



CITY OF CAMDEN

BID 24-13 – CAMDEN CITY PARKS – FACILITIES IMPROVEMENTS

ADDENDUM #2

The attention of all bidders is directed to the following addendum to the Contract Documents for the above-referenced project. The Addendum No. 2 is hereby made part of the Contract Documents. All provisions of the Contract Documents not affected by this Addendum shall remain in full force and effect. Vendor to acknowledge addendum via the e-procurement software, BidsandTenders.net.

I. **BID OPENING DATE**

1. The Bid opening scheduled for Tuesday, October 1, 2024 @ 11:00 am has been extended to Thursday, October 10, 2024 @ 11:00 am in City Council Chambers, 2nd Floor, City Hall, Sixth and Market Streets, Camden, New Jersey

This **Addendum No. 2**, dated, September 26, 2024, has been issued by order of the City of Camden's Purchasing Agent.

Lateefah Chandler
Purchasing Agent



CITY OF CAMDEN

BID 24-13 – CAMDEN CITY PARKS – FACILITIES IMPROVEMENTS

ADDENDUM #1

The attention of all bidders is directed to the following addendum to the Contract Documents for the above-referenced project. The Addendum No. 1 is hereby made part of the Contract Documents. All provisions of the Contract Documents not affected by this Addendum shall remain in full force and effect. Vendor to acknowledge addendum via the e-procurement software, BidsandTenders.net.

I. **BID OPENING DATE**

1. The Bid opening scheduled for Thursday, September 19, 2024 @ 11:00 am has been extended to Tuesday, October 1, 2024 @ 11:00 am in City Council Chambers, 2nd Floor, City Hall, Sixth and Market Streets, Camden, New Jersey
2. The Question deadline has been changed to Friday, September 20, 2024 by 9:00am.

This **Addendum No. 1**, dated, September 10, 2024, has been issued by order of the City of Camden's Purchasing Agent.

Lateefah Chandler
Purchasing Agent

Project Manual

City of Camden

Various City Owned Parks

Contract No. COCMX23006

Camden County, NJ

Owner:

City of Camden
520 Market Street
Camden, New Jersey 08102-1375

Project Manual
COCMX23006
August 29, 2024



Joseph J. Raday, PE, CME
Professional Engineer: New Jersey – No. GE43768



ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES 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 OR ON ANYOTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

**CITY OF CAMDEN
ADVERTISEMENT OF BID**

BY VIRTUE of the power of the City of Camden, the Purchasing Agent is hereby authorized to receive electronic Bid Submissions on September 19, 2024 @ 11:00 a.m. via the City's E-Procurement Portal, Bids&Tenders. Only electronic bids shall be accepted for:

BID #24-13

CAMDEN CITY PARKS – FACILITY IMPROVEMENTS
26TH & HOWELL PARK, BRADLEY AVENUE PARK, NORTHGATE PARK,
RALPH WILLIAMS PARK, WHITMAN SQUARE PARK, & YORKSHIP
SQUARE PARK

SPECIFICATIONS, Drawings, Contract Documents may be obtained via the City's Bidding System, Bids&Tenders at <https://camden.bidsandtenders.net/Module/Tenders/en>. Bids must be submitted electronically through this platform before the designated date and time of the opening. No Bidder may submit more than one bid. Any bid received after 11:00 am shall not be accepted in the Bids&Tenders system.

The City will open the bid at 11:00 am on September 19, 2024 in City Council Chambers, Second Floor, City Hall, 520 Market Street, Camden, New Jersey. Bidders can log in to their registered account at this time for the bid results.

Each bid must be accompanied by Certified Check, Cashier's Check or Bid Bond to the order of the City of Camden, in the amount equal to ten percent (10%) of the sum of the bid but not in excess of \$20,000.00 together with a non-collusion affidavit. Bid Bonds may be submitted electronically via a digital bond confirmation uploaded within the Bids&Tenders solicitation or paper bid bond uploaded in the document section within the Bids&Tenders solicitation. Paper bid bonds, certified checks or cashier's checks payable to the City of Camden may be mailed or dropped off in a sealed envelope bearing the name and address of the bidder and contract description on the outside to: Purchasing Agent C/O City Clerk, City of Camden City Hall, Room 105, Sixth and Market Streets, Camden, New Jersey. Regardless of the method of submission, bid bond must be received by Purchasing prior to the bid opening.

The Bidder to whom the City of Camden proposes to award the Contract will be required to furnish Performance, Maintenance and Payment Bonds and the necessary insurance certificates as prescribed in the specifications upon the execution of the Contract.

Bidders must submit complete and detailed specifications of the product or service, which Bidder proposes to supply.

The right to reject all bids pursuant to N.J.S.A. 40A:11-13.2 and to award the contract to the lowest responsive, responsible bidder in accordance with applicable law is expressly reserved by the authority of the City Council of the City of Camden.

In order to perform public work, the Successful Bidder and Subcontractors prior to contract award shall hold or obtain such licenses as required by State Statutes, and federal and local Laws and Regulations.

The Bidder must produce current “Certificates of Registration” from the New Jersey Department of Labor and Workforce Development for itself and each of its subcontractors.

The attention of Bidders is particularly called to the requirements as to the conditions of employment to be observed and the minimum wage rates to be paid under the contracts as determined by the New Jersey Department of Labor and Workforce Development (N.J.S.A. 34:11-56.25 et seq.) and/or with the provisions of the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”).

Bidders are also required to comply with the requirements of Affirmative Action Regulation of N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127) and Affirmative Action Compliance NJAC 17:27-1 et seq.

Any questions concerning technical issues with the City’s Bids&Tenders electronic bidding system contact support@bidsandtenders.ca.

Lateefah Chandler
Purchasing Agent

September 9, 2024

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- WAGE RATES (N.J. DEPARTMENT OF LABOR AND INDUSTRY)
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BIDDER'S CHECK LIST

Each bidder is reminded that every proposal must be submitted by the published date and time. For construction bids, failure to submit the checklist is a fatal defect and the bid will be rejected. This document serves only as a guide to bidders of the documents that are required to be submitted/uploaded with the bid.

Items submitted/uploaded with bid
(Bidder's **INITIALS**)



- _____ 1. P.L. 1999 Chapter 238 N.J.S.A. 40A-11-16 – Proof of “Public Works Contractor Certificate of Registration” Bidder and Designated Subcontractors - Prior to award, but effective at time of bid (**if applicable**)*
- _____ 2. **Bid Guarantee (if applicable)***
- _____ 3. **Bid Bond, Digital Bid Bond, Certified Check or Cashier's Check (if applicable)***
- _____ 4. **Certificate from a surety company (Consent of Surety) (if applicable)***
- _____ 5. **Statement of Ownership Disclosure***
- _____ 6. Non-Collusion Affidavit*
- _____ 7. Certification of Bidder Regarding Non-Discrimination**
- _____ 8. Copy of N.J. Business Registration Certificate – Bidder**
- _____ 9. Copy of N.J. Business Registration Certificate – Designated Subcontractor(s)**
- _____ 10. Right to Extend Award*
- _____ 11. Equipment Certification*
- _____ 12. State of New Jersey Debarred List and Ethics Complaint Affidavit**
- _____ 13. Certification Of Non-Involvement In Prohibited Activities In Russia Or Belarus**
- _____ 14. Federal Non-Debarment Certification**
- _____ 15. Disclosure of Investment Activities in Iran**
- _____ 16. Evidence of Insurance Certificate**

____ 17. Lowest Bidder Prevailing Wage Certification**

____ 18. Affirmative Action Questionnaire**

The City prefers to have all of the requested documents submitted. However, items that are MANDATORY SUBMISSION with proposal are denoted with an *. Items that are Mandatory Submission Before Contract Award are denoted with two **.

PRINT NAME OF BIDDER: _____

SIGNED BY: _____

PRINT NAME AND TITLE: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

TELEPHONE NUMBER: _____

EMAIL ADDRESS: _____

DATE _____

**THIS CHECKLIST SHOULD BE INITIALED AND SIGNED WHERE
INDICATED AND RETURNED WITH ALL ITEMS**

I. SUBMISSION OF BIDS

- A. Bidders may edit or withdraw their Bid Submission prior to the closing date and time. However, the bidder is solely responsible to ensure the re-submitted bid is received by the Bidding System no later than the stated closing date and time. Once bids have been opened, they must remain firm for a period of sixty (60) calendar days.
- B. Bidder shall complete and sign the Bidder's Checklist and include it in the bid submission. For construction bids, failure to submit the checklist may be a fatal defect and cause the bid to be rejected. This document serves as a guide to bidders of the documents that are required to be uploaded within the City's Bids&Tenders Bidding System.
- C. All prices and amounts must be provided for in the Bid Proposal Form in the City's Bids&Tenders Bidding System. Bids containing any conditions, omissions, unexplained erasures or alterations, items not called for in the bid proposal form, attachment of additive information not required by the specifications or irregularities of any kind may be rejected by the City in accordance with applicable law.
- D. Each bid proposal form must give the full business address, business phone, fax, e-mail, the contact person of the bidder and be signed by an authorized representative. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and designation of the person signing. Bids by corporations must be signed in the legal name of the corporation, followed by the name of the state in which incorporated and must contain the signature and designation of the president, secretary or other person authorized to bind the corporation in the matter. Bids by sole-proprietorship shall be signed by the proprietor. When requested, satisfactory evidence of the authority of the officer signing shall be furnished.
- E. Bidders must insert prices for furnishing all of the materials and/or labor required by these specifications. Prices shall be net, including any charges for packing, crating, containers, etc. All transportation charges shall be fully prepaid by the contractor F.O.B. destination and placement at locations specified by the City. As specified, placement may require inside deliveries.

No additional charges will be allowed for any transportation costs resulting from partial shipments made at the contractor's convenience.

- F. The vendor shall guarantee any or all materials and services supplied under these specifications. Defective or inferior items shall be replaced at the expense of the vendor. In case of rejected materials, the vendor will be responsible for return freight charges.
- G. Bidder should be aware of the following statutes that represent “Truth in Contracting” laws:
- N.J.S.A. 2C:21-34, et seq. governs false claims and representations by bidders. It is a serious crime for the bidder to knowingly submit a false claim and/or knowingly make material misrepresentation;
 - N.J.S.A. 2C:27-10 provides that a public servant commits a crime if said public servant solicits or receives a benefit directly or indirectly, for an official act performed or to be performed by a public servant, which is a violation of official duty;
 - N.J.S.A. 2C:27-11 provides that a bidder commits a crime if said person directly or indirectly, confers or agrees to confer any benefit not allowed by law to a public servant;
 - Bidders should consult the statutes or legal counsel for further information

II. BID SECURITY

The following provisions if indicated by an (X), shall be applicable to this bid and be made a part of the bidding documents:

A. (X) BID GUARANTEE

Bidder shall submit with the bid a bid bond in the amount of ten percent (10%) of the total price bid, but not to excess of \$20,000.00 payable unconditionally to the City. When submitting a Bid Bond, it shall contain valid Power of Attorney authorizing the Attorney-in-Fact to execute the documents for the full amount of Bid Bond from a Surety Company authorized to do business in the State of New Jersey and acceptable to the City. The bond of the unsuccessful bidder(s) shall be voided as prescribed by law. The bond of the bidder to whom the contract is awarded shall be retained until a contract is executed and the required performance bond or other security is submitted. The bond of the successful bidder shall be forfeited if the bidder fails to enter into a contract pursuant to N.J.S.A. 40A:11-21.

Failure to submit this with the bid shall be cause for rejection of the bid.

B. (X) CONSENT OF SURETY

Bidder shall submit with the bid a Certificate (Consent of Surety) with valid Power of Attorney authorizing the Attorney-in-Fact to execute the documents for the full amount of bid price from a Surety Company authorized to do business in the State of New Jersey and acceptable to the City stating that it will provide said bidder with a Performance and Payment Bonds in the full amount of the bid.

This certificate shall be obtained in order to confirm that the bidder to whom the contract is awarded will furnish Performance, Payment Bonds, and all other requested bonds from an acceptable surety company on behalf of said bidder, any or all subcontractors or by each respective subcontractor or by any combination thereof which results in performance security equal to the total amount of the contract, pursuant to N.J.S.A. 40A:11-22.

Failure to submit this with the bid shall be cause for rejection of the bid

C. (X) PERFORMANCE BOND

Successful bidder shall simultaneously with the delivery of the executed contract, submit an executed performance bond in the amount of one hundred percent (100%) of the acceptable bid as security for the faithful performance of this contract.

The surety on such bond or bonds shall be a duly authorized surety company authorized to do business in the State of New Jersey pursuant to N.J.S.A. 17:31-5. For multi-year contracts, the Performance Bond may be resubmitted each year on the Contract Anniversary Date for the amount remaining on the contract.

Failure to deliver this with the executed contract shall be cause for declaring the contract null and void pursuant to N.J.S.A 40A:11-22

D. (X) LABOR AND MATERIAL (PAYMENT) BOND

Successful bidder shall with the delivery of the performance bond submit an executed payment bond to guarantee payment to laborers and suppliers for the labor and material used in the work performed under the contract.

Failure to deliver this with the performance bond shall be cause for declaring the contract null and void.

E. (X) MAINTENANCE BOND

Successful bidder shall upon acceptance of the work submit a maintenance bond in the amount of one hundred percent (100%) guaranteeing against defective quality of work or materials for the period of 2 years

The performance bond provided shall not be released until final acceptance of the whole work and then only if any liens or claims have been satisfied and any maintenance bonds required have been executed and approved by the City.

The surety on such bond or bonds shall be a duly authorized surety company authorized to do business in the State of New Jersey, N.J.S.A. 17:31-5.

III. SUBMISSION REQUIREMENTS

The City will open the bid per information provided on the cover page in City Council Chambers, Second Floor, City Hall, 520 Market Street, Camden, New Jersey. Bidders can log in to their registered account at this time for the bid results.

IV. INTERPRETATION AND ADDENDA

- A. The bidder understands and agrees that its bid is submitted on the basis of the specifications prepared by the City. The bidder accepts the obligation to become familiar with these specifications.

Potential respondents are cautioned that they are responding at their own risk if a third party supplied the specifications that may or may not be complete. The City is not responsible for third party supplied documents. Respondents are urged to create a Bidding System Vendor account and register as a Plan taker for the bid opportunity.

- B. Bidders are expected to examine the specifications and observe all their requirements. Ambiguities, errors or omissions noted by bidders should be promptly reported in writing to the appropriate official. Any prospective bidder who wishes to challenge a bid specification shall file such challenges in writing with the contracting agent no less than three (3) business days prior to the opening of the bids. Challenges filed after that time shall be considered void and have no impact on the contracting unit or the award of a contract pursuant to N.J.S.A. 40A:11-13. In the event, the bidder fails to notify the City of such ambiguities, errors or omissions, the bidder shall be bound by the bid.

- C. Exceptions to Specifications

If the bidder's specifications for furnishing products or equipment are in any respect not the equivalent of the detailed City specifications, this discrepancy must specifically be called to the attention of the City in the bidder's proposal.

The City shall review the exceptions, if any, as noted and the reasons for those exceptions, and reserve the right to either reject or accept the exceptions and reasons as noted, it proves to be in the best interest of the City to do so.

- D. No oral interpretation of the meaning of the specifications will be made to any bidder. Questions related to this bid are to be submitted to the Purchasing Representative through the Bidding System only by clicking on the “Submit a Question” button for this specific bid opportunity. In order to be given consideration, written requests for interpretation must be received by the date specified in the bid opportunity. Any and all such interpretations and any supplemental instructions may be in the form of a written addenda to the specifications, and will be distributed to all prospective bidders, in accordance with **N.J.S.A. 40A:11-23c-2.3**. Bidders shall acknowledge receipt of any addenda through the Bidding System by checking a box for each addenda and any applicable attachment. The City's interpretations or corrections thereof shall be final.

It is the responsibility of the Bidder to have received all Addenda that are issued. Bidders should check online at <https://camden.bidsandtenders.net> prior to submitting their Bid and up until the Bid closing time and date in the event additional addendum are issued.

If a Bidder submits their Bid prior to the Bid closing time and date and an addenda have been issued, the Bidding System shall WITHDRAW the Bid submission and the Bid status will change to an INCOMPLETE STATUS and Withdraw the Bid. Bidders can view the status change in the “MY BIDS” section of the Bidding System.

The Bidder is solely responsible to:

- Make required adjustments to their Bid; and
- **Acknowledge the addenda;** and
- Ensure the re-submitted Bid is RECEIVED by the Bidding System no later than the stated bid closing time and date

- E. Discrepancies in Bids

1. If the amount shown in words and its equivalent in figures do not agree, the written words shall be binding. Ditto marks are not considered writing or printing and shall not be used.

2. In the event that there is a discrepancy between the unit prices and the extended totals, the unit prices shall prevail. In the event, there is an error of the summation of the extended totals; the computation by the City of the extended totals shall govern.
3. In the event that there is a discrepancy between the advertisement, as published, and the City supplied bid documents, the bid documents shall govern.

F. Recommended Pre-Bid Conference

If applicable, as stated in the advertisement for bid. Attendance is not mandatory, but is strongly recommended. Failure to attend does not relieve the bidder of any obligations or requirements.

V. BRAND NAMES, PATENTS & STANDARDS OF QUALITY

- A. Brand names and/or descriptions used in this are to acquaint bidders with the type of commodity desired and will be used as a standard by which alternate or competitive materials offered will be judged. Competitive items must be equal to the standard described and be of the same quality of work. Variations between materials described and the materials offered are to be fully identified and described by the bidder on a separate sheet and submitted with the bid proposal form.

It is the responsibility of the bidder to demonstrate the equivalency of an item(s) offered. The City reserves the right to evaluate equivalency of an item(s), which in its deliberations meets its requirements. Failure to submit such documentation shall be grounds for rejection of the claim of equivalence. Vendor's literatures WILL NOT suffice in explaining exceptions to these specifications.

In the absence of any changes by the bidder, it will be presumed and required that materials as described in the proposal be delivered.

V. **BRAND NAMES, PATENTS & STANDARDS OF QUALITY**

- B. Brand names and/or descriptions used in this are to acquaint bidders with the type of commodity desired and will be used as a standard by which alternate or competitive materials offered will be judged. Competitive items must be equal to the standard described and be of the same quality of work. Variations between materials described and the materials offered are to be fully identified and described by the bidder on a separate sheet and submitted with the bid proposal form.

It is the responsibility of the bidder to demonstrate the equivalency of an item(s) offered. The City reserves the right to evaluate equivalency of an item(s), which in its deliberations meets its requirements. Failure to submit such documentation shall be grounds for rejection of the claim of equivalence. Vendor's literatures WILL NOT suffice in explaining exceptions to these specifications.

In the absence of any changes by the bidder, it will be presumed and required that materials as described in the proposal be delivered.

- B. In submitting its bid, the bidders certifies that the merchandise to be furnished will not infringe upon any valid patent or trademark and that the successful bidder shall, at its own expense defend any and all actions or suits charging such infringement and will save the City harmless from any damages resulting from such infringement.
- C. Only manufactured and farm products of the United States, wherever available, shall be used on this contract pursuant to N.J.S.A. 40A:11-18.
- D. Wherever practical and economical to the OWNER, it is desired that recycled or recyclable products be provided. Please indicate when recycled products are being offered.
- E. In the event of a public emergency declared at the local, state or federal level prior to the expiration of the contract, if the owner opts to extend terms and conditions of the contract, the contractor agrees to extend the terms and conditions of this specification, whether existing or expiring for no longer than six months, for goods and/or services for the duration of the emergency. In the event the original contractor cannot meet this requirement, the City may solicit the goods and/or services from any respondent of this contract.

VI. INSURANCE & INDEMNIFICATION

- A. Insurance Requirements (see Certificate of Insurance Guidelines 2024)
- B. Certificates of the Required Insurance

Certificates as listed above shall be submitted prior to or along with the contract as evidence covering insurance amounts listed in the City of Camden's Certificate of Insurance Guidelines 2024. Such coverage shall be with an insurance company authorized to do business in the State of New Jersey and shall name *the City of Camden, all elected and appointed officials, employees, and volunteers* as an additional insured. It must be an insurer with a Best's rating of no less than "A" indicated compliance with the required coverages. The bidder/vendor must notify the City of Camden immediately of any material change in insurance coverage such as changes in limits, coverages, status of policy, etc. The City of Camden reserves the right to require complete copies of insurance policies at all times. Certificates for Worker's Compensation and Employer's Liability Insurance shall also be submitted.

Self-insured contractors shall submit an affidavit attesting to their self-insured coverage and shall name the owner as additional insured

- C. Indemnification

Successful bidder will indemnify and hold harmless the City of Camden, all elected and appointed officials, employees, and volunteers from all claims, suits or actions and damages or costs of every name and description to which the City may be subjected or put by reason of injury to the person or property of another, or the property of the City, resulting from negligent acts or omissions on the part of the bidder, the bidder's agents, servants or subcontractors in the delivery of materials and supplies, or in the performance of the work under this agreement; the use of any copyrighted or copyrighted composition, valid trademark, secret process, patented or unpatented invention or article furnished or used in the performance of this contract

- D. Additional Insured Status

The City of Camden, all elected and appointed officials, employees, and volunteers shall be listed as additional insured for liability arising out of activities performed by or on behalf of the bidder/vendor. This can be achieved by providing: The following language on the face of the insurance certificate *“The City of Camden, all elected and appointed officials, employees, and volunteers are included as additional insured”* or Provide the City with a copy of the Additional Insured Board Endorsement Form.

VII. PREPARATION OF BIDS

- A. The City is exempt from any local, state or federal sales, use or excise tax.
- B. Estimated Quantities (Open-End Contracts)

The City has attempted to identify the item(s) and the estimated amounts of each item bid to cover its requirements; however, past experience shows that the actual amount ordered differs than that submitted for bidding. The City reserves the right to decrease or increase the quantities specified in the specifications pursuant to N.J.A.C. 5:30-11.2 and 11.10.

NO MINIMUM PURCHASE IS IMPLIED OR GUARANTEED.

- C. Successful bidder shall be responsible for obtaining any applicable permits or licenses from any government entity that has jurisdiction to require the same. All bids submitted shall include this cost in the bid price agreement.

VIII. STATUTORY AND OTHER REQUIREMENTS

- A. Prompt Payment of Construction and Goods and Services Contracts

N.J.S.A 2A:30A-2 (P.L. 2006, c.96) known as the “Prompt Payment” Law, Chapter 96 establishes timing standards for the payment of bills by both public and private sector organizations for a wide range of construction-related contractors.

N.J.S.A. 40A: 11-19.1 (P.L. 2018, c.127) establishes a prompt payment requirement that applies to goods and services contracts a contracting unit awards to a “business concern” under the Local Public Contracts Law (LPCL).

B. Compliance with Laws

Any contract entered into between the contractor and the City must be in accordance with and subject to compliance by both parties with the New Jersey Local Public Contracts Law. The contractor must agree to comply with the non-discrimination provisions and all other laws and regulations applicable to the performance of services there under. The respondent shall sign and acknowledge such forms and certificates as may be required by this section.

C. Public Emergency

In the event of a Public Emergency declared at the Local, State or Federal Level, if the City opts to extend terms and conditions of this BID, the contractor agrees to extend the terms and conditions of this BID, whether existing, expiring or expired no longer than six months, for construction, goods and/or services for the duration of the emergency. In the event the original contractor cannot meet this requirement, the City may solicit the construction, goods and/or services from any respondent to this contract.

D. Non-Allocation of Funding Termination

Each calendar year payment obligation of the City is conditioned upon the availability of City funds appropriated or allocated for the payment of such an obligation. If funds are not allocated and available for the continuance of any services performed by the Contractor hereunder, whether in whole or in part, the City at the end of any particular calendar/fiscal year may terminate such services. The City will notify the Contractor in writing immediately of any services that will be affected by a shortage of appropriated funds. This provision shall not be construed so as to permit the City to terminate this Agreement during the term, or any service hereunder, merely in order to acquire identical services from a third party contractor.

E. Mandatory Affirmative Action Certification

No firm may be issued a contract unless it complies with the affirmative action regulations of N.J.S.A. 10:5-31 et seq. (P.L. 1975, c.127) and N.J.A.C. 17:27-1 et seq. as administered by the Division of Purchase & Property Contract Compliance and Audit Unit (Division) and/or Department

of Labor & Workforce Development provided below. The contract will include the language included in this specification.

1. Goods, Professional and Service Contracts

All successful vendors must submit, within seven days after the receipt of the notice of intent to award the contract or the receipt of the contract, one of the following:

- i. A photocopy of a valid letter for an approved Federal Affirmative Action Plan (good for one year from the date of the letter), or
- ii. A photocopy of an approved Certificate of Employee Information Report, or
- iii. If the vendor has none of the above, the public agency is required to provide the vendor with an initial Affirmative Action Employee Information Report (AA-302).

2. Construction Contracts

All successful contractors must submit within three days of the signing of the contract an Initial Project Manning Report (AA-201-available upon request from the State's Affirmative Action Office) for any contract award that meets or exceeds the bidding threshold.

3. Construction & Demolition Contracts

All signs shall be removed at the time the job is completed. This requirement is a condition precedent to receipt of final payment.

1. Construction Requirements

Contractor shall fulfill all requirements imposed by the State of New Jersey and Federal governments on expenditures, grants, and other uses of money derived by the CITY from the State of New Jersey and the Federal governments. The contractor shall comply with all applicable laws, ordinances, and codes of the City of Camden.

F. Americans with Disabilities Act of 1990

Discrimination on the basis of disability in contracting for the purchase of bids and services is prohibited. The successful bidder is required to read Americans with Disabilities language that is part of this specification and agrees that the provisions of Title II of the Act are made a part of the contract. The successful bidder is obligated to comply with the Act and to hold the City harmless.

G. New Jersey Anti-Discrimination

The contract for this bid shall require that the contractor agrees not to discriminate in employment and agrees to abide by all anti-discrimination laws including but not limited to N.J.S.A. 10:2-1.

H. Prevailing Wage Act (When Applicable)

Pursuant to N.J.S.A. 34:11-56.25, et seq., successful bidders on projects for public work shall adhere to all requirements of the New Jersey Prevailing Wage Act. The contractor shall be required to submit a certified payroll record to the City within ten (10) days of the payment of the wages. In the event it is found that any worker, employed by the contractor or any subcontractor has been paid a rate of wages less than the prevailing wage required to be paid, the owner may terminate the contractor's or subcontractor's right to proceed with the work, or such part of the work as to which there has been a failure to pay required wages and the contractor and subcontractor is then required to continue the work to completion or otherwise.

The contractor is also responsible for obtaining and submitting all subcontractors' certified payroll records within the aforementioned time period. The contractor shall submit said certified payroll records in the form set forth in N.J.A.C. 12:60-6.1(c). It will be the contractor's responsibility to obtain any additional copies of the certified payroll form to be submitted by contacting the New Jersey Department of Labor and Workforce Development, Division of Wage & Hour Compliance.

P.L. 2021, c. 301 requires a contractor submitting the lowest bid for a contract that is subject to the Prevailing Wage Act, if that bid is 10 percent or more lower than the next lowest bid, to certify to the public body that the prevailing wage rates required by the Act shall be paid. If the bidder does

not provide the certification prior to the award of the contract, the public body shall award the contract to the next lowest responsible and responsive bidder. Further, P.L. 2021, c. 301 also amended N.J.S.A. 34:11-56.27 to require that any contract for public work expressly stipulate that workers performing work under the contract shall not be paid less than the required prevailing wage rate. Contractors and their sureties shall be liable to the public body, any lessee to whom the public body is leasing a property or premises or to any lessor from whom the public body is leasing or will be leasing a property or premises, for any excess costs occasioned by the termination of their right to proceed with the work, or such part of the work as to which there has been a failure to pay required wages.

The current Camden County prevailing wage rate(s) to be utilized can be found at the following website:

<https://www.nj.gov/labor/wageandhour/prevaling-rates/public-works/index.shtml>

I. Statement of Ownership Disclosure Form

N.J.S.A. 52:25-24.2 provide that no business organization, regardless of form of ownership shall be awarded any contract for the performance of any work or the furnishing of any goods and services, unless, **prior to the receipt of the bid or accompanying the bid** of said business organization, bidders shall submit a statement setting forth the names and addresses of all persons and entities that own ten percent (10%) or more of its stock or interest of any type at all levels of ownership. The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the ten percent ownership, has been listed.

The included Statement of Ownership shall be completed and attached to the bid proposal. This requirement applies to all forms of business organizations, including, but not limited to, corporations and partnerships, publicly-owned corporations, limited partnerships, limited liability corporations, limited liability partnerships, sole proprietorship, and Subchapter S corporations. Failure to submit a disclosure document shall result in rejection of the bid as it cannot be remedied after bids have been opened.

Not-for-profit entities should fill in their name, check the not-for-profit box, and certify the form. No other information is necessary.

J. NJ Election Law Enforcement Commission (ELEC)

Contractors are advised of their responsibility to file an annual disclosure statement on political contributions with the New Jersey Election Law Enforcement Commission (“ELEC”) pursuant to N.J.S.A. 19:44A-20.26-20.27 (P.L. 2005, c.271, s.3) if a Contractor receives contracts in excess of \$50,000 from public entities in a calendar year. It is a Contractor’s responsibility to determine if filing is necessary. Additional information on this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

K. The New Jersey Worker and Community Right to Know Act (N.J.S.A. 34:5A-1 et seq., and N.J.A.C 8:59-1.1 et seq.)

The manufacturer or supplier of a chemical substance or mixture shall label them in accordance with N.J.S.A. 34:5A-1 et seq., and N.J.A.C 8:59-1.1 et seq. All direct use containers shall bear a label indicating the chemical name(s), and the Chemical Abstracts Service number(s) of all hazardous substances in the container, and all other substances which are among the five most predominant substances in the container or their trade secret registry number(s) pursuant to N.J.A.C. 8:59-5. Further all applicable Material Safety Data Sheets (MSDS) - hazardous substance fact sheet -- must be furnished. All containers which are stored on site or in a City facility by the contractor or subcontractor shall display RTK labeling. Any questions regarding labeling, contact NJ Department of Health EOHAP.

L. Non-Collusion Affidavit

The Non-Collusion Affidavit, which is part of these specifications, shall be properly executed and submitted/uploaded with the bid proposal via the City’s Bidding System. The vendor has to certify that it has not directly or indirectly, entered into any agreement, participated in any collusion, discussed any or all parts of this bid with any potential vendors, or otherwise taken any action in restraint of free, competitive procurement in connection with the above named bid, and that all statements contained in said Bid and in this affidavit are true and correct, and made with full knowledge that the City of Camden relies upon the truth of the statements contained in said Bid and in the statements contained in this affidavit in awarding the contract for the said bid.

M. Proof of Business Registration

All New Jersey and out of state business organizations **must obtain** a Business Registration Certificate (BRC) from the Department of Treasury, Division of Revenue and Enterprise Services, prior to bid submission or conducting business in the State of New Jersey. The City recommends uploading this certificate via the City's Bidding System.

N. The Public Works Contractor Registration Act

N.J.S.A. 34:11-56.48 et seq. requires that a general or prime contractor and any listed subcontractors named in the contractor's bid proposal shall possess a certificate at the time the bid proposal is submitted. After bid proposals are received and prior to award of contract, the successful contractor shall submit a copy of the contractor's certification along with those of all listed subcontractors. All non-listed subcontractors and lower tier sub-subcontractors shall be registered prior to starting work on the project. It is the general contractor's responsibility that all non-listed subcontractors at any tier have their certificate prior to starting work on the job. No contractor/subcontractor will be permitted to bid on or engage in any contract for public work, as defined in N.J.S.A. 34:11-56.2 et. seq. unless that contractor/subcontractor is registered with the NJDOL. It applies to contractors/subcontractors based in New Jersey or in another state. 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 requirement.

Therefore, all contractors are required to be registered and should submit a copy of their New Jersey Department of Labor & Workforce Development Public Works Contractor "Registration Certificate" with their bid. Any contractor not in possession of such a certificate will not be permitted to bid or engage in a contract. The City recommends uploading this certificate via the City's Bidding System.

The following link provides a list of firms and individuals that have been debarred in accordance with the provisions of the New Jersey Prevailing Wage Act from engaging in or bidding on Public Works Contracts in New Jersey. Ensure neither your company nor your subcontractors are on this list before submitting:

<https://www.nj.gov/labor/wageandhour/registration-permits/register/debarmentlist.shtml>

O. Workplace Accountability in Labor List (WALL)

N.J.S.A. 34:1A-1.16(a)), any “person” in violation of State wage, benefit and tax laws, and with outstanding liabilities to NJDOL, may be named on the WALL. The law defines “person” as “any natural person, company corporate officer or principal, firm, association, corporation, contractor, subcontractor or other entity engaged in contracting.” The WALL is a list on NJDOL’s website of businesses that have been found in violation of New Jersey State wage, benefit and tax laws and have outstanding liabilities to NJDOL under a final order/judgment. **Any business whose name appears on the WALL is prohibited from public contracting.**

Ensure neither your company nor your subcontractors are on this list:

<https://www.nj.gov/labor/ea/osec/wall.shtml>

P. Listing of Subcontractors

P.L 1997, c408 that amended the Local Public Contracts Law at N.J.S.A. 40A-11-16, The amendment established a requirement relating to the submission of construction bids, when the single prime contracting model is used, i.e., where all the work and materials required to complete the project are to be included in a single overall contract.

The law requires that, for single prime contracting bids, bidders that propose using more than one subcontractor for any of the four specialized “sub-prime” categories must submit a certificate with their bids listing each subcontractor named in the bid for that category. Specifically, “the certificate shall set forth the scope of work for which the subcontractor has submitted a price quote and which the bidder has agreed to award to each subcontractor, should the bidder be awarded the contract.”

Q. Maintenance of Documents

Pursuant to N.J.A.C. 17:44-2.2, the City of Camden shall maintain all documentation related to products, transactions or services under this contract for a period of five years from the date of final payment. Such records shall be made available to the New Jersey Office of the State Comptroller upon request.

R. Open Public Records Act (OPRA)

All documents/information, except for OPRA's Exemptions from Disclosure, submitted in response to this solicitation shall be available to the general public as required by the New Jersey Open Public Records Act N.J.S.A. 47:1A-1 et seq.

S. Disclosure of Investment Activities in Iran

Pursuant to N.J.S.A. 40A:11-2.1; N.J.S.A. 52:32-58 any person or entity that is a successful bidder or proposer, or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list is found at: <http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Bidders must review this List prior to completing the below certification. Failure to complete the certification may render a bidder's proposal non-responsive. If the Director finds a person or entity to be in violation of law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

T. Certification of Non-Involvement in Prohibited Activities in Russia or Belarus

Pursuant to N.J.S.A. 52:32-60.1, et seq. and N.J.S.A.40A:11-2.2 (L. 2022, c. 3) any person or entity (hereinafter "Vendor") that seeks to enter into or renew a contract with a local contracting unit subject to the Local Public Contracts Law for the provision of goods or services, or the purchase of bonds or other obligations, must complete the certification below indicating whether or not the Vendor is identified on the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, available here: <https://sanctionssearch.ofac.treas.gov/>. If the Department of the Treasury finds that a Vendor has made a certification in violation of the law, it shall take any action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

IX. RESERVATION OF CITY COUNCIL

The City Council will award the contract to the lowest responsible, responsive bidder, but reserves the right to reject any or all proposals and to waive any immaterial informality as may be permitted by law.

X. METHOD OF AWARD

- A. All contracts shall be for 12 consecutive months unless otherwise noted in technical or supplemental specifications.
- B. The City may award the work on the basis of the Base Bid, combined with such Options/Alternates as selected, until a net amount is reached which is within the funds available.
- C. If the award is to be made on the basis of Base Bids only, it will be made to the responsible bidder whose Base Bid, therefore, is the lowest. If the award is to be made on the basis of a combination of a Base Bid with Options/Alternates, it will be made to that responsible bidder whose net bid on such combination is the lowest.
- D. The City may also elect to award the work on the basis of line items or unit prices, whichever results in the lowest total amount.
- E. The successful bidder will not assign any interest in this contract and shall not transfer any interest in the same without the prior written consent of the City. **Intentions of this nature must be spelled out in detail with the subject bid - Note this under exceptions.**
- F. Pursuant to N.J.S.A. 40a:11-6.1(d), in the event of a tie in all aspects of bids, The City will award to the vendor whose response is most advantageous, price and other factors considered.

XI. REJECTION OF BID

A. All bids pursuant to N.J.S.A. 40A:11-13.2

B. Availability of Funds

Pursuant to statutory requirements, any contract resulting from this bid shall be subject to the availability and appropriation of sufficient funds annually.

C. Multiple Bids Not Allowed

More than one bid from an individual, a firm or partnership, a corporation or association under the same or different names or an agent representing competing bidders shall not be considered.

D. Unbalanced Bids

Bids, which are obviously unbalanced, may be rejected.

E. Unsatisfactory Past Performance

Bids received from bidders who have previously failed to complete contracts within the time scheduled therefore, or who have performed prior work for the City in an unacceptable manner, may be rejected.

F. Failure to Enter Contract

Should the bidder, to whom the contract is awarded, fail to enter into a contract within 10 days, Sunday and holidays excepted, the City may then, at its option, accept the bid of the next lowest responsible bidder.

XII. TERMINATION OF CONTRACT

A. If, through any cause, the successful bidder shall fail to fulfill in a timely and proper manner obligations under this contract or if the contractor shall violate any of the requirements of this contract, the City shall thereupon have the right to terminate this contract by giving written notice to the contractor of such termination and specifying the effective date of termination. Such termination shall relieve the City of any obligation for balances to the contractor of any sum or sums set forth in the contract.

- B. The City may terminate this contract at its convenience at any time by giving written notice to contractor of such termination and specifying the effective date thereof at least seven days before the effective date of such termination. In the event, all finished or unfinished materials prepared under this agreement shall at the option of the City become its property.

In the event of termination for the convenience of the City, contractor shall be paid in accordance with the amount expended in performing its services, and for that portion of the actual out of pocket expenses (not otherwise reimbursed under this contract) incurred by contractor during the contract period which are directly attributable to the uncompleted portion of the services covered by this contract.

- C. Notwithstanding the above, the contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of the contract by the contractor and the City may withhold any payments to the contractor for the purpose of compensation until such time as the exact amount of the damage due the City from the contractor is determined.
- D. The contractor agrees to indemnify and hold the City harmless from any liability to subcontractors/suppliers concerning payment for work performed or goods supplied arising out of the lawful termination of the contract by the City under this provision.
- E. In case of default by the successful bidder, the City may procure the articles or services from other sources and hold the successful bidder responsible for any excess cost occasioned thereby.
- F. Continuation of the terms of this contract beyond the fiscal year is contingent on availability of funds in the following year's budget. In the event of unavailability of such funds, the City reserves the right to cancel this contract.
- G. All contracts and agreements entered into by the qualified municipality during the rehabilitation term pursuant to P.L.2002, c.43 (C.52:27BBB-1 et al.) shall contain provisions stating that the City may upon 30 days' notice, terminate the contract or agreement for any reason without payment of penalty or damages.

CITY OF CAMDEN

CONSENT OF SURETY

TO: _____
(OWNER)

RE: _____
(CONTRACTOR)

(PROJECT DESCRIPTION)

This is to certify that the _____
(Surety Company)

Will provide to _____ a Performance Bond
(Owner)

In the full amount of awarded contract along with any other applicable bonds, in the event that said contractor is awarded a contract for the above noted project.

(Contractor)

(Authorized Agent of Surety Company)

Date: _____

CONSENT OF SURETY MUST BE SIGNED BY AN AUTHORIZED AGENT OR REPRESENTATIVE OF A SURETY COMPANY AND NOT BY THE INDIVIDUAL OR COMPANY REPRESENTATIVE SUBMITTING THE BID.

EXHIBIT B

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

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

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

CONSTRUCTION CONTRACTS ONLY

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

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

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will 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 trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program, may, in its

EXHIBIT B (Cont.)

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

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

(B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

(1) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;

(2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;

EXHIBIT B (Cont.)

- (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 contractor 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 Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.
 - (iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
 - (iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.

EXHIBIT B (Cont.)

(7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Dept. of LWD,

Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program upon request.

- (C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

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

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

- (D) The contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be re

EXHIBIT B (*Cont.*)

requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.

AMERICANS WITH DISABILITIES ACT OF 1990

Equal Opportunity for Individuals with Disability

The CONTRACTOR and the OWNER do hereby agree that the provisions of Title II of the Americans with Disabilities Act of 1990 (the "Act") (42 U.S.C. S12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereto, 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 that the Contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the 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 any 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 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 proceedings 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 other 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 the Agreement or otherwise at law.

NEW JERSEY ANTI-DISCRIMINATION PROVISIONS
N.J.S.A. 10:2-1 ET SEQ.

Pursuant to N.J.S.A. 10:2-1, if awarded a contract, the contractor agrees that:

- a. In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;
- b. No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex;
- c. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and
- d. This contract may be canceled or terminated by the contracting public agency, and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the contracting public agency of any prior violation of this section of the contract.

NEW JERSEY BUSINESS REGISTRATION REQUIREMENTS

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

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

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

During the course of contract performance:

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

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

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

**Provisions Concerning Changed Conditions
in Construction Contracts (N.J.S.A. 40A:11-16.7)**

(1) If the contractor encounters differing site conditions during the progress of the work of the contract, the contractor shall promptly notify the contracting unit in writing of the specific differing site conditions encountered before the site is further disturbed and before any additional work is performed in the impacted area.

(2) Upon receipt of a differing site conditions notice in accordance with paragraph (1) of this subsection, or upon the contracting unit otherwise learning of differing site conditions, the contracting unit shall promptly undertake an investigation to determine whether differing site conditions are present.

(3) If the contracting unit determines different site conditions that may result in additional costs or delays exist, the contracting unit shall provide prompt written notice to the contractor containing directions on how to proceed.

(4) (a) The contracting unit shall make a fair and equitable adjustment to the contract price and contract completion date for increased costs and delays resulting from the agreed upon differing site conditions encountered by the contractor. (b) If both parties agree that the contracting unit's investigation and directions decrease the contractor's costs or time of performance, the contracting unit shall be entitled to a fair and equitable downward adjustment of the contract price or time of performance. (c) If the contracting unit determines that there are no differing site conditions present that would result in additional costs or delays, the contracting unit shall so advise the contractor, in writing, and the contractor shall resume performance of the contract, and shall be entitled to pursue a differing site conditions claim against the contracting unit for additional compensation or time attributable to the alleged differing site conditions.

(5) Execution of the contract by the contractor shall constitute a representation that the contractor has visited the site and has become generally familiar with the local conditions under which the work is to be performed.

(6) As used in this subsection, "differing site conditions" mean physical conditions at the contract work site that are subsurface or otherwise concealed and which differ materially from those indicated in the contract documents or are of such an unusual nature that the conditions differ materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in the contract.

b. A contract subject to this section shall include the following suspension of work provisions:

(1) The contracting unit shall provide written notice to the contractor in advance of any suspension of work lasting more than 10 calendar days of the performance of all or any portion of the work of the contract.

(2) If the performance of all or any portion of the work of the contract is suspended by the contracting unit for more than 10 calendar days due to no fault of the contractor or as a consequence of an occurrence beyond the contracting unit's control, the contractor shall be entitled to compensation for any resultant delay to the project completion or additional contractor expenses, and to an extension of time, provided that, to the extent feasible, the contractor, within 10 calendar days following the conclusion of the suspension, notifies the contracting unit, in writing, of the nature and extent of the suspension of work. The notice shall include available supporting information, which information may thereafter be supplemented by the contractor as needed and as may be reasonably requested by the contracting unit. Whenever a work suspension exceeds 60 days, upon seven days' written notice, either party shall have the option to terminate the contract for cause and to be fairly and equitably compensated therefor.

(3) Upon receipt of the contractor's suspension of work notice in accordance with paragraph (2) of this subsection, the contracting unit shall promptly evaluate the contractor's notice and promptly advise the contractor of its determination on how to proceed in writing.

(4) (a) If the contracting unit determines that the contractor is entitled to additional compensation or time, the contracting unit shall make a fair and equitable upward adjustment to the contract price and contract completion date. (b) If the contracting unit determines that the contractor is not entitled to additional compensation or time, the contractor shall proceed with the performance of the contract work, and shall be entitled to pursue a suspension of work claim against the contracting unit for additional compensation or time attributable to the suspension.

(5) Failure of the contractor to provide timely notice of a suspension of work shall result in a waiver of a claim if the contracting unit can prove by clear and convincing evidence that the lack of notice or delayed notice by the contractor actually prejudiced the contracting unit's ability to adequately investigate and defend against the claim.

c. A contract subject to this section shall include the following change in character of work provisions:

(1) If the contractor believes that a change directive by the contracting unit results in a material change to the contract work, the contractor shall so notify the contracting unit in writing. The contractor shall continue to perform all work on the project that is not the subject of the notice.

(2) Upon receipt of the contractor's change in character notice in accordance with paragraph (1) of this subsection, the contracting unit shall promptly evaluate the contractor's notice and promptly advise the contractor of its determination on how to proceed in writing.

(3) (a) If the contracting unit determines that a change to the contractor's work caused or directed by the contracting unit materially changes the character of any aspect of the contract work, the contracting unit shall make a fair and equitable upward adjustment to the contract price and contract completion date. The basis for any such price adjustment shall be the difference between the cost of performance of the work as planned at the time of contracting and the actual cost of such work as a result of its change in character, or as otherwise mutually agreed upon by the contractor and the contracting unit prior to the contractor performing the subject work.

(b) If the contracting unit determines that the contractor is not entitled to additional compensation or time, the contractor shall continue the performance of all contract work, and shall be entitled to pursue a claim against the contracting unit for additional compensation or time attributable to the alleged material change.

(4) As used in this subsection, “material change” means a character change which increases or decreases the contractor’s cost of performing the work, increases or decreases the amount of time by which the contractor completes the work in relation to the contractually required completion date, or both.

d. A contract subject to this section shall include the following change in quantity provisions:

(1) The contracting unit may increase or decrease the quantity of work to be performed by the contractor.

(2) (a) If the quantity of a pay item is cumulatively increased or decreased by 20 percent or less from the bid proposal quantity, the quantity change shall be considered a minor change in quantity.

(b) If the quantity of a pay item is increased or decreased by more than 20 percent from the bid proposal quantity, the quantity change shall be considered a major change in quantity.

(3) For any minor change in quantity, the contracting unit shall make payment for the quantity of the pay item performed at the bid price for the pay item.

(4) (a) For a major increase in quantity, the contracting unit or contractor may request to renegotiate the price for the quantity in excess of 120 percent of the bid proposal quantity. If a mutual agreement cannot be reached on a negotiated price for a major quantity increase, the contracting unit shall pay the actual costs plus an additional 10 percent for overhead and an additional 10 percent for profit, unless otherwise specified in the original bid.

(b) For a major decrease in quantity, the contracting unit or contractor may request to renegotiate the price for the quantity of work performed. If a mutual agreement cannot be reached on a negotiated price for a major quantity decrease, the contracting unit shall pay the actual costs plus an additional 10 percent for overhead and an additional 10 percent for profit, unless otherwise specified in the original bid; provided, however, that the contracting unit shall not make a payment in an amount that exceeds 80 percent of the value of the bid price multiplied by the bid proposal quantity.

(5) As used in this subsection, the term “bid proposal quantity” means the quantity indicated in the bid proposal less the quantities designated in the project plans as “if and where directed.

CITY OF CAMDEN – EQUAL EMPLOYMENT OPPORTUNITY QUESTIONNAIRE

The following information is necessary for the City of Camden to evaluate its hiring/RFP practices and to prepare reports required by law for the State and Federal Government. This form will not accompany the application. The information contained will be confidential and will **NOT** be used to make a decision about your employment.

POSITION/RFP APPLIED FOR: _____

CHECK GENDER: MALE _____ FEMALE: _____

CHECK ETHNIC GROUP: WHITE _____ BLACK _____ HISPANIC _____

 AMERICAN INDIAN/ALASKAN NATIVE _____ ASIAN/PACIFIC ISLANDER _____

MINORITY STATUS: MBE _____ WMBE _____

The City of Camden is an Equal Opportunity Employer, does not discriminate on the basis of disabilities and is committed to providing reasonable accommodations.

PLEASE INDICATE ANY DISABILTIES YOU MAY HAVE:

Physical (Specify) _____

Mental (Specify) _____

If you have a disability requiring reasonable accommodation during the selection process, please inform Personnel (Employment) at (856) 757-7414 Purchasing Bureau(RFP's/Bids) at (856) 757-7159 at the time you are invited for an interview or bid opening.

HOW DID YOU LEARN OF THIS OPPORTUNITY?

Friend _____ Personal Inquiry _____ Courier Post _____ Star Ledger _____ Referral Service (Specify) _____

Dodge Report _____ Posted Bulletin (Where) _____ Internet (Specify Website) _____

Other (Specify) _____ Professional Publication (Specify) _____

VETERAN'S PREFERENCE PROGRAM

This program provides that in the event that a veteran has qualifications identical to those possessed by another applicant, based upon the veteran's and the other applicant's examinations, interviews, experience, education, training and work history, at the time of appointment, the City shall grant preference to the veteran.

The City of Camden defines **Veteran** using Government Code section 18973.

A Veteran means any person who has served full time for 30 days or more in the armed forces in time of war or in time of peace in a campaign or expedition for service in which a medal has been authorized by the government of the United States, or during the period September 16, 1940 to January 31, 1955, or who has served at least 181 consecutive days since January 31, 1955, and who served only in auxiliary or reserve components of the armed forces whose service therein did not exempt him or her from the operation of the Selective Training and Service Alert of 1940.

Based on the definition provided, are you a veteran of the United States Service?

_____ YES _____ NO

NAME: _____ DATE _____

The information obtained from this form assist the City of Camden in preparing reports required by law for the State and Federal government. The information contained will be confidential and will only be used in the final decision-making process regarding employment.

P.L. 1977, CHAPTER 33, approved March 8, 1977.

1977 Assembly No. 22

AN ACT requiring corporate “and partnership” bidders for State, county, municipal or school district contracts to submit a list of the names and addresses of all stockholders owning 10% or more of their stock, or 10% or more of the stock of their corporate stockholders “ or in the case of a partnership, the names and addresses of those partners owning a 10% or greater interest therein”.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. No corporation “or partnership” shall be awarded any contract nor shall any agreement be entered into for the performance of any work or the furnishing of any materials or supplies, the cost of which is to be paid with or out of any public funds, by the State, or any county, municipality or school district, or any subsidiary or agency of the State, or of any county, municipality or school district, or by any authority, board, or commission which exercises governmental functions, unless prior to the receipt of the bid (of said corporation) or accompanying the bid, of said corporation or said partnership, there is submitted a statement setting forth the names and addresses of all stockholders in the corporation “or partnership” who own 10% or more of its stock, of any class or of all individual partners in the partnership who own a 10% or greater interest therein, as the case may be. If one or more such stockholder “or partner” is itself a corporation “or partnership”, the stockholders holding 10% or more of that corporation’s stock, or the individual partners owning 10% or greater interest in that partnership, as the case may be, shall also be listed. The disclosure shall be continued until names and addresses of every (stockholder owning 10% of the stock of the bidding corporation or 10% of the stock of a corporation stockholder owning 10% of the stock of the bidding corporation or their corporate stockholders are submitted) non-corporate stockholder, and individual partner, exceeding the 10% ownership criteria established in this act, has been listed.

2. This act shall take effect immediately.

STATEMENT OF OWNERSHIP DISCLOSURE

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

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

Name of

Organization: _____

Organization

Address: _____

Part I Check the box that represents the type of business organization:

- Sole Proprietorship (skip Parts II and III, execute certification in Part IV)
- Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)
- For-Profit Corporation (any type) Limited Liability Company (LLC)
- Partnership Limited Partnership Limited Liability Partnership (LLP)
- Other (be specific): _____

Part II

The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. **(COMPLETE THE LIST BELOW IN THIS SECTION)**

OR

No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. **(SKIP TO PART IV)**

(Please attach additional sheets if more space is needed):

Name of Individual or Business Entity	Home Address (for Individuals) or Business Address

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

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

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

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

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

Part IV Certification

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

Full Name (Print):		Title:	
Signature:		Date:	

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

STATE OF NEW JERSEY
COUNTY OF _____ ss:

I, _____ residing in _____
(Name of Affiant) (Name of Municipality)

in the County of _____ and the State of _____ of full
age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____
(Title of Position) (Name of Firm)

_____ the bidder making the Proposal for the bid proposal entitled
_____, and that I executed the said proposal with full authority to
(Title of Bid Proposal)

do so that said bidder has not, directly or indirectly entered into any agreement, participated in
any collusion, or otherwise taken any action in restraint of free, competitive bidding in
connection with the above named project and that all statements contained in said proposal and
in this affidavit are true and correct, and made with full knowledge that the
_____ relies upon the truth of the statements contained in this

(Name of Contracting Unit)
proposal and in the statements contained in this affidavit in awarding the contract for the said
project.

I further warrant that no person or selling agency has been employed or retained to solicit
or secure such contract upon an agreement or understanding for a commission, percentage,
brokerage or contingent fee, except bona fide employees or bona fide established commercial or
selling agencies maintained by _____.

Subscribed and sworn to
before me this day
_____ 20____

(Type or print name of affiant under signature)

Notary Public of _____

My Commission Expires: _____ 20____

In accordance with the law against discrimination of the State of New Jersey N.J.S.A. 10:2-1 et., seq., a certification regarding non discrimination in employment on public contracts is required of bidders or prospective contractors and their proposed is required of bidders or prospective contractors and their proposed subcontractors prior to the award of contracts or subcontracts.

CERTIFICATION OF BIDDER REGARDING NON-DISCRIMINATION

I, _____ certify that:

(a) In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, I, nor any person acting on my behalf, shall, by reason of race, creed, color, national origin, ancestry, marital status or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates:

(b) I, nor any person on my behalf shall, in any manner discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies, or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status or sex;

(c) I acknowledge that there may be deducted from the amount payable to the contractor by the City of Camden, under this contract, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and

(d) That this contract may be canceled or terminated by the City of Camden and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the City of Camden of any prior violation of this section of the contract.

Name of contractor or subcontractor (PLEASE TYPE)

(Signature)

(Title)

(Date)

Restrictions on Certain Contracts

You are hereby notified that the City is procuring and awarding this contract. The City of Camden operates under an annual Transitional Aid to Localities Program Memorandum of Understanding (“MOU”) with the State of New Jersey Department of Community Affairs, Division of Local Government Services (“DLGS”), as duly approved by the City Council of the City of Camden on an annual basis. Under the MOU, the City must obtain the written approval of the Director of the DLGS (“DLGS Director”) with respect to certain contracts. The City must also obtain the DLGS Director’s written approval for the hiring of consultants and professionals, either directly or knowingly through a sub-contract, regardless of cost. Contract renewals must also be approved by the DLGS Director in writing.

Additionally, pursuant to the Municipal Rehabilitation and Economic Recovery Act, N.J.S.A. 52:27BBB-1, et seq. (“MRERA”), the State Commissioner of Community Affairs has full authorization to veto any City resolution awarding, amending or renewing a City contract.

This Contract shall be fully subject to the aforementioned MOU and MRERA provisions.

CITY OF CAMDEN

RIGHT TO EXTEND - TIME FOR AWARD

The City of Camden is required by The Local Public Contracts Law, N.J.S.A. 40A:11-24, to make an award on products or service within sixty (60) days of the bid opening date.

Should the City of Camden require an additional sixty (60) days extension to make an award of this bid, by signing this document you shall grant the City of Camden, NJ the right to extend this award up to one hundred twenty (120) days, if deemed necessary.

SIGNED: _____
(SIGNATURE)

TITLE: _____
(PRINTED OR TYPED)

COMPANY: _____

DATE: _____

TYPE OF PRODUCT OR SERVICE OFFERED:

EQUIPMENT CERTIFICATION

The undersigned Bidder hereby certifies as follows:

The bidder owns or controls all the necessary equipment required to accomplish the work described in the specifications:

Yes _____ or *No _____

Name of Bidder: _____

By: _____
(Signature)

Name of above: _____
(Print)

Title: _____

Date: _____

*If No, please provide details on a separate sheet of paper

**STATE OF NEW JERSEY DEBARRED LIST AND
ETHICS COMPLAINT AFFIDAVIT**

STATE OF NEW JERSEY:

SS

COUNTY OF _____ (Print County):

I, _____ (print Bidder's corporate officer's name), the duly authorized representative of _____ (print Bidder's corporate name), with a business address at _____ (print Bidder's corporate office address) in the County of _____ (print Bidder's county), and the State of _____ (print Bidder's state) being of full age and duly sworn according to law upon my oath, depose and say

1. I am an officer of the above firm, the Bidder, making the proposal for the _____ (insert project description) work; and
2. I executed the proposal with full authority from said Bidder to do so; and
3. Bidder, at the time of making of its proposal, **is not included** on the State of New Jersey, State Treasurer's List of Debarred, Suspended and Disqualified Bidders, or any other similar state list, as a result of action by any state agency (including that of other states); and
4. Bidder **does not** have any current formal ethics complaint against it or any other action pending with any state agency (including that of other states), including, without limitation, being subject to an investigation; charged; found non-compliant; voluntarily excluded; or determined ineligible..

I hereby acknowledge on behalf of the Bidder that the aforesaid statements are made with the full knowledge that the City of Camden, as the owner, relies upon the truth of the statements contained in said proposal and in the statements contained in this affidavit in awarding the contract for the aforesaid work.

I, on behalf of the Bidder, further warrant that after bid submissions or during the contract term should the above firm's status change with regards to statements 3 and 4 above, I or another authorized officer of the Bidder shall immediately notify the City of Camden of such change.

* * *

I HEREBY CERTIFY the foregoing statements c made by me are true. I acknowledge that if same are willfully false, I am subject to punishment pursuant to law.

BIDDER:

Bidder's Representative's Signature

Print Name: _____

Print Title/Position: _____

Date: _____

SUBSCRIBED AND SWORN TO
BEFORE ME THIS DAY

_____, 20____

Notary Public of

My Commission Expires: _____20____

**CERTIFICATION OF NON-DEBARMENT
FOR FEDERAL GOVERNMENT CONTRACTS**

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

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

PART I: VENDOR INFORMATION	
Individual or Organization Name	
Address of Individual or Organization	
DUNS Code (if applicable)	
CAGE Code (if applicable)	
Check the box that represents the type of business organization:	

- Sole Proprietorship (skip Parts III and IV)
 Non-Profit Corporation (skip Parts III and IV)
 For-Profit Corporation (any type)
 Limited Liability Company (LLC)
 Partnership
 Limited Partnership
 Limited Liability Partnership (LLP)
 Other (be specific): _____

PART II – CERTIFICATION OF NON-DEBARMENT: Individual or Organization			
<p>I hereby certify that the individual or organization listed above in Part I is not debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the City of Camden is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by City of Camden to notify the City of Camden in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the City of Camden, permitting the City of Camden to declare any contract(s) resulting from this certification void and unenforceable.</p>			
Full Name (Print):		Title:	
Signature:		Date:	

PART III – CERTIFICATION OF NON-DEBARMENT: Individual or Entity Owning Greater than 50 Percent of Organization

Section A (Check the Box that applies)

<input type="checkbox"/>	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of its voting stock, or of the partner in the partnership who owns more than 50 percent interest therein, or of the member of the limited liability company owning more than 50 percent interest therein, as the case may be.
Name of Individual or Organization	
Home Address (for Individual) or Business Address	
OR	
<input type="checkbox"/>	No one stockholder in the corporation owns more than 50 percent of its voting stock, or no partner in the partnership owns more than 50 percent interest therein, or no member in the limited liability company owns more than 50 percent interest therein, as the case may be.
Section B (Skip if no Business entity is listed in Section A above)	
<input type="checkbox"/>	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization’s parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization’s parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization’s parent entity, as the case may be.
Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity	
Home Address (for Individual) or Business Address	
OR	
<input type="checkbox"/>	No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be.

Section C – Part III Certification

I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the **Organization listed above in Part I** or, if applicable, owns greater than 50 percent of a parent entity of **Organization listed above in Part I**. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the City of Camden is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award City of Camden to notify the City of Camden in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the City of Camden, permitting the City of Camden to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

Part IV – CERTIFICATION OF NON-DEBARMENT: Contractor – Controlled Entities

Section A

<input type="checkbox"/>	Below is the name and address of the corporation(s) in which the Organization listed in Part I owns more than 50 percent of voting stock, or of the partnership(s) in which the Organization listed in Part I owns more than 50 percent interest therein, or of the limited liability company or companies in which the Organization listed above in Part I owns more than 50 percent interest therein, as the case may be.
--------------------------	--

Name of Business Entity	Business Address

****Add additional sheets if necessary****

OR

<input type="checkbox"/>	The Organization listed above in Part I does not own greater than 50 percent of the voting stock in any corporation and does not own greater than 50 percent interest in any partnership or any limited liability company.
--------------------------	---

Section B (skip if no business entities are listed in Section A of Part IV)

<input type="checkbox"/>	Below are the names and addresses of any entities in which an entity listed in Part III A owns greater than 50 percent of the voting stock (corporation) or owns greater than 50 percent interest (partnership or limited liability company).		
Name of Business Entity Controlled by Entity Listed in Section A of Part IV		Business Address	
Add additional Sheets if necessary			
OR			
<input type="checkbox"/>	No entity listed in Part III A owns greater than 50 percent of the voting stock in any corporation or owns greater than 50 percent interest in any partnership or limited liability company.		
Section C – Part IV Certification			
<p>I hereby certify that the Organization listed above in Part I does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the City of Camden is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by City of Camden to notify the City of Camden in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the City of Camden, permitting the City of Camden to declare any contract(s) resulting from this certification void and unenforceable.</p>			
Full Name (Print):		Title:	
Signature:		Date:	

Disclosure of Investment Activities in Iran

**CITY OF CAMDEN
DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN**

PART 1:- CERTIFICATION

PROPOSERS MUST COMPLETE PART 1 BY CHECKING EITHER BOX BELOW. FAILURE TO CHECK ONE OF THE BOXES MAY RENDER VENDORS'S PROPOSAL NON-RESPONSIVE.

Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list is found at: <http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Proposer must review this List prior to completing the below certification. Failure to complete the certification may render a vendor's proposal non-responsive. If the Director finds a person or entity to be in violation of law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party

PLEASE CHECK THE APPROPRIATE BOX:

_____ I hereby certify, pursuant to Public Law 2012, c. 25, that neither the proposer listed above nor any of the proposer's parents, subsidiaries, or affiliates is listed on the N.J. Department of the Treasury's list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and am authorized to make this certification on its behalf. **I will skip Part 2 and sign and complete the Certification below.**

OR

_____ I am unable to certify as above because the Proposer and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 List. **I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below.** FAILURE TO PROVIDE THE AFORESAID MAY RESULT IN THE PROPOSAL BEING RENDERED NON-COMPLIANT, NON-RESPONSIVE AND APPROPRIATE PENALTIES, FINES AND/OR SANCTIONS WILL BE ASSESSED AS PROVIDED BY LAW.

PART 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN

You must provide a detailed, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the boxes below.

EACH BOX WILL PROMPT YOU TO PROVIDE INFORMATION RELATIVE TO THE ABOVE QUESTIONS. PLEASE PROVIDE THOROUGH ANSWERS TO EACH QUESTION. IF YOU NEED TO MAKE ADDITIONAL ENTRIES, PLEASE ATTACH ADDITIONAL SHEETS WITH THE PERTINENT INFORMATION.

Name: _____

Relationship to Bidder/Offeror: _____

Description of Activities: _____

Duration of Engagement _____ Anticipated Cessation Date _____

Bidder/Offerer Contact Name: _____ Contact Phone Number: _____

CERTIFICATION

I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I attest that I am authorized to execute this certification on behalf of the above-referenced person or entity. I acknowledge the City of Camden is relying on the information contained herein and thereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of the subject contract with the City to notify the City in writing of any changes to the answers of information contained herein. I acknowledge I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my contract with the City of Camden and that the City, at its option, may declare any contract resulting from this certification void and unenforceable.

[Remainder of page intentionally left blank]

PROPOSER:

Proposer's Representative's Signature

Print Name: _____

Print Title/Position: _____

Date: _____

SUBSCRIBED AND SWORN TO
BEFORE ME THIS DAY

_____, 20____

Notary Public of

My Commission Expires: _____ 20____

CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES IN RUSSIA OR BELARUS

Pursuant to N.J.S.A. 52:32-60.1, et seq. and N.J.S.A.40A:11-2.2 (L. 2022, c. 3) any person or entity (hereinafter “Vendor”) that seeks to enter into or renew a contract with a local contracting unit subject to the Local Public Contracts Law for the provision of goods or services, or the purchase of bonds or other obligations, must complete the certification below indicating whether or not the Vendor is identified on the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, available here: <https://sanctionssearch.ofac.treas.gov/>. If the Department of the Treasury finds that a Vendor has made a certification in violation of the law, it shall take any action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

I, the undersigned, certify that I have read the definition of “Vendor” below, and have reviewed the Office of Foreign Assets Control (OFAC) Specially Designated Nationals and Blocked Persons list, and having done so certify

(Check the Appropriate Box)

- A. That the Vendor is not identified on the [OFAC Specially Designated Nationals and Blocked Persons list on account of activity related to Russia and/or Belarus](#)
- OR
- B. That I am unable to certify as to “A” above, because the Vendor is identified on the [OFAC Specially Designated Nationals and Blocked Persons list on account of activity related to Russia and/or Belarus](#)
- OR
- C. That I am unable to certify as to “A” above, because the Vendor is identified on the [OFAC Specially Designated Nationals and Blocked Persons list](#). However, the Vendor is engaged in activity related to Russia and/or Belarus consistent with federal law, regulation, license or exemption. A detailed description of how the Vendor’s activity related to Russia and/or Belarus is consistent with federal law is set forth below.

Signature of Vendor’s Authorized Representative	Date
Print Name and Title of Vendor’s Authorized Representative	Vendor’s FEIN
Vendor’s Name	Vendor’s Phone Number
Vendor’s Address (Street Address)	Vendor’s Fax Number
Vendor’s Address (City/State/Zip Code)	Vendor’s Email Address

ⁱ Vendor means: (1) A natural person, corporation, company, limited partnership, limited liability partnership, limited liability company, business association, sole proprietorship, joint venture, partnership, society, trust, or any other nongovernmental entity, organization, or group; (2) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in Section 1701(c)(3) of the International Financial Institutions Act, 22 U.S.C. 262r(c)(3); or (3) Any parent, successor, subunit, direct or indirect subsidiary, or any entity under common ownership or control with, any entity described in paragraph (1) or (2).
1.22.2024

LOWEST BIDDER PREVAILING WAGE CERTIFICATION

In the matter of an award of a contract for public work for a project described as:)	STATE OF NEW JERSEY
)	DEPARTMENT OF LABOR AND
)	WORKFORCE DEVELOPMENT
)	DIVISION OF
 [Enter project name])	 WAGE & HOUR COMPLIANCE
)	
)	
)	Certification of Lowest Bidder

_____, of full age and under oath, duly provides the following sworn statement:

(1). I am the owner and/or highest-ranking official or officer of a company or firm named _____, which holds a currently valid public works contractor registration pursuant to the New Jersey Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48 et seq., certificate number _____.

(2). I submitted a bid for a contract award in the above identified project and the public body has informed me that I am the lowest bidder by 10 percent or more as compared to the next lowest bid submitted.

(3). The amount of my bid does include paying the prevailing wage rate to all workers who perform work on the project at rates of pay, including both base wage and fringe benefits, set forth in applicable Wage Determinations, (1) for the appropriate locality, (2) for the appropriate work classification (e.g., carpenter, electrician, mason, plumber), and (3) for the appropriate job title (e.g., Apprentice, Journeyman, Foreman), published by the New Jersey Department of Labor and Workforce Development (NJDOL) pursuant to the New Jersey Prevailing Wage Act (NJPWA), N.J.S.A. 34:11-56.25 et seq., and corresponding NJDOL rules, N.J.A.C. 12:60.

