

COUNTY OF UNION

DEPARTMENT OF ENGINEERING, PUBLIC WORKS & FACILITIES MANAGEMENT Joseph A. Graziano Sr., Director

MEMO TO:

All Potential Bidders

BOARD OF CHOSEN FREEHOLDERS FROM: Thomas O. Mineo, P County Engineer

BRUCE H. BERGEN Chairman

DATE:

November 3, 2016

SERGIO GRANADOS

RE:

Vice Chairman

CLARIFICATION NUMBER 1

LINDA CARTER

BA#51-2016; UC Engineering Project #2013-009

The following are responses to questions received for the above referenced project:

Angel G. Estrada

Replacement of East Hazelwood Avenue Minor Bridge (Ra-69) City of Rahway, County of Union, New Jersey

CHRISTOPHER HUDAK

MOHAMED S. JALLOH

BETTE JANE KOWALSKI

ALEXANDER MIRABELLA

VERNELL WRIGHT

ALFRED J. FAELLA County Manager

ROBERT E. BARRY, ESQ. County Counsel

JAMES E. PELLETTIERE, RMC Clerk of the Board

THOMAS O. MINEO, P.E. County Engineer. Director, Division of Engineering

Under what pay item do we get paid for the installation of Verizon fiber optic sleeve for the duct bank? Note 1 on sheet 6 states "All utility work including complete reinstallation of light poles shall be included in the cost of the various

pay items for the bid and no separate payment will be made." Under what pay item do we get paid for the removal and storage of the

existing Street lights, and who is to install the new conduit & wiring for

them? Need to know what size conduit and wire size, etc. Note 1 on sheet 6 states "All utility work including complete reinstallation of light poles shall be included in the cost of the various pay items for the bid and no separate payment will be made." Per Notes 10.1 and 10.2 on sheet 6 "Street light poles impacted by construction shall be removed and stored by the contractor. Existing wiring running underground for these light poles shall be removed by the contractor, and new 2" rigid nonmetallic conduit shall be installed by the contractor."

The contractor shall install a butt joint coupling at the ends of the existing conduit where the conduit wire will be installed. The existing wire shall be removed and reinstalled in the new conduit by the contractor. Poles shall be installed by the contractor in their original location and a new foundation shall be constructed by the contractor.

DEPARTMENT OF ENGINEERING, PUBLIC WORKS & FACILITIES MANAGEMENT Joseph A. Graziano Sr., Director

BOARD OF CHOSEN FREEHOLDERS

BRUCE H. BERGEN Chairman

SERGIO GRANADOS Vice Chairman

LINDA CARTER

ANGEL G. ESTRADA

CHRISTOPHER HUDAK

MOHAMED S. JALLOH

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THOMAS O. MINEO, P.E. County Engineer, Director, Division of Engineering

- 3. Under what pay item do we get paid for the street light foundations and how many are required?
 Note 1 on sheet 6 states "All utility work including complete reinstallation of light poles shall be included in the cost of the various pay items for the bid and no separate payment will be made." Note 10.3 on sheet 6 states "Poles shall be installed by the contractor in their original location and a new foundation shall be constructed by the contractor." A new foundation shall be constructed at the location of every street light pole removed during construction. 6 street light foundations will be required.
- 4. Under what pay item do we get paid for the removal and installation of new electrical / communication boxes/handholes and how many? Note 1 on sheet 6 states "All utility work including complete reinstallation of light poles shall be included in the cost of the various pay items for the bid and no separate payment will be made."
 2 handholes shall be replaced with new handholes for the relocation of the Level 3 Communications fiber optic conduits.
- 5. Under what bid items do we get paid for the installation of conduits (electrical/communication) and footage quantities?
 Note 1 on sheet 6 states "All utility work including complete reinstallation of light poles shall be included in the cost of the various pay items for the bid and no separate payment will be made."
- Bid item 11 states 50,000 Dol unit price is 50,000.00 and total is 50,000.00, shouldn't the unit price be 1.00 or be changed to an allowance item of 1 LS for 50,000.00?
 Bid item 11 is an allowance item and should read 1 LS for \$50,000.00.

SPECIFICATIONS

FOR

REPLACEMENT OF EAST HAZELWOOD AVENUE MINOR BRIDGE (RA-69)

CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY
BA#51-2016; UNION COUNTY ENGINEERING PROJECT #2013-009

OCTOBER 2016

UNION COUNTY OFFICIALS BOARD OF CHOSEN FREEHOLDERS

Bruce H. Bergen, Chairman
Sergio Granados, Vice Chairman
Linda Carter, Freeholder
Angel G. Estrada, Freeholder
Christopher Hudak, Freeholder
Mohamed S. Jalloh, Freeholder
Bette Jane Kowalski, Freeholder
Alexander Mirabella, Freeholder
Vernell Wright, Freeholder

CLERK OF THE BOARD

James E. Pellettiere, RMC

COUNTY MANAGER

Alfred J. Faella

DEPARTMENT OF ENGINEERING, PUBLIC WORKS AND FACILITIES MANAGEMENT

Joseph A. Graziano, Sr., CPWM
Director, Department of Engineering, Public Works and
Facilities Management

COUNTY ENGINEER DIVISION OF ENGINEERING

Thomas O. Mineo, P.E. 2325 South Avenue Scotch Plains, New Jersey 07076 Telephone: (908) 789-3675 Fax: (908) 789-3674

PREPARED BY:

Remington, Vernick & Arango Engineers, RVA

One Harmon Plaza, Suite 210 Secaucus, New Jersey 07094

> T: 201-624-2137 F: 201-624-2136

COUNTY OF UNION NOTICE TO BIDDERS

Sealed bids will be received by the director of the Division of Purchasing, or his designee, at the County of Union, New Jersey on November 15, 2016, at 10:30 a.m., prevailing time, in the 3rd Floor Conference Room, U.C. Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey for:

REPLACEMENT OF EAST HAZELWOOD AVENUE MINOR BRIDGE (RA-69) CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY BA#51-2016; UNION COUNTY ENGINEERING PROJECT #2013-009

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.

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.S.A.C. 17:27.

LAURA M. SCUTARI, QPA, MPA, DIRECTOR OF PURCHASING

UNION COUNTY BOARD OF CHOSEN FREEHOLDERS

We're Connected to You!

NB-1

Revised: 01/13/16

REPLACEMENT OF EAST HAZELWOOD AVENUE MINOR BRIDGE (RA-69) CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY

BA#51-2016; Union County Engineering Project #2013-009

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Revised: 2016.08.30

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UNION COUNTY BOARD OF CHOSEN FREEHOLDERS 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 Chosen Freeholders UC Administration Building, 6th Floor 10 Elizabethtown Plaza Elizabeth, New Jersey 07207

ADDRESS BIDS AND SUBMIT TO:

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

Attn: Laura M. Scutari, QPA, MPA, Director, Division of Purchasing

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

TITLE OF PROJECT: Replacement of East Hazelwood Avenue Minor Bridge (Ra-69)

> City of Rahway, County of Union, New Jersey **BA#51-2016; UC Engineering Project #2013-009**

BIDDER: Bidder shall be a single overall contract bidder

ENGINEER: Remington, Vernick & Arango Engineers (RV&A)

One Harmon Plaza, Suite 210 Secaucus, New Jersey 07094

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

COUNTY ENGINEER:

Thomas O. Mineo, P.E. **Union County** Division of Engineering 2325 South Avenue Scotch Plains, NJ 07076

(908) 789-3675 Office: Facsimile: (908) 789-3674 Email: tmineo@ucnj.org

CONSTRUCTION MANAGER:

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Revised: 2016.08.30

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 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 informality in the bids received so long as said waiver is not of a response which is considered to be material and non-waivable pursuant to law.

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:11-2(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 Michael M. Yuska, QPA, 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, Michael M. Yuska, QPA, 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 County Engineer or Design Professional as the case may be and 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 County Engineer, 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.

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All Addenda issued through the Offices of the County Engineer 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 County Engineer 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:11-1.1 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 of Union shall award the contract or reject all bids within sixty (60) days; except that the bids of any bidders who consent thereto may, at the request of the County be held for consideration for such longer periods as may be agreed.

The County will return all certified checks or cashier's checks after the proposals have been opened, read, tabulated and checked except those of the three (3) bidders who have bid the lowest total price for carrying out the Project. 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 the said 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. BID SECURITY

All Bidders are required to submit a form of Bid Security with their bids. (Bid Bond or Certified Funds)

The Bid Security shall be in the amount of ten percent (10%) of the Bid, but not in excess of Twenty Thousand Dollars (\$20,000.00), and payable to the order of the "County of Union."

10. 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.

11. 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 Chosen Freeholders, 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.

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- 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 Chosen Freeholders, 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.

12. 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 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

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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."

13. 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.

14. 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".

15. 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.

16. 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.

17. 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.

18. OWNERSHIP DISCLOSURES REQUIRED

Pursuant to P.L. 1977, N.J.S.A. 52:25-24.2, the Bidder shall submit with its Bid, or prior to receipt of bids, a statement setting forth the names and addresses of all stockholders in the corporation or partnership bidding who own ten percent (10%) or greater interest therein. (See forms attached)

19. 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.

20. 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.

21. COMPLIANCE WITH NEW JERSEY PREVAILING WAGE ACT

The County of Union, in order to fulfill the requirements of N.J.S.A. 34:11-56a.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 Industry 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).

G-13 Revised: 2016.08.30 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 Chosen Freeholders on May 8, 2014. The resolution is furnished in Section 51 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)

22. 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;
 - 2. 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;

G-15 Revised: 2016.08.30 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.

23. 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.

24. NUMBER OF WORKING DAYS

In accordance with NJSA 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.

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

Pursuant to NJSA 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.

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26. 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.

27. 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.

28. 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.

29. 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.

30. 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.

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31. SUB-LETTING OF WORK

Except for the List of Subcontractors, pursuant to NJSA 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 NJSA 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 NJSA 40A:11-16 will not be permitted except with the consent of the County Engineer.

32. 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.

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 Commerce shall be observed.

33. 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.

34. 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.

35. PERMITS

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

36. 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.

37. CHANGE ORDERS

Change Order Procedures shall comply with *N.J.A.C.* 5:30-11.1 *et seq.*, "Change Orders and Open End Contracts" and subsequent provisions of the New Jersey Administrative Code.

38. 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.

39. 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.

40. 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 NJSA 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.

41. 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.

42. 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.

43. 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.

44. AFFIRMATIVE ACTION REQUIREMENTS

EXHIBIT B (Revised 4/10)

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

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, up-grading, 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 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 N.J.S.A. 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

G-22 Revised: 2016.08.30 trade consistent with the targeted employment goal prescribed by N.J.A.C. I7:27-7.2; provided, however, that the Division 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 Division is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division, 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. I7:27-7.2. 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 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:
- (I) To notify the public agency compliance officer, the Division, 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 Division. 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 Division, 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 Division.
- (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 Division and submitted promptly to the Division 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 Division an initial project workforce report (Form AA 201) electronically provided to the public agency by the Division, 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 Division 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 Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division 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 Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to **Subchapter I0 of the Administrative Code (NJAC 17:27).**

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Revised: 2016.08.30

45. INVESTMENT ACTIVITIES IN IRAN

Pursuant to P.L. 2012, c.25, codified as NJSA 2:32-55 *et seq*, prohibits State and local public contracts with persons or entities engaging in certain investment activities in energy or finance sectors of Iran.

46. COMPLIANCE WITH THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT - (NJSA 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 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.

47. 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

G-26 Revised: 2016.08.30 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.

48. 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:

- 1. Project to which material is consigned;
- 2. Name of the Contractor to which the material is supplied;
- 3. Kind of material supplied;
- 4. Quantity of material represented by the Certificate;
- 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.

49. 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.

50. 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.

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51. 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.

Proof of	business registration shall be
	A copy of a Business Registration Certificate issued by the Department of
the T	reasury, Division of Revenue; or
	A copy of the web version provided by the NJ Division of Revenue, or
Register o	online at http://www.state.nj.us/treasury/revenue/busregcert.htm. Click the "online"

link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-

Note: A NJ Certificate of Authority is not acceptable.

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

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:

N.J.S.A. 52:32-44 imposes the following requirements on Contractors and all subcontractors that knowingly provide goods or perform services for a Contractor fulfilling this contract:

- 1) the Contractor shall provide written notice to its subcontractors and suppliers to submit proof of business registration to the Contractor;
- 2) subcontractors through all tiers of a project must provide written notice to their subcontractors and suppliers to submit proof of business registration and

- subcontractors shall collect such proofs of business registration and maintain them on file:
- prior to receipt of final payment from a contracting agency, the Contractor must submit to the contacting agency an accurate list of all subcontractors and suppliers or attest that none was used; and,
- 4) during the term of this contract, the Contractor and its affiliates shall collect and remit, and shall notify all subcontractors and their affiliates that they must collect and remit, to the Director, New Jersey Division of Taxation, 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 this State.

A Contractor, subcontractor or supplier who fails to provide proof of business registration or provides false business registration information shall be liable to a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration copy not properly provided or maintained under a contract with a contracting agency. Information on the law and its requirements are available by calling (609) 292-9292.

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52. 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.

53. AMERICAN GOODS AND PRODUCTS WHERE POSSIBLE

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

54. 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 NJSA 19A:44A-1 et. seq. are NOT REQUIRED to be provided with the bids.

55. STATEMENT OF EQUIPMENT TO BE USED IN CONSTRUCTION

Pursuant to NJSA 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.

56. 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," (NJSA 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).

LAURA M. SCUTARI, QPA, MPA DIRECTOR/DIVISION OF PURCHASING

BID DOCUMENT SUBMISSION CHECKLIST

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

EACH	BIDDER SHOULD COMPLETE THIS FORM AND INITIAL EACH ENTRY.
DATE	COMPLETED:
	SE SUBMIT BID DOCUMENTS ON SINGLE SIDED PAPER ONLY, WITH THE EXCEPTION OF URETY AND BID BOND DOCUMENTS.
	CORDANCE WITH THE BID SPECIFICATIONS I HAVE REVIEWED, COMPLETED / EXECUTED NCLUDED THE 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 Company 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 BOTH 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") should be included with the bids as it must be received by the County prior to the award of the contract. The BRC provided <u>must show</u> that the Bidder was registered at the time of receipt of bids or the bid will be rejected.

	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 should be included with the bid as the BRC(s) must be received by the County prior to the award of the contract. Each subcontractor's certificate provided <u>must show</u> that the subcontractor was registered at the time of the receipt of bids or the bid will be rejected.
	_ 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 – 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 form
I HAV	/E 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 DIVISION OF ENGINEERING AT 908-789-3675

BIDDING DOCUMENTS

The Bidding Documents consist of the following items:

- ADDENDA, if issued
- CLARIFICATIONS, if issued
- INSTRUCTION TO BIDDERS
- BID FORM
- SPECIFCATIONS: 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.

Revised: 2016.08.30

Bidder's Name	!
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BID FORM

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

REPLACEMENT OF EAST HAZELWOOD AVENUE MINOR BRIDGE (RA-69) CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY BA#51-2016; UNION COUNTY ENGINEERING PROJECT #2013-009

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	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
			ROADWAY PAY ITEMS	6	
1	1	LS	MOBILIZATION	\$	\$
2	230	LF	SILT FENCE	\$	\$
3	15	UN	HAYBALE (IF AND WHERE DIRECTED)	\$	\$
4	65	LF	FLOATING TURBIDITY BARRIER, TYPE 2	\$	\$
5	900	SF	SEDIMENT CONTROL BAG	\$	\$
6	7	UN	INLET FILTER TYPE 2, 2 X 4	\$	\$
7	30	UN	BREAKAWAY BARRICADE	\$	\$
8	30	UN	DRUM	\$	\$
9	50	UN	TRAFFIC CONE	\$	\$
10	300	SF	CONSTRUCTION SIGNS	\$	\$

ITEM	CONTRACT	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
11	50,000	DOL	TRAFFIC DIRECTOR, UNIFORM POLICE (IF & WHERE DIRECTED)	\$50,000.00	\$50,000.00
12	530	LF	CONSTRUCTION BARRIER CURB	\$	\$
13	2	UN	TEMPORARY CRASH CUSHION, QUADGUARD 3 BAYS X 24" WIDE	\$	\$
14	2	UN	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	\$	\$
15	2	UN	PORTABLE VARIABLE MESSAGE SIGN	\$	\$
16	1	LS	FUEL PRICE ADJUSTMENT	\$5,000.00	\$ 5,000.00
17	1	LS	ASPHALT PRICE ADJUSTMENT	\$1,000.00	\$1,000.00
18	-	-	NO ITEM	\$0.00	\$ 0.00
19	2500	CY	EXCAVATION, UNCLASSIFIED	\$	\$
20	850	CY	I-9 SOIL AGGREGATE	\$	\$
21	1900	SY	DENSE GRADED AGGREGATE BASE COURSE, 4" THICK	\$	\$
22	300	GAL	TACK COAT	\$	\$
23	660	GAL	PRIME COAT	\$	\$
24	230	TON	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	\$	\$
25	660	TON	HOT MIX ASPHALT 25M64 BASE COURSE, 6" THICK	\$	\$
26	125	SY	NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	\$	\$

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
27	7	UN	RECONSTRUCTED INLET, TYPE B USING NEW CASTING	\$	\$
28	2	UN	RESET CASTING (IF & WHERE DIRECTED)	\$	\$
29	200	SY	CONCRETE SIDEWALK, 4" THICK	\$	\$
30	400	LF	10" X 20" CONCRETE VERTICAL CURB	\$	\$
31	200	LF	BEAM GUIDE RAIL	\$	\$
32	50	LF	BEAM GUIDE RAIL ELEMENT	\$	\$
33	42	LF	THRIE BEAM GUIDE RAIL, BRIDGE	\$	\$
34	1	UN	FLARED GUIDE RAIL TERMINAL	\$	\$
35	2	UN	TANGENT GUIDE RAIL TERMINAL	\$	\$
36	200	SF	TRAFFIC MARKINGS. THERMOPLASTIC	\$	\$
37	1300	LF	TRAFFIC STRIPES, LONG-LIFE EPOXY RESIN, 4"	\$	\$
38	200	SY	TOPSOILING, 6" THICK	\$	\$
39	200	SY	TOPSOIL STABILIZATION, TYPE 2 MAT	\$	\$
40	200	SY	STRAW MULCHING	\$	\$

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
41	200	SY	FERTILIZING AND SEEDING, TYPE A-3	\$	\$
42	100	CY	EXCAVATION TEST PITS (IF & WHERE DIRECTED)	\$	\$
43	90	LF	18" REINFORCED CONCRETE PIPE, CLASS IV	\$	\$
			BRIDGE PAY ITEMS		
44	1	LS	CLEARING SITE - BRIDGE	\$	\$
45	1	LS	TEMPORARY COFFERDAM	\$	\$
46	1	LS	TEMPORARY SHEETING	\$	\$
47	35,000	LB	REINFORCEMENT STEEL, EPOXY-COATED	\$	\$
48	170	CY	CONCRETE FOOTING	\$	\$
49	120	CY	CONCRETE ABUTMENT WALLS	\$	\$
50	55	CY	CONCRETE WINGWALLS	\$	\$
51	1	LS	PRE-CAST, REINFORCED CONCRETE STRUCTURAL SLAB	\$	\$
52	74	LF	CONCRETE BRIDGE PARAPET WITH ARCHITECTURAL FINISH	\$	\$

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
53	6	CY	CONCRETE BRIDGE SIDEWALK	\$	*
54	2	UN	DATE PANEL	\$	\$

TOTAL BASE BID ITEMS:	
Written	Figures
BID CONTINGENCY: (To be used if and when directed by the	he County)
One Hundred Thousand Dollars and No Cents Written	\$100,000.00 Figures
TOTAL BASE BID ITEMS PLUS BID CONTINGENCY AMOUN	NT:
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.

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Revised: 2016.08.30

Diddel 3 Name	Bidder's	Name	
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CONSENT OF SURETY

TO ACCOMPANY PROPOSAL (BID)

	$_{\scriptscriptstyle \perp}$ (hereinafter called Surety), organized and existing under the law	ws of the State of
	_ duly authorized and qualified to transact business in the State	of New Jersey, in
consideration of the sum	of One Dollar (\$1.00), lawful money of the United States of Ame	erica, to it in hand
paid, receipt whereof is h	nereby acknowledged, and in consideration, hereby certifies and	agrees that if the
contract for which the a	attached proposal is made be awarded to	(hereinafter
called Contractor) for the	e performance of certain work and labor or the supplying of cer	tain materials, or
both, as more particularly	ly set forth in said proposal and described for purposes of this	instrument as a
proposal for	to the COUNTY OF UNION and if Contractor sh	nall enter into the
contract, Surety will beco	ome bound as surety for its faithful performance, labor and mate	rial payment and
will provide the Contracto	or with a performance, labor and material payment bond in the f	ull amount of the
contract price.		
NOTE:	NAME OF INSURANCE COMPANY	-
Expiration date Needed if Annual Surety	ADDRESS:	-
		_
	ORIGINAL SIGNATURE	
	ATTORNEY IN EACT FOR INSURANCE 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**.

5.	You cannot witness	vour own signature
J.	TOU Callifor Williess	your own signature.

	NAME OF BIDDER
ORIGINAL SIGNATURE CORPORATE SECRETARY	ADDRESS OF BIDDER
	TEL:
PRINT NAME AND TITLE CORPORATE SECRETARY	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.

Bidder's Name

Fax #

BIDDER DISCLOSURE STATEMENT

N.J.S.A. 52:25-24.2 (P.L. 1977 c. 33)

Failure of the bidder/respondent to submit the required information is cause for automatic rejection. CHECK ONE I certify that the list below contains the names and home addresses of all stockholders holding 10% or more of the issued and outstanding stock of the undersigned. I certify that no one stockholder owns 10% or more of the issued and outstanding stock of the undersianed. LEGAL NAME OF BIDDER: _____ Check the box that represents the type of business organization: □ Partnership □ Corporation □Sole Proprietorship □Limited Partnership □Limited Liability Company □Limited Liability Partnership □ Subchapter S Corporation Complete if the bidder/respondent is one of the 3 types of corporations: Date Incorporated: Where Incorporated: **BUSINESS ADDRESS:** Street Address City State Zip Code

Pursuant to N.J.S.A. 52:25-24.2, also referred to as P.L. 1977, c. 33, no corporation or partnership shall be awarded any contract for the performance of any work or the furnishing of any materials or supplies, unless, prior to the receipt of the bid or accompanying the bid of said corporation or partnership, there is submitted a statement setting forth the names and addresses of all stockholders in the corporation or partnership who own ten (10) percent or more of its stock of any class, or of all individual partners in the partnership who own a ten (10) percent or greater interest therein. Further, the Attorney General has concluded that the provisions of N.J.S.A. 52:25-24.2, in referring to corporations and partnerships, are intended to apply to all forms of business entities, including, but not limited to, corporations, limited partnerships, limited liability companies, limited liability partnerships, Subchapter S corporations, partnerships and sole proprietorships.

Telephone #

Bidders are required to disclose whether they are a partnership, corporation, limited liability company or sole proprietorship. The Stockholder Disclosure Certification form shall be completed, signed and notarized. Failure of the bidder to submit the required information is cause for automatic rejection of the bid.

Bidder's	Name	

BIDDER DISCLOSURE STATEMENT - (Continued)

N.J.S.A. 52:25-24.2, also referred to as **P.L. 1977, Ch. 33**, requires all corporate, limited liability and partnership bidders for state, county, municipal or school district contracts to submit a list of names and addresses of all stockholders owning 10% or more of their stock or 10% or more of the stock of the corporate stockholders or in the case of partnership or limited liability company, the names and addresses of those partners or owners owning 10% or greater interest in the partnership or limited liability company. Furthermore, the Union County Board of Chosen Freeholders requires a statement from all Bidders, which must indicate all Principals of Bidders.

You must set forth the name, home address, title and percentage of ownership of every person who is an owner of the bidder. You must also set forth the business form of the bidder.

II. Principals:

NAME HOME ADDRESS TITLE % OF OWNERSHIP

1.
2.
3.
4.

If one or more of the owners of the Bidder is itself a corporation, limited liability company or partnership, then for that corporation, limited liability company or partnership owner you must set forth the name, home address, title and percentage of ownership of every person who is an owner of that corporation, limited liability company or partnership.

NAME HOME ADDRESS TITLE % OF OWNERSHIP

1.
2.
3.
4.

Bidder's Name	Bidder's Name
---------------	---------------

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: \$ Specific Scope of Work Subcontracted: License No. Company Name: Address: Telephone: Subcontract Amount: \$ Specific Scope of Work Subcontracted: License No. Company Name: Address: Telephone: _____ Subcontract Amount: \$_____ Specific Scope of Work Subcontracted: License No. _____ IF MORE THAN THREE SUBCONTRACTORS, PLEASE COPY THIS SHEET AS NECESSARY AND ATTACH TO THE BID PACKAGE.

(Continued on following page)

Bidder's	Name	

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

Bidder's	Name:	

ACKNOWLEDGMENT OF ADDENDUM

COUNTY OF UNION

(Name of Construction /Public V	Vorks Project)	(Project or	· Bid Number)	
Pursuant to N.J.S.A. 40A:11-23.1a., notices, revisions, or addenda to the of receipt, bidder acknowledges the or addendum. Note that the County failure to include provisions of change	bid advertisement, s submitted bid takes of Union's record o	specifications or into account the footice to bidde	bid documents. By ind e provisions of the noti ers shall take preceden	icating date ce, revision ce and that
Local Unit Reference Number or Title of Addendum/Revision	How Received (m up, etc.)	ail, fax, pick-	Date Received	
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.

Proof of business registration shall be

	A copy of a Business Registration Certificate issued by the Department of the Treasury,
Divis	sion of Revenue; 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 not 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

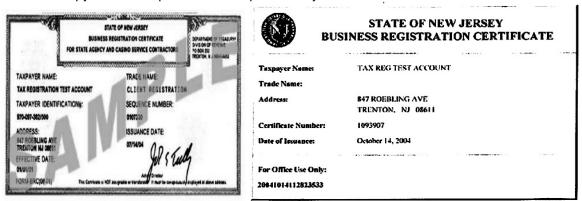
Mandatory Requirement

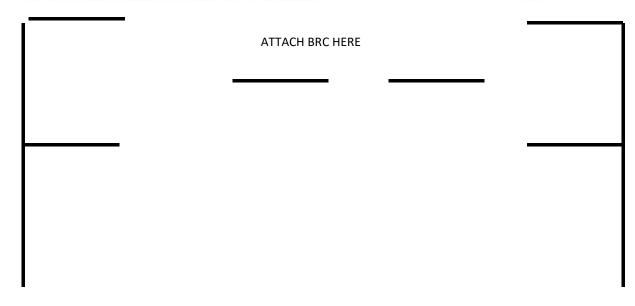
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If subcontractors are named on the bid, proof of the business registration for each must be provided prior to the award of a contract. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey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

Proof of business registration shall be:

- A copy of a Business Registration Certificate issued by the Department of Treasury, Division of Revenue; or
- A copy of the web printed version provided by the NJ Division of Revenue





Blader's Name	idder's Name
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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 <u>non-responsive and award the contract to the next lowest responsible bidder</u>.

NAME OF BIDDER
ORIGINAL SIGNATURE
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 company has never defaulted under any contract. Should you not sign this form due to prior defaults, please provide details on an attached sheet.

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

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

Bidder's Name	!

CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT

STATE OF NEW JERSEY /)
) SS:
COUNTY OF)	
I,		, of the (City, Town, Borough, etc.) of
State of to law on my oath depose and say		, of the (City, Town, Borough, etc.) of, of full age, being duly sworn according
to law on my oath depose and say	that:	
I am	of the firm of	
the Bidder making the proposal f	or the above named Pr	roject ("Contractor"), and that I executed said
proposal with full authority to do so	; and that said Contracto	r, pursuant to N.J.S.A. 40A:11-20, certifies that
it owns, leases or controls all th	ne necessary equipmen	nt required by the Plans, Specifications and
Advertisements under this Bids are	asked for.	
If the Bidder is not the actual owner	er or lessee of any such	equipment, then the Bidder shall attach to this
Certificate information identifying	the source from which	the equipment will be obtained, and such
information shall be accompanied	by a certificate from the	e owner or person in control of the equipment
	-	pment required during such time as may be
,		princing required during such time as may be
necessary for the completion of that	at portion of the contract.	
(Also type or print name of affiant ι	under signature)	
Rv:		

Bidder's	Name	
----------	------	--

NON-COLLUSION AFFIDAVIT

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

STATE OF)	
COUNTY OF) SS :)	
and say that: I am	of the firm of the firm of the pove named project, and the said proposal who any agreement, particularly betitive bidding in connumber proposal and in this APF UNION, NEW JERSE ments contained in the according agency has been understanding for a condonafide established co	, in the County of, ng duly sworn according to law, on my oath depose f, the bidder d that I executed the said proposal for the above with full authority to do so; that said bidder has not, ticipation in any collusion, or otherwise taken any ection with the above named project; and that all ffidavit are true and correct, and made with full Y relies upon the truth of the statements contained affidavit in awarding the contract for the said project. Seen employed or retained to solicit or secure such mission, percentage, brokerage or contingent fee, mmercial or selling agencies maintained by
		NAME OF BIDDER
		ORIGINAL SIGNATURE ONLY
		NOTE: The person who signed the bidder signature page for the bidder should sign this form also.
Subscribed and sworn before r thisday of, 200	• •	
Notary Public of the State of My commission expires:		

WARNING: IF YOU FAIL TO FULLY, ACCURATELY, AND COMPLETELY 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. 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 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

Bidder's	Name	

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 U.S.C.S12.101 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.

(Name o	of Bidder)
(Permai	nent Main Office Address)
(When 0	Organized)
(If a Coi	rporation, where incorporated)
	r of years your organization has been engaged in construction or contracting business und firm or trade name?
	any years of experience in construction work has your organization had (a) as a general tor? And/or (b) As a subcontractor?
	ets on hand: (Attach a list or table showing gross amounts of each Contract and the riate dates of completion)
General	I character of work performed by you
Have yo	ou ever failed to complete any work awarded to you?

Revised: 2016.08.30

Bidder's	Name	

STATEMENT OF BIDDER'S QUALIFICATIONS - (continued)

11.	Has any officer or partner of your organization ever failed to complete a construction contract handled in its own name? If so, state name of individual, name of owner, location and type of project, and reason for the failure to complete.
12.	List your major equipment available for this Contract.
13.	Experience in the construction work similar in importance to this Project.
14.	Have you had any material adverse changes from the trades as listed in NJ Notice of Classification within last five (5) years? If so, list prior classification.
15.	Background and experience of the principal members of your organization, including the officers.

Individual's Name	Present Position or Office	Yrs. of Construction Experience	Magnitude & Type of Work	In What Capacity

16.	Bank Reference. (Name, Address, Phone, Representative) Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the proper agency?					
17.						
18.		proper agen	quests any person, firm or corporation to furnish any cy in verification of the responses comprising this			
17.	Bidder's telephone number, fax	x 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 this	ibed and sworn to before me	, 20				
Specify	Notary Public of New Jersey/ / Other State mmission Expires	, 20_				

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

Bidder's N	ame

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.

Bidder's	Name	

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 and sworn to before me

this $_$ ____, 20 $_$.

(Seal) Notary Public of New Jersey/ Specify Other State

My Commission Expires______, 20___.

Bidder's Name	
---------------	--

AFFIDAVIT REGARDING LIST OF DEBARRED, SUSPENDED OR DISQUALIFIED BIDDERS

STATE OF NEW JERSEY /)
Spec	ify, if Other	
COUNTY OF	-)
Ι,		, of the (City, Town, Borough, etc.) of
State of		, of the (City, Town, Borough, etc.) of, of full age, being duly sworn according
to law on my oath depose and say that:		
l am	of the firm of	of ,
authority to do so. Said Bidder is not at the	time of the makin st of Debarred, Su	of, I have executed the said Proposal with full ag this bid included on the New Jersey State suspended or Disqualified Bidders as a result
		Name of Contractor
	By: (Signatur	re of Authorized Representative)
Subscribed and sworn to before me this day of	, 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.

Bidder's Name	
---------------	--

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

yes		no	If yes, please provide full, detailed explanation.
	of another contra		faulted on a contract, thereby requiring a public entity to provide the goods or perform the services or to
yes		no	If yes, please provide full, detailed explanation.
to look to your surety	for completion of	the c	raulted on a contract, thereby requiring a public entity contract or tender of the costs of completion?
		the c	
to look to your surety	for completion of	the c	contract or tender of the costs of completion?
to look to your surety yes Within the past ten (1 the agencies or depa	0) years, have yourtment of the execution of	no u bee	contract or tender of the costs of completion?

Bidder's	Name	

PRIOR NEGATIVE EXPERIENCE CERTIFICATION

I hereby certify that the above statements are truday of, 20	e and accurate as of this
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	
My Commission Expires	, 20

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

Bidder's	Name	

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 PROJECT: REPLACEMENT OF EAST HAZELWOOD AVENUE MINOR BRIDGE (RA-69) In accordance with the requirements of the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56 et al *, the undersigned contractor on the public work being performed for: **COUNTY OF UNION** hereby certifies that he/she has complied with the contract requirements regarding the payment of the minimum prevailing wages established under "The New Jersey Prevailing Wage Act" N.J.S.A. 34:11-56 et CONTRACTOR: ADDRESS: BY: ORIGINAL SIGNATURE ONLY **STATE OF NEW JERSEY** COUNTY OF Being by me duly sworn according to law, on his oath deposes and says that _____is ___ of _____the above named contractor, and that the facts set forth in the above statement are true.

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.

Subscribed and sworn before me this _____day of ______, 200____.

My Commission Expires: _____

Notary Public: _____

Bidder's Name

UNCOMPLETED CONTRACTS AFFIDAVIT

(To be Submitted with DPMC Form 701)

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 SOUCE (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 FRM ENTITY FOR VERIFICATION

TOTAL AMOUNT OF UNCOMPLETED CONTRA	ACTS \$	
Sworn and Subscribed to Before me	BIDDER:	
Thisday of, 20	(Signature)	
Notary Public	(Print Name)	

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

Bidder's Name

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.

Bidder's	Name
----------	------

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.

Bidder's Name_	
----------------	--

TIME OF COMPLETION

- , ,	·	e of work will be started within ten (10) dred Eighty (180) calendar days from
, NAME (Print or type)	ofCOMPANY	
Agree to complete work in the time f	rame specified	SIGNATURE
SITE VISIT – GENERAL CONTRAC	CTOR	
NAME (Print or type)	of COMPANY	
visited the site of the work on		SIGNATURE

COUNTY OF UNION NEW JERSEY Division of Purchasing

DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN

Solicitation Number:	Bidder/Offeror:
to enter into or renew a contract that the person or entity, or one on a list created and maintained investment activities in Iran. If the are the subject of the law, s/he shincluding but not limited to, impo-	5, any person or entity that submits a bid or proposal or otherwise proposes a must complete the certification below to attest, under penalty of perjury, of the person or entity's parents, subsidiaries, or affiliates, is not identified d by the Department of the Treasury as a person or entity engaging in the Director finds a person or entity to be in violation of the principles which hall take action as may be appropriate and provided by law, rule or contract, posing sanctions, seeking compliance, recovering damages, declaring the arment or suspension of the person or entity.
I certify, pursuant to Public La authorized to bid/renew:	w 2012, c. 25, that the person or entity listed above for which I am
or entity that provides oil or lique	tes of \$20,000,000 or more in the energy sector of Iran, including a person efied natural gas tankers, or products used to construct or maintain pipe efied natural gas, for the energy sector of Iran,
	t extends \$20,000,000 or more in credit to another person or entity, for 45 ntity will use the credit to provide goods or services in the energy sector in
subsidiaries, or affiliates has eng description of the activities must perjury. Failure to provide such w	by is unable to make the above certification because it or one of its parents, gaged in the above-referenced activities, a detailed, accurate and precise be provided in part 2 below to the Division of Purchase under penalty of will result in the proposal being rendered as non-responsive and appropriate will be assessed as provided by law.
IRAN. You must provide, accura	URTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN the and precise description of the activities of the bidding person/entity, or affiliates, engaging in the investment activities in Iran outlined above by
Name	Relationship to Bidder/Offeror
Description of Activities	
Duration of Engagement	Anticipated Cessation Date

DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN - (Continued)

Bidder/Offeror	
Contact Name	Contact Phone Number
and any attachments thereto to the best of the execute this certification on behalf of County is relying on the information controlling to the County in writing of any changes to am aware that it is a criminal offense to and if I do so, I recognize that I am succonstitute a material breach of my agree	ny oath, hereby represent and state that the foregoing information of my knowledge are true and complete. I attest that I am authorized the above referenced person or entity. I acknowledge that Union ained herein and hereby acknowledge that I am under a continuing on through the completion of any contracts with the County to notify the answers of information contained herein. I acknowledge that I make a false statement or misrepresentation in this certification, abject to criminal prosecution under the law and that it will also ment(s) with Union County, New Jersey and that the County at its ting from this certification void and unenforceable.
Full Name (Print)	Signature
Title	Date

NEW JERSEY PREVAILING WAGE RATES
It is recommended the bidder download the wage rates immediately prior to the scheduled bid due date to insure the latest rates are included in their bid.
http://lwd.dol.state.nj.us/labor/wagehour/wagerate/prevailing_wage_determinations.html



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

	03/14/16
Journeyman (Mechanic)	W37.18
	B21.68
	T58.86

Craft: Air Conditioning & Refrigeration - Service and Repair

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
As Shown	Mo. 1-3	Mo. 4-12	2nd Year	3rd Year	4th Year	5th Year		Wage = %	of Jnymn	Wage
Wage and Bene	50%	55%	60%	65%	75%	85%		Bene = %	of Jnymn	Bene

Ratio of Apprentices to Journeymen - 1:4

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 3-1-13:

INTERVAL PERIOD AND RATES

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

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

	01/01/16
Foreman	W47.00
	B41.02
	T88.02
General Foreman	W49.00
	B42.00
	T91.00
Journeyman	W42.00
	B39.42
	T81.42
I .	1

Craft: Boilermaker APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES								
1000 Hours	65%	70%	75%	80%	85%	90%	95%		
Benefit =	33.33	34.20	35.08	35.94	36.82	37.69	38.55		

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

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County - UNION

hours per week.

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

	02/26/16
Foreman	W31.54
	B16.17
	T47.71
General Foreman	W32.04
	B16.17
	T48.21
Mechanic	W30.04
	B16.17
	T46.21

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).

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

	05/01/16	11/01/16	05/01/17	05/01/18
Deputy Foreman	W42.25	W0.00	W0.00	W0.00
	B30.68	B0.00	B0.00	B0.00
	T72.93	T73.91	T76.04	T78.23
Foreman	W45.25	W0.00	W0.00	W0.00
	B30.68	B0.00	B0.00	B0.00
	T75.93	T76.91	T79.04	T81.23
Journeyman	W39.25	W0.00	W0.00	W0.00
	B30.68	B0.00	B0.00	B0.00
	T69.93	T70.91	T73.04	T75.23

Craft: Bricklayer, Stone Mason APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
6 Months	40%	50% 55% 60% 65% 70% 75% 80%									
Benefits	3.72	4.65	5.12	5.58	20.28	21.62	22.97	24.31			

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, 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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County - UNION

Craft: Carpenter PREVAILING WAGE RATE

	05/06/16	11/01/16	05/01/17	11/01/17	05/01/18	11/01/18
Foreman	W52.83	W0.00	W0.00	W0.00	W0.00	W0.00
	B30.11	B0.00	B0.00	B0.00	B0.00	B0.00
	T82.94	T83.74	T85.04	T86.04	T87.29	T88.54
Journeyman	W45.94	W0.00	W0.00	W0.00	W0.00	W0.00
	B26.19	B0.00	B0.00	B0.00	B0.00	B0.00
	T72.13	T72.93	T74.23	T75.23	T76.48	T77.73

Craft: Carpenter APPRENTICE RATE SCHEDULE

INTERVAL		PERIC	DD AND RAT	ES						
Yearly	40%	55% 65% 80% 90%								
Benefit	57% of	Appren	1	Wage Rate	for all	intervals				

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 7:00 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.

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, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

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County - UNION

Craft: Carpenter - Resilient Flooring PREVAILING WAGE RATE

	05/06/16	11/01/16	05/01/17	11/01/17	05/01/18	11/01/18
Foreman	W52.83	W0.00	W0.00	W0.00	W0.00	W0.00
	B30.11	B0.00	B0.00	B0.00	B0.00	B0.00
	T82.94	T83.74	T85.04	T86.04	T87.29	T88.54
Journeyman	W45.94	W0.00	W0.00	W0.00	W0.00	W0.00
	B26.19	B0.00	B0.00	B0.00	B0.00	B0.00
	T72.13	T72.93	T74.23	T75.23	T76.48	T77.73

Craft: Carpenter - Resilient Flooring APPRENTICE RATE SCHEDULE

INTERVAL		PERIC	DD AND RAT	ES					
Yearly	40%	55%	65%	80%	90%				
Benefit	57%	of	Appren	tice	Wage	for all	intervals		

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 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 wage rate, the second shift shall receive the regular wage rate plus 15% and the third shift shall receive the regular wage 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. The second shift shall receive the regular wage rate plus 15% and the third shift shall receive the regular wage rate plus 20%.

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, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

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County - UNION

Craft: Cement Ma	ason P	REVAILING WAGE RAT	E			
See "B	ricklayer, Stone Mason"	Rates				
Craft: Cement M	ason A	APPRENTICE RATE SCH	EDULE			
INTERVAL	PERIO	OD AND RATES				
Ratio of Apprentic	es to Journeymen - 1:4	1	+			
Craft: Cement M	ason (COMMENTS/NOTES				
***See "Bricklayer	, Stone Mason" Rates**	k				

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County - UNION

Craft: Diver PREVAILING WAGE RATE

	09/09/16	11/01/16	05/01/17	11/01/17	05/01/18	11/01/18
Diver	W55.84	W0.00	W0.00	W0.00	W0.00	W0.00
	B43.72	B0.00	B0.00	B0.00	B0.00	B0.00
	T99.56	T100.71	T101.91	T103.11	T104.36	T105.61
Tender	W44.10	W0.00	W0.00	W0.00	W0.00	W0.00
	B43.72	B0.00	B0.00	B0.00	B0.00	B0.00
	T87.82	T88.97	T90.17	T91.37	T92.62	T93.87

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

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

	09/09/16	11/01/16	05/01/17	11/01/17	05/01/18	11/01/18
Foreman	W50.72	W0.00	W0.00	W0.00	W0.00	W0.00
	B43.72	B0.00	B0.00	B0.00	B0.00	B0.00
	T94.44	T95.59	T96.79	T97.99	T99.24	T100.49
Foreman	W50.14	W0.00	W0.00	W0.00	W0.00	W0.00
(Concrete Form Work)	B31.56	B0.00	B0.00	B0.00	B0.00	B0.00
	T81.70	T81.70	T82.90	T84.10	T85.35	T86.60
Journeyman	W44.10	W0.00	W0.00	W0.00	W0.00	W0.00
	B43.72	B0.00	B0.00	B0.00	B0.00	B0.00
	T87.82	T88.97	T90.17	T91.37	T92.62	T93.87
Journeyman	W43.60	W0.00	W0.00	W0.00	W0.00	W0.00
(Concrete Form Work)	B31.56	B0.00	B0.00	B0.00	B0.00	B0.00
	T75.16	T75.16	T76.36	T77.56	T78.81	T80.06

Craft: Dockbuilder APPRENTICE RATE SCHEDULE

INTERVAL		PERIC	DD AND RAT	<u>ES</u>						
Yearly	17.64	4 22.05 28.67 35.28								
Benefit	29.61	for all	intervals			Form	Only	= 21.81	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

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.

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.

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County - UNION

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

	05/01/16	05/01/17
Foreman	W42.55	W44.30
	B23.10	B22.60
	T65.65	T66.90
General Foreman	W44.45	W46.20
	B23.10	B22.60
	T67.55	T68.80
Journeyman	W38.75	W40.50
	B23.10	B22.60
	T61.85	T63.10

Craft: Drywall Finisher APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
4 Months	30%	40% 50% 60% 70% 75% 80% 85% 90%									
Benefits	Intervals	1 to 3 =	9.85	Intervals	4 to 6 =	12.28	Intervals	7 to 9 =	14.95		

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

	05/30/16	05/29/17	05/28/18
Cable Splicer	W58.71	W60.08	W61.52
	B33.74	B34.53	B35.35
	T92.45	T94.61	T96.87
Foreman	W59.77	W61.17	W62.64
	B34.34	B35.15	B35.98
	T94.11	T96.32	T98.62
Journeyman	W53.37	W54.62	W55.93
	B30.67	B31.39	B32.13
	T84.04	T86.01	T88.06
		l	l

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

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:

- On any job where there are 1 to 10 Journeymen electricians, 1 shall be designated a 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.

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

PREVAILING WAGE RATE

	11/06/15
Master	W51.01
Technician/General	B29.16
Foreman	T80.17
Senior Technician/Lead	W46.70
Foreman	B26.69
(21-30 Workers on Job)	T73.39
Technician A/Foreman	W44.73
(11-20 Workers on Job)	B25.57
	T70.30
Technician B/Working	W42.77
Foreman	B24.45
(4-10 Workers on Job)	T67.22
Technician C/Journeyman	W39.24
(1-3 Workers on Job)	B22.43
	T61.67

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

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
6 Months	19.66	20.97	23.15	25.77	28.83	31.45	34.51	37.56		
Benefits	8.15	8.70	9.60	10.69	11.96	13.04	14.31	15.57		

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 10-31-14:

INTERVAL PERIOD AND RATES

6 Months 17.47 18.78 20.97 23.59 26.64 29.27 32.32 35.38 Benefits 7.25 7.79 8.70 9.78 11.05 12.14 13.40 14.67

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 8:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

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

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- 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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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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Craft: Electrician- Outside Commercial

PREVAILING WAGE RATE

			1
	05/30/16	05/29/17	05/28/18
Cable Splicer	W58.99	W60.37	W61.82
	B33.46	B34.24	B35.06
	T92.45	T94.61	T96.88
Certified Welder	W56.31	W57.62	W59.01
	B31.94	B32.68	B33.47
	T88.25	T90.30	T92.48
Equipment Operator	W53.63	W54.88	W56.20
	B30.42	B31.13	B31.88
	T84.05	T86.01	T88.08
Foreman (1-10	W60.07	W61.47	W62.94
Journeyman workers on	B34.07	B34.86	B35.70
job)	T94.14	T96.33	T98.64
Foreman (11-20	W61.67	W63.11	W64.63
Journeyman workers on	B34.98	B35.79	B36.66
job)	T96.65	T98.90	T101.29
General Foreman (21-30	W63.28	W64.76	W66.32
Journeyman workers on	B35.89	B36.73	B37.61
job)	T99.17	T101.49	T103.93
General Foreman (31-60	W68.65	W70.25	W71.94
Journeyman workers on	B38.94	B39.84	B40.80
job)	T107.59	T110.09	T112.74
General Foreman (61+	W69.72	W71.34	W73.06
Journeyman workers on	B39.54	B40.46	B41.44
job)	T109.26	T111.80	T114.50
Groundman	W32.18	W32.93	W33.72
	B18.26	B18.68	B19.13
	T50.44	T51.61	T52.85
Journeyman	W53.63	W54.88	W56.20
Lineman/Technician	B30.42	B31.13	B31.88
	T84.05	T86.01	T88.08
Sub-Foreman	W60.07	W61.47	W62.94
	B34.07	B34.86	B35.70
	T94.14	T96.33	T98.64

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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	56.4% of	Journey	man	wage	+ \$.01				

Craft: Electrician- Outside Commercial

COMMENTS/NOTES

EFFECTIVE 5-30-16- The apprentice benefit rate shall be 56.7% + \$.01.

EFFECTIVE 5-29-17- The apprentice benefit rate shall be 56.7% + \$.01.

EFFECTIVE 5-28-18- The apprentice benefit rate shall be 56.7% + \$.01.

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

FOREMAN REQUIREMENTS:

On jobs where there are 2 Journeymen, one shall be a Foreman. The following number of Foreman, General Foreman, Assistant General Foreman and Sub-Foreman shall be required with respect to number of Journeymen on site:

2-10 Journeymen (1 Foreman)

11-20 Journeymen (1 Foreman and 1 Sub-Foreman)

21-30 Journeymen (1 Foreman and 2 Sub-Foremen)

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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^{*} FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

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	62.5% 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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County - UNION

Craft: Electrician-Utility Work (South) PREVAILING WA	GE 1	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	26.72	28.95	31.18	33.41	35.63	37.86	40.09		
Benefits	23.08	24.40	25.72	27.02	28.33	29.64	30.94		

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

	03/17/16	03/17/17	03/17/18
Journeyman	W60.96	W62.64	W64.48
	B39.77	B41.56	B43.36
	T100.73	T104.20	T107.84

Craft: Elevator Constructor APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
Yearly	27.22	33.53	39.62	45.72								
Benefits	31.75	32.88	34.41	35.93								

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Constructor COMMENTS/NOTES

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 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

	03/17/16	03/17/17	03/17/18
Journeyman	W47.91	W49.14	W50.49
	B38.17	B39.91	B41.66
	T86.08	T89.05	T92.15

Craft: Elevator Modernization & Service APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
Yearly	27.22	26.35	31.14	35.93								
Benefits	31.68	31.99	33.37	34.74								

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Modernization & Service COMMENTS/NOTES

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.

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

06/20/16
00/20/10
W47.39
B23.26
T70.65
W49.39
B23.50
T72.89
W43.39
B22.78
T66.17

Craft: Glazier APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
4 Months	30%	40%	50%	60%	70%	75%	80%	85%	90%			
Benefits	Intervals	1 to 3 =	6.51	Intervals	4 to 6 =	9.33	Intervals	7 to 9 =	11.67			

Ratio of Apprentices to Journeymen - 1:4

Craft: Glazier COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AS OF 5-1-14:

INTERVAL PERIOD AND RATES

6 Months 50% 55% 60% 65% 70% 75% 80% 90% Benefits 8.10 8.10 10.34 10.34 11.51 11.51 14.62 14.62

Hazard/Height Pay: +\$1.00 per hour

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 rate.

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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

	10/13/15
Foreman	W51.77
	B29.42
	T81.19
General Foreman	W54.32
	B30.53
	T84.85
Journeyman	W50.49
	B28.86
	T79.35

Craft: Heat & Frost Insulator APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
Yearly	23.39	27.74	33.52	39.36							
Benefits	17.46	20.63	22.69	24.56							

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 8:00 AM and 4:30 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

	10/13/15
Asbestos Helper Abatement	W33.52 B22.69 T56.21
Firestop/Hazmat	W26.93 B9.25 T36.18
Foreman	W51.77 B29.42 T81.19

Craft: Heat & Frost Insulator - Asbestos Worker

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
	SEE	НЕАТ &	FROST	INSULAT								
				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 8:00 AM and 4:30 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: Ironworker PREVAILING WAGE RATE

	08/02/16	07/01/17
Rod /Fence Foreman	W42.24	W0.00
	B44.27	B0.00
	T86.51	T88.51
Rod/Fence Journeyman	W39.24	W0.00
	B44.27	B0.00
	T83.51	T85.51
Structural Foreman	W44.54	W0.00
	B44.27	B0.00
	T88.81	T90.56
Structural Journeyman	W41.54	W0.00
	B44.27	B0.00
	T85.81	T87.56

Craft: Ironworker APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
6 Months	50%	0% 60% 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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County - UNION

Craft: Laborer - Asbestos & Hazardous Waste Removal

PREVAILING WAGE RATE

	04/07/16
Journeyman (Handler)	W29.87
	B22.92
	T52.79

Craft: Laborer - Asbestos & Hazardous Waste Removal

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
Yearly	17.92	20.91	23.90	26.88								
Benefits	21.27	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 between 6:00 AM and 6:00 PM.

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.
- When the owner (Public Body) mandates that work is to be performed on Sunday, those hours may be worked at straight time, up to 8 hours per day, up to 40 hours per week.
- Benefits on ALL overtime hours shall be paid at straight time.

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

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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

	05/04/16	11/01/16	05/01/17	11/01/17	05/01/18
Class A Journeyman	W31.30	W0.00	W0.00	W0.00	W0.00
	B26.57	B0.00	B0.00	B0.00	B0.00
	T57.87	T58.77	T59.67	T60.72	T62.57
Class B Journeyman	W30.80	W0.00	W0.00	W0.00	W0.00
	B26.57	B0.00	B0.00	B0.00	B0.00
	T57.37	T58.27	T59.17	T60.22	T62.07
Class C Journeyman	W26.18	W0.00	W0.00	W0.00	W0.00
	B26.57	B0.00	B0.00	B0.00	B0.00
	T52.75	T53.65	T54.55	T55.60	T57.45
Foreman	W35.21	W0.00	W0.00	W0.00	W0.00
	B26.57	B0.00	B0.00	B0.00	B0.00
	T61.78	T62.68	T63.58	T64.63	T66.48
General Foreman	W39.13	W0.00	W0.00	W0.00	W0.00
	B26.57	B0.00	B0.00	B0.00	B0.00
	T65.70	T66.60	T67.50	T68.55	T70.40

Craft: Laborer - Building APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
6 Months	60%	50% 70% 80% 90%										
Benefit	23.32	23.32	23.32	23.32								

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 establised 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, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

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County - UNION

Craft:	Laborer - Heavy & General	PREVAILING WAGE RATE
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Rates are located in the "Statewide" rate package

Craft: Laborer - Heavy & General API

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
1000 Hours	60%	0% 70% 80% 90%										
Benefit	18.78	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.

With respect to the APPRENTICE RATE SCHEDULE, the following shall apply:

On 9-1-16- benefits shall be \$18.78.

On 3-1-17- benefits shall be \$19.53.

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

County - UNION

Craft: Millwright PREVAILING WAGE RATE

	05/01/16
Foreman	W52.96 B31.31 T84.27
Journeyman	W46.05 B27.30 T73.35

Craft: Millwright APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
6 Months	40%	40% 45% 50% 55% 60% 65% 70% 75% 85% 95%								95%		
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.
- When there are 21 or more Millwrights on a job, 2 shall be designated as Foremen.

The regular workday shall consist of 8 hours, starting between 7:00 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.

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, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

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County - UNION

Craft: Operating Engineer PF	REVAILING WAGE RATE
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Rates are located in the "Statewide" rate package

Craft: Operating Engineer APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES										
Yearly	60%	0% 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.

County - UNION

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.

County - UNION

Craft: Painter - Bridges PREVAILING WAGE RATE

	05/01/16	05/01/17
Foreman	W57.38	W61.13
	B26.92	B25.67
	T84.30	T86.80
General Foreman	W59.38	W63.13
	B26.92	B25.67
	T86.30	T88.80
Journeyman	W52.38	W56.13
	B26.92	B25.67
	T79.30	T81.80

Craft: Painter - Bridges APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
6 Months	40%	50%			60%	70%		80%	90%	
Benefits	Intervals	1 to 2 =	8.88	Intervals	3 to 4 =	10.81	Intervals	5 to 6 =	13.48	

Ratio of Apprentices to Journeymen - 1:4

Craft: Painter - Bridges COMMENTS/NOTES

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.
- 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, 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: Painter - Line Striping PREVAILING WAGE RATE

	12/01/15	12/01/16	12/01/17
Foreman (Charge Person)	W35.80	W36.80	W38.05
	B16.10	B16.90	B17.74
	T51.90	T53.70	T55.79
Helper (1st Year)	W28.05	W29.05	W30.30
	B16.10	B16.90	B17.74
	T44.15	T45.95	T48.04
Helper (2nd Year)	W29.38	W30.38	W31.63
	B16.10	B16.90	B17.74
	T45.48	T47.28	T49.37
Helper (3rd Year)	W31.53	W32.53	W33.78
	B16.10	B16.90	B17.74
	T47.63	T49.43	T51.52
Journeyman	W35.30	W36.30	W37.55
	B16.10	B16.90	B17.74
	T51.40	T53.20	T55.29

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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County - UNION

Craft: Painter - New Construction

PREVAILING WAGE RATE

	05/01/16	05/01/17
Foreman	W42.26 B22.94 T65.20	W44.39 B22.35 T66.74
General Foreman	W46.10 B23.40	W48.43 B22.81
Journeyman	T69.50 W38.42 B22.49 T60.91	T71.24 W40.36 B21.90 T62.26
	160.91	162.26

Craft: Painter - New Construction

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
4 Months	30%	40%	50%	60%	70%	75%	80%	85%	90%	
Benefits	Intervals	1 to 3 =	8.00	Intervals	4 to 6 =	10.00	Intervals	7 to 9 =	11.00	

Ratio of Apprentices to Journeymen - 1:4

Craft: Painter - New Construction

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM ON 5-1-14:

INTERVAL PERIOD AND RATES

6 Months 40% 45% 55% 65% 70% 75% 80% 90% Benefits 8.00 8.00 10.00 10.00 11.00 11.00 14.00 14.00

Spraying, sandblasting, lead abatement, work on tanks or stacks, 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.

