBEs must employ and control their own workforce, and cannot share employees with the Contractor, other subcontractors on the present project, or the renter-lessor of equipment being used on the present project. The SBE firm must be responsible for all payroll and labor compliance requirements for all of their employees performing work on the Contract. Direct or indirect payments by any other contractor are not allowed.
- 2. Managing Work. The SBE must manage the work themselves including the scheduling of work operations, ordering of equipment and materials, hiring/firing of employees, including supervisory employees, and preparing and submitting certified payrolls. The SBE must supervise their portion of daily work operations of the project. With respect to materials and supplies used on the Contract, the SBE must be responsible for preparing the estimate, negotiating price, determining quantity and quality, ordering the material, arranging delivery, installing, (where applicable), and paying for the material and supplies for the project.
- 3. Responsibility of Work. A SBE must perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own workforce. The SBE must not subcontract a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved.

- 4. Equipment of SBE. The SBE must perform the work stated in the subcontract with their own equipment, whether owned or leased and operated on a long term agreement, not an ad hoc or contract by contract agreement. The equipment must be owned by the SBE firm, or leased/rented from traditional equipment lease/rental sources. The equipment will not belong to the Contractor, any other subcontractor or lower tier subcontractors on the current project, or supplier of materials being installed by the SBE firm.
- 5. Lease of Equipment. A SBE firm may lease specialized equipment from a contractor, but not from the Contractor, if it is consistent with normal industry practices and at rates competitive for the area. Rental agreements must be for short periods of time, specify the terms of the agreement and involve specialty equipment to be used at the job site. The lease may allow the operator to remain on the lessor's payroll, if it is the generally accepted industry practice but the operation of the equipment must be subject to full control by the SBE. The SBE shall provide the operator for non-specialized equipment, and is responsible for all payroll and labor compliance requirements. A separate lease agreement is required.
- 6. SBE Trucking. SBE trucking companies must perform a commercially useful function. Contrived arrangements for the purpose of meeting SBE goals will not be allowed. The SBE must be responsible for the management and supervision of the entire trucking operation on a contract-by-contract basis, and must own and operate at least one fully, licensed, insured and operational truck used on the Contract.

The SBE trucking firm is not permitted to obtain trucks from the Contractor to perform work on the project. The SBE may lease trucks from a subcontractor working on the project, provided the trucks are obtained from the subcontractor prior to the project letting. Bona fide lease agreements must be for the length of time needed by the SBE on the Contract and signed by both the SBE and the firm(s), either certified SBE or non-SBE, from which the trucks will be leased. Leases must indicate that the SBE has exclusive use and control over the truck. All leased trucks must display the name and USDOT identification number issued for interstate commerce, of the SBE firm, on the outside of the truck. SBE firms are expected to use the same trucks for SBE credit on all projects so use of leased vehicles on a project-by-project basis is not permitted.

The Contractor shall have signed Hiring Agreements. Submit copies of these signed Hiring Agreements, and copies of all signed lease agreements to the RE prior to the trucking firm's commencing work on the project. Prior to the SBE trucking firm beginning work on the Contract, SBE Trucking firms will be required to complete the SBE Trucking Verification (Form CR-274). The SBE and Contractor must sign the form and the Contractor submit the original CR-274 form directly to the Department's RE, with a copy submitted to the DCR/AA. The Contractor is not permitted to complete any portion of the CR-274 form. The Contractor must prepare, sign and submit along with the CR-267 – Monthly Report of Utilization of DBE/ESBE or SBE form, a Monthly Trucking Verification form (CR-271), identifying each truck owner, SBE Certification number, company name and address, truck number, and commission or amount paid for all SBE and non-SBE truckers performing work on the project. Also, submit the form to the Department as per Section E of this Special Provision for the DCR/AA's review, approval and determination of credit toward the Contract goal. Failure to submit the forms may result in denial or limit of credit toward the Contract SBE goal, payment being delayed or withheld as specified in Section 105, assessing sanctions or termination of the Contract as specified in Section 108.

- 7. SBE Regular Dealers. SBE regular dealers must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. In addition, a regular dealer must own, operate or maintain a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under this Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- 8. SBE Manufacturers. SBE manufacturers must be a firm that operates or maintains a factory or establishment that produces on the premises, the materials, supplies, articles, or equipment required for this Contract.

- 9. The Contractor shall not use a SBE solely for the purpose of acting as an extra participant in a transaction, a contract or the Contract through which funds are passed in order to obtain the appearance of SBE participation.
- Good Faith Effort. To demonstrate good faith efforts to meet the Contract SBE goal, a Contractor shall, on an ongoing basis, adequately document the steps it takes to obtain SBE participation, including but not limited to the following:
 - 1. Conducting market research to identify qualified potential small business subcontractors and suppliers and soliciting through all reasonable and available means, the interest of registered SBEs that have the capability to perform the work of the Contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all registered SBEs listed in the New Jersey Selective Assistance Vendor Information (NJSAVI) database that specialize in the areas of work desired (as noted in SAVI) and which are located in the area or surrounding areas of the project.

Solicit this interest as early in the acquisition process as practicable to allow the SBEs to respond to the solicitation and submit a timely offer for the subcontract. Determine with certainty if the SBEs are interested by taking appropriate steps to follow up initial solicitations.

Request a listing of small businesses from the New Jersey Department of the Treasury, Division of Property Management and Construction if none are known to the Contractor

- 2. Selecting portions of the work to be performed by SBEs in order to increase the likelihood that the SBE goals will be achieved. This includes, where appropriate, breaking out Contract work items into economically feasible units (for example, smaller tasks or quantities) to facilitate SBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates SBE participation.
- 3. Providing all potential SBE subcontractors with detailed information about the plans, specifications, and requirements of the Contract in a timely manner to assist them in responding to a solicitation with their offer for the subcontract. Attempt to contact all potential subcontractors on the same day and use similar methods to contact them.
- 4. Negotiating in good faith with interested SBEs. Make a portion of the work available to SBE subcontractors and suppliers and select those portions of the work or material needs consistent with the available SBE subcontractors and suppliers, so as to facilitate SBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of SBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional Agreements could not be reached for SBEs to perform the work.

Consider a number of factors in negotiating with subcontractors, including SBE subcontractors. Take a firm's price and capabilities as well as Contract goals into consideration. The fact that there may be some additional costs involved in finding and using SBEs is not in itself sufficient reason for failure to meet the Contract SBE goal, as long as such costs are reasonable. The ability or desire of a Contractor to perform the work of a Contract with its own organization does not relieve the responsibility to make good faith efforts. Contractors are not, however, required to accept higher quotes from SBEs if the price difference is excessive or unreasonable.

5. Not rejecting SBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the Contract SBE goal. Another practice considered an insufficient good faith effort is the rejection of the SBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the Bidder to accept unreasonable quotes in order to satisfy the Contract SBE goal.

Inability to find a replacement SBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original SBE. The fact that the Contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the Contractor of the obligation to make good faith efforts to find a replacement SBE, and it is not a sound basis for rejecting a prospective replacement SBE's reasonable quote. Attempt, wherever possible, to negotiate prices with potential subcontractors which submitted higher than acceptable price quotes.

Keep a record of efforts, including the names of businesses contacted and the means and results of such contacts.

- Making efforts to assist interested SBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- 7. Making efforts to assist interested SBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

If the Contractor fails to meet the Contract SBE goal, they must submit documented evidence of good faith effort(s) to meet the goal with the CR-268 final SBE Report to the DCR/AA for review and approval. Submittal of such information does not imply DCR/AA approval. The Department's DCR/AA has sole authority to determine whether the Contractor met the Contract SBE goal or made adequate good faith efforts to do so. If the DCR/AA determines that the Contractor has failed to meet the Contract SBE goal or made adequate good faith effort to do so, the Department will follow Section 105.

J. Submission of Affirmative Action Program

Contractors, subcontractors and professional service firms performing work for the Department are required to submit their company's Affirmative Action Program annually to the DCR/AA. Contractors must have an **approved** Affirmative Action Program on file in the DCR/AA no later than seven (7) State business days after the date of bid opening. No recommendations to award will be made without an approved Affirmative Action Program on file in the DCR/AA. Ensure subcontractors and professional service firms have an approved Affirmative Action Plan on file in the DCR/AA prior to their beginning work on a particular project.

The Annual Affirmative Action Program will include, but is not limited to the following:

- 1. Copy of company's comprehensive EEO/Affirmative Action Plan, with a cover page that includes the company name and address, and signature of the Chief Executive or EEO Officer.
- 2. Copy of document designating the company's corporate EEO Officer, including the name, address and contact telephone number for the officer, and signature of the Chief Executive or President, on company letterhead.
- 3. Copy of the company's EEO Policy Statement on company letterhead, dated and signed by the Chief Executive and the EEO Officer.
- 4. Copy of the company's Sexual Harassment Policy on company letterhead.
- 5. EEO Legend such as letterhead, envelope, or published advertisement showing the company is an equal opportunity employer.
- Copy of document designating the company's SBE Liaison Officer to administer the firm's Small Business Program.
- 7. SBE Affirmative Action Plan which is an explanation of affirmative action methods intended to be used to seek out and consider SBEs as subcontractors, material suppliers or equipment lessors. This refers to the Contractor's ongoing responsibility, i.e., Small Business Enterprise/Affirmative Action activities after the award of the Contract and for the duration of the Contract.
- K. SBE Liaison Officer. Designate a SBE Liaison Officer who shall be responsible for the administration of your SBE program in accordance with the Contract, and ensuring that the Contractor complies with all provisions of the SBE Program.
- L. Consent by Department to Subletting. The Department will not approve any subcontract proposed by the Contractor unless and until said Contractor has complied with the terms of the Contract.
- M. Conciliation. In cases of alleged discrimination regarding these and all equal employment opportunity provisions and guidelines, investigations and conciliation will be undertaken by the DCR/AA.

N. Documentation

- Requiring of Information. The Department or the State funding agencies may at any time require
 information as specified in Section 107.02 and deemed necessary in the judgment of the Department
 to ascertain the compliance of any Bidder, Contractor or subcontractor with the terms of the Contract.
- 2. Record and Reports. The Contractor, subcontractors and other sub-recipients will keep such records as are necessary to determine compliance with its SBE obligations. These records kept will be designed to indicate:
 - a. The names of SBE contractors, subcontractors, transaction expeditors and material suppliers contacted for work on the Contract, including when and how contacted, and the specific Contract work items and other information provided to each.
 - b. Work, services and materials which are not performed or supplied by the Contractor.
 - c. The actual dollar value of work subcontracted and awarded to SBEs, including specific Contract work items and cost of each work item.
 - d. The progress being made and efforts taken in seeking out and utilizing SBEs to include: solicitations, specific Contract work items and the quotes and bids regarding those specific Contract work items, supplies, leases, or other contract items, etc.
 - e. Detailed written documentation of all correspondence, contacts, telephone calls, etc., including names and dates/times, to obtain the services of SBEs on the Contract.
 - f. Records of all SBEs and non-SBEs who have submitted quotes/bids to the Contractor on the Contract.
 - g. Monthly CR-267 Monthly Report, Utilization of DBE/ESBE or SBE, and other reports required for submission to the Department, hiring agreements, subcontracts, lease agreements, equipment rental agreements, supply tickets, delivery slips, payment information, and other records documenting SBE utilization on the Contract.
 - Documentation outlining EEO workforce information for the Contract.
 - i. Documentation outlining EEO and Affirmative Action efforts made in the administration and performance of the Contract.
- 3. Submission of Reports, Forms and Documentation. Submit reports, forms and documentation, as required by the Department, on those contracts and other business transactions executed with SBEs in such form and manner as may be prescribed by the Department. Failure to submit the required forms, reports or other documentation as required may result in payment being delayed or withheld as specified in Section 105, assessing sanctions, or termination of the contract as specified in Section 108. Submission of falsified forms, reports or other required documentation may result in termination of the Contract as specified in Section 108, investigation by the Department's Inspector General, and prosecution by the State Attorney General's Office.
- 4. Maintaining Records. All records must be maintained for a period of three (3) years following acceptance of final payment and will be available for inspection by the Department, or the State funding agencies.
- O. Prompt Payment to Subcontractors. Payment to subcontractors, equipment lessors, suppliers and manufacturers is made in accordance with Section 109.
- P. Non-Compliance. Failure by the Contractor to comply with the SBE program, rules and regulations in the administration of the Contract may result in denial or limit of credit toward the Contract SBE goal, payment being delayed or withheld as specified in Section 105, assessing sanctions, liquidated damages as specified in Section 108, default as specified in Section 108, debarment, or termination of the Contract as specified in Section 108. The Contractor may further be declared ineligible for future Department contracts.

STATE FUNDED PROJECT ATTACHMENT 2

STATE OF NEW JERSEY EQUAL EMPLOYMENT OPPORTUNITY SPECIAL PROVISIONS FOR WHOLLY STATE FUNDED PROJECTS

A. General. It is the policy of the New Jersey Department of Transportation (hereafter "NJDOT") that its contracts should create a workforce that reflects the diversity of the State of New Jersey. Therefore, contractors engaged by the Department to perform under a construction contract shall put forth a good faith effort to engage in recruitment and employment practices that further the goal of fostering equal opportunities to minorities and women.

The Contractor must demonstrate to the Department's satisfaction that a good faith effort was made to ensure that minorities and women have been afforded equal opportunity to gain employment under the Department's contract with the Contractor. Payment may be withheld from a Contractor's contract for failure to comply with these provisions.

Evidence of a "good faith effort" includes, but is not limited to:

- 1. The Contractor shall recruit prospective employees through the New Jersey career connections website, managed by the Department of Labor and Workforce Development, available online at http://careerconnections.nj.gov/careerconnections/for-businesses.shtml
- 2. The Contractor shall keep detailed documented evidence of its efforts, including records of all individuals interviewed and hired, including the specific numbers of minorities and women;
- 3. The Contractor shall actively solicit and shall provide the Department with proof of solicitations for employment, including but not limited to advertisements in general circulation media, professional service publications and electronic media;
- 4. The Contractor shall provide evidence of efforts described at 2 above to the Department no less frequently than once every 12 months; and
- 5. The Contractor shall comply with the requirements set forth at N.J.A.C. 17:27-1.1 et seq.

The Contractor is required to implement and maintain a specific Affirmative Action Compliance Program of Equal Employment Opportunity in support of the New Jersey "Law Against Discrimination", N.J.S.A. 10:5-31 et seq., and according to the Affirmative Action Regulations set forth at N.J.A.C. 17:27-1.1 et seq.

The provisions of N.J.S.A. 10:2-1 through 10:2-4 and N.J.S.A. 10:5-31 et seq., as amended and supplemented) dealing with discrimination in employment on public contracts, and the rules and regulations promulgated pursuant thereunto, are hereby made a part of this contract and are binding upon the Contractor.

Noncompliance by the Contractor with the requirements of the Affirmative Action program for Equal Employment Opportunity may be cause for delaying or withholding monthly and final payments pending corrective and appropriate measures by the Contractor to the satisfaction of the Department.

The Contractor will cooperate with the State agencies in carrying out its Equal Employment Opportunity obligations and in their review of its activities under the contract.

The Contractor and all its subcontractors, not including material suppliers, holding subcontracts of \$2,500 or more, will comply with the following minimum specific requirement activities of Equal Opportunity and Affirmative Action set forth in these special provisions. The Contractor will include the following mandatory equal employment opportunity language in every subcontract of \$2,500 or more with such modification of language in the provisions of such contracts as is necessary to make them binding on the subcontractor.

During the performance of this Contract, the contractor agrees as follows:

1. The Contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. The Contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age,

race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, veteran's status, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

- 2. The Contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex
- 3. The Contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The Contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.
- 5. When hiring or scheduling workers in each construction trade, the Contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program, may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, a, b, and c, as long as the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program is satisfied that the Contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The Contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:
 - If the Contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the Contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the Contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the Contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the Contractor or sub-contractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the Contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the Contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the Contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.
 - b. If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (a.) above, or if the Contractor does not have a referral agreement or arrangement with a union for a construction trade, the Contractor or subcontractor agrees to take the following actions:

- (1) To notify the public agency compliance officer, the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
- (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies:
- (3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
- (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
- (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions:
- (6) To adhere to the following procedure when minority and women workers apply or are referred to the Contractor or subcontractor:
 - i. The Contactor or subcontractor shall interview the referred minority or women worker.
 - ii. If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the Contractor or subcontractor shall in good faith determine the qualifications of such individuals. The Contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a Contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program. If necessary, the Contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (c) below.
 - iii. The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in 6(1) above, whenever vacancies occur. At the request of the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program, the Contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
 - iv. If, for any reason, said Contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the Contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program.
- (7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program and submitted promptly to the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program upon request.
- c. The Contractor or subcontractor agrees that nothing contained in (b.) above shall preclude the Contractor or subcontractor from complying with the union hiring hall or apprentice-ship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral,

or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the Contractor or subcontractor shall consider for employment persons referred pursuant to (b) above without regard to such agreement or arrangement; provided further, however, that the Contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the Contractor or subcontractor agrees that, in implementing the procedures of (b) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

The Contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

The Contractor and its subcontractors shall furnish such reports or other documents to the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program as may be requested by the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq...

The Contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and off-the-job programs for outreach and training of minority and female trainees employed on the construction projects.

B. Equal Employment Opportunity Policy. The Contractor agrees that it will accept and implement during the performance of this contract as its operating policy the following statement which is designed to further the provision of Equal Employment Opportunity to all persons without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex and to promote the full realization of Equal Employment Opportunity through a positive continuing program:

"It is the policy of this company that it will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex and that it will take Affirmative Action to ensure that applicants are recruited and employed and that employees are treated during employment without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship."

C. Equal Employment Opportunity Officer. Designate and make known to the Department's contracting officers, an Equal Employment Opportunity Officer (hereafter "EEO Officer") who will have the responsibility for and must be capable of effectively administering and promoting an active Equal Employment Opportunity program and be assigned adequate authority and responsibility to do so.

D. Dissemination of Policy.

1. Implementation. All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, will be made fully cognizant of, and will implement, the Contractor's Equal Employment Opportunity Policy and contractual responsibilities to provide Equal Employment Opportunity in each grade and classification of

employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

- a. Initial Project Site Meeting. Conduct an initial project site meeting with supervisory and personnel office employees before the start of work and then not less often than once every 6 months, at which time the Contractor's Equal Employment Opportunity Policy and its implementation will be reviewed and explained. The EEO Officer will conduct the meetings.
- b. **EEO Obligations**. Give all new supervisory or personnel office employees a thorough indoctrination by the EEO Officer covering all major aspects of the Contractor's Equal Employment Opportunity obligations within 30 days following their reporting for duty with the Contractor.
- **c.** All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the Contractor's procedures for locating and hiring minority and women workers.
- 2. Take the following actions in order to make the Contractor's Equal Employment Opportunity Policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc.,:
 - a. Place notices and posters setting forth in the Contractor's Equal Employment Opportunity policy, as set forth in Section 2 of these Equal Employment Opportunity Special Provisions in conspicuous places readily accessible to employees, applicants for employment and potential employees.
 - b. Bring the Contractor's Equal Employment Opportunity Policy and the procedures to implement such policy to the attention of employees by means of meetings, employee handbooks, or other appropriate channels.

E. Recruitment

- 1. In all solicitations and advertisements for employees placed by or on behalf of the Contractor, the Contractor will state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, veterans status, disability, nationality or sex. All such advertisements will be published in newspapers or other publications having a large circulation among minorities and women in the area from which the project workforce would normally be derived.
- 2. Unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority and women applicants, including, but not limited to state employment agencies, schools, colleges and minority and women organizations. Through their EEO Officer, identify sources of potential minority and women employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the Contractor for employment consideration.
- 3. In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the Contractor's compliance with Equal Employment Opportunity contract provisions. (The US Department of Labor has held that where implementations of such agreements have the effect of discriminating against minorities or women, or obligates the Contractor to do the same; such implementation violates Executive Order 11246, as amended).
- 4. In the event that the process of referrals established by such a bargaining agreement fails to provide the Contractor with a sufficient number of minority and women referrals within the time period set forth in such an agreement, the Contractor shall comply with the provisions of "Section I Unions" of this "State Of New Jersey Equal Employment Opportunity for Wholly State Funded Projects" Special Provision Attachment.
- F. Personnel Actions. Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to age, race, color, creed, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, veterans status, disability, nationality or sex. The following procedures shall be followed:

- 1. Conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- 2. Periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- 3. Periodically review selected personnel actions in-depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- 4. Promptly investigate all complaints of alleged discrimination 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 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 their avenues of appeal.