I certify under penalty of perjury that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are false, I am subject to punishment. See N.J.S.A. 2C:28-1 et seq., specifically, N.J.S.A. 2C:28-3, within the New Jersey Code of Criminal Justice.

Dated: _____ Signature: _____

Title: _____

**TRAINING/APPRENTICESHIP PROGRAM
CONSTRUCTION**

Please be notified that the City of Camden has established a Training/Apprenticeship Program pursuant to New Jersey Public Law 1975, Chapter 127(F). The Contractor, whenever possible, must employ persons from the City's Training/Apprentice Program for work performed pursuant to this project in accordance with Section 12-42 of the Camden Municipal Code.



Attachment A - 2024 City of Camden – Vendor Insurance Requirements

Category	Description	Certificate of Insurance Required	Additional Insured* Required	
1	Repair/Minor Contractors/Construction: Contracts up to \$50,000			
	General Liability	\$500,000 (occurrence); \$1,000,000 (aggregate)	X	X
	Automobile Liability	\$500,000	X	
	Workers Compensation**	Statutory	X	
	Employer's Liability	\$500,000	X	
2a	Building Contractors/Construction: Contracts up to \$1,000,000			
	General Liability	\$1,000,000 (occurrence); \$3,000,000 (aggregate)	X	X
	Automobile Liability	\$1,000,000	X	
	Workers' Compensation**	Statutory	X	
	Employer's Liability	\$1,000,000	X	
	Professional Liability - if SOS includes architectural or engineering services	\$1,000,000	X	
	Builder's Risk – if SOS includes constructing new structure or adding sq. footage to existing structure	Total value of completed structure	X	
2b	Building Contractors/Construction: Contracts \$1,000,000 to \$5,000,000			
	General Liability	\$1,000,000 (occurrence); \$3,000,000 (aggregate)	X	X
	Automobile Liability	\$1,000,000	X	
	Excess Liability/Umbrella	\$5,000,000 (occurrence); \$5,000,000 (aggregate)	X	X
	Workers' Compensation**	Statutory	X	
	Employer's Liability	\$1,000,000	X	
	Professional Liability - if SOS includes architectural or engineering services	\$1,000,000	X	
	Builder's Risk – if SOS includes constructing a new structure or adding se. footage to the existing structure	Total value of completed structure	X	

* Additional Insured shall include: City of Camden, all elected and appointed officials, employees, and volunteers.

** Waiver of Subrogation required.



Category	Description	Certificate of Insurance Required	Additional Insured* Required	
2c	Building Contractors/Construction: Contracts exceeding \$5,000,000			
	General Liability	\$1,000,000 (occurrence); \$3,000,000 (aggregate)	X	X
	Automobile Liability	\$1,000,000	X	
	Excess Liability/Umbrella	\$10,000,000 (occurrence); \$10,000,000 (aggregate)	X	X
	Workers' Compensation**	Statutory	X	
	Employer's Liability	\$1,000,000	X	
	Professional Liability - if SOS includes architectural or engineering services	\$1,000,000	X	
	Builder's Risk– if SOS includes constructing new structure or adding sq. footage to existing structure	Total value of completed structure	X	
3	Trade Contractors: Painters, Plumbers, Landscapers, Vehicle Repair, Vehicle Maintenance, etc.			
	General Liability	\$1,000,000 (occurrence); \$2,000,000 (aggregate)	X	X
	Automobile Liability	\$1,000,000	X	
	Workers' Compensation**	Statutory	X	
	Employer's Liability	\$1,000,000	X	
	Installation Floater – If SOS includes installation of equipment/fixtures, etc.	Value of equipment/fixtures, etc.	X	
4	Environmental Contractors / Consultants			
	General Liability	\$1,000,000 (occurrence); \$2,000,000 (aggregate)	X	X
	Automobile Liability	\$1,000,000	X	
	Workers' Compensation**	Statutory	X	
	Employer's Liability	\$1,000,000	X	
	Professional Liability – If SOS including consulting	\$1,000,000	X	
	Environmental Impairment Liability (Pollution) - If SOS includes removal If removal is asbestos – evidence of asbestos liability is also required.	\$1,000,000 (occurrence); \$2,000,000 (aggregate)	X	X

* Additional Insured shall include: City of Camden, all elected and appointed officials, employees, and volunteers.

** Waiver of Subrogation required.



Category	Description	Certificate of Insurance Required	Additional Insured* Required	
5a	Consultants/Professional Service Providers: Solicitor, Labor Attorney, Auditor, Engineer, Risk Management Consultant			
	General Liability	\$1,000,000 (occurrence); \$2,000,000 (aggregate)	X	X
	Automobile Liability	\$1,000,000	X	
	Workers' Compensation**	Statutory	X	
	Employer's Liability	\$1,000,000	X	
	Professional Liability	\$1,000,000	X	
	Cyber Security & Privacy Liability – If SOS includes access to the City's PII, PHI, security codes or confidential information	\$1,000,000	X	
5b	IT Consultants/Professional Service Providers: IT Consultant, Systems Analyst, Web Designer, Cloud-based Provider, Online services, Content Provider, System Installation & Software Provider			
	General Liability	\$1,000,000 (occurrence); \$2,000,000 (aggregate)	X	X
	Auto Liability	\$1,000,000	X	
	Workers' Compensation **	\$1,000,000	X	
	Employer's Liability	\$1,000,000	X	
	Technology Errors & Omissions	\$1,000,000	X	
	Cyber Security & Privacy Liability – if SOS includes access to PII, PHI, security codes or confidential information maintained by the City	\$1,000,000	X	
5c	Medical Professionals (Individuals / Facilities)			
	General Liability	\$1,000,000	X	X
	Auto Liability	\$1,000,000	X	
	Workers' Compensation**	\$1,000,000	X	
	Employer's Liability	\$1,000,000	X	
	Medical Malpractice – Facilities must also include evidence for all licensed providers	\$1,000,000	X	
	Cyber Security & Privacy Liability	\$1,000,000	X	

* Additional Insured shall include: City of Camden, all elected and appointed officials, employees, and volunteers.

** Waiver of Subrogation required.



Category	Description	Certificate of Insurance Required	Additional Insured* Required
6	Vendors /Professional Services with access to City's funds (Payroll Company, TPA, etc.)		
	General Liability	\$1,000,000	X
	Automobile Liability	\$1,000,000	X
	Workers' Compensation**	Statutory	X
	Employer's Liability	\$1,000,000	X
	Cyber Security and Privacy Liability	\$1,000,000	X
	Fidelity protecting client funds – dishonesty, depositor's forgery, computer & wire transfer theft	\$1,000,000	X
Applicable to Categories 1 through 6 – Below is in addition to categories requirement			
	Sexual Abuse or Molestation – If SOS includes working with or providing services to minors	\$1,000,000 Must be a dedicated limit and not included within the general liability per occurrence limit	X

USE OF CITY OWNED, OPERATED BY or CONTROLLED BY THE CITY			
	Private Citizens, Organizations or Non-Business Groups (local citizen groups, sports associations, etc.)		
	General Liability	\$1,000,000	X
	All Others		
	General Liability	\$1,000,000	X
	Workers' Compensation**	\$1,000,000	X
	Employer's Liability	\$1,000,000	X

* Additional Insured shall include: City of Camden, all elected and appointed officials, employees, and volunteers.

** Waiver of Subrogation required.

NJ PREVAILING WAGE RATES

CAMDEN COUNTY



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 wage rate is a percentage of the journeyman wage rate, unless otherwise indicated. The apprentice benefit 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.

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 not subject to the New Jersey Prevailing Wage Act or the Public Works Contractor Registration Act.

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

County - CAMDEN

Craft: Air Conditioning & Refrigeration - Service and Repair

PREVAILING WAGE RATE

	03/01/24
Journeyman (Mechanic)	W45.23 B30.03 T75.26

Craft: Air Conditioning & Refrigeration - Service and Repair

APPRENTICE RATE SCHEDULE

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

Ratio of Apprentices to Journeymen - 1:4

Craft: Air Conditioning & Refrigeration - Service and Repair

COMMENTS/NOTES

THESE RATES MAY BE USED FOR THE FOLLOWING:

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

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

County - CAMDEN

Craft: Boilermaker PREVAILING WAGE RATE

	01/12/24
Foreman	W54.11 B47.08 T101.19
General Foreman	W56.11 B48.14 T104.25
Journeyman	W49.11 B45.31 T94.42

Craft: Boilermaker APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	65%	70%	75%	80%	85%	90%	95%			
1000 Hours										
Benefit =	38.33	39.30	40.32	41.31	42.32	43.32	44.30			

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 7 1/2 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, holiday or any other circumstances beyond the employer's control.

OVERTIME:

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

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

County - CAMDEN

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.

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

County - CAMDEN

Craft: Boilermaker - Minor Repairs

PREVAILING WAGE RATE

	01/12/24
Foreman	W35.88 B17.89 T53.77
General Foreman	W36.38 B17.89 T54.27
Mechanic	W34.38 B17.89 T52.27

Craft: Boilermaker - Minor Repairs

COMMENTS/NOTES

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

OVERTIME:

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

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

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

County - CAMDEN

Craft: Bricklayer, Stone Mason

PREVAILING WAGE RATE

	05/09/24
Deputy Foreman	W51.60 B37.68 T89.28
Foreman	W56.35 B37.68 T94.03
Journeyman	W48.60 B37.68 T86.28

Craft: Bricklayer, Stone Mason

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	50%	55%	60%	65%	70%	75%	80%		
6 months										
Benefits	5.61	6.88	7.50	8.13	28.95	30.86	32.78	34.67		

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.

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

County - CAMDEN

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

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

County - CAMDEN

Craft: Carpenter PREVAILING WAGE RATE

	05/09/24
Foreman	W64.41 B38.73 T103.14
Journeyman	W56.01 B33.76 T89.77

Craft: Carpenter APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%	90%					
Benefit	59.25% of	Appren	tice	Wage	for all	intervals	+ \$0.57			

Ratio of Apprentices to Journeymen - 1:3

For Solar installation- all work on solar projects that fall under the jurisdiction of the carpenters, and does not require an electrician, the ratio of Apprentices to Journeymen shall be 1:1.

Craft: Carpenter COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES REGISTERED AS OF 5-1-19:

INTERVAL PERIOD AND RATES
 Yearly 40% 55% 65% 80%
 Benefits 59.25% of apprentice wage rate for all intervals + \$0.57

FOREMAN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 10%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.
- All time worked before and after a regularly established shift shall be paid at the applicable overtime rate. When a portion of the regularly established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.

OVERTIME:

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

County - CAMDEN

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

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

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

County - CAMDEN

Craft: Carpenter - Resilient Flooring

PREVAILING WAGE RATE

	05/01/24
Foreman	W64.41 B38.64 T103.05
Journeyman	W56.01 B33.67 T89.68

Craft: Carpenter - Resilient Flooring

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%	90%					
Benefit	59.25% of	Appren	tice	Wage	for all	intervals	+ \$0.48			

Ratio of Apprentices to Journeymen - *

* Ratio is 1 apprentice to 2 journeymen. No more than 3 apprentices may be on any 1 project.

Craft: Carpenter - Resilient Flooring

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES REGISTERED AS OF 5-1-19:

INTERVAL PERIOD AND RATES
 Yearly 40% 55% 65% 80%
 Benefits 59.25% of apprentice wage rate for all intervals + \$0.48.

FOREMAN REQUIREMENTS:

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

FOR SYNTHETIC TURF INSTALLATION ONLY:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

County - CAMDEN

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.

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

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

County - CAMDEN

Craft: Carpenter-Residential Construction

PREVAILING WAGE RATE

	05/09/24
Foreman	W54.29 B11.99 T66.28
Journeyman	W47.21 B11.14 T58.35

Craft: Carpenter-Residential Construction

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%						
Benefit	12% of	Appren	tice	wage rate	for all	intervals	+ \$5.48			

Ratio of Apprentices to Journeymen - 1:3

Craft: Carpenter-Residential Construction

COMMENTS/NOTES

FOREMAN REQUIREMENTS:

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

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

RESIDENTIAL CONSTRUCTION:

All residential construction (excluding commercial buildings and institutional housing), no more than four (4) floors in height above grade consisting of those projects involving the construction, alteration, or repair of town houses or row houses, single family homes, mobile homes, multi-family homes, mixed-use buildings that include commercial space on the first floor or below grade, and apartment buildings.

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

County - CAMDEN

day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

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

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

County - CAMDEN

Craft: Cement Mason

PREVAILING WAGE RATE

See " Bricklayer, Stone Mason" Rates

Craft: Cement Mason

COMMENTS/NOTES

***See " Bricklayer, Stone Mason" Rates

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

County - CAMDEN

Craft: Commercial Painter

PREVAILING WAGE RATE

	05/29/24
Foreman	W48.90 B30.71 T79.61
General Foreman	W53.34 B30.71 T84.05
Journeyman	W44.45 B30.71 T75.16

Craft: Commercial Painter

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	40%	45%	55%	65%	70%	75%	80%	80%		
Benefits	9.40	9.40	11.90	11.90	13.00	13.00	15.90	15.90		

Ratio of Apprentices to Journeymen - 1:4

Craft: Commercial Painter

COMMENTS/NOTES

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

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

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

County - CAMDEN

Veterans' Day, Thanksgiving Day, Christmas Day.

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

County - CAMDEN

Craft: Dockbuilder/Pile Driver

PREVAILING WAGE RATE

	05/01/24
Foreman	W57.00 B43.62 T100.62
Journeyman	W47.50 B43.62 T91.12

Craft: Dockbuilder/Pile Driver

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1500 hours	40%	50%	65%	80%						
Benefits	25.26	27.39	30.39	33.53						

Ratio of Apprentices to Journeymen - 1:3

Craft: Dockbuilder/Pile Driver

COMMENTS/NOTES

NOTE: The following shall be required for type of work indicated-

- There shall be one foreman and four journeymen on all land pile driving rigs. As part of the crew, one may be an apprentice.
- There shall be one foreman and two journeymen on self-contained hydraulic driving rigs. As part of the crew, one may be an apprentice.
- There shall be one foreman and two journeymen when driving sheeting with an excavator. As part of the crew, one may be an apprentice.
- When utilizing a drill rig to install Auger cast piles there shall be one foreman and two journeymen. As part of the crew, one may be an apprentice.
- There shall be one journeyman on drilled or bored soldier piles.
- There shall be not less than one journeyman per rig on all drilled shaft and caissons.
- There shall be not less than one journeyman per rig on all earth retention tie-back and anchors.

Creosote Handling:

- May 1st to Sept. 30th: + \$0.50 above hourly rate
- Oct. 1st to April 30th: + \$0.25 above hourly rate

Hazardous Material Work:

- On hazardous material work on a state or federally designated hazardous work site where the worker is required to wear Level A, B or C personal protection, the worker shall receive an additional 20% of the hourly rate, per hour.
- A Dockbuilder/Pile Driver working on a hazardous waste removal project, or site requiring hazardous waste related certification, but who is not working in a zone requiring level A, B or C personal protection, shall receive the hourly rate plus an additional \$1.00 per hour. This type of work does not include the handling of creosote or CCA materials; coated materials such as bitumastic, or galvanized; painted materials or any products designed to be used in the industry.

FOREMAN REQUIREMENTS:

- When there are 3 or more Dockbuilders/Pile Drivers on a job, 1 shall be designated as a Foreman.

SHIFT WORK:

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

County - CAMDEN

- Shift work pertains to both land and water work.
- When a 2 shift schedule (including a day shift) is established, the first shift shall start between 5:00 am and 8:00 am and work for 7 and one-half hours and receive 8 hours pay. The second shift shall start when the first shift ends and shall work for 7 and one-half hours and receive 8 hours pay.
- When a three shift schedule is established, all shifts shall work 7 and one-half hours and receive 8 hours pay.
- When there is no day shift, and a second or third shift is established, a worker shall be paid at time and one-half of the hourly rate.

OVERTIME:

- The first 2 hours in excess of 8 per day (9th and 10th hours), Monday through Friday, and the first 8 hours on Saturdays shall be paid at time and one-half the hourly rate. Hours in excess of 10 per day, Monday through Friday, hours in excess of 8 per day on Saturdays, and all hours on Sundays and holidays shall be paid at double the hourly rate.
- Employees may work four 10-hour days, 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, the first 10 hours on Friday shall be paid at time and one-half the hourly rate. Hours in excess of 10 per day shall be paid at double the hourly rate.

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

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

County - CAMDEN

Craft: Drywall Finisher

PREVAILING WAGE RATE

	05/29/24
Foreman	W47.75 B31.11 T78.86
General Foreman	W49.92 B31.11 T81.03
Journeyman	W43.41 B31.11 T74.52

Craft: Drywall Finisher

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	50%		60%	70%		80%	90%		
6 Months										
Benefits	Intervals	1 to 2 =	11.90	Intervals	3 to 4 =	15.03	Intervals	5 to 6 =	18.84	

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.

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

County - CAMDEN

Craft: Electrician

PREVAILING WAGE RATE

	10/02/23
Asst. General Foreman	W64.43 B55.99 T120.42
Foreman	W60.13 B52.68 T112.81
General Foreman	W69.80 B60.11 T129.91
Journeyman, Cable Splicer	W53.69 B47.73 T101.42
Lead Foreman	W61.74 B53.91 T115.65
Working Foreman, Welder, Crane Operator (all types)	W56.37 B49.79 T106.16

Craft: Electrician

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	16.30	20.70	23.40	27.63	31.87					
Benefits	7.94	9.19	9.95	11.16	12.36					

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician

COMMENTS/NOTES

THESE RATES ALSO APPLY TO THE FOLLOWING:

- All fire and burglar alarm work.
- All fiber optic work.
- Teledata work in new construction (including additions).
- Teledata work involving 16 or more instruments or voice/data lines.
- All camera installations.

Height Work: 40 feet above ground/floor: +10% of the wage and benefit amount.

FOREMAN REQUIREMENTS (number of Electricians on site):

(2 to 10) - a Working Foreman; (11 to 22) - a Foreman; (23 to 44) - a Lead Foreman; (35 to 48) - an Assistant General Foreman; (49 or more) - a General Foreman.

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

County - CAMDEN

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

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 wage 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 wage rate, inclusive of benefits.

OVERTIME:

The first 4 hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and the first 8 hours on Saturdays, shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 12 per day, Monday through Friday, in excess of 8 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, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

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

County - CAMDEN

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

PREVAILING WAGE RATE

	05/02/23
Master Technician/Gen. Foreman (31+ Workers on Job)	W51.90 B38.44 T90.34
Senior Technician/Lead Foreman (21-30 Workers on Job)	W47.31 B36.98 T84.29
Technician A/Foreman (11-20 Workers on Job)	W45.18 B36.31 T81.49
Technician B/Working Foreman (4-10 Workers on Job)	W43.92 B34.91 T78.83
Technician C/Journeyman (1-3 Workers on Job)	W40.00 B32.66 T72.66

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

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	17.26	17.26	20.54	20.54	25.48	25.48	30.02	30.02		
Benefits	9.65	9.65	10.62	10.62	12.57	12.57	14.92	14.92		

Ratio of Apprentices to Journeymen - 2:3

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

COMMENTS/NOTES

NOTES: These rates are for service, maintenance, moves and/or changes affecting 15 voice/data lines or less. These rates may NOT be used for any new construction or fiber optic work.

FOREMAN REQUIREMENTS:

The number of workers on the jobsite is the determining factor for which Foreman category applies.

HIGH WORK: Any work performed 40 feet above ground or floor: +10% of the wage and benefit amount.

SHIFT DIFFERENTIAL:

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

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.

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

County - CAMDEN

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

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

County - CAMDEN

Craft: Electrician - Teledata (16 Instruments & More)

PREVAILING WAGE RATE

See "Electrician" Rates

Craft: Electrician - Teledata (16 Instruments & More)

COMMENTS/NOTES

See ELECTRICIAN Rates

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

County - CAMDEN

Craft: Electrician- Outside Commercial

PREVAILING WAGE RATE

	10/02/23
Assistant General Foreman	W64.43 B55.92 T120.35
Foreman	W60.13 B52.58 T112.71
General Foreman	W69.80 B60.08 T129.88
Groundhand, Truck Driver, Conduit Installer (1 year or more experience)	W26.85 B26.74 T53.59
Groundhand, Truck Driver, Conduit Installer (2 years or more experience)	W37.58 B35.08 T72.66
Groundhand, Truck Driver, Conduit Installer (3 years or more experience)	W45.64 B41.34 T86.98
Groundhand, Truck Driver, Conduit Installer (less than 1 year exp.)	W21.48 B1.31 T22.79
Journeyman Lineman	W53.69 B47.58 T101.27
Lead Foreman	W61.74 B53.82 T115.56
Working Foreman	W56.37 B49.66 T106.03

Craft: Electrician- Outside Commercial

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	25.52	27.63	29.75	31.87	33.99	36.11	38.22			
Benefits	10.35	10.97	11.57	12.20	12.81	13.43	14.05			

Craft: Electrician- Outside Commercial

COMMENTS/NOTES

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

County - CAMDEN

* FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

FOREMAN REQUIREMENTS (number of Electricians on site):

(1 to 10)- one Working Foreman.

(11 to 20)- one Working Foreman and one Foreman.

(21 to 30)- one Working Foreman, one Foreman and one Lead Foreman.

(31 to 40) - one Working Foreman, two (2) Foremen and one Lead Foreman.

(41 to 50)- one Working Foreman, four (4) Foremen, one Assistant General Foreman (runs 5 foremen), and one General Foreman.

(51 to 60)- one Working Foreman, five (5) Foremen, one Assistant General Foreman (runs 5 foremen), and one General Foreman

(runs one foreman).

(61 to 70)- one Working Foreman, six (6) Foremen, one Assistant General Foreman (runs 5 foremen), and one General Foreman

(runs two foremen).

(71 to 80)- one Working Foreman, seven (7) Foremen, two (2) Assistant General Foremen and one General Foreman.

(81 to 90)- one Working Foreman, eight (8) Foremen, two (2) Assistant General Foremen, and one General Foreman.

(91 to 100)- one Working Foreman, nine (9) Foremen, two (2) Assistant General Foremen and one General Foreman.

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

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 wage 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 wage rate, inclusive of benefits.

OVERTIME:

All hours in excess of 8 per day, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on 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, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

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

County - CAMDEN

Craft: Electrician-Utility Work (North)

PREVAILING WAGE RATE

Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (North)

APPRENTICE RATE SCHEDULE

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

Craft: Electrician-Utility Work (North)

COMMENTS/NOTES

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

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

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

County - CAMDEN

Craft: Electrician-Utility Work (South)

PREVAILING WAGE RATE

Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (South)

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	32.52	35.23	37.94	40.65	43.36	46.07	48.78			
Benefits	28.97	30.65	32.31	33.98	35.69	37.36	39.02			

Craft: Electrician-Utility Work (South)

COMMENTS/NOTES

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

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

County - CAMDEN

Craft: Elevator Constructor

PREVAILING WAGE RATE

	01/01/24
Helper-Over 5 Years	W48.28 B43.04 T91.32
Helper-Under 5 Years	W48.28 B42.08 T90.36
Mechanic (Journeyman) over 5 years	W68.97 B44.70 T113.67
Mechanic (Journeyman) under 5 years	W68.97 B43.32 T112.29
Mechanic in Charge (Foreman) over 5 years	W77.59 B45.39 T122.98
Mechanic in Charge (Foreman) under 5 years	W77.59 B43.84 T121.43
Probationary Helper (1st 6 months)	W34.49 B41.25 T75.74

Craft: Elevator Constructor

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	55%	65%	70%	80%						
Benefits	full	journeyma	benefit	rate for	all	intervals				

Ratio of Apprentices to Journeymen - *

* Total number of helpers and apprentices shall not exceed the number of mechanics on the job , except where 2 teams are working, 1 additional helper or apprentice may be employed for first 2 teams and an extra helper or apprentice for each additional 3 teams. Further, the employer may use as many helpers or apprentices as needed, under the direction of a mechanic in wrecking old plants, handling and hoisting material, and on foundation work. When replacing cables on existing elevators, employer may use 2 helpers or apprentices to 1 mechanic.

Craft: Elevator Constructor

COMMENTS/NOTES

SHIFT DIFFERENTIALS:

- 2nd Shift (4:30 PM to 12:30 AM) shall be established on the basis of 7.5 hours of work for 8 hours of pay, plus an additional 10% per hour.
- 3rd Shift (12:30 AM to 8:00 AM) shall be established on the basis of 7 hours of work for 8 hours of pay, plus an additional 15% per hour.

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

County - CAMDEN

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays, Sundays, and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday to Thursday or Tuesday to Friday, at straight time. When working a 4-10 hour day schedule, all hours worked on a day other than the days established for the 4-10 hour schedule shall be paid at double the hourly rate.

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

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

County - CAMDEN

Craft: Glazier PREVAILING WAGE RATE

	05/09/24
Foreman	W52.00 B37.50 T89.50
Journeyman	W48.00 B37.50 T85.50

Craft: Glazier APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	22.56	24.00	26.88	30.24						
Benefits	19.79	22.54	23.99	26.61						

Ratio of Apprentices to Journeymen - 1:3

Craft: Glazier COMMENTS/NOTES

HIGH WORK (30 feet above ground /floor or using a swing stage): +\$1.00/hr

FOREMAN REQUIREMENT:

- When 4 or more Glaziers are working on a job that runs for 10 days or more, 1 shall be designated a Foreman.

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

SHIFT DIFFERENTIALS:

- Second and Third shift shall receive the regular hourly rate, plus 15% per hour.

OVERTIME:

- The first 2 hours in excess of 8 per day (9th and 10th hours), or outside the regular workday, Monday through Friday, that are not shift work, and the first 8 hours on Saturdays shall be paid at time and one-half the regular rate. All other daily overtime, and 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 Friday. The 11th and 12th hours on the 4 days worked, and the first 12 hours on the fifth day shall be paid at time and one-half the regular rate. All other daily overtime, and all hours on Saturdays, Sundays, and holidays shall be paid at double the regular rate.

- Benefits on overtime hours are as follows:

Time and one-half = \$46.36/hr.

Double time = \$55.22/hr.

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

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

County - CAMDEN

Craft: Heat & Frost Insulator

PREVAILING WAGE RATE

	05/01/24
Foreman (11-20 workers)	W65.30 B46.03 T111.33
Foreman (1-5 workers)	W62.34 B46.03 T108.37
Foreman (21-49 workers)	W68.27 B46.03 T114.30
Foreman (50+ workers)	W71.25 B46.03 T117.28
Foreman (6-10 workers)	W63.53 B46.03 T109.56
Journeyman	W59.37 B46.03 T105.40

Craft: Heat & Frost Insulator

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
1000 Hours	40%	45%	48%	50%	55%	60%	65%	70%	75%	80%
Benefits	35.54	35.54	Intervals	3 to 10 =	39.79					

Ratio of Apprentices to Journeymen - 1:4

Craft: Heat & Frost Insulator

COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- Foremen shall be designated based upon the number of Heat & Frost Insulators on the job, with the rates as shown above.
- If there is only 1 Heat & Frost Insulator on the job, he or she must be designated a Foreman.

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

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 3 consecutive workdays, with a minimum of 2 consecutive shifts each day.
- 2nd Shift shall be between the hours of 4:00 PM and 12:00 AM.
- 3rd Shift shall be between the hours of 12:00 AM and 8:00 AM.
- All shift work shall be paid an additional 15% of the regular rate, inclusive of benefits.

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

County - CAMDEN

OVERTIME:

- The 2 hours immediately before or after the regular workday, and the first 10 hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours in excess of 10 per day, Monday through Saturday, and all hours on Sundays 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.
- 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 regular rate, inclusive of benefits.

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

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

County - CAMDEN

Craft: Heat & Frost Insulator - Asbestos Worker

PREVAILING WAGE RATE

	05/01/24
Material Handler - 1st Level	W32.62 B23.87 T56.49
Material Handler - 2nd Level	W47.46 B23.77 T71.23
Mechanic (Journeyman)	W59.37 B46.03 T105.40

Craft: Heat & Frost Insulator - Asbestos Worker

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	Heat &	Frost	Insulator						

Craft: Heat & Frost Insulator - Asbestos Worker

COMMENTS/NOTES

NOTE: These rates apply ONLY to the REMOVAL of insulation containing asbestos from mechanical systems, including containment erection and demolition, and the placing of material in appropriate containers.

JOB TITLES:

- Mechanic: 8,000 hours or more of asbestos removal experience
- Material Handler - 2nd Level: 3,000 hours or more (up to 8,000 hours) of asbestos removal experience
- Material Handler - 1st Level: up to 3,000 hours of asbestos removal experience

RATIOS:

- The first worker on the project must be a Mechanic.
- Ratio of Material Handlers to Mechanics is 5:1 (5 Handlers to 1 Mechanic), with a minimum of two of the Handlers being 2nd Level Handlers.

SHIFT DIFFERENTIALS:

- 2nd Shift shall work 7.5 hours and receive 8 hours pay, plus \$0.25 per hour.
- 3rd Shift shall work 7 hours and receive 8 hours pay, plus \$0.50 per hour.

OVERTIME:

- Hours in excess of 40 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 (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, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

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

County - CAMDEN

Craft: Industrial Painter- Bridges

PREVAILING WAGE RATE

	03/21/24	02/01/25	02/01/26
Foreman	W64.29 B35.91 T100.20	W0.00 B0.00 T102.20	W0.00 B0.00 T104.20
General Foreman	W66.79 B35.91 T102.70	W0.00 B0.00 T104.70	W0.00 B0.00 T106.70
Journeyman	W59.29 B35.91 T95.20	W0.00 B0.00 T97.20	W0.00 B0.00 T99.20

Craft: Industrial Painter- Bridges

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	50%	70%	90%							
6 Months										
Benefits	14.10	21.26	27.88							

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Bridges

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as bridges.

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

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

County - CAMDEN

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.

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

County - CAMDEN

Craft: Industrial Painter- Structural Steel

PREVAILING WAGE RATE

	03/21/24	02/01/25	02/01/26
Foreman	W53.03 B33.56 T86.59	W0.00 B0.00 T88.59	W0.00 B0.00 T90.59
General Foreman	W55.53 B33.56 T89.09	W0.00 B0.00 T91.09	W0.00 B0.00 T93.09
Journeyman	W48.03 B33.56 T81.59	W0.00 B0.00 T83.59	W0.00 B0.00 T85.59

Craft: Industrial Painter- Structural Steel

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	INDUST	RIAL	PAINTER	BRIDGES					

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Structural Steel

COMMENTS/NOTES

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

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

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

County - CAMDEN

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.

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

County - CAMDEN

Craft: Industrial Painter- Water Tanks

PREVAILING WAGE RATE

	03/21/24	02/01/25	02/01/26
Foreman	W54.08 B33.21 T87.29	W0.00 B0.00 T89.29	W0.00 B0.00 T91.29
General Foreman	W56.58 B33.21 T89.79	W0.00 B0.00 T91.79	W0.00 B0.00 T93.79
Journeyman	W49.08 B33.21 T82.29	W0.00 B0.00 T84.29	W0.00 B0.00 T86.29

Craft: Industrial Painter- Water Tanks

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	50%	70%	90%							
6 Months										
Benefits	14.10	21.26	27.88							

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Water Tanks

COMMENTS/NOTES

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

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

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

County - CAMDEN

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.

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

County - CAMDEN

Craft: Ironworker PREVAILING WAGE RATE

	07/12/24
Foreman- Fence and Guardrail	W55.91 B37.94 T93.85
Foreman-Rod/Mesh	W61.23 B38.72 T99.95
Foreman-Structural	W62.38 B38.72 T101.10
Journeyman- Fence and Guardrail	W51.77 B37.94 T89.71
Journeyman-Rod/Mesh	W53.24 B38.72 T91.96
Journeyman-Structural	W54.24 B38.72 T92.96

Craft: Ironworker APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	66%	79%	88%							

Ratio of Apprentices to Journeymen - *

* On all work EXCEPT Ornamental Iron and Bridge Cable Spinning Work 1:4; On Ornamental Iron and Bridge Cable Spinning Work 1:1.

Craft: Ironworker COMMENTS/NOTES

Note: For work on hazardous waste sites, workers shall receive an additional \$3.00 per hour.

The regular workday shall consist of 8 hours between 6:00 AM and 5:00 PM.

SHIFT DIFFERENTIALS:

- Second shift shall receive an additional 10% per hour.
- Third shift shall receive an additional 15% per hour.
- An irregular shift (shift starting after 6:00 PM) shall receive an additional 15% per hour.

OVERTIME:

- Time and one-half the wage rate for hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and for all hours on Saturdays. Double the wage rate for all hours on Sundays and holidays.

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

County - CAMDEN

- Employees may work four 10-hour days, 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 worked on Friday shall be paid at time and one-half the wage rate.

- Benefits on overtime hours shall be paid at the following rates:

For Rod/Mesh and Structural-

When wages are time and one-half, benefits = \$44.58.

When wages are double, benefits = \$50.44.

For Fence and Guardrail-

When wages are time and one-half, benefits = \$43.41.

When wages are double, benefits = \$48.88.

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

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

County - CAMDEN

Craft: Laborer - Asbestos & Hazardous Waste Removal

PREVAILING WAGE RATE

	08/21/24
Foreman	W45.88 B26.21 T72.09
Journeyman (Handler)	W40.78 B26.21 T66.99

Craft: Laborer - Asbestos & Hazardous Waste Removal

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	24.47	28.55	32.62	36.70						
Benefits	22.31	for	all	intervals						

Ratio of Apprentices to Journeymen - *

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

Craft: Laborer - Asbestos & Hazardous Waste Removal

COMMENTS/NOTES

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

The regular workday shall be 8 hours.

OVERTIME:

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

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

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

County - CAMDEN

Craft: Laborer - Building

PREVAILING WAGE RATE

	08/28/24
Class A Journeyman	W39.25 B33.17 T72.42
Class B Journeyman	W38.25 B33.17 T71.42
Class C Journeyman	W32.51 B33.17 T65.68
Foreman	W44.16 B33.17 T77.33
General Foreman	W49.06 B33.17 T82.23

Craft: Laborer - Building

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	60%	70%	80%	90%	of Class B	wage rate				
6 Months										
Benefit	29.92	29.92	29.92	29.92						

Ratio of Apprentices to Journeymen - *

* Ratio of apprentices to journeymen shall not be more than one apprentice for the first journeyman and no more than one (1) apprentice for each additional three (3) 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 nozzle men on gunite work.

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

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

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

SHIFT DIFFERENTIALS:

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

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

County - CAMDEN

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%.

- When an irregular shift must be established this shift shall receive the regular rate plus an additional 10%.

OVERTIME:

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

- Four 10-hour days may be worked Monday to Thursday, at straight time, with Friday used a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the regular rate.

- Benefits on ALL overtime hours shall be paid at time and one-half.

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

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

County - CAMDEN

Craft: Laborer - Heavy & General

PREVAILING WAGE RATE

Rates are located in the
"Statewide" rate package

Craft: Laborer - Heavy & General

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1000 Hours	60%	70%	80%	90%						
Benefit	23.98	for	all	intervals						

Ratio of Apprentices to Journeymen - *

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

Craft: Laborer - Heavy & General

COMMENTS/NOTES

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

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

County - CAMDEN

Craft: Laborer-Residential and Modular Construction

PREVAILING WAGE RATE

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

Craft: Laborer-Residential and Modular Construction

APPRENTICE RATE SCHEDULE

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

Ratio of Apprentices to Journeymen-

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

Craft: Laborer-Residential and Modular Construction

COMMENTS/NOTES

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

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

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

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

County - CAMDEN

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

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

OVERTIME:

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

RECOGNIZED HOILDAYS:

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

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

County - CAMDEN

Craft: Operating Engineer - Field Engineer

PREVAILING WAGE RATE

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 - *

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

Craft: Operating Engineer - Field Engineer

COMMENTS/NOTES

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

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

County - CAMDEN

Craft: Painter - Line Striping

PREVAILING WAGE RATE

	12/01/23
Apprentice (1st year)	W29.89 B15.70 T45.59
Apprentice (2nd year)	W34.10 B26.65 T60.75
Foreman (Charge Person)	W43.10 B27.43 T70.53
Journeyman 1 (at least 1 year of working exp. as a journeyman)	W38.33 B27.43 T65.76
Journeyman 2 (at least 2 years of working exp. as a journeyman)	W42.10 B27.43 T69.53

Craft: Painter - Line Striping

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									

Ratio of Apprentices to Journeymen - 1:1

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.

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

County - CAMDEN

Craft: Paperhanger PREVAILING WAGE RATE

	05/29/24
Foreman	W53.79 B30.71 T84.50
Journeyman	W48.90 B30.71 T79.61

Craft: Paperhanger APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	COMME	CIAL	PAINTER						
		R								

Craft: Paperhanger COMMENTS/NOTES

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

County - CAMDEN

Craft: Pipefitter PREVAILING WAGE RATE

See "Plumber" Rates

Craft: Pipefitter COMMENTS/NOTES

*** See PLUMBER Rates***

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

County - CAMDEN

Craft: Plumber PREVAILING WAGE RATE

	05/01/24
Foreman	W58.16 B50.51 T108.67
Journeyman	W53.10 B50.51 T103.61

Craft: Plumber APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	30%	35%	45%	50%	55%	60%	65%	70%	75%	80%
Benefits	32.24	33.55	36.16	37.46	38.76	40.06	41.37	42.67	43.99	45.29

Ratio of Apprentices to Journeymen - 1:4

Craft: Plumber COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- On any job having 2 or more Journeyman Plumbers, 1 must be designated a Foreman.
- There must be 1 additional Foreman for every 10 Plumbers on the job.

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

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive 8 hours pay for 8 hours of work.
- 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.
- The rate of pay for all shift work shall be an additional 15% of the hourly rate, per hour.

OVERTIME:

The first 4 hours in excess of 8 per day, or before or after the regular workday that are not shift work, Monday through Friday, and the first 12 hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 12 per day, 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, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

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

County - CAMDEN

Craft: Roofer PREVAILING WAGE RATE

	05/29/24
Foreman (5 workers or less)	W46.13 B34.77 T80.90
Foreman (6 workers or more)	W46.63 B34.77 T81.40
Journeyman	W44.13 B34.77 T78.90

Craft: Roofer APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	52%	55%	60%	75%						
Benefits	23.39	28.04	34.77	34.77						

Ratio of Apprentices to Journeymen - *

* 1:2, 2:4, 3:6, 4:8, 5:10, 6:12, 7:14

Craft: Roofer COMMENTS/NOTES

NOTE: Mopper, Operator of Felt Laying Machine or Slag Dispenser shall receive an additional \$.50 per hour.

FOREMAN REQUIREMENTS:

- There must be a Foreman on all jobs.
- Foreman rate depends on the number of Roofers on the job, as indicated.

The regular workday is 8 hours between 5:00 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 wage rate.

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

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

County - CAMDEN

Craft: Roofer - Shingle, Slate & Tile

PREVAILING WAGE RATE

	05/29/24
Foreman (3 workers or less)	W34.85 B22.20 T57.05
Foreman (4 workers or more)	W35.35 B22.20 T57.55
Helper	W17.18 B22.20 T39.38
Journeyman (shingle work)	W34.35 B22.20 T56.55

Craft: Roofer - Shingle, Slate & Tile

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	60%	70%	80%							
Benefits	22.20	22.20	22.20							

Ratio of Apprentices to Journeymen - *

* 1:2, 2:4, 3:6, 4:8, 5:10, 6:12, 7:14

Craft: Roofer - Shingle, Slate & Tile

COMMENTS/NOTES

NOTE: Above rates are for Shingle work only. Slate and Tile work rates are an additional \$3.00 per hour.

HELPER RATIO: 1 Helper to 1 Journeyman

FOREMAN REQUIREMENTS:

- There must be a Foreman on all jobs.
- Foreman rate depends on the number of Roofers on the job, as indicated.

OVERTIME:

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

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

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

County - CAMDEN

Craft: Sheet Metal Sign Installation

PREVAILING WAGE RATE

	07/31/24
Foreman	W34.32 B25.82 T60.14
Journeyman	W32.32 B25.82 T58.14

Craft: Sheet Metal Sign Installation

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1000 Hours	50%	55%	60%	65%	70%	75%	80%	90%		
Benefits	22.99	23.07	23.14	23.23	24.32	24.40	24.47	24.63		

Ratio of Apprentices to Journeymen - 1:2

Craft: Sheet Metal Sign Installation

COMMENTS/NOTES

HAZARDOUS DUTY:

Sign Installers working from a bosun's chair or outside swinging scaffold at a height of 60 feet or more: + \$5.00 per hour.

FOREMAN REQUIREMENTS:

When there are 3 or more Sign Installers on a job, one must be designated a Foreman.

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

OVERTIME:

Hours in excess of 8 per day, or outside the regular workday, 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 time and one-half the regular rate.

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

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

County - CAMDEN

Craft: Sheet Metal Worker

PREVAILING WAGE RATE

	05/09/24
Foreman	W63.37 B50.56 T113.93
General Foreman	W67.51 B50.56 T118.07
Journeyman	W59.22 B50.56 T109.78

Craft: Sheet Metal Worker

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	45%	55%	60%	65%	70%	75%	85%		
6 Months										
Benefits	30.72	30.75	35.46	35.49	35.52	35.55	35.58	35.63		

Ratio of Apprentices to Journeymen - 1:4

Craft: Sheet Metal Worker

COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- When there are 1 to 10 Sheet Metal Workers on a job, 1 must be designated a foreman.
- When there are 11 to 20 Sheet Metal Workers on a job, 1 must be designated a foreman, and 1 must be designated a general foreman.
- When there are 21 or more Sheet Metal Workers on a job, 2 must be designated foremen, and 1 must be designated a general foreman.

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

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive 8 hours pay for 8 hours of work.
- 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.
- The rate of pay for all shift work shall be an additional 15% of the regular rate, per hour, 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, and the first 10 hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 10 per day, and all hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

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

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

County - CAMDEN

Craft: Tile Worker PREVAILING WAGE RATE

	06/03/24
Finisher	W43.64 B30.86 T74.50
Setter	W52.32 B36.25 T88.57

Craft: Tile Worker APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
750 Hours	40%	45%	50%	55%	60%	65%	70%	75%	80%	90%

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Worker COMMENTS/NOTES

NOTE: These rates also apply to Terrazzo and Marble work.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and the first 10 hours on Saturdays shall be paid at time and one half the regular rate, inclusive of benefits. Hours in excess of 10 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, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day. Sunday holidays shall be observed the following Monday.

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

County - CAMDEN

Craft: Truck Driver

PREVAILING WAGE RATE

	05/01/24
Bucket, Tack Spreader trucks	W43.30 B32.37 T75.67
Concrete mobile unit; Seeding/Fertilizing/ Mulching truck	W43.30 B32.37 T75.67
Dump, Water, Form, Vacuum or Vac-All, Pick-up trucks	W43.30 B32.37 T75.67
Helper on Straight 3-axle truck; Mechanic's helper	W43.10 B32.37 T75.47
Mechanics	W43.80 B32.37 T76.17
Shop Steward	W44.65 B32.37 T77.02
Straight 3-axle truck	W43.30 B32.37 T75.67
Tow truck	W43.45 B32.37 T75.82
Tractor-Trailer (any), Fuel, Winch, Asphalt Oil Distributor trucks	W43.65 B32.37 T76.02

Craft: Truck Driver

COMMENTS/NOTES

HAZARDOUS WASTE WORK:

- 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: + \$3.00 per hour.
- All other designated hazardous waste sites: + \$1.00 per hour.

SHIFT DIFFERENTIALS:

- Second and Third shifts shall receive an additional \$1.50 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on

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

County - CAMDEN

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 at straight time, Monday through Thursday, with Friday used as a make-up 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, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. The day after Thanksgiving may be substituted for Veterans' Day.

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

County - CAMDEN

Craft: Truck Driver-Material Delivery Driver

PREVAILING WAGE RATE

	05/01/24
Driver	W37.90 B32.37 T70.27

Craft: Truck Driver-Material Delivery Driver

COMMENTS/NOTES

These rates apply to delivery of materials TO a jobsite.

SHIFT DIFFERENTIALS:

- Second and Third shifts shall receive an additional \$1.50 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 hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked at straight time, Monday through Thursday, with Friday used as a make-up 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, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. The day after Thanksgiving may be substituted for Veterans' Day.

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

County - CAMDEN

Craft: Welder

PREVAILING WAGE RATE

Welder

Craft: Welder

COMMENTS/NOTES

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

STATEWIDE RATES

OPERATING ENGINEERS **Rates Expiration Date :**

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

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

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
58.88	39.15	98.03	100.53

CLASSIFICATIONS:

A-Frame

Backhoe (combination)

Boom Attachment on loaders (Except pipehook)

Boring & Drilling Machine

Brush Chopper, Brush Shredder, Tree Shredder, Tree Shearer

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: Outside Material Tower Hoist (all types including steam, gas, diesel, electric, air hydraulic, single and double drum, concrete, brick shaft caisson, snorkle roof, and other similar types, Except Chicago-boom type) * receives an additional \$1.00 per hour on 100 ft. up to 199 ft. total height, and an additional \$2.00 per hour on 200 ft. and over total height.

Hydraulic Crane (10 tons & under)

Hydraulic Dredge

Hydro-Axe

Hydro-Blaster

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
58.88	39.15	98.03	100.53

CLASSIFICATIONS:

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

Log Skidder

Pan

Paver, concrete

Plate & Frame Filter Press

Pumpcrete (unit type)

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

Scraper

Side Boom

Straddle Carrier (Ross and similar types)

Whiphammer

Winch Truck (hoisting)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
56.97	39.15	96.12	98.62

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 (Hetzl, Rexomatic & similar types)
- Concrete Vibrator

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
56.97	39.15	96.12	98.62

CLASSIFICATIONS:

- Conveyors - under 125 feet
- Crane Signalman
- Crushing Machine
- Directional Boring Machine
- Ditching Machine - Small (Ditchwitch, Vermeer or similar types)
- Dope Pot - Mechanical (with or without pump)
- Dumpster
- Elevator
- Fireman
- Fork Lift (Economobile, Lull & similar types)
- Front End Loader (1 cu. yd. and over but less than 2 cu. yds.)
- Generator (2 or 3 battery)
- Giraffe Grinder
- Goldhofer/Hydraulic Jacking Trailer
- Grader & Motor Patrols
- Grout Pump
- Gunnite Machine (Excluding nozzle)
- Hammer - Vibratory (in conjunction with generator)
- Heavy Equipment Robotics - Operator/Technician
- Hoist (roof, tigger, aerial platform hoist, house car)
- Hopper
- Hopper Doors (power operated)
- Ladder (motorized)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
56.97	39.15	96.12	98.62

CLASSIFICATIONS:

Laddervator

Locomotive (Dinky-type)

Maintenance Utility Man

Master Environmental Maintenance Technician

Mechanic

Mixer (Except paving mixers)

Pavement Breaker (truck-mounted or small self-propelled ride-on type)

Pavement Breaker - maintenance of compressor or hydraulic unit

Pipe Bending Machine (power)

Pitch Pump

Plaster Pump (regardless of size)

Post Hole Digger (post pounder, auger)

Rod Bending Machines

Roller (black top)

Scale (power)

Seamen Pulverizing Mixer

Shoulder Widener

Silo

Skimmer Machine (boom type)

Steel Cutting Machine (service & maintenance)

Tamrock Drill

Tractor

Transfer Machines

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
56.97	39.15	96.12	98.62

CLASSIFICATIONS:

Tug Captains

Tug Master (Power Boats)

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

Vacuum Blasting Machine - Operator/Maintenance Technician

Vibrating Plant (used with unloading)

Welder & Repair Mechanic

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
51.63	39.15	90.78	93.28

CLASSIFICATIONS:

Assistant Engineer/Oiler

Driller's Helper

Field Engineer - Transit man or Instrument man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Mechanic's Helper

Off Road Back Dump

Tire Repair & Maintenance

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
49.05	39.15	88.20	90.70

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

TERRITORY
ENTIRE STATE

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

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
59.21	39.15	98.36	100.86

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (minimum)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
60.47	39.15	99.62	102.12

CLASSIFICATIONS:

- Autograde Pavement Profiler (CMI & similar types)
- Autograde Pavement Profiler - Recycle Type (CMI & similar types)
- Autograde Placer/Trimmer/Spreader Combination (CMI & similar types)
- Autograde Slipform Paver (CMI & similar types)
- Backhoe (Excavator)
- Central Power Plant
- Concrete Paving Machine
- Cranes, Derricks, Pile Drivers (all types), under 100 tons with a boom (including jib and/or leads) under 100 ft.
- Draglines
- Drill, Bauer, AMI and similar types
- Drillmaster, Quarrymaster
- Drillmaster/Quarrymaster (down-the-hole drill), rotary drill, self-propelled hydraulic drill, self-powered drill
- Elevator Grader
- Field Engineer-Chief of Party
- Front End Loader (5 cu. yards or larger)
- Gradall
- Grader, Rago
- Helicopter Co-Pilot
- Helicopter Communications Engineer
- Juntann Pile Driver
- Locomotive (large)
- Mucking Machine

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
60.47	39.15	99.62	102.12

CLASSIFICATIONS:

Pavement & Concrete Breaker (Superhammer & Hoe Ram)

Pile Driver

Prentice Truck

Roadway Surface Grinder

Scooper (loader & shovel)

Shovel (Excavator)

Trackhoe (Excavator)

Tree Chopper with boom

Trenching Machine (cable plow)

Tunnel Boring Machine

Vacuum Truck

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
55.34	39.15	94.49	96.99

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

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
55.34	39.15	94.49	96.99

CLASSIFICATIONS:

Steam Generator or Boiler

Stone Spreader

Tamping Machine (vibrating ride-on type)

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

Water or Sprinkler Truck

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

Welding System - Multiple (rectifier transformer type)

Wellpoint Systems (including installation by bull gang and
maintenance)

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
62.29	39.15	101.44	103.94

CLASSIFICATIONS:

Helicopter Pilot/Engineer

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
66.97	39.15	106.12	108.62

CLASSIFICATIONS:

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

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
65.97	39.15	105.12	107.62

CLASSIFICATIONS:

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

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
62.47	39.15	101.62	104.12

CLASSIFICATIONS:

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

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
64.97	39.15	104.12	106.62

CLASSIFICATIONS:

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

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
61.47	39.15	100.62	103.12

CLASSIFICATIONS:

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

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
60.04	39.15	99.19	101.69

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

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
57.38	39.15	96.53	99.03

CLASSIFICATIONS:

- Aerial Platform Used On Hoists
- Apprentice Engineer/Oiler with Compressor or Welding Machine
- Captain (Power Boats)
- Compressor (2 or 3 in battery)
- Concrete Cleaning/Decontamination Machine Operator
- Conveyor or Tugger Hoist
- Directional Boring Machine
- Elevator or House Car
- Fireman
- Forklift
- Generator (2 or 3)
- Heavy Equipment Robotics, Operator/Technician
- Maintenance Utility Man
- Master Environmental Maintenance Technician
- Tug Master (Power Boats)
- Ultra High Pressure Waterjet Cutting Tool System Operator/Maintenance Technician
- Vacuum Blasting Machine Operator/Maintenance Technician
- Welding Machines, Gas or Electric Converters on any type-2 or 3 in battery including diesels

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
55.85	39.15	95.00	97.50

CLASSIFICATIONS:

Compressor (Single)

Generators

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

Welding System, Multiple (Rectifier Transformer Type)

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
52.09	39.15	91.24	93.74

CLASSIFICATIONS:

Assistant Engineer/Oiler

Drillers Helper

Field Engineer - Transit/Instrument Man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Off Road Back Dump

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
59.66	39.15	98.81	101.31

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
49.05	39.15	88.20	90.70

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
60.80	39.15	99.95	102.45

CLASSIFICATIONS:

Field Engineer-Chief of Party

Vacuum Truck

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
68.99	39.15	108.14	110.64

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms, including jib, 140 ft. and over, above ground). Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), and Pile Drivers (all types) 100 tons and over and Tower Cranes.

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
67.33	39.15	106.48	108.98

CLASSIFICATIONS:

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

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
64.49	39.15	103.64	106.14

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:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
62.83	39.15	101.98	104.48

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.

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STRUCTURAL STEEL ERECTION Rates Expiration Date :

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
64.49	39.15	103.64	106.14

CLASSIFICATIONS:

Helicopter Pilot & Engineer

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

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

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

Effective Dates:

	07/01/2024		07/01/2025
Rate	Fringe	Total	Total
60.47	39.15	99.62	102.12

CLASSIFICATIONS:

Driller

Effective Dates:

	07/01/2024		07/01/2025
Rate	Fringe	Total	Total
53.63	39.15	92.78	95.28

CLASSIFICATIONS:

Driller's Helper

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

{For apprentice rates refer to "Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

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

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

Traffic Control Coordinator: When either of the work classifications found below are working as a Traffic Control Coordinator they are to receive \$.75 above their current rate of pay.

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
65.06	37.33	102.39	106.26	109.94

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
64.69	37.33	102.02	105.88	109.57

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrician Foreman, Rigging Foreman

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
64.06	37.33	101.39	105.26	108.94

CLASSIFICATIONS:

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

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
67.19	37.33	104.52	108.38	112.07

CLASSIFICATIONS:

Blaster

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
63.38	37.33	100.71	104.57	108.26

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
62.94	37.33	100.27	104.13	107.82

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Manintenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Tod Man)

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
62.75	37.33	100.08	103.94	107.63

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)

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

FREE AIR TUNNEL JOBS Rates Expiration Date :

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
62.25	37.33	99.58	103.44	107.13

CLASSIFICATIONS:

All Others (including Powder Watchman, Change House Attendant, Top Laborer)

DRILL FOR GROUND WATER SUPPLY **Rates Expiration Date :**

The well driller and/or helper may perform all work relative to the construction, finishing, and servicing of wells, pumps and borings for ground water supply. The present methods of well drilling entailing as they do, many diverse job operations calling for drilling, pump discharge, piping, and the operation of various types of related power equipment, shall all be within the job duties and functions of the well driller and/or helper. In the event that an extension of work should occur beyond water well drilling functions, into the field of general construction work, such extension of work would come under the appropriate rates listed elsewhere in this wage determination.

- For Work Hours, Shift Differentials, Overtime Rates, and Recognized Holidays see the "Operating Engineers" section of this wage determination.

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
59.22	39.15	98.37	100.87

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2024			07/01/2025
Rate	Fringe	Total	Total
52.38	39.15	91.53	94.03

CLASSIFICATIONS:

Driller's Helper

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date :**

NOTE: These wage rates only apply to dredging and other marine construction activities occurring in navigable waters and their tributaries.

Boat crews carrying explosive material (dynamite, pourfex, and other similar materials) shall be paid at 120% of the hourly wage rate for hours engaged in handling of said materials. Employees required to possess a Hazardous Material Certification as a condition of employment shall be compensated at 120% of the hourly wage rate.

OVERTIME:

Hours in excess of 40 per week, and all hours on Saturdays and Sundays, shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

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

Effective Dates:

10/01/2023

Rate	Fringe	Total
45.26	15.22	60.48

CLASSIFICATIONS:

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

Effective Dates:

10/01/2023

Rate	Fringe	Total
39.14	14.79	53.93

CLASSIFICATIONS:

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

Effective Dates:

10/01/2023

Rate	Fringe	Total
36.84	14.63	51.47

CLASSIFICATIONS:

Certified Welder

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date :**

Effective Dates:

10/01/2023

Rate	Fringe	Total
35.83	14.31	50.14

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

10/01/2023

Rate	Fringe	Total
34.68	14.23	48.91

CLASSIFICATIONS:

Boat Operator

Effective Dates:

10/01/2023

Rate	Fringe	Total
28.81	13.82	42.63

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

Effective Dates:

10/01/2023

Rate	Fringe	Total
40.33	14.87	55.20

CLASSIFICATIONS:

Crane Operator

MICROSURFACING/SLURRY SEAL Rates Expiration Date :

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

IN ALL OTHER COUNTIES use the Heavy and General Laborers - North "Slurry Seal Laborer" rates.

SHIFT DIFFERENTIALS:

Any shift starting at 3:30 PM or later shall receive an additional \$0.35/hr

OVERTIME:

Hours in excess of 8 per day or 40 per week shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

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

Effective Dates:

03/01/2017

Rate	Fringe	Total
36.50	21.27	57.77

CLASSIFICATIONS:

Foreman

Effective Dates:

03/01/2017

Rate	Fringe	Total
33.80	21.27	55.07

CLASSIFICATIONS:

Box man

Effective Dates:

03/01/2017

Rate	Fringe	Total
31.75	21.27	53.02

CLASSIFICATIONS:

Microsurface/Slurry Preparation

Effective Dates:

03/01/2017

Rate	Fringe	Total
31.75	21.27	53.02

CLASSIFICATIONS:

Squeegee man

TERRITORY
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MICROSURFACING/SLURRY SEAL Rates Expiration Date :

Effective Dates:

03/01/2017

Rate	Fringe	Total
30.30	21.27	51.57

CLASSIFICATIONS:

Cleaner, Taper

ASPHALT LABORERS - SOUTH **Rates Expiration Date :**

"THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

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

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

	03/21/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
53.55	37.33	90.88	94.33	97.58

CLASSIFICATIONS:

Paving Foreman

Effective Dates:

	03/21/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.10	37.33	87.43	90.88	94.13

CLASSIFICATIONS:

Head Raker

Effective Dates:

	03/21/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.25	37.33	87.58	91.03	94.28

CLASSIFICATIONS:

Screedman

ASPHALT LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
49.70	37.33	87.03	90.48	93.73

CLASSIFICATIONS:

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

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
49.80	37.33	87.13	90.58	93.83

CLASSIFICATIONS:

Milling Controller

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.00	37.33	87.33	90.78	94.03

CLASSIFICATIONS:

Traffic Control Coordinator

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
49.95	37.33	87.28	90.73	93.98

CLASSIFICATIONS:

Raker, Luteman

TEST BORING PRELIMINARY TO CONSTRUCTION-NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset, Union

SHIFT DIFFERENTIAL:

Employees on a shift other than between the hours of 8:00 AM and 5:00 PM shall receive an additional \$2.00 per hour.

OVERTIME:

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

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

Hazardous Waste Pay (for Levels A, B, and C): an additional 15% of the hourly rate, per hour.

A newly hired Helper with no experience in the industry shall be paid as follows:

- 1st year on the job - 70% of Helper wage rate
- 2nd year on the job - 80% of Helper wage rate
- 3rd year on the job - 90% of Helper wage rate
- All helpers receive full fringe benefit rate.

Effective Dates:

12/01/2023

Rate	Fringe	Total
36.28	33.49	69.77

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

12/01/2023

Rate	Fringe	Total
46.25	33.49	79.74

CLASSIFICATIONS:

Driller

Effective Dates:

12/01/2023

Rate	Fringe	Total
52.66	33.49	86.15

CLASSIFICATIONS:

Foreman

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:

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

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

04/17/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
49.30	37.33	86.63	90.08	93.33

CLASSIFICATIONS:

"D" Rate:

basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofer; timberman; wagon drill or drill master helper; powder carrier; magazine tender; signal man; power buggy operator; tree cutter; operator of basic power tools

Effective Dates:

04/17/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.00	37.33	87.33	90.78	94.03

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; asphalt raker or lute man

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.25	37.33	87.58	91.03	94.28

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:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
53.80	37.33	91.13	94.58	97.83

CLASSIFICATIONS:

"A" Rate:

blaster

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
53.55	37.33	90.88	94.33	97.58

CLASSIFICATIONS:

"FOREMAN" Rate:

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

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
54.55	37.33	91.88	95.33	98.58

CLASSIFICATIONS:

"GENERAL FOREMAN" Rate

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.75	37.33	88.08	91.53	94.78

CLASSIFICATIONS:

TRAFFIC CONTROL COORDINATOR Rate

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:

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

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

	03/21/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
49.30	37.33	86.63	90.08	93.33

CLASSIFICATIONS:

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

Effective Dates:

	03/21/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
49.30	37.33	86.63	90.08	93.33

CLASSIFICATIONS:

wagon drill or drill master helper; powder carrier; magazine tender; signal man

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.00	37.33	87.33	90.78	94.03

CLASSIFICATIONS:

pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.00	37.33	87.33	90.78	94.03

CLASSIFICATIONS:

wagon or directional drill operator; drill master

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
53.80	37.33	91.13	94.58	97.83

CLASSIFICATIONS:

blaster

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
53.55	37.33	90.88	94.33	97.58

CLASSIFICATIONS:

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

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
54.55	37.33	91.88	95.33	98.58

CLASSIFICATIONS:

general foreman

TERRITORY
ENTIRE STATE

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

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

03/21/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.25	37.33	87.58	91.03	94.28

CLASSIFICATIONS:

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

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date :

These rates apply to the following: welding on Transportation Mainline pipe lines (cross-country pipe lines, or any segments thereof, transporting coal, gas, oil, water or other transportable materials, vapors or liquids, including portions of such pipe lines within private property boundaries up to the final metering station or connection - the point where a valve, consumer connection, or town border station divides mainline transmission lines or higher pressure lateral and branch lines from lower pressure distribution systems).

PER DIEM PAYMENT:

In addition to the total wage rate paid for each craft, the following per diem (per day) amounts must also be paid - Pipeline Journeyman: \$80.50; Pipeline Journeyman Welder: \$140.50; and Pipeline Helper: \$64.50. Note: in order to receive the per diem payment an employee must work a minimum of 8 hours in a 24 hour period.

NOTES:

- Journeymen employed as "stringer bead" welders and journeymen who are regularly employed as "hot-pass" welders shall receive \$1.00 per hour more than other journeymen.
- Welders running "stringer bead" or "hot-pass" on "cutouts" or "tie-ins" on a production basis shall be paid \$1.00 per hour above the journeymen rate.
- Whenever a welder helper is employed using a power buffer or power grinder immediately behind the stringer bead and/or hot-pass welders, and the pipe gang is set on a production basis, the helper shall be paid \$2.00 per hour above the helper rate.
- If back welding is performed inside a pipe under either or both of the following conditions, the welder engaged in the welding will receive \$3.00 per hour above the regular rate for the job only for the days on which such back welding is performed:
 - The employer elects, as a regular procedure, to back weld each line-up. This condition is not intended to apply to occasional back welding performed by the pipe gang to repair a bead, to rectify a "high-lo" condition or wall thickness, etc.
 - A welder is required to back weld a completed weld behind the firing line.
- If the welder helper is required to go inside the pipe for the purpose of brushing, buffing and grinding the weld, they shall receive a wage rate \$1.00 per hour above the regular helper rate for the days involved.
- Welders working on "hot work" shall be paid \$2.00 per hour above the regular rate for each day engaged in such work. "Hot work" is defined as work on lines in service where there is the danger of fire or explosion.

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

OVERTIME:

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

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

Effective Dates:

06/13/2024

Rate	Fringe	Total
57.34	35.90	93.24

CLASSIFICATIONS:

Pipeline Journeyman Welder

TERRITORY
ENTIRE STATE

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

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date :

Effective Dates:

06/13/2024

Rate	Fringe	Total
57.34	35.90	93.24

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

06/13/2024

Rate	Fringe	Total
33.84	25.02	58.86

CLASSIFICATIONS:

Pipeline Helper

PIPELINE - GAS DISTRIBUTION **Rates Expiration Date :**

These rates apply to the following: welding on gas line distribution systems (that portion of the gas distribution system placed in streets, roads, subways, tunnels, viaducts, highways and easements which serves the users of gas).

SHIFT DIFFERENTIALS:

An "irregular" shift may start any time from 5:00 PM to 12:00 AM, Monday through Friday, and shall receive an additional 15% of the regular rate per hour, inclusive of benefits.

OVERTIME:

Hours in excess of forty per week, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

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

Effective Dates:

11/01/2023

Rate	Fringe	Total
64.70	31.84	96.54

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

11/01/2023

Rate	Fringe	Total
64.70	31.84	96.54

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

11/01/2023

Rate	Fringe	Total
41.00	23.56	64.56

CLASSIFICATIONS:

Pipeline Helper

ASPHALT LABORERS- NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

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

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
53.55	37.33	90.88	94.33	97.58

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.25	37.33	87.58	91.03	94.28

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
50.00	37.33	87.33	90.78	94.03

CLASSIFICATIONS:

Asphalt Raker or Lute Man

TERRITORY
ENTIRE STATE

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

ASPHALT LABORERS- NORTH Rates Expiration Date :

Effective Dates:

04/17/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
49.30	37.33	86.63	90.08	93.33

CLASSIFICATIONS:

Asphalt Laborer

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Electrician-Utility Work (North)

(For apprentice rates refer to Electrician-Utility Work (North) in any county rate package).

These rates apply to work contracted for by the following utility companies:

Public Service Electric & Gas Co. of NJ, GPU Energy, Borough of Madison Electric Department, Sussex Rural Electric Cooperative, Rockland Utilities, and Butler Municipal Electric Co.

These rates do not apply to work on substations or switching stations.

For Utility work contracted for by a utility company other than those listed above or those listed under "Electrician-Utility Work (South), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 6:00 AM and 6:00 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)-all hours of work shall be paid at double the hourly rate.

SHIFT DIFFERENTIALS:

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

2nd shift (between the hours of 4:30 PM and 1:00 AM): 8 hours of work + 17.3% of the regular rate, inclusive of benefits.

3rd shift (between the hours of 12:30 AM and 9:00 AM): 8 hours of work + 31.4% of the regular rate per hour, inclusive of benefits.

OVERTIME:

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

Four 10-hour days may worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday.

RECOGNIZED HOLIDAYS:

New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day, or day on which they are legally observed.

Effective Dates:

	12/03/2023		12/01/2024
Rate	Fringe	Total	Total
62.94	43.42	106.36	109.56

CLASSIFICATIONS:

Chief Lineman

Effective Dates:

	12/03/2023		12/01/2024
Rate	Fringe	Total	Total
59.38	40.97	100.35	103.36

CLASSIFICATIONS:

Journeyman Lineman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
59.38	40.97	100.35	103.36

CLASSIFICATIONS:

Special License Operator

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
58.79	40.56	99.35	102.32

CLASSIFICATIONS:

Transit Man

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
57.00	39.33	96.33	99.21

CLASSIFICATIONS:

Line Equipment Operator

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
49.88	34.41	84.29	86.81

CLASSIFICATIONS:

Dynamite Man

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
74.23	51.21	125.44	129.20

CLASSIFICATIONS:

General Foreman

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
68.29	47.12	115.41	118.85

CLASSIFICATIONS:

Assistant General Foreman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
66.51	45.89	112.40	115.76

CLASSIFICATIONS:

Line Foreman

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
48.10	33.18	81.28	83.72

CLASSIFICATIONS:

Street Light Mechanical Leader

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
45.72	31.54	77.26	79.58

CLASSIFICATIONS:

Groundman Winch Operator

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
45.72	31.54	77.26	79.58

CLASSIFICATIONS:

Groundman Truck Operator

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
45.13	31.13	76.26	78.55

CLASSIFICATIONS:

Street Light Mechanic

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
45.13	31.13	76.26	78.55

CLASSIFICATIONS:

Line Equipment Mechanic

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
38.60	26.63	65.23	67.17

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
35.63	24.58	60.21	62.02

CLASSIFICATIONS:

Groundman 1st Year

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
58.79	40.56	99.35	102.32

CLASSIFICATIONS:

Line Equipment Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Electrician-Utility Work (South)

(For apprentice rates refer to Electrician-Utility Work (South) in any county rate package).

These rates apply to work contracted for by the following utility company:

Atlantic City Electric.

These rates do not apply to work on substations or switching stations.

For utility work contracted for by a utility company other than the one listed above or those listed under "Electrician-Utility Work (North), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

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

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)- all hours of work shall be paid at double the hourly rate.

SHIFT DIFFERENTIALS:

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

When two (2) or three (3) shifts are worked the following shall apply:

1st shift (between the hours of 8:00 AM and 4:30 PM)

2nd shift (between the hours of 4:30 PM and 12:30 AM): 8 hours of work + 10% of the regular rate of pay for 7.5 hours worked.