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County - UNION

- 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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County - UNION

Craft: Painter - Repainting PREVAILING WAGE RATE

	05/01/16	05/01/17
Foreman	W31.59	W34.17
	B18.45	B18.45
	T50.04	T52.62
General Foreman	W34.45	W37.39
	B18.87	B18.45
	T53.32	T55.84
Journeyman	W28.74	W31.16
	B18.87	B18.45
	T47.61	T49.61

Craft: Painter - Repainting APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
	SEE	PAINTER	NEW	CONSTR	TION					

Ratio of Apprentices to Journeymen - 1:4

Craft: Painter - Repainting COMMENTS/NOTES

NOTE: These rates may only be used on jobs where no major alterations occur, and where not more than 3 other trades are present on the job, but may NOT, under any circumstances, be used for work on bridges, stacks, elevated tank, or generating stations.

Spraying, sandblasting, lead abatement, work on tanks or stacks, 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.

OVERTIME:

- Hours in excess of 8 per day and 40 per week 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.
- Four 10-hour days may be worked, at straight time, Monday through Sunday.

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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County - UNION

Craft: Painter- Containment PREVAILING WAGE RATE

	05/01/16	05/01/17
Journeyman	W33.43	W37.68
	B23.92	B22.92
	T57.35	T60.60

Craft: Painter- Containment COMMENTS/NOTES

NOTE: These rates shall require no painting, but used in a supporting capacity only, such as wrapping, boxing, fencing, etc. on tanks.

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..
- 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, 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: Painter-Elevated Water Tanks

PREVAILING WAGE RATE

	05/01/16	05/01/17
Foreman	W47.17	W50.92
	B24.17	B22.92
	T71.34	T73.84
General Foreman	W49.17	W52.92
	B24.17	B22.92
	T73.34	T75.84
Journeyman	W42.17	W45.92
-	B24.17	B22.92
	T66.34	T68.84

Craft: Painter-Elevated Water Tanks

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
	SEE	PAINTER	BRIDGES							

Craft: Painter-Elevated Water Tanks

COMMENTS/NOTES

These rates apply to: All new and repaint elevated 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.
- 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, 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: Painter-Structural Steel PREVAILING WAGE RATE

	05/01/16	05/01/17
Foreman	W46.12	W49.87
	B24.51	B23.26
	T70.63	T73.13
General Foreman	W48.12	W51.87
	B24.51	B23.26
	T72.63	T75.13
Journeyman	W41.12	W44.87
	B24.51	B23.26
	T65.63	T68.13

Craft: Painter-Structural Steel APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
	SEE	PAINTER	BRIDGES							

Craft: Painter-Structural Steel COMMENTS/NOTES

These rates apply to: All work in power plants (any aspect). On steeples, on dams, on hangers, transformers, substations, etc. and on open steel, whether new or repaint. All new work (excluding traditional commercial painting work) 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.
- 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, 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: Paperhanger - New Construction

PREVAILING WAGE RATE

05/01/16	05/01/17
W43.25 B22.59	W45.32 B21.44
T65.84	T66.76
W39.32	W41.20
B22.59 T61.91	B22.01 T63.21
	W43.25 B22.59 T65.84 W39.32 B22.59

Craft: Paperhanger - New Construction

APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
4 Months	30%	40%	50%	60%	70%	75%	80%	85%	90%	
Benefits	Intervals	1 to 3 =	8.00	Intervals	4 to 6 =	10.00	Intervals	7 to 9 =	11.00	

Ratio of Apprentices to Journeymen - 1:4

Craft: Paperhanger - New Construction

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM ON 5-1-14:

INTERVAL PERIOD AND RATES

6 Months 40% 45% 55% 65% 70% 75% 80% 90% Benefits 8.00 8.00 10.00 10.00 11.00 11.00 14.00 14.00

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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County - UNION

Craft: Paperhanger - Renovation PREVAILING WAGE RATE

	05/01/16	05/01/17
Foreman	W32.39	W35.06
	B18.96	B18.53
	T51.35	T53.59
Journeyman	W29.45	W31.88
	B18.96	B18.53
	T48.41	T50.41

Craft: Paperhanger - Renovation APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
	SEE	PAPER-	HANGER	NEW	LIC	TION				

COMMENTS/NOTES

Ratio of Apprentices to Journeymen - 1:4

Craft: Paperhanger - Renovation

NOTE: These rates may only be used on jobs where no major alterations occur, and where not more than 3 other trades are present on the job, but may NOT, under any circumstances, be used for work on bridges, stacks, elevated tanks, or

generating stations.

FOREMEN REQUIREMENTS:

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

OVERTIME:

- Hours in excess of 8 per day and 40 per week shall be paid at time and one-half the regular rate.
- Four 10-hour days may be worked, at straight time, Monday through Sunday.

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County - UNION

Craft: Pipefitter PREVAILING WAGE RATE

	05/04/16	05/01/17	05/01/18	05/01/19
Foreman	W51.07	W0.00	W0.00	W0.00
	B40.18	B0.00	B0.00	B0.00
	T91.25	T93.35	T95.57	T97.79
Journeyman	W47.32	W0.00	W0.00	W0.00
	B37.25	B0.00	B0.00	B0.00
	T84.57	T86.67	T88.89	T91.11

Craft: Pipefitter APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
Yearly	35%	45%	55%	65%	75%					
Benefit	14.46	18.16	21.89	25.48	27.82					

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 25% per hour.
- 3rd Shift (11:30 PM-7:00 AM) shall work 7 hours and receive 8 hours pay at the regular rate, plus 30% per hour.

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.
- 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.

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 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

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County - UNION

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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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County - UNION

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

	05/04/16
Foreman	W55.52
	B32.99
	T88.51
General Foreman	W59.12
	B32.99
	T92.11
Journeyman	W51.41
	B32.99
	T84.40

Craft: Plumber APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
Yearly	30%	45%	55%	65%	75%					
Benefits	12.77	18.77	20.44	22.13	23.80					

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

	06/06/16
Foreman	W36.52 B25.03 T61.55
Journeyman	W35.52 B25.03 T60.55

Craft: Roofer APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
6 Months	14.21	17.76	21.31	24.86	28.42	31.97				
Benefits	2.10	2.10	22.28	22.28	22.28	22.28				

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

	04/01/16	10/31/16
Foreman	W33.79	W33.79
	B30.60	B31.82
	T64.39	T65.61
Journeyman	W32.54	W32.54
	B30.60	B31.82
	T63.14	T64.36
I .	I	1

Craft: Sheet Metal Sign Installation APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
1000 hours	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	
Benefits	9.86	11.25	12.64	14.04	15.80	17.22	18.65	20.08	21.49	22.91	

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

	08/02/16	06/01/17
Foreman	W49.99	W0.00
	B38.73	B0.00
	T88.72	T91.22
General Foreman	W50.99	W0.00
	B38.73	B0.00
	T89.72	T92.22
Journeyman	W46.49	W0.00
	B38.73	B0.00
	T85.22	T87.72

Craft: Sheet Metal Worker APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
Yearly	35%	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

	07/01/16	01/01/17	07/01/17	01/01/18	07/01/18	01/01/19
Foreman	W63.33	W62.93	W64.93	W64.38	W66.63	W66.08
	B25.72	B26.12	B26.12	B26.67	B26.67	B27.22
	T89.05	T89.05	T91.05	T91.05	T93.30	T93.30
General Foreman	W66.33	W65.93	W67.93	W67.38	W69.63	W69.08
	B25.72	B26.12	B26.12	B26.67	B26.67	B27.22
	T92.05	T92.05	T94.05	T94.05	T96.30	T96.30
Journeyman	W59.23	W58.83	W60.83	W60.28	W62.53	W61.98
	B25.72	B26.12	B26.12	B26.67	B26.67	B27.22
	T84.95	T84.95	T86.95	T86.95	T89.20	T89.20

Craft: Sprinkler Fitter APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES									
1000 Hours	9.50	11.25	50%	55%	60%	65%	70%	75%	80%	85%	
Benefits	10.67	10.67	21.22	21.22	21.22	21.22	Intervals	7 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 10.67 10.67 21.22 21.22 21.22 Intervals 7 to 10 receive Journeyman Ben.

Craft: Sprinkler Fitter COMMENTS/NOTES

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.
- 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 Thursday, at striaght-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

	07/01/16	01/01/17	07/01/17	01/01/18
Finisher	W45.66 B31.95	W46.01 B32.68	W46.32 B33.44	W46.66 B34.18
	T77.61	T78.69	T79.76	T80.84

Craft: Tile Finisher-Marble APPRENTICE RATE SCHEDULE

INTERVAL		PERIOD AND RATES								
750 Hours	50%	55%	65%	70%	75%	85%	90%	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

	06/30/16	12/05/16
Finisher	W42.89	W0.00
	B28.74	B0.00
	T71.63	T72.45
Setter	W55.38	W0.00
	B32.01	B0.00
	T87.39	T88.52
	I .	1

Craft: Tile Setter - Ceramic APPRENTICE RATE SCHEDULE

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

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

	07/01/16	01/01/17	07/01/17	01/01/18
Tile Setter	W57.32	W57.74	W58.18	W58.53
	B33.23	B34.26	B35.27	B36.37
	T90.55	T92.00	T93.45	T94.90

Craft: Tile Setter - Marble APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
750 Hours	50%	55%	65%	70%	75%	85%	90%	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

	07/01/16	01/01/17
Grinder or Assistant	W50.21 B33.64 T83.85	W0.00 B0.00 T85.00
Mechanic	W51.82 B33.65	W0.00 B0.00
	T85.47	T86.62

Craft: Tile Setter - Mosaic & Terrazzo APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
750 Hours	50%	55%	65%	70%	75%	85%	90%	95%		

Ratio of Apprentices to Journeymen - 1:5

Craft: Tile Setter - Mosaic & Terrazzo COMMENTS/NOTES

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

	09/30/16	11/01/16	05/01/17	11/01/17	05/01/18	11/01/18
Bucket, Utility,	W35.60	W36.40	W36.83	W36.83	W37.26	W37.66
Pick-up, Fuel	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
Delivery trucks	T68.61	T69.41	T70.61	T71.41	T72.66	T73.46
Dump truck, Asphalt	W35.60	W36.40	W36.83	W36.83	W37.26	W37.66
Distributor, Tack	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
Spreader	T68.61	T69.41	T70.61	T71.41	T72.66	T73.46
Euclid-type vehicles	W35.75	W36.55	W36.98	W36.98	W37.41	W37.81
(large, off-road	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
equipment)	T68.76	T69.56	T70.76	T71.56	T72.81	T73.61
Helper on Asphalt	W35.60	W36.40	W36.83	W36.83	W37.26	W37.66
Distributor truck	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
	T68.61	T69.41	T70.61	T71.41	T72.66	T73.46
Slurry Seal,	W35.60	W36.40	W36.83	W36.83	W37.26	W37.66
Seeding/Fertilizing/	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
Mulching truck	T68.61	T69.41	T70.61	T71.41	T72.66	T73.46
Straight 3-axle truck	W35.65	W36.45	W36.88	W36.88	W37.31	W37.71
	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
	T68.66	T69.46	T70.66	T71.46	T72.71	T73.51
Tractor Trailer	W35.75	W36.55	W36.98	W36.98	W37.41	W37.81
(all types)	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
	T68.76	T69.56	T70.76	T71.56	T72.81	T73.61
Vacuum or Vac-All	W35.60	W36.40	W36.83	W36.83	W37.26	W37.66
truck (entire unit)	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
	T68.61	T69.41	T70.61	T71.41	T72.66	T73.46
Winch Trailer	W35.85	W36.65	W37.08	W37.08	W37.51	W37.91
	B33.01	B33.01	B33.78	B34.58	B35.40	B35.80
	T68.86	T69.66	T70.86	T71.66	T72.91	T73.71

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.

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

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County - UNION

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): + \$2.50 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: + \$2.50 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.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day (Decoration Day), July 4th, Labor Day, Presidential Election 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: Truck Driver-Material Delivery Driver

PREVAILING WAGE RATE

	05/01/12
Driver	W22.90
	B10.17
	T33.07

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, Presidential Election 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

Welders rate is the same as the craft to which the welding is incidental $\!.$

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STATEWIDE RATES

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

OPERATING ENGINEERS Rates Expiration Date: 06/30/2017

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

On all machines, including pile drivers with booms of 100 feet and over (including jib) the Operating Engineer shall receive the regular hourly rate plus: \$1.00 per hour on rigs with 100 foot Boom (including jib) up to 139 feet, and \$2.00 per hour on rigs with 140 foot Boom (including jib) and over. On all hoists where "Cat Head" or "Sheave Point" is 100 feet or more above ground level, the same differential pay shall apply as applicable to booms 100 feet and over.

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

SHIFT DIFFERENTIALS:

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift 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 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.
- 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, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

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

ENTIRE STATE PREVA

Effective Dates:

OPERATING ENGINEERS

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
46.48	30.63	77.11	78.26

Rates Expiration Date: 06/30/2017

CLASSIFICATIONS:

Backhoe	(coml	oinati	on)

A-Frame

Boom Attachment on loaders (Except pipehook)

Boring & Drilling Machine

Brush Chopper, Brush Shredder, Tree Shredder

Bulldozer, finish grade

Cableway

Carryall

Concrete Pump

Concrete Pumping System (Pumpcrete & similar types)

Conveyor, 125 feet or longer

Drill Doctor (Duties include dust collector and maintenance)

Front End Loader (2 cu. yds. but less than 5 cu. yds.)

Grader, finish

Groove Cutting Machine (ride-on type)

Heater Planer

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)

Hydraulic Crane (10 tons & under)

Hydro-Axe

Hydro-Blaster

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

Log Skidder

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

ENTIRE STATE PREVAILING WAGE RATE DETERMINATION

Rates Expiration Date: 06/30/2017

Effective Dates:

OPERATING ENGINEERS

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
46.48	30.63	77.11	78.26

CLASSIFICATIONS:

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)

Vacuum Truck

Whiphammer

Winch Truck (hoisting)

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

ENTIRE STATE PREVAILING

Effective Dates:

OPERATING ENGINEERS

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
44.57	30.63	75.20	76.35

Rates Expiration Date: 06/30/2017

CLASSIFICATIONS:

Asphalt Curbing Machine

Asphalt Plant Engineer

Asphalt Spreader

Autograde Curb Trimmer & Sidewalk Shoulder Slipform (CMI & similar types)

Autograde Curecrete Machine (CMI & similar types)

Autograde Tube Finisher & Texturing Machine (CMI & similar types)

Bar Bending Machines (Power)

Batcher, Batching Plant, & Crusher [On Site]

Belt Conveyor System

Boom-Type Skimmer Machine

Bridge Deck Finisher

Bulldozer (all sizes)

Captain (Power Boats)

Car Dumper (railroad)

Compressor & Blower unit for loading/unloading of concrete, cement, fly ash, or similar type materials (used independently or truck-mounted)

Compressor (2 or 3 battery)

Concrete Breaking Machine

Concrete Cleaning/Decontamination Machine

Concrete Finishing Machine

Concrete Saw or Cutter (ride-on type)

Concrete Spreader (Hetzel, Rexomatic & similar types)

Concrete Vibrator

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

OPERATING ENGINEERS Rates Expiration Date: 06/30/2017

Effective Dates:

Laddervator

Effective Da	tes:		
	07/01/2010	6	01/01/2017
Rate 44.57	Fringe 30.63	Total 75.20	Total 76.35
CLASSIFIC		73.20	70.55
Conveyors -	under 125 feet		
Crane Signa	ılman		
Crushing M	achine		
Directional	Boring Machine	e	
Ditching Ma	achine - Small (Ditchwitch, Vermo	eer or similar types)
Dope Pot - I	Mechanical (wit	th or without pump	b)
Dumpster			
Elevator			
Fireman			
Fork Lift (E	conomobile, Lu	ıll & similar types)
Front End L	oader (1 cu. yd.	and over but less	than 2 cu. yds.)
Generator (2	2 or 3 battery)		
Giraffe Grin	nder		
Grader & M	Iotor Patrols		
Grout Pump)		
Gunnite Ma	chine (Excludin	ng nozzle)	
Hammer - V	ibratory (in con	njunction with gen	erator)
Heavy Equi	pment Robotics	- Operator/Techn	ician
Hoist (roof,	tugger, aerial pl	latform hoist, hous	se car)
Hopper			
Hopper Doc	ors (power opera	ated)	
Ladder (mor	torized)		

09/09/2016

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

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date: 06/30/2017

Effective Dates:

Tug Captains

Tug Master (Power Boats)

Effective Date	es:		
	07/01/2016		01/01/2017
Rate 44.57	Fringe 30.63	Total 75.20	Total 76.35
CLASSIFICA		, 0.20	70.50
Locomotive	(Dinky-type)		
Maintenance	Utility Man		
Master Envir	onmental Main	tenance Technicia	n
Mechanic			
Mixer (Exce	ot paving mixer	s)	
		ounted or small se	lf-nronelled
ride-on type		ounted of sinali se.	п-ргоренеа
Pavement Br	eaker - mainten	ance of compresso	or or hydraulic unit
Pipe Bending	g Machine (pow	rer)	
Pitch Pump			
Plaster Pump	(regardless of	size)	
Post Hole Di	gger (post poun	der, auger)	
Roller (black	top)		
Scale (power)		
Seamen Pulv	erizing Mixer		
Shoulder Wic	dener		
Silo			
Skimmmer M	Machine (boom	type)	
		ice & maintenance	e)
Tamrock Dri			•
Tractor			
Transfer Mac	hinas		
i ransfer Mac	enines		

09/09/2016

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

ENTIRE STATE

OPERATING ENGINEERS Rates Expiration Date: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
44.57	30.63	75.20	76.35

CLASSIFICATIONS:

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:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
41.23	30.63	71.86	73.01

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

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
38.65	30.63	69.28	70.43

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: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
48.81	30.63	79.44	80.59

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: 06/30/2017

Effective Da	tes:			
	07/01/2010	6	01/01/2017	
Rate 48.07	Fringe 30.63	Total 78.70	Total 79.85	
CLASSIFIC		78.70	19.63	
		er (CMI & similar	tynes)	
_				
Autograde l types)	Pavement Profile	er - Recycle Type	(CMI & similar	
Autograde l similar typ		Spreader Combina	ation (CMI &	
Autograde S	Slipform Paver (CMI & similar typ	oes)	
Backhoe (E	xcavator)			
Central Pov	ver Plant			
Concrete Pa	aving Machine			
Draglines				
Drill, Bauer	r, AMI and simil	ar types		
Drillmaster	, Quarrymaster			
		down-the-hole dril rill, self-powered d		
Elevator Gr	ader			
Field Engin	eer-Chief of Par	ty		
Front End I	Loader (5 cu. yar	ds or larger)		
Gradall				
Grader, Rago				
Helicoptor Co-Pilot				
Helicoptor Communications Engineer				
Juntann Pile Driver				
Locomotive	e (large)			
Mucking Machine				

Pavement & Concrete Breaker (Superhammer & Hoe Ram)

09/09/2016

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS

Rates Expiration Date: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
48.07	30.63	78.70	79.85

CLASSIFICATIONS:

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

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

ENTIRE STATE PREVAILING WAGE RATE DETERMINATION

Rates Expiration Date: 06/30/2017

Effective Dates:

OPERATING ENGINEERS

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
42.94	30.63	73.57	74.72

CLASSIFICATIONS:

Chipper

Compressor (single)

Concrete Spreader (small type)

Conveyor Loader (Except elevator graders)

Engines, Large Diesel (1620 HP) & Staging Pump

Farm Tractor

Fertilizing Equipment (operation & maintenance)

Fine Grade Machine (small type)

Form Line Grader (small type)

Front End Loader (under 1 cubic yard)

Generator (single)

Grease, Gas, Fuel, & Oil Supply Trucks

Heaters (Nelson or other type)

Lights - portable generating light plant

Mixer, Concrete (small)

Mulching Equipment (operation & maintenance)

Power Broom or Sweeper

Pump (diesel engine & hydraulic - regardless of power)

Pump (larger than 2 inch suction, including submersible pumps)

Road Finishing Machine (small type)

Roller - grade, fill, or stone base

Seeding Equipment (operation & maintenance)

Sprinkler & Water Pump Trucks

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

ENTIRE STATE PREVAILING WAGE RATE D

Rates Expiration Date: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
42.94	30.63	73.57	74.72

CLASSIFICATIONS:

Steam Generator or Boiler

OPERATING ENGINEERS

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:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
49.89	30.63	80.52	81.67

CLASSIFICATIONS:

Helicoptor Pilot/Engineer

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
53.82	30.63	84.45	86.35

CLASSIFICATIONS:

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

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
52.82	30.63	83.45	85.35

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), over 100 tons 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: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
50.07	30.63	80.70	81.85

CLASSIFICATIONS:

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

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
51.82	30.63	82.45	84.35

CLASSIFICATIONS:

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

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
49.07	30.63	79.70	80.85

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: 06/30/2017

{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 4:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift 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 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.
- 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, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
51.70	30.63	82.33	83.48

CLASSIFICATIONS:

Helicopter Pilot or Engineer

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION ENTIRE STATE

Rates Expiration Date: 06/30/2017

Effective Dates:

STRUCTURAL STEEL ERECTION

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
47.64	30.63	78.27	79.42

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

Effective Dates:

	07/01/201	01/01/2017	
Rate	Fringe	Total	Total
44.98	30.63	75.61	76.76

CLASSIFICATIONS:

Aerial Platform Used On Hoists

Apprentice Engineer/Oiler with Compressor or Welding Machine

Captain (Power Boats)

Compressor (2 or 3 in battery)

Conveyor or Tugger Hoist

Elevator or House Car

Fireman

Forklift

Generator (2 or 3)

Maintenance Utility Man

Tug Master (Power Boats)

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: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
43.45	30.63	74.08	75.23

CLASSIFICATIONS:

Compressor (Single)

Generators

Welding Machines, Gas, Diesel, Or Electric Converters of any type-single

Welding System, Multiple (Rectifier Transformer Type)

Effective Dates:

07/01/2016			01/01/2017
Rate Fringe Total			Total
41.69	30.63	72.32	73.47

CLASSIFICATIONS:

Assistant Engineer/Oiler

Drillers Helper

Field Engineer - Transit/Instrument Man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Effective Dates:

07/01/2016			01/01/2017
Rate Fringe Total			Total
49.26	30.63	79.89	81.04

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
38.65	30.63	69.28	70.43

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: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
48.40	30.63	79.03	80.18

CLASSIFICATIONS:

Field Engineer-Chief of Party

Effective Dates:

07/01/2016			01/01/2017
Rate Fringe Total			Total
55.84	30.63	86.47	88.37

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) over 100 tons and Tower Cranes.

Effective Dates:

07/01/2016			01/01/2017
Rate Fringe Total			Total
54.18	30.63	84.81	86.71

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. abovr ground), Derricks (all derricks. land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), over 100 tons and Tower Crane. **Effective Dates:**

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
52.09	30.63	82.72	83.87

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:

07/01/2016			01/01/2017
Rate	Fringe	Total	
50.43	30.63	81.06	82.21

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

STRUCTURAL STEEL ERECTION Rates Expiration Date: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
52.09	30.63	82.72	83.87

CLASSIFICATIONS:

Helicopter Co-Pilot

Helicopter Communications Engineer

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

TEST BORING PRELIMINARY TO CONSTRUCTION-SOUTH/WEST Rates Expiration Date: 06/30/2017

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Hunterdon, Mercer, Monmouth, Ocean, Salem, Sussex, Warren

On all machines, including pile drivers with booms of 100 feet and over (including jib) the Operating Engineer shall receive the regular hourly rate plus: \$1.00 per hour on rigs with 100 foot Boom (including jib) up to 139 feet, and \$2.00 per hour on rigs with 140 foot Boom (including jib) and over. On all hoists where "Cat Head" or "Sheave Point" is 100 feet or more above ground level, the same differential pay shall apply as applicable to booms 100 feet and over.

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

SHIFT DIFFERENTIALS:

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift 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 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.
- 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, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
48.07	30.63	78.70	79.85

CLASSIFICATIONS:

Driller

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

TEST BORING PRELIMINARY TO CONSTRUCTION-SOUTH/WEST Rates Expiration Date: 06/30/2017

Effective Dates:

07/01/2016			01/01/2017
Rate	Fringe	Total	Total
41.23	30.63	71.86	73.01

CLASSIFICATIONS:

Driller's Helper

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

FREE AIR TUNNEL JOBS Rates Expiration Date: 08/31/2017

{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 \$2.50 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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
40.35	27.78	68.13	70.53

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

	03/01/2017		
Rate	Fringe	Total	Total
40.05	27.78	67.83	70.23

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: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
39.55	27.78	67.33	69.73

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Cleanup Foreman, Grout Foreman

Effective Dates:

	09/01/201	03/01/2017	
Rate	Fringe	Total	Total
42.05	27.78	69.83	72.23

CLASSIFICATIONS:

Blaster

Effective Dates:

	03/01/2017		
Rate	Fringe	Total	Total
39.00	27.78	66.78	69.18

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.65	27.78	66.43	68.83

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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.50	27.78	66.28	68.68

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

FREE AIR TUNNEL JOBS Rates Expiration Date: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.00	27.78	65.78	68.18

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: 06/30/2017

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:

	07/01/201	01/01/2017	
Rate	Fringe	Total	Total
46.82	30.63	77.45	78.60

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2016			01/01/2017	
Rate	Fringe	Total	Total	
39.98	30.63	70.61	71.76	

CLASSIFICATIONS:

Driller's Helper

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

OPERATING ENGINEERS MARINE-DREDGING Rates Expiration Date: 09/30/2018

NOTE: 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:

02/16/2016		10/01/2016	10/01/2017	
Rate	Fringe	Total	Total	Total
36.34	13.33	49.67	51.03	52.51

CLASSIFICATIONS:

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

Effective Dates:

02/16/2016		10/01/2016	10/01/2017	
Rate	Fringe	Total	Total	Total
31.43	12.93	44.36	45.60	46.95

CLASSIFICATIONS:

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

Effective Dates:

02/16/2016		10/01/2016	10/01/2017	
Rate	Fringe	Total	Total	Total
29.59	12.79	42.38	43.56	44.86

CLASSIFICATIONS:

Certified Welder

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

ENTIRE STATE PREVAILING WAGE RATE DETERMINATION OPERATING ENGINEERS MARINE-DREDGING Rates Expiration Date: 09/30/2018

Effective Dates:

	02/16/201	6	10/01/2016	10/01/2017
Rate	Fringe	Total	Total	Total
28.78	12.42	41.20	42.36	43.64

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

	02/16/201	6	10/01/2016	10/01/2017
Rate	Fringe	Total	Total	Total
27.85	12.35	40.20	41.32	42.58

CLASSIFICATIONS:

Boat Operator

Effective Dates:

	02/16/201	6	10/01/2016	10/01/2017
Rate	Fringe	Total	Total	Total
23.13	11.67	34.80	35.81	36.92

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

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

ENTIRE STATE

MICROSURFACING/SLURRY SEAL Rates Expiration Date: 02/28/2018

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:

03/01/2016			03/01/2017
Rate	Fringe	Total	Total
35.75	20.35	56.10	57.77

CLASSIFICATIONS:

Foreman

Effective Dates:

03/01/2016			03/01/2017
Rate	Fringe	Total	Total
33.10	20.35	53.45	55.07

CLASSIFICATIONS:

Box man

Effective Dates:

03/01/2016			03/01/2017
Rate	Fringe	Total	Total
31.10	20.35	51.45	53.02

CLASSIFICATIONS:

Microsurface/Slurry Preparation

Effective Dates:

03/01/2016			03/01/2017
Rate	Fringe	Total	Total
31 10	20.35	51.45	53 02

CLASSIFICATIONS:

Squeegee man

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

MICROSURFACING/SLURRY SEAL Rates Expiration Date: 02/28/2018

Effective Dates:

03/01/2016			03/01/2017
Rate	Fringe	Total	Total
29.60	20.35	49.95	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: 08/31/2017

"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 \$2.50 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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
39.85	27.78	67.63	70.03

CLASSIFICATIONS:

Paving Foreman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.40	27.78	66.18	68.58

CLASSIFICATIONS:

Head Raker

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.25	27.78	66.03	68.43

CLASSIFICATIONS:

Raker, Screedman, Luteman

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

ENTIRE STATE

ASPHALT LABORERS - SOUTH Rates Expiration Date: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.00	27.78	65.78	68.18

CLASSIFICATIONS:

Tampers, Smoothers, Kettlemen, Painters, Shovelers, Roller Boys

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.10	27.78	65.88	68.28

CLASSIFICATIONS:

Milling Controller

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.30	27.78	66.08	68.48

CLASSIFICATIONS:

Traffic Control Coordinator

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

TEST BORING PRELIMINARY TO CONSTRUCTION-NORTH Rates Expiration Date: 10/16/2018

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 \$1.00 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 10% 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:

11/13/2015		10/17/2016	10/17/2017	
Rate	Fringe	Total	Total	Total
30.17	24.10	54.27	56.21	58.15

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

	11/13/201	5	10/17/2016	10/17/2017
Rate	Fringe	Total	Total	Total
37.82	24.10	61.92	64.13	66.34

CLASSIFICATIONS:

Driller

Effective Dates:

	11/13/201	5	10/17/2016	10/17/2017
Rate	Fringe	Total	Total	Total
43.42	24.10	67.52	69.93	72.34

CLASSIFICATIONS:

Foreman

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

HEAVY & GENERAL LABORERS - NORTH Rates Expiration Date: 08/31/2017

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 \$2.50 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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
37.60	27.78	65.38	67.78

CLASSIFICATIONS:

"D" Rate:

basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; traffic director/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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.30	27.78	66.08	68.48

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

ENTIRE STATE

HEAVY & GENERAL LABORERS - NORTH Rates Expiration Date: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.55	27.78	66.33	68.73

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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
42.10	27.78	69.88	72.28

CLASSIFICATIONS:

"A" Rate:

blaster

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
39.85	27.78	67.63	70.03

CLASSIFICATIONS:

"FOREMAN" Rate:

labor foreman, asphalt foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
40.85	27.78	68.63	71.03

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: 08/31/2017

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 \$2.50 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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
37.60	27.78	65.38	67.78

CLASSIFICATIONS:

basic, landscape, or railroad track laborer; utility meter installer; traffic director/flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofers

tree cutter, timberman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.30	27.78	66.08	68.48

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: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.30	27.78	66.08	68.48

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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.30	27.78	66.08	68.48

CLASSIFICATIONS:

wagon or directional drill operator; drill master

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
42.10	27.78	69.88	72.28

CLASSIFICATIONS:

blaster

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
39.85	27.78	67.63	70.03

CLASSIFICATIONS:

labor foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
40.85	27.78	68.63	71.03

CLASSIFICATIONS:

general foreman

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

ENTIRE STATE PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS - SOUTH Rates Expiration Date: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.55	27.78	66.33	68.73

CLASSIFICATIONS:

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; rammer; gunite nozzle man

TERRITORY ENTIRE STATE

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

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date: 06/04/2017

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: \$42.50; Pipeline Journeyman Welder: \$102.50; and Pipeline Helper: \$42.50. 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:

06/01/2016

Rate	Fringe	Total
54.56	26.59	81.15

CLASSIFICATIONS:

Pipeline Journeyman Welder

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

ENTIRE STATE

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date: 06/04/2017

Effective Dates:

06/01/2016

Rate Fringe Total 54.56 26.59 81.15

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

06/01/2016

Rate Fringe Total 32.99 18.73 51.72

CLASSIFICATIONS:

Pipeline Helper

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

ENTIRE STATE

PIPELINE - GAS DISTRIBUTION Rates Expiration Date: 10/31/2017

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:

11/01/2015			11/01/2016
Rate Fringe Total			Total
55.95	21.10	77.05	79.13

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

11/01/2015			11/01/2016
Rate	Fringe	Total	Total
55.95	21.10	77.05	79.13

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

11/01/2015			11/01/2016
Rate Fringe Total			Total
36.22	15.29	51.51	52.90

CLASSIFICATIONS:

Pipeline Helper

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

ENTIRE STATE

ASPHALT LABORERS- NORTH Rates Expiration Date: 08/31/2017

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
- Shifts shall receive an additional \$2.50 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:

09/01/2016			03/01/2017
Rate Fringe Total		Total	
39.85	27.78	67.63	70.03

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.55	27.78	66.33	68.73

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
38.30	27.78	66.08	68.48

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: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
37.60	27.78	65.38	67.78

CLASSIFICATIONS:

Asphalt Laborer

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

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date: 12/03/2017

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 7:00 AM and 6:30 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:

11/29/2015			12/04/2016
Rate Fringe Total			Total
50.52	33.84	84.36	87.27

CLASSIFICATIONS:

Chief Lineman

Effective Dates:

11/29/2015			12/04/2016
Rate Fringe Total			Total
47.66	31.93	79.59	82.34

CLASSIFICATIONS:

Journeyman Lineman

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

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date: 12/03/2017

Effective Dates:

11/29/2015			12/04/2016
Rate	Rate Fringe Total		Total
47.66	31.93	79.59	82.34

CLASSIFICATIONS:

Special License Operator

Effective Dates:

11/29/2015			12/04/2016
Rate	Fringe	Total	Total
47.18	31.61	78.79	81.51

CLASSIFICATIONS:

Transit Man

Effective Dates:

11/29/2015			12/04/2016
Rate	Fringe	Total	Total
45.75	30.65	76.40	79.04

CLASSIFICATIONS:

Line Equipment Operator

Effective Dates:

11/29/2015			12/04/2016
Rate Fringe Total			Total
40.03	26.82	66.85	69.17

CLASSIFICATIONS:

Dynamite Man

Effective Dates:

11/29/2015			12/04/2016
Rate Fringe Total			Total
56.24	37.68	93 92	97 16

CLASSIFICATIONS:

General Foreman

Effective Dates:

11/29/2015			12/04/2016
Rate	Fringe	Total	Total
54.81	36.72	91.53	94.68

CLASSIFICATIONS:

Assistant General Foreman

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

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date: 12/03/2017

Effective Dates:

11/29/2015			12/04/2016
Rate	Fringe	Total	Total
53.38	35.76	89.14	92.21

CLASSIFICATIONS:

Line Foreman

Effective Dates:

11/29/2015			12/04/2016
Rate	Fringe	Total	Total
38.60	25.86	64.46	66.69

CLASSIFICATIONS:

Straight Light Mechanical Leader

Effective Dates:

11/29/2015			12/04/2016
Rate Fringe Total			Total
36.70	24.58	61.28	63.40

CLASSIFICATIONS:

Groundman Winch Operator

Effective Dates:

11/29/2015			12/04/2016
Rate Fringe Total			Total
36.70	24.58	61.28	63.40

CLASSIFICATIONS:

Groundman Truck Operator

Effective Dates:

11/29/2015			12/04/2016
Rate	Fringe	Total	
36.22	24.26	60.48	62.57

CLASSIFICATIONS:

Straight Light Mechanic

Effective Dates:

12/04/2016	11/29/2015		
Total	Rate Fringe Total		
62.57	60.48	24.26	36.22

CLASSIFICATIONS:

Line Equipment Mechanic

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

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date: 12/03/2017

Effective Dates:

11/29/2015			12/04/2016	
Rate Fringe Total			Total	
30.98	20.75	51.73	53.52	

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

11/29/2015			12/04/2016
Rate Fringe Total			Total
28.60	19.16	47.76	49.39

CLASSIFICATIONS:

Groundman 1st Year

Effective Dates:

11/29/2015			12/04/2016
Rate	Fringe	Total	Total
47.18	31.61	78.79	81.51

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: 11/30/2017

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:

12/01/2015			11/29/2016
Rate	Fringe	Total	Total
57.01	43.16	100.17	102.92

CLASSIFICATIONS:

General Foreman

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

ENTIRE STATE

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date: 11/30/2017

Effective Dates:

12/01/2015			11/29/2016
Rate Fringe Total			Total
50.78	39.48	90.26	93.01

CLASSIFICATIONS:

Foreman

Effective Dates:

12/01/2015			11/29/2016
Rate Fringe Total			Total
48.10	37.90	86.00	88.75

CLASSIFICATIONS:

Small Job Foreman

Effective Dates:

12/01/2015			11/29/2016
Rate	Fringe	Total	
44.54	35.82	80.36	83.11

CLASSIFICATIONS:

Heavy Equipment Operator

Effective Dates:

12/01/2015			11/29/2016
Rate Fringe Total			Total
44.54	35.82	80.36	83.11

CLASSIFICATIONS:

Cable Splicer

Effective Dates:

12/01/2015			11/29/2016
Rate	Fringe	Total	Total
44.54	35.82	80.36	83.11

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/01/2015			11/29/2016
Rate	Fringe	Total	Total
44.54	35.82	80.36	83.11

CLASSIFICATIONS:

Journeyman Welder

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

ENTIRE STATE PREVAILI

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date: 11/30/2017

Effective Dates:

12/01/2015			11/29/2016
Rate Fringe Total			Total
44.54	35.82	80.36	83.11

CLASSIFICATIONS:

Journeyman Painter

Effective Dates:

12/01/2015			11/29/2016
Rate	Fringe	Total	Total
35.63	30.58	66.21	68.96

CLASSIFICATIONS:

Light Equipment Operator

Effective Dates:

12/01/2015			11/29/2016
Rate	Fringe	Total	Total
31.18	27.97	59.15	61.90

CLASSIFICATIONS:

Groundman Truck Driver

Effective Dates:

12/01/2015			11/29/2016
Rate Fringe Total			Total
28.95	26.65	55.60	58.35

CLASSIFICATIONS:

Groundman 3rd Year

Effective Dates:

12/01/2015			11/29/2016
Rate	Fringe	Total	Total
26.72	25.33	52.05	54.80

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/01/2015			11/29/2016
Rate	Fringe	Total	Total
24.50	24.04	48 54	51.29

CLASSIFICATIONS:

Groundman 1st Year

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

ENTIRE STATE PREVAILING WAGE RATE DETERMINATION

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date: 11/30/2017

Effective Dates:

12/01/2015			11/29/2016
Rate	Fringe	Total	Total
19.60	21.16	40.76	43.51

CLASSIFICATIONS:

Flagman

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

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date: 08/31/2017

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 \$2.50 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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
60.53	27.78	88.31	91.28

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
60.08	27.78	87.86	90.83

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: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
59.33	27.78	87.11	90.08

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Clean-up Foreman, Grout Foreman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
63.08	27.78	90.86	93.83

CLASSIFICATIONS:

Blaster

Effective Dates:

09/01/2016			03/01/2017
Rate Fringe Total		Total	
58.50	27.78	86.28	89.26

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
57.98	27.78	85.76	88.73

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:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
57.75	27.78	85.53	88.51

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: 08/31/2017

Effective Dates:

09/01/2016			03/01/2017
Rate	Fringe	Total	Total
57.00	27.78	84.78	87.76

CLASSIFICATIONS:

All others (including Powder Watchman, Change House Attendant, Top Laborer, Job Steward)



State of New Jersey

DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT PO BOX 389 TRENTON, NEW JERSEY 08625-0389

October 12, 2016 LISTED CONTRACTORS AND SUBCONTRACTORS

PURSUANT TO N.J.S.A 34:11-56.37 AND 34:11-56.38 OF THE PREVAILING WAGE ACT

NO PUBLIC WORKS CONTRACT MAY BE AWARDED TO ANY OF THE FOLLOWING CONTRACTORS AND SUBCONTRACTORS OR TO ANY FIRM, CORPORATION OR PARTNERSHIP IN WHICH THEY HAVE AN INTEREST UNTIL THE EXPIRATION DATE GIVEN.

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
360 Golf, LLC	300 Mamaroneck Avenue, #733, White Plains, NY 10605	06/29/2018
Michael Lenec, Partner	300 Mamaroneck Ave, White Plains, NJ 10605	
Devin Lemere, Partner	300 Mamaroneck Ave, # 133, White Plains, NY 10605	
A & H Contracting, Inc.	33 Eastwood Blvd., Manalapan, NJ 07726	05/27/2017
A.V. Construction, Inc.	12 Verduci Dr., Newtown, PA 18940	05/25/2018
Michael Verduci, President	12 Verduci Drive, Newtown, PA 18940	
AB Contracting & Develpmernt LLC	191 Central Ave, 2nd Floor, Newark, NJ 07101	11/26/2016
Michael Santos, President	988 Johnson Place, Apt. 4, Union, NJ 07083	
Advantage Contracting & Entertainment Services Inc	319 Terrace Street, Rahway, NJ 07065	05/07/2018
John H. Madara, President	319 Terrace St, Rahway, NJ 07065	
Advantage Sport USA, Inc.	1 Tigan Street, Winooski, VT 05404	01/19/2019
Maurice Guarigilia, Owner / Officer	494 North Barbor Road, Colchester, VT 05446	
All County Pipeline & Site Excavation Inc.	164 Ball Ave, Parsippany, NJ 07054	04/21/2017
Christine Charles, Vice-President	164 Ball Avenue, Parsippany, NJ 07054	
Eric Charles, President	164 Ball Avenue, Parsippany, NJ 07054	
All Jersey Fence Co.	10 Route 46 West, Clifton, NJ 07011	09/14/2019
Charles Viola, President	266 Columbus Avenue, Hasbrouck Heights, NJ 07604	
Agostino Ducato, Vice-President	223 Spring Valley Road, Paramus, NJ 07652	
Allied Construction LLC. Allied Construction Management, LLC	100 Dobbs Lane, Suite 102, Cherry Hill, NJ 08034	10/21/2016
Hal Pattalino, President	3 Chadwick Drive, Voorhees, NJ 08043	
American Eagle Contractor, Inc.	420 Broadway, Long Branch, NJ 07740	08/11/2017
Agustin Zuniga, President	420 Broadway, Long Branch, NJ 07740	
American Welding Services American Welding Services, Inc.	1041 Glassboro Rd D-2, Williamstown, NJ 08094	07/09/2017
Brian O'Shea, Owner	1041 Glassboro Rd. D-2, Williamstown, NJ 08094	

CONTRACTORS AND SUBCONTRACTORS	<u>ADDRESS</u>	EXPIRATION_DATE
Antiveros Construction, Inc.	677 Old Highway 64, Etowah, NC 28729	10/19/2018
Donnie Antiveros, President	677 Old Highway 64, Etowah, NC 28729	
Olga Conteras, Vice-President	677 Old Highway 64, Etowah, NC 28729	
Apex Tower Services, Inc.	245 Sharp Road, Marlton, NJ 08053	02/09/2019
Richard Pluese, Vice-President	66 E Cedar Avenue, Marlton, NJ 08053	
Area Fuel	207 Butler Ave, Staten Island, NY 10307	02/17/2018
Paul Grillo, Owner	207 Bulter Ave, St. Island, NY	
Paul Grillo, Owner	207 Butlerr Ave, Staten Island, NY 10307	
Arete Development Inc. Arete Development Inc.	20 Industrial Road, Fairfield, NJ 07004	01/04/2019
Justin Ettere, Vice-President	52 Brass Castle Road, Washington, NJ 07882	
John Ettere, Owner	1453 Tooz Place, South Plainfield, NJ 07080	
Matthew Ettere, Vice-President	8 Brookside Drive, Warren, NJ 07059	
Jonathan Ettere, President	7 Craig Road, Readington, NJ 08853	
B & B Atlantic LLC	526 Sheridan Ave., Roselle, NJ 07203	12/01/2016
Florian Dobre, Partner	526 Sheridan Ave, Roselle, NJ 07203	
Barzzini Construction	65 Fern St, Browns Mills, NJ 08015	09/15/2017
John Sorrentino, Owner	65 Fern St, Browns Mills, NJ 08015	
Beckett Enterprises, Inc.	P.O. Box 334, Malaga, NJ 08328	01/05/2017
Wesley J. Beckett Jr., President	110 Oak Avenue, Malaga, NJ 08328	
Blue Skies Electric L.L.C.	326 Coles Mill Road, Williamstown, NJ 08094	01/06/2017
Scott Frasca, Manager	326 Coles Mill Road, Williamstown, NJ 08094	
Rachel Frasca, Owner	326 Coles Mill Road, Williamstown, NJ 08094	
Bogert Millwork Company, Inc.	105 Johnson Ave., Hackensack, NJ 07601	06/08/2019
Anthony Yaniero, Vice-President	848 Bogert Road, River Edge, NJ 07661	
Susan Yaniero, Owner	848 Bogert Road, River Edge, NJ 07661	
Brian Patterson Mechanical Contracting, Inc.	5 Cindy Lane, Ocean, NJ 07712	03/29/2018
Brian Patterson, President	11 Arlene Drive, West Long Branch, NJ 07764	
Brothers Landscaping J.H. Brothers Inc.	169 Robertsville Rd., Freehold, NJ 07728	01/05/2018
Brad J. Moini, President	101 Buttonwood Lane, Freehold, NJ 07728	
C & E Contracting, Inc.	PO Box 690, Boonton, NJ 07005	12/15/2018
Donald Fleming, President	340 Reservoir Road, Boonton, NJ 07005	
CAM Contractors Inc. SUSPENDED PENDING DEBARMENT	179-15 Route 46 West, Suite 135, Rockaway, NJ 07866	SUSPENDED
Michelle Gamache-Caravella, President	179-15 Route 46, Suite 135, Rockaway, NJ 07866	
Joseph Caravella, Manager	,,	
Cam Flooring Installations LLC	26 Washington Street, Long Branch, NJ 07718	08/31/2019
Jose Fernandes Da Silva, Owner	26 Washington St., Long Branch, NJ 07718	
Camelot Roofing, LLC	1455 St. George Ave., Roselle, NJ 07203	02/17/2018
Juan J. Barquero, Owner	533 South 5th Street, Elizabeth, NJ 07206	
Caslo Drywall Corp.	644 East 2nd St, Unit 2, Plainfield, NJ 07060	04/22/2017
Luis Oliveras, Owner	644 East 2nd St., Plainfield, NJ 07060	
CertaPro Painters of South Jersey LLC	910 Cedar Street, Millville, NJ 08332	02/03/2019
Mark Kahn, Owner	910 Cedar Street, Millville, NJ 08332	