G. Training and Promotions.

- 1. Assist in locating, qualifying, and increasing the skills of minority group and women workers, and applicants for employment.
- 2. Consistent with the Contractor's workforce requirements and as permissible under State regulations, make full use of training programs, i.e., apprenticeship, and on-the-job training programs, for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.
- 3. Advise employees and applicants for employment of available training programs and entrance requirements for each.
- 4. Periodically review the training and promotion potential of minority group and women workers and encourage eligible employees to apply for such training and promotion.
- H. Unions. If the Contractor relies in whole or in part upon unions as a source of employees, the Contractor will use their good faith efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and women workers. Actions by the Contractor either directly or through a Contractor's association acting, as agent will include the procedures set forth below:
 - 1. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract of understanding, a notice advising the labor union or workers' representative of the Contractor's commitments under both the law against discrimination and this contract and shall post copies of the notice in conspicuous places readily accessible to employees and applicants for employment. Further, the notice will request assurance from the union or worker's representative that such union or worker's representative will cooperate with the Contractor in complying with the Contractor's Equal Employment Opportunity and Affirmative Action obligations.
 - 2. The Contractor will use their best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - 3. The Contractor will use their best efforts to incorporate an Equal Employment Opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their age, race, color, creed, sex, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, or nationality.
 - 4. The Contractor is to obtain information as to the referral practices and policies of the labor union except to the extent that such information is within the exclusive possession of the labor union and such labor unions refuse to furnish this information to the Contractor, certify to the Department and shall set forth what efforts have been made to obtain this information.
 - 5. In the event the union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the Contractor will, through independent recruitment efforts, fill the employment vacancies without regard to age, race, color, creed, sex, national origin, ancestry, marital status, affectional or sexual orientation,

gender identity or expression, disability, or nationality making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The US Department of Labor has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees). In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these Special Provisions, such Contractor shall immediately notify the Department.

I. Subcontracting. The Contractor will use his best efforts to solicit bids from and to utilize minority group and women subcontractors or subcontractors with meaningful minority group and women representation among their employees. Contractors may use lists of minority owned and women owned construction firms as issued by the NJDOT and/or the New Jersey Unified Certification Program (NJUCP).

Ensure subcontractor compliance with the Contract's Equal Employment Opportunity obligations.

J. Records and Reports

- 1. Keep such records as are necessary to determine compliance with the Contractor's Equal Employment Opportunity obligations. Records kept will be designed to indicate:
 - The work hours of minority and non-minority group members and women employed in each work classification on the project;
 - b. The progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to Contractors who rely in whole or in part on unions as a source of their workforce);
 - c. The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and women workers; and
 - d. The progress and efforts being made in securing the services of minority group and women subcontractors or subcontractors with meaningful minority and women representation among their employees.
- All such records must be retained for a period of 3 years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the NJDOT.
- 3. Submit monthly reports to the NJDOT after construction begins for the duration of the project, indicating the work hours of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on a form supplied by the NJDOT.

STATE FUNDED PROJECT ATTACHMENT 3

REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY ON WHOLLY STATE FUNDED PROJECTS

A. Minority and Women Employment Goal Obligations. The Department has established, pursuant to N.J.A.C. 17:27-7.2, the minority and women goals for each construction contractor and subcontractor based on availability statistics as reported by the New Jersey Department of Labor, Division of Planning and Research, in its report, "EEO Tabulation - Detailed Occupations by Race/Hispanic Groups." The goals for minority and women participation, in the covered area, expressed in percentage terms for the Contractor's aggregate work force in each trade, on all construction work are:

County	Minority % Participation	Women % Participation
	Percent	Percent
Atlantic	18	6.9
Bergen	22	6.9
Burlington	15	6.9
Camden	19	6.9
Cape May	5	6.9
Cumberland	27	6.9
Essex	53	6.9
Gloucester	9	6.9
Hudson	60	6.9
Hunterdon	3	6.9
Mercer	30	6.9
Middlesex	24	6.9
Monmouth	15	6.9
Morris	16	6.9
Ocean	7	6.9
Passaic	36	6.9
Salem	10	6.9
Somerset	20	6.9
Sussex	4	6.9
Union	45	6.9
Warren	5	6.9

The NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program has interpreted Section 7.2 of the State of New Jersey Affirmative Action Regulations as applicable to work hour goals for minority and women participation.

If a project is located in more than one county, the minority work hour goal will be determined by the county which serves as the primary source of hiring or, if workers are obtained equally from one or more counties, the single minority goal shall be the average of the individual goal for the affected counties.

The NJ State Department of Labor and Workforce Development, Construction EEO Monitoring Program may designate a regional goal for minority membership for a union that has regional jurisdiction. No regional goals shall apply to this project unless specifically designated elsewhere herein.

When hiring workers in the construction trade, the Contractor and/or subcontractor agree to attempt, in good faith, to employ minority and women workers in each construction trade, consistent with the applicable county or, in special cases, regional goals.

It is understood that the goals are not quotas. If the Contractor or subcontractor has attempted, in good faith, to satisfy the applicable goals, they will have complied with their obligations under these EEO Special Provisions. It is further understood that if the Contractor shall fail to attain the goals applicable to this project, it will be the Contractor's obligation to establish to the satisfaction of the Department that it has made a good faith effort to satisfy such goals. The Contractor or subcontractor agrees that a good faith effort to achieve the goals set forth in these special provisions shall include compliance with the following procedures:

- B. Requests for Referrals from Unions to Meet Contract Workforce Goals. Requests shall be made by the Contractor or subcontractor to each union or collective bargaining unit with which the Contractor or subcontractor has a referral agreement or arrangement for the referral of minority and women workers to fill job openings. Requests shall also be made for assurances for the referral of minority and women workers to fill job openings. Requests shall also be made for assurances from such unions or collective bargaining units that they will cooperate with the Contractor or subcontractor in fulfilling the Affirmative Action obligations of the Contractor or subcontractor under this contract. Such requests shall be made prior to the commencement of construction under the contract.
 - 1. The Contractor and its subcontractors shall comply with Section I, Unions of these EEO Special Provisions and, in particular, with Section I, Paragraph D, if the referral process established in any collective bargaining arrangement is failing to provide the Contractor or subcontractor with a sufficient number of minority and women referrals.
 - 2. The Contractor and its subcontractors shall notify the Department's Compliance Officer, the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program and at least one approved minority referral organization of the Contractor's or subcontractors work force needs and of the Contractor's or subcontractor's desire for assistance in attaining the goals set forth herein. The notifications should include a request for referral of minority and women workers.
 - 3. The Contractor and its subcontractors shall notify the Department's Compliance Officer and the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program in the event that a union or collective bargaining unit is not making sufficient minority and women referrals to enable the Contractor or subcontractor to attain the workforce goals for the Contract.
 - 4. The Contractor and its subcontractors shall make standing requests to all local construction unions, the State's training and employment service and other approved referral sources for additional referrals of minority and women workers until such time as the project workforce is consistent with the work hour goals for the Contract.
- C. In the event that it is necessary to lay off some of the workers in a given trade on the construction site, the Contractor and its subcontractors shall ensure that fair layoff practices are followed regarding minority, women and other workers.
- D. Comply with the other requirements of these EEO Special Provisions.
- E. Reporting Requirements.
 - 1. Directly provide the NJ Department of Labor and Workforce Development, Office of Diversity Compliance, Construction Contract Compliance Unit with workforce data for the Contract.
 - a. After notification of award, but prior to signing the Contract, submit to the Department and the Department of Labor and Workforce Development, Construction EEO Monitoring Program an AA-201 – Initial Project Workforce Report Construction form in accordance with N.J.A.C. 17:27-

7. Also, submit the info within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the Contract. This form is available online at the New Jersey Department of the Treasure's website at: http://www.nj.gov/treasury/contract_compliance/pdf/aa201.pdf. Instructions for completing the form can be found online at:

http://www.state.nj.us/treasury/contract_compliance/pdf/aa201ins.pdf.

- o. Monthly, complete and submit an AA 202 Monthly Project Workforce Report Construction form for the duration of the Contract. This form may be completed:
 - (1) Manually and mailed to the Department of Labor & Workforce Development, Construction & EEO Monitoring Program, P.O. Box 209, Trenton, NJ 08625-0209, or:
 - (2) Input electronically directly onto the AA-202 form via the Department of the Treasury's Premier Business Services Online Forms web application, located at: http://www.nj.gov/treasury/contract_compliance/. Instructions for setting up online access to the web application can be found at: http://www.nj.gov/treasury/contract_compliance/pdf/PBS-Introduction-Page.pdf. Follow all instructions to set up online access to the web application.
 - (3) Submit a printed copy of the AA-202 form to the Department along with the hard copy of the CC-257R and confirmation e-mail of the successful submission of Monthly Employment Utilization Report.
- 2. Directly provide the Department with employment workforce data of the number and work hours of minority and non-minority group members and women employed in each work classification for the Contract. The Contractor, subcontractors, professional service firms and others working on the project must submit this information via a web-based application through the New Jersey portal, Vendor Workforce Reporting Manager. Instructions on how to complete Form CC-257R are provided within the web application. Instructions for registering and receiving the authentication code to access the web based application can be found at the Contractor Manpower Project Reporting CC-257R website at: http://www.state.ni.us/transportation/business/civilrights/pdf/cc257.pdf.
 - a. On a monthly basis, submit Form CC-257R through the web based application within 10 days following the end of each reporting month.
 - b. In addition to the above, submit a hard copy of the electronic Form CC-257R to the RE within 10 days following the end of each reporting month
 - c. Submit a copy of the confirmation e-mail of the successful submission of Monthly Employment Utilization Report to the RE within 10 days following the end of each reporting month.
- 3. All employment data must be accurate and consistent with certified payroll records. The Contractor is responsible for ensuring compliance with these reporting requirements. Failure of the Contractor, subcontractors, professional service firms and others working on the Contract to report monthly employment and wage data may result in payments being delayed or withheld as per 105.01, or impact the Contractor's prequalification rating with the Department.

STATE FUNDED PROJECT ATTACHMENT 4

INVESTIGATING, REPORTING AND RESOLVING EMPLOYMENT DISCRIMINATION AND SEXUAL HARASSMENT COMPLAINTS ON WHOLLY STATE FUNDED PROJECTS

The Contractor hereby agrees to the following requirements in order to implement fully the nondiscrimination provisions of the Supplemental Specifications:

The Contractor agrees that in instances when it receives from any person working on the project site a verbal or written complaint of employment discrimination, prohibited under N.J.S.A. 10:5-1 et seq. 10:2-1 et seq., 42 U.S.C. 2000 (d) et seq., 42 U.S.C. 2000(e) et seq. and Executive Order 11246, it shall take the following actions:

- A. Within one (1) working day commence an investigation of the complaint, which will include but not be limited to interviewing the complainant, the respondent, and all possible witnesses to the alleged act or acts of discrimination or sexual harassment.
- B. Prepare and keep for its use and file a detailed written investigation report which includes the following information:
 - 1. Investigatory activities and findings.
 - 2. Dates and parties involved and activities involved in resolving the complaint.
 - 3. Resolution and corrective action taken if discrimination or sexual harassment is found to have taken place.
 - 4. A signed copy of resolution of complaint by complainant and Contractor.

(In addition to keeping in its files the above-noted detailed written investigative report, the Contractor shall keep for possible future review by the Department, all other records, including, but not limited to, interview memos and statements.)

- C. Upon the request of the Department, provides to the Department within ten (10) calendar days a copy of its detailed written investigative report and all other records on the complaint investigation and resolution.
- D. Take appropriate disciplinary actions against any Contractor employee, official or agent who has committed acts of discrimination or sexual harassment against any Contractor employee or person working on the project. If the person committing the discrimination is a subcontractor employee, then the Contractor is required to attempt to effectuate corrective and/or disciplinary action by the subcontractor in order to establish compliance with the Contract.
- E. Take appropriate disciplinary action against any Contractor employee, official or agent who retaliates, coerces or intimidates any complainant and/or person who provides information or assistance to any investigation of complaints of discrimination or sexual harassment. If the person retaliating, coercing or intimidating a complainant or other person assisting in an investigation is a subcontractor's employee, then the Contractor is required to attempt to effectuate corrective and/or disciplinary action taken by the subcontractor in order to establish compliance with the Contract.
- F. Ensure to the maximum extent possible that the privacy interests of all persons who give confidential information in aid of the Contractor's employment discrimination investigation are protected.
- G. In conjunction with the above requirements, the Contractor herein agrees to develop and post a written sexual harassment policy for its workforce.
- H. The Contractor also agrees that its failure to comply with the above requirements may be cause for the Department to institute against the Contractor any and all enforcement proceedings and/or sanctions authorized by the Contract or by State and/or Federal law.

STATE FUNDED PROJECT ATTACHMENT 5

AMERICANS WITH DISABILITIES ACT REQUIREMENTS FOR WHOLLY STATE FUNDED PROJECTS

Equal Opportunity for Individuals with Disabilities.

The CONTRACTOR and the STATE do hereby agree that the provisions of Title II of the American With Disabilities Act of 1990 (the "ACT") (42 U.S.C. Section 12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the STATE pursuant to this contract, the CONTRACTOR, agrees that the performance shall be in strict compliance with the Act. In the event that the CONTRACTOR, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the STATE in any action or administrative proceeding commenced pursuant to this Act. The CONTRACTOR shall indemnify, protect, and save harmless the STATE, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The CONTRACTOR shall, at its own expense, appear, defend, and pay any and all charges for legal services and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the STATE'S grievance procedure, the CONTRACTOR agrees to abide by any decision of the STATE which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the STATE or if the STATE incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the CONTRACTOR shall satisfy and discharge the same at its own expense.

The STATE shall, as soon as practicable after a claim has been made against it, give written notice thereof to the CONTRACTOR along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the STATE or any of its agents, servants, and employees, the STATE shall expeditiously forward or have forwarded to the CONTRACTOR every demand, complaint, notice, summons, pleading, or other process received by the STATE or its representatives.

It is expressly agreed and understood that any approval by the STATE of the services provided by the CONTRACTOR pursuant to this contract will not relieve the CONTRACTOR of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the STATE pursuant to this paragraph.

It is further agreed and understood that the STATE assumes no obligation to indemnify or save harmless the CONTRACTOR, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the CONTRACTOR expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the CONTRACTOR'S obligations assumed in this Agreement, nor shall they be construed to relieve the CONTRACTOR from any liability, nor preclude the STATE from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

BOARD OF COUNTY COMMISSIONERS PLANS FOR

HAMILTON STREET BRIDGE OVER ROBINSON'S BRANCH OF THE RAHWAY RIVER

SCOUR PROTECTION COUNTY STRUCTURE RA-29 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

UNION COUNTY ENGINEERING PROJECT #2018-008
MAY 2022
PREPARED BY: CME ASSOCIATES OF PARLIN, NJ

UNION COUNTY BOARD OF COUNTY COMMISSIONERS

CHAIR REBECCA WILLIAMS VICE CHAIR CHRISTOPHER HUDAK COMMISSIONER JAMES E. BAKER, JR. COMMISSIONER DR. ANGELA R. GARRETSON **COMMISSIONER SERGIO GRANADOS COMMISSIONER** BETTE JANE KOWALSKI COMMISSIONER **LOURDES M. LEON** COMMISSIONER **ALEXANDER MIRABELLA** KIMBERLY PALMIERI-MOUDED COMMISSIONER

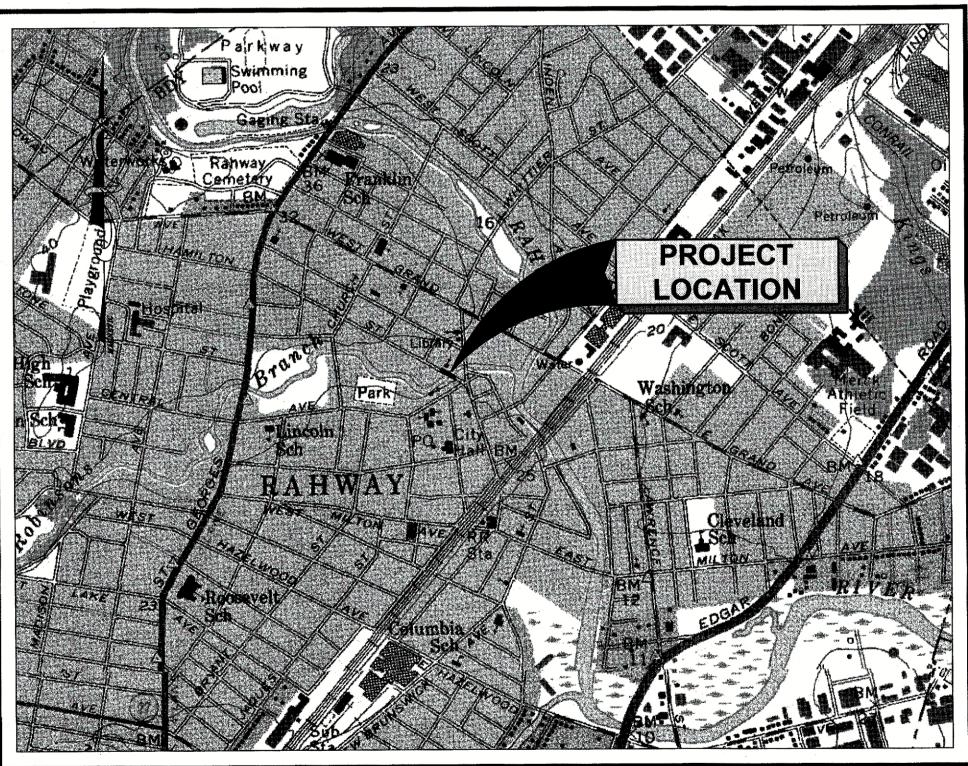
BRIDGES IN THIS CONTRACT

BRIDGE No. 2013029 HAMILTON STREET OVER ROBINSON'S BRANCH OF THE RAHWAY RIVER

(A.K.A. UNION COUNTY STRUCTURE No. RA-29)

INDEX OF DRAWINGS

SHEET No.	DESCRIPTION
1	TITLE SHEET
2	LEGEND, GENERAL NOTES AND ESTIMATE & DISTRIBUTION OF QUANTITI
3	SURVEY CONTROL PLAN
4	CONSTRUCTION AND SOIL EROSION AND SEDIMENT CONTROL PLAN
5	ENVIRONMENTAL NOTES
6	ELEVATIONS AND SECTIONS
7	CONSTRUCTION DETAILS
8	TRAFFIC CONTROL PLAN
9 - 10	CONCRETE REPAIR DETAILS



KEY MAP

NEW JERSEY DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF 2019 AND ALL AMENDMENTS IN THE UNION COUNTY FORMAT THERETO SHALL GOVERN.

THE HEADING OF THE ARTICLES CONTAINED HEREIN CONFORM TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2019 AND ALL ADDENDA THERETO, WHICH IS TO BE USED IN THE EXECUTION OF THIS CONTACT.