3rd shift (between the hours of 12:30 AM and 8:00 AM): 8 hours of work + 15% of the regular rate of pay for 7 hours worked.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday 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 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:

12/03/2023

Rate	Fringe	Total
69.38	57.15	126.53

CLASSIFICATIONS:

General Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023

Rate	Fringe	Total
61.79	52.45	114.24

CLASSIFICATIONS:

Foreman

Effective Dates:

12/03/2023

Rate	Fringe	Total
58.54	50.46	109.00

CLASSIFICATIONS:

Small Job Foreman

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Heavy Equipment Operator

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Cable Splicer

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Journeyman Welder

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date :

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Journeyman Painter

Effective Dates:

12/03/2023

Rate	Fringe	Total
43.36	41.09	84.45

CLASSIFICATIONS:

Light Equipment Operator

Effective Dates:

12/03/2023

Rate	Fringe	Total
37.94	37.71	75.65

CLASSIFICATIONS:

Groundman Truck Driver

Effective Dates:

12/03/2023

Rate	Fringe	Total
35.23	36.05	71.28

CLASSIFICATIONS:

Groundman 3rd Year

Effective Dates:

12/03/2023

Rate	Fringe	Total
32.52	34.37	66.89

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/03/2023

Rate	Fringe	Total
29.81	32.69	62.50

CLASSIFICATIONS:

Groundman 1st Year

TERRITORY
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date :

Effective Dates:

12/03/2023

Rate	Fringe	Total
23.85	29.03	52.88

CLASSIFICATIONS:

Flagman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

****THESE RATES APPLY TO CONSTRUCTION ON NEW TRANS HUDSON TUNNELS ONLY****

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

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

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

Traffic Control Coordinator: When either of the work classifications found below are working as a Traffic Control Coordinator they are to receive \$.75 above their current rate of pay.

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
78.08	37.33	115.41	119.68	123.81

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
77.63	37.33	114.96	119.23	123.36

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrical Foreman, Rigging Foreman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
76.88	37.33	114.21	118.48	122.61

CLASSIFICATIONS:

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

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
80.63	37.33	117.96	122.23	126.36

CLASSIFICATIONS:

Blaster

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
76.05	37.33	113.38	117.66	121.78

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
75.53	37.33	112.86	117.13	121.26

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:

	04/17/2024		03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
75.30	37.33	112.63	116.91	121.03

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man top or bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

TERRITORY
ENTIRE STATE

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

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date :

Effective Dates:

04/17/2024			03/01/2025	03/01/2026
Rate	Fringe	Total	Total	Total
74.70	37.33	112.03	116.31	120.43

CLASSIFICATIONS:

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

DAVIS BACON ACT PREVAILING WAGE RATES

CAMDEN COUNTY

Superseded General Decision Number: NJ20230001

State: New Jersey

Construction Type: Highway

Counties: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Monmouth, Ocean and Salem Counties in New Jersey.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

0	01/05/2024
1	01/26/2024
2	03/08/2024
3	07/12/2024
4	09/06/2024

BRNJ0002-002 05/01/2021

	Rates	Fringes
Bricklayer.....	\$ 45.20	33.26
Work 100 degrees F. and over: to be paid at the rate of double time.		
Work on high stacks: 22% per hour additional.		

BRNJ0002-003 05/01/2021

DOES NOT INCLUDE BUILDING CONSTRUCTION IN MERCER COUNTY - SEE
SUNJ1993-001

	Rates	Fringes
Cement mason.....	\$ 45.20	33.26
Cement mason: Epoxy, acid and latex work: \$.50 per hour additional.		

* CARP0006-005 05/01/2024

	Rates	Fringes
Carpenter.....	\$ 56.01	59.25%+\$0.14

CARP0454-002 05/01/2023

ATLANTIC, BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND, GLOUCESTER,
OCEAN AND SALEM COUNTIES:

	Rates	Fringes
Piledriver.....	\$ 46.73	41.69

PAID HOLIDAYS:
New Year's Day, Washington's Birthday, Memorial Day,
Independence Day, Labor Day, Thanksgiving Day and Christmas
Day; provided that the worker works any of the three days
in the five-day work week preceding the holiday and the
first work day after the holiday.

* CARP1556-002 05/01/2024

MERCER AND MONMOUTH COUNTIES:

	Rates	Fringes
Dock Builder & Piledrivermen.....	\$ 52.98	52.44

Work on land pile driving, while handling and working with creosote and creosote-impregnated products: \$.25 per hour additional.

Work on hazardous/toxic/contaminated waste removal, on a hazardous/toxic/contaminated waste site, where the worker comes into contact with hazardous/toxic/contaminated waste material, and when A, B or C personal protective equipment is required and used for respiratory, skin or eye protection: 20% per hour additional.

ELEC0269-003 10/01/2017

BURLINGTON COUNTY (north of a line following the west and south limits of Burlington Borough from the Delaware River, in a southeasterly direction, to the Burlington - Mt. Holly road; then, south-southeast along the Burlington - Mt. Holly road to the town of Mt. Holly, includes Mt. Holly; then, east along the Pennsylvania Railroad to the town of New Lisbon, includes New Lisbon; then, continuing along the Pennsylvania Railroad to the Ocean County line); MERCER COUNTY:

	Rates	Fringes
Line construction:		
Continuous pipe-type underground oil-filled transmission conduit installations:		
Ground person; truck with winch operator.....	\$ 39.83	60.93%
Line technician; cable splicer; heavy equipment operator.....	\$ 49.79	60.93%
All other work:		
Ground person; truck with winch operator.....	\$ 39.83	60.93%
Line technician; cable splicer; heavy equipment operator.....	\$ 49.79	60.93%

ELEC0269-004 01/02/2023

BURLINGTON COUNTY (north of a line following the west and south limits of Burlington Borough from the Delaware River, in a southeasterly direction, to the Burlington - Mt. Holly road; then, south-southeast along the Burlington - Mt. Holly road to the town of Mt. Holly, includes Mt. Holly; then, east along the Pennsylvania Railroad to the town of New Lisbon, includes New Lisbon; then, continuing along the Pennsylvania Railroad to the Ocean County line); MERCER COUNTY:

	Rates	Fringes
ELECTRICIAN		
Cable Splicer.....	\$ 52.71	62.48%
Electrician.....	\$ 54.27	65.20%

ELEC0351-001 10/02/2023

ATLANTIC COUNTY; BURLINGTON COUNTY (south of a line following the west and south limits of Burlington Borough from the

Delaware River, in a southeasterly direction, to the Burlington - Mt. Holly road; then, south-southeast along the Burlington - Mt. Holly road to the town of Mt. Holly, does not include Mt. Holly; then, east along the Pennsylvania Railroad to the town of New Lisbon, does not include New Lisbon; then, continuing along the Pennsylvania Railroad to the Ocean County line); CAMDEN, CAPE MAY, CUMBERLAND, GLOUCESTER AND SALEM COUNTIES:

Rates Fringes

Electricians:

Cable splicer on lead cable.	\$ 46.51	72.54% + .65
Electrician and cable splicer.....	\$ 53.69	76.87%+5.95

ELEC0351-002 12/03/2023

ATLANTIC COUNTY; BURLINGTON COUNTY (south of a line following the west and south limits of Burlington Borough from the Delaware River, in a southeasterly direction, to the Burlington - Mt. Holly road; then, south-southeast along the Burlington - Mt. Holly road to the town of Mt. Holly, does not include Mt. Holly; then, east along the Pennsylvania Railroad to the town of New Lisbon, does not include New Lisbon; then, continuing along the Pennsylvania Railroad to the Ocean County line); CAMDEN, CAPE MAY, CUMBERLAND, GLOUCESTER AND SALEM COUNTIES:

Rates Fringes

Line construction:

Groundmen.....	\$ 29.81	58.54%+14.27
Heavy equipment operator....	\$ 43.36	58.54%+14.27
Lineman.....	\$ 54.20	58.54%+14.27

ELEC0400-001 05/29/2023

MONMOUTH AND OCEAN COUNTIES:

Rates Fringes

Electrician & Cable Splicer.....	\$ 55.17	41.66
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ELEC0400-002 05/30/2022

MONMOUTH AND OCEAN COUNTIES:

Rates Fringes

Line construction:

Continuous pipe-type underground oil-filled transmission conduit installations:
Electrical installation equipment operators: Hole-digging equipment; truck with winch or pole, and steel hand; truck without winch; ground person.....\$ 30.30 20.60
Equipment service person...\$ 53.12 38.81
Line technician, cable splicer, x-ray technician, and equipment

repair person.....	\$ 53.35	38.81
Line technician/welder.....	\$ 53.35	38.81
All other work:		
Ground person.....	\$ 37.35	27.17
Line technician, cable splicer, and equipment operator.....	\$ 53.35	38.81

Work with hazardous materials: 10% per hour additional.

ENGI0825-002 07/01/2023

	Rates	Fringes
Power equipment operators:		
GROUP 1.....	\$ 59.22	33.50
GROUP 2.....	\$ 57.63	33.50
GROUP 3.....	\$ 55.72	33.50
GROUP 4.....	\$ 54.09	33.50
GROUP 5.....	\$ 50.38	33.50
GROUP 6.....	\$ 61.04	33.50

Hazardous waste removal work:

Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous material, and when personal protective equipment is required for respiratory, skin and eye protection: 20% per hour additional.

PAID HOLIDAYS:

New Year's Day, Washington's Birthday observed, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day; provided 1) that the worker works three of the preceding five work days before the holiday; or, the work day before the holiday and the work day after the holiday; and, 2) that the worker works the work day before and the work day after the holiday.

DEFINITION OF GROUPS:

GROUP 1:

Autograde - combination subgrader; base metal spreader and base trimmer (CMI and similar types); autograde placer - trimmer spreader combination (CMI and similar types); autograde slipform paver (CMI and similar types); backhoe; central power plant (all types); concrete paving machine; crane (all types, including overhead and straddle traveling type); crane, gantry; derrick (land, floating or Chicago boom type); drillmaster, quarrymaster (down-the-hole drill, rotary drill, self-propelled hydraulic drill, self-powered drill); dragline; elevating grader; front end loader (5 cu. yd. and over); gradall; grader, raygo; locomotive (large); mucking machine; pavement and concrete breaker (superhammer and hoe ram); pile driver (length of boom, including length of leads, shall determine premium rate applicable); roadway surface grinder; scooper (loader and shovel); shovel; tree chopper with boom; trench machine (cable plow)

GROUP 2:

""A"" frame/backhoe combination; boom attachment on loader (rate based on size of bucket, not applicable to pipehook); boring and drilling machine; brush chopper, shredder and

tree shredder; carryall; concrete pump; concrete pumping system, pumpcrete and similar type; conveyor, 125 ft. and over; drill doctor, including dust collecting and maintenance work; front end loader (2 cu. yd. but less than 5 cu. yd.); grader (finish); groove cutting machine (ride-on type); heater planer; hoist (all types of hoist, shall also include steam, gas, diesel, electric, air, hydraulic, single and double drum, concrete, brick shaft caisson, snorkel roof, and/or any other similar type hoisting machine, portable or stationary, except Chicago boom type) (if hoist is "outside material tower hoist", long boom rate is to be applied); hydraulic crane, 10 tons and under; hydro-axe; hydro-blaster; jack (screw, air, hydraulic power-operated unit or console type (not hand jack or pile load test type); log skidder; pan; pavers (all) (concrete); plate and frame filter press; pumpcrete machine; squeezecrete; concrete pump (regardless of size); scraper; side boom; straddle carrier, Ross and similar type; whip hammer; winch truck (hoisting)

GROUP 3:

Asphalt curbing machine; asphalt plant engineer; asphalt spreader; autograde tube finishing and texturing machine (CMI and similar types); autograde curecrete machine (CMI and similar types); autograde curb trimmer and sidewalk, shoulder, slipform (CMI and similar types); bar bending machine (power); batcher; batching plant and crusher on site; belt conveyor system; boom-type skimmer machine; bridge deck finisher; bulldozers (all); car dumper (railroad); compressor and blower-type unit (used independently or mounted on dual-purpose truck, on jobsite or in conjunction with jobsite, in loading and unloading of concrete, cement, fly ash, instantcrete, or similar type materials); compressor (2 or 3) (in battery) (within 100 ft.); concrete cleaning/decontamination machine operator, when used for decontamination and remediation; concrete finishing machine; concrete saw and cutter (ride-on type); concrete spreader, hetzel, rexomatic and similar type; concrete vibrator; conveyor, under 125 ft.; crushing machine; directional boring machine; ditching machine, small (Ditchwitch, Vermeer or similar type); dope pot (mechanical with or without pump); dumpster; elevator; firefighter; forklift (Economobile, Lull and similar type of equipment); front end loader (1 cu. yd. and over but less than 2 cu. yd.); generator (2 or 3) (in battery) (within 100 ft.); giraffe grinder; grader and motor patrol; gunite machine (does not include nozzle); hammer, vibratory (in conjunction with generator); heavy equipment robotic operator/technician, when used for decontamination and remediation; hoist (roof, tugger, aerial platform hoist and house cars); hopper; hopper door (power-operated); ladder (motorized); laddervator; locomotive, dinky type; maintenance, utility person; master environmental maintenance technician, when used for decontamination and remediation; mechanic; mixer (except paving mixer); pavement breaker, small, self-propelled ride-on type (also maintains compressor on hydraulic unit); pavement breaker, truck-mounted; pipe bending machine (power); pitch pump; plaster pump, regardless of size; posthole digger (post pounder and auger); rod bending machine (power); roller, blacktop; scale, power; seaman pulverizing mixer; shoulder widener; silo; skimmer machine (boom type); steel cutting machine, servicing and maintaining; tractor; captain, power boat; tug master, power boat; ultra high-pressure waterjet cutting tool system operator/maintenance technician, when

used for decontamination and remediation; vacuum blasting machine operator/maintenance technician, when used for decontamination and remediation; vibrating plant (used in conjunction with unloading); welder and repair mechanic

GROUP 4:

Broom and sweeper; chipper; compressor (single); concrete spreader (small type); conveyor loader (does not include elevating grader); engine, large diesel (1620 H.P.) and staging pump; farm tractor; fertilizing equipment (operation and maintenance of); fine grade machine (small type); form line grader (small type); front end loader (under 1 cu. yd.); generator (single); grease, gas, fuel and oil supply truck; heater (Nelson or other type including propane, natural gas or flow-type unit); lights (portable generating light plant); mixer, concrete, small; mulching equipment (operation and maintenance of); off-road back dump; pump (4-in. suction and over, including submersible pump); pump (diesel engine and hydraulic) (immaterial of power); road finishing machine (small type); roller, grade, fill or stone base; seeding equipment (operation and maintenance of); sprinkler and water pump truck; steam jenny and boiler; stone spreader; tamping machine, vibrating ride-on; temporary heating plant (Nelson or other type, including propane, natural gas or flow-type unit); welding machine (gas, diesel, and/or electric converter of any type) (single, or two or three in a battery) (within 100 ft.); welding system, multiple (rectifier, transformer type); wellpoint system

GROUP 5:

Oiler; tire repair and maintenance

GROUP 6:

Helicopter pilot; helicopter engineer

 ENGI0825-004 07/01/2023

	Rates	Fringes
Power equipment operators:		
Steel erection:		
GROUP 1.....	\$ 67.74	33.50
GROUP 2.....	\$ 66.08	33.50
GROUP 3.....	\$ 63.24	33.50
GROUP 4.....	\$ 58.79	33.50
GROUP 5.....	\$ 56.13	33.50
GROUP 6.....	\$ 54.60	33.50
GROUP 7.....	\$ 50.84	33.50

Hazardous waste removal work:

Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous material, and when personal protective equipment is required for respiratory, skin and eye protection: 20% per hour additional.

PAID HOLIDAYS:

New Year's Day, Washington's Birthday observed, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day; provided 1) that the worker works three of the preceding five work days before the holiday; or, the work day before

the holiday and the work day after the holiday; and, 2) that the worker works the work day before and the work day after the holiday.

DEFINITION OF GROUPS:

GROUP 1:

Cranes (all cranes, land or floating with boom including jib, 140 ft. and over, above ground); derricks (all derricks, land, floating or Chicago boom type with boom including jib, 140 ft. and over, above ground)

GROUP 2:

Cranes (all cranes, land or floating with boom including jib, less than 140 ft. above ground); derricks (all derricks, land, floating or Chicago boom type with boom including jib, less than 140 ft. above ground)

GROUP 3:

Helicopter pilot

GROUP 4:

""A"" frame; cherry picker (10 ton and under); hoist (all types of hoist, including steam, gas, diesel, electric, air, hydraulic, single and double drum, concrete, brick shaft caisson, or any other similar type of hoisting machine, portable or stationary, except Chicago boom type); jack (screw, air, hydraulic power-operated unit or console type (not hand jack or pile load test type); side boom; straddle carrier

GROUP 5:

Aerial platform used as a hoist; compressor, two or three in battery; directional boring machine; elevator or house car; concrete cleaning/decontamination machine operator, decontamination and remediation work only; conveyor and tigger hoist; firefighter; forklift; generator, two or three in battery; heavy equipment robotic operator/technician, decontamination and remediation work only; maintenance, utility person; master environmental maintenance technician, decontamination and remediation work only; rod bending machine (power); ultra high-pressure waterjet cutting tool system operator/maintenance technician, decontamination and remediation work only; vacuum blasting machine operator/maintenance technician, decontamination and remediation work only; welding machine (gas or electric, two or three in battery, including diesel); captain, power boat; tug master, power boat; oiler, with either one compressor or one welding machine

GROUP 6:

Compressor, single; off-road back dump; welding machine (single, gas, diesel and electric converters of any type); welding system, multiple (rectifier, transformer type); generator, single

GROUP 7:

Oiler; deckhand

IRON0011-001 07/01/2023

MONMOUTH COUNTY; OCEAN COUNTY (north third of county):

	Rates	Fringes
Ironworkers:		
Reinforcing.....	\$ 46.89	48.17
Structural.....	\$ 49.19	48.17

IRON0399-001 07/01/2023

	Rates	Fringes
Ironworker.....	\$ 52.99	37.15

IRON0399-008 07/01/2023

ATLANTIC COUNTY; BURLINGTON COUNTY (south and east of a line starting from the point on the Atlantic-Burlington county line where the Atlantic-Burlington county line crosses Route 206; then, following a line northeast through Wharton State Park to the town of Chatsworth; then, continuing along the same line, to the Burlington-Ocean county line); CAPE MAY COUNTY; CUMBERLAND COUNTY (east of a line drawn from the Delaware Bay through the town of Cedarville and north to the point where the county lines of Atlantic, Cumberland and Gloucester Counties meet); OCEAN COUNTY (south third of county):

	Rates	Fringes
Ironworkers:		
HIGHWAY CONSTRUCTION:		
Fence and guardrail.....	\$ 50.52	36.40
Precast and structural.....	\$ 52.99	37.15
Reinforced concrete.....	\$ 51.99	37.15

LAB00172-001 03/01/2021

HIGHWAY CONSTRUCTION:

	Rates	Fringes
Laborers:		
Group 1.....	\$ 43.50	32.35
Group 2.....	\$ 44.20	32.35
Group 3.....	\$ 44.45	32.35
Group 4.....	\$ 48.00	32.35

Hazardous waste removal work:

Work on a state or federally designated hazardous waste site, where the worker is required to wear Level A, B or C personal protection: \$3.00 per hour additional.

Work on a state or federally designated hazardous waste site, where the worker is not required to wear Level A, B, or C personal protection: \$1.00 per hour additional.

PAID HOLIDAYS:

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day; provided that the worker works three days for the same employer within a period of ten working days consisting of five working days before and five working days after the day upon which the holiday falls or is observed.

DEFINITION OF GROUPS:

GROUP 1:

Basic laborer; landscape laborer; railroad track laborer; utility meter installer; traffic director/flag person; salamander tender; pit person; dump person; asphalt laborer (only in Monmouth County); slurry seal laborer (only in Monmouth County); raker and tamper on cold patch work; wrapper and coater of pipe; waterproofing laborer; timber person; powder carrier; magazine tender; signal person; power buggy operator; tree cutter; and the operation of such other basic power tools used to perform work usually done manually by laborers

GROUP 2:

Pipelayer; laser person; conduit and duct line layer; jackhammer; chipping hammer; pavement breaker; concrete cutter; asphalt cutter; sheet hammer operator; sandblasting, acetylene cutting and burning; wagon drill operator; directional drill operator; hydraulic drill operator; drill master; core driller; traffic control coordinator; asphalt raker/lute person (only in Monmouth County); walk-behind saw cutter

GROUP 3:

Finisher; rammer; setter of brick or stone pavers; hardscaping; gunite nozzle person; stonecutter; form setter; manhole; catch basin and inlet builder; asphalt screedperson (only in Monmouth County)

GROUP 4:

Blaster

LAB00172-003 03/01/2021

ATLANTIC, BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND, GLOUCESTER, MERCER, OCEAN AND SALEM COUNTIES:

Rates Fringes

Laborers:

HIGHWAY CONSTRUCTION:

ASPHALT WORK:

GROUP 1.....	\$ 43.50	32.35
GROUP 2.....	\$ 44.20	32.35
GROUP 3.....	\$ 44.45	32.35
GROUP 4.....	\$ 48.00	32.35

PAID HOLIDAYS:

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day; provided that the worker works three days for the same employer within a period of ten working days, consisting of five working days before and five working days after the day upon which the holiday falls or is observed.

DEFINITION OF GROUPS:

GROUP 1:

Basic laborer; landscape laborer; railroad track laborer;

utility meter installer; traffic director/flag person; salamander tender; pit person; dump person; asphalt laborer (only in Bergen, Essex, Hudson and Hunterdon Counties; Middlesex County (north of the Raritan River); Morris, Passaic, Somerset, Sussex, Union and Warren Counties); slurry seal laborer (only in Bergen, Essex, Hudson and Hunterdon Counties; Middlesex County (north of the Raritan River); Morris, Passaic, Somerset, Sussex, Union and Warren Counties); raker and tamper on cold patch work; wrapper and coater of pipe; waterproofing laborer; timber person; powder carrier; magazine tender; signal person; power buggy operator; tree cutter; and the operation of such other basic power tools used to perform work usually done manually by laborers

GROUP 2:

Pipelayer; laser person; conduit and duct line layer; jackhammer; chipping hammer; pavement breaker; concrete cutter; asphalt cutter; sheet hammer operator; sandblasting, acetylene cutting and burning; wagon drill operator; directional drill operator; hydraulic drill operator; drill master; core driller; traffic control coordinator; asphalt raker/lute person (only in Bergen, Essex, Hudson and Hunterdon Counties; Middlesex County (north of the Raritan River); Morris, Passaic, Somerset, Sussex, Union and Warren Counties); walk-behind saw cutter

GROUP 3:

Finisher; rammer; setter of brick or stone pavers; hardscaping; gunite nozzle person; stonecutter; form setter; manhole; catch basin and inlet builder; asphalt screedperson (only in Bergen, Essex, Hudson and Hunterdon Counties; Middlesex County (north of the Raritan River); Morris, Passaic, Somerset, Sussex, Union and Warren Counties)

GROUP 4:

Blaster

PAIN0711-009 02/01/2024

	Rates	Fringes
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Painters:

Work on bridges (all bridges that span major waterways, railroad bridges, bridges over canyons, overpasses).....	\$ 59.29	33.56
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PAIN0711-014 05/01/2015

	Rates	Fringes
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Painters:

All other work:		
Brush and roller.....	\$ 37.76	21.50
Spray.....	\$ 38.91	17.19

PLAS0592-028 05/01/2023

ATLANTIC, CAPE MAY, CUMBERLAND AND OCEAN COUNTIES:

	Rates	Fringes
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Cement mason.....\$ 48.96 33.97

 PLAS0592-029 05/01/2023

BURLINGTON, MERCER AND MONMOUTH COUNTIES:

	Rates	Fringes
Cement mason.....	\$ 48.96	33.97

PLAS0592-031 05/01/2023		

CAMDEN, GLOUCESTER AND SALEM COUNTIES:

	Rates	Fringes
Cement mason.....	\$ 45.32	37.61

TEAM0331-001 05/01/2023		

ATLANTIC COUNTY:

	Rates	Fringes
Truck drivers:		
GROUP 2.....	\$ 43.73	22.305
GROUP 3.....	\$ 44.73	22.305
GROUP 4.....	\$ 45.08	22.305
GROUP 5.....	\$ 45.08	22.305

Hazardous waste removal work:

Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous material, and when personal protective equipment is required for respiratory, skin and eye protection: \$3.00 per hour additional.

Work on a state or federally designated hazardous waste site where the worker is not working in a zone requiring Level A, B or C personal protection: \$1.00 per hour additional.

PAID HOLIDAYS:

New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day.

BEREAVEMENT LEAVE:

Any worker having a death in his or her immediate family (parent, spouse, child, brother or sister, mother-in-law or father-in-law) shall be given three days time off with pay at the time of death upon furnishing proof of said death. This provision shall also apply to grandparents, when living with the worker.

DEFINITION OF GROUPS:

GROUP 2:

Truck driver, dump truck driver, water truck driver, transit mix driver, pick-up truck driver, tank truck driver, track truck driver, agitator truck driver, concrete mobile unit driver, stringer bead truck driver, Ross

carrier driver, warehouse forklift driver, A-frame truck driver, gin pole truck driver, form truck driver, driver for truck having self-loading/unloading attachment, vacuum truck/trailer driver

GROUP 3:

Tow truck driver

GROUP 4:

Trailer truck driver, winch truck driver, off-road dump truck driver, fuel truck driver, tractor trailer driver, asphalt oil distributor driver, off-road water truck driver

GROUP 5:

Mechanic

* TEAM0469-002 05/01/2024

BURLINGTON COUNTY (east of a line drawn from the New Jersey Turnpike to the Delaware River); MERCER, MONMOUTH AND OCEAN COUNTIES:

	Rates	Fringes
Truck drivers:		
Group 1.....	\$ 47.81	40.875
Group 2.....	\$ 47.71	40.875
Group 3.....	\$ 47.61	40.875
Group 4.....	\$ 47.56	40.875

Hazardous waste removal work:

Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous material, and when personal protective equipment is required for respiratory, skin and eye protection: \$3.00 per hour additional.

Work on a state or federally designated hazardous waste site, in a zone requiring Level A personal protection for any workers other than the truck driver: \$3.00 per hour additional.

Work on a state or federally designated hazardous waste site where the worker is not working in a zone requiring Level A, B or C personal protection: \$1.00 per hour additional.

PAID HOLIDAYS:

New Year's Day, President's Day, Decoration Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day.

VACATION PAY CREDIT:

Workers working or receiving pay for 80 days within a year receive one week paid vacation (48 hours); 125 days receive two weeks paid vacation (96 hours); 145 days receive 15 days paid vacation (120 hours); 15 years seniority and 145 days receive 4 weeks paid vacation (160 hours).

DEFINITION OF GROUPS:

GROUP 1:

Drivers of the following type vehicles: dump, flat, float, pick-up, container hauler, fuel, water sprinkler, road oil, stringer bead, hot pass, bus, dumpcrete, transit mixer, agitator mixer, half truck, winch truck, side-θ-matic, dynamite, power, x-ray, welding, skid, jeep, station wagon, A-frame, all dual-purpose trucks, truck with mechanical tailgate, asphalt distributor, batch truck, seeding, mulching, fertilizing, air compressor truck (in transit), parts chaser, escort, scissor, hi-lift, telescope, concrete breaker, gin pole, stone, sand, asphalt distributor and spreader, nipper, fuel truck (driver of fuel truck, including handling of unit), skid truck (debris container - entire unit), concrete mobile truck (entire unit), expediter (parts chaser), beltcrete truck, pumpcrete truck, line truck, reel truck, wrecker, utility truck, tank truck; driver of the following type vehicles: Broyhill coal tar epoxy truck, Littleford bituminous distributor, slurry seal truck or vehicle, thiokol trackmaster pick-up (swamp cat pick-up, bucket loader dump truck and any rubber-tired tractor used in pulling and towing farm wagons and trailers of any description, or similar type vehicles); on-site repair shop; team driver; vacuum or vac-all truck (entire unit)

GROUP 2:

Driver of 3-axle trucks and floats

GROUP 3:

Driver of all Euclid-type vehicles: Euclid, International Harvester, Wabco, Caterpillar, Koehring tractor and wagon, dumptor, bottom, rear and side dump, carryall and scraper (not self-loading - loading over the top), water sprinkler, trailer, water pull and similar type of vehicle; driver of tractor and trailer-type vehicles; flat, float, I-beam, low bed, water sprinkler, bituminous transit mix, road oil, fuel bottom dump hopper, rear dump, office shanty, epoxy, asphalt, agitator mixer, mulching, stringing, seeding, fertilizing pole spread, bituminous distributor, water pull (entire unit) (tractor trailer), reel trailer and similar type of vehicle

GROUP 4:

Winch trailer driver

TEAM0676-001 05/01/2023

BURLINGTON COUNTY (west of a line drawn from the New Jersey Turnpike to the Delaware River); CAMDEN, CUMBERLAND, GLOUCESTER AND SALEM COUNTIES:

	Rates	Fringes
Truck drivers:		
GROUP 2.....	\$ 41.20	27.35
GROUP 3.....	\$ 41.35	27.35
GROUP 4.....	\$ 41.55	27.35
GROUP 5.....	\$ 41.70	27.35

Hazardous waste removal work:

Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous materials, and when personal protective equipment is

required for respiratory, skin and eye protection: \$3.00 per hour additional.

Work on a state or federally designated hazardous waste site, where personal protection A, B, C or D is NOT required: \$1.00 per hour additional.

SHIFT WORK:

An owner mandated irregular shift starting any time other than between 6:00 am and 8:00 am to receive \$1.00 per hour, for each hour worked, in addition to the regular rate of pay.

PAID HOLIDAYS:

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day (or the day after Thanksgiving, at the option of the contractor), Thanksgiving Day, the afternoon of the day before Christmas (Dec. 24) provided that the worker works in the morning, and Christmas Day, provided that the worker works or is available for work on at least two days in the week in which the holiday occurs.

BEREAVEMENT PAY:

In case of a death in the worker's immediate family (mother, father, wife, husband, children, brother, sister, current mother-in-law, current father-in-law, grandparents), the worker shall be allowed leave not to exceed three (3) days straight-time pay, provided that he or she shall receive no pay unless the day of death and the burial day falls on a regular work day, and not on days off, holidays, vacation, Saturdays or Sundays.

DEFINITION OF GROUPS:

GROUP 2:

Dump truck driver; water truck driver; transit mix driver; pick-up truck driver; tank truck driver; track truck driver; agitator truck driver; concrete mobile unit driver; stringer bead truck driver; tack rig driver; Ross Carrier driver; warehouse forklift driver; A-frame truck driver; gin pole truck driver; form truck driver; driver for truck having self-loading/unloading attachment; vacuum truck

GROUP 3:

Tow truck driver

GROUP 4:

Trailer truck driver; winch truck driver; off-road dump truck driver; fuel truck driver; tractor trailer driver (any trailer driver); asphalt oil distributor driver; off-road water truck driver; vacuum tractor trailer

GROUP 5:

Mechanic

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave

for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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

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

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates

the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

State Adopted Rate Identifiers

Classifications listed under the "SA" identifier indicate that the prevailing wage rate set by a state (or local) government was adopted under 29 C.F.R. 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 01/03/2024 reflects the date on which the classifications and rates under the SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

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

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

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

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

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

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END OF GENERAL DECISION"

SECTION C
STATEMENT OF WORK

City of Camden
City Parks – Facility Improvements
Contract No. COCMX23006

1.1 IN GENERAL, this project consists of the items of work described below, complete as specified within these Contract Documents entitled "City Parks – Facility Improvements" prepared by Pennoni Associates Inc.

1.2 DESCRIPTION OF WORK

A. The work for this project consists of the following items:

Base Bid – 26th and Howell Park, Bradley Avenue Park, Northgate Park, Ralph Williams Park, Whitman Square Park, and Yorkship Square Park

1. Excavating or Mill the existing parking lot, cartway, court, grading and compacting.
2. Clear sites as indicated on the plans.
3. Trim trees as indicated on the plans.
4. Remove trees as indicated on the plans.
5. Resetting castings to proper grade as needed to complete the improvements shown on the plans.
6. Install court surfaces where directed.
7. Install playground surface area where directed.
8. Install playground equipment as directed.
9. Install chain link fence, ornamental fence, and vinyl screen fence and gates as identified on the plans.
10. Install 20'x30' pavilion where directed.
11. Rehabilitate existing pavilion where directed.
12. Replacing damaged curb where directed.
13. Install concrete sidewalk and brick pavers as directed.
14. Install park equipment including back bench, bike rack, proposed steps, tree pits, and game tables with four chairs as directed.
15. Install sport equipment as indicated on the plans.
16. Install park signs.
17. Install concrete paint with anti-graffiti requirement as directed.
18. Install dense graded aggregate as directed.

STATEMENT OF WORK (Continued)

19. Installing 2.5" HMA 19M64 Base Course. Providing all third-party testing, coring, and analysis required by NJDOT.
20. Installing 2" HMA 9.5M64 Surface Course. Providing all third-party testing, coring, and analysis required by NJDOT.
21. Remove and replace existing inlet and manhole grate and cover.
22. Clean storm water main.
23. Replace Bicycle safe grates.
24. Install HDPE pipe and clean out where directed.
25. Install shrubs and trees where directed.
26. Restoring disturbed vegetated/lawn areas. As a minimum, all lawns shall be restored with topsoil, fertilizer, seed, and mulch. Other materials shall be restored in-kind.
27. Providing all necessary traffic directors and traffic control in accordance with the MUTCD. City of Camden and Camden County Police Department must be contacted for any closures.
28. Work shall conform to NJDOT Standard Specifications for Road and Bridge Construction, 2019 and applicable NJDOT 2019 Special Provisions for Local Aid Projects. Reference includes, but is not limited to, Sections: 401 and 902, as amended.

Add Alternate 1 – Ralph Williams Park

1. Excavating or Mill the existing parking lot, cartway, court, grading and compacting.
2. Clear sites as indicated on the plans.
3. Install playground equipment.
4. Install chain link fence, ornamental fence, and vinyl screen fence and gates as identified on the plans.
5. Install Gazebo where directed.
6. Install concrete sidewalk and brick pavers as directed.
7. Install concrete paint with anti-graffiti requirement as directed.
8. Install dense graded aggregate as directed.
9. Installing 2" HMA 9.5M64 Surface Course. Providing all third-party testing, coring, and analysis required by NJDOT.

STATEMENT OF WORK (Continued)

10. Install shrubs and trees where directed.
11. Restoring disturbed vegetated/lawn areas. As a minimum, all lawns shall be restored with topsoil, fertilizer, seed, and mulch. Other materials shall be restored in-kind.
29. Providing all necessary traffic directors and traffic control in accordance with the MUTCD. City of Camden and Camden County Police Department must be contacted for any closures.

Add Alternate 2 – Whitman Square Park

1. Excavating or Mill the existing parking lot, cartway, court, grading and compacting.
2. Clear sites as indicated on the plans.
3. Install playground equipment.
4. Install concrete sidewalk and brick pavers as directed.
5. Install court surfaces where directed.
6. Install sport equipment as indicated on the plans.
7. Install dense graded aggregate as directed.
8. Installing 2" HMA 9.5M64 Surface Course. Providing all third-party testing, coring, and analysis required by NJDOT.
9. Install shrubs and trees where directed.
10. Restoring disturbed vegetated/lawn areas. As a minimum, all lawns shall be restored with topsoil, fertilizer, seed, and mulch. Other materials shall be restored in-kind.

Add Alternate 3 – Northgate Park

1. Clear sites as indicated on the plans.
2. Trim trees as indicated on the plans.
3. Remove trees as indicated on the plans
4. Excavating or Mill the existing parking lot, cartway, court, grading and compacting.
5. Clear sites as indicated on the plans.
6. Install sport equipment as indicated on the plans.

STATEMENT OF WORK (Continued)

7. Install park equipment including back bench, bike rack, proposed steps, tree pits, and game tables with four chairs as directed.
8. Install dense graded aggregate as directed.
9. Install chain link fence, ornamental fence, and vinyl screen fence and gates as identified on the plans.
10. Install 20'x30' pavilion where directed.
11. Install shrubs and trees where directed.
12. Restoring disturbed vegetated/lawn areas. As a minimum, all lawns shall be restored with topsoil, fertilizer, seed, and mulch. Other materials shall be restored in-kind.
13. Providing all necessary traffic directors and traffic control in accordance with the MUTCD. City of Camden and Camden County Police Department must be contacted for any closures.

The above descriptions of work outline the general items and distribution of work, and should not be construed as being all-inclusive.

- D. Prior to beginning construction the Contractor shall have arranged for the video taping by a professional commercial photographer, of the existing site condition and adjacent public and private improvements. Two copies of the tape shall be provided to the Owner prior to the start of construction. No separate payment shall be made for videotaping but the cost thereof shall be included in the unit prices bid for the various items listed in the bid proposal form.
- E. Work contained in the Contract shall include, but not be limited to, the following items:
 1. Location of all existing utilities within the project limits.
 2. Notifications of all property owners affected by construction regarding parking and access to their homes, businesses and driveways.
 3. Maintenance and protection of traffic within the project area for the duration of the project.
 4. All other work of any type or description necessary for the completion of the project, whether or not specifically shown on the plans or called for in the specifications herein.

1.3 CONSTRUCTION SCHEDULE AND PHASING

- A. A pre-construction meeting shall be held with the Contractor, Public Works Department, PSE&G, and City Engineer prior to starting work to determine schedule and phasing.

1.4 COORDINATION

STATEMENT OF WORK (Continued)

- A. In general, work shall be planned and coordinated through the office of the ENGINEER. Utility companies shall be notified directly by the Contractor at least 72 hours in advance of excavation or other work that may conflict with the operation of said utilities. A list of the individual companies having utilities in the project area is provided at the end of the section. Participating members of the "One Number to Call System" of underground facilities may be contacted at 1-800-272-1000.
- B. The Contractor shall notify adjacent property Owners 48 hours by letter in advance of starting any work. Notification format and information shall be submitted to the Engineer for approval prior to distribution.
- C. The Contractor shall notify all affected utility companies prior to commencing work.
- D. Contractor shall submit a schedule to the Engineer within 5 days of notice to proceed. Modification of schedule shall only be made with Engineer's approval.
- E. Each contractor shall perform layout and construction at such time or times and in such manner as to facilitate general progress of the project.
- F. Coordinate all work as further described in the General Provisions Section of the Contract Documents.
- G. Utility companies having jurisdiction in the Project area:

Sanitary Sewer

Department of Utilities
City of Camden
Department of Public Works
1056 Wright Avenue, 2nd Floor
Camden, NJ 08103

Department of Utilities
Cit of Camden Department of Public Works
1056 Wright Avenue, 2nd Floor
Camden, NJ 08103

Camden County municipal Utilities Authority
1645 Ferry Avenue
Camden, NJ 08104
(856) 541-3700

Gas

Public Service Gas Co.
Gas Distribution Division
535 W. Nicholson Road
Audubon, NJ 08106
(856) 239-2405

Electric

Public Service Electric Co
Facilities Relocation Group
24 Brown Avenue
Springfield, NJ 07081-1279
(732) 463-9137

STATEMENT OF WORK (Continued)

	City of Camden Dept. of Public Works Electrical Bureau 1056 Wright Avenue, 2 nd Floor Camden, NJ 08103
Telephone	Verizon 10 Tansboro Road, 2 nd Floor Berlin, NJ 08009 (856) 306-8592
Cable	Comcast Cable 1250 Haddonfield-Berlin Road Cherry Hill, NJ 08034 (856) 893-2900
	CO Communications 1220 Broadcasting Road Wyomissing, PA 19610 (610) 288-5329
	Crown Castle Fiber (Sunesys) 3200 Horizon Drive, Suite 150 King of Prussia, PA 19406 (610) 635-3234
Other	Delaware River Port Authority Riverside Drive Camden, NJ 08103 (856) 968-2000

1.5 VEHICULAR ACCESS

- A. All roads shall remain passable to emergency vehicles at all times. At the end of each working day the construction area shall be graded and cleared of excessive dust or mud conditions so as to provide reasonable access to all residences. Access to all residential, school, and commercial driveways/walkway accesses must be provided at the end of each day.

END OF SECTION

SECTION D
GENERAL CONDITIONS

INDEX

1. SCOPE OF WORK
2. CHARACTER OF WORK AND MECHANICS
3. SITE INVESTIGATION
4. OPERATIONS AND STORAGE AREAS
5. PROGRESS CHARTS AND REQUIREMENTS FOR OVERTIME WORK
6. SUBCONTRACTORS
7. QUALITY OF ARTICLES, MATERIALS AND EQUIPMENT
8. PROTECTION OF MATERIAL AND WORK
9. PROTECTION OF VEGETATION
10. POSSESSION PRIOR TO COMPLETION
11. SUSPENSION OF WORK
12. CLEANING UP
13. BONDS
14. INSPECTION
15. INSTALLATION, OPERATION AND MAINTENANCE MANUALS

GENERAL CONDITIONS

1. SCOPE OF WORK

The work to be performed under this contract consists of furnishing all materials, equipment, supplies, labor and transportation, including fuel, power, water and performing all work as required in the Statement of Work in the contract, in strict accordance with the specifications, schedules and drawings, all of which are made a part hereof, and including such detail drawings as may be furnished by the ENGINEER from time to time during the prosecution of the work in explanation of said drawings.

2. CHARACTER OF WORK AND MECHANICS

The work shall be executed in the best and most workmanlike manner by qualified, careful and efficient mechanics in strict accordance with the drawings and specifications.

3. SITE INVESTIGATION

The Contractor acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during the prosecution of the work. The Contractor further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the ENGINEER, as well as from information presented by the drawings and specifications made a part of this contract. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work. The OWNER assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the ENGINEER. The OWNER also assumes no responsibility for any understanding or representations made by its officers or agents during or prior to the execution of this contract, unless (1) such understanding or representations are expressly stated in the contract, and (2) the contract expressly provides that the responsibility therefore is assumed by the OWNER representations.

4. OPERATIONS AND STORAGE AREAS

- a. All operations of the Contractor (including storage of materials) shall be confined to areas approved by the ENGINEER. No unauthorized or unwarranted entry upon or passage through, or storage or disposal of materials shall be made upon private premises. The Contractor shall be liable for any and all damage caused by him to such private premises. The Contractor shall hold and save the OWNER, ENGINEER and their officers and agents free and harmless from liability of any nature or kind arising from any use, trespass or damage occasioned by his operations on premises of third persons.
- b. Temporary buildings (storage sheds, shops, offices, etc.) may be erected by the Contractor only with the approval of the ENGINEER, and shall be built with labor and materials furnished by the Contractor without expense to the OWNER. Such temporary buildings and/or utilities shall remain the property of the Contractor and will be removed by him at his expense upon the completion of the work. With the written consent of the ENGINEER, such buildings

and/or utilities may be abandoned and need not be removed.

- c. The Contractor shall, under regulations prescribed by the ENGINEER, use only established roadways or construct and use such temporary roadways as may be approved by the ENGINEER. Where materials are transported in the prosecution of the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any federal, state or local law or regulation. When it is necessary to cross curbs or sidewalks, protection against damage shall be provided by the Contractor, and any damaged roads, curbs or sidewalks shall be repaired by, or at the expense of, the Contractor.

5. PROGRESS CHARTS AND REQUIREMENTS FOR OVERTIME WORK

- a. The Contractor shall, within five (5) days after date of notice to proceed, prepare and submit to the ENGINEER for approval a practical schedule showing the date on which he will start the several salient features (including procurement of materials, plant and equipment) and the contemplated dates for completing same.
- b. If, in the opinion of the ENGINEER, the Contractor falls behind the progress schedule, the Contractor shall take such steps as may be necessary to improve his progress, and the ENGINEER may require him to increase days of work, and to submit for approval such supplementary schedule or schedules in chart form as may be deemed necessary to demonstrate the manner in which the agreed rate of progress will be regained, all without additional cost to the OWNER.
- c. Failure of the Contractor to comply with the requirements of the ENGINEER under the provision shall be grounds for determination by the ENGINEER that the Contractor is not prosecuting the work with such diligence as will ensure completion within the time specified. Upon such determination, the ENGINEER may terminate the Contractor's right to proceed with the work, or any separable part thereof, in accordance with the delays - damage clause of the contract.

6. SUBCONTRACTORS

Within seven (7) days after the award of any subcontract, the Contractor shall deliver to the ENGINEER a statement setting forth the name and address of the subcontractor. If for sufficient reason, at any time during the progress of the work, the ENGINEER and OWNER determine that any subcontractor is undesirable, they will notify the Contractor accordingly and immediate steps will be taken for cancellation of such subcontract. Subletting by subcontractors shall be subject to the same regulations. Nothing contained in this contract shall create any contractual relation between the subcontractor and the OWNER and/or ENGINEER.

7. QUALITY OF ARTICLES, MATERIALS AND EQUIPMENT

- a. Articles, materials and equipment to be incorporated into the work under the contract shall be new and unused unless otherwise specified; and where required to conform to standard specifications of the ENGINEER or other authorities incorporated by reference, will conform to the respective editions, including amendments specified; or where the editions are not specified, will conform to the editions, including amendments in effect on the date of the Invitation for Bids.
- b. Any samples and descriptive data required shall:

1. Be submitted within the time specified in these specifications, or, if no time be specified, within a reasonable time before use to permit inspection and testing.
 2. Be shipped, prepaid and delivered, as specified in these specifications, or as directed by the ENGINEER.
 3. Be properly marked to show the name of the material, trade name of manufacturer, place of origin, name and location of the project where the material represented by the sample is to be used, and the name of the contractor submitting the sample.
- c. Samples not subject to destructive tests may be retained until the completion of the work, but thereafter will be returned to the Contractor, if he so requests, in writing, at his own expense. Failure of any sample to pass the specified requirements will be sufficient cause for refusal to consider further any sample from the same manufacturer whose material failed to pass the tests.

8. PROTECTION OF MATERIAL AND WORK

The Contractor shall at all times protect and preserve all materials, supplies and equipment of every description (including property which may be OWNER furnished or owned) and all work performed. All reasonable requests of the ENGINEER to enclose or specially protect such property shall be complied with. If, as determined by the ENGINEER, material, equipment, supplies and work performed are not adequately protected by the Contractor, such property may be protected by the OWNER and the cost thereof may be charged to the Contractor or deducted from any payments due to him.

9. PROTECTION OF VEGETATION

- a. The Contractor will preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site which do not unreasonably interfere with the construction as may be determined by the ENGINEER. The Contractor will be responsible for all unauthorized cutting or damaging of trees and shrubs, including damage due to careless operation of equipment, stockpiling of materials, or tracking of grass areas by equipment.
- b. Care will be taken by the Contractor in felling trees authorized for removal to avoid any unnecessary damage to vegetation that is to remain in place. Any limbs or branches of trees broken during such operations shall be trimmed with a clean cut and painted with an approved tree pruning compound. The Contractor will be liable for, or may be required to replace or restore at his own expense, all vegetation destroyed or damaged.
- c. Protect existing structures and other property at site or adjacent thereto, including walks, pavements and roadways.
- d. Promptly remedy all damage or loss, at no expense to the Owner.

10. POSSESSION PRIOR TO COMPLETION

The OWNER shall have the right to take possession of or use any completed or partially completed part of the work. Such possession or use shall not be deemed an acceptance of any work not completed in accordance with the contract. If such prior possession or use by the OWNER delays the progress of the work or causes additional expenses to the Contractor, an equitable adjustment in the contract price and/or the time of completion will be made and the contract shall be modified in writing accordingly.

11. SUSPENSION OF WORK

The ENGINEER may order the Contractor to suspend all or any part of the work for such period of time as may be determined by them to be necessary or desirable for convenience of the OWNER. Unless such suspension unreasonably delays the progress of the work and causes additional expense to the Contractor, no increase in contract price will be allowed. In the case of suspension of all or any part of the work for an unreasonable length of time, causing additional expense not due to the fault or negligence of the Contractor, the ENGINEER shall make an adjustment in the contract price in the amount of the additional proper expense and modify the contract accordingly. An extension of time for the completion of the work in the event of any such suspension will be allowed the Contractor, providing, however, that the suspension was not due to the fault or negligence of the Contractor.

12. CLEANING UP

The Contractor shall at all times keep the construction area, including storage areas used by him, free from accumulations of waste materials or rubbish and prior to completion of the work remove the rubbish from the premises. Upon completion of the construction, the Contractor shall leave the work and premises in a clean, neat and workmanlike condition satisfactory to the ENGINEER.

13. BONDS

- a. Performance and Maintenance Bonds. The Contractor shall furnish a performance and maintenance bond with good and sufficient surety or sureties acceptable to the OWNER in connection with the performance of the work under this Agreement. The penal sum of such performance and maintenance bonds will be one hundred percent (100%) of the contract price. After completion and acceptance of all work, the maintenance bond shall remain in effect for a two (2) year period as guarantee against latent defects.
- b. Any bonds required hereunder will be dated as of the same date as the contract and will be furnished by the Contractor to the OWNER at the time the contract is executed, and must be accompanied by a Power of Attorney Certificate and Financial Statement.

14. INSPECTION

The work is subject to inspection by the ENGINEER or their appointed inspectors to ensure strict compliance with the terms of the contract. No inspector is authorized to change any provision of the specifications without written authorization of the ENGINEER, nor shall the presence or absence of an inspector relieve the Contractor from any requirements of the contract. As soon as practicable after the completion of the entire work, or any divisible part thereof as may be designated in these specifications, an examination thereof will be made by the ENGINEER at the site of the work. If such work is found to comply fully with the requirements of the contract, it will be accepted, and final payment therefore will be made in accordance with the clause of the contract entitled, "Payments to Contractors."

15. INSTALLATION, OPERATION AND MAINTENANCE MANUALS

Upon completion of all work the Contractors will furnish six (6) copies of Record Data and Installation, Operation and Maintenance Manuals for all Mechanical and Electrical Equipment. Maintenance Manuals shall include complete wiring diagrams, normal causes of failures and how to remedy them, with complete instructions on maintenance of equipment. Delivery of these manuals will be made to the ENGINEER prior to submittal of semi-final estimate for payment by the Contractor.

SECTION E
SPECIAL CONDITIONS

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1. ON-SITE CONDITIONS
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3. RESPONSIBILITY REGARDING EXISTING UTILITIES, PIPES AND STRUCTURES
4. STORING OF MATERIALS
5. WATER SUPPLY
6. PRECONSTRUCTION CONFERENCE
7. COMMUNICATIONS
8. MAINTENANCE OF TRAFFIC
9. EXECUTION, CORRELATION AND INTENT OF DOCUMENTS

1. ON-SITE CONDITIONS

Meet following conditions during the progress of contract as specified in the New Jersey Department of Transportation Standard Specifications, 1989, or as currently amended.

- a. Public Safety and Convenience - Section 107.11
- b. Sanitary, Health and Safety Provisions - Section 107.10
- c. Final Clean Up - Section 104.11
- d. Equipment - Sections 101.03 and 105.18

2. UTILITIES

Adhere to Section 105.09 of Standard Specifications regarding location of and construction around public utilities, including those publicly and privately owned.

Permit owners of utilities, or their agents, access to site work at all times, in order to relocate or protect their facilities. Cooperate and coordinate with utility owners in performing this work.

Notify utility owners not less than ten (10) days in advance of any work that will endanger or affect their facilities.

Separate payment will not be made for protection and preservation of utilities and cooperation and coordination with their owners. Include all such costs in unit price bid for the various items of contract as listed in Proposal.

Any public utility facilities being constructed under this contract shall be subject to inspection by the utility owner during construction, and the utility owner shall be given the opportunity to inspect material to be used in reference to the specifications and plan details applying to such materials.

Comply with requirements of Blasting-Excavating-Restrictions, State of New Jersey-Laws of 1964 Section I, P.L. 1964c 53 (C.2A:170-69.4), as currently amended, which generally requires notification of gas company before any work commences within 200 feet of their services.

Contact the following a minimum of ten (10) days prior to construction:

- 1. "One Number to Call System": (800) 272-1000

The Contractor is advised that the "One Number to Call System" Service noted above does not necessarily include all utilities in the construction area. Some utility companies (for example, New Jersey-American Water Company) may require separate notification.

3. RESPONSIBILITIES REGARDING EXISTING UTILITIES, PIPES AND STRUCTURES

Existence and location of utilities, pipes and structures shall be investigated and verified in field by Contractor before starting work.

Contractor shall be held responsible for any damages to and for protection of all existing utilities and structures.

4. STORING OF MATERIALS

All materials required in the work may be stored on site subject to approval by the ENGINEER. All such materials, tools, and machinery stored upon public thoroughfares shall be provided with approved warning lights or other devices to protect pedestrian and vehicular traffic.

5. WATER SUPPLY

Provide all water for construction purposes, including expense of having water conveyed about the work, in prices stipulated for various items of the work under this contract. The source, quality and quantity of water furnished shall at all times be satisfactory to ENGINEER.

Existing water supply lines may be connected for construction water providing a meter is installed at Contractor's expense and water paid for by Contractor.

6. PRECONSTRUCTION CONFERENCE

A Preconstruction Conference will be held at the office of the ENGINEER or at the construction site, at the discretion of the ENGINEER. The ENGINEER will notify the Contractor of date and time.

7. COMMUNICATIONS

Forward all communications to OWNER through ENGINEER.

8. MAINTENANCE OF TRAFFIC

Provide for maintenance and protection of traffic as specified in Section 110.01 of the Standard Specifications.

Place and maintain a minimum of three (3) specified lights at such locations as are necessary to call attention of oncoming traffic to the existence of a danger area. Space warning lights maximum of 100 feet to define edge of usable pavement through construction areas.

Before beginning work on any phase of the project, furnish and install all specified construction signs, barricades, wood traffic guides, lights and other devices necessary to protect the public during construction.

Erect and maintain signs in substantial manner and maintain to provide maximum visibility and legibility at all times. Erect and maintain traffic control devices in accordance with Manual on Uniform Traffic Control Devices, current edition.

Establish, repair, replace and relocate signs, lights, warning and protective services as required.

Employ competent, trained and uniformed traffic directors at every point where equipment is working immediately adjacent to or is entering, leaving or crossing active traffic lanes. Employ traffic directors continuously for full time such conditions exist as necessary.

Do not permit equipment or machinery having Caterpillar or other heavy treads that mar or damage pavements to move over or to operate from newly constructed or existing pavement unless such equipment or machinery is moved on suitable pontoons or trailers.

Repair any damage to newly constructed or existing pavements as approved by ENGINEER, at Contractor's expense, or repair will be made by others and cost of such repairs will be charged against Contractor.

Any restriction or diversion of traffic at any time shall be subject to approval of the Local Police Department. In accordance with the Laws of 1983, c.84, the Contractor shall give seventy-two (72) hours notice (by the erection and maintenance of signs near the affected area) whenever a township road must be closed to vehicular traffic for a period of forty-eight (48) hours or more. In case of emergency, "every effort shall be made to notify the public as soon as possible of the closing." Notify Municipal Police and Fire Departments at least twenty-four (24) hours prior to closing of any roadway to traffic.

Submit within ten (10) days after Notice to Proceed, a plan of methods, facilities and devices for maintenance and protection of highway traffic.

Do not occupy with equipment, materials or personnel any roadway or sidewalk areas within or adjacent to the project that is open to traffic except as necessary during actual working hours.

Provide means of access for pedestrian and vehicular traffic at all private driveways and occupied buildings affected by the work of this contract. During construction in the vicinity of driveways, access width at driveway entrance shall be plainly marked by lights, and other devices as necessary. Notify owners of adjoining properties at least twenty-four (24) hours prior to beginning any work which will interfere with their passage.

9. EXECUTION, CORRELATION AND INTENT OF DOCUMENTS

The Contract Documents as defined in the General Provisions are complementary, and what is called for by any one shall be as binding as if called for by all.

SECTION F
GENERAL PROVISIONS

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3. OBLIGATIONS OF CONTRACTOR
4. ABSENCE OF CONTRACTOR
5. NOTICES TO CONTRACTOR
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7. ENGINEER'S STATUS
8. ENGINEER'S DECISION
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10. COMPETENT WORKERS TO BE EMPLOYED
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GENERAL PROVISIONS

1. DEFINITIONS

Wherever the term "OWNER" is used herein, it shall refer to the Municipality, the party of the first part to this Agreement.

Wherever the term "Contractor" is used herein, it shall refer to and designate the party of the second part to this Agreement, or his or their legal representative, successors or assigns.

Wherever the term "ENGINEER" is used herein, it shall refer to and designate the ENGINEER duly authorized by the OWNER to approve the construction of the improvements contemplated herein, or the duly appointed assistant or representative of said ENGINEER. ENGINEER as referenced in STANDARD SPECIFICATIONS, shall be interpreted to mean the ENGINEER duly authorized by the OWNER to observe the construction of the improvements contemplated herein, or the duly appointed assistant or representative of said ENGINEER.

Wherever the terms "Mayor" and "Clerk" are used herein, they shall refer to and designate the Mayor and Clerk of the Municipality.

Wherever the term "As Designated" is used herein, it shall be held to refer to information or directions indicated on the contract drawings or in the specifications covering the construction of the improvements contemplated herein.

Wherever the term "Approved" is used herein, it shall be held, unless otherwise specified, to mean as approved by the ENGINEER. Similar use will be made of the terms "Directed," "Required," "Permitted" and words of like import.

The Contract Documents consist of Advertisement Instructions to Bidders, Statement of Work, General Conditions, Special Conditions, General Provisions, General Specifications, Proposal, Contract Documents, Wage Rate Determinations and Plans, including all modifications incorporated in the documents before their execution.

The term "Subcontractor" as employed herein, includes only those having a direct contract with the Contractor, and it includes one who furnishes material worked to a special design according to the Plans and Specifications of this work, but does not include one who merely furnishes material not so worked.

"Written Notice" shall be deemed to have been duly served if delivered in person to the authorized agent of the Contractor, such as superintendent or foreman in charge of work or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.

"Section" shall refer to either the specification section of these specifications in which case it will be followed by the term "of these specifications" or a specified section of the Standard Specifications in which case it will be followed by the term "of the STANDARD SPECIFICATIONS".

"Commissioner" as referenced in STANDARD SPECIFICATIONS shall be interpreted to mean ENGINEER.

"Department" as referenced in STANDARD SPECIFICATIONS shall be interpreted to mean the ENGINEER duly authorized by the OWNER to observe the construction of the improvements contemplated herein, or the duly appointed assistant or representative of said ENGINEER.

"Provide" shall be interpreted to mean to furnish and install complete.

"Standard Specifications", the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, dated 1989, and all amendments thereto.

"State", as referenced in STANDARD SPECIFICATIONS shall be interpreted to mean OWNER.

2. EXTENT OF CONTRACT

The Advertisement, Instructions to Bidders, Proposals, Bonds, General Specifications and Contract Drawings are, and shall be taken to be a part of this contract. All work and materials mentioned in the specifications and not shown on the drawings, and all work and materials shown on the drawings and not mentioned in the specifications, and all work and materials necessary for the completion of the work according to the true intent and meaning of the contract drawings and specifications, shall be furnished, performed and done as if the same were both mentioned in the specifications and shown on the drawings. In case of disagreement between the plans and specifications, the ENGINEER will decide which shall prevail and the Contractor shall proceed in accordance with the ENGINEER's decision at no change in contract price.

Should anything be omitted from the contract drawings or specifications which is necessary to a clear understanding of the work, or should any error appear either in any of the various instruments furnished or in the work done by other contractors affecting the work included under this contract, the Contractor shall promptly notify the ENGINEER of such omission or errors and in the event of the Contractor's failure to do so, he shall make good any damage to or defect in his work caused thereby. He will not be allowed to take advantage of any error or omission on the contract drawings, as full instructions will be furnished by the ENGINEER. Should such error or omission be discovered, the Contractor shall carry out such instructions as if originally specified.

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein, and this contract shall be read and enforced as though it were included herein, and if through mere mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party hereto, the contract shall forthwith be physically amended to make such insertion.

3. OBLIGATIONS OF CONTRACTOR

The Contractor shall, at his own cost and expense, and in strict conformity with the hereinafter contained or hereto annexed specifications and the contract drawings, furnish all the materials and labor and all tools, implements, machinery and appliances of every kind necessary or proper for the purpose, and in good substantial and workmanlike manner and within the time hereinafter specified, perform and complete the work required under this contract. He shall complete the entire work to the satisfaction and approval of the ENGINEER, and shall accept in consideration thereof, and as full compensation therefor, the sums set opposite the respective classes of work and materials named in the contract and proposal herein contained or hereto annexed, the said sums being the amounts at which the contract therefor was awarded to the Contractor at the public letting thereof.

4. ABSENCE OF CONTRACTOR

In the absence of the Contractor there shall at all times be a duly authorized representative on the work, who shall receive and execute all information provided by the ENGINEER, and such information so given to and received by said representative, shall be deemed to have been given to and received by the Contractor.

5. NOTICES TO CONTRACTOR

The residence or place of business given in the bid or proposal upon which this contract is founded is hereby designated as the place where all notices, letters and other communications shall be served, mailed to or delivered. Any notice, letter or other communication addressed to the Contractor and delivered at the above named place or deposited in a postpaid wrapper in any post office box regularly maintained by the United States Post Office Department shall be deemed sufficient service thereof upon the Contractor, and the date of mailing shall be the date of service. The place named may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor and delivered to the ENGINEER.

Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

6. INSPECTION

The ENGINEER or his authorized representative will inspect the materials furnished and the work done under this contract, and he is also hereby authorized and empowered to reject and refuse all work and materials and the method of application of any part thereof, under or in fulfillment of this contract, that does not comply in kind, quality, quantity, time or place with the specifications and the contract drawings. The inspections, approval or acceptance of any part of the work herein contracted for, or the materials used therein, or any payment on account thereof, shall not prevent the rejection of said work or materials at any time thereafter during the existence of this said work or materials be found to be defective or not in accordance with the requirements of this contract.

7. ENGINEER'S STATUS

The ENGINEER is the agent of the OWNER to the extent provided in the Contract Documents and in special instances he shall, upon request, show the Contractor written authority.

As the ENGINEER is, in the first instance, the interpreter of the conditions of the contract and the judge of its performance, he shall side neither with the OWNER nor with the Contractor, but shall use his powers under the contract to enforce its faithful performance by both.

In case of the termination of the employment of the ENGINEER, the OWNER shall appoint a capable and reputable Engineer against whom the Contractor makes no reasonable objection, whose status under the contract shall be that to the former Engineer.

8. ENGINEER'S DECISION

The ENGINEER shall, in all cases, determine the amount, quality, acceptability of the work, materials and equipment which are to be paid for under this contract. He shall also determine all questions in relation to said work and the performance thereof, and decide upon questions which may arise relative to the fulfillment of this contract on the part of the Contractor, except as provided herein. The determinations of the ENGINEER as to work, materials and equipment shall be subject to the final approval of the OWNER.

9. ACCESS TO WORK

The Contractor shall at all times give access to the work to the OWNER, to the ENGINEER and the assistants and inspectors under them, and to representatives of the Department of Health of the State. The Contractor shall furnish all the necessary facilities for determining both on the work and at the places of manufacture, that all work to be done and all materials to be furnished under this contract is being performed and are being made strictly in accordance with the terms of the contract and with the contract drawings and specifications. The Contractor shall notify the ENGINEER in writing at least seven (7) days previous to the commencement of the manufacture of any materials, of the time and place where the manufacture is to take place, in order that a representative of the OWNER may be present to inspect the manufacture, should it be so desired.

10. COMPETENT WORKERS TO BE EMPLOYED

The Contractor shall employ only competent and skillful workers to do the work, and whenever the ENGINEER shall notify the Contractor in writing that any worker on the work is, in their opinion, disorderly, disrespectful, or otherwise unsatisfactory, the Contractor, on receiving such notice, shall forthwith dismiss such person and shall not again employ him for any part of the work without the written consent of the ENGINEER.

11. LAW AND ORDINANCES

The Contractor shall keep himself fully informed of, and shall carefully observe and comply with all State, County and local laws, ordinances and regulations which in any manner affect the conduct of the work, and all such orders or decrees as exist at present and those which may be enacted later, of bodies having any jurisdiction or authority over the work, and shall indemnify and save harmless the OWNER, ENGINEER and all their officers, agents and servants against any claim or liability arising from or based upon the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees.

12. PERMITS

The Contractor shall take out all necessary permits from the municipal or other public authorities, and shall give all notices required by law or municipal ordinance. Any charge or fee for permits issued by the municipality shall be borne by the OWNER. The OWNER will be reimbursed by the Contractor for the cost of inspection of the work under this contract required by public authorities other than the OWNER, and the municipality, such as the County or the State. The Contractor shall comply with all requirements of the 1964 Assembly Bill No. 803, an act to amend and supplement an act relating to excavation or blasting near pipes distributing or transmitting manufactured, mixed, or natural gas, approved May 12, 1964 (P.L. 1964, C. 53).

13. LABOR-EMPLOYMENT-WAGES-HOURS

The Contractor shall comply with all requirements of the labor laws of the State applicable to contracts on behalf of a municipality for construction, alteration or repair of any building or public work.

14. WORKERS COMPENSATION

The Contractor shall take out and maintain Workers Compensation Insurance to fully protect the OWNER as required by existing law, or as such may be amended during the life of this contract. In case the Contractor shall subcontract any portion of the work, he shall require that all employees of the subcontractor are properly covered by such Workers Compensation Insurance. In case any class of employees engaged in hazardous work under this contract is not protected under Workers Compensation statute, the Contractor shall provide, and shall cause each subcontractor to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

15. PUBLIC LIABILITY, PROPERTY AND AUTOMOBILE INSURANCE

The Contractor shall take out and maintain during the life of this contract the various types and amounts of insurance as required to protect the Contractor, the OWNER and any subcontractor performing work covered by this contract from claims for damages or personal injury, including accidental death, as well as from claims for property damages which may arise from operations under this contract, whether such operations be by himself or by any subcontractor or by anyone directly employed by either of them.

Pennoni Associates Inc. and its consultants shall specifically be named as additional insured.

LIABILITY

A. Coverage is to be written on a Commercial General Liability Form providing:

- 1) Premises/Operations Liability Coverage
- 2) Products/Completed Operations Liability Coverage
- 3) Blanket Contractual Liability Coverage
- 4) Broad Form Property Damage Coverage
- 5) Independent Contractors Liability Coverage
- 6) Personal Injury Liability Coverage
- 7) Underground Hazard Liability Coverage
- 8) Explosion and Collapse Hazard Liability Coverage
- 9) Broad Form Comprehensive General Liability Endorsement

(Coverage as required under #7 or #8 shall be waived by the OWNER if the work to be performed by the Contractor on behalf of the OWNER does not necessitate these coverages.)

B. The Liability Policy must be written with a minimum combined single limit of \$1,000,000 for Bodily Injury and Property Damage.

AUTOMOBILE LIABILITY

A. The coverage is to be written on a Commercial Automobile Liability form providing liability coverage for all owned, hired and non-owned automobiles.

B. The Automobile Liability Policy must be written with a minimum combined single limit of \$1,000,000 for Bodily Injury and Property Damage.

WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY

A. The Worker's Compensation Policy must be issued to provide statutory coverage for the State of New Jersey.

EXCESS LIABILITY/UMBRELLA

A. Umbrella Liability coverage is to be provided with a minimum limit of \$1,000,000 in excess of all underlying primary coverages required by the OWNER.

OWNER'S, CONTRACTOR'S PROTECTIVE LIABILITY

A. An Owner's, Contractor's Protective Liability Policy with a \$2,000,000 Limit of Liability must be provided in the name of the OWNER of the project.

BUILDER'S RISK

A. Builder's Risk coverage will be provided on an "All Risk Basis" subject to standard policy conditions and exclusions for the total value of the amount shown within the bid for any structure or building that will become real property upon completion of the contract. Otherwise this coverage will not be required.

FILING OF CERTIFICATES, ENDORSEMENTS AND POLICIES

A. Certificates in triplicate from the insurance carrier stating the limits of liability and expiration date shall be filed with the OWNER before operations are begun. Such certificates shall not merely name the types of policy provided, but shall specifically refer to this Contract and shall contain a separate express statement of compliance with each of the requirements as set forth in the section.