CONTRACTORS AND SUBCONTRACTORS	<u>ADDRESS</u>	EXPIRATION_DATE
Chalmers Construction LLC.	435 Minnisink Road, Totowa, NJ 07512	11/20/2016
Shawn Chalmers, Owner	337 Crown Street, Brooklyn, NY 11211	
Keith Mishoe, Owner	341 Seaton Avenue, Roselle Park, NJ 07204	
Chanez Landscaping, LLC	PO Box 5646, New Brunswick, NJ 08903	09/23/2017
Noe Chanez, Principal	55 Miller Ave., Somerset, NJ 08873	
Cityline Contracting Inc.	556 Humboldt Street, Brooklyn, NY 11222	08/03/2017
Dorothy Dobiecka, President	556 Humboldt Street, Brooklyn, NY 11222	
Andrzej Citak, Vice-President	556 Humboldt St, Brooklyn, NY 11222	
CJC Builders Corp.	220 Mount Pleasant Ave., Newark, NJ 07104	01/07/2019
Curillo Guaman, Owner	197 Broad Street, Newark, NJ 07104	
Cobra Communications & Installations, LLC	26 Spencer Place, Garfield, NJ 07026	12/10/2017
Giovanny Bustos, Owner	26 Spencer Place, Garfield, NJ 07026	
Conex Construction Corp.	265 Wilson Avenue, Kearny, NJ 07032	01/19/2019
Armando Piedade, President	265 Wilson Avenue, Kearny, NJ 07032	
Confortini Plumbing & Heating, LLC	491 West County Drive, Somerville, NJ 08876	07/05/2019
Andrew Confortini, Vice-President	491 West County Drive, Somerville, NJ 08876	
Anthony Confortini, Owner	41 Bunnvale Road, Clifton, NJ 07830	
Coons Construction, LLC	23178 Summer View Circle, Three Springs, PA 17264	04/06/2018
William Coons, Owner	23178 Summer View Circle, Three Springs, PA 17264	
CPS Mechanical Contractors, Inc.	203 Woods Ave, Bergenfield, NJ 07621	12/15/2017
Margaret Sherman, President	203 Woods Avenue, Bergenfield, NJ 07621	
CRC Concrete Raising of South Jersey, Inc.	110 South Harding Highway, Landisville, NJ 08326	02/01/2019
Theresa Frajdenberg, President	110 South Harding Highway, Landisville, NJ 08326	
Crider Americas Solar LLC	6063 FM 535, Cedar Creek, TX 78612	05/11/2017
Steven Crider, Member	507 Pressler Street, Apt. 2128, Austin, TX 78703	
Harold Marshall, Jr., Member	1800 Eva Street, Austin, TX 78704	
Cunhas Construction Inc.	35 Carmen Ct, Floor-1, Newark, NJ 07105	10/22/2017
Nuno Cunha, Owner	35 Carmen Ct., Newark, NJ 07105	
Dane DeForest Demolition, Inc.	1508 Beaver Dam Road, Point Pleasant, NJ 08742	02/15/2019
Dane DeForest, President	2406 Herbertsville Road, Point Pleasant, NJ 08742	
DG Construction & Renovations LLC	245 Emanuel St., Trenton, NJ 08610	04/04/2019
Dean Gallo, Owner	245 Emanuel Street, Trenton, NJ 08610	
Harry Gallo, Secretary	245 Emanuel Street, Trenton, NJ 08610	0.4/0.4/204.7
Division Ten Installations, LLC	29 Monmouth Road, Monroe Township, NJ 08831	04/02/2017
Kevin G. Eib, President	29 Monmouth Road, Monroe Twp., NJ 08831	
DM Fernandes Contracts LLC	551 North Broad St, Elizabeth, NJ 07208	01/27/2018
Hugo Fernandes, Owner	90 Willow Street, Carteret, NJ 07008	04/07/0040
E & S Enterprises, LLC	P. O. Box 2050, Vineland, NJ 08360	01/27/2019
Helen Henriquez, Owner	101 South Orachard Road, Vineland, NJ 08360	
East Coast Touch Enterprises LLC	152 Jackson St., Newark, NJ 07105	08/11/2017
Frank Loureier, Vice-President	152 Jefferson St., Newark, NJ 07105	
Nelson DeOliveira, President	276 Highland Ave, Kearney, NJ 07032	05/12/2019
Eddy Drywall, LLC	1100 W. 7th St., Apt. A9, Plainfield, NJ 07060	05/13/2018
Eddy Rodriguez, Member	1100 W. 7th. St., Apt. A9, Plainfield, NJ 07063	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Elevator Medic Corporation	55 Brookview Drive, Woodcliff Lake, NJ 07677	02/24/2017
Patrick DellAquila, President	55 Brookview Drive, Woodcliff Lake, NJ 07677	
Emanuel Drywall Services, Inc	64 Grandview Ave, North Plainfield, NJ 07060	04/30/2017
Cesar Garcia, Owner	64 Grandview Ave, North Plainfield, NJ 07060	
Envirocare Enterprises, Inc.	358 Broadway, Suite 202, Newark, NJ 07104	05/15/2017
Envirocare Enterprises, Inc.	250 W F	
Uju A. Obiorah, President Inno Obiorah, Manager	259 West Forest Avenue, Englewood, NJ 07631658 Rutgers Pl, Paramus, NJ 07652	
Euro Construction	70 Bordendown-Chesterfied, Rd., Chesterfield, NJ 08022	02/24/2017
Ireneusz Waluk, Owner	70 Bordentown-Chesterfiel, Rd., Chesterfield, NJ 08515	V=/= 1/=V1/
Everest Masonry Construction, Inc.	163 E Main Street, Suite 311, Little Falls, NJ 07424	11/08/2018
Rafael Ramos, President	120 Cantello Street, Union City, NJ 07087	11/00/2010
Everest Masonry Constructors, Inc.	1 Orient Way, Suite 226, Rutherford, NJ 07070	11/08/2018
•		11/00/2010
Mark Rodrigues, President Felipe Villagomez	523 Hamilton Avenue, Kingston, PA 18704 160 Lincoln Street, Bridgeton, NJ 08302	03/08/2019
owner	To Emedia street, Bridgeton, 14 00002	05/00/2017
Felipe Villagomez, Owner	160 Lincoln Street, Bridgeton, NJ 08302	
Fittin Construction, LLC	2243 Edgar Rd, Point Pleasant Beach, NJ 08742	02/23/2019
Sheree Severini-Fittin, Member	2243 Edgar Rd., Point Pleasant Beach, NJ 08742	
Thomas Fittin, Owner / Officer	2243 Edgar Rd, Point Pleasant Beach, NJ 08742	
Five Star Quality Construction	141 Rte. 130 South, Suite 192, Cinnaminson, NJ 08077	04/22/2017
Alicirio Jose Santana Pires, Owner	141 RT. 130 South, Suite 192, Cinnaminson, NJ 08077	
Frank Montgomery Builder	42 Bryant Rd., Waretown, NJ 08758	07/10/2017
Frank Montgomery, Owner	42 Bryant Rd., Waretown, NJ 08758	
G.F.I. Siteworks, Inc. G.F.I. Siteworks, Inc.	P.O. Box 296, Clarksboro, NJ 08020	02/02/2019
James DiLorenzo, Vice-President	440 Mantua Avenue, Paulsboro, NJ 08066	
Salvatore A Casella III, President	362 Friendship Road, Clarksboro, NJ 08020	
Gale Force Telecommunications Inc	211 Jewett Road, Upper Nyack, NY 10960	12/01/2016
Galindo Const. LLC	1025 E. 23rd St. #1, Paterson, NJ 07513	08/06/2018
Gabino Galindo, Owner	1025 E. 23rd St. #1, Paterson, NJ 07513	
Garza Contracting LLC	768 Chambers Street, Trenton, NJ 08619	04/27/2017
John Garza, Owner	768 Chambers St., Trenton, NJ 08611	
GNV Concrete LLC	2127 Eisenhower Road, Toms River, NJ 08753	06/01/2019
Vincenzo Iemma, President	2127 Eisenhower Road, Toms River, NJ 08753	
Griffin Sign, Inc.	464 North Randolph Avenue, Cinnaminson, NJ 08077	03/13/2019
Michelle Angerame, President	12 Pendleton Court, Medford, NJ 08055	
GST Power Service Group Inc.	2801 Remington Street, Suite #3, Fort Collins, CO 80525	05/03/2018
Lauchland Roberts, President	2801 Remington Street, Suite 3, Fort Collins, CO 80526	
Heritage Hills Estates	3730 S. Delsea Dr, Vineland, NJ 08360	01/03/2019
Frank Carpine, Owner	100 Liberty Dr, Millville, NJ 08332	
HFC Painting	696 Elm Street, Kearny, NJ 07032	03/17/2018
Hugo Canabe, CEO	696 Elm St, Kearny, NJ 07032	
HFM Labor Ready LLC HFM Labor Ready LLC	459 Rt 38 West, Maple Shade, NJ 08052	01/05/2018
Keith Ludwig, Member	459 Rt 38 West, Maple Shade, NJ 08052	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Highway Safety Systems Inc.	200 Pine Road, Hammonton, NJ 08037	12/16/2017
William J. Doyle, President	200 Pine Rd., Hammonton, NJ 08037	
I.K.E. Electrical Corp.	100 W. Forest Avenue, Building E, Englewood, NJ 07631	07/20/2017
Rebecca Adika, Secretary	76 Alpine Dr., Closter, NJ	
Angelo Castelli, President	48 E. Central Blvd., Palisades Park, NJ 07650	
Yitzhak Adika, Vice-President	76 Alpine Drive, Closter, NJ 07624	
IBS, Inc.	1929 Darby Road, Havertown, PA 19083	05/15/2017
Christopher Rymal, Owner	1929 Darby Rd., Havertown, PA 19083	
Ideal Elevator Services Patrick Dell'Aquila	55 Brookview Dr., Woodcliff Lake, NJ 07677	02/24/2017
Patrick Dell'Aquila, President	55 Brookview Drive, Woodcliff Lake, NJ 07677	
Interstate Home Service Inc. Interstate Home Service Inc.	165 Heights Avenue, Fair Lawn, NJ 07410	08/16/2018
Maurice Rolando, Owner	165 Height's Ave., Fair Lawn, NJ 07410	
J & B Plumbing LLC	644 Cross Street, Lakewood, NJ 08701	05/03/2018
Joseph Battista, Owner	11 Hummingbird Way, Jackson, NJ 08527	
J G Roofing, LLC	85 Prospect Ave. Apt.1, Irvington, NJ 07111	04/25/2019
Manuel Chaguan, Owner	85 Prospect Ave., Irvington, NJ 07111	
J&D Plumbing & Heating Inc.	193 Natrona Avenue, Mercerville, NJ 08619	11/01/2018
John J. Benedetti Jr., President	193 Natrona Avenue, Mercerville, NJ 08619	
J.C. Maintenance & Repair	6725 13th Avenue, Brooklyn, NY 11219	03/14/2019
Emanuel Cucco, Owner	1435 71st Street, Brooklyn, NY 11228	
J.D.S Electric, Inc.	149 Montross Ave., Rutherford, NJ 07070	01/06/2018
Joe DeSalvo, Jr., Owner	149 Montross Ave., Rutherford, NJ 07070	
Jack Mack Commercial Roofing, Inc.	768 Courtlandt St., Perth Amboy, NJ 08861	03/17/2018
Gregorio Soto, Owner	153 Lewis Street, Perth Amboy, NJ 08861	
Jamali Developers, LLC SUSPENDED PENDING DEBARMENT	238 Fresh Ponds Road, Suite 100, Monroe, NJ 08816	SUSPENDED
Hussain Burhanpurwala, Member	553 Marc Drive, North Brunswick, NJ 08902	
Jamcon Construction LLC	100 Springdale Road, Cherry Hill, NJ 08003	01/12/2017
John Schiavo, Managing Member	6 Justa Lane, Cherry Hill, NJ 08003	
JC Builders	610 County Meadows Rd., Nicholls, GA 31554	08/10/2018
James Chaney, President	610 County Meadows Rd., Nicholls, GA 31554	
JD Scaffold Inc.	13353 NE 17th Ave, North Miami, FL 33181	08/24/2017
Randy Garciga, Owner	13353 NE 17th Avenue, North Miami, FL 33181	
Jerzee Container Corp. SUSPENDED PENDING DEBARMENT	123 Bartlett Avenue, West Creek, NJ 08092	SUSPENDED
Jon Whelan, Vice-President	48 8th Avenue, New York, NY 10014	
Sandra Morizzo, Member	165 Oak Ave, West Creek, NJ 08092	
Thomas Whelan, President	PO Box 155, Spring Lake, NJ 07762	
Joseph Filoon Jr, Manager	195 Lakeshore Dr, Manahawkin, NJ 08050	
Joe Antonaccio Electric	167 2nd St., Keyport, NJ 07735	06/07/2019
Joseph Antonaccio, President	167 2nd St., Keyport, NJ 07735	
Johnson Tree Transplanting LLC	1340 LeJack Circle, Forest, VA 24551	07/14/2019
Nathan Johnson, Owner Jessica Johnson, Member	5352 Lake Road, Newfield, NJ 08344 5352 Lake Road, Newfield, NJ 08344	
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CONTRACTORS AND SUBCONTRACTORS	<u>ADDRESS</u>	EXPIRATION_DATE
Joseph Csakvary, Inc.	163 Breakneck Road, Highland Lakes, NJ 07422	11/03/2016
Joseph Csakvary, President	163 Breakneck Road, Highland Lakes, NJ 07422	
JTG Scaffolding & Hoisting LLC	309 West Elizabeth Avenue, Linden, NJ 07036	10/22/2017
Randy Garciga, Owner	13353 NE 17th Avenue, Miami, FL 33181	
K & J Drywall Contractor, Inc.	705 Taft Avenue, North Plainfield, NJ 07063	03/16/2019
Jonny Ayala, Owner	68 Westervelt Avenue, Plainfield, NJ 07060	
K & S Fabrication & Welding, LLC	23 North Street, Bergenfield, NJ 07621	01/12/2018
Simon Walcott, Owner	43 Fairview Avenue, Bergenfield, NJ 07621	
K&K Construction LLC	685 Bergen Blvd., Ridgefield, NJ 07657	06/09/2017
Ki Kuk Kim, Partner	685 Bergan Blvd., Ridgefield, NJ 07657	
Kwang Hee Kim, Partner	685 Bergen Blvd., Ridgefield, NJ 07657	
Kitchen Crafters Plus d/b/a B&B Custom Cabinets	1 Suydam Place, Aberdeen, NJ 07747	05/31/2018
Albert Brisebois, Owner	1 Suydam Place, Aberdeen, NJ 07747	
KS Exteriors, LLC	650 Ohio Ave., Trenton, NJ 08638	03/08/2019
KS Exteriors, LLC	,	
Kris Brezinska, Owner	650 Ohio Ave., Trenton, NJ 08638	
L and Y Roofing, LLC	183 Belmont Avenue, Haledon, NJ 07522	03/16/2017
Luis Vargas, Owner	291 Jefferson Street, Paterson, NJ 07522	
Lombardi Enterprises, Inc.	2901 South Clinton Avenue, South Plainfield, NJ 07080	12/09/2017
Alan Lombardi, President	26 Whispering Way, Berkeley Hights., NJ 07922	
Ann Lombardi, Secretary	26 Whispeiring Way, Berkelely Hights, NJ 07922	
Low Bid, Inc.	125 East Broadway, Long Beach, NY 11561	08/18/2019
George McNulty, President	125 East Broadway, Suite 507, Long Beach, NY 11561	
M.E. Group, LLC	164 Polk St., Apt. 1, Newark, NJ 07105	06/29/2018
Segundo E. Llivicota, Member	164 Polk Street, Apt. #1, Newark, NJ 07105	
Manuel Quito, Member	164 Polk Street, Apt. 1, Newark, NJ 07105	
Ma Na Lu Transportation Corporation	799 Kearny Avenue, Apt #1, Kearny, NJ 07032	06/07/2019
Blanca Segarra, President	799 Kearny Ave., Apt 1, Kearny, NJ 07032	
Marvin Ardon Painting	52 S. Jefferson St., Orange, NJ 07070	12/03/2016
Marvin Alexander Ardon, Owner	52 South Jefferson St., Orange, NJ 07050	
Mattina Construction LLC	22 Toms River Road, Jackson, NJ 08527	12/14/2017
Vincent Mattina, Owner	22 Toms River Rd, Jackson, NJ 08527	
Metal Fab Atlantic LLC	353 Zion Road, Egg Harbor Township, NJ 08234	01/21/2018
John Dever, Owner	1086 Mays Landing Road, Somers Point, NJ 08234	
Metroplex Products Co. Inc.	377 Deans Rhode Hall Road, Monroe, NJ 08831	01/06/2018
Peter Herring, President	164 South Moetz Drive, Milltown, NJ 08850	
Metropolitan Stone & Tile, LLC	102 Richards Ave, Dover, NJ 07801	09/23/2018
Margaret Farina, Owner	30 Monsisnor Deluca Plaza, Nutley, NJ 07110	
MF Speed Construction, LLC.	65-67 7th Ave. East, 1st Floor, Newark, NJ 07104	10/16/2016
Magda Zamprogno, Other	65-67 7th Ave., East 1st Floor, Newark, NJ 07104	20,20,2020
Fernando Lopes, President	65-67 7th Ave., East 1st Floor, Newark, NJ 07104	
MG Topflight	6 Spruce Meadows Dr., Monroe, NJ 08831	07/28/2017
Ashish Thomas, Owner		01/20/2011
Ashish Thomas, Owner Midwest Construction, Inc.	6 Spruce Meadows Dr., Monroe, NJ 08831 114 Brace Road, Cherry Hill, NJ 08034	07/23/2017
	•	V1/23/2U1/
George Antonas, President	114 Brace Road, Cherry Hill, NJ 08034	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Mullen & Sons Contractors, Inc.	PO Box 773, West Caldwell, NJ 07006	02/28/2019
John Mullen, Sr, President	45 Fairfield Place, West Caldwell, NJ 07006	
John Mullen, Jr., Owner	45 Fairfield Place, West Caldwell, NJ 07006	
Natural View Landscapes LLC	513 West Summer Ave, Minotola, NJ 08341	01/05/2017
Zachary Kouhoupt, President	5923 Peach St, Mays Landing, NJ 08330	
NDA & Construction, LLC	161 Thomas St, Unit 1, Newark, NJ 07114	12/10/2017
Nester Torres, Owner	161 Thomas St, Unit 1, Newark, NJ 07114	
New Jersey State Flooring, Inc.	109 Greentree Road, Brick, NJ 08724	02/10/2019
Roy C. Apgar, President	109 Greentree Road, Brick, NJ 08724	
Cheryl Apgar, Vice-President	109 Greentree Road, Brick, NJ 08724	
Niceta Electric	2119 Merritt Drive, Northfield, NJ 08225	10/19/2018
Joseph Niceta, Owner	2119 Merritt Drive, Northfield, NJ 08225	
Nicola Matera & Sons L.L.C.	48 Old Jacksonville Road, Towaco, NJ 07082	10/20/2016
William Vlasich, Managing Member	7 Ginkgo Court, Upper Saddle River, NJ 07458	
Sheila Vlasich, Managing Member	7 Ginkgo Court, Upper Saddle River, NJ 07458	
NT&P Construction Inc.	105 White Oak Lane, Old Bridge, NJ 08857	11/22/2018
Nicola Pengue, President	4 Camelot Avenue, Monroe Township, NJ 08831	
Ocean Blue Builders LLC	711 Carol Avenue, Oakhurst, NJ 07755	11/05/2017
John Riley Jr, Managing Member	140 Harrison Avenue, Fair Haven, NJ 07704	
OCM Construction OCM Construction, LLC	203 Main Street, #204, Flemington, NJ 08822	08/11/2017
William Mitchell, Owner	22 Greenwood Place, Flemington, NJ 08822	
Octagon Construction Octagon Construction	10 Jeanette Street, Carteret, NJ 07008	03/02/2018
Wojciech Puchajda, Owner	10 Jeanette St., Carteret, NJ 07008	
Ohana Metal & Iron Works Inc.	60 Miller Road, Montgomery, NY 12549	08/05/2017
Erezy Ohana, Owner	60 Miller Road, Montgomery, NY 12549	
Old World Construction, Inc.	P.O Box 35, Pennington, NJ 08534	02/10/2018
Krzystof Oprzadek, President	19 Woodville Rd, Hopewell, NJ 08525	
Stanislaw Dziuba, Vice-President	69 West Shore Drive, Pennington, NJ 08534	
OTS-NJ, LLC OTS of New Jersey, LLC	21 Traxler Street, Butler, OH 44822	07/04/2019
James T. O'Connor, Managing Member	707 Main Street, Avon-by-the-Sea, NJ 07717	
Palazzo Fence Co	96 Taylor Dr, Levittown, PA 19054	06/26/2019
Troy Palazzo, Owner	96 Taylor Dr, Levittown, PA 19054	
Paul F. Roscitt Electric, Inc.	262 Harmon Avenue, Fort Lee, NJ 07024	11/08/2018
Paul F Roscitt, President	262 Harmon Avenue, Fort Lee, NJ 07024	
Paul Sexton	462 10th Ave., Paterson, NJ 07510	07/10/2017
Paul Sexton, Owner	462 10th Ave., Paterson, NJ	
Pax Construction Corp.	67 Highway 36, West Long Branch, NJ 07764	10/16/2017
Antonio Pereira, President	159 Locust Avenue, West Long Branch, NJ 07764	
Julio Pereira, Vice-President	304 Crimson Circle, Oakhurst, NJ 07755	
PER Construction LLC	67 State Route 36, Suite #4, West Long Branch, NJ 077	764 10/16/2017
Manuel Pereira, Owner	194 Monmouth Ave., Long Branch, NJ 07740	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Perfection Erectors, LLC Perfection Erectors, LLC	349 West Prospect Avenue, Keyport, NJ 07735	02/23/2019
Marianne Cammarata, Manager	349 W. Prospect Ave., Keyport, NJ 07735	
Vincent Frank Cammarata, Owner	349 W. Prospect Avenue, Keyport, NJ 07735	
Perrone Trucking LLC	74 Glen Roy Road East, Fairfield, NJ 07004	10/27/2018
James Perrone, Owner	74 Glenroy Road East, Fairfield, NJ 07004	
Peter Vincent	129 Highland Ave, Jersey City, NJ 07306	04/26/2018
Peter Vincent, Owner	129 Highland Ave, Jersey City, NJ 07306	
Petric & Associates, Inc.	1162 Greenpond Road, Newfoundland, NJ 07435	06/07/2018
Ellen Petric, President	1162 Greenpond Road, Newfoundland, NJ 07435	
Steven Petric, Vice-President	1162 Greenpond Road, Newfoundland, NJ 07435	
Precise Builders LLC	402 Market St, Newark, NJ 07105	05/27/2017
John Domingues, Owner	402 Market St, Newark, NJ 07105	
R & B Construction	2008 Carmel Road, Millville, NJ 08332	06/10/2018
Roxanne Lloyd, President	2008 Carmel Road, Millville, NJ 08332	
Ranco Mechanical, Inc.	P. O. Box 510, Augusta, NJ 07860	10/28/2016
Kenneth Davis, President	2 Melba Drive, Newton, NJ 07860	
Anthony Davis, Vice-President	363 Northfield Avenue, Livingston, NJ 07039	
Real Construction LLC	1984 Whitesville Rd, Toms River, NJ 08757	11/23/2017
Arkadiusz Chwedczuk, Owner	716 11th Avenue, Toms River, NJ 08757	
Ren Construction	1984 Whitesville Road, Toms River, NJ 08755	07/09/2017
Albert Chwedczuk, Owner	1984 Whitesville Road, Toms River, NJ 087055	
Resco, LLC Hallmark Electric, LLC	P.O. Box 806, Old Saybrook, CT 06475	10/21/2018
David Peckham, Owner	15 Elm Street, Old Saybrook, CT 06475	
Retail Store Painting	202 Karen Drive, Scranton, PA 18505	01/12/2018
John Thomas, President	202 Karen Drive, Scranton, PA 18505	
Riano Brothers, LLC. Atanasia Lazo Gutierrez	13 Poppy Ave., Neptune, NJ 07753	02/25/2018
Luis Riano, President	13 Poppy Ave., Neptune, 07753	
Ribles Locksmith & Hardware	613 15th Ave., Belmar, NJ 07719	07/10/2017
Evelyn McDermott, Owner	613 15th Ave, Belmar, NJ 07719	
Rizzo New York Inc. Rizzo New York Inc.	109-02 Jamaica Avenue, Richmond Hill, NY 11418	01/19/2019
Rizwan Ahmad, President	9157 97th St, Wood Haven, NY 11421	
Robert M. Mesmer, LLC	24 Sand Bridge Rd., Elmer, NJ 08318	12/11/2017
Robert Mesmer, Managing Member	24 Sand Bridge Road, Elmer, NJ 08318	
Roncone Construction, L.L.C. Roncone Construction, L.L.C.	275 Chestnut St., Store B #113, Newark, NJ 07114	02/02/2018
Leonardo Marques Roncone, Managing Member	192 Emmet St., Newark, NJ 07105	
S & S Electric, LLC	108 Oak Glen Road, Toms River, NJ 08753	01/12/2018
Al Shan, President	108 Oak Glen Road, Toms River, NJ 08753	
Sandora & Spina Contracting Inc.	15 North Branch River Rd., Branchburg, NJ 08876	06/28/2018
Edward Sandora, President	15 North Branch River Rd., Branchburg, NJ 08876	
SDT Transport LLC	12 Clifford Rd, Wanaque, NJ 07465	08/25/2019
Stonbon Trinodi Oromon	12 Clifford Dd. Womania NI 07465	

12 Clifford Rd, Wanaque, NJ 07465

Stephen Tripodi, Owner

CONTRACTORS AND SUBCONTRACTORS	<u>ADDRESS</u>	EXPIRATION_DATE
Seminole Construction, L.L.C.	128 Bartlett Ave, West Creek, NJ 08092	SUSPENDED
SUSPENDED PENDING DEBARMENT		
Sandra Morizzo, Managing Member	165 Oak Ave., West Creek, NJ 08092	
Joseph Filoon Jr., Manager	195 Lakeshore Dr, Manahawkin, NJ	
Southern State Contracting Services LLC	51 Pine Dr S., Brick, NJ 08723	06/26/2019
Joseph F. Gleason Jr., President	51 Pine Dr. S, Brick, NJ 08724	
Squillace Steel Fabricators, LLC Squillace Steel Fabricators, LLC	771 Amsterdam Avenue, Roselle, NJ 07203	05/31/2019
Rachel Squillace, Manager	771 Amsterdam Ave., Roselle Park, NJ 07203	
Richard Squillace, President	771 Amsterdam Avenue, Roselle Park, NJ 07203	
Super Stars Construction Inc	58 Steiner Ave, Neptune City, NJ 07753	08/11/2017
Juan Riano, Owner	58 Steiner Ave., Neptune City, NJ 07753	
Superior Environmental Development Corp.	859 Route 130, Unit 117, East Windsor, NJ 08520	09/12/2019
Eric T. McCully, Owner	859 Rt. 130, Unit 117, East Windsor, 08520	
T. Fiore Demolition, Inc. same	457 Wilson Avenue, Newark, NJ 07105	04/02/2017
Theodore Fiore, Owner	9 Silver Spring Court, East Hanover, NJ 07936	
TAU Associates Plumbing & Mechanical LLC	91 Graham St., Jersey City, NJ 07307	12/17/2016
Lek Tauthong, Owner	91 Graham St, Jersey City, NJ 07307	
Terra-Tech Construction, Inc.	265 Woodward Rd, Suite A, Manalapan, NJ 07726	03/17/2018
Tania Gaga, Vice-President	121 Diamond Lane, Manalapan, NJ 07726	
Nicole Lucas, President	12 Red Fox Run, Manalapan, NJ 08857	
Testa Corp.	360 Audubon Road, Wakefield, MA 01880	05/27/2017
Steven D. Testa, Owner	6 North Hill Dr., Lynnfield, MA 01940	
The Grace Brothers	311 Colonial Road, Edgewater Park, NJ 08010	01/08/2017
James T. Grace, Owner	14 Surrey Lane, Williingboro, NJ 08046	
Jethro Grace Jr., Owner	311 Colonial Road, Edgewater Park, NJ 08010	
Thomas Clark Fiberglass, LLC	145 Old Halfway Road, Barnegat, NJ 08005	10/22/2017
Thomas Clark, Owner / Officer	145 Old Halfway Rd., Barnegat, NJ 08005	
Timster Trucking Inc. SUSPENDED PENDING DEBARMENT	128 Bartlett Avenue, West Creek, NJ 08092	SUSPENDED
Sandra Morizzo, Partner	165 Oak Ave, West Creek,	
Joseph Filoon Jr., President	165 Oak Avenue, West Creek, NJ 08092	
TJB Air Conditioning And Heating	2305 Garry Rd. Suite A, Cinnaminson, NJ 08077	02/28/2019
Timothy Babbitt, Owner	2305 Garry Rd. Suite A, Cinnaminson, NJ 08077	
TJD Construction Ted Dobrzanski	138 Stonehenge Dr, Toms River, NJ 08753	02/24/2017
Ted Dobrzanski, CEO	138 Stonehenge Dr, Toms River, NJ 08753	
Todd Cable Construction, LLC	151 Old State Rd., Newport, NY 13416	04/26/2018
Todd E. Warmingham, Owner	P.o. Box 215, Newport, NY 13416	
Top Notch Tree & Landscape, LLC	70 East Allendale Rd., Saddle River, NJ 07458	12/06/2018
James Van Wyckhouse, Owner	46 Tam O Shanter Rd, Mahwah, NJ 07430	
TQM Construction Corporation	21 Pine Street, Suite 206, Rockaway, NJ 07866	03/22/2019
Balwant DeVre, President	21 Patriot Crossing, Rockaway, NJ 07866	
Trinity Paving, LLC	245 Clayton Road, Monroeville, NJ 08343-2652	10/20/2017
Michele Doyle, Member	115 Millstone Way, Monroeville, NJ 08343	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Turf Services Express LLC	26 North Broad Street, Medford, NJ 08055	03/26/2018
Sharleen Poppalardo, Managing Member	11 Muirfield Court, Medford, NJ 08055	
Turfscapes LLC	PO Box 950, Williamstown, NJ 08094	08/22/2019
Jeffrey Grize, Owner	3477 S. Blackhorse Pike, Williamstown, NJ 08094	
Turfscapes LLC	PO Box 950, Williamstown, NJ 08094	05/27/2017
Jeffrey Grize, Owner	3477 S. Blackhorse Pike, Williamstown, NJ 08094	
Twin Industries	15 Lewis Street, Eatontown, NJ 07724	04/04/2019
Jeanne Crispino, Vice-President	15 Lewis Street, Eatontown, NJ 07724	
Van Peenen Landscape Contractors, Inc. Van Peenen Landscape Contractors, Inc.	555 Preakness Avenue,, Suite 210, Totowa, NJ 07512	11/22/2018
Raymond Van Peenen, President	3 Gates Place, Wayne, NJ 07470	
Vercon Building & Maintenance Corp.	11 Arboretum Drive, Jackson, NJ 08527	05/11/2017
Allanur Islambekov, Owner	11 Arboretum Dr., Jackson, NJ 08527	
Victor Construction , Inc	4615 N. Front St, 2nd Floor, Philadelphia, PA 19140	04/22/2017
Tania Felix-Claudio, Owner	4615 N. front St., 2nd Floor, Philadelphia, PA 19140	
Wallmasters Modular Inc.	226 Mutual Avenue, Winchester, KY 40391	07/28/2017
Timothy Morrison, President	2745 SR668N, Junction City, OH 43748	
Warbeck Construction Group LLC	63 Beaver Brook Road, Suite 305, Lincoln Park, NJ 07035	02/28/2019
Jon J Warbeck, President	680 West Pine Brook Road, Lincoln Park, NJ 07035	

SUSPENDED PENDING DEBARMENT:

CONTRACTORS AND SUBCONTRACTORS	<u>ADDRESS</u>	SUSPEND DATE
CAM Contractors Inc.	179-15 Route 46 West, Rockaway, NJ 07866	10/12/2016
Michelle Gamache-Caravella, President	179-15 Route 46, Rockaway, NJ 07866	
Joseph Caravella, Manager	,,	
Jamali Developers, LLC	238 Fresh Ponds Road, Monroe, NJ 08816	01/11/2016
Hussain Burhanpurwala, Member	553 Marc Drive, North Brunswick, NJ 08902	
Jerzee Container Corp.	123 Bartlett Avenue, West Creek, NJ 08092	09/23/2016
Jon Whelan, Vice-President	48 8th Avenue, New York, NY 10014	
Joseph Filoon Jr, Manager	195 Lakeshore Dr, Manahawkin, NJ 08050	
Sandra Morizzo, Member	165 Oak Ave, West Creek, NJ 08092	
Thomas Whelan, President	PO Box 155, Spring Lake, NJ 07762	
Seminole Construction, L.L.C.	128 Bartlett Ave, West Creek, NJ 08092	09/23/2016
Joseph Filoon Jr., Manager	195 Lakeshore Dr, Manahawkin, NJ	
Sandra Morizzo, Managing Member	165 Oak Ave., West Creek, NJ 08092	
Timster Trucking Inc.	128 Bartlett Avenue, West Creek, NJ 08092	09/23/2016
Joseph Filoon Jr., President	165 Oak Avenue, West Creek, NJ 08092	
Sandra Morizzo, Partner	165 Oak Ave, West Creek,	

LIST OF DEBARRED OWNERS/OFFICERS

Owners/ Officers	Address	Company Name
Yitzhak Adika, Vice-President	76 Alpine Drive, Closter, NJ 07624	I.K.E. Electrical Corp.
Rebecca Adika, Secretary	76 Alpine Dr., Closter, NJ	I.K.E. Electrical Corp.
Rizwan Ahmad, President	9157 97th St, Wood Haven, NY 11421	Rizzo New York Inc. Rizzo New York Inc.
Michelle Angerame, President	12 Pendleton Court, Medford, NJ 08055	Griffin Sign, Inc.
Donnie Antiveros, President	677 Old Highway 64, Etowah, NC 28729	Antiveros Construction, Inc.
Joseph Antonaccio, President	167 2nd St., Keyport, NJ 07735	Joe Antonaccio Electric
George Antonas, President	114 Brace Road, Cherry Hill, NJ 08034	Midwest Construction, Inc.
Roy C. Apgar, President	109 Greentree Road, Brick, NJ 08724	New Jersey State Flooring, Inc.
Cheryl Apgar, Vice-President	109 Greentree Road, Brick, NJ 08724	New Jersey State Flooring, Inc.
Marvin Alexander Ardon, Owner	52 South Jefferson St., Orange, NJ 07050	Marvin Ardon Painting
Jonny Ayala, Owner	68 Westervelt Avenue, Plainfield, NJ 07060	K & J Drywall Contractor, Inc.
Timothy Babbitt, Owner	2305 Garry Rd. Suite A, Cinnaminson, NJ 08077	TJB Air Conditioning And Heating
Juan J. Barquero, Owner	533 South 5th Street, Elizabeth, NJ 07206	Camelot Roofing, LLC
Joseph Battista, Owner	11 Hummingbird Way, Jackson, NJ 08527	J & B Plumbing LLC
Wesley J. Beckett Jr., President	110 Oak Avenue, Malaga, NJ 08328	Beckett Enterprises, Inc.
John J. Benedetti Jr., President	193 Natrona Avenue, Mercerville, NJ 08619	J&D Plumbing & Heating Inc.
Kris Brezinska, Owner	650 Ohio Ave., Trenton, NJ 08638	KS Exteriors, LLC KS Exteriors, LLC
Albert Brisebois, Owner	1 Suydam Place, Aberdeen, NJ 07747	Kitchen Crafters Plus d/b/a B&B Custom Cabinets
Hussain Burhanpurwala, Member	553 Marc Drive, North Brunswick, NJ 08902	Jamali Developers, LLC SUSPENDED PENDING DEBARMENT
Giovanny Bustos, Owner	26 Spencer Place, Garfield, NJ 07026	Cobra Communications & Installations, LLC
Marianne Cammarata, Manager	349 W. Prospect Ave., Keyport, NJ 07735	Perfection Erectors, LLC Perfection Erectors, LLC
Vincent Frank Cammarata, Owner	349 W. Prospect Avenue, Keyport, NJ 07735	Perfection Erectors, LLC Perfection Erectors, LLC
Hugo Canabe, CEO	696 Elm St, Kearny, NJ 07032	HFC Painting
Joseph Caravella, Manager	, , 100 Liberty Dr, Millville, NJ 08332	CAM Contractors Inc. SUSPENDED PENDING DEBARMENT
Frank Carpine, Owner		Heritage Hills Estates G.F.I. Siteworks, Inc.
Salvatore A Casella III, President	362 Friendship Road, Clarksboro, NJ 08020	G.F.I. Siteworks, Inc.
Angelo Castelli, President	48 E. Central Blvd., Palisades Park, NJ 07650	I.K.E. Electrical Corp.
Manuel Chaguan, Owner	85 Prospect Ave., Irvington, NJ 07111	J G Roofing, LLC
Shawn Chalmers, Owner	337 Crown Street, Brooklyn, NY 11211	Chalmers Construction LLC.
James Chaney, President	610 County Meadows Rd., Nicholls, GA 31554	JC Builders
Noe Chanez, Principal	55 Miller Ave., Somerset, NJ 08873	Chanez Landscaping, LLC
Christine Charles, Vice-President	164 Ball Avenue, Parsippany, NJ 07054	All County Pipeline & Site Excavation Inc.
Eric Charles, President	164 Ball Avenue, Parsippany, NJ 07054	All County Pipeline & Site Excavation Inc.
Arkadiusz Chwedczuk, Owner	716 11th Avenue, Toms River, NJ 08757	Real Construction LLC
Albert Chwedczuk, Owner	1984 Whitesville Road, Toms River, NJ 087055	Ren Construction
Andrzej Citak, Vice-President	556 Humboldt St, Brooklyn, NY 11222	Cityline Contracting Inc.
Thomas Clark, Owner / Officer	145 Old Halfway Rd., Barnegat, NJ 08005	Thomas Clark Fiberglass, LLC
Andrew Confortini, Vice-President	491 West County Drive, Somerville, NJ 08876	Confortini Plumbing & Heating, LLC
Anthony Confortini, Owner	41 Bunnvale Road, Clifton, NJ 07830	Confortini Plumbing & Heating, LLC
Olga Conteras, Vice-President	677 Old Highway 64, Etowah, NC 28729	Antiveros Construction, Inc.
William Coons, Owner	23178 Summer View Circle, Three Springs, PA 17264	Coons Construction, LLC
Steven Crider, Member	507 Pressler Street, Apt. 2128, Austin, TX 78703	Crider Americas Solar LLC

15 Lewis Street, Eatontown, NJ 07724

Jeanne Crispino, Vice-President

Twin Industries

Owners/ Officers	<u>Address</u>	Company Name
Joseph Csakvary, President	163 Breakneck Road, Highland Lakes, NJ 07422	Joseph Csakvary, Inc.
Emanuel Cucco, Owner	1435 71st Street, Brooklyn, NY 11228	J.C. Maintenance & Repair
Nuno Cunha, Owner	35 Carmen Ct., Newark, NJ 07105	Cunhas Construction Inc.
Jose Fernandes Da Silva, Owner	26 Washington St., Long Branch, NJ 07718	Cam Flooring Installations LLC
Anthony Davis, Vice-President	363 Northfield Avenue, Livingston, NJ 07039	Ranco Mechanical, Inc.
Kenneth Davis, President	2 Melba Drive, Newton, NJ 07860	Ranco Mechanical, Inc.
Dane DeForest, President	2406 Herbertsville Road, Point Pleasant, NJ 08742	Dane DeForest Demolition, Inc.
Patrick DellAquila, President	55 Brookview Drive, Woodcliff Lake, NJ 07677	Elevator Medic Corporation
Patrick Dell'Aquila, President	55 Brookview Drive, Woodcliff Lake, NJ 07677	Ideal Elevator Services Patrick Dell'Aquila
Nelson DeOliveira, President	276 Highland Ave, Kearney, NJ 07032	East Coast Touch Enterprises LLC
Joe DeSalvo, Jr., Owner	149 Montross Ave., Rutherford, NJ 07070	J.D.S Electric, Inc.
John Dever, Owner	1086 Mays Landing Road, Somers Point, NJ 08234	Metal Fab Atlantic LLC
Balwant DeVre, President	21 Patriot Crossing, Rockaway, NJ 07866	TQM Construction Corporation
James DiLorenzo, Vice-President	440 Mantua Avenue, Paulsboro, NJ 08066	G.F.I. Siteworks, Inc. G.F.I. Siteworks, Inc.
Dorothy Dobiecka, President	556 Humboldt Street, Brooklyn, NY 11222	Cityline Contracting Inc.
Florian Dobre, Partner	526 Sheridan Ave, Roselle, NJ 07203	B & B Atlantic LLC
Ted Dobrzanski, CEO	138 Stonehenge Dr, Toms River, NJ 08753	TJD Construction Ted Dobrzanski
John Domingues, Owner	402 Market St, Newark, NJ 07105	Precise Builders LLC
Michele Doyle, Member	115 Millstone Way, Monroeville, NJ 08343	Trinity Paving, LLC
William J. Doyle, President	200 Pine Rd., Hammonton, NJ 08037	Highway Safety Systems Inc.
Agostino Ducato, Vice-President	223 Spring Valley Road, Paramus, NJ 07652	All Jersey Fence Co.
Stanislaw Dziuba, Vice-President	69 West Shore Drive, Pennington, NJ 08534	Old World Construction, Inc.
Kevin G. Eib, President	29 Monmouth Road, Monroe Twp., NJ 08831	Division Ten Installations, LLC
Justin Ettere, Vice-President	52 Brass Castle Road, Washington, NJ 07882	Arete Development Inc. Arete Development Inc.
John Ettere, Owner Matthew Ettere, Vice-President	1453 Tooz Place, South Plainfield, NJ 070808 Brookside Drive, Warren, NJ 07059	Arete Development Inc. Arete Development Inc. Arete Development Inc.
Matthew Ettere, Vice-Fresident	8 Blookside Dilve, Wallell, NJ 07039	Arete Development Inc. Arete Development Inc.
Jonathan Ettere, President	7 Craig Road, Readington, NJ 08853	Arete Development Inc. Arete Development Inc.
Margaret Farina, Owner	30 Monsisnor Deluca Plaza, Nutley, NJ 07110	Metropolitan Stone & Tile, LLC
Tania Felix-Claudio, Owner	4615 N. front St., 2nd Floor, Philadelphia, PA 19140	Victor Construction, Inc
Hugo Fernandes, Owner	90 Willow Street, Carteret, NJ 07008	DM Fernandes Contracts LLC
Joseph Filoon Jr, Manager	195 Lakeshore Dr, Manahawkin, NJ 08050	Jerzee Container Corp. SUSPENDED PENDING DEBARMENT
Joseph Filoon Jr., President Joseph Filoon Jr., Manager	165 Oak Avenue, West Creek, NJ 08092	Timster Trucking Inc. SUSPENDED PENDING DEBARMENT Seminole Construction, L.L.C.
Joseph Phoon Jr., Wanager	195 Lakeshore Dr, Manahawkin, NJ	SUSPENDED PENDING DEBARMENT
Theodore Fiore, Owner	9 Silver Spring Court, East Hanover, NJ 07936	T. Fiore Demolition, Inc. same
Thomas Fittin, Owner / Officer	2243 Edgar Rd, Point Pleasant Beach, NJ 08742	Fittin Construction, LLC
Donald Fleming, President	340 Reservoir Road, Boonton, NJ 07005	C & E Contracting, Inc.
Theresa Frajdenberg, President	110 South Harding Highway, Landisville, NJ 08326	CRC Concrete Raising of South Jersey, Inc.
Scott Frasca, Manager	326 Coles Mill Road, Williamstown, NJ 08094	Blue Skies Electric L.L.C.
Rachel Frasca, Owner	326 Coles Mill Road, Williamstown, NJ 08094	Blue Skies Electric L.L.C.
Tania Gaga, Vice-President	121 Diamond Lane, Manalapan, NJ 07726	Terra-Tech Construction, Inc.
Gabino Galindo, Owner	1025 E. 23rd St. #1, Paterson, NJ 07513	Galindo Const. LLC
Dean Gallo, Owner	245 Emanuel Street, Trenton, NJ 08610	DG Construction & Renovations LLC
Harry Gallo, Secretary	245 Emanuel Street, Trenton, NJ 08610	DG Construction & Renovations LLC

Owners/Officers Address **Company Name** Michelle Gamache-Caravella, President 179-15 Route 46, Suite 135, Rockaway, NJ 07866 CAM Contractors Inc. SUSPENDED PENDING DEBARMENT 64 Grandview Ave. North Plainfield, NJ 07060 Cesar Garcia, Owner Emanuel Drywall Services, Inc 13353 NE 17th Avenue, Miami, FL 33181 JTG Scaffolding & Hoisting LLC Randy Garciga, Owner Randy Garciga, Owner 13353 NE 17th Avenue, North Miami, FL 33181 JD Scaffold Inc. John Garza, Owner 768 Chambers St., Trenton, NJ 08611 Garza Contracting LLC 51 Pine Dr. S, Brick, NJ 08724 Joseph F. Gleason Jr., President Southern State Contracting Services LLC 14 Surrey Lane, Williingboro, NJ 08046 James T. Grace, Owner The Grace Brothers Jethro Grace Jr., Owner 311 Colonial Road, Edgewater Park, NJ 08010 The Grace Brothers Paul Grillo, Owner 207 Butlerr Ave, Staten Island, NY 10307 Area Fuel Paul Grillo, Owner 207 Bulter Ave, St. Island, NY Area Fuel 3477 S. Blackhorse Pike, Williamstown, NJ 08094 Turfscapes LLC Jeffrey Grize, Owner Curillo Guaman, Owner 197 Broad Street, Newark, NJ 07104 CJC Builders Corp. Advantage Sport USA, Inc. Maurice Guarigilia, Owner / Officer 494 North Barbor Road, Colchester, VT 05446 101 South Orachard Road, Vineland, NJ 08360 E & S Enterprises, LLC Helen Henriquez, Owner 164 South Moetz Drive, Milltown, NJ 08850 Metroplex Products Co. Inc. Peter Herring, President 2127 Eisenhower Road, Toms River, NJ 08753 Vincenzo Iemma, President **GNV** Concrete LLC Allanur Islambekov, Owner 11 Arboretum Dr., Jackson, NJ 08527 Vercon Building & Maintenance Corp. Jessica Johnson, Member 5352 Lake Road, Newfield, NJ 08344 Johnson Tree Transplanting LLC Nathan Johnson, Owner 5352 Lake Road, Newfield, NJ 08344 Johnson Tree Transplanting LLC Mark Kahn, Owner 910 Cedar Street, Millville, NJ 08332 CertaPro Painters of South Jersey LLC 685 Bergen Blvd., Ridgefield, NJ 07657 K&K Construction LLC Kwang Hee Kim, Partner K&K Construction LLC Ki Kuk Kim, Partner 685 Bergan Blvd., Ridgefield, NJ 07657 Zachary Kouhoupt, President 5923 Peach St, Mays Landing, NJ 08330 Natural View Landscapes LLC Devin Lemere, Partner 300 Mamaroneck Ave, # 133, White Plains, NY 10605 360 Golf, LLC Michael Lenec, Partner 300 Mamaroneck Ave, White Plains, NJ 10605 360 Golf, LLC 164 Polk Street, Apt. #1, Newark, NJ 07105 Segundo E. Llivicota, Member M.E. Group, LLC 2008 Carmel Road, Millville, NJ 08332 R & B Construction Roxanne Lloyd, President Alan Lombardi, President 26 Whispering Way, Berkeley Hights., NJ 07922 Lombardi Enterprises, Inc. Ann Lombardi, Secretary 26 Whispeiring Way, Berkelely Hights, NJ 07922 Lombardi Enterprises, Inc. 65-67 7th Ave., East 1st Floor, Newark, NJ 07104 Fernando Lopes, President MF Speed Construction, LLC. 152 Jefferson St., Newark, NJ 07105 Frank Loureier, Vice-President East Coast Touch Enterprises LLC Nicole Lucas, President 12 Red Fox Run, Manalapan, NJ 08857 Terra-Tech Construction, Inc. Keith Ludwig, Member 459 Rt 38 West, Maple Shade, NJ 08052 HFM Labor Ready LLC HFM Labor Ready LLC John H. Madara, President 319 Terrace St, Rahway, NJ 07065 Advantage Contracting & Entertainment Services I Harold Marshall, Jr., Member 1800 Eva Street, Austin, TX 78704 Crider Americas Solar LLC Vincent Mattina, Owner 22 Toms River Rd, Jackson, NJ 08527 Mattina Construction LLC 613 15th Ave, Belmar, NJ 07719 Ribles Locksmith & Hardware Evelyn McDermott, Owner 125 East Broadway, Suite 507, Long Beach, NY 11561 Low Bid, Inc. George McNulty, President Robert Mesmer, Managing Member 24 Sand Bridge Road, Elmer, NJ 08318 Robert M. Mesmer, LLC Chalmers Construction LLC. Keith Mishoe, Owner 341 Seaton Avenue, Roselle Park, NJ 07204 William Mitchell, Owner 22 Greenwood Place, Flemington, NJ 08822 **OCM Construction** OCM Construction, LLC Brad J. Moini, President 101 Buttonwood Lane, Freehold, NJ 07728 **Brothers Landscaping** J.H. Brothers Inc. Frank Montgomery, Owner 42 Bryant Rd., Waretown, NJ 08758 Frank Montgomery Builder Sandra Morizzo, Partner 165 Oak Ave, West Creek, Timster Trucking Inc. SUSPENDED PENDING DEBARMENT Jerzee Container Corp. Sandra Morizzo, Member 165 Oak Ave, West Creek, NJ 08092 SUSPENDED PENDING DEBARMENT

Owners/ Officers	Address	Company Name
Sandra Morizzo, Managing Member	165 Oak Ave., West Creek, NJ 08092	Seminole Construction, L.L.C.
		SUSPENDED PENDING DEBARMENT
Timothy Morrison, President	2745 SR668N, Junction City, OH 43748	Wallmasters Modular Inc.
John Mullen, Jr., Owner	45 Fairfield Place, West Caldwell, NJ 07006	Mullen & Sons Contractors, Inc.
John Mullen, Sr, President	45 Fairfield Place, West Caldwell, NJ 07006	Mullen & Sons Contractors, Inc.
Joseph Niceta, Owner	2119 Merritt Drive, Northfield, NJ 08225	Niceta Electric
Uju A. Obiorah, President	259 West Forest Avenue, Englewood, NJ 07631	Envirocare Enterprises, Inc. Envirocare Enterprises, Inc.
Inno Obiorah, Manager	658 Rutgers Pl, Paramus, NJ 07652	Envirocare Enterprises, Inc. Envirocare Enterprises, Inc.
James T. O'Connor, Managing Member	707 Main Street, Avon-by-the-Sea, NJ 07717	OTS-NJ, LLC OTS of New Jersey, LLC
Erezy Ohana, Owner	60 Miller Road, Montgomery, NY 12549	Ohana Metal & Iron Works Inc.
Luis Oliveras, Owner	644 East 2nd St., Plainfield, NJ 07060	Caslo Drywall Corp.
Krzystof Oprzadek, President	19 Woodville Rd, Hopewell, NJ 08525	Old World Construction, Inc.
Brian O'Shea, Owner	1041 Glassboro Rd. D-2, Williamstown, NJ 08094	American Welding Services American Welding Services, Inc.
Troy Palazzo, Owner	96 Taylor Dr, Levittown, PA 19054	Palazzo Fence Co
Hal Pattalino, President	3 Chadwick Drive, Voorhees, NJ 08043	Allied Construction LLC. Allied Construction Management, LLC
Brian Patterson, President	11 Arlene Drive, West Long Branch, NJ 07764	Brian Patterson Mechanical Contracting, Inc.
David Peckham, Owner	15 Elm Street, Old Saybrook, CT 06475	Resco, LLC Hallmark Electric, LLC
Nicola Pengue, President	4 Camelot Avenue, Monroe Township, NJ 08831	NT&P Construction Inc.
Julio Pereira, Vice-President	304 Crimson Circle, Oakhurst, NJ 07755	Pax Construction Corp.
Antonio Pereira, President	159 Locust Avenue, West Long Branch, NJ 07764	Pax Construction Corp.
Manuel Pereira, Owner	194 Monmouth Ave., Long Branch, NJ 07740	PER Construction LLC
James Perrone, Owner	74 Glenroy Road East, Fairfield, NJ 07004	Perrone Trucking LLC
Ellen Petric, President	1162 Greenpond Road, Newfoundland, NJ 07435	Petric & Associates, Inc.
Steven Petric, Vice-President	1162 Greenpond Road, Newfoundland, NJ 07435	Petric & Associates, Inc.
Armando Piedade, President	265 Wilson Avenue, Kearny, NJ 07032	Conex Construction Corp.
Alicirio Jose Santana Pires, Owner	141 RT. 130 South, Suite 192, Cinnaminson, NJ 08077	Five Star Quality Construction
Richard Pluese, Vice-President	66 E Cedar Avenue, Marlton, NJ 08053	Apex Tower Services, Inc.
Sharleen Poppalardo, Managing Member	11 Muirfield Court, Medford, NJ 08055	Turf Services Express LLC
Wojciech Puchajda, Owner	10 Jeanette St., Carteret, NJ 07008	Octagon Construction Octagon Construction
Manuel Quito, Member	164 Polk Street, Apt. 1, Newark, NJ 07105	M.E. Group, LLC
Rafael Ramos, President	120 Cantello Street, Union City, NJ 07087	Everest Masonry Construction, Inc.
Luis Riano, President	13 Poppy Ave., Neptune, 07753	Riano Brothers, LLC. Atanasia Lazo Gutierrez
Juan Riano, Owner	58 Steiner Ave., Neptune City, NJ 07753	Super Stars Construction Inc
John Riley Jr, Managing Member	140 Harrison Avenue, Fair Haven, NJ 07704	Ocean Blue Builders LLC
Lauchland Roberts, President	2801 Remington Street, Suite 3, Fort Collins, CO 80526	GST Power Service Group Inc.
Mark Rodrigues, President	523 Hamilton Avenue, Kingston, PA 18704	Everest Masonry Constructors, Inc.
Eddy Rodriguez, Member	1100 W. 7th. St., Apt. A9, Plainfield, NJ 07063	Eddy Drywall, LLC
Maurice Rolando, Owner	165 Height's Ave., Fair Lawn, NJ 07410	Interstate Home Service Inc. Interstate Home Service Inc.
Leonardo Marques Roncone, Managing	192 Emmet St., Newark, NJ 07105	Roncone Construction, L.L.C. Roncone Construction, L.L.C.
Paul F Roscitt, President	262 Harmon Avenue, Fort Lee, NJ 07024	Paul F. Roscitt Electric, Inc.
Christopher Rymal, Owner	1929 Darby Rd., Havertown, PA 19083	IBS, Inc.
Edward Sandora, President	15 North Branch River Rd., Branchburg, NJ 08876	Sandora & Spina Contracting Inc.
Michael Santos, President	988 Johnson Place, Apt. 4, Union, NJ 07083	AB Contracting & Develpment LLC

6 Justa Lane, Cherry Hill, NJ 08003

John Schiavo, Managing Member

Jamcon Construction LLC

Owners/Officers Address **Company Name** Blanca Segarra, President 799 Kearny Ave., Apt 1, Kearny, NJ 07032 Ma Na Lu Transportation Corporation Sheree Severini-Fittin, Member 2243 Edgar Rd., Point Pleasant Beach, NJ 08742 Fittin Construction, LLC Paul Sexton, Owner 462 10th Ave., Paterson, NJ Paul Sexton Al Shan, President 108 Oak Glen Road, Toms River, NJ 08753 S & S Electric, LLC 203 Woods Avenue, Bergenfield, NJ 07621 CPS Mechanical Contractors, Inc. Margaret Sherman, President John Sorrentino, Owner 65 Fern St, Browns Mills, NJ 08015 Barzzini Construction Jack Mack Commercial Roofing, Inc. Gregorio Soto, Owner 153 Lewis Street, Perth Amboy, NJ 08861 771 Amsterdam Avenue, Roselle Park, NJ 07203 Squillace Steel Fabricators, LLC Richard Squillace, President Squillace Steel Fabricators, LLC Squillace Steel Fabricators, LLC Rachel Squillace, Manager 771 Amsterdam Ave., Roselle Park, NJ 07203 Squillace Steel Fabricators, LLC Eric T. McCully, Owner 859 Rt. 130, Unit 117, East Windsor, 08520 Superior Environmental Development Corp. Lek Tauthong, Owner 91 Graham St, Jersey City, NJ 07307 TAU Associates Plumbing & Mechanical LLC Steven D. Testa, Owner 6 North Hill Dr., Lynnfield, MA 01940 Testa Corp. John Thomas, President 202 Karen Drive, Scranton, PA 18505 Retail Store Painting Ashish Thomas, Owner 6 Spruce Meadows Dr., Monroe, NJ 08831 MG Topflight Nester Torres, Owner 161 Thomas St, Unit 1, Newark, NJ 07114 NDA & Construction, LLC SDT Transport LLC Stephen Tripodi, Owner 12 Clifford Rd, Wanaque, NJ 07465 Van Peenen Landscape Contractors, Inc. Raymond Van Peenen, President 3 Gates Place, Wayne, NJ 07470 Van Peenen Landscape Contractors, Inc. James Van Wyckhouse, Owner 46 Tam O Shanter Rd, Mahwah, NJ 07430 Top Notch Tree & Landscape, LLC Luis Vargas, Owner 291 Jefferson Street, Paterson, NJ 07522 L and Y Roofing, LLC Michael Verduci, President 12 Verduci Drive, Newtown, PA 18940 A.V. Construction, Inc. Felipe Villagomez Felipe Villagomez, Owner 160 Lincoln Street, Bridgeton, NJ 08302 owner Peter Vincent, Owner 129 Highland Ave, Jersey City, NJ 07306 Peter Vincent Charles Viola, President 266 Columbus Avenue, Hasbrouck Heights, NJ 07604 All Jersey Fence Co. 7 Ginkgo Court, Upper Saddle River, NJ 07458 Nicola Matera & Sons L.L.C. Sheila Vlasich, Managing Member William Vlasich, Managing Member 7 Ginkgo Court, Upper Saddle River, NJ 07458 Nicola Matera & Sons L.L.C. Simon Walcott, Owner 43 Fairview Avenue, Bergenfield, NJ 07621 K & S Fabrication & Welding, LLC Ireneusz Waluk, Owner 70 Bordentown-Chesterfiel, Rd., Chesterfield, NJ 08515 Euro Construction 680 West Pine Brook Road, Lincoln Park, NJ 07035 Jon J Warbeck, President Warbeck Construction Group LLC Todd E. Warmingham, Owner P.o. Box 215, Newport, NY 13416 Todd Cable Construction, LLC Thomas Whelan, President PO Box 155, Spring Lake, NJ 07762 Jerzee Container Corp. SUSPENDED PENDING DEBARMENT Jon Whelan, Vice-President 48 8th Avenue, New York, NY 10014 Jerzee Container Corp. SUSPENDED PENDING DEBARMENT Anthony Yaniero, Vice-President 848 Bogert Road, River Edge, NJ 07661 Bogert Millwork Company, Inc.

848 Bogert Road, River Edge, NJ 07661

420 Broadway, Long Branch, NJ 07740

65-67 7th Ave., East 1st Floor, Newark, NJ 07104

Susan Yaniero, Owner

Magda Zamprogno, Other

Agustin Zuniga, President

Bogert Millwork Company, Inc.

MF Speed Construction, LLC.

American Eagle Contractor, Inc.



STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of New Jersey Department of Transportation, 2007 Edition; is added to and/or amended elsewhere herein by the Notice to Contractors (Advertisement), Proposal, Information for Bidders, General Conditions, Special Provisions, Project Plans, and Supplementary Specifications; shall, insofar as technical requirements are involved, govern in the execution of this project.

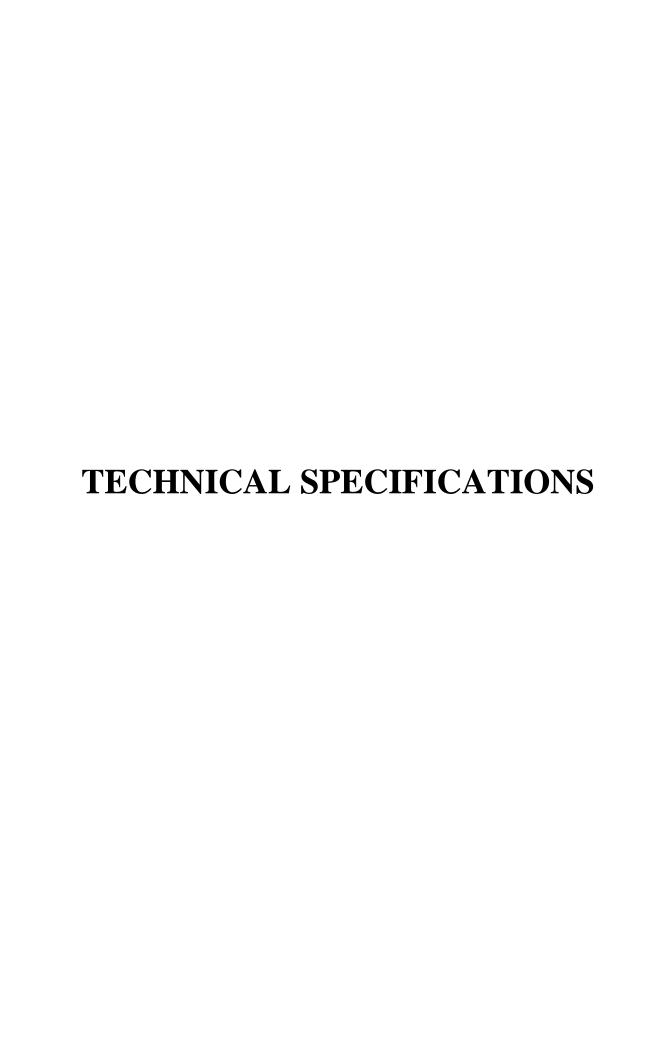
Such Standard Specifications are made a part of these Specifications by this reference and will not be repeated herein. It is the responsibility of prospective bidders to familiarize themselves with these Standard Specifications, copies of which may be examined at the office of the Engineer and may be 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 Bidders (Advertisement), Proposal, General Conditions, Instructions to Bidders, Special Provisions, Project Plans and/or Technical 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 words "RESIDENT ENGINEER (RE)", "ENGINEER" or "STATE" 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 Manual on Uniform Traffic Control Devices (MUTCD), Institute of Traffic Engineers (ITE), Federal Highway Administration (FHWA), American Association of State Highway Officials (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.



TECHNICAL SPECIFICATIONS

CONDITIONS SPECIFIC TO THIS PROJECT

The Replacement of East Hazelwood Avenue Minor Bridge Ra-69 Project in Rahway City. The work shall include the complete replacement of the bridge with a new reinforced concrete slab bridge founded on reinforced concrete abutments. Asphalt approach pavement will be reconstructed and new stone masonry faced reinforced concrete parapets will be installed, as well as new steel beam guide rail. The aesthetic appearance of the stone masonry of the parapets will be similar to Monroe Street Bridge over the Rahway River in the City of Rahway. The construction will be staged, as the road will remain open to traffic during the construction duration.

There are **extensive underground utilities** within the project area as well as overhead utilities. Refer to the Utility Relocation Plan in the Contract Drawings for requirements and responsibilities of the utility work.

Generally the utility work shall consist but not limited to the following scope of work. A 10" abandoned gas main is present below the north sidewalk which will be capped and removed by the contractor during construction. A 30" concrete sanitary sewer pipe is below the westbound lane; this utility must be maintained and supported throughout construction and the contractor shall install a sleeve around the main in both abutments. 12" and 8" water mains are present at the site. Both water mains will be shut off during construction, and the 8" water main will be capped and removed by the water company with the contractor installing a 24" sleeve for the 12 " water main. Two (2) Fiber optic duct banks are present at the bridge which must be maintained and supported during construction and the contractor is required to construct sleeves, conduit, handholes and other items for the utility to relocate the actual fiber optics. Five (5) metal conduits run along the south side of the bridge. These are from the pole risers along the southeast sidewalk. The utilities within these conduits must be maintained and supported during construction. There are reinforced concrete stormwater drainage pipes which must be removed and replaced. An unidentified concrete pipe is present below the south sidewalk which must be capped and removed. Overhead utilities within the vicinity of construction on the east side of the bridge will be relocated by PSE&G and shall generally consist of the removal of a utility pole on the northeast corner of the bridge as it is no longer in service. The overhead wire to the pole will be relocated to the south side of the bridge. Street lights shall be removed and reinstalled by the contractor for construction staging and similarly Type B storm sewer inlets shall be temporary converted to Type E inlets for construction staging purposes.

The contractor shall coordinate their work with any planned utility relocations as part of the construction and the existing utilities that will remain in their present location. It is the sole responsibility of the Contractor to investigate and use due care when operating in the vicinity of any utility. No additional compensation will be made for utility coordination and any other work involving the existing utilities.

Furthermore, the contractor is advised the Route 9 overpass bridge is adjacent and partially overhead of the project bridge, and means and methods shall be used to construct the work of the contract with this Route 9 overpass bridge in place. No additional compensation will be made.

Prior to the start of work, the Contractor shall go over the limits of all work with the Engineer or duly appointed representative.

The time of completion for this project has been set at 180 calendar days of the Notice to Proceed.

It is noted punch-list items will invariably arise. To minimize disruption to its citizens, the County shall require all punch-list items brought to the Contractor's attention, to be rectified within seven (7) calendar days from receipt of said items. If said punch-list items are not resolved to the satisfaction of the Engineer, within the specified time, Liquidated Damages as specified in Section 43 of the General Specifications ('G' sheets of this specification) shall be pursued, commencing on the eighth calendar day.

The County retains the right to increase or decrease any and all quantities up to 25 percent of those estimated, at the unit prices bid.

Certified payroll records shall be produced and submitted on a bi-weekly basis to the County for all personnel involved with this project. The County shall withhold any and all payments until the certified payroll records are received.

SPECIAL PROVISIONS

AUTHORIZATION OF CONTRACT

The Contract is authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements thereto.

SPECIFICATIONS TO BE USED

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

General wage determinations issued under Davis-Bacon and related acts, published by US Department of Labor, may be obtained from the Davis-Bacon web site at http://www.access.gpo.gov/davisbacon/nj.html under the appropriate county; select the construction type.