THE NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD ROADWAY CONSTRUCTION/TRAFFIC CONTROL/BRIDGE

CONSTRUCTION DETAILS" BOOKLET DATED 2016 TO GOVERN, EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

WATER

MR. BURK LAMBERTSON
PSE&G - ELECTRIC
472 WESTON CANAL ROAD
SOMERSET, NJ 08873
(732) 764-3160

CABLE
MR. ROBERT KNOEPFEL
COMCAST OF NEW JERSEY
800 RAHWAY AVENUE
UNION, NJ 07083
(732) 602-7444

TELEPHONE/COMMUNICATIONS
MR. IAN CHAN
VERIZON COMMUNICATIONS
999 W MAIN STREET
FREEHOLD, NJ 07728
(732) 683-5146

NJ ONE CALL SERVICE
1-800-272-1000

MID-POINT OF PROJECT

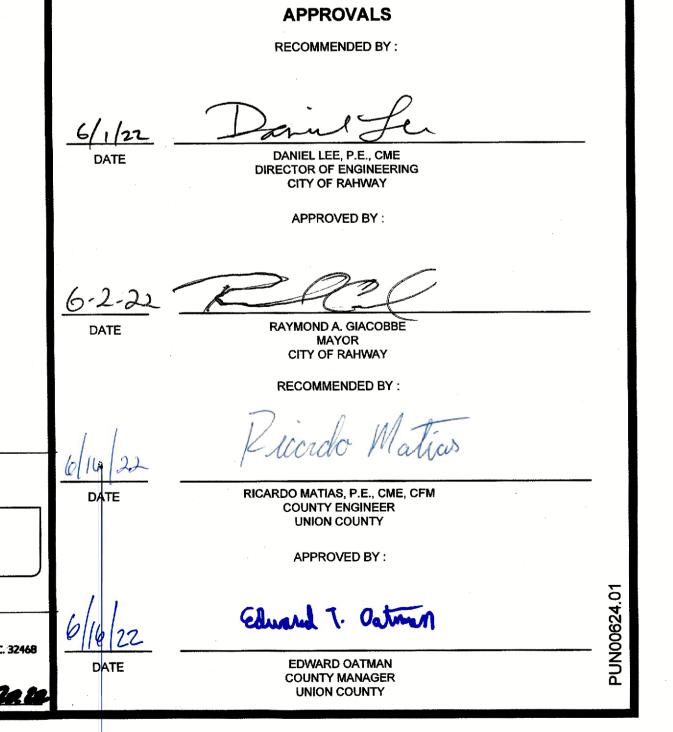
LONGITUDE: 74° 16' 48.0" W

LATITUDE: 40° 36' 36.0" N

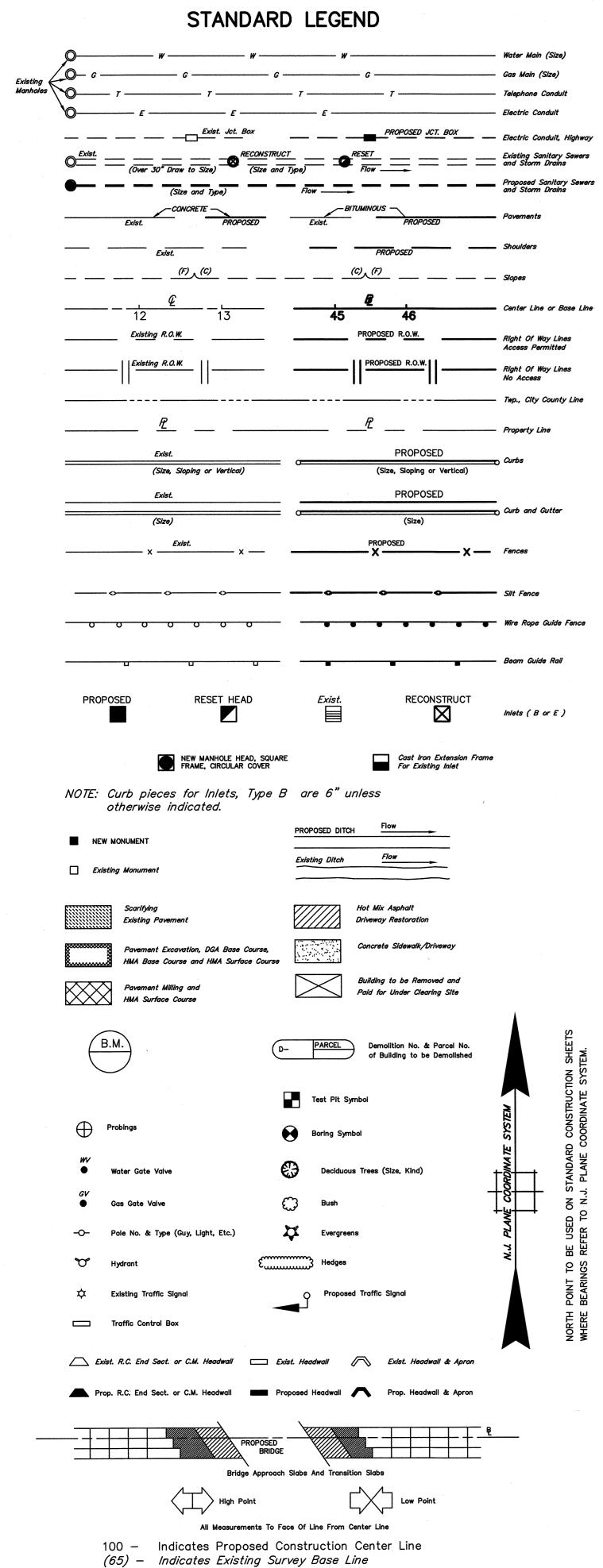
LENGTH OF PROJECT = 270 LINEAR FEET

CONSULTING AND MUNICIPAL ENGINEERS

MICHAEL J. McCLELLAND P.E.



NEW JERSEY DEPARTMENT OF TRANSPORTATION



PROJECT CONSTRUCTION NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS NECESSARY FOR CONSTRUCTION IN ACCORDANCE WITH EXISTING LOCAL, COUNTY, OR STATE REGULATIONS, OR ANY OTHER AGENCY HAVING
- 2. THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL VERIFY ALL DIMENSIONS AND DETAILS BEFORE PROCEEDING WITH WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
- ALL REGRADED AREAS AT THE SITE WHICH ARE NOT DESIGNATED AS PAVED OR GRAVEL AREAS SHALL BE TOPSOILED AND SEEDED AND SHALL BE STABILIZED IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND THE CONTRACT SPECIFICATIONS.
- 4. ALL GRADING OPERATIONS SHALL PROVIDE FOR POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND STRUCTURES AND SHALL ELIMINATE
- INFORMATION AS TO THE LOCATION OF EXISTING UTILITIES HAS BEEN COLLECTED FROM VARIOUS SOURCES, THE RESULT OF SUCH INVESTIGATIONS ARE SHOWN ON THE CONTRACT DRAWINGS AND ARE NOT GUARANTEED AS TO ACCURACY. THE CONTRACTOR IS PARTICULARLY DIRECTED TO THE FACT THAT UNDERGROUND OBJECTS OR MATERIAL LOCATION ELEVATION, OR TYPE IS NOT WARRANTED TO BE APPROXIMATELY CORRECT (NOR CAN THEY BE ASSUMED TO BE THE ONLY SUBSURFACE OBJECTS OR MATERIAL WHICH MAY BE ENCOUNTERED IN THE WORK.) THE CONTRACTOR SHALL MAKE ALL NECESSARY INVESTIGATIONS TO SATISFY HIMSELF AS TO THE EXISTING CONDITIONS PRIOR TO BIDDING
- THE CONTRACTOR IS RESPONSIBLE TO COORDINATE THE LOCATION OF THE UTILITIES WITH THE UTILITY COMPANIES PRIOR TO CONSTRUCTION.
- THE COORDINATION OF THE LOCATION OR RELOCATION WHERE REQUIRED OF TELEPHONE, ELECTRIC, GAS, AND WATER FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR AND SAME SHALL BE COORDINATED TO INSURE COMPLETION WITHIN THE TIME PERMITTED.
- 8. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN MEANS OF ADEQUATE INGRESS
 AND EGRESS TO RESIDENTS THROUGHOUT THE COURSE OF THE WORK AND
 TO PROVIDE FOR THE ADEQUATE MAINTENANCE AND PROTECTION OF TRAFFIC.
- 9. THE CONTRACTOR'S LICENSED SURVEYOR SHALL PROVIDE THE CONSTRUCTION
- 10. THE CONTRACTOR WILL NOT BE PERMITTED TO STOCKPILE EXCAVATED MATERIALS OVER EXISTING UTILITY LINES. THE STOCKPILED MATERIALS SHOULD BE PLACED SUFFICIENTLY AWAY FROM THE EDGE OF ANY EXCAVATION TO PREVENT CAVING OF THE TRENCH WALL AND TO PERMIT ADEQUATE ACCESS ALONG THE TRENCH. WITH SHEETED TRENCHES, A MINIMUM OF FIVE (5) FEET FROM THE EDGE OF THE SHEETING TO TOE OF SPOIL BANK MUST BE MAINTAINED.
- THE CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO PRECLUDE DAMAGE TO EXISTING STRUCTURES, FACILITIES, AND UTILITIES DUE TO LOSS OF LATERAL SUPPORT AND/OR CONSTRUCTION LOADINGS. SPECIFIC DETAILS NECESSARY TO ACCOMPLISH SAME SHALL BE SUBMITTED BY THE CONTRACTOR FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION OF THE PROPOSED SUBSURFACE IMPROVEMENTS.
- ALL WORK BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE NEW JERSEY STATUTE KNOWN AS CHAPTER 249 OF THE LAWS OF 1948, BEING SECTIONS 34:6-47.1 TO 47.9, INCLUSIVE OF THE REVISED STATUTES OF NEW JERSEY, 1937, AND IN ACCORDANCE WITH THE RULES AND REGULATIONS CONCERNING PRECAUTIONS TO BE TAKEN IN THE PROXIMITY OF HIGH-VOLTAGE LINES FOR THE PREVENTION OF ACCIDENTS PROMULGATED BY THE COMMISSIONER OF THE DEPARTMENT OF LABOR AND INDUSTRY OF THE STATE OF NEW INDUSTRY OF THE STATE OF NEW JERSEY, EFFECTIVE DECEMBER 28, 1948, ALL AS AMENDED AND SUPPLEMENTED, AND IN ACCORDANCE WITH THE PROVISIONS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ACT
- 13. THE CONTRACTOR IS HEREIN ADVISED THAT ALL WORK TO BE PERFORMED SHALL BE GOVERNED BY THE LOCAL MUNICIPAL ORDINANCES. THIS SHALL INCLUDE THE PROVISIONS IN THEIR CODES WHICH SET FORTH PERMITTED HOURS OF CONSTRUCTION WITHIN THE
- 14. IF REQUIRED AND IN ORDER TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS AND TECHNICAL SPECIFICATIONS, THE CONTRACTOR MAY FIND IT NECESSARY TO UTILIZE STEEL PLATES OVER TRENCHES AT NO ADDITIONAL COST TO THE
- 15. WHEN DISTURBING, REMOVING AND/OR DISPOSING OF ASBESTOS CEMENT PIPE, THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS INCLUDING BUT NOT LIMITED TO: CURRENT USEPA REGULATIONS (NESHAP. 40 CFR 61 SUBPART M): OSHA REGULATIONS (29 CFR 192658); THE CURRENT NEW JERSEY ASBESTOS HAZARD ABATEMENT SUBCODE (N.J.A.C. 5:23-8); THE CURRENT NUDEPE REGULATIONS (N.J.A.C. 7:26-1 ET. SEQ.); AND NOTIFICATION REGULATIONS (N.J.A.C. 5:23-8.6, 40 CFR 61 SUBPART M, AND N.J.A.C. 7:26-2:12).
- 16. THE SOMERSET/UNION SOIL CONSERVATION DISTRICT GOVERNS SOIL EROSION AND SEDIMENT CONTROL MEASURES WITHIN THE PROJECT AREA. ACCORDINGLY, ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AS PER THE REQUIREMENTS OF THE SOMERSET/UNION SOIL CONSERVATION DISTRICT AND THE CONTRACT DOCUMENTS.
- 17. AT CERTAIN TIMES THE SITE MAY BE OCCUPIED BY SEVERAL CONTRACTORS AND IT IS THEREFORE REQUIRED FOR ANY AND ALL CONTRACTORS OCCUPYING THE SITE TO COOPERATE WITH ONE ANOTHER. NO DELAYS RESULTING FROM MULTIPLE CONTRACTORS WORKING ON THE SITE WILL BE CONSIDERED.
- 18. THE CONTRACTOR SHALL CONTINUOUSLY DEWATER ALL EXCAVATIONS UNTIL BACKFILLING OPERATIONS HAVE BEEN COMPLETED. PRIOR TO DISCHARGE TO STREAMS, SILT SHALL BE SETTLED OUT IN AN APPROVED SETTLING BASIN.
- 19. THE CONTRACTOR SHALL MAINTAIN THE FLOW OF ALL STREAMS, DRAINAGE DITCHES, STORM SEWERS AND SANITARY SEWERS AT ALL TIMES BY A MEANS ACCEPTABLE TO THE ENGINEER AND ALL THE RESPONSIBLE AGENCIES.
- 20. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICE FLOWS AND PRESSURES UNLESS WRITTEN APPROVAL BY THE RESPONSIBLE UTILITY PERMITS HIM TO DO OTHERWISE.
- 21. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STATE OF NEW JERSEY WORKER HEALTH AND SAFETY ACT (N.J.A.C. 12:110 ET. SEQ.) AS AMENDED AND THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ACT (ÓSHA) (29 CFR 1910), AS AMENDED WITH REGARDS TO WORKER AND JOBSITE SAFETY.
- 22. THE CONTRACTOR IS SPECIFICALLY DIRECTED TO THE REQUIREMENTS CONTAINED IN THE SPECIAL PROVISIONS SECTION OF THE CONTRACT SPECIFICATIONS.

		ABBREVIATION	IS USED IN THIS CONTRACT	· —	
AH., BK.	AHEAD, BACK	IP	IRON PIN	RCCP, R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
₿ , B.L.	BASELINE	J.B.	JUNCTION BOX	RCP, R.C.P.	REINFORCED CONCRETE PIPE
B.M.	BENCH MARK	LT., RT.	LEFT, RIGHT	RMC, R.M.C.	RIGID METALLIC CONDUIT
B.T.	BELL TELEPHONE	L.O.P.	LIMIT OF PAVEMENT (PAVING)	RNMC, R.N.M.C.	RIGID NON-METALLIC CONDUIT
BIT., BITUM.	BITUMINOUS	L.O.M.	LIMIT OF MILLING	ROW, R.O.W.	RIGHT OF WAY
BLDG.	BUILDING	M.B.	MAILBOX	R.R.	RAILROAD
€, C.L.	CENTERLINE	M.P.	MILE POST	RTE., RT.	ROUTE
C.I.P.	CAST IRON PIPE	MAX.	MAXIMUM	SAN.	SANITARY
D.I.P.	DUCTILE IRON PIPE	MIN.	MINIMUM	SDWK.	SIDEWALK
C.V.C.	CONCRETE VERTICAL CURB	NO.	NUMBER	S.H.D.	STATE HIGHWAY DEPARTMENT
CONC.	CONCRETE	N.T.S.	NOT TO SCALE	SHLD.	SHOULDER
CULV.	CULVERT	PAV'T.	PAVEMENT	\$, S.L.	SURVEY LINE
D, DIA.	DIAMETER	PERF.	PERFORATED	S.O.D.	SUBBASE OUTLET DRAIN
D.C.	DROP CURB	P.G.L.	PROFILE GRADE LINE	STY.	STORY
DE	DITCH EXCAVATION	₽, P.L.	PROPERTY LINE, PROFILE LINE	T	TANGENT
DEP., DP	DEPRESSED CURB	PK	PARKER KAYLON MASONRY NAIL	TBA	TO BE ABANDONED
DH	DRILL HOLE	POC, P.O.C.	POINT ON CURVE	TBR	TO BE REMOVED
DWY	DRIVEWAY	POL, P.O.L.	POINT ON LINE	TEL.	TELEPHONE
E.B., W.B., N.B., S.B.	EASTBOUND, WESTBOUND	POT, P.O.T.	POINT ON TANGENT	TEMP.	TEMPORARY
	NORTHBOUND, SOUTHBOUND	PRC, P.R.C.	POINT OF REVERSE CURVE	THK., TH.	THICK
EL., ELEV.	ELEVATION	PROP.	PROPOSED	TYP.	TYPICAL
EXIST.	EXISTING	PT, P.T.	POINT OF TANGENCY	U.D.	UNDERDRAIN
GR.	GRATE	PVC, P.V.C.	POLYVINYL CHLORIDE PIPE,	UP, U.P.	UTILITY POLE
HT.	HEIGHT		POINT OF VERTICAL CURVATURE	VAR.	VARIABLE, VARIES
H.W.	HEADWALL	PVI, P.V.I.	POINT OF VERTICAL INTERSECTION	WM	WATER METER
HYD.	HYDRANT	PVT, P.V.T.	POINT OF VERTICAL TANGENCY, PAVEMENT		

RADIUS

COFFERDAM NOTES:

COFFERDAM SHALL BE CONSTRUCTED TO SEPARATE THE STREAM FLOW FROM WORK AREAS DURING CONSTRUCTION ACTIVITIES. THE COFFERDAM SHALL CONSIST OF TEMPORARY STRUCTURAL MEMBERS (SEE CONSTRUCTION AND SOIL EROSION AND SEDIMENT CONTROL PLAN FOR COFFERDAM LIMITS).

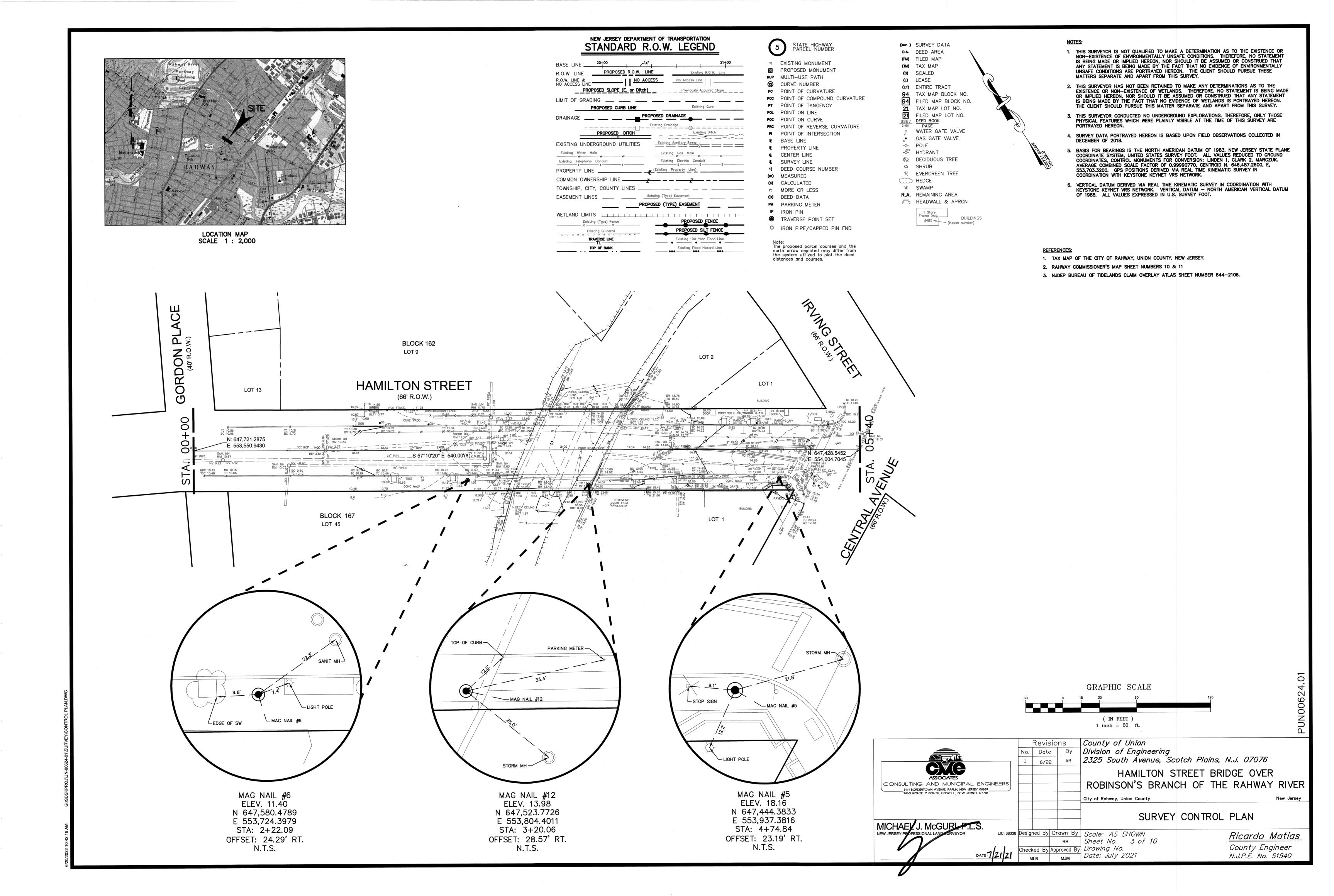
THE TEMPORARY COFFERDAM ELEMENTS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW JERSEY RETAINED BY THE CONTRACTOR, EXPERIENCED AND WELL QUALIFIED IN THE DESIGN OF EXCAVATION SUPPORT SYSTEMS AND MAINTENANCE OF STREAM FLOW. THE DESIGN SHALL CONSIDER MAINTENANCE OF EXCAVATION SUPPORT AND STREAM FLOW. SIGNED AND SEALED WORKING DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR

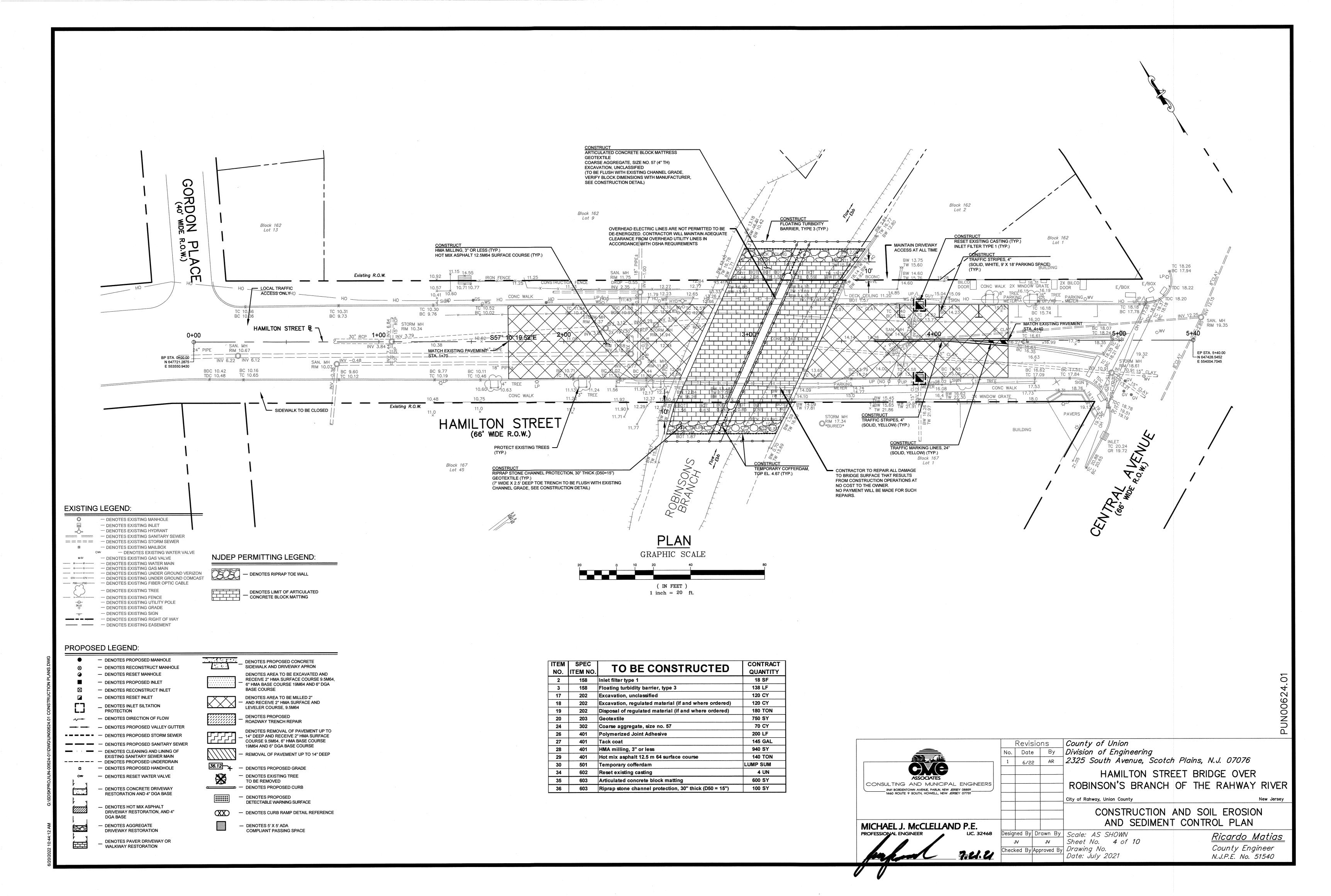
ALL COSTS TO INSTALL, MAINTAIN, AND REMOVE THE TEMPORARY COFFERDAM SHALL BE INCLUDED IN THE PAY ITEM "TEMPORARY COFFERDAM".

THE COUNTY WILL PERFORM IN SITU SAMPLING AND TESTING OF SOILS PRIOR TO EXCAVATION UPON PLACEMENT AND DEWATER OF TEMPORARY COFFERDAMS. NO EXCAVATION SHALL BE PERFORMED UNTIL THE SOIL IS CLASSIFIED TO DETERMINE IF THE RIVER PER MATERIAL IS DEEMED REGULATED. PAY ITEMS HAVE BEEN INCLUDING IN THE BID FOR THE EXCAVATION AND DISPOSAL OF REGULATED MATERIAL, IF DIRECTED BY THE ENGINEER

ITEM NO.	SPEC ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	PLAN SHEET TOTALS	IF AND WHERE DIRECTED	AS-BUILT QUANTITY
1	154	Mobilization	LS	LS			
2	158	Inlet filter type 1	SF	18	18		·
3	158	Floating turbidity barrier, type 3	LF	148	138	10	
4	158	Concrete washout facility	LS	LS			
5	158	Oil only emergency spill kit, type 1		2		2	
6	159	Breakaway barricade	UN	10	8	2	
7	159	Drum	UN	10	0	10	
8	159	Traffic cone	UN	20	0	20	
9	159	Construction signs	SF	157	137	20	
10	159	Construction barrier curb	LF	520	500	20	
11	159	Temporary crash cushion, compressive barrier, type 3, width narrov	UN	2	2		
12	159	Traffic director, municipal police allowance	ALL	ALL			
13	159	Temporary pavement markings	SF	30	25	5	
14	201	Fuel price adjustment	DOLLAR	DOLLAR		DOLLAR	
15	201	Clearing site	LS	LS			
16	202	Excavation, test pit	CY	8	1 0	8	
17	202	Excavation, unclassified	CY	120	120		
18	202	Excavation, regulated material (if and where ordered)	CY	120			
19	202	Disposal of regulated material (if and where ordered)	TON	180			
20	203	Geotextile	SY	800	750	50	
21	301	I-14 Soil Aggregate	CY	10		10	
22	301	Subbase	CY	10		10	
23	302	Dense graded aggregate base course, 6" thick	SY	90		90	
24		Coarse aggregate, size no. 57	CY	120	70	50	
25	401	Hot mix asphalt pavement repair	SY	10		10	
26	401	Polymerized Joint Adhesive	LF	220	200	20	
27	401	Tack coat	GAL	160	145	15	
28	401	HMA milling, 3" or less	SY	1030	940	90	
29	401	Hot mix asphalt 12.5 m 64 surface course	TON	155	140	15	
30	501	Temporary cofferdam	LS	LS			
31	556	Concrete spall repair	SF	30	22	8	
32	556	Pressure injection, concrete cracks	LF	75	48	27	
33	557	Masonry repointing	SF	20	9	11	
34	602	Reset existing casting	UN	4	2	2	
35	603	Articulated concrete block matting	SY	600	600		
36	603	Riprap stone channel protection, 30" thick (D50 = 15")	SY	100	100		
37	606	Concrete sidewalks, 4" thick	SY	40		40	
38	606	Concrete driveway, reinforced, 6" thick	SY	20		20	
39	607	9" X 20" Concrete vertical curb	LF	40		40	
40	610	Traffic stripes, 4"	LF	230		230	
41	610	Traffic marking lines, 24"	LF	20		20	
42	612	Regulatory and warning sign	SF	16		16	
43	651	Reset water valve box	UN	2		2	
44	652	Reset manhole, sanitary sewer, using existing casting	UN	2		2	-
45	802	Tree Removal, Over 6" to 12" Diameter	UN	4	4		
46	802	Topsoil spreading, 4" thick	SY	10	7	10	
47		Borrow topsoil	CY	2		2	
48	804 808	Sodding	SY	10		10	
	ļ	Large deciduous tree, 2-2 1/2" caliper, B&B				 	
49	811	Large deciduous tree, 2-2 1/2 Caliper, D&B	UN	4		4	1

County of Union Date By *Division of Engineering* 6/22 AR 2325 South Avenue, Scotch Plains, N.J. 07076 HAMILTON STREET BRIDGE OVER ROBINSON'S BRANCH OF THE RAHWAY RIVER CONSULTING AND MUNICIPAL ENGINEERS ____3141 BORDENTOWN AVENUE, PARLIN, NEW JERSEY 08869____ 1460 ROUTE 9 SOUTH, HOWELL, NEW JERSEY 07731 City of Rahway, Union County New Jersey LEGEND, GENERAL NOTES & ESTIMATE AND DISTRIBUTION OF QUANTITIES MICHAEL J. McCLELLAND P.E. LIC. 32468 Designed By Drawn By Scale: AS SHOWN Ricardo Matias Sheet No. 2 of 10 Checked By Approved By Drawing No. County Engineer Date: July 2021 N.J.P.E. No. 51540





- SENSITIVE AREA DO NOT ENCROACH UPON OR STORE ANY EQUIPMENT/VEHICLE/MATERIALS IN WETLANDS/TRANSITION AREAS/STATE OPEN WATER AREAS/FLOODPLAINS BEYOND THE HEAVY DUTY ORANGE SILT FENCE OR CAUTION FENCE AS SHOWN ON THE PLANS, ADHERE TO THE LOCATIONS OF THE SILT FENCE AND CAUTION FENCE. THE ENVIRONMENTAL PERMITS DO NOT ALLOW FOR ENCROACHMENT BEYOND THE FENCING LOCATIONS, IN ADDITION, DO NOT LOCATE STOCKPILES, VEHICLES, CONCRETE WASHOUT FACILITIES, AND/OR EQUIPMENT WITHIN 50 FEET, IF FEASIBLE, OF A SLOPE, DRAINAGE FACILITY, WATERBODY, WETLAND, FLOODPLAIN, OR OTHER ENVIRONMENTALLY SENSITIVE AREA, PROTECT STOCKPILE BASES WITH A HAY BALE BARRIER OR SILT FENCE.
- ALL TERMS AND CONDITIONS OF THE ENVIRONMENTAL PERMITS ARE TO BE ADHERED TO. KEEP A COPY OF ALL PERMITS/APPROVALS AT THE WORK SITE, AND EXHIBIT THEM UPON REQUEST OF ANY PERSON.
- MAKE NO CHANGES IN PERMIT-RELATED PLANS OR SPECIFICATIONS EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF THE NJDEP AND US ARMY CORPS OF ENGINEERS. ANY CONSTRUCTION, GRADING, REMOVAL OF VEGETATION, OR OTHER ACTIVITY AT THIS SITE THAT AFFECTS A REGULATED AREA, OTHER THAN SPECIFICALLY APPROVED BY THE ENVIRONMENTAL PERMITS OR AS DETAILED BY THE APPROVED DRAWINGS, REQUIRES ADDITIONAL WRITTEN APPROVALS FROM THE NJDEP. THE COMMENCEMENT OF SUCH REGULATED ACTIVITIES WITHOUT THE APPROPRIATE APPROVALS IS IN VIOLATION OF STATE LAW. CONSULT WITH THE ENGINEER REGARDING POTENTIAL PERMIT MODIFICATIONS.
- PERFORM THE WORK IN ACCORDANCE WITH THE GOVERNING SOIL CONSERVATION DISTRICT STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL AND AS SPECIFIED IN THE CURRENT NJDOT SPECIFICATIONS.
- 5. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES AND CAUTION FENCE ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED. CORRECT NON-FUNCTIONING SOIL EROSION AND SEDIMENT CONTROL MEASURES AND SITE WASTE CONTROL MEASURES WITHIN 24 HOURS AND AS SPECIFIED IN SECTION 158 OF THE SPECIFICATIONS. ALL ORANGE FENCE WILL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION. THE COLOR OF THE SILT FENCE INDICATED ON THE PLANS MUST BE ADHERED TO. BLACK SILT FENCE CAN NOT BE SUBSTITUTED FOR ORANGE AND VICE VERSA.
- 6. THE RE MAY LIMIT CLEARING, GRUBBING, GRADING, OR OTHER SOIL DISTURBING ACTIVITIES TO A MAXIMUM OF 17 ACRES BASED ON SITE CONDITIONS AND THE CONTRACTOR'S ABILITY TO INSTALL AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- 7. IN ORDER TO PROTECT THE FISHERY RESOURCES WITHIN THE ROBINSON'S BRANCH OF THE RAHWAY RIVER AND ITS TRIBUTARIES, ANY PROPOSED GRADING OR CONSTRUCTION ACTIVITIES (INCLUDING THE INSTALLATION OF COFFERDAMS) WITHIN THE BANKS OF THIS OR ANY OTHER WATERBODY ON SITE ARE PROHIBITED BETWEEN MAY 1 AND JUNE 30 OF EACH YEAR. IN ADDITION, ANY ACTIVITY WITHIN THE 100-YEAR FLOODPLAIN OR FLOOD HAZARD AREA DRAINING TO THE WATERBODY(IES) THAT COULD INTRODUCE SEDIMENT INTO SAID WATERBODY(IES) OR THAT COULD CAUSE AN INCREASE IN THE NATURAL LEVEL OF TURBIDITY IS ALSO PROHIBITED DURING THIS PERIOD, THE NJDEP RESERVES THE RIGHT TO SUSPEND ALL REGULATED ACTIVITIES ON SITE SHOULD IT BE DETERMINED THAT PROPER PRECAUTIONS HAVE NOT BEEN TAKEN TO ENSURE CONTINUOUS COMPLIANCE WITH THESE CONDITIONS
- ENSURE THE FLOW OF WATERBODIES IS MAINTAINED AT ALL TIMES, PLACE FLOATING TURBIDITY BARRIER AROUND THE WORK AREA/DEWATERING ACTIVITY DISCHARGE SO THAT IT DOES NOT RESTRICT A STREAM CHANNEL BY MORE THAN 50% OF ITS WIDTH/CROSS SECTIONAL AREA. INSTALL THE BARRIER AS CLOSE TO THE SHORE OR STRUCTURE AS PRACTICAL. PLACEMENT IS TO BE PARALLEL TO STREAM FLOW AND ANCHORED TO THE SHORELINE UPSTREAM AND DOWNSTREAM OF THE WORK AREA, UNLESS OTHERWISE DIRECTED BY THE RE. IF NEEDED, A COFFERDAM SHOULD CORRAL THE WORK AREA. ERECT FLOATING TURBIDITY BARRIER AROUND THE WORK AREA (OUTSIDE OF WHERE THE COFFERDAM WILL BE INSTALLED). PRIOR TO CONSTRUCTING A COFFERDAM, LEAVE THE FLOATING TURBIDITY BARRIER IN PLACE UNTIL WORK IN THAT AREA IS COMPLETED, THE COFFERDAM IS REMOVED (IF APPLICABLE) AND, IF APPLICABLE, THE ADJACENT GROUND AREA HAS ESTABLISHED A FIRM STAND OF VEGETATION.
- DURING THE COURSE OF CONSTRUCTION, NEITHER THE APPLICANT NOR ITS AGENTS WILL CAUSE OR PERMIT ANY UNREASONABLE INTERFERENCE WITH THE FREE FLOW OF THE STREAM BY PLACING OR DUMPING ANY MATERIALS, EQUIPMENT, DEBRIS OR STRUCTURES WITHIN OR ADJACENT TO THE STREAM CORRIDOR UPON COMPLETION OR ABANDONMENT OF THE WORK, THE APPLICANT AND/OR ITS AGENTS WILL REMOVE AND DISPOSE OF IN A LAWFUL MANNER ALL EXCESS MATERIAL, EQUIPMENT AND DEBRIS FROM THE STREAM CORRIDOR AND ADJACENT LANDS.
- 10. EARTHEN BERMS WILL NOT BE USED AS COFFERDAMS.
- 11. PRECAUTIONS MUST BE TAKEN TO PREVENT RAW CONCRETE/GROUT FROM COMING INTO CONTACT WITH WATERBODIES, RAW CONCRETE/GROUT IS TOXIC TO AQUATIC BIOTA. ANY RAW CONCRETE/GROUT THAT COMES IN CONTACT WITH A WATERBODY MUST BE REMOVED IMMEDIATELY. NO PUMPED WATER FROM CONCRETE/GROUT OPERATIONS MAY BE DISCHARGED DIRECTLY TO A WATERBODY. ALL PUMPED WATER IS TO BE DISCHARGED TO A HOLDING TANK OR CONCRETE WASHOUT FACILITY AND MANAGED AS SPECIFIED IN THE CONCRETE WASHOUT SYSTEM SPECIFICATION IN SECTION 158. NO ADDITIONAL PAYMENT WILL BE MADE FOR CONCRETE WASHOUT FACILTIES. ALL COSTS THERETO SHALL BE INCLUDED IN THE VARIOUS BID PAY ITEMS.
- 12. THE CONTRACTOR IS NOT ALLOWED TO DROP WASTE CONCRETE, DEBRIS, OR OTHER CONSTRUCTION MATERIAL INTO WATERBODIES, UNIMPACTED WETLANDS/TRANSITION AREAS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS.
- 13. PUMPING OF SEDIMENT-LADEN WATER FROM DEWATERING ACTIVITIES DIRECTLY INTO WATERBODIES, WETLANDS, OR INLETS IS PROHIBITED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. PERFORM DEWATERING AS SPECIFIED IN SECTION 501 OF THE SPECIFICATIONS, STANDARD SOIL EROSION AND SEDIMENT CONTROL ITEMS ARE LISTED IN SECTION 158. BASINS/SEDIMENT CONTROL TANK SEDIMENT CONTROL BAGS NEEDED FOR DEWATERING ACTIVITIES SHOULD NOT BE LOCATED IN UNIMPACTED WET AND OR TRANSITION AREAS OR IN FLOODPLAINS. CONSTRUCTION OF DEWATERING FACILITIES INVOLVING GROUND DISTURBANCE NEAR A WATERBODY IS TO BE DONE OUTSIDE OF ANY REGULATORY PERMIT TIMING RESTRICTION PERIOD. CLEAN AND CLEAR WATER FROM DEWATERING ACTIVITIES SHOULD BE RETURNED TO A PORTION OF THE WATERBODY THAT IS PROTECTED BY TURBIDITY BARRIER WITHOUT CAUSING SCOUR OR EROSION.
- 14. PLACE SILT FENCE/HAY BALES AROUND SEDIMENT CONTROL BAGS WHERE APPLICABLE. ALSO PLACE FLOATING TURBIDITY BARRIERS TO CORRAL THE DISCHARGE AREA IF THE DISCHARGE FROM THE SEDIMENT CONTROL BAG FLOWS IN A RECEIVING WATERBODY.
- 15. IMMEDIATELY CEASE ANY ACTIVITY THAT CAUSES TURBIDITY BEYOND CONTROL MEASURES.
- 16. PROTECT ALL DRAINAGE SYSTEM INLETS (NEW AND EXISTING) FROM SILTATION.
- 17. STABILIZE STORM DRAINAGE OUTLETS BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.