- B. All policies as hereinafter required shall be so written that the OWNER and additional insured will be notified of cancellation or restrictive amendment at least thirty (30) days prior to the effective date of such cancellation of amendment.
- C. If any part of the work is sublet, insurance of the same types and limits as required by above items shall be provided by or on behalf of the subcontractor to cover that part of the work that they have contracted to perform.
- D. The policies of insurance so required to be purchased and maintained shall include as additional insured OWNER, ENGINEER, ENGINEER'S Consultants and any other persons or identities named in the supplementary conditions, and shall include coverage for their respective officers and employees.

16. SOCIAL SECURITY ACT

The Contractor shall be and remain an independent contractor with respect to all services performed hereunder and agrees to and does hereby accept full liability for the payment of any and all contributions or taxes for social security, unemployment insurance, federal withholding tax or old age retirement benefits, pensions or annuities, nor or hereafter imposed under any state or federal law which are measured by the wages, salaries, or other remuneration paid to persons employed by the Contractor on work performed under the terms of this contract, and further agrees to obey all lawful rules and regulations and to meet all lawful requirements which are now or hereafter may be issued or promulgated under said respective laws by any duly authorized state or federal officials; and said Contractor also agrees to indemnify and save harmless the OWNER from any such contributions or taxes or liability thereof.

17. ASSIGNMENT OF CONTRACT

The contractor or his thoroughly qualified and designated representative shall give his personal attention constantly to the faithful prosecution of the work. He shall not assign, transfer, convey or otherwise dispose of this contract, or his right, title, or interest in, or to the same or any part thereof, without the previous approval of the OWNER.

The Contractor shall not assign, by power of attorney or otherwise, any of the monies to become due and payable under this contract, unless by and with the written consent of the OWNER, and such consent or approval, if given, will not relieve the Contractor from any of the obligations of said contract.

Assignment of this contract or any part thereof or of any funds to be received thereunder by the Contractor shall contain a clause to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms or corporations rendering such services or supplying such materials.

18. ROYALTIES AND PATENTS

The Contractor shall indemnify and save harmless the OWNER and its officers and agents from all damages, judgements, claims and expenses arising from the infringement of any letters, patent, or patent right because of any royalty, fee or license for the use, arrangement of operation of any tools, machinery, appliances, devices, materials, process or processes which may be used by the Contractor or furnished by him in fulfillment of the requirements of this contract. In the event of any claim or action at law on account of such patent or fees, it is agreed that the OWNER may retain out of the monies which are or which may become due the Contractor under his contract, a sum of money sufficient to protect itself against loss, and to retain the same until said claims are paid or satisfactorily adjusted.

19. CLAIMS FOR LABOR, MATERIALS AND DAMAGES

The Contractor shall, from time to time, as required by the OWNER, furnish the OWNER with satisfactory evidence that all persons who have done work or furnished materials under this contract, or have suffered some damage on account of the Contractor's operations, have been fully paid or secured; and in case such evidence be not furnished as aforesaid, such amount as the OWNER may consider necessary to meet the lawful claims of the persons aforesaid will be retained from the monies otherwise due said Contractor, until the liabilities aforesaid have been fully satisfied. It is understood and agreed, however, that the OWNER hereby assumes no obligation toward such claimants, nor in any way undertakes to pay such claims out of any funds due or that may become due the Contractor, or out of its own funds.

20. ACCIDENTS AND CLAIMS TO BE GUARDED AGAINST

All machinery and other physical hazards shall be guarded in accordance with safety codes approved by the American Standard Association, unless such codes are not compatible with Federal, State or Municipal Laws or Regulations.

The Contractor, when necessary, shall erect and maintain on the work such strong and suitable barriers and at night time such red lights as will efficiently and effectually prevent any accident to life, limb or property on consequence of said work, or in the use or occupancy of street, alley, highway or public or private grounds.

The status of the Contractor in the work to be performed by him under the contract is that of an independent contractor. As such, the work, in every respect, from the execution of the contract and during progress of the work thereunder, and until final acceptance, shall be under the charge and in care of the Contractor and at his risk. He shall properly safeguard against any or all injury to the public, to public and private property, materials and things and, as such, the Contractor alone shall be responsible for any and all damage, loss or injury to persons or property that may arise, or be incurred in, or during the conduct or progress of said work without regard to whether the Contractor, his subcontractors, agents or employees, have been negligent. The Contractor shall keep the OWNER and ENGINEER free from, and discharged of any and all responsibility and liability therefrom of any sort or kind whatsoever. The Contractor shall assume all responsibility for risks and casualties of every description and for any or all damage, loss or injury to persons or property arising out of the nature of the work from the action of the elements, or from any unforeseen or unusual difficulty or circumstance.

Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to, all persons, work materials, equipment and property at the site or adjacent thereto.

Contractor shall designate a safety representative at the site whose responsibilities shall be safety precautions and the prevention of accidents.

The Contractor shall assume and be liable for all blame and loss of whatsoever nature by reason of neglect or violation of any Federal, State, County or local laws, statutes, ordinances or any and all rules and regulations promulgated thereunder. The Contractor shall indemnify and save harmless the OWNER and ENGINEER and all of their respective officers, agents and employees from all liability or suits or actions at loss or in equity of any kind whatsoever arising from the failure of the Contractor to comply with the terms and conditions of the contract, plans and specifications or any Federal or State statutes or local ordinances or any rules and regulations promulgated, in accordance with the provisions of such statutes or ordinances by the United States, the State of New Jersey, or any municipality thereof, or by any department or agency of any or all thereof, and the Contractor shall, if required by the OWNER or ENGINEER, produce evidence of settlement of any such action before final payment under the contract shall be made by the OWNER.

The Contractor shall, unless otherwise specified, maintain and pay for such insurance, issued in the name of the OWNER, as will protect the OWNER from contingent liability under this contract, and the OWNER's right to enforce against the Contractor any provision of this article shall be contingent upon the full compliance by the OWNER with the terms of such insurance policy or policies, a copy of which shall be deposited with the OWNER.

21. STATEMENT OF QUANTITIES

The quantities of the work to be done and the materials to be furnished under this contract as given in the Instructions to Bidders or attached hereto or as indicated on the contract drawings, are to be used solely as a uniform basis for comparing proposals and/or for determining the amount of the Contractor's performance bond. The OWNER shall not be held responsible if any of the said quantities are found incorrect or omitted and the Contractor shall not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes or work as estimated and the work actually performed. If any error, omission, or misstatement is discovered in the said estimated quantities, the same shall not invalidate the contract or release the Contractor from execution and completion of the whole or any part of the work to the satisfaction of the ENGINEER and in accordance with the specifications and plans and for the prices agreed upon and fixed therefor or excuse him from any of the obligations or liabilities set forth in the Contract Documents, or entitle him to any damages or compensation otherwise than is specified in said Contract Documents. The quantities of the various work on which payments will be made to the Contractor are to be determined by measurements of the work actually performed by the Contractor and accepted by the ENGINEER as being satisfactorily completed in accordance with the requirements of the Contract Documents.

Before submitting this proposal, the Contractor shall determine for himself the quantities of work required and the conditions under which the work will be performed, by such means as he may prefer, and shall assume all risks as to variations in the quantities of the different classes of work.

He shall not at any time after the submission of this proposal, dispute or complain of the schedule of quantities or assert that there was any misunderstanding as to the amount or character of the work to be done, and shall not make any claim for damages, or for loss of profits, or for an extension of time because of a difference between the quantities of the various classes of work stated, and the quantities of work actually performed.

22. MATERIALS AND WORK

All materials furnished under this contract shall be as specified or required, or in the absence of particular specification shall be the best of their respective kinds, or new stock, unused and not deteriorated and all the work contemplated and described shall be done in a good, substantial and workmanlike manner. Only manufactured products of the United States, wherever available, shall be incorporated into the work of the contract.

Wherever in these specifications or on the plans, the terms ASTM, AWWA, ASA and SAE specifications are used, it shall be considered to mean the latest pertinent specifications (Standard or Tentative) of the American Society for Testing Materials, American Water Works Association, American Standard Association, and the Society of Automotive Engineers respectively, and any subsequent amendments thereto.

Wherever in the contract drawings or specifications any item of equipment or material is designated by reference to a particular brand name, manufacturer or trade name, it shall be understood that an approved equal product, acceptable to the ENGINEER, may be substituted by the bidder. The Contractor will be required to demonstrate to the satisfaction of the ENGINEER that the equipment, devices or materials he proposes to furnish are, in fact, similar or equal to those designated.

23. DEFECTIVE WORK OR MATERIALS

If at any time before the final acceptance of the work, any materials or workmanship shall be discovered, which do not comply with the specifications and contract drawings, they shall be immediately removed by the Contractor, when notified to do so by a written notice from the ENGINEER, and shall be replaced at the Contractor's expense. Any work condemned by the ENGINEER as unsuitable or improperly done shall be removed and repaired, or otherwise remedied, as requested by the ENGINEER.

All material condemned by the ENGINEER shall be removed from the site of the work within two (2) days if and after notice to that effect is given.

Should defective work be suspected and the ENGINEER so requires, the Contractor shall uncover, take down or make openings in the finished work for the purpose of examining at such points as said ENGINEER designates. Should the work thus exposed or examined prove satisfactory, the uncovering, taking down or making openings in and the replacing of the covering or the making good of the parts removed shall be paid for in accordance with the contract prices for the items involved; but should the work exposed or examined prove unsatisfactory, the uncovering, taking down and replacing and making good shall be at the expense of the Contractor.

If the Contractor shall neglect or refuse to remove or replace the same within seven (7) days from the date of the written notice from the ENGINEER to do so, said notice being served either personally or by leaving it at his place of business or with his agent in charge of the work, then the OWNER may remove or cause the same to be removed and satisfactorily replaced by contract or otherwise, as he may deem expedient, and charge the expense thereof to the Contractor. The expense so charged will be deducted and paid by the OWNER out of such monies as are or may become due under this Agreement; or if such monies are not sufficient to meet the said expense, the additional monies shall be furnished by the Contractor; and if he refuses or neglects to provide the necessary monies, they shall be provided by his surety.

24. PERMISSIBLE CHANGES AND VARIATIONS IN THE WORK

Should it be deemed necessary in the execution of the work, by reason of any condition or circumstance arising or discovered after the making of the contract, to make any minor variation desirable or necessary for the stability, economy or betterment of the work, which variations increase or decrease the quantities of the work specified or change the location thereof to an extent not unreasonably affecting the conditions of the work, and further interpreted by the ENGINEER as involving no classes of work other than those called for by this contract, the Contractor shall, upon written order from the ENGINEER to that effect, make such minor variations. If such minor variations diminish the quantity of the work to be done, no claim for damages or for anticipated profits on the work that may be dispensed with shall thereby accrue to the Contractor, and the value of the work dispensed with will not be included in any payments made to the Contractor. If such minor variations increase the amount of the work, the value of such increase shall be determined and fixed by the ENGINEER in accordance with the quantity of such work actually done, and/or at the unit prices stipulated in the contract.

Such alterations or changes as are mentioned in this section shall not vitiate or annul the obligations of the contract or the agreement of the work.

25. EXTRA WORK

Any extra work not originally contemplated under this contract and not covered by unit or lump sum prices in the proposal shall be performed by the Contractor if ordered in writing by the ENGINEER. Such extra work shall be subject to payment under the contract with a subsidiary agreement or a change order fixing the prices and method of payment and of doing the work or shall be compensated

on the basis of reasonable cost of necessary labor and materials and an allowance of fifteen percent for overhead and profit as may be stipulated by the OWNER in the written authorization for the work.

A formal subsidiary agreement will be prepared for execution by the OWNER and Contractor in all cases of extra work involving major changes in or additions to the project. A change order in letter form addressed to the Contractor by the ENGINEER and containing approved endorsements of the OWNER and Contractor will be prepared in all cases of extra work involving major changes in or additions to the project. At the discretion of the OWNER, extra work may be ordered on a labor, materials, overhead and profit basis as set forth above.

In cases where extra work is ordered on a labor, materials, overhead and profit basis, the cost may include all items of labor or materials, the use of power tools and equipment actually used, power and all items of cost such as public liability and workmen's compensation insurance, pro rata charges for foreman, also social security, old age and unemployment insurance; however, no percentage for overhead and profit shall be allowed on items of social security, old age and unemployment insurance. If deductions are ordered, the credits shall be the net costs. Among the items considered as overhead are included insurance other than mentioned above, bond or bonds, superintendent, timekeeper, clerks, watchmen, use of small tools, incidental job burdens, and general office expense. Charges for equipment shall be based upon the latest rental rates published by the Associates Equipment Distributors, Chicago, Illinois.

The Contractor shall give the ENGINEER access to all accounts, bills, payrolls and vouchers relating to such extra work and he agrees that he shall have no claim for compensation for such extra work in the case of items not covered by unit prices unless a statement in writing of the actual cost of the same, fully itemized as to labor, materials and other allowable costs is presented to the ENGINEER before the fifteenth day of the month following that during which each specific order was complied with by him.

26. OTHER CONTRACTS

It is understood and agreed that the Contractor shall execute his work in such a manner and in such order as will not interfere with work in progress and will permit the OWNER to perform other work or to enter into other contracts for work and materials to be constructed or placed in, on, or about the work herein described, with the least interference possible and with complete cooperation whenever it is desirable to prosecute said work, either simultaneously with the work under this contract or otherwise. It is agreed that the Contractor shall not be entitled to any damages or extra compensation from the OWNER on account of any work performed by the OWNER or other contractors that in any way affects the work under this contract, provided that such work of the OWNER and other contractors shall, in the opinion of the ENGINEER, be performed in a proper and expeditious or a necessary manner. The ENGINEER shall decide all questions between the Contractor hereunder, the other contractors, and the order of carrying on the work shall always be subject to their approval.

If, in the judgment of the ENGINEER, the joint occupation of the site of the work by the OWNER, or by two or more contractors working on different contracts at the same time actually impedes progress on the work herein described, then upon the recommendation of the ENGINEER, the OWNER may extend the time for the completion of the work by a length of time which accords with and compensates for the delay so caused. In case the Contractor by his own acts, or the acts of any person or persons in his employ, shall unnecessarily delay, in the opinion of the ENGINEER, the work of the OWNER or other contractors by not allowing them sufficient opportunity or facility to perform work as may be specified, the Contractor shall, in that case, pay all costs and expenses incurred by such parties due to any such delays, and he hereby authorizes the OWNER to deduct the amount of such cost and expenses from any monies due or to become due the Contractor under this contract. The ENGINEER, subject to the approval of the OWNER, shall decide the extent of such delay or delays, and the amount of such cost and expenses, and their decision shall be binding upon both parties to this contract. Nothing contained in this paragraph shall, however, relieve said Contractor from any liability or damage resulting to the OWNER on account of such delay or delays.

If any part of the Contractor's work depends for proper execution or results upon the work of any other contractor, the Contractor shall inspect and promptly report to the ENGINEER any defects in such work that render it unsuitable for such proper execution and results. His failure to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other contractor's work after the execution of his work.

To ensure the proper execution of this subsequent work, the Contractor shall measure work already in place and shall at once report to the ENGINEER any discrepancy between the executed work and the drawings.

27. SUSPENSION OF WORK

The OWNER shall have the right to suspend the whole or any part of the work to be done hereunder, when, in the opinion of the OWNER, the Contractor is not doing the work in accordance with the provisions of the contract and specifications.

28. REMEDIES

All claims, counterclaims, disputes and other matters in question between the OWNER and the Contractor arising out of or relating to this Agreement or the breach thereof will be decided by arbitration if the parties hereto mutually agree, or in a court of competent jurisdiction within the State in which the OWNER is located.

29. ABANDONMENT OF WORK

Should the Contractor abandon or in any manner fail to complete the said work, the OWNER is hereby authorized and empowered to pay any laborers for work done who may have been employed by said Contractor upon the work herein, and to pay any claims against the Contractor for material furnished, out of any funds that would otherwise be due or become due said Contractor under this contract, and in every such case the said OWNER is hereby authorized and empowered to ascertain through the ENGINEER, the amount or amounts so due or owing to such labor or laborers, or for material, from said Contractor, in such manner and upon such proof as the said ENGINEER may deem sufficient; and the amount or amounts so found by the ENGINEER to be due and payable be final and conclusive against the Contractor, and may therefore be paid by the OWNER to said labor or laborer, or to liquidate claims for materials furnished; and any estimate may be withheld from said Contractor until all such claims for labor or material on his contract have been satisfied.

30. FORFEITURE OF CONTRACT

The OWNER at any time during the continuance of the contract for the work herein provided for, and prior to the date of the acceptance of the work as hereinafter provided, shall have the right and power to declare the whole or any part of the same forfeited for the violation of any of the conditions, terms, requirements or limitations herein contained, if the performance of the contract is unnecessarily or unreasonably delayed, or if the Contractor is not progressing with the work as fast as is necessary to ensure its completion within the time specified by this contract, or if the Contractor is showing bad faith in carrying out the contract, or if the work be not fully completed within the time fixed in this contract, for its completion, or within the time to which such completion may be extended as hereinafter provided, or further, if the Contractor shall fail or refuse to remedy or repair defective work or materials when so ordered as herein provided. If the OWNER shall declare the said contract forfeited, in whole or in any particular, such declaration of forfeiture shall in no way relieve or affect the liability of the Contractor and his sureties for breach of any of the covenants and conditions of said contract.

The OWNER will give written notice of the Contractor stating the effective date of the forfeiture. This notice will be delivered to the Contractor at least five (5) days before said effective date.

On such event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared by the Contractor under this Contract shall, at the option of the OWNER, become the OWNER's property and the Contractor shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder.

Notwithstanding the above, the Contractor shall not be relieved of liability to the OWNER for damages sustained by the OWNER by virtue of any breach of the Contract by the Contractor, and the OWNER may withhold any payments due the Contractor until such time as the exact amount of damages due the OWNER from the Contractor is determined.

31. COMPLETION OF CONTRACT BY OWNER

If the work to be done hereunder shall be abandoned by the Contractor, or, if this contract shall be assigned or the work sublet by him, otherwise than as herein specified, or if at any time and for reasons hereinbefore specified, the OWNER declares the contract forfeited, the OWNER may notify the Contractor to discontinue all work or any part thereof, hereunder, or may notify the said Contractor to remedy or correct the condition or breaches enumerated by a written notice served upon the Contractor. In the event that the work is ordered discontinued as herein provided, or in case the said conditions or breaches are not remedied and corrected to the satisfaction of the OWNER within seven (7) days from the service of the said written notice, the OWNER will thereupon have the power to contract for the completion of the work, or such parts thereof, in the manner prescribed by law, or to employ such and so many persons as he may deem advisable, by contract or otherwise to work at and complete the work herein described or such parts thereof, and to use such machinery, materials, tools and appliances as may be found upon the site of the work, and to produce other materials, machinery, tools and appliances for the completion of the same, and to charge the expense so incurred to the Contractor. The expense so charged will be deducted and paid by the OWNER out of such monies as may be due or may at any time thereafter become due to the Contractor under and by virtue of this contract or any part thereof. In case such expense exceeds the amount due and payable or which would become due and payable under this contract, if completed by the Contractor, the amount of such excess shall be repaid to the OWNER and in case such expense shall be less than the sum which would have been payable under this contract, if the same had been completed by the Contractor, then the Contractor shall be entitled to receive the difference. When any particular part of the work is being carried on by the OWNER, by contract or otherwise, under the provisions of this clause of the contract, the Contractor shall continue the remainder of the work in conformity with the terms of this contract, and in such manner as will in nowise hinder or interfere with the persons or workers employed, as above provided, by the OWNER, by contract or otherwise, to do any part of the work or to complete the same under the provisions of this article of the contract.

32. COMPLETION OF WORK DEFINED

The completion of the herein specified work is defined as that stated when the installations and the appurtenant equipment included under this contract have been completed and tested, and are together, ready for continuous permanent use and occupancy for the purpose intended. After this date, there may still remain some cleaning up or other minor work, which does not prevent the permanent use of the contracted work.

33. TIME FOR COMPLETION

Work on this contract shall be commenced within ten (10) days from the date a notice from the OWNER/ENGINEER is received to commence work.

The work shall be carried on with such force and in such manner and order and at such points that by the date stipulated in the proposal and contract, or as may be modified or extended as hereinafter provided, the whole work and its parts shall be performed in accordance with the terms of this contract.

It is mutually agreed and understood by and between the parties hereto that time is an essential part of this contract, and that, if the Contractor shall fail to complete the work or any part thereof within the time above fixed, the OWNER may retain as liquidated damages as a result of such delay, from monies that are or which may become due the said Contractor, such sum per day as specified in the contract for each and every day (Sundays and legal holidays excepted) the completion of the work be delayed beyond the time specified herein for such completion.

It is understood and agreed that by the signing of the foregoing contract the Contractor waives any legal defense he might have because of the omission of a bonus clause in the event of completion before the date agreed upon, the term "Liquidated Damages" governing absolutely.

It is agreed by and between the parties hereto that inasmuch as expenses and inconvenience and other damages will be sustained by the OWNER in the event that said Contractor fails to perform the work herein specified within the time herein set forth, such as inconvenience of the public, consulting and field engineering expenses, interest charges, wages, salaries of inspectors, delay caused to other work by failure to perform this contract, and other elements, some of which are indefinite and in some cases insusceptible of easy proof, the sum per day specified in the contract for each day's delay (Sundays and legal holidays excepted) shall be considered as liquidated damages and not as a penalty and shall become due said OWNER as full payment for all such expenses and damages sustained to fit by the failure of said Contractor to complete the work as herein specified.

34. DELAYS AND EXTENSION OF TIME FOR COMPLETION

- a. The OWNER shall have the right to defer the beginning or to suspend the whole or any part of the work herein contracted to be done whenever, in the opinion of the OWNER or ENGINEER, it is necessary or expedient for the OWNER to do so. If the Contractor is delayed in the completion of the work by such deferral or suspension or by strikes, lockouts, fire, delay of common carriers, unavoidable casualties, delays caused by other contractors, subcontractors or suppliers or for any other reason outside of the control of the OWNER, then for all such delays and suspensions, the Contractor shall be allowed one day additional to the time herein stated for each and every day of such delay so caused in the completion of the work, the same to be determined by the ENGINEER. No such extension shall be made for any of such delays unless within ten days after the beginning of such delay, a written request for additional time is filed by the Contractor with the ENGINEER. In case of a continuing cause of delay, only one request shall be necessary.
- b. Nothing herein shall limit the Contractor's remedy for the OWNER's negligence, bad faith, active interference, tortious conduct or other reasons un contemplated by the parties that delay the Contractor's performance, to giving the Contractor an extension of time for performance under this contract. In such cases, the Contractor may claim as additional compensation only the amount of any additional out-of-pocket expenses actually incurred as a result of such action by the OWNER. No claim for such damages shall be given unless within ten days after the beginning of such delay, a written request for additional compensation shall be filed with the ENGINEER. In case of a continuing cause of delay, only one request shall be necessary. The Contractor shall provide the OWNER and the ENGINEER with such documentation as may be requested to verify the claim for reimbursement of actual additional out-of-pocket expenses.

35. PRICES

The OWNER will pay and the Contractor shall receive the prices stipulated in the proposal herein contained or hereto annexed, as full compensation for furnishing all the materials and performing all the labor which may be required in the prosecution and completion of the work in the contract as described and specified, and as shown on the contract drawings, and also for all loss and damages arising out of the nature of the work aforesaid, or from the action of the elements or from any unforeseen obstruction or difficulty encountered in the prosecution of work, and for all expense incurred by or in consequence of the suspension or discontinuance of the work as herein specified.

36. APPROVAL AND ACCEPTANCE OF WORK

Following the completion of this contract, as such completion is defined herein, and as soon thereafter as practicable, the OWNER will inspect the entire work on all parts and details or cause the same to be inspected, and if said work and all contract performances are found to be satisfactory and in accordance with the provisions and terms of the contract and specifications, the OWNER will certify the work as completed and will accept it, but conditional upon the subsequent remedying of defects which may become manifest within a period of one year following completion and as herein required. The certification of completion and the said acceptance of the work will be prerequisite to final payment hereunder.

Twenty-four (24) months after the date of the certificate of acceptance as hereinbefore set forth, and as soon thereafter as practicable, the OWNER shall make a review and reinspection of the work and performances of this contract, or cause the same to be made. If the said performances and work shall be found satisfactory and the work not to have deteriorated through defects of workmanship or materials, then the OWNER shall certify the release and payment of the two year Maintenance Bond herein elsewhere specified, if applicable, and such certification shall be prerequisite to the release of the sureties on the contract bonds. If, however, the review and reinspection as herein or any prior inspection discloses defects due to the non-fulfillment of this contract, or non-compliance with its requirements, the OWNER shall so notify the Contractor in writing, and thereupon the Contractor shall, at his own expense, repair or replace and shall make good all defects of workmanship, material and guarantee, and shall rectify any non-compliance, and such repairs and fulfillment shall be a prerequisite to the release and payment of the two year Maintenance Bond, if applicable, and to the release of the surety of the contract bond. If, however, the Contractor shall, after due notice, refuse or neglect to make good the defects as notified and to the satisfaction of the OWNER, then the OWNER may and is empowered to proceed in the manner described in the event of abandonment or forfeiture of the work by the Contractor and completion by the OWNER and the payment of claims for material and labor and other expenses as provided in such procedures shall be a prerequisite to the termination of guarantee, to the release of guarantee retainer and to the release of the surety on the bond.

37. ESTIMATES AND PAYMENT - PARTIAL AND FINAL

The ENGINEER will, each month, make an approximate partial estimate, such as he shall believe to be just and fair, of the amount and value of the work done and the materials incorporated into the work during the previous calendar month, whenever said monthly work exceeds One Thousand Dollars (\$1,000.00) in value. More frequent estimates may, at the option of the OWNER, be made at any time during the progress of the work, and payment may at any time be withheld if the work is not proceeding in accordance with the contract.

All requests for payment shall be accompanied by certified payroll records provided by the Contractor to the ENGINEER. For contracts where the Specifications require record drawings, updated record drawings shall be submitted with each payment request. No payments will be authorized by the OWNER unless said certified payroll records and record drawings have been submitted.

Upon such estimate being made and certified by the ENGINEER and approved by the OWNER, the OWNER will pay to the Contractor ninety percent (90%) of the amount stated in such estimate or certificate to be the value of the work therein certified to have been done, except that when the total contract price exceeds One Hundred Thousand Dollars (\$100,000.00), then the OWNER will pay to the Contractor ninety eight percent (98%) of the amount stated on said estimate or certificate. In lieu of the two percent (2%) cash retainage on contracts exceeding \$100,000.00, the Contractor may agree to deposit negotiable bearer bonds of the State of New Jersey, or negotiable bearer bonds or notes of any political subdivision of the State, the value of which is equal to two percent (2%) of said estimate or certificate, provided they are delivered directly to and approved by the OWNER. The value of a bond or note shall mean par value or current market value, whichever is lower. The OWNER may at all times

reserve and retain out of any or all of said partial payments, all such sums as it is or may be authorized to reserve or retain.

The making of any such estimates or payment thereon shall not be taken or construed as an approval or acceptance by the OWNER of any work so estimated. Allowances will be made for all materials placed along or upon the site, or stored at secured locations, which are suitable for use in the execution of the contract, if the person providing the materials furnishes releases of liens for the materials at the time each estimate of work is submitted for payment. The total of all the partial payments shall not exceed ninety percent (90%) of the cost of the materials. The cost of such materials shall be verified by vouchers from the materials' suppliers.

Following the completion of the work and the acceptance thereof as previously defined, the Contractor shall file with the OWNER his Contractor's Certificate duly executed. As soon after as practicable, the ENGINEER will make a final estimate of the amount of work done by the Contractor and of the value thereof. Upon such estimate being made and certified by the ENGINEER and approved by the OWNER, the OWNER will return to the Contractor any bonds or notes deposited and any interest accruing on such bonds or notes, and will pay the Contractor the full value of the work done under this contract. Any interest accruing on cash payments withheld shall be credited to the OWNER.

38. LIENS

The final payment shall not become due until the Contractor, if required, shall deliver to the OWNER a complete release of all liens arising out of this contract, or receipts in full in lieu thereof and, if required, an affidavit that so far as he has knowledge or information the release and receipts include all the labor and material for which a lien could be filed; but the Contractor may, if any subcontractor refuses to furnish a bond satisfactory to the OWNER to indemnify him against any lien. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the OWNER all monies that the later may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

39. CONTRACTOR'S CLAIM FOR DAMAGES

If the Contractor shall claim compensation for any damage sustained by reason of the acts of the OWNER, or its agents, he shall, within seven (7) days after the sustaining of such damage, make a written statement to the ENGINEER of the nature of the damage sustained. On or before the fifteenth day of the month subsequent to that in which any such damage shall have been sustained, the Contractor shall file with the ENGINEER an itemized statement of the details and the amount of such damage, and unless such statement is made as thus required, his claim for compensation shall be forfeited and invalidated, and he shall not be entitled to payment on account of any such damage.

40. NO WAIVER OF CONTRACT

Neither an extension of time for any reason beyond the date fixed herein for the completion of the contract, nor the delivery and acceptance of any articles or materials, nor any payment for, nor acceptance of the whole or any part of the work by the ENGINEER, nor any possession taken by the OWNER, or its employees or agents, shall be deemed to be a waiver by the OWNER of the right to abrogate this contract for abandonment or delay or non-performance in the manner herein provided, nor shall it operate to void or annul any of the terms of this contract.

41. NO ESTOPPEL

Neither the OWNER nor any department or officer thereof, shall be precluded or estopped by any return or certificate made or given to the OWNER, the ENGINEER, or other officer, agent or appointee to the OWNER under any provision of this agreement, from any time before the completion and acceptance of the work, and payment therefor, or before the payment of the guarantee retainer, pursuant to any such return or certificate showing the true and correct amount and character of the work done and

materials furnished by the Contractor or any other person under this agreement, or that any such return or certificate is untrue and incorrect or improperly made in any particular, or that the work and materials, or any part thereof, do not in fact conform to the specifications and contract drawings, and the OWNER shall not be precluded or estopped, notwithstanding any such return or certificate any payment in accordance therewith, from demanding and recovering from the Contractor such damages as it may sustain by reason of his failure to comply with the specifications and contract drawings.

42. SUBLETTING

The Contractor must perform, construct or install not less than 50% of each contract with his own forces and equipment. Only special items approved by the ENGINEER may be sublet.

The Contractor shall not sublet any part of the work included in this contract without the previous approval of the ENGINEER. In making application for subletting any portion of the work, the Contractor shall state in writing, the portion of the work which each subcontractor is to do or the material which he is to furnish, his place of business, and such other information as may be required in order to ascertain whether such subcontractor is responsible, reliable and able to perform the work or to furnish the materials as called for in the specifications. Subletting, if permitted, shall not relieve the Contractor of any of his obligations under this contract. The Contractor shall be as fully responsible to the OWNER for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them as he is for the acts and omissions of persons directly employed by him.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work, to bind subcontractors to the Contractor by the terms of the General Conditions and other Contract Documents insofar as applicable to the work of subcontractors, and to give the Contractor the same power as regards terminating any subcontract that the OWNER may exercise over the Contractor under any provisions of the Contract Documents.

Nothing contained in this contract shall create any contractual relations between any subcontractor and the OWNER.

Within five days after the Contractor receives payment for work performed under this contract, he shall pay each subcontractor for the amount allowed the Contractor for and on account of work performed by the subcontractor to the extent of the subcontractor's interest therein.

43. RELATIONS OF CONTRACTOR AND SUBCONTRACTOR

The Contractor agrees to bind every subcontractor and every subcontractor agrees to be bound by the terms of the Agreement, the General Conditions, the Drawings and Specifications as far as applicable to his work, including the following provisions of this article, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the OWNER or ENGINEER.

This does not apply to minor subcontracts.

The subcontractor agrees:

- a. To be bound to the Contractor by the terms of the Agreement, General Conditions, Drawings and Specifications, and to assume toward him the obligations and responsibilities that he, by those documents, assumes toward the OWNER.
- b. To submit to the Contractor applications for payment in such reasonable time as to enable the Contractor to apply for payment.
- c. To make all claims for extras, for extensions of time and for damages for delays or otherwise, to the Contractor in the manner provided in the General Conditions for like claims by the Contractor upon the OWNER, except that the time for making claims for extra cost is one week.

The Contractor agrees:

- a. To be bound to the subcontractor by all the obligations that the OWNER assumes to the Contractor under the Agreement, General Conditions, Drawings and Specifications, and by all the provisions thereof affording remedies and redress to the Contractor from the OWNER.
- b. To pay the subcontractor, upon the payment of certificates, if issued under the schedule of values described herein, the amount allowed to the Contractor on account of the subcontractor's work to the extent of the subcontractor's interest therein.
- c. To pay the subcontractor, upon the payment of certificates, if issued otherwise than in "b" so that at all times his total payments shall be as large in proportion to the value of the work done by him as the total amount certified to the Contractor is to the value of the work done by him.
- d. To pay the subcontractor to such extent as may be provided by the Contract Documents or the subcontract, if either of these provides for earlier or larger payments than the above.
- e. To pay the subcontractor on demand for his work or materials as far as executed and fixed in place, less the retained percentage, at the time the certificate should be issued, even though the ENGINEER fails to issue it for any cause not the fault of the subcontractor.
- f. To pay the subcontractor a just share of any fire insurance money received by him, the Contractor.
- g. To make no demand for liquidated damages or penalty for delay in any sum in excess of such amount as may be specifically named in the subcontract.
- h. That no claim for services rendered or materials furnished by the Contractor or to the subcontractor shall be valid unless written notice thereof is given by the Contractor to the subcontractor during the first ten (10) days of the calendar month following that in which the claim originated.
- i. To give the subcontractor an opportunity to be present and to submit evidence in any arbitration or court action involving his rights.
- j. If arbitration is used, name as arbitrator under arbitration proceedings as provided in the General Conditions, the person nominated by the subcontractor, if the sole cause of dispute is the work, materials, rights or responsibilities of the subcontractor; or if of the subcontractor and other subcontractors jointly, to name as such arbitrator the person upon whom they agree.
- k. In the matter of arbitration or court action, their rights and obligations and all procedures shall be analogous to those set forth in this contract.

Nothing in this paragraph shall create any obligation on the part of the OWNER to pay or see to the payment of any sums to any subcontractor.

44. WAGE RATES

This contract is subject to the New Jersey State Department of Labor and Industry prevailing wage rates. Prevailing minimum wage rates are appended to this contract. BIDS WILL NOT BE ACCEPTED FROM BIDDERS WHO ARE ON THE "DEBARRED LIST OF THE NEW JERSEY DEPARTMENT OF LABOR AND INDUSTRY."

The wage rates shall be made a part of the contract for performance of the described work. Contractors and subcontractors performing the described work shall post the prevailing wage rates for each craft and classification involved as herein determined in a prominent and easily accessible place at the site of the work or at such place or places as are used to pay workers their wages.

Applicable rates are those in effect at that date on which a contract is awarded, and must be kept current as indicated. The wage rates are conclusive for a period of two (2) years from date of issuance unless superseded within said two (2) year period by a later determination.

Employers not paying the itemized employees benefits to a payee designated in a collective bargaining agreement shall pay them directly to the employee on each pay day.

NOTE: Each clause of these specifications is to be followed wherever it may apply throughout the work irrespective of the section or subdivision of the specifications in which the clause may appear.

45. MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE
N.J.S.A. 10:53-1 et seq., N.J.A.C. 17:27

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

- a. 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 or sex. Except with respect to affectional or sexual orientation, the contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. 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.
- b. 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 or sex.
- c. The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, 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.
- d. 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.
- e. When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the applicable employment goal prescribed by **N.J.A.C. 17:27-7.3**; 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, 1, 2 and 3, 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 applicable employment goal established in accordance with **N.J.A.C. 17:27-7.3**.
The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

- (1) 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 attempt to hire or schedule minority and women workers directly, consistent with the applicable employment goal. 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 the applicable employment goal, the contractor or subcontractor agrees to be prepared to hire or schedule minority and women workers directly, consistent with the applicable employment goal, by complying with the hiring or scheduling procedures prescribed under (2) below; and the contractor or subcontractor further agrees to take said action immediately if it determines or is so notified by the Division that the union is not referring minority and women workers consistent with the applicable employment goal.
- (2) If the hiring or scheduling of a workforce consistent with the employment goal has not or cannot be achieved for each construction trade by adhering to the procedures of (1) 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 consistent with the applicable county employment goals:
 - (a) 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;
 - (b) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
 - (c) 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;
 - (d) 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 until such time as the workforce is consistent with the employment goal;
 - (e) If it is necessary to lay off some of the workers in a given trade on the construction site, to assure, consistent with the applicable State and Federal statutes and court decisions, that sufficient minority and women employees remain on the site consistent with the employment goal; and to employ any minority and women workers so laid off by the contractor on any other construction site on which its workforce composition is not consistent with an employment goal established pursuant to rules implementing **N.J.S.A. 10:5-31 et. seq.**;
 - (f) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:
 - (1) 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 determine the

qualifications of such individuals and if the contractor's or subcontractor's workforce in each construction trade is not consistent with the applicable employment goal, it shall hire or schedule those individuals who satisfy appropriate qualification standards. 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 (3) below.

(2) If the contractor's or subcontractor's workforce is consistent with the applicable employment goal, the name of any interested women or minority individual shall be maintained on a waiting list for the first consideration, in the event the contractor's or subcontractor's workforce is no longer consistent with the applicable employment goal.

(3) 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.

(g) 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.

(3) The contractor or subcontractor agrees that nothing contained in (2) 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 county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (2) 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 (2) above it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

(4) 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) provided to the public agency by the Division 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.

- (5) The contractor and its subcontractors shall furnish such reports or other documents to the Division of Contract Compliance & EEO 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 Contract Compliance & EEO for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.**

SECTION G

GENERAL SPECIFICATIONS

INDEX

<u>SECTION NO.</u>	<u>TITLE</u>
01050	Construction Layout
01060	Regulatory Requirements and Applicable Standards
01150	Measurement and Payment
01210	Project Meetings
01310	Construction Schedules
01340	Shop Drawings, Product Data and Samples
01380	Pre Construction Video
01510	Environmental Protection
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01640	Substitutions
01700	Contract Closeout
01710	Cleaning and Restorations
01730	Subsurface Investigation

SECTION 01050

CONSTRUCTION LAYOUT

1.1 GENERAL

- A. Construction Layout consists of establishing the line, grade, and location for work to be performed under this contract.
- B. Existing basic horizontal and vertical control points for the project are those designated on the drawings.

1.2 QUALIFICATIONS

New Jersey Licensed Land Surveyor shall be employed by Contractor to perform all Construction Layout.

1.3 OWNER'S ENGINEER/SURVEYOR RESPONSIBILITIES

- A. Provide location and elevation of basic vertical control points for use by Contractor's Surveyor for performing Construction Layout.
- B. Provide basic horizontal control points for use by Contractor's Surveyor for performing Construction Layout.

1.4 CONTRACTOR'S SURVEYOR RESPONSIBILITIES

- A. Establish lines and levels, locate and layout, by instrumentation and similar appropriate means, all work under this contract.
- B. Check all established lines and levels, locations and layout for all work under this contract both before and during construction.
- C. Present copies of cut sheets prepared during course of work to the ENGINEER's representative on the job for his use in inspection of the work.
- D. Locate and protect control points provided by the ENGINEER prior to starting work, and preserve all permanent control points during construction.
 - 1. Make no changes or relocations without prior written notice to ENGINEER, and the ENGINEER's approval.
 - 2. Report to ENGINEER when any control point is lost or disturbed.
 - 3. Points lost, damaged, displaced or removed through fault of the Contractor which are still required for completion of work, as determined by ENGINEER, shall be replaced by Contractor's Surveyor at no additional cost to OWNER.

1.5 SUBMITTALS

- A. Submit name and address of Surveyor to ENGINEER.

- B. On request of ENGINEER, submit documentation to verify accuracy of Construction Layout.
- C. Submit certificate signed by registered surveyor certifying that elevations and locations of improvements are in conformance or nonconformance with Contract Documents.

1.6 PAYMENT

No separate cost shall be allowed for Construction Layout. All costs incurred by Contractor for Construction Layout shall be reflected in the overall contract price.

END OF SECTION

SECTION 01060

REGULATORY REQUIREMENTS AND APPLICABLE STANDARDS

1.1 DESCRIPTION

A. Work included:

1. Throughout the Contract Documents, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics.
2. Where materials or workmanship are required by these Contract Documents to meet or exceed the specifically named code or standard, it is the Contractor's responsibility to provide materials and workmanship which meet or exceed the specifically named code or standard.
3. It is also the Contractor's responsibility, when so required by the Contract Documents or by written request from the ENGINEER, to deliver to the ENGINEER all required proof that the materials or workmanship, or both, meet or exceed the requirements of the specifically named code or standard. Such proof shall be in the form requested in writing by the ENGINEER, and generally will be required to be copies of a certified report of test conducted by a testing agency approved for that purpose by the ENGINEER.

B. Related work described elsewhere: Specific naming of codes or standards occurs on the drawings and in other section of these Specifications.

1.2 QUALITY ASSURANCE

A. Familiarity with pertinent codes and standards: In procuring all items used in this work, it is the Contractor's responsibility to verify the detailed requirements of the specifically named codes and standards and to verify that the items procured for use in this work meet or exceed the specified requirements.

B. Rejection of non-complying items: The ENGINEER reserves the right to reject items incorporated into the work which fail to meet the specified minimum requirements. The ENGINEER further reserves the right, and without prejudice to other recourse the ENGINEER may take, to accept non-complying items subject to an adjustment in the Contract amount as approved by the ENGINEER and to the OWNER.

C. Applicable standards listed in these specifications include, but are not necessarily limited to, standards promulgated by the following agencies and organizations:

1. AASHTO = American Association of State Highway and Transportation Officials
341 National Press Building
Washington, D.C. 20004
2. ACI = American Concrete Institute
Box 19150, Redford Station
Detroit, Michigan 48129

3. ANSI = American National Standards Institute
(successor to USASI and ASI)
1430 Broadway
New York, NY 10018
4. ASTM = American Society for Testing & Materials
1916 Race Street
Philadelphia, PA 19103
5. AWWA = American Water Works Association, Inc.
6666 West Quincy Avenue
Denver, Colorado 80235
6. NEC = National Electrical Code (See NFPA)
7. NEMA = National Electrical Manufacturers Association
155 East 44th Street
New York, NY 10017
8. UL = Underwriters' Laboratories, Inc.
207 East Ohio Street
Chicago, IL 60611
9. NSPC = National Standard Plumbing Code
1016 20th St., N.W.
Washington, D.C. 20036
10. NFPA = National Fire Protection Association
60 Batterymarch Street
Boston, MA 02110
11. BOCA = The BOCA Basic Building Code
Building Officials & Code Administrators
International, Inc.
17926 S. Halstead Street
Homewood, IL 60430
12. NJDOT = Standard Specifications for Road and
Bridge Construction
New Jersey Department of Transportation
Trenton, NJ 08625

END OF SECTION

SECTION 01150

MEASUREMENTS AND PAYMENTS

PART 1 GENERAL

1.1 DESCRIPTION

- A. Payment for materials furnished and work done under this contract will be made as hereinafter stipulated for the amount of materials furnished and Work performed under authorization of Owner, or his authorized representatives, and in accordance with their measurements. Contractor shall not be entitled to receive additional compensation for any Work or materials except as shall be authorized by written order of the Owner.

1.2 AUTHORITY

- A. Measurement methods delineated in the individual specification sections, if any, are intended to complement the criteria of this section.
- B. The Contractor shall take all measurements and compute quantities. The Engineer will verify measurements and quantities.

1.3 MEASUREMENT AND QUANTITIES

- A. Stipulated Lump Sum or Unit Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as a completed item or unit of the Work.

1.4 PAYMENT

- A. Payment includes: Full compensation for all required supervision, labor, products, tools, equipment, plant, transportation, services and all incidental work; erection, application or installation of any item of the Work; overhead and profit.
- B. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Engineer multiplied by the unit price for Work which is incorporated in or made necessary by the Work.
- C. Work items shall all other items incidental thereto in accordance with the Plans and Specifications
- D. All excavation shall be unclassified.

1.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.

1.6 NON-PAYMENT FOR REJECTED PRODUCTS

- A. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.

2. Products determined as unacceptable before or after placement.
3. Products placed beyond the lines and levels of the required Work.
4. Products remaining on hand after completion of the Work.
5. Loading, hauling, and disposing of rejected Products.

1.7 WORK ITEMS

- A. The following items, classifying the various kinds of Work, refer to respective items bid in the "Proposal".

Items 1 and A3-1: SITE CLEARING (INCL. SIDEWALK REMOVAL, PAVEMENT REMOVAL, PLAYGROUND FIXTURES REMOVAL, PICKLEBALL COURT REMOVAL, BASKETBALL COURT REMOVAL, PARK BENCHES REMOVAL, FENCE REMOVAL, BIKE RACKS REMOVAL, TRASH RECEPTACLES REMOVAL) - Payment for this item will be made at the per Lump Sum price bid in the "Form of Proposal". The price bid shall include the furnishing of all materials, labor, and equipment necessary for clearing site/demolition. This includes but not limited to hauling and dumping site clearing materials (including any debris) away from site, removal of light foundations, chain link fence, chain link posts/foundations, wood fence, wood posts/foundations, ornamental fence/gates, tree protection fence ornamental fence foundation, building foundation with suitable backfill material to fill void (if required), landscape elements, planters, wood overhang/pergolas, curb, Belgian block curb, concrete sidewalk/pads/walkways, steps, resetting soccer fence and barrier, brick sidewalk, concrete wall, concrete wall foundation/piers/piles, railroad/wood wall, railroad/wood wall foundations, playground equipment, playground surface, benches, concrete benches, concrete bench foundations, picnic tables, trash cans, pavement, sports play pavement, sports play DGA, stumps, basketball hoops, bike racks, bike rack foundations, grill, barbecue pit, and grill foundation. The price for removal and storage of playground equipment, signs (park/monument/traffic/etc), fence, gates, handrails, bleachers, and metal wall/fence/barrier is to be included in site clearing cost bid price. The price for resetting signs, handrails, bleachers, metal wall/fence/barrier, and fence is to be included in site clearing cost. Any temporary construction fence and gate and temporary park closed signs required at any park are to be included in site clearing bid price. Contractor is required to include coordination with PSE&G for park lights to be included in site clearing bid price.

Item 2, 3, 4, 5,6, and A3-2: TREE TRIMMING - Payment for this item will be made at the per Lump Sum price bid in the "Form of Proposal". The price bid for this item shall include all labor, materials, equipment, cost of insurance, protection of existing utilities, trimming of tree to 10', equipment mats, and removal of all limbs, branches, and other debris resulting from the tree removal and all other work incidental to a complete and workmanlike job. Work shall be performed as depicted on the Contract Drawings and specified in Specification Section 02231.

Items 7 and A3-3: TREE REMOVAL, 0"-12" - Payment for this item will be made at the per unit price bid in the "Form of Proposal". The price bid for this item shall include all labor, materials, equipment, cost of insurance, protection of existing utilities, removal of all limbs, equipment mats, branches, trunk, stump and other debris resulting from the tree removal and all other work incidental to a complete and workmanlike job. Work shall be performed as depicted on the Contract Drawings and specified in Specification Section 02231.

Items 8 and A3-4: TREE REMOVAL, 13"-30" - Payment for this item will be made at the per unit price bid in the "Form of Proposal". The price bid for this item shall include all labor, materials, equipment, cost of insurance, protection of existing utilities, removal of all limbs, equipment mats, branches, trunk, stump and other debris resulting from the tree removal and all other work incidental to a complete and workmanlike job. Work shall be performed as depicted on the Contract Drawings and specified in Specification Section 02231.

Item 9: TREE REMOVAL, 31"-60" - Payment for this item will be made at the per unit price bid in the "Form of Proposal". The price bid for this item shall include all labor, materials, equipment, cost of insurance, protection of existing utilities, removal of all limbs, equipment mats, branches, trunk, stump and other debris resulting from the tree removal and all other work incidental to a complete and workmanlike job. Work shall be performed as depicted on the Contract Drawings and specified in Specification Section 02231.

Items 10, A1-1, A2-1, and A3-5: DENSE GRADED AGGREGATE, 4" THICK (SIDEWALK CONCRETE, BENCH PARK CONC. PAD, GRILL CONC. PAD, GAME TABLE CONC. BIKE RACK CONC. PAD, TASH RECEPACLE CONC. PAD) - Payment for this item will be made for the quantity of DGA accepted and complete in place at the per square yard price bid in the "Form of Proposal". Price shall include the cost of excavation, placement, grading, compacting, maintenance and protection of traffic, all restorations, and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections 02721.

Items 11 and A2-2: DENSE GRADED AGGREGATE, 6" THICK (INCL. BITUMINOUS WALKWAY, BASKETBALL COURT, SOCCER COURT, HANDBALL COURT AND PICKLEBALL COURT) - Payment for this item will be made for the quantity of DGA accepted and complete in place at the per square yard price bid in the "Form of Proposal". Price shall include the cost of excavation, placement, grading, compacting, maintenance and protection of traffic, all restorations, and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections 02721.

Items 12, A2-6, and A3-6: CONCRETE SIDEWALK, 5" THICK - Payment for this item will be made at the per square yard price bid in the "Form of Proposal". Price shall include saw-cutting, removal and disposal of existing concrete, excavation, subgrade preparation, concrete, backfill, joints, finishing and curing, maintenance and protection of traffic, all restorations; and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections 02753.

Item 13: CONCRETE SIDEWALK 5" THICK (EXPOSED AGGREGATE) - Payment for this item will be made at the per square yard price bid in the "Form of Proposal". Price shall include saw-cutting, removal and disposal of existing concrete, excavation, subgrade preparation, concrete, backfill, joints, finishing and curing, maintenance and protection of traffic, all restorations; and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections 02753.

Item 14: CONCRETE VERTICAL CURB - Payment for this item will be made at the per linear foot price bid in the "Form of Proposal". Price shall include saw-cutting, cost of pavement and subgrade excavation, excavation of existing structures, disposal of excavated materials, subgrade preparation, compaction, concrete, backfill with flowable fill, joints, finishing and

curing, maintenance and protection of traffic, all restorations (including fertilizer, mulch, seeding, and topsoil); and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specification Section 02755.

Item 15: FLUSH CONCRETE VERTICAL CURB - Payment for this item will be made at the per linear foot price bid in the "Form of Proposal". Price shall include saw-cutting, cost of pavement and subgrade excavation, excavation of existing structures, disposal of excavated materials, subgrade preparation, compaction, concrete, backfill with flowable fill, joints, finishing and curing, maintenance and protection of traffic, all restorations (including fertilizer, mulch, seeding, and topsoil); and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specification Section 02755.

Item 16: DRIVEWAY (INCL DGA & REINFORCEMENT) - Payment for this item will be made at the per square foot price bid in the "Form of Proposal". Price shall include removal and disposal of existing concrete, subgrade preparation, 6" DGA, concrete, backfill, joints, finishing and curing, maintenance and protection of traffic, all restorations; and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections 02753.

Items 17 and A3-8: BRICK PAVER SIDEWALK (INCL. SETTING BED, 5" SLAB & DGA) - Payment for this item will be made at the per square yard price bid in the "Form of Proposal". Price shall include saw-cutting, removal and disposal of existing concrete, subgrade preparation, 4" DGA, concrete, bricks, bituminous setting bed, backfill, joints, finishing and curing, maintenance and protection of traffic, all restorations; and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections 02753.

Items 18 and A2-3: HOT MIX ASPHALT, 19M64 BASE COURSE, 2.5" THICK (INCL. BASKETBALL COURT, SOCCER COURT, HANDBALL COURT AND PICKLE BALL COURT) - Payment for this item will be made for the quantity of asphalt accepted and complete in place at the per square yard price bid in the "Form of Proposal". Price shall include the costs of the pavement complete, tack coat, asphalt sealing of edge abutments, resetting valve boxes, maintenance and protection of traffic, all restorations, and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections 02722.

Items 19, A1-2, and A2-4: HOT MIX ASPHALT, 9.5M64 SURFACE COURSE, 2" THICK (INCL. BITUMINOUS WALKWAY, BASKETBALL COURT, SOCCER COURT, HANDBALL COURT AND PICKLEBALL COURT) - Payment for this item will be made for the quantity of asphalt accepted and complete in place at the per square yard price bid in the "Form of Proposal". Price shall include the costs of the pavement complete, tack coat, asphalt sealing of edge abutments, pavement joints, resetting valve boxes, maintenance and protection of traffic, all restorations, and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections 02722.

Items 20 A1-5, A2-5: COURT ACRYLIC BINDER WITH COLOR COAT SYSTEM & STRIPING (INCL. BASKETBALL COURT, HANDBALL COURT, SOCCER COURT, AND PICKLEBALL)

COURT) - Payment for this item will be made for the quantity of Court Acrylic Binder with color coat system & striping accepted and complete in place at the per square yard price bid in the "Form of Proposal". Price shall include the costs of the preparation of surface, installation of court acrylic binder, color coat system, striping, maintenance and protection of traffic, all restorations, and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications Sections.

Item 21: BASKETBALL BACKBOARD SYSTEM ASSEMBLY/INSTALL (INCLUDES FOUNDATION & COMPLETE BASKETBALL HOOP SYSTEM) - Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; laying out, Installation of backboard assemblies includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 22, A1-6, and A3-11: GAME TABLE WITH FOUR SEATS - Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of Game table with four seats; includes removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 23 and A3-9: PARK GRILL - Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of Park Grill; includes removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 24 and A3-12: PICNIC TABLE - Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of Picnic Table; includes removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Item 25: SOCCER NET- Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of net and post assemblies; includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 26 AND A2-7: PICKLEBALL NET- Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of net and post assemblies; includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Item 27: FITNESS EQUIPMENT - Measurement for the individual site amenities shall be mad per lump sum as specified. Payment for the individual site amenities will be made under the lump sum bid price: this includes all labor, equipment, material costs for furnishing and installation including all furnishing, excavation, foundations, engineering, anchoring, and backfilling in accordance with the plan details and manufacturer's recommendations.

Items 28, 30, 32, and 34: PLAYGROUND EQUIPMENT (2-5 YEARS OLD) - Measurement for the individual site amenities shall be mad per lump sum as specified. Payment for the individual site amenities will be made under the lump sum bid price: this includes all labor, equipment, Construction stakeout, laying out, concrete, disposal of subgrade materials, material costs for furnishing and installation including all furnishing, excavation, foundations, engineering, anchoring, and backfilling in accordance with the plan details and manufacturer's recommendations.

Items 29, 31, 33, and 35: PLAYGROUND EQUIPMENT (5-12 YEARS OLD) Measurement for the individual site amenities shall be mad per lump sum as specified. Payment for the individual site amenities will be made under the lump sum bid price: this includes all labor, equipment, Construction stakeout, laying out, concrete, disposal of subgrade materials, material costs for furnishing and installation including all furnishing, excavation, foundations, engineering, anchoring, and backfilling in accordance with the plan details and manufacturer's recommendations.

Item 36: PLAYGROUND SURFACE AREA - Payment for this item will be made for the quantity of EPDM accepted and complete in place at the per square yard price bid in the "Form of Proposal". Price shall include the costs of the EPDM Wear Course complete, 4" Rubber Base, Filter Fabric, 3/8" Stone, Coarse Aggregate No. 8, 2" Thick, and 3/4" Clean Stone, 4" Thick, maintenance and protection of traffic, all restorations, and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications.

Items 37: PROPOSED STEPS - Payment for this item will be made at the per Lump Sum bid in the "Form of Proposal". Lump Sum price shall include maintenance and protection of traffic; excavation, compaction, 4" DGA, concrete, reinforcement, rebar, ties, construction stakeout; Installation of steps; includes removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Item 38: NO BID ITEM

Items 39 and A3-17: TREE PITS (GRANITE UNIT PAVERS, GRANITE SHAVINGS, FOUNDATION, STEEL PLATE) – Payment for construction shall be paid for on a per unit basis, installed according to the patterns established for each section as details in the plans associated with this project. The unit price bid shall include all labor, material, and equipment to install tree pit, planting soil, granite block, stone mulch, steel edging, and anything else necessary to construct each tree pit.

Item 40: CONCRETE PAINT (SEAT WALL AND HANDBALL WALL)(ANTI-GRAFFITI) Measurement for the individual site amenities shall be mad per lump sum as specified. Payment for the individual site amenities will be made under the lump sum bid price: this includes all labor, equipment, material costs for furnishing and installation including all

furnishing, number of coats to be applied shall be required for complete covering of existing surface, excavation, foundations, engineering, anchoring, and backfilling in accordance with the plan details and manufacturer's recommendations.

Items 41, A1-4, and A3-7: BACKED BENCH - Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of backed bench assemblies; includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 42, A1-5, and A3-10: BIKE RACK- Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of bike rack assemblies; includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 43 and A3-13: TRASH RECEPTACLE WITH PLASTIC INSERT- Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of trash receptacle with plastic insert; includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 44 and A3-14: RECYCLE RECEPTACLE WITH PLASTIC INSERT- Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of trash receptacle with plastic insert; includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 45, 46, 47, and A2-9: CHAIN LINK SINGLE SWING GATE, 6-FT HIGH - Payment for this item will be made at the unit price per unit designated in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of fencing gate includes concrete foundations, lock, key, locking mechanism/latch, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Item 48: CHAIN LINK DOUBLE SWING GATE, 6-FT HIGH (12-FT WIDE)(MAINTENANCE ENTRANCE) - Payment for this item will be made at the unit price per unit designated in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of fencing gate includes concrete foundations, lock, key, locking mechanism/latch, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 49 and A3-15: ORNAMENTAL DOUBLE SWING GATE, 6-FT HIGH (10-FT WIDE) - Payment for this item will be made at the unit price per unit designated in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction

stakeout; Installation of fencing gate includes concrete foundations, lock, key, locking mechanism/latch, removal and legal disposal of all excess material; Contractor to attach ornamental gates to existing masonry piers. Contractor is to install 6' ornamental fence panel to fill in void area between gate panel and existing masonry piers; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 50 and 51, and A2-8: CHAIN LINK FENCE (6-FT AND 8-FT) - Payment for this item will be made at the unit price per linear foot designated in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of fencing includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 52: ORNAMENTAL FENCE, 6-FT HIGH - Payment for this item will be made at the unit price per linear foot designated in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of fencing includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 53: VINYL SCREEN FENCE, 6-FT HIGH - Payment for this item will be made at the unit price per linear foot designated in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; Installation of fencing includes concrete foundations, removal and legal disposal of all excess material; restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified.

Items 54 and A3-16: 20'X30' PAVILION (INCLUDES FOUNDATION AND CONCRETE SLAB) - Measurement for the individual site amenities shall be made per lump sum as specified. Payment for the individual site amenities will be made under the lump sum bid price: this includes all labor, equipment, material costs for furnishing and installation including all furnishing, excavation, foundations, engineering, anchoring, and backfilling in accordance with the plan details and manufacturer's recommendations. The Contractor shall submit a foundation design signed and sealed by a New Jersey Licensed Engineer along with the pavilion shop drawings/proof drawings for review and approval as shown on the plans and as specified.

Items A1-3: GAZEBO (INCLUDES FOUNDATION AND CONCRETE SLAB) - Measurement for the individual site amenities shall be made per lump sum as specified. Payment for the individual site amenities will be made under the lump sum bid price: this includes all labor, equipment, material costs for furnishing and installation including all furnishing, excavation, foundations, engineering, anchoring, and backfilling in accordance with the plan details and manufacturer's recommendations. The Contractor shall submit a foundation design signed and sealed by a New Jersey Licensed Engineer along with the pavilion shop drawings/proof drawings for review and approval as shown on the plans and as specified.

Item 55: PAVILION REHAB (INCLUDES PAINT, PAINT PREPARATION, AND REPLACEMENT OF MISSING COMPONENTS) - Measurement for the individual site

amenities shall be mad per lump sum as specified. Payment for the individual site amenities will be made under the lump sum bid price: this includes all labor, equipment, material costs for furnishing and installation including all furnishing, excavation, foundations, engineering, anchoring, and backfilling in accordance with the plan details and manufacturer's recommendations.

Items 56 and 57: HDPE - Payment will be made at the price bid per linear foot in the "Form of Proposal". Payment will be for the actual length of pipe laid in feet as measured from center of structure to center of structure, at any depth. Unit price bid shall include: coordination with the City, pre-construction survey; construction stakeout; maintenance and protection of traffic; saw cutting of the pavement; pavement removal and legal disposal; furnishing and installation of all pipe, detectable warning tape, joint materials and accessories; protection of existing utilities; unclassified excavation; sheeting and shoring; dewatering; a stone foundation; backfilling; stone, compaction; regrading; restoration of all disturbed areas; temporary paving; connection to new pipes, inlets, manholes; and other structures; testing as-built documents per City of Camden Ordinance requirements, removal and legal disposal of excess excavated material; dust control; shop drawings; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto.

Item 58: INLET, TYPE A - Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include all maintenance and protection of traffic; construction stakeout; saw cutting, removal, and legal disposal of excavated materials; furnishing and installation of the new inlet box including bike safe grate, frame, structure, joint materials, block, bitumastic sealant, brick and mortar and appurtenances; protection of existing utilities; unclassified excavation; trap; internal coating; external coating; A-Lok gasket; test pits; sheeting and shoring; dewatering; backfilling around the entire structure; compaction; removal and legal disposal of all excess material; restoration of all disturbed areas; temporary paving; dust control; shop drawings; as-built documents per City of Camden Ordinance requirements, cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As part of the cost for removing and replacing inlet, Contractor is required to remove and replace any other pipe connection to inlet with new pipe, a minimum of 4-foot length with an approved ferenco fitting and concrete collar.

Item 59: NEW MANHOLE FRAME AND CASTING – Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; construction stakeout; saw cutting, modification of inlet box, removal, and legal disposal of existing inlet casting; test pits; furnishing and installation of the new frame castings, head and grate, including structure, joint materials, brick and mortar and appurtenances; protection of existing utilities; unclassified excavation; sheeting and shoring; dewatering; backfilling around the entire structure; compaction; removal and legal disposal of all excess material; restoration of all disturbed areas; temporary paving; dust control; shop drawings; as-built documents per City of Camden Ordinance requirements, cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto.

Item 60: STORM CLEANOUT (INCL. CHECK VALVE) – Payment for Installation of Lateral with Cleanout will be made at the per unit price bid in the "Form of Proposal". Unit price shall include maintenance and protection of traffic; preparation of the existing subsurface; trenching; unclassified excavation and rock removal; dewatering; pumping; bedding base preparation, installation of lateral; joint connections; joint sealers; thrust blocks; cleanouts; erosion and sedimentation control; coordination with the City and residents; as-built

documents per City of Camden Ordinance requirements, insurance and bonds; dust control; safety fence; steel plates; trench protection; testing; permits; traffic control; flagmen all restorations, and materials, labor, equipment, supervision, tools, and all other incidental necessary to complete the work. Work should be performed as depicted on the Contract Drawings and specified in Specification Sections. As shown on plans or as specified.

Item 61: REPLACE TYPE A GRATE TO BICYCLE SAFE GRATE – Payment for this item will be made at the per unit price bid in the "Form of Proposal". Unit price shall include all maintenance and protection of traffic; construction stakeout; saw cutting, removal, and legal disposal of existing inlet top; furnishing and installation of the Bicycle Safe Grate, including structure, joint materials, bitumastic sealant, as-built documents per City of Camden Ordinance requirements, Clean inlet of all debris; parging the interior of the inlet box with Tnemec 214: brick and mortar and appurtenances; protection of existing utilities; unclassified excavation; sheeting and shoring; dewatering; backfilling around the entire structure; compaction; removal and legal disposal of all excess material; restoration of all disturbed areas; temporary paving; dust control; shop drawings; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto.

Item 62: INLET PROTECTION FILTER – Payment for this item will be made at the unit price bid per unit designated in "Form of Proposal". Price shall include; maintenance and protection of traffic; construction stakeout, installation of silt fence; removal of fence after construction, restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified in section 02910.

Item 63: SHRUBS – Payment for shrub will be made at the unit price in the bid. The cost for maintenance, warranty, watering, planting soil mix, mulch, mulch bed, edging, installation, material, laborer, equipment, transportation, hauling, delivery, and anything else necessary for each shrub shall be included in the unit price. Any variations to the trees and shrubs by the contractor (without approval from the Engineer) will not be considered a final product and must be fixed at Contractors own expense.

Items 64, A1-7, and A3-20: DECIDUOUS TREES – Payment for trees will be made at the unit price in the bid. The cost for maintenance, warranty, gator bags, root barriers (as specified in the plans and specifications), planting soil mix, mulch, mulch bed, edging, installation, material, laborer, equipment, transportation, hauling, delivery, and anything else necessary for each tree shall be included in the unit price. Any variations to the trees and shrubs by the contractor (without approval from the Engineer) will not be considered a final product and must be fixed at Contractors own expense.

Item 65: SILT FENCE – Payment for this item will be made at the unit price bid per unit designated in "Form of Proposal". Price shall include; maintenance and protection of traffic; construction stakeout, installation of silt fence; removal of fence after construction, restoration of all disturbed areas; cleanup; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto. As shown on plans or as specified in section 02910.

Items 66, A1-8, A2-10, and A3-18: 6" THICK TOPSOIL FERTILIZING AND MULCH - Payment for this item will be made at the per Square Yard price bid in the "Form of Proposal". Payment will be made for the number of square feet of Topsoil, 6" Depth and completed in place as specified and shown on the Plans, or as directed by the ENGINEER,

which price shall include the costs of placement, compaction, and incidental work. As shown on plans or as specified.

Items 67, A1-9, A2-11 and A3-19: LAWN SEED, FERTILIZER, & MULCH. - Payment for this item will be made at the per Square Foot price bid in the "Form of Proposal". Payment will be made for the number of square Yard of Lawn Seed, Fertilizer, & Mulch and completed in place as specified and shown on the Plans, or as directed by the ENGINEER, which price shall include the costs of placement, compaction, and incidental work. As shown on plans or as specified.

Item 68: CONSTRUCTION ENTRANCE - Payment for this item will be made for the quantity of Construction Entrance accepted and complete in place at the per unit price bid in the "Form of Proposal". Price shall include the cost of placement, grading, compacting, maintenance and protection of traffic, all restorations, and materials, labor, equipment, supervision, tools and all other incidentals necessary to complete the work. Work shall be performed as depicted on the Contract Drawings and specified in Specifications.

Item 69: RE-SET PLAYGROUND EQUIPMENT (25TH AND HOWELL STREET) - Measurement for the individual site amenities shall be mad per lump sum as specified. Payment for the individual site amenities will be made under the lump sum bid price: this includes all labor, equipment, material costs for furnishing and installation including all furnishing, concrete, disposal of subgrade material. Any damage to existing playground equipment will be replaced in kind by contractor at no additional cost to owner including replacement of posts if required, excavation, foundations, engineering, anchoring, and backfilling in accordance with the plan details and manufacturer's recommendations.

Item 70: NJDOT TYPE - 2 STRAW MAT – Payment for NJDOT Type 2 Mat (NAG S75 or approved equal) will be at a square yard price as shown in the bid. The price shall include the cost of all materials, labor, and equipment necessary to complete the work. The cost shall include mulching material, sod staples (approved by engineer), and all else required to complete the work.

Item 71: PARK NAME SIGN - Payment for this item will be made at the per Unit price bid in the "Form of Proposal". The unit price shall include: coordination with the City, residents, and building manufacture / supplier; layout; protection of all existing and newly constructed features; furnishing and installation of the Site Sign as specified on the plans; cleanup; shop drawings; and all other appurtenant labor work, supervision, tools, equipment, materials and all other items incidental thereto.