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

State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development's web site at http://lwd.dol.state.nj.us/labor/wagehour/wagehour/wagehour index.html The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (NJSA 34:11-56.25, et seq.).

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

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 web site at <a href="http://lwd.dol.state.nj.us/labor/wagehour/wagehour/mag

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

The following Wholly State funded project Attachments that are located at the end of these Special Provisions:"

- 1. State of New Jersey <u>Equal Employment Opportunity Special Provisions for Construction</u> Contracts Funded by Wholly or partially State Funds.
- 2. Payroll Requirements for 100 Percent State Projects.
- 3. Americans with Disabilities Act for 100 Percent State Funded Contracts.
- 4. Small Business Enterprise Utilization Attachment for 100% State Funded Contracts.

The following additional project specific Attachments are located at the end of these Special Provisions:

GENERAL

Award of contract and subletting will not be permitted to, materials will not be permitted from, and use of equipment will not be permitted that is owned and/or operated by, firms and individuals included in the report of suspensions, debarments and disqualifications of firms and individuals as maintained by the Department of the Treasury, General Services Administration, CN-039, Trenton NJ 08625 (609-633-3990).

Payment for a pay item in the proposal includes all the compensation that will be made for the work of that item as described in the contract documents unless the "basis of payment" clause provides that certain work essential to that item will be paid for under another pay item.

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

Whenever reference to page number is made, it is construed to refer to the <u>2007 Standard Specifications</u>, as amended herein, unless otherwise noted.

Henceforth in this supplementary specification whenever reference to the State, Commissioner, Department, Engineer or Inspector is made, it is construed to mean the UNION COUNTY ENGINEER.

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

Materials or assemblies as specified will be accepted on the basis of certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with the contract requirements, will be subject to rejection whether in place or not. The Contractor shall require the manufacturer or supplier to furnish three copies of certificates of compliance with each delivery of materials, components and manufactured items that are acceptable by certification. One copy shall be furnished to the Engineer, one copy shall be furnished to the District Office, Bureau of Local Government Services and the Contractor shall retain one copy.

Certificates of compliance shall contain the following information:

- 1. Project and location to which the material is consigned.
- 2. Name of the Contractor to which the material is supplied.
- 3. Kind of material supplied.
- 4. 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. Statement that the material has been tested and found in conformity with the pertinent contract requirements stated in the certificate.
- 8. Signature of a person having legal authority to bind the supplier.
- 9. Signature attested to by a Notary Public or other properly authorized person.

Payments relative to materials specified, shall be accepted on the basis of certificates of compliance shall not be made until the Engineer has in his possession an acceptable certificate of compliance.

FOREIGN MATERIALS

The attention of the Contractor is directed to all existing federal and state statutes and regulations that prohibit on any public work the use, by the Contractor or subcontractor, of materials produced or manufactured outside the United States of America. Exceptions to this prohibition, upon the findings of the Engineer, are allowed only where its enforcement would be inconsistent with the public interest or where the material is not produced or manufactured in the United States in sufficient quantities and of a sufficient quality.

If the Engineer finds in the performance of the contract there has been a failure to comply with the provisions relative to foreign materials, he shall make public his findings, and no other contract for the construction of any public work by this contracting agent shall be awarded to such Contractor, or to any partnership, association or corporation with which such Contractor is associated or affiliated, within a period of three years after such finding is made public.

Where the use of foreign material is allowed, such material shall be furnished in accordance with the following requirements:

- 1. Materials manufactured or produced outside the United States shall be delivered to a location, approved by the Engineer, where they shall be retained until examination can be completed.
- 2. The Contractor shall arrange, at his expense, any testing which the Engineer feel necessary to ascertain the acceptability of the material.
- 3. A certificate of compliance shall accompany each lot of foreign material. In addition, certified mill tests reports shall be attached to the certificate of compliance for those materials for which mill test reports are required and shall clearly identify the lot to which they apply. Certificates of compliance shall contain the following information:
 - A. Project to which the material is consigned.
 - B. Name of the Contractor to which the material is supplied.
 - C. Kind of material supplied.
 - D. Quantity of material represented by the certificate.
 - E. Means of identifying the consignment, such as label marking, seal number, etc.
 - F. Date and method of shipment.
 - G. Statement that the material has been tested and found in conformity with the pertinent contract requirements stated in the certificate.
 - H. Signature of a person having legal authority to bind the supplier.
 - I. Signature attested to by a notary public or other properly authorized person.

The following Sections of the Standard Specifications are deleted:

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS SECTION 103 - AWARD AND EXECUTION OF CONTRACT

The above Sections of the Standard Specifications are changed to the requirements of the County of Union in General Specifications attached hereto.

The below Sections of the Standard Specifications have been changed to the requirements of the County of Union as stipulated herein, in the event of conflicts between the below sections and those of Union County, Union County stipulations shall govern.

SECTION 104 - SCOPE OF WORK SECTION 109 - MEASUREMENT AND PAYMENT

DIVISION 100 - GENERAL PROVISIONS

SECTION 101 - GENERAL INFORMATION

101.03 TERMS

THE FOLLOWING TERMS ARE CHANGED.

Completion

(3) IS CHANGED TO:

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

Department: Shall be defined as the County of Union.

Resident Engineer (**RE**) shall be defined as a representative of the County of Union or Engineer.

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

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

SECTION 104 - SCOPE OF WORK

104.03.03 Types of Changes

- 3. Changes in the Character of Work.
 - a. Differing Site Condition.

THE SECOND PARAGRAPH IS CHANGED TO:

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

104.03.04 Contractual Notice

THE SECOND PARAGRAPH IS CHANGED TO:

Immediately provide written notice to the RE of a circumstance that is believed to be a change to the Contract, include the following in the initial written notice:

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

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

104.03.08 Force Account

7. Equipment.

a. Contractor-Owned Equipment.

PART 1 IS CHANGED TO:

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

THE FOLLOWING PART IS ADDED:

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

THE SECOND PARAGRAPH IS CHANGED TO:

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

10. Subcontractors.

THE SECOND PARAGRAPH IS CHANGED TO:

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

104.03.09 Delay Damages

- 1. Non-Productive Activity.
 - e. Equipment.

THE FIRST SENTENCE IS CHANGED TO:

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

SECTION 105 - CONTROL OF WORK

105.05 WORKING DRAWINGS

THE SECOND PARAGRAPH IS CHANGED TO:

Ensure that working drawing submissions also conform to the Department design manuals and other Department standards for the proposed work. After Award, the Department will provide additional formatting information, the number of copies required, and the address of the receiving designated design unit.

THE THIRD PARAGRAPH IS CHANGED TO:

Submit working drawings on 22×36 -inch sheets. The Department may approve the use of 8- $1/2 \times 11$ inch sheet on a case by case basis. Submit design calculations required for the working drawings on 8- $1/2 \times 11$ -inch paper. Submit 7 copies of the working drawings to the designated design unit for review with a copy of the transmittal letter to the RE. For railroad-carrying structures, submit 4 additional copies to the designated design unit. Submit an additional copy for each outside testing agency or authority involved in the Project.

THE NINTH PARAGRAPH IS CHANGED TO:

Submit working drawings for certification or approval as specified in <u>Table 105.05-1</u>. This list is not all inclusive. Ensure that the working drawings submitted for approval are signed and sealed by a Professional Engineer. The working drawings submitted for certification are not required to be signed and sealed by a Professional Engineer unless they alter the original Contract.

TABLE 105.05-1 IS CHANGED TO:

Table 105.05 1 - Working Drawing Submission Category			
Certified	Approved		
Breakaway I-Beam GA Sign Support Posts	Catalog Cuts (related to landscape Items)		
Bridge Drainage	Change in Structural Steel Details		
Bridge Railing and Fencing Anchorage System	Change of Pre-stressed Concrete Strand Patterns		
Catalog Cuts	Demolition Plans		
Composite Piles	Erection Plans		
DMS Sign Support Structure	High Load Multi-Rotational (HLMR) Bearings		
DMS Standard Ground Mounted	Isolation Bearings		
Elastomeric Bearings Pads	ITS System Drawings, including Block Diagrams		
Electrical Items Not Pre-Qualified	Machinery and Electrical Items for Movable Bridges		
Expansion Deck Joint Assembly Systems	Mechanically Stabilized Earth (MSE) Walls		
Modular Expansion Joint Assembly	Other work shown on the Plans as conceptual		
Precast Pre-stressed Concrete Beams and Piles Fabrication	Pre-cast Concrete Arch Structures		
Reinforced Elastomeric Bearings	Pre-cast Concrete Box Culverts		

Sign Legends Prefabricated Modular Walls

Sign Support Structures Stay-In-Place Forms

Structural Steel Fabrication Temporary Sheeting and Cofferdams

Temporary Shielding
Temporary Structures
Value Engineering Plans

THE FIRST PARAGRAPH UNDER PART 1 OF TENTH PARAGRAPH IS CHANGED TO:

1. Certified Working Drawings. For working drawings requiring certification, include 2 blank blocks directly above the title block. Designate one block for design unit certification, and designate the other block for the Contractor's approval stamp and a signed statement stating that the Contract has not been altered. The Department will require 30 days for review and certification or rejection and return of certified working drawings.

1. Certified Working Drawings.

THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Department will require 15 days for review and certification or rejection and return of certified working drawings.

2. Approved Working Drawings.

THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Department will require 15 days for review and approval or rejection and return of working drawings.

105.07 Cooperation with Utilities.

THE FOLLOWING HAS BEEN ADDED

A. General. It is understood and agreed that the Contractor has considered in its Proposal all of the permanent and temporary utility facilities in their present, new, or relocated positions to the extent required by the Contract Documents and as revealed by its own investigations; is aware that utility service demands, adverse field conditions and emergencies may affect the Utility's ability to comply with the proposed schedules for utility work; is cognizant of the limited ability of the County to control the actions of the Utility(s), and has made allowances in its Proposal that it is not entitled to any Additional Compensation by reasons of delays, inconvenience or damage sustained by the Contractor due to any interference from utility facilities or the operation of moving or installing them. Similarly, the Contractor is deemed to understand that only limited extensions of time may be granted as specified in Subsection 108.11.

The Contractor shall notify, in writing, the Utility(s) involved of the nature and scope of the Project, and of its operations that may affect their facilities or property. The notice shall include an inquiry for all information required to determine the location of the existing utility facilities and the Contractor shall also provide the portion of the approved Preliminary Schedule relative to that respective Utility. Two copies of such notices and the Utility's responses shall be sent to the Resident Engineer prior to the start

of Construction Operations. The Contractor shall also attend a Utility preconstruction conference prior to the start of Construction Operations.

The Contractor shall provide each Utility the portion of the approved Baseline CPM Schedule related to the respective Utility and any approved updates or revisions that affect that Utility.

Information on the Utility(s), including the work to be performed by the Utility(s) on the Project, will be provided in the Special Provisions.

The corporations, companies, agencies, or municipalities owning or controlling the utilities, and the name, title, address, and telephone number of their local representative are attached herein.

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

The Contractor is advised that the design for this Contract did not identify any anticipated utility conflicts. However, this Contract does require the Contractor to call the State's One Call System as specified in Subpart C., to verify that a conflict does not exist.

A pre-construction meeting will be held to enable full coordination of parties involved in this project. The County will arrange this meeting shortly after award of contract and prior to the start of any work and send an agenda and written invitations to municipal officials, utility owners and any other interested parties.

A minimum of five business days prior to the pre-construction meeting, the Contractor will provide the County, in writing, with the following:

- 1. Proposed work schedule;
- 2. List of Sub-Contractors;
- 3. List of material suppliers;
- 4. Certificates of Compliance for all materials and or assemblies, including: Raised Pavement Markings; Signs; Public Sidewalk Ramp Delineation, etc.;
- 5. Breakdown of any lump-sum items;
- 6. Shop drawings of all construction items.

THE CONTRACTOR WILL NOT COMMENCE WORK UNTIL THE ABOVE MATERIAL IS RECEIVED & APPROVED.

SECTION 106 - CONTROL OF MATERIAL

106.07.01 Certification of Compliance

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

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

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

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

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

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

106.07.02 Certification for iron and steel

- A. Precast Concrete Steel and Concrete Pipe Certification of Compliance. For precast concrete and concrete pipe items, a Buy America Compliance Plan is required to confirm that the material meets the Buy America requirements as specified in 106.03. The ME will periodically audit compliance with the program at the precast plant. If the precast concrete item is not inspected by ME, submit a Certification of Compliance for the pre-cast concrete item as required in 106.07.01. When a Certification of Compliance is submitted, ensure that the Certification of Compliance contains a statement that the reinforcing steel used in the precast concrete item complies with the Buy America requirements as specified in 106.03
- **B.** Incidental Steel or Iron Components and Manufactured Products. Incidental steel and iron components such as lifting hooks, tie wire, chairs, nuts, bolts and screws are not required to be certified for compliance with Buy America requirements. For manufactured products that are not made predominantly of steel, the steel components are not required to be certified for compliance

with Buy America requirements.

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

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

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

Ensure that step Certifications of Compliance contain the following information:

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

The Department will not make payment for work containing steel or iron materials until the RE has received the required DC-17 and step Certifications of Compliance and has inspected and accepted the material or assembly.

SECTION 107 - LEGAL RELATIONS

107.04 NEW JERSEY CONTRACTUAL LIABILITY ACT

THE FOURTH PARAGRAPH IS CHANGED TO:

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

107.09 INDEPENDENT CONTRACTOR

THE ENTIRE SUBSECTION IS CHANGED TO:

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

107. 11 RISKS ASSUMED BY THE CONTRACTOR

THE ENTIRE SUBSECTION IS CHANGED TO:

Risks of Loss or Damage to the Permanent Construction. Until Acceptance, and within the limits of the Project's work, the Contractor shall bear the risk of all loss or damage to all permanent construction and temporary construction performed under this Contract and to materials, whether or not it has received payment for such construction or materials under Subsection 109.05, 109.06, or 109.07, except payment will be made to the Contractor for the repair or replacement of any permanent element of the construction which has not been accepted by the Department, if the element of the work damaged is completed to the stage of serving its intended function and is subsequently damaged by accident by public traffic. In order to receive payment, the Contractor must supply satisfactory evidence that such damage was caused by a public traffic accident that was not caused by vandalism or by the equipment of the Contractor or any of its subcontractors or suppliers. Satisfactory evidence shall generally be limited to: accident reports filed with the Division of Motor Vehicles, police agencies or insurance companies; statements by reliable, unbiased eye witnesses; identification of the vehicle involved in the accident. Physical evidence that the damage was caused by a motor vehicle (such as tire marks or broken headlight glass) will not be sufficient unless it can be clearly shown that the damage was not caused by the Contractor's vehicles or by vandalism. The Contractor shall take every precaution, as allowed by the Contract against injury or damage to any part of the construction or to materials by the action of the elements, the traveling public, vandalism, or from any other cause, whether arising from the execution or the non-execution of the work. The Contractor shall promptly repair, replace, and make good any such damage or loss without cost to the Department. The Contractor shall not bear such risk of loss or damage, which arises from acts of war or floods, tidal waves, earthquakes, cyclones, tornadoes, hurricanes, or other cataclysmic natural phenomenon unless such loss or damage is covered by insurance.

THE FOLLOWING SUBSECTION IS ADDED:

107.17 COMMUNICATION WITH THE NEWS MEDIA

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

SECTION 108 - PROSECUTION AND COMPLETION

108.01 SUBCONTRACTING

1. Values and Quantities.

THE FOLLOWING IS ADDED TO FIRST PARAGRAPH

1. There are no Specialty Items in this Project.

THE THIRD PARAGRAPH IS CHANGED TO:

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

THE FOURTH PARAGRAPH IS CHANGED TO:

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

108.02 COMMENCEMENT OF WORK

THE SUBPART 4 IN THE FIRST PARAGRAPH IS CHANGED TO:

4. Progress schedule as specified in 153.03

108.06 NIGHT OPERATIONS

THE FOLLOWING IS ADDED TO THE BEGINNING OF THE FIRST PARAGRAPH:

The Contractor shall be responsible for furnishing, maintaining, removal & or disposal of all equipment, material & manpower necessary for compliance with this sub-section.

2. Visibility Requirements for Workers and Equipment.

THE FIRST PARAGRAPH IS CHANGED TO:

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

108.07 TRAFFIC CONTROL

THE FOLLOWING IS ADDED:

Working hours for this project are as follows:

Weekdays (Monday through Friday) Day-Time 9:00 am to 4:00 pm

Weekends/Holidays

Not Allowed without Approval from Union County

108.07.01 Interference

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

It shall be the Contractor's responsibility to maintain driveway access for all adjacent property owners. In the event that industrial & commercial driveway access must be temporarily denied, the Contractor shall provide written notice to the Engineer and property owner at least five (5) working days in advance of the driveway closing.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL WORK ZONES FOR THE CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES & MANPOWER NECESSARY TO MAINTAIN SUCH WORK ZONES IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE SUPPLIED, IMPLEMENTED AND REMOVED AT THE APPROPRIATE TIME BY THE CONTRACTOR.

108.09 Maintenance within the Project Limits

The following is added to this sub-section:

The Contractor shall not be responsible for removal of ice or snow from sections of roadways opened to traffic or for damage to the project caused by the operation of snow plows or other snow removal or deicing operations carried on by others under the supervision or direction of the County. The Contractor shall not be responsible for mowing unless an item for mowing is scheduled in the proposal form. However, the Contractor shall be responsible for the removal of all leaves, debris and other material on the road, prior to reconstruction and resurfacing. The Contractor will also be responsible for street sweeping prior to resurfacing operations, and at the end of each day following milling operations.

108.11.01 Extensions to Contract Time

B. Types of Delays.

1. Non-Excusable Delays.

THE FOLLOWING IS ADDED:

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

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.

108.19 COMPLETION AND ACCEPTANCE

THE FOLLOWING IS ADDED:

No Incentive Payment for Early Completion is specified for this project.

SECTION 109 - MEASUREMENT AND PAYMENT

109.01 MEASUREMENT OF QUANTITIES

THE SECOND PARAGRAPH IS DELETED:

109.02 SCOPE OF PAYMENT

THE THIRD SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Department will not make additional or separate payment for work or portion of work unless specifically provided for in the "Measurement and Payment" Subsection.

109.05 ESTIMATES

THE SECOND PARAGRAPH IS CHANGED TO:

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

- Each subcontractor or supplier has been paid the amount due from the previous progress payment and shall be paid the amount due from the current progress payment and that full payment for any retainage withheld from a subcontractor has been or will be made within 30 days after the subcontractor's work has been satisfactorily completed; or
- There exists a valid basis under the terms of the subcontractor's or supplier's contract to withhold payment from the subcontractor or supplier, and therefore payment is withheld.

THE TENTH PARAGRAPH IS CHANGED TO:

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

DIVISION 150 - CONTRACT REQUIREMENTS

SECTION 151 - PERFORMANCE BOND AND PAYMENT BOND

151.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Payment will not be made for Performance Bond and Payment Bond. All cost thereof shall be included within the various bid pay items.

SECTION 152 - INSURANCE

152.03.01 Owner's and Contractor's Protective Liability Insurance

A. Policy Requirements.

THE FOURTH SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

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

152.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Payment will not be made for insurance of any kind. All cost thereof shall be included within the various bid pay items.

SECTION 153 - PROGRESS SCHEDULE

153.03.02 CPM Progress Schedule Updates

THE LAST PARAGRAPH IS CHANGED TO:

If the project falls behind schedule for non-excusable delays, so that the schedule indicates that the Work will not be completed by the Completion date, as specified in 108.10, take the necessary steps to improve progress. Under such circumstances, the RE may direct the Contractor to increase the number of shifts, begin overtime operations, work extra days including weekends and holidays, and supplement its construction plant. Furthermore, the RE may require the Contractor to submit for approval a recovery schedule showing how the Contractor proposes to meet the directed acceleration.

2. Tabular Reports.

THE FIRST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The RE may require 3 color paper copies of the longest path sort, total float sort, responsibility sort, area sort, and Gantt chart.

153.03.03 Bar Chart Progress Schedule and Updates

A. Schedule.

THE THIRD SENTENCE OF THE THIRD PARAGRAPH IS CHANGED TO:

Provide 3 color paper copies of a bar chart progress schedule or similar type that is acceptable to the RE for approval as follows:

THE FOLLOWING IS ADDED:

If the project falls behind schedule for non-excusable delays, so that the schedule indicates that the Work will not be completed by the Completion date, as specified in 108.10, take the necessary steps to improve progress. Under such circumstances, the RE may direct the Contractor to increase the number of shifts, begin overtime operations, work extra days including weekends and holidays, and supplement its construction plant. Furthermore, the RE may require the Contractor to submit for approval a recovery schedule showing how the Contractor proposes to meet the directed acceleration.

153.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Payment will not be made for Project Schedules of any kind including updates. All cost thereof shall be included within the various bid pay items.

THE THIRD PARAGRAPH IS CHANGED TO:

If the Contractor's CPM Progress Schedule update is not approved by the date of the progress meeting for the following update, the Department will assess liquidated damages to recover the Department's increased administrative costs. The Department will assess damages for each delinquent update as follows:

SECTION 157 - CONSTRUCTION LAYOUT AND MONUMENTS

157.03.01 CONSTRUCTION LAYOUT

THE SEVENTH PARAGRAPH IS CHANGED TO:

Provide the Utilities with the layout needed to install relocated utility facilities and coordinate the Work. Ensure that relocated facilities do not conflict with proposed construction, including High Voltage Proximity Act conflicts.

157.03.01 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Payment will not be made for Construction Layout. All cost thereof shall be included within the various bid pay items.

SECTION 158 - SOIL EROSION AND SEDIMENT CONTROL AND WATER QUALITY CONTROL

158.04 MEASUREMENT AND PAYMENT

THE PAY ITEM CONCRETE WASHOUT SYSTEM IS DELETED AND THE FOLLOWING IS ADDED:

Separate payment will not be made for Concrete Washout System but the costs shall be included in the various items of the proposal.

SECTION 159 - TRAFFIC CONTROL

THE FOLLOWING IS ADDED AFTER THE FIRST PARAGRAPH:

ALL WORKERS SHALL WEAR REFLECTORIZED GARMENTS, UTILIZING 360° VISIBILITY, AS SPECIFIED FOR TRAFFIC DIRECTORS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL WORK ZONES FOR THE CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES WITHIN WORK ZONES SHALL BE ESTABLISHED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TRAFFIC CONTROL MEASURES SHALL BE SUPPLIED, IMPLEMENTED AND REMOVED AT THE APPROPRIATE TIME BY THE CONTRACTOR.

All traffic control devices shall comply with these Specifications and the <u>Standard Details for Traffic Control Devices</u> as developed by the New Jersey Department of Transportation.

All traffic control devices furnished by the Contractor shall be new, or in acceptable condition as defined by the American Traffic Safety Services Association (ATSSA), Quality Standards For Work Zone Traffic Control Devices – 3rd Edition. Traffic control devices damaged under this Contract as a result of carelessness or mishandling by the Contractor (i.e., running over cones or barrels with his equipment or splashing tar on traffic control devices, etc.) shall be replaced by the Contractor at no additional cost to the County. The Contractor shall replace damaged traffic control devices within one (1) calendar day. The County reserves the right to reject any traffic control device, which in their sole opinion does not satisfy the criteria of these Specifications, is damaged or otherwise incapable of providing the function for which it was intended. In this event, the Contractor shall replace the deficient traffic control devices and/or materials within one (1) calendar day. Upon completion of the Project, all traffic control devices and materials furnished by the Contractor shall be removed by the Contractor.

All signs furnished by the Contractor shall conform to the latest addition <u>Manual of Uniform Traffic</u> <u>Control Devices</u> and the <u>U.S.D.O.T. Manual of Standard Highway Signs</u>. All signs & traffic control devices shall be manufactured with, or incorporate 3M diamond grade material or approved equal. All signs shall be aluminum, with a thickness of 0.100 inches, and cut to Standard sizes.

Should the Contractor begin work prior to the work zone being properly established as described herein, the County shall assume no responsibility for tort liability issues arising from the Contractor's premature start. All liability and consequence arising from a premature start is solely the Contractor's.

In the event that the manhole, inlet or other appurtenance is in the middle of a travel way and the placement of a traffic device would impede the flow of traffic, the manhole, inlet or other appurtenance will be ramped in accordance with Construction Details with fresh hot mix asphalt material (either cold or hot mix). The use of millings to perform this operation will not be allowed.

159.03.01 TRAFFIC CONTROL COORDINATOR

THE FOLLOWING IS ADDED:

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

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

Prior to the start of construction operations, the Contractor shall assign a supervisory-level employee to be the Traffic Control Coordinator. The Engineer and affected municipalities shall be notified as to the name & telephone number of this individual on a 24-hour, 7-day a week basis. A PAGER NUMBER FOR THIS PURPOSE WILL NOT SUFFICE. IF AND WHEN THE NUMBER IS CALLED, THE CONTRACTOR OR DULY APPOINTED AGENT MUST BE AVAILABLE TO ANSWER AND RESPOND TO THE EMERGENCY CALL. THE CONTRACTOR'S RESPONSE TIME TO EMERGENCIES THAT ARISE DURING THIS PROJECT SHALL BE WITHIN ONE (1) HOUR.

The Traffic Control Coordinator shall be responsible for ensuring that the Contractor meets all provisions of the current edition of the Manual on Uniform Traffic Control Devices, OSHA, ANSI and Title 39 – Uniform Motor Vehicle Laws of New Jersey. The Traffic Control Coordinator shall be the liaison between the Contractor and County for the duration of the project. It will be his/her responsibility to notify the Engineer when and where the Contractor's work force and equipment shall be throughout the workday. The Traffic Control Coordinator is responsible for the following:

- Provide that all Contractor equipment and vehicles are properly stored and parked so as not to create a traffic hazard;
- Coordinate the Contractor's work schedule and need for traffic directors with the Engineer or duly appointed representative with regards to the maintenance and protection of traffic;
- Confirm the Contractor's compliance and cooperation with the Engineer with regards to the maintenance and protection of traffic;
- Repositioning of traffic control devices displaced by traffic or construction equipment;
- Notifying County forces of damaged traffic control devices;
- Confirm that all traffic control devices moved or repositioned by the Contractor or his forces are placed in their original position;
- Coordinate all Concrete Construction Work Zones, including signage, traffic control devices and the appropriate manpower.

The Contractor shall be responsible for maintaining safe and adequate pedestrian access in, near or around the work site. Neither the Contractor's equipment nor debris and materials shall occupy any part of the sidewalk, path or traveled way that is not being constructed.

All equipment, materials, excavated material or debris shall be removed by the end of the workday. Material or debris left at the end of the day by the Contractor on, near or adjacent to the sidewalk or traveled way that is open to pedestrians and vehicles is subject to removal by the County forces. In this event, the costs associated with the removal will be deducted from monies owed the Contractor.

159.03.02 Traffic Control Devices

THE FOLLOWING IS ADDED AFTER THE FIRST PARAGRAPH:

Traffic Control devices shall be NCHRP-350 crash test compliant by the NJDOT and shall be duly certified, if necessary.

Newly purchased devices shall be NCHRP-350 compliant. A list of NCHRP 350 compliant and FHWA approved devices can be found at:

http://www.fhwa.dot.gov/safety/fourthlevel/pro_res_road_nchrp350.htm

4. Portable Variable Message Signs (PVMS)

THE FOLLOWING IS ADDED:

Install and activate portable variable message signs (PVMS). Install one (1) PVMS in advance of the construction limits along each approach to the work zone. Activate PVMS a minimum of one full week (7 calendar days) in advance of the start of construction and remove PVMS upon completion of the construction. PVMS shall generally read the expected construction duration and expected delays. The actual messages shall be provided by the County.

THE FOLLOWING SUBSECTION IS REPLACED IN ITS ENTIRETY WITH THE FOLLOWING:

6. Traffic Control Truck with Mounted Crash Cushions.

THE LAST SENTENCE IS CHANGED TO:

Submit drawings to the RE detailing the manner of securing the ballast, signed and sealed by a Professional Engineer, certifying that it is capable of withstanding the impact forces for which the impact attenuator is rated. Contractor shall provide Traffic Control Truck with Mounted Crash Cushion to aid in the placement of traffic control devices as needed for the duration of the project when directed.

159.03.06 TEMPORARY TRAFFIC STRIPES AND TEMPORARY TRAFFIC MARKINGS

THE ENTIRE TEXT IS CHANGED TO:

Apply temporary traffic stripes and markings when the ambient and surface temperatures are at least 45 $^{\circ}$ F and rising and the surface temperature is no more than 140 $^{\circ}$ F. Apply the traffic paint in a wet film thickness of 6 \pm 1 mil. Apply glass beads to the wet paint in a uniform pattern and at the rate of 12 pounds per gallon of paint. Ensure TRAFFIC STRIPES and TRAFFIC MARKINGS are applied within 14 days of placing temporary traffic stripes and markings unless directed by the RE.

159.03.08 TRAFFIC DIRECTION

A. Flagger.

THE LAST SENTENCE IS CHANGED TO:

Ensure that the flagger is equipped with a STOP/SLOW paddle and follows MUTCD flagging procedures.

THE FOLLOWING IS ADDED TO THIS SECTION:

Should the circumstances arise during any construction operations where the use of flaggers are not permitted by the Motor Vehicle & Traffic Laws of New Jersey, Title 39, specifically 39:4-57 and or 39:4-80 & 81, or any other section in Title 39, or in the opinion of the Engineer, where the limitations of such flaggers in the roadway do not optimize the safety of pedestrians & the motoring public, Off-Duty Police Traffic Directors shall be utilized. Under these circumstances, it shall be the Contractor's responsibility to coordinate & schedule all officers necessary for the appropriate construction phases;

however, the County of Union will regulate the amount of & location of each director. The Contractor shall be responsible for paying prevailing wage rates for Police Traffic Directors, at the respective Municipal Police Department rate. Reimbursement for police traffic directors shall be based on the amount of actual person-hours provided by the respective municipalities. Reimbursement will not be made for any:

- differential overtime rate;
- vehicle charges;
- Administration fees, & or taxes.

Payment of such shall be included in the overall price bid for various traffic control pay items. The Contractor shall be required to produce proof of both payment & hours worked for each officer, at each post for each assignment. Should the Contractor fail to produce said proof, the County will withhold payment on this item until such time that adequate & satisfactory proof can be provided.

B. Police.

THIS SUBSECTION HAS BEEN REPLACED IN ITS ENTIRETY WITH THE FOLLOWING:

The Contractor shall coordinate with local police department from the Rahway City as to their requirements or compliance with State Law for police presence during commencement from one construction stage to the next construction stage only. Contractor shall be responsible for scheduling all work and notifications with the local police to comply with local ordinance or police presences. The use of police services does not relinquish or diminish the Contractor's responsibilities for work zone safety nor shall they serve as a substitute for traffic director flaggers. County is not responsible for interruptions or delays to construction activities resulting from any failure of police presences at the work site.

159.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEM IS ADDED:

Item Pay Unit

TRAFFIC DIRECTOR, UNIFORM POLICE DOLLAR (ALLOTMENT)

THE PAY ITEMS TEMPORARY PAVEMENT MARKERS, TEMPORARY PAVEMENT MARKING TAPE, TEMPORARY TRAFFIC STRIPES AND TEMPORARY TRAFFIC MARKINGS ARE DELETED AND THE FOLLOWING IS ADDED:

Separate payment will not be made for Temporary Pavement Markers, Temporary Pavement Marking Tape, Temporary Traffic Stripes and Temporary Traffic Markings but the costs shall be included in the various items of the proposal.

THIS SUB-SECTION IS AMENDED AS FOLLOWS:

The County has included an allotted cost in the bid proposal for the presence of uniform police for this project. The Contractor shall provide invoice receipt from the municipality for work performed by uniform police, as well as the municipality requirements for police presence on public roadways for construction activity in justifying payment and reimbursement.

Where Police Traffic Directors may be utilized, the Contractor shall notify the respective Police Department at least four (4) business days (96 hours) in advance of requiring the traffic directors. Should there be a difference between the Engineer's requirement, and that of the Police Department, the Contractor shall immediately notify the Engineer and request clarification.

If the Contractor cancels any work, without prior notice to the affected Municipal Police Department, then any costs incurred from the respective Police Departments shall become the Contractor's responsibility. The Contractor shall be responsible for establishing any and all escrow accounts that may be required by the Municipal Police Department. The Contractor shall confirm specific details of hiring Traffic Directors with each respective Police Department.

Separate payment will not be made for relocating traffic control devices as required or as directed. Separate payment will not be made for posts or stands for construction signs. Separate payment will not be made for traffic control coordinator. Separate payment will not be made for moving the traffic control truck units during the various stages of construction. Separate payment will not be made for escape ramps provided at the edges of pavement lifts or at excavations. All costs thereof shall be included in the prices bid for the various Pay Items scheduled in the Bid Sheets.

All property owner notices, traffic control devices & manpower necessary to maintain such work zones utilizing the necessary devices and items, other than those stipulated to be paid under a separate bid pay item shall be supplied, implemented and removed at the appropriate time by the Contractor. Separate payment will not be made for the cost of such traffic control devices, any relocation of such and associated manpower but the costs shall be included in the various items of the proposal.

For traffic control devices measured by the linear foot or unit basis that are specified in 159.03.02, the Department will make payment for the maximum quantity in service at one time as required by the Contract. For CONSTRUCTION SIGNS, the Department will make payment for the maximum quantity of specific sign types in service at one time as required by the Contract. If a particular sign type has more than one unique text, each sign with a unique text will be considered to be a specific sign type. The Department will make payment for 50 percent of the Contract bid price for traffic control devices specified in 159.03.02 that are measured on a linear foot, square foot or unit basis upon approved placement. The Department will prorate the balance of payment over the duration of the Contract.

SECTION 160 - PRICE ADJUSTMENTS

160.03.01 Fuel Price Adjustment

THROUGHOUT THIS SUBSECTION, TABLE 161.03.01-1 IS CHANGED TO TABLE 160.03.01-1

THE THIRD PARAGRAPH IS CHANGED TO:

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

THE 25 TH LINE IN THE TABLE 160.03.01-1 IS CHANGED TO:					
HOT MIX ASPHALT	BASE COURSE	2.50 Gallons per Ton			

160.03.02 Asphalt Price Adjustment

NOTE 1 OF THE THIRD PARAGRAPH IS CHANGED TO:

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

THE FOURTH PARAGRAPH IS CHANGED TO:

$$A = B \times [(MA - BA)/BA] \times C \times M \times G$$

Where:

A = Asphalt Price Adjustment

B = Bid Price for Tack Coat/Prime Coat

MA = Monthly Asphalt Price Index

BA = Basic Asphalt Price Index

C = Petroleum Content of the Tack Coat and Prime Coat in Percent by Volume:

Use 100% for cutbacks and Tack Coat 64-22

60% for Polymer Modified Tack Coat

60% for RS or similar type emulsions

M = Percentage of Bid Price Applicable to Materials Only: Use 82%

G = Gallons of Tack Coat and Prime Coat Furnished and Applied

160.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

An Allowance for *Asphalt Price Adjustment* and *Fuel Price Adjustment* has been established in the bid proposal sheet. The allowance amount will be adjusted based on the formulas established in the specifications for calculating price adjustments if warranted.

Asphalt price adjustments will not be made for Tack Coat and Prime Coat.

SECTION 161 - FINAL CLEANUP

161.04 MEASUREMENT AND PAYMENT

THE ENTIRE SUBSECTION IS CHANGED TO:

Separate payment will not be made for Final Cleanup but the costs shall be included in various items of the proposal.

SECTION 201 - CLEARING SITE

201.04 MEASUREMENT AND PAYMENT

THE SUB-SECTION IS CHANGED AS FOLLOWS:

The County will not measure and not make payment for Stripping and Clearing Site.

Separate payment will not be made for: the removal of existing asphalt, pipe, bollards, inlets & castings, manholes & castings and other drainage structures; the removal of sidewalk, driveways, various types of curb and gutters; the removal of raised pavement markings (RPM'S); the removal of various striping & marking material; removal of loop detector lead; and the removal of existing signs to be replaced and or upgraded, unless otherwise provided in these supplementary specifications. When removal of such materials is required within the excavation for the roadway, and its right-of-way, it shall be included in the proposed work of these items.

Separate payment will not be made for clearing site but the cost will be included in the various pay items in the Bidding Sheets.

SECTION 202 - EXCAVATION

202.02 MATERIALS

THE FIRST IN THE LIST IS CHANGED TO:

202.03.03 Excavating Unclassified Material

A. Excavating.

THE FIRST PARAGRAPH IS CHANGED TO:

Unclassified excavation consists of excavation and management of material of whatever nature encountered, including regulated material, pavement removal and acid producing soil.

202.03.04 Excavating Regulated Material.

THE FIRST PARAGRAPH IS CHANGED TO:

Regulated material excavation consists of excavation and management of material of whatever nature encountered that is classified as regulated or hazardous material in the NJDEP Solid Waste Regulations, N.J.A.C. 7:26-1 *et seq.* or N.J.A.C 7:26-8.

THE FIRST SENTENCE OF THE SECOND PARAGRAPH IS DELETED

3. Temporarily Storing.

THE FIRST PARAGRAPH IS CHANGED TO:

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

202.03.05 Excavating Acid Producing Soil (APS)

THE FIRST SENTENCE OF THE SECOND PARAGRAPH IS DELETED

202.03.07 Reuse or Disposal of Excess Material

A. Reuse.

THE THIRD PARAGRAPH IS CHANGED TO:

Upon RE's approval, reuse excavated soil to widen or flatten slopes of embankment, to fade embankments into cuts, or as approved at other locations. Ensure that the excess material is not reused within a wetland, a transition area, a riparian zone, a flood hazard area or other regulated area

without obtaining an appropriate NJDEP permit.

B. Disposal.

PARTS 1 AND 2 UNDER THE FIRST PARAGRAPH ARE CHANGED TO:

- 1. At least 10 days before disposing, submit the disposal procedure and location to the RE for approval. Do not dispose of excavation on property proposed to be used for parks, playgrounds, and other recreational purposes; residential facilities, and educational facilities; environmentally sensitive areas such as wetlands, and historic sites; or areas within sight of a State highway during all seasons.
- 2. Obtain the property owner's notarized authorization of the acceptance of the excess material and where it is being placed.

202.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEMS ARE DELETED:

Item Pay Unit

PRESPLITTING SQUARE YARD

EXCAVATION, REGULATED MATERIAL CUBIC YARD

SOIL SAMPLING AND ANALYSES, REGULATED UNIT

EXCAVATION, ACID PRODUCING SOIL CUBIC YARD

SOIL SAMPLING AND ANALYSES, ACID PRODUCING SOIL UNIT

DISPOSAL OF ACID PRODUCING SOIL TON

DISPOSAL OF REGULATED MATERIAL TON

DISPOSAL OF REGULATED MATERIAL, HAZARDOUS TON

REMOVAL OF PAVEMENT SOUARE YARD

THE FOLLOWING IS ADDED:

Disposal of asphalt and concrete will be made to an N.J.D.E.P. approved recycling facility. The Contractor shall notify the Recycle Facility to provide the County with appropriate credit for recycling.

The Department will not make payment for presplitting but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for the excavation of regulated materials or acid producing soils but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for soil sampling and analyses required to complete the project but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for removal of pavement but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for disposal of material of whatever nature encountered but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for sawcutting, stripping and disposal of excess, unstable or unsuitable or unusable material from Excavation, Unclassified.

The Department will measure Excavation, Unclassified in unstable areas by the cubic yard of material actually excavated in the work. The Department will make payment for Excavation, Unclassified as specified in this section.

SECTION 401 - HOT MIX ASPHALT (HMA) COURSES

401.02.01 Materials

EMULSIFIED ASPHALT UNDER TACK COAT IS REVISED TO:

Emulsified Asphalt, Grade RS-1, CRS-1, SS-1, SS-1h, Grade CSS-1 or CSS-1h.....902.01.03

401.02.02 Equipment

THE LAST PARAGRAPH IS CHANGED TO:

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

401.03.02 Tack Coat and Prime Coat

TABLE 401.03.02-1 IS CHANGED TO:

Table 401.03.02-1 Tack Coat Application					
Material	Spraying Temp, °F	Gallons per Square Yard	Season		
Cut-Back Asphalt:					
RC-70	120 to 190	0.05 to 0.15	Oct 15 to Apr 15		
Emulsified Asphalt:					
RS-1	70 to 140	0.05 to 0.15	All year		
CRS-1	125 to 185	0.05 to 0.15	All year		
SS-1, SS-1h	70 to 140	0.05 to 0.15	All year		
CSS-1, CSS-1h	70 to 140	0.05 to 0.15	All year		

TABLE 401.03.02-2 IS CHANGED TO:

Table 401.03.02-2 Prime Coat Application					
Cut-Back Asphalt	Spraying Temp, °F	Gallons per Square Yard	Season		
MC-30	85 to 150	0.1 to 0.5	Oct 15 to Apr 15		
MC-70	120 to 190	0.1 to 0.5	Oct 15 to Apr 15		
Emulsified Asphalt:					
CSS-1	70 to 140	0.1 to 0.50	All year		

401.03.03 HMA Courses

D. Transportation and Delivery of HMA.

THE FIRST PARAGRAPH IS CHANGED TO:

Deliver HMA using HMA trucks in sufficient quantities and at such intervals to allow continuous placement of the material. Do not allow trucks to leave the plant within 1 hour of sunset unless nighttime lighting is provided as specified in 108.06. The RE will reject HMA if the HMA trucks do not meet the requirements specified in 1009.02. The RE will suspend construction operations if the Contractor fails to

maintain a continuous paving operation. Before the truck leaves the plant, obtain a weigh ticket from a fully automatic scale. Before unloading, submit for each truckload a legible weigh ticket that includes the following:

- 1. Name and location of the HMA plant.
- 2. Project title.
- 3. Load time and date.
- 4. Truck number.
- 5. Mix designation.
- 6. Plant lot number.
- 7. Tare, gross, and net weight.

E. Spreading and Grading.

1. Longitudinal Joints.

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

When constructing the first lane, care shall be exercised in rolling so as not to displace the line and grade of the edges of the HMA. The joint in the surface course shall be offset from the lane lines by 6 inches except for the centerline of a roadway in which the joint shall fall between the double yellow traffic stripes.

A wedge joint shall be constructed when traffic is to be maintained and lift thickness is greater than $2^{-1}/_4$ inches. A vertical edge joint will be permitted for lift thickness $2^{1}/_4$ inches or less when traffic has to be maintained. For lift thickness greater than $2^{-1}/_4$ inches and traffic is not required to be maintained, a vertical edge shall be utilized.

Longitudinal joints shall be constructed utilizing one of the following methods:

- A. Vertical Edge Joint. The paver shall be positioned so that in spreading, the HMA material uniformly overlaps the edge of the lane previously placed by 1 to 2 inches and shall be left sufficiently high to allow for compaction. In general, the height of the uncompacted HMA above the compacted HMA shall be ¹/₄ inch for each 1 inch of compacted mix. The overlapped HMA material being placed in the abutting lane shall be tightly crowded (bumped) over the joint. Any material in excess of the 1 to 2 inch overlap shall be pulled away from the joint and removed instead of broadcasting onto the new mat. When compacted, the new mat at the joint shall be even or slightly higher (Maximum ¹/₈ of an inch) than the previously placed adjoining mat. If the newly compacted mat results in a depression at the joint of ¹/₈ of an inch or more lower than the previously placed adjacent HMA layer, all paving operations shall cease until corrective action is taken by the Contractor to prevent reoccurrence. For all longitudinal joints that do not meet this requirement, the Contractor shall saw joints according to dimension guidelines of Subsection 404.19 and seal with an approved sealer.
- **B.** Wedge Joint. The sloped plate of the paver shall produce a wedge edge having a face slope of 3H: 1V. The plate shall be so constructed as to accommodate compacted layer thickness of 2 to 4 inches. The bottom of the sloped plate shall be mounted 1 inch above the existing surface. The plate shall be interchangeable on either side of

the screed. The Contractor shall maintain the wedge configuration under traffic conditions.

All loose material shall be removed from the traveled way before opening to traffic. The rolling operation of the adjoining lane shall proceed as indicated in Subpart A above, except that care shall be taken to keep coarse aggregate away from the point where the wedge meets the surface of the previously placed lane.

To assure a true line, the paver shall closely follow lines or markings placed along the joint for alignment purposes. All longitudinal joints shall be constructed parallel to the centerlines within a tolerance of plus or minus 3 inches for every 100 linear feet. If this tolerance is not met, the mat shall be cut back to conform. The width and depth of overlapped material shall be kept uniform at all times. Overlapped material shall be looted back, pushing the material to the edge of the cold HMA mat and directly over the joint with the hot HMA mat. In no case shall excess material be broadcast across the new layer. All excess material shall be removed.

F. Compacting

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

When compacting the longitudinal edge of the first lanes placed using the wedge joint, the breakdown roller shall not extend more than 2 inches over the top of the sloped face of the wedge joint. The Contractor shall submit a plan, to ensure material at the wedge edge is properly seated and loose material is removed, for the Resident Engineer's approval prior to the commencement of paving operations.

Care shall be taken to prevent lateral displacement of the unconfined edge during the compaction operation. The edge of the drums of vibratory or static wheel rollers shall extend over the free edge of the mat by at least 6 inches. When compacting the joint, while paving the adjacent lane, the roller shall be placed on the newly placed HMA and overlap the joint by a distance of approximately 6 inches.

Alternate trips of the roller shall be terminated in stops approximately 2 feet from the preceding stop. When paving in echelon, rollers compacting the mat behind the lead paver shall maintain approximately 6 inches of uncompacted material adjacent to the second paver. After mix from the second paver is placed against the uncompacted edge of the mat from the first paver, the rollers shall compact the HMA on both sides of the joint.

401.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

The Department will make a payment adjustment for HMA air void quality by the following formula:

Pay Adjustment = $Q \times BP \times PPA$

Where:

BP = Bid Price

Q= Air Void Lot Quantity

PPA= air void PPA as specified in 401.03.03H.

The Department will make a payment adjustment for HMA thickness quality by the following formula:

Pay Adjustment = $Q \times BP \times PPA$

Where:

BP = Bid Price

Q= Thickness Lot Quantity

PPA= thickness PPA as specified in 401.03.03I

The Department will make a payment adjustment for HMA ride quality, as specified in 401.03.03J.

The County will not measure and will not make payment for the following items:

MTV

Test Strips

Quality Control for Compaction including comparison cores and nuclear density testing Polymerized Joint Adhesive

All costs thereof shall be included in the prices bid for the various Hot Mix Asphalt items.

Pay Adjustments for Air Voids, Thickness and Ride Quality will be made according to Subsections 401.03.03.H, 401.03.3.I, and 401.03.03.J, respectively.

Disposal of asphalt will be made to an N.J.D.E.P. approved recycling facility. Prior to the start of operations, the Contractor shall notify the County of the location where the asphalt will be disposed. Disposal of the asphalt will be carried out in accordance with the Standard Specifications

Hot mix asphalt material for manhole, inlet and other ramping will not be measured. No separate payment will be made for this hot mix asphalt material.

A <u>prime coat</u> will be applied to dense graded aggregate base prior to placement of hot mix asphalt pavement.

A <u>tack coat</u> will be applied to all layers of hot mix asphalt courses, prior to placement of new hot mix asphalt course. In addition, a tack coat will be applied at the edges of the new pavement between paver passes.

Separate payment will not be made for temporary hot mix asphalt pavement but the costs shall be included in the various traffic control pay items.

SECTION 501- SHEETING AND COFFERDAMS

501.01 DESCRIPTION

THE FOLLOWING IS ADDED:

The Contractor is advised the installation of sheeting, cofferdams, and other bridge elements may interfere with the adjacent Route 9 overhead bridge. The Contractor shall be prepared to design and or change his means and methods of construction to maintain safe working clearances during the project construction.

The Contractor is advised the installation of sheeting, cofferdams, and other bridge elements may interfere with underground water, fiber optics, storm sewer, sanitary sewer and gas utilities. The Contractor shall be prepared to design and or change his means and methods of construction to maintain safe working clearances for the underground utilities during the project construction.

501.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEM IS REVISED AS FOLLOWS:

Item Pay Unit

TEMPORARY SHEETING LUMP SUM

THE LAST PARAGRAPH IS REVISED AS FOLLOWS:

Temporary and permanent sheeting will not be measured but the cost shall be paid on a lump sum basis.

SECTION 504 - STRUCTURAL CONCRETE

504.03.01 REINFORCEMENT STEEL

E. Placing and Fastening.

THE FOLLOWING IS ADDED:

Distance from the forms shall be maintained by means of metal bar chairs with plastic coated feet of the proper length.

Metal bar chairs with plastic coated feet of the proper length shall be used to support all reinforcement steel.

Hardware for reinforcement steel in structures, epoxy coated.

Bar supports and screed supports shall be epoxy coated. Tie wires shall be plastic coated or epoxy coated.

504.03.02 Constructing Concrete

B. Forms.

THE FOLLOWING IS ADDED:

All formwork joints shall be tight and aligned so as to produce smooth even exposed concrete surfaces without ridges, offsets or irregularities.

All steel forms used for forming exposed surfaces of structures shall be lined with finished lumber (i.e. coated plywood or approved equal) to provide smooth even concrete surfaces. if and where the condition of the proposed steel forms is like new (i.e. without dents, warps, holes, etc.) and will provide smooth even exposed concrete surfaces, the contractor may request in writing that the engineer waive the requirement to line steel forms with finished lumber.

C. Limitations of Placing.

THE FOLLOWING IS ADDED:

The contractor's attention is called to this subsection. This project will be constructed during winter months therefore Section 1. "Cold Weather Concreting" shall be strictly enforced. The contractor will be expected to adhere to all requirements of this section. No extra work claims will be entertained for any work described in this section.

G. Removal of Forms and Falsework.

THE FOLLOWING IS ADDED:

Do not remove forms and false work until the concrete obtains a compressive strength of 4000 psi.

504.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

No separate or extra payment shall be made for cold weather concreting, but cost shall be included in concrete items.

SECTION 505 - PRE-CAST AND PRE-STRESSED STRUCTURAL CONCRETE

505.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work to be performed under this Contract includes installation of a pre-cast, reinforced concrete, structural slab.

505.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS ADDED:

Item Pay Unit

PRE-CAST REINFORCED CONCRETE STRUCTURAL SLAB LUMP SUM

SECTION 507 - CONCRETE BRIDGE DECK AND APPROACHES

507.03.03 Date Panel

THE ENTIRE SUBSECTION IS CHANGED AS FOLLOWS:

The date panel is to be cast in one piece of statuary bronze. Background shall be in dark oxidized hard matted surface having a stippled appearance; borders and tops of letters to have a smooth, burnished finish. Concealed anchorage shall be 4-1/2" diameter threaded expansion type anchor bolts, non-corroding type.

Prior to constructing the date panel, submit a full size drawing of the date panel showing the size and arrangement of letters for the approval of the County. Block letters shall be used. Date panel having dimensions shown on the drawing shall be set in concrete at determined by the County.

507.03.05 Concrete Parapet and Barrier Curb

THE SECOND PARAGRAPH IS CHANGED TO:

Cure using curing compound as specified 504.03.02.F. If drilling is required for subsequent construction, allow the concrete to cure for a minimum of 14 days before drilling

SECTION 602 - DRAINAGE STRUCTURES

602.03.03 Setting Castings, Resetting Castings, and Reconstructing Inlets and Manholes

THE FOLLOWING IS ADDED:

Existing inlet and manhole castings which are no long required shall become the property of Union County.

602.03.07 Curb Pieces

THE FOLLOWING IS ADDED:

Existing curb pieces which are no long required shall become the property of Union County.

SECTION 606 - SIDEWALKS, DRIVEWAYS, AND ISLANDS

606.01 Description.

THE FOLLOWING IS ADDED

606.03.02 Concrete Sidewalks, Driveways, and Islands.

THE FOLLOWING IS ADDED:

The Contractor shall include the cost of all sidewalk, apron and brick removal, excavation, material disposal, expansion joint material, reinforcement material (where necessary & directed by the Engineer), curing material, adjacent site restoration, and all other material necessary for the construction of driveway aprons and various types of sidewalk, in the cost of the various items listed above. The unit price bid for these items shall include all work described heretofore for these items.

The various items for Concrete Sidewalk, consists of the removal and disposal of any existing concrete, brick or hot mix asphalt walks; excavation to the proper depth all around; setting forms as required; placing a 4" stone subbase as required; and pouring and finishing of concrete sidewalk and ramp as required at each location. After the stripping of forms, each site shall be cleaned and restored to match all adjacent conditions, including topsoil and seeding as required. The unit price given by the bidder shall include all work & restoration described hereto, for this item.

Disposal of concrete and asphalt will be made to an NJDEP approved recycling facility. The Contractor shall notify the Recycle Facility to provide the County with appropriate credit for recycling. Any brick pavers removed from the project shall be delivered to the respective Municipal Department of Public Works whence the material originated from.

New sidewalk shall meet existing sidewalk, at an existing or newly formed joint. The Contractor shall include the cost of all expansion joint materials in the unit prices.

Concrete for Concrete Sidewalks, shall be Gray, Class B, 4500 psi, 6% air-entrained, unless otherwise specified.

Concrete sidewalks shall be constructed in 4 ft. x 4 ft. squares using approved separators. An expansion joint shall be placed at 12-foot intervals. A 4-inch layer of 3/4-inch clean stone subbase shall be placed immediately below the new concrete sidewalk. This 4-inch subbase shall be constructed in accordance with Section 301, except that payment will not be made this layer. The preparation and compaction of the subbase shall be made part of the unit price bid for the Concrete Sidewalk item.

E. Expansion Joints

THIS SUB-SECTION PART E IS CHANGED AS FOLLOWS:

Expansion joints shall be ½ inch wide, placed at intervals of approximately <u>12 feet</u>, and shall be filled with preformed joint filler.

H. Protection and Curing

THE LAST SENTENCE IS CHANGED TO:

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

SECTION 607 - CURBS

607.01 Description.

THE FOLLOWING IS ADDED:

These items shall consist of the removal and disposal of various types of curb, including: concrete, Belgian block, combination curb & gutter; and or hot mix asphalt concrete curb; excavation to the proper depth; setting forms as required; placing 6" stone base as required; and pouring and finishing of concrete curb and granite as required at each location, all in the process of constructing new curb. After the stripping of forms, each site will be cleaned and restored to match all adjacent conditions, including adjoining turf repair strips in accordance with Section 805.

607.03.02 Concrete Vertical Curb and Concrete Sloping Curb

C. Installing Joints

The following is added to this sub-Section:

Expansion joints shall be provided opposite joints in abutting concrete surface course and at approximately equal distances of not more than **10** feet between joints. Joints shall be filled with preformed expansion joint filler, ½ inch thick, which shall be flush with the top and face. Between concrete curbs and concrete surface or base course, ½-inch, preformed, expansion-joint filler shall be installed and the joint shall be sealed with hot-poured joint sealer.

All materials and equipment necessary to complete the type of curb installation described in Section 607.03.02, where necessary, will also be included in the overall payment for this Item.

D. Placing Concrete.

THE ENTIRE TEXT IS CHANGED TO:

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

607.03.04 Concrete Vertical Curb and Concrete Sloping Curb, Dowelled

D. Placing Concrete.

THE ENTIRE TEXT IS CHANGED TO:

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

607.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

The Contractor shall include the cost of all curb removal, excavation, material disposal, expansion joint material, curing material, adjacent site restoration and dowels (where required) in the cost of the curbs. All curbs shall be depressed at handicap ramps, in accordance with the respective construction details, included in these specifications. All materials, labor & equipment necessary to complete this work shall

be included in the unit price bid for the curb item. The unit price bid for this item shall include all work described heretofore.

SECTION 608 - NON-VEGETATIVE SURFACES

THE ENTIRE SECTION IS CHANGED TO:

608.01 DESCRIPTION

This Section describes the requirements for constructing non-vegetative surfaces of HMA; color-coated HMA; porous HMA; broken stone, and polyester matting.

608.02 MATERIALS

608.02.01 Materials

Provide materials as specified:

Broken Stone, Coarse Aggregate No. 3	901.03
HMA (9.5M64)	
Asphalt-Stabilized Drainage Course	902.06
Non-Vegetative Surface Coating	912.02.04
Herbicide	917.11.03
Polyester Matting	919.15

Provide Non-Vegetative Surface, Porous HMA conforming to the requirements of Asphalt-Stabilized Drainage Course.

608.02.02 Equipment

Provide equipment as specified:

HMA Compactor	1003.05
Vibratory Drum Compactor	1003.06
HMA Plant	
HMA Trucks.	