- 18. DUST/DIRT CONTROL/TRACKING: EMPLOY CONSTRUCTION METHODS THAT MINIMIZE AIRBORNE DUST AND PREVENT SOILS AND OTHER MATERIALS FROM BEING DEPOSITED ON EXISTING ROADWAYS. APPLY WATER OR OTHER RE APPROVED MATERIALS TO UNPAVED AREAS TO CONTROL DUST CAUSED BY HAULING OR OTHER CONSTRUCTION OPERATIONS. IMMEDIATELY REMOVE ALL SOIL OR OTHER MATERIALS WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE OF THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY AND DISPOSE OF IT AS SPECIFIED IN 202.03.07.B OF THE SPECIFICATIONS. PAVED ROADS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- 19. DURING SAWCUTTING, MILLING, CORE SAMPLING, INSTALLING LONGITUDINAL JOINT TIES, DIAMOND GRINDING, SLIP-FORM PAVING, PLACEMENT OF PERMANENT ROADWAY REFLECTIVE MARKERS, AND SIMILAR OPERATIONS THAT COULD CAUSE DUST, SLURRY, AND STORMWATER RUNOFF PROBLEMS, DO NOT CREATE A DUST HAZARD AND ENSURE THAT DEBRIS AND SLURRY DO NOT ENTER INLETS OR ENVIRONMENTALLY SENSITIVE AREAS, SUCH AS WETLANDS AND WATERBODIES. THIS I NCLUDES, BUT IS NOT LIMITED TO, BRIDGE DECK, APPROACH SLAB, AND TRANSITION SLAB SAWCUTTING. PROVIDE FOR CONTINUOUS REMOVAL OF GRINDING RESIDUE FROM THE PAVEMENT SURFACE BEFORE IT IS BLOWN ABOUT BY TRAFFIC MOTION, WIND, OR PRECIPITATION, CONTAIN THE CONCRETE SLURRY AND DISPOSE OF IT AS SPECIFIED IN 202.03.07.B OF THE SPECIFICATIONS, THE CONTRACTOR MAY MANAGE THE SLURRY IN A CONCRETE WASHOUT FACILITY IF THAT ITEM IS PART OF THE CONTRACT.
- 20. EXCAVATED MATERIAL THAT WILL NOT BE USED AS BACKFILL MUST BE DISPOSED OF IN A LAWFUL MANNER OUTSIDE OF ANY REGULATED FLOODPLAIN, OPEN WATER, WETLAND, OR TRANSITION AREA, AND IN SUCH A WAY AS NOT TO INTERFERE WITH THE POSITIVE DRAINAGE OF THE RECEIVING AREA.
- 21. ENSURE THAT TREES, SHRUBS, GRASSES, AND OTHER VEGETATION LOCATED ON STREAM BANKS AND WITHIN 50 FEET FROM THE TOP OF ALL STREAM BANKS ON SITE ARE NOT DISTURBED FOR ANY REASON, EXCEPT WHERE APPROVED BY THE NJDEP. THIS CONDITION APPLIES TO ALL STREAMS AND WATERWAYS ON SITE, REGARDLESS OF THE CONTRIBUTORY DRAINAGE AREA.
- 22. ENSURE ALL VEGETATION OUTSIDE LIMITS OF DISTURBANCE IS PRESERVED.
- 23. UPON COMPLETION OF THE PROJECT, ALL TEMPORARILY DISTURBED AREAS, INCLUDING UPLANDS, STATE OPEN WATER, WETLANDS, AND TRANSITION AREAS, MUST BE RESTORED TO THEIR PRE-CONSTRUCTION GRADES USING NATIVE SOILS AND PLANTED WITH INDIGENOUS NON-INVASIVE VEGETATION AS DIRECTED BY THE RE.
- 24. STORE PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS, PETROLEUM PRODUCTS, ANTI-FREEZE, PAINTS AND PAINT THINNERS, CLEANING SOLVENTS AND ACIDS, DETERGENTS, CHEMICAL ADDITIVES, AND CONCRETE CURING COMPOUNDS IN CONTAINERS IN A DRY COVERED AREA, ENSURE MANUFACTURERS' RECOMMENDED APPLICATION RATES, USES, AND METHODS ARE STRICTLY FOLLOWED TO THE EXTENT NECESSARY TO PREVENT OR MINIMIZE THE PRESENCE OF WASTE FROM SUCH MATERIALS IN THE STORMWATER DISCHARGE/RUNOFF FROM THE PROJECT LIMITS, STORE PRODUCTS AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA.
- 25. ENSURE THE HANDLING OF WASTE BUILDING MATERIAL, RUBBLE AND OTHER CONSTRUCTION SITE WASTES, INCLUDING LITTER AND HAZARDOUS AND SANITARY WASTES, IS IN ACCORDANCE WITH THE STATE SOLID WASTE MANAGEMENT ACT: N.J.S.A. 13:1E-1 ET SEQ., AND ITS IMPLEMENTING RULES AT N.J.A.C. 7:26, 7:26A, AND, 7:26G; THE NEW JERSEY PESTICIDE CONTROL CODE AT N.J.A.C. 7:30; THE STATE LITTER STATUTE (N.J.S.A. 13:1E-99.3); AND OSHA REQUIREMENTS FOR SANITATION AT 29 C.F.R. 1926.
- 26. ENSURE THE PROJECT LIMITS ARE KEPT CLEAN AND FREE OF DEBRIS, TRASH AND LITTER. CONTAIN LITTER AND WASTE THAT HAS THE POTENTIAL TO BE TRANSPORTED BY STORMWATER DISCHARGE/RUNOFF. ENSURE THE PROJECT LIMITS HAVE ONE OR MORE DESIGNATED WASTE COLLECTION AREAS ONSITE OR ADJACENT TO THE SITE, AND AN ADEQUATE NUMBER OF CONTAINERS (WITH LIDS OR COVERS) FOR WASTE. ENSURE WASTE IS COLLECTED FROM SUCH CONTAINERS BEFORE THEY OVERFLOW. IMMEDIATELY CLEANUP SPILLS AT SUCH CONTAINERS SHOULD THEY OCCUR.
- 27. CONCRETE WASHOUT SYSTEM: CONCRETE WASHOUT WITHIN THE PROJECT LIMITS IS PROHIBITED OUTSIDE OF DESIGNATED AREAS. PROVIDE CONCRETE WASHOUT FACILITY(IES) AS SPECIFIED IN THE CONCRETE WASHOUT SYSTEM SPECIFICATION IN SECTION 158. MORE THAN ONE DESIGNATED CONCRETE WASHOUT FACILITY LOCATION MAY BE NECESSARY DEPENDING ON EASE OF ACCESS AND THE AMOUNT OF CONCRETE BEING POURED AT ONE TIME.
- 28. SANITARY SEWAGE/SEPTAGE DISPOSAL DISCHARGES OF RAW SANITARY SEWAGE OR SEPTAGE ONSITE ARE STRICTLY PROHIBITED. ENSURE PROPER DISPOSAL OF SANITARY SEWAGE/SEPTAGE. PROVIDE AND MAINTAIN ADEQUATE FACILITIES ADJACENT TO THE WORK SITE FOR ALL WORKERS AND OTHER SANITARY NEEDS.
- 29. BEFORE THE START OF CONSTRUCTION OPERATIONS, PROVIDE A MINIMUM OF TWO (2) OIL-ONLY EMERGENCY SPILL KITS ACCORDING TO THE SPECIFICATIONS, THAT ARE READILY AVAILABLE WITHIN THE PROJECT LIMITS, WITH EACH KIT CAPABLE OF CLEANING UP AT LEAST 95 GALLONS OF SPILL. ENSURE THE KITS ARE AS SPECIFIED IN THE OIL-ONLY EMERGENCY SPILL KIT SPECIFICATION IN SECTION 158. IMMEDIATELY CONTAIN AND CLEAN UP ALL SPILL ENSURE CLEANED UP MATERIALS ARE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS AND AS SPECIFIED IN 202.03.08 OF THE SPECIFICATIONS. REPLACE COMPONENTS OF SPILL KITS AS USED.
- 30. IF A SPILL OCCURS AS A RESULT OF THE CONTRACTOR'S OPERATIONS, IMMEDIATELY CONTAIN IT AND IMMEDIATELY CONTACT THE NJDEP HOTLINE AT 1-877-WARN DEP (1-877-927-6337), AS WELL AS THE RE. CLEAN UP AND REMEDIATE THE PILL AS DIRECTED BY NJDEP. SUBMIT AN INCIDENT REPORT TO THE RE AS SPECIFIED IN THE OIL-ONLY EMERGENCY SPILL KIT SPECIFICATION IN SECTION 158.
- 31. DISCHARGES OF HAZARDOUS SUBSTANCES (AS DEFINED IN N.J.A.C. 7:1E-1.6) IN CONSTRUCTION SITE WASTES ARE SUBJECT TO THE PROVISIONS OF THE SPILL COMPENSATION AND CONTROL ACT. N.J.S.A. 58:10-23.11 ET SEQ., AND OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES FOR DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES AT N.J.A.C.7:1E.
- 32. ENSURE REFUELING OPERATIONS ARE CONDUCTED AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA. DO NOT STORE FUEL TANKS CLOSER THAN 50 FEET, WHERE FEASIBLE, FROM THESE SENSITIVE AREAS. IMMEDIATELY REPAIR LEAKING EQUIPMENT OR REMOVE IT FROM THE PROJECT LIMITS, CLEAN UP THE TAINTED MATERIAL AND DISPOSE OF THE MATERIAL AS SPECIFIED IN 202.03.08 OF THE SPECIFICATIONS. PROTECT FUELING AREAS FROM RUN-ON AND RUNOFF.

- 33. THE ON-SCENE CONTRACTOR MUST HAVE A VHF-FM MARINE RADIO SET TO THE BRIDGE COMMUNICATION CHANNELS 16/13 OR THE DESIGNATED CHANNEL FOR THE BRIDGE. ADDITIONAL MARINE RADIOS MONITORING THE ABOVE CHANNELS MUST ALSO BE MAINTAINED AT THE MAIN CONTROL OF ANY FLOATING EQUIPMENT OR BARGES ON STATION
- 34. IF PERMANENT BRIDGE NAVIGATIONAL LIGHTING CANNOT BE MAINTAINED OPERATIONAL DURING ANY PHASE OF THIS PROJECT, TEMPORARY BATTERY/POWER LIGHTS MUST BE INSTALLED AT THE SAME LOCATIONS. THESE TEMPORARY LIGHTS MUST BE VISIBLE FOR A DISTANCE OF 2,000 YARDS ON 90% OF THE NIGHTS OF THE YEAR. GENERALLY, A LAMP OF (50 CANDELA) WILL MEET THESE REQUIREMENTS. PLANS FOR TEMPORARY LIGHTING SHALL BE SUBMITTED TO THIS OFFICE FOR WRITTEN APPROVAL. DEVIATIONS FROM THE APPROVED TEMPORARY LIGHTING SHALL BE PERMITTED ONLY UPON WRITTEN AUTHORIZATION FROM THIS OFFICE.
- 35. THE FOLLOWING TIMING RESTRICTIONS APPLY: IN ORDER TO PROTECT THE GENERAL GAME AND ANADROMOUS FISHERY RESOURCES IN THE ROBINSON'S BRANCH OF THE RAHWAY RIVER FROM SEDIMENTATION, PROPOSED CONSTRUCTION ACTIVITIES ARE PROHIBITED BETWEEN MAY 1 AND JUNE 30 EACH EAR. IN ADDITION, ANY ACTIVITY WITHIN THIS WATERCOURSE WHICH COULD INTRODUCE SEDIMENT INTO SAID RIVER OR WHICH COULD CAUSE AN INCREASE IN THE NATURAL LEVEL OF TURBIDITY IS ALSO PROHIBITED DURING THIS PERIOD. THE NJDEP RESERVES THE RIGHT TO SUSPEND ALL REGULATED ACTIVITIES ONSITE SHOULD IT BE DETERMINED THAT PROPER PRECAUTIONS HAVE NOT BEEN TAKEN TO ENSURE CONTINUOUS COMPLIANCE WITH THIS CONDITION.
- 36. ENSURE ALL PERSONNEL, MATERIALS AND EQUIPMENT ARE PROVIDED TO MOBILIZE, OPERATE AND MAINTAIN AN OIL-WATER SEPARATOR FOR REMOVAL OF FREE PRODUCT AND CONTAMINATED SEDIMENTS GENERATED DURING DEWATERING ACTIVITIES IN AREAS OF PETROLEUM-CONTAMINATED GROUNDWATER, ENSURE THE OIL-WATER SEPARATOT IS A SELF-CONTAINED, FACTORY ASSEMBLED UNIT CAPABLE OF MEETING ALL DISCHARGE APPROVALS OR PERMITS OBTAINED BT THE CONTRACTOR.
- 37. PRIOR TO THE PLACEMENT OF COFFERDAMS AND EXCAVATION, THE CONTRACTOR SHALL RETAIN THE SERVICE OF A LICENSED PROFESSIONAL TO SAMPLE AND TEST THE RIVER BED SOILS IN-SITE FOR CLASSIFICATION. A MINIMUM OF TWO (2) SAMPLES SHALL BE COLLECTED . TESTING AND SAMPLING SHALL SERVE AS THE BASIS FOR CLASSIFYING SOIL AND REGULATED PER THE NJDOT SPECIFICATIONS. OR EXCAVATING AND DISPOSAL OF REGULATOR MATERIAL, OR NON REGULATED UNCLASSIFIED MATERIAL. ALL TESTING AND SAMPLING SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT OF SAMPLING AND TESTING SHALL BE INCLUDED IN THE BID PAY ITEAM "TEMPORARY COFFERDAMS".
- 38. ENSURE ALL PERSONNEL, EQUIPMENT, AND ANCILLARY SERVICES ARE PROVIDED TO COLLECT, ANALYZE, AND TRANSPORT ENVIRONMENTAL SAMPLES REQUIRED TO CHARACTERIZE CONTAMINATED MATERIAL IN ACCORDANCE WITH THE CURRENT VERSIONS OF THE NJDEP FILED SAMPLING PROCEDURES MANUAL, NJDEP MANAGEMENT OF EXCAVATED SOILS GUIDELINES, APPENDIX I OF THE NJDEP WASTE CLASSIFICATION FORM, AND ACCORDING TO THE RECYCLING OR DISPOSAL FACILITY ACCEPTING THE WASTE.

IN THE EVENT THE PRESENCE OF REGULATED MATERIAL MATERIAL IS IDENTIFIED ON SITE THE FOLLOWING NOTES SHALL APPLY

- 39. ENSURE ALL PERSONNEL, MATERIALS AND EQUIPMENT ARE PROVIDED TO PROPERLY STORE AND PROTECT REGULATED MATERIAL AT THE EXCAVATION AND IN TEMPORARY STOCKPILES. LOCATE OK STOCKPILES IN DRY AREAS SELECTED BY THE CONTRACTOR WITHIN THE COFFERDAMS AND APPROVED BY THE RE. NO REGULATED MATERIALS MAY BE STORED ON SITE OUTSIDE COFFERDAM AREAS AND SHALL BE REMOVED AND DISPOSED OF FROM THE JOB SITE.
- 40. ENSURE A MATERIAL HANDLING PLAN IS DEVELOPED AND IMPLEMENTED TO MANAGE REGULATED SOIL. WHICH SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO SOIL EXCAVATION.
- 41. FOR BIDDING PURPOSES CONTRACTOR SHALL ASSUME MATERIAL IS CLASSIFIED AS ID-27 FOR EXCAVATION AND DISPOSAL OF REGULATED MATERIALS.

Revisions | County of Union No. Date By Division of Engineering 6/22 AR 2325 South Avenue, Scotch Plains, N.J. 07076

HAMILTON STREET BRIDGE OVER ROBINSON'S BRANCH OF THE RAHWAY RIVER

ENVIRONMENTAL NOTES

LIC. 32468 Designed By Drawn By Scale: AS SHOWN Sheet No. 5 of 10

City of Rahway, Union County

Date: July 2021

Checked By Approved By Drawing No.

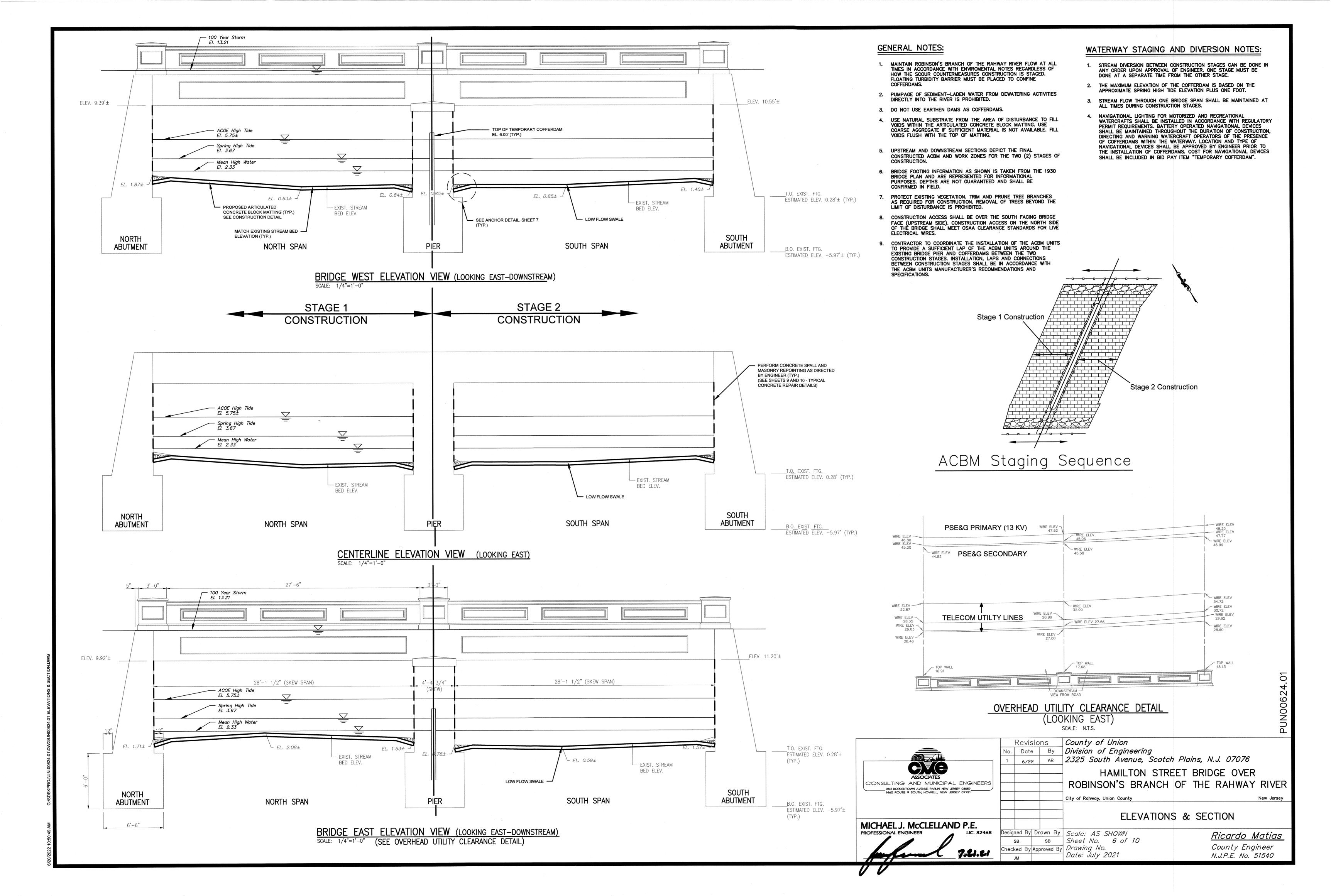
<u>Ricardo Matias</u> County Engineer N.J.P.E. No. 51540

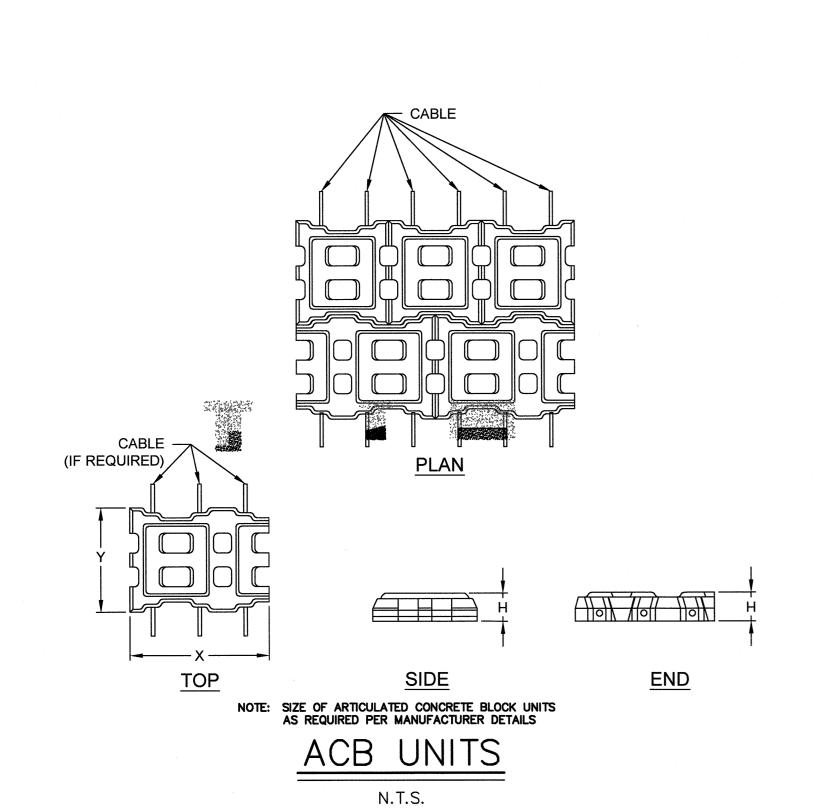
MICHAEL J. McCLELLAND P.E.