Item 72: REPLACE DECREATIVE PARK SIGN (NORTHGATE & WHITMAN SQUARE) - Payment for this item will be made at the per Unit price bid in the "Form of Proposal". The unit price shall include: coordination with the City, residents, and building manufacture / supplier; layout; protection of all existing and newly constructed features; furnishing and installation of the Site Sign as specified on the plans; cleanup; shop drawings; and all other appurtenant labor work, supervision, tools, equipment, materials and all other items incidental thereto.

Item 73: RELOCATE EXISTING MONUMENT SIGN - Payment for this item will be made at the per Unit price bid in the "Form of Proposal". The unit price shall include: coordination with the City, residents, and building manufacture; layout; protection of all existing and newly constructed features; Removal and installation of the Sign as specified on the plans; Any damage to existing monument sign will be replaced in kind by contractor at no additional

cost to owner., cleanup; shop drawings; and all other appurtenant labor work, supervision, tools, equipment, materials and all other items incidental thereto.

Items 74: STORM MAIN HEAVY CLEANING - Payment for this item will be made at the unit price bid per linear foot designated in "Form of Proposal". Payment will be made for the actual as number measured by the Engineer horizontally from the end of the pipe to the end of the pipe. The price shall include pre construction survey, 4 to 7 passes prior to videoing; videos and pictures (digital videos and CCTV report); permits; traffic control; flagmen; clean up; protection of property; protection of sewer pipes, manholes, and laterals; repair of any damage caused by Contractor's work; cleaning to include pipes and structures, root cutting, grease clearing, removal of obstructions, and any and all work to clean and remove debris from the line, proper disposal of all debris from pipe including hauling and disposal to a NJDEP collection facilities, provision of all materials and accessories, installation, protection of existing utilities, OSHA approved guardrails around all opened manholes, protection of public improvements and adjacent property as required, clean up, restoration, accommodation and protection of pedestrian and vehicular access and all appurtenant Work, labor, supervision, tools, equipment, materials and all other items incidental thereto. Work to be done in accordance with the City of Camden's Ordinance requirements.

Item 75: SITTING WALL – Payment for this item will be made at the unit price bid per linear foot designated in "Form of Proposal". Price shall include coordination with City, pre-construction survey; construction stakeout; maintenance and protection of traffic; unclassified excavation, compaction, regrading; 6" DGA, concrete, backfill, wood, joints, reinforcement, finishing and curing, removal, and legal disposal; protection of existing utilities; restoration of all disturbed areas; dust control; and all appurtenant labor, work, supervision, tools, equipment, materials and all other items incidental thereto.

Item 76: ALLOWANCE - An ALLOWANCE (Contingency), will be added as a separate line item as indicated on the Proposal Form pages. This ALLOWANCE (Contingency) shall be set aside to pay for items that are unforeseen or for additional work that is not included in the drawings or specifications. Should such an occurrence happen, the contractor must submit a written proposal for the work to be performed. Before any work is done under the ALLOWANCE (Contingency) category, it must be approved by the City of Camden, or their designee. There will be no payment for any work performed without this prior written approval.

- B. Take all measurements and compute quantities. The Engineer will verify measurements and quantities.
- C. Unit Quantities: Quantities and measurements indicated in the Bid Form are for contract purposes only. Quantities and measurements supplied or placed in the Work shall determine payment. Actual quantities provided will determine payment.
- D. Payment Includes: Full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.
- E. Payment for work which is not specifically covered by a pay item in the Contract, but is required to complete work in an item for which payment is to be made, will be considered to be included in the price bid for that pay item in the Contract. The cost of work which is not specifically covered by a pay item and is not directly related to any of the pay items in

the Contract will be considered to be included in the prices bid for the various pay items scheduled in the Contract.

- F. Defect Assessment: The Work, or portions of the Work, not conforming to specified requirements, shall be replaced. If, in the opinion of the Engineer, it is not practical to remove and replace the Work, the Engineer will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 01210

PROJECT MEETINGS

1.1 DESCRIPTION

- A. Contractor shall attend preconstruction meeting, periodic progress meetings, and special meetings called throughout the progress of the work.
- B. Representatives of Contractors, subcontractors and suppliers attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.
- C. ENGINEER may attend meetings to ascertain that work is expedited consistent with Contract Documents and the construction schedules.

1.2 PRECONSTRUCTION MEETING

- A. Will be scheduled by the ENGINEER within fifteen (15) days after date of Notice to Proceed.
- B. Location: A central site, convenient for all parties.
- C. Attendance:
 - 1. OWNER'S Representative
 - 2. ENGINEER and his professional consultants
 - 3. Resident Project Representative
 - 4. Contractor's Superintendent
 - 5. Major Subcontractors
 - 6. Major Suppliers
 - 7. Other as appropriate.
- D. Suggested agenda:
 - 1. Distribution and discussion of:
 - a. List of major subcontractors and suppliers.
 - b. Projected construction schedules.
 - 2. Critical work sequencing.
 - 3. Major equipment deliveries and priorities.
 - 4. Project coordination.

5. Procedures and processing of:
 - a. Field decisions
 - b. Proposal requests
 - c. Submittals
 - d. Change orders
 - e. Applications for payment, including vouchers and current cost estimates.
6. Adequacy of distribution of Contract Documents.
7. Procedures for maintaining Record Documents.
8. Use of premises:
 - a. Office, work and storage areas
 - b. OWNER'S requirements.
9. Construction facilities, controls and construction aids.
10. Temporary utilities.
11. Safety and first-aid procedures.
12. Security procedures.
13. Housekeeping procedures.

1.3 PROGRESS MEETINGS

- A. Will be scheduled on a regular periodic basis, as required, by the ENGINEER.
- B. Additional meetings will be held as required by progress of the work.
- C. Location of the meetings: The project field office of the Contractor.
- D. Attendance:
 1. ENGINEER, and his professional consultants as needed.
 2. Subcontractors as appropriate to the agenda.
 3. Suppliers as appropriate to the agenda.
 4. Others.
- E. Suggested agenda:
 1. Review, approval of minutes of previous meetings.

2. Review of work progress since previous meeting.
3. Field observations, problems, conflicts, recommendations.
4. Problems which impede Construction Schedule.
5. Review of off-site fabrication, delivery schedules.
6. Corrective measures and procedures to regain projected schedule.
7. Revisions to Construction Schedule.
8. Plan progress, schedule, during succeeding work period.
9. Coordination of schedules.
10. Review submittal schedules, expedite as required.
11. Maintenance of quality standards.
12. Review proposed changes for:
 - a. Effect on Construction Schedule and on completion date.
 - b. Effect on other contracts of the Project.

END OF SECTION

SECTION 01310

CONSTRUCTION SCHEDULES

1.1 GENERAL

- A. Promptly after award of the contract, the Contractor shall prepare and submit to the ENGINEER estimated construction progress schedules for the work, with sub-schedules of related activities which are essential to its progress.
- B. Submit revised progress schedules periodically.
- C. Related requirements in other parts of the Contract Documents:
See the General Conditions.

1.2 FORM OF SCHEDULES

- A. Prepare schedules in the form of a horizontal bar chart.
 - 1. Provide separate horizontal bar for each trade or operation.
 - 2. Horizontal time scale: Identify the first workday of each week.
 - 3. Scale and spacing: To allow space for notation and future revisions.
 - 4. Minimum sheet size: 18-inch by 24-inch.
- B. Format of listings: The chronological order of the start of each item of work.
- C. Identification of listings: By major specification section numbers.

1.3 CONTENT OF SCHEDULES

- A. Construction progress schedule:
 - 1. Show the complete sequence of construction by activity.
 - 2. Show the dates for the beginning, and completion of each element of construction.
 - 3. Show projected percentage of completion for each item, as of the first day of each month.
- B. Provide sub-schedules to define critical portions of prime schedules.

1.4 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission.
- B. Show changes occurring since previous submission of schedule:

1. Major changes in scope.
 2. Activities modified since previous submission.
 3. Revised projections of progress and completion.
 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
1. Problem areas, anticipated delays, and the impact on the schedule.
 2. Corrective action recommended, and its effect.
 3. The effect of changes on schedules of other prime contractors.

1.5 SUBMISSIONS

- A. Submit initial schedules within five (5) days after Notice to Proceed.
1. ENGINEER will review schedules and return review copy within ten (10) days after receipt.
 2. If required, resubmit within seven (7) days after return of review copy.
- B. Submit revised progress schedules with each application for payment.
- C. Submit one (1) reproducible transparency and one (1) opaque reproduction.

1.6 DISTRIBUTION

- A. Distribute copies of the reviewed schedules to:
1. Job site file.
 2. Subcontractors.
 3. Other concerned parties.
- B. Instruct recipients to report promptly to the Contractor, in writing, any problems anticipated by the projection shown in the schedules.

END OF SECTION

SECTION 01340

SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

1.1 GENERAL

- A. Submit to ENGINEER shop drawings, product data and samples required by the Specifications sections.
- B. Related Requirements in other parts of the Contract Documents:
Quality of Articles, Materials and Equipment: General Conditions.
- C. Schedule submission for shop drawings, product data and samples at least fourteen (14) working days before dates reviewed submittals will be needed.

1.2 SHOP DRAWINGS

- A. Original drawings, prepared by Contractor, subcontractor, supplier or distributor, which illustrate some portion of the work; showing fabrication, layout, setting or erection details.
- B. Present drawings in a clear and thorough manner:
Details shall be identified by reference to sheet and detail or schedule numbers shown on Contract Drawings.
- C. Minimum sheet size: 8 1/2-inches by 11-inches.

1.3 PRODUCT DATA

- A. Preparation:
 - 1. Clearly mark each copy to identify pertinent products or models.
 - 2. Show performance characteristics and capacities.
 - 3. Show dimension and clearances required.
 - 4. Show wiring or piping diagrams and controls.
- B. Manufacturer's standard schematic drawings and diagrams:
 - 1. Modify drawings and diagrams to delete information not applicable to the work.
 - 2. Supplement standard information to provide information specifically applicable to the work.
- C. Manufacturer's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data:
 - 1. Clearly mark each copy to identify pertinent materials, products or models.

2. Show dimensions and clearances required.

1.4 SAMPLES

- A. Office samples: Of sufficient size and quantity to clearly illustrate:
 1. Functional characteristics of product or material with integrally related parts and attachment devices.
 2. Full range of color, texture, and pattern.
 3. After review, samples will be retained by ENGINEER. Upon completion of the work, Contractor may submit written request for return of samples.

1.5 CONTRACTOR'S RESPONSIBILITIES

- A. Review shop drawings, product data and samples prior to submission.
- B. Determine and verify:
 1. Field measurements.
 2. Field construction criteria.
 3. Catalog numbers and similar data.
 4. Conformance with specifications.
- C. Coordinate each submittal with requirements of the work and of the Contract Documents.
- D. Contractor's responsibility for errors and omissions in submittals is not relieved by ENGINEER's review of submittals.
- E. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved by ENGINEER'S review of submittals, unless ENGINEER gives written acceptance of specific deviations.
- F. Notify ENGINEER, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.
- G. Begin no fabrication or work which requires submittals until return of submittals with ENGINEER'S stamp and initials or signature indicating review and approval.

1.6 SUBMISSION REQUIREMENTS

- A. Make submittals so as to cause no delay in the work or in the work of any other Contractor.
- B. Number of submittals required:

Shop drawings: Submit a minimum of six (6) legible reproductions of all complete and

detail drawings to the ENGINEER for approval.

- C. Accompany submittals with transmittal letter, in duplicate containing:
1. Date of submission and dates of any previous submissions.
 2. Project title and number.
 3. Contractor's name and address.
 4. The number of each shop drawing, product data and sample submitted.
 5. Notification of deviations from Contract Documents.
 6. Other pertinent data.
- D. Submittals shall include:
1. Date and revision date.
 2. Project title and number.
 3. The names of:
 - a. ENGINEER.
 - b. Contractor.
 - c. Subcontractor.
 - d. Supplier.
 - e. Manufacturer.
 - f. Separate details when pertinent.
 4. Identification of product or materials.
 5. Field dimensions, clearly identified as such.
 6. Specification section number.
 7. Relation to adjacent or critical features of the work or materials.
 8. Applicable standards, such as ASTM or Federal Specification numbers.
 9. Identification of deviations from Contract Documents.
 10. Identification of revisions on resubmittals.
 11. An 8-inch by 3-inch blank space for Contractor and ENGINEER stamps.
 12. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and

coordination of the information within the submittal with requirements of the work and of Contract Documents.

1.7 RESUBMISSION REQUIREMENTS

- A. Make any corrections or changes in the submittals required by the ENGINEER and resubmit until approved.
- B. Shop drawings and product data:
 - 1. Revise initial drawings or data, and resubmit as specified for the initial submittal.
 - 2. Indicate any changes which have been made other than those requested by the ENGINEER.
- C. Samples: Submit new samples as required for initial submittals.

1.8 DISTRIBUTION

- A. Distribute reproductions of Shop Drawings and copies of Product Data which carry the ENGINEER stamp of approval to:
 - 1. Subcontractors.
 - 2. Supplier.
 - 3. Contractor's file.

1.9 ENGINEER DUTIES

- A. Review submittals with reasonable promptness.
- B. Review for:
 - 1. Design concept of project.
 - 2. Information given in Contract Documents.
- C. Review of separate item does not constitute review of an assembly in which item functions.
- D. Affix stamp and initials or signature certifying to review of submittal.
- E. Return submittals to Contractor for distribution or resubmission.

END OF SECTION

SECTION 01380

PRECONSTRUCTION VIDEO

1.1 DESCRIPTION

- A. The Contractor shall provide to the Engineer a preconstruction video of the project site and adjacent areas prior to construction, but following completion of the utility markouts.

1.2 MATERIALS

Video tapes:

1. DVD format.
2. Identification:
 - a. Date and time of video.

1.3 METHODS OF WORK

A. Photography required:

1. Provide two (2) copies of a DVD that depict existing conditions prior to construction, but following the completion of the utility markouts.
2. Provide photographs weekly and at the end of the project after restoration.
3. Provide two (2) copies of the video within fourteen (14) calendar days after it is taken.
4. Views required:
 - a. Detailed coverage of existing conditions.
 - b. Video shall particularly address driveways, mailboxes, trees, shrubs, landscaping, existing pavement conditions, and existing structures including curbs, sidewalks, inlets, headwalls, manholes, utility poles, signs.
 - c. Close-ups of any structures or features within the right-of-way and to a point not less than 20-feet beyond the right-of-way.

B. Technique:

1. Factual presentation. Provide continuous narrative of view including direction, location and description of viewing area.
2. Correct exposure and focus:
 - a. High resolution and sharpness.

- b. Maximum depth of field.
- c. Minimum distortion.

C. Delivery:

Deliver two (2) copies of the DVD to the ENGINEER.

1.4 PAYMENT

- A. Include all costs for DVD in the overall contract price.
- B. Parties requiring additional videos will pay photographer directly.

END OF SECTION

SECTION 01510

ENVIRONMENTAL PROTECTION

1.1 GENERAL

The work covered by this Section consists of furnishing all labor, materials, and equipment, and performing of all work required for the prevention of environmental pollution during, and as the result of, construction operations under this Contract. For the purpose of this Specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare, unfavorably alter ecological balances of importance to human life, or affect other species of importance to man. The control of environmental pollution requires consideration of air, water and land.

1.2 APPLICABLE REGULATIONS

The Contractor and his subcontractors, in the performance of this Contract, shall comply with all applicable federal, state, and local laws and regulations concerning environmental pollution control and abatement in effect on the date of this solicitation, including, but not limited to the conditions set forth in the Stream Encroachment Permit, Wetlands Permit and Soil Erosion Control Permit, as applicable, as well as the specific requirements stated elsewhere in this Specification.

1.3 NOTIFICATION

The ENGINEER will notify the Contractor of any noncompliance with the foregoing provisions and the corrective action to be taken. The Contractor shall, after receipt of such notice, take corrective action immediately. If the Contractor fails or refuses to comply promptly, the ENGINEER may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of time lost due to any such stop order shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor unless it is later determined that the Contractor was in compliance.

1.4 SUBCONTRACTORS

Compliance with the provisions of this Section by subcontractors will be the responsibility of the Contractor.

1.5 PROTECTION OF WATER RESOURCES

The Contractor shall not pollute streams, lakes, or reservoirs with fuels, oils, bitumens, calcium chloride, acid construction wastes, or other harmful materials. All work under this Contract shall be performed in such a manner that objectionable conditions will not be created in streams through or adjacent to the project areas.

1.6 EROSION AND SEDIMENTATION CONTROL

When required by the local Soil Conservation District, documents for Soil Erosion and Sediment Control shall be included with the plans for this project. Preparation of these documents for review and approval by the Soils Conservation office shall be the responsibility of the Owner's Engineer. The Contractor shall comply with the requirements of the Soil Erosion and Sediment Control Plan, which shall include but not be limited to the following:

- 6.1 All erosion and sediment control measures are to be installed prior to or as the first step in excavation.
- 6.2 Runoff from all temporary earth berms, diversions and sediment dams is to be contained. Straw or hay mulch is recommended. The same applies to all soil stockpiles.
- 6.3 All erosion and sedimentation measures shall be maintained and/or modified as approved by the ENGINEER during construction to fulfill the intent of this specification.
- 6.4 All engineering sediment control measures are to remain in place until permission of their removal has been obtained from the ENGINEER.

1.7 DUST CONTROL

The Contractor shall maintain all work areas free from dust that would contribute to air pollution. Approved temporary methods of stabilization consisting of sprinkling, or similar methods, will be permitted to control dust. Sprinkling, where used, must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times. Dust control shall be performed as the work proceeds and whenever dust nuisance or hazard occurs.

1.8 PROTECTION OF LAND RESOURCES

It is intended that the land resources within the project boundaries and outside the limits of permanent work performed under this Contract be preserved in their present condition or be restored to a condition after completion of construction that will not detract from the appearance of the project. Insofar as possible, the Contractor shall confine his construction activities to areas defined by the Plans and Specifications or to be cleared for other operations.

1.9 PAYMENT

Unless otherwise indicated in the Proposal Section of these Specifications, costs incurred by the Contractor for items of ENVIRONMENTAL PROTECTION shall be reflected in the overall contract price.

END OF SECTION

SECTION 01530

BARRIERS

PART 1 GENERAL

1.1 DESCRIPTION

- A. Furnish, install and maintain suitable barriers as required to prevent public entry, and to protect the work, existing facilities, trees and plants from construction operations; remove when no longer needed, or at completion of work.
- B. Related requirements specified in other sections:
 - 1. Traffic Control and Signage: Section 02845

1.2 REQUIREMENTS OF REGULATORY AGENCIES

Comply with Federal, State and local codes and regulations.

PART 2 PRODUCTS

2.1 MATERIALS

General: Materials may be new or used, suitable for the intended purpose, but must not violate requirements of applicable codes and standards.

2.2 FENCING

Fencing shall not be used.

2.3 BARRIERS

Materials to Contractor's option, as appropriate to serve the required purpose.

PART 3 EXECUTION

3.01 GENERAL

- A. Install facilities of a neat and reasonable uniform appearance, structurally adequate for the required purposes.
- B. Maintain barriers during entire construction period.
- C. Relocate barriers as required by progress of construction.

3.2 FENCES

- A. Fencing shall not be used.

3.3 TREE AND PLANT PROTECTION

- A. Preserve and protect existing trees and plants at the site which are designated to remain,

and those adjacent to the site.

- B. Consult with ENGINEER, and remove agreed-on roots and branches which interfere with construction.

Employ qualified tree surgeon to remove, and to treat cuts.

- C. Provide temporary barriers, around each, or around each group of trees and plants.

- D. Protect root zones of trees and plants:

1. Do not allow vehicular traffic or parking.
2. Do not store materials or products.
3. Prevent dumping of refuse or chemically injurious materials or liquids.
4. Prevent puddling or continuous running water.

- E. Carefully supervise excavating, grading and filling, and subsequent construction operations, to prevent damage.

- F. Replace, or suitably repair, trees, and plants designated to remain which are damaged or destroyed due to construction operations.

3.4 REMOVAL

- A. Completely remove barricades, including foundations, when construction has progressed to the point that they are no longer needed, and when approved by ENGINEER.
- B. Clean and repair damage caused by installation, fill and grade the areas of the site to required elevations and slopes, and clean the area.

PART 4 PAYMENT

4.01 PAYMENT

All costs for this item shall be included in the prices bid for various items scheduled in the Proposal.

END OF SECTION

SECTION 01545

PROTECTION OF EXISTING PUBLIC UTILITIES

1.1 SECTION INCLUDES

- A. Definitions
- B. Diligent Inquiry
- C. Notification
- D. Avoid Damage and Protect Utilities
- E. Notification of Damage and Costs
- F. Contractor Convenience

1.2 APPROXIMATE LOCATION OF UTILITIES

- A. The contractor will note that the horizontal and vertical location of all underground utilities shown on the contract drawings is approximate only and no guarantee is herein implied that all existing underground utilities or services are shown thereon.

1.3 DEFINITIONS

- A. The terms public utility or public utilities used in this article shall be construed to include those publicly and privately owned.

1.4 DILIGENT INQUIRY

- A. Within the site of the Project there may be public utility structures, and notwithstanding any other clause or clauses of this Contract, the Contractor shall not proceed with his work until he has made diligent inquiry of the offices of the Engineer, the utility companies and municipal authorities or other utilities to determine their exact location.

1.5 NOTIFICATION

- A. The Contractor shall notify the Garden State Utility Location Service "one-call" system (1-800-272-1000) at least three (3) days prior to construction for mark out of all public utilities. Contractor shall supply Engineer with the one-call system certification number.
- B. The Contractor shall notify, in writing, the utility companies and municipalities or other utilities involved of the nature and scope of the Project and of his operations that may affect their facilities or property. Two copies of such notices shall be sent to the Engineer.

1.6 AVOID DAMAGE AND PROTECT UTILITIES

- A. The Contractor shall carry out his work carefully and skillfully and shall support and secure public utility structures so as to avoid damage to them. Flow in drains and sewers shall be satisfactorily maintained. He shall not move without the utilities written consent

any public utility structures, and at the completion of the work their condition shall be as safe and permanent as before.

1.7 NOTIFICATION OF DAMAGE AND COSTS

- A. When public utility structures, facilities or equipment are damaged by the Contractor, he shall notify the utilities, who may cause the damage to be repaired at the Contractor's expense.
- B. If the cost thereof be not paid by the Contractor within 30 days after repairs have been completed, the Owner, as defined in this Contract, may retain an amount sufficient to cover the cost from any monies due or that may become due to the Contractor under this contract. House service connections damaged by the Contractor shall be repaired by competent skilled mechanics.

1.8 CONTRACTOR CONVENIENCE

- A. When the removal, relocation or replacement of public utility structures or facilities is not deemed essential by the Engineer for carrying out the Project as planned, but is performed for the Contractor's convenience, the cost of such work shall be included in the prices bid for the various items scheduled in the Proposal. When such removal, relocation or replacement is deemed essential by the Engineer for carrying out the work of the Project as planned, the cost shall be borne by the Owner or the owner utility.

END OF SECTION

SECTION 01572

DUST CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Providing temporary control devices to limit migration of dust during the performance of work.
 - 2. Placing and maintaining the temporary dust control measures in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey (NJSESC) and Camden County Soil Conservation District (CCSCD).

1.3 SUBMITTALS FOR REVIEW

- A. Dust Control Measures: Indicate procedures and temporary control devices which will be provided to control the generation and migration of dust during the performance of the Work. Include locations and types of temporary control devices and performance levels to be obtained. Include mitigation measures which will be taken in the event that the implementation of the plan fails to meet the performance goal.

1.4 MAINTENANCE

- A. Contractor shall inspect and maintain the temporary control devices on a daily basis. Any item of deficiency shall be repaired immediately.

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable Federal, State and Local laws, rules and regulations which address the requirements of dust control.

1.6 ACCEPTABLE LEVEL OF PERFORMANCE

- A. The minimum level of performance of dust control shall be that no visually noticeable amount of dust generated by the project accumulates on adjoining properties, including vehicles legally parked within the area.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Provide materials for dust control in conformance with the NJSESC standards and the CCSCD.
- B. Use water additives approved by State and Local agencies for dust control when abnormal releases of dust are anticipated by the construction operations.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install all dust control devices prior to start of work or any other activity which generates the potential for dust releases.
- B. Apply water by sprinkling methods on the site and/or on the structures prior to start of Work, to retard the generation of dust in accordance NJSESC standards.
 - 1. Water will be available via existing hydrant, owned the City of Camden.
 - a. Contractor shall obtain a meter from the City prior to use of existing hydrant.
- C. Re-treat areas as necessary, or when directed by Engineer.
- D. Inspect and maintain all dust control methods throughout the term of the Contract.
- E. All trucks shall have a tarp cover to eliminate spills and dust generation.
- F. Streets and driveways used as construction access to the site shall be mechanically swept as required to keep clean and free of sediment, when directed by the Engineer, Inspector or Owner.

3.2 MEASUREMENT AND PAYMENT

- A. No payment will be made for Dust Control. Cost shall be included in all associated items in the bid.

END OF SECTION

SECTION 01640

SUBSTITUTIONS

1.1 GENERAL

Related requirements specified elsewhere:

1. Substitutions during bidding: Instructions to Bidders.
2. Shop Drawings, Product Data and Samples: Section 01340

1.2 SUBSTITUTIONS

- A. Within fifteen (15) days after Notice to Proceed ENGINEER will consider formal requests from Contractor for products in place of those specified.
- B. Submit four (4) copies of request for substitution. Include in request as applicable:
 1. Complete data substantiating compliance of proposed substitution with Contract Documents.
 2. For products:
 - a. Product identification, including manufacturer's name and address.
 - b. Manufacturer literature:
 - (1) Product description
 - (2) Performance and test data
 - (3) Reference standards
 - c. Samples
 - d. Name and address of similar projects on which product was used, and date of installation.
 3. For construction methods:
 - a. Detailed description of proposed method.
 - b. Drawings illustrating methods.
 4. Itemized comparison of proposed substitution with product or method specified.
 5. Accurate cost data on proposed substitution as for product or method specified.
 6. Relation to separate contracts.
- C. In making requests for substitution, Bidder represents:
 1. He has personally investigated proposed product or method, and determined that

it is equal or superior in all respects to that specified.

2. He will provide the same guarantee for substitution as for product or method specified.
 3. He will coordinate installation of accepted substitution into work making such changes as may be required for work to be completed in all respects.
 4. He waives all claims for additional costs related to substitutions which consequently become apparent.
 5. Cost data is complete and includes all related costs under this contract.
- D. Substitutions will not be considered if:
1. They are indicated or implied on shop drawings of product data submittals without formal request submitted in accordance with Paragraph 1.02.
 2. Acceptance will require substantial revision of Contract Documents.

END OF SECTION

SECTION 01700
CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

- 1. Substantial Completion procedures.
- 2. Final Completion procedures.
- 3. Warranties.
- 4. Final Cleaning.
- 5. Repair of the Work.
- 6. Submit As-Built Survey/Project Record Documents.
- 7. Operation and Maintenance Data.
- 8. Spare Parts and Maintenance Materials.

- B. Related Documents

- 1. Drawings and general provisions of the contract, including General and Supplementary Conditions apply to this Section.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of cleaning agent.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at final completion.

1.4 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.

- B. Submittals Prior to Substantial Completion: Complete the following a minimum of ten (10) days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, as-built plans in accordance to City of Camden Ordinance (this includes the location of the irrigation system (both electric lines and plumbing lines)) operation and maintenance manuals (this includes all required manuals related to the irrigation system), damage or settlement surveys, property surveys, and similar final record information.
3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents. This includes any warranty and maintenance documents for the irrigation system.
4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Engineer. Label with manufacturer's name and model number.
5. Submit testing, adjusting, and balancing records.
6. Submit sustainable design submittals not previously submitted.
7. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

- C. Procedures Prior to Substantial Completion: Complete the following a minimum of ten (10) days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Advise Owner of pending insurance changeover requirements.
2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
3. Complete startup and testing of systems and equipment.
4. Perform preventive maintenance on equipment used prior to Substantial Completion.
5. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
6. Complete final cleaning requirements.
7. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of ten (10) days prior to date the Work will be completed and ready for final inspection

and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.

1. Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for final completion.

1.7 FINAL COMPLETION PROCEDURES

A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:

1. Submit a final Application for Payment according to the General and Supplementary Conditions in the Construction Specifications.
2. Form of Contractor's Certificate (page J-17 of the Contract).
3. Statement of Surety Company (form at the end of this section).
4. Certified List of Incomplete Items: Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
5. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
6. Submit pest-control final inspection report.
7. Submit final completion video documentation.
8. Submit As-built Survey Plan per City Ordinance.

B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of ten (10) days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.8 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order.
2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
3. Include the following information at the top of each page:
 - a. Project Name.
 - b. Date.
 - c. Name of Engineer.

- d. Name of Contractor.
- e. Page Number.

4. Submit list of incomplete items in the following format:

- a. MS Excel electronic file. Engineer will return annotated file.
- b. PDF electronic file. Engineer will return annotated file.

1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- C. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
 - 1. Submit on digital media acceptable to Engineer.
- D. Warranties in Paper Form:
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
- E. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
 - 1. Using cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are not planted, mulched, or paved to a smooth, even textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove snow and ice to provide safe access to building.
 - f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - h. Sweep concrete floors broom clean in unoccupied spaces.
 - i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
 - j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - k. Remove labels that are not permanent.
 - l. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - n. Clean ducts, blowers, and coils if units were operated without filters during construction of that display contamination with particulate matter on inspection.
 - o. Clean light fixtures, luminaires, lamps, globes, and reflectors to function with full efficiency.
 - p. Leave Project clean and ready for occupancy.
- C. Pest Control: Comply with pest control requirements in Section 015000 "Temporary Facilities and Controls." Prepare written report.
- D. Construction Waste Disposal: Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls."

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations, before requesting inspection for determination of Substantial Completion.
- B. Repair, or remove and replace, defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 - 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
 - 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 - 4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for ne fixtures.

3.3 MEASUREMENT AND PAYMENT

- A. No payment will be made for Project Closeout. Cost should be included in all associated items in the bid.

END OF SECTION

SECTION 01710

CLEANING AND RESTORATIONS

1.1 DESCRIPTION

- A. Related work specified elsewhere:
 - 1. General requirements for cleaning and restorations: See the General Conditions.
 - 2. Cleaning for specific products or work: Specification Section for that work.
- B. Maintain premises and public properties free from accumulations of waste, debris and rubbish caused by work operations.
- C. During the course of the work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials; clean all sight exposed surfaces; leave project clean and ready for occupancy.
- D. Restore or replace, when and as directed by the ENGINEER, any public or private property disturbed or damaged by Contractor's work operations to a condition at least equal to that existing prior to beginning work, or as otherwise specified. Materials, equipment and methods shall be approved by the ENGINEER. These restorations shall include areas used by the Contractor for temporary storage of materials and for equipment.

1.2 MATERIALS

- A. For restorations, use the following materials. All materials shall comply with the following Sections of the New Jersey Department of Transportation Standard Specification for Road and Bridge Construction as currently amended.
- B. Grass restorations: All grass restoration materials shall conform to the specification sections entitled, "Topsoiling", and "Sodding".
- C. Pavement restorations: All paving materials shall conform to the specification section entitled, "Hot-Mix Asphalt Paving".
- D. Restoration of curbs and other concrete structures:
 - 1. Concrete:
 - a) Shall conform to Sections 405.02 and 903.03.
 - b) Compressive Strength: 4,000 psi at 28 days.
 - c) Air entrained.
 - 2. Joint fillers: Section 914, bituminous cellular type.
 - 3. Curing compound: Section 903.10, white-pigmented liquid.
- E. All other materials: As approved by the ENGINEER or authorities having jurisdiction.

1.3 METHODS OF CONDUCTING WORK - CLEANING

- A. Requirements of regulatory agencies: Dispose of all solid waste materials (including concrete, blacktop, trees, stumps, unacceptable backfill material including heavy clay soils, organic materials, silts, rock) in permanently established licensed OSWA (Office of Solid Waste Administration, New Jersey Department of Environmental Protection) landfills, or in temporary landfill sites approved by OSWA.

- B. Safety requirements:
 - 1 Hazards control:
 - a) Store volatile wastes in covered metal containers, and remove from premises daily.
 - b) Prevent accumulation of wastes which create a hazardous condition.
 - c) Provide adequate ventilation during use of volatile or noxious substances.

 - 2. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws:
 - a) Do not burn or bury rubbish and waste materials on project site.
 - b) Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.
 - c) Do not dispose of wastes into streams or waterways.

- C. Cleaning during construction:
 - 1. Execute periodic cleaning to keep the work, the site, and adjacent properties free from accumulations of waste materials, rubbish and windblown debris resulting from construction operations.

- D. Dust control:
 - 1. The Contractor shall employ construction methods and means that will keep flying dust to the minimum. He shall provide for the laying of water on the Project, and on roads, streets and other areas immediately adjacent to the Project limits, wherever traffic, or buildings that are occupied or in use, are affected by such dust caused by his hauling or other operations. The Contractor shall control dust using calcium chloride, water or other materials approved by the ENGINEER. If calcium is used, the rate of application shall be approximately 1.5 pounds per square yard. The cost of carrying out the foregoing provisions shall be included in the prices bid for the various items in the Contract.

The Contractor shall provide for prompt removal from existing roadways of all dirt and other materials that have been spilled, washed, tracked or otherwise deposited thereon by his hauling and other operations whenever the accumulation is sufficient to cause the formation of mud, interfere with drainage,

damage pavements or create a traffic hazard.

- E. Final cleaning:
 - 1. Employ skilled workmen for final cleaning.
 - 2. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
 - 3. Prior to final acceptance, Contractor shall conduct an inspection of all work areas to verify that the entire work is clean.

1.4 METHODS OF CONDUCTING WORK - RESTORATIONS

- A. General: All existing structures, unpaved areas and paved areas disturbed or damaged during the work under this Contract shall be restored or replaced to a condition at least equal to that existing prior to beginning work, or as otherwise specified. The methods of conducting this work shall, as a minimum, conform to the following Sections of the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction current edition.
- B. Grass restorations: All grass restorations shall comply with the specifications sections entitled, "Topsoiling", "Fertilizing and Seeding", and "Mulching".
- C. Pavement restorations: All pavement restorations shall conform to the specification section entitled, "Hot-Mix Asphalt".
- D. Restorations of curbs and other concrete structures:
 - 1. Curbs: Section 607.
 - 2. Other concrete structures: Restore in accordance with applicable Articles of the Standard Specifications, or as approved by the ENGINEER or authorities having jurisdiction.

1.5 QUANTITY AND PAYMENT

All costs for CLEANING AND RESTORATIONS shall be included in prices bid for various items scheduled in the Proposal.

END OF SECTION

SECTION 01730

SUBSURFACE INVESTIGATION

1.1 DESCRIPTION

- A. Subsurface investigation includes the excavation of test pits to ascertain the location of buried utilities or subsurface conditions.
- B. Before laying pipes or constructing any structures, the Contractor shall ascertain the location and grade of utility pipes and other subsurface structures which may interfere with such construction. Test pits shall be excavated wherever necessary to obtain the required information, subject to the approval of the ENGINEER.
- C. Before any excavation commences the Contractor shall perform subsurface investigations to determine the following:
 - 1. Perpendicular dimension from survey base line to utility crossing.
 - 2. Top and bottom elevation of utility.

All dimensions and elevations shall be obtained by the Contractor and transmitted to the ENGINEER, if and where required.

1.2 MATERIALS

- A. Materials are required for backfill.

1.3 METHODS OF WORK

- A. 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. The accuracy and completeness of this information is not guaranteed by the ENGINEER, and the bidder is advised to ascertain for himself all the facts concerning the location of these utilities.
- B. The Contractor shall adhere to Section 105.07, Cooperation with Utilities, of the Standard Specifications regarding location of and construction around public utilities.
- C. All test pits shall be excavated, backfilled and compacted as directed by the Engineer. In paved areas all pits shall be maintained in a passable condition to motor vehicles by the Contractor in a manner as approved by the ENGINEER. In unpaved areas the surfaces shall be restored in accordance with soil erosion standards as specified and shown.
- D. The Contractor shall permit the owners of the utilities or their agent, access to the site of the work at all times, in order to relocate or protect their facilities, and he shall cooperate with them in performing this work.
- E. The Contractor shall cooperate with the utility owners concerned and shall notify them not less than ten (10) days in advance of the time he proposes to perform any work that will endanger or affect their facilities.
- F. Contractor shall maintain all temporary restorations.

1.4 QUANTITY AND PAYMENT

- A. Unless specified or noted otherwise, no separate measurement and no separate payment will be made for test pits conducted to investigate soil and groundwater conditions or for test pits conducted relative to structures and/or utilities shown on the plans.

END OF SECTION

SECTION H
TECHNICAL SPECIFICATIONS
INDEX

<u>SECTION</u>	<u>TITLE</u>
02230	Site Clearing
02231	Tree Removal
02314	Excavation (Unclassified)
02325	Trench Excavation, Backfilling, and Compacting
02401	Dewatering
02633	Inlets and Manholes
02634	Resetting Castings
02660	Pipeline Cleaning/Inspection
02720	Stormwater Drainage Structures and Piping
02721	Dense Graded Aggregate
02754	Concrete Sidewalk and Driveway Apron
02755	Concrete Curb
02756	Decorative Concrete Paving
02831	PVC Vinyl Coated CL Fence
02845	Traffic Control and Signage
02910	Temporary Soil Erosion and Sediment Control Measures
02912	Soil Preparation
02922	Topsoiling
02924	Turf and Grasses
02930	Plantings
02932	Ornamental Fences and Gates
03100	Concrete Forming and Accessories
03300	Casting in Place Concrete

SECTION 02230

SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Related Documents

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

B. Section Includes:

1. Protecting existing vegetation to remain.
2. Removing existing vegetation.
3. Removing existing trees.
4. Clearing and grubbing.
5. Stripping and stockpiling topsoil.
6. Stripping and stockpiling rock.
7. Removing above- and below-grade site improvements.
8. Disconnecting, capping, or sealing site utilities.

1.2 DEFINITIONS

- A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow.
- D. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects larger than 2 inches in diameter; and free of weeds, roots, toxic materials, or other nonsoil materials.
- F. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- G. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated on Drawings.
- H. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project Site with landscape architect.

1.4 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.5 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Use sufficiently detailed photographs or video recordings.
 - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plant designated to remain.
- B. Topsoil stripping and stockpiling program.
- C. Rock stockpiling program.
- E. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.
- G. Burning: Documentation of compliance with burning requirements and permitting of authorities having jurisdiction. Identify location(s) and conditions under which burning will be performed. No burning of any material is allowed on site.

1.6 QUALITY ASSURANCE

- A. Topsoil Stripping and Stockpiling Program: Prepare a written program to systematically demonstrate the ability of personnel to properly follow procedures and handle materials and equipment during the Work. Include dimensioned diagrams for placement and protection of stockpiles.
- B. Rock Stockpiling Program: Prepare a written program to systematically demonstrate the ability of personnel to properly follow procedures and handle materials and equipment during the Work. Include dimensioned diagrams for placement and protection of stockpiles.

1.7 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.

2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing site clearing indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
 1. Do not proceed with work on adjoining property until directed by Engineer.
 - C. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises.
 - D. Utility Locator Service: Notify New Jersey One Call for area where Project is located before site clearing.
 - E. Do not commence site clearing operations until temporary erosion- and sedimentation-control measures are in place.
 - F. Tree- and Plant-Protection Zones: Protect according to requirements denoted in Soil Erosion Notes and Details.
 - G. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Existing Plant Materials: Any injuries to the plants (i.e.: branches and roots removed) shall be repaired per the current requirements and recommendations by the American Nursery and Landscape Association and by a certified NJ Arborist. No additional payment for this matter will be paid by the owner, Pennoni, and City of Camden.
- B. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 312000 "Earth Moving."
 1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Verify that trees, shrubs, and other vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed according to requirements in Soil Erosion & Sediment Control Plans, Notes, and Details.
- C. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 EXISTING UTILITIES

- A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.
 1. Arrange with utility companies to shut off indicated utilities.
 2. Owner will arrange to shut off indicated utilities when requested by contractor.
- B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 1. Notify Engineer not less than seven (7) days in advance of proposed utility interruptions.
 2. Do not proceed with utility interruptions without Engineer's written permission.
 3. Contractor is required to coordinate/notify PSE&G, Camden Public Works, American Water Camden, and any other utility company prior to any interruption of existing utilities. All cost to be included in the cost of the associated items in the bid.
- C. Excavate for and remove underground utilities indicated to be removed.
- D. Test Pits: Test pits shall be utilized to locate existing utilities where excavation for the installation of items such as inlets, manholes, cso units, fire hydrants, traffic control boxes, existing castings, pipes, laterals, playground equipment, and foundations for street lights. All work to be included in the cost of the associated items in the lump sum bid.

3.3 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 2. Grind down stumps and remove roots, obstructions, and debris to a depth of 18 inches (450 mm) below exposed subgrade.
 3. Use only hand methods or air spade for grubbing within protection zones.
 4. Chip removed tree branches and dispose of off-site.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches (200 mm) and compact each layer to a density equal to adjacent original ground.

3.4 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth of 6 inches (150 mm) in a manner to prevent intermingling with underlying subsoil or other waste materials.

1. Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other objects larger than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
1. Limit height of topsoil stockpiles to 72 inches.
 2. Do not stockpile topsoil within protection zones.
 3. Dispose of surplus topsoil. Surplus topsoil is that which exceeds quantity indicated to be stockpiled or reused.
 4. Stockpile surplus topsoil to allow for respreading deeper topsoil.

3.5 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated on the Contract Drawings and necessary to facilitate new construction.
1. Existing below-grade improvements/reputed obstructions include, but are not limited to:
 - a. Light foundations.
 - b. Fence posts.
 - c. Playground equipment posts/foundations.
 - d. Sports equipment posts/foundations.
 2. Existing below-grade improvements/reputed obstructions include but are not limited to. Contractor only required to remove items below that are necessary to be removed to facilitate new construction.
 - a. Footers
 - b. Piers
 - c. Grade beams and piles
 - d. Building foundations of past demolished structures.
 3. Existing above-grade improvements include, but are not limited to:
 - a. Slabs.
 - b. Asphalt Paving.
 - c. Curbs.
 - d. Gutters.
 - e. Aggregate base.
 - f. Chain Link Fence.
 - g. Brick Pavers.
 - h. Landscaping.
 - i. Tree Grates.
- B. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.

- C. Site Items denoted outside the limit of work area shall be maintained and protected. Contractor is to limit the amount of removal and disturbance around the project site. Any damage to any existing conditions must be repaired and/or replaced at Contractor's own expense.
- D. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.
 - 1. All disturbed City Monuments must be reinstalled by a New Jersey Licensed Surveyor in accordance with City requirements and elevations. Any existing survey monument covers missing and/or damage must be replaced. Prior to ordering the monument covers, the Contractor must contact the City for the approved required cover type. All cost to be included in the cost of the associated items in the bid.

3.6 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Burning tree, shrub, and other vegetation waste is permitted according to burning requirements and permitting of authorities having jurisdiction. Control such burning to produce the least smoke or air pollutants and minimum annoyance to surrounding properties. Burning of other waste and debris is prohibited.
- C. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION

SECTION 02231
TREE REMOVAL

1.1 DESCRIPTION

- A. This work shall consist of removal of trees as shown on the Plans or as designated in the field by the ENGINEER.

1.2 MATERIALS

- A. Topsoil, where required for restoration, shall conform to Section 02922, Topsoiling, of these Specifications.

1.3 CONSTRUCTION

- A. Employ only competent and experienced personnel for tree removal.
- B. Trees shall be completely removed, including surface and buttress roots. Stumps shall be removed to a depth at least 24" below grade, using mechanical grinder or by excavation. The use of explosives or chemicals for stump removal will not be permitted.
- C. Where overhead wires exist in the area of trees to be removed, the Contractor shall coordinate his work with the utility companies having jurisdiction.
- D. Any damage to other vegetation, structures, utility wires or other property shall be repaired without additional compensation. Damage to existing trees to remain shall be treated in accordance with Subsection 803.02.
- E. All branches, limbs, trunks and other debris resulting from tree removal shall be disposed of in accordance with Subsection 201.10.

END OF SECTION

SECTION 02314

EXCAVATION (UNCLASSIFIED)

1.1 DESCRIPTION

The excavation and removal of all earth, rock, brick, stone, concrete, small structures, existing pavements, and all other materials encountered, required for the construction of roadways/site and their appurtenances; the transportation of the excavated material; all grading, compacting and subgrade preparation, topsoiling, fertilizing, seeding, and mulching; the disposal of unsuitable and surplus materials; and all other work as specified in this section.

1.2 MATERIALS

No materials are involved.

1.3 CONSTRUCTION

A. Reference Standards used in this Specification section.

New Jersey Department of Transportation Standard Specifications:

1. Section 202: Roadway Excavation
2. Section 203: Embankment
3. Section 301: Preparation of Subgrade

B. Protection:

1. Protect trees, shrubs, lawns and other features remaining as part of final landscaping.
2. Protect curbs, inlets, manholes, utility poles, and all other existing structures to remain.
3. Refer to paragraphs of General Conditions and Supplementary Conditions regarding protection of vegetation and structures.
4. Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
5. Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.
6. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape and compact to required density prior to further construction.

C. Preparation:

1. Field measurements:
 - a. Layout work limits. Coordinate this work with the ENGINEER.

- b. Set grade stakes.
 - 2. Prior to commencement of work, establish location and extent of all utilities in the work areas. Maintain and protect as required existing utilities which pass through the work area.
 - 3. Prior to excavating, cut existing pavement vertically with sharp tool on a straight line at a distance of six (6") inches beyond limits of excavation shown on plans. Maintain cut straight and neat, or recut and dress as directed by the ENGINEER.
- D. Grading:
- 1. Grade project site to required levels, profiles, contours, and elevations, ready for finish grading and paving.
 - 2. Methods of construction for excavation and grading shall conform to Sections 202, 203 and 307 of the Standard Specifications.
 - 3. Grades shall be uniform levels or slopes between points where elevations are given or between such points and existing finished grades. Abrupt change in slopes shall be rounded.
 - 4. Use all means necessary to prevent dust being a nuisance to the public.
 - 5. Soil shall not be worked, or fill placed, during freezing weather, when frozen, or unstable due to excessive moisture.
 - 6. Unstable or unsuitable material encountered at the prescribed bottom limits of roadway excavation shall be removed within limits as directed by the ENGINEER.
 - 7. Compaction:

Compact any embankment for this project as specified in Section 203.03.02 Rolling and Vibrating Method or Section 203.10, Density Control Method, of the Standard Specifications. Embankment material shall be free of stumps, brush, weeds, roots, and other material that may decay.
 - 8. Compact subgrade in all paved areas as specified in Section 301.03.01 of the Standard Specifications.
 - 9. Dispose of surplus or unsuitable excavated materials.

END OF SECTION

SECTION 02325

TRENCH EXCAVATION, BACKFILLING AND COMPACTING

1.1 DESCRIPTION

A. Description of Work:

Trench excavation, backfilling and compacting includes but is not limited to:

1. Excavation for trenches and trench backfilling.
2. Placement and stabilization of trench soils.
3. Rough and finish grading of the work area.
4. Furnishing and installing trench stabilization material, select backfill material and low strength concrete fill.
5. Sheeting of trenches as required within the Theoretical Railroad Embankment Line.
6. Dewatering as required by site conditions.

B. Definitions:

1. Trench excavation: Removal and disposal of all material encountered when establishing required grade elevations, including pavements, concrete slabs and other obstruction.
2. Unauthorized excavation: Removal of materials beyond specified subgrade elevations without approval of the ENGINEER.

1.2 MATERIALS

A. Trench backfill material from on-site excavation:

All on-site backfill materials shall be subject to the approval of the ENGINEER, and to the following requirements.

1. Free from deleterious substances, stumps, brush, weeds, roots, sod, rubbish, garbage and matter that may decay.

2. Backfill to a height of two feet (2') above the top of pipes, culverts and other structures with material free from stones or rock fragments larger than two inches (2") in greatest dimension.
 3. Free of large rocks or lumps that, in the opinion of the ENGINEER, may create voids or prevent proper compaction.
- B. Select backfill material: Select backfill material shall be as designated on the Plans.
- Soil aggregate select backfill materials, when designated, shall conform to Section 901.09 of the Standard Specifications.
- C. Stone for trench stabilization and bedding: Trench stabilization material for bedding under pipes and structures shall be broken stone conforming to Section 901.04 of the Standard Specifications, and meeting the gradation specified in Table 901-1. Size shall be as shown on the Plans.
- D. Other materials: All other materials, not specifically described but required for a complete and proper installation shall be as selected by the Contractor and approved by the ENGINEER.

1.3 METHODS OF CONSTRUCTION

- A. Requirements of Regulatory Agencies:
1. All excavations shall be in compliance with Federal Occupational Safety and Health Act, Sections 1926.650 thru 1926.653 and Rules and Regulations of the State of New Jersey Department of Labor and Industry, Bureau of Engineering and Safety, N.J.A.C. 12:180.
 2. Excavation work shall be in compliance with applicable requirements of other governing authorities having jurisdiction.
- B. Reference Standards included in this Specification Section:
1. New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2001 (Standard Specifications), as currently amended.
 - a. Section 901.03: Coarse Aggregate
 - b. Section 901.04: Broken Stone
 - c. Section 901.09: Soil Aggregate

2. American Society for Testing and Materials (ASTM):
 - a. D-1556-64 (Reapproved 1974): Density of Soil in Place by the Sand-Cone Method.
 - b. D-1557-78: Moisture Density Relations of Soils and Soil Aggregate Mixtures Using 10 lb. Rammer and 18-inch Drop.
 - c. D-2049-69: Relative Density of Cohesionless Soils.
 - d. D-2992-78: Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth).

C. Submittals:

1. Test reports:

When directed by the ENGINEER, submit test reports on all select backfill material in accordance with the standards.

2. Submit test reports as approved by the Engineer.

D. Job conditions:

1. Existing utilities: Should uncharted, or incorrectly charted piping or other utilities be encountered during excavation, consult the Utility Owner immediately for directions. Cooperate with the OWNER and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of Utility Owner.
2. Do not interrupt existing utilities serving facilities occupied and used by OWNER or others, except when permitted in writing by the ENGINEER and then only after acceptable temporary utility services have been provided.

E. Use of explosives: The use of explosives is not permitted unless approved by the ENGINEER.

F. Protection of persons and property:

1. Barricade open excavations occurring as part of this work and post with warning lights as required to protect persons on site. Operate warning lights as recommended by authorities having jurisdiction.
2. Protect trees, shrubs, lawns and other features remaining as part of final landscaping.

3. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining washout and other hazards created by earthwork operations.
 4. Refer to paragraphs of General Conditions regarding protection of vegetation and structures.
 5. In the event of damage, immediately make all repairs and replacements to the approval of the ENGINEER at no cost to the owner.
- G. Dust control: Use all means necessary to control dust on and near the work if such dust is caused by the Contractor's operations during performance of the work or if resulting from the conditions. Do not resume work until conditions are favorable as determined by the ENGINEER.
- H. Weather conditions: Do not place, spread, roll or fill material during freezing, raining or otherwise unfavorable weather conditions. Do not resume work until conditions are favorable as determined by the ENGINEER.
- I. Inspection by Contractor: Examine the areas and conditions under which trenching, backfilling, compacting and grading are to be performed and notify the ENGINEER in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.
- J. Preparation:
1. Prior to commencement of work, establish location and extent of all utilities in the work area(s). Maintain, and protect as required existing utilities which pass through the work area.
 2. Prior to excavation in pavement areas, cut existing pavement vertically with sharp tool on a straight line to the limits of excavation shown on the Plans or as approved by the ENGINEER.
- K. Excavation:
1. Unauthorized excavation: Unauthorized excavation, including remedial work directed by the ENGINEER, shall include removing all loosened material and providing broken stone material as required to attain a firm and unyielding foundation and to attain required grade elevations to the approval of the ENGINEER.

2. Additional excavation:

- a. When excavation has reached required subgrade elevations, notify the ENGINEER who will make an inspection of conditions.
- b. If unsuitable bearing materials are encountered at the required subgrade elevations, carry excavations deeper and replace the excavated material as approved by the ENGINEER.
- c. Removal of unsuitable material and its replacement as approved by the ENGINEER.

3. Stability of excavations:

- a. Slope sides of excavations to comply with local codes and ordinances having jurisdiction. Shore and brace where sloping is not possible because of space restrictions or stability of materials excavated.
- b. Maintain sides and slopes of excavations in a safe condition until completion of backfilling.

4. Shoring and bracing:

- a. Provide materials for shoring and bracing, such as sheet piling, uprights, stringers and cross-braces, in good serviceable condition.
- b. Establish requirements for trench shoring and bracing to comply with local codes and authorities having jurisdiction.
- c. Maintain shoring and bracing in excavations regardless of time period excavations will be open.
- d. Brace, sheet, and support trench walls in such a manner that they will be safe and that the ground along side the excavation will not slide or settle, and that all existing improvements of every kind, whether on public or private property, will be fully protected from damage.
- e. In the event of damage to such improvements, immediately make all repairs and replacements necessary to the approval of the ENGINEER and at no additional cost to the OWNER.
- f. Arrange bracing, sheeting and shoring so as to not place stress on any portion of the completed work until the general construction thereof has proceeded far enough to provide sufficient strength.

- g. Exercise care in the drawing and removal of sheeting, shoring, bracing and timbering to prevent collapse and caving of the excavation faces being supported.
- h. Sheeting used in Theoretical Railroad Embankment Line will be cut 2' below finished grade and left in place.
- i. Sheeting left in place shall be indicated on as-built drawings.

5. Dewatering:

- a. Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding project site and surrounding area.
- b. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, sumps, suction and discharge lines, and dewatering system components necessary to convey water away from excavations.
- c. Convey water removed from excavations and rainwater to temporary drainage ditches and other diversions outside excavation limits for each structure. Do not use trench excavations as temporary drainage ditches.

6. Material storage:

- a. Stockpile satisfactory excavated materials where directed until required for use as backfill or fill. Place, grade and shape stockpiles for proper drainage.
- b. Locate and retain soil materials away from edge of excavations.
- c. Dispose of excess soil material and waste materials as herein specified. Excavated material unsuitable for backfilling shall be kept separate from other materials excavated, and disposed of. Material suitable for backfilling shall not be disposed of until completion of filling or backfilling operations.

7. Excavation for trenches:

- a. Dig trenches to the uniform width required for the particular item to be installed, sufficiently wide to provide ample working room.

- (1) Maximum trench width to a point two feet above the outside top of pipe shall be the pipe outer diameter plus eighteen inches.
 - (2) Maximum trench width at ground surface shall be as indicated on the Plans.
- b. Excavate trenches to the depth indicated or required. Carry the depth of trenches for piping to establish the indicated flow lines and invert elevations.
 - c. Trenches for pipes shall not be opened more than the number of linear feet of pipe that can be placed and backfilled in one day.
 - d. Grub roots and stumps within six inches of outside surface of pipe bottom and sides to minimum depth of six inches below grade.
 - e. Pipe bedding shall be in accordance with the details shown on the Plans.

L. Backfill and compaction:

1. General:

- a. Place acceptable material in layers to required subgrade elevations.
- b. Backfill using material obtained from on-site excavating, except use select backfill material where indicated on Plans or as approved by the ENGINEER. Backfill to a height of two feet (2') above top of pipe with earth free from stones, rock fragments, dirt clods or frozen material greater than two inches (2") in largest dimension.

2. Backfill excavation as promptly as work permits, but not until completion of the following:

- a. Acceptance by the ENGINEER of construction below finish grade.
- b. Inspection, testing, approval and recording locations of underground utilities.
- c. Removal of shoring and bracing, and backfilling of voids with satisfactory materials. Cut off temporary sheet piling driven below bottom of structure or utilities, or leave in place if required.
- d. Removal of trash and debris.

3. Backfilling prior to approvals:

- a. Should any of the work be so enclosed or covered up before it has been approved, uncover all such work at no additional cost to the OWNER.
- b. After the work has been completely tested, inspected and approved, make all repairs and replacements necessary to restore the work to the condition in which it was found at the time of uncovering, all at no additional cost to the OWNER.

4. Placement and compaction:

- a. Place backfill materials in layers not more than six inches (6") in loose depth.
- b. Control soil compaction during construction providing minimum percentage of density specified for each area classification listed below.
- c. Pavement areas are defined, for the purpose of this Paragraph, as extending a minimum of five feet (5') beyond the pavement.
- d. Compact soil to not less than the following percentages of maximum dry density for soils which exhibit a well defined moisture density relationship determined in accordance with ASTM D-1557; and not less than the following percentages of relative density, determined in accordance with ASTM D-2049, for soils which will not exhibit a well defined moisture density relationship:
 - (1) Structures: Compact top 12 inches (12") of subgrade and each layer of backfill or fill material at 95 percent (95%) maximum dry density or 90 percent (90%) relative dry density.
 - (2) Lawn on Unpaved Areas: Compact top six inches (6") of subgrade and each layer of backfill or fill material at 90 percent (90%) maximum dry density.
 - (3) Walkways: Compact top six inches (6") of subgrade and each layer of backfill or fill material at 95 percent (95%) maximum dry density or 90 percent (90%) relative dry density.

- (4) Pavement Areas: Compact top 12 inches (12") of subgrade and each layer of backfill or fill material at 95 percent (95%) maximum dry density or 90 percent (90%) relative dry density.
- (5) Trench Stabilization Materials: Compact each layer of material to 95 percent (95%) of maximum dry density.

e. Moisture control:

- (1) Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations.
- (2) Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
- (3) Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing or pulverizing until moisture content is reduced to a satisfactory value.

f. Puddling or jetting will not be permitted.

- g. Do not place backfill material on surfaces that are muddy, frozen or contain frost or ice, other unsuitable materials.
- h. Place backfill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around structure to approximately same elevation in each lift.
- i. Compact backfill to height of two feet (2') above top of pipe using approved flat faced mechanical tampers. Compact backfill more than two feet (2') above top of pipe using approved vibratory soil compactors or flat-faced mechanical tampers.

M. Grading of disturbed areas:

1. General: Uniformly grade all disturbed areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.

2. Grading: Grade areas to prevent ponding. Finish surfaces free from irregular surface changes, and as follows:
 - a. Lawn or unpaved areas: Finish areas to receive topsoil to within not more than 0.10 foot above or below the required subgrade elevations.
 - b. Walks: Shape surface of areas under walks to line, grade and cross-section, with finish surface not more than 0.10 foot above or below the required subgrade elevation.
 - c. Pavements and slabs: Shape surface of areas under pavement to line, grade and cross-section, with finish surface not more than 1/2 inch above or below the required subgrade elevation.
3. Compaction: After grading, compact subgrade surfaces to the depth and percentage of maximum density for each area classification.

4. Treatment after grading:

- a. After grading is completed and the ENGINEER has finished his inspection, permit no further grading except with the approval of and inspection of the ENGINEER.
- b. Use all means necessary to prevent erosion of freshly graded areas during construction and until time as permanent cover material is installed.

5. Prepare pavement subgrade areas as specified in Section 208.04 of the Standard Specifications except as modified by the requirements of this Specification Section.

N. Field Quality Control:

1. The ENGINEER, at his discretion, will perform compaction testing in accordance with one or more of the following standards:
 - a. ASTM D-1556
 - b. ASTM D-1557
 - c. ASTM D-2049
 - d. ASTM D-2922

2. Contractor shall employ and pay for the services of an Independent Testing Laboratory acceptable to the ENGINEER to perform additional field quality control sampling and testing when initial compaction tests performed by the ENGINEER indicate work does not comply with the Contract Documents. Sampling and testing shall be performed using the same methods as were used by the ENGINEER.
 3. When testing service reports indicate that compaction is below specified densities, the Contractor shall provide additional compaction and retesting as approved by the ENGINEER, at no additional cost to the OWNER.
- O. Maintenance:
1. Protection of graded areas:
 - a. Protect newly graded areas from traffic and erosion. Keep free of trash and debris
 - b. Repair and re-establish grades in settled, eroded and rutted areas to specified tolerances.
 2. Reconditioning compacted areas: Where completed compacted areas are distributed by subsequent construction operations or adverse weather, scarify surface, reshape and compact to required density prior to further construction.
- P. Disposal of excess and waste materials: Remove waste materials, including unacceptable excavated material, trash and debris, and dispose of it off the OWNER'S property.

END OF SECTION

SECTION 02401

DEWATERING

1.1 DESCRIPTION

- A. Work covered by this Section includes the maintenance of trenches and excavations free of water, snow, ice, and other liquids.
- B. Definition: Liquids, as used in this Section, means sewage, water, stormwater, groundwater, or other liquid or fluid material.

1.2 RELATED SECTIONS

- A. Section 01340 - Shop Drawings, Product data and Samples.
- B. Section 02220 - Excavation, Backfilling and Compaction.

1.3 QUALITY ASSURANCE

- A. Conduct operations in a manner which will keep the Work free of standing and flowing liquids, snow, and ice, and dispose of these materials so as not to damage or create a nuisance to the Work, the public, surface and ground waters, and adjacent properties.
- B. The accumulation of liquids, ice and snow in excavations, trenches, areas to be graded and adjacent areas during construction is not permitted.
- C. Unless otherwise noted or approved by Engineer, the placement of Work in a liquid is not permitted.
- D. The Contractor shall be required to ascertain and obtain all permits required governing dewatering operations, and shall be bound by their conditions and provisions.
- E. The Contractor shall submit for the Engineer's approval, his plan and method for the dewatering operation.

1.4 DESIGN AND PERMITTING

- A. Contractor shall design an appropriate dewatering system suitable for the site to maintain all excavations free of standing water.
- B. Contractor shall obtain all necessary permits from local, county and state agencies, as required, for temporary dewatering operations.

1.5 MATERIALS

- A. Provide all equipment and materials necessary to perform dewatering operations in a safe and satisfactory manner.

1.6 NOISE SUPPRESSION ENCLOSURES

- A. Minimum Requirements 3/8" plywood enclosure; interior lining -2" acoustical insulation, 8 pcf min. density.

1.7 PERFORMANCE

- A. All water removed from the trenches or excavations by pumping, bailing, siphoning, well-points, or other means shall be disposed of in such a manner as to avoid interference with business, pedestrian and vehicular traffic and to prevent damage to persons or property. Unless otherwise permitted, groundwater encountered within the limits of excavation shall be depressed to an elevation not less than twelve inches below the bottom thereof before pipe laying or concreting is started, and shall be so maintained until concrete and joint material have attained adequate strength as determined by the Engineer.
- B. The Contractor shall not discharge water from dewatering operations directly into any live or intermittent stream, channel, wetlands, surface water or storm sewer. Water from dewatering operations shall be treated by filtration, settling basins, or other approved method to reduce the amount of sediment contained in the water to allowable levels, as determined by the State. The Engineer will specify or verify the location of all silt settling basins.
- C. Upon completion of the section wherein the operations have been performed, the Contractor shall remove from the catch basins, sumps, ditches or water courses, all mud, silt, debris and other accumulations discharged to these various locations. The Contractor is responsible for leaving the site in a condition similar to that which existed prior to his operations. Proper control measures shall be employed to minimize siltation and erosion in and adjacent to the area of the Work.
- D. Locate dewatering pumps as far as possible from residential structures. Pumps shall be housed in noise suppression enclosures. If the operating noise levels, as determined by the Engineer, are still excessive, the Contractor shall, apply damping compound to the external portion of the enclosure or take other such actions as are required to reduce the noise levels at the discretion of the Engineer.
- E. Dewatering shall continue as required to avoid flotation danger to the structures until completed, unless other positive measures, such as flooding sleeves, can be used.

1.8 PROTECTION

- A. Provide adequate protection from the effect of possible uplift due to storm or groundwater where buoyancy might lift installed work or cause joint or structure failure during construction.
- B. Protect the interior of installed work from the entering and accumulation of liquids, ice and snow. Immediately remove and dispose of any accumulation which may occur.

1.9 ADJUST AND CLEAN

- A. Adjust, repair, replace or clean all work, surfaces and property which may have been damaged as a result of any dewatering operation.

END OF SECTION

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SECTION 02633

INLETS AND MANHOLES

1.1 DESCRIPTION

- A. Provide concrete brick or block storm drainage inlets and manholes.
- B. Provide block manholes for sanitary sewer systems.
- C. All inlets and manholes shall be built on site.

1.2 MATERIALS

- A. Materials for brick or concrete block manholes and inlets shall conform to Section 602.03.02 of the Standard Specifications, except as modified by the following:
 - 1. Concrete: Provide air entrained concrete meeting the requirements of Class "B" concrete described in the Standard Specifications.
 - 2. Ladder rungs: Shall be cast iron or aluminum alloy conforming to ASTM C-478 except as hereinafter specified:
 - a. Ferrous metal rungs shall be hot dipped galvanized, and be a minimum of one inch (1") in diameter.
 - b. Steps shall be twelve inches (12") wide with a non-slip surface, with the ends turned up a minimum of two inches (2"). Rungs shall be set into the wall a minimum of three inches (3") and extend six inches (6") from the manhole wall.
- B. Precast concrete manholes shall conform to ASTM C-478.
- C. Rubber gasket for precast manholes sections shall conform to ASTM C-361.

Concrete and rubber gasket joint shall be watertight at head pressure of up to fifty feet (50').
- D. Rubber gasket pipe to manhole seal for precast sanitary manholes: ASTM C-443.
 - 1. Gasket shall be cast integrally in manhole wall.
 - 2. Use "A-Lok" gasket as manufactured by Atlantic Concrete Products Company, Omega Concrete Products, Inc., Duncan Thecker Precast, or approved equal.
- E. Non-shrink mortar for pipe to structure seal for inlets and storm manholes: As approved by ENGINEER prior to construction.
- F. Castings:
 - 1. General:

Proprietary products: References to specified proprietary products are used to establish minimum standards of utility and quality. Unless otherwise approved by the ENGINEER, provide only the specific products. Design is based on the materials specified. Other materials may be considered by the ENGINEER in accordance with the provisions of Section 01640, Substitutions.

2. Materials: Frames, grates, covers and ladder rungs shall be gray iron castings conforming to AASHTO M 105, Class 30 and shall be true to pattern in form and dimensions, free from pouring faults, sponginess, cracks, blowholes, and other defects in composition affecting their strength and value for the service intended. The castings shall be sandblasted or otherwise effectively cleaned of scale and sand so as present a smooth, clean and uniform surface.
3. Products:
 - a. Castings for inlets (all references are to Campbell Foundry Pattern numbers, or equal, with bicycle-safe grates, and Type N Eco curb pieces that read "Dump No Waste/Drains to Waterways"):
 - (1) Type A - No. 3405
 - (2) Type B - No. 2618
 - (3) Type D - No. 2617
 - (4) Type E - No. 3425
 - (5) Yard Inlet - No. 1390 or 1440
 - b. Castings for manholes: Bridgestate Foundry Pattern No. 1012 (or equal) with lifting handles, non-penetrating pickholes and "STORM" or "SEWER" cast-in-lid, as applicable.
 - c. NOTE: All castings for inlets and manholes, when installed within a public right-of-way (Municipal, County or State) shall be manufactured by a North American Foundry Company in order to comply with State of New Jersey "Buy American" requirements.

G. Underground Stormwater Storage Tanks

1. Where underground tanks are to be constructed in conjunction with stormwater inlets, the tanks shall be as manufactured by Infiltrator Systems, Inc., Hancor, Inc. or approved equal.
2. Tanks shall have the storage capacity as indicated on the Plans and shall be able to withstand H-20 wheel loading when installed, in accordance with the manufacturer's recommendations.

1.3 CONSTRUCTION

A. Submittals:

1. Submit manufacturer's product data for precast manholes and precast flared end sections as specified in the section entitled, "Product Data".