608.03 CONSTRUCTION

608.03.01 Non-Vegetative Surface, HMA

Excavate as specified in 202.03.03. Shape and compact the underlying material to produce a firm, even surface. Obtain RE approval before finishing excavation. If the RE determines that the bottom of the excavation is unstable, undercut, backfill, and compact as directed by the RE.

Construct the non-vegetative surface, HMA before installing guide rail. Obtain RE approval for alternate methods of construction.

Deliver HMA as specified in 401.03.03.D. Construct non-vegetative surfaces 4 inches thick. Place and compact the material to produce a surface free of roller marks and ridges. Spread and grade the HMA as specified in 401.03.03.E. Ensure that the finished surface is smooth, even, and graded to drain away from the guide rail. Compact HMA as specified in 401.03.03.F. Spread, rake, and lute areas not accessible to pavers and rollers with hand tools and compact with dynamic compactors.

Repair non-vegetative surface damaged by guide rail installation with HMA. Use hand tampers around posts and other obstacles where mechanical compactors are not accessible.

608.04 MEASUREMENT AND PAYMENT

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

Item Pay Unit

NON-VEGETATIVE SURFACE, HOT MIX ASPHALT SQUARE YARD

When the RE directs undercutting of unstable material in the excavation area, the Department will make payment, as specified in 104.03.03, for the additional excavation. The Department will also make payment, as specified in 104.03.03, for the additional bedding if there is not an excess of excavated material available for use as bedding.

SECTION 609 - BEAM GUIDE RAIL

609.03.01 Beam Guide Rail

THE SEVENTH PARAGRAPH IS CHANGED TO:

Install flexible delineators with white retroreflective sheeting on the right side of the direction of traffic. Install flexible delineators with yellow retroreflective sheeting on the left side of the direction of traffic. Mount flexible delineators on the blockout of beam guide rail using either a "U" channel base on the I-beam blockout or a flat base attached to a wood, polymer, or other solid top blockout. Attach the base to the blockout using an adhesive recommended by the manufacturer of the base and panel.

609.04 MEASUREMENT AND PAYMENT

THE PAY ITEM REMOVAL OF BEAN GUIDE RAIL IS DELETED AND THE FOLLOWING IS ADDED:

Separate payment will not be made for the removal of beam guide rail but the cost shall be included in the price bid for the various beam guide rail items.

Separate payment will not be made for connections of the various beam guide rail types to the parapet including extra posts, blockouts and rail elements but the cost shall be included in the various beam guide rail items.

SECTION 610 - TRAFFIC STRIPES, TRAFFIC MARKINGS AND RUMBLE STRIPS

610.01 Description

THE FOLLOWING IS ADDED TO THIS SECTION:

Traffic stripes and pavement markings of the various types, shall be installed prior to the roadway being opened for traffic, unless prior approval is obtained from the Engineer. Should this approval be granted, or such is not recommended by the Manufacturer of the material, the Contractor shall pre-mark the newly surfaced road, prior to such being opened to traffic, and in the presence of the Engineer's representative. The use of traffic control devices (i.e., cones or drums) to delineate traveled ways, crosswalks, stop bars, etc. will not be allowed.

Temporary tapes and/or paint may be utilized on milled surfaces only. No additional payment will be made for temporary traffic tape and or paint. All labor & materials necessary to install and remove temporary striping items shall be made part of the various striping items as described herein.

Materials used on this project shall meet all manufacturers' specifications.

610.02.02 Equipment.

THE FOLLOWING IS ADDED:

All equipment for applying traffic stripes or traffic markings shall be equipped with glass bead dispensers of a type that will mechanically and automatically dispense beads uniformly on wet stripes or markings at the rates specified.

610.03 CONSTRUCTION

610.03.01 Long-Life Traffic Stripes

THE ENTIRE SUBSECTION IS CHANGED TO:

- **A. Striping Plan.** At least 20 days before beginning the work, submit to the RE for approval a striping plan that includes:
 - 1. Schedule of operations for applying traffic stripes.
 - 2. Number and type of equipment.
 - 3. Manufacturer's recommendations for use of the materials, including, but not limited to, mixing ratios and application temperatures.
 - 4. Details on the means and methods for surface preparation
 - 5. Details on the means and methods for premarking
 - 6. Details on the proposed test strip such as location, length etc
- **B.** Surface Preparation. Immediately before striping the pavement surface, clean the surface of dirt, oil, grease, and foreign material, including curing compound on new concrete. Clean the surface two (2) inches beyond the perimeter of the stripes to be placed.
- **C. Striping Test Strip.** Before beginning striping operations, construct 1 or more striping test strips to demonstrate the Contractor's ability to meet the requirements specified in 610.03.01.D. For each striping test strip, apply striping to approximately 500 linear feet of pavement with the same striping

procedure that will be used for the Project. Construct a test strip for each applicator unit and epoxy resin material used. Provide the RE with 50 test cards made of heavy stock paper measuring 8 inches by 2 inches, and two wet film thickness gauges. Construct additional test strips when major equipment repairs or adjustments are made or when the traffic stripes are determined to be defective. Construct additional test strips when traffic striping operations are performed on multiple, noncontinuous occasions. Perform additional test strips as requested by the RE. When the test strip is in compliance, as determined by the RE, proceed with striping operations. Each test strip may remain in place and become part of the finished stripes subject to the requirements of 610.03.01.E.

D. Applying Striping. Mix epoxy resin with an automatic proportioning and mixing machine, and hotspray the compound at a temperature of between 100 and 130 °F onto dry surfaces. Apply the compound with a wet film thickness of 20 ± 1 mil. Apply the material during dry weather conditions when the ambient temperature is a minimum of 45 °F and the surface temperature is a minimum of 50 °F. Adjust operations as required for the prevailing ambient and surface conditions to achieve a no-track drying time of 30 minutes or less.

Immediately after, or in conjunction with, the compound application, uniformly apply 12 pounds of large glass beads per gallon of epoxy resin to the compound. After applying the large glass beads, uniformly apply 12 pounds of small glass beads per gallon of epoxy resin to the compound.

Remove all compound that has been tracked or spilled outside of the intended placement areas.

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

375 millicandelas per square meter per lux for white traffic stripe

250 millicandelas per square meter per lux for yellow traffic stripe

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

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

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

Provide the RE with an LTL-X Reflectometer that has been certified by the manufacturer as being calibrated within the last two years. The RE will test the retroreflectance of traffic stripes. Replace traffic stripes that do not meet the retroreflectance values indicated in 610.03.01.E. Replace the entire length of striping where improper curing or discoloration has occurred. Discoloration is localized areas or patches of brown or grayish colored compound. Where improper curing or discoloration occurs intermittently in intervals of 100 feet or less throughout the striping length, replace the entire length of striping from the beginning of the first occurrence until the end of the last occurrence, plus 5 feet on each end.

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

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

THE FOLLOWING IS ADDED TO SUBSECTION C:

The traffic lines shall be applied in accordance with the manufacturer's installation instructions.

All traffic stripes, words, legends and markings shall conform to the current edition of the **Manual on Uniform Traffic Control Devices (MUTCD)** for size, color, shape and placement.

All centerline markings shall be a six-inch wide double yellow line for the entire length of the road. Additionally, the Contractor performing this work shall provide a six-inch wide gap between the double yellow lines for the placement of plowable raised pavement markers, either installed under this or future contracts. In the event that a six-inch wide gap is not provided, the Contractor shall remove that length of line not in compliance and reapply the material to provide the required gap distance without additional compensation. Openings 6" in length may be provided at 20 foot intervals along edge lines placed on the inside radius of super elevated curves, to avoid surface ponding.

Longitudinal lines shall be offset at least 4 inches from construction joints of Portland cement concrete pavements and joints and shoulder breaks of hot mix asphalt concrete pavements.

All stray materials which result from the application of traffic marking lines and symbols shall be cleaned up and disposed of prior to opening the road to traffic and to the satisfaction of the Engineer. **The use of grinders or similar method will not be allowed on the new pavement surface.** Additionally where applicable, excess glass beads that are on the roadway surface shall be cleaned up prior to opening the road to traffic. The beads must be swept or vacuumed up. The use of blowers to clean the roadway surface of glass beads is not an acceptable method of removal.

When traffic lines are specified in the contract for newly paved asphalt concrete surfaces, they shall be applied before public traffic is allowed on the freshly paved surface. In snow removal states, the traffic lines should preferably be inlaid in the fresh surface during final rolling of the mat, but in any case they shall be applied before the close of the shift on the day that the surface is paved. These traffic lines can also be overlaid on existing pavement surfaces in accordance with the manufacturer's installation instructions.

THE FOLLOWING IS ADDED TO SUBSECTION D:

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

At no additional compensation by the County, the Contractor shall remove all traffic paint where the striping or markings will not be directly under long-life material, replace long-life traffic stripes or traffic markings damaged due to any sawing or sealing of joints in the HMA overlay, and replace all existing pavement reflectors that have been marred by striping or marking material as a result of improperly located traffic stripes or traffic markings.

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

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

The RE will determine initial retroreflectance as follows:

Provide the RE with an LTL-X Reflectometer that has been certified by the manufacturer as being calibrated within the last two years. The RE will test the retroreflectance of traffic markings. Replace traffic markings that do not meet the retroreflectance values indicated in 610.03.02.D.

Complete each application of traffic markings and allow to thoroughly dry. All stray materials which result from the application of traffic lines and markings shall be cleaned up and disposed of prior to opening the road to traffic and to the satisfaction of the Resident Engineer. The use of grinders or similar method will not be allowed on newly paved surfaces. Additionally, where applicable, excess glass beads that are on the roadway surface shall be cleaned up prior to opening the road to traffic. The beads must be swept or vacuumed up - the use of blowers to clean the roadway surface of glass beads is not an acceptable method of removal.

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

610.03.08 Removal of Traffic Stripes and Markings

THE FOLLOWING HAS BEEN ADDED:

Equipment for removing the various types of traffic stripes or traffic markings shall be designed with a vacuum system to remove all millings from the pavement surface and prevent airborne residue from escaping into the atmosphere. All equipment including traffic marking tape applicator and retrometer shall be duly calibrated and shall conform to manufacturer's requirements.

610.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Payment for traffic stripes will be made for the number of linear feet installed, accepted and placed in accordance with the requirements of these and the manufacturer's specifications at the price bid per linear foot under the item TRAFFIC STRIPES, LONG LIFE EPOXY RESIN, 4".

No additional payment will be made for the removal of reflectors & castings.

The cost for the removal of traffic lines and markings including solid areas, letters, arrows, and other symbols from HMA and Portland cement concrete surfaces shall be included in the unit price bid for this item.

Traffic lines will be paid for at the contract unit price, which shall be full compensation for cleaning and preparing the pavement surface, for furnishing and placing all materials, and for all materials, labor, tools, equipment and incidentals necessary to complete the work.

At no cost to the County, the Contractor shall remove all traffic paint where the striping or markings will be directly under proposed long-life material, replace long-life traffic stripes or traffic markings damaged due to any sawing or sealing of joints in the hot mix asphalt concrete overlay (resurfacing), and replace all existing pavement reflectors that have been marred by striping or marking material as a result of improperly located traffic stripes or traffic markings.

SECTION 651 - WATER

651.04 MEASUREMENT AND PAYMENT

THIS SUB-SECTION IS CHANGED AS FOLLOW:

The item *Reset Water Valve Box* shall not be measured and no separate payment will be made.

SECTION 653 - GAS

653.04 MEASUREMENT AND PAYMENT

THIS SUB-SECTION IS CHANGED AS FOLLOWS:

The item *Reset Gas Valve Box* shall not be measured and no separate payment will be made.

SECTION 901 - AGGREGATES

901.10.03 Virgin and RAP Mixture

3. Density Control

THE FOLLOWING IS ADDED:

When AASHTO T 310 (Direct Transmission Method, nuclear gauge method for measuring density and moisture content) is used to perform Compaction Acceptance Testing (Subsection 302.03.01), a representative sample of five tests for each 5,000 square yards lot will be taken.

SECTION 902 - ASPHALT

902.02.02 Composition of Mixtures

TABLE 902.02.02-2 IS CHANGED TO:

Table 902.02.02-2 Additional Fine Aggregate Requirements for HMA			
Tests	Test Method	Minimum Percent	
Uncompacted Void Content of Fine Aggregate	AASHTO T 304, Method A	45	
Sand Equivalent	AASHTO T 176	45	

902.02.04 Sampling and Testing

B. Sampling.

THIS ENTIRE PART IS CHANGED TO:

The ME will take a random sample from each 700 tons of production for volumetric acceptance testing and to verify composition. The ME will perform sampling according to AASHTO T 168, NJDOT B-2, or ASTM D 3665.

902.03.02 Mix Design

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

UNLESS OTHERWISE APPROVED BY THE ENGINEER, ONLY ONE SOURCE OF SUPPLY FOR HOT MIX ASPHALT MATERIAL MAY BE USED ON THE PROJECT.

THE FOURTH PARAGRAPH IS CHANGED TO:

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

902.03.03 Sampling and Testing

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

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

THE SECOND PARAGRAPH IS CHANGED TO:

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

THE FOURTH PARAGRAPH IS CHANGED TO:

The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308 or NJDOT B-5. Perform testing for air voids according to AASHTO T 209 and either NJDOT B-6 or AASHTO T 331. Perform testing for drain down according to NJDOT B-7 or NJDOT B-8.

902.04.03 Sampling and Testing

THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material. Maintain the temperature of the mix between 300 °F and 330 °F. Perform and meet requirements for quality control testing as specified in 902.02.04.C.

THE SECOND PARAGRAPH IS CHANGED TO:

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

902.05.01 Composition of Mixture

THE FIFTH PARAGRAPH IS CHANGED TO:

For fine aggregate, use stone sand conforming to 901.05.02. Ensure that the combined fine aggregate in the mixture conforms to the requirements in Table 902.02.02-2.

902.05.02 Mix Design

THE FIRST PARAGRAPH IS CHANGED TO:

Design the SMA to meet the requirements in Table 902.05.02-1 and Table 902.05.02-2. Prepare the JMF according to AASHTO R 46. Determine the JMF at 4 percent air voids and 75 gyrations of the Superpave gyratory compactor.

TABLE 902.05.02-2 IS CHANGED TO:

Table 902.05.02-2 SMA Mixtures Volumetric For Design and Plant Production		
Property	Production Control Tolerances	Requirement
Air Voids	±1%	4.0%
Voids in Mineral Aggregate (VMA)	_	17.0% minimum
VCA _{mix}	_	Less than VCA _{dry}
Drain down @ production temperature	_	0.30% maximum
Asphalt Binder Content (NJDOT B-5)	±0.15%	6% minimum
Asphalt Binder Content (AASHTO T 308)	$\pm 0.40\%$	6% minimum
Tensile Strength Ratio (AASHTO T 283)	_	80% minimum

902.05.03 Sampling and Testing

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

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

THE SECOND PARAGRAPH IS CHANGED TO:

During production at the plant, the ME will take a sample from each 700 tons of production to verify composition and air voids. Conduct drain down, VCAmix, VCAdry, and VMA testing as directed by the ME. Perform tests according to AASHTO R 46.

THE FOURTH PARAGRAPH IS CHANGED TO:

The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308, or NJDOT B-5. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166 or AASHTO T 331. The ME will use the most current QC maximum specific gravity test result, obtained according to AASHTO T 209, in calculating the volumetric properties of the SMA. Perform testing for drain down according to AASHTO T 305.

902.06.03 Sampling and Testing

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that the mix meets the requirements as specified in 902.02.04.A, except that the temperature of the mix at discharge is required to be between 230 °F and 275 °F, otherwise the RE or ME will reject the material.

THE SECOND PARAGRAPH IS CHANGED TO:

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

SECTION 905 - REINFORCEMENT METALS

905.01 REINFORCEMENT STEEL

THE ENTIRE SUBPART IS CHANGED TO:

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

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

905.01.03 Welded Wire Reinforcement

THE SECOND PARAGRAPH IS CHANGED TO:

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

905.01.05 Dowels

THE ENTIRE SUBPART IS CHANGED TO:

Use plain reinforcement bars according to ASTM A 615, Grade 60. Galvanize according to ASTM A 123.

905.03.03 Dowel Bars

THE FIRST PARAGRAPH IS CHANGED TO:

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

SECTION 911 - SIGNS, SIGN SUPPORTS, AND DELINEATORS

911.02.03 Non-Breakaway Sign Supports for Ground Mounted Signs

THE LAST SENTENCE OF THE SECOND PARAGRAPH IS CHANGED TO:

Tie-wrap posts during shipment and handling to protect the finish.

911.03 FLEXIBLE DELINEATORS

- 1. Delineator Dimensions.
 - b. Guide Rail Mounted.

THE ENTIRE TEXT IS CHANGED TO:

Ensure that the unit for beam guide rail mounted flexible delineators has a minimum width of 3 inches and a minimum thickness of 0.100 inch. Use units of a height that will ensure that the top of the reflective area is 5 ± 2 inches above the top of post.

Design the base of the unit to mount over the I-beam blockout or to the top of a wood or synthetic blockout, of the beam guide rail.

THE FOLLOWING IS ADDED:

d. Construction Barrier Curb Mounted. For construction barrier curb top mounted flexible delineators, use a delineator that is 6 x 12 inches with a minimum thickness of 0.100 inch. For construction barrier curb side mounted flexible delineators, use a delineator that is 3-1/2 x 3-1/2 inches with a minimum thickness of 0.100 inch, and that has a base that forms a "T" shape with the panel for mounting on the barrier curb and is flexible or hinged so as to return to its original position after being struck.

THE FOLLOWING IS ADDED:

d. Construction Barrier Curb Mounted. Ensure that the sheeting for top mounted flexible delineators is 6 x 12 inches and the sheeting for side mounted flexible delineators is 3-1/2 x 3-1/2 inches.

Submit a certification of compliance, as specified in <u>106.07</u>, for delineators.

SECTION 912 - PAINTING, COATINGS, TRAFFIC STRIPES AND TRAFFIC MARKINGS

912.03.01 Epoxy Traffic Stripes

B. Glass Beads.

THE FIRST PARAGRAPH IS CHANGED TO:

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

912.03.02 Thermoplastic Traffic Markings

THE SUB-SECTION SHALL BE REVISED AS FOLLOWS:

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

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

Thermoplastic for long-life traffic markings shall be hot extruded material. Thermoplastic material shall be applied to the road surface in a molten state by the *Ribbon/Extrude Method*, whereby, the suspended extrusion die has multi (four) sided control of the flow and shape of the materials. The thermoplastic shall conform to the requirements of AASHTO M 249, except as follows:

- 1. All thermoplastic material shall be applied at a *thickness of 125 mils*.
- 2. For white, the composition of the mixture shall be as follows:

Component	Percent by weight
Resin/Binder	22-26 percent
Glass Beads (pre-mix)	30 percent minimum
White Pigment	10 percent minimum
Calcium Carbonate and Inert Fillers	•
(shall not contain silica other than as glass beads)	

3. Only yellow non-lead formulas shall be used, the composition of the mixture shall be as follows:

Component	Percent by weight
Resin/Binder	22-26 percent
Glass Beads (pre-mix)	30 percent minimum
Yellow Pigment	2 percent minimum
Calcium Carbonate and Inert Fillers	
(shall not contain silica other than as glass beads)	

The yellow material's combined totals of lead, cadmium, mercury, and hexavalent chromium shall not exceed 100 parts per million. The thermoplastic manufacturer shall certify, according to Sub-section 106.04, that the material will meet the requirements specified.

The material, when formed into traffic stripes & markings, shall be readily renewable by placing an overlay of new material directly upon an existing line of the same material. Such new material shall bond itself to the existing line in such a manner to avoid splitting and or separation. The thermoplastic material shall not deteriorate on contact with the following: Sodium Chloride, Calcium Chloride, or other de-icing chemicals; oil contents of paving materials and or vehicles.

912.04 TEMPORARY TRAFFIC STRIPES AND MARKINGS

912.04 Latex Paint

THE FOLLOWING SHALL BE ADDED TO THE BEGINNING OF THIS SUB PART:

Latex Traffic Paint shall only be utilized and accepted for use as temporary striping & marking of milled surfaces. All other striping & markings shall conform to Sub-sections 912.10.C, as amended herein. Temporary traffic marking tape may also be used; however, product will require approval of the Engineer, prior to any use.

912.04.01 Latex Paint

THE ENTIRE SUBPART TEXT IS CHANGED TO:

For temporary traffic stripes, use latex traffic paint that is a fast-drying white, or non-lead yellow, ready-mixed pigmented binder emulsified in water and capable of anchoring reflective glass beads that are separately applied. Ensure that the color matches FED-STD-595B color chip No. 33538 for yellow and No. 37886 for white. Ensure that the paint has a maximum no-track time of 120 seconds when applied in a wet film thickness of 15 ± 1 mil, at 140 °F, and with 12 pounds per gallon of glass beads. In addition, ensure that the finished product meets the following:

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

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

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

SECTION 1009 - HMA PLANT EQUIPMENT

1009.01 HMA PLANT

A. Requirements for HMA Mixing Plants.

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

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

APPENDIX I

U.S. ARMY CORPS OF ENGINEERS - PERMIT

THE OFFICE AND ADDRESS OF THE OFFICE AND ADDRESS OF THE OFFICE ADD

DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT JACOB K. JAVITS FEDERAL BUILDING 26 FEDERAL PLAZA NEW YORK NY 10278-0090

MAY n 9 2016

REGULATORY BRANCH

SUBJECT: Permit Application File Number NAN-2015-01725-ESW by Union County for Maintenance of Bridge Footings in An Unnamed Stream, tributary to the Rahway River in the City of Rahway, Union County, New Jersey

1. PERMITTEE:

Union County Attn: Thomas Mineo 2325 South Avenue Scotch Plains, New Jersey 07076 (908) 789-3690

- 2. On December 21, 2015, the New York District of the U.S. Army Corps of Engineers received a request for Department of the Army authorization to repair bridge-footing structures of the East Hazelwood Avenue Bridge RA-69 in-kind. Bridge repair activities will consist of 0.03 acres of temporary dewatering, bypass, and sediment excavation with replacement. Regulated work also consists of permanent impacts from the replacement of bridge footings through discharge of 109 cubic yards of concrete over an area of 0.03 acres in an unnamed stream, tributary to the Rahway River in the City of Rahway, Union County, New Jersey.
- 3. The specific applicant-provided details are as shown on the attached dated permit drawings.
- 4. This determination covers only the work described in the submitted material. Any major changes in the project may require additional authorizations from the New York District of the U.S. Army Corps of Engineers.
- 5. Based on the information submitted to this office and accomplishment of any required notification in accordance with the applicable federal requirements, our review of the subject work indicates that an individual Department of the Army permit is not required. It appears that the activities within the jurisdiction of this office could be accomplished under Department of the Army Nationwide General Permit Number 3, MAINTENANCE, in accordance with Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). The nationwide permits are prescribed at Reissuance of Nationwide Permits in the Federal Register dated February 21, 2012 (77 FR 10184). The subject work may be performed without further authorization from this office provided it complies with Sections A through D, Number 3 MAINTENANCE; New York District regional conditions; with the following work-specific Special Conditions listed below; and any applicable regional conditions added by the State of New Jersey.
- 6. Other than the work-specific Special Conditions listed below, the 2012 nationwide general permits in the State of New Jersey, including their final regional conditions, water quality certifications, and coastal zone concurrence statements are available at: http://www.nan.usace.armv.mil/Portals/37/docs/regulatory/geninfo/natp/PN NWPRegCon

SUBJECT: Permit Application File Number NAN-2015-01725-ESW by Union County for Maintenance of Bridge Footings in An Unnamed Stream, tributary to the Rahway River in the City of Rahway, Union County, New Jersey

-2-

dNJDE 16mar12.pdf

If you require a specific paper copy, please contact our Regulator-of-the-Day at 917-790-8511 to request one be mailed to you. Please be sure to have the above eighteen-character file number readily available when you call.

- 7. Work-specific Special Conditions:
- (A) The permittee, and their agents, shall take actions to prevent construction materials, including debris, from entering any waterway to become drift or pollution hazards.
- (B) The permittee shall contact the appropriate state and local government officials to ensure that the subject work is performed in compliance with their requirements.
- (C) The permittee shall sign and submit the attached compliance certification form to this office within 30 days of the completion of the regulated activity authorized by this permit and any mitigation work required by Special Condition.
- (D) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 8. Please note that this nationwide general permit (NWGP) verification is based on a preliminary jurisdictional determination (JD). A preliminary jurisdictional determination (JD) is not appealable. If you wish, prior to commencement of the authorized work you may request an approved jurisdictional determination (JD), which may be appealed, by contacting the New York District, US Army Corps of Engineers for further instructions. To assist you in this decision and address any questions you may have on the differences between preliminary and approved jurisdictional determinations, please review US Army Corps of Engineers Regulatory Guidance Letter Number 08-02, which can be found at:

http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl08-02.pdf

9. This verification is valid until <u>March 17, 2017</u>, unless the nationwide general permits are modified, reissued, or revoked before then. This verification will remain valid until <u>March 17, 2017</u>, if the subject work activity complies with the terms of any subsequent modifications of the nationwide general permits. If the nationwide general permits are suspended, revoked, or modified in such a way that the subject activity would no longer comply with the terms and conditions of a nationwide general permit, and the proposed

SUBJECT: Permit Application File Number NAN-2015-01725-ESW by Union County for Maintenance of Bridge Footings in An Unnamed Stream, tributary to the Rahway River in the City of Rahway, Union County, New Jersey

-3-

work activity has commenced, or is under contract to commence, the permittee will have twelve (12) months from the date of such permit action to complete the regulated work.

10. In order for us to better serve you and others, please complete our Customer Service Survey located at:

http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx

11. Any inquires should be directed to our Regulator-of-the-Day at 917-790-8511. Please be sure to have the above eighteen-character file number readily available when you call.

Ronald R. Pinzon Chief, Eastern Section

Enclosures (2)

- 1. Dated Permit Drawings
- 2. Completion Form

Copies furnished:

Remington & Vernick Engineers Attn: Stephen Beaver 232 Kings Highway East Haddonfield, New Jersey 08033

APPENDIX II

SOMERSET-UNION COUNTY SOIL CONSERVATION DISTRICT PERMIT



County of Union Thomas Mineo, PE 2325 South Avenue Scotch Plains, NJ 07076

SOMERSET - UNION SOIL CONSERVATION DISTRICT

Somerset County 4-H Center 308 Milltown Road • Bridgewater, NJ 08807 (908) 526-2701 Fax (908) 575-3977

January 11, 2016

RE:

Hazelwood Ave. Minor Bridge Ra-69 Repl.

(plan 12/14/2015)

Block Hazelwood Ave.ROW, Lot Hazelwood

Ave.ROW

City of Rahway

Application #2015-1996

Dear Sir or Madam:

The Somerset-Union Soil Conservation District has reviewed the above erosion control plan and certifies that the plan is in accordance with the N.J. Erosion and Sediment Control Act, Chapter 251, P.L.

This approval is limited to the soil erosion and sedimentation controls specified in this plan. It is not authorization to engage in the proposed land use unless such use has been previously approved by the municipality or other controlling agency.

All revisions and municipal renewals of this project will require resubmission and approval by the Any conveyance of the project (or portion thereof) will transfer full responsibility for compliance to subsequent owner(s). The District must be notified in writing of any change of ownership.

The District requires written notification prior to the start of land disturbance. Please be advised that failure to do so is considered a violation of State Law and a fine will be imposed,

If there are any questions, please feel free to call our office.

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JAN 1 5 2016

Fublic Works & Facilities

SOMERSET-UNION S.C.D.

Mark Kirby
District Supervisor

MK/FC/JK J:\Accuss\MASTERS\CertLet-35-SU.doc

Enclosure

cc; City of Rahway Const. Off.

Mun. Planning Board

Mun. Engineer

Remington, Vernick & Arango Engineers

APPENDIX III

NJDEP PERMIT

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF LAND USE REGULATION



Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420 Telephone: (609) 777-0454 or Fax: (609) 777-3656 www.nj.gov/dep/landuse



PERMIT

In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.

Approval Date

FEB 1 2 2016

Expiration Date

FEB 1 1 2021

Permit Number(s):

2013-15-0003.1 WFD 150001 Type of Approval(s):

Waterfront Development Individual Permit In-Water and Water Quality Certificate

Enabling Statute(s):

N.J.S.A. 12:5-3 N.J.S.A. 58:10A

N.J.S.A. 58:16A

Permittee:

Thomas Mineo Union County, Division of Engineering 2325 South Avenue Scotch Plains, New Jersey 07076 Site Location:

Hazelwood Avenue (CR 621) – Bridge Ra-69

Block: N/A Lot: N/A Municipality: Rahway City

County: Union

Description of Authorized Activities:

Union County, Division of Engineering will replace an existing bridge structure on Hazelwood Avenue (CR 621) over stream 10-5 which drains directly into the Rahway River. The project will install a 3-sided bridge structure in the location of the existing structure. In addition, portions of the existing sidewalks on both sides of the structure will be replaced. The subject site is located within the City of Rahway, Union County, and consisting of the replacement of Bridge Ra-69, Hazelwood Avenue (CR 621), over a stream 10-5 perpendicular with the Rahway River.

This permit is authorized under, and in compliance with the Freshwater Wetlands Protection Act Rules and following Rules on Coastal Zone Management, N.J.A.C. 7:7-1.1 et seq., specifically: Navigation Channels 7:7-9.7, Flood Hazard Areas 7:7-9.25, Riparian Zones 7:7-9.26, Historic and Archaeological Resources 7:7-9.34, Endangered or Threatened Wildlife or Vegetation Species Habitats 7:7-9.36, Public Open Space 7:7-9.38, Special Urban Areas 7:7-9.41, Lands and Waters Subject to Public Trust Rights 7:7-9.48 and Public Access 7:7-16.9.

By issuance of this permit, the State of New Jersey does not relinquish tidelands ownership or claim to any portion of the subject property or adjacent properties. The permittee shall allow an authorized Division representative the right to inspect the construction pursuant to N.J.A.C. 7:7-27.2(c)13. This letter of authorization to conduct a regulated activity in a wetland or open water includes a Water Quality Certificate for these activities.

Prepared by:

Cathryn Schaffer

Received and/or Recorded by County Clerk:

THIS PERMIT IS NOT EFFECTIVE AND NO CONSTRUCTION APPROVED BY THIS PERMIT, OR OTHER REGULATED ACTIVITY, MAY BE UNDERTAKEN UNTIL THE APPLICANT HAS SATISFIED ALL PRE-CONSTRUCTION CONDITIONS AS SET FORTH HEREIN.

This permit is not valid unless authorizing signature appears on the last page.

STANDARD CONDITIONS:

1. Recording of Permit: This permit shall be recorded in its entirety in the office of the County Clerk or the Registrar of Deeds and Mortgages for each county where this project is located. Verified notice of this action shall be forwarded to the Division immediately thereafter.

2. Responsibilities:

- The permittee, its contractors and subcontractors shall comply with all conditions of this permit, authorizing and/or supporting documents and approved plans and drawings.
 - b. A copy of this permit, other authorizing documents, records and information including all approved plans and drawings shall be maintained at the authorized site at all times and made available to Department representatives or their designated agents upon request.
 - 3. **Permit modification:** Plans and specifications in the application and conditions imposed by this permit shall remain in full force and effect so long as the proposed development or any portion thereof is in existence, unless modified by the Department. No change in plans or specifications upon which this permit is issued shall be made except with the prior written permission of the Department. The filing of a request to modify an issued permit by the permittee, or a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.
 - 4. **Duty to minimize environmental impacts:** The permittee shall take all reasonable steps to prevent, minimize or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of this permit. The Department may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.
 - 5. Proper site maintenance: While the regulated activities are being undertaken, neither the permittee, its contractors nor subcontractors shall cause or permit any unreasonable interference with the free flow of a regulated feature by placing or dumping any materials, equipment, debris or structures within or adjacent to the regulated area. Upon completion or abandonment of the work, the permittee, its contractors or subcontractors shall remove and dispose of in a lawful manner all excess materials, debris, equipment, silt fences and other temporary soil erosion and sediment control devices from all regulated areas. Only clean non-toxic fill shall be used where necessary.
 - 6. Sediment control: Development which requires soil disturbance, creation of drainage structures, or changes in natural contours shall conduct operations in accordance with the latest revised version of "Standards for Soil Erosion Sediment Control in New Jersey," promulgated by the New Jersey State Soil Conservation Committee, pursuant to the Soil Erosion and Sediment Control Act of 1975, N.J.S.A. 4:24-42 et seq. and N.J.A.C. 2:90-1.3-1.14.

7. Rights of the State:

- a. This permit does not convey any property rights of any sort, or any exclusive privilege.
- b. Upon notification and presentation of credentials, the permittee shall allow Department representatives or their designated agents, to enter upon the project site and/or where records must be kept under the conditions of this permit, inspect at reasonable times any facilities, equipment, practices or operations regulated or required under the permit, and sample or monitor for the purposes of determining compliance. Failure to allow

Page 3 Union County Division of Engineering
DLUR File No.: 2013-15-0003.1 WFD 150001

reasonable access shall be considered a violation of this permit and subject the permittee to enforcement action.

- c. The issuance of this permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction, structure or structures. Neither the State nor the Department shall, in any way, be liable for the loss of life or property which may occur by virtue of the activity of development resulting from any permit.
- 8. **Duty to Reapply:** If the permittee wishes to continue an activity covered by the permit after the expiration date of the permit authorization, the permittee must apply for and obtain a new permit authorization.
- 9. **Transfer of Permit:** This permit may not be transferable to any person unless the transfer is approved by the Department. Please refer to the applicable rules for more information.
- 10. Other Approvals: The permittee must obtain any and all other Federal, State and/or Local approvals. Authorization to undertake a regulated activity under this permit does not indicate that the activity also meets the requirements of any other rule, plan or ordinance.

11. Noncompliance:

- a. Any noncompliance with this permit constitutes a violation, and is grounds for enforcement action, as well as modification, suspension and/or termination of the permit.
- b. The permittee shall immediately report to the Department by telephone at (877) 927-6337 any noncompliance that may endanger health or the environment. In addition, the permittee shall report all noncompliance to Bureau of Coastal and Land Use Compliance and Enforcement, 401 E. State Street, 4th Floor, P.O. Box 420, Mail Code: 401-04C, Trenton, NJ 08625, in writing within five business days of the time the permittee becomes aware of the noncompliance. The written notice shall include: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter.
- 12. Appeal of Permit: In accordance with the applicable regulations, any person who is aggrieved by this decision or any of the conditions of this permit may request a hearing within 30 days after notice of the decision is published in the DEP Bulletin. This request must include a completed copy of the Administrative Hearing Request Checklist. The DEP Bulletin is available through the Department's website at http://www.nj.gov/dep/bulletin and the Checklist is available through the Division's website at http://www.nj.gov/dep/landuse/download/lur_024.pdf. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see the website www.nj.gov/dep/odr for more information about this process.

PROJECT SPECIFIC CONDTIONS:

13. <u>Limit of Authorized Riparian Zone Vegetation Disturbance</u> – This permit authorizes the disturbance of 832 square feet of riparian zone vegetation.

- 14. The permittee is responsible for obtaining all necessary approvals from any applicable agencies, including but not necessarily limited to Soil Conservation District Office.
- 15. All sediment barriers and other soil erosion control measures shall be installed prior to commencing any clearing, grading or construction onsite, and shall be maintained in proper working condition throughout the entire duration of the project.
- 16. Vegetation within 50 feet of the top of the bank shall only be disturbed in the areas specifically shown on the approved drawing/s. No other vegetation within 50 feet of the top of any stream bank onsite shall be disturbed for any reason. This condition applies to all channels onsite regardless of the contributory drainage area.
- 17. Upon completion of the project, all temporarily disturbed areas within freshwater wetlands, wetland transition area, State open waters and within 50 feet of the top of any stream bank onsite shall be restored to original topography and replanted with indigenous, non-invasive vegetation in accordance with N.J.A.C. 10.2(u).
- 18. All excavated material shall be disposed of in a lawful manner outside of any flood hazard area riparian zone, open water, freshwater wetland and adjacent transition area, and in such a way as to not interfere with the positive drainage of the receiving area.
- 19. For the purposes of this permit, the Department has determined that this project is not a Major Development as defined in the Stormwater Management rules at N.J.A.C. 7:8-1.2. Therefore, the Department did not review the project for compliance with these rules.

APPROVED PLANS:

The drawings hereby approved are six (6) sheets, prepared by Remington, Vernick & Arango, Engineers, dated October 2015, unrevised, entitled: "REPLACEMENT OF EAST HAZELWOOD AVE., MINOR BRIDGE Ra-69, CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

"CONSTRUCTON PLAN," sheet 4;

"ROADWAY PROFILE," sheet 5;

"CROSS SECTIONS - 8+00 TO 10+00," sheet 6;

"CROSS SECTIONS - 10+50 TO 12+00," sheet 7;

"SOIL EROSION & SEDIMENT CONTROL ENVIRONMENTAL PLAN," Sheet 8; and

"GENERAL PLAN, ELEVATION, & SECTION," sheet 11.

If you need clarification on any section of this permit or conditions, please contact our Technical Support Call Center at (609) 777-0454.

Christopher Jones, Manager

Bureau of Urban Growth and Redevelopment

Division of Land Use Regulation

Original sent to Agent to record

C: Rahway City Construction Official Remington & Vernick Engineers, Attn: Frank J. Seney, Jr.

APPENDIX IV

U. S. COAST GUARD PERMIT EXEMPTION



Commander First Coast Guard District One South Street Battery Park Building New York, NY 10004-1466 Staff Symbol: D1 (dpb) Phone: (212) 514-4331 Fax: (212) 514-4337

16591/NV-938 Stream 10-5//NJ

January 21, 2016

Mr. Frank J. Seney, P.E. Remington & Vernick Engineers 232 Kings Highway East Haddonfield, NJ 08033

RE: East Hazelwood Avenue Minor Bridge - Steam 10-5 (Rahway River)

Dear Mr. Seney:

This responds to your correspondence of November 23, 2015 regarding the referenced project. The project as noted falls within the area of responsibility for the First Coast Guard District Bridge Branch (your correspondence had originally been transmitted to the Fifth Coast Guard District, located in Portsmouth, Virginia). Based on the documentation provided it is determined that no formal Coast Guard bridge permit will be required.

The project is placed in the Advance Approval category in accordance with 33 CFR 115.70. Future bridge projects along the same waterway will have to be independently evaluated before they may be considered for Advance Approval. This Advance Approval determination is valid for three years from the date of this letter. If construction does not commence within this time period, you must contact this office for reaffirmation of this authorization. Our approval also does not relieve the applicant, Union County, New Jersey, of the responsibility to ensure compliance with any applicable federal, state or local requirements for the proposed action.

Although this project will not require a bridge permit, other areas of Coast Guard jurisdiction apply and the following stipulations must be met:

- a) The lowest portion of the superstructure of the bridge across the waterway should clear the 100-year flood height elevation if feasible.
- b) The requirement to display permanent navigation lights at this bridge is waived. This waiver may be rescinded at any time in the future should nighttime navigation through the bridge be increased to a level determined by the District Commander to warrant lighting (generally four or more passages per week between the hours of sunset and sunrise).
- c) At no time during the bridge work will the waterway be closed to navigation without prior notification and approval of the Coast Guard.
- d) This office shall be notified as soon as possible referencing commencement and completion of bridge work so appropriate announcements may be prepared for our Local Notice to Mariners publication.
- e) Upon completion of construction, the bridge owner shall submit "as built" drawings showing navigational clearances through the bridge and sufficient data to allow this

office to prepare a completion report. This report is used for Coast Guard and other mariner publications.

f) Any spillage of oil or oil-based products during construction must be reported promptly to the Coast Guard by calling 1-800-424-8802.

If you have any questions please call this office at the telephone number noted above.

Sincerely,

Supervisory Bridge Management Specialist

By direction

E-copy:

U.S. Army Corps of Engineers – New York District Mr. Thomas Mineo, Union County Engineer – <u>tmineo@ucnj.org</u> U.S. Coast Guard Sector New York – Waterways Management

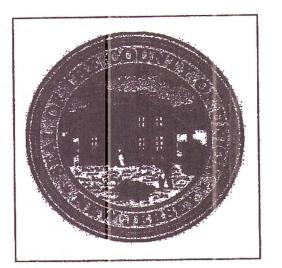
APPENDIX V

SOIL BORING LOG

REMINGTON & VERNICK ENGINEERS

SOIL BORING LOG

						SOIL BORING LOG				
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Hamme	er Ty	pe: /	Automatic			Driller: Steve Parisano Date	05-04	1 -15	_	
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_	7	S-3	3-21-6-2	10"		Dark brown m-f SAND, little Silt, trace f Gravel, some large Wood Fragments (fill)	, –			
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COUNTY OF UNION

BOARD OF CHOSEN FREEHOLDERS REPLACEMENT OF EAST HAZELWOOD AVENUE MINOR BRIDGE Ra-69

AUGUST 2016 CITY OF RAHWAY

UNION COUNTY PROJECT NO. 2013 - 009

PUBLIC UTILITIES

COMCAST CABLEVISION OF NJ **800 RAHWAY AVENUE UNION CITY, NEW JERSEY 07083** ATTN: BOB KNOEPFEL

LEVEL 3 COMMUNICATIONS 1025 ELDORADO BOULEVARD BROOMFIELD, CO 80021 ATTN: RICK MILLER, PROJECT MANAGE, OSP RELOCATIONS

ATTN: ROBERT S. TARZIAN, OPERATIONS MANAGER, NJ

2COM GROUP (RETAINED BY ZAYO GROUP) 102 DORSA AVENUE LIVINGSTON, NJ 07039 ATTN: RICHARD R. HEYS

ATTN: WILLIAM SCHNEIDER

ELIZABETHTOWN GAS 520 GREEN LANE UNION, NEW JERSEY 07083

RAHWAY VALLEY SEWAGE AUTHORITY 1050 EAST HAZELWOOD AVENUE RAHWAY, NJ 07065 ATTN: JOHN BUONOCORE, PE

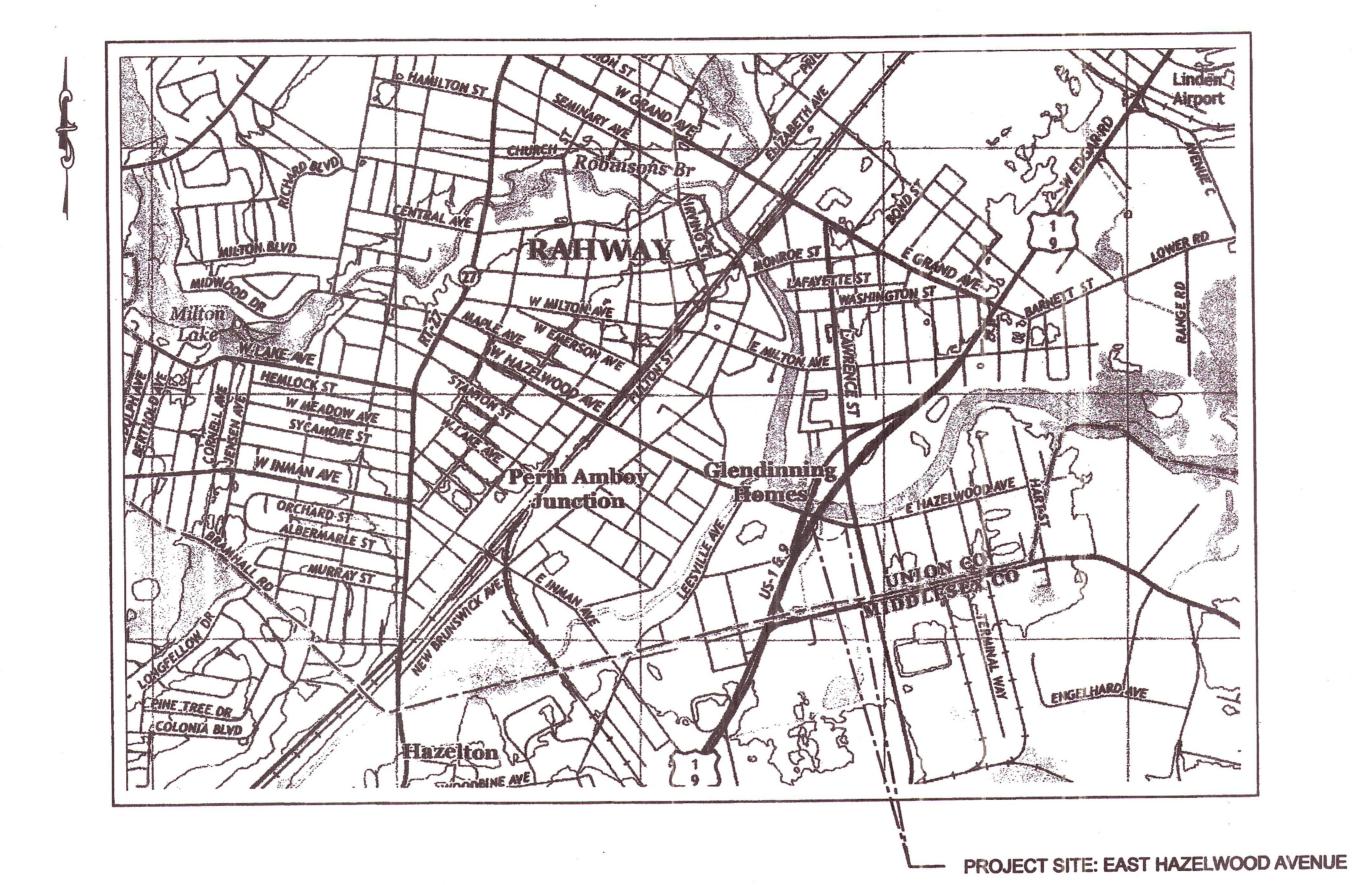
80 PARK PLAZA, T-12 NEWARK, NJ 07102 ATTN: JOHN M. GRABENSTEIN

RAHWAY CITY DEPARTMENT OF PUBLIC WORKS 1 CITY HALL PLAZA, RAHWAY, NJ 07065 ATTN: MIKE SMALLING, CPWM, CRP, DIRECTOR/SUPERINTENDENT

SUEZ WATER RAHWAY 1045 WESTFIELD AVENUE RAHWAY, NEW JERSEY 07065 ATTN: KEVIN BAMBURAK, PROJECT MANAGER

THE CONTRACTOR SHALL CONTACT NJ ONE CALL AT 811 OR 1-800-272-1000 FOR FIELD LOCATION OF UNDERGROUND UTILITIES

PRIOR TO THE START OF CONSTRUCTION.

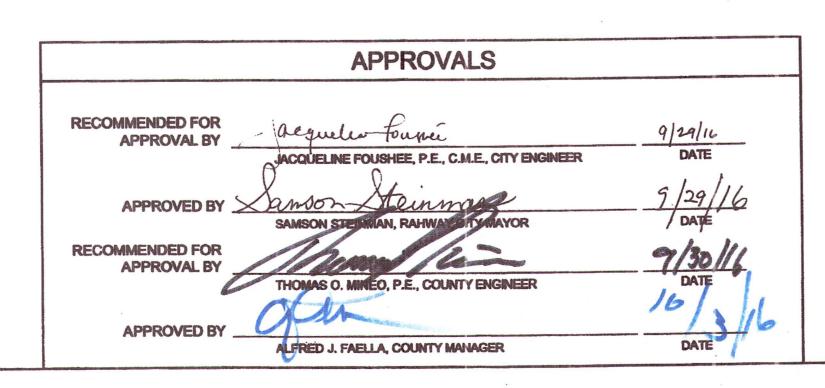


	INDEX OF SHEETS
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4	CONSTRUCTION PLAN
5	ROADWAY PROFILE
6	UTILITY PLAN
7	CROSS SECTIONS - 8+00 to 10+00
8	CROSS SECTIONS - 10+50 TO 12+00
9	SOIL EROSION & SEDIMENT CONTROL ENVIRONMENTAL PLAN
10	SOIL EROSION & SEDIMENT CONTROL NOTES
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12	GENERAL PLAN, ELEVATION, & SECTION
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15	ABUTMENT 1 - PLAN, ELEVATION & SECTION
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17	WINGWALLS - PLAN & SECTION
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22	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 2
23	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 3
24	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 4
25-26	BRIDGE CONSTRUCTION STAGING SECTIONS & NOTES
27	REINFORCEMENT BAR SCHEDULE

NOTES

NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 WITH AMENDMENTS THERETO TO GOVERN

STANDARD ROADWAY CONSTRUCTION/TRAFFIC CONTROL/ BRIDGE CONSTRUCTION DETAILS BOOKLET, 2007 AND STANDARD ELECTRICAL DETAILS BOOKLET, 2007 ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.



	NO.	REVISION	DATE DI CHA. DI
AND COMMENTE DESCRIPTION OF DEPARTMENT		TITLE SHEET	
ALL DOCUMENTS PREPARED BY REMINGTON & VERNICK ENGINEERS ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT	RE	PLACEMENT OF EAST HAZE MINOR BRIDGE Ra- city of rahway, union county, new	69
OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY REMINGTON & VERNICK ENGINEERS FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO REMINGTON & VERNICK ENGINEERS; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS REMINGTON & VERNICK	DATE: RICH	ARD G. ARANGO ISKONAL BUGNER UR. NO. 30082 DATE: FRANK J. NJ PROFESSIONAL EN	9.29.16 SENEY JR.
ENGINEERS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM. PLANS WHICH DO NOT BEAR AN	RY	REMINCTON, VERNICK & ARAN 300 PENHORN AVENUE, 3RD FLOOR, SECAUCH (201) 624–2137, FAX (201) 624–2136, WEB SITE ADDR Certificate of Authorization: 24 GA 28003	US, NJ 07094 NESS: WWW.RVE.COM
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OCT-2015 S.F.B. S.F.B. F.J.S.

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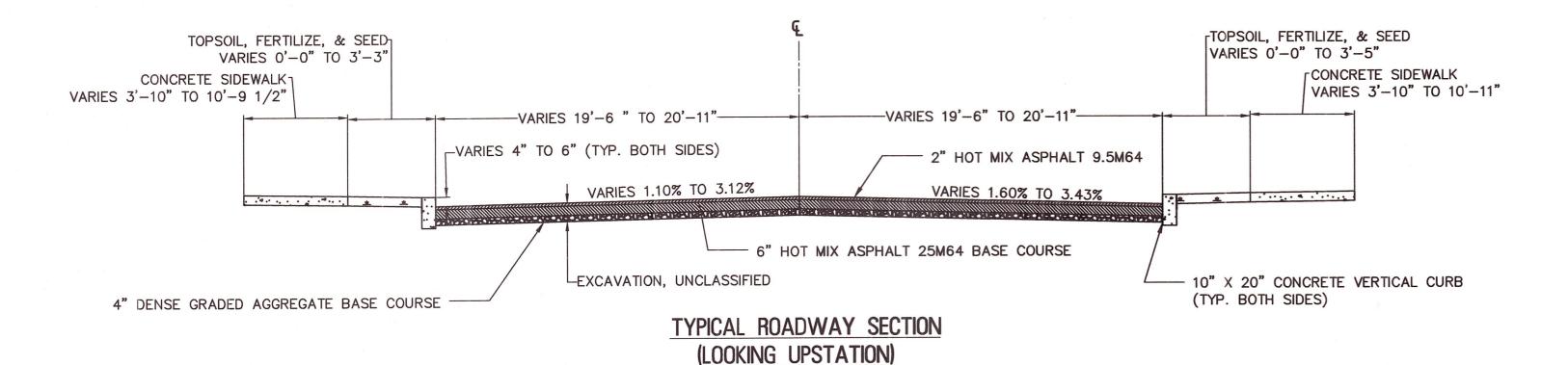
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ESTIMATE OF QUANTITIES

ROADWAY PAY ITEMS						
PAY ITEM	DESCRIPTION	UNITS	PLAN	IF & WHERE	CONTRACT	
NO.			QUANTITY	DIRECTED	QUANTITY	
11	MOBILIZATION	L.S.	1	0	1	
2	SILT FENCE	L.F.	206	24	230	
3	HAYBALE (IF AND WHERE DIRECTED)	UNIT	0	15	15	
4	FLOATING TURBIDITY BARRIER, TYPE 2	L.F.	50	15	65	
5	SEDIMENT CONTROL BAG	S.F.	450	450	900	
6	INLET FILTER TYPE 2, 2 X 4	UNIT	7	0	7	
7	BREAKAWAY BARRICADE	UNIT	25	5	30	
8	DRUM	UNIT	20	10	30	
9	TRAFFIC CONE	UNIT	25	25	50	
10	CONSTRUCTION SIGNS	S.F.	232	68	300	
11	TRAFFIC DIRECTOR, UNIFORM POLICE (IF & WHERE DIRECTED)	DOL	0	50000	50000	
12	CONSTRUCTION BARRIER CURB	L.F.	480	50	530	
13	TEMPORARY CRASH CUSHION, QUADGUARD 3 BAYS X 24" WIDE	UNIT	2	0	2	
14	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	2	0	2	
15	PORTABLE VARIABLE MESSAGE SIGN	UNIT	2	0	2	
16	FUEL PRICE ADJUSTMENT	L.S.	1	0	1	
17	ASPHALT PRICE ADJUSTMENT	L.S.	1	0	1	
18	NO ITEM	-	0	0	0	
19	EXCAVATION, UNCLASSIFIED	C.Y.	2215	285	2500	
20	I-9 SOIL AGGREGATE	C.Y.	630	220	850	
21	DENSE-GRADED AGGREGATE BASE COURSE, 4" THICK	S.Y.	1752	148	1900	
22	TACK COAT	GAL.	270	30	300	
23	PRIME COAT	GAL.	630	30	660	
24	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	TON	210	20	230	
25	HOT MIX ASPHALT 25M64 BASE COURSE, 6" THICK	TON	620	40	660	
26	NON VEGETATIVE SURFACE, HOT MIX ASPHALT	S.Y.	100	25	125	
27	RECONSTRUCTED INLET, TYPE B USING NEW CASTING	UNIT	6	1	7	
28	RESET CASTING (IF AND WHERE DIRECTED)	UNIT	0	2	2	
29	CONCRETE SIDEWALK, 4" THICK	S.Y.	190	10	200	
30	10" x 20" CONCRETE VERTICAL CURB	L.F.	267	133	400	
31	BEAM GUIDE RAIL	L.F.	175	25	200	
32	BEAM GUIDE RAIL ELEMENT	L.F.	25	25	50	
33	THRIE BEAM GUIDE RAIL, BRIDGE	L.F.	42	0	42	
34	FLARED GUIDE RAIL TERMINAL	UNIT	1	0	1	
35	TANGENT GUIDE RAIL TERMINAL	UNIT	2	0	2	
36	TRAFFIC MARKINGS, THERMOPLASTIC	S.F.	160	40	200	
37	TRAFFIC STIPES, LONG-LIFE, EPOXY RESIN, 4"	L.F.	1250	50	1300	
38	TOPSOILING, 6" THICK	S.Y.	178	22	200	
39	TOPSOIL STABILIZATION, TYPE 2 MAT	S.Y.	178	22	200	
40	STRAW MULCHING	S.Y.	178	22	200	
41	FERTILIZING AND SEEDING, TYPE A-3	S.Y.	178	22	200	
42	EXCAVATION TEST PITS (IF & WHERE DIRECTED)	C.Y.	0	100	100	
43	18" REINFORCED CONCRETE PIPE, CLASS IV	L.F.	80	10	90	

AY ITEMS

PAY ITEM	DESCRIPTION		PLAN	IF & WHERE	CONTRACT
NO.	DESCRIPTION	UNITS	QUANTITY	DIRECTED	QUANTITY
44	CLEARING SITE - BRIDGE	L.S.	1	0	1
45	TEMPORARY COFFERDAM	L.S.	1	0	1
46	TEMPORARY SHEETING	L.S.	1	0	1
47	REINFORCEMENT STEEL, EPOXY-COATED	POUND	31661	3339	35000
48	CONCRETE FOOTING	C.Y.	155	15	170
49	CONCRETE ABUTMENT WALLS	C.Y.	103	17	120
50	CONCRETE WINGWALLS	C.Y.	49	6	55
51	PRECAST REINFORCED CONCRETE STRUCTURAL SLAB	L.S.	1	0	1
52	CONCRETE BRIDGE PARAPET W/ARCHITECTURAL FINISH	L.F.	72	2	74
53	CONCRETE BRIDGE SIDEWALK	C.Y.	5	1	6
54	DATE PANEL	UNIT	2	0	2



SCALE: 1" = 5'-0"

GENERAL NOTES

- 1. DESIGN CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. ANY ERRORS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
- 3. THE CONTRACTOR SHALL USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 4. ALL PAVED AND CONCRETE AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO THE START OF CONSTRUCTION. AND
- 5. ALL GRASSED OR WOODED AREAS DISTURBED DURING CONSTRUCTION
- 6. ALL FILL SHALL BE PLACED IN 8" LOOSE LAYERS, AND COMPACTION OF MATERIAL SHALL BE 95% PROCTOR DENSITY (ASTM D1557). IF BORROW FILL IS REQUIRED, IT SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF UNDERGROUND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION AND IT SHALL BE AT THEIR OWN EXPENSE TO REPAIR OR REPLACE ANYTHING THAT THEY DAMAGE.
- 8. BASELINES HAVE BEEN PROVIDED ON THE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THE BASELINE AS SHOWN ON THE PLAN.
- 9. ALL CONSTRUCTION DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH N.J.D.O.T. STANDARDS AS DETAILS IN "STANDARD ROADWAY CONSTRUCTION/TRAFFIC CONTROL/BRIDGE CONSTRUCTION DETAILS."