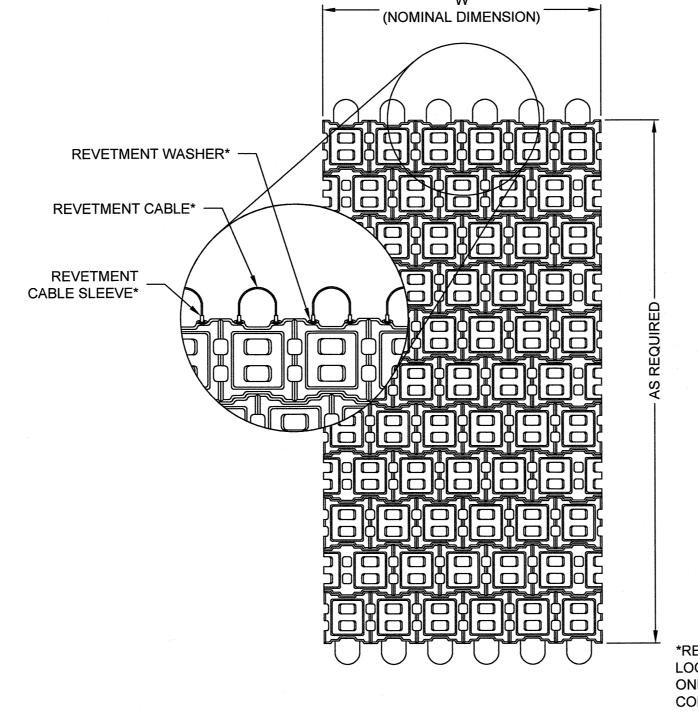
CONSULTING AND MUNICIPAL ENGINEERS

3141 BORDENTOWN AVENUE, PARLIN, NEW JERSEY 08859______ 1460 ROUTE 9 SOUTH, HOWELL, NEW JERSEY 07731

PROFESSIONAL ENGINEER







TYPICAL MAT ASSEMBLY

(IF REQUIRED FOR CONTRACTOR INSTALLATION METHODOLOGY)

N.T.S.

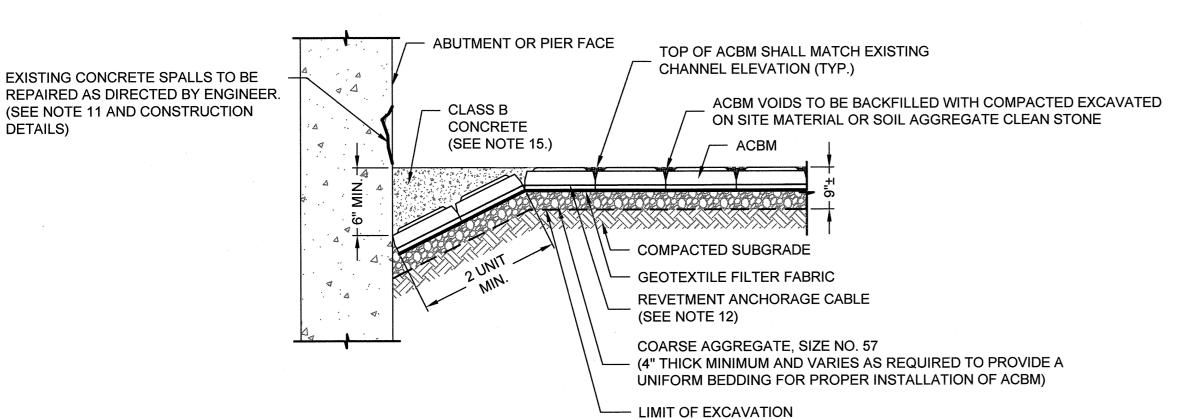
*REVETMENT CABLE LOOPS AT ACBM EDGES ONLY REQUIRED AS PER CONSTRUCTION METHOD

ACBM CONNECTION

(IF REQUIRED FOR CONTRACTOR INSTALLATION METHODOLOGY) N.T.S.

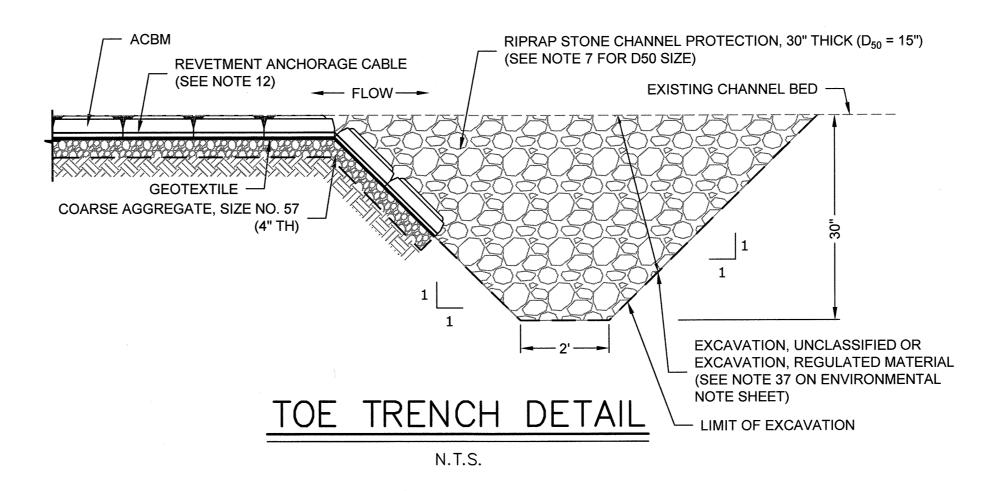
✓ ACBM

GEOTEXTILE



ANCHOR DETAIL AT ABUTMENT, PIER OR WINGWALL

NOTE: THERE WILL BE NO SEPARATE MEASUREMENT AND PAYMENT FOR ANCHORS FOR ARTICULATED CONCRETE BLOCK MATTING, FILLING OF OPEN CELL WITH SOIL AGGREGATE AND CLASS B CONCRETE.ALL COST THERE OF SHALL BE INCLUDED IN THE BID PAY ITEM FOR ARTICULAR CONCRETE BLOCK MATTING.



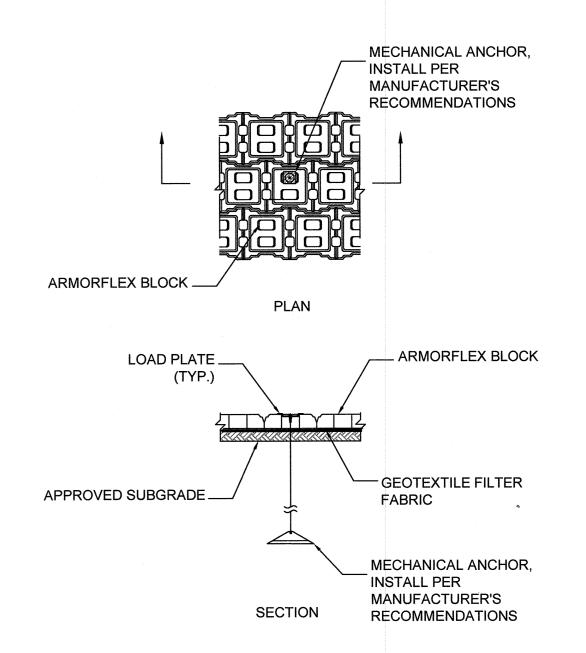
CLASS B CONCRETE

REVETMENT

CABLE*

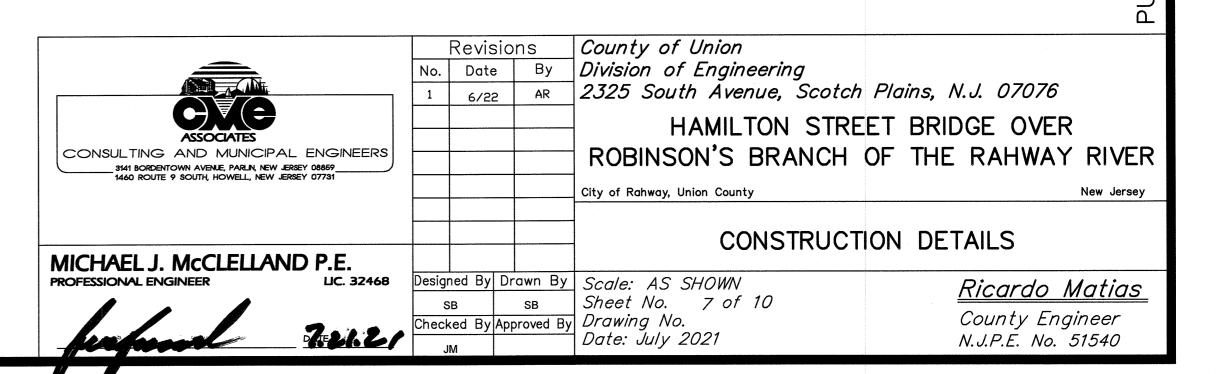
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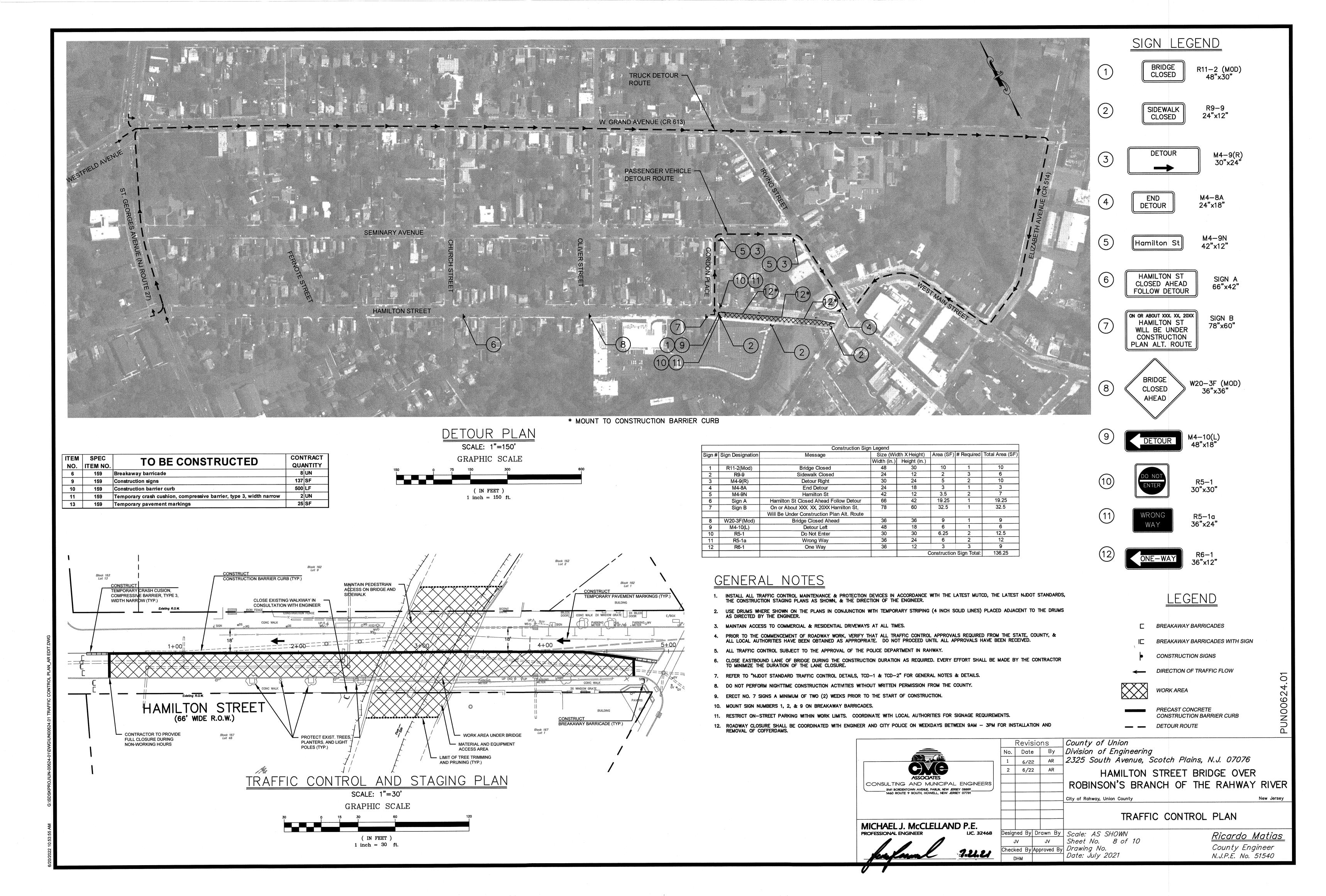
- THE ARTICULATED CONCRETE BLOCK SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS. ACBM SHOWN IS ARMORFLEX BY CONTECH CONSTRUCTION PRODUCTS OR APPROVED EQUAL AND IS TO BE USED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR MAY, AT HIS DISCRETION, AND AT NO EXTRA COST TO THE COUNTY, PROPOSE OTHER COMPARABLE ACBMS FOR ENGINEER'S APPROVAL. DETAILED DESIGN CALCULATIONS MEETING THE STABILITY, CONSTRUCTION AND INSTALLATION CRITERIA THAT SATISFY ALL PERMITTING AGENCY REQUIREMENTS SHALL BE SUBMITTED WITH ANY PROPOSED CHANGE TO ACB MATTRESS TYPE. SUCH DESIGN SHALL BE SIGNED AND SEALED BY A NEW JERSEY LICENSED PROFESSIONAL
- 2. CONTRACTOR MAY, DEPENDING UPON METHOD OF INSTALLATION, PROPOSE DIFFERENT WIDTHS OF ACB MATS CONSISTENT WITH EQUIPMENT AND/OR METHOD OF INSTALLATION. HAND INSTALLATION OF ACB'S BENEATH THE BRIDGE SUPER STRUCTURE IS PERMITTED, AND MAY BE WARRANTED BASED ON SITE
- MODIFIED MATS SHALL BE CONSTRUCTED BY REMOVING THE REQUIRED BLOCKS SO THE REQUIRED MAT SHAPE CAN BE OBTAINED.
- CONTRACTOR SHALL SUBMIT HIS DETAILS FOR METHOD OF INSTALLATION OF PROPOSED ACB MATS INCLUDING EQUIPMENT, METHOD OF ACCESS TO THE SITE, INSTALLATION OF GEOTEXTILE AND METHOD OF VERIFYING FINAL ACB MAT LAYOUT THAT INCLUDES THE EARTH AND ROCK ANCHORS IF REQUIRED. THE VERTICAL OFFSET BETWEEN ADJACENT BLOCKS IN THEIR FINAL POSITION SHALL NOT BE MORE THAN 1/3 INCH. THE CONTRACTOR SHALL SUBMIT DETAILED "SHOP DRAWINGS", SPECIFICATIONS AND METHOD OF INSTALLATION FOR THE RESPECTIVE ANCHORS FOR APPROVAL BY THE ENGINEER.
- 5. THE ACTUAL PLACEMENT OF ACB MAT, ALONG AND ACROSS THE RIVER BED, MAY VARY DEPENDING UPON THE EXISTING SITE CONDITION.
- 6. THE ACB MAT SHALL BE PLACED BUTTING SUCH THAT THE GAP BETWEEN SIDE-BY-SIDE MATS IS NOT MORE THAN 1/2 INCH.
- THE ACB MAT SHALL BE ANCHORED UPSTREAM AND DOWNSTREAM BY LOWERING TWO BLOCKS INTO THE TOE TRENCH, AS SHOWN. THE TOE TRENCH SHALL BE FILLED WITH MEDIAN STONE DIAMETER (D50) OF 15
- 8. FILL THE ACB OPEN CELLS WITH EXCAVATED ON SITE NATIVE SOIL OR COARSE AGGREGATE.
- ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE OR STOCKPILED IN COFFERDAM AREA FOR FUTURE REUSE AS BACKFILL. EXCESS MATERIAL EXCAVATED SHALL BE DISPOSED IN ACCORDANCE WITH SPECIFICATIONS AND STATE LAW. EXCAVATED MATERIAL SHALL NOT BE STOCKPILED ON SITE OUTSIDE OF
- 10. ALL COFFERDAMS SHALL BE CONTAINED WITHIN THE FLOATING TURBIDITY BARRIERS DURING EACH STAGE OF CONSTRUCTION.
- 11. CONCRETE SPALL REPAIRS AND MASON REPOINTING SHALL BE PERFORMED TO FACILITATE PROPER PLACEMENT AND INSTALLATION OF THE ACBMS, AND AT LOCATIONS AS DIRECTED BY ENGINEER.
- 12. REVETMENT CABLES SHALL BE USED. IT IS BROUGHT TO THE CONTRACTORS ATTENTION THAT SITE CONDITIONS MAY RESTRICT PLACEMENT OF ACBM MATTRESSES. WITH REVENTMENT CABLES BENEATH THE EXISTING BRIDGE AND REQUIRE HAND PLACEMENT OF ACBM BLOCKS. SITE RESTRICTIONS SHALL BE CONSIDERED IN CONTRACTOR'S INSTALLATION METHODOLOGY.
- 13. COSTS FOR ANCHORS AND CABLES SHALL BE INCLUDED IN BID PRICE FOR ACBM.
- 14. COURSE AGGREGATE, SIZE NO. 57 SHALL BE A MINIMUM OF 4" THICK, AND THICKER AS DIRECTED BY THE ENGINEER.
- 15. COST OF CONCRETE SHALL BE INCLUDED IN BID PAY ITEM FOR ARTICULATED CONCRETE BLOCK MATTING

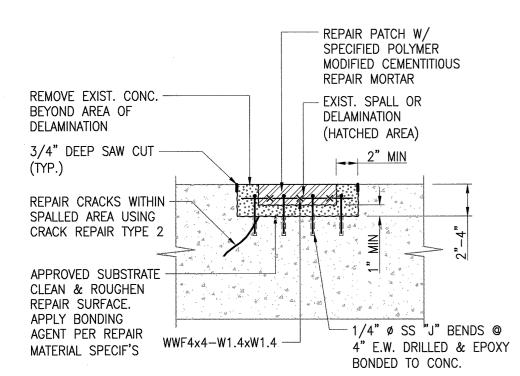


ANCHOR THROUGH MAT DETAIL

NOTE: IF REQUIRED PER MANUFACTURER RECOMMENDATIONS







SPALL REPAIR TYPE SR-1A (HORIZONTAL SPALLS W/ NO REINF. BARS EXPOSED)

REPAIR PROCEDURE - HORIZONTAL SPALL AND DELAMINATION REPAIR TYPES SR-1A AND SR-1B

FOR EACH CRACK INJECTION OF EPOXY

STARTS AT LOWEST END. WHEN EPOXY

APPEARS AT THE NEXT PORT, COMMENCE

INJECTION THERE. SEE STEPS 1 THRU 4

& SPECIFICATIONS FOR SEQUENCE OF

INJECTION OPERATION.

INJECTION PORT -

SURFACE SEAL

SCHEMATIC SEQUENCE -

INJECTION OF GROUT

SEE STEPS 1-4

REPAIR W/ SPECIFIED POLYMER SPALL W/ EXPOSED REBAR MODIFIED REPAIR MORTAR HATCHED AREA CLEAN REBAR TO BRIGHT FINISH & REMOVE EXIST. DETERIORATED APPLY EPOXY BONDING & REINF. CONC. TO HARD SUBSTRATE PROTECTION AGENT EXPOSING CORRODED REBARS 3/4" DEEP SAW CUT (TYP.) -APPROVED SUBSTRATE CLEAN & ROUGHEN REPAIR SURFACE. APPLY BONDING AGENT PER REPAIR MATERIAL SPECIF'S REPAIR ANY CRACKS WITHIN SPALLÈD AREA USING EPOXY CRACK REPAIR TYPE ECR-1

> <u>SPALL REPAIR TYPE SR-1B</u> (HORIZONTAL SPALLS W/ REINF, BARS EXPOSED)

> > SAW CUT ----

CUT MIN. TYP. SPALLED OR DELAMINATED CONC.

SPALL REPAIR TYPE SR-2A (VERTICAL SPALLS W/ NO REINF. BARS EXPOSED)

REPAIR PROCEDURE - VERTICAL SPALL REPAIR TYPES SR-2A AND SR-2B

BEYOND EXPOSED REINFORCING BAR. DO NOT DAMAGE ANY EXISTING REINFORCING BARS.