2. Provide certification stating that concrete block or brick; clay or shale brick; conform to Specifications. Submit two (2) copies prior to installing materials.
 3. Submit manufacturer's certification that ladder rungs, frames, grates and covers meet Specifications if other than specified products are proposed for use.
 4. All deliveries of concrete shall be accompanied by delivery slips. Provide copies of all delivery slips to ENGINEER at end of each working day.
- B. Reference standards used in this Specification:
1. New Jersey Department of Transportation Standard Specifications, 2019: Section 602.03.02, Inlets and Manholes.
 2. American Society for Testing and Materials (ASTM):
 - a. ASTM C-76: Reinforced Concrete Culvert, Storm Drain and Sewer Pressure Pipe.
 - b. ASTM C-361: Reinforced Concrete Low-Head Pressure Pipe.
 - c. ASTM C-334: Joints for Circular Concrete Sewer and Culvert Pipe Using Rubber Gaskets.
 - d. ASTM C-478: Precast Reinforced Concrete Manhole Sections.
 3. American Association of State Highway and Transportation Officials (AASHTO): Standard Specification for Gray Iron Castings.
- C. General: The general method of construction shall conform to Section 602.03.01 of the Standard Specifications. The manhole, inlets and flared end sections shall be constructed as shown on the Plans.
- D. Castings:
1. Cast iron frames, grates and covers shall be fitted together and match-marked before being delivered to prevent rocking of covers and grates. All castings shall be set firm and snug and shall not rattle.
 2. If castings are to be set in concrete or cement mortar, all anchors or bolts shall be in place and position before the concrete has set.
 3. When castings are to be placed upon previously constructed masonry, they shall be brought to line and grade and present an even bearing surface in order that the entire face or back of the casting will come in contact with the masonry. Castings shall be well bedded in butyl trowelable sealant, making a water tight joint.
- E. Manholes:
1. Manhole walls shall be constructed of precast concrete rings, brick or concrete block and all joints between bricks or blocks shall be made to produce a smooth and uniform surface. The outside surface of each manhole shall be plastered

and troweled smooth with cement-sand mortar of the same consistency as above.

Manhole walls maybe constructed of poured concrete, subject to approval by the ENGINEER. Installation of rubber gaskets for precast manholes shall be in accordance with the manufacturer's recommendations.

2. Frames shall be well set in mortar, making a watertight joint, and shall be adjusted so that the rim is approximately 1/4 inch above finished grade. Cover and frame shall have a shop coat of asphaltic pitch and shall have a field coat of similar paint after the frame is set in final position. Steps shall be provided in the manhole as shown on the Plans.
3. The invert channels shall be smooth and semicircular in shape conforming to the inside of the adjacent sewer section. Changes in direction of flow shall be made with a smooth curve of as large a radius as the size of the manhole will permit.

Changes in size and grade of the channels shall be made gradually and evenly. The invert channels shall be formed in the concrete fill above the manhole base, or shall be half tile laid in concrete, or shall be constructed by laying full section sewer pipe through the manhole and cutting out the top half after the surrounding concrete has hardened. The floor of the manhole outside the channels shall be smooth and shall slope toward the channels not less than one inch (1") per foot nor more than two inches (2") per foot.

4. Construct manholes to the lines and grades shown on the Plans.

F. Inlets:

1. Concrete block shall be laid with broken joints. All horizontal joints, and all keyways of vertical joints shall be filled with 1:2 cement-sand mortar, troweled to a smooth finish.
2. To provide temporary drainage at such inlets as the ENGINEER may direct, omit one or more blocks in whichever course or courses of the structure as the ENGINEER may determine during construction. Prior to construction of base and pavement courses at inlets where blocks are temporarily omitted, place the required blocks and complete the inlet walls.
3. Inlets shall be constructed as follows:
 - a. Inlet excavation and backfilling shall conform to the Specification Section 02325, "Trench Excavating, Backfilling, and Compacting."
 - b. Inside inlet dimensions: As shown on Plan details.
 - c. Base: Class "B" air entrained concrete, 8 inches thick; place on a bedding of 3/4 inch size stone, 8 inches in thickness.
 - d. Walls: 6 inches thick.
 - e. The inlet walls at pipe openings shall be sealed with non-shrink mortar.

- f. Steps: Place 12 inches on center; and firmly embedded in the inlet wall.
 - g. Grate: Set to the required finished grade elevation, and firmly bedded in 1:2 cement-sand mortar.
 - h. All construction methods shall be subject to approval of the ENGINEER.
- 4. The construction of the inlets shall include all construction necessary to connect the inlets to the existing or proposed storm drainage pipe.
 - 5. Grade areas and construct stable subgrade under flared end sections using 8-inch depth of 3/4 inch broken stone. Securely mortar the end sections to the storm drainage pipe.

END OF SECTION

SECTION 02634
RESETTING CASTINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. This work consists of resetting existing manhole castings, inlet grates, water valve boxes and other utility valves/boxes indicated, as necessary or as directed by the Engineer, to finished grade elevations as shown on the contract drawings.

1.3 MATERIALS

- A. Materials:
 - 1. Butyl sealant conforming to ASTM C-990.

1.4 CONSTRUCTION

- A. Manhole Castings and Inlet Grates:
 - 1. Reference standards included in this Specification section: New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, latest version and/or as amended (Standard Specifications).
 - 2. Reset existing castings and grates in strict conformance with utility company or municipal regulations, and as directed in the field by the Engineer, or the utility owner.
 - 3. Use of masonry:
 - a. The masonry of present structures shall be added to or removed as necessary to conform to new surface grades and elevations.
 - b. The reset castings and grates shall be well bedded in butyl trowelable sealant, making a watertight joint.
 - 4. Use of Extension Rings and Frames

- a. Extension rings and/or frames may be used with the approval of the Municipality and/or Utility Authority Engineer as may be appropriate.
 5. Replace in kind, castings and grates damaged due to Contractor's work operations or due to vehicular traffic at no additional cost to the Owner.
 6. Furnish and maintain lights, barricades and other traffic control devices at all manhole or inlet locations when necessary to protect vehicular traffic as determined by the Engineer. All traffic control devices shall be subject to the Engineer's approval. Remove devices immediately prior to installation of new pavement.
 7. Utility castings shall be, at all times during construction, set and reset as necessary, at an elevation which is at or near the currently existing surface. Castings shall only be raised (or lowered) to the final proposed elevation(s) immediately prior to final paving operations. If it is necessary to leave a raised (or lowered) casting overnight, it shall be adequately marked as deemed appropriate in the interest of the protection of public health and safety. Fillets, if used, shall extend a minimum of 2 feet beyond edge of casting and be removed immediately prior to paving.
- B. Valve Boxes/Meters/Clean Outs/Etc.:
1. Exercise care in raising/lowering valve boxes, meters, cleanouts, etc. and in protecting them after resetting and until the final course of resurfacing has been laid.
 2. If the casting is damaged either because of the Contractor's operations or because of vehicular traffic, it shall be replaced in kind and in a manner satisfactory to the utility owner, at the Contractor's expense.
 3. Methods of construction shall be such that when completed, the reset valve boxes, meters, clean outs, etc. shall conform to the grade of the resurfaced area. All work shall be in strict conformance with utility company or municipal regulations, and as directed in the field by the Engineer, or the utility owner.
- C. Temporary Elevation - Manhole Castings, Utility Valve Boxes, etc.:
1. Unless otherwise directed by the Engineer, manhole castings and utility valve boxes shall be temporarily set to the grade of the base course paving and re-set to the grade of the surface course of paving.
 - a. This procedure shall apply for maintenance of traffic conditions.
 - b. This procedure shall apply to circumstances where there is a lapse in time through the winter months until placement of the paving surface course.

1.4 MEASUREMENT AND PAYMENT

- A. No separate payment will be made for resetting castings. Cost to be included in the associated items in the bid.

END OF SECTION

SECTION 02720

STORMWATER DRAINAGE STRUCTURES AND PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. City of Camden Ordinance for storm pipe, inlet, and manhole specifications.
- C. New Jersey Department of Transportation Standard Specification for Road and Bridge Construction (NJDOT Standards), latest version.

1.2 SUMMARY

- A. Section Includes:
 - 1. Pipe and fittings.
 - 2. Perforated-wall pipe and fittings
 - 3. Encasement for piping.
 - 4. Manholes.
 - 5. Cleanouts.
 - 6. Nonpressure transition couplings.
 - 7. Expansion joints.
 - 8. Catch basins (Stormwater inlets).

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings:
 - 1. Manholes: Include plans, elevations, sections, details, frames, structure schedule, structural calculations, buoyance calculations, and covers.
 - 2. Stormwater Inlets. Include plans, elevations, sections, details, frames, structure schedule, structural calculations, buoyance calculations, covers, and grates.

1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Show pipe sizes, locations, and elevations. Show other piping in same trench and clearances from storm drainage system piping. Indicate interface and spatial relationship between manholes, piping, and proximate structures.

- B. Product Certificates: For each type of cast-iron soil pipe and fitting, from manufacturer.
- C. Field quality-control reports.
- D. The Contractor shall visit all inlets and manholes to be replaced and shall field verify existing conditions and measure the angles, size, inverts, and elevations of all connections before ordering. It is strongly encourage Cost to be included in associated bid items.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do no store plastic manholes, pipe, and fittings in direct sunlight.
- B. Protect pipe, pipe fittings, and seals from dirt and damage.
- C. Handle manholes according to manufacturer's written rigging instructions.
- D. Handle catch basins and stormwater inlets according to manufacturer's written rigging instructions.

1.6 PROJECT CONDITIONS

- A. Interruption of Existing Storm Drainage Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary service according to requirements indicated:
 - 1. Notify Engineer, Owner, City of Camden Engineer, and American Water no fewer than two (2) days in advance of proposed interruption of service.
 - 2. Do not proceed with interruption of service without Owner's written permission.

PART 2 - PRODUCTS

2.1 PE PIPE AND FITTINGS

- A. Corrugated PE Drainage Pipe and Fittings NPS 3 to NPS 10: AASHTO M 252M, Type S, with smooth waterway for coupling joints.
 - 1. Silt-tight Couplings: PE sleeve with ASTM D 1056, Type 2, Class A, Grade 2 gasket material that mates with tube and fittings.
 - 2. Soil-tight Couplings: AASHTO M 252M (4-10 inch), corrugated, matching tube and fittings.
 - 3. Soil-tight Couplings: AASHTO M 294M (12-60 inch), corrugated, matching tube and fittings.

2.2 PVC PIPE AND FITTINGS

A. PVC Corrugated Sewer Piping:

1. Pipe: ASTM F 949, PVC, corrugated pipe with bell-and-spigot ends for gasketed joints.
2. Fittings: ASTM F 949, PVC molded or fabricated, socket type.
3. Gaskets: ASTM F 477, elastomeric seals.

2.3 PERFORATED-WALL PIPES AND FITTINGS

A. Perforated PE Pipe and Fittings:

1. NPS 6 and Smaller: ASTM F 405 or AASHTO M 252, Type CP; corrugated, for coupled joints.
2. Couplings: Manufacturer's standard, band type.

B. Perforated PVC Sewer Pipe and Fittings: ASTM D 2729, bell-and-spigot ends, for loose joints.

2.4 CONCRETE PIPE AND FITTINGS

A. Reinforced-Concrete Sewer Pipe and Fittings: ASTM C 76 (ASTM C 76M).

1. Bell-and-spigot ends and sealant joints with ASTM C 990 (ASTM C 990M), bitumen
2. Class II, Wall B.
3. Class III, Wall B.
4. Class IV, Wall B.
5. Class V, Wall B.

B. All concrete pipes shall receive an interior seal coating in accordance with City of Camden ordinance specifications.

2.5 NONPRESSURE TRANSITION COUPLINGS

A. Comply with ASTM C 1173, elastomeric, sleeve-type, reducing or transition coupling, for joining underground nonpressure piping. Include ends of same sizes as piping to be joined, and corrosion-resistant-metal tension band and tightening mechanism on each end.

B. Sleeve Materials:

1. For Concrete Pipes: ASTM C 443 (ASTM C 443M), rubber.
2. For Cast-Iron Soil Pipes: ASTM C 564, rubber.
3. For Plastic Pipes: ASTM F 477, elastomeric seal or ASTM D 5926, PVC.
4. For Dissimilar Pipes: ASTM D 5926, PVC or other material compatible with pipe materials being joined.

C. Shielded, Flexible Couplings:

1. Description: ASTM C 1460, elastomeric or rubber sleeve with full-length, corrosion-resistant outer shield and corrosion-resistant-metal tension band and tightening mechanism on each end.

D. Ring-Type, Flexible Couplings:

1. Description: Elastomeric compression seal with dimensions to fit inside bell of larger pipe and for spigot of smaller pipe to fit inside ring.

2.6 CLEANOUTS

A. Plastic Cleanouts:

1. Description: PVC body with PVC threaded plug. Include PVC sewer pipe fitting and riser to cleanout of same material as sewer piping.

2.7 ENCASUREMENT FOR PIPING

A. Standard: ASTM A 674 or AWWA C105.

B. Material: high-density, cross-laminated polyethylene film of 0.004-inch (0.10-mm) minimum thickness.

C. Form: tube.

D. Color: Black.

2.8 MANHOLES

A. Designed Precast Concrete Manholes:

1. Description: ASTM C 585; Precast manhole shall be reinforced consistent with the design drawings, and/or designed for standard Highway Loading (H-25) in accordance with NJDOT Standard Specifications.
2. Ballast: Increase thickness of one or more precast concrete sections or add concrete to manhole as required to prevent flotation.
3. Joint Sealant: ASTM C 990, bitumen or butyl rubber.
4. Resilient Pipe Connectors: ASTM C 923, cast or fitted into manhole walls, for each pipe connection.
5. Steps: Individual FRP steps, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12-inch intervals.

6. Adjusting Rings: Interlocking HDPE rings with level or sloped edge in thickness and diameter matching manhole frame and cover, and of height required to adjust manhole frame and cover to indicated elevation and slope. Include sealant recommended by ring manufacturer.
7. Grade Rings: Reinforced-concrete rings, 6-inch total thickness, to match diameter of manhole frame and cover, and of height required to adjust manhole frame and cover to indicated elevation and slope.
8. Provide reinforcing design and cover per ACI-318-08 and/or as indicated on plans.
9. All precast concrete manholes shall receive internal (Sherwin DuraPlate 6100 or equal) and external (Carboline Coal Tar Epoxy 300M) coatings in accordance with City of Camden Ordinance specifications/requirements.
10. Flexible Connector shall be A-Lok or approved equal and connector shall be cast integrally with the precast structure.
11. Existing manhole castings which are no longer required shall become property of the City of Camden. Contractor shall contact American Water to coordinate delivery of manhole castings to a location designated by City of Camden at no additional cost.

B. Manhole Frames and Covers:

1. Recommended manufacturer of manhole frames and covers is Campbell Foundry Company or approved equal. Contract to refer to contract drawings.

2.9 CATCH BASINS

A. Standard Precast Concrete Catch Basins (NJDOT Type A, B and E) shall be constructed in accordance with NJDOT Standard Specifications for Road and Bridge Construction, latest ed., and/or the following minimum criteria:

1. Description: ASTM C 478, precast, reinforced concrete, of depth indicated, with provision for sealant joints.
2. Base Section: 8-inch minimum thickness for floor slab and 6-inch minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.
3. Riser Sections: minimum thickness and length to provide depth indicated.
4. Joint Sealant: ASTM C 990, bitumen or butyl rubber.
5. Adjusting Rings: Interlocking rings with level or sloped edge in thickness and shape matching catch basin frame and grate. Include sealant recommended by ring manufacturer.
6. Steps: Individual FRP steps wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12-inch intervals.

7. Pipe Connectors: ASTM C 923, resilient, of size required, for each pipe connecting to base section.
 8. All precast concrete inlets shall receive internal (Sherwin DuraPlate 6100 or equal) and external (Carboline Coal Tar Epoxy 300M) coatings in accordance with City of Camden Ordinance specifications/requirements.
 9. Flexible Connector shall be A-Lok or approved equal and connector shall be cast integrally with the precast structure.
 10. Existing inlet castings which are no longer required shall become property of the City of Camden. Contractor shall contact American Water to coordinate delivery of manhole castings to a location designated by City of Camden at no additional cost.
- B. Frames and Grates: Pursuant to NJDOT Standards, and/or: ASTM A 536, Grade 60-40-18, ductile iron designed for A-16, structural loading. Include flat grate with small, square or short-slotted drainage openings.
1. Size and Type: as noted on contract plans.

2.10 CONCRETE

- A. General: Cast-in-place concrete according to ACI 318, ACI 350/350R (ACI 350M/350RM), and the following:
1. Cement: ASTM C 150, Type II.
 2. Fine Aggregate: ASTM C 33, sand.
 3. Coarse Aggregate: ASTM C 33, crushed gravel.
 4. Water: Potable.
- B. Portland Cement Design Mix: 4000 psi (27.6 MPa) minimum, with 0.45 maximum water/cementitious materials ratio.
1. Reinforcing Fabric: ASTM A 185/A 185M, steel, welded wire fabric, plain.
 2. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (420 MPa) deformed steel.
- C. Manhole Channels and Benches: Factory or field formed from concrete. Portland cement design mix, 4000 psi (27.6 MPa) minimum, with 0.45 maximum water/cementitious materials ratio. Include channels and benches in manholes.
1. Channels: Concrete invert, formed to same width as connected piping, with height of vertical sides to three-fourths of pipe diameter. Form curved channels with smooth, uniform radius and slope.
 - a. Invert Slope: 2 percent through manhole.
 2. Benches: Concrete, sloped to drain into channel.
 - a. Slope: 4 percent.

- D. Ballast and Pipe Supports: Portland cement design mix, 3000 psi (20.7 MPa) minimum, with 0.58 maximum water/cementitious materials ratio.
 - 1. Reinforcing Fabric: ASTM A 185/A 185M, steel, welded wire fabric, plain.
 - 2. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (420 MPa) deformed steel.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavation, trenching, and backfilling are specified in contract documents.

3.2 PIPING INSTALLATION

- A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take into account design considerations. Install piping as indicated, to extent practical. Where specific installation is not indicated, follow piping manufacturer's written instructions.
- B. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions for use of lubricants, cements, and other installation requirements.
- C. Install manholes for changes in direction unless fittings are indicated. Use fittings for branch connections unless direct tap into existing sewer is indicated.
- D. Install proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.
- E. When installing pipe under streets or other obstructions that cannot be disturbed, use pipe-jacking process of microtunneling.
- F. Install gravity-flow, nonpressure drainage piping according to the following:
 - 1. Install piping pitched down in direction of flow.
 - 2. Install piping and larger with restrained joints at tee fittings and at changes in direction. Use corrosion-resistant rods, pipe or fitting manufacturer's proprietary restraint system, or cast-in-place concrete supports or anchors.
 - 3. Install piping with minimum cover.
 - 4. Install PE corrugated sewer piping according to ASTM D 2321.
 - 5. Install PVC sewer piping according to ASTM D 2321 and ASTM F 1668.
 - 6. Install reinforced-concrete sewer piping according to ASTM C 1479 and ACPA's "Concrete Pipe Installation Manual."
 - 7. Lay perforated pipe with perforations down.

3.3 PIPE JOINT CONSTRUCTION

- A. Join gravity-flow, nonpressure drainage piping according to the following:
 - 1. Join corrugated PE piping according to ASTM D 3212 for push-on joints.
 - 2. Join PVC corrugated sewer piping according to ASTM D 2321 for elastomeric-seal joints.
 - 3. Join reinforced-concrete sewer piping according to ACPA's "Concrete Pipe Installation Manual" for rubber-gasketed joints.
 - 4. Join dissimilar pipe materials with nonpressure-type flexible couplings.

3.4 CLEANOUT INSTALLATION

- A. Install cleanouts and riser extensions from sewer pipes to cleanouts at grade. Use cast-iron soil pipe fittings in sewer pipes at branches for cleanouts and cast-iron soil pipe for riser extensions to cleanouts. Install piping so cleanouts open in direction of flow in sewer pipe.
 - 1. Per City of Camden requirements.
- B. Set cleanout frames and covers in earth in cast-in-place concrete block. Set with tops flush with surrounding earth grade.
- C. Set cleanout frames and covers in concrete pavement and roads with tops flush with pavement surface.

3.5 MANHOLE INSTALLATION

- A. General: Install manholes, complete with appurtenances and accessories indicated on the contract drawings.
- B. Install precast concrete manhole sections with sealants according to ASTM C 891.
- C. Where specific manhole construction is not indicated, follow manhole manufacturer's written instructions.
- D. Set tops of frames and covers flush with finished surface of manholes that occur in pavements. Set tops at finished surface elsewhere unless otherwise indicated on the contract drawings.

3.6 CATCH BASIN INSTALLATION

- A. Construct catch basins to size, orientation as indicated on the contract drawings.
- B. Set frames and grates to elevations indicated on the contract drawings.

3.7 STORMWATER INLET INSTALLATION

- A. Construct inlet head walls, aprons, and sides of reinforced concrete, as indicated on the contract drawings
- B. Construct riprap of broken stone, as indicated on the contract drawings.

- C. Install outlets that spill onto grade, anchored with concrete, where indicated.
- D. Install outlets that spill onto grade, with flared end sections that match pipe, where indicated.
- E. Construct energy dissipaters at outlets, as indicated.

3.8 CONCRETE PLACEMENT

- A. Place cast-in-place concrete according to ACI 318.

3.9 CONNECTIONS

- A. Connect nonpressure, gravity-flow drainage piping in building's storm building drains specified in Section 221413 "Facility Storm Drainage Piping."
- B. Make connections to existing piping and underground manholes.
 - 1. Use commercially manufactured wye fittings for piping branch connections. Remove section of existing pipe; install wye fitting into existing piping; and encase entire wye fitting, plus 6-inch (150-mm) overlap, with not less than 6 inches (150 mm) of concrete with 28-day compressive strength of 3000 psi (20.7 MPa).
 - 2. Make branch connections from side into existing piping, NPS 4 to NPS 20 (DN 100 to DN 500). Remove section of existing pipe, install wye fitting into existing piping, and encase entire wye with not less than 6 inches (150 mm) of concrete with 28-day compressive strength of 3000 psi (20.7 MPa).
 - 3. Make branch connections from side into existing piping, NPS 21 (DN 525) or larger, or to underground manholes and structures by cutting into existing unit and creating an opening large enough to allow 3 inches (76 mm) of concrete to be packed around entering connection. Cut end of connection pipe passing through pipe or structure wall to conform to shape of and be flush with inside wall unless otherwise indicated. On outside of pipe, manhole, or structure wall, encase entering connection in 6 inches (150 mm) of concrete for minimum length of 12 inches (300 mm) to provide additional support of collar from connection to undisturbed ground.
 - a. Use concrete that will attain a minimum 28-day compressive strength of 3000 psi (20.7 MPa) unless otherwise indicated.
 - b. Use epoxy-bonding compound as interface between new and existing concrete and piping materials.
 - 4. Protect existing piping, manholes, and structures to prevent concrete or debris from entering while making tap connections. Remove debris or other extraneous material that may accumulate.
- C. Pipe couplings and expansion joints with pressure ratings at least equal to piping rating may be used in applications below unless otherwise indicated.
 - 1. Use nonpressure-type flexible couplings where required to join gravity-flow, nonpressure sewer piping unless otherwise indicated.
 - a. Shielded flexible couplings for same or minor difference OD pipes.

- b. Unshielded, increaser/reducer-pattern, flexible couplings for pipes with different OD.
- c. Ring-type flexible couplings for piping of different sizes where annular space between smaller piping's OD and larger piping's ID permits installation.

3.10 IDENTIFICATION

- A. Materials and their installation are specified in Contract Documents. Arrange for installation of green warning tape directly over piping and at outside edge of underground structures.
 - 1. Use warning tape or detectable warning tape over ferrous piping.
 - 2. Use detectable warning tape over nonferrous piping and over edges of underground structures.

3.11 PAYMENT & MEASUREMENT

- A. No separate payment will be made for pipe bedding, trenches, and/or backfilling of trenches for pipe work, and required compaction and frequency testing per NJDOT Section 203.10. Cost to be included in the associated bid items.
- B. No additional payment will be made to the Contractor for any coordination that is required. Cost to be provided in the associated bid items.
- C. All material used should meet Buy America requirements as specified in USC 313 and 23 CFR 635.410 and NJSA 52:33-1.
- D. The Contractor must follow the guidelines in the City of Camden's ordinances. By submitting bid, Contractor confirms they reviewed ordinance and all work, equipment, and material provided for this project will be in compliance with ordinance as required to complete work.

3.12 FIELD QUALITY CONTROL

- A. Video inspect interior of piping to determine whether line displacement or other damage has occurred. Video inspect after approximately 24 inches (610 mm) of backfill is in place, and again at completion of Project.
 - 1. Submit separate inspection reports for each system inspection; inspection video must accompany report and submitted on a DVD or Flash Drive.
 - 2. Defects requiring correction include the following:
 - a. Alignment: Less than full diameter of inside of pipe is visible between structures.
 - b. Deflection: Flexible piping with deflection that prevents passage of ball or cylinder of size not less than 92.5 percent of piping diameter.
 - c. Damage: Crushed, broken, cracked, or otherwise damaged piping.
 - d. Infiltration: Water leakage into piping.
 - e. Exfiltration: Water leakage from or around piping.
 - 3. Replace defective piping using new materials and repeat inspections until defects are within allowances specified.
 - 4. Reinspect and repeat procedure until results are satisfactory.

- B. Test new piping systems, and parts of existing systems that have been altered, extended, or repaired, for leaks and defects.
 - 1. Do not enclose, cover, or put into service before inspection and approval.
 - 2. Test completed piping systems according to requirements of authorities having jurisdiction.
 - 3. Schedule tests and inspections by authorities having jurisdiction with at least 24 hours' advance notice.
 - 4. Submit separate report for each test.
 - 5. Gravity-Flow Storm Drainage Piping: Test according to requirements of authorities having jurisdiction, UNI-B-6, and the following:
 - a. Exception: Piping with soiltight joints unless required by authorities having jurisdiction.
 - b. Option: Test plastic piping according to ASTM F 1417.
 - c. Option: Test concrete piping according to ASTM C 924 (ASTM C 924M).
- C. Leaks and loss in test pressure constitute defects that must be repaired.
- D. Replace leaking piping using new materials and repeat testing until leakage is within allowances specified.

END OF SECTION

SECTION 02660

PIPELINE CLEANING / INSPECTION

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. Provide all labor, superintendence, materials, tools, transportation, plant equipment and all means of construction necessary and reasonably incidental to perform the cleaning and video inspection of the lines and manholes/inlets designated on the Contract Drawings.
- B. All materials and labor obviously a part of the work, and as necessary for proper installation and/or operation of same, although not specifically indicated in the Contract Documents and/or in the specifications shall be provided by the Contractor as if called in detail without additional cost to the Owner.
- C. By-passing of sewerage flow may be required to perform the work under this Contract. The Contractor shall provide pumping and by-passing in a timely manner and in sufficient quantity as may be necessary. No additional payment will be made for by-passing operations.

PART 2 – EXECUTION

2.1 GENERAL

- A. The Contractor shall provide sufficient equipment and labor to perform the work required under this specifications section. All work shall be completed by workmen skilled in their trade. Contractor shall have access to adjacent fire hydrants during work.

2.2 CLEANING OF SEWER LINES

- A. Pressure shall be enough to clean the pipe but not cause damage.
- B. The Contractor shall remove all internal debris from the sewer lines and manholes/inlets that will interfere with the video inspection of the sewer line. The Contractor shall be responsible for the removal and disposal of all debris removed from the sewers during the cleaning operation. Cost for removal will be paid per Ton in the bid. Collected Debris shall be hauled to facility which accepts combined sewer debris.
- C. The Contractor, when required, shall remove roots from the sewer lines and manholes. Chain-knocking for root removal will not be permitted. Separate payment shall not be made for root removal.
- D. It is understood that upon demonstration by the Contractor that a hazardous waste material is encountered during this project, it will be considered a changed condition.

2.3 INSPECTION OF SEWER SYSTEM

- A. Inspection of sewer lines shall be performed by experienced personnel trained in locating breaks, obstacles, and service connections by close circuit television.
- B. The interior of the sewer pipe shall be carefully inspected to determine the location and severity of any breaks, obstacles or pipe defects. If any such conditions are encountered, the Contractor shall provide a written assessment to the Owner/Engineer describing the condition.
- C. Two (2) copies of the video tapes and associated logs keyed by labeling and audio to the contract drawings shall be submitted to the Owner at the end of each work day. The contractor's assessment as to corrections of negative conditions shall be written in the inspection log as well as indicated by audio on the inspection video.
- E. All visual inspections and testing shall be done in accordance with the following:
 - 1. All manholes and pipelines shall be completed and flushed clean prior to the video inspection. The inspections must be performed with a representative of the Authority and/or Engineer. All discrepancies must be noted and a reinspection performed to verify the corrective action.
 - 2. All manholes/inlets and pipelines shall be visually inspected and accepted prior to testing.
 - 3. All StormFilter Devices shall be visually inspected and accepted prior to testing. Removal/replacement of filter canisters shall be completed with a representative of the Authority and/or Engineer.

END OF SECTION

SECTION 02721

DENSE GRADED AGGREGATE

1.1 DESCRIPTION

- A. Dense Graded Aggregate Subbase shall be constructed to the full depth and to the lines and grades shown on the Plans.

1.2 MATERIALS

- A. Dense Graded Aggregate shall consist of quarry-processed stone or recycled concrete conforming to the Standard Specifications, New Jersey Department of Transportation, 2019 edition or as currently amended.
- B. The contractor shall furnish certificates of compliance stating that the material meets the requirements specified above.
- C. If required by the ENGINEER, the Contractor shall arrange for the testing by an approved laboratory to determine if the material tested meets the requirements of the NJDOT Standard Specifications. Such testing shall be at the expense of the Contractor.
- D. **Use of recycled concrete aggregate (RCA) material is prohibited.**

1.3 METHODS OF CONSTRUCTION

- A. Methods of construction, including, but not limited to spreading and compaction equipment; preparation of subgrade; and placement, spreading and compaction of material complying with the NJDOT Standard Specifications.
- B. Copies of all delivery slips shall be submitted to the ENGINEER.

SECTION 02754

CONCRETE SIDEWALKS, DRIVEWAYS, DRIVEWAY APRONS AND HANDICAP RAMPS

1.1 DESCRIPTION

- A. Remove and replace existing concrete sidewalk/driveway aprons at locations as required.
- B. Remove and replace additional concrete sidewalk/driveway aprons to be designated by the ENGINEER prior to construction.
- C. Remove and replace handicap ramps, and provide new handicap ramps at the locations show on the plans.

1.2 MATERIALS

- A. Concrete:
 - 1. Use concrete meeting the requirements of Class "B" concrete as defined in the NJDOT Standard Specifications.
 - 2. Use air-entrained concrete.
- B. Cement aggregates, water and air-entrainment methods and materials: as specified in the NJDOT Standard Specifications.
- C. Joint filler: Bituminous cellular type, as specified in the NJDOT Standard Specifications.
- D. Curing compound: White or clear pigmented liquid, as specified in the NJDOT Standard Specifications.
- E. Reinforcing shall be welded wire fabric where and as detailed.
- F. Cast in place Tactile Detectable surfaces for Handicap Ramps shall be as specified Section 02783

1.3 CONSTRUCTION

- A. Reference standards included in this Specification section:
 - 1. New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2019, or as currently amended:
 - a. Concrete Surface Course
 - b. Sidewalks and Driveways
 - c. Curing Materials for Concrete
 - d. Joint Fillers, Preformed.
- B. Submittals: CERTIFICATES: All deliveries of concrete shall be accompanied by delivery slips, copies of which shall be provided to the ENGINEER by the Contractor.

- C. Environmental Requirements:
1. Allowable concrete temperatures:
 - a. Cold weather: 60 degrees F. when discharged from the mixer.
 - b. Hot weather: Maximum concrete temperature is 80 degrees F.
 2. Do not place concrete during rain, when atmospheric temperature is at or below 36 degrees F., or when conditions are otherwise unfavorable as determined by the ENGINEER.
- D. Protection:
1. Protect concrete from pedestrian and vehicular traffic, rain damage and vandalism until concrete has been sufficiently cured as determined by the ENGINEER.
 2. Method of protection shall be approved by the ENGINEER prior to beginning work under this section.
 3. Damaged concrete, resulting from improper protection, shall be replaced as directed by the ENGINEER, at no additional cost to the owner.
- E. Preparation:
1. Coordinate with ENGINEER for marking out of apron removal limits.
 2. Excavate subgrade and set forms so that finished structure conforms to lines and grades shown on Plans, or as directed by the ENGINEER.
 3. Prepare subgrade to provide a firm, even surface. Place 4" thick DGA subbase material and compact.
 4. Verify that earthwork is completed to correct line and grade.
 5. Verify that forms conform to line, grade and cross section shown on Plans.
 6. Check that subgrade is smooth, compacted and free of frost or excessive moisture.
 7. Do not commence work until conditions are satisfactory.
- F. Performance: Method of apron construction shall conform to the NJDOT Standard Specifications paragraph entitled, "Concrete Sidewalks and Driveways," except as modified by the Supplemental Requirements below:
1. Construction shall conform to the requirements described in the Statement of Work, and shall be in accordance with the Plans.

2. Restorations shall be performed as specified in the section entitled, "Cleaning and Restorations."

END OF SECTION

SECTION 02755

CONCRETE CURB AND MONOLITHIC GUTTERS

1.1 DESCRIPTION

- A. Install new concrete curb and concrete curb and monolithic gutters at the locations designated on the Plans.
- B. Remove and replace existing concrete curb.
- C. This work includes restorations of adjacent paved and unpaved areas.
- D. The requirements of this section apply to 6"x 8"x18" vertical curb, mountable curb, monolithic curb and gutter, NJDOT vertical curb, rolled curb and depressed curb.

1.2 MATERIALS

- A. Concrete:
 - 1. For all concrete curb use concrete meeting the requirements of Class "B" concrete as specified in the NJDOT Standard Specifications.
 - 2. Use air-entrained concrete.
- B. Cement aggregates, water and air-entrainment methods and materials for concrete curb: as specified in the NJDOT Standard Specifications.
- C. Joint Filler: Bituminous cellular type, as specified in the NJDOT Standard Specifications.
- D. Curing compound: White or clear pigmented liquid, as specified in the NJDOT Standard Specifications.

1.3 CONSTRUCTION

- A. Reference standards included in this Specification Section:

New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2019, or as currently amended.

 - 1. Concrete Surface Course
 - 2. Curbs
 - 3. Curing Materials for Concrete
 - 4. Joint Filler, Preformed
- B. Submittals:

Certificates: All deliveries of concrete shall be accompanied by delivery slips, copies of which shall be provided to ENGINEER by the Contractor.

C. Environmental requirements:

1. Allowable concrete temperatures:
 - a. Cold weather: 60 degrees F. (60° F) when discharged from the mixer.
 - b. Hot weather: Maximum concrete temperature is 80 degrees F. (80 ° F).
2. Do not place concrete during rain, when atmospheric temperature is at or below 36 degrees F. (36° F), or when conditions are otherwise unfavorable as determined by the ENGINEER.

D. Protection:

1. Protect concrete from pedestrian and vehicular traffic, rain damage and vandalism until concrete has been sufficiently cured as determined by the ENGINEER.
2. Method of protection shall be approved by ENGINEER prior to beginning work under this section.
3. Damaged concrete, resulting from improper protection, shall be replaced as approved by the ENGINEER, at no additional cost to the owner.

E. Preparation:

1. When encountered, cut existing pavements vertically with a sharp tool on a straight line prior to excavating for curb. Cut shall be made six inches (6") beyond the limits of excavation, and maintained straight and neat, or recut and dressed as approved by the ENGINEER.
2. Excavate subgrade and set forms so that finished curb conforms to required lines and grades.
3. Prepare curb subgrade as specified in the NJDOT Standard Specifications.
4. Verify that earthwork is completed to correct line and grade.
5. Verify that forms conform to proposed line, grade and curb cross section.
6. Check that subgrade is smooth, compacted and free of frost and excessive moisture.
7. Do not commence work until conditions are satisfactory.

F. Performance:

Method of curb construction shall conform to the NJDOT Standard Specifications, except as otherwise modified by this Specification section:

1. Install 1/2 inch wide expansion joints at equal intervals, not to exceed twenty feet (20'). Install additional expansion joints where curb abuts sidewalk or other structures. Fill expansion joints with joint filler, 1/2-inch thick. Insert joint filler 1/4-inch from the top and face of curb.
2. Construct contraction joints midway between expansion joints.
3. Finish concrete surfaces of curb to match existing adjacent curbs. Curb cross section shall match the existing curb.

END OF SECTION

SECTION 02756

DECORATIVE CONCRETE PAVING (STAMPED CONCRETE CROSSWALK)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes colored, stamped concrete paving.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.4 ACTION SUBMITTALS

- A. Samples for Verification: For each type of exposed color, pattern, or texture indicated.
- B. Design Mixtures: For each decorative concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer of decorative concrete paving systems.
- B. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
- C. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Build mockups of full-thickness sections of decorative concrete paving to demonstrate typical joints; surface color, pattern, and texture; curing; and standard of workmanship.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Cold-Weather Concrete Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:
 1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 2. Do not use frozen materials or materials containing ice or snow.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.
- C. Hot-Weather Concrete Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
 1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Cover steel reinforcement with water-soaked burlap, so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 3. Fog-spray forms and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless otherwise indicated.

2.2 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
 1. Use flexible or uniformly curved forms for curves of a radius of 100 feet or less. Do not use notched and bent forms.

- B. Forms for Textured Finish Concrete: Units of face design, size, arrangement, and configuration indicated. Provide solid backing and form supports to ensure stability of textured form liners.
- C. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.3 CONCRETE MATERIALS

- A. Concrete:
 - 1. Use concrete meeting the requirements of 4,000 PSI concrete as defined in the NJDOT Standard Specifications.
 - 2. Use air-entrained concrete.
- B. Cement aggregates, water and air-entrainment methods and materials: as specified in the NJDOT Standard Specifications.
- C. Joint filler: Bituminous cellular type, as specified in the NJDOT Standard Specifications.
- D. Curing compound: White or clear pigmented liquid, as specified in the NJDOT Standard Specifications.
- E. Color Pigment: ASTM C 979/C 979M, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, nonfading, and resistant to lime and other alkalis. Color and pattern to match existing.
- F. Water: Potable and complying with ASTM C 94/C 94M.

2.4 SURFACE COLORING MATERIALS

- A. Pigmented Mineral Dry-Shake Hardener: Factory-packaged, dry combination of portland cement, graded quartz aggregate, color pigments, and plasticizing admixture. Use color pigments that are finely ground, nonfading mineral oxides interground with cement.
- B. Pigmented Powder Release Agent: Factory-packaged, dry combination of surface-conditioning and dispersing agents interground with color pigments that facilitates release of stamp mats. Use color pigments that are finely ground, nonfading mineral oxides interground with cement.
- C. Liquid Release Agent: Manufacturer's standard, clear, evaporating formulation that facilitates release of stamp mats and texture rollers.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.
- B. Protect adjacent construction from discoloration and spillage during application of color hardeners, release agents, stains, curing compounds, and sealers.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 CONCRETE PLACEMENT

- A. Remove snow, ice, or frost from subbase surface before placing concrete. Do not place concrete on frozen surfaces.
- B. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- C. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- D. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.
- E. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- F. Screed paving surface with a straightedge and strike off.
- G. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleedwater appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

3.5 STAMPING

- A. Mat Stamping: After floating and while concrete is plastic, apply mat-stamped finish.
 - 1. Pigmented Powder Release Agent: Uniformly distribute onto concrete at a rate of 3 to 4 lb/100 sq. ft..

2. Liquid Release Agent: Apply liquid release agent to the concrete surface and the stamp mat. Uniformly mist surface of concrete at a rate of 5 gal/1000 sq. ft.
 3. After application of release agent, accurately align and place stamp mats in sequence.
 4. Uniformly load mats and press into concrete to produce required imprint pattern and depth of imprint on concrete surface. Gently remove stamp mats. Hand stamp edges and surfaces unable to be imprinted by stamp mats.
 5. Remove residual release agent according to manufacturer's written instructions, but no fewer than three days after stamping concrete. High-pressure-wash surface and joint patterns, taking care not to damage stamped concrete. Control, collect, and legally dispose of runoff.
- B. Tool Stamping: After floating and while concrete is plastic, apply tool-stamped finish.
1. Cover surface with polyethylene film, stretch taut to remove wrinkles, lap sides and ends 3 inches, and secure to edge forms. Lightly broom surface to remove air bubbles.
 2. Accurately align and place stamp tools in sequence and tamp into concrete to produce required imprint pattern and depth of imprint on concrete surface. Gently remove stamp tools. Hand stamp edges and surfaces unable to be imprinted by stamp tools.
 3. Carefully remove polyethylene film immediately after tool stamping.
- C. Roller Stamping: After floating and while concrete is plastic, apply roller-stamped finish.
1. Cover surface with polyethylene film, stretch taut to remove wrinkles, lap sides and ends 3 inches, and secure to edge forms. Lightly broom surface to remove air bubbles.
 2. Accurately align roller and perform rolling operation to produce required imprint pattern and depth of imprint on concrete surface. Hand stamp surfaces inaccessible to roller.
 3. Carefully remove polyethylene film immediately after roller stamping.

3.6 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing and Sealing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating, and repair damage during curing period.

3.7 REPAIR AND PROTECTION

- A. Remove and replace decorative concrete paving that is broken or damaged or does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Engineer.

END OF SECTION

SECTION 02831

PVC VINYL COATED CHAIN-LINK FENCES AND GATES

PART 1 GENERAL

1.01 DESCRIPTION

- A. Vinyl coated chain link fencing, swing gates and accessories.
- B. Concrete post footings.

1.03 SUBMITTALS

- A. Shop drawings: Layout of fences and gates with dimensions, details, and finishes of components, accessories, and post foundations.
- B. Product data: Manufacturer's catalog cuts indicating material compliance and specified options.
- C. Samples: If requested, samples of materials (e.g., fabric, wires, and accessories).
- D. Warranty Information

PART 2 MATERIALS

2.01 MANUFACTURER

- A. Manufacturer: Master Halco /Anchor Fence, Baltimore, MD
Phone (410) 633-6500 Fax (410) 633-6506.or approved Equivalent.
- B. Product shall be from a qualified manufacturer having a minimum of five (5) years experience manufacturing of zinc galvanized and polyester powder coated steel chain link fencing.
- C. Obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source.

2.02 PRODUCT WARRANTY: 15 year on all fence fabric and framing components and coatings.

2.03 CHAIN LINK FENCE FABRIC

- A. Fabric: 9 gauge, ASTM F 641, galvanized steel core wire with a tensile strength of 75,000 psi (571 MPa) and helically wound and woven.
- B. Mesh Sizes: 1 ¾" mesh for tennis court fence and gates and 2" diamond mesh for all other fences and gates.
- C. Height: 4, 8, 10, 12 and 16 feet as noted on Drawings.
- D. Coating: Permafused II™ Polyolefin elastomer coating per ASTM F 668, Class 2b, 10 mils minimum thickness, thermally fused and adhered to steel fabric. Color: Midnight Black

2.04 STEEL FENCE FRAMING

- A. Steel Pipe - Type I: ASTM F 1083, standard weight schedule 40; minimum yield strength of 25,000 psi; sizes as indicated. Hot-dipped galvanized with minimum average 1.8 oz/ft² of coated surface area.
- Sizes: 1. End and Corner Post - 2 7/8 inch O.D.
2. Line (intermediate) Posts - 2 3/8 inch O.D.
3. Top, Middle and Bottom Rail and Braces - 1 5/8 inch O.D.
- B. Frame Coatings: In accordance with ASTM F1043, apply supplemental color coating of 10 min. thickness of thermally fused Polyolefin
Color: Midnight Black, to match fence fabric.

2.05 CHAIN LINK SWING GATES

- A. Gate Frames: Fabricate chain link swing gates in accordance with ASTM F 900, using two inch (2") square tubular galvanized steel members, weighing 2.60 lb/ft. Fusion or stainless steel welded connections forming rigid one-piece unit.
- B. Chain Link Gate Fabric: MATCH FENCE FABRIC. Install fabric with hook bolts and tension bars at all 4 sides. Attach to gate frame at not more than 15" on center.
- C. Hardware materials: Hot dipped galvanized steel or malleable iron shapes to suit gate size.
- D. Finish for Gate Frame, Fabric and Hardware: MATCH FENCING.
- E. Hinges: Structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180° outward.
- F. Latch: Forked type capable of retaining gate in closed position and have provision for padlock. Latch shall permit operation from either side of gate.
- G. Keeper: Provide keeper for each gate leaf. Gate keeper shall consist of mechanical device for securing free end of gate when in full open position.
- H. Double gates: Provide drop rod to hold inactive leaf. Provide gate stop pipe to engage center drop rod. Provide locking device and padlock eyes as an integral part of latch, requiring one padlock for locking both gate leaves.
- I. Gate posts: Steel pipe,[ASTM F 1083] standard weight schedule 40; minimum yield strength of 25,000 psi, size as indicated below.

<u>Gate Leaf Single Width</u>	<u>Post Size (Round)</u>	<u>Weight</u>
6 ft or less	2.875 in	5.79 lb/ft
6 ft to 12 ft	4.00 in	9.11 lb/ft

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PVC Vinyl Coated
Chain Link Fences and Gates

12 ft to 19 ft	6.625 in	18.97 lb/ft
19 ft to 23 ft	8.625 in	28.55 lb/ft

2.06 ACCESSORIES

General: Chain link fence accessories: ASTM F626 Provide items required to complete fence system. Galvanize each ferrous metal item and finish to match framing.

- A. Post caps: Formed steel alloy weather tight closure cap for tubular posts. Provide one cap for each post.
- B. Top rail and brace rail ends: Pressed steel per ASTM F626, for connection of rail and brace to terminal posts.
- C. Top rail sleeves: 7" expansion sleeve with spring, allowing for expansion and contraction of top rail.
- D. Wire ties: 9 gauge [0.148"] galvanized steel wire for attachment of fabric to line posts. Double wrap 13 gauge [0.092"] for rails and braces. Hog ring ties of 12-1/2 gauge [0.0985"] for attachment of fabric to tension wire.
- E. Brace and tension (stretcher bar) bands: Pressed steel. At square post provide tension bar clips.
- F. Tension wire: Metallic coated steel wire, 7 gauge, 0.177" diameter core wire with tensile strength of 75,000 psi. Finish: SAME AS FENCE FRAME AND FABRIC.
- G. Tension (stretcher) bars: One piece lengths equal to 2 inches less than full height of fabric with a minimum cross-section of 3/16" x 3/4" or equivalent fiber glass rod. Provide tension (stretcher) bars where chain link fabric meets terminal posts.
- H. Truss Rods and Tightener: Steel rods with minimum diameter of 5/16". Capable of withstanding a tension of minimum 2,000 lbs.
- I. Nuts and bolts shall be galvanized, not vinyl coated.

2.07 SETTING MATERIALS

- A. Concrete: Minimum 28-day compressive strength of 3500 psi minimum.

PART 3 CONSTRUCTION

3.01 EXAMINATION

- A. Verify areas to receive fencing are completed to final grades and elevations.
- B. Ensure property lines and legal boundaries of work are clearly established.
- C. Verify areas to assure sufficient space to receive slide gates in open position, (gate and overhang.)

3.02 CHAIN LINK FENCE FRAMING INSTALLATION

- A. Install chain link fence in accordance with ASTM F567 and manufacturer's instructions.
- B. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.
- C. Space line posts uniformly at the following dimensions:
 - 8 ft. o.c. maximum for 4 ft. to 8 ft. high fence
 - 10 ft. o.c. maximum for fence greater than 8 ft. in height
- D. Concrete set [terminal] [and] [gate] posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6"(152 mm) deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" (914 mm) below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts.
- E. Drive Anchor [line] posts: With protective cap, drive post 36" (914 mm) into ground. Slightly below ground level install drive anchor shoe fitting. Install 2 diagonal drive anchors and tighten in the shoe.
- F. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.
- G. Bracing: Install horizontal pipe brace at mid-height for fences 6' (1829 mm) and over, on each side of terminal posts. Firmly attach with fittings. Install diagonal truss rods at these points. Adjust truss rod, ensuring posts remain plumb.
- H. Tension wire: Provide tension wire at bottom of fabric [and at top, if top rail is not specified]. Install tension wire before stretching fabric and attach to each post with ties. Secure tension wire to fabric with 12-1/2 gauge [0.0985"] hog rings 24" oc.
- I. Top rail: Install lengths, 21'. Connect joints with sleeves for rigid connections for expansion/contraction.
- J. Center Rails (for fabric height 12' and over). Install mid rails between posts with fittings and accessories.
- K. Bottom Rails: Install bottom rails between posts with fittings and accessories.

3.03 CHAIN LINK FABRIC INSTALLATION

- A. Fabric: Install fabric on security side and attach so that fabric remains in tension after pulling force is released. Leave approximately 2" between finish grade and bottom selvage. Attach fabric with wire ties to line posts at 15" on center and to rails, braces, and tension wire at 24" (600 mm) on center.

B. Tension (stretcher) bars: Pull fabric taut; thread tension bar through fabric and attach to terminal posts with bands or clips spaced maximum of 15" on center.

3.04 CHAIN LINK SWING GATE INSTALLATION

A. Gate Posts

1. Install gate posts in accordance with manufacturer's instructions.
2. Concrete set gate posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6" deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post and slope to direct water away from posts.
3. Gate posts and hardware: Set keeper, stops, sleeves into concrete. Check each post for vertical and top alignment and maintain in position during placement and finishing operations.

B. Swing Gate

1. Install gates plumb, level, and secure for full opening without interference.
2. Attach hardware by means which will prevent unauthorized removal.
3. Adjust hardware for smooth operation.

3.05 ACCESSORIES

- A. Tie wires: Bend ends of wire to minimize hazard to persons and clothing.
- B. Fasteners: Install nuts on side of fence opposite fabric side for added security.
- C. Barbed wire: Uniformly space parallel rows of barbed wire on security side of fence. Pull wire taut and attach in clips or slots of each extension.

3.06 CLEANING

- A. Clean up debris, unused material, and remove from the site.

END OF SECTION

SECTION 02845

TRAFFIC CONTROL AND SIGNAGE

1.1 DESCRIPTION

- A. The work of this section shall consist of providing traffic protection devices, informational signs, and traffic directors (trained flaggers) to assure safe flow of traffic and protection of pedestrians in the vicinity of the construction site.
- B. The work includes the erection and maintenance of ROAD CLOSED LOCAL TRAFFIC ONLY barriers and signs.

1.2 MATERIALS

- A. Materials shall consist of signs and other traffic control devices as described in the MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
- B. Other materials not specifically required on the Plans that shall be immediately available to the Contractor for traffic control includes:
 - 1) Traffic Cones
 - 2) Battery operated flashing devices
 - 3) Drums
 - 4) Other as approved by ENGINEER upon reasonable notice.

1.3 TRAFFIC DIRECTOR QUALIFICATIONS

The contractor shall provide the following personnel:

- A. **Trained Flaggers.** Trained flaggers shall be in good physical condition, including sight and hearing, mentally alert, and shall have a courteous but firm manner, neat appearance, and a sense of responsibility for the safety of the public. Trained flaggers shall wear an orange or fluorescent orange garment such as a shirt, jacket, or vest. This garment shall be reflectorized for nighttime operations with reflective material that shall be orange in color. When controlling traffic, trained flaggers shall be equipped with STOP/SLOW paddles, and shall follow the procedures stipulated for flaggers in the MUTCD.

Trained flaggers as specified in this Subsection shall be an approved subcontractor or employees of the Contractor. They shall not be police from any jurisdiction working on behalf of the Contractor while in uniform or in any other official status. All trained flaggers shall be formally trained in flagging operations and proper use of the **STOP/SLOW** paddle. This training may consist of ATSSA (American Traffic Safety Services Association), union, or trade association training, or training by an individual who has received formal training from a recognized program or agency in work zone traffic control. When requested by the Engineer or City Police, trained flaggers shall demonstrate competency. Failure to demonstrate competency shall result in the immediate replacement with a competent person.

- B. The Contractor shall provide the Engineer and the City Police with certificates of training for each flagger on the job site prior to work start, and shall have a copy of the certificates available on site.
- C. Should the City Police determine that their presence is necessary to maintain traffic control, the City will provide for their direct payment. **The Contractor is required to provide trained**

flaggers and maintain proper traffic control. Should the City Police determine that their presence is necessary due to the Contractor's failure to provide trained flaggers and/or maintain proper traffic control, any payment due to the City Police will be deducted from monies due to the Contractor under the contract.

1.4 METHODS OF CONSTRUCTION

- A. Before beginning work on any phase of the project, the contractor shall furnish and install all warning signals, barricades, lights, flares and other devices necessary to protect the public and workmen during that phase of his operations.
- B. During the work on this project, the contractor shall provide supplementary traffic protection devices, such as traffic cones, flashers and drums. When lack of any required safety devices presents an immediate hazard, the Engineer or City Police may order that such devices be provided by the contractor.
- C. Trained flaggers shall be provided whenever alternate two-way traffic is maintained in a single lane, whenever contractor's operations require closing of a lane or portion of a lane on a multiple lane roadway, whenever the contractor's equipment or vehicles are entering or leaving active roadways at other than normal street intersections, whenever a contractor's operations will be contrary to or cause confusion regarding normal traffic control devices (traffic signals, signs, etc.) within a work area and whenever else, in the opinion of the Engineer or City Police, the contractor's operations cause such hazards as to require the use of trained flaggers.
- D. Trained flaggers shall be responsible and thoroughly familiar with their responsibilities, and while serving as flaggers, shall not be required to perform any other duties. Flaggers shall be provided with an orange or red flag, an orange or orange and white traffic safety vest and white or orange hard hat or other appropriate head gear.
- E. When two-way traffic must be maintained throughout the work area during construction, at least two 10' lanes must be maintained for traffic and shall be directed by trained flaggers.
- F. Any restriction of traffic at any time shall be subject to the approval of the Engineer and the City Police Department. The contractor shall submit a narrative Traffic Control Plan indicating the methods of traffic control anticipated.
- G. The contractor shall provide adequate means of access for fire, police and emergency vehicles throughout the duration of the project.
- H. All roadways must be fully open to the public during contractor non-working hours.

END OF SECTION

SECTION 02910

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES

1.1 DESCRIPTION

- A. This work shall consist of temporary measures to control erosion and sediment during the life of the contract, as shown on the Plans and as approved by the ENGINEER and/or as directed by the Engineer in the field.
- B. The temporary control provisions contained herein shall be coordinated with the permanent improvements (grass, pavement and other restorations) specified elsewhere in the contract to the extent practical to assure effective and continuous erosion and sediment control throughout the construction and post-construction period.
- C. The erosion and sediment control measures described herein shall be continued until the construction is complete and final restorations installed.

1.2 MATERIALS

- A. All materials and methods of construction shall be in accordance with the New Jersey State Standards for Soil Erosion and Sediment Control.

1.3 METHODS OF CONSTRUCTION

- A. Contractor shall comply with the construction requirements shown on the plan entitled, "Soil Erosion Control Notes", which is appended hereto and is a part of the Contract Documents.
- B. Contractor shall adhere, as closely at practicable, to the construction sequence provided on the plan entitled, "Soil Erosion Control Notes".
- C. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal or state or location agencies, the more restrictive laws, rules or regulations shall apply.
- D. The Contractor will be responsible for maintaining all soil erosion and sediment control measures as specified on the Plans. All temporary measures shall be removed by the Contractor as approved by the ENGINEER.

END OF SECTION

SECTION 02912
SOIL PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes planting soils specified by composition of the mixes.
- B. See Landscape plans for further details related to planting soil mixes.
- C. Related Requirements:
 - 1. Section 02230 - Site Clearing (for topsoil stripping and stockpiling).
 - 2. Section 02924 – Turf and Grasses.
 - 3. Section 02930 – Plants.

1.2 DEFINITIONS

- A. Duff Layer: A surface layer of soil, typical of forested areas, that is composed of mostly decayed leaves, twigs, and detritus.
- B. Imported Soil: Soil that is transported to Project site for use.
- C. Manufactured Soil: Soil produced by blending soils, sand, stabilized organic soil amendments, and other materials to produce planting soil.
- D. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified as specified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- E. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- F. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- G. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil"; but in disturbed areas such as urban environments, the surface soil can be subsoil.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each bulk-supplied material in sealed containers labeled with content, source, and date obtained; providing an accurate representation of composition, color, and texture.
- C. Topsoil Analysis Report: Submit certified soil analysis report for topsoil.
 - 1. Before delivery of topsoil, furnish to the Engineer a certified soil analysis, made by a certified soil-testing laboratory. In the soil analysis report, indicate the particle size distribution, the testing laboratory's recommended quantities for nitrogen, phosphorus, and potash; and any limestone, aluminum sulfate, or other soil amendments to be added to make the soil suitable.
 - 2. Submit to the Engineer a certified soil analysis made by a certified soil testing laboratory of the amended planting mix showing total porosity, non-capillary porosity, capillary porosity and organic matter content.
- D. Planting soil sample:
 - 1. Submit a sample of each mixed planting soil to the Engineer.

1.5 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

1.6 QUALITY ASSURANCE

- A. General: Comply with applicable federal, state, county, and local regulations governing landscape materials and work.
- B. Testing Agency Qualifications: An independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in types of tests to be performed.
- C. Employ only experienced personnel familiar with required work. Provide adequate supervision by qualified foreman.
- D. Guarantee: All materials shall be guaranteed true to the analysis as required.
- E. Inspection: The Engineer may inspect mixed planting soils at any time during the process for compliance with requirements and may reject any defective or unsatisfactory process of mixed planting soil. Such inspections shall not limit the rights of the Engineer with regard to warranty of trueness to analysis.
 - 1. Remove rejected planting soil from project site immediately.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Topsoil:

1. Topsoil shall be loose, fertile, friable natural loam capable of sustaining vigorous plant growth. The topsoil shall be free from subsoil, stones larger than one (1) inch, clods of hard earth, plants or roots, stumps, brush, weeds, sticks or other extraneous materials. It shall contain no toxic materials.
2. Topsoil obtained from striping within the limits of the project or furnished from outside the project shall contain no stones, debris (of any kind), lumps, roots or similar objects larger than a one-half inch in any dimension, and shall have a pH value of not less than 6.0 nor more than 7.0.
3. When the pH value of the topsoil is less than 6.0, it must be increased by applying ground limestone at a rate necessary to obtain a pH value of 6.5.
4. Topsoil must have a minimum organic content not less than 4.0 percent, not more than 20 percent by weight. When organic content of topsoil is less than 4.0 percent, it must be increased by adding peat at a rate necessary to obtain this minimum organic content. The organic content of soils must be determined by using the chromic acid titration method as described in the United States Department of Agriculture's Circular 755 or a method acceptable to the Engineer.
5. Lower limits of silt and clay must be flexible to the extent that soils with a minimum combined silt and clay content of 20 percent to be satisfactory. However, if more than one-half of the sand is larger than 0.5 MM, then the minimum clay content must be 15 percent or combined silt and clay must be 25 percent.
6. All imported topsoil on this Project Site must be in accordance to N.J.A.C. 7:26E – 1.8. All imported topsoil utilized on this Project Site must be considered as "certified clean" and generated from a virgin source/quarry, or from source(s) other than a virgin source/quarry in accordance with the requirements as set forth in the Contract Documents. Furnished topsoil shall meet the following grading analysis:

<u>Sieve</u>	<u>Minimum Percent Passing</u>
2"	100
No. 4	75
No. 10	60

7. Sand, silt and clay material passing the No. 10 sieve shall be present within the following ranges:

<u>Sieve</u>	<u>Minimum Percent Passing</u>
2"	100
No. 4	75
No. 10	60

2.2 LAWN/PLANTING SOIL MIX

A. Planting-Soil Mix:

1. Planting soil mix shall be topsoil amended per the results of the soil analysis to have the following properties. Test the mixture to confirm it meets the specified requirements before placing.
 - a. pH range from 6.2 to 6.5
 - b. Total porosity 40-55%
 - c. Non-capillary porosity (at 300 mm tension) 20-30%
 - d. Capillary porosity (at 300 mm tension) 20-25%
 - e. Organic matter content (by weight)
 - 1) Lawn areas: 5-10%
 - 2) Trees, shrubs, and ground covers: 10-20%
2. Sources: Take imported, unamended soil from sources that are naturally well-drained sites where topsoil occurs at least 4 inches (100 mm) deep, not from bogs, or marshes; and that do not contain undesirable organisms; disease-causing plant pathogens; or obnoxious weeds and invasive plants including, but not limited to, quackgrass, Johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and bromegrass.
3. Unacceptable Properties: Clean soil of the following:
 - a. Unacceptable Materials: Concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
 - b. Unsuitable Materials: Stones, roots, plants, sod, clay lumps, and pockets of coarse sand that exceed a combined maximum of 8 percent by dry weight of the imported soil.
 - c. Large Materials: Stones, clods, roots, clay lumps, and pockets of coarse sand exceeding 1 inch in any dimension.

2.3 SOIL AMENDMENTS

- A. Limestone: Ground limestone shall have a minimum of 85% total carbonates and a minimum of 50% total calcium oxides. At least 90% of it shall be able to pass a No. 20 sieve and at least 50% to pass a No. 100 sieve.
- B. Sulfur: Granular, biodegradable, and containing a minimum of 90 percent elemental sulfur, with a minimum of 99 percent passing through a No. 6 (3.35-mm) sieve and a maximum of 10 percent passing through a No. 40 (0.425-mm) sieve.
- C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
- D. Perlite: Horticultural perlite, soil amendment grade.
- E. Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through a No. 50 (0.30-mm) sieve.

- F. Sand: Clean, washed, natural or manufactured, free of toxic materials, and according to ASTM C 33/C 33M.

2.4 STONE

- A. Stone to be NJDOT #5 or #57 stone or size designation equivalent to AASHTO size # 4 whichever is closer, preferably a crushed stone with no modifications.
 - 1. Stone shall be clean and be certified to meet NJDOT aggregate soundness requirements for use in road construction.
 - 2. Stone of high angularity will be preferred over washed gravel.
 - 3. Stone dimension aspect ratio should approach 1:1:1 with a maximum of 2:1:1
 - 4. Particle size distribution shall meet NJDOT #5 or #57 stone. A single sized stone near one inch will be preferred to a wider size distribution or smaller single sized stone fitting the general size description.

2.5 HYDROGEL

- A. Gelscape7 as manufactured by Amereq Corp., Congers, NY 10920 or approved equal.

2.6 MIXING PROTOCOL

- A. Mixing Location and Method

- 1. The Contractor and Landscape Architect shall hold a pre-bid meeting to ascertain the mixing location and method. It is preferable to mix the Structural Soil (Select Fill) Material at a mixing if botching plant in lieu of a site. The quantity of the soil mix will be used to determine the economies of bulk mixing and will be decided at that time.

Mixture of soil, stone, and hydrogel, mixed to the following proportions:

<u>Component</u>	<u>by units of wight</u>
Stone	100
Soil	16-20
Hydrogel	0.03
Water	approx.. 10

- 2. Adjust the water in the mix to bring the final mix up to optimum moisture content for compaction as determined by AASHTO T 99\ASTM D 698. The soil moisture content! water contribution at the time of mixing should also be accounted for before selecting the amount of water to add to the mix.
- B. Adjust the ratio of the components in accordance with voids present in the ridded unit weight determination of the stone. If stone sample porosity is near 40%, the weight percentage of soil in the mix may increase towards 16%. If the stone sample porosity is near 33%, then the weight percentage of soil in the mix should decrease toward 14%.
- C. Mixing procedure
 - 1. Mix the hydrogel and the water to produce a slurry and allow at least four hours for hydration (may be stored for longer periods in bulk processing).

2. Add the water-hydrogel slurry uniformly to the stone.
3. Add the soil and mix (experience and testing will establish some initial guidelines).
4. Deposit the material.
5. Do not over-mix. If the clay begins to pelletize and separate from the stone, discard the batch

2.7 MIXING DESIGN

- A. Prepare sample structural mixes for testing and approval.
 1. Test the topsoil and stone. Submit the test results and the samples, with their respective analysis for approval to the Engineer. Based on the samples and the analysis, the Engineer and the Contractor will jointly determine the course of action to bring compliance to the requirements of the specifications.
 2. The Contractor shall prepare the samples of the proposed mix and obtain test results. Submit the samples of the mixes with the testing results.
 3. Develop a standard moisture-density curve per AASHTO T 99 FOR each proposed mix.
 4. If desired, conduct permeability and California bearing ratio (CBR) tests on compacted samples when compacted to peak density. Soaked CBR should be a minimum of 40 at peak standard density.
 5. If a volumetric mixing ratio is desired calibration of measuring containers can be conducted using bulk densities and unit weights of the materials.
 6. If nuclear methods for density measurement are to be used to check site compaction, it is advisable to provide the testing engineer with a large sample of material for calibration of the tool.
 7. The Engineer may request additional Structural Soil Material ratio samples to be tested in the event that further refinement of the mix is necessary.

2.8 MIXING AND TESTING

- A. All mixing shall be performed at a location and in a manner as determined at the pre-bid meeting. (Or if known.)
- B. The Contractor shall mix sufficient material in advance of the time needed at the job site to allow adequate time for testing as required by the progress of the work. Structural Soil (Select Fill) Material shall be stored in piles of approximately 400 cubic yards and each pile numbered for identification and testing purposes.
- C. If a volumetric system is employed during the mixing process, the bulk density of the soil component shall be checked for every 100 cubic yards of Structural Soil (Select Fill) Material mixed to assure to constant stone to soil ratio. If the density changes, the volumetric calibration should be changed accordingly.
- D. For each stock pile, not less than two samples of Structural Soil (Select Fill) Material weighing not less than ten pounds shall be collected for every 100 cubic yards of material produced. The sample stone-soil will be checked by splitting a known weight of material on a #4 sieve. The percentage of soil should be greater than 2% from the target ratio. The mean stone soil ratio for the stockpile will be calculated and included.

- E. In the event that the average stone-soil ratio varies significantly from the approved sample, as determined by the Site Architect, make adjustments to the mixing ratios and procedures. Re-mix and re-test the lot of soil that fails to meet the correct analysis after the adjustment has been made.
- F. After completion of the mixing and prior to the installation, protect the Structural Soil (Select Fill) Material Stockpile, adjust the mixing ratios and procedures. Re-mix and re-test any lot of soil that fails to meet the correct analysis after the adjustment has been made.

2.9 ORGANIC SOIL AMENDMENTS

- A. Compost: Well-composted, stable, and weed-free organic matter produced by composting feedstock, and as follows:
 - 1. Feedstock: Limited to leaves, may include sewage sludge, and may include animal waste.
 - 2. Reaction: pH of 5.5 to 8.
 - 3. Soluble-Salt Concentration: Less than 4 dS/m.
 - 4. Moisture Content: 35 to 55 percent by weight.
 - 5. Organic-Matter Content: 90 percent of dry weight.
 - 6. Particle Size: Minimum of 98 percent passing through a [4-inch (100-mm)] [2-inch (50-mm)] [1-inch (25-mm)] [1/2-inch (13-mm)] sieve.
- B. Sphagnum Peat: Partially decomposed sphagnum peat moss, finely divided or of granular texture with 100 percent passing through a 1/2-inch (13-mm) sieve, a pH of 3.4 to 4.8, and a soluble-salt content measured by electrical conductivity of maximum 5 dS/m.
- C. Wood Derivatives: Shredded and composted, nitrogen-treated sawdust, ground bark, or wood waste; of uniform texture and free of chips, stones, sticks, soil, or toxic materials.
- D. Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, debris, and material harmful to plant growth.

2.10 FERTILIZERS

- A. Fertilizer shall be standard commercial fertilizers conforming to the requirements of the current federal, state, and local laws.

PART 3 - EXECUTION

3.1 GENERAL

- A. Place planting soil and fertilizers according to requirements in other Specification Sections.
- B. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil.

3.2 PREPARATION OF UNAMENDED, ON-SITE SOIL BEFORE AMENDING

- A. Excavation: Excavate soil from designated area(s) to a depth of 6 inches (150 mm) or the existing depth of topsoil and stockpile until amended and screened.
- B. Unacceptable Materials: Clean soil of concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
- C. Unsuitable Materials: Clean soil to contain a maximum of 8 percent by dry weight of stones, roots, plants, sod, clay lumps, and pockets of coarse sand.
- D. Screening: Pass unamended soil through a 2-inch (50-mm) sieve to remove large materials.