INCLUDING ALL APPLICABLE BASELINE DOCUMENT CHANGES AND APPENDICES. THESE DETAILS MAY BE PURCHASED THROUGH THE N.J.D.O.T. PLANS AND SPECIFICATION DISTRIBUTION CENTER AT: 1035 PARKWAY AVENUE, TRENTON, NJ 0862-0600 (TELEPHONE: 1-609-530-2096).

- 10. A MINIMUM OF ONE (1) FOOT OF PAVING SHALL BE REMOVED AROUND THE PERIMETER OF ALL EXISTING MANHOLE AND INLET CASTINGS TO ENSURE A MINIMUM OF TWO (2) INCHES OF SURFACE COURSE IS PROVIDED AROUND THEM. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "HOT MIX ASPHALT 9.5M64 SURFACE
- 11. NO SEPARATE PAYMENT WILL BE MADE FOR CLEARING AND GRUBBING.
 ALL COSTS THEREOF SHALL BE INCLUDED IN THE PRICE BID FOR
 THE ITEM "CLEARING SITE, BRIDGE".

COURSE, 2" THICK".

- 12. NO SEPARATE PAYMENT WILL BE MADE FOR FILTER FABRIC WHEN NOTED. ALL COSTS THEREOF SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS SCHEDULED WITHIN THE PROPOSAL.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH FEDERAL, STATE, COUNTY, AND MUNICIPAL LAWS, ORDINANCES, AND REGULATIONS
- 14. THE CONTRACTOR SHALL FURNISH, PLACE, AND MAINTAIN SHEETING, BRACING, SHORING, AND OTHER SUPPORTS REQUIRED BY THE WORK. NO SEPARATE PAYMENT WILL BE MADE FOR PROVIDING SHEETING, BRACING, SHORING, AND OTHER SUPPORT SYSTEMS FOR THE WORK. COSTS THEREOF ARE TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS OF THE PROPOSAL.
- 15. ALL UTILITY CASTINGS, VALVE BOXES, AND CURB BOXES SHALL BE RESET TO THE FINISHED GRADE. THE COST OF RESETTING AND THE COORDINATION WITH UTILITY COMPANIES FOR RESETTING EXISTING UTILITY CASTINGS, VALVE BOXES, AND CURB BOXES SHALL BE INCLUDED IN THE COST OF THE VARIOUS PAY ITEMS FOR THE PROPOSAL

BRIDGE GENERAL NOTES

- 1. DESIGN SPECIFICATIONS:
 2012 A.A.S.H.T.O. LRFD STANDARD SPECIFICATIONS FOR HIGHWAY
 BRIDGES (WITH INTERIMS), SECTIONS 3 AND 29 (WITH INTERIMS) OF
 THE 2009 NJDOT BRIDGE AND STRUCTURES DESIGN MANUAL, AS
 MODIFIED BY THE SUPPLEMENTAL SPECIFICATIONS.
- 2 CONSTRUCTION AND MATERIAL SPECIFICATIONS:
 2007 NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE
 CONSTRUCTION BOUND VERSION AS MODIFIED BY THE CONTRACT
 SUPPLEMENTARY SPECIFICATIONS.

DESIGN LOADING:

3.1. LIVE LOAD

3.1.1. AASHTO LRFD HL-93 VEHICULAR LIVE LOAD

3.2. DEAD LOAD

3.2.1. DEAD LOAD SHALL INCLUDE 25 PSF FUTURE WEARING SURFACE

4. CONCRETE DESIGN STRESSES:

4.1. SPECIFIED COMPRESSIVE STRENGTH I'C (IN ACCORDANCE WITH NJDOT STANDARD SPECIFICATIONS AS MAY BE MODFIEID BY THE SUPPLEMENTAL SPECIFICATIONS).

- 4.1.1. CLASS A = 4,000 PSI (CAST-IN-PLACE PARAPET AND SIDEWALK)
- 4.1.2. CLASS B = 3,000 PSI (CAST-IN-PLACE FOOTINGS AND WINGWALLS)
- 4.1.3. CLASS P = 5,000 PSI (PRECAST REINFORCED STRUCTURAL SLAB).
- 4.2. CLASS DESIGN STRENGTHS (IN ACCORDANCE WITH TABLE 903.03.06-3 OF THE NJDOT STANDARD SPECIFICATIONS)
- 4.2.1. CLASS A = 4,600 PSI 4.2.2. CLASS B = 3,700 PSI
- 4.2.3. CLASS P = 5,500 PSI

5. REINFORCEMENT STEEL:

- 5.1. ASMT A615 (GRADE 60), ALLOWABLE TENSILE STREE, Fs=24,000 PSI.
- 5.2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

BORINGS:

6.1. INDICATED LOCATION OF BORINGS, DENOTED AS LOG NO. 6.2. BORING LOGS ARE INCLUDED IN THE CONTRACT SPECIFICATIONS.

7. EXISTING STRUCTURE:

- 7.1. THE EXISTING STRUCTURE SHALL BE REMOVED IN ITS ENTIRETY.8. FOUNDATION PREPARATION:
- 8.1. ALL FOUNDATION SITE PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

9. SUPERSTRUCTURE
9.1. DRAWING SHALL INCLUDE DETAILS OF ALL PERTINENT

9.1. DRAWING SHALL INCLUDE DETAILS OF ALL PERTINENT
ATTACHEMENTS. NO PRECAST ATTACHMENTS SHALL BE
EXPOSED.

9.2. ANCHOR BOLTS SHALL CONFORM TO CURRENT ASTM DESIGNATION

A36. TIE ROADS, SLEEVES, ANCHOR BOLTS AND INSERTS SHALL BE HOT—DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.

9.3. NON SHRINK GROUT, DOWEL BARS, POST TENSIONING STRANDS, AND ELASTOMERIC MATERIAL SHALL BE INCIDENTAL TO THE

- PRECAST REINFORCED CONCRETE STRUCTURAL SLABS. 9.4. THE USE OF LONGITUDINAL POST-TENSIONED TIES FOR THE PRECAST REINFORCED CONCRETE STRUCTURAL SLABS ARE REQUIRED. PROVISIONS SHALL BE MADE TO ACCOMMODATE POST-TENSIONING THE BRIDGE UNIT IN THREE STAGES. LONGITUDINAL TIES THAT ARE USED TO TIE THE PRECAST UNITS TOGETHER SHALL BE 3/4" DIAMETER HIGH TENSILE STRENGTH STEEL BARS CONFORMING TO AASHTO M275 (ASTM A722). POST-TENSIONING HAS TO BE STAGED (SPLICED AS TO MANUFACTURER): 1/2"ø 7 STRAND WIRE CANNOT BE SPLICED. IT SHOULD BE REMOVED. BARS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 (ASTM A153). ALL HARDWARE ASSOCIATED WITH END ANCHORAGE SYSTEMS SHALL BE GALVANIZED. END ANCHORAGES (NUTS, WASHER AND ANCHOR PARTS) SHALL BE COMPATIBLE WITH THE TIE ROAD SYSTEM AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 (ASTM A153). EACH TIE ROD SHALL BE BE STRESSED TO A TENSION OF 30 KIPS. AFTER TENSIONING, THE EXPOSED ENDS OF THE TIES SHALL BE REMOVED SO THAT NO PART OF THE TIES OR END FITTINGS EXTEND BEYOND 1" INSIDE THE
- TWO COATS OF BITUMINOUS PAINT.

 9.5. THE MANUFACTURER MUST BE A MEMBER OF THE
- PRECAST/PRESTRESSED CONCRETE INSTITUTE (P.C.I.).

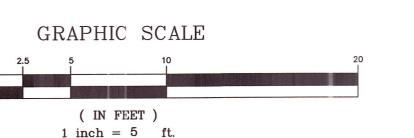
 9.6. SEPERATE PAYMENT WILL NOT BE MADE FOR THE WATERSTOPS,
 BUT THE COST SHALL BE INCLUDED IN VARIOUS ITEMS OF THE

ANCHORAGE POCKET. AFTER TENSIONING IS COMPLETED,

EXPOSED PARTS OF END FITTINGS SHALL BE COATED WITH WITH

DATE BY CHK. B

10. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" X 3/4" UNLESS OTHERWISE NOTED.



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ESTIMATE OF QUANTITIES, GENERAL NOTES, & TYPICAL SECTION

REPROJECT.

OF REPRESENTED

USE BY OWNER OR
OF THE PROJECT.

OF THE

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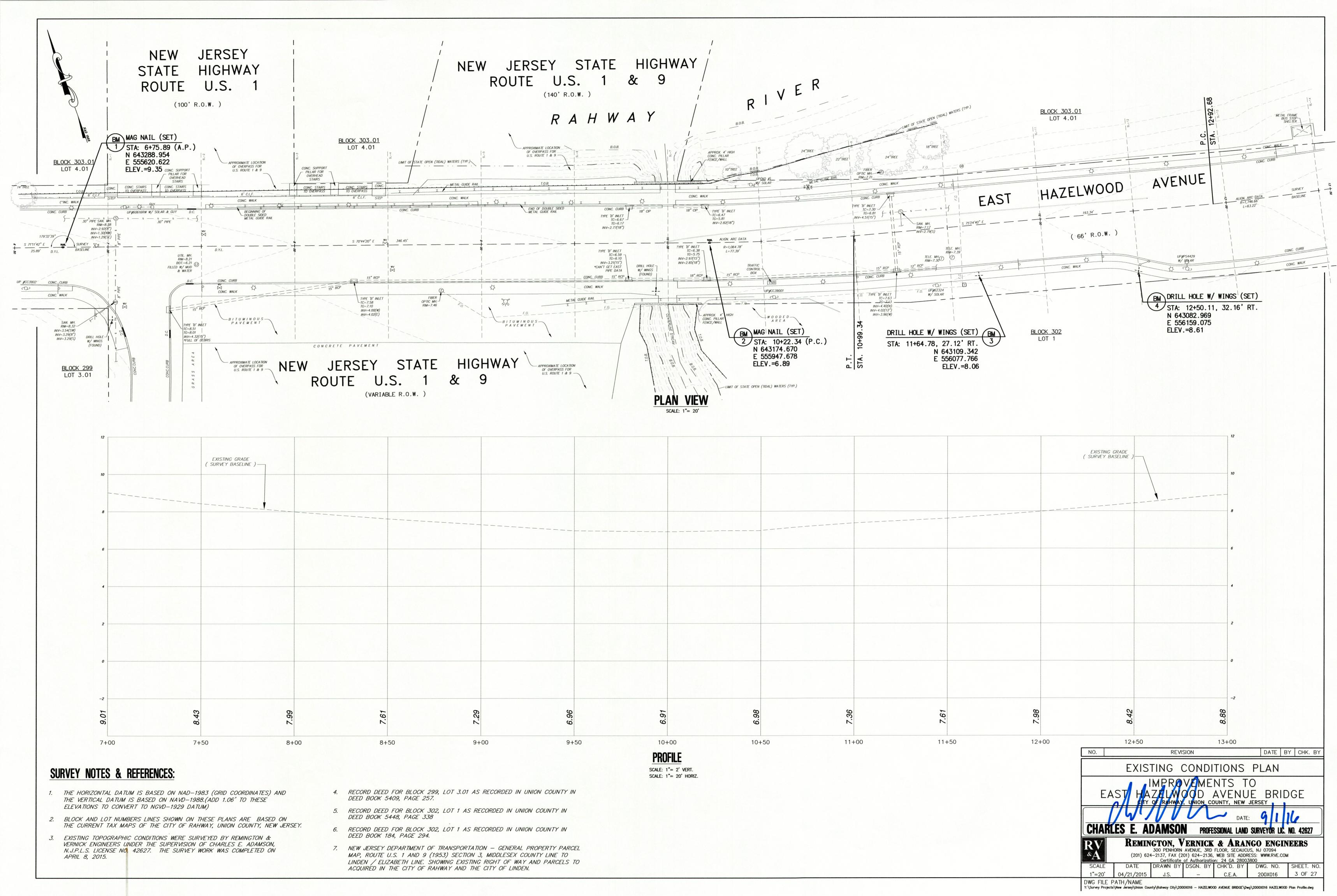
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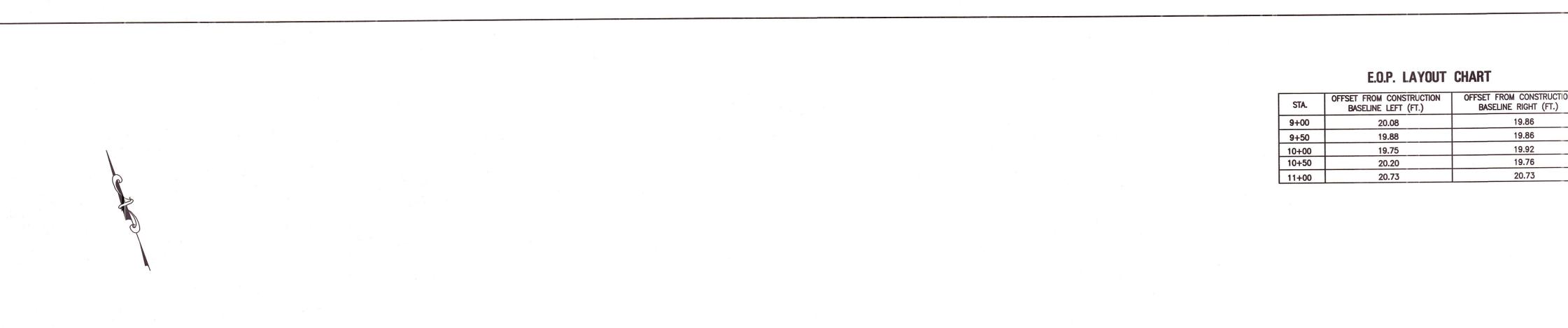
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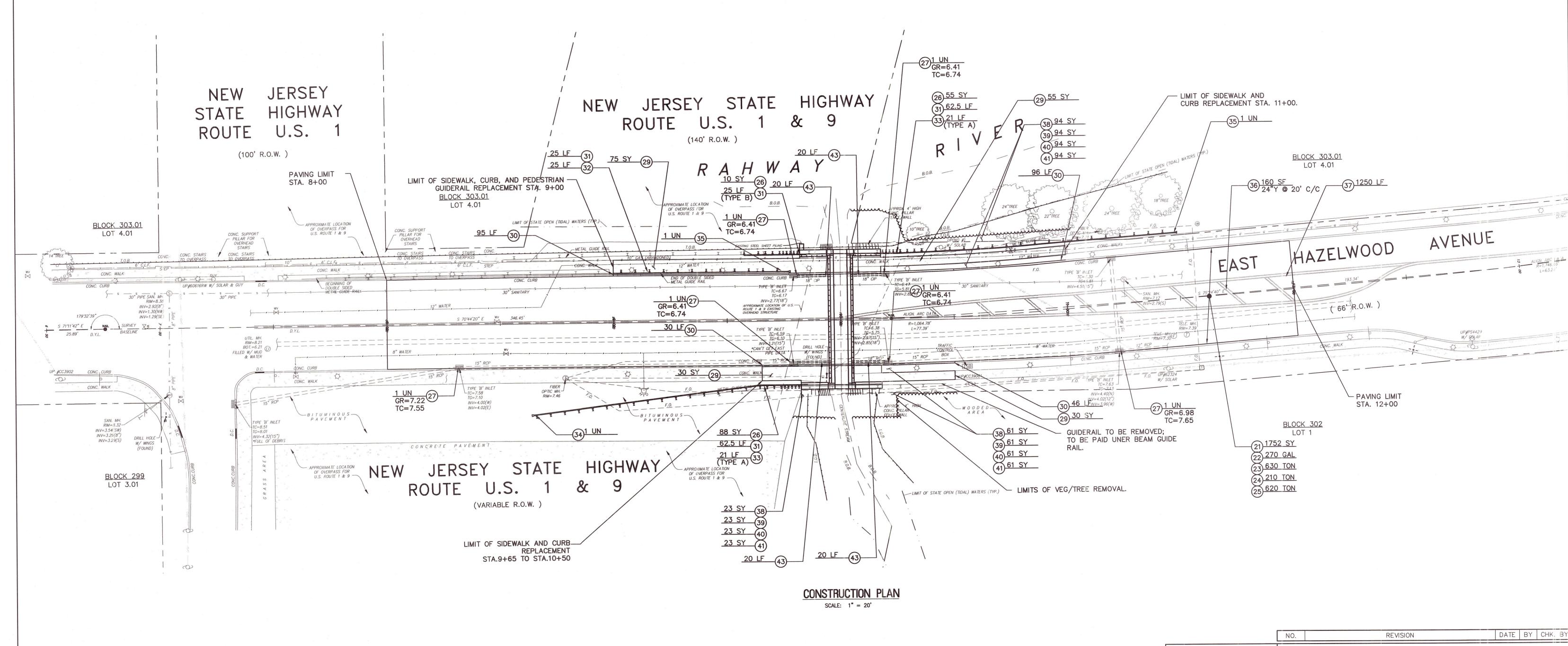
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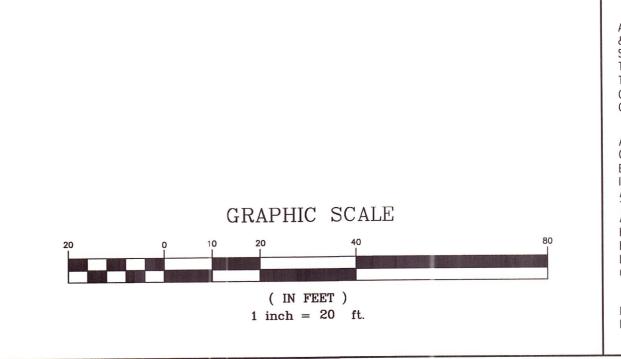




	E.O.P. L.AYOUT	CHART
STA.	OFFSET FROM CONSTRUCTION BASELINE LEFT (FT.)	OFFSET FROM CONSTRUCTION BASELINE RIGHT (FT.)
9+00	20.08	19.86
9+50	19.88	19.86
10+00	19.75	19.92
10+50	20.20	19.76
11+00	20.73	20.73

TO BE CONSTRUCTED							
PAY ITEM NO.	DESCRIPTION	UNITS	PLAN QUANTITY				
21	DENSE-GRADED AGGREGATE BASE COURSE, 4" THICK	S.Y.	1752				
22	TACK COAT	GAL.	270				
23	PRIME COAT	GAL.	630				
24	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	TON	210				
25	HOT MIX ASPHALT 25M64 BASE COURSE, 6" THICK	TON	620				
26	NON VEGETATIVE SURFACE, HOT MIX ASPHALT	S.Y.	100				
27	RECONSTRUCTED INLET, TYPE B USING NEW CASTING	UNIT	6				
29	CONCRETE SIDEWALK, 4" THICK	S.Y.	190				
30	10" x 20" CONCRETE VERTICAL CURB	L.F.	267				
31	BEAM GUIDE RAIL	L.F.	175				
32	BEAM GUIDE RAIL ELEMENT	L.F.	25				
33	THRIE BEAM GUIDE RAIL, BRIDGE	L.F.	42				
34	FLARED GUIDE RAIL TERMINAL	UNIT	1				
35	TANGENT GUIDE RAIL TERMINAL	UNIT	2				
36	TRAFFIC MARKINGS, THERMOPLASTIC	S.F.	160				
37	TRAFFIC STIPES, LONG-LIFE, EPOXY RESIN, 4"	L.F.	1250				
38	TOPSOILING, 6" THICK	S.Y.	178				
39	TOPSOIL STABILIZATION, TYPE 2 MAT	S.Y.	178				
40	STRAW MULCHING	S.Y.	178				
41	FERTILIZING AND SEEDING, TYPE A-3	S.Y.	178				
43	18" REINFORCED CONCRETE PIPE, CLASS IV	L.F.	80				





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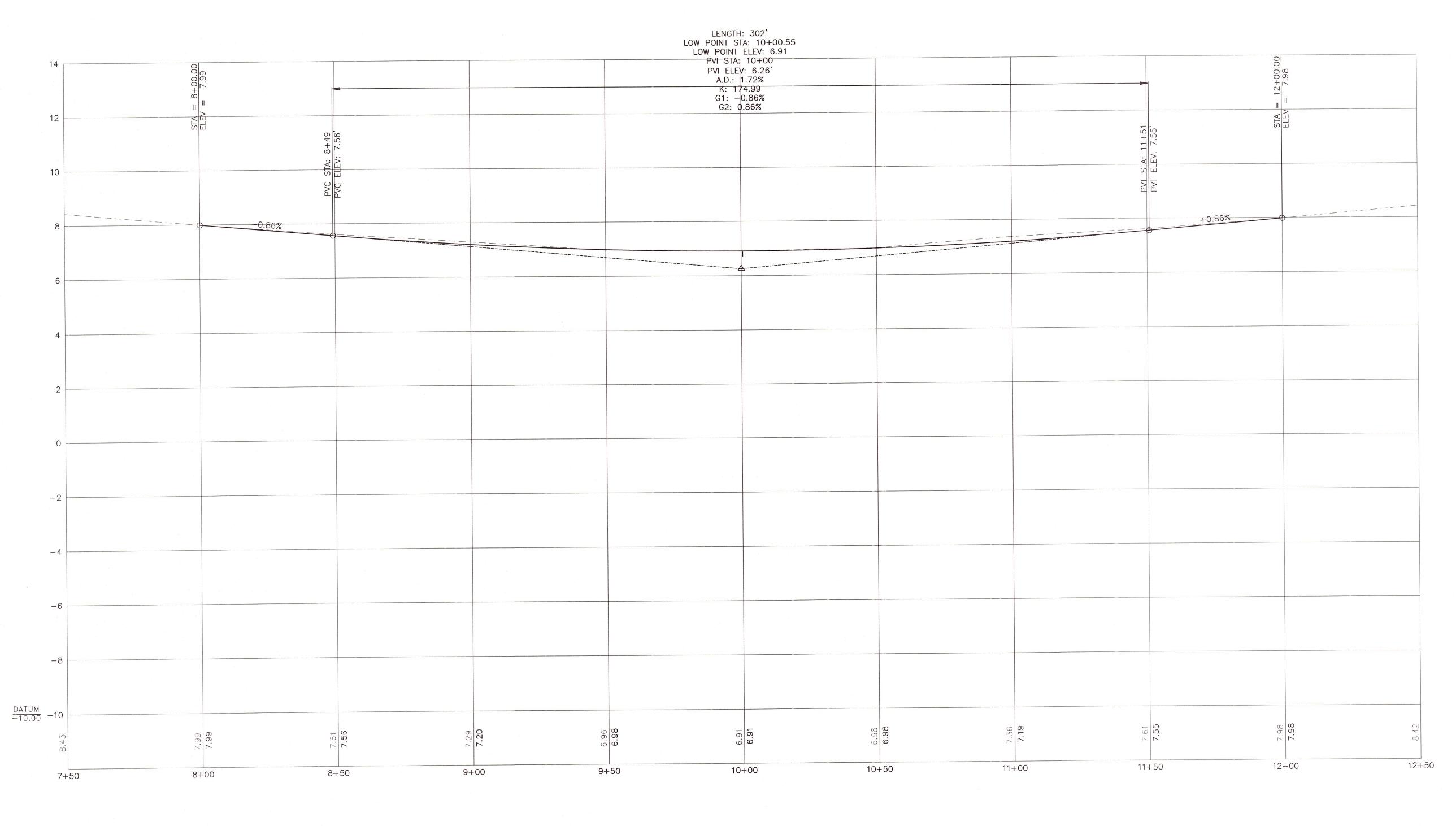
CONSTRUCTION PLAN REPLACEMENT OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

FRANK J. SENEY JR. RICHARD G. ARANGO NJ PROFESSIONAL ENGINEER LIC. NO. 38882 NJ PROFESSIONAL ENGINEER LIC. No. 35321

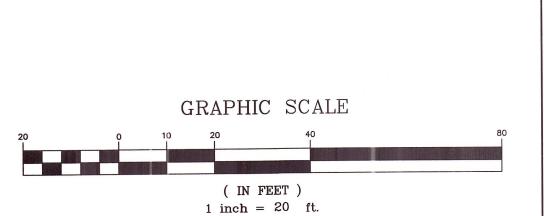
REMINGTON, VERNICK & ARANGO ENGINEERS 300 PENHORN AVENUE, 3RD FLOOR, SECAUCUS, NJ 07094 (201) 624–2137, FAX (201) 624–2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 GA 28003800

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PROFILE SCALE: 1" = 20' (HORIZONTAL) 1" = 2' (VERTICAL)



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REVISION DATE BY CHK. BY NO. ROADWAY PROFILE REPLACEMENT OF EAST HAZELWOOD & AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY 9.29.16 RICHARD G. ARANGO NJ PROFESSIONAL ENGINEER LIC. No. 35321 NJ PROFESSIONAL ENGINEER LIC. NO. 38882

REMINGTON, VERNICK & ARANGO ENGINEERS

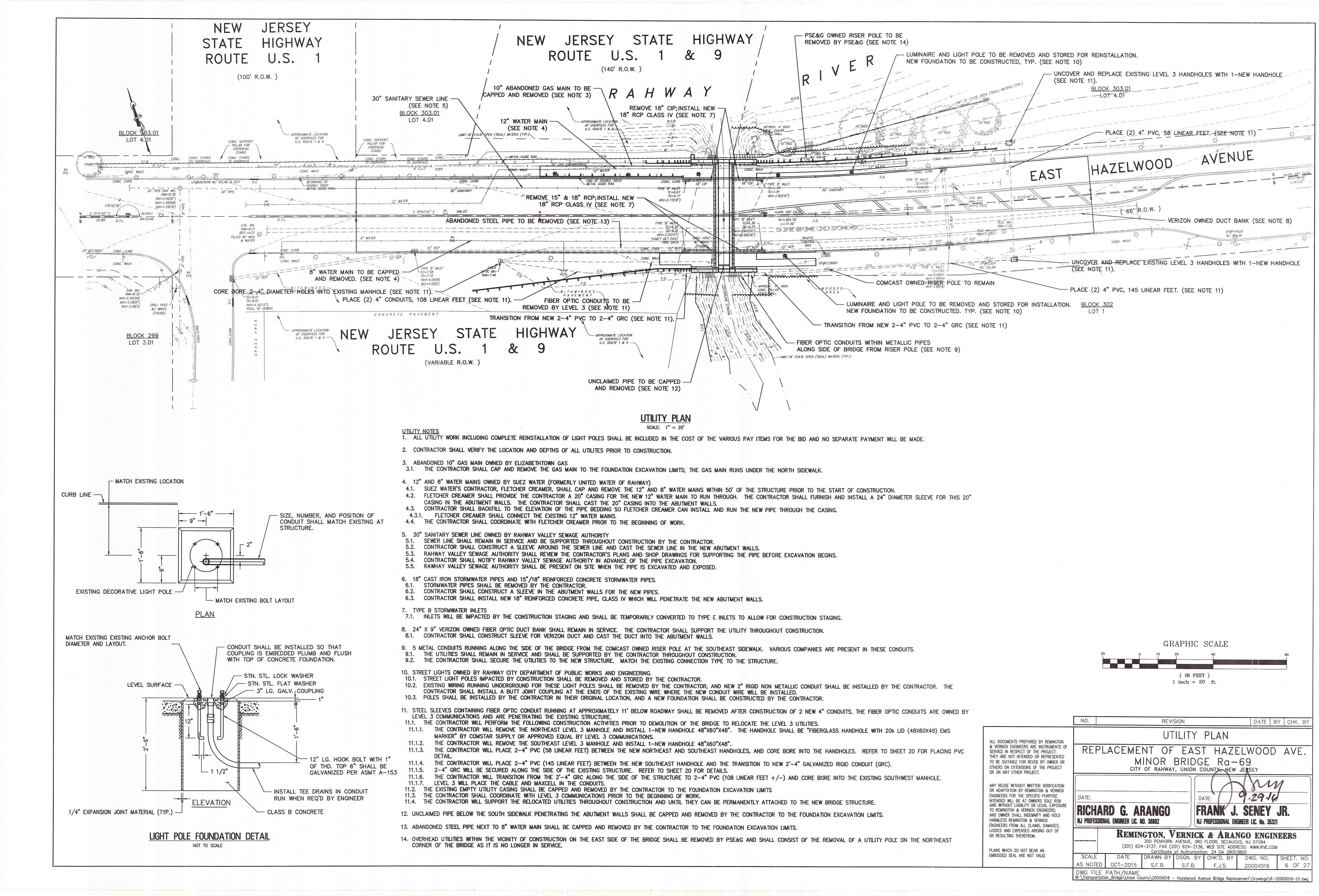
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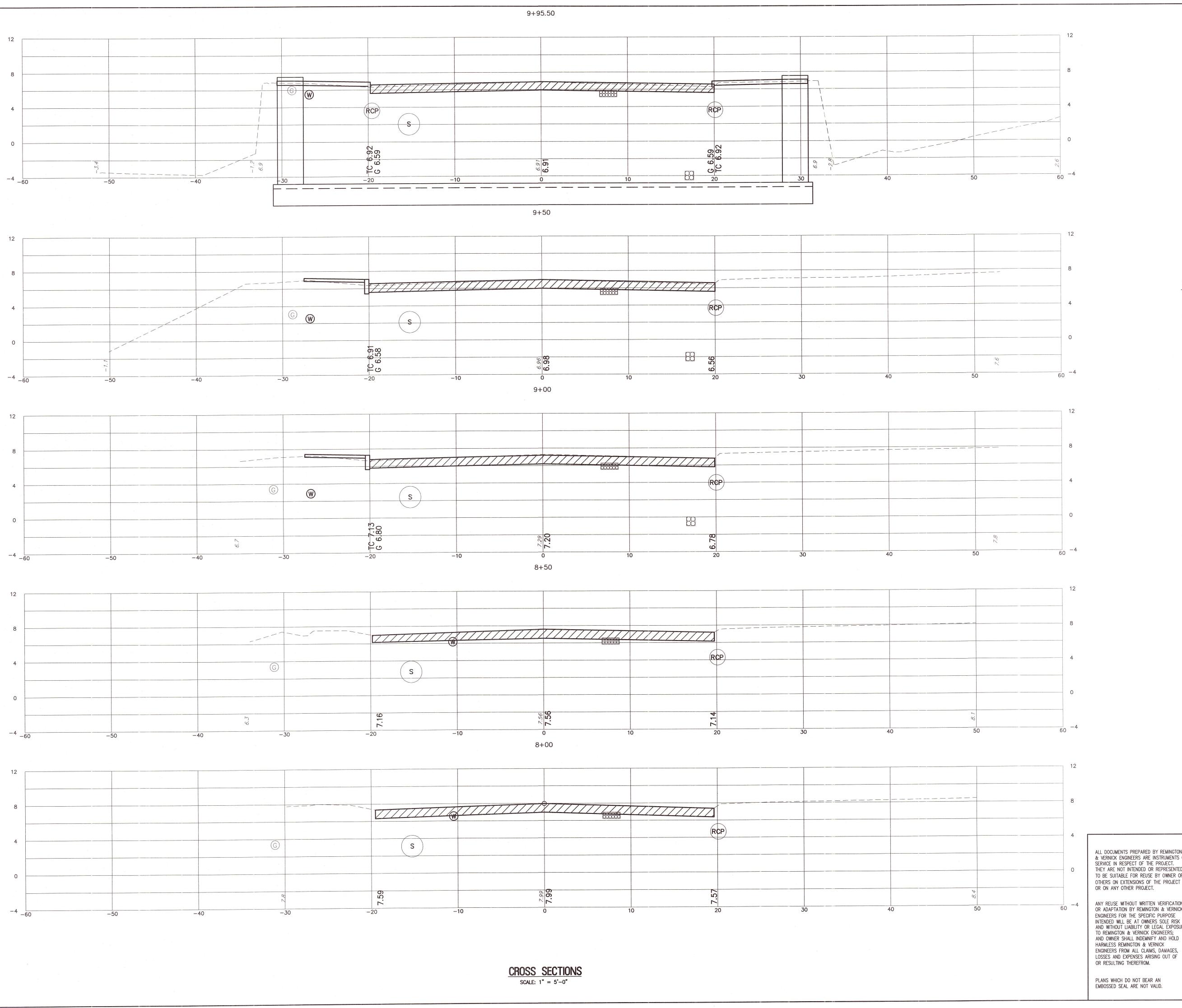
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DATE DRAWN BY DSGN. BY CHK'D. BY DWG. NO. SHEET. NO.

2000X016 5 OF 27 AS NOTED OCT-2015 S.F.B. S.F.B. F.J.S. DWG FILE PATH/NAME
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LEGEND

(RCP) EXISTING REINFORCED CONCRETE PIPE

EXISTING 24" x 9" DUCT BANK WITH (12) 3 $\frac{1}{2}$ " IRON PIPES

EXISTING 30" SANITARY SEWER PIPE

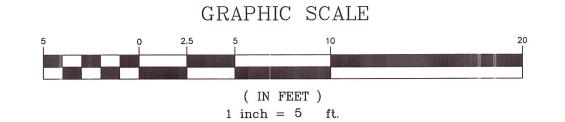
W EXISTING 12" WATER MAIN

(G) EXISTING ABANDONED GAS MAIN

EXISTING FIBER OPTIC DUCT BANK

NOTE:

- 1. REFER TO SHEET 6 OF 27, UTILITY PLAN, FOR THE REMOVAL AND RELOCATION OF ALL EXISTING UTILITIES.
- 2. THE LOCATIONS OF THE UTILITIES SHOWN ARE BASED UPON INFORMATION PROVIDED BY THE UTILITY COMPANIES. THE ACTUAL LOCATION OF THE UTILITIES MAY DIFFER AND THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.



ALL DOCUMENTS PREPARED BY REMINGTON & VERNICK ENGINEERS ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT

ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY REMINGTON & VERNICK ENGINEERS FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO REMINGTON & VERNICK ENGINEERS; AND OWNER SHALL INDEMNIFY AND HOLD ENGINEERS FROM ALL CLAIMS, DAMAGES,

DATE BY CHK. BY NO. CROSS SECTIONS - 8+00 TO 10+00 REPLACEMENT OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY NEW JERSEY

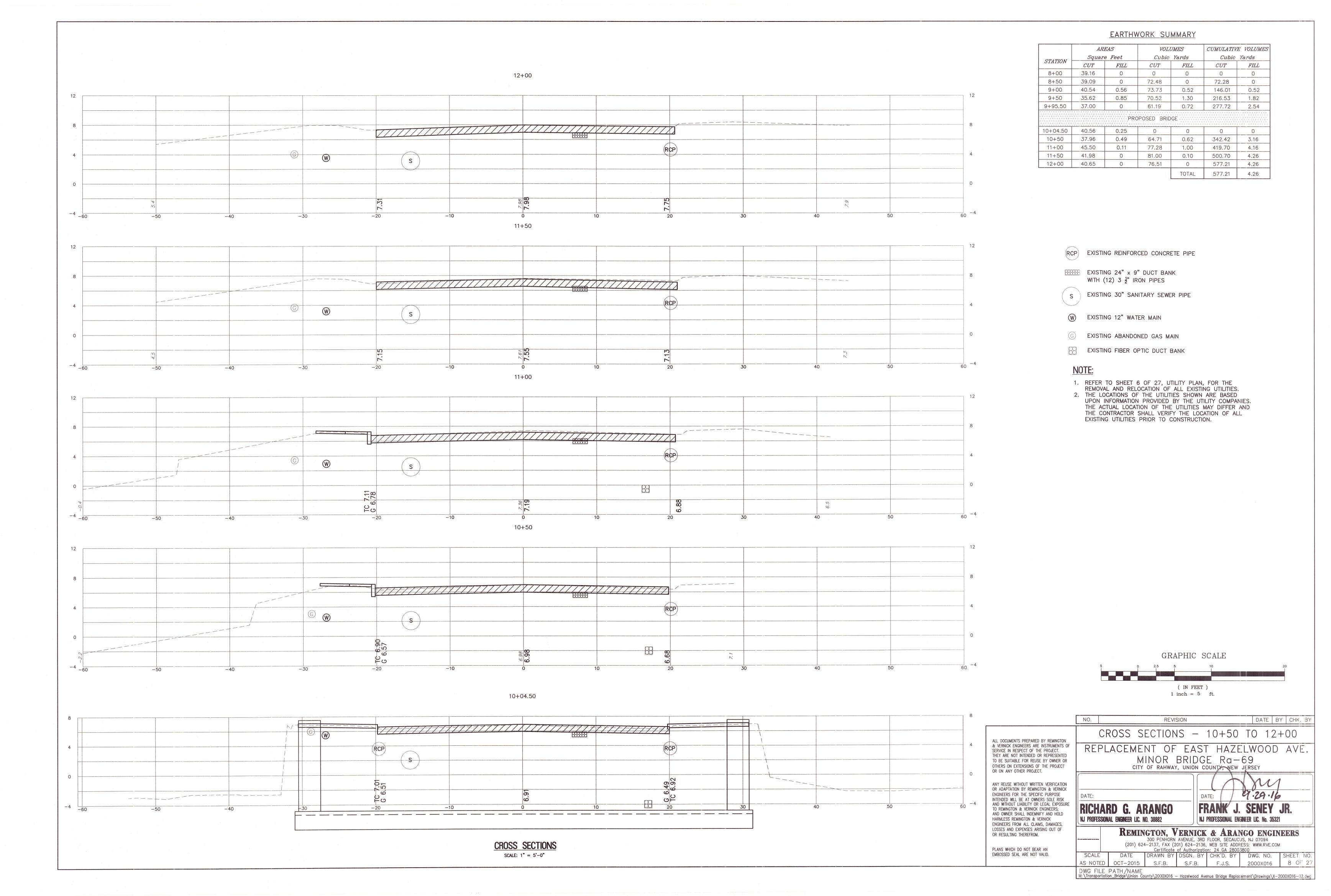
RICHARD G. ARANGO NJ PROFESSIONAL ENGINEER LIC. NO. 38882 NJ PROFESSIONAL ENGINEER LIC. No. 35321

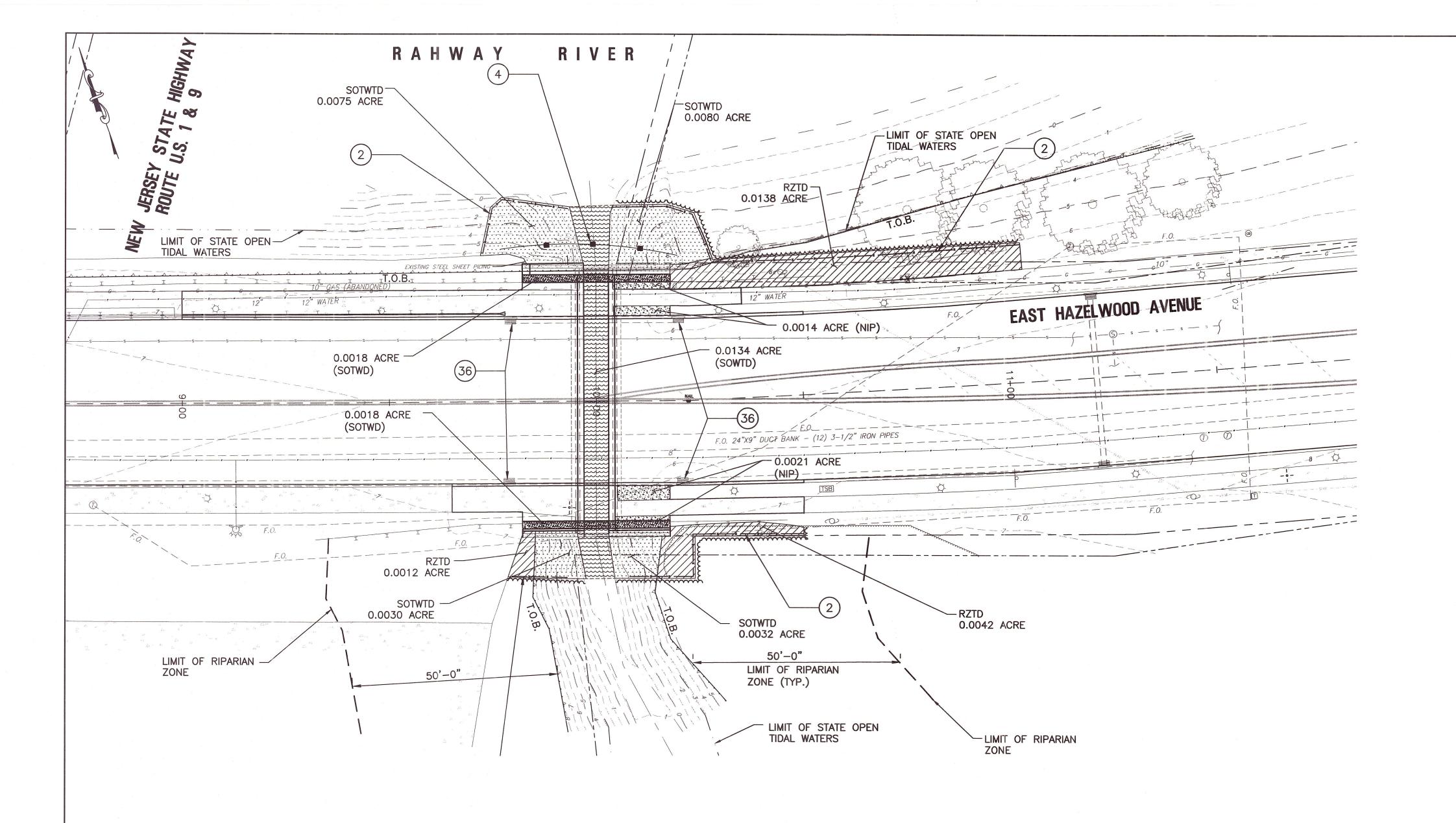
REMINGTON, VERNICK & ARANGO ENGINEERS

300 PENHORN AVENUE, 3RD FLOOR, SECAUCUS, NJ 07094

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	TO BE CONSTRUCTED						
NO.	DESCRIPTION	UNITS	PLAN QUANTITY				
2	SILT FENCE	L.F.	206				
3	HAYBALE (IF AND WHERE DIRECTED)	UNIT	0				
4	FLOATING TURBIDITY BARRIER, TYPE 3	L.F.	50				
5	SEDIMENT CONTROL BAG	S.F.	450				
36	INLET FILTER TYPE 2, 2 X 4	UNIT	4				

PLAN KEY AND LEGEND

X	SILT FENCE
	LIMIT OF DISTURBANCE
	FLOATING TURBIDITY BARRIER
•••••	STATE OPEN TIDAL WATER TEMPORARY DISTURBANCE
SOTWTD	STATE OPEN TIDAL WATER TEMPORARY DISTURBANCE
	STATE OPEN TIDAL WATER DISTURBANCE
SOTWD	STATE OPEN TIDAL WATER DISTURBANCE
	RIPARIAN ZONE TEMPORARY DISTURBANCE
RZTD	RIPARIAN ZONE TEMPORARY DISTURBANCE
	STATE OPEN WATER DISTURBANCE
SOW	STATE OPEN WATER DISTURBANCE
	NEW IMPERVIOUS SURFACE
NIP	NEW IMPERVIOUS SURFACE

SUMMARY OF IMPACTS

WATERFRONT DEVELOPMENT PERMIT	RIPARIAN ZONE TEMPORARY DISTRUBANCE	STATE OPEN TIDAL WATER TEMPORARY DISTURBANCE	STATE OPEN TIDAL WATER DISTURBANCE	STATE OPEN WATER TEMPORARY DISTURBANCE	NEW IMPERVIOUS SURFACE	TOTALS
DEVELOPMENT PERMIT	0.0192 ACRE	0.0217 ACRE	0.0036 ACRE	0.0134 ACRE	0.0035 ACRE	0.0614 ACRE
	(837 SQFT)	(946 SQFT)	(157 SQFT)	(584 SQFT)	(153 SQFT)	(2677 SQFT)

ENVIRONMENTAL NOTES AND COMMITMENTS

- 1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND/OR AREA IS STABILIZED.
 2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PROJECT WILL BE CONSTRUCTED IN ACCORDANCE WITH THE UNION COUNTY SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
- ALL CONSTRUCTION SOIL DISTURBANCES, WHERE SOIL IS SUBJECT TO MOVEMENT OUTSIDE OF THE PROJECT LIMITS, WILL REQUIRE SILT FENCING AROUND THE TEMPORARY CONSTRUCTION DISTURBANCES.
- 4. ALL TERMS AND CONDITIONS OF THE ENVIRONMENTAL PERMITS SHALL BE ADHERED TO. NO CHANGES IN THE CONDITIONS, PLANS, OR SPECIFICATIONS SHALL BE MADE EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF THE NJDEP.

 5. A COPY OF THE PERMIT SHALL BE KEPT AT THE WORK SITE AND SHALL BE EXHIBITED
- UPON REQUEST OF ANY PERSON.

 6. AREAS OF TEMPORARY DISTURBANCE SHALL BE RESTORED TO ORIGINAL GRADE AND SHALL BE REPLANTED WITH APPROPRIATE VEGETATION UPON COMPLETION OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.
- 7. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE OF THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY, WILL BE REMOVED IMMEDIATELY. PAVED ROADS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.

 B. CONTRACTOR IS RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR
- BELOW STORMWATER OUTFALLS OR OFF—SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

 9. CONTRACTOR IS RESPONSIBLE TO VISIT THE SENSITIVE AREAS PERIODICALLY AND TO INSURE THE EROSION CONTROLS ARE FUNCTIONING PROPERLY AND INTRODUCE ADDITIONAL
- CONTROL IF IT IS NECESSARY. ALSO, ANY ADDITIONAL EROSION AND SEDIMENTATION THAT OCCURS WITHIN THE PROJECT SITE NEEDS TO BE PROPERLY ADDRESSED.

 DUST/DIRT CONTROL: EMPLOY CONSTRUCTION METHODS THAT MINIMIZE AIRBORNE DUST. APPLY WATER OR OTHER APPROVED MATERIALS TO UNPAVED AREAS TO CONTROL DUST
- CAUSED BY HAULING OR OTHER CONSTRUCTION OPERATIONS.

 1. ACID PRODUCING SOIL IS TO BE TREATED ACCORDING TO THE NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL AND AS SPECIFIED IN 202.03.05 OF THE SPECIFICATIONS. ENSURE THE CLEANING OF EQUIPMENT USED TO MOVE THE ACID—PRODUCING SOIL IS CONDUCTED AT A MINIMUM OF 50 FEET FROM THE WATERBODY,
- WETLAND, OR OTHER ENVIRONMENTAL SENSITIVE AREA.

 2. ENSURE ALL VEGETATION OUTSIDE LIMITS OF DISTURBANCE IS PRESERVED. STORE PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS, PETROLEUM PRODUCTS, ANTIFREEZE, PAINTS AND PAINT THINNERS, CLEANING SOLVENTS AND ACIDS, DETERGENTS, CHEMICAL ADDITIVES, AND CONCRETE CURING COMPOUNDS IN CONTAINERS IN A DRY, COVERED AREAS.

 3. THE TOTAL AMOUNT OF THE VARIOUS LAND DISTURBANCE AREAS ASSOCIATED WITH THIS

AUTHORIZATION SHALL NOT EXCEED 0.0614 ACRE.

PERMIT CONDITIONS

PLAN

SCALE: 1" = 15'-0"

- 1. ALL ACTIVITIES APPROVED BY THIS PERMIT SHALL BE UNDERTAKEN USING THE BEST MANAGEMENT PRACTICES AVAILABLE. FURTHERMORE, THE SITE SHALL BE SUBJECT TO INSPECTION AT ANY TIME BY REPRESENTATIVES OF THE ENGINEER TO ENSURE THE
- CONTINUOUS APPLICATION OF THE PROVISIONS OF THIS PERMIT.

 2. DURING THE COURSE OF CONSTRUCTION, NEITHER THE CONTRACTOR SHALL 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 CONTRACTOR SHALL REMOVE AND DISPOSE OF, IN A LAWFUL MANNER, ALL EXCESS MATERIALS, EQUIPMENT, AND DEBRIS FROM THE STREAM CORRIDOR AND ADJACENT LANDS.
- 3. ALL ACTIVITIES AUTHORIZED BY THIS PERMIT SHALL BE STABILIZED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY TO PREVENT ERODED SOIL AND SEDIMENT FROM ENTERING ADJACENT WATERWAYS AND WETLANDS AT ANY TIME DURING AND SUBSEQUENT TO CONSTRUCTION. THE TOWNSHIP RESERVES THE RIGHT TO ORDER THE SUSPENSION OF ANY ACTIVITY IF UNACCEPTABLE LEVELS OF EROSION OR TURBIDITY RESULT FROM THE SAME. FURTHERMORE, THE CONTRACTOR SHALL MAINTAIN THE STREAM CORRIDOR, AS SHOWN ON THE APPROVED DRAWINGS, FOR THE CHANNEL OR BANKS TO BECOME REASONABLY STABILIZED.
- 4. ANY AND ALL PRECAUTIONS SHALL BE TAKEN TO PREVENT RAW CONCRETE FROM COMING INTO CONTACT WITH THE WATERS OF THE SOUTH BRANCH BIG TIMBER CREEK, SINCE RAW CONCRETE IS TOXIC TO AQUATIC BIOTS. THE STREAMBED SHALL BE LEFT INTACT AND
- ANY MINOR DISTURBANCE ARE TO BE RESTORED USING NATIVE SUBSTRATE.

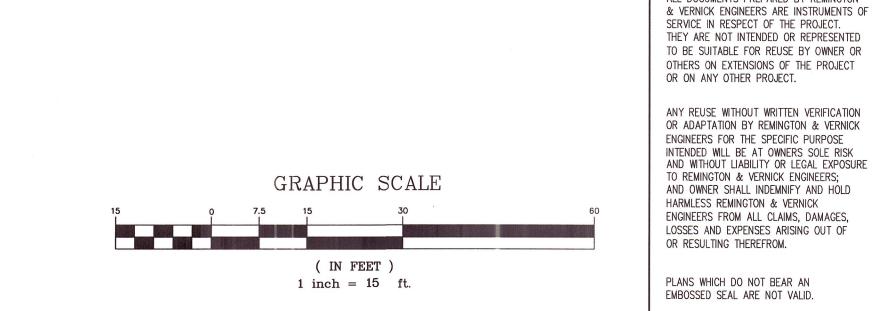
 5. ALL WORKERS SHALL BE INSTRUCTED TO REMOVE ANY TURTLES AND/OR ANY WILDLIFE IN GENERAL OUT OF HARMS WAY. SILT FENCING SHOULD BE PLACED ALONG ACTIVE CONSTRUCTION AREAS/EXCAVATION IN ORDER TO PREVENT THEIR ACCESS TO THESE
- 6. AREAS OF TEMPORARY EXCAVATION MUST BE RESTORED WITH NATIVE, INDIGENOUS SPECIES. THE EMBANKMENTS MUST BE RESTORED WITH NATIVE VEGETATION AND
- STABILIZED.

 7. ALL SUBSTRATE REMOVED FROM CONSTRUCTION ACTIVITIES, MUST BE STOCKPILED OUTSIDE
- THE FRESHWATER WETLANDS, TRANSITION AREAS, AND STATE OPEN WATERS.

 8. ANY PROPOSED GRADING OR CONSTRUCTION ACTIVITY WHICH COULD INTRODUCE SEDIMENT INTO STATE OPEN WATERS OR WHICH COULD CAUSE AN INCREASE IN THE NATURAL LEVEL OF TURBIDITY IS PROHIBITED BETWEEN MAY 1 AND JUNE 30 OF EACH YEAR.

GENERAL NOTES:

- 1. EXISTING STREAMBED TO REMAIN UNDISTURBED OUTSIDE OF THE LIMITS OF CONSTRUCTION AS PER NEW JERSEY DEPARTMENT NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS.
- 2. EXACT LOCATIONS OF THE SEDIMENT CONTROL BAGS SHALL BE DETERMINED, IN THE FIELD BY THE ENGINEER
- AND CONTRACTOR, PRIOR TO THE START OF CONSTRUCTION.
- 3. THE RIPARIAN ZONE FOR STREAM 10-5 IS 50 FEET.
- 4. 0.0035 ACRE OF NEW IMPERVIOUS SURFACES FOR THIS PROJECT.
- 5. SOIL TYPE AT THE SITE IS BOOTON-URBAN LAND-HALEDON COMPLEX, 0 TO 8 PERCENT SLOPES.
- 6. THE TOTAL DISTURBANCE, TEMPORARY AND PERMANENT, IN THE 50-FOOT RIPARIAN ZONE, WAS CALCULATED TO BE 837 SQUARE FEET.
- 7. <u>BEDROCK GEOLOGY</u>:
 STRATIGRAPHIC UNIT ABBREVIATIONS: JTRP
 STRATIGRAPHIC UNIT NAME: PASSAIC FORMATION
 LITHOLOGY: SILTSTONE AND SHALE
- 8. NO FRESHWATER OR COASTAL WETLANDS ARE LOCATED WITHIN 100' OF THE PROPOSED STRUCTURE.



NO. REVISION

SOIL EROSION & SEDIMENT CONTROL

ENVIRONMENTAL PLAN

REPLACEMENT OF EAST HAZELWOOD AVE.

THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT.

ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY REMINGTON & VERNICK ENGINEERS FOR THE SPECIFIC PURPOSE CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

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SOIL EROSION & SEDIMENT CONTROL

ENVIRONMENTAL PLAN

REPLACEMENT OF EAST HAZELWOOD AVE.

MINOR BRIDGE Ra — 69

CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

DATE:

DATE:

RICHARD G. ARANGO
NJ PROFESSIONAL ENGINEER LIC. NO. 38882

DWG FILE PATH/NAME

ENGINEER LIC. NO. 38882

NJ PROFESSIONAL ENGINEER LIC. No. 35321

REMINGTON, VERNICK & ARANGO ENGINEERS

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AS NOTED OCT—2015 S.F.B. S.F.B. F.J.S. 2000X016 9 OF 25

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UNION COUNTY SOIL EROSION AND SEDIMENT CONTROL NOTES

- THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN
- ADVANCE OF ANY LAND DISTRURBING ACTIVITY. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS.
- PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND
- S. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
- . ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAT 3:1)
- . TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6''PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE 10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE
- VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED. 1. IN THAT NJSA 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE
- THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY. 12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE
- SYSTEM BECOMING OPERATIONAL 13. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR
- RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS. 14. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP. 15. MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE.
- CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING. 16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION
- 17. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL
- 18. HYDRO SEEDING IS A TWO- STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.
- 19. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SOIL TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.

UNION COUNTY BASIN COMPACTION NOTES

- 1. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
- 2. INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED IN ACCORDANCE WITH ABOVE.
- 3. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
- 4. SOIL COMPACTION RESULTING FROM LAND GRADING ACTIVITIES CAN IMPACT THE INFILTRATION RATE OF THE SOIL. RESTORATION OF COMPACTED SOILS THROUGH DEEP TILLAGE (6"TO 12") AND THE ADDITION OF ORGANIC MATTER MAY BE REQUIRED IN PLANNED PERVIOUS AREAS TO ENHANCE THE INFILTRATION RATE OF THE DISTURBED SOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLE, IRRIGATION SYSTEMS, ETC.).
- TO PREVENT COMPACTION OF THE SUBSOIL WHICH WILL REDUCE ITS INFILTRATION CAPACITY, BASINS SHOULD BE EXCAVATED WITH LIGHT EARTH MOVING EQUIPMENT, PREFERABLY WITH TRACKS OR OVER-SIZED TIRES RATHER THAN THE NORMAL RUBBER TIRES,. ONCE THE FINAL CONSTRUCTION PHASE IS REACHED, THE FLOOR OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND SMOOTHED OVER WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT.
- 6. FOR BASINS, ANNUAL TILLING OPERATIONS MAINTAIN INFILTRATION CAPACITY. THESE TILLED AREAS SHOULD BE RE-VEGETATED IMMEDIATELY TO PREVENT EROSION. DEEP TILLING CAN BE USED TO BREAKUP CLOGGED SURFACE LAYERS FOLLOWED BY REGARDING AND LEVELING. SAND OR ORGANIC MATTER CAN BE TILLED INTO THE BASIN FLOOR TO PROMOTE A RESTORED INFILTRATION CAPACITY. SEDIMENT REMOVAL PROCEDURES SHOULD NOT BE UNDERTAKEN UNTIL THE BASIN IS THOROUGHLY DRY. THE TOP LAYER SHOULD BE REMOVED BY LIGHT EQUIPMENT TO PREVENT COMPACTION. THE REMAINING SOIL CAN BE RETILED AND DISTURBED VEGETATION REPLANTED.