WALL THICKNESS

GALV. WWF4x4-1.4x1.4

1/4" Ø SS "J" BOLTS

@ 4"o/c E.W. DRILLED

& EPOXY BONDED TO

CLEAN & ROUGHEN SURFACE

REPAIR SURFACE. APPLY

_BONDING AGENT PER

MATERIAL MANUF'R

RECOMMENDATIONS

1. SAW CUT (3/4 INCH DEPTH) TO DELINEATE AND SQUARE-OFF AREA TO BE REPAIRED. SAW CUT SHALL BE A MINIMUM OF 1 INCH BEYOND

3. CLEAN EXPOSED REINFORCING BARS PER SSPC-SP6. EXPOSED REINFORCING BARS WHICH EXHIBIT 25 PERCENT LOSS OF CROSS SECTIONAL

REMOVE EXISTING CONCRETE TO COMPETENT SUBSTRATE BUT NOT LESS THAN A DEPTH OF 1/4 INCH NOR MORE THAN 3/4 INCH BEYOND

DETERIORATION. IF THE REMOVAL EXPOSES MORE THAN HALF THE DIAMETER OF A REINFORCING BAR, REMOVE CONCRETE TO 1/2 INCH DEPTH

AREA AFTER CLEANING SHALL HAVE A SUPPLEMENTARY REINFORCING BAR OF THE ORIGINAL DIAMETER SPLICED TO IT. SUPPLEMENTAL

REINFORCING BAR SHALL BE SPLICED AT LEAST 24 BAR DIAMETERS TO THE EXISTING BAR, ALL SPLICING DETAILS SHALL BE SUBMITTED TO THE

ENGINEER FOR APPROVAL. COMPENSATION FOR WORK REQUIRED FOR SPLICING OF EXISTING REINFORCING BARS WITH SUPPLEMENTAL BARS SHALL

BE DONE ON A "NET COST" BASIS. ALTERNATE APPROVED MECHANICAL SPLICERS MAY BE USED IN LIEU OF LAP SPLICES UPON APPROVAL BY

MANUFACTURED BY SIKA CORP., LYNDHURST, N.J., OR APPROVED EQUAL. PREPARE AND APPLY COATING PER MANUFACTURER'S WRITTEN

A. TROWEL APPLICATION (SMALL AREAS) — USE SIKA REPAIR 224 AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL. APPLY IN LIFTS AS

B. PUMPED INTO FORMS (LARGER AREAS) - USE SIKA REPAIR 224, EXTEND WITH 3/8" MAX. AGGREGATE, AS MANUFACTURED BY SIKA CORP.,

INSTALL REPAIR MATERIAL(S) IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS & RECOMMENDATIONS AND CONTRACT

SPECIFICATIONS. DO NOT REMOVE FORM WORK UNTIL REPAIR MATERIAL HAS ATTAINED ADEQUATE STRENGTH. FILL ANY SURFACE VOIDS WITH NEAT MIXTURE OF REPAIR MATERIAL AS NECESSARY. FINISHED SURFACE OF REPAIR MATERIAL SHALL MATCH EXISTING. REFER TO APPROPRIATE

RECOMMENDED BY THE MANUFACTURER. ALTERNATE POLYMER MODIFIED CEMENT REPAIR MATERIALS MAY BE USED FOR TROWEL APPLICATIONS

4. COAT EXPOSED REINFORCING BARS AND SPALL SURFACE WITH EPOXY BONDING AGENT. COATING SHALL BE SIKA ARMATEC 110 AS

RECOMMENDATIONS. APPLY COATING WITHIN TIME LIMITS RECOMMENDED - PRIOR TO APPLICATION OF REPAIR MATERIAL.

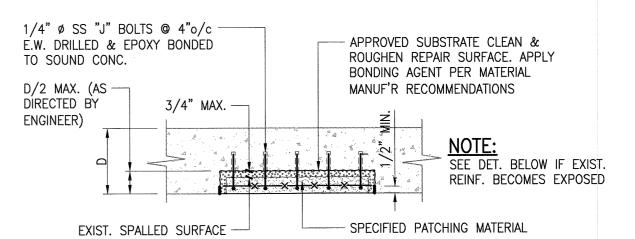
C. WET SPRAY SHOTCRETE (LARGER AREAS) - USE SIKA REPAIR 224 AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL.

SOUND CONC.

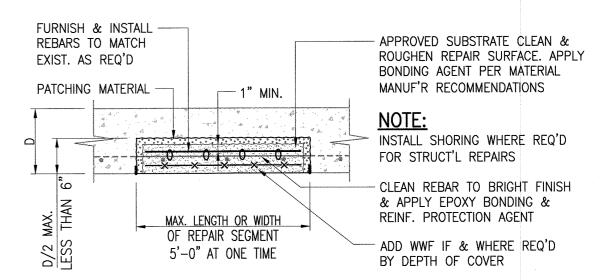
MAX.

WALL THICKNESS MAX. CLEAN REBAR TO BRIGHT FINISH & APPLY EPOXY BONDING & REINF. PROTECTION AGENT - REPAIR ANY CRACKS USING CONC. REPAIR PROCEDURE CR-2 TYP. APPROVED SUBSTRATE CLEAN & ROUGHEN REPAIR SURFACE. APPLY BONDING AGENT PER MATERIAL MANUF'R RECOMMENDATIONS

SPALL REPAIR TYPE SR-2B (VERTICAL SPALLS W/ REINF. BARS EXPOSED



TYP. OVERHEAD SPALL WITHOUT REINFORCING EXPOSED



TYP. OVERHEAD SPALL WITH REINFORCING EXPOSED SPALL REPAIR TYPE 3B

REPAIR PROCEDURE - OVERHEAD SPALL REPAIR TYPE SR-3A AND SR-3B

GENERAL REPAIR DRAWING NOTES

COMMENCING STRUCTURAL REPAIRS.

APPROVED BY THE ENGINEER.

RECOMMENDED PROCEDURES.

MANUFACTURER'S RECOMMENDATIONS.

MANUFACTURER'S RECOMMENDATIONS.

OTHER PURPOSE.

- 1. SAW CUT (1/2 INCH DEPTH) TO DELINEATE AND SQUARE-OFF AREA TO BE REPAIRED. SAW CUT SHALL BE A MINIMUM OF 1 INCH BEYOND DETERIORATED CONCRETE AREA TO BE REPAIRED.
- 2. REMOVE EXISTING CONCRETE TO A DEPTH NOT LESS THAN 1/4 INCH NOR MORE THAN 3/4 INCH BEYOND DETERIORATION. IF THE REMOVAL EXPOSES MORE THAN HALF THE DIAMETER OF A REINFORCING BAR, REMOVE CONCRETE TO 1/2 INCH DEPTH BEYOND EXPOSED REINFORCING BAR. DO NOT DAMAGE ANY
- EXISTING REINFORCING BARS. 3. CLEAN EXPOSED REINFORCING BARS PER SSPC-SP6. EXPOSED REINFORCING BARS WHICH EXHIBIT 25 PERCENT LOSS OF CROSS SECTIONAL AREA AFTER CLEANING SHALL HAVE A SUPPLEMENTARY REINFORCING BAR OF THE ORIGINAL DIAMETER SPLICED TO IT. SUPPLEMENTAL REINFORCING BAR SHALL BE SPLICED AT LEAST 24 BAR DIAMETERS TO THE EXISTING BAR. ALL SPLICING DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. COMPENSATION FOR
- WORK REQUIRED FOR SPLICING OF EXISTING REINFORCING BARS WITH SUPPLEMENTAL BARS SHALL BE DONE ON A "NET COST" BASIS 4. COAT EXPOSED REINFORCING BARS AND SPALL SURFACE WITH RUST INHIBITOR/BONDING AGENT. COATING SHALL BE SIKA ARMATEC 110 AS MANUFACTURED BY SIKA CORP., LYNDHURST, N.J., OR APPROVED EQUAL. PREPARE AND APPLY COATING PER MANUFACTURER'S WRITTEN RECOMMENDATIONS. APPLY COATING WITHIN TIME LIMITS RECOMMENDED - PRIOR TO APPLICATION OF REPAIR MATERIAL.
- 5. PATCH REPAIR AREA WITH SPALL REPAIR MATERIAL AS FOLLOWS: A. TROWEL APPLICATION (SMALL AREAS) - USE SIKA REPAIR 224 AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL. APPLY IN LIFTS AS
- RECOMMENDED BY THE MANUFACTURER. B. PUMPED INTO FORMS (LARGER AREAS) - USE SIKA REPAIR 224, EXTEND WITH 3/8" MAX. AGGREGATE, AS MANUFACTURED BY SIKA CORP., OR
- C. WET SPRAY SHOTCRETE (LARGER AREAS) USE SIKA REPAIR 224 AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL 6. INSTALL REPAIR MATERIAL(S) IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS & RECOMMENDATIONS AND CONTRACT SPECIFICATIONS. DO NOT REMOVE FORM WORK UNTIL REPAIR MATERIAL HAS ATTAINED ADEQUATE STRENGTH. FILL ANY SURFACE VOIDS WITH NEAT MIXTURE OF REPAIR MATERIAL AS
- NECESSARY. FINISHED SURFACE OF REPAIR MATERIAL SHALL MATCH EXISTING. REFER TO APPROPRIATE CONTRACT SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

THESE DRAWINGS ARE PART OF THE CLIENT'S CONCRETE REPAIR PROJECT, AND ARE NOT WARRANTED AS SUITABLE FOR ANY

THE DETAILS PROVIDED HEREIN ARE SCHEMATIC AND MUST BE ADJUSTED BASED ON UNIQUE CONDITIONS ENCOUNTERED IN THE

PROVIDE ADEQUATE SHORING TO EXISTING SLABS. BEAMS AND WALLS AS REQUIRED TO MAINTAIN STABILITY PRIOR TO

6. REMOVE DELAMINATED AND/OR DETERIORATED CONCRETE TO FIRM SUBSTRATES IN ACCORDANCE WITH APPROVED MANUFACTURER'S

8. INSTALL SUPPLEMENTARY REINFORCEMENT IN ACCORDANCE WITH GENERAL DETAILS AS MODIFIED BY WORKING SKETCHES

9. CLEAN EXISTING REINFORCEMENT AND APPLY BONDING AGENTS IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S

10. INSTALL FORMWORK AS REQUIRED FOR LARGER REPAIRS IN ACCORDANCE WITH APPROVED WORKING DRAWINGS REVIEWED WITH

12. PROVIDE SMOOTH RUBBED FINISH TO ALL REPAIR SURFACES AND CURE MATERIALS IN ACCORDANCE WITH MATERIAL

13. VERIFY THAT ALL SURFACES SCHEDULED FOR FINAL REPAIR COATINGS HAVE BEEN CLEANED IN ACCORDANCE WITH

11. VERIFY THAT CONDITIONS ARE READY FOR APPLICATION OF REPAIR MATERIALS PRIOR TO PROCEEDING WITH THE WORK.

EMPLOY ALL SAFETY PROCEDURES AS PROVIDED ON REPAIR MATERIAL MANUFACTURER'S MATERIAL SAFETY DATA SHEETS.

PREPARE SUBSTRATES AS RECOMMENDED BY THE MATERIAL MANUFACTURER'S RECOMMENDED PROCEDURES.

WORK AS SELECTIVE DEMOLITION AND LOCALIZED REMOVAL OF DETERIORATED MATERIALS PROCEEDS. SUBMIT WORKING DRAWINGS DETAILING THE PROCEDURES TO BE APPLIED FOR PARTICULAR REPAIRS BASED ON FIELD CONDITIONS IN COORDINATION WITH THE

TYP. PLAN AND/OR WALL ELEVATION REPLACEMENT LIMITS

DETERIORATED CONCRETE AREA TO BE REPAIRED.

IF APPROVED BY THE ENGINEER.

OR APPROVED EQUAL.

PATCH REPAIR AREA WITH SPALL REPAIR MATERIAL AS FOLLOWS:

CONTRACT SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

REPAIR W/ SPECIFIED

POLYMER MODIFIED

REPAIR MORTAR

EXIST. SPALL OR

(HATCHED AREA)

3/4" DEEP SAW

DELAMINATION

SAWCUT AROUND ENTIRE PERIMETER OF EXISTING DETERIORATED CONCRETE (3/4" DEEP MINIMUM). A MINIMUM DISTANCE OF 2" IS TO BE MAINTAINED BETWEEN THE SAWCUT AND THE AREA

SPALL REPAIRS (REPAIR TYPES 1A & 1B)

(HORIZONTAL REPAIR TO SPALLED OR DELAMINATED CONCRETE)

- REPAIR PER DETAIL TYPE 1A OR 1B, AS APPLICABLE A. REPAIR TYPE 1A - SPALL W/ NO REINFORCING BAR EXPOSED: REMOVE EXISTING CONCRETE TO A DEPTH OF 1" BEYOND DETERIORATION. IF REINFORCING BAR IS EXPOSED USE REPAIR
- B. REPAIR TYPE 1B SPALL W/ REINFORCING BAR EXPOSED: REMOVE EXISTING DETERIORATED CONCRETE TO A DEPTH OF 1" BEYOND DETERIORATION. IF MORE THAN HALF THE DIAMETER OF REINFORCING BAR IS EXPOSED, REMOVE CONCRETE A MINIMUM 2" DEPTH BEYOND THE EXPOSED CONCRETE IN REPAIR AREA & CLEAN. REPAIR PER THE FOLLOWING:
- A. VERTICAL AND OVERHEAD SURFACES USE SIKAREPAIR 224 AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL, PNEUMATICALLY APPLIED POLYMER-MODIFIED PORTLAND CEMENT MORTAR/CONCRETE. ALL REPAIRS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND PER THE CONTRACT SPECIFICATIONS. B. HORIZONTAL SURFACES - USE SIKAREPAIR 224 AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL, PNEUMATICALLY APPLIED POLYMER-MODIFIED PORTLAND CEMENT
- MORTAR/CONCRETE. REPAIR OF ALL SPALLS OR DELAMINATED CONCRETE SHALL BE FINISHED TO PROVIDE A SMOOTH REPAIR SURFACE.
- A. CORRODED SECTION LENGTHWISE OF STRUCTURAL REINFORCING BARS. CLEAN ALL EXPOSED REINFORCING STEEL PER SSPC-SP-5 AND COAT WITH SIKA ARMATEC 110 AS MANUFACTURED BY SIKA CORP., LYNDHURST, N.J. OR APPROVED EQUAL. ANY REINFORCING BAR WHICH IS DETERIORATED FOR 25% OR MORE OF ITS ORIGINAL DIAMETER SHALL HAVE A SUPPLEMENTARY REINFORCING BAR OF THE ORIGINAL DIAMETER SPLICED TO IT. SUPPLEMENTARY REINFORCING BARS SHALL BE SPLICED AT LEAST 24 BAR DIAMETERS TO THE EXISTING BAR. ALL SPLICING DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. CONTRACTOR SHALL BE REIMBURSED FOR THE WORK OF SPLICING REINFORCING BARS ON A "NET COST" BASIS.

FACE OF CONC.

SPECIFICATIONS.

- SURFACE SEAL

REMOVE ALL LOOSE MATERIAL,

CLEAN & PREPARE SURFACE

AS PER SEAL MANUFACTURER'S

DRILL HOLES & INSERT PORTS.

SEAL CRACKS W/SURFACE SEAL

ADJACENT CRACKS AT THE SAME

INJECT EPOXY AT 10 TO 40 PSI

PRESSURE. PLUG PORT WHEN

EPOXY EXUDES FROM THE NEXT

AFTER EPOXY HAS CURED, REMOVE

PORTS AND SURFACE SEAL, FILL

MATERIAL & REPAIR ANY DAMAGE

TO THE CONCRETE. PROCEED TO

MATERIAL & PRÉPARE ANY

WHEN SEALER HAS CURED,

PORT IN THE SERIES PLUG

INJECTION PORT AND START INJECTION AT THE NEXT PORT IN

HOLES WITH SURFACE SEAL

THE SERIES.

CRACK

THE ENGINEER.

ENCASEMENT CRACK REPAIR CRACK REPAIR TYPE CR2

GENERAL CONCRETE DISTRESS REPAIR AND REHABILITATION CONCRETE REPAIR AND COATING MATERIAL SCHEDULE

REPAIR MATERIAL CATEGORY	MATERIAL DESCRIPTION	QUALIFIED PRODUCTS		
BONDING AGENT TO EXISTING CONC. AND REINF.	MOISTURE-TOLERANT EPOXY MODIFIED CEMENTITIOUS BONDING AGENT & ANTI-CORROSION PROTECTION	SIKA ARMATEC 110 EPOCEM, OR EQUAL		
REPAIR CONCRETE WALL & FLOOR SECTIONS	JOB MIXED OR READY MIXED AIR—ENTRAINED NORMAL WEIGHT CONCRETE CONFORMING TO DIV. 3 OF PROJECT SPECIFICATION FOR 4000 PSI CONCRETE STRENGTH	APPROVED — CONCRETE DESIGN MIX.		
REPAIR MORTAR PNUEMATICALLY OR APPLIED	ONE COMPONENT CEMENTITIOUS READY-TO-USE REPAIR MORTAR USED WITH LATEX FOR POLYMER MODIFIED MORTAR	SIKAREPAIR 224 OR EQUAL		
REPAIR MORTAR PUMPED INTO FORMS	ONE COMPONENT SILICA FUME ENHANCED, POLYMER MODIFIED PORTLAND—CEMENT MORTAR	MONOTOP 611 AS MANUF. BY SIKA OR EQUAL		
REPAIR MORTAR TROWELED HORIZONTAL REPAIRS ½" TO 3" DEEP.	ONE COMPONENT CEMENTITIOUS READY—TO—USE REPAIR MORTAR USED WITH LATEX FOR POLYMER MODIFIED MORTAR	SIKAREPAIR 223 OR SIKAREPAIR SHB OR EQUAL		
LEVELING/ SEALING MORTAR	TWO COMPONENT POLYMER MODIFIED CEMENTITIOUS LEVELING AND PORE-SEALING MORTAR WITH PENETRATING CORROSION INHIBITOR	SIKATOP 121 PLUS OR EQUAL ALTERNATE		
CEMENT COATING	TWO COMPONENT POLYMER MODIFIED CEMENTITIOUS LEVELING AND PORE—SEALING MORTAR WITH PENETRATING CORROSION INHIBITOR	OR EQUAL COMBINED SIKATOP SEAL 107 OR EQUAL		

ADJACENT CRACK CRACK REPAIR (REPAIR TYPE CR1) (EPOXY INJECTION CRACK REPAIR FOR CRACKS UP TO 3/16"

CRACK

STEP 1

CRACK

CRACK

CRACK

INJECTION -

WIDE IN WALLS & SLAB UNDERSIDE)

REPAIR PROCEDURE- REPAIR TYPE 2

CONC. SURFACE

- CRACK REPAIR SHALL BE DONE WHERE DIRECTED BY ENGINEER. REPAIR CRACKS IN WALLS & UNDERSIDE OF SLAB USING EPOXY RESIN INJECTION AS PER CONTRACT SPECIFICATIONS. SEAL CONCRETE SURFACE AT CRACK WITH SIKADUR 33 AS MANUFACTURED BY SIKA CORP., OR NITOBOND EPOXY GEL AS MANUFACTURED BY FOSROC INC., OR APPROVED EQUAL. INJECT CRACK IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS USING SIKADUR 52 EPOXY AS MANUFACTURED BY SIKA CORP., OR NITOBOND ULV AS MANUFACTURED BY FOSROC INC., OR APPROVED EQUAL CONFORMING TO ASTM C-881, TYPE 4, GRADE 1, CLASS B & CLASS C.
- 3. CRACKS LARGER THAN 3/6 INCH IN WALLS & SLAB SHALL BE REPAIRED AS A SPALL PER REPAIR TYPE 1A OR 1B - WHERE DIRECTED BY THE ENGINEER.

REPAIR PROCEDURE - REPAIR TYPE CR2

3/8" MIN.

- 1. SAW CUT AND/OR ROUT THE SURFACE OF THE CRACK TO CREATE A 34" DEEP (MIN.) AND 36" WIDE (MIN.) GROOVE, AS SHOWN.
- CLEAN SURFACE BY HIGH PRESSURE WATER BLASTING TO REMOVE RESIDUAL LOOSE MATERIAL. THE SURFACE SHALL BE SATURATED SURFACE DRY WITH NO STANDING WATER.
- FILL NOTCH WITH ENCASEMENT PATCHING MATERIAL. USE SIKATOP 123 PLUS AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL. PREPARE & INSTALL ENCASEMENT REPAIR MATERIAL IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS & RECOMMENDATIONS AND CONTRACT SPECIFICATIONS. FINISHED SURFACE OF REPAIR MATERIAL SHALL MATCH EXISTING. REFER TO APPROPRIATE CONTRACT SPECIFICATIONS.