3.3 PLACING AND MIXING PLANTING SOIL OVER EXPOSED SUBGRADE

- A. General: Apply and mix unamended soil with amendments on-site to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Lawn/Planting soil mix shall be topsoil amended per the results of the soil analysis when placing and mixing over exposed subgrade.
- C. Subgrade Preparation: Till subgrade to a minimum depth of 4 inches (100 mm). Remove stones larger than 1-1/2 inches (38 mm) in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
- D. Mixing: Spread unamended soil to total compacted depth of 4 inches (100 mm), but not less than required to meet finish grades after mixing with amendments and natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
 - 1. Amendments: Apply soil amendments, compost, and fertilizer, if required, evenly on surface, and thoroughly blend them with unamended soil to produce planting soil.
 - 2. Lifts: Apply and mix unamended soil and amendments in lifts not exceeding 8 inches (200 mm) in loose depth for material compacted by compaction equipment, and not more than 4 inches (100 mm) in loose depth for material compacted by hand-operated tampers.
- E. Compaction: Compact each blended lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698 and tested in-place.
- F. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.4 INSTALLTION OF THE STRUCTURAL SOIL MATERIAL

- A. Install the Structural Soil (Select Fill) Material in six inch lifts to the level and depth shown on the drawing. Deeper levels may be used if the installing Contractor can present documentation of a deeper effective compaction depth of the equipment used on the site, and with eight inch nuclear density data confirming acceptable compaction of the material.

1. Compact all materials to not less than 95% proctor of peak dry density from standard AASHTO compaction curve (AASHTO T 99) and in accordance with all applicable NJDOT specifications.
2. As excessive moisture can become problematic, check moisture content of the Structural Soil (Select Fill) Material in place before compaction proceeds. Have drainage systems functional to all egress of additional water in the event of rain. Do not allow water to be introduced to the profile before compaction excepting to purposely raise the moisture level of a dry mix. If moisture content is excessive, allow 24 hours to drain before compaction.
3. After completion of the installation of the Structural Soil (Select Fill) Material, protect the mix from contamination by toxic materials, trash and debris, and from water containing cement, clay, silt, or materials that will alter the particle size distribution of the mix.
4. Immediately after installation of the Structural Soil (Select Fill) Material, install the base course material or paving material specified and shown on drawings. Do not schedule or phase the progress of the work to install the Structural Soil (Select Fill) Material significantly prior to the installation of the next pavement layer.

3.5 PLACING MANUFACTURED PLANTING SOIL OVER EXPOSED SUBGRADE

- A. General: Apply manufactured soil on-site in its final, blended condition. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Lawn/Planting soil mix shall be manufactured topsoil amended per the results of the soil analysis when placing over exposed subgrade.
- C. Subgrade Preparation: Till subgrade to a minimum depth of 4 inches (100 mm). Remove stones larger than 1-1/2 inches (38 mm) in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
- D. Application: Spread planting soil to total compacted depth of 4 inches (100 mm), but not less than required to meet finish grades after natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
 1. Lifts: Apply planting soil in lifts not exceeding 8 inches (200 mm) in loose depth for material compacted by compaction equipment, and not more than 4 inches (100 mm) in loose depth for material compacted by hand-operated tampers.
- E. Compaction: Compact each lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698.
- F. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.6 BLENDING PLANTING SOIL IN PLACE

- A. General: Mix amendments with in-place, unamended soil to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Lawn/Planting soil mix shall be topsoil amended per the results of the soil analysis when placing, mixing, and blending over the soil in place.

- C. Preparation: Till unamended, existing soil in planting areas to a minimum compacted depth of 4 inches (100 mm). Remove stones larger than 1-1/2 inches (38 mm) in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
- D. Mixing: Apply soil amendments, compost, and fertilizer, if required, evenly on surface, and thoroughly blend them into full depth of unamended, in-place soil to produce planting soil.
 - 1. Mix lime and sulfur with dry soil before mixing fertilizer.
 - 2. Mix fertilizer with planting soil no more than seven days before planting.
- E. Compaction: Compact blended planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698.
- F. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.7 APPLYING COMPOST TO SURFACE OF PLANTING SOIL

- A. Lawn/Planting soil mix shall be topsoil amended per the results of the soil analysis when adding compost.
- B. Application: Apply 4 inches (100 mm) of compost to surface of in-place planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- C. Finish Grading: Grade surface to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.8 CLEANUP OF STRUCTURAL SOIL MIXED ON SITE

- A. Upon completion of the Structural Soil (Select Fill) Material installation operations, clean areas within the contract limits.
 - 1. Remove all Excess materials, equipment, trash and debris and leave site in a neat, clean appearance.
 - 2. Sweep, do not wash, all paving and other exposed surfaces of dirt and mud until the paving has been installed over the mix. Avoid washing the area until all paving has been completed.

3.9 FIELD QUALITY CONTROL

- A. Testing Agency: Contractor is to provide a qualified testing agency to perform tests and inspections.
- B. Perform the following tests:
 - 1. Compaction: Test planting-soil compaction after placing each lift and at completion using a densitometer or soil-compaction meter calibrated to a reference test value based on laboratory testing according to ASTM D 698. Space tests at no less than one for each 2000 sq. ft. (200 sq. m) of in-place soil or part thereof.

- C. Soil will be considered defective if it does not pass tests.
- D. Prepare test reports. Contractor to submit reports to Engineer.
- E. Label each sample and test report with the date, location keyed to a site plan or other location system, visible conditions when and where sample was taken, and sampling depth.

3.10 MEASUREMENT & PAYMENT

- A. No separate payment will be made for the soil preparation. Cost to be included in the associated items in the bid.

3.11 PROTECTION AND CLEANING

- A. Protection Zone: Identify protection zones according to requirements specified in Contract Documents.
- B. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Vehicle traffic.
 - 4. Foot traffic.
 - 5. Erection of sheds or structures.
 - 6. Impoundment of water.
 - 7. Excavation or other digging unless otherwise indicated.
- C. Remove surplus soil and waste material including excess subsoil, unsuitable materials, trash, and debris and legally dispose of them off Owner's property unless otherwise indicated.
 - 1. Dispose of excess subsoil and unsuitable materials on-site where directed by Owner.

END OF SECTION

SECTION 02922

TOPSOIL

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Furnish topsoil from approved sources located outside the project limits and place in locations requiring landscape planting mix for planting beds only in excess of the stockpiled topsoil stripped under this Contract.
- B. Related Requirements:
 - 1. Section 02310 – Earth Moving.
 - 2. Section 02924 – Turf and Grasses.
 - 3. Section 02930 – Plantings.

1.2 SUBMITTALS AND SAMPLES

- A. Submit to Engineer topsoil supplier and soil tests indicating Ph level, nutrient levels (nitrogen, phosphorus, potassium), percentage of sand, silt, clay and organic matter content and soluble salt content. Submit ½ lb. bag sample of topsoil.
- B. Submit to Engineer compost and peat moss manufacturer and supplier.

1.4 PRODUCT DELIVERY AND STORAGE:

- A. Obtain all legal rights or easements necessary from private Owners on whose lands topsoil may be stored. Furnish rights or easements in written form satisfactory to Engineer, and signed by both Contractor and property Owner involved, or their duly authorized representatives.

1.5 JOB CONDITIONS

- A. Existing conditions: Perform topsoiling only after preceding work affecting ground surface is completed.
- B. Environmental requirements: Do not prepare or place frozen or saturated topsoil.

C. Protection:

1. Protect trees and shrubs to remain as part of final landscaping against damage with snow fence or suitable fencing installed at the drip line. This shall be done prior to clearing or grading. No equipment, vehicles, materials shall be allowed within these limits.

PART 2 - MATERIALS

2.1 TOPSOIL

A. General requirements for on-site stockpiled topsoil or supplied from off-site sources:

1. Shall be SCREENED SANDY LOAM TOPSOIL. Containing no stones, lumps, roots or other objects larger than one inch in any dimension.
2. Free of broken glass.
3. Acid-Alkaline Range: pH 5.8 to 6.5.
4. Free of pests, pest larvae, and matter toxic to plants.
5. Maximum soluble salts: 500 ppm
6. Free of viable Bermudagrass, quackgrass, Johnsongrass, nutsedge, poison ivy, Canada thistle, and other objectionable grassy or broadleaf weeds.
7. Contain a minimum of 3% organic matter content and a maximum of 7%.

B. Topsoil mechanical content:

1. Gradation range:

Sand (2.00mm to 0.050mm) 65 - 70 percent
Silt (0.050mm to 0.005mm) 20 - 25 percent
Clay (0.005mm and smaller) 8 - 10 percent
Organic Content: 6-8 percent by weight.

- a. When one-half of the sand content is larger than 0.500 mm., the maximum sand content shall be seventy-five percent; and maximum clay content shall be fifteen percent.
- b. Lower limits of silt and clay shall be flexible to extent that soils with minimum combined silt and clay content of twenty percent shall be satisfactory. However, if more than one-half of the sand is larger than 0.500mm., then minimum clay content shall be fifteen percent, or the minimum combined silt and clay content shall be twenty-five percent.

2.2. SOIL CONDITIONERS

A. Peat: Aged mushroom compost and Canadian peat moss mix meeting the following specifications:

1. Double screened processed and pasteurized to remove weed seeds:
2. Containing no gravel, debris, or toxic compounds. Average Water Content: not to exceed sixty-five percent by weight.
3. pH Value: Not less than 4.

4. Minimum organic content: 75% percent by weight.
5. Inorganic materials: Consisting only of sand, silt and clay.

If required, add compost/peat mix to topsoil obtained from sources outside project limits, at rate necessary to attain minimum 5-8 percent organic content.

B. Organic Humus/Compost

C. Lime

1. Composition: Ground limestone with not less than 85 percent total carbonates, ASTM C602.
2. Gradation:
 - i. Minimum 50 percent passing No. 100 sieve.
 - ii. Minimum 90 percent passing No. 20 sieve.
 - iii. Coarser material acceptable provided rates of application are increased proportionately on basis of quantities passing No. 100 sieve.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Verify that clearing, earthwork, grading and other preceding work affecting ground surface have been completed.
- B. Verify that trees, shrubs, and other plants to remain as part of final landscaping have been identified.
- C. Assure that area to be topsoiled is cleared, shaped, dressed, and approved by the Engineer.
- D. Do not proceed with topsoil distribution until conditions are satisfactory.
- E. Preparation of topsoil subsoil:
 1. Shape and dress area to be topsoiled. This work includes grading to required lines and elevations; removal of all stones, clods, lumps two inches or larger in any dimension; removal of all wires, cables, pieces of concrete, tree roots, and debris or other unsuitable material.
 2. Do not proceed with installation of topsoil until this work has been approved by the Engineer.

3.2 INSTALLATION

- A. Soil Mixes:

1. Lawn Areas: Refer to Turf and Grasses Section 02924.
- C. Install topsoil or amended topsoil to the following minimum compacted depths:
 1. Seed and Sod Lawn Areas: Six inches (6")
- D. If quantity of topsoil obtained from stripping is insufficient for the project requirements, provide required topsoil from approved sources located outside project limits.
- E. Remove stones, lumps, roots, and other objects larger than one (1) inch in any dimension from graded topsoil surface.

3.3 COMPACTION

- A. All topsoil shall be installed to an eighty five percent (85%) maximum density dry density.

3.4 CLEANING

- A. In addition to cleaning required in General Conditions entitled, "Cleaning Up".
 1. Immediately clean spills, soil, and conditioners on paved and finished areas.
 2. Distribute, stockpile, or haul topsoil in excess of the quantity required for the project as approved by the Engineer.
 3. Dispose of protective barricades and warning signs at termination of maintenance period.

END OF SECTION

SECTION 02924
TURF AND GRASSES

PART 1 - GENERAL

1.1 SUMMARY

- A. Turf work shall include installation of turf, regrading (if required), and repair any areas disturbed by construction including, but not limited to those areas adjacent to roadways, sidewalks, buildings and fences. Turf repair shall include fertilizing, seeding, sod, mulching and providing topsoil as required.
- B. All imported soil or aggregate material utilized on this Project Site must be "clean fill" in accordance to N.J.A.C. 7:26E – 1.8. All imported soil and aggregate material utilized on this project must be clean fill generated from a virgin source/quarry or from source(s) other than a virgin source/quarry in accordance with the requirements as set forth in the Contract Documents.
- C. Section Includes:
 - 1. Section 02912 – Soil Preparation.
 - 2. Section 02930 – Plantings.

1.2 DEFINITIONS

- A. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- B. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 02912 "Soil Preparation" and drawing designations for planting soils.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 REFERENCE SPECIFICATIONS

- A. Standards for Soil Erosion and Sediment Control in New Jersey
- B. Circular 757, United States Department of Agriculture
- C. AASHTO T 88-70, Standard Method of Mechanical Analysis of Soils

- D. NJDOT Standard Specifications for Road and Bridge Construction, current standards
- E. New Jersey State Seed Law

1.5 INFORMATIONAL SUBMITTALS

- A. Certification of grass seed.
 - 1. Certification of each seed mixture for turfgrass sod. From seed vendor for each grass-seed/meadow-seed monostand or mixture stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity germination, and weed seed. Include the year of production and date of packaging. The certification of each seed mixture should include identification of source and name with telephone number of supplier.
- B. Product certificates. For soil amendments, fertilizers, pesticides, and herbicides; from manufacturer. Include product label and manufacturer's application instructions specific to this project.
- C. Qualification Data: For qualified landscape contractor.
- D. Material Test Reports: For imported surface topsoil. Refer to Section 02912 "Soil Preparation" Construction Specifications for further information.
- E. Maintenance Instructions: Recommended procedures to be established for maintenance of turf during a calendar year. Submit before expiration of required initial maintenance period ends.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape Installer whose work has resulted in successful turf establishment.
 - 1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - 2. Personnel Certifications: Installer's field supervisor shall have certification in one of the following categories from the Professional Landcare Network:
 - a. Landscape Industry Certified Technician - Exterior.
 - b. Landscape Industry Certified Lawncare Manager.
 - c. Landscape Industry Certified Lawncare Technician.
 - 3. Pesticide Applicator: State licensed, commercial.
- B. Soil Testing Laboratory Qualifications: An independent laboratory or university laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.
- C. Soil Analysis: For each unamended soil type, furnish soil analysis and a written report by a qualified soil-testing laboratory stating percentages of organic matter, gradation of sand, silt, and clay content; cation exchange capacity; sodium absorption ratio; deleterious material; pH; and mineral and plant-nutrient content of the soil.

1. A total of 3 soil analysis must be provided. Locations to be determined and approved by Engineer.
2. Testing methods and written recommendations shall comply with USDA's Handbook No. 60.
3. Report suitability of tested soil for turf/plant growth.
 - a. Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated. State recommendations in weight per 1,000 sq. ft. or volume per cu. Yd. for nitrogens, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory planting soil suitable for healthy viable plants and lawn.
 - b. Report presence of problem salts, minerals, or heavy metals (including aluminum, arsenic, barium, cadmium, chromium, cobalt, lead, lithium, and vanadium). If such problem materials are present, provide additional recommendations for corrective action.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.
- B. Sod (if required or directed by Engineer): Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.
- C. Bulk Materials:
 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas of plants, unless directed by engineer.
 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, or water conveyance systems.
 3. Accompany each delivery of bulk fertilizers, lime, and soil amendments with appropriate certificates. The products stored on site must be stored in a weather proof container that has the capabilities to be locked.
- D. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.8 PROJECT CONDITIONS

- A. Planting Restrictions: Coordinate planting periods with initial maintenance periods to provide required maintenance from date of planting completion.
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

1. When weather and soil conditions are suitable, the Owner and Engineer may allow seeding at other times.
- C. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of substantial completion:
1. Spring Planting: March 15 to May 15.
 2. Fall Planting: August 15 to October 15.

1.9 MAINTENANCE SERVICE

- A. Initial Turf Maintenance Service: Provide full maintenance by skilled employees of landscape contractor. Maintain as required in Part 3. Begin maintenance immediately after each area is planted and continue until acceptable turf is established but for not less than the following periods:
1. Seed Turf: 120 days from date of planting completion.
 - a. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.
- B. The contractor is required to provide a minimum guarantee period of 1 full year from acceptance for the lawn area. The guarantee period must consist of a lawn area that establishes a satisfactory stand of grass that is acceptable to the Owner and Engineer.
- C. Continuing Maintenance Proposal: From Contractor to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

PART 2 - PRODUCTS

2.1 SEED

- A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Rules for Testing Seeds" for purity and germination tolerances.
- B. Seed shall be labeled to show it meets the requirements of the New Jersey State Seed Law.
- C. Seed Species:
1. Seed Mixture shall be NJDOT Type A-3 conforming to the current NJDOT Standard Specification Table 917.05.01-5 requirements. Seed shall be labeled to show it meets the requirements of New Jersey State Seed Law.

2.2 TURFGRASS SOD

- A. Turfgrass Sod: Certified, Approved, and Number 1 Quality/Premium, including limitations on thatch, weeds, diseases, nematodes, and insects, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.
- B. Turfgrass Species: Sod of grass species as follows:
 - 1. Full Sun: Kentucky Blue Grass

2.3 FERTILIZERS

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Fertilizer for establishing turf is to have a commercial designation of 10-20-10 or a 1-2-1 ratio fertilizer containing a minimum of 5 percent nitrogen, 10 percent phosphoric acid, and 5 percent soluble potash. Applying fertilizer in a dry form with a mechanical spreader is to have a minimum of 75 percent passing a No. 8 sieve, a minimum of 75 percent is retained on a No. 16 sieve, and the maximum free moisture content is 2 percent. A delivery ticket denoting the weight and a certified chemical analysis of the composition of the fertilizer from the manufacturer must be submitted to the Engineer prior to installation.

2.4 MULCH

- A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.
- B. Hydro-seeding: Mulch shall be composed of cellulose or wood fiber products with no growth or germination inhibiting substances and shall be manufactured in such a manner that when thoroughly mixed with seed, fertilizer, organic stabilizer, and water (in accordance with NJDOT requirements) in the proportions specified, will form homogenous slurry which is capable of being sprayed to form a porous mat. The fibrous mulch in its air-dry state shall contain no more than 15% by weight of water. The fiber shall have a temporary green dye and shall be accompanied by a certificate of compliance stating the fiber conforms to NJDOT requirements.
- C. Fiber Mulch: Made from wood or plant fibers containing no growth inhibiting materials.
- D. Erosion control mulch blanket (NAG S75 or approved equal) shall be a machine-produced mat of organic, biodegradable mulch material (i.e.: straw, coconut fiber, or other approved materials) that is covered on both sides with a ½ x ½ inch photodegradable polypropylene mesh netting. The mesh netting must contain an accelerant that will cause breakdown of the mesh within 6 months. The NAG S75 or approved equal must conform to the property values specified in NJDOT Standard Specification Table 917.08.02-1.

2.5 TOPSOIL

- A. See Section 02912, Soil Preparation.

2.6 LIMESTONE

- A. Ground limestone shall contain a minimum of 50 percent total calcium.

2.7 PESTICIDES

- A. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
- B. Any and all applications will require proper notification in accordance with local, county, and state laws.
- C. Apply pesticides and other chemical products and biological control agents in accordance with requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Engineer and others in proximity to the work. Notify Owner before each application is performed.

2.8 WATER

- A. Clean, fresh and free of substances or matter that could inhibit vigorous growth of grass.

PART 3 - EXECUTION

3.1 TURF AREA PREPARATION

- A. General: Prepare planting area for soil placement and mix planting soil according to Section 02912 "Soil Preparation."
- B. Examine areas to be planted for compliance with requirements and other conditions affecting performance. Verify that no foreign or deleterious material or liquid has been deposited in soil within a planting area.
- C. Reduce elevation of planting soil to allow for soil thickness of sod (if required).
- D. Moisten prepared area before planting if soil is dry. Uniformly moisten excessively dry soil that is not workable and which is too dusty. Water thoroughly and allow surface to dry before planting. Do not create muddy soil. Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
- E. Suspend soil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.

- F. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by the Engineer and replace with new planting soil.
- G. Proceed with installation only after unsatisfactory conditions have been corrected.
- H. Before planting, obtain Engineer's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.2 SITE PREPARATION

- A. The site is to be prepared, seed and erosion control mulch blankets are to be installed, anchored and watered per the New Jersey Standards for Soil Erosion and Sediment Control plans, notes, and details.
- B. Grass which dies prior to 90 days is to be replaced by the contractor at his expense.
- C. Topsoil shall be stripped prior to rough grading to its full existing depth.
- D. Topsoil shall not be placed or spread until the area to be topsoiled has been shaped and dressed and found to be acceptable by the Engineer. Shaping and dressing shall include grading to required lines and elevations and the removal of all stones one (1) inches or larger in any dimension and the removal of all other debris such as wires, cables, tree roots, pieces of concrete, clods, lumps, and other unsuitable material. Reusing of existing on-site topsoil (if approved by Engineer) must be screened and sifted before topsoil is placed back on-site.
- E. After the area to be topsoiled has been found to be acceptable by the Engineer, the topsoil shall be spread in a uniform layer that will produce the prescribed compacted thickness.
- F. Topsoil shall not be delivered or spread in a frozen or muddy condition.
- G. After shaping and grading, all trucks and other equipment shall be excluded from the topsoiled area to prevent excessive compaction.
- H. During hauling and spreading operations, the Contractor shall immediately remove any material dumped or spilled beyond the limits of the area to be topsoiled.
- I. It shall be the Contractor's responsibility to restore to the line, grade and surface all eroded areas with approved material and to keep topsoiled areas in an acceptable condition.

3.3 PROTECTION OF ADJACENT AREAS

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting, turf area operations.
 - 1. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray (if allowed by Engineer).
 - 2. Protect stakes set by others until directed to remove by the Engineer.
- B. Contractor shall be responsible for protecting topsoiled areas outside the topsoil payment limits against damage caused by the delivery, handling or storage of materials, washouts due to

drainage diversion, or by his workmen or equipment. Any such damage shall be repaired by properly grading and adding topsoil at the Contractor's expense.

3.4 COMPACTED THICKNESS

- A. Topsoil shall be placed to a minimum compacted depth of (6) inches for lawn area, (12) inches for shrub planting areas, and 24 (inches for tree planting areas, or as noted on the contract drawings.

3.5 SOIL PREPARATION

- A. Soil surfaces in seeding areas shall be loosened to a depth of not less than six (6) inches, and all stones, rocks, roots, wires, clods and other debris measuring one (1) inch in any dimension shall be removed. Do not spread if soil or subgrade is frozen, muddy, or excessively wet. Surface irregularities shall be eliminated and the surface rolled smooth prior to seed application.
- B. When the soil to be seeded has a pH value of less than 6.0, ground limestone, which has been protected from moisture and is dry and free flowing, shall be evenly spread over the area to be seeded at a rate that will change the soil pH value to 6.5. The limestone shall be thoroughly incorporated into the upper three (3) to four (4) inches of soil by discing or other approved methods.
- C. When ground limestone is required, a minimum of 100 pounds of magnesium oxide per acre shall be provided.
- D. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus ½ inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit finish grading to areas that can be planted in the immediate future.
- E. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- F. Before planting, obtain Engineer's acceptance of finish grading, restore planting areas if eroded or otherwise disturbed after finish grading.

3.6 SEEDING RATES AND DATES

- A. Permanent seed mixture is composed of drought tolerant species that can thrive with low maintenance. The contractor should use Pennington Seed, Inc, Ernst Conservation Seeds, or approved equal for the seed mixes.
 - 1. Application Rates: 5 lbs/1,000 SF
 - 2. Seed mixture: NJDOT Type A-3 Grass Seed Mixture
 - 3. Seeding dates shall be the following:
 - a. Spring – March 15 to May 15
 - b. Fall – August 15 to October 15
 - c. Or approved by Engineer

- B. Temporary seed mixtures refer to the plans.

3.7 SEEDING

- A. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph (8 km/h).
 - 1. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.
 - 2. Do not use wet seed or seed that is moldy or otherwise damaged.
 - 3. Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer.
- B. Sow seed at the rates denoted in the construction specifications.
- C. Rake seed lightly into top 1/8 inch (3 mm) of soil, roll lightly, and water with fine spray.
- D. Straw Mulch: Protect seeded areas with slopes not exceeding 1:6 by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre (42 kg/92.9 sq. m) to form a continuous blanket 1-1/2 inches (38 mm) in loose thickness over seeded areas. Spread by hand, blower, or other suitable equipment. Anchor straw mulch by crimping into soil with suitable mechanical equipment or bond straw mulch with an approved product and rate by the Engineer. Take precautions to prevent damage or staining of structures or other plantings adjacent to mulched areas. Immediately clean damaged or stained areas.
- E. Hydroseeding: Mix specified seed, fertilizer, and fiber mulch in water using equipment specifically designed for hydroseeding application. Mix slurry with nonasphaltic tackifier. Continue mixing until uniformly to a thickness of 3/16 inch and roll smooth. Apply slurry uniformly to all areas to be seeded in a one step process. Apply slurry at a rate so that mulch component is deposited at not less than 1500 lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate.
- F. Peat mulch within 24 hours after completing seeding operations. Soak areas, scatter mulch uniformly to a thickness of 3/16 inch (4.8 mm) and roll surface smooth.

3.8 SODDING (IF REQUIRED)

- A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.
- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
 - 1. Lay sod across slopes exceeding 1:3.
 - 2. Anchor sod on slopes exceeding 1:6 with wood pegs or steel staples spaced as recommended by sod manufacturer but not less than two anchors per sod strip to prevent slippage.

- C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches (38 mm) below sod.

3.9 TURF MAINTENANCE

- A. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
 - 1. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
 - 2. In areas where mulch has been disturbed by wind or maintenance operations; add new seed, mulch, and anchor as required to prevent displacement.
 - 3. Apply treatments as required to keep turf and soil free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.
- B. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.
 - 1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 - 2. Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.
- C. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than one-third of grass height. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings.
 - 1. Mow to a height of 2 ¾ to 3 inches for cuts 1 to 3.
 - 2. Mow to a height of 2 ½ to 2 ¾ inches for cuts 3 to 6.
 - 3. Mow to a height of 2 to 2 ½ inches after the 6th cut.
 - 4. Mow to a height of 2 ¾ to 3 inches during hot and dry weather conditions.
- D. Post-Emergent Herbicides (Selective and Non-Selective): Apply only as necessary to treat already germinated weeds and in accordance with manufacturer's written recommendations.
 - 1. Use fertilizer that will provide actual nitrogen of at least 1 lb/1,000 square feet to turf area.

3.10 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas. In addition, the contractor must comply with the Remedial Action Work Plan with cleanup measures.

- B. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic (vehicle, construction equipment, and pedestrian). Maintain fencing and barricades throughout maintenance period and remove after plantings are established.
- C. Remove nondegradable erosion control measures after grass establishment period under the direction of the Engineer.

3.11 SATISFACTORY TURF

- A. Finished seeded areas shall be smooth and shall conform to the prescribed lines and elevations.
- B. When a satisfactory stand of grass and legumes, practically weed-free and containing plants in reasonable proportion to the various kinds of seed in grass seed mixture, is not established on areas of seeding, the deficient areas shall be refertilized, reseeded, and mulched by the Contractor until a satisfactory stand of grass and legumes is established without additional compensation.
- C. Turf installations shall meet the following criteria as determined by Architect:
 - 1. Satisfactory Seeded Turf: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. (0.92 sq. m) and bare spots not exceeding 5 by 5 inches (125 by 125 mm).
- D. Use specified materials to reestablish turf that does not comply with requirements and continue maintenance until turf is satisfactory.
- E. Hydro-seeding overspray: Installing contractor is responsible for washing or cleaning excess material off all area not intended to receive treatment per NJDOT, per Owner's and/or City of Camden requirements.
- F. Post-Emergent Herbicides (Selective and Non-Selective): Apply only as necessary to treat already germinated weeds and in accordance with manufacturer's written recommendations.
- G. Pesticide Application (if required): Apply pesticides and other chemical products and biological control agents in accordance with requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Engineer and others in proximity to the work. Notify Owner before each application is performed.

3.12 MEASUREMENT AND PAYMENT

- A. No separate payment shall be made for soil testing/analysis. Cost to be included in the bid.
- B. No separate payment shall be made for any lawn maintenance. Cost to be included in the bid.
- C. No separate payment shall be made for any pesticide application (if required). Cost to be included in the bid.
- D. No separate payment shall be made for any post-emergent herbicides (selective and non-selective). Cost to be included in the bid.

END OF SECTION

SECTION 02930

PLANTINGS

PART 1- GENERAL

1.1 RELATED DOCUMENTS

- A. General Conditions, Special Contract Requirements and Division 01 Specification sections, apply to work of this section.
- B. Section 02270 – Erosion and Sediment Control.
- C. Section 02310 – Earth Moving.
- D. Section 02912 - Soil Preparation.
- E. Section 02922 – Topsoil.

1.2 SCOPE OF WORK

- A. This work shall consist of all labor, materials, transportation, and equipment for planting, preparation, and furnishing all trees, shrubs, perennials, ornamental grasses, and groundcovers as shown in the plans.
- B. The cost of all work and materials required for the construction of the new tree pits includes materials, labor, transportation, equipment, planting soil, granite block, grit, root barrier, and steel edging should be included in the tree pit bid price.
- C. The cost of all work and materials required for the planting of the trees, shrubs, perennials, ornamental grasses, and groundcovers includes plant material, installation, labor, transportation, equipment, gator bags, and maintenance shall be included in the bid price for the new tree. The cost of all work and materials required for wood mulch (where indicated) includes wood mulch material, labor, installation, transportation, and equipment in the wood mulch bid price.
- D. If existing trees require removal due to construction that are not already noted on the drawings to be removed, the Contractor shall furnish, plant and maintain replacement trees of equal value as directed by the owner.
- E. In addition to the work indicated, landscape work includes restoring all areas within and without the limit of work disturbed by work of contract and coordination of work with other contractors/subcontractors.
- F. The work of this Section includes, but is not limited to, the following:
 - 1. Trees, shrubs, perennials, ornamental grass, and groundcover.
 - 2. Mulch, fertilizer and other soil amendment applications to suit plant type during and after planting.
 - 3. Plant anchoring system.
 - 4. Temporary erosion control.

5. Protecting the completed work.
6. Post-installation maintenance.
7. Warranty.
8. Coordination with other trades.
9. Clean up.

1.3 STANDARDS

- A. ASNS: "American Standard for Nursery Stock," ANSI, Z60.1 latest edition, published by the American Association of Nurserymen, (AAN).
- B. SPN: "Standardized Plant Names," latest edition, by the American Joint Committee on Horticultural Nomenclature (AJCHN).
- C. Agricultural chemist: Qualified, experienced public or private soils testing laboratory, capable of providing test results as specified, and approved by the Engineer.
- D. NJDOT: New Jersey Department of Transportation Standard Specifications, latest edition.
- E. ASTM: American Society for Testing and Materials, latest edition.
- F. AASHTO: American Association of State Highway and Transportation Officials, latest edition.

1.4 SUBMITTALS

- A. Planting Schedule: Submit proposed planting schedule in writing to Engineer 60 working days prior to starting work, indicating anticipated dates and locations for each plant installation. Proposed schedule must comply with the requirements of the section 1.5 Quality Assurance and Guarantee.
- B. The methods for temporary storage of planting materials.
- C. Maintenance Schedule: Provide written maintenance schedule detailing work to be performed by contractor during maintenance period.
- D. Submit names of nurseries and plants being supplied by individual nurseries for inspection purposes. Provide name and location of nursery, contact person, and telephone number.
- E. Submit product data, samples, test reports, and certificates, or plant material inspected at source of supply, does not constitute final acceptance.
- F. Testing: Submit written statement from proposed agricultural chemist that required test can be performed in accordance with specifications.
- E. The contractor is to submit bark mulch sample and information when applicable.
- F. The contractor is to submit literature or tear sheets giving name of product, manufacture's name and compliance with specifications.

1. Root barrier.
 2. Anti-desiccant.
 3. Herbicides, pesticides, and fungicides (include safety information).
 4. Fertilizer (include guarantee analysis and weight for packaged material).
- G. Certifications: Submit with certificate names of materials and manufacturer. Plant material: furnish certificates of inspection as may be required by Federal, State or other authorities that plant material is free of disease or hazardous insects.

1.5 QUALITY ASSURANCE AND GUARANTEE

- A. Comply with applicable federal, state, county, and local regulations governing landscape materials and work.
- B. Landscape work shall be performed by a single firm specializing in landscape work. Employ only experienced landscape personnel. Provide adequate supervision by a foreman with a degree in horticulture, landscape architecture, forestry, or related field, and a minimum of 5 years experience in the landscaping field.
- C. Substitutions: Substitutions of landscape materials are not allowed. If specified landscape material is not obtainable, submit written proof of unavailability to the Engineer, together with proposal for use of equivalent material. It is recommended Landscape Contractor must have contacted a minimum of seven (7) different nurseries specifying certain plant material is not obtainable. When authorized, adjustment of contract will be made by written change order.
- D. Provide quantity, size, genus, species, and variety of plant materials indicated and scheduled for landscape work. Comply with applicable requirements of ASNS, ANSI, Z60.1-069, of the AAN.
- E. Arrange a preconstruction meeting between the Engineer, General Contractor, and Landscape Subcontractor. Such meeting shall seek to review the proposed plant schedule, source of plants, consideration of substitutions, general review of specifications and planting procedures.
- F. Measurements: The measurements specified are the minimum size acceptable and are the measurements after pruning, when pruning is required.
 1. Measure trees and shrubs with branches and trunks or canes in their normal position.
 2. Do not prune to obtain required sizes.
 3. Take caliper measurements 6" above ground for trees up to 4" caliper, and 12" above ground for larger sizes.
 4. Measure main body of shrub for height and spread dimensions; do not measure from tip to tip of branches or roots.
 5. Branch structure for proposed trees should start six (6) feet from the finished grade.

G. Maintenance and Guarantee

1. General:

- a. Guarantees shall be in addition to, and not a limitation of, other rights the owner may have against the Contractor under the contract documents.
- b. The Contractor must guarantee all plant material for the specified guarantee period, and proper maintenance is an integral part of such guarantee.
- c. All costs of guarantee including maintenance must be included in the bid price for planting. No extra payment will be allowed for any aspect of guarantee or maintenance.

2. Definitions:

"Plant Material" includes all vegetation of any species, installed by any means including transplanting, on site propagation, or other methods.

"Installation" refers to placement of plant material as defined by the plans and specifications and in accordance with sound horticultural practice.

"Maintenance" refers to those practices required after the completion of installation to keep plant material alive and healthy, free from pests, diseases, weeds and defects. In case of unsatisfactory growth, such practices as trimming, pruning or otherwise controlling the plant materials to fit the requirements of the design, are to be based on sound horticultural methods and vary from species to species and in accordance with the regional environment.

"Guarantee" refers to the guarantee that at a specified date the plant material will be alive and in healthy condition described under "Maintenance" above.

The activities of maintenance are a necessary part of any guarantee of plant material. The guarantee period is as defined below.

"Guarantee" also refers to the guarantee that all plant material is true to type, species, and variety. Claims against the trueness-to-type guarantee must be made by the owner within 6 months of the first appearance of flowers or other conclusive botanical identifying features.

3. Period of Maintenance and Guarantee

Maintain all plant material from the time they leave the supplier's nursery or vehicle and continue to maintain all plant material through the installation period as defined below. The Maintenance and Guarantee period shall be for 24 months after the installation acceptance of the Engineer. The guarantee includes that the maintenance will be correctly performed throughout the guarantee period. Where more than one period might be applicable to a species, the longest of the applicable periods shall apply unless specifically limited by this contract.

The Period of Plant Establishment Maintenance and Replacement, shall begin after the acceptance at Final Guarantee Inspection. (24 months from installation acceptance).

The Contractor will not be held responsible or liable for damages by animals, malicious or careless damage by human agencies over which the contractor has no control, or by fire and storm damage.

H. Inspections:

1. The Engineer retains the right to inspect all plant material at the nursery. The Contractor maybe required to reimburse the Engineer for travel to nurseries including air travel, overnight stays or mileage from the project site.
2. An Installation Inspection of this work will be made by the Engineer upon written notification by Contractor of completion. Under normal circumstance this date shall be within two working weeks of written notification.
 - a. Criteria - Installation Inspection will be for apparent correctness of the installation of plant material, verification of quantities, proper maintenance since time of planting, specified species and specified size.
 - b. Acceptance - Acceptance of plant material at Installation Inspection will be the basis for invoicing, excluding any amounts tied to guarantee fulfillment.
 - c. Rejection and Replacement - Replace plant material rejected at Installation Inspection immediately. Where immediate replacement would result in planting outside Spring or Fall planting season, replace during the next planting season. Each replacement resulting from rejection at Installation Inspection will be considered for inspection and guarantee as if it were a new plant material, and all guaranteed dates will correlate to the date of the acceptable replacement. Repeated replacement may be required until the criteria of the Installation Inspection are met.

3. Two guarantee inspections will be made within the guarantee period, as follow:

a. First Guarantee Inspection

Season when Installed	Time Elapsed since Install'n Acceptance	Date of First Guarantee Inspection
SPRING	3 1/2 to 6 months	On or near Sept. 1 year of installation
FALL	3 1/2 to 6 months	On or near April 1 year following installation

1. Notify the Engineer in writing of pending inspections approximately two weeks in advance and arrange a mutually convenient date. Inspections scheduled on or near April 1 may be adjusted to ensure that the plant material is not dormant at the time of inspection.
2. Criteria - The First Guarantee Inspection will be for survival, health, acceptance growth and fullness, durability of installation, proper maintenance practices, and trueness to type.

3. Acceptance - Acceptance at the First Guarantee Inspection will not be the basis of any invoice unless a specific progress payment agreement is listed below.
 4. Rejection and Replacement - Replace rejected plant material areas during the planting season most closely following the inspection.
- b. The final Guarantee Inspection shall be conducted on or near the date two years after an accepted Installation Inspection. Notify the Engineer at least two weeks in advance and arrange a mutually convenient date.
1. Criteria - Same as the First Guarantee Inspection
 2. Acceptance - Acceptance at the Final Guarantee Inspection will be the basis for final payment.
 3. Rejection and Replacement - See 1.5 Quality Assurance and Guarantee G.,2.,c.
 4. The Engineer retains the right of inspection at any time during the work to inspect plant material for true species, variety, size and condition of root systems, insects, injuries, and latent defect, and to reject unsatisfactory or unacceptable plant material.
- I. Coordinate with work of other sections.
- J. If underground obstructions are encountered, notify Engineer as to whether an adjustment of location for plant material is possible within the design intent. If the contractor is allowed to adjust the location, rather than remove the obstruction, he/she shall make the change at no expense to the owner.
- K. Planting trees, shrubs, perennials, ornamental grasses, and groundcovers that are considered fall dig hazard plants, shall not relieve the Contractor of the obligation of guarantee.

PART 2 - PRODUCTS

2.1 PLANTING SOIL

- A. See Section 02912 Soil Preparation

2.2 SOIL AMENDMENTS

- A. Organic Matter: on dry wt. basis- 90% or better, pH factor 3.5-5.5.
- B. Fertilizer: Use 20-10-5 (10 gram tablets) slow release, plus iron supplement as required. Soluble fertilizer, with analysis of 20-20-20 or 23-29-27, such as Ra-Pid-Gro or approved equal for non-ericaceous plant material, unless otherwise recommended by the soil test results. Miracid, or an approved equal for ericaceous and other evergreen plant materials, unless otherwise recommended by soil test results.

2.3 MULCH

- A. Stone Mulch

1. Stone mulch to be free of foreign material, any substance toxic to plant growth, mature seed-bearing stalks or roots of prohibited and noxious weeds, and to be free of insects.
2. Mulch to be suitable stone of a coarse aggregate, approximate No. 4 size, conforming to the requirements of the NJDOT Standard Specifications for Road and Bridge Construction, latest edition. Sample shall be submitted for approval of size and color.

B. Organic Wood Mulch

1. Mulch to consist of fibrous organic material, resistant to displacement by wind and free of foreign material, coarse stems, and any substance toxic to plant growth, and to be free of insects, mature seed-bearing stalks or roots of prohibited and noxious weeds.
2. Mulch to be suitable double shredded hardwood bark, aged hardwood or pinewood bark, not decomposed, size passing one inch square mesh 100% and retained 1/8 inch square mesh 70%.

2.4 PLANTS

A. General

1. Plant stocks:
 - a. Plants shall be of specimen quality, exceptionally heavy, symmetrical, dense plants so trained or favored in development and appearance as to be unquestionably and outstandingly superior in form, number of branches, compactness and symmetry. Trees are to have a straight trunk with leader intact undamaged and uncut. Tree branch structure should start a minimum of seven (7) feet above finished grade. Landscape contractor must get as close as possible to this height.
 - b. Plants shall be nursery grown under climatic conditions similar to those in the locality of the project for at least two years.
 - c. Provide healthy stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
 - d. Plants shall have fully developed root systems and have roots pruned two years prior to being dug.
 - e. Engineer to approve all plant material before installation.
 - f. Provide balled and burlapped stock (B&B) with a compact natural ball of earth, firmly wrapped and tied in burlap so that upon delivery the soil in the ball is still firm and compact about the small feeding roots. Root ball sizes shall be in accordance with standards specified in ASNS and must be sufficient to encompass the fibrous root feeding systems necessary for healthy development of the plant. B&B plants for spring planting shall not be dug prior to March 1 of the installation year. B&B plants for fall planting shall not be dug prior to October 1 of the installation year. B&B plants for fall planting that are a fall dig hazard must already be pre-dug before the fall installation year.

- g. Trees with abrasion of bark, sunscalds, disfiguring knots, or fresh cuts of limbs over 1 ¼ inch which have not completely callused will be rejected.
- h. The thickness of each shrub, perennial, ornamental grass, and groundcover shall correspond to the trade classification "No. 1". Single stemmed or thin plants will not be accepted. The side branches must be generous well twigged and the plant as a whole well branched to the ground. The plants must be in moist condition, free from dead wood, bruises or other root or branch injuries.

2. Size:

- a. Provide plant materials of size indicated on plan and with proportions and shape as defined in ASNS, ANSI, Z60.1 of the AAN for individual species. Trees, shrubs, perennials, ornamental grass, and groundcover of larger size than specified may be used if acceptable to the Site Engineer, in which case size of roots and rootball must be increased proportionally.
- b. Plants that have the measurements specified, but do not pass the normal balance between the height and spread shall be rejected. Thin, poorly branched, or sparsely rooted plants will be rejected regardless of whether they have the minimum technical requirement of ASNS, ANSI, Z60.1 of the AAN.
- c. If a range of size is given, no plant shall be less than the minimum size. More than 50% of the plants shall be as large as the median size or larger.

3. Labels: Provide a securely attached waterproof tag bearing legible weather resistant ink designating correct common name, botanical name, size and condition for each plant.

- a. Where formal arrangement or consecutive order of plants is shown, select stock for uniform height and spread and label with number to ensure symmetry in planting.
- b. Attach directly to plants in a manner that shall not restrict growth.

B. Shade, Flowering Trees and Deciduous Shrubs: Balled and Burlapped. (B & B)

- 1. Container grown stock is acceptable in lieu of balled and burlapped stock, subject to size limitations specified in ASNS, ANSI, Z60.1 of the AAN.

C. PERENNIALS, ORNAMENTAL GRASSES, & GROUNDCOVERS

- 1. Provide well-rooted and established plants in containers as indicated in the plant list and conform to ASNS standards for species and sizes. All plants to be a minimum of 3 years in age for containers. Plug plants must be a minimum of three (3) to six (6) months and must be in similar size to the following:

<u>Container Size</u>	<u>Size</u>
LP32	4" deep x 2.22" square, 32 per to a standard nursery liner
LP50	5" deep x 2" square, 50 per to a standard nursery liner

2.5 MISCELLANEOUS LANDSCAPE MATERIALS

- A. Burlap: AASHTO-M 182, Class 1
- B. Twine: To be of natural, biodegradable jute materials. Synthetic materials are not acceptable.
- C. Water: Clean, fresh, potable and free from substances harmful to plant material.
- D. Anti-desiccant spray materials: Wiltpruf or ASTM-E96 in liquid form. Deliver in manufacturer's original containers, fully identified, with instructions for mixing and application included on label.
- E. Herbicides, fungicides, pesticides: approved before use for type and rate of application by the Engineer and local, state, and/or federal agencies with jurisdiction.
- F. Root Barrier: Root Barrier shall be Biobarrier I, 19.5 inches in width, consisting of the geotextile Typar to which nodules of polyethylene are permanently attached, which deliver a continuous amount of trifluralin, a root growth inhibitor, as manufactured by Reemay, Inc. (800-25-ROOTS) and as distributed by GeoTech Services, Inc., 70 Vale Road, Brookfield, CT 06804 (800-633-4GEO) or approved equal. The root barrier (if required) will be installed under the direction of the Engineer.
- G. Mulch Material: Organic mulch. Double shredded hardwood bark for each tree pit. Mulch must be placed inside each tree pit within 24 hours of plantings installed. See plans for the required depth and location. The Contractor must submit specifications on the mulch being used to the Engineer for approval.
- H. Gator Bags or approved equal: 20-gallon single bag. Deliver in manufacturer's original containers, fully identified, with instructions for installing around each tree.

PART 3-EXECUTION

3.1 PLANTING SEASON

- A. The planting season refers to the period for installation of plant material. Under normal conditions, the approved planting seasons are as follows:

 Spring: March 15 - May 15.
 Fall: September 15 – November 23

 In case of unusual climate conditions which could threaten the survival of plantings, the Engineer may extend or decrease the approved planting season.
- B. The decision of the Engineer with regard to changed planting seasons shall be taken in consultation with the Contractor, but shall be final, and shall not be grounds for any claim whatsoever by the Contractor, nor shall the normal planting seasons defined above be construed as a guarantee that the contractor can in fact plant during any given day within such seasons.
- C. Fall Dig Hazard: Many species of trees or shrubs are considered "Fall Transplanting Hazards" by the nursery trade. Fall Transplanting Hazards are to be transplanted only during the spring digging season. The contractor must identify Fall Transplanting Hazards from the plant schedule and factor the proper handling of these plants into the overall sequencing of construction. The contractor must notify the Engineer of any conflicts arising from this analysis of the plant list and schedule.

3.2 DELIVERY

- A. Notify the Engineer at least 48 hours in advance of any delivery of plant materials to the site. A legible copy of the invoice, showing kinds and sizes of materials included for each shipment shall be furnished to the Engineer for review.
- B. The preparation of plants at nursery: Immediately after digging, spray evergreen and deciduous plant materials in full leaf with anti-desiccant, applying an adequate film over trunks, branches, twigs and foliage.
- C. Deliver trees, shrubs, perennials, ornamental grasses, and groundcovers after preparations for planting have been completed, and plant immediately.
 - 1. Balled and Burlapped plants:
 - a. Deliver only freshly dug trees and shrubs. See section 2.4 A.I.F
 - b. Do not prune prior to delivery unless other wise directed by the Engineer.
 - c. Provide protective cover during delivery.
 - d. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches, or destroy natural shape.
 - e. Do not drop any plant stock during delivery.
- D. Packaged Materials: Deliver packaged materials in containers showing weight, analysis, and manufacturer's name. Protect materials from deterioration during delivery and while stored on site.
- E. Plants transported to the project in open vehicles shall be covered with tarpaulins or other suitable covers securely fastened to the body of the vehicle to prevent injury to the plants. Closed vehicles shall be adequately ventilated to prevent overheating of the plants. Evidence of inadequate protection following digging, carelessness while in transit, or improper handling or storage shall be cause for rejection. All plants shall be kept moist, fresh, and protected. Such protection shall encompass the entire period during which the plants are in transit, being handled, or are in temporary storage.

3.3 STORAGE

- A. Balled and Burlapped Plants: If planting is delayed for more than 6 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist by watering and covering with burlap, mulch, or other acceptable means of retaining moisture.
- B. Container Grown Stock: Keep plants moist and do not remove from containers until immediately before planting.

3.4 PLANTING BED AND PIT PREPARATION

- A. Trees and Shrubs:

1. Layout and stake individual tree, shrub, perennial, ornamental grass, and groundcover locations and areas for multiple plantings. Obtain the Engineer's acceptance of layout before starting planting work. Make adjustments as may be requested.
2. Site Preparation
 - a. Completely clean up and remove all trash and debris from the proposed planting area.
 - b. Remove existing vegetation and turf. Dispose of such material outside of the owner's property; do not turn over into soil being prepared for planting beds.
 - c. Excavate historic fill, install continuous geotextile filter fabric (if required, approved by Engineer), and install the appropriate soil below:

Trees: install planting soil mix
Shrubs: install planting soil mix
Ornamental Grass: install planting soil mix
Perennial: install planting soil mix
Groundcover: install planting soil mix
 - d. Till soil to a minimum depth of 12 inches or to an approved depth.
 - e. Remove lumps, clods, stones, roots, and other extraneous matter that is not acceptable to the Engineer, leaving fine-textured homogeneous topsoil.

B. Perennials, Ornamental Grasses, and Groundcovers

1. For each cleared area labeled perennial, ornamental grass, and groundcover, spread organic material and fertilizer if needed. Roto-till top into 12 inches of topsoil until area is loose and friable.
2. Lightly compact and rake area to its original line and grade. Mix the soil amendment to reach the standard soil requirement as indicated in the specifications and/or soil report.

3.5 EXCAVATION FOR TREES AND SHRUBS:

- A. Excavate pits, beds, and trenches with vertical sides, leaving bottom of excavation slightly raised at center to provide proper drainage. Loosen hard subsoil at sides of excavation.
1. For Balled and Burlapped (B & B) trees and shrubs, make excavations at least 24" wider than the diameter of the ball (12" all around ball) and equal to the depth of the ball.
 2. Excavate for container grown plants as specified for balled and burlapped stock but using container width (diameter) and depth in place of ball diameter and depth.
 3. For all tree cluster plantings bed approximately 1 foot outside of each plant's root ball excavation. Entire bed shall be mulched.
 4. The size of the planting bed for perennials, ornamental grasses, and groundcovers should be approximately 1 foot outside the boundary area.

- B. Contractor is responsible for confirming that water drains from the planting pit and mulch beds. If additional drainage is required, inform the Engineer and obtain instructions before planting.
- C. All subsoil and debris from excavation shall be removed from the site. Do not mix with planting soil or use as back-fill.

3.6 PLANTING TREES AND SHRUBS

A. Balled and Burlapped Stock:

1. Set plants in pit with top of ball 1-2" above adjacent finished grade. Plants shall be set in center of each pit plumb and straight and in accordance with the planting details.
2. Remove burlap and any non-biodegradable material from top third of ball retain burlap on bottom of ball. Do not pull burlap out from under the balls.
3. Place backfill, topsoil, and/or planting soil in 2" to 3" thick layers under the direction of the Engineer. Tamp each layer by hand to compact backfill and eliminate voids. Maintain plant plumb during backfilling.
4. When excavation is approximately 2/3 full, saturate backfill with water. Repeat watering until no more water can be absorbed.
5. Place and tamp remainder of backfill and water again.
6. Dish top of backfill 2 inches to hold water, unless specified otherwise in these specification.
7. Spread mulch to depth indicated on drawings. Use organic mulch unless otherwise indicated on the drawings.
8. For deciduous trees over 4" in caliper the orientation of the trunk is to match the orientation of the nursery. This is true for only certain species and will be as directed by the Engineer.

B. Container Grown Plants: Place and backfill as specified for balled and burlapped stock, and as follows:

1. Remove plants from containers by cutting or inverting the container. The root earth mass shall receive three vertical cuts, spaced equidistantly about the perimeter and a cross on the bottom. Each cut about ½ inch deep, shall begin at the top of the root earth mass and continue to the bottom.
2. Immediately before placing, remove container.
 - a. Metal Cans: Cut two sides from bottom of can to within 1 inch of top, using approved can cutter, remove container.
3. See 3.6- A.1 through A. 8

C. Anti-desiccant: Apply using spray equipment to provide adequate film over trunks, branches, stems, twigs, and foliage.

1. If deciduous trees or shrubs are moved in full leaf, spray with anti-desiccant at nursery immediately before moving and again 2 weeks after planting.

3.7 PRUNING

- A. Neatly prune deciduous plants to preserve their natural form and character and as directed by the site Engineer. Limit pruning to the minimum necessary to remove injured twigs and branches and to compensate for the loss of roots during transplanting, but never to exceed 1/5 of the branching structure. Do not prune leaders. Use only workmen experienced in pruning for this work, in accordance with standard horticultural practices.

3.8 GATOR BAGS

- A. Trees:

1. Installation

- a. Wrap both sides around the trunk until zippers meet.
- b. Zip both sides of bag together from bottom to top.
- c. Lift up tag at top of bag to expose fill opening.
- d. Insert water hose (up to 3-inch diameter), into fill opening.
- e. Turn on water supply and begin filling with water. The water must be clean water and free of any material that may be harmful to the plant material.
- f. Fill the bag to approximately ¼ capacity and gently lift up on black straps at top of bag to expand bottom.
- g. Fill bag to the maximum capacity allowed for the bag.
- h. Repeat items c through g at least two (2) times a week during the first year of the maintenance period. If the weather conditions warrant the process to be repeated sooner, then the contractor is to repeat the process to keep the trees healthy and not stressed out.
- i. The contractor is to remove the bags every other week, unless weather conditions are not favorable.

2. Warranty

- a. Per manufactures recommendations.
- b. Owner will not compensate for any malfunctions with bags.

3. Maintenance

- a. The contractor is responsible for all bags to be percolating. Any bags that do not percolate must be cleaned and/or replaced within a two week notice by Site Engineer.

3.9 PLANTING PERENNIAL, ORNAMENTAL GRASS, AND GROUNDCOVER

- A. Plants:
 - 1. Spacing: Space plants as indicated on plans
 - 2. Dig holes large enough to install continuous geotextile filter fabric (if required) and allow for spreading of roots; backfill with planting soil.
 - 3. Work soil around roots to eliminate air pockets. Leave a slight saucer-shaped indentation around plants to hold water.
 - 4. Place ground cover plants at the same level as the plants were grown in the nursery. Firm soil around the plant.
- B. Spread mulch after planting perennial, ornamental grass, groundcover. In a large area if mulch was spread before planting perennial, ornamental grass, and ground cover, the Contractor shall guarantee all roots to be below the surface of the planting soil.
- C. Water thoroughly after planting. Do not wash soil onto crowns of plants.
- D. Weed Killer: Pre-emergent weed killer may be used at contractor's option, provided plants showing loss of health or vigor resulting from weed killer use are replaced by contractor

3.10 MAINTENANCE

- A. General: The Contractor shall monitor and maintain all plant material and all work incidental thereto by performing the following and all other operations necessary for care and promotion of root growth and plant life. This is so that all plant material is in an approved condition during the entire period of work under the contract up to the expiration of the guarantee period. The guarantee period; expires 24 months after the acceptance of the First Installation Inspection by the Engineer.
 - 1. Watering and Draining: Plants shall be watered suitably to maintain the plant's health. During wet periods, omit watering. If excessively poor drainage or waterlogged conditions prevail, recommend and obtain approval from the Engineer for provisions to permanently drain or relocate the plant. Check relative moisture content of soil for typical areas of ground cover, shrub, and tree plantings weekly during the months of July and August. Water plants sufficiently to maintain relative moisture content of 25 to 30 percent. This specification to prevail unless as directed otherwise, elsewhere in the specification.
 - 2. Weeding: April through November, weed the mulched area around each perennial, ornamental grass, shrub and tree and in bedded areas once every two weeks. Use of chemical weed killers is the responsibility of the Contractor. Remove weeds from the project site.
 - 3. Controlling Insects and Diseases: Treat plants year-round with an approved chemical spray or absorbent chemical as required for insect, disease and fungus growth. The Contractor shall assume full responsibility for effectiveness of the treatment and plant survival. Protect vehicles and construction in the vicinity from damage or staining.
 - 4. Replacing Plants: During the maintenance period, remove or cut off at the ground line any plant materials that are dead, or that, in the opinion of the Engineer, are in an unhealthy, unsightly, or unacceptable condition. Complete replacement within one week of being

notified by the Engineer, or at any time when the Contractor observes dead plants on the site. Where immediate replacement would result in plant material being installed outside the respective planting season, replace during next planting season. New plant material installation and placement shall comply with the requirements of the particular specification for the original planting and at no additional cost to the owner. Fill all pits, remove all debris, and repair all damaged or unsafe conditions caused by removal operations. Replacement plantings shall be guaranteed true to name, variety, and size of specified materials guaranteed healthy for a period of two years from the date of replanting or for the duration of the original two year maintenance period, whichever is longer.

- B. Trees, shrubs, perennials, ornamental grasses, and groundcover: Along with the regular maintenance methods as indicated in 3 .10A General, the trees, shrubs, perennials, ornamental grasses, and groundcover shall be treated as follows:
1. Pruning: Prune plants during each growing season as necessary to remove crossing branches, dead and/or infected growth and suckers.
 2. Fertilizing: Fertilize all trees and shrubs once a year between May 15 and July 1 with 15-30-15 soluble fertilizer or equal, at the rate of one pound of fertilizer to 30 gallons of water. Apply mixture at rate as per manufacturer's recommendations. Do not fertilize at installation.
 3. Mulching: Provide sufficient mulch to maintain the depth as specified in the plans and specifications throughout the maintenance period.

END OF SECTION

SECTION 02932

ORNAMENTAL FENCES AND GATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. The Contractor by submitting the bid must acknowledge that they have visited the site and understands the bid submitted meets the intent of the drawing. The intent is to supply and construct the fence, pedestrian and driveway gates per the drawings.
- B. Contractor will be required to coordinate and work with Engineer and City on installation and removing and replacing existing ornamental fence and gates at Northgate Park prior to starting work.

1.3 SYSTEM DESCRIPTION

- A. The manufacturer shall supply a total industrial steel fence system of the Barcelona 2-rail, 6' x 6' fence (color is bronze) and Barcelona 2-rail, 6' tall, 10' wide double swing gate (color is bronze) design to match existing type fence and gates at Northgate Park. The system shall include all components (i.e., pickets, rails, posts, gates, locks, and hardware) required.

1.4 QUALITY ASSURANCE

- A. The Contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.
- B. The contractor installing fences and gates must have a representative that has a minimum of 5 years experience onsite. An experience installer who has completed fences and gates similar in material, design, and extent those indicated for this project and whose work has resulted in construction with a record of successful in-service performance.
- C. A meeting between the Engineer and contractor must be established prior to the fence contractor starting work.
- D. The contractor is required to follow the requirements established in the plans and Construction Facilities and Temporary Control specifications and/or under the direction of the Engineer in establishing temporary traffic and pedestrian control for the project.

1.5 REFERENCES

- A. ASTM A653/653M – Standard Specification for Steel Sheet, Zing-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
- B. ASTM A123 – Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products.
- C. ASTM A153 – Zinc Coating (Hot Dip) on Iron and Steel Hardware.

- D. ASTM A116 – Metallic Coated Steel Woven Wire Fence Fabric.
- E. ASTM A53 – Pipe, Steel, Black and Hot Dipped Zinc Coated, Welded and Seamless.
- F. ASTM A1001 – Steel, Sheet and Strip, Hot Rolled, Carbon, Structural, High Strength Low Alloy with Improved Formability and Ultra High Strength.
- G. ASTM B117 – Practice for Operating Salt-Spray (Fog) Apparatus.
- H. ASTM D523 – Test Method for Specular Gloss.
- I. ASTM D822 – Practice for Conducting Tests on Pain and Related Coatings and Materials Using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
- J. ASTM D1654 – Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
- K. ASTM D2244 – Test Method for Calculations of Color Differences from Instrumentally Measured Color Coordinates.
- L. ASTM D2794 – Test Method for Resistance of Organic Coatings to The Effects of Rapid Deformation (Impact).
- M. ASTM D3359 – Test Method for Measuring Adhesion by Tape Test.
- N. ASTM C94 – Ready Mixed Concrete.

1.6 SUBMITTAL

- A. The contractor is required to submit the manufacturer’s submittal package prior to installation.
- B. Shop drawings should include construction details, sections, sizes, weights, material descriptions, attachment information, dimensions of individual components and profiles, and finishes for fences and gates. Product certifications for the fences and gates must be signed by the product manufacturer.

1.7 PRODUCT HANDLING AND STORAGE

- A. Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. The ornamental fence system shall conform to Barcelona 2-rail, 6’ x 6’ fence (color is bronze) and Barcelona 2-rail, 10’ wide double swing gate (color is bronze) that match existing type fence at

Northgate Park.

2.2 MATERIAL

- A. Steel material for fence framework (i.e., tubular pickets, tails and posts), when galvanized prior to forming, shall conform to the requirements of ASTM A924/A924M, with a minimum yield strength of 50,000 psi (344 MPa). The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft² (276 g/m²), Coating Designation G-90. Contractor to verify new fence and gate matches existing fence and gate.
- B. Material for fence pickets shall be 1" square x 15 Ga. tubing. The cross-sectional shape of the rails shall conform to the manufacturer's design with outside cross-section dimensions of 1.625" square and a minimum thickness of 15 Ga. Picket holes in the rail shall be spaced 3.9375" o.c., Picket retaining rods shall be 0.125" diameter galvanized steel. Posts shall be a minimum of 2-1/2" square x 14 Ga. High quality PVC grommets shall be supplied to seal all picket-to-rail intersections. Contractor to verify new fence and gate matches existing fence and gate.

2.3 FABRICATION – ORNAMENTAL FENCE

- A. Pickets, rails and posts shall be pre-cut to specified lengths. Rails shall be pre-punched to accept pickets.
- B. Grommets shall be inserted into the pre-punched holes in the rails and pickets shall be inserted through the grommets so that pre-drilled picket holes align with the internal upper raceway of the rails. (Note: This can best be accomplished by using an alignment template). Retaining rods shall be inserted into each rail so that they pass through the pre-drilled holes in each picket, thus completing the panel assembly.
- C. Completed panels shall be capable of supporting a 600 lb. load (applied at midspan) without permanent deformation. Panels without rings shall be bias able to a 25% change in grade; panels with rings shall be biasable to a 12.5% change in grade.
- D. Swing gates shall be fabricated using Barcelona 2-rail panel material and gate ends having the same outside cross-section dimensions as the rail. All rail and upright intersections shall be joined by welding. All picket and rail intersections shall also be joined either by welding or by the same retaining rod process used for panel assembly.

PART 3 - EXECUTION

3.1 PREPARATION

- A. All new installation shall be laid out by the contractor in accordance with the construction plans.

3.2 INSTALLATION

- A. Fence posts shall be set in accordance with manufacturer's requirements. Gate posts shall be spaced according to the gate openings specified in the construction plans. The "Earthwork" and "Concrete" sections of this specification shall govern post base material requirements. Barcelona 2-rail panels shall be attached to posts using mechanically fastened panel brackets supplied by the manufacturer.
- B. Contractor to attach gate to existing masonry piers. Fence panel is required to be used to fill any gaps between gate and existing masonry piers (both in base and alternate bids for Northgate Park).

3.3 CLEANING

A.The contractor shall clean the jobsite of excess materials; post-hole excavations shall be scattered uniformly away from posts.

Table 1 - Coating Performance Requirements

Quality Characteristics	ASTM Test Method	Performance Requirements
Adhesion	D3359 – Method B	Adhesion (Retention of Coating) over 90% test area (Tape and knife test)
Corrosion Resistance	B117 & D1654	Corrosion Resistance over 3,500 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).
Impact Resistance	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).
Weathering Resistance	D822, D2244, D523 (60 deg Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).

END OF SECTION

SECTION 03100
CONCRETE FORMING AND ACCESSORIES

PART 1 - GENERAL

1.1 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
 - 1. American Concrete Institute (ACI):
 - a. 117/117R, Standard Tolerances for Concrete Construction and Materials.
 - b. 318/318R, Building Code Requirements for Structural Concrete and Commentary.
 - c. 347, Guide to Formwork for Concrete.

1.2 DESIGN REQUIREMENTS

- A. Design formwork in accordance with ACI 347 and ACI 318/318R to provide concrete finishes specified in Section 03300, Cast-in-Place Concrete.
- B. When high range water reducer (superplasticizer) is used in concrete mix, forms shall be designed for full hydrostatic pressure per ACI 347.
- C. Make joints in forms watertight.
- D. Limit panel deflection to 1/360th of each component span to achieve tolerances specified.

1.3 SUBMITTALS

- A. Action Submittals:
 - 1. Shop Drawings:
 - a. Layout of panel joints and tie hole pattern.
 - b. Form Ties-Tapered Through-Bolts: Proposed method of sealing form tie hole; coordinate with details shown.
 - c. Manufacturer's data for form release agent.

2. Informational Submittals:
 - a. Statement of qualification for formwork designer.

1.4 QUALIFICATIONS

- A. Formwork Designer: Formwork, falsework, and shoring design shall be by an engineer licensed in the State of New Jersey.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

- A. Wall Forms and Underside of Slabs and Beams:
 1. Materials: Plywood, hard plastic finished plywood, overlaid waterproof particle board, or steel in "new and undamaged" condition, of sufficient strength and surface smoothness to produce specified finish.
 - a) Circular Structures:
 - 1) Wall forms shall conform to the circular shape of the structure.
 - 2) Straight panels may be substituted for circular forms provided panels do not exceed 2 feet in horizontal width and angular deflection is no greater than 3-1/2 degrees per joint.
- B. Column Forms:
 1. Rectangular Columns: As specified for walls.
 2. Circular Columns: Fabricated steel or fiber reinforced plastic with bolted together sections or spirally wound laminated fiber form internally treated with release agent for height of column.
- C. All Other Forms: Materials as specified for wall forms.
- D. Form Ties:
 1. Material: Steel
 2. Spreader Inserts:
 - a. Conical or spherical type.
 - b. Design to maintain positive contact with forming material.
 - c. Furnish units that will leave no metal closer than 1.5 inches to concrete surface when forms, inserts, and tie ends are removed.

- d. Wire ties not permitted.
- e. Water Stop Ties: For water-holding structures, basements, pipe galleries, and accessible spaces below finish grade, furnish one of the following:
 - 1) Integral steel water stop 0.103 inch thick and 0.625 inch in diameter tightly and continuously welded to tie.
 - 2) Neoprene water stop 3/16 inch thick and 15/16 inch diameter whose center hole is one half diameter of tie, or molded plastic water stop of comparable size.
 - 3) Orient water stop perpendicular to tie and symmetrical about center of tie.
 - 4) Design ties to prevent rotation or disturbance of center portion of tie during removal of ends and to prevent water leaking along tie.
- f. Through-Bolts: Tapered minimum 1-inch diameter at smallest end.

PART 3 - EXECUTION

3.1 FORM SURFACE PREPARATION

- A. Thoroughly clean form surfaces that will be in contact with concrete or that have been in contact with previously cast concrete, dirt, and other surface contaminants prior to coating surface.
- B. Exposed Wood Forms in Contact with Concrete: Apply form release agent as recommended by the manufacturer.
- C. Steel Forms: Apply form release agent to steel forms as soon as they are cleaned to prevent discoloration of concrete from rust.

3.2 ERECTION

- A. General:
 - 1. Unless specified otherwise, follow applicable recommendations of ACI 347.
 - 2. Form 3/4-inch bevels at concrete edges, unless otherwise shown.
 - 3. Brace as required to prevent distortion during concrete placement.
 - 4. Construct so ties remain embedded in the wall with no metal within 1 inch of concrete surface when forms, inserts, and tie ends are removed.

3.3 FORM REMOVAL

- A. Non-supporting forms (sides of beams, walls, columns, and similar parts of Work) may be removed after cumulatively curing at not less than 50 degrees F for 24 hours from time of concrete placement if:
 - 1. Concrete is sufficiently hard so as not to sustain damage by form removal operations.
 - 2. Curing and protection operations are maintained.