METHOD AND MATERIALS— STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS

- LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID PRODUCING SOILS ARE ENCOUNTERED.
- 2. TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOILS.
- S. STOCKPILES OF HIGH ACID PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
- TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOIL MATERIAL TO BE EXPOSED MORE THAN 30 DAYS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID PRODUCING SOILS.
- . HIGH ACID PRODUCING SOILS WITH A pH OF 4 OR LESS, OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 6 TONS PER ACRE (OR 275 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5 OR MORE EXCEPT AS FOLLOWS: a. AREAS WHERE TREES OR SHRUBS TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH
 - b. DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES, AND OTHERS TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.
- 6. EQUIPMENT USED FOR MOVEMENT OF HIGH ACID PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH WORK DAY TO PREVENT SPREADING OF HIGH ACID SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS OR STORMWATER CONVEYANCES AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
- NON VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SILT FENCE, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID PRODUCING SOILS FROM, AROUND, OR OFF THE SITE.
- FOLLOWING BURIAL OR MOVEMENT OF HIGH ACID PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE, MONITORING SHOULD CONTINUE FOR APPROXIMATELY 6 TO 12 MONTHS TO ASSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.
- MONITORING OF AREAS WHERE HIGH ACID PRODUCING SOILS HAS BEEN PLACED OR BURIED SHOULD BE PERFORMED FOR AT LEAST 2 YEARS OR LONGER IF PROBLEMS OCCUR, TO ASSURE THERE IS NO MIGRATION OF POTENTIAL ACID LEACHATE.

STANDARD FOR TOPSOILING

- A. TOPSOIL SHOULD BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). TOPSOIL HAULED IN FROM OFFSITE SHOULD HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER
- CONTENT MAY BE RAISED BY ADDITIVES. B. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.

2. STRIPPING AND STOCKPILING

- A. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
- B. STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. C. WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY
- 6.5. IN LIEU OF SOIL TESTS, SEE LIME RATE GUIDE IN SEEDBED PREPARATION FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, PG. 4-1. D. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
- E. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE. F. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS PREVIOUSLY DESCRIBED HEREIN; SEE STANDARDS FOR PERMANENT (PG. 4-1) OR TEMPORARY (PG.7-1) VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES.

3. SITE PREPARATION A. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. THE IS OF THE ESSENCE

- B. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND
- ANCHORING, AND MAINTENANCE. SEE THE STANDARD FOR LAND GRADING, PG. 19-1. C. AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES. D. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE
- A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). E. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY (SEE GLOSSARY) B. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HÁVING A PH OF 5.0 OR MORE, IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL (PG. 1-1).

- 1. TEMPORARY STABILIZATION ALL EXPOSED AREAS NOT TO BE CONSTRUCTED UPON WITHIN 30 DAYS SHOULD RECEIVE TEMPORARY STABILIZATION, ACCORDING TO THE TEMPORARY VEGETATIVE COVER SPECIFICATIONS.
- 2. PERMANENT STABILIZATION ALL EXPOSED AREAS WHICH ARE TO BE PERMANENTLY VEGETATED SHOULD BE SEEDED WITHIN 10 DAYS OF FINAL GRADING, ACCORDING TO THE PERMANENT SEEDING SPECIFICATIONS.

TOTAL AREA OF DISTURBANCE: 0.060 ACRE

PROPOSED SEQUENCE OF DEVELOPMENT

- 1. CONTACT THE SOMERSET-UNION COUNTY SOIL CONSERVATION DISTRICT AT 908-526-2701 A MINIMUM
- OF 72 HOURS PRIOR TO ANY SOIL DISTURBANCE TO ARRANGE A PRECONSTRUCTION MEETING. 2. THE ORIGINAL SOMERSET-UNION COUTY SOIL CONSERVATION DISTRICT CERTIFICATION AND PLANS MUST
- BE AVAILABLE AT THE SITE AT ALL TIMES.
- INSTALL THE STABILIZED CONSTRUCTION ENTRANCE.
- 4. DISTURB ONLY THE MINIMUM AREA NEEDED TO INSTALL SILT FENCE AND TREE PROTECTION FENCE AT THE DRIPLINE OF ALL TREES SHOWN TO REMAIN. NO CONSTRUCTION ACCESS OR STORAGE
- SHALL BE PERMITTED WITHIN THESE PROTECTION AREAS. 5. CLEAR AND GRUB ALL TREES IN THE IMMEDIATE AREAS OF CONSTRUCTION. ALL VEGETATION TO REMAIN SHALL BE PROPERLY PROTECTED. STRIP TOPSOIL AND STOCKPILE WHERE SHOWN. TEMPORARILY STABILIZE STOCKPILE WITH SEED.
- 6. GENERAL AND PRELIMINARY GRADE THOSE AREAS TO BE DEVELOPED.
- 7. CONSTRUCT PROPOSED STRUCTURES AND STORMWATER APPURTENANCES.
- 8. INSTALL SUB-BASE COURSE IMMEDIATELY FOLLOWING PRELIMINARY GRADING AND INSTALLATION OF
- IMPROVEMENTS IN ORDER TO STABILIZE PAVEMENT AREA. FINE GRADE ALL PAVEMENT AREAS AND INSTALL SURFACE COURSE PAVEMENT.
- 10. STABILIZE THE SITE WITH PERMANENT VEGETATIVE COVER AND LANDSCAPING.
- 11. REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES.
- 12. CONTACT SOMERESET-UNION SOIL CONSERVATION DISTRICT FOR FINAL INSPECTION.

ALL CONDUIT OUTLET PROTECTION SHALL BE STABILIZED AS PER THE CERTIFIED PLAN PRIOR TO BECOMING OPERATIONAL.

<u>ADDITIONAL NOTES</u>

- ALL SEDIMENT TRACKED ONTO ANY PAVED SURFACE SHALL BE SWEPT CLEAN AT THE END OF EACH
- WHEN IT BECOMES NECESSARY, THE OWNER SHALL INFORM THE CONTRACTORS OF UNSATISFACTORY CONDITIONS OF EROSION AND SEDIMENT DEVICES. AT SUCH TIME THE CONTRACTOR SHALL IMPROVE THE CONDITIONS OF SAID DEVICE TO MEET WITH THE APPROVAL OF THE OWNER.
- SHOULD UNFORESEEN EROSION CONDITION DEVELOP DURING CONSTRUCTION THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUN-OFF AND/OR SEDIMENT REPLACEMENT
- SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED AS NECESSARY AND THEN RE-SEED. THIS PROCEDURE SHALL BE REPEATED AFTER EACH STORM OR UNTIL NO MORE SIGNS OF
- THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION AND WHILE THE SURETY BOND IS IN EFFECT. UPON EXPIRATION OF THE SURETY BOND, THE COUNTY OF UNION WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES.

SCIENTIFIC NAME

PERMANENT VEGETATIVE MIXTURES AND PLANTING RATES

ERNMX-178 (RIPARIAN BUFFER MIX)

TABLE 4-3

PERCENT SEE MIXTURE

20% Virginia Wildrye, PA Ecotype (Hymus virginicus, PA Ecotype) 16% Indiangrass, PA Ecotype (Sorghastrum nutans, PA Ecotype) 15% Deertongue, 'Tioga' (Panicum clandestinum (Dichanthelium c.), 'Tioga') 12.5% Big Bluestem, 'Niagara' (Andropogon gerardii, 'Niagara') 8% Sw itchgrass, 'Carthage', NC Ecotype (Panicum virgatum, 'Carthage', NC Ecotype) 5% Partridge Pea, PA Ecotype (Chamaecrista fasciculata (Cassia f.), PA Ecotype) 4% Autumn Bentgrass, PA Ecotype (Agrostis perennans, PA Ecotype) 4% Blue Vervain, PA Ecotype (Verbena hastata, PA Ecotype) 3% Blackeyed Susan, Coastal Plain NC Ecotype (Rudbeckia hirta, Coastal Plain NC Ecotype) 3% Oxeye Sunflow er, PA Ecotype (Heliopsis helianthoides, PA Ecotype) 2.3% New England Aster, PA Ecotype (Aster novae-angliae (Symphyotrichum n.), PA Ecotype) 2% Soft Rush (Juncus effusus) 1% Boneset, PA Ecotype (Eupatorium perfoliatum, PA Ecotype) 1% Joe Pye Weed, PA Ecotype (Eupatorium fistulosum, PA Ecotype) 1% Blue False Indigo, Southern WV Ecotype (Baptisia australis, Southern WV Ecotype) 1% New York Ironw eed, PA Ecotype (Vernonia noveboracensis, PA Ecotype)).5% Great Blue Lobelia, PA Ecotype (Lobelia siphilitica, PA Ecotype) 0.5% Wild Bergamot, PA Ecotype (Monarda fistulosa, PA Ecotype) 0.2% Grassleaf Goldenrod, PA Ecotype (Euthamia graminifolia (Solidago g.), PA Ecotype)

RECOMMENDED SEEDING PERIODS ARE 2/15 TO 4/30 AND 8/15 TO 10/30.

3. SEEDING RATE: TWO (2) POUNDS PER 1,000 SQUARE FEET.

SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION.

SEQUENCE OF CONSTRUCTION

CONSTRUCTION WILL BE THREE STAGES TO MAINTAIN TRAFFIC AND WILL PROCEED IN THE FOLLOWING MANNER: ESTIMATED DURATION (WEEKS)

- 1. SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS TO THE START OF ANY LAND 2. CLOSURE OF THE BRIDGE PORTION TO BE CONSTRUCTED AND PLACE NEW TRAFFIC PATTERN. 3. INSTALLATION OF ALL SEDIMENT/EROSION CONTROL DEVICES PRIOR TO ANY DEMOLITION OF SOIL DISTURBANCES. ALL
- SOIL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED UNTIL CONSTRUCTION IS COMPLETE. LITILITY RELOCATION AND MAINTENANCE 5. CLEARING SITE, REMOVAL OF THE EXISTING BRIDGE PORTION. REMOVAL OF ALL VEGETATION IN THE IMMEDIATE AREA
- OF CONSTRUCTION. . INSTALLATION OF THE TEMPORARY COFFERDAM AND PERMANENT SHEETING. PREPARATION OF THE FOOTINGS, INSTALLATION OF FOOTINGS, BRIDGE SECTIONS, PARAPETS, AND WING WALLS.
- 8. ROADWAY RECONSTRUCTION, INCLUDING HOT MIX ASPHALT PAVEMENT, GUIDE RAIL AND TERMINAL ENDS. GRADING OF THE SLOPES AND EMBANKMENTS ALONG THE PROJECT LIMITS.
- 10. PERMANENT SEED AND MULCH ALL REQUIRED AREAS IMMEDIATELY FOLLOWING FINAL GRADING. 11. REPEAT STEPS 2 THROUGH 9 AS NECESSARY FOR TWO MORE STAGES OF CONSTRUCTION.
- 12. REMOVAL OF THE SOIL EROSION CONTROL DEVICES AFTER PROPER STABILIZATION HAS TAKEN EFFECT (UP TO THREE (3) MONTHS AFTER COMPLETION OF THE WORK OR AS REQUIRED BY THE COUNTY'S ENGINEER'S OFFICE).

TOTAL CONSTRUCTION TIME 26 WEEKS

STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.

UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

EACH PEG WITH TWO OR MORE ROUND TURNS.

UNTIL GERMINATION OF GRASS.

GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.

7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION

UNIFORM IN APPEARANCE.

b. USE ONE OF THE FOLLOWING:

5. IRRIGATION (WHERE FEASIBLE)

TOPDRESSING

ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.

D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS,

A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED

BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/).

C. HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID—PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

A. SEED MIXTURE IS SHOWN IN TABLE 4-3 OR USE A MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION

1. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING.

3. COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 850F. MANY GRASSES BECOME ACTIVE AT 650F. ADJUSTMENT OF PLANTING

FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE

NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE

B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH 4-INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDED IS PREPARED.

DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDED AREA AND MOWED ONCE.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT

FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO

D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER—MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT—FIBERED MULCH MAY BE APPLIED

WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE

FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH

APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE

3. CRIMPER (MULCH ANCHORING COULTER TOOL) — A TRACTOR—DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS

TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT

a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE

RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER

B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE

RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE

C. PELLETIZED MULCH - COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S

RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEEDSEED FREE MULCH IS DESIRED, OR ON

SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH

IF SOIL MOISTURE IS DEFICIENT SUPPLY NEW SEEDING WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH APPLIED UP TO TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS

SINCE SOIL ORGANIC MATTER CONTENT AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTION 2A - SEEDBED PREPARATION IN THIS STANDARD, NO FOLLOW-UP OF TOPDRESSING IS MANDATORY. AN EXCEPTION MAY BE MADE WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 300 POUNDS PER ACRE OR 7 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE

THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT

PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVER (OF THE SEEDED SPECIES) AND MOWED ONCE. NOTE THIS DESIGNATION OF MOWED ONCE DOES NOT GUARANTEE THE PERMANENCY OF THE TURF SHOULD OTHER MAINTENANCE FACTORS BE NEGLECTED OR OTHERWISE MISMANAGED.

ARE ESSENTIAL. THE SEED APPLICATION RATES IN TABLE 4-3 ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF

(1) ORGANIC AND VEGETABLE BASED BINDERS — NATURALLY OCCURRING, POWDER—BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE

PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS

(2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND, FOLLOWING APPLICATION OF MULCH, DRYING AND CURING,

SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACK

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER

OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND

C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

PLANTING RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS.

2. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 850 F AND ABOVE.

RATES TO COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL SEASON GRASSES.

4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.

1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.

EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIÓDS IN SPRING AND FALL.

ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL

IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES

(UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.

METHODS AND MATERIALS

2. SEEDBED PREPARATION

SITE PREPARATION

THIS PLAN TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY!

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REVISION

SOIL EROSION & SEDIMENT CONTROL NOTES

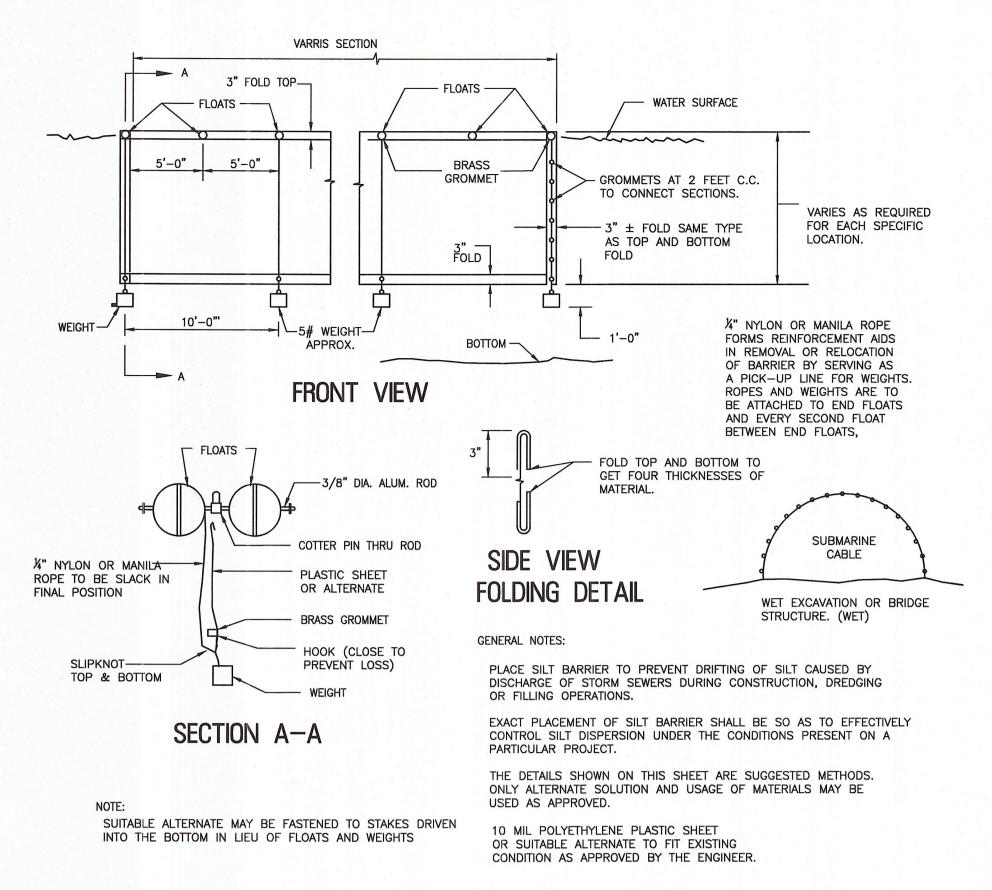
REPLACEMENT OF EAST HAZELWOOD AVE.

MINOR BRIDGE Ra-69

CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

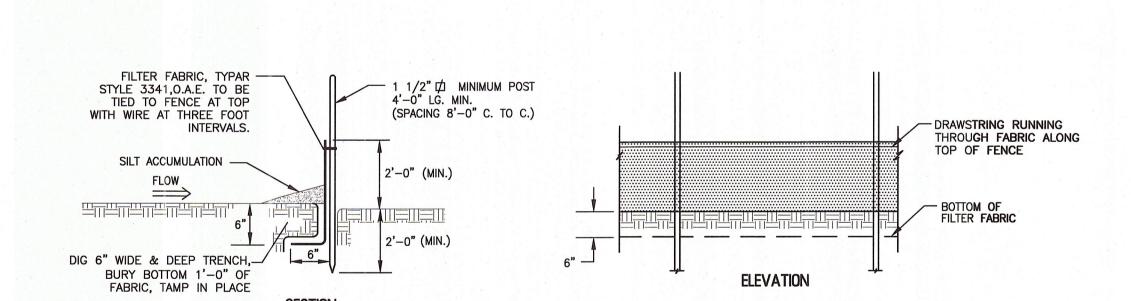
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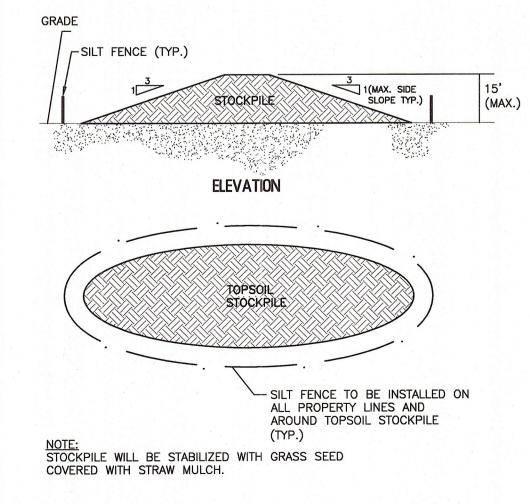


FLOATING TURBIDITY BARRIER

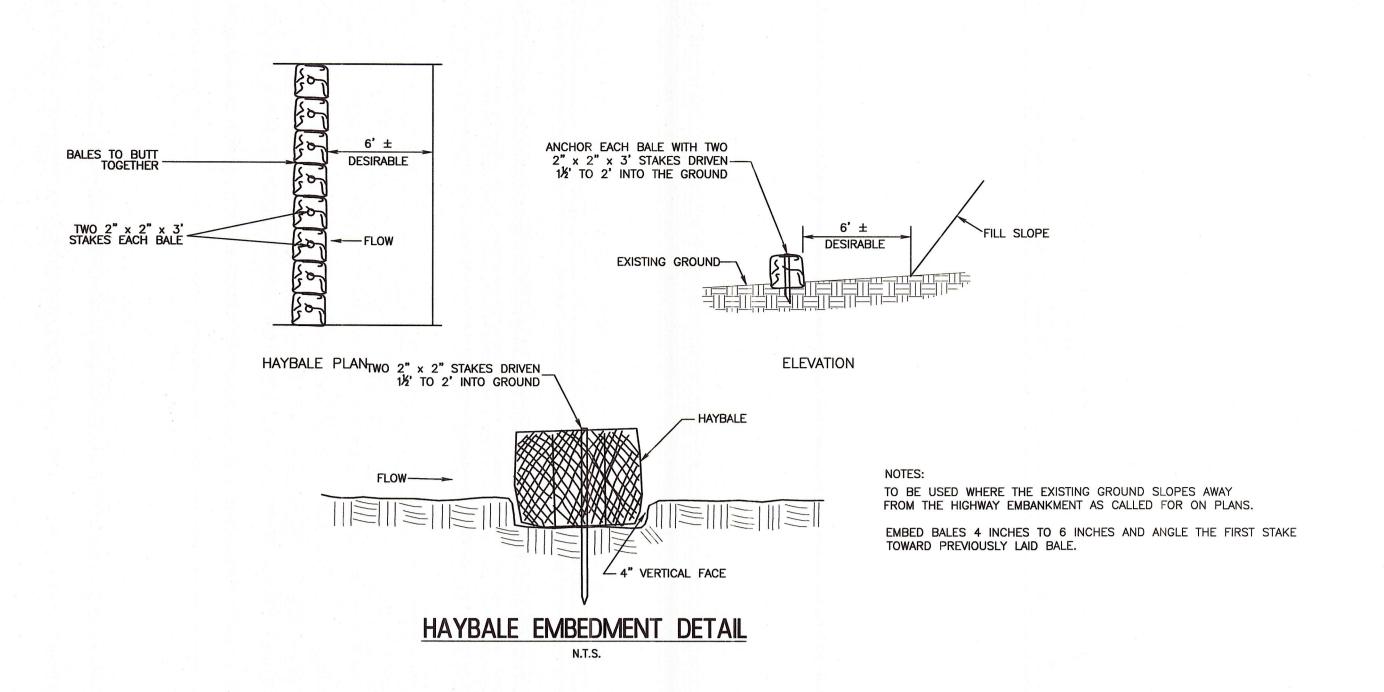
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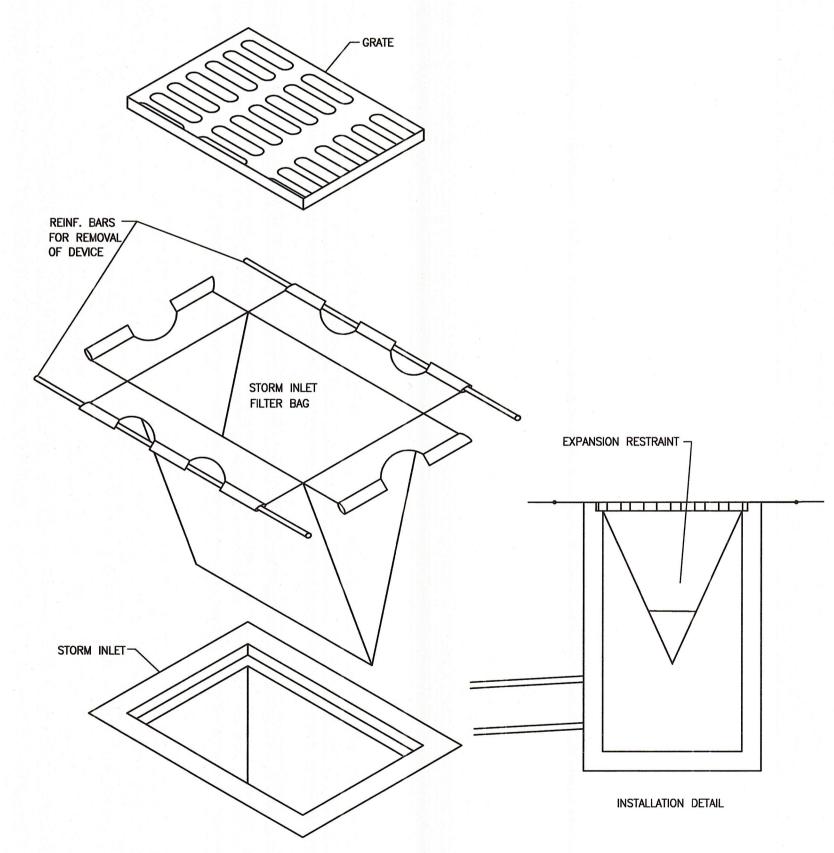


SILT FENCE



TOPSOIL STOCKPILE

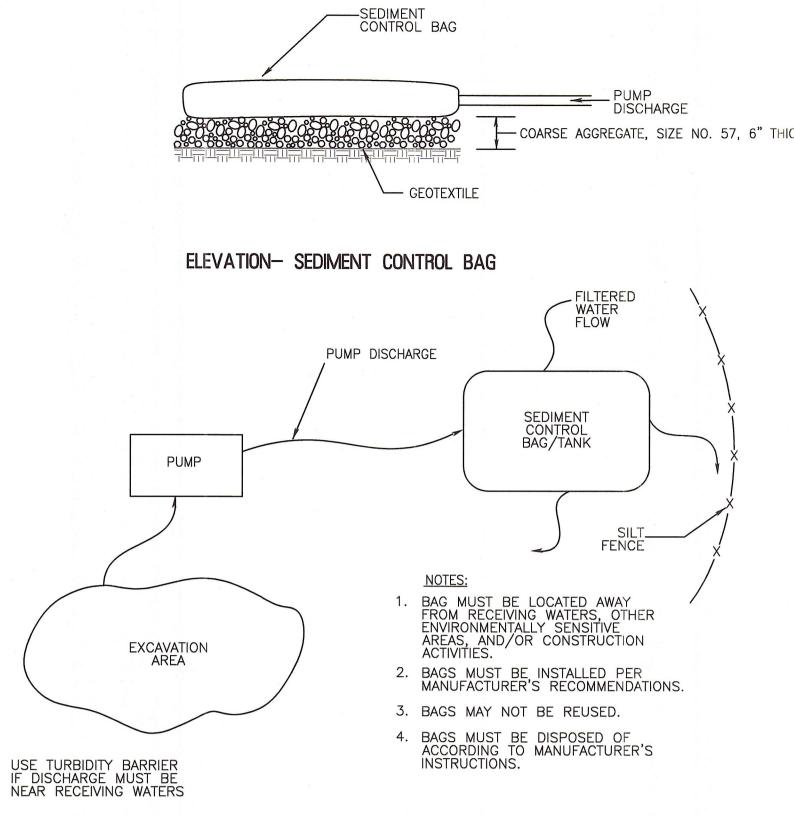




NOTE: STORMWATER INLETS WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS MUST BE PROTECTED UNTIL THE DRAINAGE AREAS ARE STABILIZED. THE STORM INLET FILTER BAGS SHALL BE EMPTIED ONTO TOPSOIL STOCKPILE WHEN APPROXIMATELY HALF (1/2) FULL AND REINSTALLED UNDAMAGED; DAMAGED BAGS SHALL BE REPLACED WITH NEW BAGS. CONTRACTOR SHALL COMPLETE MAINTENANCE AND REPAIRS WITHIN ONE (1) DAY.

STORM INLET FILTER BAG DETAIL

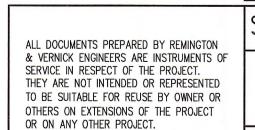
THIS PLAN TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY!



SEDIMENT CONTROL BAG FOR DEWATERING

N.T.S.

PLAN VIEW



ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY REMINGTON & VERNICK ENGINEERS FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO REMINGTON & VERNICK ENGINEERS; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS REMINGTON & VERNICK ENGINEERS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

SOIL EROSION & SEDIMENT CONTROL DETAILS

REPLACEMENT OF EAST HAZELWOOD AVE.

MINOR BRIDGE Ra — 69

CITY OF RAHWAY, UNION COUNTY, NEW, JERSEY

DATE:

RICHARD G. ARANGO

NJ PROFESSIONAL ENGINEER LIC. NO. 38882

REMINGTON, VERNICK & ARANGO ENGINEERS

REMINGTON, VERNICK & ARANGO ENGINEERS

300 PENHORN AVENUE, 3RD FLOOR, SECAUCUS, NJ 07094

(201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM

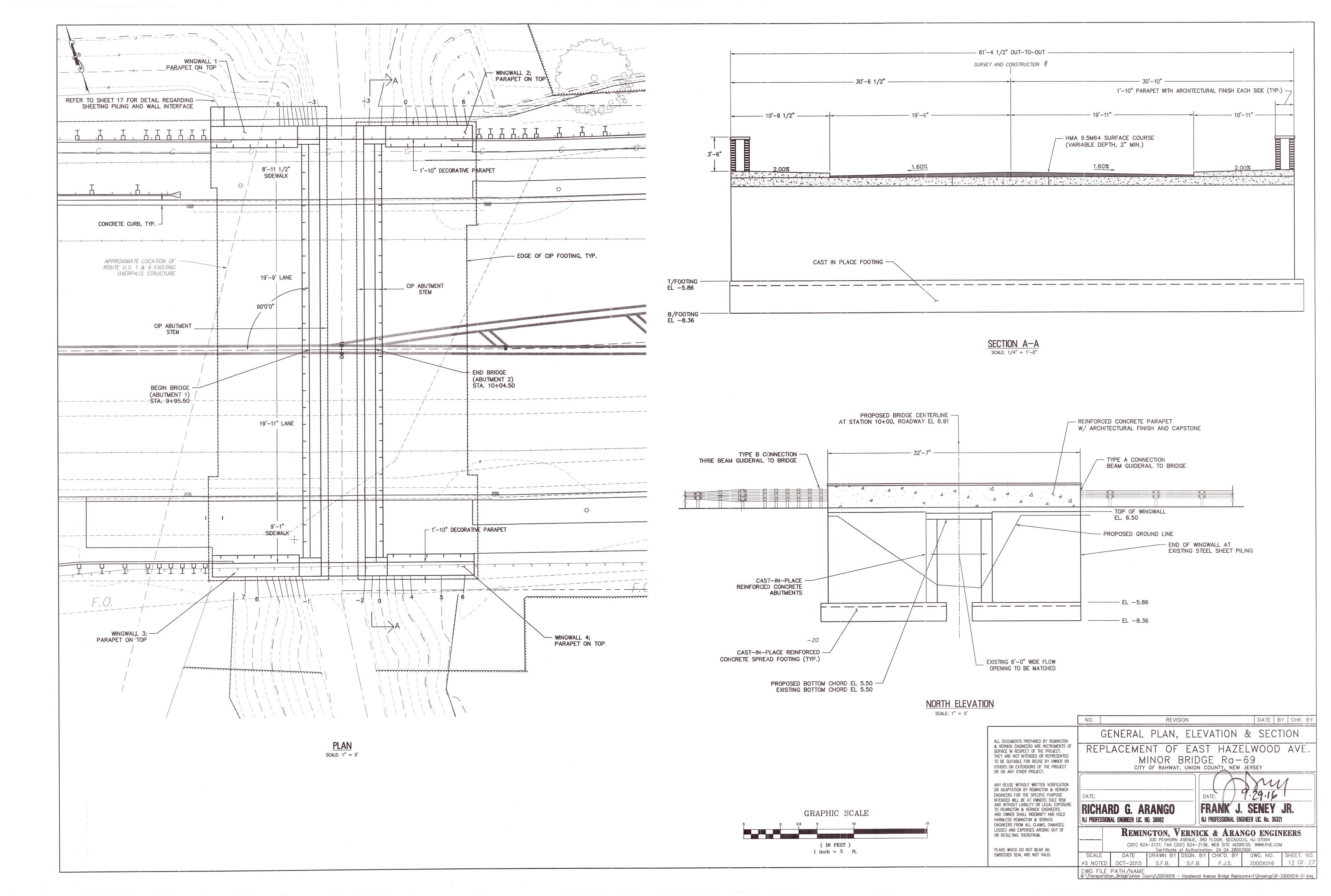
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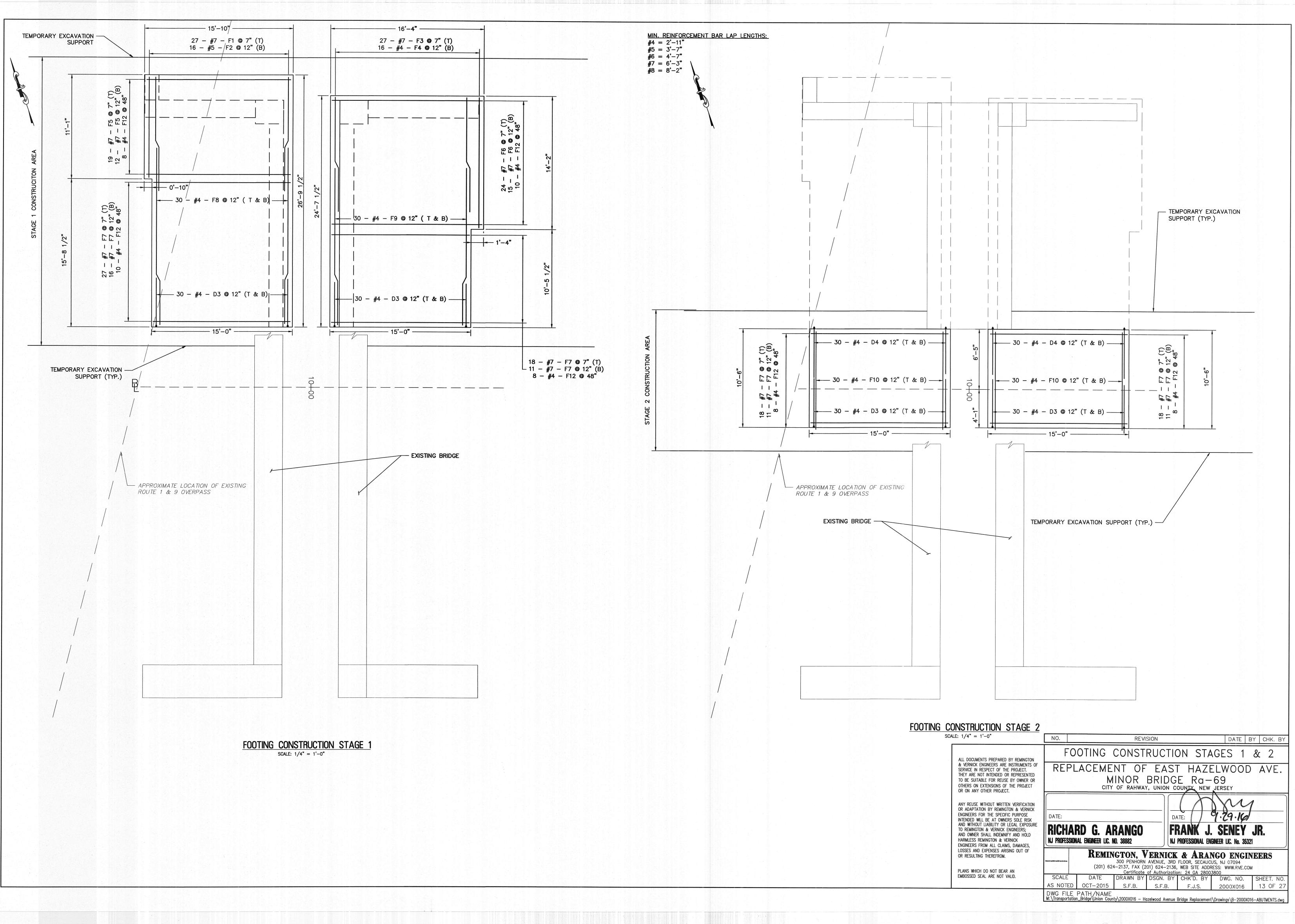
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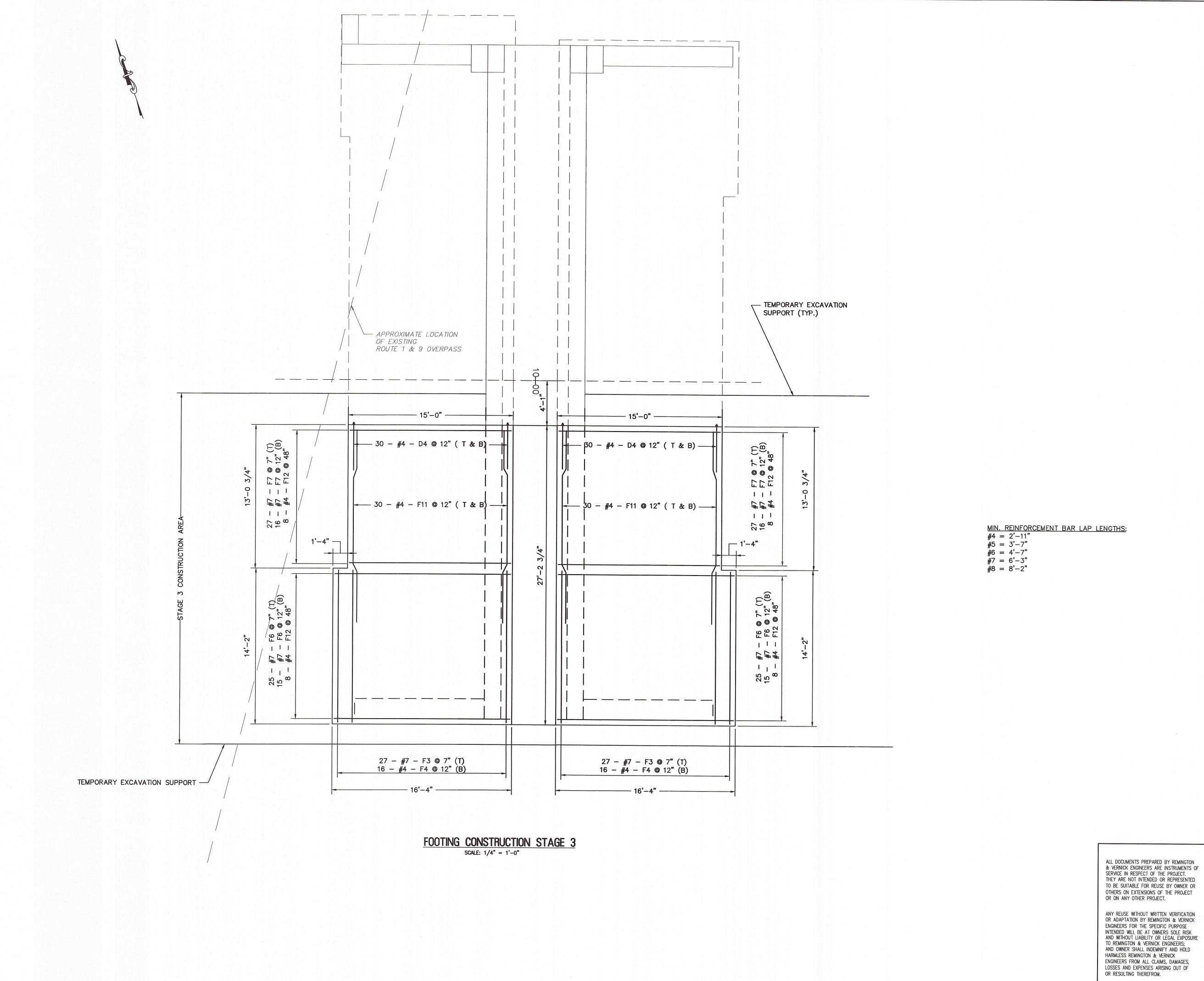
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NO. REVISION DATE BY CHK. BY FOOTING CONSTRUCTION STAGE 3 REPLACEMENT OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY MM RICHARD G. ARANGO

NJ PROFESSIONAL ENGINEER LIC. NO. 38882

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

NJ PROFESSIONAL ENGINEER LIC. No. 35321

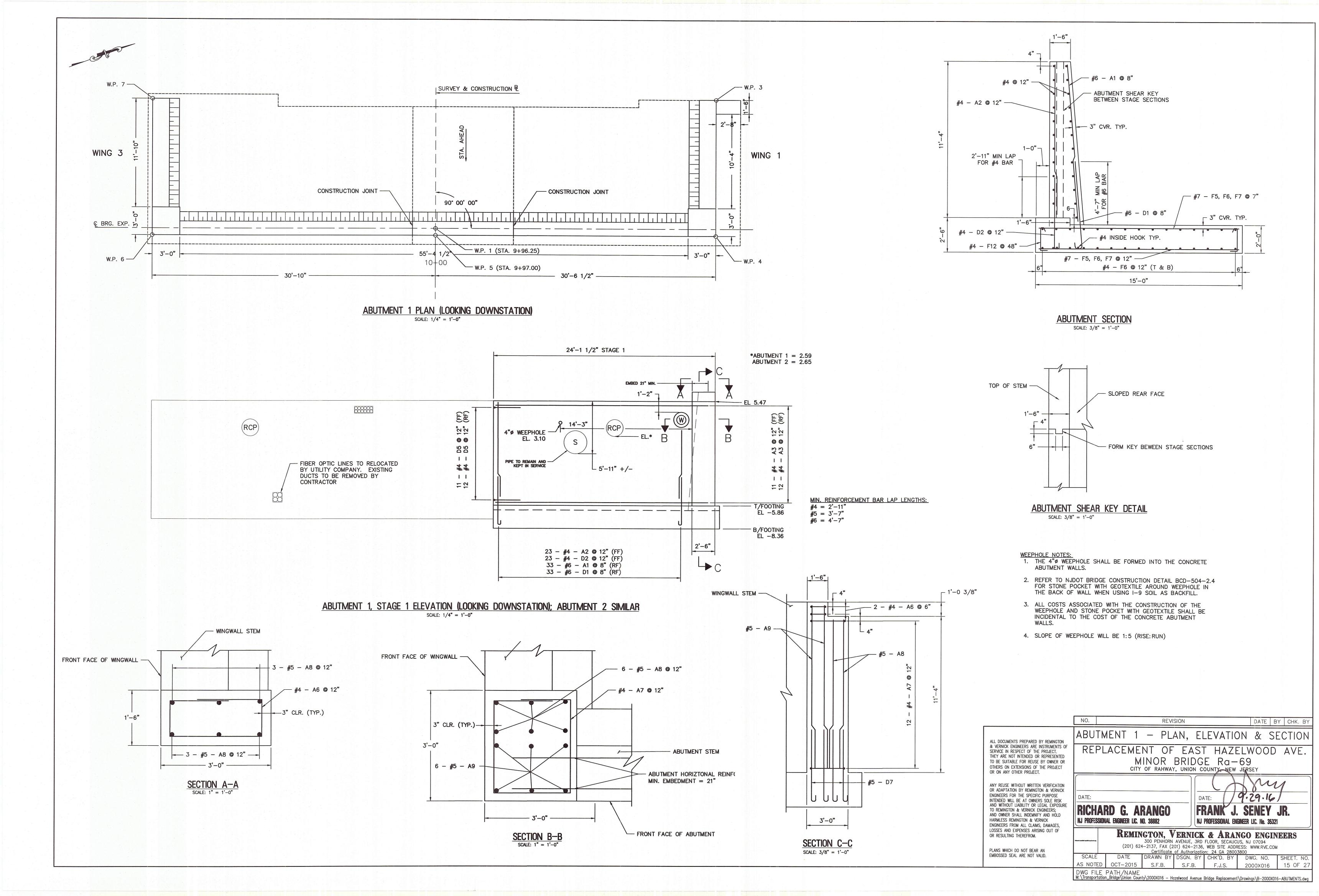
REMINGTON, VERNICK & ARANGO ENGINEERS

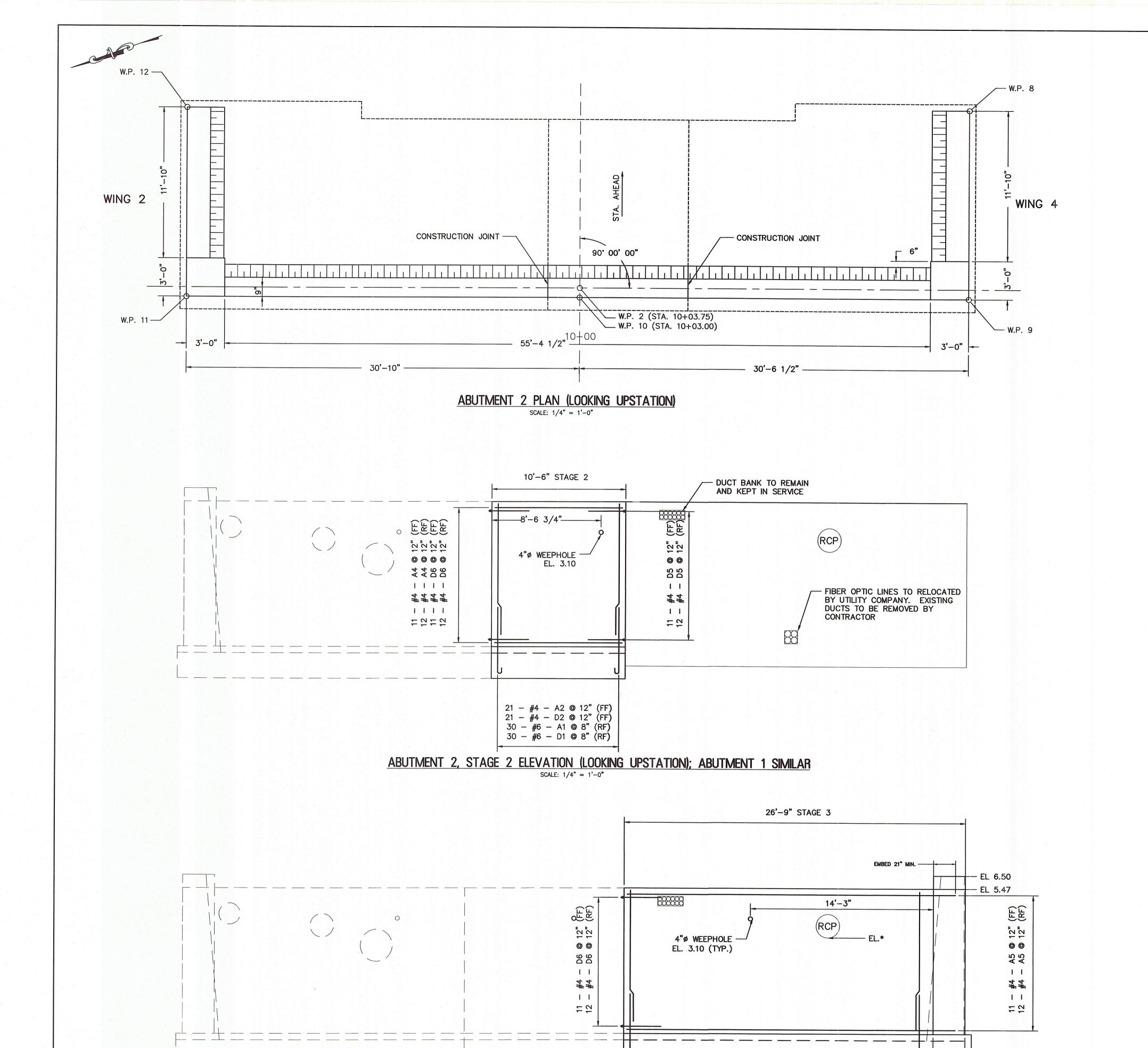
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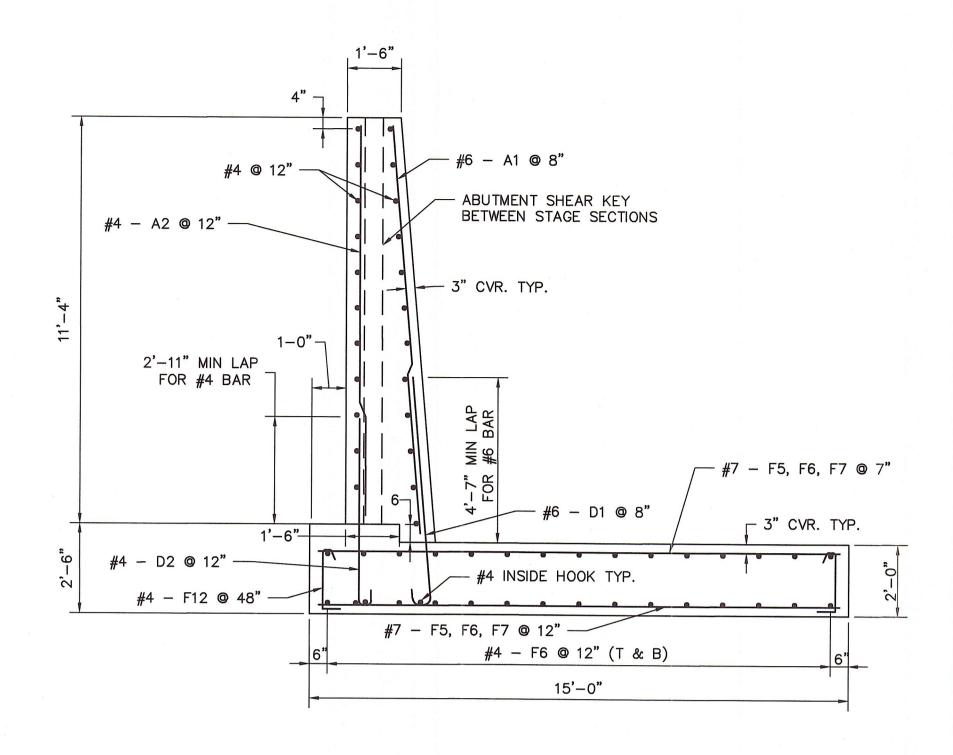
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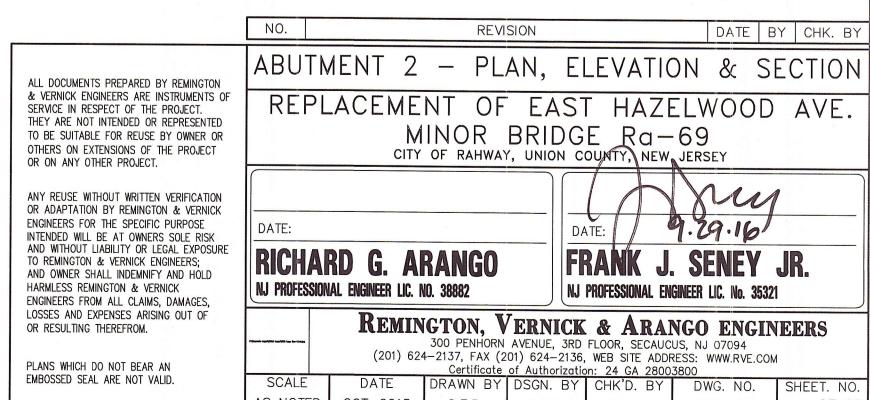
ABUTMENT 2, STAGE 3 ELEVATION (LOOKING UPSTATION); ABUTMENT 1 SIMILAR

SCALE: 1/4" = 1'-0"



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

W.P. NUMBER		WORKING POINT DATA						
I NUMBER I				DINATES				
HOWBER	E STATION	OIT SET TROW IE	NORTHING	EASTING				
1	9+96.25	0.00	643183.49	555922.42				
2	10+03.75	0.00	643180.77	555930.21				
3	9+82.17	30.54'LT.	643216.69	555919.90				
4	9+97.00	30.54'LT.	643211.80	555933.90				
5	9+97.00	0.00	643183.00	555923.84				
6	9+97.00	30.83' RT.	643153.88	555913.66				
7	9+82.17	30.83' RT.	643158.78	555899.66				
8	10+17.83	30.54'RT.	643147.01	555933.33				
9	10+03.00	30.54' RT.	643151.91	555919.33				
10	10+03.00	0.00	643181.02	555929.50				
11	10+03.00	30.83' LT.	643209.83	555939.57				
12	10+17.83	30.83' LT.	643204.93	555953.57				



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SCALE

MIN. REINFORCEMENT BAR LAP LENGTHS: #4 = 2'-11"#5 = 3'-7"

2'-6"

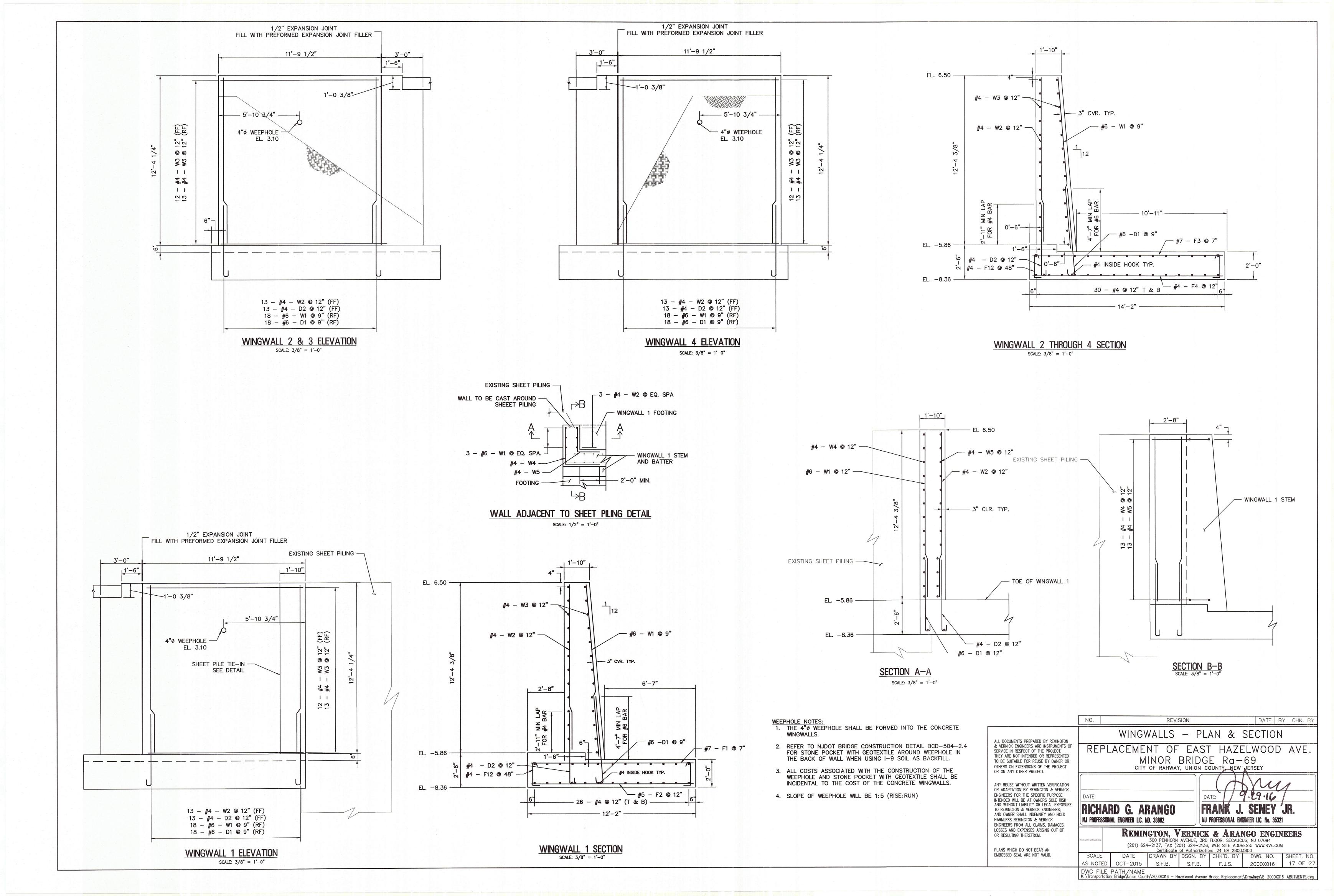
*ABUTMENT 1 = 2.78

ABUTMENT 2 = 2.67

25 - #4 - A2 @ 12" (FF) 25 - #4 - D2 @ 12" (FF)

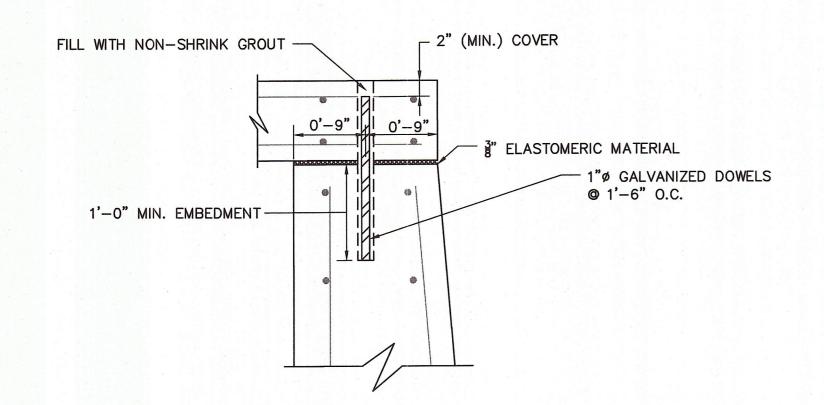
37 - #6 - A1 @ 8" (RF) 37 - #6 - D1 @ 8" (RF)

#6 = 4'-7"

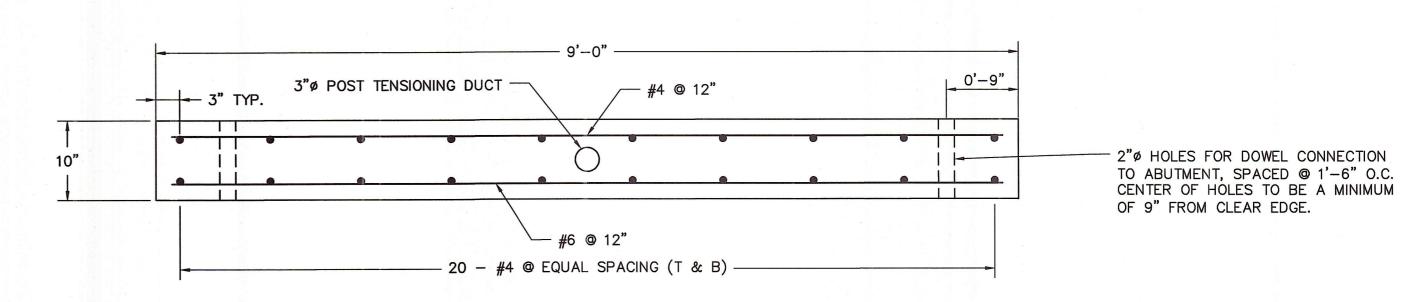


	10'-6"	26'-9"	
STAGE 1 —	STAGE 2 —	STAGE 3 —	

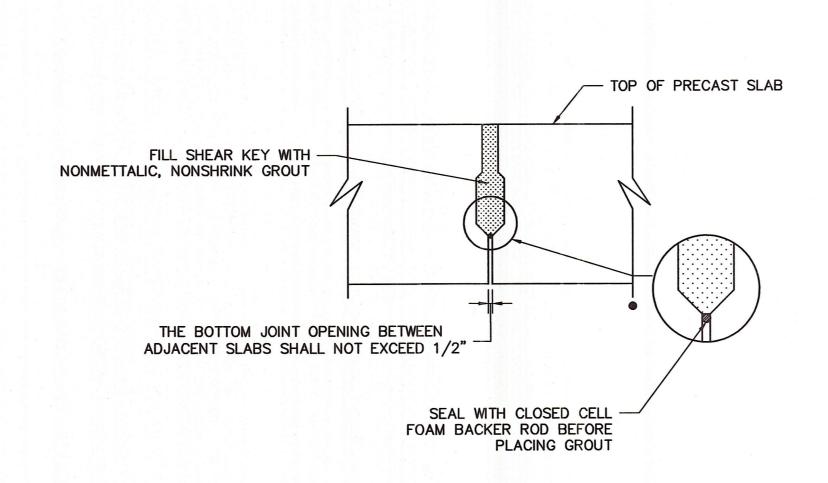
PRECAST SLABS LAYOUT SCALE: $3/8^{\circ} = 1'-0^{\circ}$



SLAB TO ABUTMENT CONNECTION DETAIL

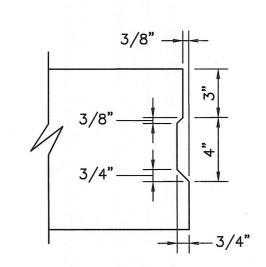


PRECAST LONGITUDINAL SLAB BRIDGE SECTION SCALE: 1" = 1'-0"



PRECAST SLAB KEYWAY DETAIL 2

NOT TO SCALE



PRECAST SLAB KEYWAY DETAIL 1 (OMIT ON FASCIA SIDE) SCALE: 2" = 1'-0"

	NO. REVISION	DATE BY CHK. BY
ALL DOCUMENTS PREPARED BY REMINGTON	PRECAST S	SLAB DETAILS
E VERNICK ENGINEERS ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR DITHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT.	MINOR BRI	AST HAZELWOOD AVE. DGE Ra-69 ION COUNTY, NEW JERSEY
ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY REMINGTON & VERNICK ENGINEERS FOR THE SPECIFIC PURPOSE NTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO REMINGTON & VERNICK ENGINEERS; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS REMINGTON & VERNICK ENGINEERS FROM ALL CLAIMS, DAMAGES,	DATE: RICHARD G. ARANGO NJ PROFESSIONAL ENGINEER LIC. NO. 38882	DATE: 129.16 FRANK J. SENEY JR. NJ PROFESSIONAL ENGINEER LIC. No. 35321
OSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.		NICK & ARANGO ENGINEERS JE, 3RD FLOOR, SECAUCUS, NJ 07094

PLANS WHICH DO NOT BEAR AN

EMBOSSED SEAL ARE NOT VALID.