PROJECT NOTES

- ALL CONCRETE SHALL ACHIEVE A MINIMUM COMPRESSIVE STRESS OF 4,000 PSI AT 28 DAYS.
- REINFORCEMENT STEEL SHALL BE DEFORMED REINFORCING BARS CONFORMING TO ASTM A615 GRADE 60 WITH MINIMUM YIELD STRENGTH 60 KSI.
- CONCRETE WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS.
- 4. ALL REINFORCING STEEL BARS, DOWELS AND/OR WELDED WIRE FABRIC SHALL BE EPOXY-COATED. 5. ALL CONCRETE SPALL REPAIRS SHALL BE PAID FOR UNDER BID ITEM "CONCRETE SPALL REPAIR".
- 6. ALL CONCRETE CRACK REPAIRS SHALL BE PAID FOR UNDER BID ITEM "PRESSURE INJECTION,
- CONCRETE CRACKS".

BONDING AGENT MAXIMUM RECOMMENDED "OPEN TIME" BETWEEN APPLICATION OF BONDING AGENT AND PLACEMENT OF MORTAR OR CONCRETE (VERIFY WITH MANUFACTURER)

UM OPEN TIME (HRS)
OURS.
OURS
OURS
IOURS

REINFORCING

- A. ALL REINFORCING STEEL BARS, DOWELS AND/OR WELDED WIRE FABRIC SHALL BE GALVANIZED OR STAINLESS STEEL AND SHALL CONFORM TO PROJECT REQUIREMENTS FOR REINFORCING STRENGTH.
- B. J TYPE ANCHOR PINS SHALL BE STAINLESS STEEL AND SHALL BE INSTALLED AS EPOXY BONDED ANCHORS

14. APPLY COATINGS ON APPROVED SURFACES IN ACCORDANCE WITH ALL MANUFACTURER'S RECOMMENDATIONS.

REFER TO THE DEFICIENCY LOCATION PLANS FOR ADDITIONAL DETAILS.

RECOMMENDATIONS AND APPROVED BY THE ENGINEER.

County of Union Division of Engineering Date By 2325 South Avenue, Scotch Plains, N.J. 07076 HAMILTON STREET BRIDGE OVER CONSULTING AND MUNICIPAL ENGINEERS ROBINSON'S BRANCH OF THE RAHWAY RIVER _ 3141 BORDENTOWN AVENUE, PARLIN, NEW JERSEY 08859__ IAO ROLITE 9 SOUTH HOWELL NEW JERSEY 0773 City of Rahway, Union County New Jersey **TYPICAL CONCRETE REPAIR DETAILS (1 OF 2)** MICHAEL J. McCLELLAND P.E.

PROFESSIONAL ENGINEER LIC. 32468

Z.W./J.N. J.N.

Designed By Drawn By Scale: AS SHOWN Sheet No. 9 of 10 Checked By Approved By Drawing No. Date: July 2021

Ricardo Matias County Engineer N.J.P.E. No. 51540

SCHEMATIC ENCASED STEEL BEAM REPAIRS &/OR RETROFIT (REPAIR TYPE BR1)

REPAIR PROCEDURE - REPAIR TYPE 3

- 1. SAW CUT (½" DEPTH) TO DELINEATE AND SQUARE-OFF AREA TO BE REPAIRED. SAW CUT SHALL BE A MINIMUM OF 1" BEYOND DETERIORATED CONCRETE AREA TO BE REPAIRED.
- REMOVE EXISTING CONCRETE ENCASEMENT (21/4" THICK) TO EXPOSE EXISTING STEEL BEAM FLANGE, IF NECESSARY. DO NOT DAMAGE OR REMOVE ANY EXISTING REINFORCING BARS. NOTE THAT A 6" WIDE BAND OF THE EXISTING WIRE MESH REINFORCING SHALL REMAIN AT PERIMETER OF REPAIR AREA (FOR LAPPING
- 3. CLEAN EXISTING EXPOSED STEEL MEMBER PER SSPC-SP6. CLEAN EXISTING REINFORCING BARS AND
- REMAINING EXISTING WIRE MESH. 4. INSTALL STEEL TAB ANCHORS IF EXPOSED FLANGE EXCEEDS 12" IN WIDTH OR IF REMAINING EXISTING WIRE MESH IS DETERIORATED (MAX. SPACING 6" CENTER TO CENTER). INSTALL 1/4" DIAMETER STAINLESS STEEL ANCHOR PINS AT 6" CENTER TO CENTER IF CONCRETE BETWEEN TOP AND BOTTOM FLANGE REQUIRES
- 5. INSTALL 4x4-W1.4xW1.4 WIRE MESH WITHIN REPAIR AREA AS INDICATED. WIRE MESH SHALL LAP EXISTING WIRE MESH A MINIMUM OF 6" AT PERIMETER OF REPAIR AREA. TACK WELD WIRE MESH TO EXISTING MESH
- COAT EXPOSED STEEL MEMBER, WELDED WIRE MESH AND EDGES OF EXISTING CONCRETE ENCASEMENT WITH RUST INHIBITOR/BONDING AGENT. COATING SHALL BE ARMATEC 110 OR SIKADUR 32 HI MOD MANUFUFACTURED BY SIKA CORP., OR APPROVED EQUAL. PREPARE AND APPLY COATING PER MANUFACTURER'S WRITTEN RECOMMENDATIONS. APPLY COATING WITHIN TIME LIMITS RECOMMENDED
- PRIOR TO APPLICATION OF REPAIR MATERIAL (NOTE 7). 7. PATCH REPAIR AREA WITH ENCASEMENT REPAIR MATERIAL AS FOLLOWS:
- A. TROWEL APPLICATION (SMALL AREAS) USE SIKATOP 123 PLUS AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL. APPLY IN LIFTS AS RECOMMENDED BY THE MANUFACTURER.
- B. PUMPED INTO FORMS (LARGER AREAS) -- USE MONOTOP 611, EXTEND WITH ¾" MAX. AGGREGATE, AS
- MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL. WET SPRAY SHOTCRETE (LARGER AREAS) - USE SIKA REPAIR 224 AS MANUF. BY SIKA CORP., OR
- APPROVED EQUAL.
- 8. INSTALL ENCASEMENT REPAIR MATERIAL(S) IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS & RECOMMENDATIONS AND CONTRACT SPECIFICATIONS. DO NOT REMOVE FORM WORK UNTIL REPAIR MATERIAL HAS ATTAINED ADEQUATE STRENGTH. FILL ANY SURFACE VOIDS WITH NEAT MIXTURE OF REPAIR MATERIAL AS NECESSARY. FINISHED SURFACE OF REPAIR MATERIAL SHALL MATCH EXISTING. REFER TO APPROPRIATE CONTRACT SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

PROJECT NOTES

- ALL CONCRETE SHALL ACHIEVE A MINIMUM COMPRESSIVE STRESS OF 4,000 PSI AT 28 DAYS. REINFORCEMENT STEEL SHALL BE DEFORMED REINFORCING BARS CONFORMING TO ASTM A615 GRADE
- 60 WITH MINIMUM YIELD STRENGTH 60 KSI.
- CONCRETE WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS.
- 4. ALL REINFORCING STEEL BARS, DOWELS AND/OR WELDED WIRE FABRIC SHALL BE EPOXY-COATED. 5. ALL CONCRETE SPALL REPAIRS SHALL BE PAID FOR UNDER BID ITEM "CONCRETE SPALL REPAIR".
- 6. ALL CONCRETE CRACK REPAIRS SHALL BE PAID FOR UNDER BID ITEM "PRESSURE INJECTION, CONCRETE CRACKS".

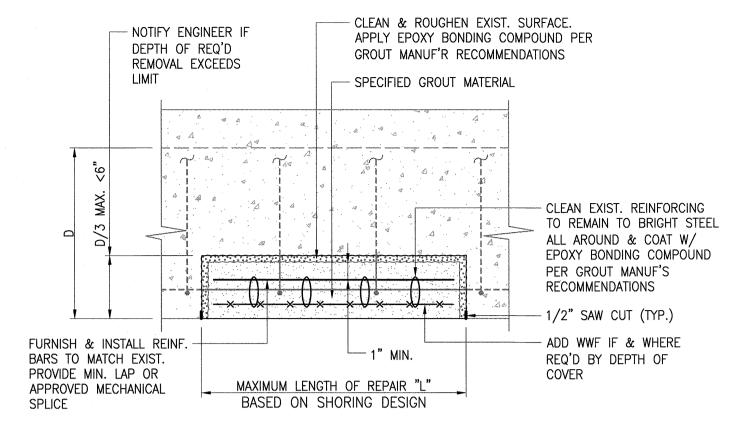
REMOVE CONC. TO FIRM-SUBSTRATE CLEAN & INSTALL APPLY EPOXY ADD REINF. BONDING COMPOUND BARS AS PER PATCH MANUF'R REQ'D RECOMMENDATIONS SPECIFIED PATCHING -MATERIAL CLEAN & MAINTAIN EXIST. REINF. TO REMAIN, APPLY

EPOXY BONDING

COMPOUND PER

RECOMMENDATIONS

PATCHING MAT'L MANUF'R



SHORING NOTE:

INSTALL SHORING PRIOR TO REMOVING DISTRESSED CONCRETE AND REINFORCING. SUBMIT SHORING LAYOUT AND DETAILS TO ENGINEER PRIOR TO COMMENCING REPAIR INSTALLATION. INSTALL SUPPLEMENTARY CLAMPS AND/OR BRACKETS IF AND WHERE DIRECTED BY THE

BEAM REPAIR CROSS SECTION

BEAM REPAIR LONGITUDINAL SECTION

<u>SCHEMATIC</u> DISTRESSED REINFORCED CONCRETE BEAM REPAIR

(REPAIR TYPE BR2)

- <u> REPAIR PROCEDURE REPAIR TYPE BR-2</u>
- I. PREPARE WORKING DRAWINGS FOR SHORING AND PLACEMENT OF FORMS FOR CONCRETE REPAIR. SUBMIT FOR REVIEW BY THE ENGINEER.
- 2. SAW CUT (1/2" DEPTH) TO DELINEATE AND SQUARE-OFF AREA TO BE REPAIRED. SAW CUT SHALL BE A MINIMUM OF 1" BEYOND DETERIORATED CONCRETE AREA TO BE REPAIRED.
- REMOVE EXISTING DELAMINATED CONCRETE USING DRILLS AND LIGHT DEMOLITION HAMMERS WHILE
- MAINTAINING EXISTING FLEXURAL AND SHEAR REINFORCEMENT. 4. DO NOT DAMAGE OR REMOVE ANY EXISTING REINFORCING BARS. CLEAN EXISTING REINFORCING PER
- SSPC-SP6. CLEAN EXISTING EXPOSED STEEL MEMBER PER SSPC-SP6.
- 5. COORDINATE WITH THE ENGINEER TO IDENTIFY REINFORCING SECTIONS IF ANY THAT NEED TO BE REMOVED
- 6. SPLICE REINFORCING WITH APPROVED MECHANICAL REINFORCING SPLICERS.
- 7. INSTALL 4x4-W1.4xW1.4 WIRE MESH WITHIN REPAIR AREA AS INDICATED. WIRE MESH SHALL LAP EXISTING WIRE MESH A MINIMUM OF 6" AT PERIMETER OF REPAIR AREA. TACK WELD WIRE MESH TO EXISTING MESH AND STEEL TABS
- 8. COAT EXPOSED STEEL REINFORCING, WELDED WIRE MESH AND EDGES OF EXISTING CONCRETE ENCASEMENT WITH RUST INHIBITOR/BONDING AGENT. COATING SHALL BE ARMATEC 110 OR SIKADUR 32 HI MOD MANUFUFACTURED BY SIKA CORP., OR APPROVED EQUAL. PREPARE AND APPLY COATING PER MANUFACTURER'S WRITTEN RECOMMENDATIONS. APPLY COATING WITHIN TIME LIMITS RECOMMENDED -
- PRIOR TO APPLICATION OF REPAIR MATERIAL (NOTE 9). 9. PATCH REPAIR AREA WITH ENCASEMENT REPAIR MATERIAL AS FOLLOWS:
- A. TROWEL APPLICATION (SMALL AREAS) USE SIKATOP 123 PLUS AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL. APPLY IN LIFTS AS RECOMMENDED BY THE MANUFACTURER.
- B. PUMPED INTO FORMS (LARGER AREAS) USE MONOTOP 611, EXTEND WITH ¾" MAX. AGGREGATE, AS MANUFACTURED BY SIKA CORP., OR APPROVED EQUAL.
- WET SPRAY SHOTCRETE (LARGER AREAS) USE SIKA REPAIR 224 AS MANUF. BY SIKA CORP., OR APPROVED EQUAL.
- 8. INSTALL ENCASEMENT REPAIR MATERIAL(S) IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS & RECOMMENDATIONS AND CONTRACT SPECIFICATIONS. DO NOT REMOVE FORM WORK UNTIL REPAIR MATERIAL HAS ATTAINED ADEQUATE STRENGTH. FILL ANY SURFACE VOIDS WITH NEAT MIXTURE OF REPAIR MATERIAL AS NECESSARY. FINISHED SURFACE OF REPAIR MATERIAL SHALL MATCH EXISTING. REFER TO APPROPRIATE CONTRACT SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

REPAIR MORTAR TROWELED TO 3" DEEP.

LEVELING/ SEALING MORTAR

CEMENT COATING

APPLIED

REPAIR MATERIAL

REPAIR MORTAR
PNUEMATICALLY OR

REPAIR MORTAR
PUMPED INTO FORMS

BONDING AGENT
TO EXISTING CONC. AND

REPAIR CONCRETE
WALL & FLOOR SECTIONS

CATEGORY

- **NEW REINFORCING** 1. ALL REINFORCING STEEL BARS, DOWELS AND/OR WELDED WIRE FABRIC SHALL BE
- GALVANIZED OR STAINLESS STEEL 2. J TYPE ANCHOR PINS SHALL BE STAINLESS STEEL AND SHALL BE INSTALLED AS EPOXY BONDED ANCHORS
- 1. BONDING AGENT MAXIMUM RECOMMENDED "OPEN TIME" BETWEEN APPLICATION OF BONDING AGENT AND PLACEMENT OF MORTAR OR CONCRETE (VERIFY WITH MANUFACTURER)

GENERAL CONCRETE DISTRESS REPAIR AND REHABILITATION

CONCRETE REPAIR AND COATING MATERIAL SCHEDULE

MATERIAL DESCRIPTION

CONCRETE STRENGTH

MODIFIED MORTAR

MODIFIED MORTAR

MOISTURE-TOLERANT EPOXY MODIFIED

JOB MIXED OR READY MIXED AIR-ENTRAINED

3 OF PROJECT SPECIFICATION FOR 4000 PSI

ONE COMPONENT CEMENTITIOUS READY-TO-USE

REPAIR MORTAR USED WITH LATEX FOR POLYMER

POLYMER MODIFIED PORTLAND-CEMENT MORTAR

ONE COMPONENT SILICA FUME ENHANCED,

TWO COMPONENT POLYMER MODIFIED

TWO COMPONENT POLYMER MODIFIED

CEMENTITIOUS LEVELING AND PORE-SEALING

CEMENTITIOUS LEVELING AND PORE-SEALING

MORTAR WITH PENETRATING CORROSION INHIBITOR

MORTAR WITH PENETRATING CORROSION INHIBITOR

NORMAL WEIGHT CONCRETE CONFORMING TO DIV. MIX.

CEMENTITIOUS BONDING AGENT & ANTI-CORROSION PROTECTION

QUALIFIED PRODUCTS

SIKA ARMATEC 110

EPOCEM, OR EQUAL

SIKA OR EQUAL

SIKATOP 144 /

ONE COMPONENT CEMENTITIOUS READY-TO-USE | SIKAREPAIR 223 OR SIKAREPAIR

REPAIR MORTAR USED WITH LATEX FOR POLYMER SHB OR EQUAL

SIKAREPAIR 224 OR EQUAL

SIKATOP 121 PLUS OR

MONOTOP 611 AS MANUF. BY

LEVEL & SEAL

COMBINED SIKATOP

SEAL 107 OR EQUAL

TEMPERATURE MAXIMUM OPEN TIME (HRS)

95 DEG F. (35 DEG. C) 6 HOURS. 68 DEG F. (20 DEG. C). 12 HOURS 50 DEG F. (10 DEG. C). 16 HOURS

40 DEG F. (5 DEG. C). 24 HOURS

REINFORCING

- A. ALL REINFORCING STEEL BARS, DOWELS AND/OR WELDED WIRE FABRIC SHALL BE GALVANIZED OR STAINLESS
- STEEL AND SHALL CONFORM TO PROJECT REQUIREMENTS FOR REINFORCING STRENGTH. B. J TYPE ANCHOR PINS SHALL BE STAINLESS STEEL AND SHALL BE INSTALLED AS EPOXY BONDED ANCHORS

GENERAL REPAIR DRAWING NOTES

RECOMMENDED PROCEDURES.

- 1. THESE DRAWINGS ARE PART OF THE CLIENT'S CONCRETE REPAIR PROJECT, AND ARE NOT WARRANTED AS SUITABLE FOR ANY OTHER PURPOSE.
- 2. THE DETAILS PROVIDED HEREIN ARE SCHEMATIC AND MUST BE ADJUSTED BASED ON UNIQUE CONDITIONS ENCOUNTERED IN THE WORK AS SELECTIVE DEMOLITION AND LOCALIZED REMOVAL OF DETERIORATED MATERIALS PROCEEDS. SUBMIT WORKING DRAWINGS DETAILING THE PROCEDURES TO BE APPLIED FOR PARTICULAR REPAIRS BASED ON FIELD CONDITIONS IN COORDINATION WITH THE ENGINEER.
- 3. REFER TO THE DEFICIENCY LOCATION PLANS FOR ADDITIONAL DETAILS. PROVIDE ADEQUATE SHORING TO EXISTING SLABS, BEAMS AND WALLS AS REQUIRED TO MAINTAIN STABILITY PRIOR TO
- COMMENCING STRUCTURAL REPAIRS. 5. EMPLOY ALL SAFETY PROCEDURES AS PROVIDED ON REPAIR MATERIAL MANUFACTURER'S MATERIAL SAFETY DATA SHEETS. 6. REMOVE DELAMINATED AND/OR DETERIORATED CONCRETE TO FIRM SUBSTRATES IN ACCORDANCE WITH APPROVED
- MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE ENGINEER. 7. PREPARE SUBSTRATES AS RECOMMENDED BY THE MATERIAL MANUFACTURER'S RECOMMENDED PROCEDURES.
- 8. INSTALL SUPPLEMENTARY REINFORCEMENT IN ACCORDANCE WITH GENERAL DETAILS AS MODIFIED BY WORKING SKETCHES
- 9. CLEAN EXISTING REINFORCEMENT AND APPLY BONDING AGENTS IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S
- 10. INSTALL FORMWORK AS REQUIRED FOR LARGER REPAIRS IN ACCORDANCE WITH APPROVED WORKING DRAWINGS REVIEWED
- 11. VERIFY THAT CONDITIONS ARE READY FOR APPLICATION OF REPAIR MATERIALS PRIOR TO PROCEEDING WITH THE WORK. 12. PROVIDE SMOOTH RUBBED FINISH TO ALL REPAIR SURFACES AND CURE MATERIALS IN ACCORDANCE WITH MATERIAL
- MANUFACTURER'S RECOMMENDATIONS.
- 13. VERIFY THAT ALL SURFACES SCHEDULED FOR FINAL REPAIR COATINGS HAVE BEEN CLEANED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 14. APPLY COATINGS ON APPROVED SURFACES IN ACCORDANCE WITH ALL MANUFACTURER'S RECOMMENDATIONS.

CONSULTING AND MUNICIPAL ENGINEERS __ 3141 BORDENTOWN AVENUE, PARLIN, NEW JERSEY 08859___ 1460 ROUTE 9 SOUTH, HOWELL, NEW JERSEY 07731

Revisions | County of Union Date By *Division of Engineering* 6/22 AR 2325 South Avenue, Scotch Plains, N.J. 07076 HAMILTON STREET BRIDGE OVER ROBINSON'S BRANCH OF THE RAHWAY RIVER

City of Rahway, Union County

TYPICAL CONCRETE REPAIR DETAILS (2 OF 2)

Designed By Drawn By Scale: AS SHOWN Z.W./J.N. | Sheet No. 10 of 10 Checked By Approved By Drawing No.

Date: July 2021

Ricardo Matias County Engineer N.J.P.E. No. 51540

New Jersey

MICHAEL J. McCLELLAND P.E. PROFESSIONAL ENGINEER