- B. Elevated Structural Slabs or Beams: In accordance with ACI 318/318R, Chapter 6, and at such time as concrete has reached compressive strength equal to 80 percent of specified 28-day compressive strength as determined by test cylinders.

END OF SECTION

SECTION 03300

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.
- B. This Section specifies cast-in place concrete, including the following:
 - 1. Cast-in-place concrete including mixture design, supplying, placing, consolidating, finishing, and curing.
 - 2. Steel reinforcing complete with required supports, spacers, and related accessories.
 - 3. Formwork and formwork design complete with required shoring, reshoring, bracing, and anchorage.
 - 4. Accessories including waterstops, reglets, expansion joint fillers, and preformed construction joints.
 - 5. Vapor barriers.
 - 6. Execution for items furnished under other sections, such as anchor rods, leveling plates, bearing plates, and embedded plates, anchors for attaching other materials, sleeves, and inserts.
 - 7. Concrete repairs.
 - 8. Certified surveys of concrete frame formwork, anchor bolts, leveling plates and bearing plates.
- C. Related Documents:
 - 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

1.2 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume; materials subject to compliance with requirements.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
 - a. Contractor's superintendent.
 - b. Independent testing agency responsible for concrete design mixtures.
 - c. Ready-mix concrete manufacturer.
 - d. Concrete Subcontractor.
 - f. Special concrete finish Subcontractor.
2. Review special inspection and testing and inspecting agency procedures for field quality control, cold- and hot-weather concreting procedures, curing procedures, construction contraction and isolation joints, and joint-filler strips, semirigid joint fillers, forms and form removal limitations, shoring and reshoring procedures, anchor rod and anchorage device installation tolerances, steel reinforcement installation, and concrete protection.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
 1. Indicate amounts of mixing water to be withheld for later addition at Project site.
- C. Steel Reinforcement Shop Drawings: Placing Drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.
- D. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.
 1. Location of construction joints is subject to approval of the Engineer.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and manufacturer.
- B. Material certificates. For each of the following, signed by manufacturers:
 1. Cementitious materials.
 2. Admixtures.
 3. Form materials and form-release agents.
 4. Steel reinforcement and accessories.
 5. Fiber reinforcement.
 6. Waterstops.
 7. Curing compounds.
 8. Floor and slab treatments.

9. Bonding agents.
 10. Adhesives.
 11. Vapor retarders.
 12. Semirigid joint filler.
 13. Joint-filler strips.
 14. Repair materials.
- C. Material test reports. For the following, from a qualified testing agency:
1. Aggregates.
- D. Concrete Delivery Tickets: Record of drum revolution counter, type, brand, test certification, amount of fly ash if used in accordance with ASTM C94/C94M, Section 16.
- E. Field quality-control test and inspection reports.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
- B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- C. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.
 2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician, Grade I. Testing agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician, Grade II.
- D. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
1. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 - a. ACI 301, "Specifications for Structural Concrete," Sections 1 through 5.
 - b. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

2. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.
3. Preinstallation Conference: Conduct conference at Project site.
 - a. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
 1. Contractor's superintendent.
 2. Independent testing agency responsible for concrete design mixtures.
 3. Ready-mix concrete manufacturer.
 4. Concrete subcontractor.

1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction testing on concrete mixtures.

1.8 FIELD CONDITIONS

- A. Cold-Weather Placement: Comply with ACI 306.1. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 1. When average high and low temperature is expected to fall below 40 deg F for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- B. Hot-Weather Placement: Comply with ACI 301 (ACI 301M) and ACI 305.1.
 1. Maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 - 1. ACI 301 (ACI 301M).
 - 2. ACI 117 (ACI 117M).

2.2 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 - 1. Plywood, metal, or other approved panel materials.
 - 2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:
 - a. High-density overlay, Class 1 or better.
 - b. Medium-density overlay, Class 1 or better; mill-release agent treated and edge sealed.
 - c. Structural 1, B-B or better; mill oiled and edge sealed.
 - d. B-B (Concrete Form), Class 1 or better; mill oiled and edge sealed.
 - 3. Overlaid Finnish birch plywood.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Form-Release Agent: Commercially formulated form-release agent that does not bond with, stain, or adversely affect concrete surfaces and does not impair subsequent treatments of concrete surfaces.
 - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- D. Form Ties: Factory-fabricated, removable or snap-off glass-fiber-reinforced plastic or metal form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
 - 1. Furnish units that leave no corrodible metal closer than 1 inch to the plane of exposed concrete surface.
 - 2. Furnish ties that, when removed, leave holes no larger than 1 inch in diameter in concrete surface.
 - 3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

2.3 STEEL REINFORCEMENT

- A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.
- B. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
- C. Low-Alloy-Steel Reinforcing Bars: ASTM A 706/A 706M, deformed.
- D. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, plain, fabricated from as-drawn steel wire into flat sheets.
- E. Deformed-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, flat sheet.
- F. Galvanized-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, plain, fabricated from galvanized-steel wire into flat sheets.
- G. Epoxy-Coated Welded-Wire Reinforcement: ASTM A 884/A 884M, Class A coated, Type 1, plain steel.
- H. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice."

2.4 REINFORCEMENT ACCESSORIES

- A. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60, plain-steel bars, cut true to length with ends square and free of burrs.
- B. Epoxy-Coated Joint Dowel Bars: ASTM A 615/A 615M, Grade 60, plain-steel bars, ASTM A 775/A 775M epoxy coated.
- C. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating; compatible with epoxy coating on reinforcement and complying with ASTM A 775/A 775M.
- D. Zinc Repair Material: ASTM A 780/A 780M.
- E. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:
 - 1. For concrete surfaces exposed to view, where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.
 - 2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.
 - 3. For zinc-coated reinforcement, use galvanized wire or dielectric-polymer-coated wire bar supports.

2.5 CONCRETE MATERIALS

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- B. Cementitious Materials:
 - 1. Portland Cement: ASTM C 150/C 150M, Type I white.
 - 2. Fly Ash: ASTM C 618, Class F or C.
 - 3. Slag Cement: ASTM C 989/C 989M, Grade 100 or 120.
- C. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source.
 - 1. Maximum Coarse-Aggregate Size: 3/4 inch (19 mm) nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- D. Air-Entraining Admixture: ASTM C 260/C 260M.
- E. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
 - 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
 - 2. Retarding Admixture: ASTM C 494/C 494M, Type B.
 - 3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
 - 4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
 - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
 - 6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.
- F. Set-Accelerating Corrosion-Inhibiting Admixture: Commercially formulated, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete and complying with ASTM C 494/C 494M, Type C.
- G. Non-Set-Accelerating Corrosion-Inhibiting Admixture: Commercially formulated, non-set-accelerating, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete.
- H. Water: ASTM C 94/C 94M and potable.

2.6 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) when dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.

- D. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.

2.7 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.
- B. Bonding Agent: ASTM C 1059, Type II, nonredispersible, acrylic emulsion or styrene butadiene.

2.8 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301 (ACI 301M).
 - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
 - 1. Fly Ash: 25 percent.
 - 2. Combined Fly Ash and Pozzolan: 25 percent.
 - 3. Slag Cement: 50 percent.
 - 4. Combined Fly Ash or Pozzolan and Slag Cement: 50 percent portland cement minimum, with fly ash or pozzolan not exceeding 25 percent.
 - 6. Silica Fume: 10 percent.
 - 7. Combined Fly Ash, Pozzolans, and Silica Fume: 35 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
 - 8. Combined Fly Ash or Pozzolans, Slag Cement, and Silica Fume: 50 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
- C. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
- D. Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use plasticizing admixture in concrete, as required, for placement and workability.
 - 2. Use water-reducing and -retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 - 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a w/c ratio below 0.50.
 - 4. Use corrosion-inhibiting admixture in concrete mixtures where indicated.

2.9 CONCRETE MIXTURES FOR BUILDING ELEMENTS

A. Normal-Weight Concrete:

1. Minimum Compressive Strength: 4000 psi (27.6 MPa) at 28 days.
2. Maximum W/C Ratio: 0.45.
3. Minimum Cementitious Materials Content: 540 lb/cu. yd.
4. Slump Limit: 4 inches (100 mm) for concrete with verified slump of plus or minus 1 inch (25 mm).
5. Air Content: 6 percent, plus or minus 1.5 percent at point of delivery.

2.10 FABRICATING REINFORCEMENT

- ### A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.11 CONCRETE MIXING

- ### A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116/C 1116M and furnish batch ticket information.
1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 FORMWORK INSTALLATION

- #### A. Design, erect, shore, brace, and maintain formwork, according to ACI 301 (ACI 301M), to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- #### B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117 (ACI 117M).
- #### C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
1. See Contract Documents, 1/4 inch for rough-formed finished surfaces.
- #### D. Construct forms tight enough to prevent loss of concrete mortar.
- #### E. Construct forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast-concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
1. Install keyways, reglets, recesses, and the like, for easy removal.
 2. Do not use rust-stained steel form-facing material.

- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exterior corners and edges of permanently exposed concrete.
- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 EMBEDDED ITEM INSTALLATION

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC 303.

3.3 REMOVING AND REUSING FORMS

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete. Concrete has to be hard enough to not be damaged by form-removal operations and curing and protection operations need to be maintained.
 - 1. Leave formwork for beam soffits, joists, slabs, and other structural elements that support weight of concrete in place until concrete has achieved at least 70 percent of its 28-day design compressive strength.
- B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material are not acceptable for exposed surfaces. Apply new form-release agent.
- C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Engineer.

3.4 STEEL REINFORCEMENT INSTALLATION

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that reduce bond to concrete.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
 - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Install welded-wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.
- G. Epoxy-Coated Reinforcement: Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D 3963/D 3963M. Use epoxy-coated steel wire ties to fasten epoxy-coated steel reinforcement.
- I. Zinc-Coated Reinforcement: Repair cut and damaged zinc coatings with zinc repair material according to ASTM A 780/A 780M. Use galvanized-steel wire ties to fasten zinc-coated steel reinforcement.

3.5 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect/Engineer.
- C. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated.
- D. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
- E. Space vertical joints in walls as indicated.
- F. Control Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect/Engineer.
- G. Place joints perpendicular to main reinforcement. Do not continue reinforcement across construction joints. Place reinforcement in midsection of wall as indicated.

- H. Space vertical joints in walls as indicated.
- I. Expansion Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect/Engineer.
- J. Place joints perpendicular to main reinforcement. Do not continue reinforcement across construction joints.
- K. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
- L. Install joint filler material.
- M. Space vertical joints in walls as indicated.
- N. Contraction Joints in Base Slabs: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness.
- O. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
- P. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch-wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.
- Q. Isolation Joints in Base Slabs: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as manholes, curbs and other fixed objects, and where indicated.
- R. Locate expansion joints at intervals of 50 feet, unless otherwise indicated.
- S. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface unless otherwise indicated.
- T. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

3.6 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections are completed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Engineer.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.

1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
1. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301 (ACI 301M).
 2. Consolidate concrete during placement operations, so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
 3. Maintain reinforcement in position on chairs during concrete placement.
 4. Screed slab surfaces with a straightedge and strike off to correct elevations.
 5. Slope surfaces uniformly to drains where required.
 6. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.

3.7 FINISHING FLOORS AND SLABS

- A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, ramps, and elsewhere as indicated.
1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with Engineer before application.
- C. Weep Holes: Install PVC pipe, or drill weep holes in concrete base slabs as indicated on Drawings.

3.8 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 (ACI 301M) for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for remainder of curing period.

- D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.
- E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days.
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period, using cover material and waterproof tape.
 - a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
 - b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
 - c. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer certifies does not interfere with bonding of floor covering used on Project.
 - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - a. Removal: After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer.
 - 4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.9 JOINT FILLING

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
 - 1. Defer joint filling until concrete has aged at least one month(s). Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joints clean and dry.

- C. Install semirigid joint filler full depth in saw-cut joints and at least 2 inches deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.

3.10 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect/Engineer's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
- D. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inching any dimension to solid concrete. Limit cut depth to 3/4 inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
- E. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
- F. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect/Engineer.
- G. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
- H. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
- I. After concrete has cured at least 14 days, correct high areas by grinding.
- J. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
- K. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.

- L. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.
- M. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
- N. Repair materials and installation not specified above may be used, subject to Architect/Engineer's approval.

3.11 FIELD QUALITY CONTROL

- A. Special Inspections: Testing Agency: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.
- B. Inspections:
 - 1. Steel reinforcement placement.
 - 2. Steel reinforcement welding.
 - 3. Headed bolts and studs.
 - 4. Verification of use of required design mixture.
 - 5. Concrete placement, including conveying and depositing.
 - 6. Curing procedures and maintenance of curing temperature.
 - 7. Verification of concrete strength before removal of shores and forms from beams and slabs.
- C. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172/C 172M shall be performed according to the following requirements:
 - 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 11 cu. yd., plus one set for each additional 11 cu. yd. or fraction thereof.
 - 2. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
 - 3. Air Content: ASTM C 231, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 - 4. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below or 80 deg F and above, and one test for each composite sample.
 - 5. Unit Weight: ASTM C 567/C 567M, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 - 6. Compression Test Specimens: ASTM C 31.
 - a. Cast and field cure two sets of two standard cylinder specimens for each composite sample.
 - 7. Compressive-Strength Tests: ASTM C 39; test one set of two laboratory-cured specimens at 7 days and one set of two specimens at 28 days.

- a. Test one set of two field-cured specimens at 7 days and one set of two specimens at 28 days.
 - b. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
8. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
 9. Strength of each concrete mixture will be satisfactory if every average of any three-consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
 10. Test results shall be reported in writing to Engineer, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
 11. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Engineer but will not be used as sole basis for approval or rejection of concrete.
 12. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Engineer. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42 or by other methods as directed by Engineer.
 13. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
 14. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

END OF SECTION

SECTION I(Continued)

- 1.03 Submission Schedule: If, a prior to or at the time the Public Agency submits a contract for signing, a Contractor does not submit evidence of an existing federally approved or sanctioned Affirmative Action Program, then no later than three (3) calendar days after Contractor signs the contract, the Contractor shall submit the required documentation. All documentation required by the Public Agency shall be submitted to the ENGINEER. All documentation required to be submitted to the State Affirmative Action Office shall be submitted directly to them.

- 1.04 The purpose of this questionnaire and information form is to provide general guidance to the Contractor. All responsibility for complying with the Affirmative Action Regulations (P.L. 1975, c. 127) rests solely with the Contractor.

- 1.05 I certify that all the above information is correct to the best of my knowledge.

NAME: _____

SIGNATURE: _____

TITLE: _____

DATE: _____

24-13 - CAMDEN CITY PARKS - FACILITIES IMPROVEMENTS

Opening Date: September 9, 2024 12:45 PM

Closing Date: September 19, 2024 11:00 AM

Instructions to Bidders and Statutory Requirements

All proposals will be publicly opened and read by the Purchasing Agent of the City of Camden at the time and place indicated in the advertised invitation to bidders. Vendors can also login to their account to view the results.

A. City of Camden, Camden County, New Jersey (hereinafter referred to as "City") invites sealed proposals pursuant to the published advertisement via the City's e-Procurement Portal Bids&Tenders.

B. To obtain documents online please visit <https://camden.bidsandtenders.net/>. All potential bidders shall have a Bidding System Vendor account and be registered as a Plan Taker for this Bid opportunity, which will enable the Bidder to download the Bid Call Document, to receive Addenda email notifications and download all documents without the watermark "preview" on them.

C. Electronic proposals submissions only, shall be received by the Bidding System. Documents are not provided in any other matter. Hardcopy submissions are not permitted.

D. The City will publicly open and read bid submissions at Camden City Hall, City Chambers, 2nd Floor, 520 Market Street, Camden, NJ 08102. Vendors can also login to their account to view the results.

E. Proposers are cautioned that the timing of their Bid Submission is based on when the Bid is RECEIVED by the Bidding System, not when a Bid is submitted, as Bid transmission can be delayed due to file transfer size, transmission speed, etc.

F. For the above reasons, it is recommended that sufficient time to complete your Bid Submission and to resolve any issues that may arise. The closing time and date shall be determined by the Bidding System's web clock. The City encourages prospective proposers to submit their BIDs before the designated date and time of the opening via the City's Bidding System.

G. Proposers should contact Bids&Tenders support listed below, at least twenty-four (24) hours prior to the closing time and date, if they encounter any problems. The Bidding System will send a confirmation email to the Proposer advising that their bid was submitted successfully. If you do not receive a confirmation email, contact Bids&Tenders support at support@bidsandtenders.ca.

H. Late Bid's are not permitted by the Bidding System. It is the Bidders' responsibility to submit Bids prior to or at the time designated.

I. To ensure receipt of the latest information and updates via email regarding this Bid, or if a Proposer has obtained this Bid Document from a third party, the onus is on the Proposer to create a Bidding System Vendor account and register as a Plan Taker for the Bid opportunity.

J. The City uses Bids, RFPs, RFQs, and Quotes interchangeably. The City's intent in using these words is to competitively bid out goods and services under the statutes governing NJ Local Public Contract Law.

K. BID responses shall remain open for a period of sixty (60) calendar days from the stated submittal date. The City will either award the Contract within the applicable time period or reject all bids. The City may extend the decision to award or reject all bids beyond the sixty (60) calendar days when the submissions of any respondents who consent thereto may, at the request of the City, be held for consideration for such longer period as may be agreed.

L. The right to reject all bids pursuant to N.J.S.A. 40A:11-13.2 and to award the contract to the lowest responsive, responsible bidder in accordance with applicable law is expressly reserved by the authority of the City Council of the City of Camden.

M. Regarding the CAMDEN CITY PARKS - FACILITY IMPROVEMENTS project for the Department of Planning and Development, City of Camden, County of Camden, New Jersey.:

- a) (s)he has carefully examined the annexed Advertisement for Proposals, Specifications, and forms for Contract and Bond;
- b) (s)he has familiarized himself with Federal, State, and Local Laws, ordinances, rules and regulations affecting the proposed Project;
- c) (s)he has visited the site of the work and made such independent investigations as (s)he deems necessary; and
- d) (s) he has examined fully into the conditions, costs, and expenses involved in the performance of the proposed work;
- e) (s) he proposes and agrees that if this proposal is accepted he will enter into contract with the City of Camden, County of Camden, to furnish all plant, labor, materials, supplies and equipment and other facilities and things necessary or proper for or incidental to the milling and resurfacing improvements as required by, and in strict accordance with the applicable provisions of plans, specifications, requirements and all addenda issued by the City of Camden, of its engineer and mailed to the undersigned by certified mail with return receipt requested prior to the date of opening of bids whether received by the undersigned or not for the amount bid based on the following unit and/or lump sum prices: **Contract Time: Two Hundred Seventy (270) Calendar Days**

Schedule of Prices

The Respondent hereby Bids and offers to enter into the Contract referred to and to supply and perform all or any part of the Work which is set out or called for in these specifications, at the unit prices, and/or lump sums, hereinafter stated.

*Denotes a "MANDATORY" field

Do not enter \$0.00 dollars unless you are providing the line item at zero dollars to the Owner.

If the line item and/or table is "NON-MANDATORY" and you are not bidding on it, leave the table and/or line item blank. Do not enter a \$0.00 dollar value.

BASE BID

The undersigned hereby declare(s) that he (it, they) has (have) carefully examined the Advertisement, Proposal, Information for Bidders, General Conditions, Construction Specifications, Supplementary Specifications, Appendix, Drawings, Plans and Form of Contract and Bond for the Project named above; that he/she they has/have carefully examined the site of the project; and that he/she/they will contract to carry out and complete said project as required by, and in strict accordance with the applicable provisions of plans and specifications and all addenda issued by the CITY OF CAMDEN prior to the date of opening the bids, whether received by the undersigned or not, as specified and delineated at the price per unit measure for each scheduled item of work stated in the Schedule of Prices following.

It is understood that the Total Price for the entire contract stated by the undersigned in the Schedule is based on the estimated quantities and will control in the awarding of the contract. It is further understood that the quantities stated in this Schedule of Prices for the various items are estimated only and may be increased or decreased. Payment will be made only for the actual quantity of authorized work done under each scheduled item.

It is further understood that the following procedure will be used to correct numerical discrepancies found in the Schedule of Prices following:

1. All Unit Prices and the Total Price for the entire contract shall be expressed in both words and figures, and in case of discrepancy, the written price shall govern over the price stated in figures.
2. If based on the above, it is found that the written Total Price for the entire contract is found to have been incorrectly computed, then changes will be made in any or all unit prices so as to attain conformity with said Total Price before the contract is executed.

The undersigned proposes to furnish all labor, materials and equipment required to construct and complete the structures and do other work complete in every detail, in accordance with plans, specifications and other contract documents prepared by Pennoni Associates Inc., Consulting Engineers, at and for the following Lump Sum Prices and Unit Prices:

NOTE: Extension of Unit Prices must be exact.

Bids will be compared on the basis of the TOTAL AMOUNT OF BID. The TOTAL AMOUNT OF BID is defined as the sum of the Total Price Bid for Each Item. Please note the City may award the construction work on the basis of the Main Bid, combined with any such Alternate(s) as selected, until a net amount is reached which is within the funds available

Where the price in figures differs from the price in words, the price in words will be accepted as the amount bid and amounts computed and adjusted accordingly.

The Owner reserves the right to omit or add to the construction of any portion or portions of the work heretofore enumerated or shown on the plans.

Furthermore, the Owner reserves the right to omit in its entirety any one or more items of this Contract without forfeiture of Contract or claims for loss of anticipated profits or any other claims by the Contractor on account of such omissions.

The bidder, by submitting a response to this solicitation, hereby agrees to complete all of the work shown or specified for **Base Bid** within Contract Time: **Two Hundred Seventy (270) Calendar Days** from the date of the receipt of written notice to begin work, and (it, they) further agree(s) that the City may retain from the monies that are or may become due for each and every day, where the completion of the work may be delayed as stipulated below:

Schedule of Liquidated Damages:

- One (1) to Fifteen (15) Days: **\$500 per calendar day**
- Sixteen (16) to Thirty (30) Days: **\$1,000.00 per calendar day**
- Greater Than Thirty (30) Days: **\$2,000.00 per calendar day**

And such amount so to be retained is hereby agreed to be for the costs of the Inspection and Engineering as liquidated damages accruing to the City of Camden incident to such delay. Also, refer to the General Conditions.

Unless otherwise directed, **the Contractor shall be prepared to mobilize and commence construction activities within thirty (30) days of the notice to proceed date.** Requests for mobilization dates contrary to the above-referenced instruction must be provided to the City Engineer or designee in writing for review/approval within three (3) days of the notice to proceed date.

Accompanying this proposal is a certification of bidder regarding non-discrimination; a non-collusion affidavit; a duly executed consent from an approved surety company, licensed to conduct business in the State of New Jersey, agreeing to

furnish the required bond(s) upon the award of contract; and a certified check, cashier's check, paper bid or digital bid bond to the order of the City of Camden, in amount equal to ten percent (10%) of the sum of the bid but not in excess of twenty thousand dollars (\$20,000.00) which the undersigned agrees to be forfeited as liquidated damages and not a penalty if the contract is awarded to the undersigned, and the undersigned shall fail to execute the contract, furnish the bond(s), and complete the work within the stipulated time.

ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE *	UNIT PRICE IN WORDS *	AMOUNT
1	SITE CLEARING (INCL. SIDEWALK REMOVAL, PAVEMENT REMOVAL, PLAYGROUND FIXTURES REMOVAL, TENNIS COURT REMOVAL, BASKETBALL COURT REMOVAL, PARK BENCHES REMOVAL, FENCE REMOVAL, BIKE RACKS REMOVAL, TRASH RECEPTACLES REMOVAL)	1	LUMP SUM			
2	TREE TRIMMING (NORTH GATE)	1	LUMP SUM			
3	TREE TRIMMING (BRADLEY PARK)	1	LUMP SUM			
4	TREE TRIMMING (RALPH WILLIAMS)	1	LUMP SUM			
5	TREE TRIMMING (WHITMAN SQUARE)	1	LUMP SUM			
6	TREE TRIMMING (YORKSHIP SQUARE)	1	LUMP SUM			
7	TREE REMOVAL, 0"-12"	23	UNITS			
8	TREE REMOVAL 13'30	42	UNITS			
9	TREE REMOVAL 31'60	3	LUMP SUM			
10	DENSE GRADED AGGREGATE 4' THICK (SIDEWALK, CONCRETE, BENCH PARK CONC. PAD, TRASH RECEPTACLE CONC. PAD)	2001	SQUARE YARDS			
11	DENSE GRADED AGGREGATE 6' THICK (INCL. BITUMINOUS WALKAWAY, BASKETBALL COURT, SOCCER COURT, HANDBALL COURT AND PICKLEBALL COURT)	6403	SQUARE YARDS			
12	CONCRETE SIDEWALKS, 5' THICK	1839	SQUARE YARDS			
13	CONCRETE SIDEWALKS, 5' THICK (EXPOSED AGGREGATE)	162	SQUARE YARDS			
14	CONCRETE VERTICAL CURB	185	LINEAR FEET			
15	FLUSH CONCRETE VERTICAL CURB	973	LINEAR FEET			
16	DRIVEWAY (INCL. DGA & REINFORCEMENT)	23	YARDS			
17	BRICK PAVER SIDEWALK (INCL. SETTING BED, 5' SLAB &DGA)	617	SQUARE YARDS			
18	HOT MIX ASPHALT, 19M64 BASE COURSE, 2.5" THICK INCL. BASKETBALL COURT, SOCCER COURT, HANDBALL COURT AND TENNIS COURT)	5235	SQUARE YARDS			

19	HOT MIX ASPHALT, 9.5M64 SURFACE COURSE, 2' THICK (INCL. BASKETBALL COURT AND PICKLEBALL COURT)	6403	SQUARE YARDS		
20	COURT ACRYLIC BINDER WITH COLOR COAT SYSTEM & STRIPING (INCL. BASKETBALL COURT, SOCCER COURT, AND PICKLEBALL COURT)	5212	SQUARE YARDS		
21	BASKETBALL BACKBOARD SYSTEM ASSEMBLY/INSTALL HOOP SYSTEM	8	UNITS		
22	GAME TABLE WITH FOUR SEATS	8	UNITS		
23	PARK GRILL	11	UNITS		
24	PICNIC TABLE	16	UNITS		
25	SOCCER NET	6	UNITS		
26	PICKLEBALL NET	1	UNIT		
27	FITNESS EQUIPMENT	3	UNITS		
28	PLAYGROUND EQUIPMENT 92-5 YEARS OLD) NORTH GATE	1	UNIT		
29	PLAYGROUND EQUIPMENT (5-12 YEARS OLD) NORTH GATE	1	UNIT		
30	PLAYGROUND EQUIPMENT (2-5 YEARSS OLD) RALPH WILLIAMS	1	UNIT		
31	PLAYGROUND EQUIPMENT (5-12 YEARS OLD) RALPH WILLIAMS	1	UNIT		
32	PLAYGROUND EQUIPMENT (2-5 YEARS OLD) SPRUCE STREET	1	UNIT		
33	PLAYGROUND EQUIPMENT (5-12 YEARS OLD) SPRUCE STREET	1	UNIT		
34	PLAYGROUND EQUIPMENT (2-5 YEARSS OLD) WHITMAN SQUARE	1	UNIT		
35	PLAYGROUND EQUIPMENT (5-12 YEARS OLD) WHITMAN SQUARE	1	UNIT		
36	PLAYGROUND SURFACE YARD	1753	SQUARE YARD		
37	PROPOSED STEPS	1	LUMP SUM		
38	REHABILITATE EXISTING BELGIAN BLOCK EDGING	1	LUMP SUM		
39	TREE PITS (GRANITE PAVERS, GRANITE SHAVINGS, FOUNDATION, STEEL PLATE)	4	UNITS		
40	CONCRETE PAINT (SEA WALL AND HANDBALL WALL)	1	LUMP SUM		
41	BACKED BENCH	53	UNITS		
42	BIKE RACK	19	UNITS		
43	TRASH RECEPTACLE WITH PLASTIC INSERT	27	UNITS		
44	RECYCLE RECEPTACLE WITH PLASTIC INSERT	26	UNITS		
45	CHAIN LINK SINGLE SWING GATE, 6-FT HIGH (5-FT WIDE)	1	UNIT		
46	CHAIN LINK SINGLE SWING GATE, 6-FT HIGH (4-FT WIDE)	1	UNIT		
47	CHAIN LINK SINGLE SWING GATE, 6FT HIGH 5-FT WIDE)	4	UNITS		
48	CHAIN LINK DOUBLE SWING GATE, 6FT HIGH 12FT WIDE MAITENANCE ENTRANCE)	2	UNITS		
49	ORNAMENTAL GATE DOUBLE SWING GATE, 6FT HIGH (10-FT WIDE)	2	UNITS		
50	CHAIN LINK FENCE, 6FT HIGH	765	LINEAR FEET		
51	CHAIN LINK FENCE, 8FT HIGH	452	LINEAR FEET		
52	ORNAMENTAL FENCE, 6FT HIGH	20	LINEAR FEET		
53	VINYL SCREEN, 6FT HIGH	106	LINEAR FEET		
54	20X30 PAVILION	1	UNIT		
55	PAVILLION REHAB	1	LUMP SUM		
56	10" HDPE	107	LINEAR FEET		
57	12" HDPE	79	LINEAR FEET		
58	INLET, TYPE A	3	UNIT		
59	NEW MANHOLE FRAME AND CASTING	1	UNIT		
60	STORM CLEANOUT (INL.CHECK VALVE)	1	UNIT		
61	REPLACE TYPE A INLET GRATE TO BICYCLE SAFE GRATE	1	UNIT		
62	INLET PROTECTION FILTER	20	UNITS		
63	SHRUBS	11	UNITS		
64	DECIDUOUS TREES	99	UNITS		
65	SILT FENSE	3442	LINEAR FEET		
66	6" THICK TOPSOIL, SEED, AND MULCH	12730	SQUARE YARDS		
67	LAWN SEED, FERTILIZER, & MULCH	12730	SQUARE YARDS		
68	CONSTRUCTION ENTRANCE	6	UNITS		
69	RESET PLAY GROUND EQUIPMENT (25TH AND HOWELL STREET)	1	UNITS		
70	NJDOT TYPE -2 STRAW MAT	585	SQUARE YARDS		
71	PARK NAME SIGN	3	UNITS		
72	REPLACE DECREATIVE PARK SIGN (NORTHGATE)	1	UNITS		
73	PARK NAME SIGN	1	LUMP SUM		

Subtotal:

BASE BID - (Allowances)

The undersigned hereby declare(s) that he (it, they) has (have) carefully examined the Advertisement, Proposal, Information for Bidders, General Conditions, Construction Specifications, Supplementary Specifications, Appendix, Drawings, Plans and Form of Contract and Bond for the Project named above; that he/she they has/have carefully examined the site of the project; and that he/she/they will contract to carry out and complete said project as required by, and in strict accordance with the applicable provisions of plans and specifications and all addenda issued by the CITY OF CAMDEN prior to the date of opening the bids, whether received by the undersigned or not, as specified and delineated at the price per unit measure for each scheduled item of work stated in the Schedule of Prices following.

It is understood that the Total Price for the entire contract stated by the undersigned in the Schedule is based on the estimated quantities and will control in the awarding of the contract. It is further understood that the quantities stated in this Schedule of Prices for the various items are estimated only and may be increased or decreased. Payment will be made only for the actual quantity of authorized work done under each scheduled item.

It is further understood that the following procedure will be used to correct numerical discrepancies found in the Schedule of Prices following:

1. All Unit Prices and the Total Price for the entire contract shall be expressed in both words and figures, and in case of discrepancy, the written price shall govern over the price stated in figures.
2. If based on the above, it is found that the written Total Price for the entire contract is found to have been incorrectly computed, then changes will be made in any or all unit prices so as to attain conformity with said Total Price before the contract is executed.

The undersigned proposes to furnish all labor, materials and equipment required to construct and complete the structures and do other work complete in every detail, in accordance with plans, specifications and other contract documents prepared by Pennoni Associates Inc., Consulting Engineers, at and for the following Lump Sum Prices and Unit Prices:

NOTE: Extension of Unit Prices must be exact.

Bids will be compared on the basis of the TOTAL AMOUNT OF BID. The TOTAL AMOUNT OF BID is defined as the sum of the Total Price Bid for Each Item. Please note the City may award the construction work on the basis of the Main Bid, combined with any such Alternate(s) as selected, until a net amount is reached which is within the funds available

Where the price in figures differs from the price in words, the price in words will be accepted as the amount bid and amounts computed and adjusted accordingly.

The Owner reserves the right to omit or add to the construction of any portion or portions of the work heretofore enumerated or shown on the plans.

Furthermore, the Owner reserves the right to omit in its entirety any one or more items of this Contract without forfeiture of Contract or claims for loss of anticipated profits or any other claims by the Contractor on account of such omissions.

The bidder, by submitting a response to this solicitation, hereby agrees to complete all of the work shown or specified for **Base Bid** within Contract Time: **Two Hundred Seventy (270) Calendar Days** from the date of the receipt of written notice to begin work, and (it, they) further agree(s) that the City may retain from the monies that are or may become due for each and every day, where the completion of the work may be delayed as stipulated below:

Schedule of Liquidated Damages:

- One (1) to Fifteen (15) Days: **\$500 per calendar day**
- Sixteen (16) to Thirty (30) Days: **\$1,000.00 per calendar day**
- Greater Than Thirty (30) Days: **\$2,000.00 per calendar day**

And such amount so to be retained is hereby agreed to be for the costs of the Inspection and Engineering as liquidated damages accruing to the City of Camden incident to such delay. Also, refer to the General Conditions.

Unless otherwise directed, **the Contractor shall be prepared to mobilize and commence construction activities within thirty (30) days of the notice to proceed date.** Requests for mobilization dates contrary to the above-referenced instruction must be provided to the City Engineer or designee in writing for review/approval within three (3) days of the notice to proceed date.

Accompanying this proposal is a certification of bidder regarding non-discrimination; a non-collusion affidavit; a duly executed consent from an approved surety company, licensed to conduct business in the State of New Jersey, agreeing to

furnish the required bond(s) upon the award of contract; and a certified check, cashier's check, paper bid or digital bid bond to the order of the City of Camden, in amount equal to ten percent (10%) of the sum of the bid but not in excess of twenty thousand dollars (\$20,000.00) which the undersigned agrees to be forfeited as liquidated damages and not a penalty if the contract is awarded to the undersigned, and the undersigned shall fail to execute the contract, furnish the bond(s), and complete the work within the stipulated time.

ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	UNIT PRICE IN WORDS	AMOUNT
74	ALLOWANCE	1	LUMP SUM	\$300,000.0000	THREE HUNDRED THOUSAND DOLLARS AND ZERO CENTS	\$ 300,000.00
Subtotal:						\$ 300,000.00

BID ALTERNATE NO. 1 - RALPH WILLIAMS PARK

The undersigned hereby declare(s) that he (it, they) has (have) carefully examined the Advertisement, Proposal, Information for Bidders, General Conditions, Construction Specifications, Supplementary Specifications, Appendix, Drawings, Plans and Form of Contract and Bond for the Project named above; that he/she they has/have carefully examined the site of the project; and that he/she/they will contract to carry out and complete said project as required by, and in strict accordance with the applicable provisions of plans and specifications and all addenda issued by the CITY OF CAMDEN prior to the date of opening the bids, whether received by the undersigned or not, as specified and delineated at the price per unit measure for each scheduled item of work stated in the Schedule of Prices following.

It is understood that the Total Price for the entire contract stated by the undersigned in the Schedule is based on the estimated quantities and will control in the awarding of the contract. It is further understood that the quantities stated in this Schedule of Prices for the various items are estimated only and may be increased or decreased. Payment will be made only for the actual quantity of authorized work done under each scheduled item.

It is further understood that the following procedure will be used to correct numerical discrepancies found in the Schedule of Prices following:

1. All Unit Prices and the Total Price for the entire contract shall be expressed in both words and figures, and in case of discrepancy, the written price shall govern over the price stated in figures.
2. If based on the above, it is found that the written Total Price for the entire contract is found to have been incorrectly computed, then changes will be made in any or all unit prices so as to attain conformity with said Total Price before the contract is executed.

The undersigned proposes to furnish all labor, materials and equipment required to construct and complete the structures and do other work complete in every detail, in accordance with plans, specifications and other contract documents prepared by Pennoni Associates Inc., Consulting Engineers, at and for the following Lump Sum Prices and Unit Prices:

NOTE: Extension of Unit Prices must be exact.

Bids will be compared on the basis of the TOTAL AMOUNT OF BID. The TOTAL AMOUNT OF BID is defined as the sum of the Total Price Bid for Each Item. Please note the City may award the construction work on the basis of the Main Bid, combined with any such Alternate(s) as selected, until a net amount is reached which is within the funds available

Where the price in figures differs from the price in words, the price in words will be accepted as the amount bid and amounts computed and adjusted accordingly.

The Owner reserves the right to omit or add to the construction of any portion or portions of the work heretofore enumerated or shown on the plans.

Furthermore, the Owner reserves the right to omit in its entirety any one or more items of this Contract without forfeiture of Contract or claims for loss of anticipated profits or any other claims by the Contractor on account of such omissions.

The bidder, by submitting a response to this solicitation, hereby agrees to complete all of the work shown or specified for **BID ALTERNATE NO. 1 - RALPH WILLIAMS PARK** with an additional Contract Time of **Fifteen (15) Calendar Days** from the date of the receipt of written notice to begin work, and (it, they) further agree(s) that the City may retain from the monies that are or may become due for each and every day, where the completion of the work may be delayed as stipulated below:

Schedule of Liquidated Damages:

- One (1) to Fifteen (15) Days: **\$500 per calendar day**
- Sixteen (16) to Thirty (30) Days: **\$1,000.00 per calendar day**
- Greater Than Thirty (30) Days: **\$2,000.00 per calendar day**

And such amount so to be retained is hereby agreed to be for the costs of the Inspection and Engineering as liquidated damages accruing to the City of Camden incident to such delay. Also, refer to the General Conditions.

Unless otherwise directed, **the Contractor shall be prepared to mobilize and commence required activities within thirty (30) days of the notice to proceed date.** Requests for mobilization dates contrary to the above-referenced instruction must be provided to the City Engineer or designee in writing for review/approval within three (3) days of the notice to proceed date.

ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE *	UNIT PRICE IN WORDS *	AMOUNT
A1-1	DENSE GRADED AGGREGATE,4' THICK (INL. SIDEWALK AND GAME TABLE CONC. PAD)	103	SQUARE YARDS			
A1-2	HOT MIX ASPALT, 9.5M64 SURFACE COURSE, 2' THICK(INCL. BITUMINOUS WALKAWAY, BASKETBALL COURT, AND PICKLEBALL COURT	103	SQUARE YARDS			
A1-3	GAZEBO	1	UNIT			
A1-4	BACKED BENCH	1	UNIT			
A1-5	BIKE RACK	4	UNITS			
A1-6	GAME TABLE WITH FOUR SEATS	3	UNITS			
A1-7	DECIDUOUS TREES	3	UNITS			
A1-8	6' THICK TOPSOIL, SEED, AND MULCH	127	SQUARE YARDS			
A1-9	LAWN SEED, FERTILIZER, & MULCH	127	SQUARE YARDS			
Subtotal:						

BID ALTERNATE NO. 2 - WHITMAN SQUARE

The undersigned hereby declare(s) that he (it, they) has (have) carefully examined the Advertisement, Proposal, Information for Bidders, General Conditions, Construction Specifications, Supplementary Specifications, Appendix, Drawings, Plans and Form of Contract and Bond for the Project named above; that he/she they has/have carefully examined the site of the project; and that he/she/they will contract to carry out and complete said project as required by, and in strict accordance with the applicable provisions of plans and specifications and all addenda issued by the CITY OF CAMDEN prior to the date of opening the bids, whether received by the undersigned or not, as specified and delineated at the price per unit measure for each scheduled item of work stated in the Schedule of Prices following.

It is understood that the Total Price for the entire contract stated by the undersigned in the Schedule is based on the estimated quantities and will control in the awarding of the contract. It is further understood that the quantities stated in this Schedule of Prices for the various items are estimated only and may be increased or decreased. Payment will be made only for the actual quantity of authorized work done under each scheduled item.

It is further understood that the following procedure will be used to correct numerical discrepancies found in the Schedule of Prices following:

1. All Unit Prices and the Total Price for the entire contract shall be expressed in both words and figures, and in case of discrepancy, the written price shall govern over the price stated in figures.
2. If based on the above, it is found that the written Total Price for the entire contract is found to have been incorrectly computed, then changes will be made in any or all unit prices so as to attain conformity with said Total Price before the contract is executed.

The undersigned proposes to furnish all labor, materials and equipment required to construct and complete the structures and do other work complete in every detail, in accordance with plans, specifications and other contract documents prepared by Pennoni Associates Inc., Consulting Engineers, at and for the following Lump Sum Prices and Unit Prices:

NOTE: Extension of Unit Prices must be exact.

Bids will be compared on the basis of the TOTAL AMOUNT OF BID. The TOTAL AMOUNT OF BID is defined as the sum of the Total Price Bid for Each Item. Please note the City may award the construction work on the basis of the Main Bid, combined with any such Alternate(s) as selected, until a net amount is reached which is within the funds available

Where the price in figures differs from the price in words, the price in words will be accepted as the amount bid and amounts computed and adjusted accordingly.

The Owner reserves the right to omit or add to the construction of any portion or portions of the work heretofore enumerated or shown on the plans.

Furthermore, the Owner reserves the right to omit in its entirety any one or more items of this Contract without forfeiture of Contract or claims for loss of anticipated profits or any other claims by the Contractor on account of such omissions.

The bidder, by submitting a response to this solicitation, hereby agrees to complete all of the work shown or specified for **BID ALTERNATE NO. 2 - WHITMAN SQUARE** with an additional Contract Time of **Fifteen (15) Calendar Days** from the date of the receipt of written notice to begin work, and (it, they) further agree(s) that the City may retain from the monies that are or may become due for each and every day, where the completion of the work may be delayed as stipulated below:

Schedule of Liquidated Damages:

- One (1) to Fifteen (15) Days: **\$500 per calendar day**
- Sixteen (16) to Thirty (30) Days: **\$1,000.00 per calendar day**
- Greater Than Thirty (30) Days: **\$2,000.00 per calendar day**

And such amount so to be retained is hereby agreed to be for the costs of the Inspection and Engineering as liquidated damages accruing to the City of Camden incident to such delay. Also, refer to the General Conditions.

Unless otherwise directed, **the Contractor shall be prepared to mobilize and commence required activities within thirty (30) days of the notice to proceed date.** Requests for mobilization dates contrary to the above-referenced instruction must be provided to the City Engineer or designee in writing for review/approval within three (3) days of the notice to proceed date.

ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE *	UNIT PRICE IN WORDS *	AMOUNT
A2-1	DENSE GRADED AGGREGATE, 4' THICK (SIDEWALK, CONCRETE, BENCH PARK CONC. BIKE RACK CONC. PAD, TASH RECEPT CONC. PAD)	18	SQUARE YARDS			
A2-2	DENSE GRADED AGGGATE, 6" THICK (INCL. BITUMINOUS WALKAWAY, BASKETBALL COURT, SOCCER COURT, HANDBALL AND PICKLEBALL COURT)	508	SQUARE YARDS			
A2-3	HOT MIX ASPHALT, 19M64 BASE COURSE, 2.5" THICK INCL. BASKETBALL COURT, SOCCER COURT, HANDBALL COURT AND TENNIS COURT)	508	SQUARE YARDS			
A2-4	HOT MIX ASPHALT, 9.5M64 SURFACE COURSE, 2" THICK (INCL. BASKETBALL COURT AND PICKLEBALL COURT)	508	SQUARE YARDS			
A2-5	COURT ACRYLIC BINDER WITH COLOR COAT SYSTEM & STRIPING (INCL. BASKETBALL COURT, SOCCER COURT, AND PICKLEBALL COURT)	508	SQUARE YARDS			
A2-6	CONCRETE SIDEWALK, 5' THICK	18	SQUARE YARDS			
A2-7	PICKLEBALL NET	1	UNIT			
A2-8	CHAIN LINK FENCE, 6-FT HIGH	273	LINEAR FEET			
A2-9	CHAIN LINK SWING GATE 6FT HIGH 5FT WIDE	1	UNIT			
A2-10	6" THICK TOPSOIL, SEED, AND MULCH	515	SQUARE YARDS			
A2-11	LAWN SEED, FERTILIZER, & MULCH	515	SQUARE YARDS			
Subtotal:						

BID ALTERNATE NO. 3 - NORTHGATE PARK

The undersigned hereby declare(s) that he (it, they) has (have) carefully examined the Advertisement, Proposal, Information for Bidders, General Conditions, Construction Specifications, Supplementary Specifications, Appendix, Drawings, Plans and Form of Contract and Bond for the Project named above; that he/she they has/have carefully examined the site of the project; and that he/she/they will contract to carry out and complete said project as required by, and in strict accordance with the applicable provisions of plans and specifications and all addenda issued by the CITY OF CAMDEN prior to the date of opening the bids, whether received by the undersigned or not, as specified and delineated at the price per unit measure for each scheduled item of work stated in the Schedule of Prices following.

It is understood that the Total Price for the entire contract stated by the undersigned in the Schedule is based on the estimated quantities and will control in the awarding of the contract. It is further understood that the quantities stated in this Schedule of Prices for the various items are estimated only and may be increased or decreased. Payment will be made only for the actual quantity of authorized work done under each scheduled item.

It is further understood that the following procedure will be used to correct numerical discrepancies found in the Schedule of Prices following:

1. All Unit Prices and the Total Price for the entire contract shall be expressed in both words and figures, and in case of discrepancy, the written price shall govern over the price stated in figures.
2. If based on the above, it is found that the written Total Price for the entire contract is found to have been incorrectly computed, then changes will be made in any or all unit prices so as to attain conformity with said Total Price before the contract is executed.

The undersigned proposes to furnish all labor, materials and equipment required to construct and complete the structures and do other work complete in every detail, in accordance with plans, specifications and other contract documents prepared by Pennoni Associates Inc., Consulting Engineers, at and for the following Lump Sum Prices and Unit Prices:

NOTE: Extension of Unit Prices must be exact.

Bids will be compared on the basis of the TOTAL AMOUNT OF BID. The TOTAL AMOUNT OF BID is defined as the sum of the Total Price Bid for Each Item. Please note the City may award the construction work on the basis of the Main Bid, combined with any such Alternate(s) as selected, until a net amount is reached which is within the funds available

Where the price in figures differs from the price in words, the price in words will be accepted as the amount bid and amounts computed and adjusted accordingly.

The Owner reserves the right to omit or add to the construction of any portion or portions of the work heretofore enumerated or shown on the plans.

Furthermore, the Owner reserves the right to omit in its entirety any one or more items of this Contract without forfeiture of Contract or claims for loss of anticipated profits or any other claims by the Contractor on account of such omissions.

The bidder, by submitting a response to this solicitation, hereby agrees to complete all of the work shown or specified for **BID ALTERNATE NO. 3 - NORTHGATE PARK** with an additional Contract Time of **Fifteen (15) Calendar Days** from the date of the receipt of written notice to begin work, and (it, they) further agree(s) that the City may retain from the monies that are or may become due for each and every day, where the completion of the work may be delayed as stipulated below:

Schedule of Liquidated Damages:

- One (1) to Fifteen (15) Days: **\$500 per calendar day**
- Sixteen (16) to Thirty (30) Days: **\$1,000.00 per calendar day**
- Greater Than Thirty (30) Days: **\$2,000.00 per calendar day**

And such amount so to be retained is hereby agreed to be for the costs of the Inspection and Engineering as liquidated damages accruing to the City of Camden incident to such delay. Also, refer to the General Conditions.

Unless otherwise directed, **the Contractor shall be prepared to mobilize and commence required activities within thirty (30) days of the notice to proceed date.** Requests for mobilization dates contrary to the above-referenced instruction must be provided to the City Engineer or designee in writing for review/approval within three (3) days of the notice to proceed date.

ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE *	UNIT PRICE IN WORDS *	AMOUNT
A3-1	SITE CLEARING (INCL. SIDEWALK REMOVAL AND PARK BENCHES REMOVAL)	1	LUMP SUM			
A3-2	TREE TRIMMING	1	LUMP SUM			
A3-3	TREE REMOVAL 0'-12'	2	UNITS			
A3-4	TREE REMOVAL 13'-30'	12	UNITS			
A3-5	DENSE GRADED AGGREGATE, 4' THICK (SIDEWALK CONCRETE, BENCH PARK CONC. PAD, CONC. BIKE RACK CONC. PAD, TRASH RECEPTACLE CONC. PAD)	273	SQUARE YARDS			
A3-6	CONCRETE SIDEWALK, 5' THICK	273	SQUARE YARDS			
A3-7	BACKED BENCH	12	UNITS			
A3-8	BRICK PAVER SIDEWALK (INCL. SETTING BED, 5' SLAB & DGA)	240	SQUARE YARDS			
A3-9	PARK GRILL	2	UNITS			
A3-10	BIKE RACK	2	UNITS			
A3-11	GAME TABLE WITH FOUR SEATS	3	UNITS			
A3-12	PICNIC TABLE	11	UNITS			
A3-13	TRASH RECEPTACLE WITH PLASTIC INSERT	4	UNITS			
A3-14	RECYCLE RECEPTACLE WITH PLASTIC INSERT	4	UNITS			
A3-15	ORNAMENTAL FENCE, DOUBLE SWING GATE 6FT HIGH (10 FT-WIDE)	1	UNIT			
A3-16	20X30 PAVILION	1	UNIT			
A3-17	TREE PITS (GRANITE PAVERS, GRANITE SHAVINGS, FOUNDATION, STEEL PLATE)	4	UNITS			
A3-18	6' THICK TOPSOIL, SEED, AND MULCH	575	SQUARE YARDS			
A3-19	LAWN SEED, FERTILIZER, & MULCH	575	SQUARE YARDS			
A3-20	DECIDUOUS TREES	17	UNITS			
Subtotal:						

Summary Table

Bid Form	Amount
BASE BID	
BASE BID - (Allowances)	\$ 300,000.00
BID ALTERNATE NO. 1 - RALPH WILLIAMS PARK	
BID ALTERNATE NO. 2 - WHITMAN SQUARE	
BID ALTERNATE NO. 3 - NORTHGATE PARK	
Subtotal Contract Amount:	

Bid Questions

Please ensure you have fully read the bid document and addenda (if applicable) prior to submitting your question(s) through bids&tenders. Upon submitting your question(s) you will receive an onscreen confirmation message which acknowledges receipt of your question(s). Your question(s) may be responded to through an upcoming addendum.

The Owner shall not be responsible for responding to questions that are sent other than this method. The Owner may not respond to questions received after the Deadline for Questions, as defined in the bid document. No such communications are to be directed to anyone other than the Procurement Representative. The Owner is under no obligation to provide additional information, and the Owner is not responsible for any information provided by or obtained from any source other than the Procurement Representative.

All questions must be answered and the data given must be clear and comprehensive. If necessary, questions may be answered on separate attached sheets that you can upload in the documents section of this platform. The bidder may submit any additional information he/she desires. The City may contact the job references provided.

If Bidder is incorporated, provide State of Incorporation; Date of Incorporation and address of Principal Office if different than registration address.

Provide name, title, address and telephone number/email of Office of Agent in Charge of said office, and with the appointing authority, upon whom notice may be legally serviced.

If not incorporated, provide State where registered, name of owner, address and telephone

Provide proof of all licenses, permits, and similar authorizations issued by federal, state, and local government agencies to Bidder and all its subcontractors, which will be used in performing the obligations under the Contract

How many years have you been engaged in the work requested in this contract under your present firm or trade name.

General character of work performed by you.

Have you ever failed to complete any work awarded to you? If so, where and why?

Have you ever defaulted on a contract? If so, where and why?

List your major equipment for the use of this contract and whether leased or owned. You may upload this paperwork in the "Other" upload section.

Provide name, address, description, dollar amount and dates of the last three (3) jobs in similar scope and scale as these bid specifications. Job Reference #1

Provide name, address, description, dollar amount and dates of the last three (3) jobs in similar scope and scale as these bid specifications. Job Reference #2

Provide name, address, description, dollar amount and dates of the last three (3) jobs in similar scope and scale as these bid specifications. Job Reference #3

Pursuant to N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127) & N.J.A.C. 17:27 All successful construction contractors must submit within three (3) days of the signing of the contract an Initial Project Manning Report (AA201) for this project. Contractor agrees to comply with the Affirmative Action Regulation of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27 et seq. (Yes or No)

Form AA101 Information

FORM AA101 INFORMATION

Enforceable AFFIRMATIVE ACTION RULES AND REGULATIONS PERTAIN TO THIS BID

For any construction contract in excess of \$50,000, a Contractor must comply with all the requirements of City of Camden Code, Chapter 14, Affirmative Action, including but not limited to, Article III, Hiring Goals which include twenty-five percent (25%) of the work hours to be furnished by minority workers and forty percent (40%) of the work hours to be furnished by City residents.

For all construction contracts, a Contractor must comply with Article IV, Minority Business Enterprise Goals, sections 14-13 and 14-14. Alternatively, a Contractor can establish the good faith efforts it made to meet the above goals as indicated in Chapter 14.

For Contracts involving certain HUD funding, Section 3 applies. A contractor must comply with all HUD Section 3 rules and regulations. Contractors and subcontractors are required to provide employment and other economic opportunities, to the greatest extent possible, to Section 3 residents and business concerns which provide economic opportunities to qualifying residents.

If a contractor cannot meet HUD's goals, the contractor must establish the best efforts it made to meet the goals, describe barriers it encountered or provide other relevant information that will allow the Affirmative Action Officer and the Affirmative Action Review Council to render an Affirmative Action compliance determination.

For bids involving federal aid set-aside, Disadvantaged Business Enterprise (DBE) and/or Emerging Small Business Enterprise (ESBE) or Small Business Enterprise (SBE) goals have been established in consultation with the New Jersey Department of Transportation (NJDOT), the bidder/contractor must meet the established hiring goal(s), or alternatively, the bidder/contractor must establish the good faith efforts it made to meet the goal(s).

For good faith efforts, please see NJDOT BDC17S-12, Civil Rights Requirements, Section 102.13, Consideration of Bids, sections 14-31 and 14-32 of Chapter 14 of the City of Camden Code, Affirmative Action; and section 33-6 of Chapter 33 of the City of Camden Code, Minority Women, and Veteran-Owned Business Set-Aside Program.

For set-aside contracts where a MBE/WBE/VBE goal has been established by the City pursuant to Chapter 33, Minority Women, and Veteran-Owned Business Set-Aside Program, a Contractor must meet the goal(s) established pursuant to section 33-5 of Chapter 33, or alternatively, establish the good faith efforts it made to meet the goal(s) as indicated in section 33-6 of Chapter 33.

For federal aid set-aside construction projects, Contractor should review NJDOT BDC17S-12, Civil Rights Requirements, Section 102.13, Consideration of Bids for forms to be submitted, including but not limited to, Form CR-266, Form CR-273, Form CR-272 and Form CR-274. Form AA-101 is also to be included with the Bidder's bid submission. The bidder's submission will be reviewed by City and NJDOT Officials.

For all City construction projects or City projects where a set-aside has been established pursuant to City Code Chapter 33, without exception, a fully legible Form AA-101 must be included with the Bidder's bid submission. Once submitted, with the bid submission, revisions to the AA-101 Form will not be accepted. Goals must be established in the bid submission. However, the Affirmative Action Officer may seek documents and other information with regard to good faith efforts or best efforts after the bid opening date. **PLEASE NOTE: All Contractor's efforts that are to be reviewed by the Affirmative Action Officer and ultimately by the Affirmative Action Review Council shall only focus on efforts that took place prior to the bid opening date. These efforts are to be reported by the contractor in its bid submission, including on Form AA 101. These efforts are also to be reported in the contractor's written affirmative action plan.** The contractor's written affirmative plan shall only improve upon the contractor's desire to attain the goals but in no way shall lessen or alters the initial AA-101 form submitted with the contractor's bid.

After bids are received but prior to the award of such contract by City Council, the low bidder and its principal subcontractors will be required to attend a pre-award conference. The low bidder will also be required to submit an Affirmative Action Plan documenting the low bidder method (s) for complying with the relative articles of affirmative action to the Affirmative Action Officer at least three (3) business days before this pre-award conference date. The purpose of the pre-award conference will be for the Affirmative Action Officer to evaluate the low Bidder's Affirmative Action Plan(s) to determine whether the plan(s) comply with the provisions of Chapter 14, Section 3, if applicable, or Chapter 33, if applicable, and to examine the bidder's past performance with respect to complying with the applicable articles of affirmative action.

The low Bidder's Affirmative Action Plan will be reviewed by the Affirmative Action Review Council which will then make a recommendation to City Council regarding the award of the construction contract.

A developer/contractor award a contract with the City of Camden must continue to comply with all of the applicable requirements including the good faith or best efforts defined by the contractor's own written affirmative action plan throughout the duration of the project or penalties may be imposed pursuant to Section 3, if applicable, Section 14-35 of Chapter 14 or section 33-16 of Chapter 33, as applicable.

Evidence submitted by the Bidder and responses to questions posed by the Affirmative Action Officer and the Affirmative Action Review Council will be considered by the Affirmative Action Officer and the Affirmative Action Review Council in evaluating Bidder's bid submission in determining whether Bidder met the goals in the bid specifications, or alternatively, established good faith efforts to do so.

Form AA101 (Page 1)

Identify all current employees, including city residents, who will be working on this project and identify the Work Classification.

*Pursuant to Chapter 14 of the Camden Code, "Minority Group Members are persons as are defined in Section 14-1 of Chapter 14 of the Camden Code, Affirmative Action. Section 3 residents are as defined by HUD rules and regulations.

**Bidder may add additional rows.

Work Classification *	Name of Employee *	Minority *	Resident *	Section 3 Resident *
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

Form AA101 (Page 2)

Questions	Response *
Number of additional employees, if any, to be hired for this Project?	
How many of these additional employees will be City Residents?	
How many of these additional employees will be Section 3 Residents?	
Are you or your company a certified DBE/MBE/WBE/VBE/ESBE/SBE, Section 3 or Other Classification(s) who will be performing working on this Project? (Yes or No)	
If yes, identify the type of firm your company is and how your company was certified:	
Who was the certifying entity: Federal Government, State of New Jersey, Affirmative Action Review Council, Other	
If applicable, list other certifying entities. Indicate N/A if not applicable.	

Form AA101 (Page 3)

For every subcontractor contacted by your company for this project, including the subcontractor(s) that will be used for this project, fill in the form. Bidder may add additional rows.

Vendor to relist the same contractors on the "Listing of Prime and General Contractors" form.

Feel free to supply any other information that may positively affect the determination of your firm as a responsible bidder on additional rows or upload a statement in the Document Upload area.

Subcontractor Name *	Address *	Telephone Number (with area code) *	Indicate if certified Section 3 Business or DBE, MBE, WBE, VBE, ESBE, SBE, Other or None and provide all certifications	Type of work (electrical, paving, etc) to be performed or materials to be supplied *	NAICS Code(s)	Date Contacted *	Indicate if contacted by Email, Phone, Fax or Mail	Quote Received *	Dollar amount of quote received or contract entered into *	Provide name, address, description, dollar amount and dates of the last job in similar scope and scale as these bid specifications.
								<input type="radio"/> Yes <input type="radio"/> No		

EXHIBIT B MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

EXHIBIT B

**MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE
N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)**

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

CONSTRUCTION CONTRACTS ONLY

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

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

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will 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 trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program, may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B, and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

- A. If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.
- B. If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

(1) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;

(2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;

(3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

(4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;

(5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and nondiscrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;

(6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

- i. The contractor 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 Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.
- iii. The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
- iv. If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.

(7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Dept. of LWD, Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program upon request.

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

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

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the job programs for outreach and training of minorities and women.

(D) The contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.

Line Item	Certification	Bidder's Initials *
1	By initiating this document, the contractor hereby declares and acknowledges that they have carefully examined and duly understands Exhibit B - Mandatory Equal Employment Opportunity Language and agree to furnish and deliver the goods and services, and in doing so, comply with this document.	

AMERICANS WITH DISABILITIES ACT OF 1990

Equal Opportunity for Individuals with Disability

The CONTRACTOR and the OWNER do hereby agree that the provisions of Title II of the Americans with Disabilities Act of 1990 (the "Act") (42 U.S.C. S12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereto, 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 that the Contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the 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 any 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 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 proceedings 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 other 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 the Agreement or otherwise at law.

Certification	Response - Bidder's Initials *
By initialing this document, the contractor hereby declares and acknowledges that they have carefully examined and duly understands the Americans with Disabilities Act of 1990 and agree to furnish and deliver the goods and services, and in doing so, comply with this document.	

Right to Extend - Time for Award

The City of Camden is required by The Local Public Contracts Law, N.J.S.A. 40A:11-24, to make an award on products or service within sixty (60) days of the bid opening date.

Should the City of Camden require an additional sixty (60) days extension to make an award of this bid, by signing this document you shall grant the City of Camden, NJ the right to extend this award up to one hundred twenty (120) days, if deemed necessary.

Certification	Bidder's Initials *
By initialing this document, the proposer consents to the above request to extend the time of award by an additional sixty (60) calendar days.	

The Bidder shall state all Subcontractor(s) and type of Work proposed to be used for this project. Bidders shall not indicate "TBD" (To Be Determined) or "TBA" (To Be Announced) or similar wording.

Bidder(s) shall upon request by the Owner produce a list of references for all or any proposed Subcontractors within three (3) business days.

Installer Qualifications

The projects listed below have been constructed by the bidder or persons to be in responsible charge of this project.

The bidder attests to the fact that he or the subcontractor has crews trained and expert in the construction of the type specified.

Date of Completion *	Owner & Contact No. *	Location *	Engineer & Contact No. *

Subcontractors

The Bidder shall state all Subcontractor(s) and type of Work proposed to be used for this project. Bidders shall not indicate "TBD" (To Be Determined) or "TBA" (To Be Announced) or similar wording and shall not indicate multiple choices of Subcontractor names for any Subcontractor category in their list of Subcontractors.

Listing of Prime and General Subcontractors

Include any subcontractors listed on Form AA101. Indicate whether the listed subcontractors are considered Prime Subcontractors (i.e. plumbing, electrical, HVAC, Steel).

NJSA 40A:11-16(2)(b)(c)

Plumbing and Gas Fitting:

In order to be a Plumbing Contractor in the State of New Jersey a Master Plumber licensed in accordance with N.J.S.A. 45:14C, et seq., must own ten percent (10%) of the firm (N.J.S.A. 45:14C-2(d) and (h).

Electrical Work:

In order to be an Electrical Contractor in the State of New Jersey a licensed and business Permit must be obtained in accordance with N.J.S.A. 45:5A-9 of the "Electrical Contractors Licensing Act"

*Upload proof of licenses in the document section of this platform.

**If applicable, must have a valid NJ Business Registration Certificate/Public Works Contractor Certification of Registration at time of bid submission.

***Bidder may add additional rows.

Trade	Prime Subcontractor (Plumbing, Electric, HVAC, or Steel)	Subcontractor Name, Address & Telephone Number	If applicable, License Number	Other (i.e. Master Plumber name, business permit number)	Provide name, address, description, dollar amount and dates of the last job in similar scope and scale as these bid specifications.
	<input type="checkbox"/> Yes <input type="checkbox"/> No				

Documents

It is your responsibility to make sure the uploaded file(s) is/are not defective or corrupted and are able to be opened and viewed by the Owner. If the attached file(s) cannot be opened or viewed, your Bid submission may be rejected.

If you have any miscellaneous documents that would add value to your bid submission or any documents not explicitly listed on the checklist, please upload it in the last upload space titled "Upload Additional Document". This particular upload area is optional.

The City prefers to have all of the requested documents submitted. However, items that are MANDATORY SUBMISSION with proposal are denoted with an *. Items that are Mandatory Submission Before Contract Award are denoted with two **. Vendor should not upload the same document more than once.

- Bidder's Checklist* * (mandatory)
- Statement of Ownership Disclosure* * (mandatory)
- State of New Jersey Debarred List and Ethics Complaint** (optional)
- Disclosure of Iran Investment Activities & Certification Of Non-Involvement In Prohibited Activities In Russia Or Belarus** (optional)
- Licenses, certificates, etc. for both contractor & subcontractor(s) (i.e. BRC, Prevailing Wage Certificate, etc.) (optional)
- Non-Collusion Affidavit* * (mandatory)
- All Certifications and Disclosure Forms (i.e. AA Certification/Questionnaire, Equipment Certification, Prevailing Wage, Business Entity, etc.) (optional)
- Federal Non-Debarment Certification & Lowest Bidder Prevailing Wage Certification** (optional)
- Additional Document (optional)

Bonding Upload Section

Bidders shall submit with their on-line bid either a Digital copy (preferred) or Scanned copy of both the Bid Deposit in the amount of ten percent (10%) of the total price bid, but not to excess of \$20,000.00 payable unconditionally to the City:

Option # 1A Digital Bid Bond (preferred by the owner)

Option # 2A scanned Bid Bond– (pdf)

Each bid must be accompanied by Certified Check, Cashier's Check of Bid Bond to the order of the City of Camden, in the amount equal to ten percent (10%) of the sum of the bid but not in excess of \$20,000.00 together with a Consent of Surety. The Consent of Surety will confirm that the bidder to whom the contract is awarded will furnish all requested bonds, including but not limited to Performance and Payment Bonds, Maintenance Bond, etc. Bid Bonds may be submitted electronically via a digital bond confirmation uploaded within the Bids&Tenders solicitation or upload a paper bid bond. Paper bid bonds, certified checks or cashier's checks payable to the City of Camden may be mailed or dropped off in a sealed envelope bearing the name and address of the bidder and contract description on the outside to: Purchasing Agent C/O City Clerk, City of Camden City Hall, Room 105, 520 Market Streets, Camden, New Jersey. Regardless of the method of submission, the bid guarantee must be received by Purchasing prior to the bid opening.

- Bid Bond * (mandatory)

Addenda, Terms and Conditions

Terms and Conditions

The Bidder hereby acknowledges and agrees:

1. To provide all goods, services and construction, as more specifically set out and in accordance with the Owner's Bid Call Document, including but not limited to the scope of work, specifications, drawings, Addenda (if issued by the Owner), the terms and conditions, etc. stated therein, which are expressly acknowledged and made part of this Contract.
2. This Bid is made without any connections, knowledge, comparison of figures or arrangements with any other company, firm or person making a Bid for the same Work and is in all respects fair and without collusion or fraud.
3. I/WE do hereby Bid and offer to enter into a Contract to do all the Work as specified in the Bid Call Document(s) which shall include all costs but not limited to; freight, duty, currency, etc. in accordance with the prices and terms as submitted by the Bidder herein.
4. If I/WE withdraw this Bid before the formal Contract is executed by the Awarded Bidder for the said Work or One Hundred and Twenty (120) Calendar Days, whichever event first occurs, the amount of the Bid Deposit accompanying this Bid (if applicable to this bid) shall be forfeited to the Owner.
5. If the Bid is accepted, I/WE agree to furnish all required documentation, as required by the Bid Call Document(s) within Ten (10) Calendar Days after notification of Award.
6. I/We acknowledge and agree that any issued Addendum/Addenda forms part of the Bid Call Document.
7. I/WE (including any related or affiliated entities and any principal thereof) have no unresolved litigation with the Owner.

■

Bidder hereby declares and acknowledges that they have carefully examined and fully understands the specifications, Instructions to Bidders and form of Advertisement in connection herewith and is familiar with conditions thereof.

Identify any material arrangements, relationships, associations, employment or other contacts that may cause a conflict of interest or the appearance of a conflict of interest when responding to the solicitation. Do you have a conflict or potential conflict of interest?

Yes **No**

The Bidder acknowledges and agrees that the addendum/addenda below form part of the Bid Document

Please check the box in the column "**I have reviewed this addendum**" below to acknowledge each of the addenda.

File Name	I have reviewed the below addendum and attachments (if applicable)	Pages
There have not been any addenda issued for this bid.		