REVISION

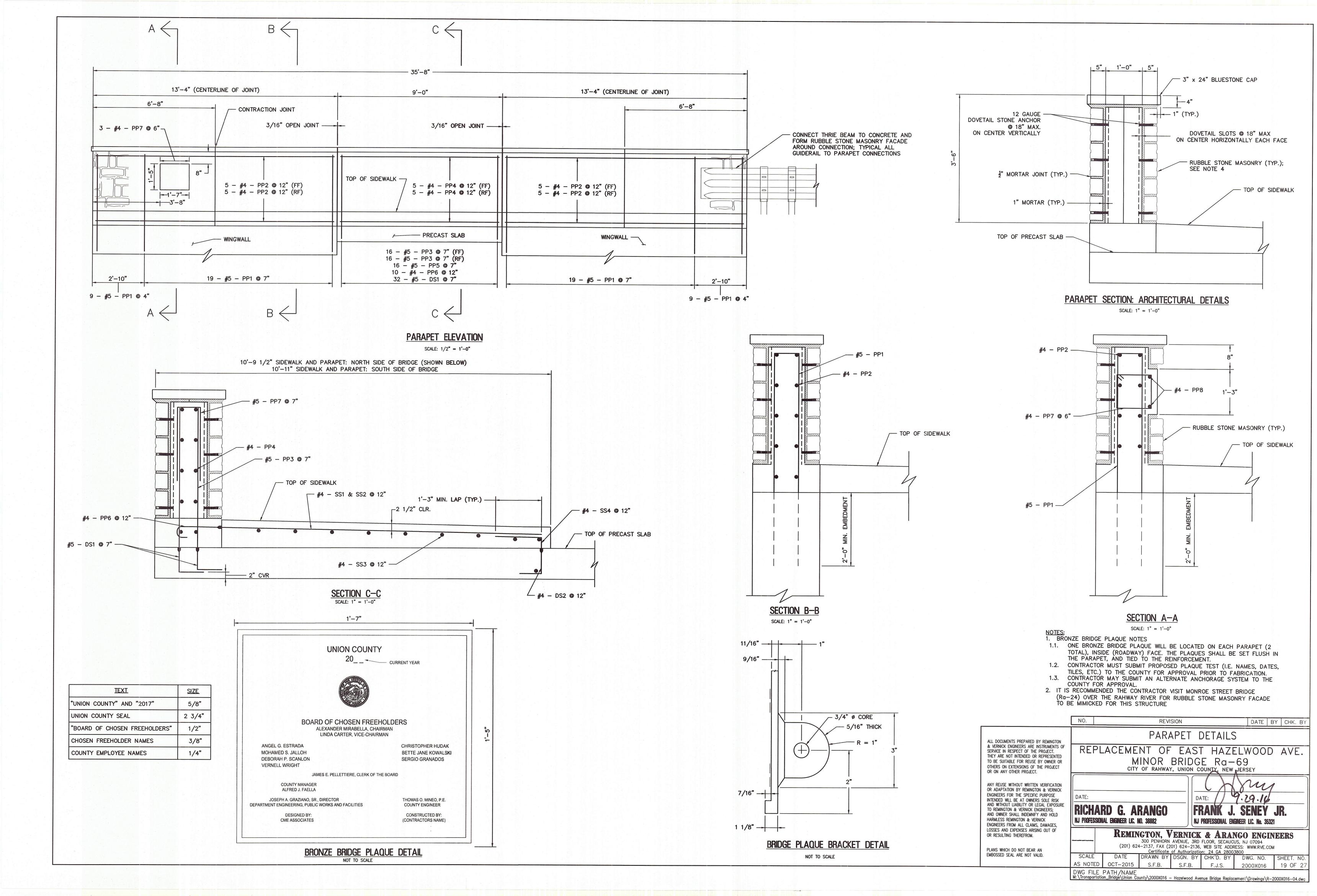
SSIONAL ENGINEER LIC. NO. 38882 NJ PROFESSIONAL ENGINEER LIC. No. 35321 REMINGTON, VERNICK & ARANGO ENGINEERS

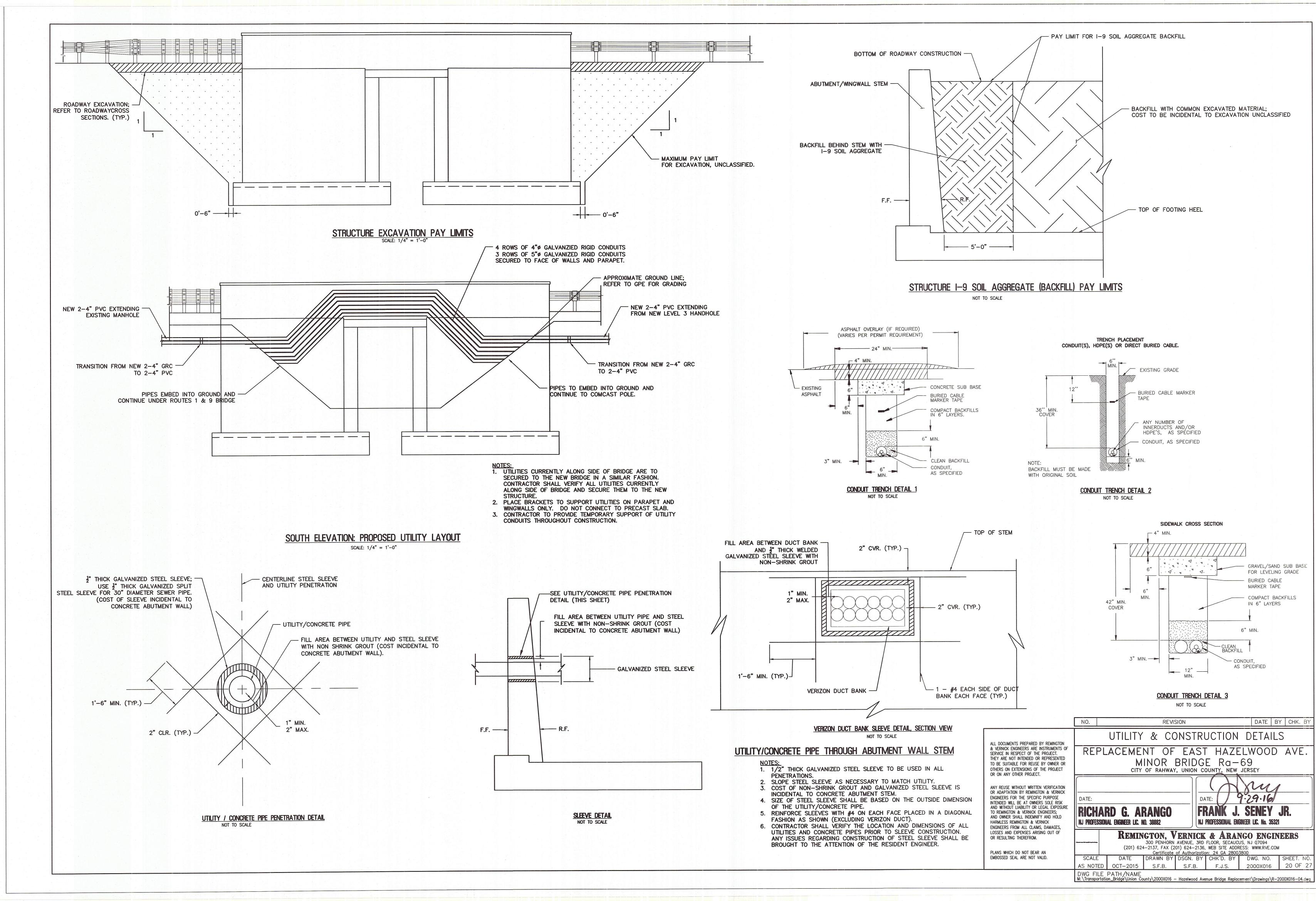
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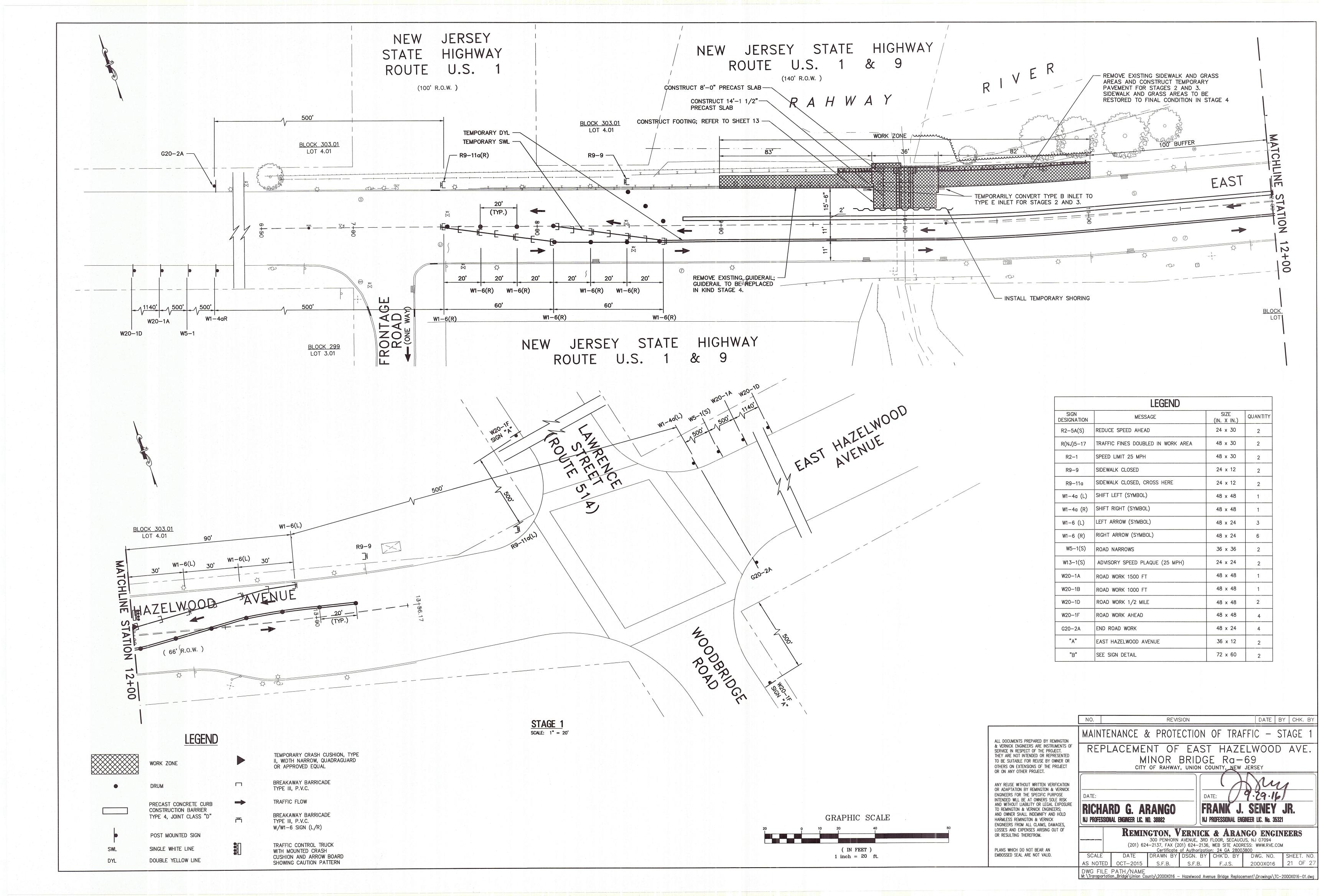
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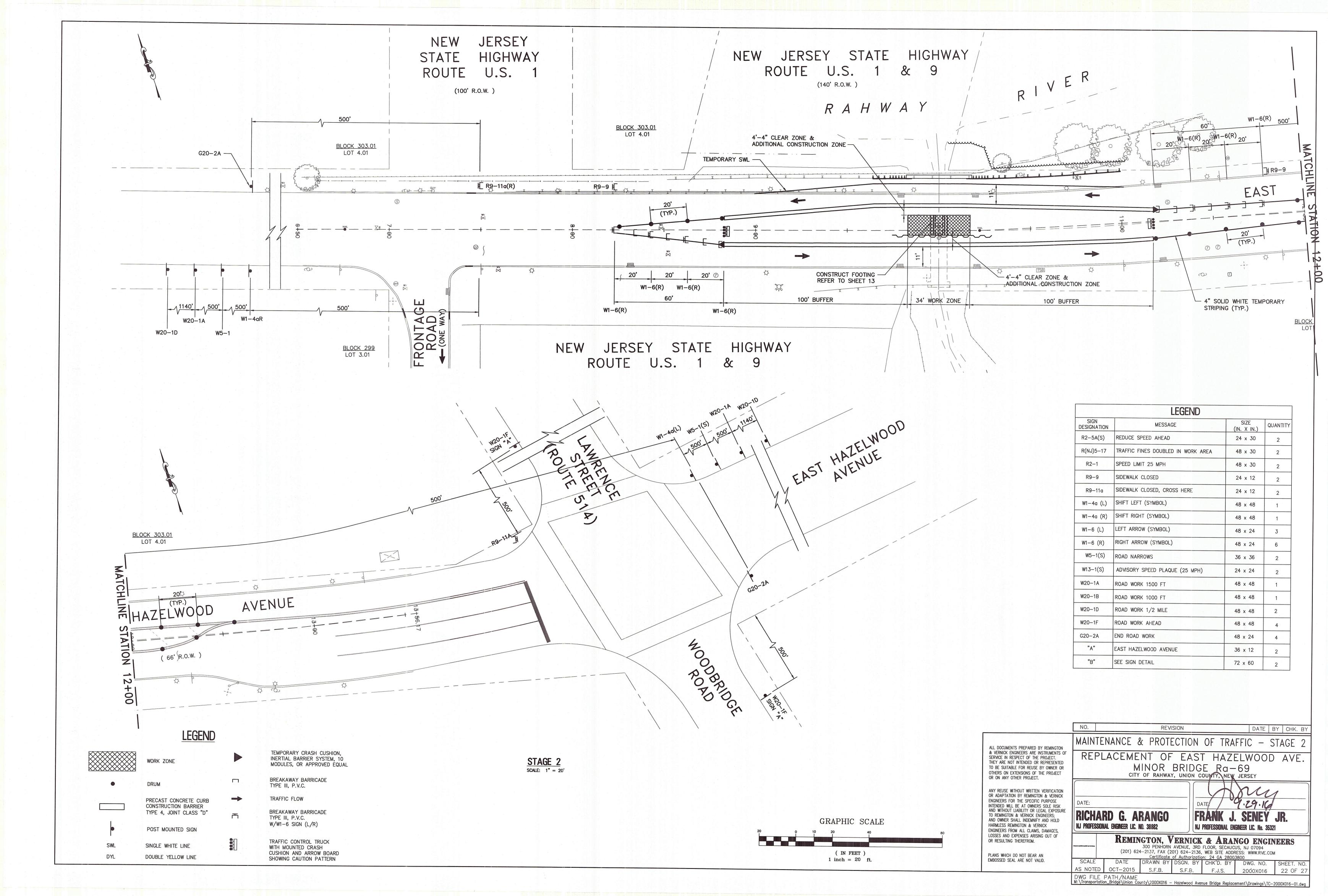
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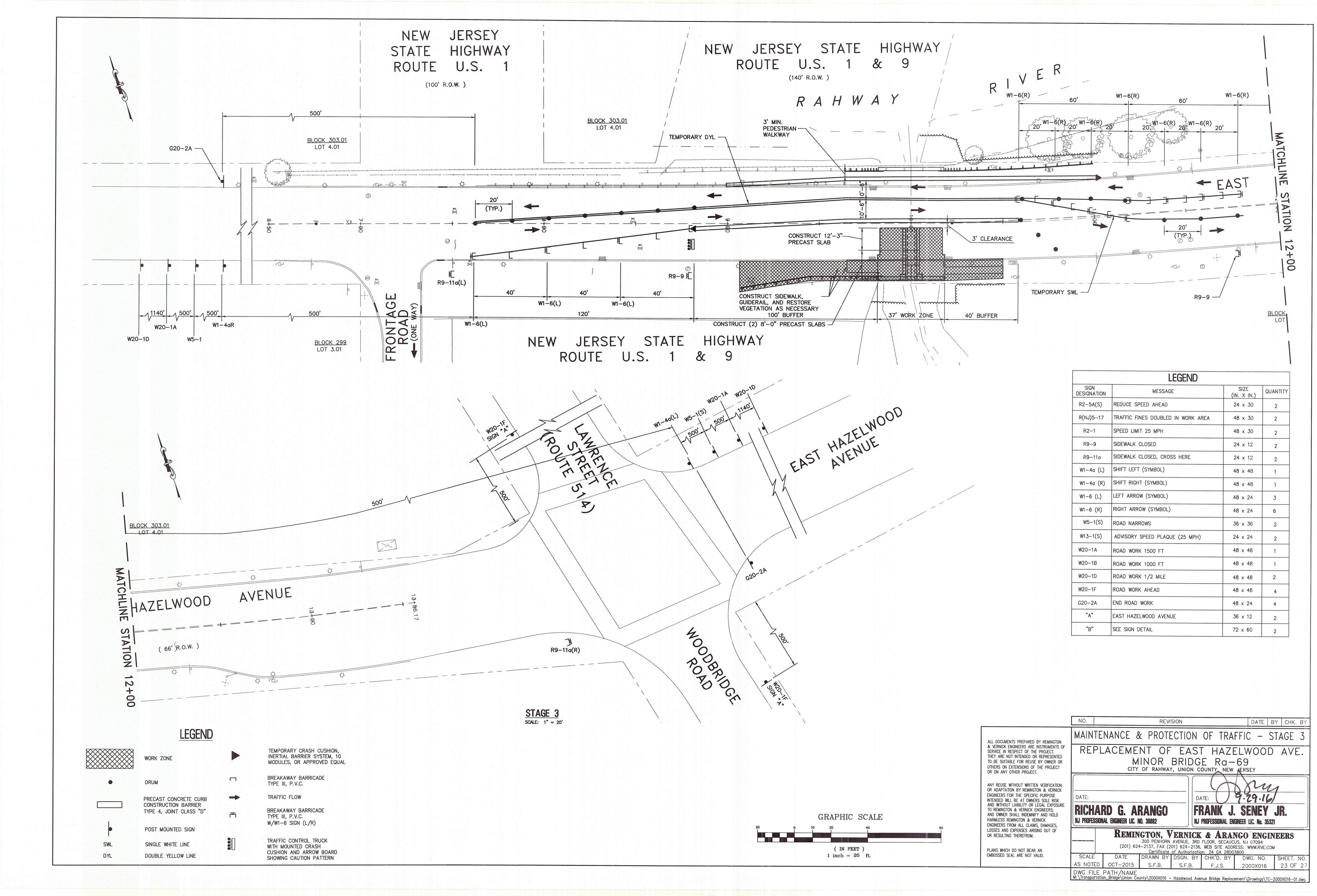
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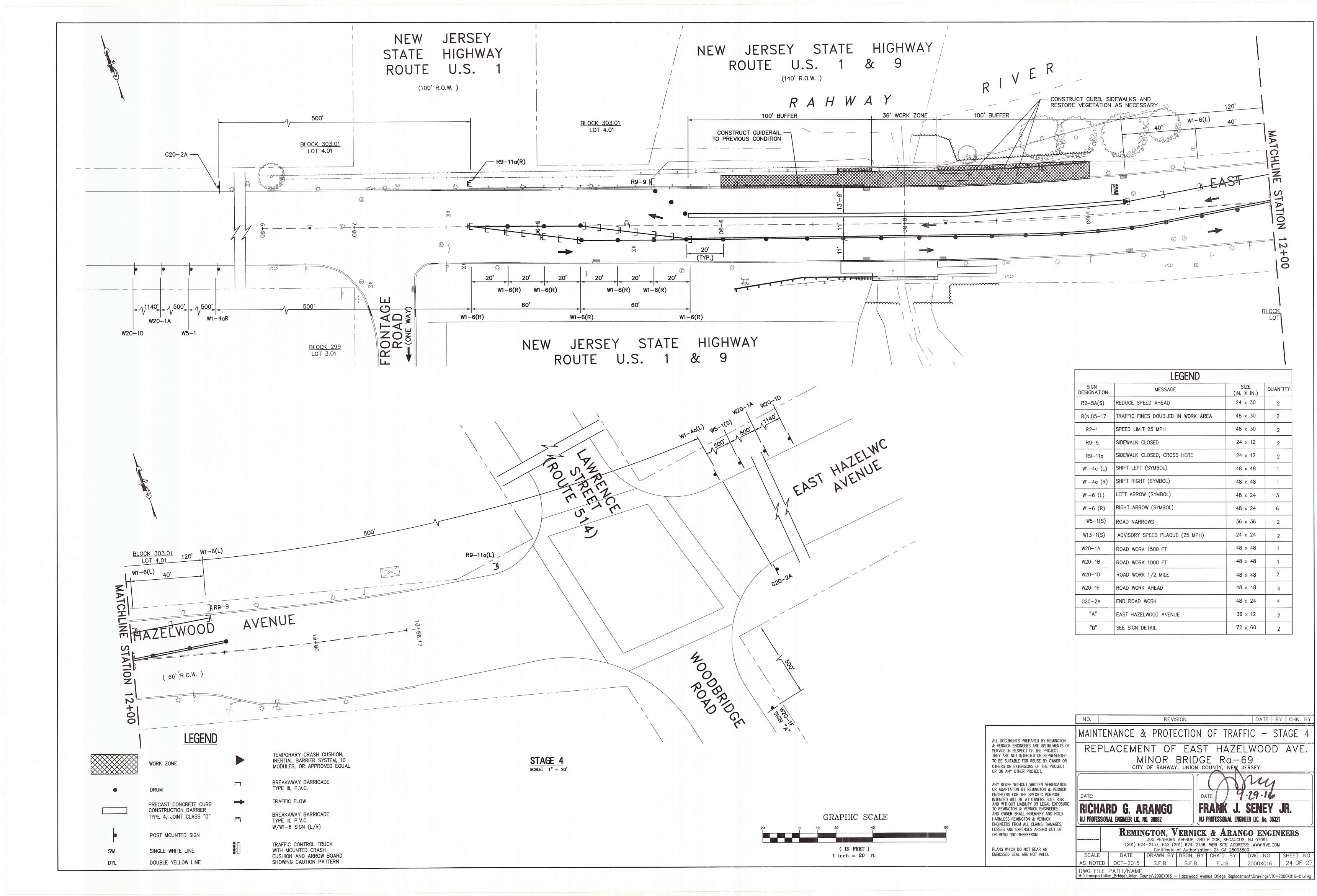


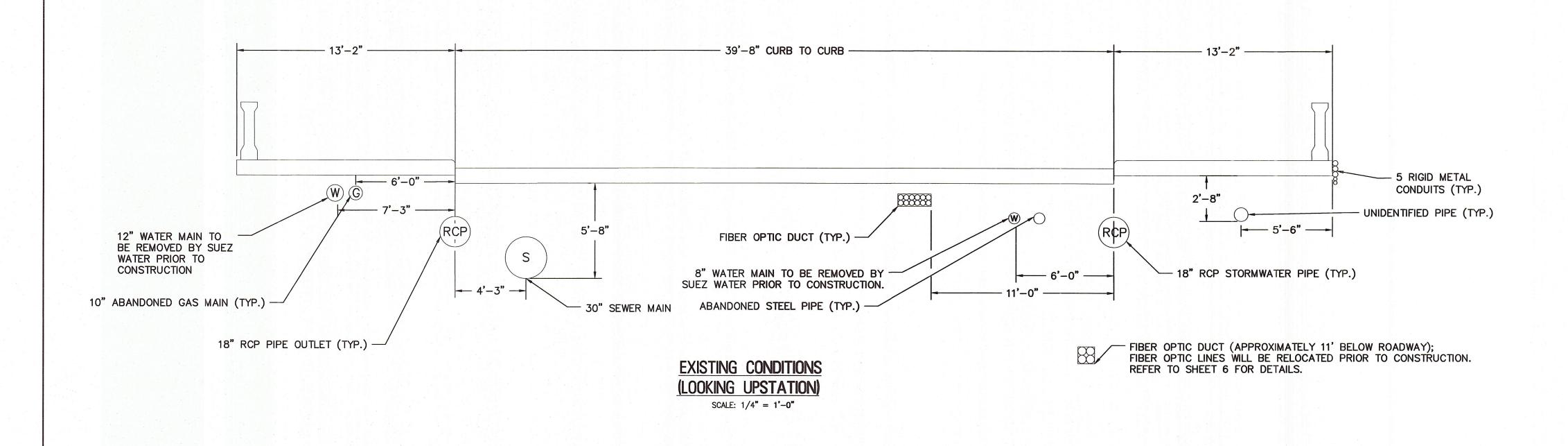


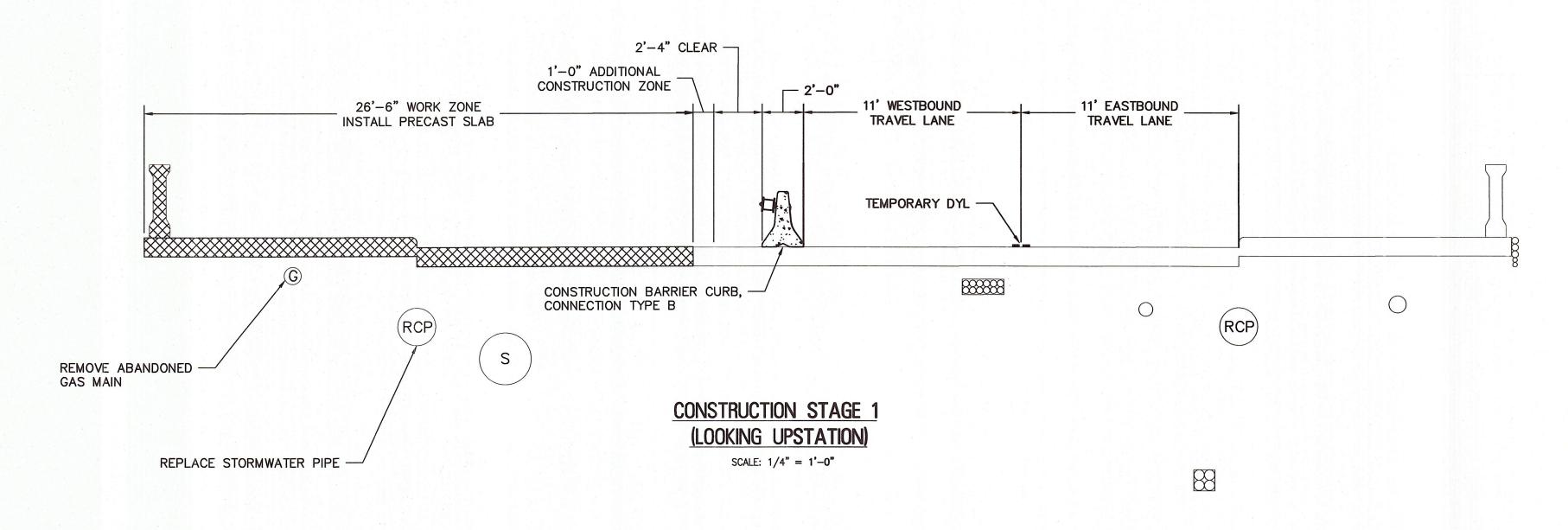


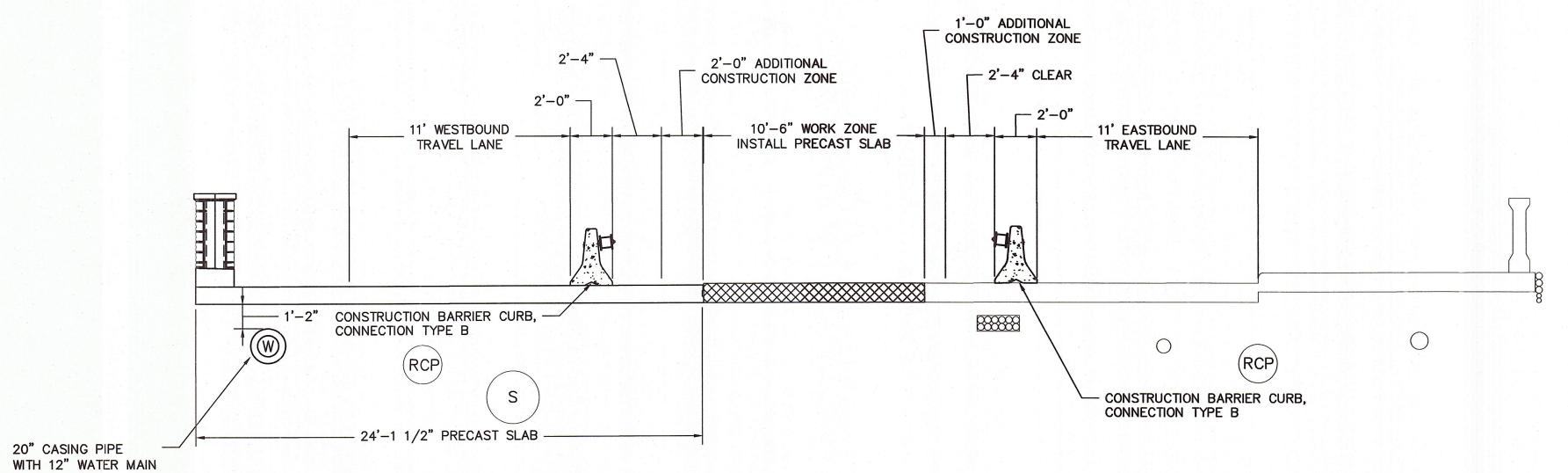












CONSTRUCTION STAGE 2 (LOOKING UPSTATION) SCALE: 1/4" = 1'-0"

INITIAL CONSTRUCTION NOTES:

- 1. PRIOR TO STAGE 1, IMPLEMENT LANE AND SHOULDER CLOSERS WITH FLAGGING IN ACCORDANCE WITH NJDOT TCD-4; SUEZ WATER WILL REMOVE AND CAP THE 12" AND 8" WATER MAINS PRIOR TO CONSTRUCTION. SEE SHEET 6 FOR DETAILS.
- 2. CONTRACTOR SHALL VERIFY THE DIMENSIONS AND LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF
- 3. ALL COSTS FOR TEMPORARY HMA PAVEMENT AND CONVERTING TYPE B INLETS TO TYPE E INLETS SHALL BE INCLUDED IN THE VARIOUS TRAFFIC CONTROL ITEMS AS SEPARATE PAYMENT WILL NOT BE MADE.

STAGE 1 CONSTRUCTION NOTES:

- 1. THE FOLLOWING WILL BE PERFORMED IN STAGE 1:
 - A. INSTALL TRAFFIC CONTROL DEVICES AS INDICATED.
 - B. REMOVE/DEMOLISH EXISTING SIDEWALK, PARAPETS, AND STRUCTURE WHILE SUPPORTING 30" SEWER MAIN AND ANY OTHER UTILITIES, AS NEEDED.
 - C. REMOVE 10" ABANDONED GAS LINE. D. CONSTRUCT SUBSTRUCTURE, SUPERSTRUCTURE, AND NEW RCP PIPE. DURING SUBSTRUCTURE
 - CONSTRUCTION, CONSTRUCT SLEEVES FOR 20" CASING PIPE (FOR 12" WATER MAIN), 18" RCP PIPE. AND 30" SEWER MAIN WITHIN THE ABUTMENT WALLS. E. WATERPROOF TOP SLAB.
 - F. CONSTRUCT/PREPARE NECESSARY MEASURES FOR TAPERING TRAFFIC MOVEMENT INTO EXISTING SIDEWALK AREAS.
 - G. TEMPORARILY CONVERT TYPE B INLETS TO TYPE E INLETS.
- H. CONSTRUCT NEW SIDEWALK AND TEMPORARY PAVEMENT (6" HMA 12.5M64 IN TWO LIFTS). 2. APPLY BLACK LINE MASKING TAPE TO COVER ALL CONFLICTING PAVEMENT MARKINGS ALONG THE BRIDGE APPROACHES AS NEEDED.
- 3. APPLY TEMPORARY PAVEMENT MARKINGS ALONG EAST HAZELWOOD AVENUE. 4. TRAFFIC CONTROL SIGNAGE AND DEVICE PLACEMENT SHALL CONFORM TO NEW JERSEY DEPARTMENT OF
- TRANSPORTATION TRAFFIC CONTROL STANDARD DETAILS. 6. ONE (1) THROUGH LANE ON EASTBOUND AND WESTBOUND EAST HAZELWOOD AVENUE MUST BE
- MAINTAINED AT ALL TIMES. THE EXISTING PEDESTRIAN SIDEWALK ON THE SOUTH SIDE OF THE BRIDGE WILL REMAIN OPEN DURING THIS STAGE. 7. THE CONSTRUCTION BARRIER CURB SHALL BE EQUIPPED WITH SLOTS TO ALLOW STORMWATER RUNOFF TO
- ENTER THE EXISTING INLETS. 8. MINIMUM LANE WIDTHS ALONG EAST HAZELWOOD AVENUE SHALL BE 11'-0". 9. ALL TAPER LENGTHS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL

STAGE 2 CONSTRUCTION NOTES:

- 1. THE FOLLOWING WILL BE PERFORMED IN STAGE 2:
 - A. RELOCATE AND INSTALL TRAFFIC CONTROL DEVICES AS INDICATED.
 - B. DEMOLISH EXISTING STRUCTURE WHILE SUPPORTING UTILITIES AS NEEDED.
 - C. CONSTRUCT SUBSTRUCTURE AND SUPERSTRUCTURE.

DEVICES, 2009 EDITION AND BASED ON A 25 M.P.H. DESIGN SPEED.

- D. WATERPROOF TOP SLAB. E. CONSTRUCT HMA OVERLAY.
- 2. REMOVE ALL TEMPORARY PAVEMENT MARKINGS ALONG THE BRIDGE FROM STAGE 1 AND COVER ALL
- CONFLICTING STRIPES AND MARKING WITH REMOVABLE BLACK LINE MASKING TAPE.
- 3. APPLY TEMPORARY PAVEMENT MARKINGS ALONG EAST HAZELWOOD AVENUE. 4. TRAFFIC CONTROL SIGNAGE AND DEVICE PLACEMENT SHALL CONFORM TO NEW JERSEY DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL STANDARD DETAILS.
- 6. ONE (1) THROUGH LANE ON EASTBOUND AND WESTBOUND EAST HAZELWOOD AVENUE MUST BE MAINTAINED AT ALL TIMES. THE EASTBOUND SIDE PEDESTRIAN SIDEWALK ON SIDE OF THE BRIDGE WILL REMAIN OPEN DURING THIS STAGE.
- 7. THE CONSTRUCTION BARRIER CURB SHALL BE EQUIPPED WITH SLOTS TO ALLOW STORMWATER RUNOFF TO ENTER THE EXISTING INLETS.

DEVICES, 2009 EDITION AND BASED ON A 25 M.P.H. CONSTRUCTION SPEED LIMIT.

8. MINIMUM LANE WIDTHS ALONG EAST HAZELWOOD AVENUE SHALL BE 11'-0". 9. ALL TAPER LENGTHS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL

LEGEND

- REINFORCED CONCRETE PIPE
- EXISTING 24" x 9" DUCT BANK WITH (12) 3 $\frac{1}{2}$ IRON PIPES
- EXISTING 30" SANITARY SEWER PIPE
- 20" CASING PIPE WITH 12" WATER MAIN INSIDE
- EXISTING ABANDONED GAS MAIN
- EXISTING DUCT BANK WITH 16 - 1 1/4" CONDUITS
 - WORK/CONSTRUCTION ZONE

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OTHERS ON EXTENSIONS OF THE PROJECT

OR ON ANY OTHER PROJECT.

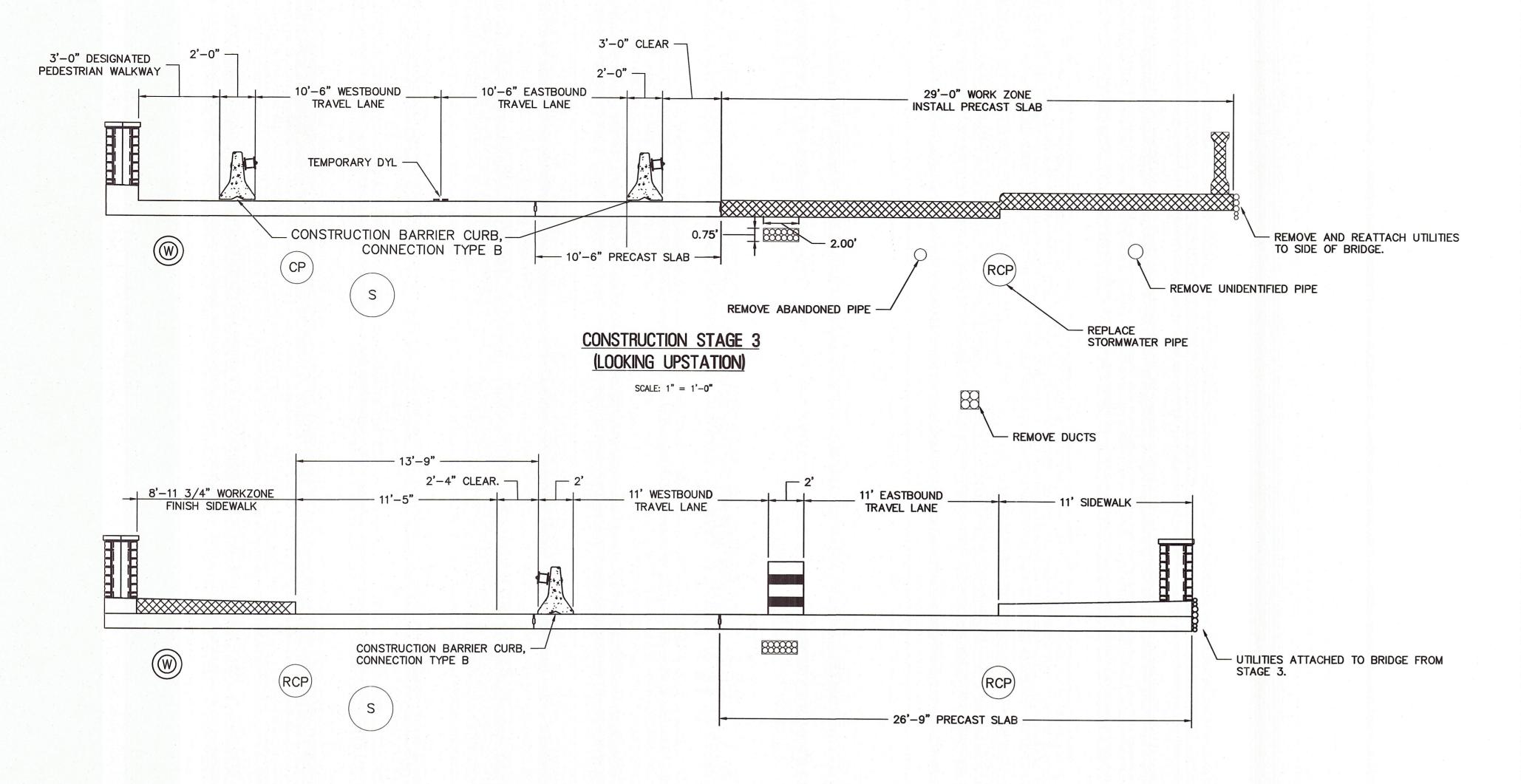
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MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY NEW JERSEY M RICHARD G. ARANGO NJ PROFESSIONAL ENGINEER LIC. No. 35321 NJ PROFESSIONAL ENGINEER LIC. NO. 38882

REMINGTON, VERNICK & ARANGO ENGINEERS 300 PENHORN AVENUE, 3RD FLOOR, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM DRAWN BY DSGN. BY CHK'D. BY

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CONSTRUCTION STAGE 4 (LOOKING UPSTATION)

SCALE: 1" = 1'-0"

10'-9 1/2" SIDEWALK 10'-11" SIDEWALK AND PARAPET 39'-8" CURB TO CURB AND PARAPET STAGE 4 - 20 " REINFORCED CONCRETE STORMWATER PIPE (TYP.) RIGID METALIC CONDUITS (TYP.) FIBER OPTIC DUCT (TYP.) -(CP) (CP)30" SEWER MAIN (TYP.) - 20" CASING PIPE WITH 12" WATER MAIN (TYP.) STAGE 2 STAGE 3: 26'-9" PRECAST SLAB STAGE 1: 24'-1 1/2" PRECAST SLAB 10'-6" PRECAST SLAB

FINAL CONDITION, TYPICAL SECTION

(LOOKING UPSTATION)

SCALE: 1" = 1'-0"

STAGE 3 CONSTRUCTION NOTES:

- 1. THE FOLLOWING WILL BE PERFORMED IN STAGE 3:
 - A. RELOCATE AND REMOVE TRAFFIC CONTROL DEVICES AS INDICATED.
 - B. ABANDONED PIPE, AND UNIDENTIFIED PIPE.

 C. REMOVE/DEMOLISH REMAINING SIDEWALK, PARAPETS, UNIDENTIFIED PIPE, DUCTS AND
 - STRUCTURE WHILE SUPPORTING 24"X9" FIBER OPTIC DUCT, UTILITIES ALONG SIDE OF BRIDGE, AND ANY OTHER UTILITIES, AS NEEDED.

 E. CONSTRUCT SUBSTRUCTURE, SUPERSTRUCTURE, AND NEW RCP PIPE. IN ADDITION, CONSTRUCT
 - SLEEVES FOR RCP PIPE AND 24"X9" FIBER OPTIC DUCT.
 - F. ATTACH UTLITIES TO SOUTH SIDE OF THE BRIDGE
 - G. WATERPROOF TOP SLAB.H. CONSTRUCT NEW SIDEWALK AND HMA OVERLAY.
- 2. REMOVE ALL TEMPORARY PAVEMENT MARKINGS ALONG THE BRIDGE FROM STAGE 2 AND COVER ALL CONFLICTING STRIPES AND MARKING WITH REMOVABLE BLACK LINE MASKING TAPE.
- 3. APPLY TEMPORARY PAVEMENT MARKINGS ALONG EAST HAZELWOOD AVENUE.
- 4. TRAFFIC CONTROL SIGNAGE AND DEVICE PLACEMENT SHALL CONFORM TO NEW JERSEY DEPARTMENT OF
- TRANSPORTATION TRAFFIC CONTROL STANDARD DETAILS.

 6. ONE (1) THROUGH LANE ON EASTBOUND AND WESTBOUND EAST HAZELWOOD AVENUE MUST BE
- MAINTAINED AT ALL TIMES.

 7. THE CONSTRUCTION BARRIER CURB SHALL BE EQUIPPED WITH SLOTS TO ALLOW STORMWATER RUNOFF TO
- ENTER THE EXISTING INLETS.

 8. MINIMUM LANE WIDTHS ALONG EAST HAZELWOOD AVENUE SHALL BE 11'-0".
- 9. ALL TAPER LENGTHS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL
- DEVICES, 2009 EDITION AND BASED ON A 25 M.P.H. CONSTRUCTION SPEED LIMIT.

 10. REMOVE BLACK LINE MASKING TAPE, CONSTRUCTION BARRIER CURB, AND INSTALL PERMANENT STRIPING.
- 11. COORDINATE WITH UNITED WATER TO REACTIVATE 12" WATER MAIN.

STAGE 4 CONSTRUCTION NOTES:

- 1. THE FOLLOWING WILL BE PERFORMED IN STAGE 4:
 - A. RELOCATE AND REMOVE TRAFFIC CONTROL DEVICES AS INDICATED.
 B. CONSTRUCT NEW SIDEWALK ON BRIDGE AND AS NECESSARY IN APPROACH AREAS TO
- RESTABLISH FINAL CONDITIONS.

 2. REMOVE ALL TEMPORARY PAVEMENT MARKINGS ALONG THE BRIDGE FROM STAGE 3 AND COVER ALL
- CONFLICTING STRIPES AND MARKING WITH REMOVABLE BLACK LINE MASKING TAPE.
- 3. APPLY TEMPORARY PAVEMENT MARKINGS ALONG EAST HAZELWOOD AVENUE.
 4. TRAFFIC CONTROL SIGNAGE AND DEVICE PLACEMENT SHALL CONFORM TO NEW JERSEY DEPARTMENT OF
- TRANSPORTATION TRAFFIC CONTROL STANDARD DETAILS.

 6. ONE (1) THROUGH LANE ON EASTBOUND AND WESTBOUND EAST HAZELWOOD AVENUE MUST BE
- MAINTAINED AT ALL TIMES.
- 7. THE CONSTRUCTION BARRIER CURB SHALL BE EQUIPPED WITH SLOTS TO ALLOW STORMWATER RUNOFF TO ENTER THE EXISTING INLETS.
- 8. MINIMUM LANE WIDTHS ALONG EAST HAZELWOOD AVENUE SHALL BE 11'-0".
- 9. ALL TAPER LENGTHS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION AND BASED ON A 25 M.P.H. CONSTRUCTION SPEED LIMIT.
- 10. REMOVE BLACK LINE MASKING TAPE, CONSTRUCTION BARRIER CURB, AND INSTALL PERMANENT STRIPING.

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REINFORCEMENT BAR SCHEDULE										
ARK	SIZE	TYPE	NO. REQ.	LENGTH (FT)	A	В	С	D	E	REMARKS
OTINGS		The same of the same of								
F1	#7	STR.	27	10'-9"						WINGWALL 1 TOP TRANSVERSE BAR
F2	#5	STR.	16	10'-9"						WINGWALL 1 BOTTOM TRANSVERSE BAR
F3	#7	STR.	81	13'-8"						WINGWALL 2 - 4 TOP TRANSVERSE BAR
F4	#4	STR.	48	13'-8"						WINGWALL 2 - 4 BOTTOM TRANSVERSE BAR
F5	#7	STR.	31	15'-6"					9	ABUTMENT AT WINGWALL 1 TOP & BOTTOM TRANSVERSE BAR
F6	#7	STR.	119	16'-0"						ABUTMENT AT WINGWALL 2 - 4 TOP & BOTTOM TRANSVERSE BAR
F7	#7	STR.	130	14'-8"						ABUTMENT TOP & BOTTOM TRANSVERSE BAR
F8	#4	STR.	30	18'-5 1/2"						ABUTMENT 1 TOP & BOTTOM LONGITUDINAL BAR, STAGE 1
F9	#4	STR.	30	13'-2 1/2"						ABUTMENT 2 TOP & BOTTOM LONGITUDINAL BAR, STAGE 1
F10	#4	STR.	60	10'-2"						ABUTMENT TOP & BOTTOM LONGITUDINAL. BAR, STAGE 2
F11	#4	STR.	60	15'-9 3/4"						ABUTMENT TOP & BOTTOM LONGITUDINAL. BAR, STAGE 3
F12	#4	2	84	2'-4 1/2"	0'-6"	1'-6"	0'-4 1/4"	0'-2"		135° SEISMIC HOOK BAR
D3	#4	7	120	3'-1"						DOWEL SPLICER BAR BETWEEN FOOTINGS, FEMALE END
D4	#4	8	120	3'-1"					***************************************	DOWEL IN SPLICER BAR BETWEEN FOOTINGS
BUTMENT										
A1	#6	STR.	200	11'-6"						ABUTMENT STEM VERTICAL BAR, REAR FACE
A2	#4	STR.	138	11'-0"						ABUTMENT STEM VERTICAL BAR, FRONT FACE
A3	#4	STR.	50	22'-8 1/2"						ABUTMENT STEM HORIZONTAL BAR, FRONT FACE & REAR FACE, STAGE 1
A4	#4	STR.	46	10'-2"						ABUTMENT STEM HORIZONTAL BAR, FRONT FACE & REAR FACE, STAGE 2
A5	#4	STR.	46	25'-2"						ABUTMENT STEM HORIZONTAL BAR, FRONT FACE & REAR FACE, STAGE 3
A6	#4	3	8	8'-0"	1'-0"	2'-6"				STIRRUP, ABUTMENT CORNER
A7	#4	3	48	11'-0"	2'-6"	2'-0"				STIRRUP, ABUTMENT CORNER
A8	#5	STR.	24	12'-0 3/8"						ABUTMENT CORNER, VERTICAL BAR
A9	#5	STR.	20	11'-0"						ABUTMENT CORNER, VERTICAL BAR
D1	#6	1	275	7'-0"	4'-7"	0'-8"	0'-4 1/2"	0'-6"		DOWEL BAR, REAR FACE
D2	#4	1	193	5'-8"	2'-11"	0'-6"	0'-3"	0'-4"		DOWEL BAR, FRONT FACE
D5	#4	7	72	1'-9"		"	"			DOWEL SPLICER BAR BETWEEN STEM SECTIONS, FEMALE END
D6	#4	8	72	1'-9"						DOWEL IN SPLICER BAR BETWEEN STEM SECTIONS
D7	#5	1	48	6'-5"	5'-10"	0'-7"	0'-3 3/4"	0'-5"		DOWEL AT ABUTMENT CORNER
INGWALLS							0 0 0 4			
W1	#6	STR.	75	12'-0 1/4"						WINGWALL VERTICAL BAR, REAR FACE
W2	#4	STR.	55	12'-0 1/4"						WINGWALL VERTICAL BAR, FRONT FACE
W3	#4	STR.	100	11'-5 1/2"						WINGWALL HORIZONTAL BAR, FRONT FACE AND REAR FACE
W4	#4	4	13	4'-9"	2'-9"	2'-0"				WINGWALL CORNER BAR
W5	#4	1	13	7'-9"	4'-2"	3'-7"				WINGWALL CORNER BAR
	ND SIDEWALI				1 7-2					TWING VALE CONTROL BAN
PP1	#5	5	112 T	12'-2"	5'-9"	T 0'-8"				PARAPET VERTICAL STIRRUP OVER WINGWALL
PP2	#4	STR.	40	13'-0"	3-5	0-0				PARAPET HORIZONTAL BAR OVER WINGWALL
PP3	#5	8	64	3'-7"						PARAPET OVER SLAB, VERTICAL DOWEL IN BARS
PP4	#4	STR.	20	8'-8"						PARAPET OVER SLAB, VERTIOAE DOWLETIN BARS
	#5	5 IN.	32	5'-3"	2'-0"	0'-7 1/2"			***************************************	PARAPET STIRRUP
PP5 PP6	#3	10	20	1'-8"	1'-0"	0-7 1/2	4 1/2"	0'-6"		HOOK FEMALE DOWEL SPLICER BAR TO SIDEWALK
			20				4 1/2	0-6		STIRRUP AT PLAQUE SUPPEORT
PP7	#4	3 CTD	2	4'-11"	1'-1"	0'-11"				
PP8	#4	STR.		1'-5"						HORIZONTAL BAR AT PLAQUE SUPPORT
SS1	#4	8	10	10'-7 1/2" 10'-9"						DOWEL IN BAR, SIDEWALK 1 DOWEL IN BAR, SIDEWALK 2
SS2	#4	8 CTD	10							
SS3	#4	STR.	18	8'-8"	411	41.00				HORIZONTAL BAR IN SIDEWALK
SS4	#4	9	20	1'-7"	4"	1'-3"				DOWEL IN BAR, SIDEWALK
DS1	#5	6	40	1'-5"	5"	1'-0"				FEMALE DOWEL BAR IN PRECAST SLAB FOR PARAPET
DS2	#4	6	20	1'-2"	4"	0'-10"				FEMALE DOWEL BAR IN PRECAST SLAB FOR PARAPET

REINFORCEMENT BAR SCHEDULE

